

# APPENDIX L

## CHEMISTRY DATA VALIDATION REPORTS

Level II Data Validation  
Report  
Amec Foster Wheeler



# **DATA VALIDATION REPORT**

Regional Harbor Monitoring Program

San Diego, California

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## ACRONYMS

°C	degrees Celsius
µg/g	micrograms per gram
µg/L	micrograms per liter
µmol/g	micromoles per gram
Amec Foster Wheeler	Amec Foster Wheeler Environment & Infrastructure, Inc.
aroclor	polychlorinated biphenyl aroclor
AVS	acid volatile sulfides
CCV	continuing calibration verification
CLP	Contract Laboratory Program
COC	chain of custody
CRM	certified reference material
CVS	calibration verification standard
DOC	dissolved organic carbon
DFTPP	decafluorotriphenylphosphine
EPA	United States Environmental Protection Agency
GC/MS	gas chromatography/mass spectrometer
ICAL	initial calibration
ICV	initial calibration verification
ID	identification
IIRMES	Institute for Integrated Research in Materials, Environments and Society
LCS	laboratory control sample
LCSD	laboratory control sample duplicate
MBAS	methylene blue active substances
MDL	method detection limit
MS	matrix spike
MSD	matrix spike duplicate
ng	nanograms
ng/g	nanograms per gram
ng/L	nanograms per liter
PAH	polycyclic aromatic hydrocarbon
PBDE	polybrominated diphenyl ether
PCB	polychlorinated biphenyl
Physis	Physis Environmental Laboratories, Inc.
QAM	quality assurance manual
QC	quality control
RL	reporting limit



RPD	relative percent difference
RSD	relative standard deviation
SDG	sample delivery group
SEM	simultaneously extracted metals
SM	Standard Methods
Sunstar	Sunstar Laboratories, Inc.
TCMX	tetrachloro-m-xylene
TOC	total organic carbon

## **DATA VALIDATION REPORT**

### **Regional Harbor Monitoring Program**

### **San Diego, California**

## **1.0 INTRODUCTION**

Amec Foster Wheeler Environment & Infrastructure, Inc. (Amec Foster Wheeler) collected 75 sediment and surface water samples and 3 water samples, consisting of 1 field blank and 2 equipment blanks, between August 6 and September 10, 2013. Amec Foster Wheeler submitted the samples to Physis Environmental Laboratories, Inc. (Physis), located in Anaheim, California, where they were assigned to sample delivery groups (SDGs) 1307002-001, 1307002-002, 137002-003, 137002-004, 137002-005, 137002-006, 137002-007, 137002-008, 137002-009, 137002 010, 137002-011, 137002-012, 137002-013, 137002-014, 137002-015, 137002-016, 137002-017, and 137002-018. Physis analyzed the sediment samples for: acid volatile sulfides (AVS) by the Plumb 1981 method and simultaneously extracted metals (SEM) by United States Environmental Protection Agency (EPA) Method 200.8; ammonia by Standard Methods (SM) 4500-NH<sub>3</sub> D; metals and total phosphorus by EPA Method 6020; and chlorinated pesticides, fipronil and degradates, polybrominated diphenyl ethers (PBDEs), polychlorinated biphenyl (PCB) aroclors (aroclors), PCB congeners, polycyclic aromatic hydrocarbons (PAHs), and pyrethroid pesticides by EPA Method 8270C. Physis analyzed the surface water samples for: ammonia by SM 4500-NH<sub>3</sub> D, barium by EPA Method 200.8, metals by EPA Method 1640, mercury by EPA Method 245.7, methylene blue active substances (MBAS) by SM 5540-C, nitrate by SM 4500-NO<sub>3</sub> E, oil and grease by EPA Method 1664A, total orthophosphate by SM 4500-P E, and PAHs by EPA Method 625. Physis subcontracted the sediment samples to the Institute for Integrated Research in Materials, Environments, and Society (IIRMES), where they were assigned to SDGs 119-13-15, 119-13-15b, 119-13-15c, 119-13-15d, 119 13 15d, 119-13-15e, 119-13-15f, 119-13-15g, and 119-13-15h. IIRMES analyzed the samples for total organic carbon (TOC) and total nitrogen by EPA Method 9060. Physis subcontracted the surface water samples to Sunstar Laboratories, Inc. (Sunstar), where they were assigned to SDGs T131718, T131740, T131758, T131773, T131850, T131868, T131874, T131922, and T131955. Sunstar analyzed the samples for methyl tert-butyl ether (MTBE) by EPA Method 624 and TOC and dissolved organic carbon (DOC) by EPA Method 415.3. A list of these samples by field sample identification (ID), sample collection date, matrix, Physis sample ID, IIRMES sample ID, and Sunstar sample ID is presented in Table 1.

## 2.0 DATA VALIDATION METHODOLOGY

Results for these samples underwent a Region 9 Tier 2 data validation to evaluate the usability of the data. The Tier 2 validation includes review of the quality control (QC) results in the laboratory's analytical report and reported on QC summary forms, but does not include review of the raw analytical data to confirm reported concentrations and analyte identification. This data validation has been performed in general accordance with:

- Bight, 2013. Southern California Bight 2013 Regional Marine Monitoring Survey Quality Assurance Manual (QAM), June 13, 2013.
- EPA, 2001. Region 9 Superfund Data Evaluation/Validation Guidance, Version 1, R9QA/006.1, December.
- EPA, 2014a. EPA Contract Laboratory Program (CLP) National Functional Guidelines for Inorganic Superfund Data Review, EPA-540-R-013-001.
- EPA, 2014b. EPA CLP National Functional Guidelines for Superfund Organic Methods Data Review, EPA-540-R-014-002.

The EPA CLP guidelines listed above were written specifically for the CLP, and have been modified for the purposes of this data review where they differ from method-specific QC requirements.

The laboratory's certified analytical report and supporting documentation were reviewed to assess the following:

- Data package and electronic data deliverable completeness;
- Chain of custody (COC) compliance;
- Holding time compliance;
- Initial calibration (ICAL), initial calibration verification (ICV), and calibration verification standard (CVS) compliance with method-specified criteria;
- Presence or absence of laboratory contamination as demonstrated by laboratory blanks;
- Accuracy and bias as demonstrated by recovery of surrogate spikes, laboratory control sample (LCS), and matrix spike (MS) samples;
- Analytical precision as relative percent difference (RPD) of analyte concentration between laboratory duplicates or MS/MS duplicate (MSD);
- Sampling and analytical precision as RPD of analyte concentration between field duplicates;

- Assessment of field contamination as demonstrated by equipment and field blanks; and
- Insofar as possible, the degree of conformance to method requirements and good laboratory practices.

In general, it is important to recognize that no analytical data are guaranteed to be correct, even if all QC audits are passed. Strict QC serves to increase confidence in data, but any reported value may potentially contain error.

### **3.0 DEFINITIONS OF QUALIFIERS THAT MAY BE ADDED DURING DATA QUALITY REVIEW**

- U** The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
- J** The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- N** The analysis indicates the presence of an analyte for which there is presumptive evidence to make a tentative identification.
- NJ** The analysis indicates the presence of an analyte that has been tentatively identified and the associated numerical value represents its approximate concentration.
- UJ** The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
- R** The sample result is rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

### **4.0 QUALIFIER REASON CODES**

Amec Foster Wheeler applied the following reason codes during the data quality review:

- BC** The ICAL curve did not meet method-specified criteria.
- CH** High continuing calibration verification (CCV) recovery. Analytical result may be biased high.



- DL The analyte concentration was between the method detection limit (MDL) and the reporting limit (RL).
- FB The analyte was detected in the sample and its associated field blank and the concentration detected in the sample is less than 5 times the concentration detected in the blank
- HD Potential analytical imprecision.
- HL High LCS recovery. Analytical result may be biased high.
- HM High MS recovery. Analytical result may be biased high.
- HP High certified reference material (CRM) recovery. Analytical result may be biased high.
- HV ICV recovery. Analytical result may be biased high.
- LC Low CCV recovery. Analytical result may be biased low.
- LL Low LCS recovery. Analytical result may be biased low.
- LM Low MS recovery. Analytical result may be biased low.
- LP Low CRM recovery. Analytical result may be biased low.
- LS Low surrogate recovery. Analytical result may be biased low.
- LV Low ICV recovery. Analytical result may be biased low.
- NC Calibration verification standard concentrations were outside the calibration range.
- NQ There is a lack of QC for this analyte.
- RB The analyte was detected in the sample and its associated equipment blank and the concentration detected in the sample is less than 5 times the concentration detected in the blank.
- TD The dissolved metal concentration is significantly higher than the total metal concentration.

## **5.0 EXPLANATION OF DATA QUALITY INDICATORS**

Summary explanations of the specific data quality indicators reviewed during this data quality review are presented below.

### **5.1 LABORATORY CONTROL SAMPLE RECOVERIES**

LCSs and LCS duplicates (LCSDs) are aliquots of analyte-free matrices that are spiked with the analytes of interest for an analytical method, or a representative subset of those analytes. The spiked matrix is then processed through the same analytical procedures as the samples they accompany. LCS recovery is an indication of a laboratory's ability to successfully perform an analytical method in an interference-free matrix.

### **5.2 MATRIX SPIKE RECOVERIES**

MSs and MSDs are prepared by adding known amounts of the analytes of interest for an analytical method, or a representative subset of those analytes, to an aliquot of sample. The spiked sample is then processed through the same extraction, concentration, cleanup, and analytical procedures as the unspiked samples in an analytical batch.

MS recovery and precision are an indication of a laboratory's ability to successfully recover an analyte in the matrix of a specific sample or closely related sample matrices. It is important not to apply MS results for any specific sample to other samples without understanding how the sample matrices are related.

### **5.3 SURROGATE SPIKE RECOVERIES**

Surrogate spikes are used to evaluate accuracy, method performance, and extraction efficiency in each individual sample. Surrogate compounds are compounds not normally found in environmental samples, but which are similar to target analytes in chemical composition and behavior in the analytical process.

### **5.4 BLANK CONCENTRATIONS**

Blank samples are aliquots of analyte free matrix that are used as negative controls to verify that the sample collection, storage, preparation, and analysis system does not produce false positive results.



Laboratory blanks are processed by the laboratory using exactly the same procedures as the field samples. Target analytes should not be found in laboratory blanks.

Equipment blanks are prepared by passing analyte free water through or over sample collection equipment and collecting the water in sample containers. Equipment blanks are analyzed for the analytical suite required for the project. Equipment blanks are used to monitor for possible sample contamination during the sample collection process and serve as a check on the effectiveness of field decontamination procedures.

Field blanks are prepared by pouring analyte free water into sample containers in the field. Field blanks are analyzed for the analytical suite required for the project. Field blanks are used to monitor for possible sample contamination during the sample collection process.

When target analytes are detected in blanks, analyte concentrations in associated samples greater than the RL but less than 5 times the concentration detected in the blank will be U qualified and analyte concentrations less than the RL will be U qualified at the RL.

## 5.5 LABORATORY DUPLICATES

Laboratory duplicate analysis verifies acceptable method precision by the laboratory at the time of preparation and analysis.

## 6.0 CHAIN OF CUSTODY AND SAMPLE RECEIPT CONDITION DOCUMENTATION

The samples were received in good condition, with acceptable COC documentation, and at temperatures less than the EPA-recommended maximum of 6 degrees Celsius (°C), with the following exceptions.

### ***Sediment Samples***

- According to Physis' sample receipt documentation, samples B13-8233\_Sed, B13 8236\_Sed, and B13-8239\_Sed were received at a temperature of 11.1°C. The samples arrived at the laboratory within four hours of sampling and likely did not have sufficient time to reach thermal equilibrium with the ice in the cooler. In Amec Foster Wheeler's professional opinion, data usability is not adversely affected.
- According to Physis' sample receipt documentation, one jar of sample B13-8029\_Sed was broken during sample shipment. The sample was transferred to a new jar at the lab and

analysis proceeded. The sample was not analyzed for volatile compounds and in Amec Foster Wheeler's professional opinion, data usability is not adversely affected.

- Physis did not include receipt documentations in the data package for samples B13 8013\_Sed, B13-8014\_Sed, B13-8028\_Sed, B13 8030\_Sed, B13-8036\_Sed, B13 8038\_Sed, B13-8040\_Sed, B13-8052\_Sed, B13-8060\_Sed, and B13 8078\_Sed. It is not possible to evaluate data usability for these samples based on sample receipt conditions.

### **Water Samples**

- According to Physis' sample receipt documentation, water samples B13-8233, B13 8236, and B13-8239 were received at a temperature of 19.1°C and samples B13 8259, B13 8263, B13-8265, and B13-8267 were received at a temperature of 12.0°C. Data limitations are summarized below.
  - Amec Foster Wheeler J qualified the detected and UJ qualified the nondetected results, excluding metals, TOC and DOC, from samples B13-8259, B13 8263, B13-8265, and B13 8267 because of the temperature exceedance. (J/UJ-RT)
  - Samples B13-8233, B13-8236, and B13-8239 were received at the lab on ice and within eight hours of sampling. The samples likely had insufficient time to reach thermal equilibrium with the ice in the coolers and Amec Foster Wheeler did not qualify data from these samples based on the temperature exceedance.
- According to Physis' sample receipt documentation, samples B13-8018 and B13-8053 were received at a temperature of 16.4°C. The samples were received at the lab on ice and within eight hours of sampling and likely had insufficient time to reach thermal equilibrium with the ice in the coolers. Amec Foster Wheeler did not qualify data from these samples based on the temperature exceedance.

## **7.0 SPECIFIC DATA VALIDATION FINDINGS**

Results from these samples may be considered usable with the limitations and exceptions described Sections 7.1 and 7.2. Summaries of specific qualifiers added to the samples as a result of the data quality review findings are presented in Tables 2 and 3.

### **7.1 ORGANIC ANALYSES**

Chlorinated pesticide, fipronil and degradates, PBDE, PCB aroclor, PCB congener, PAH, and pyrethroid pesticide results generated by Physis may be considered usable with the limitations described in Sections 7.1.1 through 7.1.12.

### 7.1.1 Holding Times

#### ***Sediment Samples***

According to the laboratory, the sediment samples were frozen upon receipt. Chlorinated pesticide, fipronil and degradates, PAH, and pyrethroid pesticide analyses were performed within the QAM-specified maximum hold time of one year from collection.

#### ***Water Samples***

Samples for MTBE analysis were analyzed within the EPA-recommended maximum holding time of 14 days from collection.

Samples for PAH analysis were extracted within the EPA-recommended maximum holding time of 7 days from collection and analyzed within 40 days from extraction.

### 7.1.2 Gas Chromatograph/Mass Spectrometer Tunes

Physis uses the gas chromatograph/mass spectrometer (GC/MS) software to tune the instrument instead of a decafluorotriphenylphosphine (DFTPP) tune solution, as specified by EPA Method 8270. Physis did not provide results of the software tune, but Physis generally analyzes a DFTPP tune with each analytical batch.

According to Physis' case narrative, the DFTPP tune associated with the analysis of samples B13 8233\_Sed, B13 8236\_Sed, B13 8239\_Sed, B13 8259\_Sed, B13 8263\_Sed, B13 8265\_Sed, and B13-8267\_Sed mis-injected and it is therefore not possible to confirm that the tune meets all EPA-specified criteria. Physis performed a library search for all target analytes in the calibration standard and all match qualities were greater than 95%. Data usability is not adversely affected.

The DFTPP tune associated with the analysis of sediment samples B13-8018\_Sed and B13 8053\_Sed, and water samples B13-8145, B13-8146, B13-8151, B13-8152, B13-8156, B13 8159, B13-8160, B13-8163, B13 8233, B13 8236, B13-8239, B13 8259, B13-8263, B13 8265, and B13 8267 did not meet all method-specified criteria. Previous conversations with Physis indicated that they do a library search for all target analytes in the calibration standard and confirm that match qualities are greater than 95%. Based on this information Amec Foster Wheeler did not qualify any data based on the failing tune reports.

### 7.1.3 Initial Calibration

Relative standard deviations (RSDs) of response factors between calibration levels were less than the QAM-specified maximum of 25% in the ICALs associated with the organic analyses of these samples, with the following exceptions:

### **Sediment Samples**

- Physis did not report an ICAL for the toxaphene analysis of these samples; however, CCV recoveries were reported. Toxaphene was not detected in these samples and a curve does not need to be analyzed unless the analyte chromatographic pattern is detected. Amec Foster Wheeler did not qualify data based on the missing ICALs.
- Percent RSDs were high for allethrin (25.85%), beta-BHC (29.26%), cyfluthrin (25.7%), cypermethrin (29.9%), 2,4'-DDT (55.4%), 4,4'-DDT (83.09%), dicofol (76.52%), endrin aldehyde (27.23%), endrin ketone (28.97%), esfenvalerate (39.4%), fenvalerate (36.55%), fluvalinate (30.03%), heptachlor (30.01%), methoxychlor (84.67%), PCB 187 (27.63%), PCB 206 (25.74%), perthane (26.22%), and resmethrin (45.05%) in the ICALs associated with the analysis of samples B13-8013\_Sed, B13-8014\_Sed, B13 8028\_Sed, B13 8030\_Sed, B13-8033\_Sed, B13-8036\_Sed, B13-8038\_Sed, B13 8040\_Sed, B13-8052\_Sed, B13-8060\_Sed, B13 8078\_Sed, B13-8093\_Sed, B13 8109\_Sed, B13-8118\_Sed, and B13-8122\_Sed. Amec Foster Wheeler J qualified the detected results and UJ qualified the nondetected results for these analytes in the associated samples due to the curves not meeting QAM-specified criteria. (J/UJ-BC)
- Physis reported two-point calibration curves for cis-permethrin, trans-permethrin, and deltamethrin/tralomethrin in the data package associated with the analysis of samples B13-8013\_Sed, B13-8014\_Sed, B13-8028\_Sed, B13-8030\_Sed, B13-8033\_Sed, B13 8036\_Sed, B13-8038\_Sed, B13 8040\_Sed, B13-8052\_Sed, B13-8060\_Sed, B13 8078\_Sed, B13-8093\_Sed, B13-8109\_Sed, B13-8118\_Sed, and B13-8122\_Sed. Organics calibration curves should have at least five points. Amec Foster Wheeler R qualified and rejected the nondetected results for these analytes in these samples because of the unacceptable calibration curves. (R-BC)
- Percent RSDs were high for beta-BHC (28.49%), 2,4'-DDT (55.4%), 4,4'-DDT (83.09%), deltamethrin/Tralomethrin (45.89%), dicofol (76.55%), endrin aldehyde (27.23%), endrin ketone (28.99%), fipronil sulfone (27.62%), heptachlor (30.03%), methoxychlor (84.66%), perthane (26.23%), cis permethrin (40.7%), and trans-permethrin (52.36%) in the ICALs associated with the analysis of samples B13-8017\_Sed, B13-8020\_Sed, B13 8029\_Sed, B13-8049\_Sed, B13-8050\_Sed, B13-8056\_Sed, B13-8064\_Sed, B13 8065\_Sed, B13-8069\_Sed, B13-8074\_Sed, B13-8075\_Sed, B13-8076\_Sed, and B13-8077\_Sed. Amec Foster Wheeler J qualified the detected results and UJ qualified the nondetected results for these analytes in the associated samples due to the curves not meeting QAM-specified criteria. (J/UJ-BC)
- Percent RSDs were high for beta-BHC (29.26%), deltamethrin/Tralomethrin (43.11%), 2,4'-DDT (55.4%), 4,4'-DDT (83.09%), dicofol (76.52%), endrin aldehyde (27.23%), endrin ketone (28.97%), fluvalinate (29.28%), heptachlor (30.01%), methoxychlor (84.67%), PBDE 209 (27.17%), perthane (26.22%), and prallethrin (34.4%) in the ICALs associated with the analysis of samples B13-8018\_Sed, B13-8031\_Sed, B13 8045\_Sed, B13-8053\_Sed, B13-

8058\_Sed, B13-8068\_Sed, B13 8073\_Sed, B13 8087\_Sed, B13-8090\_Sed, B13 8095\_Sed, B13-8096\_Sed, B13-8098\_Sed, B13 8099\_Sed, and B13-8100\_Sed. Amec Foster Wheeler J qualified the detected results and UJ qualified the nondetected results for these analytes in the associated samples due to the curves not meeting QAM-specified criteria. (J/UJ-BC)

- Percent RSDs were high or regression correlation coefficients ( $r^2$ s) were low for beta BHC (43.6%), 4,4' DDMU (72%), 4,4'-DDT (27.6%), dicofol (43.6%), benzo(b)fluoranthene (70.8%), methoxychlor (35.8%), PCB 008 ( $r^2=0.98$ ), PCB 105 ( $r^2=0.98$ ), PCB 126 ( $r^2=0.98$ ), PCB 153 ( $r^2=0.98$ ), PCB 156( $r^2=0.98$ ), PCB 169 ( $r^2=0.97$ ), and perthane (27.6%) in the ICALs associated with the analysis of samples B13 8085\_Sed, B13-8102\_Sed, B13-8105\_Sed, B13 8106\_Sed, B13-8108\_Sed, B13 8111\_Sed, B13-8112\_Sed, B13-8113\_Sed, B13-8116\_Sed, B13-8117\_Sed, B13 8121\_Sed, B13-8123\_Sed, B13-8124\_Sed, B13-8127\_Sed, B13-8128\_Sed, and B13-8500\_Sed. Amec Foster Wheeler J qualified the detected results and UJ qualified the nondetected results for these analytes in the associated samples due to the curves not meeting QAM-specified criteria. (J/UJ-BC)
- Percent RSDs were high for deltamethrin/tralomethrin (140%), dicofol (87.51%), endosulfan II (28.39%), fipronil sulfone (27.49%), PBDE 209 (27.17%), and trans permethrin (26.76%) in the ICALs associated with the analysis of samples B13 8145\_Sed, B13-8146\_Sed, B13-8151\_Sed, B13 8152\_Sed, B13-8156\_Sed, B13 8157\_Sed, B13-8159\_Sed, B13-8160\_Sed, B13-8163\_Sed, B13-8233\_Sed, B13 8236\_Sed, B13-8239\_Sed, B13-8259\_Sed, B13 8263\_Sed, B13-8265\_Sed, and B13-8267\_Sed. Amec Foster Wheeler J qualified the detected results and UJ qualified the nondetected results for these analytes in the associated samples due to the curves not meeting QAM-specified criteria. (J/UJ-BC)
- Physis removed calibration points from the middle of the curve for DCPA (dacthal) and dicofol in the ICAL associated with the chlorinated pesticide analysis of samples B13 8145\_Sed, B13-8146\_Sed, B13-8151\_Sed, B13 8152\_Sed, B13-8156\_Sed, B13 8157\_Sed, B13-8159\_Sed, B13-8160\_Sed, B13-8163\_Sed, B13 8233\_Sed, B13 8236\_Sed, B13-8239\_Sed, B13-8259\_Sed, B13 8263\_Sed, B13-8265\_Sed, and B13-8267\_Sed. Calibration points from the middle of a calibration curve should not be excluded unless it can be proven that the data from the analysis is unusable due to injection error, the analysis was interrupted before completion, or the standard was incorrectly prepared. In these cases all data from the affected calibration point would be excluded from the curve. Dicofol results from the affected samples were previously qualified because of an ICAL that did not meet QAM-specified criteria and further qualification because of ICAL issues is not warranted. Amec Foster Wheeler UJ qualified the nondetected DCPA (dacthal) results from the associated samples because the curve did not meet QAM-specified criteria. (UJ BC)

### **Water Samples**

- Percent RSDs were high for bifenthrin (26.96%), cyfluthrin (31.87%), cyhalothrin (29.42%), cypermethrin (36.92%), deltamethrin/tralomethrin (55.46%), dicofol (87.51%), endosulfan II (28.39%), fluvalinate (37.92%), cis-permethrin (47.9%), and trans permethrin (28.38%) in the ICALs associated with the analysis of equipment blank B13 VVEB. Amec Foster Wheeler does not routinely qualify data from equipment blanks and no data were qualified based on this issue.
- Percent RSDs were high for benzo(a)pyrene (26.07%) and naphthalene (26.33%) in the ICAL associated with the analysis of samples B13-8017, B13-8020, B13-8029, B13 8049, B13-8050, B13-8056, B13-8064, B13-8065, B13-8066, B13-8069, B13 8074, B13-8075, B13-8076, B13-8077, B13-8145, B13-8146, B13-8151, B13-8152, B13-8156, B13-8159, B13-8160, B13-8163, B13 8233, B13 8236, B13-8239, B13 8259, B13-8263, B13 8265, and B13-8267. Amec Foster Wheeler J qualified the detected and UJ qualified the nondetected results for these analytes because the curves did not meet calibration criteria. (J/UJ-BC)
- The reported ICAL associated with the PAH analysis of samples B13-8018, B13-8053, B13 8085, B13-8102, B13-8105, B13-8106, B13-8108, B13 8111, B13-8112, B13-8113, B13-8116, B13-8117, B13-8121, B13-8123, B13-8124, B13-8127, and B13-8500 has an analysis date more than two weeks after the samples' reported analysis dates. Based on discussions with the laboratory, this may be due to shortcomings in the instrument or reporting software. It is not possible to confirm that the reported curve was associated with the samples based on the information provided by the laboratory. Amec Foster Wheeler J qualified all detected and UJ qualified all nondetected PAH results from these samples because of a lack of verifiable QC. (J/UJ-NQ)

#### **7.1.4 Initial Calibration Verification**

ICV recoveries were within the QAM-specified 80 to 120% limits for PAHs, method-specified 80 to 120% limits for MTBE, or QAM-specified 75 to 125% limits for the other organic analyses, with the following exceptions.

### **Sediment Samples**

- The ICVs and CCVs for chlorinated pesticides, fipronil and degradates, PAHs, and pyrethroid pesticides analyses of samples B13-8013\_Sed, B13-8014\_Sed, B13 8028\_Sed, B13-8030\_Sed, B13-8033\_Sed, B13-8036\_Sed, B13-8038\_Sed, B13 8040\_Sed, B13-8052\_Sed, B13-8060\_Sed, B13-8078\_Sed, B13 8093\_Sed, B13 8109\_Sed, B13 8118\_Sed, B13-8122\_Sed, B13-8145\_Sed, B13 8146\_Sed, B13 8151\_Sed, B13 8152\_Sed, B13-8156\_Sed, B13 8157\_Sed, B13-8159\_Sed, B13 8160\_Sed, B13-8163\_Sed, B13 8233\_Sed, B13 8236\_Sed, B13-8239\_Sed, B13 8259\_Sed, B13 8263\_Sed, B13 8265\_Sed, and B13-8267\_Sed had concentrations equivalent to the highest point in the ICAL. ICV and CCV concentrations should be close to the middle of the



calibration range. Amec Foster Wheeler J qualified the detected and UJ qualified the nondetected results from these analyses in these samples because of a lack of proper curve verification. (J/UJ-NQ)

- The high end of Physis' PCB congener curve was 200 nanograms (ng), but the ICV and CCV concentrations associated with the analysis of samples B13-8145\_Sed, B13 8146\_Sed, B13-8151\_Sed, B13 8152\_Sed, B13-8156\_Sed, B13 8157\_Sed, B13 8159\_Sed, B13-8160\_Sed, B13-8163\_Sed, B13 8233\_Sed, B13 8236\_Sed, B13 8239\_Sed, B13-8259\_Sed, B13 8263\_Sed, B13 8265\_Sed, and B13-8267\_Sed, are 500 ng. The ICV and CCV concentrations should be within the instrument's calibration range. Amec Foster Wheeler J qualified all detected and UJ qualified all nondetected PCB congener results from these samples because the calibration curve was not verified before analysis. (J/UJ-NQ)
- ICVs associated with the chlorinated pesticide and PAH analyses of samples B13 8145\_Sed, B13-8146\_Sed, B13-8151\_Sed, B13 8152\_Sed, B13-8156\_Sed, B13 8157\_Sed, B13-8159\_Sed, B13-8160\_Sed, B13-8163\_Sed, B13 8233\_Sed, B13 8236\_Sed, B13-8239\_Sed, B13-8259\_Sed, B13 8263\_Sed, B13-8265\_Sed, and B13-8267\_Sed were analyzed on November 2, 2013, and the CCVs were analyzed on November 3 through 5, 2013, but the samples were originally reported as being analyzed on October 24, 2013. Physis reissued the laboratory reports and changed the sample analysis dates to November 3, 2014. The laboratory did not provide documentation to justify changing the sample analysis date. The analysis date changed; however, the reported results remained the same.
- The ICVs and CCVs associated with the chlorinated pesticide and PCB congener analyses of samples B13-8018\_Sed, B13-8031\_Sed, B13-8045\_Sed, 13-8053\_Sed, B13-8058\_Sed, B13-8068\_Sed, B13 8073\_Sed, B13-8087\_Sed, B13-8090\_Sed, B13 8095\_Sed, B13-8096\_Sed, B13-8098\_Sed, B13-8099\_Sed, and B13-8100\_Sed were documented as being analyzed on May 31, 2014 (ICV) and May 29 and 30, 2014 (CCVs), but according to the report the samples were analyzed on June 1 and 2, 2014. Additionally, the ICV and CCVs associated with the PAH analysis of these samples were recorded as taking place between May 27 and 30, 2014. Data limitations are summarized below.
  - According to the QC summaries provided, only the chlorinated pesticide and PCB congener ICVs would be associated with the analysis of these samples and Amec Foster Wheeler chose not to evaluate data usability based on the CCV results. However, samples B13-8073\_Sed and B13-8087\_Sed were analyzed more than 12 hours after the ICVs and without closing CCVs to confirm the instrument's stability. It is not possible to fully evaluate data for these samples based on the ICV recoveries. Amec Foster Wheeler J qualified all detected and UJ qualified all nondetected chlorinated pesticide and PCB congener results from samples B13-8073\_Sed and B13-8087\_Sed because missing closing CCV. (J/UJ-NQ)

- According to the QC summaries provided, only the PAH ICV would be directly associated with the analysis of these samples because the CCVs were analyzed more than 12 hours before the samples. Amec Foster Wheeler J qualified all detected and UJ qualified all nondetected PAH results from the associated samples because the calibration curve was not verified before analysis. (J/UJ-NQ)
- Allethrin (218%), beta-BHC (324%), gamma-BHC (137%), bifenthrin (179%), cyfluthrin (157%), cyhalothrin (147%), cypermethrin (163%), Danitol (166%), 4,4'-DDT (127%), deltamethrin/tralomethrin (160%), dicofol (171%), endrin (127%), Esfenvalerate (157%), fenvalerate (164%), fluvalinate (160%), heptachlor (133%), methoxychlor (148%), PCB 018 (68%), PCB 044 (74%), PCB 049 (74%), PCB 052 (69%), PCB 187 (73%), PCB 199 (68%), trans-permethrin (145%), prallethrin (189%), and resmethrin (150%) recoveries were outside QAM-specified limits in the ICVs associated with the analysis of samples B13-8013\_Sed, B13-8014\_Sed, B13-8028\_Sed, B13-8030\_Sed, B13 8033\_Sed, B13-8036\_Sed, B13 8038\_Sed, B13-8040\_Sed, B13-8052\_Sed, B13 8060\_Sed, B13 8078\_Sed, B13-8093\_Sed, B13-8109\_Sed, B13-8118\_Sed, and B13-8122\_Sed. Data limitations are summarized below.
  - Amec Foster Wheeler J qualified the detected and UJ qualified the nondetected PCB 018, PCB 044, PCB 049, PCB 052, PCB 187, and PCB 199 results from the associated samples because of potentially low analytical bias. (J/UJ-LV)
  - Amec Foster Wheeler J qualified the detected allethrin, beta-BHC, gamma-BHC, bifenthrin, cyfluthrin, cyhalothrin, cypermethrin, danitol, 4,4'-DDT, deltamethrin/tralomethrin, dicofol, endrin, Esfenvalerate, fenvalerate, fluvalinate, heptachlor, methoxychlor, trans-permethrin, prallethrin, and resmethrin results from the associated samples because of potentially high analytical bias. (J-HV) Nondetected results for these analytes were not qualified the associated samples and data usability is not adversely affected by the potentially high analytical bias.
- Allethrin (137%), beta-BHC (246%), gamma-BHC (137%), cyhalothrin (63%), deltamethrin/Tralomethrin (66.4%), 2,4'-DDT (131%), 4,4'-DDT (143%), dicofol (199%), endrin (132%), fenvalerate (127%), heptachlor (139%), methoxychlor (158%), PCB 201 (131%), cis-permethrin (71.6%), trans-permethrin (133%), prallethrin (132%) recoveries were outside QAM-specified limits in the ICVs associated with the analysis of samples B13-8017\_Sed, B13-8020\_Sed, B13 8029\_Sed, B13-8049\_Sed, B13-8050\_Sed, B13 8056\_Sed, B13-8064\_Sed, B13-8065\_Sed, B13-8069\_Sed, B13-8074\_Sed, B13 8075\_Sed, B13-8076\_Sed, and B13-8077\_Sed. Data limitations are summarized below.
  - Amec Foster Wheeler J qualified the detected and UJ qualified the nondetected cyhalothrin, deltamethrin/Tralomethrin, and cis-permethrin results from the associated samples because of potentially low analytical bias. (J/UJ-LV)



- Amec Foster Wheeler J qualified the detected allethrin, beta-BHC, gamma-BHC, 2,4'-DDT, 4,4' DDT, dicofol, endrin, fenvalerate, heptachlor, methoxychlor, PCB 201, trans permethrin, and prallethrin results from the associated samples because of potentially high analytical bias. (J-HV) Nondetected results for these analytes were not qualified the associated samples and data usability is not adversely affected by the potentially high analytical bias.
- Allethrin (127%), beta-BHC (232%), bifenthrin (245%), cyfluthrin (176%), cypermethrin (220%), Danitol (158%), 2,4'-DDT (130%), deltamethrin/tralomethrin (158%), dicofol (47%), esfenvalerate (229%), fenvalerate (254%), fluvalinate (212%), 1-methylnaphthalene (122%), oxychlordane (131%), PCB 119 (73%), cis-permethrin (146%), trans-permethrin (271%), resmethrin (0%) recoveries were outside QAM-specified limits in the ICV associated with the analysis of samples B13-8018\_Sed, B13 8031\_Sed, B13 8045\_Sed, B13-8053\_Sed, B13-8058\_Sed, B13-8068\_Sed, B13 8073\_Sed, B13-8087\_Sed, B13-8090\_Sed, B13 8095\_Sed, B13-8096\_Sed, B13 8098\_Sed, B13-8099\_Sed, and B13-8100\_Sed. Data limitations are summarized below.
  - Amec Foster Wheeler R qualified and rejected the nondetected and J qualified the detected resmethrin results from the associated samples because the analyte was not recovered from the ICV. (R/J-LV)
  - Amec Foster Wheeler J qualified the detected and UJ qualified the nondetected dicofol and PCB 119 results from the associated samples because of potentially low analytical bias. (J/UJ-LV)
  - Amec Foster Wheeler J qualified the detected allethrin, beta-BHC, bifenthrin, cyfluthrin, cypermethrin, Danitol, 2,4'-DDT, deltamethrin/tralomethrin, Esfenvalerate, fenvalerate, fluvalinate, 1-methylnaphthalene, oxychlordane, cis-permethrin, and trans-permethrin results from the associated samples because of potentially high analytical bias. (J-HV) Nondetected results for these analytes were not qualified the associated samples and data usability is not adversely affected by the potentially high analytical bias.
- ICVs associated with the PBDE and pyrethroid pesticide analyses of samples B13 8085\_Sed, B13-8102\_Sed, B13-8105\_Sed, B13 8106\_Sed, B13 8108\_Sed, B13 8111\_Sed, B13-8112\_Sed, B13-8113\_Sed, B13-8116\_Sed, B13-8117\_Sed, B13 8121\_Sed, B13-8123\_Sed, B13-8124\_Sed, B13-8127\_Sed, B13-8128\_Sed, and B13-8500\_Sed were analyzed at concentrations equivalent to the highest calibration level. ICV concentrations should be close to the middle of the calibration range, and not just a verification of the highest calibration level. It is not possible to evaluate whether the concentrations detected in the samples were close to the highest point in the ICAL, justifying the high ICV concentrations.
- Beta-BHC (315%), cyhalothrin (72%), gamma-BHC (137%), deltamethrin/tralomethrin (63%), PCB 128 (71.5%), PCB 209 (70%), cis-permethrin (69%), and prallethrin (134%)

recoveries were outside QAM-specified limits in the ICV associated with the analysis of samples B13-8085\_Sed, B13-8102\_Sed, B13-8105\_Sed, B13 8106\_Sed, B13 8108\_Sed, B13-8111\_Sed, B13-8112\_Sed, B13-8113\_Sed, B13-8116\_Sed, B13 8117\_Sed, B13-8121\_Sed, B13-8123\_Sed, B13-8124\_Sed, B13-8127\_Sed, B13 8128\_Sed, and B13-8500\_Sed. Data limitations are summarized below.

- Amec Foster Wheeler J qualified the detected and UJ qualified the nondetected cyhalothrin, deltamethrin/traolmethrin, PCB 128, PCB 209, and cis-permethrin results from the associated samples because of potentially low analytical bias. (J/UJ-LV)
- Beta-BHC, gamma-BHC, and prallethrin were not detected in the associated samples and data usability is not adversely affected by the potentially high analytical bias.
- Benzo(e)pyrene (74.7%), PCB 167 (122%), PCB 169 (130%), PCB 189 (121%), cis permethrin (66.3%), perylene (78.9%), and resmethrin (66.9%) recoveries were outside QAM-specified limits in the ICVs associated with the analysis of samples B13 8145\_Sed, B13-8146\_Sed, B13-8151\_Sed, B13 8152\_Sed, B13-8156\_Sed, B13 8157\_Sed, B13-8159\_Sed, B13-8160\_Sed, B13-8163\_Sed, B13-8233\_Sed, B13 8236\_Sed, B13 8239\_Sed, B13-8259\_Sed, B13 8263\_Sed, B13-8265\_Sed, and B13-8267\_Sed. Data limitations are summarized below.
  - Amec Foster Wheeler J qualified the detected and UJ qualified the nondetected benzo(e)pyrene, cis-permethrin, perylene, and resmethrin results from the associated samples because of potentially low analytical bias. (J/UJ-LV)
  - The remaining analytes were not detected in the associated samples and data usability is not adversely affected by the potentially high analytical bias.

### **Water Samples**

Most of the ICVs associated with the PAH analysis of the water samples were analyzed at concentrations equivalent to the highest point in the calibration curve. While this practice technically meets method-specified QC criteria, confirming analytical performance at the highest point in the curve does not provide adequate confirmation of analytical performance over the calibration range. In the future, ICV concentrations should be adjusted to the mid-point of the curve.

- According to the documentation provided by Physis, equipment blank B13-VVEB was analyzed for PCB congeners on October 22, 2013, but the ICV and CCVs provided with the data package were analyzed between November 2 and 5, 2013. It is not possible to evaluate data usability for the PCB congener analysis of this blank based on the provided data. Amec Foster Wheeler does not routinely qualify data from equipment blanks and no data were qualified based on this issue.

- Cis-permethrin (54%) and prallethrin (134%) recoveries were outside QAM-specified limits in the ICV associated with the analysis of equipment blank B13-VVEB. Amec Foster Wheeler does not routinely qualify data from equipment blanks and no data were qualified due to this issue.
- ICVs associated with the chlorinated pesticide, PAH, and pyrethroid pesticide analyses of equipment blank B13 VVEB were analyzed at concentrations equivalent to the highest calibration level. ICV concentrations should be close to the middle of the calibration range, and not just a verification of the highest calibration level. In the future, ICV concentrations should be adjusted to the mid-point of the curve
- Dibenz(a,h)anthracene and indeno(1,2,3-cd)pyrene recoveries were high at 141% and 126%, respectively, in the ICV associated with the analysis of samples B13-8013, B13 8014, B13-8028, B13-8030, B13-8031, B13-8033, B13-8036, B13-8038, B13-8040, B13-8045, B13-8052, B13-8058, B13-8060, B13-8068, B13-8073, B13-8078, B13-8087, B13-8090, B13 8093, B13-8095, B13-8096, B13-8098, B13-8099, B13-8100, B13-8109, B13-8118, and B13-8122. These analytes were not detected in the associated samples and data usability is not adversely affected by the potentially high analytical bias.
- Benzo(b)fluoranthene (125%), benzo(a)pyrene (124%), biphenyl (77.7%), 2,6 dimethylnaphthalene (78.6%), fluoranthene (135%), 1-methylnaphthalene (75.5%), 2-methylnaphthalene (73.2%), naphthalene (71.2%), perylene (125%), and pyrene (125%) recoveries were outside QAM-specified limits in the ICV associated with the analysis of samples B13-8017, B13-8020, B13-8029, B13-8049, B13-8050, B13-8056, B13-8064, B13-8065, B13-8066, B13-8069, B13 8074, B13-8075, B13-8076, and B13 8077. Data limitations are summarized below.
  - Amec Foster Wheeler J qualified the detected benzo(b)fluoranthene, benzo(a)pyrene, fluoranthene, perylene, and pyrene results from the associated samples because of potentially high analytical bias. (J-HV) Nondetected results for these analytes were not qualified and data usability is not adversely affected.
  - Amec Foster Wheeler J qualified the detected and UJ qualified the nondetected biphenyl, 2,6 dimethylnaphthalene, 1-methylnaphthalene, 2-methylnaphthalene, and naphthalene results from the associated samples because of potentially low analytical bias. (J/UJ-LV)
- Acenaphthene (79%), acenaphthylene (76%), anthracene (149%), biphenyl (73%), dibenzothiophene (72%), 2,6-dimethylnaphthalene (62%), 1-methylnaphthalene (54%), 2-methylnaphthalene (50%), naphthalene (52%), and 2,3,5 trimethylnaphthalene (60%) recoveries were outside QAM-specified limits in the ICV associated with the analysis of samples B13-8145, B13-8146, B13-8151, B13-8152, B13-8156, B13-8159, B13-8160, B13-8163, B13 8233, B13 8236, B13-8239, B13 8259, B13-8263, B13 8265, and B13 8267. Data limitations are summarized below.

- Amec Foster Wheeler J qualified the detected and UJ qualified the nondetected acenaphthene, acenaphthylene, biphenyl, dibenzothiophene, 2,6-dimethylnaphthalene, 1 methylnaphthalene, 2-methylnaphthalene, naphthalene, and 2,3,5 trimethylnaphthalene results from the associated samples because of potentially low analytical bias. (J/UJ-LV)
- Anthracene was not detected in the associated samples and data usability is not adversely affected by the potentially high analytical bias.
- The ICV associated with the analysis of samples B13-8018, B13-8053, B13 8085, B13-8102, B13-8105, B13-8106, B13-8108, B13 8111, B13-8112, B13-8113, B13-8116, B13-8117, B13-8121, B13-8123, B13-8124, B13-8127, and B13-8500 has an analysis date reported in the quantitative analysis sample report more than two weeks after the samples' reported analysis dates. The results were reported on a QC summary form with an analysis date five days before the reported date from the quantitative analysis sample report, but ten days after the reported sample analytical dates. Based on discussions with the laboratory, this may be due to shortcomings in the instrument or reporting software. It is not possible to confirm that the reported ICV was associated with the samples based on the information provided by the laboratory. Amec Foster Wheeler J qualified all detected and UJ qualified all nondetected PAH results from these samples because of a lack of verifiable QC. (J/UJ-NQ)

### 7.1.5 Continuing Calibration Verification

CCV recoveries were within the QAM-specified 80 to 120% limits for PAHs, method-specified 80 to 120% limits for MTBE, or QAM-specified 75 to 125% limits for the other organic analyses, with the following exceptions:

#### ***Sediment Samples***

- Allethrin (141%), 4,4'-DDT (132% and 137%), cyhalothrin (137%, 146%, and 143%), deltamethrin/tralomethrin (135%, 154%, and 135%), dibenz(a,h)anthracene (77%), dicofol (128% and 139%), endrin aldehyde (134%), fluvalinate (131%), methoxychlor (129% and 136%), PBDE 085 (69%), PBDE 138 (57%), PBDE 153 (70%), PBDE 183 (57%), PBDE 209 (29%), PCB 018 (63% and 63%), PCB 044 (68% and 68%), PCB 049 (69% and 68%), PCB 052 (65% and 65%), PCB 087 (71% and 73%), PCB 099 (72% and 72%), PCB 101 (67% and 69%), PCB 110 (74%), PCB 119 (73%), PCB 149 (67% and 69%), PCB 151 (69% and 70%), PCB 158 (74%), PCB 177 (73% and 74%), PCB 183 (74%), PCB 187 (70% and 69%), PCB 199 (61% and 60%), PCB 206 (67% and 65%), PCB 209 (73% and 72%), prallethrin (136%), resmethrin (139% and 137%), and toxaphene (146% and 256%) recoveries were outside QAM-specified limits in the CCVs associated with the analysis of samples B13-8013\_Sed, B13 8014\_Sed, B13 8028\_Sed, B13 8030\_Sed, B13-8033\_Sed, B13-8036\_Sed, B13-8038\_Sed, B13 8040\_Sed, B13 8052\_Sed, B13-8060\_Sed, B13

8078\_Sed, B13-8093\_Sed, B13 8109\_Sed, B13-8118\_Sed, and B13 8122\_Sed. Data limitations are summarized below.

- Amec Foster Wheeler J qualified the detected and UJ qualified the nondetected dibenz(a,h)anthracene, PBDE 085, PBDE 138, PBDE 153, PBDE 183, PBDE 209, PCB 018, PCB 044, PCB 049, PCB 052, PCB 087, PCB 099, PCB 101, PCB 110, PCB 119, PCB 149, PCB 151, PCB 158, PCB 177, PCB 183, PCB 187, PCB 199, PCB 206, and PCB 209 results from the associated samples because of potentially low analytical bias. (J/UJ-LC)
- Amec Foster Wheeler J qualified the detected allethrin, cyhalothrin, 4,4'-DDT, deltamethrin/tralomethrin, dicofol, endrin aldehyde, fluvalinate, methoxychlor, prallethrin, resmethrin, and toxaphene results from the associated samples because of potentially high analytical bias. (J CH) Nondetected results for these analytes were not qualified the associated samples and data usability is not adversely affected by the potentially high analytical bias.
- Allethrin (153% and 270%), bifenthrin (153% and 239%), cyfluthrin (133% and 177%), cyhalothrin (152% and 204%), cypermethrin (130% and 178%), danitol (168% and 261%), 4,4'-DDD (74%), 4,4'-DDT (134% and 133%), dicofol (175% and 177%), esfenvalerate (127% and 171%), fenvalerate (129% and 173%), fipronil (130%), fipronil desulfinyl (138% and 172%), fipronil sulfide (139% and 171%), fipronil sulfone (129%), fluvalinate (131% and 166%), heptachlor (133% and 132%), methoxychlor (137% and 138%), 1-methylnaphthalene (123%), 2-methylnaphthalene (124%), naphthalene (131%), PCB 018 (132% and 130%), PCB 037 (128% and 126%), PCB 044 (126%), PCB 105 (126%), PCB 126 (128% and 128%), PCB 128 (131% and 129%), PCB 170 (130% and 128%), PCB 180 (129% and 128%), PCB 187 (128%), PCB 194 (138% and 141%), PCB 199 and 200 (129% and 131%), PCB 201 (126%), PCB 206 (148% and 148%), PBDE 138 (72%), PBDE 183 (71%), PBDE 209 (141% and 151%), cis permethrin (133% and 235%), trans-permethrin (138% and 180%), prallethrin (210% and 341%), resmethrin (156% and 287%), and toxaphene (64%) recoveries were outside QAM-specified limits in the CCVs associated with the analysis of samples B13 8017\_Sed, B13-8020\_Sed, B13 8029\_Sed, B13-8049\_Sed, B13-8050\_Sed, B13 8056\_Sed, B13-8064\_Sed, B13-8065\_Sed, B13-8066\_Sed, B13-8069\_Sed, B13-8074\_Sed, B13 8075\_Sed, B13-8076\_Sed, and B13-8077\_Sed. Data limitations are summarized below.
  - Amec Foster Wheeler J qualified the detected and UJ qualified the nondetected 4,4'-DDD, PBDE 138, PBDE 183, and toxaphene results from the associated samples because of potentially low analytical bias. (J/UJ-LC)
  - Amec Foster Wheeler J qualified detected results for allethrin, bifenthrin, cyfluthrin, cyhalothrin, cypermethrin, danitol, 4,4'-DDT, dicofol, Esfenvalerate, fenvalerate, fipronil, fipronil desulfinyl, fipronil sulfide, fipronil sulfone, fluvalinate, heptachlor, methoxychlor,

1 methyl-naphthalene, 2 methyl-naphthalene, naphthalene, PCB 018, PCB 037, PCB 044, PCB 105, PCB 126, PCB 128, PCB 170, PCB 180, PCB 187, PCB 194, PCB 199 and 200, PCB 201, PCB 206, cis-permethrin, trans-permethrin, prallethrin, and resmethrin in the associated samples because of potentially high analytical bias. (J-CH) Nondetected results for these analytes were not qualified and data usability is not adversely affected by the potentially high analytical bias.

- Allethrin (73.5% and 67.6%), bifenthrin (127%), cyfluthrin (126%), cypermethrin (140%), deltamethrin/tralomethrin (137% and 126%), esfenvalerate (145% and 129%), fenvalerate (134%), fipronil (196%), fipronil desulfinyl (160%), fipronil sulfide (174%), fipronil sulfone (142%), fluvalinate (157%), PBDE 049 (62% and 58.5%), PBDE 209 (27.7% and 54.3%), cis-permethrin (152% and 128%), trans-permethrin (145% and 126%), prallethrin (71.6% and 56.9%), resmethrin (131%), and toxaphene (128%) recoveries were outside QAM-specified limits in CCVs associated with the analysis of samples B13-8018\_Sed, B13-8031\_Sed, B13-8045\_Sed, B13-8053\_Sed, B13-8058\_Sed, B13-8068\_Sed, B13-8073\_Sed, B13-8087\_Sed, B13-8090\_Sed, B13-8095\_Sed, B13-8096\_Sed, B13-8098\_Sed, B13-8099\_Sed, and B13-8100\_Sed. Data limitations are summarized below.
  - Amec Foster Wheeler J qualified the detected and UJ qualified the nondetected allethrin, PBDE 049, PBDE 209, and prallethrin results from the associated samples because of potentially low analytical bias. (J/UJ-LC)
  - The remaining analytes were not detected in the associated samples and data usability is not adversely affected by the potentially high analytical bias.
- According to the documentations supplied by Physis, the CCVs associated with the PAH analysis of samples B13-8085\_Sed, B13-8102\_Sed, B13-8105\_Sed, B13-8106\_Sed, B13-8108\_Sed, B13-8111\_Sed, B13-8112\_Sed, B13-8113\_Sed, B13-8116\_Sed, B13-8117\_Sed, B13-8121\_Sed, B13-8123\_Sed, B13-8124\_Sed, B13-8127\_Sed, B13-8128\_Sed, and B13-8500\_Sed were analyzed on April 8 and 9, 2014, but the samples were analyzed between April 7 and 8, 2014. Additionally, the CCV associated with the fipronil and degradates analysis were analyzed on January 8, 2014, but the samples were analyzed between January 7 and 8, 2014. Amec Foster Wheeler evaluated the PAH and fipronil and degradates data against these CCVs even though they may not be applicable to these samples.
- The CCVs associated with the fipronil and degradates, PBDE, and pyrethroid pesticide analyses of samples B13-8085\_Sed, B13-8102\_Sed, B13-8105\_Sed, B13-8106\_Sed, B13-8108\_Sed, B13-8111\_Sed, B13-8112\_Sed, B13-8113\_Sed, B13-8116\_Sed, B13-8117\_Sed, B13-8121\_Sed, B13-8123\_Sed, B13-8124\_Sed, B13-8127\_Sed, B13-8128\_Sed, and B13-8500\_Sed were analyzed at concentrations equivalent to the highest calibration level. CCV concentrations should be close to the middle of the calibration range, and not just a verification of the highest calibration level. It is not possible to evaluate



whether the concentrations detected in the samples were close to the highest point in the ICAL, justifying the high CCV concentrations.

- Allethrin (135% and 132%), benzo(a)anthracene (162% and 192%), benzo(b)fluoranthene (140% and 144%), benzo(k)fluoranthene (57% and 58%), benzo(a)pyrene (132%), benzo(e)pyrene (132% and 148%), chrysene (166% and 188%), cypermethrin (73%), 2,4' DDT (73.8%), 4,4'-DDT (59.8% and 55.2%), deltamethrin/tralomethrin (34%), dibenz(a,h)anthracene (129%), dicofol (57% and 59.2%), endosulfan II (70.8%), esfenvalerate (52%), fenvalerate (54%), fipronil (206% and 196%), fipronil desulfinyl (165% and 160%), fipronil sulfide (177% and 174%), fipronil sulfone (146% and 142%), fluvalinate (61%), heptachlor (67%), indeno(1,2,3-cd)pyrene (202% and 166%), methoxychlor (58.4%), PBDE 138 (74%), PBDE 209 (26% and 35%), PCB 005 (140% and 159%), PCB 008 (72%), PCB 018 (142% and 134%), PCB 028 (133% and 139%), PCB 029 (129% and 127%), PCB 037 (133% and 131%), PCB 044 (149% and 148%), PCB 049 (150% and 146%), PCB 052 (139% and 138%), PCB 066 (128% and 133%), PCB 070 (142% and 142%), PCB 074 (145% and 147%), PCB 081 (128% and 134%), PCB 087 (128% and 136%), PCB 099 (135% and 140%), PCB 101 (148% and 155%), PCB 110 (129% and 139%), PCB 114 (129% and 139%), PCB 118 (140% and 153%), PCB 119 (126% and 134%), PCB 126 (127%), PCB 149 (126%), PCB 151 (133%), PCB 167 (131%), PCB 168/132 (126%), PCB 187 (126% and 133%), PCB 209 (65.2%), perylene (126% and 127%), prallethrin (140%), pyrene (77.2%), and resmethrin (53% and 18%) recoveries were outside QAM-specified limits in the CCVs associated with the analysis of samples B13-8085\_Sed, B13 8102\_Sed, B13-8105\_Sed, B13 8106\_Sed, B13 8108\_Sed, B13-8111\_Sed, B13 8112\_Sed, B13-8113\_Sed, B13-8116\_Sed, B13-8117\_Sed, B13-8121\_Sed, B13 8123\_Sed, B13-8124\_Sed, B13-8127\_Sed, B13-8128\_Sed, and B13-8500\_Sed. Data limitations are summarized below.
  - Amec Foster Wheeler J qualified the detected results and UJ qualified nondetected results for benzo(k)fluoranthene, 2,4' DDT, 4,4'-DDT, dicofol, endosulfan II, heptachlor, methoxychlor, PBDE 138, PBDE 209, PCB 008, PCB 209, pyrene, and resmethrin in the associated samples because of potentially low analytical bias. (J/UJ LC)
  - Amec Foster Wheeler J qualified detected results for benzo(a)anthracene, benzo(b)fluoranthene, benzo(e)pyrene, chrysene, dibenz(a,h)anthracene, fipronil, fipronil desulfinyl, fipronil sulfide, fipronil sulfone, indeno(1,2,3-cd)pyrene, PCB 005, PCB 018, PCB 028, PCB 029, PCB 037, PCB 044, PCB 049, PCB 052, PCB 066, PCB 070, PCB 074, PCB 081, PCB 087, PCB 099, PCB 101, PCB 110, PCB 114, PCB 118, PCB 119, PCB 126, PCB 149, PCB 151, PCB 167, PCB 168/132, PCB 187, and perylene in the associated samples because of potentially high analytical bias. (J CH) Nondetected results for these analytes were not qualified and data usability is not adversely affected by the potentially high analytical bias.

- Benzo(b)fluoranthene (71.6%), benzo(k)fluoranthene (75.3%), benzo(a)pyrene (72.1%), benzo(e)pyrene (74.8% and 60%), bifenthrin (56.6%), cyfluthrin (164%), dicofol (49% and 43%), dibenz(a,h)anthracene (128% and 132%), 2,6 dimethylnaphthalene (78.4%), esfenvalerate (133%), fenvalerate (148%), fipronil (50.2% and 70.9%), fipronil desulfinyl (43.1% and 64.8%), fipronil sulfide (51.8% and 67.4%), fluvalinate (148%), heptachlor (64% and 62%), indeno(1,2,3 cd)pyrene (143% and 140%), PCB 126 (130% and 132%), PCB 156 (128% and 126%), PCB 167 (128% and 133%), PCB 169 (141% and 141%), PCB 180 (127% and 126%), PCB 189 (134% and 132%), PCB 194 (121%), perylene (69.9%), PBDE 209 (122% and 148%), prallethrin (65%), and resmethrin (72.6%) recoveries were outside QAM-specified limits in the CCVs were low in the CCVs associated with the analysis of samples B13-8145\_Sed, B13-8146\_Sed, B13 8151\_Sed, B13 8152\_Sed, B13-8156\_Sed, B13 8157\_Sed, B13-8159\_Sed, B13 8160\_Sed, B13-8163\_Sed, B13-8233\_Sed, B13 8236\_Sed, B13-8239\_Sed, B13 8259\_Sed, B13 8263\_Sed, B13-8265\_Sed, and B13-8267\_Sed. Data limitations are summarized below.
  - Amec Foster Wheeler J qualified the detected results and UJ qualified nondetected results for benzo(b)fluoranthene, benzo(k)fluoranthene, benzo(a)pyrene, benzo(e)pyrene, bifenthrin, dicofol, 2,6 dimethylnaphthalene, fipronil, fipronil desulfinyl, fipronil sulfide, heptachlor, perylene, prallethrin, and resmethrin in the associated samples because of potentially low analytical bias. (UJ-LC)
  - Amec Foster Wheeler J qualified the detected dibenz(a,h)anthracene and indeno(1,2,3-cd)pyrene results from the associated samples because of potentially high analytical bias. (J HC)
  - Cyfluthrin, Esfenvalerate, fenvalerate, fluvalinate, PCB 126, PCB 156, PCB 167, PCB 169, PCB 180, PCB 189, PCB 194, and PBDE 209 were not detected in the associated samples and data usability is not adversely affected by the potentially high analytical bias.

### **Water Samples**

Most of the CCVs associated with the PAH analysis of the water samples were analyzed at concentrations equivalent to the highest point in the calibration curve. While this practice technically meets method-specified QC criteria, confirming analytical performance at the highest point in the curve does not provide adequate confirmation of analytical performance over the calibration range. In the future, CCV concentrations should be adjusted to the mid-point of the curve.

- The CCVs associated with the chlorinated pesticide, PAH, PBDE, pyrethroid pesticide, and toxaphene analyses of sample B13 VVEB were analyzed at concentrations equivalent to the highest calibration level. CCV concentrations should be close to the middle of the calibration range, and not just a verification of the highest calibration level. Target analytes



were not detected in this sample at concentrations greater than the RL and there is no justification for the high CCV concentrations. Amec Foster Wheeler does not routinely qualify data from equipment blanks and no data were qualified based on this issue.

- According to the documentation provided by Physis, equipment blank B13-VVEB was analyzed for PBDE on November 18, 2013, but the CCVs provided with the data package were analyzed on November 19, 2013. Amec Foster Wheeler does not routinely qualify data from equipment blanks and no data were qualified based on this issue.
- Benzo(b)fluoranthene (72%), benzo(a)pyrene (72%), benzo(e)pyrene (60%), cyfluthrin (50% and 14%), cyhalothrin (68% and 43%), cypermethrin (55% and 15%), danitol (72%), deltamethrin/tralomethrin (0% and 0%), dibenz(a,h)anthracene (128% and 132%), dicofol (49% and 44%), esfenvalerate (59% and 42%), fenvalerate (70% and 9.5%), fluvalinate (1.3%), heptachlor (64% and 62%), indeno(1,2,3-cd)pyrene (143% and 140%), PBDE 049 (64% and 58%), PBDE 066 (74%), PBDE 085 (63%), PBDE 099 (67%), PBDE 100 (67%), PBDE 138 (58%), PBDE 153 (66%), PBDE 154 (68%), PBDE 183 (60%), PBDE 190 (47%), PBDE 209 (32%), cis-permethrin (58% and 0%), trans-permethrin (57% and 0%), perylene (70%), prallethrin (132%), resmethrin (138%), and toxaphene (137%) recoveries were outside QAM-specified limits in the CCVs associated with the analysis of equipment blank B13 VVEB. Amec Foster Wheeler does not routinely qualify data from equipment blanks and no data were qualified based on this issue.
- Benzo(b)fluoranthene (78.3%), benzo(a)pyrene (72.8%), benzo(e)pyrene (75.1% and 79.4%), 1-methylnaphthalene (76.2%), 2-methylnaphthalene (78%), naphthalene (73.3%), and perylene (137%) recoveries were outside QAM-specified limits in CCVs associated with the analysis of samples B13-8013, B13-8014, B13-8028, B13-8030, B13-8031, B13-8033, B13-8036, B13-8038, B13-8040, B13-8045, B13-8052, B13-8058, B13-8060, B13-8068, B13-8073, B13-8078, B13-8087, B13-8090, B13-8093, B13-8095, B13-8096, B13-8098, B13-8099, B13-8100, B13-8109, B13-8118, and B13-8122. . Data limitations are summarized below.
  - Amec Foster Wheeler J qualified the detected and UJ qualified the nondetected benzo(b)fluoranthene, benzo(a)pyrene, benzo(e)pyrene, 1-methylnaphthalene, 2-methylnaphthalene, and naphthalene results from the associated samples because of potentially low analytical bias. (J/UJ-LC)
  - Perylene was not detected in the associated samples and data usability is not adversely affected by the potentially high analytical bias
- Benzo(a)anthracene (123% and 132%), benzo(b)fluoranthene (144% and 150%), benzo(k)fluoranthene (122% and 133%), benzo(a)pyrene (126% and 131%), benzo(e)pyrene (122%), biphenyl (79.7%), chrysene (122% and 134%), dibenz(a,h)anthracene (157% and 131%), fluoranthene (133% and 131%), indeno(1,2,3-cd)pyrene (135%), 1-methylnaphthalene (79.3%), 2-methylnaphthalene (73.9%),

naphthalene (74.2%), perylene (131% and 137%), and pyrene (123% and 123%) recoveries were outside QAM-specified limits in CCVs associated with the analysis of samples B13-8017, B13-8020, B13-8029, B13 8049, B13-8050, B13-8056, B13-8064, B13-8065, B13-8066, B13-8069, B13 8074, B13-8075, B13-8076, and B13 8077. Data limitations are summarized below.

- Amec Foster Wheeler J qualified the detected benzo(a)anthracene, benzo(b)fluoranthene, benzo(k)fluoranthene, benzo(a)pyrene, benzo(e)pyrene, chrysene, dibenz(a,h)anthracene, fluoranthene, indeno(1,2,3-cd)pyrene, perylene, and pyrene results from the associated samples because of potentially high analytical bias. (J CH) Nondetected results for these analytes were not qualified and data usability is not adversely affected by the potentially high analytical bias.
- Amec Foster Wheeler J qualified the detected and UJ qualified the nondetected biphenyl, 1-methylnaphthalene, 2-methylnaphthalene, and naphthalene results from these samples because of potentially low analytical bias. (J/UJ-LC)
- CCVs associated with the analysis of samples B13-8018, B13-8053, B13 8085, B13 8111, B13-8102, B13-8105, B13-8106, B13-8108, B13-8112, B13-8113, B13-8116, B13-8117, B13-8121, B13-8123, B13-8124, B13-8127, and B13-8500 had analysis dates reported in the quantitative analysis sample report more than two weeks after the samples' reported analysis dates. The results were reported on a QC summary form with analysis dates five days before the reported date from the quantitative analysis sample report, but ten days after the reported sample analytical dates. Based on discussions with the laboratory, this may be due to shortcomings in the instrument or reporting software. It is not possible to confirm that the reported ICV was associated with the samples based on the information provided by the laboratory. Amec Foster Wheeler J qualified all detected and UJ qualified all nondetected PAH results from these samples because of a lack of verifiable QC. (J/UJ-NQ)
- Benzo(e)pyrene (79.4%), biphenyl (77%), chrysene (75%), 1-methylnaphthalene (76.2% and 73.1%), 2-methylnaphthalene (78% and 74.4%), and naphthalene (73.4% and 69.1%) recoveries were low in a CCV associated with the analysis of samples B13 8033, B13-8073, B13-8087, B13-8093, B13-8095, B13-8096, B13-8098, B13-8099, B13-8100, B13-8109, B13-8118, and B13-8122. Amec Foster Wheeler J qualified the detected results and UJ qualified the nondetected results for these analytes in these samples because of potentially low analytical bias. (J/UJ-LC)
- Acenaphthene (79%), acenaphthylene (59%), benzo(a)anthracene (131%), biphenyl (52%), chrysene (136%), 2,6-dimethylnaphthalene (64%), 1-methylnaphthalene (76%), 2-methylnaphthalene (75%), and naphthalene (74%) recoveries were outside QAM-specified limits in the CCV associated with the analysis of samples B13-8145, B13 8146, B13-8151,

B13-8152, B13-8156, B13-8159, B13-8160, B13-8163, B13 8233, B13 8236, B13-8239, B13 8259, B13-8263, B13 8265, and B13 8267. Data limitations are summarized below.

- Amec Foster Wheeler J qualified the detected and UJ qualified the nondetected acenaphthene, acenaphthylene, biphenyl, 2,6-dimethylnaphthalene, 1 methylnaphthalene, 2 methylnaphthalene, and naphthalene results from the associated samples because of potentially low analytical bias. (J/UJ-LC)
- Amec Foster Wheeler J qualified the detected benzo(a)anthracene and chrysene results from the associated samples because of potentially high analytical bias. (J-CH) Nondetected results for these analytes were not qualified the associated samples and data usability is not adversely affected by the potentially high analytical bias.
- Benzo(a)anthracene (149%), benzo(b)fluoranthene (129%), benzo(k)fluoranthene (128%), benzo(a)pyrene (126%), chrysene (153%), and perylene (124%) recoveries were high in a CCV associated with the analysis of samples B13-8145, B13-8146, B13 8151, B13-8152, B13-8156, B13-8159, B13-8160, and B13-8163. Amec Foster Wheeler J qualified the detected results for these analytes in these samples because of potentially high analytical bias. (J-CH) Nondetected results were not qualified and data usability is not adversely affected by the potentially high analytical bias.

#### 7.1.6 Laboratory Blanks

Target analytes were not detected in the laboratory blanks associated with the analysis of these samples. It should be noted that the laboratory blanks associated with the sediment samples were listed as deionized water in the laboratory reports and the results were reported in nanograms per gram (ng/g) or micromoles per gram ( $\mu\text{mol/g}$ ) on a dry weight basis.

#### 7.1.7 Equipment and Field Blanks

Target analytes were not detected in the equipment and field blanks associated with the analysis of these samples, with the following exceptions:

- 2-Methylnaphthalene (1.8 nanograms per liter [ng/L]) and naphthalene (2.5 ng/L) were detected in equipment blank B13-VVEB, associated with samples B13-8085\_Sed, B13 8102\_Sed, B13 8105\_Sed, B13-8106\_Sed, B13-8108\_Sed, B13-8113\_Sed, and B13-8116\_Sed, B13-8117\_Sed. Data limitations are summarized below.
  - Amec Foster Wheeler U qualified the detected 2-methylnaphthalene results from samples B13 8102\_Sed (3.7 ng/g) and B13-8116\_Sed (2.4 ng/g) because the concentrations detected in the samples were less than 5 times the concentrations detected in the blank. (U-RB)

- Amec Foster Wheeler U qualified the detected naphthalene results from samples B13-8102\_Sed (6 ng/g), B13-8106\_Sed (3.2 ng/g), B13-8113\_Sed (2.4 ng/g), B13-8116\_Sed (2.9 ng/g), and B13-8117 (2.4 ng/g) because the concentrations detected in the samples were less than 5 times the concentrations detected in the blank. (U-RB)
- 2-Methylnaphthalene and/or naphthalene were not detected in the remaining samples and data usability is not adversely affected.

### 7.1.8 Laboratory Control Sample Accuracy and Precision

LCS/LCSD recoveries were within the laboratory-specified 70 to 130% limits and RPDs were less than or equal to the QAM-specified maximum of 30%, with the following exceptions.

#### ***Sediment Samples***

- Dicofol (141%-LCSD), endosulfan I (46% and 51%), endosulfan II (60% and 66%), endrin aldehyde (4% and 26%), fipronil (144%-LCSD), fipronil sulfone (144%-LCSD), PCB 123 (137%-LCSD), PCB 126 (131%-LCSD), PCB 169 (153% and 158%), and trans-permethrin (68%-LCS) recoveries were outside QAM-specified limits in the LCSs and/or LCSDs associated with the analysis of samples B13-8013\_Sed, B13-8014\_Sed, B13-8028\_Sed, B13-8030\_Sed, B13-8033\_Sed, B13-8036\_Sed, B13-8038\_Sed, B13-8040\_Sed, B13-8052\_Sed, B13-8060\_Sed, B13-8078\_Sed, B13-8093\_Sed, B13-8109\_Sed, B13-8118\_Sed, and B13-8122\_Sed. Data limitations are summarized below.
  - Amec Foster Wheeler J qualified the detected results and UJ qualified the nondetected results for endosulfan I, endosulfan II, and trans-permethrin in the associated samples because of potentially low analytical bias. (J/UJ-LL)
  - Amec Foster Wheeler R qualified and rejected nondetected results and J qualified detected results for endrin aldehyde in the associated samples because of the extremely low LCS recovery. (R/J-LL)
  - Amec Foster Wheeler J qualified detected dicofol, fipronil, fipronil sulfone, PCB 123, PCB 126, and PCB 169 results from the associated samples because of potentially high analytical bias. (J-HL) Nondetected results for these analytes were not qualified and data usability is not adversely affected by the potentially high analytical bias.
- RPDs between results were high for endrin aldehyde (147%) and fipronil desulfinyl (33%) in the LCSs and LCSDs associated with the analysis of samples B13-8013\_Sed, B13-8014\_Sed, B13-8028\_Sed, B13-8030\_Sed, B13-8033\_Sed, B13-8036\_Sed, B13-8038\_Sed, B13-8040\_Sed, B13-8052\_Sed, B13-8060\_Sed, B13-8078\_Sed, B13-8093\_Sed, B13-8109\_Sed, B13-8118\_Sed, and B13-8122\_Sed. These analytes were not detected in the associated samples and data usability is not adversely affected by the potential analytical imprecision.

- Allethrin (167% and 199%), bifenthrin (189% and 218%), cyhalothrin (154% and 161%), danitol (250% and 277%), endosulfan I (58%-LCS), endrin (133% and 124%), endrin aldehyde (2% and 76%), esfenvalerate (138% and 141%), fenvalerate (131% and 134%), fipronil (163% and 170%), fluoranthene (131%-LCS), heptachlor (151%-LCS), PCB 114 (135%-LCS), PCB 118 (135%-LCS), PBDE 017 (55%-LCSD), PBDE 049 (55%-LCS), PBDE 071 (65%-LCS), PBDE 099 (140%-LCSD), PBDE 100 (135%), cis-permethrin (134% and 147%), phenanthrene (140%-LCS), prallethrin (219% and 249%), and resmethrin (270% and 257%) recoveries were outside QAM-specified limits in the LCSs and/or LCSDs associated with the analysis of samples B13-8017\_Sed, B13-8020\_Sed, B13 8029\_Sed, B13-8049\_Sed, B13-8050\_Sed, B13-8056\_Sed, B13 8064\_Sed, B13-8065\_Sed, B13-8069\_Sed, B13-8074\_Sed, B13-8075\_Sed, B13 8076\_Sed, and B13-8077\_Sed. Data limitations are summarized below.
  - Amec Foster Wheeler J qualified the detected results and UJ qualified the nondetected results for endosulfan I, PBDE 017, PBDE 049, and PBDE 071 from the associated samples because of potentially low analytical bias. (J/UJ-LL)
  - Amec Foster Wheeler R qualified and rejected the nondetected and J qualified the detected endrin aldehyde results from the associated samples because of the extremely low LCS recovery. (R/J-LL)
  - Amec Foster Wheeler J qualified the detected allethrin, bifenthrin, cyhalothrin, danitol, endrin, esfenvalerate, fenvalerate, fipronil, fluoranthene, heptachlor, PCB 114, PCB 118, PBDE 099, PBDE 100, cis-permethrin, phenanthrene, prallethrin, and resmethrin results from the associated samples because of potentially high analytical bias. (J HL) Nondetected results for these analytes were not qualified and data usability is not adversely affected by the potentially high analytical bias.
- RPDs between results were high for acenaphthylene (29%), PCB 114 (30%), PCB 118 (30%), PCB 128 (34%), PCB 169 (30%), PCBs 199 and 200 (29%), PCB 206 (29%), PCB 209 (32%), PBDE 017 (31%), PBDE 049 (37%), and PBDE 209 (30%) in the LCSs and LCSDs associated with the analysis of samples B13-8017\_Sed, B13-8020\_Sed, B13 8029\_Sed, B13-8049\_Sed, B13-8050\_Sed, B13-8056\_Sed, B13-8064\_Sed, B13 8065\_Sed, B13-8069\_Sed, B13-8074\_Sed, B13-8075\_Sed, B13-8076\_Sed, and B13-8077\_Sed. Amec Foster Wheeler J qualified the detected results for these analytes in the associated samples because of potential analytical imprecision. (J-HD) Nondetected results for these analytes were not qualified and data usability is not adversely affected by the potential analytical imprecision.
- Danitol (63%-LCS), endosulfan I (45% and 27%), endosulfan II (68% and 58%), endrin aldehyde (12% and 16%), and resmethrin (26% and 31%) recoveries were outside QAM-specified limits in the LCSs and LCSDs associated with the analysis of samples B13-8018\_Sed, B13-8031\_Sed, B13-8045\_Sed, B13-8053\_Sed, B13-8058\_Sed, B13

8068\_Sed, B13 8073\_Sed, B13-8087\_Sed, B13-8090\_Sed, B13 8095\_Sed, B13 8096\_Sed, B13-8098\_Sed, B13-8099\_Sed, and B13-8100\_Sed. Amec Foster Wheeler J qualified the detected and UJ qualified the nondetected Danitol, endosulfan I, endosulfan II, endrin aldehyde, and resmethrin results from the associated samples because of potentially low analytical bias. (J/UJ-LL)

- RPDs between results were high for acenaphthene (33%), acenaphthylene (38%), anthracene (34%), biphenyl (42%), 2,6-dimethylnaphthalene (42%), dibenz(a,h)anthracene (33%), dibenzothiophene (33%), endosulfan I (50%), fluoranthene (33%), indeno(1,2,3-cd)pyrene (41%), 1-methylnaphthalene (44%), 2 methylnaphthalene (44%), naphthalene (42%), phenanthrene (32%), and pyrene (31%) in the LCSs and LCSDs associated with the analysis of samples B13-8018\_Sed, B13-8031\_Sed, B13-8045\_Sed, B13-8053\_Sed, B13-8058\_Sed, B13-8068\_Sed, B13 8073\_Sed, B13-8087\_Sed, B13-8090\_Sed, B13 8095\_Sed, B13-8096\_Sed, B13 8098\_Sed, B13-8099\_Sed, and B13-8100\_Sed. Amec Foster Wheeler J qualified the detected results for these analytes in the associated samples because of potential analytical imprecision. (J-HD) Nondetected results for these analytes were not qualified and data usability is not adversely affected by the potential analytical imprecision.
- Fipronil sulfide (68%-LCSD), PBDE 209 (131%-LCSD), PCB 169 (131%), and resmethrin (69%-LCS) recoveries were outside QAM-specified limits in the LCSs or LCSDs associated with the analysis of samples B13-8145\_Sed, B13-8146\_Sed, B13 8151\_Sed, B13 8152\_Sed, B13-8156\_Sed, B13 8157\_Sed, B13-8159\_Sed, B13 8160\_Sed, B13-8163\_Sed, B13-8233\_Sed, B13 8236\_Sed, B13 8239\_Sed, B13 8259\_Sed, B13-8263\_Sed, B13 8265\_Sed, and B13-8267\_Sed. Data limitations are summarized below.
  - Amec Foster Wheeler UJ qualified the nondetected Fipronil sulfide and resmethrin results from the associated samples because of potentially low analytical bias. (UJ-LL)
  - PCB 169 and PBDE 209 were not detected in the associated samples and data usability is not adversely affected by the potentially high analytical bias.

It should be noted that the sample matrix for the LCSs associated with the sediment samples is listed as being deionized water in the laboratory report and the results are reported on a dry weight basis.

### **Water Samples**

The LCSs associated with the PAH analysis of the water samples were spiked at concentrations equivalent to the highest point in the calibration curve. While this practice technically meets method-specified QC criteria, confirming analytical performance at the highest point in the curve does not provide adequate confirmation of analytical performance over the calibration range.



- 1-Methylnaphthalene (68% and 68%), 2-methylnaphthalene (66% and 67%), and naphthalene (63% and 62%) recoveries were low in the LCS and LCSD associated with the analysis of samples B13-8017, B13-8020, B13 8029, B13-8049, B13-8050, B13 8056, B13-8064, B13-8065, B13-8066, B13 8069, B13-8074, B13-8075, B13-8076, and B13-8077. Amec Foster Wheeler J qualified the detected and UJ qualified the nondetected results for these analytes in the associated samples because of potentially low analytical bias. (J/UJ-LL).
- Acenaphthene (57%-LCSD), acenaphthylene (58%-LCSD), biphenyl (68% and 55%), dibenzothiophene (69%-LCSD), 2,6-dimethylnaphthalene (57%), fluorene (64%-LCSD), 1-methylnaphthalene (62% and 50%), 2-methylnaphthalene (63% and 51%), naphthalene (56% and 44%), and 2,3,5-trimethylnaphthalene (62%-LCSD) recoveries were low in the LCS and/or LCSD associated with the analysis of samples B13-8031, B13-8045, B13-8058, B13-8068, and B13-8090. Amec Foster Wheeler J qualified the detected results and UJ qualified the nondetected results for these analytes in these samples because of potentially low analytical bias. (J/UJ-LL)
- Naphthalene recoveries were low at 68% and 67% in the LCS and LCSD associated with the analysis of samples B13-8033, B13-8073, B13-8087, B13-8093, B13-8095, B13-8096, B13-8098, B13-8099, B13-8100, B13-8109, B13-8118, and B13-8122. Amec Foster Wheeler J qualified the detected and UJ qualified the nondetected naphthalene results from these samples because of potentially low analytical bias. (J/UJ-LL)
- MTBE recovery was high at 132% in the LCSD associated with the analysis of samples B13-8085, B13-8102, B13-8105, B13-8106, B13-8108, B13-8111, B13-8112, B13-8113, B13-8116, B13-8117, B13-8121, B13-8123, B13-8124, B13-8127, B13-8128, and B13 8500. MTBE was not detected in these samples and data usability is not adversely affected by the potentially high analytical bias.
- Benzo(b)fluoranthene (133%-LCSD) and naphthalene (58%-LCS) recoveries were outside laboratory-specified limits in the LCS or LCSD associated with the analysis of samples B13-8145, B13-8146, B13-8151, B13-8152, B13-8156, B13-8157, B13-8159, B13-8160, B13-8163, B13-8233, B13-8236, B13-8239, B13-8259, B13-8263, B13 8265, and B13 8267. Data limitations are summarized below.
  - Amec Foster Wheeler J qualified the detected benzo(b)fluoranthene results from the associated samples because of potentially high analytical bias. (J-HL) Nondetected benzo(b)fluoranthene results from the associated samples were not qualified and data usability is not adversely affected by the potentially high analytical bias.
  - Amec Foster Wheeler J qualified the detected and UJ qualified the nondetected naphthalene results from the associated samples because of potentially low analytical bias. (J/UJ-LL)

- The RPD between naphthalene results was high at 32% in the LCS and LCSD associated with the analysis of samples B13-8145, B13-8146, B13-8151, B13-8152, B13-8156, B13-8157, B13-8159, B13-8160, B13-8163, B13-8233, B13-8236, B13-8239, B13-8259, B13-8263, B13 8265, and B13 8267. Amec Foster Wheeler J qualified the detected naphthalene results from the associated samples because of potential analytical imprecision. (J-HD) Nondetected naphthalene results were not qualified and data usability is not adversely affected by the potential analytical imprecision.

### 7.1.9 Certified Reference Materials

Physis analyzed CRMs for chlorinated pesticides, PAHs, and PCB congeners. Analyte recoveries were within the QAM-specified 60 to 140% limits, with the following exceptions:

- Benzo(a)pyrene (58%), 2,4'-DDE (173%), dibenz(a,h)anthracene (168%), PBDE 154 (208%), and perylene (54%) recoveries were outside laboratory-specified limits in the CRM associated with the analysis of samples B13-8013\_Sed, B13-8014\_Sed, B13 8028\_Sed, B13 8030\_Sed, B13-8036\_Sed, B13-8038\_Sed, B13-8040\_Sed, B13 8052\_Sed, B13-8060\_Sed, B13 8078\_Sed, B13-8093\_Sed, B13-8109\_Sed, B13 8118\_Sed, and B13-8122\_Sed. Data limitations are summarized below.
  - Amec Foster Wheeler J qualified the detected and UJ qualified the nondetected benzo(a)pyrene and perylene results from the associated samples because of potentially low analytical bias. (J/UJ-LP)
  - Amec Foster Wheeler J qualified the detected 2,4'-DDE, dibenz(a,h)anthracene, and PBDE 154 results from the associated samples because of potentially high analytical bias. (J HP) Nondetected results for these analytes were not qualified and data usability is not adversely affected by the potentially high analytical bias.
- Gamma-chlordane (37%), 4,4'-DDT (53%), fluorene (160%), and PCB 118 (48%) recoveries were outside laboratory-specified limits in the CRMs associated with the analysis of samples B13-8017\_Sed, B13-8020\_Sed, B13 8029\_Sed, B13-8049\_Sed, B13-8050\_Sed, B13-8056\_Sed, B13-8064\_Sed, B13-8065\_Sed, B13-8069\_Sed, B13 8074\_Sed, B13-8075\_Sed, B13-8076\_Sed, and B13-8077\_Sed. Data limitations are summarized below.
  - Amec Foster Wheeler J qualified the detected fluorene results the associated samples because of potentially high analytical bias. (J-HP) Nondetected fluorene results were not qualified and data usability is not adversely affected by the potentially high analytical bias.
  - Amec Foster Wheeler J qualified the detected and UJ qualified the nondetected gamma-chlordane, 4,4'-DDT, and PCB 118 results from the associated samples because of potentially low analytical bias. (J/UJ-LP)



- PCB 195 (253%), PBDE 154 (148%), and PBDE 209 (269%) recoveries were high in the CRMs associated with the analysis of samples B13-8145\_Sed, B13-8146\_Sed, B13-8151\_Sed, B13 8152\_Sed, B13-8156\_Sed, B13 8157\_Sed, B13-8159\_Sed, B13 8160\_Sed, B13-8163\_Sed, B13-8233\_Sed, B13 8236\_Sed, B13 8239\_Sed, B13 8259\_Sed, B13 8263\_Sed, B13-8265\_Sed, and B13-8267\_Sed. Data limitations are summarized below.
  - Amec Foster Wheeler J qualified the detected PBDE 154 results from samples B13 8259\_Sed, B13-8263\_Sed, B13-8265\_Sed, and B13 8267\_Sed because of potentially high analytical bias. (J-HP)
  - PBDE 154 was not detected in the remaining samples and data usability is not adversely affected by the potentially high analytical bias.
  - PCB 195 and PBDE 209 were not detected in the associated samples and data usability is not adversely affected by the potentially high analytical bias.

#### 7.1.10 Matrix Spikes/Matrix Spike Duplicate Accuracy and Precision

Physis performed MSs on sediment samples B13-8013\_Sed, B13 8014\_Sed, B13-8049\_Sed, B13 8058\_Sed, B13-8065\_Sed, and B13 8236\_Sed; water samples B13-8052, B13-8085, B13 8093, and B13-8127; and Sunstar performed MSs on sample B13-8075, B13-8145. Recoveries were within the laboratory-specified 50 to 150% limits for PAHs or QAM-specified 70 to 130% limits for other analytes and RPDs between MS and MSD results were less than the QAM-specified maximum of 30%, with the following exceptions.

##### ***Sediment Samples***

- RPDs between results were high for PBDE 017 (40%), PBDE 028 (35%), PBDE 047 (36%), PBDE 049 (46%), PBDE 066 (42%), PBDE 071 (40%), PBDE 085 (35%), PBDE 099 (38%), PBDE 100 (36%), PBDE 153 (42%), and PBDE 154 (32%) in the MS and MSD performed on sample B13-8013\_Sed. Data limitations are summarized below.
  - Amec Foster Wheeler J qualified the detected PBDE 066 and PBDE 071 results from this sample because of potential analytical imprecision. (J-HD)
  - The remaining analytes were not detected in the unspiked native sample and data usability is not adversely affected by the potential analytical imprecision.
- Bifenthrin (136%-MSD), endosulfan I (48% and 40%), endosulfan II (65% and 65%), endrin aldehyde (10% and 12%), fipronil (147%-MS), fipronil desulfinyl (134%-MS), fipronil sulfide (148%-MS), fipronil sulfone (135%-MSA), methoxychlor (133%-MSD), PCB 126 (135%-MS), PCB 169 (146% and 141%), PBDE 017 (166%-MS), PBDE 028 (149%-MS), PBDE 049 (62%-MSD), PBDE 066 (133%-MS), PBDE 138 (62%-MSD), PBDE 209 (56% and 40%), cis-permethrin (149% and 177%), and trans-permethrin (132% and 167%) recoveries

were outside QAM-specified limits in the MS and/or MSD performed on sample B13-8014\_Sed. Data limitations are summarized below.

- Amec Foster Wheeler J qualified the detected PCB 169 result from this sample because of potentially high analytical bias. (J-HM)
- Amec Foster Wheeler UJ qualified the nondetected endosulfan I, endosulfan II, PBDE 049, PBDE 138, and PBDE 209 results from this sample because of potentially low analytical bias. (J-LM)
- The endrin aldehyde result from this sample was previously R qualified and rejected because of extremely low LCS recovery. Further qualification is not warranted.
- The remaining analytes were not detected in the unspiked native sample and data usability is not adversely affected by the potentially high analytical bias.
- Allethrin (233% and 288%), bifenthrin (248% and 397%), cyfluthrin (142%-MSD), cyhalothrin (143% and 166%), cypermethrin (142%-MSD), danitol (277% and 393%), deltamethrin/Tralomethrin (45% and 43%), dicofol (137% and 132%), endosulfan I (60% and 68%), endrin (133% and 136%), endrin aldehyde (0% and 2%), fenvalerate (141% and 160%), fipronil (148% and 148%), heptachlor (154% and 146%), PBDE 049 (55% and 55%), PBDE 071 (65%-MSD), cis-permethrin (190% and 240%), trans-permethrin (174% and 229%), perylene (48%-MS), prallethrin (255% and 407%), and resmethrin (6% and 7%) recoveries were outside QAM-specified limits in the MS and/or MSD performed on sample B13-8049\_Sed. Data limitations are summarized below.
  - Amec Foster Wheeler UJ qualified the nondetected deltamethrin/Tralomethrin, endosulfan I, PBDE 049, and PBDE 071 results from sample B13-8049\_Sed because of potentially low analytical bias. (UJ-LM)
  - Amec Foster Wheeler R qualified and rejected the nondetected endrin aldehyde and resmethrin results from sample B13-8049\_Sed because of the extremely low MS and MSD recoveries. (R-LM)
  - Allethrin, bifenthrin, cyfluthrin, cyhalothrin, cypermethrin, dicofol, fenvalerate, fipronil, heptachlor, cis-permethrin, trans-permethrin, and prallethrin were not detected in the unspiked native sample and data usability is not adversely affected by the potentially high analytical bias.
- RPDs between results were high for benzo(a)anthracene (33%), bifenthrin (46%), chrysene (42%), Danitol (35%), PCB 003 (29%), PCB 018 (26%), PCB 189, perylene (40%), and prallethrin (46%) in the MS and MSD performed on sample B13-8049\_Sed. Data limitations are summarized below.
  - Amec Foster Wheeler J qualified the detected benzo(a)anthracene, chrysene, and perylene results from sample B13-8049\_Sed because of potential analytical imprecision. (J-HD)

- The remaining analytes were not detected in the unspiked native sample and data usability is not adversely affected by the potential analytical imprecision.
- Cypermethrin (63%-MS), endosulfan I (56% and 41%), endosulfan II (69%-MSD), endrin aldehyde (23% and 14%), PBDE 099 (136%-MS), PBDE 154 (135% and 132%), and resmethrin (37% and 35%) recoveries were outside QAM-specified limits in the MS and/or MSD performed on sample B13-8058\_Sed. Data limitations are summarized below.
  - Amec Foster Wheeler UJ qualified the nondetected cypermethrin, endosulfan I, endosulfan II, endrin aldehyde, and resmethrin results from this sample because of potentially low analytical bias. (UJ-LM)
  - Amec Foster Wheeler J qualified the detected PBDE 099 result from this sample because of potentially high analytical bias. (J-HM)
  - PBDE 154 was not detected in the unspiked native sample and data usability is not adversely affected by the potentially high analytical bias.
- RPDs between results were high for endosulfan I (31%) and endrin aldehyde (49%) in the MS and MSD performed on sample B13-8058\_Sed. These analytes were not detected in the unspiked native sample and data usability is not adversely affected by the potential analytical imprecision.
- Aldrin (64%-MS), Dicofol (163% and 173%), endosulfan I (44% and 42%), endosulfan II (65% MS), endrin aldehyde (6%/11%), fipronil (69%-MS), fipronil desulfinyl (49% and 48%), fipronil sulfide (55%/55%), PBDE 017 (132%-MSD), PBDE 209 (67% and 65%), trans-permethrin (139%-MSD), prallethrin (56%/57%), and resmethrin (58% and 58%) recoveries were outside QAM-specified limits in the MS and/or MSD performed on sample B13 8236\_Sed. Data limitations are summarized below.
  - Amec Foster Wheeler R qualified and rejected the nondetected endrin aldehyde result from this sample because of extremely low MS recovery. (R-LM)
  - Amec Foster Wheeler UJ qualified the nondetected aldrin, endosulfan I, endosulfan II, fipronil, fipronil desulfinyl, fipronil sulfide, PBDE 209, prallethrin, and resmethrin results from this sample because of potentially low analytical bias. (UJ-LM)
  - Dicofol, PBDE 017, and trans-permethrin recoveries were high and these analytes were not detected in the unspiked native sample. Data usability is not adversely affected by the potentially high analytical bias.

### **Water Samples**

The MSs associated with the PAH analysis of the water samples were spiked at concentrations equivalent to the highest point in the calibration curve. While this practice technically meets

method-specified QC criteria, confirming analytical performance at the highest point in the curve does not provide adequate confirmation of analytical performance over the calibration range.

- RPDs for benzo(a)anthracene (42%), benzo(g,h,i)perylene (32%), chrysene (31%), indeno(1,2,3-cd)pyrene, and 1-methylphenanthrene (32%) were high in the MS and MSD performed on sample B13-8127. These analytes were not detected in the unspiked native sample and data usability is not adversely affected by the potential analytical imprecision.
- MTBE recoveries were high at 139% and 146% in the MS and MSD performed on sample B13-8145. MTBE was not detected in the unspiked native sample and data usability is not adversely affected by the potentially high analytical bias.

### 7.1.11 Surrogate Recoveries

#### ***Sediment Samples***

Physis reported three sets of surrogate QC limits: 25 to 125% for naphthalene-d8 or 50 to 150% for all other surrogates in field samples and MSs, 70 to 130% for laboratory blanks and LCSs, and 60 to 140% for CRMs. Surrogate recoveries were within laboratory-specified limits with the following exceptions:

- Recovery of the surrogate compound tetrachloro-m-xylene (TCMX) was low at 46% in sample B13-8031\_Sed. Amec Foster Wheeler J qualified the detected and UJ qualified the nondetected chlorinated pesticide results from this sample because of potentially low analytical bias. (J/UJ-LS)

#### ***Water Samples***

Surrogate recoveries were within the laboratory's 25 to 125% limits for naphthalene-d8 or 50 to 150% limits for other analytes, with the following exceptions:

- Recovery of the surrogate compound Chrysene-d12 was high at 160% in sample B13 8267. Up to one surrogate can be outside of limits without affecting data usability and Amec Foster Wheeler did not qualify data based on the high surrogate recovery.

### 7.1.12 Internal Standard Recoveries

Physis adds a constant mass of internal standard to each sample and standard, but does not concentrate all extracts to the same final volume. It is therefore not possible to evaluate data usability for the organic analyses based in internal standard area counts.

### 7.1.13 Laboratory Duplicates

Physis performed duplicate analyses of sediment samples B13-8013\_Sed and B13 8065\_Sed for toxaphene; B13-8014\_Sed, B13-8049\_Sed, B13-8058\_Sed, and B13-8236\_Sed for aroclors, chlorinated pesticides, fipronil and degradates, PAHs, PBDEs, PCB congeners, and pyrethroid pesticides; and water samples B13-8052, B13-8085, B13-8093, and B13-8127 for PAHs. RPDs between duplicate results were less than the QAM-specified maximum of 30%, or the differences between analyte concentrations were less than applicable RLs, with the following exceptions:

- RPDs were high for PCB 095 (60%), PCB 138 (32%), and PCB 149 (52%) in the duplicate analysis of sample B13-8014\_Sed. Amec Foster Wheeler J qualified the detected results for these analytes in this sample because of potential analytical imprecision. (J HD)
- RPDs were high for anthracene (26%), 2-methylnaphthalene (26%), PCB 099 (47%), PCB 101 (28%), PCB 110 (31%), PCB 149 (39%), PCB 153 (26%), PCB 158 (135%), PCB 170 (28%), PCB 174 (33%), PCB 177 (82%), PCB 180 (26%), PCB 183 (123%), and PCB 187 (43%) in the duplicate analysis of sample B13-8049\_Sed. Amec Foster Wheeler J qualified the detected results for these analytes in this sample because of potential analytical imprecision. (J-HD)
- The RPD was high for PCB 099 in the duplicate analysis of sample B13-8058\_Sed. Amec Foster Wheeler J qualified the detected PCB 099 result from this sample because of potential analytical imprecision. (J-HD)
- RPDs were high for 4,4'-DDE (58%), fluoranthene (61%), and pyrene (70%) in the duplicate analyses of sample B13-8236\_Sed. Amec Foster Wheeler J qualified the detected results for these analytes in this sample because of potential analytical imprecision. (J HD)
- PBDE 099 was not detected in the initial analysis of sample B13-8236\_Sed, but was detected at a concentration of 0.11 ng/g in the duplicate analysis. The difference between the detected concentration and the MDL of 0.05 ng/g is greater than the RL of 0.1 ng/L. Amec Foster Wheeler UJ qualified the nondetected PBDE 099 result from this sample because of potential analytical imprecision. (UJ-HD)

### 7.1.14 Data Reporting and Analytical Procedure

Physis' reported Aroclor results are based on the PCB congener results and not specific Aroclor analyses. Physis did not provide documentation proving the accuracy of the reported Aroclor concentrations and Amec Foster Wheeler has J qualified all detected Aroclor results and UJ qualified all nondetected Aroclor results as being estimated concentrations. (J/UJ-EM)

Physis originally reported that the chlorinated pesticide, PAH, and PCB congener analyses of samples B13-8145\_Sed, B13-8146\_Sed, B13-8151\_Sed, B13 8152\_Sed, B13-8156\_Sed, B13

8157\_Sed, B13-8159\_Sed, B13-8160\_Sed, B13-8163\_Sed, B13-8233\_Sed, B13-8236\_Sed, B13-8239\_Sed, B13-8259\_Sed, B13 8263\_Sed, B13-8265\_Sed, and B13-8267\_Sed took place on October 24, 2013. Physis reissued the laboratory reports with the same results, but changed the samples' analysis dates to November 3 and 4, 2014. The laboratory did not provide documentation or justification for the date changes.

Physis J qualified analytes with concentrations between the MDL and the RL. Amec Foster Wheeler agrees that these results are quantitatively uncertain and maintained Physis' J qualifiers. (J-DL)

## **7.2 INORGANIC ANALYSES**

Inorganic (ammonia, AVS, metals, percent solids, TOC, total nitrogen, and total phosphorus) results generated by Physis and IIRMES may be considered usable with the limitations described in Sections 7.2.1 through 7.2.10.

### **7.2.1 Holding Times**

#### ***Sediment Samples***

According to the laboratory, sediment samples were frozen upon receipt. Samples were analyzed within the QAM-specified maximum holding times of six months for grain size and mercury or one year for metals. The QAM did not list hold times for ammonia, AVS, total nitrogen, or total phosphorus. Amec Foster Wheeler chose to evaluate the hold times for these analysis against the more conservative QAM-specified hold time of 6 months.

#### ***Water Samples***

Aqueous samples were prepared and analyzed within the method-specific recommended maximum holding times of 48 hours for MBAS, nitrate, and orthophosphate; 7 days for TDS; 28 days for ammonia, DOC, mercury, oil and grease, and TOC; and 6 months for metals, with the following exceptions:

- Physis did not provide sample preparation times and it is not possible to determine whether MBAS and orthophosphate analyses were performed within 48 hours of sampling. However, these analyses were performed within two days of sampling.
- Physis performed nitrate analyses on all samples within two days of sampling and then acid preserved the samples. These acid preserved samples were then analyzed for total nitrate and nitrite within the EPA-recommended maximum holding time of 28 days from sampling.



Physis' reported nitrate results are the differences between the total nitrate/nitrite concentrations and the nitrite concentrations.

### 7.2.2 Initial Calibration

ICALs associated with the inorganic analyses of these samples met method-specified criteria, with the following exception:

- According to Physis' case narrative, a point from the middle of the metals curve was excluded because the calibration standard was not spiked with internal standard. The curve should have been reanalyzed to include all calibration standards. Amec Foster Wheeler did not qualify any data based on the missing data point.

### 7.2.3 Initial and Continuing Calibration Verification

Calibration Verification recoveries were within the QAM-specified 90 to 110% limits, with the following exceptions.

#### ***Sediment Samples***

- Aluminum and iron recoveries were high at 135% and 123%, respectively in a CCV associated with the analysis of samples B13-8017\_Sed, B13-8020\_Sed, B13 8029\_Sed, B13-8049\_Sed, B13-8050\_Sed, B13-8056\_Sed, B13-8064\_Sed, B13 8065\_Sed, B13-8066\_Sed, B13-8069\_Sed, B13-8145\_Sed, B13-8146\_Sed, B13 8151\_Sed, B13 8152\_Sed, B13-8156\_Sed, B13 8157\_Sed, B13-8159\_Sed, B13 8160\_Sed, B13-8163\_Sed, B13-8233\_Sed, B13-8236\_Sed, B13-8239\_Sed, B13 8259\_Sed, B13-8263\_Sed, B13-8265\_Sed, and B13-8267\_Sed. It is not possible to associate the CCV with specific samples based on the information provided by Physis and Amec Foster Wheeler J qualified the detected aluminum and iron results from the associated samples because of potentially high analytical bias. (J-CH)
- Many of the total metals CCVs had date stamps earlier than the dates reported with the metals results. It is possible that this is due to shortcomings with the reporting software. CCV recoveries were generally acceptable and Amec Foster Wheeler did not qualify data based on this issue, with the following exceptions:
  - Barium recovery was high at 114% in CCVs associated with the analysis of samples B13-8013\_Sed, B13-8014\_Sed, B13-8018\_Sed, B13-8028\_Sed, B13-8030\_Sed, B13-8033\_Sed, B13 8036\_Sed, B13-8038\_Sed, B13-8040\_Sed, B13-8045\_Sed, B13 8052\_Sed, B13-8053\_Sed, B13 8058\_Sed, B13-8060\_Sed, B13-8068\_Sed, B13 8078\_Sed, B13-8085\_Sed, B13-8090\_Sed, B13-8102\_Sed, B13-8105\_Sed, B13-8106\_Sed, B13-8108\_Sed, B13-8111\_Sed, B13-8112\_Sed, B13-8113\_Sed, B13-8116\_Sed, B13-8117\_Sed, B13-8121\_Sed, B13-8123\_Sed, B13-8124\_Sed, B13-8127\_Sed, B13-8128\_Sed, and B13 8500\_Sed. Amec Foster Wheeler J qualified the



detected barium results from these samples because of potentially high analytical bias.  
(J-CH)

- Mercury recoveries were low at 87.3% and 87% in the CCVs associated with the analysis of samples B13-8031\_Sed, B13-8045\_Sed, B13-8058\_Sed, B13-8068\_Sed, B13-8073\_Sed, B13-8087\_Sed, B13-8090\_Sed, B13-8093\_Sed, B13-8095\_Sed, B13 8096\_Sed, B13-8098\_Sed, B13-8099\_Sed, and B13-8100\_Sed. Amec Foster Wheeler J qualified the detected and UJ qualified the nondetected mercury results from the associated samples because of potentially low analytical bias. (UJ-LC)
- Ammonia recovery was low at 88% in the CCV associated with the analysis of samples B13-8145\_Sed, B13-8146\_Sed, B13-8151\_Sed, B13 8152\_Sed, B13-8156\_Sed, B13 8157\_Sed, B13-8159\_Sed, B13-8160\_Sed, B13-8163\_Sed, B13-8233\_Sed, B13 8236\_Sed, B13-8239\_Sed, B13-8259\_Sed, B13 8263\_Sed, B13-8265\_Sed, and B13-8267\_Sed. Amec Foster Wheeler J qualified the detected ammonia results from these samples because of potentially low analytical bias. (J-LC)
- It appears that Physis performed an ICAL for AVS, but did not check the curve with an ICV or CCV. Amec Foster Wheeler J qualified the detected and UJ qualified the nondetected AVS results from these samples because of a lack of calibration check standards. (J/UJ-NQ)
- Physis performed an ICV with the phosphorus analysis of these samples, but did not perform CCVs. Amec Foster Wheeler J qualified the detected phosphorus results and UJ qualified the nondetected phosphorus results from these samples because the curve was not confirmed throughout the analysis. (J/UJ-NQ)
- According to the IIRMES report, there was an injection error with one if the standards associated with the total nitrogen analysis of samples B13 8017\_Sed, B13-8020\_Sed, B13 8029\_Sed, B13-8049\_Sed, B13-8050\_Sed, B13-8056\_Sed, B13-8064\_Sed, B13 8065\_Sed, B13-8069\_Sed, B13-8074\_Sed, B13-8075\_Sed, B13-8076\_Sed, B13 8077\_Sed, B13-8145\_Sed, B13-8146\_Sed, B13-8151\_Sed, B13-8152\_Sed, B13 8156\_Sed, B13-8157\_Sed, B13-8159\_Sed, B13-8160\_Sed, B13-8163\_Sed, B13 8233\_Sed, B13-8236\_Sed, B13-8239\_Sed, B13-8259\_Sed, B13-8263\_Sed, B13 8265\_Sed, and B13-8267\_Sed. Amec Foster Wheeler J qualified the detected and UJ qualified the nondetected total nitrogen results from these samples because of the incomplete calibration curve. (J/UJ-BC)
- It appears that IIRMES does not perform ICVs or CCVs with the total nitrogen and TOC analyses. Amec Foster Wheeler J qualified the detected results and UJ qualified the nondetected results for these analytes because there were no calibration check standards analyzed. (J/UJ-NQ)

## **Water Samples**

- MBAS recovery was low at 85.2% in an ICV and aluminum (80% and 73.8%), antimony (89.8%), beryllium (64.7% and 57.9%), chromium (87.3%), cobalt (87.5%), manganese (88.5%), selenium (111%), titanium (88.8% and 84.8%), vanadium (86%), and zinc (88%) recoveries were outside QAM-specified limits in CCVs associated with the analysis of samples B13-8013, B13-8014, B13-8028, B13-8030, B13-8036, B13-8038, B13-8040, B13-8052, B13-8060, and B13-8078. Data limitations are summarized below.
  - Amec Foster Wheeler J qualified the detected and UJ qualified the nondetected MBAS results from the associated samples because of potentially low analytical bias. (J/UJ-LV)
  - Amec Foster Wheeler J qualified the detected and UJ qualified the nondetected aluminum, antimony, beryllium, chromium, cobalt, manganese, titanium, vanadium, and zinc results from the associated samples because of potentially low analytical bias. (J/UJ LC)
  - Amec Foster Wheeler J qualified the detected selenium results from the associated samples because of potentially high analytical bias. (J-CH) Nondetected selenium results were not qualified and data usability is not adversely affected by the potentially high analytical bias.
- MBAS recovery was low at 82% in an ICV and aluminum (80.7%), arsenic (88.7%), beryllium (71.9%), chromium (89.6%), copper (84.6%), iron (89.8%), nickel (84.7%), selenium (85.6%), titanium (85%), and vanadium (86.4%) recoveries were low in CCVs associated with the analyses of samples B13-8017, B13-8020, B13-8029, B13-8049, B13-8050, B13-8056, B13-8064, B13-8065, B13-8066, and B13-8069. Data limitations are summarized below.
  - Amec Foster Wheeler J qualified the detected and UJ qualified the nondetected MBAS results from the associated samples because of potentially low analytical bias. (J/UJ LV)
  - Amec Foster Wheeler J qualified the detected and UJ qualified the nondetected aluminum, arsenic, beryllium, chromium, copper, iron, nickel, selenium, titanium, and vanadium results from the associated samples because of potentially low analytical bias. (J/UJ LC)
- Nitrate recovery was high at 111% in an ICV and barium (115%), beryllium (71.8%), and MBAS (84.9%) recoveries were outside QAM-specified limits in CCVs associated with the analysis of samples B13-8018 and B13-8053. Data limitations are summarized below.
  - Nitrate was not detected in the associated samples and data usability is not adversely affected by the potentially high analytical bias.

- Amec Foster Wheeler J qualified the detected barium results from the associated samples because of potentially high analytical bias. (J-CH) Nondetected results were not qualified and data usability is not adversely affected by the potentially high analytical bias.
- Amec Foster Wheeler J qualified the detected and UJ qualified the beryllium and MBAS results from the associated samples because of potentially low analytical bias. (J/UJ LC)
- Nitrate recovery was high at 112% in the ICV and aluminum (80% and 73.8%), antimony (89.8%), beryllium (64.7% and 57.9%), chromium (87.3%), cobalt (87.5%), manganese (88.5%), selenium (111%), titanium (88.8% and 84.8%), vanadium (86%), and zinc (88%) recoveries were low in CCVs associated with the analysis of samples B13-8031, B13-8045, B13-8058, B13 8068, and B13-8090. Data limitations are summarized below.
  - Nitrate was not detected in the associated samples and data usability is not adversely affected by the potentially high analytical bias.
  - Amec Foster Wheeler J qualified the detected and UJ qualified the nondetected aluminum, antimony, beryllium, chromium, cobalt, manganese, titanium, vanadium, and zinc results from the associated samples because of potentially low analytical bias. (J/UJ-LC)
  - Amec Foster Wheeler J qualified the detected selenium results from the associated samples because of potentially high analytical bias. (J-CH) Nondetected results were not qualified and data usability is not adversely affected by the potentially high analytical bias.
- MBAS recovery was high at 123% in an ICV and antimony (89.8%), MBAS (83.5%), nitrate (115%), and selenium (111%) recoveries were outside QAM-specified limits in CCVs associated with the analysis of samples B13-8033, B13-8073, B13-8087, B13 8093, B13-8095, B13-8096, B13-8098, B13-8099, B13-8100, B13-8109, B13-8118, and B13-8122. Data limitations are summarized below.
  - Amec Foster Wheeler J qualified the detected MBAS results from the associated samples because of potentially high analytical bias. (J-HV)
  - Amec Foster Wheeler J qualified the detected nitrate and selenium results from the associated samples because of potentially high analytical bias. (J-CH) Nondetected nitrate and selenium results were not qualified and data usability is not adversely affected by the potentially high analytical bias.
  - Amec Foster Wheeler J qualified the detected and UJ qualified the nondetected antimony and MBAS results from the associated samples because of potentially low analytical bias. (J/UJ-LC)

- Aluminum (80%), beryllium (64.7%), and titanium (88.8%) recoveries were low in CCVs associated with the analysis of samples B13-8033, B13 8093, B13-8095, B13 8096, B13-8098, B13-8099, B13-8100, B13-8109, B13-8118, and B13-8122. Amec Foster Wheeler J qualified the detected results and UJ qualified the nondetected results for these analytes in these samples because of potentially low analytical bias. (J/UJ-LC)
- Aluminum (80% and 73.8%), beryllium (64.7% and 57.9%), chromium (87.3%), cobalt (87.4%), manganese (88.5%), titanium (88.8% and 84.8%), vanadium (86%), and zinc (88%) recoveries were low in CCVs associated with the analysis of samples B13-8073 and B13-8087. Amec Foster Wheeler J qualified the detected results and UJ qualified the nondetected results for these analytes in these samples because of potentially low analytical bias. (J/UJ-LC)
- Aluminum (80.8%), barium (115%), and beryllium (71.8% and 60.8%) recoveries were outside QAM-specified limits in CCVs associated with the analysis of samples B13 8085, B13-8102, B13-8105, B13-8106, B13-8108, B13-8111, B13-8112, B13-8113, B13-8116, B13-8117, B13-8121, B13-8123, B13-8124, B13-8127, and B13-8500. Data limitations are summarized below.
  - Amec Foster Wheeler J qualified the detected barium results from these samples because of potentially high analytical bias. (J-CH) Nondetected barium results were not qualified and data usability is not adversely affected by the potentially high analytical bias.
  - Amec Foster Wheeler J qualified the detected and UJ qualified the nondetected aluminum and beryllium results from the associated samples because of potentially low analytical bias. (J/UJ-LC)
- Silver recovery was high at 113% in and ICV and barium (116%), mercury (86.2% and 83.7%), and silver (86%) recoveries were outside QAM-specified limits in CCVs associated with the analysis of samples B13-8145, B13-8146, B13-8151, B13-8152, B13-8156, B13-8157, B13-8159, B13-8160, and B13-8163. Data limitations are summarized below.
  - Amec Foster Wheeler J qualified the detected silver results from the associated samples because of potentially high analytical bias. (J-HV)
  - Amec Foster Wheeler J qualified the detected barium results from the associated samples because of potentially high analytical bias. (J-CH)
  - Amec Foster Wheeler J qualified the detected and UJ qualified the nondetected mercury and silver results from the associated samples because of potentially low analytical bias. (J/UJ LC)
- MBAS (111%) and silver (113%) recoveries were high in ICVs; and barium (116%), beryllium (81%), mercury (86%), nitrate (112%), and silver (86%) recoveries were outside QAM-specified limits in CCVs associated with the analysis of samples B13 8074, B13-8075,

B13-8076, B13-8077, B13 8233, B13 8236, B13-8239, B13 8259, B13-8263, B13 8265, and B13-8267. Data limitations are summarized below.

- Amec Foster Wheeler J qualified the detected MBAS and silver results from the associated samples because of potentially high analytical bias. (J-HV)
- Amec Foster Wheeler J qualified the detected and UJ qualified the nondetected beryllium, mercury, and silver results from the associated samples because of potentially low analytical bias. (J/UJ LC)
- Amec Foster Wheeler J qualified the detected barium and nitrate results from the associated samples because of potentially high analytical bias. (J-CH) Nondetected barium and nitrate results were not qualified and data usability is not adversely affected by the potentially high analytical bias.
- Beryllium (80.5%), mercury (84.1% and 83.7%), and silver (86.3%) recoveries were low in CCVs associated with the analysis of samples B13 8074, B13-8075, B13-8076, and B13-8077. Amec Foster Wheeler J qualified the detected and UJ qualified the nondetected beryllium, mercury, and silver results from these samples because of potentially low analytical bias. (J/UJ-LC)
- Physis did not provide CCV or ICV results for the ammonia, MBAS, nitrate, and orthophosphate analyses of samples B13-8085, B13-8102, B13-8105, B13-8106, B13-8108, B13-8111, B13-8112, B13-8113, B13-8116, B13-8117, B13-8121, B13-8123, B13-8124, B13-8127, B13-8128, and B13-8500. Amec Foster Wheeler J qualified the detected and UJ qualified the nondetected results for these analytes in the associated samples because of a lack of QC. (J/UJ-NQ)
- Sunstar provided data for the CCVs associated with the TOC and DOC analyses, but did not provide recoveries or documentation of the CCV concentrations. Amec Foster Wheeler J qualified the detected and UJ qualified the nondetected TOC and DOC results from these samples because it is not possible to evaluate the results with the data provided. (J/UJ-NQ)

#### **7.2.4 Laboratory Blanks**

Target analytes were not detected in the laboratory blanks associated with the ammonia, DOC, MBAS, metals, mercury, nitrate, oil and grease, orthophosphate, TOC, and TDS analysis of these samples.

#### **7.2.5 Equipment and Field Blanks**

Target analytes were not detected in the equipment and field blanks associated with the analysis of these samples, with the following exceptions:

- Aluminum (33.57 micrograms per liter [ $\mu\text{g/L}$ ]), antimony (0.03  $\mu\text{g/L}$ ), arsenic (0.28  $\mu\text{g/L}$ ), barium (1.02  $\mu\text{g/L}$ ), chromium (0.17  $\mu\text{g/L}$ ), copper (0.008  $\mu\text{g/L}$ ), iron (3.91  $\mu\text{g/L}$ ), nickel (0.13  $\mu\text{g/L}$ ), silver (0.04  $\mu\text{g/L}$ ), and zinc (0.88  $\mu\text{g/L}$ ) were detected in equipment blank B13-VVEB, associated with samples B13-8085\_Sed, B13 8102\_Sed, B13 8105\_Sed, B13 8106\_Sed, B13-8108\_Sed, B13 8113\_Sed, and B13-8116\_Sed, B13-8117\_Sed. Data limitations are summarized below.
  - Amec Foster Wheeler U qualified the detected antimony result from sample B13-8018\_Sed (0.143 micrograms per gram [ $\mu\text{g/g}$ ]) because the concentration detected in the sample was less than 5 times the concentration detected in the blank. (U-RB)
  - The remaining analytes were detected in the associated samples at concentrations more than 5 times the concentrations detected in the blank and data usability is not adversely affected.
- Total chromium (0.0934  $\mu\text{g/L}$ ), total molybdenum (0.01  $\mu\text{g/L}$ ), dissolved molybdenum (0.01  $\mu\text{g/L}$ ), total nickel (0.0216  $\mu\text{g/L}$ ), total silver (0.03  $\mu\text{g/L}$ ), and dissolved silver (0.03  $\mu\text{g/L}$ ) were detected in field blank B13-FB, associated with samples B13-8017, B13-8020, and B13-8029. Data limitations are summarized below.
  - Amec Foster Wheeler U qualified the total chromium result from sample B13-8029 (0.361  $\mu\text{g/L}$ ) because the concentration detected in the sample was less than 5 times the concentration detected in the blank. (U-FB)
  - Amec Foster Wheeler U qualified the total silver results from samples B13-8017 (0.06  $\mu\text{g/L}$ ), B13 8020 (0.07  $\mu\text{g/L}$ ), and B13-8029 (0.06  $\mu\text{g/L}$ ) because the concentrations detected in the samples were less than 5 times the concentration detected in the blank. (U FB)
  - Amec Foster Wheeler U qualified the dissolved silver results from samples B13-8017 (0.05  $\mu\text{g/L}$ ), B13-8020 (0.04  $\mu\text{g/L}$ ), and B13-8029 (0.06  $\mu\text{g/L}$ ) because the concentrations detected in the samples were less than 5 times the concentration detected in the blank. (U FB)
  - The remaining analytes either were not detected in the associated samples or were detected at concentrations greater than 5 times the concentrations detected in the blank and data usability is not adversely affected.
- Total arsenic (0.005  $\mu\text{g/L}$ ), total chromium (0.0162  $\mu\text{g/L}$ ), total lead (0.0032  $\mu\text{g/L}$ ), dissolved lead (0.0028  $\mu\text{g/L}$ ), total manganese (0.01  $\mu\text{g/L}$ ), dissolved manganese (0.03  $\mu\text{g/L}$ ), total molybdenum (0.007  $\mu\text{g/L}$ ), dissolved molybdenum (0.006  $\mu\text{g/L}$ ), total nickel (0.0237  $\mu\text{g/L}$ ), total silver (0.03  $\mu\text{g/L}$ ), dissolved silver (0.02  $\mu\text{g/L}$ ), total tin (0.04  $\mu\text{g/L}$ ), dissolved tin (0.031  $\mu\text{g/L}$ ), and total zinc (0.0763  $\mu\text{g/L}$ ) were detected in equipment blank N13-NBEB, associated with samples B13-8017, B13-8020, and B13-8029. Data limitations are summarized below.



- Amec Foster Wheeler U qualified the total silver results from samples B13-8017 (0.06 µg/L), B13 8020 (0.07 µg/L), and B13-8029 (0.06 µg/L) because the concentrations detected in the samples were less than 5 times the concentration detected in the blank. (U RB)
- Amec Foster Wheeler U qualified the dissolved silver results from samples B13-8017 (0.05 µg/L), B13-8020 (0.04 µg/L), and B13-8029 (0.06 µg/L) because the concentrations detected in the samples were less than 5 times the concentration detected in the blank. (U RB)
- Amec Foster Wheeler U qualified the total tin results from samples B13-8017 (0.057 µg/L), B13 8020 (0.051 µg/L), and B13-8029 (0.026 µg/L) because the concentrations detected in the samples were less than 5 times the concentration detected in the blank. (U RB)
- Amec Foster Wheeler U qualified the dissolved tin results from samples B13-8020 (0.034 µg/L) and B13-8029 (0.03 µg/L) because the concentrations detected in the samples were less than 5 times the concentration detected in the blank. (U RB)
- The remaining analytes either were not detected in the associated samples or were detected at concentrations greater than 5 times the concentrations detected in the blank and data usability is not adversely affected.

Note that Amec Foster Wheeler compared detections in field and equipment blanks against detections in samples collected on the same day as the blanks.

## 7.2.6 Laboratory Control Sample Accuracy

### ***Sediment***

Metal LCS recoveries were within the QAM-specified 75 to 125% limits and recoveries for other inorganic analytes were within the laboratory-specified 80 to 120% limits, with the following exceptions.

### ***Sediment Samples***

- Silver recoveries were low at 47% and 58% in the LCS and LCSD associated with the analysis of samples B13-8018\_Sed and B13-8053\_Sed. Amec Foster Wheeler UJ qualified the nondetected silver results from the associated samples because of potentially low analytical bias. (J-LL)
- Total phosphorus recoveries were high at 127% and 129% in the LCS and LCSD associated with the analysis of samples B13-8074\_Sed, B13-8075\_Sed, B13 8076\_Sed, and B13-8077\_Sed. Amec Foster Wheeler J qualified the detected total phosphorus results from these samples because of potentially high analytical bias. (J-HL)



- IIRMES did not report LCS or CRM results associated with the total nitrogen analysis of samples B13 8017\_Sed, B13-8020\_Sed, B13 8029\_Sed, B13-8049\_Sed, B13 8050\_Sed, B13-8056\_Sed, B13-8064\_Sed, B13-8065\_Sed, B13-8069\_Sed, B13 8074\_Sed, B13-8075\_Sed, B13-8076\_Sed, B13-8077\_Sed, B13-8145\_Sed, B13 8146\_Sed, B13-8151\_Sed, B13-8152\_Sed, B13-8156\_Sed, B13-8157\_Sed, B13 8159\_Sed, B13-8160\_Sed, B13-8163\_Sed, B13-8233\_Sed, B13-8236\_Sed, B13 8239\_Sed, B13-8259\_Sed, B13-8263\_Sed, B13-8265\_Sed, and B13-8267\_Sed. Amec Foster Wheeler R qualified and rejected the nondetected total nitrogen results from samples B13-8029\_Sed, B13-8076\_Sed, and B13 8151\_Sed and J qualified the detected total nitrogen results from the remaining sample because of a lack of analyte-specific QC. (J/R-NQ)
- IIRMES did not report LCS or CRM results associated with the total nitrogen analysis of samples B13-8013\_Sed, B13-8014\_Sed, B13-8018\_Sed, B13-8028\_Sed, B13 8030\_Sed, B13-8031\_Sed, B13-8033\_Sed, B13-8036\_Sed, B13-8038\_Sed, B13 8040\_Sed, B13 8045\_Sed, B13-8052\_Sed, B13-8053\_Sed, B13-8058\_Sed, B13 8060\_Sed, B13 8066\_Sed, B13-8068\_Sed, B13 8073\_Sed, B13-8078\_Sed, B13 8085\_Sed, B13 8087\_Sed, B13-8090\_Sed, B13-8093\_Sed, B13-8095\_Sed, B13 8096\_Sed, B13 8098\_Sed, B13-8099\_Sed, B13-8100\_Sed, B13 8102\_Sed, B13 8105\_Sed, B13 8106\_Sed, B13 8108\_Sed, B13-8109\_Sed, B13-8111\_Sed, B13 8112\_Sed, B13 8113\_Sed, B13-8116\_Sed, B13-8117\_Sed, B13 8118\_Sed, B13 8121\_Sed, B13 8122\_Sed, B13-8123\_Sed, B13-8124\_Sed, B13-8127\_Sed, B13 8128\_Sed, and B13-8500\_Sed. However, the raw data indicates that CRMs were analyzed for total nitrogen, but it is not possible to determine whether recoveries were acceptable. Amec Foster Wheeler J qualified the detected and UJ qualified the nondetected total nitrogen results from these samples because of uncertainty with the QC. (J/UJ-NQ)

It should be noted that the samples reviewed in this report were sediment samples but Physis' sample matrix for the metal LCSs is listed as deionized water in the laboratory report and the results are reported in µg/g on a dry weight basis.

### **Water Samples**

Physis analyzed aliquots of spiked laboratory-certified matrix for the metals LCSs associated with the water samples. Recoveries were within laboratory-specified limits, with the following exceptions:

- The RPD between MBAS results was high at 40% in the LCS and LCSD associated with the analysis of samples B13-8013, B13-8014, B13-8028, B13-8030, B13-8036, B13 8038, B13-8040, B13-8052, B13-8060, and B13-8078. Amec Foster Wheeler J qualified the detected MBAS results from these samples because of potential analytical imprecision. (J HD)

- The RPD between selenium results was high at 34% in the LCS and LCSD associated with the analysis of samples B13-8018 and B13-8053. Amec Foster Wheeler J qualified the detected selenium results from these samples because of potential analytical imprecision. (J HD)
- The RPD between ammonia results was high at 40% in the LCS and LCSD associated with the analysis of samples B13-8018, B13-8031, B13-8045, B13-8053, B13-8058, B13-8068, and B13-8090. Ammonia was not detected in these samples and data usability is not adversely affected by the potential analytical imprecision.
- Cobalt recovery was low at 85% in the LCSD associated with the analysis of samples B13-8031, B13-8045, B13-8058, B13-8068, and B13-8090. Amec Foster Wheeler J qualified the detected and UJ qualified the nondetected cobalt results from these samples because of potentially low analytical bias. (J/UJ-LL)
- Cobalt recovery was low at 85% in the LCSD associated with the analysis of sample B13-8073 and B13-8087. Amec Foster Wheeler J qualified the detected and UJ qualified the nondetected cobalt results from these samples because of potentially low analytical bias. (J/UJ-LL)
- Titanium recovery was low at 64% in the LCS and silver recovery was high at 162% in the LCSD associated with the analysis of samples B13-8074, B13-8075, B13-8076, B13-8077, B13-8145, B13-8146, B13-8151, B13-8152, B13-8156, B13-8157, B13-8159, B13-8160, and B13-8163. Data limitations are summarized below.
  - Amec Foster Wheeler J qualified the detected and UJ qualified the nondetected titanium results from the associated samples because of potentially low analytical bias. (J/UJ-LL)
  - Amec Foster Wheeler J qualified the detected silver results from the associated samples because of potentially high analytical bias. (J-HL) Nondetected silver results were not qualified and data usability is not adversely affected by the potentially high analytical bias.
- RPDs between MBAS (38%) and selenium (36% and 32%) results were high in LCSs and LCSDs associated with the analysis of samples B13-8085, B13-8102, B13-8105, B13-8106, B13-8108, B13-8111, B13-8112, B13-8113, B13-8116, B13-8117, B13-8121, B13-8123, B13-8124, B13-8127, B13-8128, and B13-8500. Amec Foster Wheeler J qualified the detected MBAS and selenium results from these samples because of potential analytical imprecision. (J HD) Nondetected MBAS and selenium results were not qualified and data usability is not adversely affected by the potential analytical imprecision.
- Titanium recovery was low at 67% in the LCS associated with the analysis of samples B13-8233, B13-8236, B13-8239, B13-8259, B13-8263, B13-8265, and B13-8267. Additionally, the RPD between the titanium results was high at 37%. Data limitations are summarized below.

- Amec Foster Wheeler J qualified the detected and UJ qualified the nondetected titanium results from the associated samples because of potentially low analytical bias. (J/UJ-LL)
- Amec Foster Wheeler J qualified the detected titanium results from the associated samples because of potential analytical imprecision. (J-HD)

## 7.2.7 Certified Reference Materials

Physis analyzed CRMs for metals. Analyte recoveries were within laboratory-specified limits, with the following exceptions:

- Aluminum (318% and 177%), antimony (173%), arsenic (126%), beryllium (197%), cadmium (65%), chromium (294%), iron (127% and 143%), and nickel (129%) recoveries were outside laboratory-specified limits in the CRMs associated with the analysis of samples B13-8013\_Sed, B13-8014\_Sed, B13-8028\_Sed, B13-8030\_Sed, B13-8036\_Sed, B13-8038\_Sed, B13-8040\_Sed, B13-8052\_Sed, B13-8060\_Sed, and B13-8078\_Sed. Data limitations are summarized below.
  - Amec Foster Wheeler J qualified the detected aluminum, antimony, arsenic, beryllium, chromium, iron, and nickel results from the associated samples because of potentially high analytical bias. (J HP)
  - Amec Foster Wheeler J qualified the detected cadmium results from the associated samples because of potentially low analytical bias. (J-LP)
- Aluminum (343% and 172%), antimony (168%), arsenic (127%), beryllium (207%), cadmium (62%), chromium (313%), iron (123% and 127%), and nickel (124%) recoveries were outside laboratory-specified limits in the CRMs associated with the analysis of samples B13-8018\_Sed and B13-8053\_Sed. Data limitations are summarized below.
  - Amec Foster Wheeler J qualified the detected aluminum, antimony, arsenic, beryllium, cadmium, chromium, iron, and nickel results from the associated samples because of potentially high analytical bias. (J HP)
  - Amec Foster Wheeler J qualified the detected cadmium results from the associated samples because of potentially low analytical bias. (J-LP)
- Aluminum (370% and 195%), antimony (169%), beryllium (200%), cadmium (63%), chromium (319%), and iron (123% and 142%) recoveries were outside laboratory-specified limits in the CRMs associated with the analysis of samples B13-8017\_Sed, B13-8020\_Sed, B13-8029\_Sed, B13-8049\_Sed, B13-8050\_Sed, B13-8056\_Sed, B13-8064\_Sed, B13-8065\_Sed, and B13-8069\_Sed. Data limitations are summarized below.
  - Amec Foster Wheeler J qualified the detected aluminum, antimony, beryllium, chromium, and iron results from the associated samples because of potentially high analytical bias. (J HP)

- Amec Foster Wheeler J qualified the detected and UJ qualified the nondetected cadmium results from the associated samples because of potentially low analytical bias. (J/UJ-LP)
- Aluminum (271%), antimony (143%), beryllium (153%), cadmium (64%), and chromium (249%) recoveries were outside laboratory-specified limits in the CRMs associated with the analysis of samples B13-8031\_Sed, B13-8045\_Sed, B13-8058\_Sed, B13-8068\_Sed, and B13-8090\_Sed. Data limitations are summarized below.
  - Amec Foster Wheeler J qualified the detected aluminum, antimony, beryllium, and chromium results from the associated samples because of potentially high analytical bias. (J HP)
  - Amec Foster Wheeler J qualified the detected cadmium results from the associated samples because of potentially low analytical bias. (J-LP)
- Aluminum (232% and 159%), antimony (175%), beryllium (158%), cadmium (61%), chromium (228%), and iron (126%) recoveries were outside laboratory-specified limits in the CRMs associated with the analysis of samples B13-8074\_Sed, B13-8075\_Sed, B13-8076\_Sed, and B13-8077\_Sed. Data limitations are summarized below.
  - Amec Foster Wheeler J qualified the detected aluminum, antimony, beryllium, chromium, and iron results from the associated samples because of potentially high analytical bias. (J HP)
  - Amec Foster Wheeler J qualified the detected cadmium results from the associated samples because of potentially low analytical bias. (J-LP)
- Aluminum (305% and 270%), arsenic (122%), beryllium (180% and 160%), cadmium (59% and 58%), chromium (282% and 248%), iron (122%), and nickel (121%) recoveries were outside laboratory-specified limits in the CRMs associated with the analysis of samples B13-8033\_Sed, B13-8093\_Sed, B13-8095\_Sed, B13-8096\_Sed, B13-8098\_Sed, B13-8099\_Sed, B13-8100\_Sed, B13-8109\_Sed, B13-8118\_Sed, and B13-8122\_Sed. Data limitations are summarized below.
  - Amec Foster Wheeler J qualified the detected aluminum, arsenic, beryllium, chromium, iron, and nickel results from the associated samples because of potentially high analytical bias. (J HP)
  - Amec Foster Wheeler J qualified the detected cadmium results from the associated samples because of potentially low analytical bias. (J-LP)
- Mercury recovery was low at 78% in a CRM associated with the analysis of samples B13-8033\_Sed, B13-8073\_Sed, B13-8087\_Sed, B13-8093\_Sed, B13-8095\_Sed, B13-8096\_Sed, B13-8098\_Sed, B13-8099\_Sed, B13-8100\_Sed, B13-8109\_Sed, B13-8118\_Sed, and B13-8122\_Sed. Amec Foster Wheeler J qualified the detected mercury results from the associated samples because of potentially low analytical bias. (J-LP)

- Aluminum (223% and 154%), antimony (163%), beryllium (150%), cadmium (58%), chromium (205%), and iron (125%) recoveries were outside laboratory-specified limits in the CRMs associated with the analysis of samples B13-8085\_Sed, B13-8102\_Sed, B13-8105\_Sed, B13-8106\_Sed, B13 8108\_Sed, B13-8113\_Sed, B13-8116\_Sed, B13 8117\_Sed, B13-8121\_Sed, and B13-8127\_Sed. Data limitations are summarized below.
  - Amec Foster Wheeler J qualified the detected aluminum, antimony, beryllium, chromium, and iron results from the associated samples because of potentially high analytical bias. (J HP)
  - Amec Foster Wheeler J qualified the detected cadmium results from the associated samples because of potentially low analytical bias. (J-LP)
- Aluminum (270% and 149%), antimony (169% and 143%), beryllium (160%), cadmium (58%), chromium (248%), and iron (133%) recoveries were outside laboratory-specified limits in the CRMs associated with the analysis of samples B13-8073\_Sed and B13 8087\_Sed. Data limitations are summarized below.
  - Amec Foster Wheeler J qualified the detected aluminum, antimony, beryllium, chromium, and iron results from the associated samples because of potentially high analytical bias. (J HP)
  - Amec Foster Wheeler J qualified the detected cadmium results from the associated samples because of potentially low analytical bias. (J-LP)
- Aluminum (352% and 178%), antimony (167%), arsenic (125%), beryllium (201%), cadmium (56%), chromium (312%), iron (125% and 129%), and nickel (126%) recoveries were outside laboratory-specified limits in the CRM associated with the analysis of samples B13-8111\_Sed, B13-8112\_Sed, B13-8123\_Sed, B13 8124\_Sed, B13-8128\_Sed, and B13 8500\_Sed. Data limitations are summarized below.
  - Amec Foster Wheeler J qualified the detected aluminum, antimony, arsenic, beryllium, chromium, iron, and nickel results from the associated samples because of potentially high analytical bias. (J HP)
  - Amec Foster Wheeler J qualified the detected cadmium results from the associated samples because of potentially low analytical bias. (J-LP)
- Aluminum (279%, 263%), antimony (161%), beryllium (163%), cadmium (57%), chromium (255%), and iron (127%) recoveries were outside laboratory-specified limits in the CRMs associated with the analysis of samples B13-8145\_Sed, B13-8146\_Sed, B13-8151\_Sed, B13 8152\_Sed, B13-8156\_Sed, B13 8157\_Sed, B13-8159\_Sed, B13 8160\_Sed, and B13-8163\_Sed. Data limitations are summarized below.
  - Amec Foster Wheeler J qualified the detected aluminum, antimony, beryllium, chromium, and iron results from the associated samples because of potentially high analytical bias. (J HP)

- Amec Foster Wheeler J qualified the detected and UJ qualified the nondetected cadmium results from the associated samples because of potentially low analytical bias. (J/UJ-LP)
- Aluminum (271% and 207%), antimony (174%), beryllium (182%), chromium (267%), iron (139%), and nickel (123%) recoveries were high in the CRMs associated with the analysis of samples B13-8233\_Sed, B13-8236\_Sed, B13-8239\_Sed, B13-8259\_Sed, B13-8263\_Sed, B13-8265\_Sed, and B13-8267\_Sed. Amec Foster Wheeler J qualified the detected aluminum, antimony, beryllium, chromium, iron, and nickel results from these samples because of potentially high analytical bias. (J-HP)

### 7.2.8 Laboratory Duplicates

Physis performed duplicate analyses of sediment samples B13-8013\_Sed, B13-8017\_Sed, B13-8018\_Sed, B13-8058\_Sed, B13-8065\_Sed, B13-8077\_Sed, B13-8087, B13-8109\_Sed, B13-8145\_Sed, and B13-8233\_Sed; and water sample B13-8013, B13-8018, B13-8020, B13-8028, B13-8052, B13-8058, B13-8065, B13-8068, B13-8075, B13-8077, B13-8085, B13-8087, B13-8093, B13-8109, B13-8111, B13-8118, B13-8127, B13-8152, and B13-8233. IIRMES performed duplicate analyses of samples B13-8017\_Sed, B13-8018\_Sed, B13-8031\_Sed, B13-8073\_Sed, B13-8074\_Sed, B13-8078\_Sed, B13-8111\_Sed, B13-8146\_Sed, and B13-8259\_Sed for total nitrogen and TOC. Sunstar performed duplicate analyses of water samples B13-8013, B13-8014, B13-8018, B13-8058, B13-8065, B13-8075, B13-8105, B13-8109, B13-8111, B13-8145, and B13-8233. RPDs between primary and duplicate results were less than the QAM-specified maximum of 30% or the differences between analyte concentrations were less than the applicable RLs, with the following exceptions.

#### ***Sediment Samples***

- RPDs between ammonia (28%) and SEM copper (368%) results from the duplicate analysis of sample B13-8013\_Sed were high. Amec Foster Wheeler J qualified the detected results for these analytes from this sample because of potential analytical imprecision. (J-HD)
- RPDs between total nitrogen results from the duplicate analyses of samples B13-8017\_Sed and B13-8074\_Sed were high at 57% and 40%, respectively, and the differences between detected results were greater than the reporting limit. Amec Foster Wheeler J qualified the detected total nitrogen results from these samples because of potential analytical imprecision. (J-HD)
- The RPD between silver results from the duplicate analyses of sample B13-8017\_Sed was high at 40% and the difference between the detected concentrations was greater than the RL. Amec Foster Wheeler J qualified the detected silver result from this sample because of potential analytical imprecision. (J-HD)



- RPDs between TOC results from the duplicate analyses of samples B13-8111 (31%), B13-8031 (37%), and B13 8073 (89%) were high. Amec Foster Wheeler J qualified the detected TOC results from these samples because of potential analytical imprecision. (J-HD)
- The RPD between mercury results from the duplicate analysis of sample B13 8077\_Sed was high at 66%. Amec Foster Wheeler J qualified the detected mercury result from this sample because of potential analytical imprecision. (J-HD)

### **Water Samples**

- RPDs between dissolved copper (76%) and dissolved lead (39%) results were high in the duplicate analysis of sample B13-8013. Amec Foster Wheeler J qualified the detected dissolved copper and dissolved lead result from this sample because of potential analytical imprecision. (J-HD)
- RPDs between dissolved chromium (40%) and dissolved selenium (67%) results were high at 40% and 67% in the duplicate analysis of sample B13-8018. Amec Foster Wheeler J qualified the detected dissolved chromium and dissolved selenium results from this sample because of potential analytical imprecision. (J-HD)
- RPDs between dissolved antimony (48%) and total selenium (62%) results were high in the duplicate analysis of sample B13-8058. Amec Foster Wheeler J qualified the detected dissolved antimony and total selenium results from these sample because of potential analytical imprecision. (J-HD)
- RPDs between dissolved cobalt (100%) and total selenium (60%) results were high in the duplicate analysis of sample B13-8085. Amec Foster Wheeler J qualified the detected dissolved cobalt and total selenium results from this sample because of potential analytical imprecision. (J-HD)
- RPDs between total antimony (36%) and dissolved cobalt (32%) results were high in the duplicate analysis of sample B13-8087. Amec Foster Wheeler J qualified the detected total antimony and dissolved cobalt results from this sample because of potential analytical imprecision. (J-HD)
- The RPD between total antimony results was high at 32% in the duplicate analysis of sample B13-8109. Amec Foster Wheeler J qualified the detected total antimony result from this sample because of potential analytical imprecision. (J-HD)
- RPDs between dissolved lead results were high in the duplicate analyses of samples B13-8066 (59%) and B13-8233 (117%). Amec Foster Wheeler J qualified the detected dissolved lead results from these samples because of potential analytical imprecision. (J HD)



### 7.2.9 Matrix Spikes/ Matrix Spike Duplicates

Physis performed MS and MSD analyses on sediment samples B13-8013\_Sed, B13-8017\_Sed, B13 8018\_Sed, B13-8058\_Sed, B13-8065\_Sed, B13-8077\_Sed, B13-8087, B13-8109\_Sed, B13 8111\_Sed, B13-8127\_Sed, B13 8145\_Sed, and B13-8233\_Sed; and water samples B13 8013, B13-8018, B13 8020, B13-8052, B13-8058, B13-8065, B13-8066, B13-8068, B13-8075, B13-8077, B13-8085, B13-8087, B13-8093, B13-8109, B13-8111, B13-8118, B13-8127, B13-8145, B13-8146, B13-8163, B13-8152, and B13 8233. Recoveries were within the QAM-specified 70 to 130% limits and RPDs between MS and MSD results were less than the QAM-specified maximum of 30%, with the following exceptions.

#### ***Sediment Samples***

- Aluminum (177% and 178%), AVS (159% and 228%), and iron (60%-MS) recoveries were outside QAM-specified limits in the MS and/or MSD performed on sample B13 8013\_Sed. Data limitations are summarized below.
  - Amec Foster Wheeler J qualified the detected AVS result from this sample because of potentially high analytical bias. (J-HM)
  - Background aluminum and iron concentrations in the unspiked native sample were more than 4 times the spike concentrations and it is not possible to evaluate data usability for these analytes based on MS recoveries.
- RPDs between AVS results were high in the MSs and MSDs performed on samples B13-8013\_Sed and B13-8058\_Sed at 36% and 44%, respectively. Amec Foster Wheeler J qualified the detected AVS results from these samples because of potential analytical imprecision. (J-HD)
- Aluminum (-90% and -56%) and iron (20% and 46%) recoveries were low in the MS and MSD performed on sample B13-8058\_Sed. The background concentrations in the unspiked native samples were more than 4 times the spike concentrations and it is not possible to evaluate data usability for these analytes based on MS recoveries.
- RPDs between aluminum and iron results were high at 47% and 79%, respectively, in the MS and MSD performed on sample B13-8058\_Sed. Amec Foster Wheeler J qualified the detected aluminum and iron results from this sample because of potential analytical imprecision. (J HD)
- Aluminum (570% and 247%), iron (443% and 169%), and mercury (127%-MSD) recoveries were high in the MS and/or MSD performed on sample B13-8065\_Sed. Additionally, the RPDs between MS and MSD results were high for aluminum and iron at 79% and 90%, respectively. Data limitations are summarized below.
  - Amec Foster Wheeler J qualified the detected aluminum and iron results from sample B13 8065\_Sed because of potential analytical imprecision. (J-HD)

- Amec Foster Wheeler J qualified the detected mercury result from sample B13-8065\_Sed because of potentially high analytical bias. (J-HM)
- Background aluminum and iron concentrations in the unspiked native samples were more than 4 times the spike concentrations and it is not possible to evaluate data usability for these analytes based on MS recoveries.
- Mercury recoveries were high at 151% and 150% in the MS and MSD performed on sample B13-8077\_Sed. Amec Foster Wheeler J qualified the detected mercury results from this sample because of potentially high analytical bias. (J-HM)
- There was 30% RPD between iron results from the MS and MSD performed on sample B13-8077\_Sed. Amec Foster Wheeler J qualified the detected iron result from this sample because of potential analytical imprecision. (J-HD)
- Aluminum (225% and 58%), iron (212% and 67%), mercury (160% and 146%), and silver (10%-MS) recoveries were outside QAM-specified limits in the MS and/or MSD performed on sample B13-8111\_Sed. Data limitations are summarized below.
  - Amec Foster Wheeler J qualified the detected mercury result from sample B13-8111\_Sed because of potentially high analytical bias. (J-HM)
  - Amec Foster Wheeler J qualified the detected silver result from sample B13-8111\_Sed because of potentially low analytical bias. (J-LM)
  - The background aluminum and iron concentrations in the unspiked native sample were more than 4 times the spike concentrations and it is not possible to evaluate data usability for these analytes based on MS recoveries.
- RPDs between aluminum (118%), iron (104%), and silver (162%) results were high in the MS and MSD performed on sample B13-8111\_Sed. Amec Foster Wheeler J qualified the detected results for these analytes in this sample because of potential analytical imprecision. (J HD)
- Aluminum (-29% and 4%), iron (-23% and 29%), and silver (10%-MS) recoveries were low in the MS and/or MSD performed on sample B13-8127\_Sed. Data limitations are summarized below.
  - Amec Foster Wheeler J qualified the detected silver result from sample B13-8127\_Sed because of potentially low analytical bias. (J-LM)
  - The background aluminum and iron concentrations in the unspiked native sample were more than 4 times the spike concentrations and it is not possible to evaluate data usability for these analytes based on MS recoveries.
- RPDs between aluminum (264%), iron (1,733%), and silver (163%) results were high in the MS and MSD performed on sample B13-8127\_Sed. Amec Foster Wheeler J qualified the results for these analytes in this sample because of potential analytical imprecision. (J-HD)

- Aluminum recoveries were high at 155% and 164% in the MS and MSD performed on sample B13-8145\_Sed. The background aluminum concentration in the unspiked native sample was more than 4 times the spike concentration and it is not possible to evaluate data usability for this analyte based on MS recoveries.
- Aluminum (353%-MSD) and iron (164%/392%) recoveries were high in the MS and/or MSD performed on sample B13-8233\_Sed. In both cases the background analyte concentrations in the unspiked native samples were more than 4 times the spike concentrations and it is not possible to evaluate data usability for these analytes based on MS recoveries.
- Ammonia recovery was low at 59% in the MSD performed on sample B13 8233\_Sed. Amec Foster Wheeler J qualified the detected ammonia result from this sample because of potentially low analytical bias. (J-LM)
- Ammonia (187% and 143%) and AVS (131% and 181%) recoveries were high in the MS and MSD performed on sample B13 8145\_Sed. Amec Foster Wheeler J qualified the detected ammonia and AVS result from this sample because of potentially high analytical bias. (J-HM)

### **Water Samples**

- MBAS recovery was low at 69% in the MSD performed on sample B13-8018. Amec Foster Wheeler J qualified the detected MBAS results from this sample because of potentially low analytical bias. (J-LM)
- The RPD between MBAS results was high at 32% in the MS and MSD performed on sample B13-8163. MBAS was not detected in the unspiked native sample and data usability is not adversely affected by the potential analytical imprecision.
- Ammonia (144%-MS) and dissolved barium (-23% and -22%) recoveries were outside QAM-specified limits in the MS and/or MSD performed on sample B13 8233. Data limitations are summarized below.
  - Amec Foster Wheeler J qualified the detected ammonia result from this sample because of potentially high analytical bias. (J-HM)
  - Amec Foster Wheeler J qualified the detected dissolved barium result from this sample because of potentially low analytical bias. (J-LM)

### **7.2.10 Data Reporting and Analytical Procedure**

Physis J qualified analytes with concentrations between the MDL and the RL. Amec Foster Wheeler agrees that these results are quantitatively uncertain and maintained Physis' J qualifiers.

Physis reported result for both total and dissolved metals analyses of the water samples. Dissolved metals concentrations were generally less than total metal concentrations. If dissolved

concentrations were greater than total concentrations, RPDs between the total and dissolved results were less than the EPA-recommended maximum of 20% for duplicate results, or the differences between concentrations were less than the applicable RL, with the following exceptions. Amec Foster Wheeler J or UJ qualified, as appropriate, the results in the following table because the dissolved results were significantly higher than the total results. (J/UJ-TD)

Sample ID	Analyte	Total	Dissolved	RL
B13-8013	Antimony	0.11	0.22	0.015
B13-8014	Antimony	0.12	0.22	0.015
B13-8014	Barium	10.95	13.64	0.5
B13-8020	Antimony	0.14	0.18	0.015
B13-8028	Antimony	0.09	0.24	0.015
	Tin	0.01	0.02	0.01
B13-8030	Antimony	0.12	0.19	0.015
B13-8036	Antimony	0.12	0.19	0.015
B13-8038	Antimony	0.12	0.19	0.015
B13-8040	Antimony	0.12	0.22	0.015
B13-8045	Antimony	0.09	0.11	0.015
B13-8052	Antimony	0.1	0.17	0.015
B13-8058	Antimony	0.1	0.13	0.015
B13-8060	Antimony	0.1	0.21	0.015
B13-8066	Antimony	0.13	0.17	0.015
B13-8069	Antimony	0.12	0.15	0.015
B13-8073	Antimony	0.12	0.15	0.015
	Barium	7.84	10.36	0.5
B13-8078	Antimony	0.09	0.18	0.015
	Titanium	7.522	9.34	0.07
B13-8087	Barium	6.48	8.12	0.5
B13-8090	Barium	7.92	10.91	0.5
B13-8095	Antimony	0.1	0.17	0.015
B13-8096	Antimony	0.1	0.16	0.015
B13-8098	Antimony	0.12	0.17	0.015
B13-8099	Antimony	0.09	0.17	0.015
B13-8100	Antimony	0.09	0.15	0.015
B13-8109	Antimony	0.11	0.17	0.015

Sample ID	Analyte	Total	Dissolved	RL
B13-8112	Zinc	6.008	7.6377	0.005
B13-8118	Antimony	0.11	0.16	0.015
B13-8122	Antimony	0.1	0.14	0.015
B13-8145	Antimony	0.08	0.11	0.015
B13-8146	Antimony	0.09	0.11	0.015
	Titanium	10.755	13.338	0.07
B13-8157	Selenium	0.013	0.04	0.015
B13-8159	Molybdenum	7.341	9.406	0.01
B13-8160	Antimony	0.12	0.17	0.015
	Molybdenum	7.123	9.603	0.01
B13-8233	Antimony	0.09	0.11	0.015
B13-8236	Antimony	0.08	0.12	0.015
B13-8239	Antimony	0.08	0.1	0.015
	Cadmium	0.0261	0.0581	0.005
	Lead	0.0629	0.1153	0.005
B13-8259	Antimony	0.08	0.11	0.015
B13-8263	Antimony	0.07	0.1	0.015
B13-8265	Antimony	0.09	0.11	0.015
	Beryllium	0.01 U	0.022	0.01
	Tin	0.01 U	0.314	0.01
B13-8267	Antimony	0.08	0.1	0.015
	Molybdenum	6.86	8.703	0.01
	Barium	5.54	7.17	0.5

## 8.0 SUMMARY AND CONCLUSIONS

Amec Foster Wheeler evaluated a total of 18,725 data records from field samples during this data validation.

Amec Foster Wheeler R qualified and rejected 93 (0.5%) data points because of unacceptable calibration curves (Section 7.1.3), extremely low ICV (7.1.4), CCV (Section 7.1.5), LCS (7.1.8), and/or MS recoveries (Section 7.1.10), or missing QC (Section 7.2.6). The remaining results are fully usable with the addition of the qualifiers specified in this report and summarized in Tables 2 and 3.



- Amec Foster Wheeler J or UJ qualified 10,282 records (55%) as estimated values because of:
  - Elevated sample receipt temperatures,
  - A lack of analyte-specific QC,
  - Calibration curves not meeting criteria,
  - ICV, CCV, LCS, and/or MS recoveries outside laboratory or QAM-specified limits,
  - Potential analytical imprecision,
  - Dissolved metal concentrations significantly higher than total metal concentrations, and
  - Analyte concentrations between the DL and the RL.
- Amec Foster Wheeler U qualified 18 results (0.10%) because of detections in the associated equipment or field blanks.

## REFERENCES

Bight, 2013. Southern California Bight 2013 Regional Marine Monitoring Survey Quality Assurance Manual, June 13, 2013.

APHA, 2005. Standard Methods for Examination of Water and Wastewater. 21st Edition.

EPA, 2014a. EPA Contract Laboratory Program (CLP) National Functional Guidelines for Inorganic Superfund Data Review, EPA-540-R-013-001.

EPA, 2014b. EPA Contract Laboratory Program (CLP) National Functional Guidelines for Superfund Organic Methods Data Review, EPA-540-R-014-002.

EPA, 2004. SW-846 Test Methods for Evaluating Solid Wastes, Update IIIB.





## **LIMITATIONS**

This report was prepared exclusively for City of San Diego by Amec Foster Wheeler Environment & Infrastructure, Inc. The quality of information, conclusions, and estimates contained herein is consistent with the level of effort involved in Amec Foster Wheeler services and based on: i) information available at the time of preparation, ii) data supplied by outside sources, and iii) the assumptions, conditions, and qualifications set forth in this report. This Data Quality review is intended to be used by City of San Diego only, subject to the terms and conditions of its contract with Amec Foster Wheeler. Any other use of, or reliance on, this report by any third party is at that party's sole risk.

## **TABLES**

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TABLE 1

**Field Samples Submitted to Physis Environmental Laboratories, Inc. and Institute for Integrated  
Research in Materials, Environments Society  
Regional Harbor Monitoring Program  
San Diego, California**

Field Sample ID	Matrix	Collection Date	Physis Sample ID	IIRMES Sample ID	Sunstar Sample ID
			SDG 1307002-001		
B13-8233	Surface Water	8/6/2013	21948	-	T131718-01
B13-8236	Surface Water	8/6/2013	21949	-	T131718-02
B13-8239	Surface Water	8/6/2013	21950	-	T131718-03
B13-8259	Surface Water	8/5/2013	21951	-	T131718-04
B13-8267	Surface Water	8/5/2013	21952	-	T131718-05
B13-8265	Surface Water	8/5/2013	21953	-	T131718-06
B13-8263	Surface Water	8/5/2013	21954	-	T131718-07
			SDG 1307002-002	SDG 119-13-15	
B13-8233_Sed	Sediment	8/6/2013	21957	8436	-
B13-8236_Sed	Sediment	8/6/2013	21958	8437	-
B13-8239_Sed	Sediment	8/6/2013	21959	8438	-
B13-8267_Sed	Sediment	8/5/2013	21960	8439	-
B13-8265_Sed	Sediment	8/5/2013	21961	8440	-
B13-8263_Sed	Sediment	8/5/2013	21962	8441	-
B13-8259_Sed	Sediment	8/5/2013	21963	8442	-
			SDG 1307002-003		
B13-8145	Surface Water	8/7/2013	22025	-	T131740-01
B13-8146	Surface Water	8/7/2013	22026	-	T131740-02
B13-8151	Surface Water	8/7/2013	22027	-	T131740-03
B13-8152	Surface Water	8/7/2013	22028	-	T131740-04
B13-8156	Surface Water	8/7/2013	22029	-	T131740-05
B13-8157	Surface Water	8/8/2013	22030	-	T131740-06
B13-8159	Surface Water	8/8/2013	22031	-	T131740-07
B13-8160	Surface Water	8/8/2013	22032	-	T131740-08
B13-8163	Surface Water	8/8/2013	22033	-	T131740-09
			SDG 1307002-004	SDG 119-13-15b	
B13-8145_Sed	Sediment	8/8/2013	22036	8446	-
B16-8163_Sed	Sediment	8/8/2013	22037	8447	-
B13-8160_Sed	Sediment	8/8/2013	22038	8448	-
B13-8159_Sed	Sediment	8/8/2013	22039	8449	-
B13-8157_Sed	Sediment	8/8/2013	22040	8450	-
B13-8156_Sed	Sediment	8/7/2014	22041	8451	-
B13-8152_Sed	Sediment	8/7/2013	22042	8452	-
B13-8151_Sed	Sediment	8/7/2013	22043	8453	-
B13-8146_Sed	Sediment	8/7/2013	22044	8454	-
			SDG 1307002-005		
B13-8020	Surface Water	8/11/2013	22064	-	T131758-01
B13-8017	Surface Water	8/11/2013	22065	-	T131758-02
B13-FB	Water	8/11/2013	22066	-	T131758-03
B13-NBEB	Water	8/11/2013	22067	-	T131758-04
B13-8064	Surface Water	8/12/2013	22068	-	T131758-05
B13-8050	Surface Water	8/12/2013	22069	-	T131758-06
B13-8029	Surface Water	8/11/2013	22070	-	T131758-07
B13-8069	Surface Water	8/12/2013	22071	-	T131758-08
B13-8056	Surface Water	8/12/2013	22072	-	T131758-09
B13-8049	Surface Water	8/12/2013	22073	-	T131758-10
B13-8066	Surface Water	8/12/2013	22074	-	T131758-11
B13-8065	Surface Water	8/12/2013	22075	-	T131758-12

TABLE 1

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Regional Harbor Monitoring Program  
San Diego, California**

Field Sample ID	Matrix	Collection Date	Physis Sample ID	IIRMES Sample ID	Sunstar Sample ID
			SDG 1307002-006	SDG 119-13-15c	
B13-8065_Sed	Sediment	8/12/2013	22078	8457	-
B13-8049_Sed	Sediment	8/12/2013	22079	8458	-
B13-8029_Sed	Sediment	8/11/2013	22080	8459	-
B13-8056_Sed	Sediment	8/12/2013	22081	8460	-
B13-8064_Sed	Sediment	8/12/2013	22082	8461	-
B13-8066_Sed	Sediment	8/12/2013	22083	8462	-
B13-8020_Sed	Sediment	8/11/2013	22084	8463	-
B13-8050_Sed	Sediment	8/12/2013	22085	8464	-
B13-8069_Sed	Sediment	8/12/2013	22086	8465	-
B13-8017_Sed	Sediment	8/11/2013	22087	8466	-
			SDG 1307002-007		
B13-8075	Surface Water	8/13/2013	22094	-	T131773-01
B13-8074	Surface Water	8/13/2013	22095	-	T131773-02
B13-8076	Surface Water	8/13/2013	22096	-	T131773-03
B13-8077	Surface Water	8/13/2013	22097	-	T131773-04
			SDG 1307002-008	SDG 119-13-15d	
B13-8077_Sed	Sediment	8/13/2013	22100	8469	-
B13-8076_Sed	Sediment	8/13/2013	22101	8470	-
B13-8075_Sed	Sediment	8/13/2013	22102	8471	-
B13-8074_Sed	Sediment	8/13/2013	22103	8472	-
			SDG 1307002-009		
B13-8013	Surface Water	8/26/2013	22470	-	T131850-01
B13-8014	Surface Water	8/26/2013	22471	-	T131850-02
B13-8028	Surface Water	8/26/2013	22472	-	T131850-03
B13-8030	Surface Water	8/26/2013	22473	-	T131850-04
B13-8036	Surface Water	8/26/2013	22474	-	T131850-05
B13-8038	Surface Water	8/26/2013	22475	-	T131850-06
B13-8040	Surface Water	8/26/2013	22476	-	T131850-07
B13-8052	Surface Water	8/27/2013	22477	-	T131850-08
B13-8060	Surface Water	8/27/2013	22478	-	T131850-09
B13-8078	Surface Water	8/27/2013	22479	-	T131850-10
			SDG 1307002-010	SDG 119-13-15e	
B13-8013_Sed	Sediment	8/26/2013	22482	8718	-
B13-8014_Sed	Sediment	8/26/2013	22483	8719	-
B13-8028_Sed	Sediment	8/26/2013	22484	8720	-
B13-8030_Sed	Sediment	8/26/2013	22485	8721	-
B13-8036_Sed	Sediment	8/26/2013	22486	8722	-
B13-8038_Sed	Sediment	8/26/2013	22487	8723	-
B13-8040_Sed	Sediment	8/26/2013	22488	8724	-
B13-8052_Sed	Sediment	8/27/2013	22489	8725	-
B13-8060_Sed	Sediment	8/27/2013	22490	8726	-
B13-8078_Sed	Sediment	8/27/2013	22491	8727	-

TABLE 1

**Field Samples Submitted to Physis Environmental Laboratories, Inc. and Institute for Integrated  
Research in Materials, Environments Society  
Regional Harbor Monitoring Program  
San Diego, California**

Field Sample ID	Matrix	Collection Date	Physis Sample ID	IIRMES Sample ID	Sunstar Sample ID
			SDG 1307002-011		
B13-8109	Surface Water	8/28/2013	22530	-	T131868-01
B13-8118	Surface Water	8/28/2013	22531	-	T131868-02
B13-8122	Surface Water	8/28/2013	22532	-	T131868-03
B13-8033	Surface Water	8/28/2013	22533	-	T131868-04
B13-8093	Surface Water	8/29/2013	22534	-	T131868-05
B13-8100	Surface Water	8/29/2013	22535	-	T131868-06
B13-8099	Surface Water	8/29/2013	22536	-	T131868-07
B13-8098	Surface Water	8/29/2013	22537	-	T131868-08
B13-8096	Surface Water	8/29/2013	22538	-	T131868-09
B13-8095	Surface Water	8/29/2013	22539	-	T131868-10
B13-8087	Surface Water	8/29/2013	22540	-	T131868-11
B13-8073	Surface Water	8/29/2013	22541	-	T131868-12
			SDG 1307002-012	SDG 119-13-15f	
B13-8109_Sed	Sediment	8/28/2013	22546	8730	-
B13-8118_Sed	Sediment	8/28/2013	22547	8731	-
B13-8122_Sed	Sediment	8/28/2013	22548	8732	-
B13-8033_Sed	Sediment	8/28/2013	22549	8733	-
B13-8093_Sed	Sediment	8/29/2013	22550	8734	-
B13-8100_Sed	Sediment	8/29/2013	22551	8735	-
B13-8099_Sed	Sediment	8/29/2013	22552	8736	-
B13-8098_Sed	Sediment	8/29/2013	22553	8737	-
B13-8096_Sed	Sediment	8/29/2013	22554	8738	-
B13-8095_Sed	Sediment	8/29/2013	22555	8739	-
B13-8087_Sed	Sediment	8/29/2013	22556	8740	-
B13-8073_Sed	Sediment	8/29/2013	22557	8741	-
			SDG 1307002-013		
B13-8058	Surface Water	8/30/2013	22564	-	T131874-01
B13-8068	Surface Water	8/30/2013	22565	-	T131874-02
B13-8090	Surface Water	8/30/2013	22566	-	T131874-03
B13-8045	Surface Water	8/30/2013	22567	-	T131874-04
B13-8031	Surface Water	8/30/2013	22568	-	T131874-05
			SDG 1307002-014	SDG 119-13-15g	
B13-8058_Sed	Sediment	8/30/2013	22571	8744	-
B13-8068_Sed	Sediment	8/30/2013	22572	8745	-
B13-8090_Sed	Sediment	8/30/2013	22573	8746	-
B13-8045_Sed	Sediment	8/30/2013	22574	8747	-
B13-8031_Sed	Sediment	8/30/2013	22575	8748	-
			SDG 1307002-015		
B13-8018	Surface Water	9/6/2013	22595	-	T131922-01
B13-8053	Surface Water	9/6/2013	22596	-	T131922-02
			SDG 1307002-016	SDG 119-13-15h	
B13-8018_Sed	Sediment	9/6/2013	22600	8751	-
B13-8053_Sed	Sediment	9/6/2013	22599	8752	-

**TABLE 1**

**Field Samples Submitted to Physis Environmental Laboratories, Inc. and Institute for Integrated  
Research in Materials, Environments Society  
Regional Harbor Monitoring Program  
San Diego, California**

Field Sample ID	Matrix	Collection Date	Physis Sample ID	IIRMES Sample ID	Sunstar Sample ID
			SDG 1307002-017		
B13-8111	Surface Water	9/9/2013	22607	-	T131955-01
B13-8112	Surface Water	9/9/2013	22608	-	T131955-02
B13-8500	Surface Water	9/9/2013	22609	-	T131955-03
B13-8123	Surface Water	9/9/2013	22610	-	T131955-04
B13-8124	Surface Water	9/9/2013	22611	-	T131955-05
B13-8128	Surface Water	9/9/2013	22612	-	T131955-06
B13-8127	Surface Water	9/9/2013	22613	-	T131955-07
B13-8121	Surface Water	9/9/2013	22614	-	T131955-08
B13-8085	Surface Water	9/10/2013	22615	-	T131955-09
B13-8105	Surface Water	9/10/2013	22616	-	T131955-10
B13-8117	Surface Water	9/10/2013	22617	-	T131955-11
B13-8113	Surface Water	9/10/2013	22618	-	T131955-12
B13-8116	Surface Water	9/10/2013	22619	-	T131955-13
B13-8108	Surface Water	9/10/2013	22620	-	T131955-14
B13-8106	Surface Water	9/10/2013	22621	-	T131955-15
B13-8102	Surface Water	9/10/2013	22622	-	T131955-16
			SDG 1307002-018	SDG 119-13-15i	
B13-VVEB	Sediment	9/10/2013	22623	-	T131955-17
B13-8111_Sed	Sediment	9/9/2013	22628	8755	-
B13-8112_Sed	Sediment	9/9/2013	22629	8756	-
B13-8500_Sed	Sediment	9/9/2013	22630	8757	-
B13-8123_Sed	Sediment	9/9/2013	22631	8758	-
B13-8124_Sed	Sediment	9/9/2013	22632	8759	-
B13-8128_Sed	Sediment	9/9/2013	22633	8760	-
B13-8127_Sed	Sediment	9/9/2013	22634	8761	-
B13-8121_Sed	Sediment	9/9/2013	22635	8762	-
B13-8085_Sed	Sediment	9/10/2013	22636	8763	-
B13-8105_Sed	Sediment	9/10/2013	22637	8764	-
B13-8117_Sed	Sediment	9/10/2013	22638	8765	-
B13-8113_Sed	Sediment	9/10/2013	22639	8766	-
B13-8116_Sed	Sediment	9/10/2013	22640	8767	-
B13-8108_Sed	Sediment	9/10/2013	22641	8768	-
B13-8106_Sed	Sediment	9/10/2013	22642	8769	-
B13-8102_Sed	Water	9/10/2013	22643	8770	-

**Notes:**

ID = identification

IIRMES = Institute for Integrated Research in Materials, Environments &amp; Society

Physis = Physis Environmental Laboratories, Inc.

SDG = sample delivery group

Sunstar = Sunstar Laboratories, Inc.

**TABLE 2**  
**Qualifiers Added to the Sediment Samples During Validation**  
**Regional Harbor Monitoring Program**  
**San Diego, California**

Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8013_SED	EPA 200.8	Copper	0.0667 µmol/dry g	J HD
B13-8013_SED	EPA 6020	Aluminum	34658 µg/dry g	J HP
B13-8013_SED	EPA 6020	Antimony	0.323 µg/dry g	J HP
B13-8013_SED	EPA 6020	Arsenic	6.964 µg/dry g	J HP
B13-8013_SED	EPA 6020	Barium	82.098 µg/dry g	J CH
B13-8013_SED	EPA 6020	Beryllium	0.677 µg/dry g	J HP
B13-8013_SED	EPA 6020	Cadmium	0.2007 µg/dry g	J LP
B13-8013_SED	EPA 6020	Chromium	52.583 µg/dry g	J HP
B13-8013_SED	EPA 6020	Iron (Fe)	31582.8 µg/dry g	J HP
B13-8013_SED	EPA 6020	Nickel	15.54 µg/dry g	J HP
B13-8013_SED	EPA 6020	Silver	0.73 µg/dry g	J LL
B13-8013_SED	EPA 6020	Total Phosphorus	516.846 µg/dry g	J NQ
B13-8013_SED	EPA 8270C	1-Methylnaphthalene	5 ng/dry g	UJ NQ
B13-8013_SED	EPA 8270C	1-Methylphenanthrene	2.6 ng/dry g	J DL, NQ
B13-8013_SED	EPA 8270C	2,3,5-Trimethylnaphthalene	1 ng/dry g	J DL, NQ
B13-8013_SED	EPA 8270C	2,4'-DDD	0.1 ng/dry g	UJ NQ
B13-8013_SED	EPA 8270C	2,4'-DDE	0.1 ng/dry g	UJ NQ
B13-8013_SED	EPA 8270C	2,4'-DDT	0.1 ng/dry g	UJ NQ, BC
B13-8013_SED	EPA 8270C	2,6-Dimethylnaphthalene	5 ng/dry g	UJ NQ
B13-8013_SED	EPA 8270C	2-Methylnaphthalene	5 ng/dry g	UJ NQ
B13-8013_SED	EPA 8270C	4,4'-DDD	0.1 ng/dry g	UJ NQ
B13-8013_SED	EPA 8270C	4,4'-DDE	0.1 ng/dry g	UJ NQ
B13-8013_SED	EPA 8270C	4,4'-DDMU	0.1 ng/dry g	UJ NQ
B13-8013_SED	EPA 8270C	4,4'-DDT	0.1 ng/dry g	UJ NQ, BC
B13-8013_SED	EPA 8270C	Acenaphthene	5 ng/dry g	UJ NQ
B13-8013_SED	EPA 8270C	Acenaphthylene	5 ng/dry g	UJ NQ
B13-8013_SED	EPA 8270C	Aldrin	0.1 ng/dry g	UJ NQ
B13-8013_SED	EPA 8270C	Anthracene	2.1 ng/dry g	J DL, NQ
B13-8013_SED	EPA 8270C	Aroclor 1016	2 ng/dry g	UJ NQ
B13-8013_SED	EPA 8270C	Aroclor 1221	2 ng/dry g	UJ NQ
B13-8013_SED	EPA 8270C	Aroclor 1232	2 ng/dry g	UJ NQ
B13-8013_SED	EPA 8270C	Aroclor 1242	2 ng/dry g	UJ NQ
B13-8013_SED	EPA 8270C	Aroclor 1248	2 ng/dry g	UJ NQ
B13-8013_SED	EPA 8270C	Aroclor 1254	2 ng/dry g	UJ NQ
B13-8013_SED	EPA 8270C	Aroclor 1260	5 ng/dry g	J NQ
B13-8013_SED	EPA 8270C	Aroclor 1262	2 ng/dry g	UJ NQ
B13-8013_SED	EPA 8270C	Aroclor 1268	2 ng/dry g	UJ NQ
B13-8013_SED	EPA 8270C	Benz[a]anthracene	21.8 ng/dry g	J NQ
B13-8013_SED	EPA 8270C	Benzo[a]pyrene	36.4 ng/dry g	J NQ, LP
B13-8013_SED	EPA 8270C	Benzo[b]fluoranthene	41.4 ng/dry g	J NQ
B13-8013_SED	EPA 8270C	Benzo[e]pyrene	32.8 ng/dry g	J NQ
B13-8013_SED	EPA 8270C	Benzo[g,h,i]perylene	42.1 ng/dry g	J NQ
B13-8013_SED	EPA 8270C	Benzo[k]fluoranthene	20.3 ng/dry g	J NQ
B13-8013_SED	EPA 8270C	BHC-alpha	0.1 ng/dry g	UJ NQ
B13-8013_SED	EPA 8270C	BHC-beta	0.1 ng/dry g	UJ NQ, BC
B13-8013_SED	EPA 8270C	BHC-delta	0.1 ng/dry g	UJ NQ
B13-8013_SED	EPA 8270C	BHC-gamma	0.1 ng/dry g	UJ NQ
B13-8013_SED	EPA 8270C	Biphenyl	5 ng/dry g	UJ NQ
B13-8013_SED	EPA 8270C	Chlordane-alpha	0.1 ng/dry g	UJ NQ
B13-8013_SED	EPA 8270C	Chlordane-gamma	0.1 ng/dry g	UJ NQ
B13-8013_SED	EPA 8270C	Chrysene	39.1 ng/dry g	J NQ
B13-8013_SED	EPA 8270C	cis-Nonachlor	0.1 ng/dry g	UJ NQ
B13-8013_SED	EPA 8270C	DCPA (Dacthal)	0.1 ng/dry g	UJ NQ
B13-8013_SED	EPA 8270C	Dibenz[a,h]anthracene	7 ng/dry g	J NQ, LC, HP



**TABLE 2**  
**Qualifiers Added to the Sediment Samples During Validation**  
**Regional Harbor Monitoring Program**  
**San Diego, California**

Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8013_SED	EPA 8270C	Dibenzothiophene	1.8 ng/dry g	J DL, NQ
B13-8013_SED	EPA 8270C	Dicofol	0.1 ng/dry g	UJ NQ, BC
B13-8013_SED	EPA 8270C	Dieldrin	0.1 ng/dry g	UJ NQ
B13-8013_SED	EPA 8270C	Endosulfan sulfate	0.1 ng/dry g	UJ NQ
B13-8013_SED	EPA 8270C	Endosulfan-I	0.1 ng/dry g	UJ NQ, LL
B13-8013_SED	EPA 8270C	Endosulfan-II	0.1 ng/dry g	UJ NQ, LL
B13-8013_SED	EPA 8270C	Endrin	0.1 ng/dry g	UJ NQ
B13-8013_SED	EPA 8270C	Endrin aldehyde	0.1 ng/dry g	R LL
B13-8013_SED	EPA 8270C	Endrin ketone	0.1 ng/dry g	UJ NQ, BC
B13-8013_SED	EPA 8270C	Fluoranthene	67 ng/dry g	J NQ
B13-8013_SED	EPA 8270C	Fluorene	1.5 ng/dry g	J DL, NQ
B13-8013_SED	EPA 8270C	Heptachlor	0.1 ng/dry g	UJ NQ, BC
B13-8013_SED	EPA 8270C	Heptachlor epoxide	0.1 ng/dry g	UJ NQ
B13-8013_SED	EPA 8270C	Hexachlorobenzene	0.1 ng/dry g	UJ NQ
B13-8013_SED	EPA 8270C	Indeno[1,2,3-c,d]pyrene	40.1 ng/dry g	J NQ
B13-8013_SED	EPA 8270C	Methoxychlor	0.1 ng/dry g	UJ NQ, BC
B13-8013_SED	EPA 8270C	Mirex	0.1 ng/dry g	UJ NQ
B13-8013_SED	EPA 8270C	Naphthalene	1.3 ng/dry g	J DL, NQ
B13-8013_SED	EPA 8270C	Oxychlorane	0.1 ng/dry g	UJ NQ
B13-8013_SED	EPA 8270C	PCB018	0.1 ng/dry g	UJ LV, LC
B13-8013_SED	EPA 8270C	PCB044	0.1 ng/dry g	UJ LV, LC
B13-8013_SED	EPA 8270C	PCB049	0.1 ng/dry g	UJ LV, LC
B13-8013_SED	EPA 8270C	PCB052	0.1 ng/dry g	UJ LV, LC
B13-8013_SED	EPA 8270C	PCB087	0.17 ng/dry g	J LC
B13-8013_SED	EPA 8270C	PCB099	0.28 ng/dry g	J LC
B13-8013_SED	EPA 8270C	PCB101	0.59 ng/dry g	J LC
B13-8013_SED	EPA 8270C	PCB110	0.26 ng/dry g	J LC
B13-8013_SED	EPA 8270C	PCB119	0.1 ng/dry g	UJ LC
B13-8013_SED	EPA 8270C	PCB149	0.79 ng/dry g	J LC
B13-8013_SED	EPA 8270C	PCB151	0.14 ng/dry g	J LC
B13-8013_SED	EPA 8270C	PCB158	0.1 ng/dry g	UJ LC
B13-8013_SED	EPA 8270C	PCB169	1.31 ng/dry g	J HL
B13-8013_SED	EPA 8270C	PCB177	0.13 ng/dry g	J LC
B13-8013_SED	EPA 8270C	PCB183	0.21 ng/dry g	J LC
B13-8013_SED	EPA 8270C	PCB187	0.44 ng/dry g	J BC, LV, LC
B13-8013_SED	EPA 8270C	PCB199(200)	0.2 ng/dry g	UJ LV, LC
B13-8013_SED	EPA 8270C	PCB206	0.1 ng/dry g	UJ BC, LC
B13-8013_SED	EPA 8270C	PCB209	0.1 ng/dry g	UJ LC
B13-8013_SED	EPA 8270C	Perthane	0.1 ng/dry g	UJ NQ, BC
B13-8013_SED	EPA 8270C	Perylene	8.5 ng/dry g	J NQ, LP
B13-8013_SED	EPA 8270C	Phenanthrene	20.9 ng/dry g	J NQ
B13-8013_SED	EPA 8270C	Pyrene	61.3 ng/dry g	J NQ
B13-8013_SED	EPA 8270C	trans-Nonachlor	0.1 ng/dry g	UJ NQ
B13-8013_SED	EPA 8270C-NCI	Allethrin	0.5 ng/dry g	UJ NQ, BC
B13-8013_SED	EPA 8270C-NCI	Bifenthrin	1.4 ng/dry g	J NQ, HV
B13-8013_SED	EPA 8270C-NCI	Cyfluthrin, total	0.5 ng/dry g	UJ NQ, BC
B13-8013_SED	EPA 8270C-NCI	Cypermethrin, total	0.5 ng/dry g	UJ NQ, BC
B13-8013_SED	EPA 8270C-NCI	Danitol (Fenprothrin)	0.5 ng/dry g	UJ NQ
B13-8013_SED	EPA 8270C-NCI	Deltamethrin/Tralomethrin	0.5 ng/dry g	R BC
B13-8013_SED	EPA 8270C-NCI	Esfenvalerate	0.5 ng/dry g	UJ NQ, BC
B13-8013_SED	EPA 8270C-NCI	Fenvalerate	0.5 ng/dry g	UJ NQ, BC
B13-8013_SED	EPA 8270C-NCI	Fipronil	0.5 ng/dry g	UJ NQ
B13-8013_SED	EPA 8270C-NCI	Fipronil Desulfinyl	0.5 ng/dry g	UJ NQ
B13-8013_SED	EPA 8270C-NCI	Fipronil Sulfide	0.5 ng/dry g	UJ NQ

**TABLE 2**  
**Qualifiers Added to the Sediment Samples During Validation**  
**Regional Harbor Monitoring Program**  
**San Diego, California**

Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8013_SED	EPA 8270C-NCI	Fipronil Sulfone	0.5 ng/dry g	UJ NQ
B13-8013_SED	EPA 8270C-NCI	Fluvalinate	0.5 ng/dry g	UJ NQ, BC
B13-8013_SED	EPA 8270C-NCI	I-Cyhalothrin	0.91 ng/dry g	J NQ, HV, CH
B13-8013_SED	EPA 8270C-NCI	PBDE066	0.05 ng/dry g	J DL, HD
B13-8013_SED	EPA 8270C-NCI	PBDE071	0.24 ng/dry g	J HD
B13-8013_SED	EPA 8270C-NCI	PBDE085	0.1 ng/dry g	UJ LC
B13-8013_SED	EPA 8270C-NCI	PBDE138	0.1 ng/dry g	UJ LC
B13-8013_SED	EPA 8270C-NCI	PBDE153	0.1 ng/dry g	UJ LC
B13-8013_SED	EPA 8270C-NCI	PBDE183	0.07 ng/dry g	J DL, LC
B13-8013_SED	EPA 8270C-NCI	PBDE209	0.1 ng/dry g	UJ LC
B13-8013_SED	EPA 8270C-NCI	Permethrin, cis-	0.5 ng/dry g	R BC
B13-8013_SED	EPA 8270C-NCI	Permethrin, trans-	0.5 ng/dry g	R BC
B13-8013_SED	EPA 8270C-NCI	Prallethrin	0.5 ng/dry g	UJ NQ
B13-8013_SED	EPA 8270C-NCI	Resmethrin	0.5 ng/dry g	UJ NQ, BC
B13-8013_SED	EPA 9060	Total Nitrogen	0.48 % Dry Weight	J NQ
B13-8013_SED	EPA 9060	Total Organic Carbon	1.71 % Dry Weight	J NQ
B13-8013_SED	Plumb, 1981 and Teryl	Acid Volatile Sulfides	102.27 mg/dry kg	J NQ, HM, HD
B13-8013_SED	SM 4500-NH3 D	Ammonia-N	3.45 mg/dry kg	J HD
B13-8014_SED	EPA 200.8	Copper	0.0089 µmol/dry g	J DL
B13-8014_SED	EPA 200.8	Nickel	0.0062 µmol/dry g	J DL
B13-8014_SED	EPA 6020	Aluminum	15467.7 µg/dry g	J HP
B13-8014_SED	EPA 6020	Antimony	0.169 µg/dry g	J HP
B13-8014_SED	EPA 6020	Arsenic	2.89 µg/dry g	J HP
B13-8014_SED	EPA 6020	Barium	46.432 µg/dry g	J CH
B13-8014_SED	EPA 6020	Beryllium	0.272 µg/dry g	J HP
B13-8014_SED	EPA 6020	Cadmium	0.1639 µg/dry g	J LP
B13-8014_SED	EPA 6020	Chromium	20.464 µg/dry g	J HP
B13-8014_SED	EPA 6020	Iron (Fe)	13610.7 µg/dry g	J HP
B13-8014_SED	EPA 6020	Nickel	6.07 µg/dry g	J HP
B13-8014_SED	EPA 6020	Total Phosphorus	326.16 µg/dry g	J NQ
B13-8014_SED	EPA 8270C	1-Methylnaphthalene	5 ng/dry g	UJ NQ
B13-8014_SED	EPA 8270C	1-Methylphenanthrene	1.1 ng/dry g	J DL, NQ
B13-8014_SED	EPA 8270C	2,3,5-Trimethylnaphthalene	5 ng/dry g	UJ NQ
B13-8014_SED	EPA 8270C	2,4'-DDD	0.1 ng/dry g	UJ NQ
B13-8014_SED	EPA 8270C	2,4'-DDE	0.1 ng/dry g	UJ NQ
B13-8014_SED	EPA 8270C	2,4'-DDT	0.1 ng/dry g	UJ NQ, BC
B13-8014_SED	EPA 8270C	2,6-Dimethylnaphthalene	5 ng/dry g	UJ NQ
B13-8014_SED	EPA 8270C	2-Methylnaphthalene	5 ng/dry g	UJ NQ
B13-8014_SED	EPA 8270C	4,4'-DDD	0.1 ng/dry g	UJ NQ
B13-8014_SED	EPA 8270C	4,4'-DDE	0.1 ng/dry g	UJ NQ
B13-8014_SED	EPA 8270C	4,4'-DDMU	0.1 ng/dry g	UJ NQ
B13-8014_SED	EPA 8270C	4,4'-DDT	0.1 ng/dry g	UJ NQ, BC
B13-8014_SED	EPA 8270C	Acenaphthene	5 ng/dry g	UJ NQ
B13-8014_SED	EPA 8270C	Acenaphthylene	5 ng/dry g	UJ NQ
B13-8014_SED	EPA 8270C	Aldrin	0.1 ng/dry g	UJ NQ
B13-8014_SED	EPA 8270C	Anthracene	5 ng/dry g	UJ NQ
B13-8014_SED	EPA 8270C	Aroclor 1016	2 ng/dry g	UJ NQ
B13-8014_SED	EPA 8270C	Aroclor 1221	2 ng/dry g	UJ NQ
B13-8014_SED	EPA 8270C	Aroclor 1232	2 ng/dry g	UJ NQ
B13-8014_SED	EPA 8270C	Aroclor 1242	2 ng/dry g	UJ NQ
B13-8014_SED	EPA 8270C	Aroclor 1248	2 ng/dry g	UJ NQ
B13-8014_SED	EPA 8270C	Aroclor 1254	2 ng/dry g	UJ NQ
B13-8014_SED	EPA 8270C	Aroclor 1260	2.9 ng/dry g	J NQ
B13-8014_SED	EPA 8270C	Aroclor 1262	2 ng/dry g	UJ NQ

**TABLE 2**  
**Qualifiers Added to the Sediment Samples During Validation**  
**Regional Harbor Monitoring Program**  
**San Diego, California**

Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8014_SED	EPA 8270C	Aroclor 1268	2 ng/dry g	UJ NQ
B13-8014_SED	EPA 8270C	Benz[a]anthracene	5 ng/dry g	UJ NQ
B13-8014_SED	EPA 8270C	Benzo[a]pyrene	1.7 ng/dry g	J DL, NQ, LP
B13-8014_SED	EPA 8270C	Benzo[b]fluoranthene	2 ng/dry g	J DL, NQ
B13-8014_SED	EPA 8270C	Benzo[e]pyrene	2 ng/dry g	J DL, NQ
B13-8014_SED	EPA 8270C	Benzo[g,h,i]perylene	4.7 ng/dry g	J DL, NQ
B13-8014_SED	EPA 8270C	Benzo[k]fluoranthene	5 ng/dry g	UJ NQ
B13-8014_SED	EPA 8270C	BHC-alpha	0.1 ng/dry g	UJ NQ
B13-8014_SED	EPA 8270C	BHC-beta	0.1 ng/dry g	UJ NQ, BC
B13-8014_SED	EPA 8270C	BHC-delta	0.1 ng/dry g	UJ NQ
B13-8014_SED	EPA 8270C	BHC-gamma	0.1 ng/dry g	UJ NQ
B13-8014_SED	EPA 8270C	Biphenyl	5 ng/dry g	UJ NQ
B13-8014_SED	EPA 8270C	Chlordane-alpha	0.1 ng/dry g	UJ NQ
B13-8014_SED	EPA 8270C	Chlordane-gamma	0.1 ng/dry g	UJ NQ
B13-8014_SED	EPA 8270C	Chrysene	1.9 ng/dry g	J DL, NQ
B13-8014_SED	EPA 8270C	cis-Nonachlor	0.1 ng/dry g	UJ NQ
B13-8014_SED	EPA 8270C	DCPA (Dacthal)	0.1 ng/dry g	UJ NQ
B13-8014_SED	EPA 8270C	Dibenz[a,h]anthracene	5 ng/dry g	UJ NQ, LC
B13-8014_SED	EPA 8270C	Dibenzothiophene	5 ng/dry g	UJ NQ
B13-8014_SED	EPA 8270C	Dicofol	0.1 ng/dry g	UJ NQ, BC
B13-8014_SED	EPA 8270C	Dieldrin	0.1 ng/dry g	UJ NQ
B13-8014_SED	EPA 8270C	Endosulfan sulfate	0.1 ng/dry g	UJ NQ
B13-8014_SED	EPA 8270C	Endosulfan-I	0.1 ng/dry g	UJ NQ, LL, LM
B13-8014_SED	EPA 8270C	Endosulfan-II	0.1 ng/dry g	UJ NQ, LL, LM
B13-8014_SED	EPA 8270C	Endrin	0.1 ng/dry g	UJ NQ
B13-8014_SED	EPA 8270C	Endrin aldehyde	0.1 ng/dry g	R LL
B13-8014_SED	EPA 8270C	Endrin ketone	0.1 ng/dry g	UJ NQ, BC
B13-8014_SED	EPA 8270C	Fluoranthene	4.8 ng/dry g	J DL, NQ
B13-8014_SED	EPA 8270C	Fluorene	5 ng/dry g	UJ NQ
B13-8014_SED	EPA 8270C	Heptachlor	0.1 ng/dry g	UJ NQ, BC
B13-8014_SED	EPA 8270C	Heptachlor epoxide	0.1 ng/dry g	UJ NQ
B13-8014_SED	EPA 8270C	Hexachlorobenzene	0.1 ng/dry g	UJ NQ
B13-8014_SED	EPA 8270C	Indeno[1,2,3-c,d]pyrene	4.1 ng/dry g	J DL, NQ
B13-8014_SED	EPA 8270C	Methoxychlor	0.1 ng/dry g	UJ NQ, BC
B13-8014_SED	EPA 8270C	Mirex	0.1 ng/dry g	UJ NQ
B13-8014_SED	EPA 8270C	Naphthalene	5 ng/dry g	UJ NQ
B13-8014_SED	EPA 8270C	Oxychlordane	0.1 ng/dry g	UJ NQ
B13-8014_SED	EPA 8270C	PCB018	0.1 ng/dry g	UJ LV, LC
B13-8014_SED	EPA 8270C	PCB044	0.1 ng/dry g	UJ LV, LC
B13-8014_SED	EPA 8270C	PCB049	0.1 ng/dry g	UJ LV, LC
B13-8014_SED	EPA 8270C	PCB052	0.1 ng/dry g	UJ LV, LC
B13-8014_SED	EPA 8270C	PCB087	0.14 ng/dry g	J LC
B13-8014_SED	EPA 8270C	PCB095	0.14 ng/dry g	J HD
B13-8014_SED	EPA 8270C	PCB099	0.11 ng/dry g	J LC
B13-8014_SED	EPA 8270C	PCB101	0.35 ng/dry g	J LC
B13-8014_SED	EPA 8270C	PCB110	0.19 ng/dry g	J LC
B13-8014_SED	EPA 8270C	PCB119	0.1 ng/dry g	UJ LC
B13-8014_SED	EPA 8270C	PCB138	0.8 ng/dry g	J HD
B13-8014_SED	EPA 8270C	PCB149	0.58 ng/dry g	J LC, HD
B13-8014_SED	EPA 8270C	PCB151	0.13 ng/dry g	J LC
B13-8014_SED	EPA 8270C	PCB158	0.1 ng/dry g	UJ LC
B13-8014_SED	EPA 8270C	PCB169	0.33 ng/dry g	J HL, HM
B13-8014_SED	EPA 8270C	PCB177	0.12 ng/dry g	J LC
B13-8014_SED	EPA 8270C	PCB183	0.1 ng/dry g	J LC

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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8014_SED	EPA 8270C	PCB187	0.18 ng/dry g	J BC, LV, LC
B13-8014_SED	EPA 8270C	PCB199(200)	0.2 ng/dry g	UJ LV, LC
B13-8014_SED	EPA 8270C	PCB206	0.1 ng/dry g	UJ BC, LC
B13-8014_SED	EPA 8270C	PCB209	0.1 ng/dry g	UJ LC
B13-8014_SED	EPA 8270C	Perthane	0.1 ng/dry g	UJ NQ, BC
B13-8014_SED	EPA 8270C	Perylene	5 ng/dry g	UJ NQ, LP
B13-8014_SED	EPA 8270C	Phenanthrene	5.9 ng/dry g	J NQ
B13-8014_SED	EPA 8270C	Pyrene	5.2 ng/dry g	J NQ
B13-8014_SED	EPA 8270C	trans-Nonachlor	0.1 ng/dry g	UJ NQ
B13-8014_SED	EPA 8270C-NCI	Allethrin	0.5 ng/dry g	UJ NQ, BC
B13-8014_SED	EPA 8270C-NCI	Bifenthrin	0.5 ng/dry g	UJ NQ
B13-8014_SED	EPA 8270C-NCI	Cyfluthrin, total	0.5 ng/dry g	UJ NQ, BC
B13-8014_SED	EPA 8270C-NCI	Cypermethrin, total	0.5 ng/dry g	UJ NQ, BC
B13-8014_SED	EPA 8270C-NCI	Danitol (Fenpropathrin)	0.5 ng/dry g	UJ NQ
B13-8014_SED	EPA 8270C-NCI	Deltamethrin/Tralomethrin	0.5 ng/dry g	R BC
B13-8014_SED	EPA 8270C-NCI	Esfenvalerate	0.5 ng/dry g	UJ NQ, BC
B13-8014_SED	EPA 8270C-NCI	Fenvalerate	0.5 ng/dry g	UJ NQ, BC
B13-8014_SED	EPA 8270C-NCI	Fipronil	0.5 ng/dry g	UJ NQ
B13-8014_SED	EPA 8270C-NCI	Fipronil Desulfinyl	0.5 ng/dry g	UJ NQ
B13-8014_SED	EPA 8270C-NCI	Fipronil Sulfide	0.5 ng/dry g	UJ NQ
B13-8014_SED	EPA 8270C-NCI	Fipronil Sulfone	0.5 ng/dry g	UJ NQ
B13-8014_SED	EPA 8270C-NCI	Fluvalinate	0.5 ng/dry g	UJ NQ, BC
B13-8014_SED	EPA 8270C-NCI	I-Cyhalothrin	0.5 ng/dry g	UJ NQ
B13-8014_SED	EPA 8270C-NCI	PBDE049	0.1 ng/dry g	UJ LM
B13-8014_SED	EPA 8270C-NCI	PBDE085	0.1 ng/dry g	UJ LC
B13-8014_SED	EPA 8270C-NCI	PBDE138	0.1 ng/dry g	UJ LC, LM
B13-8014_SED	EPA 8270C-NCI	PBDE153	0.1 ng/dry g	UJ LC
B13-8014_SED	EPA 8270C-NCI	PBDE183	0.45 ng/dry g	J LC
B13-8014_SED	EPA 8270C-NCI	PBDE209	0.1 ng/dry g	UJ LC, LM
B13-8014_SED	EPA 8270C-NCI	Permethrin, cis-	0.5 ng/dry g	R BC
B13-8014_SED	EPA 8270C-NCI	Permethrin, trans-	0.5 ng/dry g	R BC
B13-8014_SED	EPA 8270C-NCI	Prallethrin	0.5 ng/dry g	UJ NQ
B13-8014_SED	EPA 8270C-NCI	Resmethrin	0.5 ng/dry g	UJ NQ, BC
B13-8014_SED	EPA 9060	Total Nitrogen	0.24 % Dry Weight	J NQ
B13-8014_SED	EPA 9060	Total Organic Carbon	1.03 % Dry Weight	J NQ
B13-8014_SED	Plumb, 1981 and Teryl	Acid Volatile Sulfides	76.61 mg/dry kg	J NQ
B13-8017_SED	EPA 200.8	Cadmium	0.0036 µmol/dry g	J LP
B13-8017_SED	EPA 6020	Aluminum	31735.7 µg/dry g	J CH, HP
B13-8017_SED	EPA 6020	Antimony	0.294 µg/dry g	J HP
B13-8017_SED	EPA 6020	Beryllium	0.518 µg/dry g	J HP
B13-8017_SED	EPA 6020	Cadmium	0.1717 µg/dry g	J LP
B13-8017_SED	EPA 6020	Chromium	40.7817 µg/dry g	J HP
B13-8017_SED	EPA 6020	Iron (Fe)	26185.3 µg/dry g	J CH, HP
B13-8017_SED	EPA 6020	Silver	0.51 µg/dry g	J HD
B13-8017_SED	EPA 6020	Total Phosphorus	434.159 µg/dry g	J NQ
B13-8017_SED	EPA 8270C	1-Methylnaphthalene	5 ng/dry g	UJ LV, LC
B13-8017_SED	EPA 8270C	1-Methylphenanthrene	1.6 ng/dry g	J DL
B13-8017_SED	EPA 8270C	2,4'-DDT	0.1 ng/dry g	UJ BC
B13-8017_SED	EPA 8270C	2,6-Dimethylnaphthalene	5 ng/dry g	UJ LV
B13-8017_SED	EPA 8270C	2-Methylnaphthalene	5 ng/dry g	UJ LV, LC
B13-8017_SED	EPA 8270C	4,4'-DDD	0.1 ng/dry g	UJ LC
B13-8017_SED	EPA 8270C	4,4'-DDT	0.1 ng/dry g	UJ BC, LP
B13-8017_SED	EPA 8270C	Aroclor 1016	2 ng/dry g	UJ NQ
B13-8017_SED	EPA 8270C	Aroclor 1221	2 ng/dry g	UJ NQ

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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8017_SED	EPA 8270C	Aroclor 1232	2 ng/dry g	UJ NQ
B13-8017_SED	EPA 8270C	Aroclor 1242	2 ng/dry g	UJ NQ
B13-8017_SED	EPA 8270C	Aroclor 1248	2 ng/dry g	UJ NQ
B13-8017_SED	EPA 8270C	Aroclor 1254	2 ng/dry g	UJ NQ
B13-8017_SED	EPA 8270C	Aroclor 1260	6.4 ng/dry g	J NQ
B13-8017_SED	EPA 8270C	Aroclor 1262	2 ng/dry g	UJ NQ
B13-8017_SED	EPA 8270C	Aroclor 1268	2 ng/dry g	UJ NQ
B13-8017_SED	EPA 8270C	Benz[a]anthracene	2 ng/dry g	J DL, CH
B13-8017_SED	EPA 8270C	Benzo[a]pyrene	3.5 ng/dry g	J DL, HV, CH
B13-8017_SED	EPA 8270C	Benzo[b]fluoranthene	2.9 ng/dry g	J DL, HV, CH
B13-8017_SED	EPA 8270C	Benzo[e]pyrene	3.2 ng/dry g	J DL, CH
B13-8017_SED	EPA 8270C	Benzo[k]fluoranthene	2.1 ng/dry g	J DL, CH
B13-8017_SED	EPA 8270C	BHC-beta	0.1 ng/dry g	UJ BC
B13-8017_SED	EPA 8270C	Biphenyl	5 ng/dry g	UJ LV, LC
B13-8017_SED	EPA 8270C	Chlordane-gamma	0.1 ng/dry g	UJ LP
B13-8017_SED	EPA 8270C	Chrysene	3.8 ng/dry g	J DL, CH
B13-8017_SED	EPA 8270C	Dibenz[a,h]anthracene	1.3 ng/dry g	J DL, CH
B13-8017_SED	EPA 8270C	Dibenzothiophene	1.2 ng/dry g	J DL
B13-8017_SED	EPA 8270C	Dicofol	0.1 ng/dry g	UJ BC
B13-8017_SED	EPA 8270C	Endosulfan-I	0.1 ng/dry g	UJ LL
B13-8017_SED	EPA 8270C	Endrin aldehyde	0.1 ng/dry g	R LL
B13-8017_SED	EPA 8270C	Endrin ketone	0.1 ng/dry g	UJ BC
B13-8017_SED	EPA 8270C	Fluoranthene	8.8 ng/dry g	J HV, CH, HL
B13-8017_SED	EPA 8270C	Fluorene	1.6 ng/dry g	J DL, HP
B13-8017_SED	EPA 8270C	Heptachlor	0.1 ng/dry g	UJ BC
B13-8017_SED	EPA 8270C	Indeno[1,2,3-c,d]pyrene	9 ng/dry g	J CH
B13-8017_SED	EPA 8270C	Methoxychlor	0.1 ng/dry g	UJ BC
B13-8017_SED	EPA 8270C	Naphthalene	1.6 ng/dry g	J DL, LV, CH, LC
B13-8017_SED	EPA 8270C	PCB118	0.1 ng/dry g	UJ LP
B13-8017_SED	EPA 8270C	PCB180	0.3 ng/dry g	J CH
B13-8017_SED	EPA 8270C	PCB187	0.28 ng/dry g	J CH
B13-8017_SED	EPA 8270C	Perthane	0.1 ng/dry g	UJ BC
B13-8017_SED	EPA 8270C	Phenanthrene	8.8 ng/dry g	J HL
B13-8017_SED	EPA 8270C	Pyrene	11.3 ng/dry g	J HV, CH
B13-8017_SED	EPA 8270C-NCI	Deltamethrin/Tralomethrin	0.5 ng/dry g	UJ BC, LV
B13-8017_SED	EPA 8270C-NCI	Fipronil Sulfone	0.5 ng/dry g	UJ BC
B13-8017_SED	EPA 8270C-NCI	I-Cyhalothrin	0.5 ng/dry g	UJ LV
B13-8017_SED	EPA 8270C-NCI	PBDE017	0.1 ng/dry g	UJ LL
B13-8017_SED	EPA 8270C-NCI	PBDE049	0.1 ng/dry g	UJ LL
B13-8017_SED	EPA 8270C-NCI	PBDE071	0.1 ng/dry g	UJ LL
B13-8017_SED	EPA 8270C-NCI	PBDE138	0.1 ng/dry g	UJ LC
B13-8017_SED	EPA 8270C-NCI	PBDE183	0.58 ng/dry g	J LC
B13-8017_SED	EPA 8270C-NCI	PBDE209	0.67 ng/dry g	J CH, HD
B13-8017_SED	EPA 8270C-NCI	Permethrin, cis-	0.5 ng/dry g	UJ BC, LV
B13-8017_SED	EPA 8270C-NCI	Permethrin, trans-	0.5 ng/dry g	UJ BC
B13-8017_SED	EPA 8270C-NCI	Toxaphene	0.2 ng/dry g	UJ LC
B13-8017_SED	EPA 9060	Total Nitrogen	0.05 % Dry Weight	J NQ, HD
B13-8017_SED	EPA 9060	Total Organic Carbon	1.51 % Dry Weight	J NQ
B13-8017_SED	Plumb, 1981 and Teryl	Acid Volatile Sulfides	16.56 mg/dry kg	J NQ
B13-8018_SED	EPA 6020	Aluminum	5846.8 µg/dry g	J HP
B13-8018_SED	EPA 6020	Antimony	0.123 µg/dry g	J HP
B13-8018_SED	EPA 6020	Arsenic	1.925 µg/dry g	J HP
B13-8018_SED	EPA 6020	Barium	11.323 µg/dry g	J CH
B13-8018_SED	EPA 6020	Beryllium	0.109 µg/dry g	J HP

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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8018_SED	EPA 6020	Cadmium	0.1461 µg/dry g	J LP
B13-8018_SED	EPA 6020	Chromium	11.1959 µg/dry g	J HP
B13-8018_SED	EPA 6020	Iron (Fe)	4524.1 µg/dry g	J HP
B13-8018_SED	EPA 6020	Nickel	2.66 µg/dry g	J HP
B13-8018_SED	EPA 6020	Silver	0.1 µg/dry g	J LL
B13-8018_SED	EPA 6020	Total Phosphorus	104.406 µg/dry g	J NQ
B13-8018_SED	EPA 8270C	1-Methylnaphthalene	1.3 ng/dry g	J DL, NQ, HV, HD
B13-8018_SED	EPA 8270C	1-Methylphenanthrene	5 ng/dry g	UJ NQ
B13-8018_SED	EPA 8270C	2,3,5-Trimethylnaphthalene	5 ng/dry g	UJ NQ
B13-8018_SED	EPA 8270C	2,4'-DDT	0.1 ng/dry g	UJ BC
B13-8018_SED	EPA 8270C	2,6-Dimethylnaphthalene	2 ng/dry g	J DL, NQ, HD
B13-8018_SED	EPA 8270C	2-Methylnaphthalene	3 ng/dry g	J DL, NQ, HD
B13-8018_SED	EPA 8270C	4,4'-DDT	0.1 ng/dry g	UJ BC
B13-8018_SED	EPA 8270C	Acenaphthene	1.3 ng/dry g	J DL, NQ, HD
B13-8018_SED	EPA 8270C	Acenaphthylene	5 ng/dry g	UJ NQ
B13-8018_SED	EPA 8270C	Anthracene	1.4 ng/dry g	J DL, NQ, HD
B13-8018_SED	EPA 8270C	Aroclor 1016	2 ng/dry g	UJ NQ
B13-8018_SED	EPA 8270C	Aroclor 1221	2 ng/dry g	UJ NQ
B13-8018_SED	EPA 8270C	Aroclor 1232	2 ng/dry g	UJ NQ
B13-8018_SED	EPA 8270C	Aroclor 1242	2 ng/dry g	UJ NQ
B13-8018_SED	EPA 8270C	Aroclor 1248	2 ng/dry g	UJ NQ
B13-8018_SED	EPA 8270C	Aroclor 1254	2 ng/dry g	UJ NQ
B13-8018_SED	EPA 8270C	Aroclor 1260	17.7 ng/dry g	J NQ
B13-8018_SED	EPA 8270C	Aroclor 1262	2 ng/dry g	UJ NQ
B13-8018_SED	EPA 8270C	Aroclor 1268	2 ng/dry g	UJ NQ
B13-8018_SED	EPA 8270C	Benz[a]anthracene	3.7 ng/dry g	J DL, NQ
B13-8018_SED	EPA 8270C	Benzo[a]pyrene	4.8 ng/dry g	J DL, NQ
B13-8018_SED	EPA 8270C	Benzo[b]fluoranthene	8.5 ng/dry g	J NQ
B13-8018_SED	EPA 8270C	Benzo[e]pyrene	8 ng/dry g	J NQ
B13-8018_SED	EPA 8270C	Benzo[g,h,i]perylene	15.7 ng/dry g	J NQ
B13-8018_SED	EPA 8270C	Benzo[k]fluoranthene	4.8 ng/dry g	J DL, NQ
B13-8018_SED	EPA 8270C	BHC-beta	0.1 ng/dry g	UJ BC
B13-8018_SED	EPA 8270C	Biphenyl	3.8 ng/dry g	J DL, NQ, HD
B13-8018_SED	EPA 8270C	Chrysene	5.8 ng/dry g	J NQ
B13-8018_SED	EPA 8270C	Dibenz[a,h]anthracene	2.6 ng/dry g	J DL, NQ, HD
B13-8018_SED	EPA 8270C	Dibenzothiophene	2.8 ng/dry g	J DL, NQ, HD
B13-8018_SED	EPA 8270C	Dicofol	0.1 ng/dry g	UJ BC, LV
B13-8018_SED	EPA 8270C	Endosulfan-I	0.1 ng/dry g	UJ LL
B13-8018_SED	EPA 8270C	Endosulfan-II	0.1 ng/dry g	UJ LL
B13-8018_SED	EPA 8270C	Endrin aldehyde	0.1 ng/dry g	UJ BC, LL
B13-8018_SED	EPA 8270C	Endrin ketone	0.1 ng/dry g	UJ BC
B13-8018_SED	EPA 8270C	Fluoranthene	7.3 ng/dry g	J NQ, HD
B13-8018_SED	EPA 8270C	Fluorene	3.1 ng/dry g	J DL, NQ
B13-8018_SED	EPA 8270C	Heptachlor	0.1 ng/dry g	UJ BC
B13-8018_SED	EPA 8270C	Indeno[1,2,3-c,d]pyrene	10.2 ng/dry g	J NQ, HD
B13-8018_SED	EPA 8270C	Methoxychlor	0.1 ng/dry g	UJ BC
B13-8018_SED	EPA 8270C	Naphthalene	6.7 ng/dry g	J NQ, HD
B13-8018_SED	EPA 8270C	PCB119	0.1 ng/dry g	UJ LV
B13-8018_SED	EPA 8270C	Perthane	0.1 ng/dry g	UJ BC
B13-8018_SED	EPA 8270C	Perylene	2.8 ng/dry g	J DL, NQ
B13-8018_SED	EPA 8270C	Phenanthrene	12.2 ng/dry g	J NQ, HD
B13-8018_SED	EPA 8270C	Pyrene	7.7 ng/dry g	J NQ, HD
B13-8018_SED	EPA 8270C-NCI	Allethrin	0.5 ng/dry g	UJ LC
B13-8018_SED	EPA 8270C-NCI	Danitol (Fenpropathrin)	0.5 ng/dry g	UJ LL

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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8018_SED	EPA 8270C-NCI	Deltamethrin/Tralomethrin	0.5 ng/dry g	UJ BC
B13-8018_SED	EPA 8270C-NCI	Fluvalinate	0.5 ng/dry g	UJ BC
B13-8018_SED	EPA 8270C-NCI	PBDE049	0.1 ng/dry g	UJ LC
B13-8018_SED	EPA 8270C-NCI	PBDE209	0.1 ng/dry g	UJ BC, LC
B13-8018_SED	EPA 8270C-NCI	Prallethrin	0.5 ng/dry g	UJ BC, LC
B13-8018_SED	EPA 8270C-NCI	Resmethrin	0.5 ng/dry g	R LV
B13-8018_SED	EPA 9060	Total Nitrogen	0.01 % Dry Weight	UJ NQ
B13-8018_SED	EPA 9060	Total Organic Carbon	0.14 % Dry Weight	J NQ
B13-8018_SED	Plumb, 1981 and Teryl	Acid Volatile Sulfides	24.42 mg/dry kg	J NQ
B13-8020_SED	EPA 200.8	Cadmium	0.0036 µmol/dry g	J LP
B13-8020_SED	EPA 6020	Aluminum	66619.2 µg/dry g	J CH, HP
B13-8020_SED	EPA 6020	Antimony	0.509 µg/dry g	J HP
B13-8020_SED	EPA 6020	Beryllium	1.098 µg/dry g	J HP
B13-8020_SED	EPA 6020	Cadmium	0.3494 µg/dry g	J LP
B13-8020_SED	EPA 6020	Chromium	92.7713 µg/dry g	J HP
B13-8020_SED	EPA 6020	Iron (Fe)	57144.4 µg/dry g	J CH, HP
B13-8020_SED	EPA 6020	Total Phosphorus	914.355 µg/dry g	J NQ
B13-8020_SED	EPA 8270C	1-Methylnaphthalene	5 ng/dry g	UJ LV, LC
B13-8020_SED	EPA 8270C	1-Methylphenanthrene	2.8 ng/dry g	J DL
B13-8020_SED	EPA 8270C	2,3,5-Trimethylnaphthalene	1 ng/dry g	J DL
B13-8020_SED	EPA 8270C	2,4'-DDT	0.1 ng/dry g	UJ BC
B13-8020_SED	EPA 8270C	2,6-Dimethylnaphthalene	1.2 ng/dry g	J DL, LV
B13-8020_SED	EPA 8270C	2-Methylnaphthalene	1.6 ng/dry g	J DL, LV, CH, LC
B13-8020_SED	EPA 8270C	4,4'-DDD	0.1 ng/dry g	UJ LC
B13-8020_SED	EPA 8270C	4,4'-DDT	0.1 ng/dry g	UJ BC, LP
B13-8020_SED	EPA 8270C	Anthracene	1.4 ng/dry g	J DL
B13-8020_SED	EPA 8270C	Aroclor 1016	2 ng/dry g	UJ NQ
B13-8020_SED	EPA 8270C	Aroclor 1221	2 ng/dry g	UJ NQ
B13-8020_SED	EPA 8270C	Aroclor 1232	2 ng/dry g	UJ NQ
B13-8020_SED	EPA 8270C	Aroclor 1242	2 ng/dry g	UJ NQ
B13-8020_SED	EPA 8270C	Aroclor 1248	2 ng/dry g	UJ NQ
B13-8020_SED	EPA 8270C	Aroclor 1254	2 ng/dry g	UJ NQ
B13-8020_SED	EPA 8270C	Aroclor 1260	16.9 ng/dry g	J NQ
B13-8020_SED	EPA 8270C	Aroclor 1262	2 ng/dry g	UJ NQ
B13-8020_SED	EPA 8270C	Aroclor 1268	2 ng/dry g	UJ NQ
B13-8020_SED	EPA 8270C	Benz[a]anthracene	4 ng/dry g	J DL, CH
B13-8020_SED	EPA 8270C	Benzo[a]pyrene	5.7 ng/dry g	J HV, CH
B13-8020_SED	EPA 8270C	Benzo[b]fluoranthene	6.1 ng/dry g	J HV, CH
B13-8020_SED	EPA 8270C	Benzo[e]pyrene	5.2 ng/dry g	J CH
B13-8020_SED	EPA 8270C	Benzo[k]fluoranthene	4.3 ng/dry g	J DL, CH
B13-8020_SED	EPA 8270C	BHC-beta	0.1 ng/dry g	UJ BC
B13-8020_SED	EPA 8270C	Biphenyl	5 ng/dry g	UJ LV, LC
B13-8020_SED	EPA 8270C	Chlordane-gamma	0.1 ng/dry g	UJ LP
B13-8020_SED	EPA 8270C	Chrysene	6.6 ng/dry g	J CH
B13-8020_SED	EPA 8270C	Dibenz[a,h]anthracene	1.9 ng/dry g	J DL, CH
B13-8020_SED	EPA 8270C	Dibenzothiophene	2 ng/dry g	J DL
B13-8020_SED	EPA 8270C	Dicofol	0.1 ng/dry g	UJ BC
B13-8020_SED	EPA 8270C	Endosulfan-I	0.1 ng/dry g	UJ LL
B13-8020_SED	EPA 8270C	Endrin aldehyde	0.1 ng/dry g	R LL
B13-8020_SED	EPA 8270C	Endrin ketone	0.1 ng/dry g	UJ BC
B13-8020_SED	EPA 8270C	Fluoranthene	14.4 ng/dry g	J HV, CH, HL
B13-8020_SED	EPA 8270C	Fluorene	2.3 ng/dry g	J DL, HP
B13-8020_SED	EPA 8270C	Heptachlor	0.1 ng/dry g	UJ BC
B13-8020_SED	EPA 8270C	Indeno[1,2,3-c,d]pyrene	13.2 ng/dry g	J CH



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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8020_SED	EPA 8270C	Methoxychlor	0.1 ng/dry g	UJ BC
B13-8020_SED	EPA 8270C	Naphthalene	2.6 ng/dry g	J DL, LV, CH, LC
B13-8020_SED	EPA 8270C	PCB118	0.1 ng/dry g	UJ LP
B13-8020_SED	EPA 8270C	PCB169	1.04 ng/dry g	J HD
B13-8020_SED	EPA 8270C	PCB180	0.55 ng/dry g	J CH
B13-8020_SED	EPA 8270C	PCB187	0.26 ng/dry g	J CH
B13-8020_SED	EPA 8270C	Perthane	0.1 ng/dry g	UJ BC
B13-8020_SED	EPA 8270C	Perylene	1.4 ng/dry g	J DL, HV, CH
B13-8020_SED	EPA 8270C	Phenanthrene	15 ng/dry g	J HL
B13-8020_SED	EPA 8270C	Pyrene	16.5 ng/dry g	J HV, CH
B13-8020_SED	EPA 8270C-NCI	Deltamethrin/Tralomethrin	0.5 ng/dry g	UJ BC, LV
B13-8020_SED	EPA 8270C-NCI	Fipronil Sulfone	0.5 ng/dry g	UJ BC
B13-8020_SED	EPA 8270C-NCI	I-Cyhalothrin	0.5 ng/dry g	UJ LV
B13-8020_SED	EPA 8270C-NCI	PBDE017	0.1 ng/dry g	UJ LL
B13-8020_SED	EPA 8270C-NCI	PBDE049	0.1 ng/dry g	UJ LL
B13-8020_SED	EPA 8270C-NCI	PBDE071	0.1 ng/dry g	UJ LL
B13-8020_SED	EPA 8270C-NCI	PBDE099	14.45 ng/dry g	J HL
B13-8020_SED	EPA 8270C-NCI	PBDE138	0.1 ng/dry g	UJ LC
B13-8020_SED	EPA 8270C-NCI	PBDE183	0.96 ng/dry g	J LC
B13-8020_SED	EPA 8270C-NCI	PBDE209	9.51 ng/dry g	J CH, HD
B13-8020_SED	EPA 8270C-NCI	Permethrin, cis-	0.5 ng/dry g	UJ BC, LV
B13-8020_SED	EPA 8270C-NCI	Permethrin, trans-	0.5 ng/dry g	UJ BC
B13-8020_SED	EPA 8270C-NCI	Toxaphene	0.2 ng/dry g	UJ LC
B13-8020_SED	EPA 9060	Total Nitrogen	0.04 % Dry Weight	J NQ
B13-8020_SED	EPA 9060	Total Organic Carbon	1.65 % Dry Weight	J NQ
B13-8020_SED	Plumb, 1981 and Teryl	Acid Volatile Sulfides	25.78 mg/dry kg	J NQ
B13-8028_SED	EPA 6020	Aluminum	28892.6 µg/dry g	J HP
B13-8028_SED	EPA 6020	Antimony	0.223 µg/dry g	J HP
B13-8028_SED	EPA 6020	Arsenic	6.805 µg/dry g	J HP
B13-8028_SED	EPA 6020	Barium	85.105 µg/dry g	J CH
B13-8028_SED	EPA 6020	Beryllium	0.472 µg/dry g	J HP
B13-8028_SED	EPA 6020	Cadmium	0.174 µg/dry g	J LP
B13-8028_SED	EPA 6020	Chromium	36.4554 µg/dry g	J HP
B13-8028_SED	EPA 6020	Iron (Fe)	26887.9 µg/dry g	J HP
B13-8028_SED	EPA 6020	Nickel	11.54 µg/dry g	J HP
B13-8028_SED	EPA 6020	Total Phosphorus	394.145 µg/dry g	J NQ
B13-8028_SED	EPA 8270C	1-Methylnaphthalene	5 ng/dry g	UJ NQ
B13-8028_SED	EPA 8270C	1-Methylphenanthrene	1.7 ng/dry g	J DL, NQ
B13-8028_SED	EPA 8270C	2,3,5-Trimethylnaphthalene	1.1 ng/dry g	J DL, NQ
B13-8028_SED	EPA 8270C	2,4'-DDD	0.1 ng/dry g	UJ NQ
B13-8028_SED	EPA 8270C	2,4'-DDE	0.1 ng/dry g	UJ NQ
B13-8028_SED	EPA 8270C	2,4'-DDT	0.1 ng/dry g	UJ NQ, BC
B13-8028_SED	EPA 8270C	2,6-Dimethylnaphthalene	5 ng/dry g	UJ NQ
B13-8028_SED	EPA 8270C	2-Methylnaphthalene	5 ng/dry g	UJ NQ
B13-8028_SED	EPA 8270C	4,4'-DDD	0.1 ng/dry g	UJ NQ
B13-8028_SED	EPA 8270C	4,4'-DDE	0.1 ng/dry g	UJ NQ
B13-8028_SED	EPA 8270C	4,4'-DDMU	0.1 ng/dry g	UJ NQ
B13-8028_SED	EPA 8270C	4,4'-DDT	0.1 ng/dry g	UJ NQ, BC
B13-8028_SED	EPA 8270C	Acenaphthene	5 ng/dry g	UJ NQ
B13-8028_SED	EPA 8270C	Acenaphthylene	2.3 ng/dry g	J DL, NQ
B13-8028_SED	EPA 8270C	Aldrin	0.1 ng/dry g	UJ NQ
B13-8028_SED	EPA 8270C	Anthracene	4.4 ng/dry g	J DL, NQ
B13-8028_SED	EPA 8270C	Aroclor 1016	2 ng/dry g	UJ NQ
B13-8028_SED	EPA 8270C	Aroclor 1221	2 ng/dry g	UJ NQ

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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8028_SED	EPA 8270C	Aroclor 1232	2 ng/dry g	UJ NQ
B13-8028_SED	EPA 8270C	Aroclor 1242	2 ng/dry g	UJ NQ
B13-8028_SED	EPA 8270C	Aroclor 1248	2 ng/dry g	UJ NQ
B13-8028_SED	EPA 8270C	Aroclor 1254	2 ng/dry g	UJ NQ
B13-8028_SED	EPA 8270C	Aroclor 1260	4.4 ng/dry g	J NQ
B13-8028_SED	EPA 8270C	Aroclor 1262	2 ng/dry g	UJ NQ
B13-8028_SED	EPA 8270C	Aroclor 1268	2 ng/dry g	UJ NQ
B13-8028_SED	EPA 8270C	Benz[a]anthracene	9 ng/dry g	J NQ
B13-8028_SED	EPA 8270C	Benzo[a]pyrene	17.4 ng/dry g	J NQ, LP
B13-8028_SED	EPA 8270C	Benzo[b]fluoranthene	18 ng/dry g	J NQ
B13-8028_SED	EPA 8270C	Benzo[e]pyrene	14.5 ng/dry g	J NQ
B13-8028_SED	EPA 8270C	Benzo[g,h,i]perylene	16 ng/dry g	J NQ
B13-8028_SED	EPA 8270C	Benzo[k]fluoranthene	9.6 ng/dry g	J NQ
B13-8028_SED	EPA 8270C	BHC-alpha	0.1 ng/dry g	UJ NQ
B13-8028_SED	EPA 8270C	BHC-beta	0.1 ng/dry g	UJ NQ, BC
B13-8028_SED	EPA 8270C	BHC-delta	0.1 ng/dry g	UJ NQ
B13-8028_SED	EPA 8270C	BHC-gamma	0.1 ng/dry g	UJ NQ
B13-8028_SED	EPA 8270C	Biphenyl	5 ng/dry g	UJ NQ
B13-8028_SED	EPA 8270C	Chlordane-alpha	0.1 ng/dry g	UJ NQ
B13-8028_SED	EPA 8270C	Chlordane-gamma	0.1 ng/dry g	UJ NQ
B13-8028_SED	EPA 8270C	Chrysene	15.5 ng/dry g	J NQ
B13-8028_SED	EPA 8270C	cis-Nonachlor	0.1 ng/dry g	UJ NQ
B13-8028_SED	EPA 8270C	DCPA (Dacthal)	0.1 ng/dry g	UJ NQ
B13-8028_SED	EPA 8270C	Dibenz[a,h]anthracene	2.7 ng/dry g	J DL, NQ, LC, HP
B13-8028_SED	EPA 8270C	Dibenzothiophene	1.2 ng/dry g	J DL, NQ
B13-8028_SED	EPA 8270C	Dicofol	0.1 ng/dry g	UJ NQ, BC
B13-8028_SED	EPA 8270C	Dieldrin	0.1 ng/dry g	UJ NQ
B13-8028_SED	EPA 8270C	Endosulfan sulfate	0.1 ng/dry g	UJ NQ
B13-8028_SED	EPA 8270C	Endosulfan-I	0.1 ng/dry g	UJ NQ, LL
B13-8028_SED	EPA 8270C	Endosulfan-II	0.1 ng/dry g	UJ NQ, LL
B13-8028_SED	EPA 8270C	Endrin	0.1 ng/dry g	UJ NQ
B13-8028_SED	EPA 8270C	Endrin aldehyde	0.1 ng/dry g	R LL
B13-8028_SED	EPA 8270C	Endrin ketone	0.1 ng/dry g	UJ NQ, BC
B13-8028_SED	EPA 8270C	Fluoranthene	15 ng/dry g	J NQ
B13-8028_SED	EPA 8270C	Fluorene	1.5 ng/dry g	J DL, NQ
B13-8028_SED	EPA 8270C	Heptachlor	0.1 ng/dry g	UJ NQ, BC
B13-8028_SED	EPA 8270C	Heptachlor epoxide	0.1 ng/dry g	UJ NQ
B13-8028_SED	EPA 8270C	Hexachlorobenzene	0.1 ng/dry g	UJ NQ
B13-8028_SED	EPA 8270C	Indeno[1,2,3-c,d]pyrene	13.9 ng/dry g	J NQ
B13-8028_SED	EPA 8270C	Methoxychlor	0.1 ng/dry g	UJ NQ, BC
B13-8028_SED	EPA 8270C	Mirex	0.1 ng/dry g	UJ NQ
B13-8028_SED	EPA 8270C	Naphthalene	1.2 ng/dry g	J DL, NQ
B13-8028_SED	EPA 8270C	Oxychlordane	0.1 ng/dry g	UJ NQ
B13-8028_SED	EPA 8270C	PCB018	0.1 ng/dry g	UJ LV, LC
B13-8028_SED	EPA 8270C	PCB044	0.1 ng/dry g	UJ LV, LC
B13-8028_SED	EPA 8270C	PCB049	0.1 ng/dry g	UJ LV, LC
B13-8028_SED	EPA 8270C	PCB052	0.1 ng/dry g	UJ LV, LC
B13-8028_SED	EPA 8270C	PCB087	0.23 ng/dry g	J LC
B13-8028_SED	EPA 8270C	PCB099	0.19 ng/dry g	J LC
B13-8028_SED	EPA 8270C	PCB101	0.54 ng/dry g	J LC
B13-8028_SED	EPA 8270C	PCB110	0.35 ng/dry g	J LC
B13-8028_SED	EPA 8270C	PCB119	0.1 ng/dry g	UJ LC
B13-8028_SED	EPA 8270C	PCB149	0.92 ng/dry g	J LC
B13-8028_SED	EPA 8270C	PCB151	0.18 ng/dry g	J LC

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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8028_SED	EPA 8270C	PCB158	0.22 ng/dry g	J LC
B13-8028_SED	EPA 8270C	PCB177	0.19 ng/dry g	J LC
B13-8028_SED	EPA 8270C	PCB183	0.14 ng/dry g	J LC
B13-8028_SED	EPA 8270C	PCB187	0.32 ng/dry g	J BC, LV, LC
B13-8028_SED	EPA 8270C	PCB199(200)	0.2 ng/dry g	UJ LV, LC
B13-8028_SED	EPA 8270C	PCB206	0.1 ng/dry g	UJ BC, LC
B13-8028_SED	EPA 8270C	PCB209	0.1 ng/dry g	UJ LC
B13-8028_SED	EPA 8270C	Perthane	0.1 ng/dry g	UJ NQ, BC
B13-8028_SED	EPA 8270C	Perylene	4.4 ng/dry g	J DL, NQ, LP
B13-8028_SED	EPA 8270C	Phenanthrene	9.3 ng/dry g	J NQ
B13-8028_SED	EPA 8270C	Pyrene	17.1 ng/dry g	J NQ
B13-8028_SED	EPA 8270C	trans-Nonachlor	0.1 ng/dry g	UJ NQ
B13-8028_SED	EPA 8270C-NCI	Allethrin	0.5 ng/dry g	UJ NQ, BC
B13-8028_SED	EPA 8270C-NCI	Bifenthrin	0.5 ng/dry g	UJ NQ
B13-8028_SED	EPA 8270C-NCI	Cyfluthrin, total	0.5 ng/dry g	UJ NQ, BC
B13-8028_SED	EPA 8270C-NCI	Cypermethrin, total	0.5 ng/dry g	UJ NQ, BC
B13-8028_SED	EPA 8270C-NCI	Danitol (Fenpropathrin)	0.5 ng/dry g	UJ NQ
B13-8028_SED	EPA 8270C-NCI	Deltamethrin/Tralomethrin	0.5 ng/dry g	R BC
B13-8028_SED	EPA 8270C-NCI	Esfenvalerate	0.5 ng/dry g	UJ NQ, BC
B13-8028_SED	EPA 8270C-NCI	Fenvalerate	0.5 ng/dry g	UJ NQ, BC
B13-8028_SED	EPA 8270C-NCI	Fipronil	0.5 ng/dry g	UJ NQ
B13-8028_SED	EPA 8270C-NCI	Fipronil Desulfinyl	0.5 ng/dry g	UJ NQ
B13-8028_SED	EPA 8270C-NCI	Fipronil Sulfide	0.5 ng/dry g	UJ NQ
B13-8028_SED	EPA 8270C-NCI	Fipronil Sulfone	0.5 ng/dry g	UJ NQ
B13-8028_SED	EPA 8270C-NCI	Fluvalinate	0.5 ng/dry g	UJ NQ, BC
B13-8028_SED	EPA 8270C-NCI	I-Cyhalothrin	0.5 ng/dry g	UJ NQ
B13-8028_SED	EPA 8270C-NCI	PBDE085	0.1 ng/dry g	UJ LC
B13-8028_SED	EPA 8270C-NCI	PBDE138	0.1 ng/dry g	UJ LC
B13-8028_SED	EPA 8270C-NCI	PBDE153	0.1 ng/dry g	UJ LC
B13-8028_SED	EPA 8270C-NCI	PBDE183	0.06 ng/dry g	J DL, LC
B13-8028_SED	EPA 8270C-NCI	PBDE209	0.1 ng/dry g	UJ LC
B13-8028_SED	EPA 8270C-NCI	Permethrin, cis-	0.5 ng/dry g	R BC
B13-8028_SED	EPA 8270C-NCI	Permethrin, trans-	0.5 ng/dry g	R BC
B13-8028_SED	EPA 8270C-NCI	Prallethrin	0.5 ng/dry g	UJ NQ
B13-8028_SED	EPA 8270C-NCI	Resmethrin	0.5 ng/dry g	UJ NQ, BC
B13-8028_SED	EPA 9060	Total Nitrogen	0.45 % Dry Weight	J NQ
B13-8028_SED	EPA 9060	Total Organic Carbon	1.25 % Dry Weight	J NQ
B13-8028_SED	Plumb, 1981 and Teryl	Acid Volatile Sulfides	15.81 mg/dry kg	J NQ
B13-8029_SED	EPA 200.8	Cadmium	0.0036 µmol/dry g	J LP
B13-8029_SED	EPA 6020	Aluminum	24650.4 µg/dry g	J CH, HP
B13-8029_SED	EPA 6020	Antimony	0.216 µg/dry g	J HP
B13-8029_SED	EPA 6020	Beryllium	0.378 µg/dry g	J HP
B13-8029_SED	EPA 6020	Cadmium	0.178 µg/dry g	J LP
B13-8029_SED	EPA 6020	Chromium	29.9278 µg/dry g	J HP
B13-8029_SED	EPA 6020	Iron (Fe)	22458.1 µg/dry g	J CH, HP
B13-8029_SED	EPA 6020	Total Phosphorus	297.272 µg/dry g	J NQ
B13-8029_SED	EPA 8270C	1-Methylnaphthalene	5 ng/dry g	UJ LV, LC
B13-8029_SED	EPA 8270C	1-Methylphenanthrene	1.8 ng/dry g	J DL
B13-8029_SED	EPA 8270C	2,4'-DDT	0.1 ng/dry g	UJ BC
B13-8029_SED	EPA 8270C	2,6-Dimethylnaphthalene	5 ng/dry g	UJ LV
B13-8029_SED	EPA 8270C	2-Methylnaphthalene	5 ng/dry g	UJ LV, LC
B13-8029_SED	EPA 8270C	4,4'-DDD	0.1 ng/dry g	UJ LC
B13-8029_SED	EPA 8270C	4,4'-DDT	0.1 ng/dry g	UJ BC, LP
B13-8029_SED	EPA 8270C	Anthracene	1.4 ng/dry g	J DL

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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8029_SED	EPA 8270C	Aroclor 1016	2 ng/dry g	UJ NQ
B13-8029_SED	EPA 8270C	Aroclor 1221	2 ng/dry g	UJ NQ
B13-8029_SED	EPA 8270C	Aroclor 1232	2 ng/dry g	UJ NQ
B13-8029_SED	EPA 8270C	Aroclor 1242	2 ng/dry g	UJ NQ
B13-8029_SED	EPA 8270C	Aroclor 1248	2 ng/dry g	UJ NQ
B13-8029_SED	EPA 8270C	Aroclor 1254	2 ng/dry g	UJ NQ
B13-8029_SED	EPA 8270C	Aroclor 1260	8.7 ng/dry g	J NQ
B13-8029_SED	EPA 8270C	Aroclor 1262	2 ng/dry g	UJ NQ
B13-8029_SED	EPA 8270C	Aroclor 1268	2 ng/dry g	UJ NQ
B13-8029_SED	EPA 8270C	Benzo[a]anthracene	4.6 ng/dry g	J DL, CH
B13-8029_SED	EPA 8270C	Benzo[a]pyrene	5.7 ng/dry g	J HV, CH
B13-8029_SED	EPA 8270C	Benzo[b]fluoranthene	5.8 ng/dry g	J HV, CH
B13-8029_SED	EPA 8270C	Benzo[e]pyrene	4.9 ng/dry g	J DL, CH
B13-8029_SED	EPA 8270C	Benzo[k]fluoranthene	4.1 ng/dry g	J DL, CH
B13-8029_SED	EPA 8270C	BHC-beta	0.1 ng/dry g	UJ BC
B13-8029_SED	EPA 8270C	Biphenyl	5 ng/dry g	UJ LV, LC
B13-8029_SED	EPA 8270C	Chlordane-gamma	0.1 ng/dry g	UJ LP
B13-8029_SED	EPA 8270C	Chrysene	8 ng/dry g	J CH
B13-8029_SED	EPA 8270C	Dibenz[a,h]anthracene	1.6 ng/dry g	J DL, CH
B13-8029_SED	EPA 8270C	Dibenzothiophene	1 ng/dry g	J DL
B13-8029_SED	EPA 8270C	Dicofol	0.1 ng/dry g	UJ BC
B13-8029_SED	EPA 8270C	Endosulfan-I	0.1 ng/dry g	UJ LL
B13-8029_SED	EPA 8270C	Endrin aldehyde	0.1 ng/dry g	R LL
B13-8029_SED	EPA 8270C	Endrin ketone	0.1 ng/dry g	UJ BC
B13-8029_SED	EPA 8270C	Fluoranthene	10 ng/dry g	J HV, CH, HL, HP
B13-8029_SED	EPA 8270C	Heptachlor	0.1 ng/dry g	UJ BC
B13-8029_SED	EPA 8270C	Indeno[1,2,3-c,d]pyrene	9.3 ng/dry g	J CH
B13-8029_SED	EPA 8270C	Methoxychlor	0.1 ng/dry g	UJ BC
B13-8029_SED	EPA 8270C	Naphthalene	1.1 ng/dry g	J DL, LV, CH, LC
B13-8029_SED	EPA 8270C	PCB118	0.1 ng/dry g	UJ LP
B13-8029_SED	EPA 8270C	PCB151	0.07 ng/dry g	J DL
B13-8029_SED	EPA 8270C	PCB170	0.17 ng/dry g	J CH
B13-8029_SED	EPA 8270C	PCB180	0.61 ng/dry g	J CH
B13-8029_SED	EPA 8270C	PCB187	0.4 ng/dry g	J CH
B13-8029_SED	EPA 8270C	Perthane	0.1 ng/dry g	UJ BC
B13-8029_SED	EPA 8270C	Perylene	1.5 ng/dry g	J DL, HV, CH
B13-8029_SED	EPA 8270C	Phenanthrene	7.5 ng/dry g	J HL
B13-8029_SED	EPA 8270C	Pyrene	12 ng/dry g	J HV, CH
B13-8029_SED	EPA 8270C-NCI	Deltamethrin/Tralomethrin	0.5 ng/dry g	UJ BC, LV
B13-8029_SED	EPA 8270C-NCI	Fipronil Sulfone	0.5 ng/dry g	UJ BC
B13-8029_SED	EPA 8270C-NCI	I-Cyhalothrin	0.5 ng/dry g	UJ LV
B13-8029_SED	EPA 8270C-NCI	PBDE017	0.1 ng/dry g	UJ LL
B13-8029_SED	EPA 8270C-NCI	PBDE049	0.1 ng/dry g	UJ LL
B13-8029_SED	EPA 8270C-NCI	PBDE071	0.1 ng/dry g	UJ LL
B13-8029_SED	EPA 8270C-NCI	PBDE138	0.1 ng/dry g	UJ LC
B13-8029_SED	EPA 8270C-NCI	PBDE183	0.51 ng/dry g	J LC
B13-8029_SED	EPA 8270C-NCI	PBDE209	5.9 ng/dry g	J CH, HD
B13-8029_SED	EPA 8270C-NCI	Permethrin, cis-	0.5 ng/dry g	UJ BC, LV
B13-8029_SED	EPA 8270C-NCI	Permethrin, trans-	0.5 ng/dry g	UJ BC
B13-8029_SED	EPA 8270C-NCI	Toxaphene	0.2 ng/dry g	UJ LC
B13-8029_SED	EPA 9060	Total Nitrogen	0.01 % Dry Weight	R NQ
B13-8029_SED	EPA 9060	Total Organic Carbon	1.51 % Dry Weight	J NQ
B13-8029_SED	Plumb, 1981 and Teryl	Acid Volatile Sulfides	2.52 mg/dry kg	J NQ
B13-8030_SED	EPA 200.8	Nickel	0.0048 µmol/dry g	J DL

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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8030_SED	EPA 6020	Aluminum	22803 µg/dry g	J HP
B13-8030_SED	EPA 6020	Antimony	0.162 µg/dry g	J HP
B13-8030_SED	EPA 6020	Arsenic	5.467 µg/dry g	J HP
B13-8030_SED	EPA 6020	Barium	80.297 µg/dry g	J CH
B13-8030_SED	EPA 6020	Beryllium	0.371 µg/dry g	J HP
B13-8030_SED	EPA 6020	Cadmium	0.1548 µg/dry g	J LP
B13-8030_SED	EPA 6020	Chromium	28.4997 µg/dry g	J HP
B13-8030_SED	EPA 6020	Iron (Fe)	21535.3 µg/dry g	J HP
B13-8030_SED	EPA 6020	Nickel	9.59 µg/dry g	J HP
B13-8030_SED	EPA 6020	Total Phosphorus	298.365 µg/dry g	J NQ
B13-8030_SED	EPA 8270C	1-Methylnaphthalene	5 ng/dry g	UJ NQ
B13-8030_SED	EPA 8270C	1-Methylphenanthrene	1.6 ng/dry g	J DL, NQ
B13-8030_SED	EPA 8270C	2,3,5-Trimethylnaphthalene	5 ng/dry g	UJ NQ
B13-8030_SED	EPA 8270C	2,4'-DDD	0.1 ng/dry g	UJ NQ
B13-8030_SED	EPA 8270C	2,4'-DDE	0.1 ng/dry g	UJ NQ
B13-8030_SED	EPA 8270C	2,4'-DDT	0.1 ng/dry g	UJ NQ, BC
B13-8030_SED	EPA 8270C	2,6-Dimethylnaphthalene	5 ng/dry g	UJ NQ
B13-8030_SED	EPA 8270C	2-Methylnaphthalene	5 ng/dry g	UJ NQ
B13-8030_SED	EPA 8270C	4,4'-DDD	0.1 ng/dry g	UJ NQ
B13-8030_SED	EPA 8270C	4,4'-DDE	0.1 ng/dry g	UJ NQ
B13-8030_SED	EPA 8270C	4,4'-DDMU	0.1 ng/dry g	UJ NQ
B13-8030_SED	EPA 8270C	4,4'-DDT	0.1 ng/dry g	UJ NQ, BC
B13-8030_SED	EPA 8270C	Acenaphthene	5 ng/dry g	UJ NQ
B13-8030_SED	EPA 8270C	Acenaphthylene	1.4 ng/dry g	J DL, NQ
B13-8030_SED	EPA 8270C	Aldrin	0.1 ng/dry g	UJ NQ
B13-8030_SED	EPA 8270C	Anthracene	2.7 ng/dry g	J DL, NQ
B13-8030_SED	EPA 8270C	Aroclor 1016	2 ng/dry g	UJ NQ
B13-8030_SED	EPA 8270C	Aroclor 1221	2 ng/dry g	UJ NQ
B13-8030_SED	EPA 8270C	Aroclor 1232	2 ng/dry g	UJ NQ
B13-8030_SED	EPA 8270C	Aroclor 1242	2 ng/dry g	UJ NQ
B13-8030_SED	EPA 8270C	Aroclor 1248	2 ng/dry g	UJ NQ
B13-8030_SED	EPA 8270C	Aroclor 1254	2 ng/dry g	UJ NQ
B13-8030_SED	EPA 8270C	Aroclor 1260	2.3 ng/dry g	J NQ
B13-8030_SED	EPA 8270C	Aroclor 1262	2 ng/dry g	UJ NQ
B13-8030_SED	EPA 8270C	Aroclor 1268	2 ng/dry g	UJ NQ
B13-8030_SED	EPA 8270C	Benz[a]anthracene	13.2 ng/dry g	J NQ
B13-8030_SED	EPA 8270C	Benzo[a]pyrene	21.1 ng/dry g	J NQ, LP
B13-8030_SED	EPA 8270C	Benzo[b]fluoranthene	34.6 ng/dry g	J NQ
B13-8030_SED	EPA 8270C	Benzo[e]pyrene	22.6 ng/dry g	J NQ
B13-8030_SED	EPA 8270C	Benzo[g,h,i]perylene	16 ng/dry g	J NQ
B13-8030_SED	EPA 8270C	Benzo[k]fluoranthene	19 ng/dry g	J NQ
B13-8030_SED	EPA 8270C	BHC-alpha	0.1 ng/dry g	UJ NQ
B13-8030_SED	EPA 8270C	BHC-beta	0.1 ng/dry g	UJ NQ, BC
B13-8030_SED	EPA 8270C	BHC-delta	0.1 ng/dry g	UJ NQ
B13-8030_SED	EPA 8270C	BHC-gamma	0.1 ng/dry g	UJ NQ
B13-8030_SED	EPA 8270C	Biphenyl	5 ng/dry g	UJ NQ
B13-8030_SED	EPA 8270C	Chlordane-alpha	0.1 ng/dry g	UJ NQ
B13-8030_SED	EPA 8270C	Chlordane-gamma	0.1 ng/dry g	UJ NQ
B13-8030_SED	EPA 8270C	Chrysene	47.4 ng/dry g	J NQ
B13-8030_SED	EPA 8270C	cis-Nonachlor	0.1 ng/dry g	UJ NQ
B13-8030_SED	EPA 8270C	DCPA (Dacthal)	0.1 ng/dry g	UJ NQ
B13-8030_SED	EPA 8270C	Dibenz[a,h]anthracene	3.2 ng/dry g	J DL, NQ, LC, HP
B13-8030_SED	EPA 8270C	Dibenzothiophene	5 ng/dry g	UJ NQ
B13-8030_SED	EPA 8270C	Dicofol	0.1 ng/dry g	UJ NQ, BC

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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8030_SED	EPA 8270C	Dieldrin	0.1 ng/dry g	UJ NQ
B13-8030_SED	EPA 8270C	Endosulfan sulfate	0.1 ng/dry g	UJ NQ
B13-8030_SED	EPA 8270C	Endosulfan-I	0.1 ng/dry g	UJ NQ, LL
B13-8030_SED	EPA 8270C	Endosulfan-II	0.1 ng/dry g	UJ NQ, LL
B13-8030_SED	EPA 8270C	Endrin	0.1 ng/dry g	UJ NQ
B13-8030_SED	EPA 8270C	Endrin aldehyde	0.1 ng/dry g	R LL
B13-8030_SED	EPA 8270C	Endrin ketone	0.1 ng/dry g	UJ NQ, BC
B13-8030_SED	EPA 8270C	Fluoranthene	15.8 ng/dry g	J NQ
B13-8030_SED	EPA 8270C	Fluorene	1.1 ng/dry g	J DL, NQ
B13-8030_SED	EPA 8270C	Heptachlor	0.1 ng/dry g	UJ NQ, BC
B13-8030_SED	EPA 8270C	Heptachlor epoxide	0.1 ng/dry g	UJ NQ
B13-8030_SED	EPA 8270C	Hexachlorobenzene	0.1 ng/dry g	UJ NQ
B13-8030_SED	EPA 8270C	Indeno[1,2,3-c,d]pyrene	17.1 ng/dry g	J NQ
B13-8030_SED	EPA 8270C	Methoxychlor	0.1 ng/dry g	UJ NQ, BC
B13-8030_SED	EPA 8270C	Mirex	0.1 ng/dry g	UJ NQ
B13-8030_SED	EPA 8270C	Naphthalene	1 ng/dry g	J DL, NQ
B13-8030_SED	EPA 8270C	Oxychlorane	0.1 ng/dry g	UJ NQ
B13-8030_SED	EPA 8270C	PCB018	0.1 ng/dry g	UJ LV, LC
B13-8030_SED	EPA 8270C	PCB044	0.1 ng/dry g	UJ LV, LC
B13-8030_SED	EPA 8270C	PCB049	0.1 ng/dry g	UJ LV, LC
B13-8030_SED	EPA 8270C	PCB052	0.1 ng/dry g	UJ LV, LC
B13-8030_SED	EPA 8270C	PCB087	0.1 ng/dry g	UJ LC
B13-8030_SED	EPA 8270C	PCB099	0.12 ng/dry g	J LC
B13-8030_SED	EPA 8270C	PCB101	0.36 ng/dry g	J LC
B13-8030_SED	EPA 8270C	PCB110	0.16 ng/dry g	J LC
B13-8030_SED	EPA 8270C	PCB119	0.1 ng/dry g	UJ LC
B13-8030_SED	EPA 8270C	PCB149	0.48 ng/dry g	J LC
B13-8030_SED	EPA 8270C	PCB151	0.13 ng/dry g	J LC
B13-8030_SED	EPA 8270C	PCB158	0.15 ng/dry g	J LC
B13-8030_SED	EPA 8270C	PCB177	0.11 ng/dry g	J LC
B13-8030_SED	EPA 8270C	PCB183	0.07 ng/dry g	J DL, LC
B13-8030_SED	EPA 8270C	PCB187	0.16 ng/dry g	J BC, LV, LC
B13-8030_SED	EPA 8270C	PCB199(200)	0.2 ng/dry g	UJ LV, LC
B13-8030_SED	EPA 8270C	PCB206	0.1 ng/dry g	UJ BC, LC
B13-8030_SED	EPA 8270C	PCB209	0.1 ng/dry g	UJ LC
B13-8030_SED	EPA 8270C	Perthane	0.1 ng/dry g	UJ NQ, BC
B13-8030_SED	EPA 8270C	Perylene	4.6 ng/dry g	J DL, NQ, LP
B13-8030_SED	EPA 8270C	Phenanthrene	7.4 ng/dry g	J NQ
B13-8030_SED	EPA 8270C	Pyrene	21.1 ng/dry g	J NQ
B13-8030_SED	EPA 8270C	trans-Nonachlor	0.1 ng/dry g	UJ NQ
B13-8030_SED	EPA 8270C-NCI	Allethrin	0.5 ng/dry g	UJ NQ, BC
B13-8030_SED	EPA 8270C-NCI	Bifenthrin	0.5 ng/dry g	UJ NQ
B13-8030_SED	EPA 8270C-NCI	Cyfluthrin, total	0.5 ng/dry g	UJ NQ, BC
B13-8030_SED	EPA 8270C-NCI	Cypermethrin, total	0.5 ng/dry g	UJ NQ, BC
B13-8030_SED	EPA 8270C-NCI	Danitol (Fenpropathrin)	0.5 ng/dry g	UJ NQ
B13-8030_SED	EPA 8270C-NCI	Deltamethrin/Tralomethrin	0.5 ng/dry g	R BC
B13-8030_SED	EPA 8270C-NCI	Esfenvalerate	0.5 ng/dry g	UJ NQ, BC
B13-8030_SED	EPA 8270C-NCI	Fenvalerate	0.5 ng/dry g	UJ NQ, BC
B13-8030_SED	EPA 8270C-NCI	Fipronil	0.5 ng/dry g	UJ NQ
B13-8030_SED	EPA 8270C-NCI	Fipronil Desulfinyl	0.5 ng/dry g	UJ NQ
B13-8030_SED	EPA 8270C-NCI	Fipronil Sulfide	0.5 ng/dry g	UJ NQ
B13-8030_SED	EPA 8270C-NCI	Fipronil Sulfone	0.5 ng/dry g	UJ NQ
B13-8030_SED	EPA 8270C-NCI	Fluvalinate	0.5 ng/dry g	UJ NQ, BC
B13-8030_SED	EPA 8270C-NCI	I-Cyhalothrin	0.5 ng/dry g	UJ NQ

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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8030_SED	EPA 8270C-NCI	PBDE085	0.1 ng/dry g	UJ LC
B13-8030_SED	EPA 8270C-NCI	PBDE138	0.1 ng/dry g	UJ LC
B13-8030_SED	EPA 8270C-NCI	PBDE153	0.1 ng/dry g	UJ LC
B13-8030_SED	EPA 8270C-NCI	PBDE183	0.1 ng/dry g	UJ LC
B13-8030_SED	EPA 8270C-NCI	PBDE209	0.1 ng/dry g	UJ LC
B13-8030_SED	EPA 8270C-NCI	Permethrin, cis-	0.5 ng/dry g	R BC
B13-8030_SED	EPA 8270C-NCI	Permethrin, trans-	0.5 ng/dry g	R BC
B13-8030_SED	EPA 8270C-NCI	Prallethrin	0.5 ng/dry g	UJ NQ
B13-8030_SED	EPA 8270C-NCI	Resmethrin	0.5 ng/dry g	UJ NQ, BC
B13-8030_SED	EPA 9060	Total Nitrogen	0.32 % Dry Weight	J NQ
B13-8030_SED	EPA 9060	Total Organic Carbon	0.57 % Dry Weight	J NQ
B13-8030_SED	Plumb, 1981 and Teryl	Acid Volatile Sulfides	100.54 mg/dry kg	J NQ
B13-8031_SED	EPA 200.8	Nickel	0.0061 µmol/dry g	J DL
B13-8031_SED	EPA 245.7	Mercury	0.016 µg/dry g	J LC
B13-8031_SED	EPA 6020	Aluminum	30894.5 µg/dry g	J HP
B13-8031_SED	EPA 6020	Antimony	0.134 µg/dry g	J HP
B13-8031_SED	EPA 6020	Beryllium	0.444 µg/dry g	J HP
B13-8031_SED	EPA 6020	Cadmium	0.1134 µg/dry g	J LP
B13-8031_SED	EPA 6020	Chromium	32.2135 µg/dry g	J HP
B13-8031_SED	EPA 6020	Total Phosphorus	288.108 µg/dry g	J NQ
B13-8031_SED	EPA 8270C	1-Methylnaphthalene	5 ng/dry g	UJ NQ
B13-8031_SED	EPA 8270C	1-Methylphenanthrene	5 ng/dry g	UJ NQ
B13-8031_SED	EPA 8270C	2,3,5-Trimethylnaphthalene	5 ng/dry g	UJ NQ
B13-8031_SED	EPA 8270C	2,4'-DDD	0.1 ng/dry g	UJ LS
B13-8031_SED	EPA 8270C	2,4'-DDE	0.1 ng/dry g	UJ LS
B13-8031_SED	EPA 8270C	2,4'-DDT	0.1 ng/dry g	UJ BC, LS
B13-8031_SED	EPA 8270C	2,6-Dimethylnaphthalene	5 ng/dry g	UJ NQ
B13-8031_SED	EPA 8270C	2-Methylnaphthalene	5 ng/dry g	UJ NQ
B13-8031_SED	EPA 8270C	4,4'-DDD	0.1 ng/dry g	UJ LS
B13-8031_SED	EPA 8270C	4,4'-DDE	0.1 ng/dry g	UJ LS
B13-8031_SED	EPA 8270C	4,4'-DDMU	0.1 ng/dry g	UJ LS
B13-8031_SED	EPA 8270C	4,4'-DDT	0.1 ng/dry g	UJ BC, LS
B13-8031_SED	EPA 8270C	Acenaphthene	5 ng/dry g	UJ NQ
B13-8031_SED	EPA 8270C	Acenaphthylene	5 ng/dry g	UJ NQ
B13-8031_SED	EPA 8270C	Aldrin	0.1 ng/dry g	UJ LS
B13-8031_SED	EPA 8270C	Anthracene	5 ng/dry g	UJ NQ
B13-8031_SED	EPA 8270C	Aroclor 1016	2 ng/dry g	UJ NQ
B13-8031_SED	EPA 8270C	Aroclor 1221	2 ng/dry g	UJ NQ
B13-8031_SED	EPA 8270C	Aroclor 1232	2 ng/dry g	UJ NQ
B13-8031_SED	EPA 8270C	Aroclor 1242	2 ng/dry g	UJ NQ
B13-8031_SED	EPA 8270C	Aroclor 1248	2 ng/dry g	UJ NQ
B13-8031_SED	EPA 8270C	Aroclor 1254	2 ng/dry g	UJ NQ
B13-8031_SED	EPA 8270C	Aroclor 1260	2 ng/dry g	UJ NQ
B13-8031_SED	EPA 8270C	Aroclor 1262	2 ng/dry g	UJ NQ
B13-8031_SED	EPA 8270C	Aroclor 1268	2 ng/dry g	UJ NQ
B13-8031_SED	EPA 8270C	Benz[a]anthracene	5 ng/dry g	UJ NQ
B13-8031_SED	EPA 8270C	Benzo[a]pyrene	5 ng/dry g	UJ NQ
B13-8031_SED	EPA 8270C	Benzo[b]fluoranthene	5 ng/dry g	UJ NQ
B13-8031_SED	EPA 8270C	Benzo[e]pyrene	5 ng/dry g	UJ NQ
B13-8031_SED	EPA 8270C	Benzo[g,h,i]perylene	5 ng/dry g	UJ NQ
B13-8031_SED	EPA 8270C	Benzo[k]fluoranthene	5 ng/dry g	UJ NQ
B13-8031_SED	EPA 8270C	BHC-alpha	0.1 ng/dry g	UJ LS
B13-8031_SED	EPA 8270C	BHC-beta	0.1 ng/dry g	UJ BC, LS
B13-8031_SED	EPA 8270C	BHC-delta	0.1 ng/dry g	UJ LS



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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8031_SED	EPA 8270C	BHC-gamma	0.1 ng/dry g	UJ LS
B13-8031_SED	EPA 8270C	Biphenyl	5 ng/dry g	UJ NQ
B13-8031_SED	EPA 8270C	Chlordane-alpha	0.1 ng/dry g	UJ LS
B13-8031_SED	EPA 8270C	Chlordane-gamma	0.1 ng/dry g	UJ LS
B13-8031_SED	EPA 8270C	Chrysene	5 ng/dry g	UJ NQ
B13-8031_SED	EPA 8270C	cis-Nonachlor	0.1 ng/dry g	UJ LS
B13-8031_SED	EPA 8270C	DCPA (Dacthal)	0.1 ng/dry g	UJ LS
B13-8031_SED	EPA 8270C	Dibenz[a,h]anthracene	5 ng/dry g	UJ NQ
B13-8031_SED	EPA 8270C	Dibenzothiophene	5 ng/dry g	UJ NQ
B13-8031_SED	EPA 8270C	Dicofol	0.1 ng/dry g	UJ BC, LV, LS
B13-8031_SED	EPA 8270C	Dieldrin	0.1 ng/dry g	UJ LS
B13-8031_SED	EPA 8270C	Endosulfan sulfate	0.1 ng/dry g	UJ LS
B13-8031_SED	EPA 8270C	Endosulfan-I	0.1 ng/dry g	UJ LL, LS
B13-8031_SED	EPA 8270C	Endosulfan-II	0.1 ng/dry g	UJ LL, LS
B13-8031_SED	EPA 8270C	Endrin	0.1 ng/dry g	UJ LS
B13-8031_SED	EPA 8270C	Endrin aldehyde	0.1 ng/dry g	UJ BC, LL, LS
B13-8031_SED	EPA 8270C	Endrin ketone	0.1 ng/dry g	UJ BC, LS
B13-8031_SED	EPA 8270C	Fluoranthene	1.1 ng/dry g	J DL, NQ, HD
B13-8031_SED	EPA 8270C	Fluorene	5 ng/dry g	UJ NQ
B13-8031_SED	EPA 8270C	Heptachlor	0.1 ng/dry g	UJ BC, LS
B13-8031_SED	EPA 8270C	Heptachlor epoxide	0.1 ng/dry g	UJ LS
B13-8031_SED	EPA 8270C	Hexachlorobenzene	0.1 ng/dry g	UJ LS
B13-8031_SED	EPA 8270C	Indeno[1,2,3-c,d]pyrene	5 ng/dry g	UJ NQ
B13-8031_SED	EPA 8270C	Methoxychlor	0.1 ng/dry g	UJ BC, LS
B13-8031_SED	EPA 8270C	Mirex	0.1 ng/dry g	UJ LS
B13-8031_SED	EPA 8270C	Naphthalene	5 ng/dry g	UJ NQ
B13-8031_SED	EPA 8270C	Oxychlordane	0.1 ng/dry g	UJ LS
B13-8031_SED	EPA 8270C	PCB119	0.1 ng/dry g	UJ LV
B13-8031_SED	EPA 8270C	Perthane	0.1 ng/dry g	UJ BC, LS
B13-8031_SED	EPA 8270C	Perylene	5 ng/dry g	UJ NQ
B13-8031_SED	EPA 8270C	Phenanthrene	3.2 ng/dry g	J DL, NQ, HD
B13-8031_SED	EPA 8270C	Pyrene	5 ng/dry g	UJ NQ
B13-8031_SED	EPA 8270C	trans-Nonachlor	0.1 ng/dry g	UJ LS
B13-8031_SED	EPA 8270C-NCI	Allethrin	0.5 ng/dry g	UJ LC
B13-8031_SED	EPA 8270C-NCI	Danitol (Fenpropathrin)	0.5 ng/dry g	UJ LL
B13-8031_SED	EPA 8270C-NCI	Deltamethrin/Tralomethrin	0.5 ng/dry g	UJ BC
B13-8031_SED	EPA 8270C-NCI	Fluvalinate	0.5 ng/dry g	UJ BC
B13-8031_SED	EPA 8270C-NCI	PBDE049	0.1 ng/dry g	UJ LC
B13-8031_SED	EPA 8270C-NCI	PBDE209	0.1 ng/dry g	UJ BC, LC
B13-8031_SED	EPA 8270C-NCI	Prallethrin	0.5 ng/dry g	UJ BC, LC
B13-8031_SED	EPA 8270C-NCI	Resmethrin	0.5 ng/dry g	R LV
B13-8031_SED	EPA 9060	Total Nitrogen	0.37 % Dry Weight	J NQ
B13-8031_SED	EPA 9060	Total Organic Carbon	1.32 % Dry Weight	J HD, NQ
B13-8031_SED	Plumb, 1981 and Teryl	Acid Volatile Sulfides	1.3 mg/dry kg	J NQ
B13-8033_SED	EPA 245.7	Mercury	0.1845 µg/dry g	J LP
B13-8033_SED	EPA 6020	Aluminum	34928.8 µg/dry g	J HP
B13-8033_SED	EPA 6020	Arsenic	7.982 µg/dry g	J HP
B13-8033_SED	EPA 6020	Barium	92.784 µg/dry g	J CH
B13-8033_SED	EPA 6020	Beryllium	0.573 µg/dry g	J HP
B13-8033_SED	EPA 6020	Cadmium	0.2297 µg/dry g	J LP
B13-8033_SED	EPA 6020	Chromium	46.0093 µg/dry g	J HP
B13-8033_SED	EPA 6020	Iron (Fe)	32280.4 µg/dry g	J HP
B13-8033_SED	EPA 6020	Nickel	14.1 µg/dry g	J HP
B13-8033_SED	EPA 6020	Total Phosphorus	501.7 µg/dry g	J NQ

**TABLE 2**  
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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8033_SED	EPA 8270C	1-Methylnaphthalene	5 ng/dry g	UJ NQ
B13-8033_SED	EPA 8270C	1-Methylphenanthrene	2.3 ng/dry g	J DL, NQ
B13-8033_SED	EPA 8270C	2,3,5-Trimethylnaphthalene	1.3 ng/dry g	J DL, NQ
B13-8033_SED	EPA 8270C	2,4'-DDD	0.1 ng/dry g	UJ NQ
B13-8033_SED	EPA 8270C	2,4'-DDE	0.1 ng/dry g	UJ NQ
B13-8033_SED	EPA 8270C	2,4'-DDT	0.1 ng/dry g	UJ NQ, BC
B13-8033_SED	EPA 8270C	2,6-Dimethylnaphthalene	5 ng/dry g	UJ NQ
B13-8033_SED	EPA 8270C	2-Methylnaphthalene	1.3 ng/dry g	J DL, NQ
B13-8033_SED	EPA 8270C	4,4'-DDD	0.1 ng/dry g	UJ NQ
B13-8033_SED	EPA 8270C	4,4'-DDE	0.1 ng/dry g	UJ NQ
B13-8033_SED	EPA 8270C	4,4'-DDMU	0.1 ng/dry g	UJ NQ
B13-8033_SED	EPA 8270C	4,4'-DDT	0.1 ng/dry g	UJ NQ, BC
B13-8033_SED	EPA 8270C	Acenaphthene	5 ng/dry g	UJ NQ
B13-8033_SED	EPA 8270C	Acenaphthylene	2.6 ng/dry g	J DL, NQ
B13-8033_SED	EPA 8270C	Aldrin	0.1 ng/dry g	UJ NQ
B13-8033_SED	EPA 8270C	Anthracene	6.4 ng/dry g	J NQ
B13-8033_SED	EPA 8270C	Aroclor 1016	2 ng/dry g	UJ NQ
B13-8033_SED	EPA 8270C	Aroclor 1221	2 ng/dry g	UJ NQ
B13-8033_SED	EPA 8270C	Aroclor 1232	2 ng/dry g	UJ NQ
B13-8033_SED	EPA 8270C	Aroclor 1242	2 ng/dry g	UJ NQ
B13-8033_SED	EPA 8270C	Aroclor 1248	2 ng/dry g	UJ NQ
B13-8033_SED	EPA 8270C	Aroclor 1254	2 ng/dry g	UJ NQ
B13-8033_SED	EPA 8270C	Aroclor 1260	5.3 ng/dry g	J NQ
B13-8033_SED	EPA 8270C	Aroclor 1262	2 ng/dry g	UJ NQ
B13-8033_SED	EPA 8270C	Aroclor 1268	2 ng/dry g	UJ NQ
B13-8033_SED	EPA 8270C	Benz[a]anthracene	11.7 ng/dry g	J NQ
B13-8033_SED	EPA 8270C	Benzo[a]pyrene	22.7 ng/dry g	J NQ, LP
B13-8033_SED	EPA 8270C	Benzo[b]fluoranthene	21.5 ng/dry g	J NQ
B13-8033_SED	EPA 8270C	Benzo[e]pyrene	21 ng/dry g	J NQ
B13-8033_SED	EPA 8270C	Benzo[g,h,i]perylene	20.6 ng/dry g	J NQ
B13-8033_SED	EPA 8270C	Benzo[k]fluoranthene	11.5 ng/dry g	J NQ
B13-8033_SED	EPA 8270C	BHC-alpha	0.1 ng/dry g	UJ NQ
B13-8033_SED	EPA 8270C	BHC-beta	0.1 ng/dry g	UJ NQ, BC
B13-8033_SED	EPA 8270C	BHC-delta	0.1 ng/dry g	UJ NQ
B13-8033_SED	EPA 8270C	BHC-gamma	0.1 ng/dry g	UJ NQ
B13-8033_SED	EPA 8270C	Biphenyl	5 ng/dry g	UJ NQ
B13-8033_SED	EPA 8270C	Chlordane-alpha	0.1 ng/dry g	UJ NQ
B13-8033_SED	EPA 8270C	Chlordane-gamma	0.1 ng/dry g	UJ NQ
B13-8033_SED	EPA 8270C	Chrysene	23 ng/dry g	J NQ
B13-8033_SED	EPA 8270C	cis-Nonachlor	0.1 ng/dry g	UJ NQ
B13-8033_SED	EPA 8270C	DCPA (Dacthal)	0.1 ng/dry g	UJ NQ
B13-8033_SED	EPA 8270C	Dibenz[a,h]anthracene	3.3 ng/dry g	J DL, NQ, LC, HP
B13-8033_SED	EPA 8270C	Dibenzothiophene	1.6 ng/dry g	J DL, NQ
B13-8033_SED	EPA 8270C	Dicofol	0.1 ng/dry g	UJ NQ, BC
B13-8033_SED	EPA 8270C	Dieldrin	0.1 ng/dry g	UJ NQ
B13-8033_SED	EPA 8270C	Endosulfan sulfate	0.1 ng/dry g	UJ NQ
B13-8033_SED	EPA 8270C	Endosulfan-I	0.1 ng/dry g	UJ NQ, LL
B13-8033_SED	EPA 8270C	Endosulfan-II	0.1 ng/dry g	UJ NQ, LL
B13-8033_SED	EPA 8270C	Endrin	0.1 ng/dry g	UJ NQ
B13-8033_SED	EPA 8270C	Endrin aldehyde	0.1 ng/dry g	R LL
B13-8033_SED	EPA 8270C	Endrin ketone	0.1 ng/dry g	UJ NQ, BC
B13-8033_SED	EPA 8270C	Fluoranthene	22.5 ng/dry g	J NQ
B13-8033_SED	EPA 8270C	Fluorene	1.9 ng/dry g	J DL, NQ
B13-8033_SED	EPA 8270C	Heptachlor	0.1 ng/dry g	UJ NQ, BC

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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8033_SED	EPA 8270C	Heptachlor epoxide	0.1 ng/dry g	UJ NQ
B13-8033_SED	EPA 8270C	Hexachlorobenzene	0.1 ng/dry g	UJ NQ
B13-8033_SED	EPA 8270C	Indeno[1,2,3-c,d]pyrene	15.5 ng/dry g	J NQ
B13-8033_SED	EPA 8270C	Methoxychlor	0.1 ng/dry g	UJ NQ, BC
B13-8033_SED	EPA 8270C	Mirex	0.1 ng/dry g	UJ NQ
B13-8033_SED	EPA 8270C	Naphthalene	2.3 ng/dry g	J DL, NQ
B13-8033_SED	EPA 8270C	Oxychlorodane	0.1 ng/dry g	UJ NQ
B13-8033_SED	EPA 8270C	PCB018	0.1 ng/dry g	UJ LV, LC
B13-8033_SED	EPA 8270C	PCB044	0.1 ng/dry g	UJ LV, LC
B13-8033_SED	EPA 8270C	PCB049	0.1 ng/dry g	UJ LV, LC
B13-8033_SED	EPA 8270C	PCB052	0.1 ng/dry g	UJ LV, LC
B13-8033_SED	EPA 8270C	PCB087	0.1 ng/dry g	UJ LC
B13-8033_SED	EPA 8270C	PCB099	0.32 ng/dry g	J LC
B13-8033_SED	EPA 8270C	PCB101	0.61 ng/dry g	J LC
B13-8033_SED	EPA 8270C	PCB110	0.39 ng/dry g	J LC
B13-8033_SED	EPA 8270C	PCB119	0.1 ng/dry g	UJ LC
B13-8033_SED	EPA 8270C	PCB149	1.2 ng/dry g	J LC
B13-8033_SED	EPA 8270C	PCB151	0.3 ng/dry g	J LC
B13-8033_SED	EPA 8270C	PCB158	0.25 ng/dry g	J LC
B13-8033_SED	EPA 8270C	PCB177	0.12 ng/dry g	J LC
B13-8033_SED	EPA 8270C	PCB183	0.18 ng/dry g	J LC
B13-8033_SED	EPA 8270C	PCB187	0.4 ng/dry g	J BC, LV, LC
B13-8033_SED	EPA 8270C	PCB199(200)	0.2 ng/dry g	UJ LV, LC
B13-8033_SED	EPA 8270C	PCB206	0.1 ng/dry g	UJ BC, LC
B13-8033_SED	EPA 8270C	PCB209	0.1 ng/dry g	UJ LC
B13-8033_SED	EPA 8270C	Perthane	0.1 ng/dry g	UJ NQ, BC
B13-8033_SED	EPA 8270C	Perylene	7.1 ng/dry g	J NQ, LP
B13-8033_SED	EPA 8270C	Phenanthrene	12.3 ng/dry g	J NQ
B13-8033_SED	EPA 8270C	Pyrene	26.1 ng/dry g	J NQ
B13-8033_SED	EPA 8270C	trans-Nonachlor	0.1 ng/dry g	UJ NQ
B13-8033_SED	EPA 8270C-NCI	Allethrin	0.5 ng/dry g	UJ NQ, BC
B13-8033_SED	EPA 8270C-NCI	Bifenthrin	0.5 ng/dry g	UJ NQ
B13-8033_SED	EPA 8270C-NCI	Cyfluthrin, total	0.5 ng/dry g	UJ NQ, BC
B13-8033_SED	EPA 8270C-NCI	Cypermethrin, total	0.5 ng/dry g	UJ NQ, BC
B13-8033_SED	EPA 8270C-NCI	Danitol (Fenprothrin)	0.5 ng/dry g	UJ NQ
B13-8033_SED	EPA 8270C-NCI	Deltamethrin/Tralomethrin	0.5 ng/dry g	R BC
B13-8033_SED	EPA 8270C-NCI	Esfenvalerate	0.5 ng/dry g	UJ NQ, BC
B13-8033_SED	EPA 8270C-NCI	Fenvalerate	0.5 ng/dry g	UJ NQ, BC
B13-8033_SED	EPA 8270C-NCI	Fipronil	0.5 ng/dry g	UJ NQ
B13-8033_SED	EPA 8270C-NCI	Fipronil Desulfinyl	0.5 ng/dry g	UJ NQ
B13-8033_SED	EPA 8270C-NCI	Fipronil Sulfide	0.5 ng/dry g	UJ NQ
B13-8033_SED	EPA 8270C-NCI	Fipronil Sulfone	0.5 ng/dry g	UJ NQ
B13-8033_SED	EPA 8270C-NCI	Fluvalinate	0.5 ng/dry g	UJ NQ, BC
B13-8033_SED	EPA 8270C-NCI	I-Cyhalothrin	0.5 ng/dry g	UJ NQ
B13-8033_SED	EPA 8270C-NCI	PBDE085	0.1 ng/dry g	UJ LC
B13-8033_SED	EPA 8270C-NCI	PBDE100	0.07 ng/dry g	J DL
B13-8033_SED	EPA 8270C-NCI	PBDE138	0.1 ng/dry g	UJ LC
B13-8033_SED	EPA 8270C-NCI	PBDE153	0.1 ng/dry g	UJ LC
B13-8033_SED	EPA 8270C-NCI	PBDE183	0.1 ng/dry g	UJ LC
B13-8033_SED	EPA 8270C-NCI	PBDE209	0.1 ng/dry g	UJ LC
B13-8033_SED	EPA 8270C-NCI	Permethrin, cis-	0.5 ng/dry g	R BC
B13-8033_SED	EPA 8270C-NCI	Permethrin, trans-	0.5 ng/dry g	R BC
B13-8033_SED	EPA 8270C-NCI	Prallethrin	0.5 ng/dry g	UJ NQ
B13-8033_SED	EPA 8270C-NCI	Resmethrin	0.5 ng/dry g	UJ NQ, BC

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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8033_SED	EPA 9060	Total Nitrogen	0.49 % Dry Weight	J NQ
B13-8033_SED	EPA 9060	Total Organic Carbon	1.14 % Dry Weight	J NQ
B13-8033_SED	Plumb, 1981 and Teryl	Acid Volatile Sulfides	88 mg/dry kg	J NQ
B13-8036_SED	EPA 6020	Aluminum	26430 µg/dry g	J HP
B13-8036_SED	EPA 6020	Antimony	0.248 µg/dry g	J HP
B13-8036_SED	EPA 6020	Arsenic	6.157 µg/dry g	J HP
B13-8036_SED	EPA 6020	Barium	101.64 µg/dry g	J CH
B13-8036_SED	EPA 6020	Beryllium	0.434 µg/dry g	J HP
B13-8036_SED	EPA 6020	Cadmium	0.2073 µg/dry g	J LP
B13-8036_SED	EPA 6020	Chromium	32.859 µg/dry g	J HP
B13-8036_SED	EPA 6020	Iron (Fe)	25780.6 µg/dry g	J HP
B13-8036_SED	EPA 6020	Nickel	10.92 µg/dry g	J HP
B13-8036_SED	EPA 6020	Total Phosphorus	350.836 µg/dry g	J NQ
B13-8036_SED	EPA 8270C	1-Methylnaphthalene	1.3 ng/dry g	J DL, NQ
B13-8036_SED	EPA 8270C	1-Methylphenanthrene	2.4 ng/dry g	J DL, NQ
B13-8036_SED	EPA 8270C	2,3,5-Trimethylnaphthalene	3.6 ng/dry g	J DL, NQ
B13-8036_SED	EPA 8270C	2,4'-DDD	0.1 ng/dry g	UJ NQ
B13-8036_SED	EPA 8270C	2,4'-DDE	0.1 ng/dry g	UJ NQ
B13-8036_SED	EPA 8270C	2,4'-DDT	0.1 ng/dry g	UJ NQ, BC
B13-8036_SED	EPA 8270C	2,6-Dimethylnaphthalene	5.2 ng/dry g	J NQ
B13-8036_SED	EPA 8270C	2-Methylnaphthalene	2.5 ng/dry g	J DL, NQ
B13-8036_SED	EPA 8270C	4,4'-DDD	0.1 ng/dry g	UJ NQ
B13-8036_SED	EPA 8270C	4,4'-DDE	0.1 ng/dry g	UJ NQ
B13-8036_SED	EPA 8270C	4,4'-DDMU	0.1 ng/dry g	UJ NQ
B13-8036_SED	EPA 8270C	4,4'-DDT	0.1 ng/dry g	UJ NQ, BC
B13-8036_SED	EPA 8270C	Acenaphthene	5 ng/dry g	UJ NQ
B13-8036_SED	EPA 8270C	Acenaphthylene	5.5 ng/dry g	J NQ
B13-8036_SED	EPA 8270C	Aldrin	0.1 ng/dry g	UJ NQ
B13-8036_SED	EPA 8270C	Anthracene	10.5 ng/dry g	J NQ
B13-8036_SED	EPA 8270C	Aroclor 1016	2 ng/dry g	UJ NQ
B13-8036_SED	EPA 8270C	Aroclor 1221	2 ng/dry g	UJ NQ
B13-8036_SED	EPA 8270C	Aroclor 1232	2 ng/dry g	UJ NQ
B13-8036_SED	EPA 8270C	Aroclor 1242	2 ng/dry g	UJ NQ
B13-8036_SED	EPA 8270C	Aroclor 1248	2 ng/dry g	UJ NQ
B13-8036_SED	EPA 8270C	Aroclor 1254	2 ng/dry g	UJ NQ
B13-8036_SED	EPA 8270C	Aroclor 1260	3 ng/dry g	J NQ
B13-8036_SED	EPA 8270C	Aroclor 1262	2 ng/dry g	UJ NQ
B13-8036_SED	EPA 8270C	Aroclor 1268	2 ng/dry g	UJ NQ
B13-8036_SED	EPA 8270C	Benz[a]anthracene	12 ng/dry g	J NQ
B13-8036_SED	EPA 8270C	Benzo[a]pyrene	110.3 ng/dry g	J NQ, LP
B13-8036_SED	EPA 8270C	Benzo[b]fluoranthene	121.4 ng/dry g	J NQ
B13-8036_SED	EPA 8270C	Benzo[e]pyrene	81 ng/dry g	J NQ
B13-8036_SED	EPA 8270C	Benzo[g,h,i]perylene	41.6 ng/dry g	J NQ
B13-8036_SED	EPA 8270C	Benzo[k]fluoranthene	50.7 ng/dry g	J NQ
B13-8036_SED	EPA 8270C	BHC-alpha	0.1 ng/dry g	UJ NQ
B13-8036_SED	EPA 8270C	BHC-beta	0.1 ng/dry g	UJ NQ, BC
B13-8036_SED	EPA 8270C	BHC-delta	0.1 ng/dry g	UJ NQ
B13-8036_SED	EPA 8270C	BHC-gamma	0.1 ng/dry g	UJ NQ
B13-8036_SED	EPA 8270C	Biphenyl	5 ng/dry g	UJ NQ
B13-8036_SED	EPA 8270C	Chlordane-alpha	0.1 ng/dry g	UJ NQ
B13-8036_SED	EPA 8270C	Chlordane-gamma	0.1 ng/dry g	UJ NQ
B13-8036_SED	EPA 8270C	Chrysene	24 ng/dry g	J NQ
B13-8036_SED	EPA 8270C	cis-Nonachlor	0.1 ng/dry g	UJ NQ
B13-8036_SED	EPA 8270C	DCPA (Dacthal)	0.1 ng/dry g	UJ NQ

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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8036_SED	EPA 8270C	Dibenz[a,h]anthracene	10.7 ng/dry g	J NQ, LC, HP
B13-8036_SED	EPA 8270C	Dibenzothiophene	1.4 ng/dry g	J DL, NQ
B13-8036_SED	EPA 8270C	Dicofol	0.1 ng/dry g	UJ NQ, BC
B13-8036_SED	EPA 8270C	Dieldrin	0.1 ng/dry g	UJ NQ
B13-8036_SED	EPA 8270C	Endosulfan sulfate	0.1 ng/dry g	UJ NQ
B13-8036_SED	EPA 8270C	Endosulfan-I	0.1 ng/dry g	UJ NQ, LL
B13-8036_SED	EPA 8270C	Endosulfan-II	0.1 ng/dry g	UJ NQ, LL
B13-8036_SED	EPA 8270C	Endrin	0.1 ng/dry g	UJ NQ
B13-8036_SED	EPA 8270C	Endrin aldehyde	0.1 ng/dry g	R LL
B13-8036_SED	EPA 8270C	Endrin ketone	0.1 ng/dry g	UJ NQ, BC
B13-8036_SED	EPA 8270C	Fluoranthene	16.4 ng/dry g	J NQ
B13-8036_SED	EPA 8270C	Fluorene	2.6 ng/dry g	J DL, NQ
B13-8036_SED	EPA 8270C	Heptachlor	0.1 ng/dry g	UJ NQ, BC
B13-8036_SED	EPA 8270C	Heptachlor epoxide	0.1 ng/dry g	UJ NQ
B13-8036_SED	EPA 8270C	Hexachlorobenzene	0.1 ng/dry g	UJ NQ
B13-8036_SED	EPA 8270C	Indeno[1,2,3-c,d]pyrene	46.7 ng/dry g	J NQ
B13-8036_SED	EPA 8270C	Methoxychlor	0.1 ng/dry g	UJ NQ, BC
B13-8036_SED	EPA 8270C	Mirex	0.1 ng/dry g	UJ NQ
B13-8036_SED	EPA 8270C	Naphthalene	1.7 ng/dry g	J DL, NQ
B13-8036_SED	EPA 8270C	Oxychlorane	0.1 ng/dry g	UJ NQ
B13-8036_SED	EPA 8270C	PCB018	0.1 ng/dry g	UJ LV, LC
B13-8036_SED	EPA 8270C	PCB044	0.1 ng/dry g	UJ LV, LC
B13-8036_SED	EPA 8270C	PCB049	0.1 ng/dry g	UJ LV, LC
B13-8036_SED	EPA 8270C	PCB052	0.1 ng/dry g	UJ LV, LC
B13-8036_SED	EPA 8270C	PCB087	0.1 ng/dry g	UJ LC
B13-8036_SED	EPA 8270C	PCB099	0.16 ng/dry g	J LC
B13-8036_SED	EPA 8270C	PCB101	0.44 ng/dry g	J LC
B13-8036_SED	EPA 8270C	PCB110	0.21 ng/dry g	J LC
B13-8036_SED	EPA 8270C	PCB119	0.1 ng/dry g	UJ LC
B13-8036_SED	EPA 8270C	PCB149	0.55 ng/dry g	J LC
B13-8036_SED	EPA 8270C	PCB151	0.12 ng/dry g	J LC
B13-8036_SED	EPA 8270C	PCB158	0.09 ng/dry g	J DL, LC
B13-8036_SED	EPA 8270C	PCB177	0.1 ng/dry g	J LC
B13-8036_SED	EPA 8270C	PCB183	0.09 ng/dry g	J DL, LC
B13-8036_SED	EPA 8270C	PCB187	0.21 ng/dry g	J BC, LV, LC
B13-8036_SED	EPA 8270C	PCB199(200)	0.2 ng/dry g	UJ LV, LC
B13-8036_SED	EPA 8270C	PCB206	0.1 ng/dry g	UJ BC, LC
B13-8036_SED	EPA 8270C	PCB209	0.1 ng/dry g	UJ LC
B13-8036_SED	EPA 8270C	Perthane	0.1 ng/dry g	UJ NQ, BC
B13-8036_SED	EPA 8270C	Perylene	28.7 ng/dry g	J NQ, LP
B13-8036_SED	EPA 8270C	Phenanthrene	12.1 ng/dry g	J NQ
B13-8036_SED	EPA 8270C	Pyrene	24.2 ng/dry g	J NQ
B13-8036_SED	EPA 8270C	trans-Nonachlor	0.1 ng/dry g	UJ NQ
B13-8036_SED	EPA 8270C-NCI	Allethrin	0.5 ng/dry g	UJ NQ, BC
B13-8036_SED	EPA 8270C-NCI	Bifenthrin	0.5 ng/dry g	UJ NQ
B13-8036_SED	EPA 8270C-NCI	Cyfluthrin, total	0.5 ng/dry g	UJ NQ, BC
B13-8036_SED	EPA 8270C-NCI	Cypermethrin, total	0.5 ng/dry g	UJ NQ, BC
B13-8036_SED	EPA 8270C-NCI	Danitol (Fenpropathrin)	0.5 ng/dry g	UJ NQ
B13-8036_SED	EPA 8270C-NCI	Deltamethrin/Tralomethrin	0.5 ng/dry g	R BC
B13-8036_SED	EPA 8270C-NCI	Esfenvalerate	0.5 ng/dry g	UJ NQ, BC
B13-8036_SED	EPA 8270C-NCI	Fenvalerate	0.5 ng/dry g	UJ NQ, BC
B13-8036_SED	EPA 8270C-NCI	Fipronil	0.5 ng/dry g	UJ NQ
B13-8036_SED	EPA 8270C-NCI	Fipronil Desulfinyl	0.5 ng/dry g	UJ NQ
B13-8036_SED	EPA 8270C-NCI	Fipronil Sulfide	0.5 ng/dry g	UJ NQ

**TABLE 2**  
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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8036_SED	EPA 8270C-NCI	Fipronil Sulfone	0.5 ng/dry g	UJ NQ
B13-8036_SED	EPA 8270C-NCI	Fluvalinate	0.5 ng/dry g	UJ NQ, BC
B13-8036_SED	EPA 8270C-NCI	I-Cyhalothrin	0.5 ng/dry g	UJ NQ
B13-8036_SED	EPA 8270C-NCI	PBDE049	0.08 ng/dry g	J DL
B13-8036_SED	EPA 8270C-NCI	PBDE071	0.07 ng/dry g	J DL
B13-8036_SED	EPA 8270C-NCI	PBDE085	0.1 ng/dry g	UJ LC
B13-8036_SED	EPA 8270C-NCI	PBDE138	0.1 ng/dry g	UJ LC
B13-8036_SED	EPA 8270C-NCI	PBDE153	0.1 ng/dry g	UJ LC
B13-8036_SED	EPA 8270C-NCI	PBDE183	0.1 ng/dry g	UJ LC
B13-8036_SED	EPA 8270C-NCI	PBDE209	0.1 ng/dry g	UJ LC
B13-8036_SED	EPA 8270C-NCI	Permethrin, cis-	0.5 ng/dry g	R BC
B13-8036_SED	EPA 8270C-NCI	Permethrin, trans-	0.5 ng/dry g	R BC
B13-8036_SED	EPA 8270C-NCI	Prallethrin	0.5 ng/dry g	UJ NQ
B13-8036_SED	EPA 8270C-NCI	Resmethrin	0.5 ng/dry g	UJ NQ, BC
B13-8036_SED	EPA 9060	Total Nitrogen	0.26 % Dry Weight	J NQ
B13-8036_SED	EPA 9060	Total Organic Carbon	0.47 % Dry Weight	J NQ
B13-8036_SED	Plumb, 1981 and Teryl	Acid Volatile Sulfides	129.14 mg/dry kg	J NQ
B13-8038_SED	EPA 6020	Aluminum	28703.9 µg/dry g	J HP
B13-8038_SED	EPA 6020	Antimony	0.216 µg/dry g	J HP
B13-8038_SED	EPA 6020	Arsenic	6.803 µg/dry g	J HP
B13-8038_SED	EPA 6020	Barium	95.828 µg/dry g	J CH
B13-8038_SED	EPA 6020	Beryllium	0.471 µg/dry g	J HP
B13-8038_SED	EPA 6020	Cadmium	0.2211 µg/dry g	J LP
B13-8038_SED	EPA 6020	Chromium	35.3803 µg/dry g	J HP
B13-8038_SED	EPA 6020	Iron (Fe)	26914.7 µg/dry g	J HP
B13-8038_SED	EPA 6020	Nickel	11.52 µg/dry g	J HP
B13-8038_SED	EPA 6020	Total Phosphorus	410.405 µg/dry g	J NQ
B13-8038_SED	EPA 8270C	1-Methylnaphthalene	5 ng/dry g	UJ NQ
B13-8038_SED	EPA 8270C	1-Methylphenanthrene	1.7 ng/dry g	J DL, NQ
B13-8038_SED	EPA 8270C	2,3,5-Trimethylnaphthalene	1 ng/dry g	J DL, NQ
B13-8038_SED	EPA 8270C	2,4'-DDD	0.1 ng/dry g	UJ NQ
B13-8038_SED	EPA 8270C	2,4'-DDE	0.1 ng/dry g	UJ NQ
B13-8038_SED	EPA 8270C	2,4'-DDT	0.1 ng/dry g	UJ NQ, BC
B13-8038_SED	EPA 8270C	2,6-Dimethylnaphthalene	5 ng/dry g	UJ NQ
B13-8038_SED	EPA 8270C	2-Methylnaphthalene	5 ng/dry g	UJ NQ
B13-8038_SED	EPA 8270C	4,4'-DDD	0.1 ng/dry g	UJ NQ
B13-8038_SED	EPA 8270C	4,4'-DDE	0.1 ng/dry g	UJ NQ
B13-8038_SED	EPA 8270C	4,4'-DDMU	0.1 ng/dry g	UJ NQ
B13-8038_SED	EPA 8270C	4,4'-DDT	0.1 ng/dry g	UJ NQ, BC
B13-8038_SED	EPA 8270C	Acenaphthene	5 ng/dry g	UJ NQ
B13-8038_SED	EPA 8270C	Acenaphthylene	1.5 ng/dry g	J DL, NQ
B13-8038_SED	EPA 8270C	Aldrin	0.1 ng/dry g	UJ NQ
B13-8038_SED	EPA 8270C	Anthracene	4.4 ng/dry g	J DL, NQ
B13-8038_SED	EPA 8270C	Aroclor 1016	2 ng/dry g	UJ NQ
B13-8038_SED	EPA 8270C	Aroclor 1221	2 ng/dry g	UJ NQ
B13-8038_SED	EPA 8270C	Aroclor 1232	2 ng/dry g	UJ NQ
B13-8038_SED	EPA 8270C	Aroclor 1242	2 ng/dry g	UJ NQ
B13-8038_SED	EPA 8270C	Aroclor 1248	2 ng/dry g	UJ NQ
B13-8038_SED	EPA 8270C	Aroclor 1254	2 ng/dry g	UJ NQ
B13-8038_SED	EPA 8270C	Aroclor 1260	3.9 ng/dry g	J NQ
B13-8038_SED	EPA 8270C	Aroclor 1262	2 ng/dry g	UJ NQ
B13-8038_SED	EPA 8270C	Aroclor 1268	2 ng/dry g	UJ NQ
B13-8038_SED	EPA 8270C	Benz[a]anthracene	14.2 ng/dry g	J NQ
B13-8038_SED	EPA 8270C	Benzo[a]pyrene	15 ng/dry g	J NQ, LP

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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8038_SED	EPA 8270C	Benzo[b]fluoranthene	15.7 ng/dry g	J NQ
B13-8038_SED	EPA 8270C	Benzo[e]pyrene	11.6 ng/dry g	J NQ
B13-8038_SED	EPA 8270C	Benzo[g,h,i]perylene	12.6 ng/dry g	J NQ
B13-8038_SED	EPA 8270C	Benzo[k]fluoranthene	9 ng/dry g	J NQ
B13-8038_SED	EPA 8270C	BHC-alpha	0.1 ng/dry g	UJ NQ
B13-8038_SED	EPA 8270C	BHC-beta	0.1 ng/dry g	UJ NQ, BC
B13-8038_SED	EPA 8270C	BHC-delta	0.1 ng/dry g	UJ NQ
B13-8038_SED	EPA 8270C	BHC-gamma	0.1 ng/dry g	UJ NQ
B13-8038_SED	EPA 8270C	Biphenyl	5 ng/dry g	UJ NQ
B13-8038_SED	EPA 8270C	Chlordane-alpha	0.1 ng/dry g	UJ NQ
B13-8038_SED	EPA 8270C	Chlordane-gamma	0.1 ng/dry g	UJ NQ
B13-8038_SED	EPA 8270C	Chrysene	21.8 ng/dry g	J NQ
B13-8038_SED	EPA 8270C	cis-Nonachlor	0.1 ng/dry g	UJ NQ
B13-8038_SED	EPA 8270C	DCPA (Dacthal)	0.1 ng/dry g	UJ NQ
B13-8038_SED	EPA 8270C	Dibenz[a,h]anthracene	2.3 ng/dry g	J DL, NQ, LC, HP
B13-8038_SED	EPA 8270C	Dibenzothiophene	1.2 ng/dry g	J DL, NQ
B13-8038_SED	EPA 8270C	Dicofol	0.1 ng/dry g	UJ NQ, BC
B13-8038_SED	EPA 8270C	Dieldrin	0.1 ng/dry g	UJ NQ
B13-8038_SED	EPA 8270C	Endosulfan sulfate	0.1 ng/dry g	UJ NQ
B13-8038_SED	EPA 8270C	Endosulfan-I	0.1 ng/dry g	UJ NQ, LL
B13-8038_SED	EPA 8270C	Endosulfan-II	0.1 ng/dry g	UJ NQ, LL
B13-8038_SED	EPA 8270C	Endrin	0.1 ng/dry g	UJ NQ
B13-8038_SED	EPA 8270C	Endrin aldehyde	0.1 ng/dry g	R LL
B13-8038_SED	EPA 8270C	Endrin ketone	0.1 ng/dry g	UJ NQ, BC
B13-8038_SED	EPA 8270C	Fluoranthene	19.3 ng/dry g	J NQ
B13-8038_SED	EPA 8270C	Fluorene	1.6 ng/dry g	J DL, NQ
B13-8038_SED	EPA 8270C	Heptachlor	0.1 ng/dry g	UJ NQ, BC
B13-8038_SED	EPA 8270C	Heptachlor epoxide	0.1 ng/dry g	UJ NQ
B13-8038_SED	EPA 8270C	Hexachlorobenzene	0.1 ng/dry g	UJ NQ
B13-8038_SED	EPA 8270C	Indeno[1,2,3-c,d]pyrene	11.3 ng/dry g	J NQ
B13-8038_SED	EPA 8270C	Methoxychlor	0.1 ng/dry g	UJ NQ, BC
B13-8038_SED	EPA 8270C	Mirex	0.1 ng/dry g	UJ NQ
B13-8038_SED	EPA 8270C	Naphthalene	1.3 ng/dry g	J DL, NQ
B13-8038_SED	EPA 8270C	Oxychlordane	0.1 ng/dry g	UJ NQ
B13-8038_SED	EPA 8270C	PCB018	0.1 ng/dry g	UJ LV, LC
B13-8038_SED	EPA 8270C	PCB044	0.1 ng/dry g	UJ LV, LC
B13-8038_SED	EPA 8270C	PCB049	0.1 ng/dry g	UJ LV, LC
B13-8038_SED	EPA 8270C	PCB052	0.1 ng/dry g	UJ LV, LC
B13-8038_SED	EPA 8270C	PCB087	0.1 ng/dry g	UJ LC
B13-8038_SED	EPA 8270C	PCB099	0.09 ng/dry g	J DL, LC
B13-8038_SED	EPA 8270C	PCB101	0.32 ng/dry g	J LC
B13-8038_SED	EPA 8270C	PCB110	0.24 ng/dry g	J LC
B13-8038_SED	EPA 8270C	PCB119	0.1 ng/dry g	UJ LC
B13-8038_SED	EPA 8270C	PCB149	0.7 ng/dry g	J LC
B13-8038_SED	EPA 8270C	PCB151	0.23 ng/dry g	J LC
B13-8038_SED	EPA 8270C	PCB158	0.22 ng/dry g	J LC
B13-8038_SED	EPA 8270C	PCB169	0.42 ng/dry g	J HL
B13-8038_SED	EPA 8270C	PCB177	0.14 ng/dry g	J LC
B13-8038_SED	EPA 8270C	PCB183	0.12 ng/dry g	J LC
B13-8038_SED	EPA 8270C	PCB187	0.24 ng/dry g	J BC, LV, LC
B13-8038_SED	EPA 8270C	PCB199(200)	0.2 ng/dry g	UJ LV, LC
B13-8038_SED	EPA 8270C	PCB206	0.1 ng/dry g	UJ BC, LC
B13-8038_SED	EPA 8270C	PCB209	0.1 ng/dry g	UJ LC
B13-8038_SED	EPA 8270C	Perthane	0.1 ng/dry g	UJ NQ, BC



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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8038_SED	EPA 8270C	Perylene	3.7 ng/dry g	J DL, NQ, LP
B13-8038_SED	EPA 8270C	Phenanthrene	12.1 ng/dry g	J NQ
B13-8038_SED	EPA 8270C	Pyrene	19.2 ng/dry g	J NQ
B13-8038_SED	EPA 8270C	trans-Nonachlor	0.1 ng/dry g	UJ NQ
B13-8038_SED	EPA 8270C-NCI	Allethrin	0.5 ng/dry g	UJ NQ, BC
B13-8038_SED	EPA 8270C-NCI	Bifenthrin	0.5 ng/dry g	UJ NQ
B13-8038_SED	EPA 8270C-NCI	Cyfluthrin, total	0.5 ng/dry g	UJ NQ, BC
B13-8038_SED	EPA 8270C-NCI	Cypermethrin, total	0.5 ng/dry g	UJ NQ, BC
B13-8038_SED	EPA 8270C-NCI	Danitol (Fenpropathrin)	0.5 ng/dry g	UJ NQ
B13-8038_SED	EPA 8270C-NCI	Deltamethrin/Tralomethrin	0.5 ng/dry g	R BC
B13-8038_SED	EPA 8270C-NCI	Esfenvalerate	0.5 ng/dry g	UJ NQ, BC
B13-8038_SED	EPA 8270C-NCI	Fenvalerate	0.5 ng/dry g	UJ NQ, BC
B13-8038_SED	EPA 8270C-NCI	Fipronil	0.5 ng/dry g	UJ NQ
B13-8038_SED	EPA 8270C-NCI	Fipronil Desulfinyl	0.5 ng/dry g	UJ NQ
B13-8038_SED	EPA 8270C-NCI	Fipronil Sulfide	0.5 ng/dry g	UJ NQ
B13-8038_SED	EPA 8270C-NCI	Fipronil Sulfone	0.5 ng/dry g	UJ NQ
B13-8038_SED	EPA 8270C-NCI	Fluvalinate	0.5 ng/dry g	UJ NQ, BC
B13-8038_SED	EPA 8270C-NCI	I-Cyhalothrin	0.5 ng/dry g	UJ NQ
B13-8038_SED	EPA 8270C-NCI	PBDE085	0.1 ng/dry g	UJ LC
B13-8038_SED	EPA 8270C-NCI	PBDE138	0.1 ng/dry g	UJ LC
B13-8038_SED	EPA 8270C-NCI	PBDE153	0.1 ng/dry g	UJ LC
B13-8038_SED	EPA 8270C-NCI	PBDE183	0.1 ng/dry g	UJ LC
B13-8038_SED	EPA 8270C-NCI	PBDE209	0.1 ng/dry g	UJ LC
B13-8038_SED	EPA 8270C-NCI	Permethrin, cis-	0.5 ng/dry g	R BC
B13-8038_SED	EPA 8270C-NCI	Permethrin, trans-	0.5 ng/dry g	R BC
B13-8038_SED	EPA 8270C-NCI	Prallethrin	0.5 ng/dry g	UJ NQ
B13-8038_SED	EPA 8270C-NCI	Resmethrin	0.5 ng/dry g	UJ NQ, BC
B13-8038_SED	EPA 9060	Total Nitrogen	0.3 % Dry Weight	J NQ
B13-8038_SED	EPA 9060	Total Organic Carbon	0.64 % Dry Weight	J NQ
B13-8038_SED	Plumb, 1981 and Teryl	Acid Volatile Sulfides	27.15 mg/dry kg	J NQ
B13-8040_SED	EPA 200.8	Cadmium	0.0022 µmol/dry g	J DL
B13-8040_SED	EPA 6020	Aluminum	50671.3 µg/dry g	J HP
B13-8040_SED	EPA 6020	Antimony	0.5 µg/dry g	J HP
B13-8040_SED	EPA 6020	Arsenic	9.656 µg/dry g	J HP
B13-8040_SED	EPA 6020	Barium	133.066 µg/dry g	J CH
B13-8040_SED	EPA 6020	Beryllium	0.907 µg/dry g	J HP
B13-8040_SED	EPA 6020	Cadmium	0.4671 µg/dry g	J LP
B13-8040_SED	EPA 6020	Chromium	58.248 µg/dry g	J HP
B13-8040_SED	EPA 6020	Iron (Fe)	44924.1 µg/dry g	J HP
B13-8040_SED	EPA 6020	Nickel	20.13 µg/dry g	J HP
B13-8040_SED	EPA 6020	Total Phosphorus	607.314 µg/dry g	J NQ
B13-8040_SED	EPA 8270C	1-Methylnaphthalene	5 ng/dry g	UJ NQ
B13-8040_SED	EPA 8270C	1-Methylphenanthrene	2.7 ng/dry g	J DL, NQ
B13-8040_SED	EPA 8270C	2,3,5-Trimethylnaphthalene	1.4 ng/dry g	J DL, NQ
B13-8040_SED	EPA 8270C	2,4'-DDD	0.1 ng/dry g	UJ NQ
B13-8040_SED	EPA 8270C	2,4'-DDE	0.1 ng/dry g	UJ NQ
B13-8040_SED	EPA 8270C	2,4'-DDT	0.1 ng/dry g	UJ NQ, BC
B13-8040_SED	EPA 8270C	2,6-Dimethylnaphthalene	5 ng/dry g	UJ NQ
B13-8040_SED	EPA 8270C	2-Methylnaphthalene	1.2 ng/dry g	J DL, NQ
B13-8040_SED	EPA 8270C	4,4'-DDD	0.1 ng/dry g	UJ NQ
B13-8040_SED	EPA 8270C	4,4'-DDE	0.91 ng/dry g	J NQ
B13-8040_SED	EPA 8270C	4,4'-DDMU	0.1 ng/dry g	UJ NQ
B13-8040_SED	EPA 8270C	4,4'-DDT	0.1 ng/dry g	UJ NQ, BC
B13-8040_SED	EPA 8270C	Acenaphthene	5 ng/dry g	UJ NQ

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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8040_SED	EPA 8270C	Acenaphthylene	1.2 ng/dry g	J DL, NQ
B13-8040_SED	EPA 8270C	Aldrin	0.1 ng/dry g	UJ NQ
B13-8040_SED	EPA 8270C	Anthracene	3.7 ng/dry g	J DL, NQ
B13-8040_SED	EPA 8270C	Aroclor 1016	2 ng/dry g	UJ NQ
B13-8040_SED	EPA 8270C	Aroclor 1221	2 ng/dry g	UJ NQ
B13-8040_SED	EPA 8270C	Aroclor 1232	2 ng/dry g	UJ NQ
B13-8040_SED	EPA 8270C	Aroclor 1242	2 ng/dry g	UJ NQ
B13-8040_SED	EPA 8270C	Aroclor 1248	2 ng/dry g	UJ NQ
B13-8040_SED	EPA 8270C	Aroclor 1254	2 ng/dry g	UJ NQ
B13-8040_SED	EPA 8270C	Aroclor 1260	5 ng/dry g	J NQ
B13-8040_SED	EPA 8270C	Aroclor 1262	2 ng/dry g	UJ NQ
B13-8040_SED	EPA 8270C	Aroclor 1268	2 ng/dry g	UJ NQ
B13-8040_SED	EPA 8270C	Benz[a]anthracene	11.6 ng/dry g	J NQ
B13-8040_SED	EPA 8270C	Benzo[a]pyrene	13.6 ng/dry g	J NQ, LP
B13-8040_SED	EPA 8270C	Benzo[b]fluoranthene	15.3 ng/dry g	J NQ
B13-8040_SED	EPA 8270C	Benzo[e]pyrene	12.5 ng/dry g	J NQ
B13-8040_SED	EPA 8270C	Benzo[g,h,i]perylene	15.3 ng/dry g	J NQ
B13-8040_SED	EPA 8270C	Benzo[k]fluoranthene	8.4 ng/dry g	J NQ
B13-8040_SED	EPA 8270C	BHC-alpha	0.1 ng/dry g	UJ NQ
B13-8040_SED	EPA 8270C	BHC-beta	0.1 ng/dry g	UJ NQ, BC
B13-8040_SED	EPA 8270C	BHC-delta	0.1 ng/dry g	UJ NQ
B13-8040_SED	EPA 8270C	BHC-gamma	0.1 ng/dry g	UJ NQ
B13-8040_SED	EPA 8270C	Biphenyl	5 ng/dry g	UJ NQ
B13-8040_SED	EPA 8270C	Chlordane-alpha	0.1 ng/dry g	UJ NQ
B13-8040_SED	EPA 8270C	Chlordane-gamma	0.18 ng/dry g	J NQ
B13-8040_SED	EPA 8270C	Chrysene	31.6 ng/dry g	J NQ
B13-8040_SED	EPA 8270C	cis-Nonachlor	0.1 ng/dry g	UJ NQ
B13-8040_SED	EPA 8270C	DCPA (Dacthal)	0.1 ng/dry g	UJ NQ
B13-8040_SED	EPA 8270C	Dibenz[a,h]anthracene	2.5 ng/dry g	J DL, NQ, LC, HP
B13-8040_SED	EPA 8270C	Dibenzothiophene	2 ng/dry g	J DL, NQ
B13-8040_SED	EPA 8270C	Dicofol	0.1 ng/dry g	UJ NQ, BC
B13-8040_SED	EPA 8270C	Dieldrin	0.1 ng/dry g	UJ NQ
B13-8040_SED	EPA 8270C	Endosulfan sulfate	0.1 ng/dry g	UJ NQ
B13-8040_SED	EPA 8270C	Endosulfan-I	0.1 ng/dry g	UJ NQ, LL
B13-8040_SED	EPA 8270C	Endosulfan-II	0.1 ng/dry g	UJ NQ, LL
B13-8040_SED	EPA 8270C	Endrin	0.1 ng/dry g	UJ NQ
B13-8040_SED	EPA 8270C	Endrin aldehyde	0.1 ng/dry g	R LL
B13-8040_SED	EPA 8270C	Endrin ketone	0.1 ng/dry g	UJ NQ, BC
B13-8040_SED	EPA 8270C	Fluoranthene	21.2 ng/dry g	J NQ
B13-8040_SED	EPA 8270C	Fluorene	2.2 ng/dry g	J DL, NQ
B13-8040_SED	EPA 8270C	Heptachlor	0.1 ng/dry g	UJ NQ, BC
B13-8040_SED	EPA 8270C	Heptachlor epoxide	0.1 ng/dry g	UJ NQ
B13-8040_SED	EPA 8270C	Hexachlorobenzene	0.1 ng/dry g	UJ NQ
B13-8040_SED	EPA 8270C	Indeno[1,2,3-c,d]pyrene	12.5 ng/dry g	J NQ
B13-8040_SED	EPA 8270C	Methoxychlor	0.1 ng/dry g	UJ NQ, BC
B13-8040_SED	EPA 8270C	Mirex	0.1 ng/dry g	UJ NQ
B13-8040_SED	EPA 8270C	Naphthalene	2.1 ng/dry g	J DL, NQ
B13-8040_SED	EPA 8270C	Oxychlordane	0.1 ng/dry g	UJ NQ
B13-8040_SED	EPA 8270C	PCB018	0.1 ng/dry g	UJ LV, LC
B13-8040_SED	EPA 8270C	PCB044	0.1 ng/dry g	UJ LV, LC
B13-8040_SED	EPA 8270C	PCB049	0.1 ng/dry g	UJ LV, LC
B13-8040_SED	EPA 8270C	PCB052	0.1 ng/dry g	UJ LV, LC
B13-8040_SED	EPA 8270C	PCB087	0.22 ng/dry g	J LC
B13-8040_SED	EPA 8270C	PCB099	0.22 ng/dry g	J LC

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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8040_SED	EPA 8270C	PCB101	0.56 ng/dry g	J LC
B13-8040_SED	EPA 8270C	PCB110	0.37 ng/dry g	J LC
B13-8040_SED	EPA 8270C	PCB119	0.1 ng/dry g	UJ LC
B13-8040_SED	EPA 8270C	PCB149	0.99 ng/dry g	J LC
B13-8040_SED	EPA 8270C	PCB151	0.26 ng/dry g	J LC
B13-8040_SED	EPA 8270C	PCB158	0.22 ng/dry g	J LC
B13-8040_SED	EPA 8270C	PCB177	0.19 ng/dry g	J LC
B13-8040_SED	EPA 8270C	PCB183	0.14 ng/dry g	J LC
B13-8040_SED	EPA 8270C	PCB187	0.39 ng/dry g	J BC, LV, LC
B13-8040_SED	EPA 8270C	PCB199(200)	0.2 ng/dry g	UJ LV, LC
B13-8040_SED	EPA 8270C	PCB206	0.1 ng/dry g	UJ BC, LC
B13-8040_SED	EPA 8270C	PCB209	0.1 ng/dry g	UJ LC
B13-8040_SED	EPA 8270C	Perthane	0.1 ng/dry g	UJ NQ, BC
B13-8040_SED	EPA 8270C	Perylene	3.5 ng/dry g	J DL, NQ, LP
B13-8040_SED	EPA 8270C	Phenanthrene	16.5 ng/dry g	J NQ
B13-8040_SED	EPA 8270C	Pyrene	22.9 ng/dry g	J NQ
B13-8040_SED	EPA 8270C	trans-Nonachlor	0.09 ng/dry g	J DL, NQ
B13-8040_SED	EPA 8270C-NCI	Allethrin	0.5 ng/dry g	UJ NQ, BC
B13-8040_SED	EPA 8270C-NCI	Bifenthrin	0.5 ng/dry g	UJ NQ
B13-8040_SED	EPA 8270C-NCI	Cyfluthrin, total	0.5 ng/dry g	UJ NQ, BC
B13-8040_SED	EPA 8270C-NCI	Cypermethrin, total	0.5 ng/dry g	UJ NQ, BC
B13-8040_SED	EPA 8270C-NCI	Danitol (Fenpropathrin)	0.5 ng/dry g	UJ NQ
B13-8040_SED	EPA 8270C-NCI	Deltamethrin/Tralomethrin	0.5 ng/dry g	R BC
B13-8040_SED	EPA 8270C-NCI	Esfenvalerate	0.5 ng/dry g	UJ NQ, BC
B13-8040_SED	EPA 8270C-NCI	Fenvalerate	0.5 ng/dry g	UJ NQ, BC
B13-8040_SED	EPA 8270C-NCI	Fipronil	0.5 ng/dry g	UJ NQ
B13-8040_SED	EPA 8270C-NCI	Fipronil Desulfinyl	0.5 ng/dry g	UJ NQ
B13-8040_SED	EPA 8270C-NCI	Fipronil Sulfide	0.5 ng/dry g	UJ NQ
B13-8040_SED	EPA 8270C-NCI	Fipronil Sulfone	0.5 ng/dry g	UJ NQ
B13-8040_SED	EPA 8270C-NCI	Fluvalinate	0.5 ng/dry g	UJ NQ, BC
B13-8040_SED	EPA 8270C-NCI	l-Cyhalothrin	0.5 ng/dry g	UJ NQ
B13-8040_SED	EPA 8270C-NCI	PBDE047	0.07 ng/dry g	J DL
B13-8040_SED	EPA 8270C-NCI	PBDE066	0.06 ng/dry g	J DL
B13-8040_SED	EPA 8270C-NCI	PBDE085	0.1 ng/dry g	UJ LC
B13-8040_SED	EPA 8270C-NCI	PBDE138	0.1 ng/dry g	UJ LC
B13-8040_SED	EPA 8270C-NCI	PBDE153	0.1 ng/dry g	UJ LC
B13-8040_SED	EPA 8270C-NCI	PBDE183	0.1 ng/dry g	UJ LC
B13-8040_SED	EPA 8270C-NCI	PBDE209	0.1 ng/dry g	UJ LC
B13-8040_SED	EPA 8270C-NCI	Permethrin, cis-	0.5 ng/dry g	R BC
B13-8040_SED	EPA 8270C-NCI	Permethrin, trans-	0.5 ng/dry g	R BC
B13-8040_SED	EPA 8270C-NCI	Prallethrin	0.5 ng/dry g	UJ NQ
B13-8040_SED	EPA 8270C-NCI	Resmethrin	0.5 ng/dry g	UJ NQ, BC
B13-8040_SED	EPA 9060	Total Nitrogen	0.58 % Dry Weight	J NQ
B13-8040_SED	EPA 9060	Total Organic Carbon	1.67 % Dry Weight	J NQ
B13-8040_SED	Plumb, 1981 and Teryl	Acid Volatile Sulfides	106.57 mg/dry kg	J NQ
B13-8045_SED	EPA 245.7	Mercury	0.22 µg/dry g	J LC
B13-8045_SED	EPA 6020	Aluminum	38436.8 µg/dry g	J HP
B13-8045_SED	EPA 6020	Antimony	0.274 µg/dry g	J HP
B13-8045_SED	EPA 6020	Barium	99.855 µg/dry g	J CH
B13-8045_SED	EPA 6020	Beryllium	0.608 µg/dry g	J HP
B13-8045_SED	EPA 6020	Cadmium	0.197 µg/dry g	J LP
B13-8045_SED	EPA 6020	Chromium	50.3686 µg/dry g	J HP
B13-8045_SED	EPA 6020	Total Phosphorus	487.866 µg/dry g	J NQ
B13-8045_SED	EPA 8270C	1-Methylnaphthalene	5 ng/dry g	UJ NQ

**TABLE 2**  
**Qualifiers Added to the Sediment Samples During Validation**  
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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8045_SED	EPA 8270C	1-Methylphenanthrene	5 ng/dry g	UJ NQ
B13-8045_SED	EPA 8270C	2,3,5-Trimethylnaphthalene	5 ng/dry g	UJ NQ
B13-8045_SED	EPA 8270C	2,4'-DDT	0.1 ng/dry g	UJ BC
B13-8045_SED	EPA 8270C	2,6-Dimethylnaphthalene	5 ng/dry g	UJ NQ
B13-8045_SED	EPA 8270C	2-Methylnaphthalene	5 ng/dry g	UJ NQ
B13-8045_SED	EPA 8270C	4,4'-DDT	0.1 ng/dry g	UJ BC
B13-8045_SED	EPA 8270C	Acenaphthene	5 ng/dry g	UJ NQ
B13-8045_SED	EPA 8270C	Acenaphthylene	2.2 ng/dry g	J DL, NQ, HD
B13-8045_SED	EPA 8270C	Anthracene	3.2 ng/dry g	J DL, NQ, HD
B13-8045_SED	EPA 8270C	Aroclor 1016	2 ng/dry g	UJ NQ
B13-8045_SED	EPA 8270C	Aroclor 1221	2 ng/dry g	UJ NQ
B13-8045_SED	EPA 8270C	Aroclor 1232	2 ng/dry g	UJ NQ
B13-8045_SED	EPA 8270C	Aroclor 1242	2 ng/dry g	UJ NQ
B13-8045_SED	EPA 8270C	Aroclor 1248	2 ng/dry g	UJ NQ
B13-8045_SED	EPA 8270C	Aroclor 1254	2 ng/dry g	UJ NQ
B13-8045_SED	EPA 8270C	Aroclor 1260	2 ng/dry g	J NQ
B13-8045_SED	EPA 8270C	Aroclor 1262	2 ng/dry g	UJ NQ
B13-8045_SED	EPA 8270C	Aroclor 1268	2 ng/dry g	UJ NQ
B13-8045_SED	EPA 8270C	Benz[a]anthracene	7 ng/dry g	J NQ
B13-8045_SED	EPA 8270C	Benzo[a]pyrene	12.1 ng/dry g	J NQ
B13-8045_SED	EPA 8270C	Benzo[b]fluoranthene	10.3 ng/dry g	J NQ
B13-8045_SED	EPA 8270C	Benzo[e]pyrene	9.6 ng/dry g	J NQ
B13-8045_SED	EPA 8270C	Benzo[g,h,i]perylene	17.4 ng/dry g	J NQ
B13-8045_SED	EPA 8270C	Benzo[k]fluoranthene	7.7 ng/dry g	J NQ
B13-8045_SED	EPA 8270C	BHC-beta	0.1 ng/dry g	UJ BC
B13-8045_SED	EPA 8270C	Biphenyl	1.2 ng/dry g	J DL, NQ, HD
B13-8045_SED	EPA 8270C	Chrysene	12.6 ng/dry g	J NQ
B13-8045_SED	EPA 8270C	Dibenz[a,h]anthracene	2.5 ng/dry g	J DL, NQ, HD
B13-8045_SED	EPA 8270C	Dibenzothiophene	1.1 ng/dry g	J DL, NQ, HD
B13-8045_SED	EPA 8270C	Dicofol	0.1 ng/dry g	UJ BC, LV
B13-8045_SED	EPA 8270C	Endosulfan-I	0.1 ng/dry g	UJ LL
B13-8045_SED	EPA 8270C	Endosulfan-II	0.1 ng/dry g	UJ LL
B13-8045_SED	EPA 8270C	Endrin aldehyde	0.1 ng/dry g	UJ BC, LL
B13-8045_SED	EPA 8270C	Endrin ketone	0.1 ng/dry g	UJ BC
B13-8045_SED	EPA 8270C	Fluoranthene	12.7 ng/dry g	J NQ, HD
B13-8045_SED	EPA 8270C	Fluorene	1.7 ng/dry g	J DL, NQ
B13-8045_SED	EPA 8270C	Heptachlor	0.1 ng/dry g	UJ BC
B13-8045_SED	EPA 8270C	Indeno[1,2,3-c,d]pyrene	14.2 ng/dry g	J NQ, HD
B13-8045_SED	EPA 8270C	Methoxychlor	0.1 ng/dry g	UJ BC
B13-8045_SED	EPA 8270C	Naphthalene	3 ng/dry g	J DL, NQ, HD
B13-8045_SED	EPA 8270C	PCB119	0.1 ng/dry g	UJ LV
B13-8045_SED	EPA 8270C	Perthane	0.1 ng/dry g	UJ BC
B13-8045_SED	EPA 8270C	Perylene	2.6 ng/dry g	J DL, NQ
B13-8045_SED	EPA 8270C	Phenanthrene	8.5 ng/dry g	J NQ, HD
B13-8045_SED	EPA 8270C	Pyrene	15.9 ng/dry g	J NQ, HD
B13-8045_SED	EPA 8270C-NCI	Allethrin	0.5 ng/dry g	UJ LC
B13-8045_SED	EPA 8270C-NCI	Danitol (Fenpropathrin)	0.5 ng/dry g	UJ LL
B13-8045_SED	EPA 8270C-NCI	Deltamethrin/Tralomethrin	0.5 ng/dry g	UJ BC
B13-8045_SED	EPA 8270C-NCI	Fluvalinate	0.5 ng/dry g	UJ BC
B13-8045_SED	EPA 8270C-NCI	PBDE049	0.1 ng/dry g	UJ LC
B13-8045_SED	EPA 8270C-NCI	PBDE209	0.1 ng/dry g	UJ BC, LC
B13-8045_SED	EPA 8270C-NCI	Prallethrin	0.5 ng/dry g	UJ BC, LC
B13-8045_SED	EPA 8270C-NCI	Resmethrin	0.5 ng/dry g	R LV
B13-8045_SED	EPA 9060	Total Nitrogen	0.45 % Dry Weight	J NQ

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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8045_SED	EPA 9060	Total Organic Carbon	0.93 % Dry Weight	J NQ
B13-8045_SED	Plumb, 1981 and Teryl	Acid Volatile Sulfides	17.16 mg/dry kg	J NQ
B13-8049_SED	EPA 200.8	Cadmium	0.0036 µmol/dry g	J LP
B13-8049_SED	EPA 6020	Aluminum	43379.8 µg/dry g	J CH, HP
B13-8049_SED	EPA 6020	Antimony	0.359 µg/dry g	J HP
B13-8049_SED	EPA 6020	Beryllium	0.765 µg/dry g	J HP
B13-8049_SED	EPA 6020	Cadmium	0.1921 µg/dry g	J LP
B13-8049_SED	EPA 6020	Chromium	62.4005 µg/dry g	J HP
B13-8049_SED	EPA 6020	Iron (Fe)	38323.9 µg/dry g	J CH, HP
B13-8049_SED	EPA 6020	Total Phosphorus	592.725 µg/dry g	J NQ
B13-8049_SED	EPA 8270C	1-Methylnaphthalene	5 ng/dry g	UJ LV, LC
B13-8049_SED	EPA 8270C	1-Methylphenanthrene	2.7 ng/dry g	J DL
B13-8049_SED	EPA 8270C	2,4'-DDT	0.1 ng/dry g	UJ BC
B13-8049_SED	EPA 8270C	2,6-Dimethylnaphthalene	1.1 ng/dry g	J DL, LV
B13-8049_SED	EPA 8270C	2-Methylnaphthalene	1.3 ng/dry g	J DL, LV, CH, HD
B13-8049_SED	EPA 8270C	4,4'-DDD	0.1 ng/dry g	UJ LC
B13-8049_SED	EPA 8270C	4,4'-DDT	0.1 ng/dry g	UJ BC, LP
B13-8049_SED	EPA 8270C	Acenaphthylene	2 ng/dry g	J DL, HD
B13-8049_SED	EPA 8270C	Anthracene	7.4 ng/dry g	J HD
B13-8049_SED	EPA 8270C	Aroclor 1016	2 ng/dry g	UJ NQ
B13-8049_SED	EPA 8270C	Aroclor 1221	2 ng/dry g	UJ NQ
B13-8049_SED	EPA 8270C	Aroclor 1232	2 ng/dry g	UJ NQ
B13-8049_SED	EPA 8270C	Aroclor 1242	2 ng/dry g	UJ NQ
B13-8049_SED	EPA 8270C	Aroclor 1248	2 ng/dry g	UJ NQ
B13-8049_SED	EPA 8270C	Aroclor 1254	2 ng/dry g	UJ NQ
B13-8049_SED	EPA 8270C	Aroclor 1260	17.8 ng/dry g	J NQ
B13-8049_SED	EPA 8270C	Aroclor 1262	2 ng/dry g	UJ NQ
B13-8049_SED	EPA 8270C	Aroclor 1268	2 ng/dry g	UJ NQ
B13-8049_SED	EPA 8270C	Benz[a]anthracene	10.8 ng/dry g	J CH, HD
B13-8049_SED	EPA 8270C	Benzo[a]pyrene	17.3 ng/dry g	J HV, CH
B13-8049_SED	EPA 8270C	Benzo[b]fluoranthene	17.7 ng/dry g	J HV, CH
B13-8049_SED	EPA 8270C	Benzo[e]pyrene	14.4 ng/dry g	J CH
B13-8049_SED	EPA 8270C	Benzo[k]fluoranthene	12.7 ng/dry g	J CH
B13-8049_SED	EPA 8270C	BHC-beta	0.1 ng/dry g	UJ BC
B13-8049_SED	EPA 8270C	Biphenyl	5 ng/dry g	UJ LV, LC
B13-8049_SED	EPA 8270C	Chlordane-gamma	0.1 ng/dry g	UJ LP
B13-8049_SED	EPA 8270C	Chrysene	24 ng/dry g	J CH, HD
B13-8049_SED	EPA 8270C	Dibenz[a,h]anthracene	5.6 ng/dry g	J CH
B13-8049_SED	EPA 8270C	Dibenzothiophene	1.5 ng/dry g	J DL
B13-8049_SED	EPA 8270C	Dicofol	0.1 ng/dry g	UJ BC
B13-8049_SED	EPA 8270C	Endosulfan-I	0.1 ng/dry g	UJ LL, LM
B13-8049_SED	EPA 8270C	Endrin aldehyde	0.1 ng/dry g	R LL, LM
B13-8049_SED	EPA 8270C	Endrin ketone	0.1 ng/dry g	UJ BC
B13-8049_SED	EPA 8270C	Fluoranthene	23.7 ng/dry g	J HV, CH, HL
B13-8049_SED	EPA 8270C	Fluorene	2.2 ng/dry g	J DL, HP
B13-8049_SED	EPA 8270C	Heptachlor	0.1 ng/dry g	UJ BC
B13-8049_SED	EPA 8270C	Indeno[1,2,3-c,d]pyrene	30.9 ng/dry g	J CH
B13-8049_SED	EPA 8270C	Methoxychlor	0.1 ng/dry g	UJ BC
B13-8049_SED	EPA 8270C	Naphthalene	2.7 ng/dry g	J DL, LV, CH, LC
B13-8049_SED	EPA 8270C	PCB099	0.21 ng/dry g	J HD
B13-8049_SED	EPA 8270C	PCB101	0.89 ng/dry g	J HD
B13-8049_SED	EPA 8270C	PCB110	0.75 ng/dry g	J HD
B13-8049_SED	EPA 8270C	PCB118	0.1 ng/dry g	UJ LP
B13-8049_SED	EPA 8270C	PCB149	1.83 ng/dry g	J HD

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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8049_SED	EPA 8270C	PCB153	2.95 ng/dry g	J HD
B13-8049_SED	EPA 8270C	PCB158	0.1 ng/dry g	UJ HD
B13-8049_SED	EPA 8270C	PCB169	0.99 ng/dry g	J HD
B13-8049_SED	EPA 8270C	PCB170	0.49 ng/dry g	J CH, HD
B13-8049_SED	EPA 8270C	PCB174	0.46 ng/dry g	J HD
B13-8049_SED	EPA 8270C	PCB177	0.1 ng/dry g	UJ HD
B13-8049_SED	EPA 8270C	PCB180	1.04 ng/dry g	J CH, HD
B13-8049_SED	EPA 8270C	PCB183	0.1 ng/dry g	UJ HD
B13-8049_SED	EPA 8270C	PCB187	0.97 ng/dry g	J CH, HD
B13-8049_SED	EPA 8270C	Perthane	0.1 ng/dry g	UJ BC
B13-8049_SED	EPA 8270C	Perylene	4.3 ng/dry g	J DL, HV, CH, HD
B13-8049_SED	EPA 8270C	Phenanthrene	13.6 ng/dry g	J HL
B13-8049_SED	EPA 8270C	Pyrene	27 ng/dry g	J HV, CH
B13-8049_SED	EPA 8270C-NCI	Deltamethrin/Tralomethrin	0.5 ng/dry g	UJ BC, LV, LM
B13-8049_SED	EPA 8270C-NCI	Fipronil Sulfone	0.5 ng/dry g	UJ BC
B13-8049_SED	EPA 8270C-NCI	I-Cyhalothrin	0.5 ng/dry g	UJ LV
B13-8049_SED	EPA 8270C-NCI	PBDE017	0.1 ng/dry g	UJ LL
B13-8049_SED	EPA 8270C-NCI	PBDE049	0.1 ng/dry g	UJ LL, LM
B13-8049_SED	EPA 8270C-NCI	PBDE071	0.1 ng/dry g	UJ LL, LM
B13-8049_SED	EPA 8270C-NCI	PBDE138	0.1 ng/dry g	UJ LC
B13-8049_SED	EPA 8270C-NCI	PBDE183	0.74 ng/dry g	J LC
B13-8049_SED	EPA 8270C-NCI	PBDE209	4.09 ng/dry g	J CH, HD
B13-8049_SED	EPA 8270C-NCI	Permethrin, cis-	0.5 ng/dry g	UJ BC, LV
B13-8049_SED	EPA 8270C-NCI	Permethrin, trans-	0.5 ng/dry g	UJ BC
B13-8049_SED	EPA 8270C-NCI	Resmethrin	0.5 ng/dry g	R LM
B13-8049_SED	EPA 8270C-NCI	Toxaphene	0.2 ng/dry g	UJ LC
B13-8049_SED	EPA 9060	Total Nitrogen	0.07 % Dry Weight	J NQ
B13-8049_SED	EPA 9060	Total Organic Carbon	1.22 % Dry Weight	J NQ
B13-8049_SED	Plumb, 1981 and Teryl	Acid Volatile Sulfides	64.36 mg/dry kg	J NQ
B13-8050_SED	EPA 200.8	Cadmium	0.0036 µmol/dry g	J LP
B13-8050_SED	EPA 6020	Aluminum	29116.8 µg/dry g	J CH, HP
B13-8050_SED	EPA 6020	Antimony	0.264 µg/dry g	J HP
B13-8050_SED	EPA 6020	Beryllium	0.517 µg/dry g	J HP
B13-8050_SED	EPA 6020	Cadmium	0.1369 µg/dry g	J LP
B13-8050_SED	EPA 6020	Chromium	43.8016 µg/dry g	J HP
B13-8050_SED	EPA 6020	Iron (Fe)	27412.7 µg/dry g	J CH, HP
B13-8050_SED	EPA 6020	Total Phosphorus	438.461 µg/dry g	J NQ
B13-8050_SED	EPA 8270C	1-Methylnaphthalene	5 ng/dry g	UJ LV, LC
B13-8050_SED	EPA 8270C	1-Methylphenanthrene	3 ng/dry g	J DL
B13-8050_SED	EPA 8270C	2,4'-DDT	0.1 ng/dry g	UJ BC
B13-8050_SED	EPA 8270C	2,6-Dimethylnaphthalene	5 ng/dry g	UJ LV
B13-8050_SED	EPA 8270C	2-Methylnaphthalene	1.1 ng/dry g	J DL, LV, CH, LC
B13-8050_SED	EPA 8270C	4,4'-DDD	0.1 ng/dry g	UJ LC
B13-8050_SED	EPA 8270C	4,4'-DDT	0.1 ng/dry g	UJ BC, LP
B13-8050_SED	EPA 8270C	Acenaphthylene	1.7 ng/dry g	J DL, HD
B13-8050_SED	EPA 8270C	Aroclor 1016	2 ng/dry g	UJ NQ
B13-8050_SED	EPA 8270C	Aroclor 1221	2 ng/dry g	UJ NQ
B13-8050_SED	EPA 8270C	Aroclor 1232	2 ng/dry g	UJ NQ
B13-8050_SED	EPA 8270C	Aroclor 1242	2 ng/dry g	UJ NQ
B13-8050_SED	EPA 8270C	Aroclor 1248	2 ng/dry g	UJ NQ
B13-8050_SED	EPA 8270C	Aroclor 1254	2 ng/dry g	UJ NQ
B13-8050_SED	EPA 8270C	Aroclor 1260	6.1 ng/dry g	J NQ
B13-8050_SED	EPA 8270C	Aroclor 1262	2 ng/dry g	UJ NQ
B13-8050_SED	EPA 8270C	Aroclor 1268	2 ng/dry g	UJ NQ

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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8050_SED	EPA 8270C	Benz[a]anthracene	9.5 ng/dry g	J CH
B13-8050_SED	EPA 8270C	Benzo[a]pyrene	10.9 ng/dry g	J HV, CH
B13-8050_SED	EPA 8270C	Benzo[b]fluoranthene	11 ng/dry g	J HV, CH
B13-8050_SED	EPA 8270C	Benzo[e]pyrene	9.1 ng/dry g	J CH
B13-8050_SED	EPA 8270C	Benzo[k]fluoranthene	8.5 ng/dry g	J CH
B13-8050_SED	EPA 8270C	BHC-beta	0.1 ng/dry g	UJ BC
B13-8050_SED	EPA 8270C	Biphenyl	5 ng/dry g	UJ LV, LC
B13-8050_SED	EPA 8270C	Chlordane-gamma	0.1 ng/dry g	UJ LP
B13-8050_SED	EPA 8270C	Chrysene	23.9 ng/dry g	J CH
B13-8050_SED	EPA 8270C	Dibenz[a,h]anthracene	5.1 ng/dry g	J CH
B13-8050_SED	EPA 8270C	Dibenzothiophene	1.7 ng/dry g	J DL
B13-8050_SED	EPA 8270C	Dicofol	0.1 ng/dry g	UJ BC
B13-8050_SED	EPA 8270C	Endosulfan-I	0.1 ng/dry g	UJ LL
B13-8050_SED	EPA 8270C	Endrin aldehyde	0.1 ng/dry g	R LL
B13-8050_SED	EPA 8270C	Endrin ketone	0.1 ng/dry g	UJ BC
B13-8050_SED	EPA 8270C	Fluoranthene	20.4 ng/dry g	J HV, CH, HL
B13-8050_SED	EPA 8270C	Fluorene	2.4 ng/dry g	J DL, HP
B13-8050_SED	EPA 8270C	Heptachlor	0.1 ng/dry g	UJ BC
B13-8050_SED	EPA 8270C	Indeno[1,2,3-c,d]pyrene	23 ng/dry g	J CH
B13-8050_SED	EPA 8270C	Methoxychlor	0.1 ng/dry g	UJ BC
B13-8050_SED	EPA 8270C	Naphthalene	1.9 ng/dry g	J DL, LV, CH, LC
B13-8050_SED	EPA 8270C	PCB118	0.1 ng/dry g	UJ LP
B13-8050_SED	EPA 8270C	PCB187	0.35 ng/dry g	J CH
B13-8050_SED	EPA 8270C	Perthane	0.1 ng/dry g	UJ BC
B13-8050_SED	EPA 8270C	Perylene	2.7 ng/dry g	J DL, HV, CH
B13-8050_SED	EPA 8270C	Phenanthrene	16.9 ng/dry g	J HL
B13-8050_SED	EPA 8270C	Pyrene	23.2 ng/dry g	J HV, CH
B13-8050_SED	EPA 8270C-NCI	Deltamethrin/Tralomethrin	0.5 ng/dry g	UJ BC, LV
B13-8050_SED	EPA 8270C-NCI	Fipronil Sulfone	0.5 ng/dry g	UJ BC
B13-8050_SED	EPA 8270C-NCI	I-Cyhalothrin	0.5 ng/dry g	UJ LV
B13-8050_SED	EPA 8270C-NCI	PBDE017	0.1 ng/dry g	UJ LL
B13-8050_SED	EPA 8270C-NCI	PBDE049	0.1 ng/dry g	UJ LL
B13-8050_SED	EPA 8270C-NCI	PBDE071	0.1 ng/dry g	UJ LL
B13-8050_SED	EPA 8270C-NCI	PBDE138	0.1 ng/dry g	UJ LC
B13-8050_SED	EPA 8270C-NCI	PBDE183	0.49 ng/dry g	J LC
B13-8050_SED	EPA 8270C-NCI	PBDE209	4.98 ng/dry g	J CH, HD
B13-8050_SED	EPA 8270C-NCI	Permethrin, cis-	0.5 ng/dry g	UJ BC, LV
B13-8050_SED	EPA 8270C-NCI	Permethrin, trans-	0.5 ng/dry g	UJ BC
B13-8050_SED	EPA 8270C-NCI	Toxaphene	0.2 ng/dry g	UJ LC
B13-8050_SED	EPA 9060	Total Nitrogen	0.01 % Dry Weight	J NQ
B13-8050_SED	EPA 9060	Total Organic Carbon	1.61 % Dry Weight	J NQ
B13-8050_SED	Plumb, 1981 and Teryl	Acid Volatile Sulfides	16.54 mg/dry kg	J NQ
B13-8052_SED	EPA 6020	Aluminum	21562.2 µg/dry g	J HP
B13-8052_SED	EPA 6020	Antimony	0.163 µg/dry g	J HP
B13-8052_SED	EPA 6020	Arsenic	6.564 µg/dry g	J HP
B13-8052_SED	EPA 6020	Barium	41.583 µg/dry g	J CH
B13-8052_SED	EPA 6020	Beryllium	0.376 µg/dry g	J HP
B13-8052_SED	EPA 6020	Cadmium	0.1115 µg/dry g	J LP
B13-8052_SED	EPA 6020	Chromium	35.5908 µg/dry g	J HP
B13-8052_SED	EPA 6020	Iron (Fe)	19660.9 µg/dry g	J HP
B13-8052_SED	EPA 6020	Nickel	8.7 µg/dry g	J HP
B13-8052_SED	EPA 6020	Total Phosphorus	380.79 µg/dry g	J NQ
B13-8052_SED	EPA 8270C	1-Methylnaphthalene	5 ng/dry g	UJ NQ
B13-8052_SED	EPA 8270C	1-Methylphenanthrene	1.5 ng/dry g	J DL, NQ

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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8052_SED	EPA 8270C	2,3,5-Trimethylnaphthalene	5 ng/dry g	UJ NQ
B13-8052_SED	EPA 8270C	2,4'-DDD	0.1 ng/dry g	UJ NQ
B13-8052_SED	EPA 8270C	2,4'-DDE	0.1 ng/dry g	UJ NQ
B13-8052_SED	EPA 8270C	2,4'-DDT	0.1 ng/dry g	UJ NQ, BC
B13-8052_SED	EPA 8270C	2,6-Dimethylnaphthalene	5 ng/dry g	UJ NQ
B13-8052_SED	EPA 8270C	2-Methylnaphthalene	5 ng/dry g	UJ NQ
B13-8052_SED	EPA 8270C	4,4'-DDD	0.1 ng/dry g	UJ NQ
B13-8052_SED	EPA 8270C	4,4'-DDE	0.1 ng/dry g	UJ NQ
B13-8052_SED	EPA 8270C	4,4'-DDMU	0.1 ng/dry g	UJ NQ
B13-8052_SED	EPA 8270C	4,4'-DDT	0.1 ng/dry g	UJ NQ, BC
B13-8052_SED	EPA 8270C	Acenaphthene	5 ng/dry g	UJ NQ
B13-8052_SED	EPA 8270C	Acenaphthylene	5 ng/dry g	UJ NQ
B13-8052_SED	EPA 8270C	Aldrin	0.1 ng/dry g	UJ NQ
B13-8052_SED	EPA 8270C	Anthracene	5 ng/dry g	UJ NQ
B13-8052_SED	EPA 8270C	Aroclor 1016	2 ng/dry g	UJ NQ
B13-8052_SED	EPA 8270C	Aroclor 1221	2 ng/dry g	UJ NQ
B13-8052_SED	EPA 8270C	Aroclor 1232	2 ng/dry g	UJ NQ
B13-8052_SED	EPA 8270C	Aroclor 1242	2 ng/dry g	UJ NQ
B13-8052_SED	EPA 8270C	Aroclor 1248	2 ng/dry g	UJ NQ
B13-8052_SED	EPA 8270C	Aroclor 1254	2 ng/dry g	UJ NQ
B13-8052_SED	EPA 8270C	Aroclor 1260	2.2 ng/dry g	J NQ
B13-8052_SED	EPA 8270C	Aroclor 1262	2 ng/dry g	UJ NQ
B13-8052_SED	EPA 8270C	Aroclor 1268	2 ng/dry g	UJ NQ
B13-8052_SED	EPA 8270C	Benz[a]anthracene	2.7 ng/dry g	J DL, NQ
B13-8052_SED	EPA 8270C	Benzo[a]pyrene	6 ng/dry g	J NQ, LP
B13-8052_SED	EPA 8270C	Benzo[b]fluoranthene	5.7 ng/dry g	J NQ
B13-8052_SED	EPA 8270C	Benzo[e]pyrene	5 ng/dry g	J NQ
B13-8052_SED	EPA 8270C	Benzo[g,h,i]perylene	7.5 ng/dry g	J NQ
B13-8052_SED	EPA 8270C	Benzo[k]fluoranthene	2.7 ng/dry g	J DL, NQ
B13-8052_SED	EPA 8270C	BHC-alpha	0.1 ng/dry g	UJ NQ
B13-8052_SED	EPA 8270C	BHC-beta	0.1 ng/dry g	UJ NQ, BC
B13-8052_SED	EPA 8270C	BHC-delta	0.1 ng/dry g	UJ NQ
B13-8052_SED	EPA 8270C	BHC-gamma	0.1 ng/dry g	UJ NQ
B13-8052_SED	EPA 8270C	Biphenyl	5 ng/dry g	UJ NQ
B13-8052_SED	EPA 8270C	Chlordane-alpha	0.1 ng/dry g	UJ NQ
B13-8052_SED	EPA 8270C	Chlordane-gamma	0.1 ng/dry g	UJ NQ
B13-8052_SED	EPA 8270C	Chrysene	4.4 ng/dry g	J DL, NQ
B13-8052_SED	EPA 8270C	cis-Nonachlor	0.1 ng/dry g	UJ NQ
B13-8052_SED	EPA 8270C	DCPA (Dacthal)	0.1 ng/dry g	UJ NQ
B13-8052_SED	EPA 8270C	Dibenz[a,h]anthracene	1.1 ng/dry g	J DL, NQ, LC, HP
B13-8052_SED	EPA 8270C	Dibenzothiophene	1 ng/dry g	J DL, NQ
B13-8052_SED	EPA 8270C	Dicofol	0.1 ng/dry g	UJ NQ, BC
B13-8052_SED	EPA 8270C	Dieldrin	0.1 ng/dry g	UJ NQ
B13-8052_SED	EPA 8270C	Endosulfan sulfate	0.1 ng/dry g	UJ NQ
B13-8052_SED	EPA 8270C	Endosulfan-I	0.1 ng/dry g	UJ NQ, LL
B13-8052_SED	EPA 8270C	Endosulfan-II	0.1 ng/dry g	UJ NQ, LL
B13-8052_SED	EPA 8270C	Endrin	0.1 ng/dry g	UJ NQ
B13-8052_SED	EPA 8270C	Endrin aldehyde	0.1 ng/dry g	R LL
B13-8052_SED	EPA 8270C	Endrin ketone	0.1 ng/dry g	UJ NQ, BC
B13-8052_SED	EPA 8270C	Fluoranthene	7.7 ng/dry g	J NQ
B13-8052_SED	EPA 8270C	Fluorene	5 ng/dry g	UJ NQ
B13-8052_SED	EPA 8270C	Heptachlor	0.1 ng/dry g	UJ NQ, BC
B13-8052_SED	EPA 8270C	Heptachlor epoxide	0.1 ng/dry g	UJ NQ
B13-8052_SED	EPA 8270C	Hexachlorobenzene	0.1 ng/dry g	UJ NQ



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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8052_SED	EPA 8270C	Indeno[1,2,3-c,d]pyrene	6.2 ng/dry g	J NQ
B13-8052_SED	EPA 8270C	Methoxychlor	0.1 ng/dry g	UJ NQ, BC
B13-8052_SED	EPA 8270C	Mirex	0.1 ng/dry g	UJ NQ
B13-8052_SED	EPA 8270C	Naphthalene	1.4 ng/dry g	J DL, NQ
B13-8052_SED	EPA 8270C	Oxychlorodane	0.1 ng/dry g	UJ NQ
B13-8052_SED	EPA 8270C	PCB018	0.1 ng/dry g	UJ LV, LC
B13-8052_SED	EPA 8270C	PCB044	0.1 ng/dry g	UJ LV, LC
B13-8052_SED	EPA 8270C	PCB049	0.1 ng/dry g	UJ LV, LC
B13-8052_SED	EPA 8270C	PCB052	0.1 ng/dry g	UJ LV, LC
B13-8052_SED	EPA 8270C	PCB087	0.18 ng/dry g	J LC
B13-8052_SED	EPA 8270C	PCB099	0.09 ng/dry g	J DL, LC
B13-8052_SED	EPA 8270C	PCB101	0.21 ng/dry g	J LC
B13-8052_SED	EPA 8270C	PCB110	0.14 ng/dry g	J LC
B13-8052_SED	EPA 8270C	PCB119	0.1 ng/dry g	UJ LC
B13-8052_SED	EPA 8270C	PCB141	0.08 ng/dry g	J DL
B13-8052_SED	EPA 8270C	PCB149	0.39 ng/dry g	J LC
B13-8052_SED	EPA 8270C	PCB151	0.14 ng/dry g	J LC
B13-8052_SED	EPA 8270C	PCB158	0.1 ng/dry g	UJ LC
B13-8052_SED	EPA 8270C	PCB177	0.06 ng/dry g	J DL, LC
B13-8052_SED	EPA 8270C	PCB183	0.1 ng/dry g	UJ LC
B13-8052_SED	EPA 8270C	PCB187	0.2 ng/dry g	J BC, LV, LC
B13-8052_SED	EPA 8270C	PCB199(200)	0.2 ng/dry g	UJ LV, LC
B13-8052_SED	EPA 8270C	PCB203	0.08 ng/dry g	J DL
B13-8052_SED	EPA 8270C	PCB206	0.1 ng/dry g	UJ BC, LC
B13-8052_SED	EPA 8270C	PCB209	0.1 ng/dry g	UJ LC
B13-8052_SED	EPA 8270C	Perthane	0.1 ng/dry g	UJ NQ, BC
B13-8052_SED	EPA 8270C	Perylene	1.3 ng/dry g	J DL, NQ, LP
B13-8052_SED	EPA 8270C	Phenanthrene	6.6 ng/dry g	J NQ
B13-8052_SED	EPA 8270C	Pyrene	8.1 ng/dry g	J NQ
B13-8052_SED	EPA 8270C	trans-Nonachlor	0.1 ng/dry g	UJ NQ
B13-8052_SED	EPA 8270C-NCI	Allethrin	0.5 ng/dry g	UJ NQ, BC
B13-8052_SED	EPA 8270C-NCI	Bifenthrin	0.5 ng/dry g	UJ NQ
B13-8052_SED	EPA 8270C-NCI	Cyfluthrin, total	0.5 ng/dry g	UJ NQ, BC
B13-8052_SED	EPA 8270C-NCI	Cypermethrin, total	0.5 ng/dry g	UJ NQ, BC
B13-8052_SED	EPA 8270C-NCI	Danitol (Fenprothrin)	0.5 ng/dry g	UJ NQ
B13-8052_SED	EPA 8270C-NCI	Deltamethrin/Tralomethrin	0.5 ng/dry g	R BC
B13-8052_SED	EPA 8270C-NCI	Esfenvalerate	0.5 ng/dry g	UJ NQ, BC
B13-8052_SED	EPA 8270C-NCI	Fenvalerate	0.5 ng/dry g	UJ NQ, BC
B13-8052_SED	EPA 8270C-NCI	Fipronil	0.5 ng/dry g	UJ NQ
B13-8052_SED	EPA 8270C-NCI	Fipronil Desulfinyl	0.5 ng/dry g	UJ NQ
B13-8052_SED	EPA 8270C-NCI	Fipronil Sulfide	0.5 ng/dry g	UJ NQ
B13-8052_SED	EPA 8270C-NCI	Fipronil Sulfone	0.5 ng/dry g	UJ NQ
B13-8052_SED	EPA 8270C-NCI	Fluvalinate	0.5 ng/dry g	UJ NQ, BC
B13-8052_SED	EPA 8270C-NCI	I-Cyhalothrin	0.5 ng/dry g	UJ NQ
B13-8052_SED	EPA 8270C-NCI	PBDE066	0.05 ng/dry g	J DL
B13-8052_SED	EPA 8270C-NCI	PBDE085	0.1 ng/dry g	UJ LC
B13-8052_SED	EPA 8270C-NCI	PBDE138	0.1 ng/dry g	UJ LC
B13-8052_SED	EPA 8270C-NCI	PBDE153	0.1 ng/dry g	UJ LC
B13-8052_SED	EPA 8270C-NCI	PBDE183	0.1 ng/dry g	UJ LC
B13-8052_SED	EPA 8270C-NCI	PBDE209	0.1 ng/dry g	UJ LC
B13-8052_SED	EPA 8270C-NCI	Permethrin, cis-	0.5 ng/dry g	R BC
B13-8052_SED	EPA 8270C-NCI	Permethrin, trans-	0.5 ng/dry g	R BC
B13-8052_SED	EPA 8270C-NCI	Prallethrin	0.5 ng/dry g	UJ NQ
B13-8052_SED	EPA 8270C-NCI	Resmethrin	0.5 ng/dry g	UJ NQ, BC

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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8052_SED	EPA 9060	Total Nitrogen	0.33 % Dry Weight	J NQ
B13-8052_SED	EPA 9060	Total Organic Carbon	0.58 % Dry Weight	J NQ
B13-8052_SED	Plumb, 1981 and Teryl	Acid Volatile Sulfides	17.06 mg/dry kg	J NQ
B13-8053_SED	EPA 200.8	Nickel	0.0056 µmol/dry g	J DL
B13-8053_SED	EPA 6020	Aluminum	20134.9 µg/dry g	J HP
B13-8053_SED	EPA 6020	Antimony	0.137 µg/dry g	J HP
B13-8053_SED	EPA 6020	Arsenic	3.361 µg/dry g	J HP
B13-8053_SED	EPA 6020	Barium	117.956 µg/dry g	J CH
B13-8053_SED	EPA 6020	Beryllium	0.277 µg/dry g	J HP
B13-8053_SED	EPA 6020	Cadmium	0.0937 µg/dry g	J LP
B13-8053_SED	EPA 6020	Chromium	26.9282 µg/dry g	J HP
B13-8053_SED	EPA 6020	Iron (Fe)	21362.3 µg/dry g	J HP
B13-8053_SED	EPA 6020	Nickel	8.92 µg/dry g	J HP
B13-8053_SED	EPA 6020	Silver	0.38 µg/dry g	J LL
B13-8053_SED	EPA 6020	Total Phosphorus	245.601 µg/dry g	J NQ
B13-8053_SED	EPA 8270C	1-Methylnaphthalene	5 ng/dry g	UJ NQ
B13-8053_SED	EPA 8270C	1-Methylphenanthrene	5 ng/dry g	UJ NQ
B13-8053_SED	EPA 8270C	2,3,5-Trimethylnaphthalene	5 ng/dry g	UJ NQ
B13-8053_SED	EPA 8270C	2,4'-DDT	0.1 ng/dry g	UJ BC
B13-8053_SED	EPA 8270C	2,6-Dimethylnaphthalene	5 ng/dry g	UJ NQ
B13-8053_SED	EPA 8270C	2-Methylnaphthalene	5 ng/dry g	UJ NQ
B13-8053_SED	EPA 8270C	4,4'-DDT	0.1 ng/dry g	UJ BC
B13-8053_SED	EPA 8270C	Acenaphthene	5 ng/dry g	UJ NQ
B13-8053_SED	EPA 8270C	Acenaphthylene	2.9 ng/dry g	J DL, NQ, HD
B13-8053_SED	EPA 8270C	Anthracene	4.6 ng/dry g	J DL, NQ, HD
B13-8053_SED	EPA 8270C	Aroclor 1016	2 ng/dry g	UJ NQ
B13-8053_SED	EPA 8270C	Aroclor 1221	2 ng/dry g	UJ NQ
B13-8053_SED	EPA 8270C	Aroclor 1232	2 ng/dry g	UJ NQ
B13-8053_SED	EPA 8270C	Aroclor 1242	2 ng/dry g	UJ NQ
B13-8053_SED	EPA 8270C	Aroclor 1248	2 ng/dry g	UJ NQ
B13-8053_SED	EPA 8270C	Aroclor 1254	2 ng/dry g	UJ NQ
B13-8053_SED	EPA 8270C	Aroclor 1260	1.6 ng/dry g	J DL, NQ
B13-8053_SED	EPA 8270C	Aroclor 1262	2 ng/dry g	UJ NQ
B13-8053_SED	EPA 8270C	Aroclor 1268	2 ng/dry g	UJ NQ
B13-8053_SED	EPA 8270C	Benz[a]anthracene	7 ng/dry g	J NQ
B13-8053_SED	EPA 8270C	Benzo[a]pyrene	12.9 ng/dry g	J NQ
B13-8053_SED	EPA 8270C	Benzo[b]fluoranthene	13.5 ng/dry g	J NQ
B13-8053_SED	EPA 8270C	Benzo[e]pyrene	9.8 ng/dry g	J NQ
B13-8053_SED	EPA 8270C	Benzo[g,h,i]perylene	15.4 ng/dry g	J NQ
B13-8053_SED	EPA 8270C	Benzo[k]fluoranthene	9.5 ng/dry g	J NQ
B13-8053_SED	EPA 8270C	BHC-beta	0.1 ng/dry g	UJ BC
B13-8053_SED	EPA 8270C	Biphenyl	5 ng/dry g	UJ NQ
B13-8053_SED	EPA 8270C	Chrysene	14.4 ng/dry g	J NQ
B13-8053_SED	EPA 8270C	Dibenz[a,h]anthracene	2.8 ng/dry g	J DL, NQ, HD
B13-8053_SED	EPA 8270C	Dibenzothiophene	5 ng/dry g	UJ NQ
B13-8053_SED	EPA 8270C	Dicofol	0.1 ng/dry g	UJ BC, LV
B13-8053_SED	EPA 8270C	Endosulfan-I	0.1 ng/dry g	UJ LL
B13-8053_SED	EPA 8270C	Endosulfan-II	0.1 ng/dry g	UJ LL
B13-8053_SED	EPA 8270C	Endrin aldehyde	0.1 ng/dry g	UJ BC, LL
B13-8053_SED	EPA 8270C	Endrin ketone	0.1 ng/dry g	UJ BC
B13-8053_SED	EPA 8270C	Fluoranthene	11.1 ng/dry g	J NQ, HD
B13-8053_SED	EPA 8270C	Fluorene	1.1 ng/dry g	J DL, NQ
B13-8053_SED	EPA 8270C	Heptachlor	0.1 ng/dry g	UJ BC
B13-8053_SED	EPA 8270C	Indeno[1,2,3-c,d]pyrene	12.8 ng/dry g	J NQ, HD

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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8053_SED	EPA 8270C	Methoxychlor	0.1 ng/dry g	UJ BC
B13-8053_SED	EPA 8270C	Naphthalene	2 ng/dry g	J DL, NQ, HD
B13-8053_SED	EPA 8270C	PCB119	0.1 ng/dry g	UJ LV
B13-8053_SED	EPA 8270C	Perthane	0.1 ng/dry g	UJ BC
B13-8053_SED	EPA 8270C	Perylene	2.9 ng/dry g	J DL, NQ
B13-8053_SED	EPA 8270C	Phenanthrene	5.7 ng/dry g	J NQ, HD
B13-8053_SED	EPA 8270C	Pyrene	12.2 ng/dry g	J NQ, HD
B13-8053_SED	EPA 8270C-NCI	Allethrin	0.5 ng/dry g	UJ LC
B13-8053_SED	EPA 8270C-NCI	Danitol (Fenpropathrin)	0.5 ng/dry g	UJ LL
B13-8053_SED	EPA 8270C-NCI	Deltamethrin/Tralomethrin	0.5 ng/dry g	UJ BC
B13-8053_SED	EPA 8270C-NCI	Fluvalinate	0.5 ng/dry g	UJ BC
B13-8053_SED	EPA 8270C-NCI	PBDE049	0.1 ng/dry g	UJ LC
B13-8053_SED	EPA 8270C-NCI	PBDE209	0.1 ng/dry g	UJ BC, LC
B13-8053_SED	EPA 8270C-NCI	Prallethrin	0.5 ng/dry g	UJ BC, LC
B13-8053_SED	EPA 8270C-NCI	Resmethrin	0.5 ng/dry g	R LV
B13-8053_SED	EPA 9060	Total Nitrogen	0.01 % Dry Weight	UJ NQ
B13-8053_SED	EPA 9060	Total Organic Carbon	0.41 % Dry Weight	J NQ
B13-8053_SED	Plumb, 1981 and Teryl	Acid Volatile Sulfides	22.21 mg/dry kg	J NQ
B13-8056_SED	EPA 200.8	Cadmium	0.0036 µmol/dry g	J LP
B13-8056_SED	EPA 6020	Aluminum	43659.3 µg/dry g	J CH, HP
B13-8056_SED	EPA 6020	Antimony	0.447 µg/dry g	J HP
B13-8056_SED	EPA 6020	Beryllium	0.781 µg/dry g	J HP
B13-8056_SED	EPA 6020	Cadmium	0.2358 µg/dry g	J LP
B13-8056_SED	EPA 6020	Chromium	63.8023 µg/dry g	J HP
B13-8056_SED	EPA 6020	Iron (Fe)	38458.3 µg/dry g	J CH, HP
B13-8056_SED	EPA 6020	Total Phosphorus	598.137 µg/dry g	J NQ
B13-8056_SED	EPA 8270C	1-Methylnaphthalene	5 ng/dry g	UJ LV, LC
B13-8056_SED	EPA 8270C	2,4'-DDT	0.1 ng/dry g	UJ BC
B13-8056_SED	EPA 8270C	2,6-Dimethylnaphthalene	5 ng/dry g	UJ LV
B13-8056_SED	EPA 8270C	2-Methylnaphthalene	1.4 ng/dry g	J DL, LV, CH, LC
B13-8056_SED	EPA 8270C	4,4'-DDD	0.1 ng/dry g	UJ LC
B13-8056_SED	EPA 8270C	4,4'-DDT	0.1 ng/dry g	UJ BC, LP
B13-8056_SED	EPA 8270C	Acenaphthylene	7.5 ng/dry g	J HD
B13-8056_SED	EPA 8270C	Aroclor 1016	2 ng/dry g	UJ NQ
B13-8056_SED	EPA 8270C	Aroclor 1221	2 ng/dry g	UJ NQ
B13-8056_SED	EPA 8270C	Aroclor 1232	2 ng/dry g	UJ NQ
B13-8056_SED	EPA 8270C	Aroclor 1242	2 ng/dry g	UJ NQ
B13-8056_SED	EPA 8270C	Aroclor 1248	2 ng/dry g	UJ NQ
B13-8056_SED	EPA 8270C	Aroclor 1254	2 ng/dry g	UJ NQ
B13-8056_SED	EPA 8270C	Aroclor 1260	30.6 ng/dry g	J NQ
B13-8056_SED	EPA 8270C	Aroclor 1262	2 ng/dry g	UJ NQ
B13-8056_SED	EPA 8270C	Aroclor 1268	2 ng/dry g	UJ NQ
B13-8056_SED	EPA 8270C	Benz[a]anthracene	72.9 ng/dry g	J CH
B13-8056_SED	EPA 8270C	Benzo[a]pyrene	96.4 ng/dry g	J HV, CH
B13-8056_SED	EPA 8270C	Benzo[b]fluoranthene	83.3 ng/dry g	J HV, CH
B13-8056_SED	EPA 8270C	Benzo[e]pyrene	65.6 ng/dry g	J CH
B13-8056_SED	EPA 8270C	Benzo[k]fluoranthene	62.4 ng/dry g	J CH
B13-8056_SED	EPA 8270C	BHC-beta	0.1 ng/dry g	UJ BC
B13-8056_SED	EPA 8270C	Biphenyl	5 ng/dry g	UJ LV, LC
B13-8056_SED	EPA 8270C	Chlordane-gamma	0.1 ng/dry g	UJ LP
B13-8056_SED	EPA 8270C	Chrysene	120.3 ng/dry g	J CH
B13-8056_SED	EPA 8270C	Dibenz[a,h]anthracene	17.2 ng/dry g	J CH
B13-8056_SED	EPA 8270C	Dibenzothiophene	2 ng/dry g	J DL
B13-8056_SED	EPA 8270C	Dicofol	0.1 ng/dry g	UJ BC

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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8056_SED	EPA 8270C	Endosulfan-I	0.1 ng/dry g	UJ LL
B13-8056_SED	EPA 8270C	Endrin aldehyde	0.1 ng/dry g	R LL
B13-8056_SED	EPA 8270C	Endrin ketone	0.1 ng/dry g	UJ BC
B13-8056_SED	EPA 8270C	Fluoranthene	106.5 ng/dry g	J HV, CH, HL
B13-8056_SED	EPA 8270C	Fluorene	2.7 ng/dry g	J DL, HP
B13-8056_SED	EPA 8270C	Heptachlor	0.1 ng/dry g	UJ BC
B13-8056_SED	EPA 8270C	Indeno[1,2,3-c,d]pyrene	72.2 ng/dry g	J CH
B13-8056_SED	EPA 8270C	Methoxychlor	0.1 ng/dry g	UJ BC
B13-8056_SED	EPA 8270C	Naphthalene	2.8 ng/dry g	J DL, LV, CH, LC
B13-8056_SED	EPA 8270C	PCB118	0.82 ng/dry g	J HL, HD, LP
B13-8056_SED	EPA 8270C	PCB169	1.88 ng/dry g	J HD
B13-8056_SED	EPA 8270C	PCB170	1.1 ng/dry g	J CH
B13-8056_SED	EPA 8270C	PCB180	1.97 ng/dry g	J CH
B13-8056_SED	EPA 8270C	PCB187	1.47 ng/dry g	J CH
B13-8056_SED	EPA 8270C	Perthane	0.1 ng/dry g	UJ BC
B13-8056_SED	EPA 8270C	Perylene	20.7 ng/dry g	J HV, CH
B13-8056_SED	EPA 8270C	Phenanthrene	27.8 ng/dry g	J HL
B13-8056_SED	EPA 8270C	Pyrene	117.6 ng/dry g	J HV, CH
B13-8056_SED	EPA 8270C-NCI	Deltamethrin/Tralomethrin	0.5 ng/dry g	UJ BC, LV
B13-8056_SED	EPA 8270C-NCI	Fipronil Sulfone	0.5 ng/dry g	UJ BC
B13-8056_SED	EPA 8270C-NCI	I-Cyhalothrin	0.5 ng/dry g	UJ LV
B13-8056_SED	EPA 8270C-NCI	PBDE017	0.1 ng/dry g	UJ LL
B13-8056_SED	EPA 8270C-NCI	PBDE049	0.1 ng/dry g	UJ LL
B13-8056_SED	EPA 8270C-NCI	PBDE071	0.1 ng/dry g	UJ LL
B13-8056_SED	EPA 8270C-NCI	PBDE138	0.1 ng/dry g	UJ LC
B13-8056_SED	EPA 8270C-NCI	PBDE183	0.74 ng/dry g	J LC
B13-8056_SED	EPA 8270C-NCI	PBDE209	15.29 ng/dry g	J CH, HD
B13-8056_SED	EPA 8270C-NCI	Permethrin, cis-	0.5 ng/dry g	UJ BC, LV
B13-8056_SED	EPA 8270C-NCI	Permethrin, trans-	0.5 ng/dry g	UJ BC
B13-8056_SED	EPA 8270C-NCI	Toxaphene	0.2 ng/dry g	UJ LC
B13-8056_SED	EPA 9060	Total Nitrogen	0.06 % Dry Weight	J NQ
B13-8056_SED	EPA 9060	Total Organic Carbon	1.86 % Dry Weight	J NQ
B13-8056_SED	Plumb, 1981 and Teryl	Acid Volatile Sulfides	4.58 mg/dry kg	J NQ
B13-8058_SED	EPA 245.7	Mercury	0.242 µg/dry g	J LC
B13-8058_SED	EPA 6020	Aluminum	17640.6 µg/dry g	J HP, HD
B13-8058_SED	EPA 6020	Antimony	0.148 µg/dry g	J HP
B13-8058_SED	EPA 6020	Barium	45.785 µg/dry g	J CH
B13-8058_SED	EPA 6020	Beryllium	0.295 µg/dry g	J HP
B13-8058_SED	EPA 6020	Cadmium	0.1369 µg/dry g	J LP
B13-8058_SED	EPA 6020	Chromium	29.4994 µg/dry g	J HP
B13-8058_SED	EPA 6020	Iron (Fe)	16905.8 µg/dry g	J HD
B13-8058_SED	EPA 6020	Total Phosphorus	327.319 µg/dry g	J NQ
B13-8058_SED	EPA 8270C	1-Methylnaphthalene	5 ng/dry g	UJ NQ
B13-8058_SED	EPA 8270C	1-Methylphenanthrene	5 ng/dry g	UJ NQ
B13-8058_SED	EPA 8270C	2,3,5-Trimethylnaphthalene	5 ng/dry g	UJ NQ
B13-8058_SED	EPA 8270C	2,4'-DDT	0.1 ng/dry g	UJ BC
B13-8058_SED	EPA 8270C	2,6-Dimethylnaphthalene	5 ng/dry g	UJ NQ
B13-8058_SED	EPA 8270C	2-Methylnaphthalene	5 ng/dry g	UJ NQ
B13-8058_SED	EPA 8270C	4,4'-DDT	0.1 ng/dry g	UJ BC
B13-8058_SED	EPA 8270C	Acenaphthene	5 ng/dry g	UJ NQ
B13-8058_SED	EPA 8270C	Acenaphthylene	1.3 ng/dry g	J DL, NQ, HD
B13-8058_SED	EPA 8270C	Anthracene	1.8 ng/dry g	J DL, NQ, HD
B13-8058_SED	EPA 8270C	Aroclor 1016	2 ng/dry g	UJ NQ
B13-8058_SED	EPA 8270C	Aroclor 1221	2 ng/dry g	UJ NQ

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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8058_SED	EPA 8270C	Aroclor 1232	2 ng/dry g	UJ NQ
B13-8058_SED	EPA 8270C	Aroclor 1242	2 ng/dry g	UJ NQ
B13-8058_SED	EPA 8270C	Aroclor 1248	2 ng/dry g	UJ NQ
B13-8058_SED	EPA 8270C	Aroclor 1254	2 ng/dry g	UJ NQ
B13-8058_SED	EPA 8270C	Aroclor 1260	2 ng/dry g	UJ NQ
B13-8058_SED	EPA 8270C	Aroclor 1262	2 ng/dry g	UJ NQ
B13-8058_SED	EPA 8270C	Aroclor 1268	2 ng/dry g	UJ NQ
B13-8058_SED	EPA 8270C	Benz[a]anthracene	4.7 ng/dry g	J DL, NQ
B13-8058_SED	EPA 8270C	Benzo[a]pyrene	8.3 ng/dry g	J NQ
B13-8058_SED	EPA 8270C	Benzo[b]fluoranthene	5.8 ng/dry g	J NQ
B13-8058_SED	EPA 8270C	Benzo[e]pyrene	6.5 ng/dry g	J NQ
B13-8058_SED	EPA 8270C	Benzo[g,h,i]perylene	13.4 ng/dry g	J NQ
B13-8058_SED	EPA 8270C	Benzo[k]fluoranthene	4.7 ng/dry g	J DL, NQ
B13-8058_SED	EPA 8270C	BHC-beta	0.1 ng/dry g	UJ BC
B13-8058_SED	EPA 8270C	Biphenyl	5 ng/dry g	UJ NQ
B13-8058_SED	EPA 8270C	Chrysene	7.9 ng/dry g	J NQ
B13-8058_SED	EPA 8270C	Dibenz[a,h]anthracene	1.5 ng/dry g	J DL, NQ, HD
B13-8058_SED	EPA 8270C	Dibenzothiophene	1 ng/dry g	J DL, NQ, HD
B13-8058_SED	EPA 8270C	Dicofol	0.1 ng/dry g	UJ BC, LV
B13-8058_SED	EPA 8270C	Endosulfan-I	0.1 ng/dry g	UJ LL, LM
B13-8058_SED	EPA 8270C	Endosulfan-II	0.1 ng/dry g	UJ LL, LM
B13-8058_SED	EPA 8270C	Endrin aldehyde	0.1 ng/dry g	UJ BC, LL, LM
B13-8058_SED	EPA 8270C	Endrin ketone	0.1 ng/dry g	UJ BC
B13-8058_SED	EPA 8270C	Fluoranthene	8.4 ng/dry g	J NQ, HD
B13-8058_SED	EPA 8270C	Fluorene	5 ng/dry g	UJ NQ
B13-8058_SED	EPA 8270C	Heptachlor	0.1 ng/dry g	UJ BC
B13-8058_SED	EPA 8270C	Indeno[1,2,3-c,d]pyrene	9.5 ng/dry g	J NQ, HD
B13-8058_SED	EPA 8270C	Methoxychlor	0.1 ng/dry g	UJ BC
B13-8058_SED	EPA 8270C	Naphthalene	2 ng/dry g	J DL, NQ, HD
B13-8058_SED	EPA 8270C	PCB099	0.1 ng/dry g	UJ HD
B13-8058_SED	EPA 8270C	PCB119	0.1 ng/dry g	UJ LV
B13-8058_SED	EPA 8270C	Perthane	0.1 ng/dry g	UJ BC
B13-8058_SED	EPA 8270C	Perylene	1.8 ng/dry g	J DL, NQ
B13-8058_SED	EPA 8270C	Phenanthrene	5.6 ng/dry g	J NQ, HD
B13-8058_SED	EPA 8270C	Pyrene	12 ng/dry g	J NQ, HD
B13-8058_SED	EPA 8270C-NCI	Allethrin	0.5 ng/dry g	UJ LC
B13-8058_SED	EPA 8270C-NCI	Cypermethrin, total	0.5 ng/dry g	UJ LM
B13-8058_SED	EPA 8270C-NCI	Danitol (Fenpropathrin)	0.5 ng/dry g	UJ LL
B13-8058_SED	EPA 8270C-NCI	Deltamethrin/Tralomethrin	0.5 ng/dry g	UJ BC
B13-8058_SED	EPA 8270C-NCI	Fluvalinate	0.5 ng/dry g	UJ BC
B13-8058_SED	EPA 8270C-NCI	PBDE049	0.1 ng/dry g	UJ LC
B13-8058_SED	EPA 8270C-NCI	PBDE209	0.1 ng/dry g	UJ BC, LC
B13-8058_SED	EPA 8270C-NCI	Prallethrin	0.5 ng/dry g	UJ BC, LC
B13-8058_SED	EPA 8270C-NCI	Resmethrin	0.5 ng/dry g	R LV
B13-8058_SED	EPA 9060	Total Nitrogen	0.34 % Dry Weight	J NQ
B13-8058_SED	EPA 9060	Total Organic Carbon	0.47 % Dry Weight	J NQ
B13-8058_SED	Plumb, 1981 and Teryl	Acid Volatile Sulfides	5.66 mg/dry kg	J NQ, HD
B13-8060_SED	EPA 6020	Aluminum	24385.4 µg/dry g	J HP
B13-8060_SED	EPA 6020	Antimony	0.223 µg/dry g	J HP
B13-8060_SED	EPA 6020	Arsenic	6.961 µg/dry g	J HP
B13-8060_SED	EPA 6020	Barium	55.716 µg/dry g	J CH
B13-8060_SED	EPA 6020	Beryllium	0.447 µg/dry g	J HP
B13-8060_SED	EPA 6020	Cadmium	0.1578 µg/dry g	J LP
B13-8060_SED	EPA 6020	Chromium	40.1687 µg/dry g	J HP

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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8060_SED	EPA 6020	Iron (Fe)	21220.2 µg/dry g	J HP
B13-8060_SED	EPA 6020	Nickel	10.05 µg/dry g	J HP
B13-8060_SED	EPA 6020	Total Phosphorus	393.596 µg/dry g	J NQ
B13-8060_SED	EPA 8270C	1-Methylnaphthalene	5 ng/dry g	UJ NQ
B13-8060_SED	EPA 8270C	1-Methylphenanthrene	1.7 ng/dry g	J DL, NQ
B13-8060_SED	EPA 8270C	2,3,5-Trimethylnaphthalene	1.3 ng/dry g	J DL, NQ
B13-8060_SED	EPA 8270C	2,4'-DDD	0.1 ng/dry g	UJ NQ
B13-8060_SED	EPA 8270C	2,4'-DDE	0.1 ng/dry g	UJ NQ
B13-8060_SED	EPA 8270C	2,4'-DDT	0.1 ng/dry g	UJ NQ, BC
B13-8060_SED	EPA 8270C	2,6-Dimethylnaphthalene	5 ng/dry g	UJ NQ
B13-8060_SED	EPA 8270C	2-Methylnaphthalene	5 ng/dry g	UJ NQ
B13-8060_SED	EPA 8270C	4,4'-DDD	0.1 ng/dry g	UJ NQ
B13-8060_SED	EPA 8270C	4,4'-DDE	0.1 ng/dry g	UJ NQ
B13-8060_SED	EPA 8270C	4,4'-DDMU	0.1 ng/dry g	UJ NQ
B13-8060_SED	EPA 8270C	4,4'-DDT	0.1 ng/dry g	UJ NQ, BC
B13-8060_SED	EPA 8270C	Acenaphthene	5 ng/dry g	UJ NQ
B13-8060_SED	EPA 8270C	Acenaphthylene	1.1 ng/dry g	J DL, NQ
B13-8060_SED	EPA 8270C	Aldrin	0.1 ng/dry g	UJ NQ
B13-8060_SED	EPA 8270C	Anthracene	1.8 ng/dry g	J DL, NQ
B13-8060_SED	EPA 8270C	Aroclor 1016	2 ng/dry g	UJ NQ
B13-8060_SED	EPA 8270C	Aroclor 1221	2 ng/dry g	UJ NQ
B13-8060_SED	EPA 8270C	Aroclor 1232	2 ng/dry g	UJ NQ
B13-8060_SED	EPA 8270C	Aroclor 1242	2 ng/dry g	UJ NQ
B13-8060_SED	EPA 8270C	Aroclor 1248	2 ng/dry g	UJ NQ
B13-8060_SED	EPA 8270C	Aroclor 1254	2 ng/dry g	UJ NQ
B13-8060_SED	EPA 8270C	Aroclor 1260	3.9 ng/dry g	J NQ
B13-8060_SED	EPA 8270C	Aroclor 1262	2 ng/dry g	UJ NQ
B13-8060_SED	EPA 8270C	Aroclor 1268	2 ng/dry g	UJ NQ
B13-8060_SED	EPA 8270C	Benz[a]anthracene	6.2 ng/dry g	J NQ
B13-8060_SED	EPA 8270C	Benzo[a]pyrene	11.7 ng/dry g	J NQ, LP
B13-8060_SED	EPA 8270C	Benzo[b]fluoranthene	9.8 ng/dry g	J NQ
B13-8060_SED	EPA 8270C	Benzo[e]pyrene	9.1 ng/dry g	J NQ
B13-8060_SED	EPA 8270C	Benzo[g,h,i]perylene	14.7 ng/dry g	J NQ
B13-8060_SED	EPA 8270C	Benzo[k]fluoranthene	4.9 ng/dry g	J DL, NQ
B13-8060_SED	EPA 8270C	BHC-alpha	0.1 ng/dry g	UJ NQ
B13-8060_SED	EPA 8270C	BHC-beta	0.1 ng/dry g	UJ NQ, BC
B13-8060_SED	EPA 8270C	BHC-delta	0.1 ng/dry g	UJ NQ
B13-8060_SED	EPA 8270C	BHC-gamma	0.1 ng/dry g	UJ NQ
B13-8060_SED	EPA 8270C	Biphenyl	5 ng/dry g	UJ NQ
B13-8060_SED	EPA 8270C	Chlordane-alpha	0.1 ng/dry g	UJ NQ
B13-8060_SED	EPA 8270C	Chlordane-gamma	0.1 ng/dry g	UJ NQ
B13-8060_SED	EPA 8270C	Chrysene	8.4 ng/dry g	J NQ
B13-8060_SED	EPA 8270C	cis-Nonachlor	0.1 ng/dry g	UJ NQ
B13-8060_SED	EPA 8270C	DCPA (Dacthal)	0.1 ng/dry g	UJ NQ
B13-8060_SED	EPA 8270C	Dibenz[a,h]anthracene	2.2 ng/dry g	J DL, NQ, LC, HP
B13-8060_SED	EPA 8270C	Dibenzothiophene	1.4 ng/dry g	J DL, NQ
B13-8060_SED	EPA 8270C	Dicofol	0.1 ng/dry g	UJ NQ, BC
B13-8060_SED	EPA 8270C	Dieldrin	0.1 ng/dry g	UJ NQ
B13-8060_SED	EPA 8270C	Endosulfan sulfate	0.1 ng/dry g	UJ NQ
B13-8060_SED	EPA 8270C	Endosulfan-I	0.1 ng/dry g	UJ NQ, LL
B13-8060_SED	EPA 8270C	Endosulfan-II	0.1 ng/dry g	UJ NQ, LL
B13-8060_SED	EPA 8270C	Endrin	0.1 ng/dry g	UJ NQ
B13-8060_SED	EPA 8270C	Endrin aldehyde	0.1 ng/dry g	R LL
B13-8060_SED	EPA 8270C	Endrin ketone	0.1 ng/dry g	UJ NQ, BC

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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8060_SED	EPA 8270C	Fluoranthene	12.5 ng/dry g	J NQ
B13-8060_SED	EPA 8270C	Fluorene	1.2 ng/dry g	J DL, NQ
B13-8060_SED	EPA 8270C	Heptachlor	0.1 ng/dry g	UJ NQ, BC
B13-8060_SED	EPA 8270C	Heptachlor epoxide	0.1 ng/dry g	UJ NQ
B13-8060_SED	EPA 8270C	Hexachlorobenzene	0.1 ng/dry g	UJ NQ
B13-8060_SED	EPA 8270C	Indeno[1,2,3-c,d]pyrene	12.1 ng/dry g	J NQ
B13-8060_SED	EPA 8270C	Methoxychlor	0.1 ng/dry g	UJ NQ, BC
B13-8060_SED	EPA 8270C	Mirex	0.1 ng/dry g	UJ NQ
B13-8060_SED	EPA 8270C	Naphthalene	1.9 ng/dry g	J DL, NQ
B13-8060_SED	EPA 8270C	Oxychlorane	0.1 ng/dry g	UJ NQ
B13-8060_SED	EPA 8270C	PCB018	0.1 ng/dry g	UJ LV, LC
B13-8060_SED	EPA 8270C	PCB044	0.1 ng/dry g	UJ LV, LC
B13-8060_SED	EPA 8270C	PCB049	0.1 ng/dry g	UJ LV, LC
B13-8060_SED	EPA 8270C	PCB052	0.1 ng/dry g	UJ LV, LC
B13-8060_SED	EPA 8270C	PCB087	0.12 ng/dry g	J LC
B13-8060_SED	EPA 8270C	PCB099	0.21 ng/dry g	J LC
B13-8060_SED	EPA 8270C	PCB101	0.42 ng/dry g	J LC
B13-8060_SED	EPA 8270C	PCB110	0.25 ng/dry g	J LC
B13-8060_SED	EPA 8270C	PCB119	0.1 ng/dry g	UJ LC
B13-8060_SED	EPA 8270C	PCB149	0.72 ng/dry g	J LC
B13-8060_SED	EPA 8270C	PCB151	0.15 ng/dry g	J LC
B13-8060_SED	EPA 8270C	PCB158	0.13 ng/dry g	J LC
B13-8060_SED	EPA 8270C	PCB177	0.17 ng/dry g	J LC
B13-8060_SED	EPA 8270C	PCB183	0.13 ng/dry g	J LC
B13-8060_SED	EPA 8270C	PCB187	0.28 ng/dry g	J BC, LV, LC
B13-8060_SED	EPA 8270C	PCB199(200)	0.2 ng/dry g	UJ LV, LC
B13-8060_SED	EPA 8270C	PCB206	0.1 ng/dry g	UJ BC, LC
B13-8060_SED	EPA 8270C	PCB209	0.1 ng/dry g	UJ LC
B13-8060_SED	EPA 8270C	Perthane	0.1 ng/dry g	UJ NQ, BC
B13-8060_SED	EPA 8270C	Perylene	2.5 ng/dry g	J DL, NQ, LP
B13-8060_SED	EPA 8270C	Phenanthrene	9.2 ng/dry g	J NQ
B13-8060_SED	EPA 8270C	Pyrene	15.8 ng/dry g	J NQ
B13-8060_SED	EPA 8270C	trans-Nonachlor	0.1 ng/dry g	UJ NQ
B13-8060_SED	EPA 8270C-NCI	Allethrin	0.5 ng/dry g	UJ NQ, BC
B13-8060_SED	EPA 8270C-NCI	Bifenthrin	0.5 ng/dry g	UJ NQ
B13-8060_SED	EPA 8270C-NCI	Cyfluthrin, total	0.5 ng/dry g	UJ NQ, BC
B13-8060_SED	EPA 8270C-NCI	Cypermethrin, total	0.5 ng/dry g	UJ NQ, BC
B13-8060_SED	EPA 8270C-NCI	Danitol (Fenpropathrin)	0.5 ng/dry g	UJ NQ
B13-8060_SED	EPA 8270C-NCI	Deltamethrin/Tralomethrin	0.5 ng/dry g	R BC
B13-8060_SED	EPA 8270C-NCI	Esfenvalerate	0.5 ng/dry g	UJ NQ, BC
B13-8060_SED	EPA 8270C-NCI	Fenvalerate	0.5 ng/dry g	UJ NQ, BC
B13-8060_SED	EPA 8270C-NCI	Fipronil	0.5 ng/dry g	UJ NQ
B13-8060_SED	EPA 8270C-NCI	Fipronil Desulfinyl	0.5 ng/dry g	UJ NQ
B13-8060_SED	EPA 8270C-NCI	Fipronil Sulfide	0.5 ng/dry g	UJ NQ
B13-8060_SED	EPA 8270C-NCI	Fipronil Sulfone	0.5 ng/dry g	UJ NQ
B13-8060_SED	EPA 8270C-NCI	Fluvalinate	0.5 ng/dry g	UJ NQ, BC
B13-8060_SED	EPA 8270C-NCI	I-Cyhalothrin	0.5 ng/dry g	UJ NQ
B13-8060_SED	EPA 8270C-NCI	PBDE071	0.08 ng/dry g	J DL
B13-8060_SED	EPA 8270C-NCI	PBDE085	0.1 ng/dry g	UJ LC
B13-8060_SED	EPA 8270C-NCI	PBDE138	0.1 ng/dry g	UJ LC
B13-8060_SED	EPA 8270C-NCI	PBDE153	0.1 ng/dry g	UJ LC
B13-8060_SED	EPA 8270C-NCI	PBDE183	0.1 ng/dry g	UJ LC
B13-8060_SED	EPA 8270C-NCI	PBDE209	0.1 ng/dry g	UJ LC
B13-8060_SED	EPA 8270C-NCI	Permethrin, cis-	0.5 ng/dry g	R BC

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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8060_SED	EPA 8270C-NCI	Permethrin, trans-	0.5 ng/dry g	R BC
B13-8060_SED	EPA 8270C-NCI	Prallethrin	0.5 ng/dry g	UJ NQ
B13-8060_SED	EPA 8270C-NCI	Resmethrin	0.5 ng/dry g	UJ NQ, BC
B13-8060_SED	EPA 9060	Total Nitrogen	0.35 % Dry Weight	J NQ
B13-8060_SED	EPA 9060	Total Organic Carbon	1.44 % Dry Weight	J NQ
B13-8060_SED	Plumb, 1981 and Teryl	Acid Volatile Sulfides	7.61 mg/dry kg	J NQ
B13-8064_SED	EPA 200.8	Cadmium	0.0036 µmol/dry g	J LP
B13-8064_SED	EPA 6020	Aluminum	52326.3 µg/dry g	J CH, HP
B13-8064_SED	EPA 6020	Antimony	0.606 µg/dry g	J HP
B13-8064_SED	EPA 6020	Beryllium	0.886 µg/dry g	J HP
B13-8064_SED	EPA 6020	Cadmium	0.257 µg/dry g	J LP
B13-8064_SED	EPA 6020	Chromium	82.9471 µg/dry g	J HP
B13-8064_SED	EPA 6020	Iron (Fe)	45772.3 µg/dry g	J CH, HP
B13-8064_SED	EPA 6020	Total Phosphorus	698.315 µg/dry g	J NQ
B13-8064_SED	EPA 8270C	1-Methylnaphthalene	5 ng/dry g	UJ LV, LC
B13-8064_SED	EPA 8270C	1-Methylphenanthrene	2.4 ng/dry g	J DL
B13-8064_SED	EPA 8270C	2,4'-DDT	0.1 ng/dry g	UJ BC
B13-8064_SED	EPA 8270C	2,6-Dimethylnaphthalene	1.2 ng/dry g	J DL, LV
B13-8064_SED	EPA 8270C	2-Methylnaphthalene	1.7 ng/dry g	J DL, LV, CH, LC
B13-8064_SED	EPA 8270C	4,4'-DDD	0.1 ng/dry g	UJ LC
B13-8064_SED	EPA 8270C	4,4'-DDT	0.1 ng/dry g	UJ BC, LP
B13-8064_SED	EPA 8270C	Acenaphthylene	4.7 ng/dry g	J DL, HD
B13-8064_SED	EPA 8270C	Aroclor 1016	2 ng/dry g	UJ NQ
B13-8064_SED	EPA 8270C	Aroclor 1221	2 ng/dry g	UJ NQ
B13-8064_SED	EPA 8270C	Aroclor 1232	2 ng/dry g	UJ NQ
B13-8064_SED	EPA 8270C	Aroclor 1242	2 ng/dry g	UJ NQ
B13-8064_SED	EPA 8270C	Aroclor 1248	2 ng/dry g	UJ NQ
B13-8064_SED	EPA 8270C	Aroclor 1254	2 ng/dry g	UJ NQ
B13-8064_SED	EPA 8270C	Aroclor 1260	24.6 ng/dry g	J NQ
B13-8064_SED	EPA 8270C	Aroclor 1262	2 ng/dry g	UJ NQ
B13-8064_SED	EPA 8270C	Aroclor 1268	2 ng/dry g	UJ NQ
B13-8064_SED	EPA 8270C	Benz[a]anthracene	18.7 ng/dry g	J CH
B13-8064_SED	EPA 8270C	Benzo[a]pyrene	24.8 ng/dry g	J HV, CH
B13-8064_SED	EPA 8270C	Benzo[b]fluoranthene	25.7 ng/dry g	J HV, CH
B13-8064_SED	EPA 8270C	Benzo[e]pyrene	19.7 ng/dry g	J CH
B13-8064_SED	EPA 8270C	Benzo[k]fluoranthene	19.2 ng/dry g	J CH
B13-8064_SED	EPA 8270C	BHC-beta	0.1 ng/dry g	UJ BC
B13-8064_SED	EPA 8270C	Biphenyl	5 ng/dry g	UJ LV, LC
B13-8064_SED	EPA 8270C	Chlordane-gamma	0.1 ng/dry g	UJ LP
B13-8064_SED	EPA 8270C	Chrysene	35.5 ng/dry g	J CH
B13-8064_SED	EPA 8270C	Dibenz[a,h]anthracene	16.4 ng/dry g	J CH
B13-8064_SED	EPA 8270C	Dibenzothiophene	1.6 ng/dry g	J DL
B13-8064_SED	EPA 8270C	Dicofol	0.1 ng/dry g	UJ BC
B13-8064_SED	EPA 8270C	Endosulfan-I	0.1 ng/dry g	UJ LL
B13-8064_SED	EPA 8270C	Endrin aldehyde	0.1 ng/dry g	R LL
B13-8064_SED	EPA 8270C	Endrin ketone	0.1 ng/dry g	UJ BC
B13-8064_SED	EPA 8270C	Fluoranthene	36.1 ng/dry g	J HV, CH, HL
B13-8064_SED	EPA 8270C	Fluorene	1.9 ng/dry g	J DL, HP
B13-8064_SED	EPA 8270C	Heptachlor	0.1 ng/dry g	UJ BC
B13-8064_SED	EPA 8270C	Indeno[1,2,3-c,d]pyrene	66 ng/dry g	J CH
B13-8064_SED	EPA 8270C	Methoxychlor	0.1 ng/dry g	UJ BC
B13-8064_SED	EPA 8270C	Naphthalene	3.7 ng/dry g	J DL, LV, CH, LC
B13-8064_SED	EPA 8270C	PCB118	0.58 ng/dry g	J HL, HD, LP
B13-8064_SED	EPA 8270C	PCB169	1.2 ng/dry g	J HD



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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8064_SED	EPA 8270C	PCB180	1.25 ng/dry g	J CH
B13-8064_SED	EPA 8270C	PCB187	1.1 ng/dry g	J CH
B13-8064_SED	EPA 8270C	PCB209	1.47 ng/dry g	J HD
B13-8064_SED	EPA 8270C	Perthane	0.1 ng/dry g	UJ BC
B13-8064_SED	EPA 8270C	Perylene	5.6 ng/dry g	J HV, CH
B13-8064_SED	EPA 8270C	Phenanthrene	18.4 ng/dry g	J HL
B13-8064_SED	EPA 8270C	Pyrene	44.8 ng/dry g	J HV, CH
B13-8064_SED	EPA 8270C-NCI	Deltamethrin/Tralomethrin	0.5 ng/dry g	UJ BC, LV
B13-8064_SED	EPA 8270C-NCI	Fipronil Sulfone	0.5 ng/dry g	UJ BC
B13-8064_SED	EPA 8270C-NCI	I-Cyhalothrin	0.5 ng/dry g	UJ LV
B13-8064_SED	EPA 8270C-NCI	PBDE017	0.1 ng/dry g	UJ LL
B13-8064_SED	EPA 8270C-NCI	PBDE049	0.1 ng/dry g	UJ LL
B13-8064_SED	EPA 8270C-NCI	PBDE071	0.1 ng/dry g	UJ LL
B13-8064_SED	EPA 8270C-NCI	PBDE099	0.29 ng/dry g	J HL
B13-8064_SED	EPA 8270C-NCI	PBDE138	0.1 ng/dry g	UJ LC
B13-8064_SED	EPA 8270C-NCI	PBDE183	0.46 ng/dry g	J LC
B13-8064_SED	EPA 8270C-NCI	PBDE209	20.16 ng/dry g	J CH, HD
B13-8064_SED	EPA 8270C-NCI	Permethrin, cis-	0.5 ng/dry g	UJ BC, LV
B13-8064_SED	EPA 8270C-NCI	Permethrin, trans-	0.5 ng/dry g	UJ BC
B13-8064_SED	EPA 8270C-NCI	Toxaphene	0.2 ng/dry g	UJ LC
B13-8064_SED	EPA 9060	Total Nitrogen	0.07 % Dry Weight	J NQ
B13-8064_SED	EPA 9060	Total Organic Carbon	1.53 % Dry Weight	J NQ
B13-8064_SED	Plumb, 1981 and Teryl	Acid Volatile Sulfides	93.35 mg/dry kg	J NQ
B13-8065_SED	EPA 200.8	Cadmium	0.0036 µmol/dry g	J LP
B13-8065_SED	EPA 245.7	Mercury	0.6447 µg/dry g	J HM
B13-8065_SED	EPA 6020	Aluminum	45137.2 µg/dry g	J CH, HP, HD
B13-8065_SED	EPA 6020	Antimony	1.143 µg/dry g	J HP
B13-8065_SED	EPA 6020	Beryllium	0.766 µg/dry g	J HP
B13-8065_SED	EPA 6020	Cadmium	0.4652 µg/dry g	J LP
B13-8065_SED	EPA 6020	Chromium	82.4049 µg/dry g	J HP
B13-8065_SED	EPA 6020	Iron (Fe)	41878.7 µg/dry g	J CH, HP, HD
B13-8065_SED	EPA 6020	Total Phosphorus	777.297 µg/dry g	J NQ
B13-8065_SED	EPA 8270C	1-Methylnaphthalene	1.3 ng/dry g	J DL, LV, CH, LC
B13-8065_SED	EPA 8270C	2,4'-DDT	0.1 ng/dry g	UJ BC
B13-8065_SED	EPA 8270C	2,6-Dimethylnaphthalene	2 ng/dry g	J DL, LV
B13-8065_SED	EPA 8270C	2-Methylnaphthalene	2.7 ng/dry g	J DL, LV, CH, LC
B13-8065_SED	EPA 8270C	4,4'-DDD	0.1 ng/dry g	UJ LC
B13-8065_SED	EPA 8270C	4,4'-DDT	0.1 ng/dry g	UJ BC, LP
B13-8065_SED	EPA 8270C	Acenaphthene	1.5 ng/dry g	J DL
B13-8065_SED	EPA 8270C	Acenaphthylene	9.7 ng/dry g	J HD
B13-8065_SED	EPA 8270C	Aroclor 1016	2 ng/dry g	UJ NQ
B13-8065_SED	EPA 8270C	Aroclor 1221	2 ng/dry g	UJ NQ
B13-8065_SED	EPA 8270C	Aroclor 1232	2 ng/dry g	UJ NQ
B13-8065_SED	EPA 8270C	Aroclor 1242	2 ng/dry g	UJ NQ
B13-8065_SED	EPA 8270C	Aroclor 1248	2 ng/dry g	UJ NQ
B13-8065_SED	EPA 8270C	Aroclor 1254	2 ng/dry g	UJ NQ
B13-8065_SED	EPA 8270C	Aroclor 1260	31.4 ng/dry g	J NQ
B13-8065_SED	EPA 8270C	Aroclor 1262	2 ng/dry g	UJ NQ
B13-8065_SED	EPA 8270C	Aroclor 1268	2 ng/dry g	UJ NQ
B13-8065_SED	EPA 8270C	Benz[a]anthracene	50 ng/dry g	J CH
B13-8065_SED	EPA 8270C	Benzo[a]pyrene	99 ng/dry g	J HV, CH
B13-8065_SED	EPA 8270C	Benzo[b]fluoranthene	109.3 ng/dry g	J HV, CH
B13-8065_SED	EPA 8270C	Benzo[e]pyrene	77.4 ng/dry g	J CH
B13-8065_SED	EPA 8270C	Benzo[k]fluoranthene	74.7 ng/dry g	J CH

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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8065_SED	EPA 8270C	BHC-beta	0.1 ng/dry g	UJ BC
B13-8065_SED	EPA 8270C	Biphenyl	5 ng/dry g	UJ LV, LC
B13-8065_SED	EPA 8270C	Chlordane-gamma	0.1 ng/dry g	UJ LP
B13-8065_SED	EPA 8270C	Chrysene	121.2 ng/dry g	J CH
B13-8065_SED	EPA 8270C	Dibenz[a,h]anthracene	39.3 ng/dry g	J CH
B13-8065_SED	EPA 8270C	Dibenzothiophene	3 ng/dry g	J DL
B13-8065_SED	EPA 8270C	Dicofol	0.1 ng/dry g	UJ BC
B13-8065_SED	EPA 8270C	Endosulfan-I	0.1 ng/dry g	UJ LL
B13-8065_SED	EPA 8270C	Endrin aldehyde	0.1 ng/dry g	R LL
B13-8065_SED	EPA 8270C	Endrin ketone	0.1 ng/dry g	UJ BC
B13-8065_SED	EPA 8270C	Fluoranthene	103.1 ng/dry g	J HV, CH, HL
B13-8065_SED	EPA 8270C	Fluorene	4.1 ng/dry g	J DL, HP
B13-8065_SED	EPA 8270C	Heptachlor	0.1 ng/dry g	UJ BC
B13-8065_SED	EPA 8270C	Indeno[1,2,3-c,d]pyrene	144.4 ng/dry g	J CH
B13-8065_SED	EPA 8270C	Methoxychlor	0.1 ng/dry g	UJ BC
B13-8065_SED	EPA 8270C	Naphthalene	4.7 ng/dry g	J DL, LV, CH, LC
B13-8065_SED	EPA 8270C	PCB118	0.86 ng/dry g	J HL, HD, LP
B13-8065_SED	EPA 8270C	PCB169	2.13 ng/dry g	J HD
B13-8065_SED	EPA 8270C	PCB180	2.24 ng/dry g	J CH
B13-8065_SED	EPA 8270C	PCB187	1.76 ng/dry g	J CH
B13-8065_SED	EPA 8270C	Perthane	0.1 ng/dry g	UJ BC
B13-8065_SED	EPA 8270C	Perylene	19.1 ng/dry g	J HV, CH
B13-8065_SED	EPA 8270C	Phenanthrene	31.3 ng/dry g	J HL
B13-8065_SED	EPA 8270C	Pyrene	120.6 ng/dry g	J HV, CH
B13-8065_SED	EPA 8270C-NCI	Deltamethrin/Tralomethrin	0.5 ng/dry g	UJ BC, LV
B13-8065_SED	EPA 8270C-NCI	Fipronil Sulfone	0.5 ng/dry g	UJ BC
B13-8065_SED	EPA 8270C-NCI	I-Cyhalothrin	0.92 ng/dry g	J CH, LV, HL
B13-8065_SED	EPA 8270C-NCI	PBDE017	0.1 ng/dry g	UJ LL
B13-8065_SED	EPA 8270C-NCI	PBDE049	0.26 ng/dry g	J LL, HD
B13-8065_SED	EPA 8270C-NCI	PBDE071	0.1 ng/dry g	UJ LL
B13-8065_SED	EPA 8270C-NCI	PBDE099	0.83 ng/dry g	J HL
B13-8065_SED	EPA 8270C-NCI	PBDE138	0.1 ng/dry g	UJ LC
B13-8065_SED	EPA 8270C-NCI	PBDE183	0.95 ng/dry g	J LC
B13-8065_SED	EPA 8270C-NCI	PBDE209	22.04 ng/dry g	J CH, HD
B13-8065_SED	EPA 8270C-NCI	Permethrin, cis-	0.5 ng/dry g	UJ BC, LV
B13-8065_SED	EPA 8270C-NCI	Permethrin, trans-	0.5 ng/dry g	UJ BC
B13-8065_SED	EPA 8270C-NCI	Toxaphene	0.2 ng/dry g	UJ LC
B13-8065_SED	EPA 9060	Total Nitrogen	0.23 % Dry Weight	J NQ
B13-8065_SED	EPA 9060	Total Organic Carbon	2.62 % Dry Weight	J NQ
B13-8065_SED	Plumb, 1981 and Teryl	Acid Volatile Sulfides	12.14 mg/dry kg	J NQ
B13-8066_SED	EPA 6020	Aluminum	48584.9 µg/dry g	J CH, HP
B13-8066_SED	EPA 6020	Antimony	0.683 µg/dry g	J HP
B13-8066_SED	EPA 6020	Beryllium	0.837 µg/dry g	J HP
B13-8066_SED	EPA 6020	Cadmium	0.2505 µg/dry g	J LP
B13-8066_SED	EPA 6020	Chromium	76.0027 µg/dry g	J HP
B13-8066_SED	EPA 6020	Iron (Fe)	42905.9 µg/dry g	J CH, HP
B13-8066_SED	EPA 6020	Total Phosphorus	697.691 µg/dry g	J NQ
B13-8066_SED	EPA 8270C	1-Methylnaphthalene	5 ng/dry g	UJ LV, LC
B13-8066_SED	EPA 8270C	1-Methylphenanthrene	3 ng/dry g	J DL
B13-8066_SED	EPA 8270C	2,4'-DDT	0.1 ng/dry g	UJ BC
B13-8066_SED	EPA 8270C	2,6-Dimethylnaphthalene	1.2 ng/dry g	J DL, LV
B13-8066_SED	EPA 8270C	2-Methylnaphthalene	1.8 ng/dry g	J DL, LV, CH, LC
B13-8066_SED	EPA 8270C	4,4'-DDD	0.1 ng/dry g	UJ LC
B13-8066_SED	EPA 8270C	4,4'-DDT	0.1 ng/dry g	UJ BC, LP

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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8066_SED	EPA 8270C	Acenaphthene	1 ng/dry g	J DL
B13-8066_SED	EPA 8270C	Acenaphthylene	4.2 ng/dry g	J DL, HD
B13-8066_SED	EPA 8270C	Aroclor 1016	2 ng/dry g	UJ NQ
B13-8066_SED	EPA 8270C	Aroclor 1221	2 ng/dry g	UJ NQ
B13-8066_SED	EPA 8270C	Aroclor 1232	2 ng/dry g	UJ NQ
B13-8066_SED	EPA 8270C	Aroclor 1242	2 ng/dry g	UJ NQ
B13-8066_SED	EPA 8270C	Aroclor 1248	2 ng/dry g	UJ NQ
B13-8066_SED	EPA 8270C	Aroclor 1254	2 ng/dry g	UJ NQ
B13-8066_SED	EPA 8270C	Aroclor 1260	20.5 ng/dry g	J NQ
B13-8066_SED	EPA 8270C	Aroclor 1262	2 ng/dry g	UJ NQ
B13-8066_SED	EPA 8270C	Aroclor 1268	2 ng/dry g	UJ NQ
B13-8066_SED	EPA 8270C	Benz[a]anthracene	17.1 ng/dry g	J CH
B13-8066_SED	EPA 8270C	Benzo[a]pyrene	24 ng/dry g	J HV, CH
B13-8066_SED	EPA 8270C	Benzo[b]fluoranthene	22.8 ng/dry g	J HV, CH
B13-8066_SED	EPA 8270C	Benzo[e]pyrene	18.8 ng/dry g	J CH
B13-8066_SED	EPA 8270C	Benzo[k]fluoranthene	15.3 ng/dry g	J CH
B13-8066_SED	EPA 8270C	BHC-beta	0.1 ng/dry g	UJ BC
B13-8066_SED	EPA 8270C	Biphenyl	5 ng/dry g	UJ LV, LC
B13-8066_SED	EPA 8270C	Chlordane-gamma	0.1 ng/dry g	UJ LP
B13-8066_SED	EPA 8270C	Chrysene	32.4 ng/dry g	J CH
B13-8066_SED	EPA 8270C	Dibenz[a,h]anthracene	15.2 ng/dry g	J CH
B13-8066_SED	EPA 8270C	Dibenzothiophene	2.2 ng/dry g	J DL
B13-8066_SED	EPA 8270C	Dicofol	0.1 ng/dry g	UJ BC
B13-8066_SED	EPA 8270C	Endosulfan-I	0.1 ng/dry g	UJ LL
B13-8066_SED	EPA 8270C	Endrin aldehyde	0.1 ng/dry g	R LL
B13-8066_SED	EPA 8270C	Endrin ketone	0.1 ng/dry g	UJ BC
B13-8066_SED	EPA 8270C	Fluoranthene	38.7 ng/dry g	J HV, CH, HL
B13-8066_SED	EPA 8270C	Fluorene	3.1 ng/dry g	J DL, HP
B13-8066_SED	EPA 8270C	Heptachlor	0.1 ng/dry g	UJ BC
B13-8066_SED	EPA 8270C	Indeno[1,2,3-c,d]pyrene	65.5 ng/dry g	J CH
B13-8066_SED	EPA 8270C	Methoxychlor	0.1 ng/dry g	UJ BC
B13-8066_SED	EPA 8270C	Naphthalene	3.5 ng/dry g	J DL, LV, CH, LC
B13-8066_SED	EPA 8270C	PCB118	0.45 ng/dry g	J HL, HD, LP
B13-8066_SED	EPA 8270C	PCB169	1.27 ng/dry g	J HD
B13-8066_SED	EPA 8270C	PCB180	1.03 ng/dry g	J CH
B13-8066_SED	EPA 8270C	PCB187	1.01 ng/dry g	J CH
B13-8066_SED	EPA 8270C	Perthane	0.1 ng/dry g	UJ BC
B13-8066_SED	EPA 8270C	Perylene	5.1 ng/dry g	J HV, CH
B13-8066_SED	EPA 8270C	Phenanthrene	20.7 ng/dry g	J HL
B13-8066_SED	EPA 8270C	Pyrene	47.3 ng/dry g	J HV, CH
B13-8066_SED	EPA 8270C-NCI	Deltamethrin/Tralomethrin	0.5 ng/dry g	UJ BC, LV
B13-8066_SED	EPA 8270C-NCI	Fipronil Sulfone	0.5 ng/dry g	UJ BC
B13-8066_SED	EPA 8270C-NCI	I-Cyhalothrin	0.5 ng/dry g	UJ LV
B13-8066_SED	EPA 8270C-NCI	PBDE017	0.1 ng/dry g	UJ LL
B13-8066_SED	EPA 8270C-NCI	PBDE049	0.1 ng/dry g	UJ LL
B13-8066_SED	EPA 8270C-NCI	PBDE071	0.1 ng/dry g	UJ LL
B13-8066_SED	EPA 8270C-NCI	PBDE138	0.1 ng/dry g	UJ LC
B13-8066_SED	EPA 8270C-NCI	PBDE183	0.7 ng/dry g	J LC
B13-8066_SED	EPA 8270C-NCI	PBDE209	7.99 ng/dry g	J CH, HD
B13-8066_SED	EPA 8270C-NCI	Permethrin, cis-	0.5 ng/dry g	UJ BC, LV
B13-8066_SED	EPA 8270C-NCI	Permethrin, trans-	0.5 ng/dry g	UJ BC
B13-8066_SED	EPA 8270C-NCI	Toxaphene	0.2 ng/dry g	UJ LC
B13-8066_SED	EPA 9060	Total Nitrogen	0.06 % Dry Weight	J NQ
B13-8066_SED	EPA 9060	Total Organic Carbon	1.93 % Dry Weight	J NQ

**TABLE 2**  
**Qualifiers Added to the Sediment Samples During Validation**  
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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8066_SED	Plumb, 1981 and Teryl	Acid Volatile Sulfides	25.06 mg/dry kg	J NQ
B13-8068_SED	EPA 200.8	Nickel	0.0054 µmol/dry g	J DL
B13-8068_SED	EPA 245.7	Mercury	0.1605 µg/dry g	J LC
B13-8068_SED	EPA 6020	Aluminum	9916.5 µg/dry g	J HP
B13-8068_SED	EPA 6020	Antimony	0.145 µg/dry g	J HP
B13-8068_SED	EPA 6020	Barium	26.283 µg/dry g	J CH
B13-8068_SED	EPA 6020	Beryllium	0.162 µg/dry g	J HP
B13-8068_SED	EPA 6020	Cadmium	0.1243 µg/dry g	J LP
B13-8068_SED	EPA 6020	Chromium	16.9877 µg/dry g	J HP
B13-8068_SED	EPA 6020	Total Phosphorus	211.801 µg/dry g	J NQ
B13-8068_SED	EPA 8270C	1-Methylnaphthalene	5 ng/dry g	UJ NQ
B13-8068_SED	EPA 8270C	1-Methylphenanthrene	5 ng/dry g	UJ NQ
B13-8068_SED	EPA 8270C	2,3,5-Trimethylnaphthalene	5 ng/dry g	UJ NQ
B13-8068_SED	EPA 8270C	2,4'-DDT	0.1 ng/dry g	UJ BC
B13-8068_SED	EPA 8270C	2,6-Dimethylnaphthalene	5 ng/dry g	UJ NQ
B13-8068_SED	EPA 8270C	2-Methylnaphthalene	5 ng/dry g	UJ NQ
B13-8068_SED	EPA 8270C	4,4'-DDT	0.1 ng/dry g	UJ BC
B13-8068_SED	EPA 8270C	Acenaphthene	5 ng/dry g	UJ NQ
B13-8068_SED	EPA 8270C	Acenaphthylene	5 ng/dry g	UJ NQ
B13-8068_SED	EPA 8270C	Anthracene	1.1 ng/dry g	J DL, NQ, HD
B13-8068_SED	EPA 8270C	Aroclor 1016	2 ng/dry g	UJ NQ
B13-8068_SED	EPA 8270C	Aroclor 1221	2 ng/dry g	UJ NQ
B13-8068_SED	EPA 8270C	Aroclor 1232	2 ng/dry g	UJ NQ
B13-8068_SED	EPA 8270C	Aroclor 1242	2 ng/dry g	UJ NQ
B13-8068_SED	EPA 8270C	Aroclor 1248	2 ng/dry g	UJ NQ
B13-8068_SED	EPA 8270C	Aroclor 1254	2 ng/dry g	UJ NQ
B13-8068_SED	EPA 8270C	Aroclor 1260	2 ng/dry g	UJ NQ
B13-8068_SED	EPA 8270C	Aroclor 1262	2 ng/dry g	UJ NQ
B13-8068_SED	EPA 8270C	Aroclor 1268	2 ng/dry g	UJ NQ
B13-8068_SED	EPA 8270C	Benz[a]anthracene	2.4 ng/dry g	J DL, NQ
B13-8068_SED	EPA 8270C	Benzo[a]pyrene	4 ng/dry g	J DL, NQ
B13-8068_SED	EPA 8270C	Benzo[b]fluoranthene	2.7 ng/dry g	J DL, NQ
B13-8068_SED	EPA 8270C	Benzo[e]pyrene	3.2 ng/dry g	J DL, NQ
B13-8068_SED	EPA 8270C	Benzo[g,h,i]perylene	8.6 ng/dry g	J NQ
B13-8068_SED	EPA 8270C	Benzo[k]fluoranthene	1.7 ng/dry g	J DL, NQ
B13-8068_SED	EPA 8270C	BHC-beta	0.1 ng/dry g	UJ BC
B13-8068_SED	EPA 8270C	Biphenyl	5 ng/dry g	UJ NQ
B13-8068_SED	EPA 8270C	Chrysene	3.6 ng/dry g	J DL, NQ
B13-8068_SED	EPA 8270C	Dibenz[a,h]anthracene	5 ng/dry g	UJ NQ
B13-8068_SED	EPA 8270C	Dibenzothiophene	5 ng/dry g	UJ NQ
B13-8068_SED	EPA 8270C	Dicofol	0.1 ng/dry g	UJ BC, LV
B13-8068_SED	EPA 8270C	Endosulfan-I	0.1 ng/dry g	UJ LL
B13-8068_SED	EPA 8270C	Endosulfan-II	0.1 ng/dry g	UJ LL
B13-8068_SED	EPA 8270C	Endrin aldehyde	0.1 ng/dry g	UJ BC, LL
B13-8068_SED	EPA 8270C	Endrin ketone	0.1 ng/dry g	UJ BC
B13-8068_SED	EPA 8270C	Fluoranthene	7.4 ng/dry g	J NQ, HD
B13-8068_SED	EPA 8270C	Fluorene	1.2 ng/dry g	J DL, NQ
B13-8068_SED	EPA 8270C	Heptachlor	0.1 ng/dry g	UJ BC
B13-8068_SED	EPA 8270C	Indeno[1,2,3-c,d]pyrene	6.4 ng/dry g	J NQ, HD
B13-8068_SED	EPA 8270C	Methoxychlor	0.1 ng/dry g	UJ BC
B13-8068_SED	EPA 8270C	Naphthalene	1.4 ng/dry g	J DL, NQ, HD
B13-8068_SED	EPA 8270C	PCB119	0.1 ng/dry g	UJ LV
B13-8068_SED	EPA 8270C	Perthane	0.1 ng/dry g	UJ BC
B13-8068_SED	EPA 8270C	Perylene	1 ng/dry g	J DL, NQ

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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8068_SED	EPA 8270C	Phenanthrene	7.1 ng/dry g	J NQ, HD
B13-8068_SED	EPA 8270C	Pyrene	8.9 ng/dry g	J NQ, HD
B13-8068_SED	EPA 8270C-NCI	Allethrin	0.5 ng/dry g	UJ LC
B13-8068_SED	EPA 8270C-NCI	Danitol (Fenpropathrin)	0.5 ng/dry g	UJ LL
B13-8068_SED	EPA 8270C-NCI	Deltamethrin/Tralomethrin	0.5 ng/dry g	UJ BC
B13-8068_SED	EPA 8270C-NCI	Fluvalinate	0.5 ng/dry g	UJ BC
B13-8068_SED	EPA 8270C-NCI	PBDE049	0.1 ng/dry g	UJ LC
B13-8068_SED	EPA 8270C-NCI	PBDE209	0.1 ng/dry g	UJ BC, LC
B13-8068_SED	EPA 8270C-NCI	Prallethrin	0.5 ng/dry g	UJ BC, LC
B13-8068_SED	EPA 8270C-NCI	Resmethrin	0.5 ng/dry g	R LV
B13-8068_SED	EPA 9060	Total Nitrogen	0.34 % Dry Weight	J NQ
B13-8068_SED	EPA 9060	Total Organic Carbon	0.27 % Dry Weight	J NQ
B13-8068_SED	Plumb, 1981 and Teryl	Acid Volatile Sulfides	8.67 mg/dry kg	J NQ
B13-8069_SED	EPA 200.8	Cadmium	0.0036 µmol/dry g	J LP
B13-8069_SED	EPA 6020	Aluminum	35634.1 µg/dry g	J CH, HP
B13-8069_SED	EPA 6020	Antimony	0.528 µg/dry g	J HP
B13-8069_SED	EPA 6020	Beryllium	0.586 µg/dry g	J HP
B13-8069_SED	EPA 6020	Cadmium	0.262 µg/dry g	J LP
B13-8069_SED	EPA 6020	Chromium	58.7146 µg/dry g	J HP
B13-8069_SED	EPA 6020	Iron (Fe)	32107.7 µg/dry g	J CH, HP
B13-8069_SED	EPA 6020	Total Phosphorus	575.584 µg/dry g	J NQ
B13-8069_SED	EPA 8270C	1-Methylnaphthalene	5 ng/dry g	UJ LV, LC
B13-8069_SED	EPA 8270C	1-Methylphenanthrene	3.3 ng/dry g	J DL
B13-8069_SED	EPA 8270C	2,4'-DDT	0.1 ng/dry g	UJ BC
B13-8069_SED	EPA 8270C	2,6-Dimethylnaphthalene	5 ng/dry g	UJ LV
B13-8069_SED	EPA 8270C	2-Methylnaphthalene	1.5 ng/dry g	J DL, LV, CH, LC
B13-8069_SED	EPA 8270C	4,4'-DDD	0.1 ng/dry g	UJ LC
B13-8069_SED	EPA 8270C	4,4'-DDT	0.1 ng/dry g	UJ BC, LP
B13-8069_SED	EPA 8270C	Acenaphthene	1.1 ng/dry g	J DL
B13-8069_SED	EPA 8270C	Acenaphthylene	4.4 ng/dry g	J DL, HD
B13-8069_SED	EPA 8270C	Aroclor 1016	2 ng/dry g	UJ NQ
B13-8069_SED	EPA 8270C	Aroclor 1221	2 ng/dry g	UJ NQ
B13-8069_SED	EPA 8270C	Aroclor 1232	2 ng/dry g	UJ NQ
B13-8069_SED	EPA 8270C	Aroclor 1242	2 ng/dry g	UJ NQ
B13-8069_SED	EPA 8270C	Aroclor 1248	2 ng/dry g	UJ NQ
B13-8069_SED	EPA 8270C	Aroclor 1254	2 ng/dry g	UJ NQ
B13-8069_SED	EPA 8270C	Aroclor 1260	76.1 ng/dry g	J NQ
B13-8069_SED	EPA 8270C	Aroclor 1262	2 ng/dry g	UJ NQ
B13-8069_SED	EPA 8270C	Aroclor 1268	2 ng/dry g	UJ NQ
B13-8069_SED	EPA 8270C	Benz[a]anthracene	21.4 ng/dry g	J CH
B13-8069_SED	EPA 8270C	Benzo[a]pyrene	34 ng/dry g	J HV, CH
B13-8069_SED	EPA 8270C	Benzo[b]fluoranthene	36.7 ng/dry g	J HV, CH
B13-8069_SED	EPA 8270C	Benzo[e]pyrene	26.7 ng/dry g	J CH
B13-8069_SED	EPA 8270C	Benzo[k]fluoranthene	26.1 ng/dry g	J CH
B13-8069_SED	EPA 8270C	BHC-beta	0.1 ng/dry g	UJ BC
B13-8069_SED	EPA 8270C	Biphenyl	5 ng/dry g	UJ LV, LC
B13-8069_SED	EPA 8270C	Chlordane-gamma	0.1 ng/dry g	UJ LP
B13-8069_SED	EPA 8270C	Chrysene	46.1 ng/dry g	J CH
B13-8069_SED	EPA 8270C	Dibenz[a,h]anthracene	16 ng/dry g	J CH
B13-8069_SED	EPA 8270C	Dibenzothiophene	1.8 ng/dry g	J DL
B13-8069_SED	EPA 8270C	Dicofol	0.1 ng/dry g	UJ BC
B13-8069_SED	EPA 8270C	Endosulfan-I	0.1 ng/dry g	UJ LL
B13-8069_SED	EPA 8270C	Endrin aldehyde	0.1 ng/dry g	R LL
B13-8069_SED	EPA 8270C	Endrin ketone	0.1 ng/dry g	UJ BC

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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8069_SED	EPA 8270C	Fluoranthene	51.8 ng/dry g	J HV, CH, HL
B13-8069_SED	EPA 8270C	Fluorene	2.2 ng/dry g	J DL, HP
B13-8069_SED	EPA 8270C	Heptachlor	0.1 ng/dry g	UJ BC
B13-8069_SED	EPA 8270C	Indeno[1,2,3-c,d]pyrene	72.3 ng/dry g	J CH
B13-8069_SED	EPA 8270C	Methoxychlor	0.1 ng/dry g	UJ BC
B13-8069_SED	EPA 8270C	Naphthalene	2.9 ng/dry g	J DL, LV, CH, LC
B13-8069_SED	EPA 8270C	PCB105	1.36 ng/dry g	J CH
B13-8069_SED	EPA 8270C	PCB118	2.89 ng/dry g	J HL, HD, LP
B13-8069_SED	EPA 8270C	PCB128	1.03 ng/dry g	J CH, HD
B13-8069_SED	EPA 8270C	PCB169	1.18 ng/dry g	J HD
B13-8069_SED	EPA 8270C	PCB170	0.68 ng/dry g	J CH
B13-8069_SED	EPA 8270C	PCB180	1.73 ng/dry g	J CH
B13-8069_SED	EPA 8270C	PCB187	1.16 ng/dry g	J CH
B13-8069_SED	EPA 8270C	PCB209	0.39 ng/dry g	J HD
B13-8069_SED	EPA 8270C	Perthane	0.1 ng/dry g	UJ BC
B13-8069_SED	EPA 8270C	Perylene	6.4 ng/dry g	J HV, CH
B13-8069_SED	EPA 8270C	Phenanthrene	18.9 ng/dry g	J HL
B13-8069_SED	EPA 8270C	Pyrene	59.5 ng/dry g	J HV, CH
B13-8069_SED	EPA 8270C-NCI	Deltamethrin/Tralomethrin	0.5 ng/dry g	UJ BC, LV
B13-8069_SED	EPA 8270C-NCI	Fipronil Sulfone	0.5 ng/dry g	UJ BC
B13-8069_SED	EPA 8270C-NCI	I-Cyhalothrin	0.5 ng/dry g	UJ LV
B13-8069_SED	EPA 8270C-NCI	PBDE017	0.1 ng/dry g	UJ LL
B13-8069_SED	EPA 8270C-NCI	PBDE049	0.1 ng/dry g	UJ LL
B13-8069_SED	EPA 8270C-NCI	PBDE071	0.1 ng/dry g	UJ LL
B13-8069_SED	EPA 8270C-NCI	PBDE138	0.1 ng/dry g	UJ LC
B13-8069_SED	EPA 8270C-NCI	PBDE183	0.44 ng/dry g	J LC
B13-8069_SED	EPA 8270C-NCI	PBDE209	9.66 ng/dry g	J CH, HD
B13-8069_SED	EPA 8270C-NCI	Permethrin, cis-	0.5 ng/dry g	UJ BC, LV
B13-8069_SED	EPA 8270C-NCI	Permethrin, trans-	0.5 ng/dry g	UJ BC
B13-8069_SED	EPA 8270C-NCI	Toxaphene	0.2 ng/dry g	UJ LC
B13-8069_SED	EPA 9060	Total Nitrogen	0.04 % Dry Weight	J NQ
B13-8069_SED	EPA 9060	Total Organic Carbon	1.46 % Dry Weight	J NQ
B13-8069_SED	Plumb, 1981 and Teryl	Acid Volatile Sulfides	6.13 mg/dry kg	J NQ
B13-8073_SED	EPA 200.8	Nickel	0.005 µmol/dry g	J DL
B13-8073_SED	EPA 245.7	Mercury	0.2902 µg/dry g	J LC, LP
B13-8073_SED	EPA 6020	Aluminum	9765 µg/dry g	J HP
B13-8073_SED	EPA 6020	Antimony	0.168 µg/dry g	J HP
B13-8073_SED	EPA 6020	Beryllium	0.174 µg/dry g	J HP
B13-8073_SED	EPA 6020	Cadmium	0.1666 µg/dry g	J LP
B13-8073_SED	EPA 6020	Chromium	17.9832 µg/dry g	J HP
B13-8073_SED	EPA 6020	Iron (Fe)	9221.3 µg/dry g	J HP
B13-8073_SED	EPA 6020	Total Phosphorus	189.922 µg/dry g	J NQ
B13-8073_SED	EPA 8270C	1-Methylnaphthalene	5 ng/dry g	UJ NQ
B13-8073_SED	EPA 8270C	1-Methylphenanthrene	5 ng/dry g	UJ NQ
B13-8073_SED	EPA 8270C	2,3,5-Trimethylnaphthalene	5 ng/dry g	UJ NQ
B13-8073_SED	EPA 8270C	2,4'-DDD	0.1 ng/dry g	UJ NQ
B13-8073_SED	EPA 8270C	2,4'-DDE	0.1 ng/dry g	UJ NQ
B13-8073_SED	EPA 8270C	2,4'-DDT	0.1 ng/dry g	UJ BC, NQ
B13-8073_SED	EPA 8270C	2,6-Dimethylnaphthalene	5 ng/dry g	UJ NQ
B13-8073_SED	EPA 8270C	2-Methylnaphthalene	5 ng/dry g	UJ NQ
B13-8073_SED	EPA 8270C	4,4'-DDD	0.1 ng/dry g	UJ NQ
B13-8073_SED	EPA 8270C	4,4'-DDE	0.1 ng/dry g	UJ NQ
B13-8073_SED	EPA 8270C	4,4'-DDMU	0.1 ng/dry g	UJ NQ
B13-8073_SED	EPA 8270C	4,4'-DDT	0.1 ng/dry g	UJ BC, NQ

**TABLE 2**  
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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8073_SED	EPA 8270C	Acenaphthene	5 ng/dry g	UJ NQ
B13-8073_SED	EPA 8270C	Acenaphthylene	5 ng/dry g	UJ NQ
B13-8073_SED	EPA 8270C	Aldrin	0.1 ng/dry g	UJ NQ
B13-8073_SED	EPA 8270C	Anthracene	5 ng/dry g	UJ NQ
B13-8073_SED	EPA 8270C	Aroclor 1016	2 ng/dry g	UJ NQ
B13-8073_SED	EPA 8270C	Aroclor 1221	2 ng/dry g	UJ NQ
B13-8073_SED	EPA 8270C	Aroclor 1232	2 ng/dry g	UJ NQ
B13-8073_SED	EPA 8270C	Aroclor 1242	2 ng/dry g	UJ NQ
B13-8073_SED	EPA 8270C	Aroclor 1248	2 ng/dry g	UJ NQ
B13-8073_SED	EPA 8270C	Aroclor 1254	2 ng/dry g	UJ NQ
B13-8073_SED	EPA 8270C	Aroclor 1260	2 ng/dry g	UJ NQ
B13-8073_SED	EPA 8270C	Aroclor 1262	2 ng/dry g	UJ NQ
B13-8073_SED	EPA 8270C	Aroclor 1268	2 ng/dry g	UJ NQ
B13-8073_SED	EPA 8270C	Benz[a]anthracene	1.3 ng/dry g	J DL, NQ
B13-8073_SED	EPA 8270C	Benzo[a]pyrene	1.7 ng/dry g	J DL, NQ
B13-8073_SED	EPA 8270C	Benzo[b]fluoranthene	2.5 ng/dry g	J DL, NQ
B13-8073_SED	EPA 8270C	Benzo[e]pyrene	1.8 ng/dry g	J DL, NQ
B13-8073_SED	EPA 8270C	Benzo[g,h,i]perylene	4.8 ng/dry g	J DL, NQ
B13-8073_SED	EPA 8270C	Benzo[k]fluoranthene	1.3 ng/dry g	J DL, NQ
B13-8073_SED	EPA 8270C	BHC-alpha	0.1 ng/dry g	UJ NQ
B13-8073_SED	EPA 8270C	BHC-beta	0.1 ng/dry g	UJ BC, NQ
B13-8073_SED	EPA 8270C	BHC-delta	0.1 ng/dry g	UJ NQ
B13-8073_SED	EPA 8270C	BHC-gamma	0.1 ng/dry g	UJ NQ
B13-8073_SED	EPA 8270C	Biphenyl	5 ng/dry g	UJ NQ
B13-8073_SED	EPA 8270C	Chlordane-alpha	0.1 ng/dry g	UJ NQ
B13-8073_SED	EPA 8270C	Chlordane-gamma	0.1 ng/dry g	UJ NQ
B13-8073_SED	EPA 8270C	Chrysene	2 ng/dry g	J DL, NQ
B13-8073_SED	EPA 8270C	cis-Nonachlor	0.1 ng/dry g	UJ NQ
B13-8073_SED	EPA 8270C	DCPA (Dacthal)	0.1 ng/dry g	UJ NQ
B13-8073_SED	EPA 8270C	Dibenz[a,h]anthracene	5 ng/dry g	UJ NQ
B13-8073_SED	EPA 8270C	Dibenzothiophene	5 ng/dry g	UJ NQ
B13-8073_SED	EPA 8270C	Dicofol	0.1 ng/dry g	UJ BC, NQ, LV
B13-8073_SED	EPA 8270C	Dieldrin	0.1 ng/dry g	UJ NQ
B13-8073_SED	EPA 8270C	Endosulfan sulfate	0.1 ng/dry g	UJ NQ
B13-8073_SED	EPA 8270C	Endosulfan-I	0.1 ng/dry g	UJ NQ, LL
B13-8073_SED	EPA 8270C	Endosulfan-II	0.1 ng/dry g	UJ NQ, LL
B13-8073_SED	EPA 8270C	Endrin	0.1 ng/dry g	UJ NQ
B13-8073_SED	EPA 8270C	Endrin aldehyde	0.1 ng/dry g	UJ BC, NQ, LL
B13-8073_SED	EPA 8270C	Endrin ketone	0.1 ng/dry g	UJ BC, NQ
B13-8073_SED	EPA 8270C	Fluoranthene	3.5 ng/dry g	J DL, NQ, HD
B13-8073_SED	EPA 8270C	Fluorene	5 ng/dry g	UJ NQ
B13-8073_SED	EPA 8270C	Heptachlor	0.1 ng/dry g	UJ BC, NQ
B13-8073_SED	EPA 8270C	Heptachlor epoxide	0.1 ng/dry g	UJ NQ
B13-8073_SED	EPA 8270C	Hexachlorobenzene	0.1 ng/dry g	UJ NQ
B13-8073_SED	EPA 8270C	Indeno[1,2,3-c,d]pyrene	3.3 ng/dry g	J DL, NQ, HD
B13-8073_SED	EPA 8270C	Methoxychlor	0.1 ng/dry g	UJ BC, NQ
B13-8073_SED	EPA 8270C	Mirex	0.1 ng/dry g	UJ NQ
B13-8073_SED	EPA 8270C	Naphthalene	5 ng/dry g	UJ NQ
B13-8073_SED	EPA 8270C	Oxychlordane	0.1 ng/dry g	UJ NQ
B13-8073_SED	EPA 8270C	PCB003	0.1 ng/dry g	UJ NQ
B13-8073_SED	EPA 8270C	PCB005	0.1 ng/dry g	UJ NQ
B13-8073_SED	EPA 8270C	PCB008	0.1 ng/dry g	UJ NQ
B13-8073_SED	EPA 8270C	PCB015	0.1 ng/dry g	UJ NQ
B13-8073_SED	EPA 8270C	PCB018	0.1 ng/dry g	UJ NQ

**TABLE 2**  
**Qualifiers Added to the Sediment Samples During Validation**  
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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8073_SED	EPA 8270C	PCB027	0.1 ng/dry g	UJ NQ
B13-8073_SED	EPA 8270C	PCB028	0.1 ng/dry g	UJ NQ
B13-8073_SED	EPA 8270C	PCB029	0.1 ng/dry g	UJ NQ
B13-8073_SED	EPA 8270C	PCB031	0.1 ng/dry g	UJ NQ
B13-8073_SED	EPA 8270C	PCB033	0.1 ng/dry g	UJ NQ
B13-8073_SED	EPA 8270C	PCB037	0.1 ng/dry g	UJ NQ
B13-8073_SED	EPA 8270C	PCB044	0.1 ng/dry g	UJ NQ
B13-8073_SED	EPA 8270C	PCB049	0.1 ng/dry g	UJ NQ
B13-8073_SED	EPA 8270C	PCB052	0.1 ng/dry g	UJ NQ
B13-8073_SED	EPA 8270C	PCB056(060)	0.2 ng/dry g	UJ NQ
B13-8073_SED	EPA 8270C	PCB066	0.1 ng/dry g	UJ NQ
B13-8073_SED	EPA 8270C	PCB070	0.1 ng/dry g	UJ NQ
B13-8073_SED	EPA 8270C	PCB074	0.1 ng/dry g	UJ NQ
B13-8073_SED	EPA 8270C	PCB077	0.1 ng/dry g	UJ NQ
B13-8073_SED	EPA 8270C	PCB081	0.1 ng/dry g	UJ NQ
B13-8073_SED	EPA 8270C	PCB087	0.1 ng/dry g	UJ NQ
B13-8073_SED	EPA 8270C	PCB095	0.1 ng/dry g	UJ NQ
B13-8073_SED	EPA 8270C	PCB097	0.1 ng/dry g	UJ NQ
B13-8073_SED	EPA 8270C	PCB099	0.1 ng/dry g	UJ NQ
B13-8073_SED	EPA 8270C	PCB101	0.1 ng/dry g	UJ NQ
B13-8073_SED	EPA 8270C	PCB105	0.1 ng/dry g	UJ NQ
B13-8073_SED	EPA 8270C	PCB110	0.1 ng/dry g	UJ NQ
B13-8073_SED	EPA 8270C	PCB114	0.1 ng/dry g	UJ NQ
B13-8073_SED	EPA 8270C	PCB118	0.1 ng/dry g	UJ NQ
B13-8073_SED	EPA 8270C	PCB119	0.1 ng/dry g	UJ NQ, LV
B13-8073_SED	EPA 8270C	PCB123	0.1 ng/dry g	UJ NQ
B13-8073_SED	EPA 8270C	PCB126	0.1 ng/dry g	UJ NQ
B13-8073_SED	EPA 8270C	PCB128	0.1 ng/dry g	UJ NQ
B13-8073_SED	EPA 8270C	PCB137	0.1 ng/dry g	UJ NQ
B13-8073_SED	EPA 8270C	PCB138	0.1 ng/dry g	UJ NQ
B13-8073_SED	EPA 8270C	PCB141	0.1 ng/dry g	UJ NQ
B13-8073_SED	EPA 8270C	PCB149	0.1 ng/dry g	UJ NQ
B13-8073_SED	EPA 8270C	PCB151	0.1 ng/dry g	UJ NQ
B13-8073_SED	EPA 8270C	PCB153	0.26 ng/dry g	J NQ
B13-8073_SED	EPA 8270C	PCB156	0.1 ng/dry g	UJ NQ
B13-8073_SED	EPA 8270C	PCB157	0.1 ng/dry g	UJ NQ
B13-8073_SED	EPA 8270C	PCB158	0.1 ng/dry g	UJ NQ
B13-8073_SED	EPA 8270C	PCB167	0.1 ng/dry g	UJ NQ
B13-8073_SED	EPA 8270C	PCB168+132	0.2 ng/dry g	UJ NQ
B13-8073_SED	EPA 8270C	PCB169	0.1 ng/dry g	UJ NQ
B13-8073_SED	EPA 8270C	PCB170	0.1 ng/dry g	UJ NQ
B13-8073_SED	EPA 8270C	PCB174	0.1 ng/dry g	UJ NQ
B13-8073_SED	EPA 8270C	PCB177	0.1 ng/dry g	UJ NQ
B13-8073_SED	EPA 8270C	PCB180	0.1 ng/dry g	UJ NQ
B13-8073_SED	EPA 8270C	PCB183	0.1 ng/dry g	UJ NQ
B13-8073_SED	EPA 8270C	PCB187	0.1 ng/dry g	UJ NQ
B13-8073_SED	EPA 8270C	PCB189	0.1 ng/dry g	UJ NQ
B13-8073_SED	EPA 8270C	PCB194	0.1 ng/dry g	UJ NQ
B13-8073_SED	EPA 8270C	PCB195	0.1 ng/dry g	UJ NQ
B13-8073_SED	EPA 8270C	PCB199(200)	0.2 ng/dry g	UJ NQ
B13-8073_SED	EPA 8270C	PCB201	0.1 ng/dry g	UJ NQ
B13-8073_SED	EPA 8270C	PCB203	0.1 ng/dry g	UJ NQ
B13-8073_SED	EPA 8270C	PCB206	0.1 ng/dry g	UJ NQ
B13-8073_SED	EPA 8270C	PCB209	0.1 ng/dry g	UJ NQ



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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8073_SED	EPA 8270C	Perthane	0.1 ng/dry g	UJ BC, NQ
B13-8073_SED	EPA 8270C	Perylene	5 ng/dry g	UJ NQ
B13-8073_SED	EPA 8270C	Phenanthrene	3.8 ng/dry g	J DL, NQ, HD
B13-8073_SED	EPA 8270C	Pyrene	3.8 ng/dry g	J DL, NQ, HD
B13-8073_SED	EPA 8270C	trans-Nonachlor	0.1 ng/dry g	UJ NQ
B13-8073_SED	EPA 8270C-NCI	Allethrin	0.5 ng/dry g	UJ LC
B13-8073_SED	EPA 8270C-NCI	Danitol (Fenpropathrin)	0.5 ng/dry g	UJ LL
B13-8073_SED	EPA 8270C-NCI	Deltamethrin/Tralomethrin	0.5 ng/dry g	UJ BC
B13-8073_SED	EPA 8270C-NCI	Fluvalinate	0.5 ng/dry g	UJ BC
B13-8073_SED	EPA 8270C-NCI	PBDE047	0.07 ng/dry g	J DL
B13-8073_SED	EPA 8270C-NCI	PBDE049	0.1 ng/dry g	UJ LC
B13-8073_SED	EPA 8270C-NCI	PBDE209	0.1 ng/dry g	UJ BC, LC
B13-8073_SED	EPA 8270C-NCI	Prallethrin	0.5 ng/dry g	UJ BC, LC
B13-8073_SED	EPA 8270C-NCI	Resmethrin	0.5 ng/dry g	R LV
B13-8073_SED	EPA 9060	Total Nitrogen	0.25 % Dry Weight	J NQ
B13-8073_SED	EPA 9060	Total Organic Carbon	0.99 % Dry Weight	J HD, NQ
B13-8073_SED	Plumb, 1981 and Teryl	Acid Volatile Sulfides	87.63 mg/dry kg	J NQ
B13-8074_SED	EPA 6020	Aluminum	39344.4 µg/dry g	J HP
B13-8074_SED	EPA 6020	Antimony	1.241 µg/dry g	J HP
B13-8074_SED	EPA 6020	Beryllium	0.811 µg/dry g	J HP
B13-8074_SED	EPA 6020	Cadmium	0.3784 µg/dry g	J LP
B13-8074_SED	EPA 6020	Chromium	68.5466 µg/dry g	J HP
B13-8074_SED	EPA 6020	Iron (Fe)	36674.7 µg/dry g	J HP
B13-8074_SED	EPA 6020	Total Phosphorus	531.463 µg/dry g	J NQ, HL
B13-8074_SED	EPA 8270C	1-Methylnaphthalene	1.7 ng/dry g	J DL, LV, CH, LC
B13-8074_SED	EPA 8270C	2,3,5-Trimethylnaphthalene	1.1 ng/dry g	J DL
B13-8074_SED	EPA 8270C	2,4'-DDT	0.1 ng/dry g	UJ BC
B13-8074_SED	EPA 8270C	2,6-Dimethylnaphthalene	2 ng/dry g	J DL, LV
B13-8074_SED	EPA 8270C	2-Methylnaphthalene	3.4 ng/dry g	J DL, LV, CH, LC
B13-8074_SED	EPA 8270C	4,4'-DDD	0.1 ng/dry g	UJ LC
B13-8074_SED	EPA 8270C	4,4'-DDE	2.12 ng/dry g	J DL
B13-8074_SED	EPA 8270C	4,4'-DDT	8.33 ng/dry g	J BC, HV, CH, LP
B13-8074_SED	EPA 8270C	Acenaphthene	2.1 ng/dry g	J DL
B13-8074_SED	EPA 8270C	Acenaphthylene	8.2 ng/dry g	J HD
B13-8074_SED	EPA 8270C	Aroclor 1016	2 ng/dry g	UJ NQ
B13-8074_SED	EPA 8270C	Aroclor 1221	2 ng/dry g	UJ NQ
B13-8074_SED	EPA 8270C	Aroclor 1232	2 ng/dry g	UJ NQ
B13-8074_SED	EPA 8270C	Aroclor 1242	2 ng/dry g	UJ NQ
B13-8074_SED	EPA 8270C	Aroclor 1248	2 ng/dry g	UJ NQ
B13-8074_SED	EPA 8270C	Aroclor 1254	2 ng/dry g	UJ NQ
B13-8074_SED	EPA 8270C	Aroclor 1260	45 ng/dry g	J NQ
B13-8074_SED	EPA 8270C	Aroclor 1262	2 ng/dry g	UJ NQ
B13-8074_SED	EPA 8270C	Aroclor 1268	2 ng/dry g	UJ NQ
B13-8074_SED	EPA 8270C	Benz[a]anthracene	32.7 ng/dry g	J CH
B13-8074_SED	EPA 8270C	Benzo[a]pyrene	52.5 ng/dry g	J HV, CH
B13-8074_SED	EPA 8270C	Benzo[b]fluoranthene	54.2 ng/dry g	J HV, CH
B13-8074_SED	EPA 8270C	Benzo[e]pyrene	43.6 ng/dry g	J CH
B13-8074_SED	EPA 8270C	Benzo[k]fluoranthene	41.4 ng/dry g	J CH
B13-8074_SED	EPA 8270C	BHC-beta	0.1 ng/dry g	UJ BC
B13-8074_SED	EPA 8270C	Biphenyl	1.5 ng/dry g	J DL, LV, LC
B13-8074_SED	EPA 8270C	Chlordane-alpha	1.69 ng/dry g	J DL
B13-8074_SED	EPA 8270C	Chlordane-gamma	2.13 ng/dry g	J DL, LP
B13-8074_SED	EPA 8270C	Chrysene	59.9 ng/dry g	J CH
B13-8074_SED	EPA 8270C	cis-Nonachlor	0.43 ng/dry g	J DL

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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8074_SED	EPA 8270C	Dibenz[a,h]anthracene	27.2 ng/dry g	J CH
B13-8074_SED	EPA 8270C	Dibenzothiophene	3.3 ng/dry g	J DL
B13-8074_SED	EPA 8270C	Dicofol	0.1 ng/dry g	UJ BC
B13-8074_SED	EPA 8270C	Endosulfan-I	0.1 ng/dry g	UJ LL
B13-8074_SED	EPA 8270C	Endrin aldehyde	0.1 ng/dry g	R LL
B13-8074_SED	EPA 8270C	Endrin ketone	0.1 ng/dry g	UJ BC
B13-8074_SED	EPA 8270C	Fluoranthene	75.6 ng/dry g	J HV, CH, HL
B13-8074_SED	EPA 8270C	Fluorene	4.1 ng/dry g	J DL, HP
B13-8074_SED	EPA 8270C	Heptachlor	0.1 ng/dry g	UJ BC
B13-8074_SED	EPA 8270C	Indeno[1,2,3-c,d]pyrene	119.3 ng/dry g	J CH
B13-8074_SED	EPA 8270C	Methoxychlor	0.1 ng/dry g	UJ BC
B13-8074_SED	EPA 8270C	Naphthalene	6.6 ng/dry g	J LV, CH, LC
B13-8074_SED	EPA 8270C	PCB087	1.02 ng/dry g	J DL
B13-8074_SED	EPA 8270C	PCB095	2.84 ng/dry g	J DL
B13-8074_SED	EPA 8270C	PCB099	1.47 ng/dry g	J DL
B13-8074_SED	EPA 8270C	PCB101	4.04 ng/dry g	J DL
B13-8074_SED	EPA 8270C	PCB110	2.93 ng/dry g	J DL
B13-8074_SED	EPA 8270C	PCB118	1.93 ng/dry g	J DL, HL, HD, LP
B13-8074_SED	EPA 8270C	PCB149	3.39 ng/dry g	J DL
B13-8074_SED	EPA 8270C	PCB151	0.85 ng/dry g	J DL
B13-8074_SED	EPA 8270C	PCB158	1.11 ng/dry g	J DL
B13-8074_SED	EPA 8270C	PCB168+132	1.7 ng/dry g	J DL
B13-8074_SED	EPA 8270C	PCB174	0.97 ng/dry g	J DL
B13-8074_SED	EPA 8270C	PCB180	2.14 ng/dry g	J DL, CH
B13-8074_SED	EPA 8270C	PCB183	0.61 ng/dry g	J DL
B13-8074_SED	EPA 8270C	PCB187	1.96 ng/dry g	J DL, CH
B13-8074_SED	EPA 8270C	Perthane	0.1 ng/dry g	UJ BC
B13-8074_SED	EPA 8270C	Perylene	11 ng/dry g	J HV, CH
B13-8074_SED	EPA 8270C	Phenanthrene	40.4 ng/dry g	J HL
B13-8074_SED	EPA 8270C	Pyrene	95.8 ng/dry g	J HV, CH
B13-8074_SED	EPA 8270C	trans-Nonachlor	0.82 ng/dry g	J DL
B13-8074_SED	EPA 8270C-NCI	Deltamethrin/Tralomethrin	0.5 ng/dry g	UJ BC, LV
B13-8074_SED	EPA 8270C-NCI	Fipronil Sulfone	0.5 ng/dry g	UJ BC
B13-8074_SED	EPA 8270C-NCI	I-Cyhalothrin	0.55 ng/dry g	J CH, LV, HL
B13-8074_SED	EPA 8270C-NCI	PBDE017	0.1 ng/dry g	UJ LL
B13-8074_SED	EPA 8270C-NCI	PBDE047	0.9 ng/dry g	J DL
B13-8074_SED	EPA 8270C-NCI	PBDE049	0.44 ng/dry g	J DL, LL, HD
B13-8074_SED	EPA 8270C-NCI	PBDE066	0.83 ng/dry g	J DL
B13-8074_SED	EPA 8270C-NCI	PBDE071	0.1 ng/dry g	UJ LL
B13-8074_SED	EPA 8270C-NCI	PBDE099	1.16 ng/dry g	J HL
B13-8074_SED	EPA 8270C-NCI	PBDE100	0.3 ng/dry g	J DL, HL
B13-8074_SED	EPA 8270C-NCI	PBDE138	0.1 ng/dry g	UJ LC
B13-8074_SED	EPA 8270C-NCI	PBDE153	0.32 ng/dry g	J DL
B13-8074_SED	EPA 8270C-NCI	PBDE154	0.26 ng/dry g	J DL
B13-8074_SED	EPA 8270C-NCI	PBDE183	0.65 ng/dry g	J DL, LC
B13-8074_SED	EPA 8270C-NCI	PBDE209	44.09 ng/dry g	J CH, HD
B13-8074_SED	EPA 8270C-NCI	Permethrin, cis-	0.5 ng/dry g	UJ BC, LV
B13-8074_SED	EPA 8270C-NCI	Permethrin, trans-	0.5 ng/dry g	UJ BC
B13-8074_SED	EPA 8270C-NCI	Toxaphene	0.2 ng/dry g	UJ LC
B13-8074_SED	EPA 9060	Total Nitrogen	0.04 % Dry Weight	J NQ, HD
B13-8074_SED	EPA 9060	Total Organic Carbon	1.66 % Dry Weight	J NQ
B13-8074_SED	Plumb, 1981 and Teryl	Acid Volatile Sulfides	10.71 mg/dry kg	J NQ
B13-8075_SED	EPA 6020	Aluminum	30889.5 µg/dry g	J HP
B13-8075_SED	EPA 6020	Antimony	2.014 µg/dry g	J HP

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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8075_SED	EPA 6020	Beryllium	0.722 µg/dry g	J HP
B13-8075_SED	EPA 6020	Cadmium	0.4493 µg/dry g	J LP
B13-8075_SED	EPA 6020	Chromium	63.9778 µg/dry g	J HP
B13-8075_SED	EPA 6020	Iron (Fe)	33451.2 µg/dry g	J HP
B13-8075_SED	EPA 6020	Total Phosphorus	514.206 µg/dry g	J NQ, HL
B13-8075_SED	EPA 8270C	1-Methylnaphthalene	2.3 ng/dry g	J DL, LV, CH, LC
B13-8075_SED	EPA 8270C	2,3,5-Trimethylnaphthalene	1.1 ng/dry g	J DL
B13-8075_SED	EPA 8270C	2,4'-DDE	0.82 ng/dry g	J DL
B13-8075_SED	EPA 8270C	2,4'-DDT	0.1 ng/dry g	UJ BC
B13-8075_SED	EPA 8270C	2,6-Dimethylnaphthalene	3 ng/dry g	J DL, LV
B13-8075_SED	EPA 8270C	2-Methylnaphthalene	5.1 ng/dry g	J LV, CH, LC
B13-8075_SED	EPA 8270C	4,4'-DDD	0.1 ng/dry g	UJ LC
B13-8075_SED	EPA 8270C	4,4'-DDT	5.33 ng/dry g	J BC, HV, CH, LP
B13-8075_SED	EPA 8270C	Acenaphthene	3.6 ng/dry g	J DL
B13-8075_SED	EPA 8270C	Acenaphthylene	9.9 ng/dry g	J HD
B13-8075_SED	EPA 8270C	Aroclor 1016	2 ng/dry g	UJ NQ
B13-8075_SED	EPA 8270C	Aroclor 1221	2 ng/dry g	UJ NQ
B13-8075_SED	EPA 8270C	Aroclor 1232	2 ng/dry g	UJ NQ
B13-8075_SED	EPA 8270C	Aroclor 1242	2 ng/dry g	UJ NQ
B13-8075_SED	EPA 8270C	Aroclor 1248	2 ng/dry g	UJ NQ
B13-8075_SED	EPA 8270C	Aroclor 1254	2 ng/dry g	UJ NQ
B13-8075_SED	EPA 8270C	Aroclor 1260	57.9 ng/dry g	J NQ
B13-8075_SED	EPA 8270C	Aroclor 1262	2 ng/dry g	UJ NQ
B13-8075_SED	EPA 8270C	Aroclor 1268	2 ng/dry g	UJ NQ
B13-8075_SED	EPA 8270C	Benz[a]anthracene	45.1 ng/dry g	J CH
B13-8075_SED	EPA 8270C	Benzo[a]pyrene	77.6 ng/dry g	J HV, CH
B13-8075_SED	EPA 8270C	Benzo[b]fluoranthene	87 ng/dry g	J HV, CH
B13-8075_SED	EPA 8270C	Benzo[e]pyrene	69.8 ng/dry g	J CH
B13-8075_SED	EPA 8270C	Benzo[k]fluoranthene	55.7 ng/dry g	J CH
B13-8075_SED	EPA 8270C	BHC-beta	0.1 ng/dry g	UJ BC
B13-8075_SED	EPA 8270C	Biphenyl	2.1 ng/dry g	J DL, LV, LC
B13-8075_SED	EPA 8270C	Chlordane-gamma	5.18 ng/dry g	J LP
B13-8075_SED	EPA 8270C	Chrysene	83.8 ng/dry g	J CH
B13-8075_SED	EPA 8270C	cis-Nonachlor	1.49 ng/dry g	J DL
B13-8075_SED	EPA 8270C	Dibenz[a,h]anthracene	42.1 ng/dry g	J CH
B13-8075_SED	EPA 8270C	Dibenzothiophene	4.9 ng/dry g	J DL
B13-8075_SED	EPA 8270C	Dicofol	0.1 ng/dry g	UJ BC
B13-8075_SED	EPA 8270C	Endosulfan-I	0.1 ng/dry g	UJ LL
B13-8075_SED	EPA 8270C	Endrin aldehyde	0.1 ng/dry g	R LL
B13-8075_SED	EPA 8270C	Endrin ketone	0.1 ng/dry g	UJ BC
B13-8075_SED	EPA 8270C	Fluoranthene	132.6 ng/dry g	J HV, CH, HL
B13-8075_SED	EPA 8270C	Fluorene	5.2 ng/dry g	J HP
B13-8075_SED	EPA 8270C	Heptachlor	0.1 ng/dry g	UJ BC
B13-8075_SED	EPA 8270C	Indeno[1,2,3-c,d]pyrene	180.7 ng/dry g	J CH
B13-8075_SED	EPA 8270C	Methoxychlor	0.1 ng/dry g	UJ BC
B13-8075_SED	EPA 8270C	Naphthalene	11.3 ng/dry g	J LV, CH, LC
B13-8075_SED	EPA 8270C	PCB095	2.97 ng/dry g	J DL
B13-8075_SED	EPA 8270C	PCB097	1.44 ng/dry g	J DL
B13-8075_SED	EPA 8270C	PCB099	2.25 ng/dry g	J DL
B13-8075_SED	EPA 8270C	PCB110	2.96 ng/dry g	J DL
B13-8075_SED	EPA 8270C	PCB118	2.05 ng/dry g	J DL, HL, HD, LP
B13-8075_SED	EPA 8270C	PCB151	1.2 ng/dry g	J DL
B13-8075_SED	EPA 8270C	PCB170	2.03 ng/dry g	J DL, CH
B13-8075_SED	EPA 8270C	PCB180	3.11 ng/dry g	J DL, CH

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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8075_SED	EPA 8270C	PCB187	3.45 ng/dry g	J DL, CH
B13-8075_SED	EPA 8270C	Perthane	0.1 ng/dry g	UJ BC
B13-8075_SED	EPA 8270C	Perylene	17.6 ng/dry g	J HV, CH
B13-8075_SED	EPA 8270C	Phenanthrene	71.4 ng/dry g	J HL
B13-8075_SED	EPA 8270C	Pyrene	163.5 ng/dry g	J HV, CH
B13-8075_SED	EPA 8270C	trans-Nonachlor	4.74 ng/dry g	J DL
B13-8075_SED	EPA 8270C-NCI	Deltamethrin/Tralomethrin	0.5 ng/dry g	UJ BC, LV
B13-8075_SED	EPA 8270C-NCI	Fipronil Sulfone	0.5 ng/dry g	UJ BC
B13-8075_SED	EPA 8270C-NCI	I-Cyhalothrin	0.49 ng/dry g	J DL, LV, CH, HL
B13-8075_SED	EPA 8270C-NCI	PBDE017	0.1 ng/dry g	UJ LL
B13-8075_SED	EPA 8270C-NCI	PBDE049	1.41 ng/dry g	J LL, HD
B13-8075_SED	EPA 8270C-NCI	PBDE066	1 ng/dry g	J DL
B13-8075_SED	EPA 8270C-NCI	PBDE071	0.1 ng/dry g	UJ LL
B13-8075_SED	EPA 8270C-NCI	PBDE099	4.08 ng/dry g	J HL
B13-8075_SED	EPA 8270C-NCI	PBDE100	0.87 ng/dry g	J DL, HL
B13-8075_SED	EPA 8270C-NCI	PBDE138	0.1 ng/dry g	UJ LC
B13-8075_SED	EPA 8270C-NCI	PBDE154	0.9 ng/dry g	J DL
B13-8075_SED	EPA 8270C-NCI	PBDE183	0.66 ng/dry g	J DL, LC
B13-8075_SED	EPA 8270C-NCI	PBDE209	46.51 ng/dry g	J CH, HD
B13-8075_SED	EPA 8270C-NCI	Permethrin, cis-	0.5 ng/dry g	UJ BC, LV
B13-8075_SED	EPA 8270C-NCI	Permethrin, trans-	0.5 ng/dry g	UJ BC
B13-8075_SED	EPA 8270C-NCI	Toxaphene	0.2 ng/dry g	UJ LC
B13-8075_SED	EPA 9060	Total Nitrogen	0.05 % Dry Weight	J NQ
B13-8075_SED	EPA 9060	Total Organic Carbon	1.99 % Dry Weight	J NQ
B13-8075_SED	Plumb, 1981 and Teryl	Acid Volatile Sulfides	74.95 mg/dry kg	J NQ
B13-8076_SED	EPA 6020	Aluminum	39540.8 µg/dry g	J HP
B13-8076_SED	EPA 6020	Antimony	0.811 µg/dry g	J HP
B13-8076_SED	EPA 6020	Beryllium	0.789 µg/dry g	J HP
B13-8076_SED	EPA 6020	Cadmium	0.3843 µg/dry g	J LP
B13-8076_SED	EPA 6020	Chromium	74.5065 µg/dry g	J HP
B13-8076_SED	EPA 6020	Iron (Fe)	36338.8 µg/dry g	J HP
B13-8076_SED	EPA 6020	Total Phosphorus	705.43 µg/dry g	J NQ, HL
B13-8076_SED	EPA 8270C	1-Methylnaphthalene	1.1 ng/dry g	J DL, LV, CH, LC
B13-8076_SED	EPA 8270C	2,4'-DDD	0.68 ng/dry g	J DL
B13-8076_SED	EPA 8270C	2,4'-DDT	12 ng/dry g	J BC, HV
B13-8076_SED	EPA 8270C	2,6-Dimethylnaphthalene	1.4 ng/dry g	J DL, LV
B13-8076_SED	EPA 8270C	2-Methylnaphthalene	1.8 ng/dry g	J DL, LV, CH, LC
B13-8076_SED	EPA 8270C	4,4'-DDD	5.2 ng/dry g	J LC
B13-8076_SED	EPA 8270C	4,4'-DDE	1.37 ng/dry g	J DL
B13-8076_SED	EPA 8270C	4,4'-DDT	6.8 ng/dry g	J BC, HV, CH, LP
B13-8076_SED	EPA 8270C	Acenaphthene	2.2 ng/dry g	J DL
B13-8076_SED	EPA 8270C	Acenaphthylene	20.5 ng/dry g	J HD
B13-8076_SED	EPA 8270C	Aroclor 1016	2 ng/dry g	UJ NQ
B13-8076_SED	EPA 8270C	Aroclor 1221	2 ng/dry g	UJ NQ
B13-8076_SED	EPA 8270C	Aroclor 1232	2 ng/dry g	UJ NQ
B13-8076_SED	EPA 8270C	Aroclor 1242	2 ng/dry g	UJ NQ
B13-8076_SED	EPA 8270C	Aroclor 1248	2 ng/dry g	UJ NQ
B13-8076_SED	EPA 8270C	Aroclor 1254	2 ng/dry g	UJ NQ
B13-8076_SED	EPA 8270C	Aroclor 1260	64.2 ng/dry g	J NQ
B13-8076_SED	EPA 8270C	Aroclor 1262	2 ng/dry g	UJ NQ
B13-8076_SED	EPA 8270C	Aroclor 1268	2 ng/dry g	UJ NQ
B13-8076_SED	EPA 8270C	Benz[a]anthracene	93.6 ng/dry g	J CH
B13-8076_SED	EPA 8270C	Benzo[a]pyrene	216.7 ng/dry g	J HV, CH
B13-8076_SED	EPA 8270C	Benzo[b]fluoranthene	209.1 ng/dry g	J HV, CH

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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8076_SED	EPA 8270C	Benzo[e]pyrene	169.3 ng/dry g	J CH
B13-8076_SED	EPA 8270C	Benzo[k]fluoranthene	153 ng/dry g	J CH
B13-8076_SED	EPA 8270C	BHC-beta	0.1 ng/dry g	UJ BC
B13-8076_SED	EPA 8270C	Biphenyl	1.2 ng/dry g	J DL, LV, LC
B13-8076_SED	EPA 8270C	Chlordane-alpha	0.7 ng/dry g	J DL
B13-8076_SED	EPA 8270C	Chlordane-gamma	1.09 ng/dry g	J DL, LP
B13-8076_SED	EPA 8270C	Chrysene	186.4 ng/dry g	J CH
B13-8076_SED	EPA 8270C	Dibenz[a,h]anthracene	36.1 ng/dry g	J CH
B13-8076_SED	EPA 8270C	Dibenzothiophene	3.1 ng/dry g	J DL
B13-8076_SED	EPA 8270C	Dicofol	0.1 ng/dry g	UJ BC
B13-8076_SED	EPA 8270C	Endosulfan-I	0.1 ng/dry g	UJ LL
B13-8076_SED	EPA 8270C	Endrin aldehyde	0.1 ng/dry g	R LL
B13-8076_SED	EPA 8270C	Endrin ketone	0.1 ng/dry g	UJ BC
B13-8076_SED	EPA 8270C	Fluoranthene	131.9 ng/dry g	J HV, CH, HL
B13-8076_SED	EPA 8270C	Fluorene	3.7 ng/dry g	J DL, HP
B13-8076_SED	EPA 8270C	Heptachlor	0.1 ng/dry g	UJ BC
B13-8076_SED	EPA 8270C	Indeno[1,2,3-c,d]pyrene	151.9 ng/dry g	J CH
B13-8076_SED	EPA 8270C	Methoxychlor	0.1 ng/dry g	UJ BC
B13-8076_SED	EPA 8270C	Naphthalene	3.7 ng/dry g	J DL, LV, CH, LC
B13-8076_SED	EPA 8270C	PCB037	4.04 ng/dry g	J DL, CH
B13-8076_SED	EPA 8270C	PCB052	4.12 ng/dry g	J DL
B13-8076_SED	EPA 8270C	PCB087	0.86 ng/dry g	J DL
B13-8076_SED	EPA 8270C	PCB095	2.45 ng/dry g	J DL
B13-8076_SED	EPA 8270C	PCB097	0.7 ng/dry g	J DL
B13-8076_SED	EPA 8270C	PCB099	1.46 ng/dry g	J DL
B13-8076_SED	EPA 8270C	PCB101	3.76 ng/dry g	J DL
B13-8076_SED	EPA 8270C	PCB105	0.71 ng/dry g	J DL, CH
B13-8076_SED	EPA 8270C	PCB110	2.76 ng/dry g	J DL
B13-8076_SED	EPA 8270C	PCB118	2.19 ng/dry g	J DL, HL, HD, LP
B13-8076_SED	EPA 8270C	PCB141	0.94 ng/dry g	J DL
B13-8076_SED	EPA 8270C	PCB149	3.73 ng/dry g	J DL
B13-8076_SED	EPA 8270C	PCB151	0.84 ng/dry g	J DL
B13-8076_SED	EPA 8270C	PCB168+132	1.1 ng/dry g	J DL
B13-8076_SED	EPA 8270C	PCB170	1.62 ng/dry g	J DL, CH
B13-8076_SED	EPA 8270C	PCB174	1.15 ng/dry g	J DL
B13-8076_SED	EPA 8270C	PCB177	1.07 ng/dry g	J DL
B13-8076_SED	EPA 8270C	PCB180	2.98 ng/dry g	J DL, CH
B13-8076_SED	EPA 8270C	PCB183	0.66 ng/dry g	J DL
B13-8076_SED	EPA 8270C	PCB187	2.11 ng/dry g	J DL, CH
B13-8076_SED	EPA 8270C	PCB206	1.75 ng/dry g	J DL, CH, HD
B13-8076_SED	EPA 8270C	PCB209	0.95 ng/dry g	J DL, HD
B13-8076_SED	EPA 8270C	Perthane	0.1 ng/dry g	UJ BC
B13-8076_SED	EPA 8270C	Perylene	43.2 ng/dry g	J HV, CH
B13-8076_SED	EPA 8270C	Phenanthrene	46.2 ng/dry g	J HL
B13-8076_SED	EPA 8270C	Pyrene	167.7 ng/dry g	J HV, CH
B13-8076_SED	EPA 8270C	trans-Nonachlor	0.75 ng/dry g	J DL
B13-8076_SED	EPA 8270C-NCI	Deltamethrin/Tralomethrin	0.5 ng/dry g	UJ BC, LV
B13-8076_SED	EPA 8270C-NCI	Fipronil Sulfone	0.5 ng/dry g	UJ BC
B13-8076_SED	EPA 8270C-NCI	I-Cyhalothrin	0.55 ng/dry g	J CH, LV, HL
B13-8076_SED	EPA 8270C-NCI	PBDE017	0.1 ng/dry g	UJ LL
B13-8076_SED	EPA 8270C-NCI	PBDE047	0.83 ng/dry g	J DL
B13-8076_SED	EPA 8270C-NCI	PBDE049	0.48 ng/dry g	J DL, LL, HD
B13-8076_SED	EPA 8270C-NCI	PBDE066	0.76 ng/dry g	J DL
B13-8076_SED	EPA 8270C-NCI	PBDE071	0.1 ng/dry g	UJ LL

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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8076_SED	EPA 8270C-NCI	PBDE099	1.08 ng/dry g	J HL
B13-8076_SED	EPA 8270C-NCI	PBDE100	0.24 ng/dry g	J DL, HL
B13-8076_SED	EPA 8270C-NCI	PBDE138	0.1 ng/dry g	UJ LC
B13-8076_SED	EPA 8270C-NCI	PBDE153	0.35 ng/dry g	J DL
B13-8076_SED	EPA 8270C-NCI	PBDE154	0.25 ng/dry g	J DL
B13-8076_SED	EPA 8270C-NCI	PBDE183	0.64 ng/dry g	J DL, LC
B13-8076_SED	EPA 8270C-NCI	PBDE209	36.51 ng/dry g	J CH, HD
B13-8076_SED	EPA 8270C-NCI	Permethrin, cis-	0.5 ng/dry g	UJ BC, LV
B13-8076_SED	EPA 8270C-NCI	Permethrin, trans-	0.5 ng/dry g	UJ BC
B13-8076_SED	EPA 8270C-NCI	Toxaphene	0.2 ng/dry g	UJ LC
B13-8076_SED	EPA 9060	Total Nitrogen	0.01 % Dry Weight	R NQ
B13-8076_SED	EPA 9060	Total Organic Carbon	0.1 % Dry Weight	J NQ
B13-8076_SED	Plumb, 1981 and Teryl	Acid Volatile Sulfides	63.27 mg/dry kg	J NQ
B13-8077_SED	EPA 200.8	Cadmium	0.0022 µmol/dry g	J DL
B13-8077_SED	EPA 245.7	Mercury	0.6241 µg/dry g	J HD, HM
B13-8077_SED	EPA 6020	Aluminum	29657.6 µg/dry g	J HP
B13-8077_SED	EPA 6020	Antimony	0.905 µg/dry g	J HP
B13-8077_SED	EPA 6020	Beryllium	0.607 µg/dry g	J HP
B13-8077_SED	EPA 6020	Cadmium	0.5408 µg/dry g	J LP
B13-8077_SED	EPA 6020	Chromium	45.4244 µg/dry g	J HP
B13-8077_SED	EPA 6020	Iron (Fe)	28232.5 µg/dry g	J HP, HD
B13-8077_SED	EPA 6020	Total Phosphorus	393.918 µg/dry g	J NQ, HL
B13-8077_SED	EPA 8270C	1-Methylnaphthalene	2.3 ng/dry g	J DL, LV, CH, LC
B13-8077_SED	EPA 8270C	2,3,5-Trimethylnaphthalene	1.1 ng/dry g	J DL
B13-8077_SED	EPA 8270C	2,4'-DDT	0.1 ng/dry g	UJ BC
B13-8077_SED	EPA 8270C	2,6-Dimethylnaphthalene	2.8 ng/dry g	J DL, LV
B13-8077_SED	EPA 8270C	2-Methylnaphthalene	5.1 ng/dry g	J LV, CH, LC
B13-8077_SED	EPA 8270C	4,4'-DDD	2.05 ng/dry g	J DL, LC
B13-8077_SED	EPA 8270C	4,4'-DDT	10.72 ng/dry g	J BC, HV, CH, LP
B13-8077_SED	EPA 8270C	Acenaphthene	2.2 ng/dry g	J DL
B13-8077_SED	EPA 8270C	Acenaphthylene	12.7 ng/dry g	J HD
B13-8077_SED	EPA 8270C	Aroclor 1016	2 ng/dry g	UJ NQ
B13-8077_SED	EPA 8270C	Aroclor 1221	2 ng/dry g	UJ NQ
B13-8077_SED	EPA 8270C	Aroclor 1232	2 ng/dry g	UJ NQ
B13-8077_SED	EPA 8270C	Aroclor 1242	2 ng/dry g	UJ NQ
B13-8077_SED	EPA 8270C	Aroclor 1248	2 ng/dry g	UJ NQ
B13-8077_SED	EPA 8270C	Aroclor 1254	2 ng/dry g	UJ NQ
B13-8077_SED	EPA 8270C	Aroclor 1260	124.9 ng/dry g	J NQ
B13-8077_SED	EPA 8270C	Aroclor 1262	2 ng/dry g	UJ NQ
B13-8077_SED	EPA 8270C	Aroclor 1268	2 ng/dry g	UJ NQ
B13-8077_SED	EPA 8270C	Benz[a]anthracene	44.9 ng/dry g	J CH
B13-8077_SED	EPA 8270C	Benzo[a]pyrene	117.8 ng/dry g	J HV, CH
B13-8077_SED	EPA 8270C	Benzo[b]fluoranthene	133.1 ng/dry g	J HV, CH
B13-8077_SED	EPA 8270C	Benzo[e]pyrene	95.6 ng/dry g	J CH
B13-8077_SED	EPA 8270C	Benzo[k]fluoranthene	92.9 ng/dry g	J CH
B13-8077_SED	EPA 8270C	BHC-beta	0.1 ng/dry g	UJ BC
B13-8077_SED	EPA 8270C	Biphenyl	2 ng/dry g	J DL, LV, LC
B13-8077_SED	EPA 8270C	Chlordane-gamma	7.39 ng/dry g	J LP
B13-8077_SED	EPA 8270C	Chrysene	88.3 ng/dry g	J CH
B13-8077_SED	EPA 8270C	cis-Nonachlor	2.5 ng/dry g	J DL
B13-8077_SED	EPA 8270C	Dibenz[a,h]anthracene	44.3 ng/dry g	J CH
B13-8077_SED	EPA 8270C	Dibenzothiophene	3.8 ng/dry g	J DL
B13-8077_SED	EPA 8270C	Dicofol	0.1 ng/dry g	UJ BC
B13-8077_SED	EPA 8270C	Endosulfan-I	0.1 ng/dry g	UJ LL

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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8077_SED	EPA 8270C	Endrin aldehyde	0.1 ng/dry g	R LL
B13-8077_SED	EPA 8270C	Endrin ketone	0.1 ng/dry g	UJ BC
B13-8077_SED	EPA 8270C	Fluoranthene	108.7 ng/dry g	J HV, CH, HL
B13-8077_SED	EPA 8270C	Fluorene	4.4 ng/dry g	J DL, HP
B13-8077_SED	EPA 8270C	Heptachlor	0.1 ng/dry g	UJ BC
B13-8077_SED	EPA 8270C	Indeno[1,2,3-c,d]pyrene	180.3 ng/dry g	J CH
B13-8077_SED	EPA 8270C	Methoxychlor	0.1 ng/dry g	UJ BC
B13-8077_SED	EPA 8270C	Naphthalene	8.5 ng/dry g	J LV, CH, LC
B13-8077_SED	EPA 8270C	PCB052	4.66 ng/dry g	J DL
B13-8077_SED	EPA 8270C	PCB095	3.21 ng/dry g	J DL
B13-8077_SED	EPA 8270C	PCB099	1.76 ng/dry g	J DL
B13-8077_SED	EPA 8270C	PCB101	4.55 ng/dry g	J DL
B13-8077_SED	EPA 8270C	PCB110	3.32 ng/dry g	J DL
B13-8077_SED	EPA 8270C	PCB118	2.43 ng/dry g	J DL, HL, HD, LP
B13-8077_SED	EPA 8270C	PCB149	4.5 ng/dry g	J DL
B13-8077_SED	EPA 8270C	PCB151	1.68 ng/dry g	J DL
B13-8077_SED	EPA 8270C	PCB168+132	1.7 ng/dry g	J DL
B13-8077_SED	EPA 8270C	PCB169	5.02 ng/dry g	J HD
B13-8077_SED	EPA 8270C	PCB174	1.72 ng/dry g	J DL
B13-8077_SED	EPA 8270C	PCB177	1.3 ng/dry g	J DL
B13-8077_SED	EPA 8270C	PCB180	3.22 ng/dry g	J DL, CH
B13-8077_SED	EPA 8270C	PCB183	1.1 ng/dry g	J DL
B13-8077_SED	EPA 8270C	PCB187	2.58 ng/dry g	J DL, CH
B13-8077_SED	EPA 8270C	PCB201	0.93 ng/dry g	J DL, HV, CH
B13-8077_SED	EPA 8270C	Perthane	0.1 ng/dry g	UJ BC
B13-8077_SED	EPA 8270C	Perylene	16.6 ng/dry g	J HV, CH
B13-8077_SED	EPA 8270C	Phenanthrene	54.8 ng/dry g	J HL
B13-8077_SED	EPA 8270C	Pyrene	136.8 ng/dry g	J HV, CH
B13-8077_SED	EPA 8270C-NCI	Deltamethrin/Tralomethrin	0.5 ng/dry g	UJ BC, LV
B13-8077_SED	EPA 8270C-NCI	Fipronil Sulfone	0.5 ng/dry g	UJ BC
B13-8077_SED	EPA 8270C-NCI	I-Cyhalothrin	0.5 ng/dry g	UJ LV
B13-8077_SED	EPA 8270C-NCI	PBDE017	0.1 ng/dry g	UJ LL
B13-8077_SED	EPA 8270C-NCI	PBDE047	0.77 ng/dry g	J DL
B13-8077_SED	EPA 8270C-NCI	PBDE049	0.6 ng/dry g	J DL, LL, HD
B13-8077_SED	EPA 8270C-NCI	PBDE066	0.92 ng/dry g	J DL
B13-8077_SED	EPA 8270C-NCI	PBDE071	0.1 ng/dry g	UJ LL
B13-8077_SED	EPA 8270C-NCI	PBDE099	1.38 ng/dry g	J HL
B13-8077_SED	EPA 8270C-NCI	PBDE138	0.1 ng/dry g	UJ LC
B13-8077_SED	EPA 8270C-NCI	PBDE153	0.26 ng/dry g	J DL
B13-8077_SED	EPA 8270C-NCI	PBDE154	0.38 ng/dry g	J DL
B13-8077_SED	EPA 8270C-NCI	PBDE183	0.61 ng/dry g	J DL, LC
B13-8077_SED	EPA 8270C-NCI	PBDE209	26.04 ng/dry g	J CH, HD
B13-8077_SED	EPA 8270C-NCI	Permethrin, cis-	0.5 ng/dry g	UJ BC, LV
B13-8077_SED	EPA 8270C-NCI	Permethrin, trans-	0.5 ng/dry g	UJ BC
B13-8077_SED	EPA 8270C-NCI	Toxaphene	0.2 ng/dry g	UJ LC
B13-8077_SED	EPA 9060	Total Nitrogen	0.03 % Dry Weight	J NQ
B13-8077_SED	EPA 9060	Total Organic Carbon	1.69 % Dry Weight	J NQ
B13-8077_SED	Plumb, 1981 and Teryl	Acid Volatile Sulfides	7.11 mg/dry kg	J NQ
B13-8078_SED	EPA 6020	Aluminum	21139.7 µg/dry g	J HP
B13-8078_SED	EPA 6020	Antimony	0.22 µg/dry g	J HP
B13-8078_SED	EPA 6020	Arsenic	6.463 µg/dry g	J HP
B13-8078_SED	EPA 6020	Barium	56.132 µg/dry g	J CH
B13-8078_SED	EPA 6020	Beryllium	0.386 µg/dry g	J HP
B13-8078_SED	EPA 6020	Cadmium	0.1071 µg/dry g	J LP

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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8078_SED	EPA 6020	Chromium	35.9964 µg/dry g	J HP
B13-8078_SED	EPA 6020	Iron (Fe)	20457.3 µg/dry g	J HP
B13-8078_SED	EPA 6020	Nickel	9.26 µg/dry g	J HP
B13-8078_SED	EPA 6020	Total Phosphorus	400.053 µg/dry g	J NQ
B13-8078_SED	EPA 8270C	1-Methylnaphthalene	5 ng/dry g	UJ NQ
B13-8078_SED	EPA 8270C	1-Methylphenanthrene	2.8 ng/dry g	J DL, NQ
B13-8078_SED	EPA 8270C	2,3,5-Trimethylnaphthalene	1.2 ng/dry g	J DL, NQ
B13-8078_SED	EPA 8270C	2,4'-DDD	0.1 ng/dry g	UJ NQ
B13-8078_SED	EPA 8270C	2,4'-DDE	0.1 ng/dry g	UJ NQ
B13-8078_SED	EPA 8270C	2,4'-DDT	0.1 ng/dry g	UJ NQ, BC
B13-8078_SED	EPA 8270C	2,6-Dimethylnaphthalene	5 ng/dry g	UJ NQ
B13-8078_SED	EPA 8270C	2-Methylnaphthalene	1.3 ng/dry g	J DL, NQ
B13-8078_SED	EPA 8270C	4,4'-DDD	0.1 ng/dry g	UJ NQ
B13-8078_SED	EPA 8270C	4,4'-DDE	0.1 ng/dry g	UJ NQ
B13-8078_SED	EPA 8270C	4,4'-DDMU	0.1 ng/dry g	UJ NQ
B13-8078_SED	EPA 8270C	4,4'-DDT	0.1 ng/dry g	UJ NQ, BC
B13-8078_SED	EPA 8270C	Acenaphthene	5 ng/dry g	UJ NQ
B13-8078_SED	EPA 8270C	Acenaphthylene	3.9 ng/dry g	J DL, NQ
B13-8078_SED	EPA 8270C	Aldrin	0.1 ng/dry g	UJ NQ
B13-8078_SED	EPA 8270C	Anthracene	4.4 ng/dry g	J DL, NQ
B13-8078_SED	EPA 8270C	Aroclor 1016	2 ng/dry g	UJ NQ
B13-8078_SED	EPA 8270C	Aroclor 1221	2 ng/dry g	UJ NQ
B13-8078_SED	EPA 8270C	Aroclor 1232	2 ng/dry g	UJ NQ
B13-8078_SED	EPA 8270C	Aroclor 1242	2 ng/dry g	UJ NQ
B13-8078_SED	EPA 8270C	Aroclor 1248	2 ng/dry g	UJ NQ
B13-8078_SED	EPA 8270C	Aroclor 1254	2 ng/dry g	UJ NQ
B13-8078_SED	EPA 8270C	Aroclor 1260	5.9 ng/dry g	J NQ
B13-8078_SED	EPA 8270C	Aroclor 1262	2 ng/dry g	UJ NQ
B13-8078_SED	EPA 8270C	Aroclor 1268	2 ng/dry g	UJ NQ
B13-8078_SED	EPA 8270C	Benz[a]anthracene	19.7 ng/dry g	J NQ
B13-8078_SED	EPA 8270C	Benzo[a]pyrene	32.8 ng/dry g	J NQ, LP
B13-8078_SED	EPA 8270C	Benzo[b]fluoranthene	25.9 ng/dry g	J NQ
B13-8078_SED	EPA 8270C	Benzo[e]pyrene	23.4 ng/dry g	J NQ
B13-8078_SED	EPA 8270C	Benzo[g,h,i]perylene	32.8 ng/dry g	J NQ
B13-8078_SED	EPA 8270C	Benzo[k]fluoranthene	14.1 ng/dry g	J NQ
B13-8078_SED	EPA 8270C	BHC-alpha	0.1 ng/dry g	UJ NQ
B13-8078_SED	EPA 8270C	BHC-beta	0.1 ng/dry g	UJ NQ, BC
B13-8078_SED	EPA 8270C	BHC-delta	0.1 ng/dry g	UJ NQ
B13-8078_SED	EPA 8270C	BHC-gamma	0.1 ng/dry g	UJ NQ
B13-8078_SED	EPA 8270C	Biphenyl	5 ng/dry g	UJ NQ
B13-8078_SED	EPA 8270C	Chlordane-alpha	0.1 ng/dry g	UJ NQ
B13-8078_SED	EPA 8270C	Chlordane-gamma	0.1 ng/dry g	UJ NQ
B13-8078_SED	EPA 8270C	Chrysene	27.2 ng/dry g	J NQ
B13-8078_SED	EPA 8270C	cis-Nonachlor	0.1 ng/dry g	UJ NQ
B13-8078_SED	EPA 8270C	DCPA (Dacthal)	0.1 ng/dry g	UJ NQ
B13-8078_SED	EPA 8270C	Dibenz[a,h]anthracene	6 ng/dry g	J NQ, LC, HP
B13-8078_SED	EPA 8270C	Dibenzothiophene	1.4 ng/dry g	J DL, NQ
B13-8078_SED	EPA 8270C	Dicofol	0.1 ng/dry g	UJ NQ, BC
B13-8078_SED	EPA 8270C	Dieldrin	0.1 ng/dry g	UJ NQ
B13-8078_SED	EPA 8270C	Endosulfan sulfate	0.1 ng/dry g	UJ NQ
B13-8078_SED	EPA 8270C	Endosulfan-I	0.1 ng/dry g	UJ NQ, LL
B13-8078_SED	EPA 8270C	Endosulfan-II	0.1 ng/dry g	UJ NQ, LL
B13-8078_SED	EPA 8270C	Endrin	0.1 ng/dry g	UJ NQ
B13-8078_SED	EPA 8270C	Endrin aldehyde	0.1 ng/dry g	R LL



**TABLE 2**  
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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8078_SED	EPA 8270C	Endrin ketone	0.1 ng/dry g	UJ NQ, BC
B13-8078_SED	EPA 8270C	Fluoranthene	27.3 ng/dry g	J NQ
B13-8078_SED	EPA 8270C	Fluorene	1.3 ng/dry g	J DL, NQ
B13-8078_SED	EPA 8270C	Heptachlor	0.1 ng/dry g	UJ NQ, BC
B13-8078_SED	EPA 8270C	Heptachlor epoxide	0.1 ng/dry g	UJ NQ
B13-8078_SED	EPA 8270C	Hexachlorobenzene	0.1 ng/dry g	UJ NQ
B13-8078_SED	EPA 8270C	Indeno[1,2,3-c,d]pyrene	28.6 ng/dry g	J NQ
B13-8078_SED	EPA 8270C	Methoxychlor	0.1 ng/dry g	UJ NQ, BC
B13-8078_SED	EPA 8270C	Mirex	0.1 ng/dry g	UJ NQ
B13-8078_SED	EPA 8270C	Naphthalene	2.4 ng/dry g	J DL, NQ
B13-8078_SED	EPA 8270C	Oxychlorthane	0.1 ng/dry g	UJ NQ
B13-8078_SED	EPA 8270C	PCB018	0.1 ng/dry g	UJ LV, LC
B13-8078_SED	EPA 8270C	PCB044	0.1 ng/dry g	UJ LV, LC
B13-8078_SED	EPA 8270C	PCB049	0.1 ng/dry g	UJ LV, LC
B13-8078_SED	EPA 8270C	PCB052	0.1 ng/dry g	UJ LV, LC
B13-8078_SED	EPA 8270C	PCB087	0.29 ng/dry g	J LC
B13-8078_SED	EPA 8270C	PCB099	0.22 ng/dry g	J LC
B13-8078_SED	EPA 8270C	PCB101	0.77 ng/dry g	J LC
B13-8078_SED	EPA 8270C	PCB110	0.57 ng/dry g	J LC
B13-8078_SED	EPA 8270C	PCB119	0.1 ng/dry g	UJ LC
B13-8078_SED	EPA 8270C	PCB149	0.99 ng/dry g	J LC
B13-8078_SED	EPA 8270C	PCB151	0.29 ng/dry g	J LC
B13-8078_SED	EPA 8270C	PCB158	0.17 ng/dry g	J LC
B13-8078_SED	EPA 8270C	PCB177	0.2 ng/dry g	J LC
B13-8078_SED	EPA 8270C	PCB183	0.17 ng/dry g	J LC
B13-8078_SED	EPA 8270C	PCB187	0.4 ng/dry g	J BC, LV, LC
B13-8078_SED	EPA 8270C	PCB199(200)	0.2 ng/dry g	UJ LV, LC
B13-8078_SED	EPA 8270C	PCB206	0.1 ng/dry g	UJ BC, LC
B13-8078_SED	EPA 8270C	PCB209	0.1 ng/dry g	UJ LC
B13-8078_SED	EPA 8270C	Perthane	0.1 ng/dry g	UJ NQ, BC
B13-8078_SED	EPA 8270C	Perylene	6.7 ng/dry g	J NQ, LP
B13-8078_SED	EPA 8270C	Phenanthrene	12.3 ng/dry g	J NQ
B13-8078_SED	EPA 8270C	Pyrene	40.9 ng/dry g	J NQ
B13-8078_SED	EPA 8270C	trans-Nonachlor	0.1 ng/dry g	UJ NQ
B13-8078_SED	EPA 8270C-NCI	Allethrin	0.5 ng/dry g	UJ NQ, BC
B13-8078_SED	EPA 8270C-NCI	Bifenthrin	0.5 ng/dry g	UJ NQ
B13-8078_SED	EPA 8270C-NCI	Cyfluthrin, total	0.5 ng/dry g	UJ NQ, BC
B13-8078_SED	EPA 8270C-NCI	Cypermethrin, total	0.5 ng/dry g	UJ NQ, BC
B13-8078_SED	EPA 8270C-NCI	Danitol (Fenpropathrin)	0.5 ng/dry g	UJ NQ
B13-8078_SED	EPA 8270C-NCI	Deltamethrin/Tralomethrin	0.5 ng/dry g	R BC
B13-8078_SED	EPA 8270C-NCI	Esfenvalerate	0.5 ng/dry g	UJ NQ, BC
B13-8078_SED	EPA 8270C-NCI	Fenvalerate	0.5 ng/dry g	UJ NQ, BC
B13-8078_SED	EPA 8270C-NCI	Fipronil	0.5 ng/dry g	UJ NQ
B13-8078_SED	EPA 8270C-NCI	Fipronil Desulfinyl	0.5 ng/dry g	UJ NQ
B13-8078_SED	EPA 8270C-NCI	Fipronil Sulfide	0.5 ng/dry g	UJ NQ
B13-8078_SED	EPA 8270C-NCI	Fipronil Sulfone	0.5 ng/dry g	UJ NQ
B13-8078_SED	EPA 8270C-NCI	Fluvalinate	0.5 ng/dry g	UJ NQ, BC
B13-8078_SED	EPA 8270C-NCI	I-Cyhalothrin	0.5 ng/dry g	UJ NQ
B13-8078_SED	EPA 8270C-NCI	PBDE066	0.06 ng/dry g	J DL
B13-8078_SED	EPA 8270C-NCI	PBDE085	0.1 ng/dry g	UJ LC
B13-8078_SED	EPA 8270C-NCI	PBDE138	0.1 ng/dry g	UJ LC
B13-8078_SED	EPA 8270C-NCI	PBDE153	0.1 ng/dry g	UJ LC
B13-8078_SED	EPA 8270C-NCI	PBDE183	0.1 ng/dry g	UJ LC
B13-8078_SED	EPA 8270C-NCI	PBDE209	0.1 ng/dry g	UJ LC

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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8078_SED	EPA 8270C-NCI	Permethrin, cis-	0.5 ng/dry g	R BC
B13-8078_SED	EPA 8270C-NCI	Permethrin, trans-	0.5 ng/dry g	R BC
B13-8078_SED	EPA 8270C-NCI	Prallethrin	0.5 ng/dry g	UJ NQ
B13-8078_SED	EPA 8270C-NCI	Resmethrin	0.5 ng/dry g	UJ NQ, BC
B13-8078_SED	EPA 9060	Total Nitrogen	0.36 % Dry Weight	J NQ
B13-8078_SED	EPA 9060	Total Organic Carbon	0.71 % Dry Weight	J NQ
B13-8078_SED	Plumb, 1981 and Teryl	Acid Volatile Sulfides	4.68 mg/dry kg	J NQ
B13-8085_SED	EPA 6020	Aluminum	27355.2 µg/dry g	J HP
B13-8085_SED	EPA 6020	Antimony	0.331 µg/dry g	J HP
B13-8085_SED	EPA 6020	Barium	107.844 µg/dry g	J CH
B13-8085_SED	EPA 6020	Beryllium	0.507 µg/dry g	J HP
B13-8085_SED	EPA 6020	Cadmium	0.4771 µg/dry g	J LP
B13-8085_SED	EPA 6020	Chromium	47.6544 µg/dry g	J HP
B13-8085_SED	EPA 6020	Iron (Fe)	30817.1 µg/dry g	J HP
B13-8085_SED	EPA 6020	Total Phosphorus	788.423 µg/dry g	J NQ
B13-8085_SED	EPA 8270C	2,3,5-Trimethylnaphthalene	2.9 ng/dry g	J DL
B13-8085_SED	EPA 8270C	2,4'-DDT	0.1 ng/dry g	UJ LC
B13-8085_SED	EPA 8270C	4,4'-DDMU	0.1 ng/dry g	UJ BC
B13-8085_SED	EPA 8270C	4,4'-DDT	0.1 ng/dry g	UJ BC, LC
B13-8085_SED	EPA 8270C	Acenaphthylene	2 ng/dry g	J DL
B13-8085_SED	EPA 8270C	Aroclor 1016	2 ng/dry g	UJ NQ
B13-8085_SED	EPA 8270C	Aroclor 1221	2 ng/dry g	UJ NQ
B13-8085_SED	EPA 8270C	Aroclor 1232	2 ng/dry g	UJ NQ
B13-8085_SED	EPA 8270C	Aroclor 1242	2 ng/dry g	UJ NQ
B13-8085_SED	EPA 8270C	Aroclor 1248	2 ng/dry g	UJ NQ
B13-8085_SED	EPA 8270C	Aroclor 1254	2 ng/dry g	UJ NQ
B13-8085_SED	EPA 8270C	Aroclor 1260	10.7 ng/dry g	J NQ
B13-8085_SED	EPA 8270C	Aroclor 1262	2 ng/dry g	UJ NQ
B13-8085_SED	EPA 8270C	Aroclor 1268	2 ng/dry g	UJ NQ
B13-8085_SED	EPA 8270C	Benz[a]anthracene	50.9 ng/dry g	J CH
B13-8085_SED	EPA 8270C	Benzo[b]fluoranthene	51.6 ng/dry g	J BC, CH
B13-8085_SED	EPA 8270C	Benzo[e]pyrene	37.3 ng/dry g	J CH
B13-8085_SED	EPA 8270C	BHC-beta	0.1 ng/dry g	UJ BC
B13-8085_SED	EPA 8270C	Chrysene	74.3 ng/dry g	J CH
B13-8085_SED	EPA 8270C	Dibenz[a,h]anthracene	6.5 ng/dry g	J CH
B13-8085_SED	EPA 8270C	Dibenzothiophene	4.1 ng/dry g	J DL
B13-8085_SED	EPA 8270C	Dicofol	0.1 ng/dry g	UJ BC, LC
B13-8085_SED	EPA 8270C	Endosulfan-II	0.1 ng/dry g	UJ LC
B13-8085_SED	EPA 8270C	Heptachlor	0.1 ng/dry g	UJ LC
B13-8085_SED	EPA 8270C	Indeno[1,2,3-c,d]pyrene	59.4 ng/dry g	J CH
B13-8085_SED	EPA 8270C	Methoxychlor	0.1 ng/dry g	UJ BC, LC
B13-8085_SED	EPA 8270C	PCB008	0.1 ng/dry g	UJ BC, LC
B13-8085_SED	EPA 8270C	PCB044	0.63 ng/dry g	J CH
B13-8085_SED	EPA 8270C	PCB101	0.6 ng/dry g	J CH
B13-8085_SED	EPA 8270C	PCB105	0.1 ng/dry g	UJ BC
B13-8085_SED	EPA 8270C	PCB118	0.91 ng/dry g	J CH
B13-8085_SED	EPA 8270C	PCB126	0.1 ng/dry g	UJ BC
B13-8085_SED	EPA 8270C	PCB128	0.1 ng/dry g	UJ LV
B13-8085_SED	EPA 8270C	PCB149	0.91 ng/dry g	J CH
B13-8085_SED	EPA 8270C	PCB151	0.32 ng/dry g	J CH
B13-8085_SED	EPA 8270C	PCB153	1.36 ng/dry g	J BC
B13-8085_SED	EPA 8270C	PCB156	0.1 ng/dry g	UJ BC
B13-8085_SED	EPA 8270C	PCB168+132	0.2 ng/dry g	J CH
B13-8085_SED	EPA 8270C	PCB169	0.1 ng/dry g	UJ BC

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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8085_SED	EPA 8270C	PCB187	0.55 ng/dry g	J CH
B13-8085_SED	EPA 8270C	PCB209	0.1 ng/dry g	UJ LV, LC
B13-8085_SED	EPA 8270C	Perthane	0.1 ng/dry g	UJ BC
B13-8085_SED	EPA 8270C	Perylene	5.9 ng/dry g	J CH
B13-8085_SED	EPA 8270C-NCI	Deltamethrin/Tralomethrin	0.5 ng/dry g	UJ LV
B13-8085_SED	EPA 8270C-NCI	I-Cyhalothrin	0.5 ng/dry g	UJ LV
B13-8085_SED	EPA 8270C-NCI	PBDE138	0.1 ng/dry g	UJ LC
B13-8085_SED	EPA 8270C-NCI	PBDE209	0.1 ng/dry g	UJ LC
B13-8085_SED	EPA 8270C-NCI	Permethrin, cis-	0.5 ng/dry g	UJ LV
B13-8085_SED	EPA 8270C-NCI	Resmethrin	0.5 ng/dry g	UJ LC
B13-8085_SED	EPA 9060	Total Nitrogen	0.11 % Dry Weight	J NQ
B13-8085_SED	EPA 9060	Total Organic Carbon	2.26 % Dry Weight	J NQ
B13-8085_SED	Plumb, 1981 and Teryl	Acid Volatile Sulfides	569.61 mg/dry kg	J NQ
B13-8087_SED	EPA 200.8	Nickel	0.0037 µmol/dry g	J DL
B13-8087_SED	EPA 245.7	Mercury	0.0682 µg/dry g	J LC, LP
B13-8087_SED	EPA 6020	Aluminum	7390.4 µg/dry g	J HP
B13-8087_SED	EPA 6020	Antimony	0.156 µg/dry g	J HP
B13-8087_SED	EPA 6020	Beryllium	0.141 µg/dry g	J HP
B13-8087_SED	EPA 6020	Cadmium	0.03 µg/dry g	J LP
B13-8087_SED	EPA 6020	Chromium	12.2231 µg/dry g	J HP
B13-8087_SED	EPA 6020	Iron (Fe)	9900.2 µg/dry g	J HP
B13-8087_SED	EPA 6020	Total Phosphorus	243.945 µg/dry g	J NQ
B13-8087_SED	EPA 8270C	1-Methylnaphthalene	5 ng/dry g	UJ NQ
B13-8087_SED	EPA 8270C	1-Methylphenanthrene	5 ng/dry g	UJ NQ
B13-8087_SED	EPA 8270C	2,3,5-Trimethylnaphthalene	5 ng/dry g	UJ NQ
B13-8087_SED	EPA 8270C	2,4'-DDD	0.1 ng/dry g	UJ NQ
B13-8087_SED	EPA 8270C	2,4'-DDE	0.1 ng/dry g	UJ NQ
B13-8087_SED	EPA 8270C	2,4'-DDT	0.1 ng/dry g	UJ BC, NQ
B13-8087_SED	EPA 8270C	2,6-Dimethylnaphthalene	5 ng/dry g	UJ NQ
B13-8087_SED	EPA 8270C	2-Methylnaphthalene	5 ng/dry g	UJ NQ
B13-8087_SED	EPA 8270C	4,4'-DDD	0.1 ng/dry g	UJ NQ
B13-8087_SED	EPA 8270C	4,4'-DDE	0.1 ng/dry g	UJ NQ
B13-8087_SED	EPA 8270C	4,4'-DDMU	0.1 ng/dry g	UJ NQ
B13-8087_SED	EPA 8270C	4,4'-DDT	0.1 ng/dry g	UJ BC, NQ
B13-8087_SED	EPA 8270C	Acenaphthene	5 ng/dry g	UJ NQ
B13-8087_SED	EPA 8270C	Acenaphthylene	1 ng/dry g	J DL, NQ, HD
B13-8087_SED	EPA 8270C	Aldrin	0.1 ng/dry g	UJ NQ
B13-8087_SED	EPA 8270C	Anthracene	5 ng/dry g	UJ NQ
B13-8087_SED	EPA 8270C	Aroclor 1016	2 ng/dry g	UJ NQ
B13-8087_SED	EPA 8270C	Aroclor 1221	2 ng/dry g	UJ NQ
B13-8087_SED	EPA 8270C	Aroclor 1232	2 ng/dry g	UJ NQ
B13-8087_SED	EPA 8270C	Aroclor 1242	2 ng/dry g	UJ NQ
B13-8087_SED	EPA 8270C	Aroclor 1248	2 ng/dry g	UJ NQ
B13-8087_SED	EPA 8270C	Aroclor 1254	2 ng/dry g	UJ NQ
B13-8087_SED	EPA 8270C	Aroclor 1260	2 ng/dry g	UJ NQ
B13-8087_SED	EPA 8270C	Aroclor 1262	2 ng/dry g	UJ NQ
B13-8087_SED	EPA 8270C	Aroclor 1268	2 ng/dry g	UJ NQ
B13-8087_SED	EPA 8270C	Benzo[a]anthracene	3.2 ng/dry g	J DL, NQ
B13-8087_SED	EPA 8270C	Benzo[a]pyrene	6.7 ng/dry g	J NQ
B13-8087_SED	EPA 8270C	Benzo[b]fluoranthene	4.8 ng/dry g	J DL, NQ
B13-8087_SED	EPA 8270C	Benzo[e]pyrene	5 ng/dry g	J NQ
B13-8087_SED	EPA 8270C	Benzo[g,h,i]perylene	10.7 ng/dry g	J NQ
B13-8087_SED	EPA 8270C	Benzo[k]fluoranthene	3.5 ng/dry g	J DL, NQ
B13-8087_SED	EPA 8270C	BHC-alpha	0.1 ng/dry g	UJ NQ

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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8087_SED	EPA 8270C	BHC-beta	0.1 ng/dry g	UJ BC, NQ
B13-8087_SED	EPA 8270C	BHC-delta	0.1 ng/dry g	UJ NQ
B13-8087_SED	EPA 8270C	BHC-gamma	0.1 ng/dry g	UJ NQ
B13-8087_SED	EPA 8270C	Biphenyl	5 ng/dry g	UJ NQ
B13-8087_SED	EPA 8270C	Chlordane-alpha	0.1 ng/dry g	UJ NQ
B13-8087_SED	EPA 8270C	Chlordane-gamma	0.1 ng/dry g	UJ NQ
B13-8087_SED	EPA 8270C	Chrysene	4.9 ng/dry g	J DL, NQ
B13-8087_SED	EPA 8270C	cis-Nonachlor	0.1 ng/dry g	UJ NQ
B13-8087_SED	EPA 8270C	DCPA (Dacthal)	0.1 ng/dry g	UJ NQ
B13-8087_SED	EPA 8270C	Dibenz[a,h]anthracene	1.3 ng/dry g	J DL, NQ, HD
B13-8087_SED	EPA 8270C	Dibenzothiophene	5 ng/dry g	UJ NQ
B13-8087_SED	EPA 8270C	Dicofol	0.1 ng/dry g	UJ BC, NQ, LV
B13-8087_SED	EPA 8270C	Dieldrin	0.1 ng/dry g	UJ NQ
B13-8087_SED	EPA 8270C	Endosulfan sulfate	0.1 ng/dry g	UJ NQ
B13-8087_SED	EPA 8270C	Endosulfan-I	0.1 ng/dry g	UJ NQ, LL
B13-8087_SED	EPA 8270C	Endosulfan-II	0.1 ng/dry g	UJ NQ, LL
B13-8087_SED	EPA 8270C	Endrin	0.1 ng/dry g	UJ NQ
B13-8087_SED	EPA 8270C	Endrin aldehyde	0.1 ng/dry g	UJ BC, NQ, LL
B13-8087_SED	EPA 8270C	Endrin ketone	0.1 ng/dry g	UJ BC, NQ
B13-8087_SED	EPA 8270C	Fluoranthene	4.7 ng/dry g	J DL, NQ, HD
B13-8087_SED	EPA 8270C	Fluorene	5 ng/dry g	UJ NQ
B13-8087_SED	EPA 8270C	Heptachlor	0.1 ng/dry g	UJ BC, NQ
B13-8087_SED	EPA 8270C	Heptachlor epoxide	0.1 ng/dry g	UJ NQ
B13-8087_SED	EPA 8270C	Hexachlorobenzene	0.1 ng/dry g	UJ NQ
B13-8087_SED	EPA 8270C	Indeno[1,2,3-c,d]pyrene	8.5 ng/dry g	J NQ, HD
B13-8087_SED	EPA 8270C	Methoxychlor	0.1 ng/dry g	UJ BC, NQ
B13-8087_SED	EPA 8270C	Mirex	0.1 ng/dry g	UJ NQ
B13-8087_SED	EPA 8270C	Naphthalene	2.1 ng/dry g	J DL, NQ, HD
B13-8087_SED	EPA 8270C	Oxychlordane	0.1 ng/dry g	UJ NQ
B13-8087_SED	EPA 8270C	PCB003	0.1 ng/dry g	UJ NQ
B13-8087_SED	EPA 8270C	PCB005	0.1 ng/dry g	UJ NQ
B13-8087_SED	EPA 8270C	PCB008	0.1 ng/dry g	UJ NQ
B13-8087_SED	EPA 8270C	PCB015	0.1 ng/dry g	UJ NQ
B13-8087_SED	EPA 8270C	PCB018	0.1 ng/dry g	UJ NQ
B13-8087_SED	EPA 8270C	PCB027	0.1 ng/dry g	UJ NQ
B13-8087_SED	EPA 8270C	PCB028	0.1 ng/dry g	UJ NQ
B13-8087_SED	EPA 8270C	PCB029	0.1 ng/dry g	UJ NQ
B13-8087_SED	EPA 8270C	PCB031	0.1 ng/dry g	UJ NQ
B13-8087_SED	EPA 8270C	PCB033	0.1 ng/dry g	UJ NQ
B13-8087_SED	EPA 8270C	PCB037	0.1 ng/dry g	UJ NQ
B13-8087_SED	EPA 8270C	PCB044	0.1 ng/dry g	UJ NQ
B13-8087_SED	EPA 8270C	PCB049	0.1 ng/dry g	UJ NQ
B13-8087_SED	EPA 8270C	PCB052	0.1 ng/dry g	UJ NQ
B13-8087_SED	EPA 8270C	PCB056(060)	0.2 ng/dry g	UJ NQ
B13-8087_SED	EPA 8270C	PCB066	0.1 ng/dry g	UJ NQ
B13-8087_SED	EPA 8270C	PCB070	0.1 ng/dry g	UJ NQ
B13-8087_SED	EPA 8270C	PCB074	0.1 ng/dry g	UJ NQ
B13-8087_SED	EPA 8270C	PCB077	0.1 ng/dry g	UJ NQ
B13-8087_SED	EPA 8270C	PCB081	0.1 ng/dry g	UJ NQ
B13-8087_SED	EPA 8270C	PCB087	0.1 ng/dry g	UJ NQ
B13-8087_SED	EPA 8270C	PCB095	0.1 ng/dry g	UJ NQ
B13-8087_SED	EPA 8270C	PCB097	0.1 ng/dry g	UJ NQ
B13-8087_SED	EPA 8270C	PCB099	0.1 ng/dry g	UJ NQ
B13-8087_SED	EPA 8270C	PCB101	0.1 ng/dry g	UJ NQ

**TABLE 2**  
**Qualifiers Added to the Sediment Samples During Validation**  
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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8087_SED	EPA 8270C	PCB105	0.1 ng/dry g	UJ NQ
B13-8087_SED	EPA 8270C	PCB110	0.1 ng/dry g	UJ NQ
B13-8087_SED	EPA 8270C	PCB114	0.1 ng/dry g	UJ NQ
B13-8087_SED	EPA 8270C	PCB118	0.1 ng/dry g	UJ NQ
B13-8087_SED	EPA 8270C	PCB119	0.1 ng/dry g	UJ NQ, LV
B13-8087_SED	EPA 8270C	PCB123	0.1 ng/dry g	UJ NQ
B13-8087_SED	EPA 8270C	PCB126	0.1 ng/dry g	UJ NQ
B13-8087_SED	EPA 8270C	PCB128	0.1 ng/dry g	UJ NQ
B13-8087_SED	EPA 8270C	PCB137	0.1 ng/dry g	UJ NQ
B13-8087_SED	EPA 8270C	PCB138	0.1 ng/dry g	UJ NQ
B13-8087_SED	EPA 8270C	PCB141	0.1 ng/dry g	UJ NQ
B13-8087_SED	EPA 8270C	PCB149	0.1 ng/dry g	UJ NQ
B13-8087_SED	EPA 8270C	PCB151	0.1 ng/dry g	UJ NQ
B13-8087_SED	EPA 8270C	PCB153	0.1 ng/dry g	UJ NQ
B13-8087_SED	EPA 8270C	PCB156	0.1 ng/dry g	UJ NQ
B13-8087_SED	EPA 8270C	PCB157	0.1 ng/dry g	UJ NQ
B13-8087_SED	EPA 8270C	PCB158	0.1 ng/dry g	UJ NQ
B13-8087_SED	EPA 8270C	PCB167	0.1 ng/dry g	UJ NQ
B13-8087_SED	EPA 8270C	PCB168+132	0.2 ng/dry g	UJ NQ
B13-8087_SED	EPA 8270C	PCB169	0.1 ng/dry g	UJ NQ
B13-8087_SED	EPA 8270C	PCB170	0.1 ng/dry g	UJ NQ
B13-8087_SED	EPA 8270C	PCB174	0.1 ng/dry g	UJ NQ
B13-8087_SED	EPA 8270C	PCB177	0.1 ng/dry g	UJ NQ
B13-8087_SED	EPA 8270C	PCB180	0.1 ng/dry g	UJ NQ
B13-8087_SED	EPA 8270C	PCB183	0.1 ng/dry g	UJ NQ
B13-8087_SED	EPA 8270C	PCB187	0.1 ng/dry g	UJ NQ
B13-8087_SED	EPA 8270C	PCB189	0.1 ng/dry g	UJ NQ
B13-8087_SED	EPA 8270C	PCB194	0.1 ng/dry g	UJ NQ
B13-8087_SED	EPA 8270C	PCB195	0.1 ng/dry g	UJ NQ
B13-8087_SED	EPA 8270C	PCB199(200)	0.2 ng/dry g	UJ NQ
B13-8087_SED	EPA 8270C	PCB201	0.1 ng/dry g	UJ NQ
B13-8087_SED	EPA 8270C	PCB203	0.1 ng/dry g	UJ NQ
B13-8087_SED	EPA 8270C	PCB206	0.1 ng/dry g	UJ NQ
B13-8087_SED	EPA 8270C	PCB209	0.1 ng/dry g	UJ NQ
B13-8087_SED	EPA 8270C	Perthane	0.1 ng/dry g	UJ BC, NQ
B13-8087_SED	EPA 8270C	Perylene	1.3 ng/dry g	J DL, NQ
B13-8087_SED	EPA 8270C	Phenanthrene	3.8 ng/dry g	J DL, NQ, HD
B13-8087_SED	EPA 8270C	Pyrene	5.7 ng/dry g	J NQ, HD
B13-8087_SED	EPA 8270C	trans-Nonachlor	0.1 ng/dry g	UJ NQ
B13-8087_SED	EPA 8270C-NCI	Allethrin	0.5 ng/dry g	UJ LC
B13-8087_SED	EPA 8270C-NCI	Danitol (Fenpropathrin)	0.5 ng/dry g	UJ LL
B13-8087_SED	EPA 8270C-NCI	Deltamethrin/Tralomethrin	0.5 ng/dry g	UJ BC
B13-8087_SED	EPA 8270C-NCI	Fluvalinate	0.5 ng/dry g	UJ BC
B13-8087_SED	EPA 8270C-NCI	PBDE047	0.06 ng/dry g	J DL
B13-8087_SED	EPA 8270C-NCI	PBDE049	0.1 ng/dry g	UJ LC
B13-8087_SED	EPA 8270C-NCI	PBDE209	0.1 ng/dry g	UJ BC, LC
B13-8087_SED	EPA 8270C-NCI	Prallethrin	0.5 ng/dry g	UJ BC, LC
B13-8087_SED	EPA 8270C-NCI	Resmethrin	0.5 ng/dry g	R LV
B13-8087_SED	EPA 9060	Total Nitrogen	0.24 % Dry Weight	J NQ
B13-8087_SED	EPA 9060	Total Organic Carbon	0.57 % Dry Weight	J NQ
B13-8087_SED	Plumb, 1981 and Teryl	Acid Volatile Sulfides	2.13 mg/dry kg	J NQ
B13-8090_SED	EPA 245.7	Mercury	0.9626 µg/dry g	J LC
B13-8090_SED	EPA 6020	Aluminum	45466.9 µg/dry g	J HP
B13-8090_SED	EPA 6020	Antimony	0.853 µg/dry g	J HP

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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8090_SED	EPA 6020	Barium	125.596 µg/dry g	J CH
B13-8090_SED	EPA 6020	Beryllium	0.839 µg/dry g	J HP
B13-8090_SED	EPA 6020	Cadmium	0.5009 µg/dry g	J LP
B13-8090_SED	EPA 6020	Chromium	93.5734 µg/dry g	J HP
B13-8090_SED	EPA 6020	Total Phosphorus	928.395 µg/dry g	J NQ
B13-8090_SED	EPA 8270C	1-Methylnaphthalene	1.8 ng/dry g	J DL, NQ, HV, HD
B13-8090_SED	EPA 8270C	1-Methylphenanthrene	16.1 ng/dry g	J NQ
B13-8090_SED	EPA 8270C	2,3,5-Trimethylnaphthalene	4.2 ng/dry g	J DL, NQ
B13-8090_SED	EPA 8270C	2,4'-DDT	0.1 ng/dry g	UJ BC
B13-8090_SED	EPA 8270C	2,6-Dimethylnaphthalene	3.5 ng/dry g	J DL, NQ, HD
B13-8090_SED	EPA 8270C	2-Methylnaphthalene	3.1 ng/dry g	J DL, NQ, HD
B13-8090_SED	EPA 8270C	4,4'-DDT	0.1 ng/dry g	UJ BC
B13-8090_SED	EPA 8270C	Acenaphthene	5.6 ng/dry g	J NQ, HD
B13-8090_SED	EPA 8270C	Acenaphthylene	52.3 ng/dry g	J NQ, HD
B13-8090_SED	EPA 8270C	Anthracene	106.2 ng/dry g	J NQ, HD
B13-8090_SED	EPA 8270C	Aroclor 1016	340.3 ng/dry g	J NQ
B13-8090_SED	EPA 8270C	Aroclor 1221	2 ng/dry g	UJ NQ
B13-8090_SED	EPA 8270C	Aroclor 1232	2 ng/dry g	UJ NQ
B13-8090_SED	EPA 8270C	Aroclor 1242	2 ng/dry g	UJ NQ
B13-8090_SED	EPA 8270C	Aroclor 1248	2 ng/dry g	UJ NQ
B13-8090_SED	EPA 8270C	Aroclor 1254	2 ng/dry g	UJ NQ
B13-8090_SED	EPA 8270C	Aroclor 1260	812.9 ng/dry g	J NQ
B13-8090_SED	EPA 8270C	Aroclor 1262	2 ng/dry g	UJ NQ
B13-8090_SED	EPA 8270C	Aroclor 1268	2 ng/dry g	UJ NQ
B13-8090_SED	EPA 8270C	Benz[a]anthracene	190.4 ng/dry g	J NQ
B13-8090_SED	EPA 8270C	Benzo[a]pyrene	288 ng/dry g	J NQ
B13-8090_SED	EPA 8270C	Benzo[b]fluoranthene	264.7 ng/dry g	J NQ
B13-8090_SED	EPA 8270C	Benzo[e]pyrene	211.3 ng/dry g	J NQ
B13-8090_SED	EPA 8270C	Benzo[g,h,i]perylene	338.7 ng/dry g	J NQ
B13-8090_SED	EPA 8270C	Benzo[k]fluoranthene	160.4 ng/dry g	J NQ
B13-8090_SED	EPA 8270C	BHC-beta	0.1 ng/dry g	UJ BC
B13-8090_SED	EPA 8270C	Biphenyl	3.7 ng/dry g	J DL, NQ, HD
B13-8090_SED	EPA 8270C	Chrysene	332.5 ng/dry g	J NQ
B13-8090_SED	EPA 8270C	Dibenz[a,h]anthracene	90.5 ng/dry g	J NQ, HD
B13-8090_SED	EPA 8270C	Dibenzothiophene	6.4 ng/dry g	J NQ, HD
B13-8090_SED	EPA 8270C	Dicofol	0.1 ng/dry g	UJ BC, LV
B13-8090_SED	EPA 8270C	Endosulfan-I	0.1 ng/dry g	UJ LL
B13-8090_SED	EPA 8270C	Endosulfan-II	0.1 ng/dry g	UJ LL
B13-8090_SED	EPA 8270C	Endrin aldehyde	0.1 ng/dry g	UJ BC, LL
B13-8090_SED	EPA 8270C	Endrin ketone	0.1 ng/dry g	UJ BC
B13-8090_SED	EPA 8270C	Fluoranthene	238.7 ng/dry g	J NQ, HD
B13-8090_SED	EPA 8270C	Fluorene	12.5 ng/dry g	J NQ
B13-8090_SED	EPA 8270C	Heptachlor	0.1 ng/dry g	UJ BC
B13-8090_SED	EPA 8270C	Indeno[1,2,3-c,d]pyrene	337.1 ng/dry g	J NQ, HD
B13-8090_SED	EPA 8270C	Methoxychlor	0.1 ng/dry g	UJ BC
B13-8090_SED	EPA 8270C	Naphthalene	12 ng/dry g	J NQ, HD
B13-8090_SED	EPA 8270C	PCB119	0.1 ng/dry g	UJ LV
B13-8090_SED	EPA 8270C	Perthane	0.1 ng/dry g	UJ BC
B13-8090_SED	EPA 8270C	Perylene	55.5 ng/dry g	J NQ
B13-8090_SED	EPA 8270C	Phenanthrene	100.9 ng/dry g	J NQ, HD
B13-8090_SED	EPA 8270C	Pyrene	319.2 ng/dry g	J NQ, HD
B13-8090_SED	EPA 8270C-NCI	Allethrin	0.5 ng/dry g	UJ LC
B13-8090_SED	EPA 8270C-NCI	Danitol (Fenpropathrin)	0.5 ng/dry g	UJ LL
B13-8090_SED	EPA 8270C-NCI	Deltamethrin/Tralomethrin	0.5 ng/dry g	UJ BC

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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8090_SED	EPA 8270C-NCI	Fluvalinate	0.5 ng/dry g	UJ BC
B13-8090_SED	EPA 8270C-NCI	PBDE049	0.1 ng/dry g	UJ LC
B13-8090_SED	EPA 8270C-NCI	PBDE209	0.1 ng/dry g	UJ BC, LC
B13-8090_SED	EPA 8270C-NCI	Prallethrin	0.5 ng/dry g	UJ BC, LC
B13-8090_SED	EPA 8270C-NCI	Resmethrin	0.5 ng/dry g	R LV
B13-8090_SED	EPA 9060	Total Nitrogen	0.78 % Dry Weight	J NQ
B13-8090_SED	EPA 9060	Total Organic Carbon	2.43 % Dry Weight	J NQ
B13-8090_SED	Plumb, 1981 and Teryl	Acid Volatile Sulfides	107.51 mg/dry kg	J NQ
B13-8093_SED	EPA 245.7	Mercury	0.1763 µg/dry g	J LC, LP
B13-8093_SED	EPA 6020	Aluminum	13609.4 µg/dry g	J HP
B13-8093_SED	EPA 6020	Arsenic	6.725 µg/dry g	J HP
B13-8093_SED	EPA 6020	Beryllium	0.259 µg/dry g	J HP
B13-8093_SED	EPA 6020	Cadmium	0.0676 µg/dry g	J LP
B13-8093_SED	EPA 6020	Chromium	26.7602 µg/dry g	J HP
B13-8093_SED	EPA 6020	Iron (Fe)	15443.3 µg/dry g	J HP
B13-8093_SED	EPA 6020	Nickel	6.11 µg/dry g	J HP
B13-8093_SED	EPA 6020	Total Phosphorus	298.87 µg/dry g	J NQ
B13-8093_SED	EPA 8270C	1-Methylnaphthalene	5 ng/dry g	UJ NQ
B13-8093_SED	EPA 8270C	1-Methylphenanthrene	1.6 ng/dry g	J DL, NQ
B13-8093_SED	EPA 8270C	2,3,5-Trimethylnaphthalene	1.1 ng/dry g	J DL, NQ
B13-8093_SED	EPA 8270C	2,4'-DDD	0.1 ng/dry g	UJ NQ
B13-8093_SED	EPA 8270C	2,4'-DDE	0.1 ng/dry g	UJ NQ
B13-8093_SED	EPA 8270C	2,4'-DDT	0.1 ng/dry g	UJ NQ, BC
B13-8093_SED	EPA 8270C	2,6-Dimethylnaphthalene	5 ng/dry g	UJ NQ
B13-8093_SED	EPA 8270C	2-Methylnaphthalene	5 ng/dry g	UJ NQ
B13-8093_SED	EPA 8270C	4,4'-DDD	0.1 ng/dry g	UJ NQ
B13-8093_SED	EPA 8270C	4,4'-DDE	0.1 ng/dry g	UJ NQ
B13-8093_SED	EPA 8270C	4,4'-DDMU	0.1 ng/dry g	UJ NQ
B13-8093_SED	EPA 8270C	4,4'-DDT	0.1 ng/dry g	UJ NQ, BC
B13-8093_SED	EPA 8270C	Acenaphthene	5 ng/dry g	UJ NQ
B13-8093_SED	EPA 8270C	Acenaphthylene	1.5 ng/dry g	J DL, NQ
B13-8093_SED	EPA 8270C	Aldrin	0.1 ng/dry g	UJ NQ
B13-8093_SED	EPA 8270C	Anthracene	2.7 ng/dry g	J DL, NQ
B13-8093_SED	EPA 8270C	Aroclor 1016	2 ng/dry g	UJ NQ
B13-8093_SED	EPA 8270C	Aroclor 1221	2 ng/dry g	UJ NQ
B13-8093_SED	EPA 8270C	Aroclor 1232	2 ng/dry g	UJ NQ
B13-8093_SED	EPA 8270C	Aroclor 1242	2 ng/dry g	UJ NQ
B13-8093_SED	EPA 8270C	Aroclor 1248	2 ng/dry g	UJ NQ
B13-8093_SED	EPA 8270C	Aroclor 1254	2 ng/dry g	UJ NQ
B13-8093_SED	EPA 8270C	Aroclor 1260	5.9 ng/dry g	J NQ
B13-8093_SED	EPA 8270C	Aroclor 1262	2 ng/dry g	UJ NQ
B13-8093_SED	EPA 8270C	Aroclor 1268	2 ng/dry g	UJ NQ
B13-8093_SED	EPA 8270C	Benz[a]anthracene	11.5 ng/dry g	J NQ
B13-8093_SED	EPA 8270C	Benzo[a]pyrene	18.8 ng/dry g	J NQ, LP
B13-8093_SED	EPA 8270C	Benzo[b]fluoranthene	15.7 ng/dry g	J NQ
B13-8093_SED	EPA 8270C	Benzo[e]pyrene	14 ng/dry g	J NQ
B13-8093_SED	EPA 8270C	Benzo[g,h,i]perylene	14.4 ng/dry g	J NQ
B13-8093_SED	EPA 8270C	Benzo[k]fluoranthene	8.3 ng/dry g	J NQ
B13-8093_SED	EPA 8270C	BHC-alpha	0.1 ng/dry g	UJ NQ
B13-8093_SED	EPA 8270C	BHC-beta	0.1 ng/dry g	UJ NQ, BC
B13-8093_SED	EPA 8270C	BHC-delta	0.1 ng/dry g	UJ NQ
B13-8093_SED	EPA 8270C	BHC-gamma	0.1 ng/dry g	UJ NQ
B13-8093_SED	EPA 8270C	Biphenyl	5 ng/dry g	UJ NQ
B13-8093_SED	EPA 8270C	Chlordane-alpha	0.1 ng/dry g	UJ NQ

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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8093_SED	EPA 8270C	Chlordane-gamma	0.1 ng/dry g	UJ NQ
B13-8093_SED	EPA 8270C	Chrysene	16 ng/dry g	J NQ
B13-8093_SED	EPA 8270C	cis-Nonachlor	0.1 ng/dry g	UJ NQ
B13-8093_SED	EPA 8270C	DCPA (Dacthal)	0.1 ng/dry g	UJ NQ
B13-8093_SED	EPA 8270C	Dibenz[a,h]anthracene	2.5 ng/dry g	J DL, NQ, LC, HP
B13-8093_SED	EPA 8270C	Dibenzothiophene	1.1 ng/dry g	J DL, NQ
B13-8093_SED	EPA 8270C	Dicofol	0.1 ng/dry g	UJ NQ, BC
B13-8093_SED	EPA 8270C	Dieldrin	0.1 ng/dry g	UJ NQ
B13-8093_SED	EPA 8270C	Endosulfan sulfate	0.1 ng/dry g	UJ NQ
B13-8093_SED	EPA 8270C	Endosulfan-I	0.1 ng/dry g	UJ NQ, LL
B13-8093_SED	EPA 8270C	Endosulfan-II	0.1 ng/dry g	UJ NQ, LL
B13-8093_SED	EPA 8270C	Endrin	0.1 ng/dry g	UJ NQ
B13-8093_SED	EPA 8270C	Endrin aldehyde	0.1 ng/dry g	R LL
B13-8093_SED	EPA 8270C	Endrin ketone	0.1 ng/dry g	UJ NQ, BC
B13-8093_SED	EPA 8270C	Fluoranthene	17.9 ng/dry g	J NQ
B13-8093_SED	EPA 8270C	Fluorene	1.2 ng/dry g	J DL, NQ
B13-8093_SED	EPA 8270C	Heptachlor	0.1 ng/dry g	UJ NQ, BC
B13-8093_SED	EPA 8270C	Heptachlor epoxide	0.1 ng/dry g	UJ NQ
B13-8093_SED	EPA 8270C	Hexachlorobenzene	0.1 ng/dry g	UJ NQ
B13-8093_SED	EPA 8270C	Indeno[1,2,3-c,d]pyrene	12.2 ng/dry g	J NQ
B13-8093_SED	EPA 8270C	Methoxychlor	0.1 ng/dry g	UJ NQ, BC
B13-8093_SED	EPA 8270C	Mirex	0.1 ng/dry g	UJ NQ
B13-8093_SED	EPA 8270C	Naphthalene	1.6 ng/dry g	J DL, NQ
B13-8093_SED	EPA 8270C	Oxychlordane	0.1 ng/dry g	UJ NQ
B13-8093_SED	EPA 8270C	PCB018	0.1 ng/dry g	UJ LV, LC
B13-8093_SED	EPA 8270C	PCB044	0.1 ng/dry g	UJ LV, LC
B13-8093_SED	EPA 8270C	PCB049	0.1 ng/dry g	UJ LV, LC
B13-8093_SED	EPA 8270C	PCB052	0.1 ng/dry g	UJ LV, LC
B13-8093_SED	EPA 8270C	PCB087	0.32 ng/dry g	J LC
B13-8093_SED	EPA 8270C	PCB099	0.25 ng/dry g	J LC
B13-8093_SED	EPA 8270C	PCB101	0.79 ng/dry g	J LC
B13-8093_SED	EPA 8270C	PCB110	0.61 ng/dry g	J LC
B13-8093_SED	EPA 8270C	PCB119	0.1 ng/dry g	UJ LC
B13-8093_SED	EPA 8270C	PCB149	1.01 ng/dry g	J LC
B13-8093_SED	EPA 8270C	PCB151	0.28 ng/dry g	J LC
B13-8093_SED	EPA 8270C	PCB158	0.19 ng/dry g	J LC
B13-8093_SED	EPA 8270C	PCB177	0.13 ng/dry g	J LC
B13-8093_SED	EPA 8270C	PCB183	0.16 ng/dry g	J LC
B13-8093_SED	EPA 8270C	PCB187	0.31 ng/dry g	J BC, LV, LC
B13-8093_SED	EPA 8270C	PCB199(200)	0.2 ng/dry g	UJ LV, LC
B13-8093_SED	EPA 8270C	PCB206	0.1 ng/dry g	UJ BC, LC
B13-8093_SED	EPA 8270C	PCB209	0.1 ng/dry g	UJ LC
B13-8093_SED	EPA 8270C	Perthane	0.1 ng/dry g	UJ NQ, BC
B13-8093_SED	EPA 8270C	Perylene	4.1 ng/dry g	J DL, NQ, LP
B13-8093_SED	EPA 8270C	Phenanthrene	9.3 ng/dry g	J NQ
B13-8093_SED	EPA 8270C	Pyrene	20 ng/dry g	J NQ
B13-8093_SED	EPA 8270C	trans-Nonachlor	0.1 ng/dry g	UJ NQ
B13-8093_SED	EPA 8270C-NCI	Allethrin	0.5 ng/dry g	UJ NQ, BC
B13-8093_SED	EPA 8270C-NCI	Bifenthrin	0.5 ng/dry g	UJ NQ
B13-8093_SED	EPA 8270C-NCI	Cyfluthrin, total	0.5 ng/dry g	UJ NQ, BC
B13-8093_SED	EPA 8270C-NCI	Cypermethrin, total	0.5 ng/dry g	UJ NQ, BC
B13-8093_SED	EPA 8270C-NCI	Danitol (Fenpropathrin)	0.5 ng/dry g	UJ NQ
B13-8093_SED	EPA 8270C-NCI	Deltamethrin/Tralomethrin	0.5 ng/dry g	R BC
B13-8093_SED	EPA 8270C-NCI	Esfenvalerate	0.5 ng/dry g	UJ NQ, BC



**TABLE 2**  
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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8093_SED	EPA 8270C-NCI	Fenvalerate	0.5 ng/dry g	UJ NQ, BC
B13-8093_SED	EPA 8270C-NCI	Fipronil	0.5 ng/dry g	UJ NQ
B13-8093_SED	EPA 8270C-NCI	Fipronil Desulfinyl	0.5 ng/dry g	UJ NQ
B13-8093_SED	EPA 8270C-NCI	Fipronil Sulfide	0.5 ng/dry g	UJ NQ
B13-8093_SED	EPA 8270C-NCI	Fipronil Sulfone	0.5 ng/dry g	UJ NQ
B13-8093_SED	EPA 8270C-NCI	Fluvalinate	0.5 ng/dry g	UJ NQ, BC
B13-8093_SED	EPA 8270C-NCI	I-Cyhalothrin	0.5 ng/dry g	UJ NQ
B13-8093_SED	EPA 8270C-NCI	PBDE085	0.1 ng/dry g	UJ LC
B13-8093_SED	EPA 8270C-NCI	PBDE138	0.1 ng/dry g	UJ LC
B13-8093_SED	EPA 8270C-NCI	PBDE153	0.1 ng/dry g	UJ LC
B13-8093_SED	EPA 8270C-NCI	PBDE183	0.1 ng/dry g	UJ LC
B13-8093_SED	EPA 8270C-NCI	PBDE209	0.1 ng/dry g	UJ LC
B13-8093_SED	EPA 8270C-NCI	Permethrin, cis-	0.5 ng/dry g	R BC
B13-8093_SED	EPA 8270C-NCI	Permethrin, trans-	0.5 ng/dry g	R BC
B13-8093_SED	EPA 8270C-NCI	Prallethrin	0.5 ng/dry g	UJ NQ
B13-8093_SED	EPA 8270C-NCI	Resmethrin	0.5 ng/dry g	UJ NQ, BC
B13-8093_SED	EPA 9060	Total Nitrogen	0.26 % Dry Weight	J NQ
B13-8093_SED	EPA 9060	Total Organic Carbon	1.5 % Dry Weight	J NQ
B13-8093_SED	Plumb, 1981 and Teryl	Acid Volatile Sulfides	3.89 mg/dry kg	J NQ
B13-8095_SED	EPA 245.7	Mercury	0.668 µg/dry g	J LC, LP
B13-8095_SED	EPA 6020	Aluminum	42219.9 µg/dry g	J HP
B13-8095_SED	EPA 6020	Arsenic	13.021 µg/dry g	J HP
B13-8095_SED	EPA 6020	Beryllium	0.769 µg/dry g	J HP
B13-8095_SED	EPA 6020	Cadmium	0.2723 µg/dry g	J LP
B13-8095_SED	EPA 6020	Chromium	79.8841 µg/dry g	J HP
B13-8095_SED	EPA 6020	Iron (Fe)	40459.5 µg/dry g	J HP
B13-8095_SED	EPA 6020	Nickel	20.76 µg/dry g	J HP
B13-8095_SED	EPA 6020	Total Phosphorus	783.583 µg/dry g	J NQ
B13-8095_SED	EPA 8270C	1-Methylnaphthalene	5 ng/dry g	UJ NQ
B13-8095_SED	EPA 8270C	1-Methylphenanthrene	3.4 ng/dry g	J DL, NQ
B13-8095_SED	EPA 8270C	2,3,5-Trimethylnaphthalene	1.3 ng/dry g	J DL, NQ
B13-8095_SED	EPA 8270C	2,4'-DDT	0.1 ng/dry g	UJ BC
B13-8095_SED	EPA 8270C	2,6-Dimethylnaphthalene	5 ng/dry g	UJ NQ
B13-8095_SED	EPA 8270C	2-Methylnaphthalene	1.5 ng/dry g	J DL, NQ, HD
B13-8095_SED	EPA 8270C	4,4'-DDT	0.1 ng/dry g	UJ BC
B13-8095_SED	EPA 8270C	Acenaphthene	1.2 ng/dry g	J DL, NQ, HD
B13-8095_SED	EPA 8270C	Acenaphthylene	15.2 ng/dry g	J NQ, HD
B13-8095_SED	EPA 8270C	Anthracene	26.1 ng/dry g	J NQ, HD
B13-8095_SED	EPA 8270C	Aroclor 1016	2 ng/dry g	UJ NQ
B13-8095_SED	EPA 8270C	Aroclor 1221	2 ng/dry g	UJ NQ
B13-8095_SED	EPA 8270C	Aroclor 1232	2 ng/dry g	UJ NQ
B13-8095_SED	EPA 8270C	Aroclor 1242	2 ng/dry g	UJ NQ
B13-8095_SED	EPA 8270C	Aroclor 1248	2 ng/dry g	UJ NQ
B13-8095_SED	EPA 8270C	Aroclor 1254	2 ng/dry g	UJ NQ
B13-8095_SED	EPA 8270C	Aroclor 1260	13.1 ng/dry g	J NQ
B13-8095_SED	EPA 8270C	Aroclor 1262	2 ng/dry g	UJ NQ
B13-8095_SED	EPA 8270C	Aroclor 1268	2 ng/dry g	UJ NQ
B13-8095_SED	EPA 8270C	Benzo[a]anthracene	48.9 ng/dry g	J NQ
B13-8095_SED	EPA 8270C	Benzo[a]pyrene	84.5 ng/dry g	J NQ
B13-8095_SED	EPA 8270C	Benzo[b]fluoranthene	76.7 ng/dry g	J NQ
B13-8095_SED	EPA 8270C	Benzo[e]pyrene	62.9 ng/dry g	J NQ
B13-8095_SED	EPA 8270C	Benzo[g,h,i]perylene	95.9 ng/dry g	J NQ
B13-8095_SED	EPA 8270C	Benzo[k]fluoranthene	48.4 ng/dry g	J NQ
B13-8095_SED	EPA 8270C	BHC-beta	0.1 ng/dry g	UJ BC

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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8095_SED	EPA 8270C	Biphenyl	1.6 ng/dry g	J DL, NQ, HD
B13-8095_SED	EPA 8270C	Chrysene	88 ng/dry g	J NQ
B13-8095_SED	EPA 8270C	Dibenz[a,h]anthracene	19.7 ng/dry g	J NQ, HD
B13-8095_SED	EPA 8270C	Dibenzothiophene	2.8 ng/dry g	J DL, NQ, HD
B13-8095_SED	EPA 8270C	Dicofol	0.1 ng/dry g	UJ BC, LV
B13-8095_SED	EPA 8270C	Endosulfan-I	0.1 ng/dry g	UJ LL
B13-8095_SED	EPA 8270C	Endosulfan-II	0.1 ng/dry g	UJ LL
B13-8095_SED	EPA 8270C	Endrin aldehyde	0.1 ng/dry g	UJ BC, LL
B13-8095_SED	EPA 8270C	Endrin ketone	0.1 ng/dry g	UJ BC
B13-8095_SED	EPA 8270C	Fluoranthene	63.3 ng/dry g	J NQ, HD
B13-8095_SED	EPA 8270C	Fluorene	3 ng/dry g	J DL, NQ
B13-8095_SED	EPA 8270C	Heptachlor	0.1 ng/dry g	UJ BC
B13-8095_SED	EPA 8270C	Indeno[1,2,3-c,d]pyrene	87.3 ng/dry g	J NQ, HD
B13-8095_SED	EPA 8270C	Methoxychlor	0.1 ng/dry g	UJ BC
B13-8095_SED	EPA 8270C	Naphthalene	4.7 ng/dry g	J DL, NQ, HD
B13-8095_SED	EPA 8270C	PCB119	0.1 ng/dry g	UJ LV
B13-8095_SED	EPA 8270C	Perthane	0.1 ng/dry g	UJ BC
B13-8095_SED	EPA 8270C	Perylene	18.9 ng/dry g	J NQ
B13-8095_SED	EPA 8270C	Phenanthrene	28.8 ng/dry g	J NQ, HD
B13-8095_SED	EPA 8270C	Pyrene	83.5 ng/dry g	J NQ, HD
B13-8095_SED	EPA 8270C-NCI	Allethrin	0.5 ng/dry g	UJ LC
B13-8095_SED	EPA 8270C-NCI	Danitol (Fenpropathrin)	0.5 ng/dry g	UJ LL
B13-8095_SED	EPA 8270C-NCI	Deltamethrin/Tralomethrin	0.5 ng/dry g	UJ BC
B13-8095_SED	EPA 8270C-NCI	Fluvalinate	0.5 ng/dry g	UJ BC
B13-8095_SED	EPA 8270C-NCI	PBDE049	0.1 ng/dry g	UJ LC
B13-8095_SED	EPA 8270C-NCI	PBDE209	0.1 ng/dry g	UJ BC, LC
B13-8095_SED	EPA 8270C-NCI	Prallethrin	0.5 ng/dry g	UJ BC, LC
B13-8095_SED	EPA 8270C-NCI	Resmethrin	0.5 ng/dry g	R LV
B13-8095_SED	EPA 9060	Total Nitrogen	0.66 % Dry Weight	J NQ
B13-8095_SED	EPA 9060	Total Organic Carbon	1.78 % Dry Weight	J NQ
B13-8095_SED	Plumb, 1981 and Teryl	Acid Volatile Sulfides	39.02 mg/dry kg	J NQ
B13-8096_SED	EPA 245.7	Mercury	0.1652 µg/dry g	J LC, LP
B13-8096_SED	EPA 6020	Aluminum	13359.9 µg/dry g	J HP
B13-8096_SED	EPA 6020	Arsenic	4.41 µg/dry g	J HP
B13-8096_SED	EPA 6020	Beryllium	0.239 µg/dry g	J HP
B13-8096_SED	EPA 6020	Cadmium	0.0664 µg/dry g	J LP
B13-8096_SED	EPA 6020	Chromium	22.8916 µg/dry g	J HP
B13-8096_SED	EPA 6020	Iron (Fe)	14013.6 µg/dry g	J HP
B13-8096_SED	EPA 6020	Nickel	6.06 µg/dry g	J HP
B13-8096_SED	EPA 6020	Total Phosphorus	267.578 µg/dry g	J NQ
B13-8096_SED	EPA 8270C	1-Methylnaphthalene	5 ng/dry g	UJ NQ
B13-8096_SED	EPA 8270C	1-Methylphenanthrene	5 ng/dry g	J NQ
B13-8096_SED	EPA 8270C	2,3,5-Trimethylnaphthalene	1.5 ng/dry g	J DL, NQ
B13-8096_SED	EPA 8270C	2,4'-DDT	0.1 ng/dry g	UJ BC
B13-8096_SED	EPA 8270C	2,6-Dimethylnaphthalene	5 ng/dry g	UJ NQ
B13-8096_SED	EPA 8270C	2-Methylnaphthalene	1.3 ng/dry g	J DL, NQ, HD
B13-8096_SED	EPA 8270C	4,4'-DDT	0.1 ng/dry g	UJ BC
B13-8096_SED	EPA 8270C	Acenaphthene	5 ng/dry g	UJ NQ
B13-8096_SED	EPA 8270C	Acenaphthylene	7.3 ng/dry g	J NQ, HD
B13-8096_SED	EPA 8270C	Anthracene	5.9 ng/dry g	J NQ, HD
B13-8096_SED	EPA 8270C	Aroclor 1016	2 ng/dry g	UJ NQ
B13-8096_SED	EPA 8270C	Aroclor 1221	2 ng/dry g	UJ NQ
B13-8096_SED	EPA 8270C	Aroclor 1232	2 ng/dry g	UJ NQ
B13-8096_SED	EPA 8270C	Aroclor 1242	2 ng/dry g	UJ NQ

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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8096_SED	EPA 8270C	Aroclor 1248	2 ng/dry g	UJ NQ
B13-8096_SED	EPA 8270C	Aroclor 1254	2 ng/dry g	UJ NQ
B13-8096_SED	EPA 8270C	Aroclor 1260	2 ng/dry g	UJ NQ
B13-8096_SED	EPA 8270C	Aroclor 1262	2 ng/dry g	UJ NQ
B13-8096_SED	EPA 8270C	Aroclor 1268	2 ng/dry g	UJ NQ
B13-8096_SED	EPA 8270C	Benz[a]anthracene	28.1 ng/dry g	J NQ
B13-8096_SED	EPA 8270C	Benzo[a]pyrene	42.6 ng/dry g	J NQ
B13-8096_SED	EPA 8270C	Benzo[b]fluoranthene	21.1 ng/dry g	J NQ
B13-8096_SED	EPA 8270C	Benzo[e]pyrene	26.4 ng/dry g	J NQ
B13-8096_SED	EPA 8270C	Benzo[g,h,i]perylene	42 ng/dry g	J NQ
B13-8096_SED	EPA 8270C	Benzo[k]fluoranthene	13.5 ng/dry g	J NQ
B13-8096_SED	EPA 8270C	BHC-beta	0.1 ng/dry g	UJ BC
B13-8096_SED	EPA 8270C	Biphenyl	1.4 ng/dry g	J DL, NQ, HD
B13-8096_SED	EPA 8270C	Chrysene	33.8 ng/dry g	J NQ
B13-8096_SED	EPA 8270C	Dibenz[a,h]anthracene	8 ng/dry g	J NQ, HD
B13-8096_SED	EPA 8270C	Dibenzothiophene	1.5 ng/dry g	J DL, NQ, HD
B13-8096_SED	EPA 8270C	Dicofol	0.1 ng/dry g	UJ BC, LV
B13-8096_SED	EPA 8270C	Endosulfan-I	0.1 ng/dry g	UJ LL
B13-8096_SED	EPA 8270C	Endosulfan-II	0.1 ng/dry g	UJ LL
B13-8096_SED	EPA 8270C	Endrin aldehyde	0.1 ng/dry g	UJ BC, LL
B13-8096_SED	EPA 8270C	Endrin ketone	0.1 ng/dry g	UJ BC
B13-8096_SED	EPA 8270C	Fluoranthene	39.5 ng/dry g	J NQ, HD
B13-8096_SED	EPA 8270C	Fluorene	5 ng/dry g	UJ NQ
B13-8096_SED	EPA 8270C	Heptachlor	0.1 ng/dry g	UJ BC
B13-8096_SED	EPA 8270C	Indeno[1,2,3-c,d]pyrene	34.9 ng/dry g	J NQ, HD
B13-8096_SED	EPA 8270C	Methoxychlor	0.1 ng/dry g	UJ BC
B13-8096_SED	EPA 8270C	Naphthalene	4.4 ng/dry g	J DL, NQ, HD
B13-8096_SED	EPA 8270C	PCB119	0.1 ng/dry g	UJ LV
B13-8096_SED	EPA 8270C	Perthane	0.1 ng/dry g	UJ BC
B13-8096_SED	EPA 8270C	Perylene	7.3 ng/dry g	J NQ
B13-8096_SED	EPA 8270C	Phenanthrene	16 ng/dry g	J NQ, HD
B13-8096_SED	EPA 8270C	Pyrene	96.4 ng/dry g	J NQ, HD
B13-8096_SED	EPA 8270C-NCI	Allethrin	0.5 ng/dry g	UJ LC
B13-8096_SED	EPA 8270C-NCI	Danitol (Fenpropathrin)	0.5 ng/dry g	UJ LL
B13-8096_SED	EPA 8270C-NCI	Deltamethrin/Tralomethrin	0.5 ng/dry g	UJ BC
B13-8096_SED	EPA 8270C-NCI	Fluvalinate	0.5 ng/dry g	UJ BC
B13-8096_SED	EPA 8270C-NCI	PBDE047	0.08 ng/dry g	J DL
B13-8096_SED	EPA 8270C-NCI	PBDE049	0.1 ng/dry g	UJ LC
B13-8096_SED	EPA 8270C-NCI	PBDE209	0.1 ng/dry g	UJ BC, LC
B13-8096_SED	EPA 8270C-NCI	Prallethrin	0.5 ng/dry g	UJ BC, LC
B13-8096_SED	EPA 8270C-NCI	Resmethrin	0.5 ng/dry g	R LV
B13-8096_SED	EPA 9060	Total Nitrogen	0.23 % Dry Weight	J NQ
B13-8096_SED	EPA 9060	Total Organic Carbon	0.38 % Dry Weight	J NQ
B13-8096_SED	Plumb, 1981 and Teryl	Acid Volatile Sulfides	3.83 mg/dry kg	J NQ
B13-8098_SED	EPA 200.8	Nickel	0.0056 µmol/dry g	J DL
B13-8098_SED	EPA 245.7	Mercury	0.1276 µg/dry g	J LC, LP
B13-8098_SED	EPA 6020	Aluminum	11423.9 µg/dry g	J HP
B13-8098_SED	EPA 6020	Arsenic	3.973 µg/dry g	J HP
B13-8098_SED	EPA 6020	Beryllium	0.196 µg/dry g	J HP
B13-8098_SED	EPA 6020	Cadmium	0.0503 µg/dry g	J LP
B13-8098_SED	EPA 6020	Chromium	19.5479 µg/dry g	J HP
B13-8098_SED	EPA 6020	Iron (Fe)	12119.4 µg/dry g	J HP
B13-8098_SED	EPA 6020	Nickel	4.93 µg/dry g	J HP
B13-8098_SED	EPA 6020	Total Phosphorus	228.047 µg/dry g	J NQ

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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8098_SED	EPA 8270C	1-Methylnaphthalene	1.4 ng/dry g	J DL, NQ, HV, HD
B13-8098_SED	EPA 8270C	1-Methylphenanthrene	7.5 ng/dry g	J NQ
B13-8098_SED	EPA 8270C	2,3,5-Trimethylnaphthalene	1.5 ng/dry g	J DL, NQ
B13-8098_SED	EPA 8270C	2,4'-DDT	0.1 ng/dry g	UJ BC
B13-8098_SED	EPA 8270C	2,6-Dimethylnaphthalene	1.1 ng/dry g	J DL, NQ, HD
B13-8098_SED	EPA 8270C	2-Methylnaphthalene	3.9 ng/dry g	J DL, NQ, HD
B13-8098_SED	EPA 8270C	4,4'-DDT	0.1 ng/dry g	UJ BC
B13-8098_SED	EPA 8270C	Acenaphthene	5 ng/dry g	UJ NQ
B13-8098_SED	EPA 8270C	Acenaphthylene	12.4 ng/dry g	J NQ, HD
B13-8098_SED	EPA 8270C	Anthracene	8.2 ng/dry g	J NQ, HD
B13-8098_SED	EPA 8270C	Aroclor 1016	2 ng/dry g	UJ NQ
B13-8098_SED	EPA 8270C	Aroclor 1221	2 ng/dry g	UJ NQ
B13-8098_SED	EPA 8270C	Aroclor 1232	2 ng/dry g	UJ NQ
B13-8098_SED	EPA 8270C	Aroclor 1242	2 ng/dry g	UJ NQ
B13-8098_SED	EPA 8270C	Aroclor 1248	2 ng/dry g	UJ NQ
B13-8098_SED	EPA 8270C	Aroclor 1254	2 ng/dry g	UJ NQ
B13-8098_SED	EPA 8270C	Aroclor 1260	2.1 ng/dry g	J NQ
B13-8098_SED	EPA 8270C	Aroclor 1262	2 ng/dry g	UJ NQ
B13-8098_SED	EPA 8270C	Aroclor 1268	2 ng/dry g	UJ NQ
B13-8098_SED	EPA 8270C	Benz[a]anthracene	48.7 ng/dry g	J NQ
B13-8098_SED	EPA 8270C	Benzo[a]pyrene	82.1 ng/dry g	J NQ
B13-8098_SED	EPA 8270C	Benzo[b]fluoranthene	41.5 ng/dry g	J NQ
B13-8098_SED	EPA 8270C	Benzo[e]pyrene	51.2 ng/dry g	J NQ
B13-8098_SED	EPA 8270C	Benzo[g,h,i]perylene	77 ng/dry g	J NQ
B13-8098_SED	EPA 8270C	Benzo[k]fluoranthene	24.6 ng/dry g	J NQ
B13-8098_SED	EPA 8270C	BHC-beta	0.1 ng/dry g	UJ BC
B13-8098_SED	EPA 8270C	Biphenyl	2 ng/dry g	J DL, NQ, HD
B13-8098_SED	EPA 8270C	Chrysene	54.8 ng/dry g	J NQ
B13-8098_SED	EPA 8270C	Dibenz[a,h]anthracene	14 ng/dry g	J NQ, HD
B13-8098_SED	EPA 8270C	Dibenzothiophene	1.5 ng/dry g	J DL, NQ, HD
B13-8098_SED	EPA 8270C	Dicofol	0.1 ng/dry g	UJ BC, LV
B13-8098_SED	EPA 8270C	Endosulfan-I	0.1 ng/dry g	UJ LL
B13-8098_SED	EPA 8270C	Endosulfan-II	0.1 ng/dry g	UJ LL
B13-8098_SED	EPA 8270C	Endrin aldehyde	0.1 ng/dry g	UJ BC, LL
B13-8098_SED	EPA 8270C	Endrin ketone	0.1 ng/dry g	UJ BC
B13-8098_SED	EPA 8270C	Fluoranthene	82.1 ng/dry g	J NQ, HD
B13-8098_SED	EPA 8270C	Fluorene	1.1 ng/dry g	J DL, NQ
B13-8098_SED	EPA 8270C	Heptachlor	0.1 ng/dry g	UJ BC
B13-8098_SED	EPA 8270C	Indeno[1,2,3-c,d]pyrene	63.4 ng/dry g	J NQ, HD
B13-8098_SED	EPA 8270C	Methoxychlor	0.1 ng/dry g	UJ BC
B13-8098_SED	EPA 8270C	Naphthalene	8.6 ng/dry g	J NQ, HD
B13-8098_SED	EPA 8270C	PCB119	0.1 ng/dry g	UJ LV
B13-8098_SED	EPA 8270C	Perthane	0.1 ng/dry g	UJ BC
B13-8098_SED	EPA 8270C	Perylene	14.1 ng/dry g	J NQ
B13-8098_SED	EPA 8270C	Phenanthrene	16.8 ng/dry g	J NQ, HD
B13-8098_SED	EPA 8270C	Pyrene	189 ng/dry g	J NQ, HD
B13-8098_SED	EPA 8270C-NCI	Allethrin	0.5 ng/dry g	UJ LC
B13-8098_SED	EPA 8270C-NCI	Danitol (Fenpropathrin)	0.5 ng/dry g	UJ LL
B13-8098_SED	EPA 8270C-NCI	Deltamethrin/Tralomethrin	0.5 ng/dry g	UJ BC
B13-8098_SED	EPA 8270C-NCI	Fluvalinate	0.5 ng/dry g	UJ BC
B13-8098_SED	EPA 8270C-NCI	PBDE049	0.1 ng/dry g	UJ LC
B13-8098_SED	EPA 8270C-NCI	PBDE153	0.05 ng/dry g	J DL
B13-8098_SED	EPA 8270C-NCI	PBDE209	0.1 ng/dry g	UJ BC, LC
B13-8098_SED	EPA 8270C-NCI	Prallethrin	0.5 ng/dry g	UJ BC, LC

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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8098_SED	EPA 8270C-NCI	Resmethrin	0.5 ng/dry g	R LV
B13-8098_SED	EPA 9060	Total Nitrogen	0.2 % Dry Weight	J NQ
B13-8098_SED	EPA 9060	Total Organic Carbon	0.84 % Dry Weight	J NQ
B13-8098_SED	Plumb, 1981 and Teryl	Acid Volatile Sulfides	3.31 mg/dry kg	J NQ
B13-8099_SED	EPA 245.7	Mercury	0.4133 µg/dry g	J LC, LP
B13-8099_SED	EPA 6020	Aluminum	28817.8 µg/dry g	J HP
B13-8099_SED	EPA 6020	Arsenic	8.132 µg/dry g	J HP
B13-8099_SED	EPA 6020	Beryllium	0.486 µg/dry g	J HP
B13-8099_SED	EPA 6020	Cadmium	0.1719 µg/dry g	J LP
B13-8099_SED	EPA 6020	Chromium	49.1853 µg/dry g	J HP
B13-8099_SED	EPA 6020	Iron (Fe)	29194.8 µg/dry g	J HP
B13-8099_SED	EPA 6020	Nickel	13.26 µg/dry g	J HP
B13-8099_SED	EPA 6020	Total Phosphorus	529.122 µg/dry g	J NQ
B13-8099_SED	EPA 8270C	1-Methylnaphthalene	1.7 ng/dry g	J DL, NQ, HV, HD
B13-8099_SED	EPA 8270C	1-Methylphenanthrene	8.3 ng/dry g	J NQ
B13-8099_SED	EPA 8270C	2,3,5-Trimethylnaphthalene	2.3 ng/dry g	J DL, NQ
B13-8099_SED	EPA 8270C	2,4'-DDT	0.1 ng/dry g	UJ BC
B13-8099_SED	EPA 8270C	2,6-Dimethylnaphthalene	1.8 ng/dry g	J DL, NQ, HD
B13-8099_SED	EPA 8270C	2-Methylnaphthalene	4.3 ng/dry g	J DL, NQ, HD
B13-8099_SED	EPA 8270C	4,4'-DDT	0.1 ng/dry g	UJ BC
B13-8099_SED	EPA 8270C	Acenaphthene	3.3 ng/dry g	J DL, NQ, HD
B13-8099_SED	EPA 8270C	Acenaphthylene	21.4 ng/dry g	J NQ, HD
B13-8099_SED	EPA 8270C	Anthracene	22.8 ng/dry g	J NQ, HD
B13-8099_SED	EPA 8270C	Aroclor 1016	2 ng/dry g	UJ NQ
B13-8099_SED	EPA 8270C	Aroclor 1221	2 ng/dry g	UJ NQ
B13-8099_SED	EPA 8270C	Aroclor 1232	2 ng/dry g	UJ NQ
B13-8099_SED	EPA 8270C	Aroclor 1242	2 ng/dry g	UJ NQ
B13-8099_SED	EPA 8270C	Aroclor 1248	2 ng/dry g	UJ NQ
B13-8099_SED	EPA 8270C	Aroclor 1254	2 ng/dry g	UJ NQ
B13-8099_SED	EPA 8270C	Aroclor 1260	15.6 ng/dry g	J NQ
B13-8099_SED	EPA 8270C	Aroclor 1262	2 ng/dry g	UJ NQ
B13-8099_SED	EPA 8270C	Aroclor 1268	2 ng/dry g	UJ NQ
B13-8099_SED	EPA 8270C	Benz[a]anthracene	86.8 ng/dry g	J NQ
B13-8099_SED	EPA 8270C	Benzo[a]pyrene	165.6 ng/dry g	J NQ
B13-8099_SED	EPA 8270C	Benzo[b]fluoranthene	104.6 ng/dry g	J NQ
B13-8099_SED	EPA 8270C	Benzo[e]pyrene	109.6 ng/dry g	J NQ
B13-8099_SED	EPA 8270C	Benzo[g,h,i]perylene	181.7 ng/dry g	J NQ
B13-8099_SED	EPA 8270C	Benzo[k]fluoranthene	60.3 ng/dry g	J NQ
B13-8099_SED	EPA 8270C	BHC-beta	0.1 ng/dry g	UJ BC
B13-8099_SED	EPA 8270C	Biphenyl	2.8 ng/dry g	J DL, NQ, HD
B13-8099_SED	EPA 8270C	Chrysene	119 ng/dry g	J NQ
B13-8099_SED	EPA 8270C	Dibenz[a,h]anthracene	32.7 ng/dry g	J NQ, HD
B13-8099_SED	EPA 8270C	Dibenzothiophene	3.7 ng/dry g	J DL, NQ, HD
B13-8099_SED	EPA 8270C	Dicofol	0.1 ng/dry g	UJ BC, LV
B13-8099_SED	EPA 8270C	Endosulfan-I	0.1 ng/dry g	UJ LL
B13-8099_SED	EPA 8270C	Endosulfan-II	0.1 ng/dry g	UJ LL
B13-8099_SED	EPA 8270C	Endrin aldehyde	0.1 ng/dry g	UJ BC, LL
B13-8099_SED	EPA 8270C	Endrin ketone	0.1 ng/dry g	UJ BC
B13-8099_SED	EPA 8270C	Fluoranthene	148 ng/dry g	J NQ, HD
B13-8099_SED	EPA 8270C	Fluorene	4.5 ng/dry g	J DL, NQ
B13-8099_SED	EPA 8270C	Heptachlor	0.1 ng/dry g	UJ BC
B13-8099_SED	EPA 8270C	Indeno[1,2,3-c,d]pyrene	153.2 ng/dry g	J NQ, HD
B13-8099_SED	EPA 8270C	Methoxychlor	0.1 ng/dry g	UJ BC
B13-8099_SED	EPA 8270C	Naphthalene	14.1 ng/dry g	J NQ, HD

**TABLE 2**  
**Qualifiers Added to the Sediment Samples During Validation**  
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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8099_SED	EPA 8270C	PCB119	0.1 ng/dry g	UJ LV
B13-8099_SED	EPA 8270C	Perthane	0.1 ng/dry g	UJ BC
B13-8099_SED	EPA 8270C	Perylene	31.3 ng/dry g	J NQ
B13-8099_SED	EPA 8270C	Phenanthrene	50.6 ng/dry g	J NQ, HD
B13-8099_SED	EPA 8270C	Pyrene	298.4 ng/dry g	J NQ, HD
B13-8099_SED	EPA 8270C-NCI	Allethrin	0.5 ng/dry g	UJ LC
B13-8099_SED	EPA 8270C-NCI	Danitol (Fenpropathrin)	0.5 ng/dry g	UJ LL
B13-8099_SED	EPA 8270C-NCI	Deltamethrin/Tralomethrin	0.5 ng/dry g	UJ BC
B13-8099_SED	EPA 8270C-NCI	Fluvalinate	0.5 ng/dry g	UJ BC
B13-8099_SED	EPA 8270C-NCI	PBDE049	0.1 ng/dry g	UJ LC
B13-8099_SED	EPA 8270C-NCI	PBDE209	0.1 ng/dry g	UJ BC, LC
B13-8099_SED	EPA 8270C-NCI	Prallethrin	0.5 ng/dry g	UJ BC, LC
B13-8099_SED	EPA 8270C-NCI	Resmethrin	0.5 ng/dry g	R LV
B13-8099_SED	EPA 9060	Total Nitrogen	0.44 % Dry Weight	J NQ
B13-8099_SED	EPA 9060	Total Organic Carbon	1.14 % Dry Weight	J NQ
B13-8099_SED	Plumb, 1981 and Teryl	Acid Volatile Sulfides	24.97 mg/dry kg	J NQ
B13-8100_SED	EPA 245.7	Mercury	0.6203 µg/dry g	J LC, LP
B13-8100_SED	EPA 6020	Aluminum	42172 µg/dry g	J HP
B13-8100_SED	EPA 6020	Arsenic	12.291 µg/dry g	J HP
B13-8100_SED	EPA 6020	Beryllium	0.736 µg/dry g	J HP
B13-8100_SED	EPA 6020	Cadmium	0.2703 µg/dry g	J LP
B13-8100_SED	EPA 6020	Chromium	73.1008 µg/dry g	J HP
B13-8100_SED	EPA 6020	Iron (Fe)	38789.6 µg/dry g	J HP
B13-8100_SED	EPA 6020	Nickel	18.96 µg/dry g	J HP
B13-8100_SED	EPA 6020	Total Phosphorus	731.669 µg/dry g	J NQ
B13-8100_SED	EPA 8270C	1-Methylnaphthalene	1.7 ng/dry g	J DL, NQ, HV, HD
B13-8100_SED	EPA 8270C	1-Methylphenanthrene	14.6 ng/dry g	J NQ
B13-8100_SED	EPA 8270C	2,3,5-Trimethylnaphthalene	3.8 ng/dry g	J DL, NQ
B13-8100_SED	EPA 8270C	2,4'-DDT	0.1 ng/dry g	UJ BC
B13-8100_SED	EPA 8270C	2,6-Dimethylnaphthalene	2.2 ng/dry g	J DL, NQ, HD
B13-8100_SED	EPA 8270C	2-Methylnaphthalene	4.7 ng/dry g	J DL, NQ, HD
B13-8100_SED	EPA 8270C	4,4'-DDT	0.1 ng/dry g	UJ BC
B13-8100_SED	EPA 8270C	Acenaphthene	2.5 ng/dry g	J DL, NQ, HD
B13-8100_SED	EPA 8270C	Acenaphthylene	35.1 ng/dry g	J NQ, HD
B13-8100_SED	EPA 8270C	Anthracene	40.4 ng/dry g	J NQ, HD
B13-8100_SED	EPA 8270C	Aroclor 1016	2 ng/dry g	UJ NQ
B13-8100_SED	EPA 8270C	Aroclor 1221	2 ng/dry g	UJ NQ
B13-8100_SED	EPA 8270C	Aroclor 1232	2 ng/dry g	UJ NQ
B13-8100_SED	EPA 8270C	Aroclor 1242	2 ng/dry g	UJ NQ
B13-8100_SED	EPA 8270C	Aroclor 1248	2 ng/dry g	UJ NQ
B13-8100_SED	EPA 8270C	Aroclor 1254	2 ng/dry g	UJ NQ
B13-8100_SED	EPA 8270C	Aroclor 1260	53.9 ng/dry g	J NQ
B13-8100_SED	EPA 8270C	Aroclor 1262	2 ng/dry g	UJ NQ
B13-8100_SED	EPA 8270C	Aroclor 1268	2 ng/dry g	UJ NQ
B13-8100_SED	EPA 8270C	Benz[a]anthracene	123.3 ng/dry g	J NQ
B13-8100_SED	EPA 8270C	Benzo[a]pyrene	182.5 ng/dry g	J NQ
B13-8100_SED	EPA 8270C	Benzo[b]fluoranthene	131.9 ng/dry g	J NQ
B13-8100_SED	EPA 8270C	Benzo[e]pyrene	124.2 ng/dry g	J NQ
B13-8100_SED	EPA 8270C	Benzo[g,h,i]perylene	211.3 ng/dry g	J NQ
B13-8100_SED	EPA 8270C	Benzo[k]fluoranthene	77.4 ng/dry g	J NQ
B13-8100_SED	EPA 8270C	BHC-beta	0.1 ng/dry g	UJ BC
B13-8100_SED	EPA 8270C	Biphenyl	2.3 ng/dry g	J DL, NQ, HD
B13-8100_SED	EPA 8270C	Chrysene	188 ng/dry g	J NQ
B13-8100_SED	EPA 8270C	Dibenz[a,h]anthracene	42.1 ng/dry g	J NQ, HD

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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8100_SED	EPA 8270C	Dibenzothiophene	5 ng/dry g	J NQ, HD
B13-8100_SED	EPA 8270C	Dicofol	0.1 ng/dry g	UJ BC, LV
B13-8100_SED	EPA 8270C	Endosulfan-I	0.1 ng/dry g	UJ LL
B13-8100_SED	EPA 8270C	Endosulfan-II	0.1 ng/dry g	UJ LL
B13-8100_SED	EPA 8270C	Endrin aldehyde	0.1 ng/dry g	UJ BC, LL
B13-8100_SED	EPA 8270C	Endrin ketone	0.1 ng/dry g	UJ BC
B13-8100_SED	EPA 8270C	Fluoranthene	174.2 ng/dry g	J NQ, HD
B13-8100_SED	EPA 8270C	Fluorene	3.9 ng/dry g	J DL, NQ
B13-8100_SED	EPA 8270C	Heptachlor	0.1 ng/dry g	UJ BC
B13-8100_SED	EPA 8270C	Indeno[1,2,3-c,d]pyrene	186.4 ng/dry g	J NQ, HD
B13-8100_SED	EPA 8270C	Methoxychlor	0.1 ng/dry g	UJ BC
B13-8100_SED	EPA 8270C	Naphthalene	11.4 ng/dry g	J NQ, HD
B13-8100_SED	EPA 8270C	PCB119	0.1 ng/dry g	UJ LV
B13-8100_SED	EPA 8270C	Perthane	0.1 ng/dry g	UJ BC
B13-8100_SED	EPA 8270C	Perylene	36.9 ng/dry g	J NQ
B13-8100_SED	EPA 8270C	Phenanthrene	68 ng/dry g	J NQ, HD
B13-8100_SED	EPA 8270C	Pyrene	312.5 ng/dry g	J NQ, HD
B13-8100_SED	EPA 8270C-NCI	Allethrin	0.5 ng/dry g	UJ LC
B13-8100_SED	EPA 8270C-NCI	Danitol (Fenpropathrin)	0.5 ng/dry g	UJ LL
B13-8100_SED	EPA 8270C-NCI	Deltamethrin/Tralomethrin	0.5 ng/dry g	UJ BC
B13-8100_SED	EPA 8270C-NCI	Fluvalinate	0.5 ng/dry g	UJ BC
B13-8100_SED	EPA 8270C-NCI	PBDE049	0.1 ng/dry g	UJ LC
B13-8100_SED	EPA 8270C-NCI	PBDE209	0.1 ng/dry g	UJ BC, LC
B13-8100_SED	EPA 8270C-NCI	Prallethrin	0.5 ng/dry g	UJ BC, LC
B13-8100_SED	EPA 8270C-NCI	Resmethrin	0.5 ng/dry g	R LV
B13-8100_SED	EPA 9060	Total Nitrogen	0.56 % Dry Weight	J NQ
B13-8100_SED	EPA 9060	Total Organic Carbon	1.58 % Dry Weight	J NQ
B13-8100_SED	Plumb, 1981 and Teryl	Acid Volatile Sulfides	25.96 mg/dry kg	J NQ
B13-8102_SED	EPA 6020	Aluminum	32514.7 µg/dry g	J HP
B13-8102_SED	EPA 6020	Antimony	0.296 µg/dry g	J HP
B13-8102_SED	EPA 6020	Barium	106.664 µg/dry g	J CH
B13-8102_SED	EPA 6020	Beryllium	0.576 µg/dry g	J HP
B13-8102_SED	EPA 6020	Cadmium	0.3596 µg/dry g	J LP
B13-8102_SED	EPA 6020	Chromium	58.0752 µg/dry g	J HP
B13-8102_SED	EPA 6020	Iron (Fe)	33518.5 µg/dry g	J HP
B13-8102_SED	EPA 6020	Total Phosphorus	746.211 µg/dry g	J NQ
B13-8102_SED	EPA 8270C	1-Methylnaphthalene	2.2 ng/dry g	J DL
B13-8102_SED	EPA 8270C	2,4'-DDT	0.1 ng/dry g	UJ LC
B13-8102_SED	EPA 8270C	2,6-Dimethylnaphthalene	3 ng/dry g	J DL
B13-8102_SED	EPA 8270C	2-Methylnaphthalene	3.7 ng/dry g	U RB
B13-8102_SED	EPA 8270C	4,4'-DDMU	0.1 ng/dry g	UJ BC
B13-8102_SED	EPA 8270C	4,4'-DDT	0.1 ng/dry g	UJ BC, LC
B13-8102_SED	EPA 8270C	Acenaphthene	2.4 ng/dry g	J DL
B13-8102_SED	EPA 8270C	Aroclor 1016	2 ng/dry g	UJ NQ
B13-8102_SED	EPA 8270C	Aroclor 1221	2 ng/dry g	UJ NQ
B13-8102_SED	EPA 8270C	Aroclor 1232	2 ng/dry g	UJ NQ
B13-8102_SED	EPA 8270C	Aroclor 1242	2 ng/dry g	UJ NQ
B13-8102_SED	EPA 8270C	Aroclor 1248	2 ng/dry g	UJ NQ
B13-8102_SED	EPA 8270C	Aroclor 1254	2 ng/dry g	UJ NQ
B13-8102_SED	EPA 8270C	Aroclor 1260	18.7 ng/dry g	J NQ
B13-8102_SED	EPA 8270C	Aroclor 1262	2 ng/dry g	UJ NQ
B13-8102_SED	EPA 8270C	Aroclor 1268	2 ng/dry g	UJ NQ
B13-8102_SED	EPA 8270C	Benz[a]anthracene	89.6 ng/dry g	J CH
B13-8102_SED	EPA 8270C	Benzo[b]fluoranthene	152 ng/dry g	J BC, CH

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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8102_SED	EPA 8270C	Benzo[e]pyrene	109.2 ng/dry g	J CH
B13-8102_SED	EPA 8270C	Benzo[k]fluoranthene	134.6 ng/dry g	J LC
B13-8102_SED	EPA 8270C	BHC-beta	0.1 ng/dry g	UJ BC
B13-8102_SED	EPA 8270C	Biphenyl	2.4 ng/dry g	J DL
B13-8102_SED	EPA 8270C	Chrysene	227.7 ng/dry g	J CH
B13-8102_SED	EPA 8270C	Dibenz[a,h]anthracene	19.7 ng/dry g	J CH
B13-8102_SED	EPA 8270C	Dibenzothiophene	4.2 ng/dry g	J DL
B13-8102_SED	EPA 8270C	Dicofol	0.1 ng/dry g	UJ BC, LC
B13-8102_SED	EPA 8270C	Endosulfan-II	0.1 ng/dry g	UJ LC
B13-8102_SED	EPA 8270C	Heptachlor	0.1 ng/dry g	UJ LC
B13-8102_SED	EPA 8270C	Indeno[1,2,3-c,d]pyrene	119.2 ng/dry g	J CH
B13-8102_SED	EPA 8270C	Methoxychlor	0.1 ng/dry g	UJ BC, LC
B13-8102_SED	EPA 8270C	Naphthalene	6 ng/dry g	U RB
B13-8102_SED	EPA 8270C	PCB008	0.1 ng/dry g	UJ BC, LC
B13-8102_SED	EPA 8270C	PCB099	0.42 ng/dry g	J CH
B13-8102_SED	EPA 8270C	PCB101	1.19 ng/dry g	J CH
B13-8102_SED	EPA 8270C	PCB105	0.1 ng/dry g	UJ BC
B13-8102_SED	EPA 8270C	PCB118	1.32 ng/dry g	J CH
B13-8102_SED	EPA 8270C	PCB126	0.1 ng/dry g	UJ BC
B13-8102_SED	EPA 8270C	PCB128	0.1 ng/dry g	UJ LV
B13-8102_SED	EPA 8270C	PCB149	1.82 ng/dry g	J CH
B13-8102_SED	EPA 8270C	PCB151	0.33 ng/dry g	J CH
B13-8102_SED	EPA 8270C	PCB153	2.49 ng/dry g	J BC
B13-8102_SED	EPA 8270C	PCB156	0.1 ng/dry g	UJ BC
B13-8102_SED	EPA 8270C	PCB169	0.1 ng/dry g	UJ BC
B13-8102_SED	EPA 8270C	PCB187	1.42 ng/dry g	J CH
B13-8102_SED	EPA 8270C	PCB209	0.1 ng/dry g	UJ LV, LC
B13-8102_SED	EPA 8270C	Perthane	0.1 ng/dry g	UJ BC
B13-8102_SED	EPA 8270C	Perylene	8.6 ng/dry g	J CH
B13-8102_SED	EPA 8270C	Pyrene	135.4 ng/dry g	J LC
B13-8102_SED	EPA 8270C-NCI	Deltamethrin/Tralomethrin	0.5 ng/dry g	UJ LV
B13-8102_SED	EPA 8270C-NCI	I-Cyhalothrin	0.5 ng/dry g	UJ LV
B13-8102_SED	EPA 8270C-NCI	PBDE138	0.1 ng/dry g	UJ LC
B13-8102_SED	EPA 8270C-NCI	PBDE209	0.1 ng/dry g	UJ LC
B13-8102_SED	EPA 8270C-NCI	Permethrin, cis-	0.5 ng/dry g	UJ LV
B13-8102_SED	EPA 8270C-NCI	Resmethrin	0.5 ng/dry g	UJ LC
B13-8102_SED	EPA 9060	Total Nitrogen	0.01 % Dry Weight	UJ NQ
B13-8102_SED	EPA 9060	Total Organic Carbon	1.52 % Dry Weight	J NQ
B13-8102_SED	Plumb, 1981 and Teryl	Acid Volatile Sulfides	24.1 mg/dry kg	J NQ
B13-8105_SED	EPA 6020	Aluminum	11845.1 µg/dry g	J HP
B13-8105_SED	EPA 6020	Antimony	0.297 µg/dry g	J HP
B13-8105_SED	EPA 6020	Barium	45.525 µg/dry g	J CH
B13-8105_SED	EPA 6020	Beryllium	0.179 µg/dry g	J HP
B13-8105_SED	EPA 6020	Cadmium	0.241 µg/dry g	J LP
B13-8105_SED	EPA 6020	Chromium	25.0697 µg/dry g	J HP
B13-8105_SED	EPA 6020	Iron (Fe)	11183.7 µg/dry g	J HP
B13-8105_SED	EPA 6020	Total Phosphorus	297.307 µg/dry g	J NQ
B13-8105_SED	EPA 8270C	1-Methylphenanthrene	4.1 ng/dry g	J DL
B13-8105_SED	EPA 8270C	2,3,5-Trimethylnaphthalene	2.1 ng/dry g	J DL
B13-8105_SED	EPA 8270C	2,4'-DDT	0.1 ng/dry g	UJ LC
B13-8105_SED	EPA 8270C	4,4'-DDMU	0.1 ng/dry g	UJ BC
B13-8105_SED	EPA 8270C	4,4'-DDT	0.1 ng/dry g	UJ BC, LC
B13-8105_SED	EPA 8270C	Acenaphthylene	2.8 ng/dry g	J DL
B13-8105_SED	EPA 8270C	Aroclor 1016	2 ng/dry g	UJ NQ



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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8105_SED	EPA 8270C	Aroclor 1221	2 ng/dry g	UJ NQ
B13-8105_SED	EPA 8270C	Aroclor 1232	2 ng/dry g	UJ NQ
B13-8105_SED	EPA 8270C	Aroclor 1242	2 ng/dry g	UJ NQ
B13-8105_SED	EPA 8270C	Aroclor 1248	2 ng/dry g	UJ NQ
B13-8105_SED	EPA 8270C	Aroclor 1254	2 ng/dry g	UJ NQ
B13-8105_SED	EPA 8270C	Aroclor 1260	122.9 ng/dry g	J NQ
B13-8105_SED	EPA 8270C	Aroclor 1262	2 ng/dry g	UJ NQ
B13-8105_SED	EPA 8270C	Aroclor 1268	2 ng/dry g	UJ NQ
B13-8105_SED	EPA 8270C	Benz[a]anthracene	40 ng/dry g	J CH
B13-8105_SED	EPA 8270C	Benzo[b]fluoranthene	54.5 ng/dry g	J BC, CH
B13-8105_SED	EPA 8270C	Benzo[e]pyrene	42 ng/dry g	J CH
B13-8105_SED	EPA 8270C	Benzo[k]fluoranthene	49.9 ng/dry g	J LC
B13-8105_SED	EPA 8270C	BHC-beta	0.1 ng/dry g	UJ BC
B13-8105_SED	EPA 8270C	Chrysene	57 ng/dry g	J CH
B13-8105_SED	EPA 8270C	Dibenz[a,h]anthracene	14 ng/dry g	J CH
B13-8105_SED	EPA 8270C	Dibenzothiophene	1.9 ng/dry g	J DL
B13-8105_SED	EPA 8270C	Dicofol	0.1 ng/dry g	UJ BC, LC
B13-8105_SED	EPA 8270C	Endosulfan-II	0.1 ng/dry g	UJ LC
B13-8105_SED	EPA 8270C	Fluorene	2.8 ng/dry g	J DL
B13-8105_SED	EPA 8270C	Heptachlor	0.1 ng/dry g	UJ LC
B13-8105_SED	EPA 8270C	Indeno[1,2,3-c,d]pyrene	85.5 ng/dry g	J CH
B13-8105_SED	EPA 8270C	Methoxychlor	0.1 ng/dry g	UJ BC, LC
B13-8105_SED	EPA 8270C	PCB008	0.1 ng/dry g	UJ BC, LC
B13-8105_SED	EPA 8270C	PCB044	1.96 ng/dry g	J CH
B13-8105_SED	EPA 8270C	PCB052	5.51 ng/dry g	J CH
B13-8105_SED	EPA 8270C	PCB066	1.31 ng/dry g	J CH
B13-8105_SED	EPA 8270C	PCB070	3.36 ng/dry g	J CH
B13-8105_SED	EPA 8270C	PCB087	4.65 ng/dry g	J CH
B13-8105_SED	EPA 8270C	PCB099	3.44 ng/dry g	J CH
B13-8105_SED	EPA 8270C	PCB101	10.97 ng/dry g	J CH
B13-8105_SED	EPA 8270C	PCB105	2.37 ng/dry g	J BC
B13-8105_SED	EPA 8270C	PCB110	10.52 ng/dry g	J CH
B13-8105_SED	EPA 8270C	PCB118	7.26 ng/dry g	J CH
B13-8105_SED	EPA 8270C	PCB126	0.1 ng/dry g	UJ BC
B13-8105_SED	EPA 8270C	PCB128	3.29 ng/dry g	J LV
B13-8105_SED	EPA 8270C	PCB149	5.51 ng/dry g	J CH
B13-8105_SED	EPA 8270C	PCB151	1.3 ng/dry g	J CH
B13-8105_SED	EPA 8270C	PCB153	6.81 ng/dry g	J BC
B13-8105_SED	EPA 8270C	PCB156	1.29 ng/dry g	J BC
B13-8105_SED	EPA 8270C	PCB167	0.4 ng/dry g	J CH
B13-8105_SED	EPA 8270C	PCB168+132	2.7 ng/dry g	J CH
B13-8105_SED	EPA 8270C	PCB169	0.1 ng/dry g	UJ BC
B13-8105_SED	EPA 8270C	PCB187	1.39 ng/dry g	J CH
B13-8105_SED	EPA 8270C	PCB209	0.11 ng/dry g	J LV, LC
B13-8105_SED	EPA 8270C	Perthane	0.1 ng/dry g	UJ BC
B13-8105_SED	EPA 8270C	Perylene	8.5 ng/dry g	J CH
B13-8105_SED	EPA 8270C	Pyrene	68.2 ng/dry g	J LC
B13-8105_SED	EPA 8270C-NCI	Deltamethrin/Tralomethrin	0.5 ng/dry g	UJ LV
B13-8105_SED	EPA 8270C-NCI	I-Cyhalothrin	0.5 ng/dry g	UJ LV
B13-8105_SED	EPA 8270C-NCI	PBDE138	0.1 ng/dry g	UJ LC
B13-8105_SED	EPA 8270C-NCI	PBDE154	0.05 ng/dry g	J DL
B13-8105_SED	EPA 8270C-NCI	PBDE209	0.1 ng/dry g	UJ LC
B13-8105_SED	EPA 8270C-NCI	Permethrin, cis-	0.5 ng/dry g	UJ LV
B13-8105_SED	EPA 8270C-NCI	Resmethrin	0.5 ng/dry g	UJ LC

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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8105_SED	EPA 9060	Total Nitrogen	0.01 % Dry Weight	UJ NQ
B13-8105_SED	EPA 9060	Total Organic Carbon	0.02 % Dry Weight	J NQ
B13-8105_SED	Plumb, 1981 and Teryl	Acid Volatile Sulfides	22.34 mg/dry kg	J NQ
B13-8106_SED	EPA 6020	Aluminum	16892.4 µg/dry g	J HP
B13-8106_SED	EPA 6020	Antimony	0.16 µg/dry g	J HP
B13-8106_SED	EPA 6020	Barium	59.752 µg/dry g	J CH
B13-8106_SED	EPA 6020	Beryllium	0.31 µg/dry g	J HP
B13-8106_SED	EPA 6020	Cadmium	0.1706 µg/dry g	J LP
B13-8106_SED	EPA 6020	Chromium	31.8398 µg/dry g	J HP
B13-8106_SED	EPA 6020	Iron (Fe)	19482.8 µg/dry g	J HP
B13-8106_SED	EPA 6020	Total Phosphorus	446.917 µg/dry g	J NQ
B13-8106_SED	EPA 8270C	2,3,5-Trimethylnaphthalene	3.1 ng/dry g	J DL
B13-8106_SED	EPA 8270C	2,4'-DDT	0.1 ng/dry g	UJ LC
B13-8106_SED	EPA 8270C	4,4'-DDMU	0.1 ng/dry g	UJ BC
B13-8106_SED	EPA 8270C	4,4'-DDT	0.1 ng/dry g	UJ BC, LC
B13-8106_SED	EPA 8270C	Aroclor 1016	2 ng/dry g	UJ NQ
B13-8106_SED	EPA 8270C	Aroclor 1221	2 ng/dry g	UJ NQ
B13-8106_SED	EPA 8270C	Aroclor 1232	2 ng/dry g	UJ NQ
B13-8106_SED	EPA 8270C	Aroclor 1242	2 ng/dry g	UJ NQ
B13-8106_SED	EPA 8270C	Aroclor 1248	2 ng/dry g	UJ NQ
B13-8106_SED	EPA 8270C	Aroclor 1254	2 ng/dry g	UJ NQ
B13-8106_SED	EPA 8270C	Aroclor 1260	16.9 ng/dry g	J NQ
B13-8106_SED	EPA 8270C	Aroclor 1262	2 ng/dry g	UJ NQ
B13-8106_SED	EPA 8270C	Aroclor 1268	2 ng/dry g	UJ NQ
B13-8106_SED	EPA 8270C	Benz[a]anthracene	43.8 ng/dry g	J CH
B13-8106_SED	EPA 8270C	Benzo[b]fluoranthene	69 ng/dry g	J BC, CH
B13-8106_SED	EPA 8270C	Benzo[e]pyrene	50.7 ng/dry g	J CH
B13-8106_SED	EPA 8270C	Benzo[k]fluoranthene	66.1 ng/dry g	J LC
B13-8106_SED	EPA 8270C	BHC-beta	0.1 ng/dry g	UJ BC
B13-8106_SED	EPA 8270C	Chrysene	82.9 ng/dry g	J CH
B13-8106_SED	EPA 8270C	Dibenz[a,h]anthracene	10.7 ng/dry g	J CH
B13-8106_SED	EPA 8270C	Dibenzothiophene	2.5 ng/dry g	J DL
B13-8106_SED	EPA 8270C	Dicofol	0.1 ng/dry g	UJ BC, LC
B13-8106_SED	EPA 8270C	Endosulfan-II	0.1 ng/dry g	UJ LC
B13-8106_SED	EPA 8270C	Fluorene	4.5 ng/dry g	J DL
B13-8106_SED	EPA 8270C	Heptachlor	0.1 ng/dry g	UJ LC
B13-8106_SED	EPA 8270C	Indeno[1,2,3-c,d]pyrene	66.9 ng/dry g	J CH
B13-8106_SED	EPA 8270C	Methoxychlor	0.1 ng/dry g	UJ BC, LC
B13-8106_SED	EPA 8270C	Naphthalene	3.2 ng/dry g	U RB
B13-8106_SED	EPA 8270C	PCB008	0.1 ng/dry g	UJ BC, LC
B13-8106_SED	EPA 8270C	PCB049	2.05 ng/dry g	J CH
B13-8106_SED	EPA 8270C	PCB052	1.94 ng/dry g	J CH
B13-8106_SED	EPA 8270C	PCB101	0.89 ng/dry g	J CH
B13-8106_SED	EPA 8270C	PCB105	0.1 ng/dry g	UJ BC
B13-8106_SED	EPA 8270C	PCB118	0.88 ng/dry g	J CH
B13-8106_SED	EPA 8270C	PCB126	0.1 ng/dry g	UJ BC
B13-8106_SED	EPA 8270C	PCB128	0.1 ng/dry g	UJ LV
B13-8106_SED	EPA 8270C	PCB149	0.9 ng/dry g	J CH
B13-8106_SED	EPA 8270C	PCB151	0.38 ng/dry g	J CH
B13-8106_SED	EPA 8270C	PCB153	1.54 ng/dry g	J BC
B13-8106_SED	EPA 8270C	PCB156	0.1 ng/dry g	UJ BC
B13-8106_SED	EPA 8270C	PCB168+132	0.3 ng/dry g	J CH
B13-8106_SED	EPA 8270C	PCB169	0.1 ng/dry g	UJ BC
B13-8106_SED	EPA 8270C	PCB187	0.65 ng/dry g	J CH

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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8106_SED	EPA 8270C	PCB209	0.1 ng/dry g	UJ LV, LC
B13-8106_SED	EPA 8270C	Perthane	0.1 ng/dry g	UJ BC
B13-8106_SED	EPA 8270C	Perylene	4.3 ng/dry g	J DL, CH
B13-8106_SED	EPA 8270C	Pyrene	79 ng/dry g	J LC
B13-8106_SED	EPA 8270C-NCI	Deltamethrin/Tralomethrin	0.5 ng/dry g	UJ LV
B13-8106_SED	EPA 8270C-NCI	I-Cyhalothrin	0.5 ng/dry g	UJ LV
B13-8106_SED	EPA 8270C-NCI	PBDE138	0.1 ng/dry g	UJ LC
B13-8106_SED	EPA 8270C-NCI	PBDE154	0.06 ng/dry g	J DL
B13-8106_SED	EPA 8270C-NCI	PBDE209	0.1 ng/dry g	UJ LC
B13-8106_SED	EPA 8270C-NCI	Permethrin, cis-	0.5 ng/dry g	UJ LV
B13-8106_SED	EPA 8270C-NCI	Resmethrin	0.5 ng/dry g	UJ LC
B13-8106_SED	EPA 9060	Total Nitrogen	0.01 % Dry Weight	J DL, NQ
B13-8106_SED	EPA 9060	Total Organic Carbon	0.67 % Dry Weight	J NQ
B13-8106_SED	Plumb, 1981 and Teryl	Acid Volatile Sulfides	12.01 mg/dry kg	J NQ
B13-8108_SED	EPA 200.8	Nickel	0.0054 µmol/dry g	J DL
B13-8108_SED	EPA 6020	Aluminum	12499.7 µg/dry g	J HP
B13-8108_SED	EPA 6020	Antimony	0.143 µg/dry g	UJ RB, HP
B13-8108_SED	EPA 6020	Barium	35.486 µg/dry g	J CH
B13-8108_SED	EPA 6020	Beryllium	0.223 µg/dry g	J HP
B13-8108_SED	EPA 6020	Cadmium	0.1192 µg/dry g	J LP
B13-8108_SED	EPA 6020	Chromium	21.937 µg/dry g	J HP
B13-8108_SED	EPA 6020	Iron (Fe)	12635.7 µg/dry g	J HP
B13-8108_SED	EPA 6020	Total Phosphorus	337.09 µg/dry g	J NQ
B13-8108_SED	EPA 8270C	1-Methylphenanthrene	2.3 ng/dry g	J DL
B13-8108_SED	EPA 8270C	2,3,5-Trimethylnaphthalene	2.1 ng/dry g	J DL
B13-8108_SED	EPA 8270C	2,4'-DDT	0.1 ng/dry g	UJ LC
B13-8108_SED	EPA 8270C	4,4'-DDMU	0.1 ng/dry g	UJ BC
B13-8108_SED	EPA 8270C	4,4'-DDT	0.1 ng/dry g	UJ BC, LC
B13-8108_SED	EPA 8270C	Anthracene	2.7 ng/dry g	J DL
B13-8108_SED	EPA 8270C	Aroclor 1016	2 ng/dry g	UJ NQ
B13-8108_SED	EPA 8270C	Aroclor 1221	2 ng/dry g	UJ NQ
B13-8108_SED	EPA 8270C	Aroclor 1232	2 ng/dry g	UJ NQ
B13-8108_SED	EPA 8270C	Aroclor 1242	2 ng/dry g	UJ NQ
B13-8108_SED	EPA 8270C	Aroclor 1248	2 ng/dry g	UJ NQ
B13-8108_SED	EPA 8270C	Aroclor 1254	2 ng/dry g	UJ NQ
B13-8108_SED	EPA 8270C	Aroclor 1260	9.7 ng/dry g	J NQ
B13-8108_SED	EPA 8270C	Aroclor 1262	2 ng/dry g	UJ NQ
B13-8108_SED	EPA 8270C	Aroclor 1268	2 ng/dry g	UJ NQ
B13-8108_SED	EPA 8270C	Benz[a]anthracene	9.7 ng/dry g	J CH
B13-8108_SED	EPA 8270C	Benzo[b]fluoranthene	20.9 ng/dry g	J BC, CH
B13-8108_SED	EPA 8270C	Benzo[e]pyrene	13.7 ng/dry g	J CH
B13-8108_SED	EPA 8270C	Benzo[k]fluoranthene	19.8 ng/dry g	J LC
B13-8108_SED	EPA 8270C	BHC-beta	0.1 ng/dry g	UJ BC
B13-8108_SED	EPA 8270C	Chrysene	15 ng/dry g	J CH
B13-8108_SED	EPA 8270C	Dibenz[a,h]anthracene	4 ng/dry g	J DL, CH
B13-8108_SED	EPA 8270C	Dicofol	0.1 ng/dry g	UJ BC, LC
B13-8108_SED	EPA 8270C	Endosulfan-II	0.1 ng/dry g	UJ LC
B13-8108_SED	EPA 8270C	Fluorene	1.8 ng/dry g	J DL
B13-8108_SED	EPA 8270C	Heptachlor	0.1 ng/dry g	UJ LC
B13-8108_SED	EPA 8270C	Indeno[1,2,3-c,d]pyrene	24.2 ng/dry g	J CH
B13-8108_SED	EPA 8270C	Methoxychlor	0.1 ng/dry g	UJ BC, LC
B13-8108_SED	EPA 8270C	PCB008	0.1 ng/dry g	UJ BC, LC
B13-8108_SED	EPA 8270C	PCB101	0.7 ng/dry g	J CH
B13-8108_SED	EPA 8270C	PCB105	0.1 ng/dry g	UJ BC

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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8108_SED	EPA 8270C	PCB118	0.59 ng/dry g	J CH
B13-8108_SED	EPA 8270C	PCB126	0.1 ng/dry g	UJ BC
B13-8108_SED	EPA 8270C	PCB128	0.1 ng/dry g	UJ LV
B13-8108_SED	EPA 8270C	PCB149	0.93 ng/dry g	J CH
B13-8108_SED	EPA 8270C	PCB151	0.47 ng/dry g	J CH
B13-8108_SED	EPA 8270C	PCB153	1.13 ng/dry g	J BC
B13-8108_SED	EPA 8270C	PCB156	0.1 ng/dry g	UJ BC
B13-8108_SED	EPA 8270C	PCB168+132	0.2 ng/dry g	J CH
B13-8108_SED	EPA 8270C	PCB169	0.1 ng/dry g	UJ BC
B13-8108_SED	EPA 8270C	PCB187	0.57 ng/dry g	J CH
B13-8108_SED	EPA 8270C	PCB209	0.1 ng/dry g	UJ LV, LC
B13-8108_SED	EPA 8270C	Perthane	0.1 ng/dry g	UJ BC
B13-8108_SED	EPA 8270C	Perylene	1.5 ng/dry g	J DL, CH
B13-8108_SED	EPA 8270C	Pyrene	14.7 ng/dry g	J LC
B13-8108_SED	EPA 8270C-NCI	Deltamethrin/Tralomethrin	0.5 ng/dry g	UJ LV
B13-8108_SED	EPA 8270C-NCI	I-Cyhalothrin	0.5 ng/dry g	UJ LV
B13-8108_SED	EPA 8270C-NCI	PBDE138	0.1 ng/dry g	UJ LC
B13-8108_SED	EPA 8270C-NCI	PBDE209	0.1 ng/dry g	UJ LC
B13-8108_SED	EPA 8270C-NCI	Permethrin, cis-	0.5 ng/dry g	UJ LV
B13-8108_SED	EPA 8270C-NCI	Resmethrin	0.5 ng/dry g	UJ LC
B13-8108_SED	EPA 9060	Total Nitrogen	0.01 % Dry Weight	UJ NQ
B13-8108_SED	EPA 9060	Total Organic Carbon	0.34 % Dry Weight	J NQ
B13-8108_SED	Plumb, 1981 and Teryl	Acid Volatile Sulfides	5.16 mg/dry kg	J NQ
B13-8109_SED	EPA 245.7	Mercury	0.2343 µg/dry g	J LP
B13-8109_SED	EPA 6020	Aluminum	14474.7 µg/dry g	J HP
B13-8109_SED	EPA 6020	Arsenic	5.513 µg/dry g	J HP
B13-8109_SED	EPA 6020	Beryllium	0.291 µg/dry g	J HP
B13-8109_SED	EPA 6020	Cadmium	0.1204 µg/dry g	J LP
B13-8109_SED	EPA 6020	Chromium	27.2327 µg/dry g	J HP
B13-8109_SED	EPA 6020	Iron (Fe)	16030.5 µg/dry g	J HP
B13-8109_SED	EPA 6020	Nickel	7.22 µg/dry g	J HP
B13-8109_SED	EPA 6020	Total Phosphorus	313.437 µg/dry g	J NQ
B13-8109_SED	EPA 8270C	1-Methylnaphthalene	5 ng/dry g	UJ NQ
B13-8109_SED	EPA 8270C	1-Methylphenanthrene	3.6 ng/dry g	J DL, NQ
B13-8109_SED	EPA 8270C	2,3,5-Trimethylnaphthalene	2.1 ng/dry g	J DL, NQ
B13-8109_SED	EPA 8270C	2,4'-DDD	0.1 ng/dry g	UJ NQ
B13-8109_SED	EPA 8270C	2,4'-DDE	0.1 ng/dry g	UJ NQ
B13-8109_SED	EPA 8270C	2,4'-DDT	0.1 ng/dry g	UJ NQ, BC
B13-8109_SED	EPA 8270C	2,6-Dimethylnaphthalene	5 ng/dry g	UJ NQ
B13-8109_SED	EPA 8270C	2-Methylnaphthalene	1.6 ng/dry g	J DL, NQ
B13-8109_SED	EPA 8270C	4,4'-DDD	0.1 ng/dry g	UJ NQ
B13-8109_SED	EPA 8270C	4,4'-DDE	0.1 ng/dry g	UJ NQ
B13-8109_SED	EPA 8270C	4,4'-DDMU	0.1 ng/dry g	UJ NQ
B13-8109_SED	EPA 8270C	4,4'-DDT	0.1 ng/dry g	UJ NQ, BC
B13-8109_SED	EPA 8270C	Acenaphthene	5 ng/dry g	UJ NQ
B13-8109_SED	EPA 8270C	Acenaphthylene	6 ng/dry g	J NQ
B13-8109_SED	EPA 8270C	Aldrin	0.1 ng/dry g	UJ NQ
B13-8109_SED	EPA 8270C	Anthracene	7.6 ng/dry g	J NQ
B13-8109_SED	EPA 8270C	Aroclor 1016	2 ng/dry g	UJ NQ
B13-8109_SED	EPA 8270C	Aroclor 1221	2 ng/dry g	UJ NQ
B13-8109_SED	EPA 8270C	Aroclor 1232	2 ng/dry g	UJ NQ
B13-8109_SED	EPA 8270C	Aroclor 1242	2 ng/dry g	UJ NQ
B13-8109_SED	EPA 8270C	Aroclor 1248	2 ng/dry g	UJ NQ
B13-8109_SED	EPA 8270C	Aroclor 1254	2 ng/dry g	UJ NQ

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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8109_SED	EPA 8270C	Aroclor 1260	2.4 ng/dry g	J NQ
B13-8109_SED	EPA 8270C	Aroclor 1262	2 ng/dry g	UJ NQ
B13-8109_SED	EPA 8270C	Aroclor 1268	2 ng/dry g	UJ NQ
B13-8109_SED	EPA 8270C	Benz[a]anthracene	30 ng/dry g	J NQ
B13-8109_SED	EPA 8270C	Benzo[a]pyrene	46.4 ng/dry g	J NQ, LP
B13-8109_SED	EPA 8270C	Benzo[b]fluoranthene	28.7 ng/dry g	J NQ
B13-8109_SED	EPA 8270C	Benzo[e]pyrene	30.4 ng/dry g	J NQ
B13-8109_SED	EPA 8270C	Benzo[g,h,i]perylene	46.7 ng/dry g	J NQ
B13-8109_SED	EPA 8270C	Benzo[k]fluoranthene	13.7 ng/dry g	J NQ
B13-8109_SED	EPA 8270C	BHC-alpha	0.1 ng/dry g	UJ NQ
B13-8109_SED	EPA 8270C	BHC-beta	0.1 ng/dry g	UJ NQ, BC
B13-8109_SED	EPA 8270C	BHC-delta	0.1 ng/dry g	UJ NQ
B13-8109_SED	EPA 8270C	BHC-gamma	0.1 ng/dry g	UJ NQ
B13-8109_SED	EPA 8270C	Biphenyl	1.5 ng/dry g	J DL, NQ
B13-8109_SED	EPA 8270C	Chlordane-alpha	0.1 ng/dry g	UJ NQ
B13-8109_SED	EPA 8270C	Chlordane-gamma	0.1 ng/dry g	UJ NQ
B13-8109_SED	EPA 8270C	Chrysene	36.2 ng/dry g	J NQ
B13-8109_SED	EPA 8270C	cis-Nonachlor	0.1 ng/dry g	UJ NQ
B13-8109_SED	EPA 8270C	DCPA (Dacthal)	0.1 ng/dry g	UJ NQ
B13-8109_SED	EPA 8270C	Dibenz[a,h]anthracene	6.2 ng/dry g	J NQ, LC, HP
B13-8109_SED	EPA 8270C	Dibenzothiophene	3.4 ng/dry g	J DL, NQ
B13-8109_SED	EPA 8270C	Dicofol	0.1 ng/dry g	UJ NQ, BC
B13-8109_SED	EPA 8270C	Dieldrin	0.1 ng/dry g	UJ NQ
B13-8109_SED	EPA 8270C	Endosulfan sulfate	0.1 ng/dry g	UJ NQ
B13-8109_SED	EPA 8270C	Endosulfan-I	0.1 ng/dry g	UJ NQ, LL
B13-8109_SED	EPA 8270C	Endosulfan-II	0.1 ng/dry g	UJ NQ, LL
B13-8109_SED	EPA 8270C	Endrin	0.1 ng/dry g	UJ NQ
B13-8109_SED	EPA 8270C	Endrin aldehyde	0.1 ng/dry g	R LL
B13-8109_SED	EPA 8270C	Endrin ketone	0.1 ng/dry g	UJ NQ, BC
B13-8109_SED	EPA 8270C	Fluoranthene	59.6 ng/dry g	J NQ
B13-8109_SED	EPA 8270C	Fluorene	2.4 ng/dry g	J DL, NQ
B13-8109_SED	EPA 8270C	Heptachlor	0.1 ng/dry g	UJ NQ, BC
B13-8109_SED	EPA 8270C	Heptachlor epoxide	0.1 ng/dry g	UJ NQ
B13-8109_SED	EPA 8270C	Hexachlorobenzene	0.37 ng/dry g	J NQ
B13-8109_SED	EPA 8270C	Indeno[1,2,3-c,d]pyrene	37.2 ng/dry g	J NQ
B13-8109_SED	EPA 8270C	Methoxychlor	0.1 ng/dry g	UJ NQ, BC
B13-8109_SED	EPA 8270C	Mirex	0.1 ng/dry g	UJ NQ
B13-8109_SED	EPA 8270C	Naphthalene	3.4 ng/dry g	J DL, NQ
B13-8109_SED	EPA 8270C	Oxychlordane	0.1 ng/dry g	UJ NQ
B13-8109_SED	EPA 8270C	PCB018	0.1 ng/dry g	UJ LV, LC
B13-8109_SED	EPA 8270C	PCB044	0.1 ng/dry g	UJ LV, LC
B13-8109_SED	EPA 8270C	PCB049	0.1 ng/dry g	UJ LV, LC
B13-8109_SED	EPA 8270C	PCB052	0.1 ng/dry g	UJ LV, LC
B13-8109_SED	EPA 8270C	PCB087	0.1 ng/dry g	UJ LC
B13-8109_SED	EPA 8270C	PCB099	0.05 ng/dry g	J DL, LC
B13-8109_SED	EPA 8270C	PCB101	0.34 ng/dry g	J LC
B13-8109_SED	EPA 8270C	PCB110	0.16 ng/dry g	J LC
B13-8109_SED	EPA 8270C	PCB119	0.1 ng/dry g	UJ LC
B13-8109_SED	EPA 8270C	PCB149	0.35 ng/dry g	J LC
B13-8109_SED	EPA 8270C	PCB151	0.07 ng/dry g	J DL, LC
B13-8109_SED	EPA 8270C	PCB158	0.15 ng/dry g	J LC
B13-8109_SED	EPA 8270C	PCB168+132	0.1 ng/dry g	J DL
B13-8109_SED	EPA 8270C	PCB169	0.47 ng/dry g	J HL
B13-8109_SED	EPA 8270C	PCB174	0.09 ng/dry g	J DL

**TABLE 2**  
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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8109_SED	EPA 8270C	PCB177	0.06 ng/dry g	J DL, LC
B13-8109_SED	EPA 8270C	PCB183	0.07 ng/dry g	J DL, LC
B13-8109_SED	EPA 8270C	PCB187	0.15 ng/dry g	J BC, LV, LC
B13-8109_SED	EPA 8270C	PCB199(200)	0.2 ng/dry g	UJ LV, LC
B13-8109_SED	EPA 8270C	PCB206	0.1 ng/dry g	UJ BC, LC
B13-8109_SED	EPA 8270C	PCB209	0.1 ng/dry g	UJ LC
B13-8109_SED	EPA 8270C	Perthane	0.1 ng/dry g	UJ NQ, BC
B13-8109_SED	EPA 8270C	Perylene	10.1 ng/dry g	J NQ, LP
B13-8109_SED	EPA 8270C	Phenanthrene	41.6 ng/dry g	J NQ
B13-8109_SED	EPA 8270C	Pyrene	83.8 ng/dry g	J NQ
B13-8109_SED	EPA 8270C	trans-Nonachlor	0.1 ng/dry g	UJ NQ
B13-8109_SED	EPA 8270C-NCI	Allethrin	0.5 ng/dry g	UJ NQ, BC
B13-8109_SED	EPA 8270C-NCI	Bifenthrin	0.5 ng/dry g	UJ NQ
B13-8109_SED	EPA 8270C-NCI	Cyfluthrin, total	0.5 ng/dry g	UJ NQ, BC
B13-8109_SED	EPA 8270C-NCI	Cypermethrin, total	0.5 ng/dry g	UJ NQ, BC
B13-8109_SED	EPA 8270C-NCI	Danitol (Fenpropathrin)	0.5 ng/dry g	UJ NQ
B13-8109_SED	EPA 8270C-NCI	Deltamethrin/Tralomethrin	0.5 ng/dry g	R BC
B13-8109_SED	EPA 8270C-NCI	Esfenvalerate	0.5 ng/dry g	UJ NQ, BC
B13-8109_SED	EPA 8270C-NCI	Fenvalerate	0.5 ng/dry g	UJ NQ, BC
B13-8109_SED	EPA 8270C-NCI	Fipronil	0.5 ng/dry g	UJ NQ
B13-8109_SED	EPA 8270C-NCI	Fipronil Desulfinyl	0.5 ng/dry g	UJ NQ
B13-8109_SED	EPA 8270C-NCI	Fipronil Sulfide	0.5 ng/dry g	UJ NQ
B13-8109_SED	EPA 8270C-NCI	Fipronil Sulfone	0.5 ng/dry g	UJ NQ
B13-8109_SED	EPA 8270C-NCI	Fluvalinate	0.5 ng/dry g	UJ NQ, BC
B13-8109_SED	EPA 8270C-NCI	I-Cyhalothrin	0.5 ng/dry g	UJ NQ
B13-8109_SED	EPA 8270C-NCI	PBDE085	0.1 ng/dry g	UJ LC
B13-8109_SED	EPA 8270C-NCI	PBDE138	0.1 ng/dry g	UJ LC
B13-8109_SED	EPA 8270C-NCI	PBDE153	0.1 ng/dry g	UJ LC
B13-8109_SED	EPA 8270C-NCI	PBDE183	0.1 ng/dry g	UJ LC
B13-8109_SED	EPA 8270C-NCI	PBDE209	0.1 ng/dry g	UJ LC
B13-8109_SED	EPA 8270C-NCI	Permethrin, cis-	0.5 ng/dry g	R BC
B13-8109_SED	EPA 8270C-NCI	Permethrin, trans-	0.5 ng/dry g	R BC
B13-8109_SED	EPA 8270C-NCI	Prallethrin	0.5 ng/dry g	UJ NQ
B13-8109_SED	EPA 8270C-NCI	Resmethrin	0.5 ng/dry g	UJ NQ, BC
B13-8109_SED	EPA 9060	Total Nitrogen	0.31 % Dry Weight	J NQ
B13-8109_SED	EPA 9060	Total Organic Carbon	0.5 % Dry Weight	J NQ
B13-8109_SED	Plumb, 1981 and Teryl	Acid Volatile Sulfides	5.96 mg/dry kg	J NQ
B13-8111_SED	EPA 245.7	Mercury	1.1948 µg/dry g	J HM
B13-8111_SED	EPA 6020	Aluminum	44067.6 µg/dry g	J HP, HD
B13-8111_SED	EPA 6020	Antimony	0.436 µg/dry g	J HP
B13-8111_SED	EPA 6020	Arsenic	14.745 µg/dry g	J HP
B13-8111_SED	EPA 6020	Barium	135.005 µg/dry g	J CH
B13-8111_SED	EPA 6020	Beryllium	0.804 µg/dry g	J HP
B13-8111_SED	EPA 6020	Cadmium	0.2637 µg/dry g	J LP
B13-8111_SED	EPA 6020	Chromium	77.8874 µg/dry g	J HP
B13-8111_SED	EPA 6020	Iron (Fe)	40012.2 µg/dry g	J HP, HD
B13-8111_SED	EPA 6020	Nickel	20.48 µg/dry g	J HP
B13-8111_SED	EPA 6020	Silver	1.02 µg/dry g	J LM, HD
B13-8111_SED	EPA 6020	Total Phosphorus	837.175 µg/dry g	J NQ
B13-8111_SED	EPA 8270C	1-Methylnaphthalene	3.1 ng/dry g	J DL
B13-8111_SED	EPA 8270C	2,3,5-Trimethylnaphthalene	4.2 ng/dry g	J DL
B13-8111_SED	EPA 8270C	2,4'-DDT	0.1 ng/dry g	UJ LC
B13-8111_SED	EPA 8270C	4,4'-DDMU	0.1 ng/dry g	UJ BC
B13-8111_SED	EPA 8270C	4,4'-DDT	0.1 ng/dry g	UJ BC, LC

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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8111_SED	EPA 8270C	Aroclor 1016	2 ng/dry g	UJ NQ
B13-8111_SED	EPA 8270C	Aroclor 1221	2 ng/dry g	UJ NQ
B13-8111_SED	EPA 8270C	Aroclor 1232	2 ng/dry g	UJ NQ
B13-8111_SED	EPA 8270C	Aroclor 1242	2 ng/dry g	UJ NQ
B13-8111_SED	EPA 8270C	Aroclor 1248	2 ng/dry g	UJ NQ
B13-8111_SED	EPA 8270C	Aroclor 1254	2 ng/dry g	UJ NQ
B13-8111_SED	EPA 8270C	Aroclor 1260	117.3 ng/dry g	J NQ
B13-8111_SED	EPA 8270C	Aroclor 1262	2 ng/dry g	UJ NQ
B13-8111_SED	EPA 8270C	Aroclor 1268	2 ng/dry g	UJ NQ
B13-8111_SED	EPA 8270C	Benzo[a]anthracene	171.7 ng/dry g	J CH
B13-8111_SED	EPA 8270C	Benzo[b]fluoranthene	216.8 ng/dry g	J BC, CH
B13-8111_SED	EPA 8270C	Benzo[e]pyrene	177.3 ng/dry g	J CH
B13-8111_SED	EPA 8270C	Benzo[k]fluoranthene	220.1 ng/dry g	J LC
B13-8111_SED	EPA 8270C	BHC-beta	0.1 ng/dry g	UJ BC
B13-8111_SED	EPA 8270C	Chrysene	437.1 ng/dry g	J CH
B13-8111_SED	EPA 8270C	Dibenz[a,h]anthracene	47.6 ng/dry g	J CH
B13-8111_SED	EPA 8270C	Dicofol	0.1 ng/dry g	UJ BC, LC
B13-8111_SED	EPA 8270C	Endosulfan-II	0.1 ng/dry g	UJ LC
B13-8111_SED	EPA 8270C	Heptachlor	0.1 ng/dry g	UJ LC
B13-8111_SED	EPA 8270C	Indeno[1,2,3-c,d]pyrene	225.2 ng/dry g	J CH
B13-8111_SED	EPA 8270C	Methoxychlor	0.1 ng/dry g	UJ BC, LC
B13-8111_SED	EPA 8270C	PCB008	0.1 ng/dry g	UJ BC, LC
B13-8111_SED	EPA 8270C	PCB044	2.53 ng/dry g	J CH
B13-8111_SED	EPA 8270C	PCB052	7.31 ng/dry g	J CH
B13-8111_SED	EPA 8270C	PCB070	2.88 ng/dry g	J CH
B13-8111_SED	EPA 8270C	PCB087	4.77 ng/dry g	J CH
B13-8111_SED	EPA 8270C	PCB099	2.96 ng/dry g	J CH
B13-8111_SED	EPA 8270C	PCB101	10.17 ng/dry g	J CH
B13-8111_SED	EPA 8270C	PCB105	1.77 ng/dry g	J BC
B13-8111_SED	EPA 8270C	PCB110	9.06 ng/dry g	J CH
B13-8111_SED	EPA 8270C	PCB118	6.7 ng/dry g	J CH
B13-8111_SED	EPA 8270C	PCB126	0.1 ng/dry g	UJ BC
B13-8111_SED	EPA 8270C	PCB128	0.1 ng/dry g	UJ LV
B13-8111_SED	EPA 8270C	PCB149	5.49 ng/dry g	J CH
B13-8111_SED	EPA 8270C	PCB151	1.78 ng/dry g	J CH
B13-8111_SED	EPA 8270C	PCB153	5.88 ng/dry g	J BC
B13-8111_SED	EPA 8270C	PCB156	1.18 ng/dry g	J BC
B13-8111_SED	EPA 8270C	PCB168+132	3 ng/dry g	J CH
B13-8111_SED	EPA 8270C	PCB169	0.1 ng/dry g	UJ BC
B13-8111_SED	EPA 8270C	PCB187	1.5 ng/dry g	J CH
B13-8111_SED	EPA 8270C	PCB209	0.1 ng/dry g	UJ LV, LC
B13-8111_SED	EPA 8270C	Perthane	0.1 ng/dry g	UJ BC
B13-8111_SED	EPA 8270C	Perylene	34 ng/dry g	J CH
B13-8111_SED	EPA 8270C	Pyrene	201.3 ng/dry g	J LC
B13-8111_SED	EPA 8270C-NCI	Deltamethrin/Tralomethrin	0.5 ng/dry g	UJ LV
B13-8111_SED	EPA 8270C-NCI	I-Cyhalothrin	0.5 ng/dry g	UJ LV
B13-8111_SED	EPA 8270C-NCI	PBDE138	0.1 ng/dry g	UJ LC
B13-8111_SED	EPA 8270C-NCI	PBDE209	0.1 ng/dry g	UJ LC
B13-8111_SED	EPA 8270C-NCI	Permethrin, cis-	0.5 ng/dry g	UJ LV
B13-8111_SED	EPA 8270C-NCI	Resmethrin	0.5 ng/dry g	UJ LC
B13-8111_SED	EPA 9060	Total Nitrogen	0.28 % Dry Weight	J NQ
B13-8111_SED	EPA 9060	Total Organic Carbon	1.3 % Dry Weight	J HD, NQ
B13-8111_SED	Plumb, 1981 and Teryl	Acid Volatile Sulfides	7.42 mg/dry kg	J NQ
B13-8112_SED	EPA 6020	Aluminum	27653.9 µg/dry g	J HP

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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8112_SED	EPA 6020	Antimony	0.325 µg/dry g	J HP
B13-8112_SED	EPA 6020	Arsenic	7.777 µg/dry g	J HP
B13-8112_SED	EPA 6020	Barium	103.171 µg/dry g	J CH
B13-8112_SED	EPA 6020	Beryllium	0.468 µg/dry g	J HP
B13-8112_SED	EPA 6020	Cadmium	0.1401 µg/dry g	J LP
B13-8112_SED	EPA 6020	Chromium	42.5268 µg/dry g	J HP
B13-8112_SED	EPA 6020	Iron (Fe)	24583.2 µg/dry g	J HP
B13-8112_SED	EPA 6020	Nickel	11.9 µg/dry g	J HP
B13-8112_SED	EPA 6020	Total Phosphorus	473.629 µg/dry g	J NQ
B13-8112_SED	EPA 8270C	2,3,5-Trimethylnaphthalene	3.9 ng/dry g	J DL
B13-8112_SED	EPA 8270C	2,4'-DDT	0.1 ng/dry g	UJ LC
B13-8112_SED	EPA 8270C	4,4'-DDMU	0.1 ng/dry g	UJ BC
B13-8112_SED	EPA 8270C	4,4'-DDT	0.1 ng/dry g	UJ BC, LC
B13-8112_SED	EPA 8270C	Acenaphthene	3.4 ng/dry g	J DL
B13-8112_SED	EPA 8270C	Aroclor 1016	2 ng/dry g	UJ NQ
B13-8112_SED	EPA 8270C	Aroclor 1221	2 ng/dry g	UJ NQ
B13-8112_SED	EPA 8270C	Aroclor 1232	2 ng/dry g	UJ NQ
B13-8112_SED	EPA 8270C	Aroclor 1242	2 ng/dry g	UJ NQ
B13-8112_SED	EPA 8270C	Aroclor 1248	2 ng/dry g	UJ NQ
B13-8112_SED	EPA 8270C	Aroclor 1254	2 ng/dry g	UJ NQ
B13-8112_SED	EPA 8270C	Aroclor 1260	16 ng/dry g	J NQ
B13-8112_SED	EPA 8270C	Aroclor 1262	2 ng/dry g	UJ NQ
B13-8112_SED	EPA 8270C	Aroclor 1268	2 ng/dry g	UJ NQ
B13-8112_SED	EPA 8270C	Benz[a]anthracene	78.8 ng/dry g	J CH
B13-8112_SED	EPA 8270C	Benzo[b]fluoranthene	120.4 ng/dry g	J BC, CH
B13-8112_SED	EPA 8270C	Benzo[e]pyrene	92.2 ng/dry g	J CH
B13-8112_SED	EPA 8270C	Benzo[k]fluoranthene	108.6 ng/dry g	J LC
B13-8112_SED	EPA 8270C	BHC-beta	0.1 ng/dry g	UJ BC
B13-8112_SED	EPA 8270C	Chrysene	165.1 ng/dry g	J CH
B13-8112_SED	EPA 8270C	Dibenz[a,h]anthracene	15.5 ng/dry g	J CH
B13-8112_SED	EPA 8270C	Dicofol	0.1 ng/dry g	UJ BC, LC
B13-8112_SED	EPA 8270C	Endosulfan-II	0.1 ng/dry g	UJ LC
B13-8112_SED	EPA 8270C	Heptachlor	0.1 ng/dry g	UJ LC
B13-8112_SED	EPA 8270C	Indeno[1,2,3-c,d]pyrene	101.9 ng/dry g	J CH
B13-8112_SED	EPA 8270C	Methoxychlor	0.1 ng/dry g	UJ BC, LC
B13-8112_SED	EPA 8270C	PCB008	0.1 ng/dry g	UJ BC, LC
B13-8112_SED	EPA 8270C	PCB049	2.38 ng/dry g	J CH
B13-8112_SED	EPA 8270C	PCB099	0.29 ng/dry g	J CH
B13-8112_SED	EPA 8270C	PCB101	0.66 ng/dry g	J CH
B13-8112_SED	EPA 8270C	PCB105	0.1 ng/dry g	UJ BC
B13-8112_SED	EPA 8270C	PCB118	1.23 ng/dry g	J CH
B13-8112_SED	EPA 8270C	PCB126	0.1 ng/dry g	UJ BC
B13-8112_SED	EPA 8270C	PCB128	0.1 ng/dry g	UJ LV
B13-8112_SED	EPA 8270C	PCB149	1.02 ng/dry g	J CH
B13-8112_SED	EPA 8270C	PCB153	1.46 ng/dry g	J BC
B13-8112_SED	EPA 8270C	PCB156	0.1 ng/dry g	UJ BC
B13-8112_SED	EPA 8270C	PCB168+132	0.8 ng/dry g	J CH
B13-8112_SED	EPA 8270C	PCB169	0.1 ng/dry g	UJ BC
B13-8112_SED	EPA 8270C	PCB187	0.86 ng/dry g	J CH
B13-8112_SED	EPA 8270C	PCB209	0.1 ng/dry g	UJ LV, LC
B13-8112_SED	EPA 8270C	Perthane	0.1 ng/dry g	UJ BC
B13-8112_SED	EPA 8270C	Perylene	11.6 ng/dry g	J CH
B13-8112_SED	EPA 8270C	Pyrene	114.9 ng/dry g	J LC
B13-8112_SED	EPA 8270C-NCI	Deltamethrin/Tralomethrin	0.5 ng/dry g	UJ LV



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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8112_SED	EPA 8270C-NCI	I-Cyhalothrin	0.5 ng/dry g	UJ LV
B13-8112_SED	EPA 8270C-NCI	PBDE138	0.1 ng/dry g	UJ LC
B13-8112_SED	EPA 8270C-NCI	PBDE154	0.08 ng/dry g	J DL
B13-8112_SED	EPA 8270C-NCI	PBDE209	0.1 ng/dry g	UJ LC
B13-8112_SED	EPA 8270C-NCI	Permethrin, cis-	0.5 ng/dry g	UJ LV
B13-8112_SED	EPA 8270C-NCI	Resmethrin	0.5 ng/dry g	UJ LC
B13-8112_SED	EPA 9060	Total Nitrogen	0.01 % Dry Weight	UJ NQ
B13-8112_SED	EPA 9060	Total Organic Carbon	1 % Dry Weight	J NQ
B13-8112_SED	Plumb, 1981 and Teryl	Acid Volatile Sulfides	19.44 mg/dry kg	J NQ
B13-8113_SED	EPA 6020	Aluminum	30384.2 µg/dry g	J HP
B13-8113_SED	EPA 6020	Antimony	0.268 µg/dry g	J HP
B13-8113_SED	EPA 6020	Barium	102.609 µg/dry g	J CH
B13-8113_SED	EPA 6020	Beryllium	0.536 µg/dry g	J HP
B13-8113_SED	EPA 6020	Cadmium	0.1332 µg/dry g	J LP
B13-8113_SED	EPA 6020	Chromium	48.2405 µg/dry g	J HP
B13-8113_SED	EPA 6020	Iron (Fe)	32261.4 µg/dry g	J HP
B13-8113_SED	EPA 6020	Total Phosphorus	536.977 µg/dry g	J NQ
B13-8113_SED	EPA 8270C	1-Methylphenanthrene	4.6 ng/dry g	J DL
B13-8113_SED	EPA 8270C	2,3,5-Trimethylnaphthalene	3.8 ng/dry g	J DL
B13-8113_SED	EPA 8270C	2,4'-DDT	0.1 ng/dry g	UJ LC
B13-8113_SED	EPA 8270C	4,4'-DDMU	0.1 ng/dry g	UJ BC
B13-8113_SED	EPA 8270C	4,4'-DDT	0.1 ng/dry g	UJ BC, LC
B13-8113_SED	EPA 8270C	Acenaphthylene	2.5 ng/dry g	J DL
B13-8113_SED	EPA 8270C	Anthracene	4.1 ng/dry g	J DL
B13-8113_SED	EPA 8270C	Aroclor 1016	2 ng/dry g	UJ NQ
B13-8113_SED	EPA 8270C	Aroclor 1221	2 ng/dry g	UJ NQ
B13-8113_SED	EPA 8270C	Aroclor 1232	2 ng/dry g	UJ NQ
B13-8113_SED	EPA 8270C	Aroclor 1242	2 ng/dry g	UJ NQ
B13-8113_SED	EPA 8270C	Aroclor 1248	2 ng/dry g	UJ NQ
B13-8113_SED	EPA 8270C	Aroclor 1254	2 ng/dry g	UJ NQ
B13-8113_SED	EPA 8270C	Aroclor 1260	16.8 ng/dry g	J NQ
B13-8113_SED	EPA 8270C	Aroclor 1262	2 ng/dry g	UJ NQ
B13-8113_SED	EPA 8270C	Aroclor 1268	2 ng/dry g	UJ NQ
B13-8113_SED	EPA 8270C	Benz[a]anthracene	13.5 ng/dry g	J CH
B13-8113_SED	EPA 8270C	Benzo[b]fluoranthene	37 ng/dry g	J BC, CH
B13-8113_SED	EPA 8270C	Benzo[e]pyrene	27.4 ng/dry g	J CH
B13-8113_SED	EPA 8270C	Benzo[k]fluoranthene	34.1 ng/dry g	J LC
B13-8113_SED	EPA 8270C	BHC-beta	0.1 ng/dry g	UJ BC
B13-8113_SED	EPA 8270C	Chrysene	26.8 ng/dry g	J CH
B13-8113_SED	EPA 8270C	Dibenz[a,h]anthracene	3.4 ng/dry g	J DL, CH
B13-8113_SED	EPA 8270C	Dibenzothiophene	2 ng/dry g	J DL
B13-8113_SED	EPA 8270C	Dicofol	0.1 ng/dry g	UJ BC, LC
B13-8113_SED	EPA 8270C	Endosulfan-II	0.1 ng/dry g	UJ LC
B13-8113_SED	EPA 8270C	Fluorene	2.5 ng/dry g	J DL
B13-8113_SED	EPA 8270C	Heptachlor	0.1 ng/dry g	UJ LC
B13-8113_SED	EPA 8270C	Indeno[1,2,3-c,d]pyrene	26.3 ng/dry g	J CH
B13-8113_SED	EPA 8270C	Methoxychlor	0.1 ng/dry g	UJ BC, LC
B13-8113_SED	EPA 8270C	Naphthalene	2.4 ng/dry g	U RB
B13-8113_SED	EPA 8270C	PCB008	0.1 ng/dry g	UJ BC, LC
B13-8113_SED	EPA 8270C	PCB099	0.37 ng/dry g	J CH
B13-8113_SED	EPA 8270C	PCB101	0.91 ng/dry g	J CH
B13-8113_SED	EPA 8270C	PCB105	0.1 ng/dry g	UJ BC
B13-8113_SED	EPA 8270C	PCB110	0.58 ng/dry g	J CH
B13-8113_SED	EPA 8270C	PCB118	1.25 ng/dry g	J CH

**TABLE 2**  
**Qualifiers Added to the Sediment Samples During Validation**  
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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8113_SED	EPA 8270C	PCB126	0.1 ng/dry g	UJ BC
B13-8113_SED	EPA 8270C	PCB128	0.1 ng/dry g	UJ LV
B13-8113_SED	EPA 8270C	PCB149	1.22 ng/dry g	J CH
B13-8113_SED	EPA 8270C	PCB151	0.71 ng/dry g	J CH
B13-8113_SED	EPA 8270C	PCB153	1.95 ng/dry g	J BC
B13-8113_SED	EPA 8270C	PCB156	0.1 ng/dry g	UJ BC
B13-8113_SED	EPA 8270C	PCB168+132	0.5 ng/dry g	J CH
B13-8113_SED	EPA 8270C	PCB169	0.1 ng/dry g	UJ BC
B13-8113_SED	EPA 8270C	PCB187	0.84 ng/dry g	J CH
B13-8113_SED	EPA 8270C	PCB209	0.1 ng/dry g	UJ LV, LC
B13-8113_SED	EPA 8270C	Perthane	0.1 ng/dry g	UJ BC
B13-8113_SED	EPA 8270C	Perylene	2 ng/dry g	J DL, CH
B13-8113_SED	EPA 8270C	Pyrene	28.8 ng/dry g	J LC
B13-8113_SED	EPA 8270C-NCI	Deltamethrin/Tralomethrin	0.5 ng/dry g	UJ LV
B13-8113_SED	EPA 8270C-NCI	I-Cyhalothrin	0.5 ng/dry g	UJ LV
B13-8113_SED	EPA 8270C-NCI	PBDE138	0.1 ng/dry g	UJ LC
B13-8113_SED	EPA 8270C-NCI	PBDE209	0.1 ng/dry g	UJ LC
B13-8113_SED	EPA 8270C-NCI	Permethrin, cis-	0.5 ng/dry g	UJ LV
B13-8113_SED	EPA 8270C-NCI	Resmethrin	0.5 ng/dry g	UJ LC
B13-8113_SED	EPA 9060	Total Nitrogen	0.07 % Dry Weight	J NQ
B13-8113_SED	EPA 9060	Total Organic Carbon	0.7 % Dry Weight	J NQ
B13-8113_SED	Plumb, 1981 and Teryl	Acid Volatile Sulfides	1.46 mg/dry kg	J NQ
B13-8116_SED	EPA 200.8	Nickel	0.0055 µmol/dry g	J DL
B13-8116_SED	EPA 6020	Aluminum	12988.5 µg/dry g	J HP
B13-8116_SED	EPA 6020	Antimony	0.35 µg/dry g	J HP
B13-8116_SED	EPA 6020	Barium	136.092 µg/dry g	J CH
B13-8116_SED	EPA 6020	Beryllium	0.231 µg/dry g	J HP
B13-8116_SED	EPA 6020	Cadmium	0.0905 µg/dry g	J LP
B13-8116_SED	EPA 6020	Chromium	21.8362 µg/dry g	J HP
B13-8116_SED	EPA 6020	Iron (Fe)	13878 µg/dry g	J HP
B13-8116_SED	EPA 6020	Total Phosphorus	268.842 µg/dry g	J NQ
B13-8116_SED	EPA 8270C	1-Methylnaphthalene	2.7 ng/dry g	J DL
B13-8116_SED	EPA 8270C	2,3,5-Trimethylnaphthalene	3.7 ng/dry g	J DL
B13-8116_SED	EPA 8270C	2,4'-DDT	0.1 ng/dry g	UJ LC
B13-8116_SED	EPA 8270C	2,6-Dimethylnaphthalene	2.1 ng/dry g	J DL
B13-8116_SED	EPA 8270C	2-Methylnaphthalene	2.4 ng/dry g	U RB
B13-8116_SED	EPA 8270C	4,4'-DDMU	0.1 ng/dry g	UJ BC
B13-8116_SED	EPA 8270C	4,4'-DDT	0.1 ng/dry g	UJ BC, LC
B13-8116_SED	EPA 8270C	Acenaphthene	3.4 ng/dry g	J DL
B13-8116_SED	EPA 8270C	Aroclor 1016	2 ng/dry g	UJ NQ
B13-8116_SED	EPA 8270C	Aroclor 1221	2 ng/dry g	UJ NQ
B13-8116_SED	EPA 8270C	Aroclor 1232	2 ng/dry g	UJ NQ
B13-8116_SED	EPA 8270C	Aroclor 1242	2 ng/dry g	UJ NQ
B13-8116_SED	EPA 8270C	Aroclor 1248	2 ng/dry g	UJ NQ
B13-8116_SED	EPA 8270C	Aroclor 1254	2 ng/dry g	UJ NQ
B13-8116_SED	EPA 8270C	Aroclor 1260	40.2 ng/dry g	J NQ
B13-8116_SED	EPA 8270C	Aroclor 1262	2 ng/dry g	UJ NQ
B13-8116_SED	EPA 8270C	Aroclor 1268	2 ng/dry g	UJ NQ
B13-8116_SED	EPA 8270C	Benz[a]anthracene	69.7 ng/dry g	J CH
B13-8116_SED	EPA 8270C	Benzo[b]fluoranthene	112.5 ng/dry g	J BC, CH
B13-8116_SED	EPA 8270C	Benzo[e]pyrene	77.1 ng/dry g	J CH
B13-8116_SED	EPA 8270C	Benzo[k]fluoranthene	100.8 ng/dry g	J LC
B13-8116_SED	EPA 8270C	BHC-beta	0.1 ng/dry g	UJ BC
B13-8116_SED	EPA 8270C	Chrysene	127.2 ng/dry g	J CH

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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8116_SED	EPA 8270C	Dibenz[a,h]anthracene	44.5 ng/dry g	J CH
B13-8116_SED	EPA 8270C	Dicofol	0.1 ng/dry g	UJ BC, LC
B13-8116_SED	EPA 8270C	Endosulfan-II	0.1 ng/dry g	UJ LC
B13-8116_SED	EPA 8270C	Heptachlor	0.1 ng/dry g	UJ LC
B13-8116_SED	EPA 8270C	Indeno[1,2,3-c,d]pyrene	175 ng/dry g	J CH
B13-8116_SED	EPA 8270C	Methoxychlor	0.1 ng/dry g	UJ BC, LC
B13-8116_SED	EPA 8270C	Naphthalene	2.9 ng/dry g	U RB
B13-8116_SED	EPA 8270C	PCB008	0.1 ng/dry g	UJ BC, LC
B13-8116_SED	EPA 8270C	PCB052	2.96 ng/dry g	J CH
B13-8116_SED	EPA 8270C	PCB066	1.45 ng/dry g	J CH
B13-8116_SED	EPA 8270C	PCB099	1.4 ng/dry g	J CH
B13-8116_SED	EPA 8270C	PCB101	2.66 ng/dry g	J CH
B13-8116_SED	EPA 8270C	PCB105	0.1 ng/dry g	UJ BC
B13-8116_SED	EPA 8270C	PCB110	2.06 ng/dry g	J CH
B13-8116_SED	EPA 8270C	PCB118	1.76 ng/dry g	J CH
B13-8116_SED	EPA 8270C	PCB126	0.1 ng/dry g	UJ BC
B13-8116_SED	EPA 8270C	PCB128	0.78 ng/dry g	J LV
B13-8116_SED	EPA 8270C	PCB149	2.07 ng/dry g	J CH
B13-8116_SED	EPA 8270C	PCB151	0.66 ng/dry g	J CH
B13-8116_SED	EPA 8270C	PCB153	3.06 ng/dry g	J BC
B13-8116_SED	EPA 8270C	PCB156	0.1 ng/dry g	UJ BC
B13-8116_SED	EPA 8270C	PCB168+132	1.2 ng/dry g	J CH
B13-8116_SED	EPA 8270C	PCB169	0.1 ng/dry g	UJ BC
B13-8116_SED	EPA 8270C	PCB187	1.67 ng/dry g	J CH
B13-8116_SED	EPA 8270C	PCB209	0.2 ng/dry g	J LV, LC
B13-8116_SED	EPA 8270C	Perthane	0.1 ng/dry g	UJ BC
B13-8116_SED	EPA 8270C	Perylene	11.3 ng/dry g	J CH
B13-8116_SED	EPA 8270C	Pyrene	136.3 ng/dry g	J LC
B13-8116_SED	EPA 8270C-NCI	Deltamethrin/Tralomethrin	0.5 ng/dry g	UJ LV
B13-8116_SED	EPA 8270C-NCI	I-Cyhalothrin	0.5 ng/dry g	UJ LV
B13-8116_SED	EPA 8270C-NCI	PBDE138	0.1 ng/dry g	UJ LC
B13-8116_SED	EPA 8270C-NCI	PBDE154	0.09 ng/dry g	J DL
B13-8116_SED	EPA 8270C-NCI	PBDE209	0.1 ng/dry g	UJ LC
B13-8116_SED	EPA 8270C-NCI	Permethrin, cis-	0.5 ng/dry g	UJ LV
B13-8116_SED	EPA 8270C-NCI	Resmethrin	0.5 ng/dry g	UJ LC
B13-8116_SED	EPA 9060	Total Nitrogen	0.24 % Dry Weight	J NQ
B13-8116_SED	EPA 9060	Total Organic Carbon	0.16 % Dry Weight	J NQ
B13-8116_SED	Plumb, 1981 and Teryl	Acid Volatile Sulfides	2.87 mg/dry kg	J NQ
B13-8117_SED	EPA 6020	Aluminum	42691.6 µg/dry g	J HP
B13-8117_SED	EPA 6020	Antimony	0.282 µg/dry g	J HP
B13-8117_SED	EPA 6020	Barium	113.008 µg/dry g	J CH
B13-8117_SED	EPA 6020	Beryllium	0.723 µg/dry g	J HP
B13-8117_SED	EPA 6020	Cadmium	0.1595 µg/dry g	J LP
B13-8117_SED	EPA 6020	Chromium	72.1433 µg/dry g	J HP
B13-8117_SED	EPA 6020	Iron (Fe)	44681.3 µg/dry g	J HP
B13-8117_SED	EPA 6020	Total Phosphorus	827.216 µg/dry g	J NQ
B13-8117_SED	EPA 8270C	2,3,5-Trimethylnaphthalene	4.4 ng/dry g	J DL
B13-8117_SED	EPA 8270C	2,4'-DDT	0.1 ng/dry g	UJ LC
B13-8117_SED	EPA 8270C	4,4'-DDMU	0.1 ng/dry g	UJ BC
B13-8117_SED	EPA 8270C	4,4'-DDT	0.1 ng/dry g	UJ BC, LC
B13-8117_SED	EPA 8270C	Acenaphthylene	3.5 ng/dry g	J DL
B13-8117_SED	EPA 8270C	Aroclor 1016	2 ng/dry g	UJ NQ
B13-8117_SED	EPA 8270C	Aroclor 1221	2 ng/dry g	UJ NQ
B13-8117_SED	EPA 8270C	Aroclor 1232	2 ng/dry g	UJ NQ

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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8117_SED	EPA 8270C	Aroclor 1242	2 ng/dry g	UJ NQ
B13-8117_SED	EPA 8270C	Aroclor 1248	2 ng/dry g	UJ NQ
B13-8117_SED	EPA 8270C	Aroclor 1254	2 ng/dry g	UJ NQ
B13-8117_SED	EPA 8270C	Aroclor 1260	20.3 ng/dry g	J NQ
B13-8117_SED	EPA 8270C	Aroclor 1262	2 ng/dry g	UJ NQ
B13-8117_SED	EPA 8270C	Aroclor 1268	2 ng/dry g	UJ NQ
B13-8117_SED	EPA 8270C	Benz[a]anthracene	26.7 ng/dry g	J CH
B13-8117_SED	EPA 8270C	Benzo[b]fluoranthene	54.4 ng/dry g	J BC, CH
B13-8117_SED	EPA 8270C	Benzo[e]pyrene	44.3 ng/dry g	J CH
B13-8117_SED	EPA 8270C	Benzo[k]fluoranthene	61.1 ng/dry g	J LC
B13-8117_SED	EPA 8270C	BHC-beta	0.1 ng/dry g	UJ BC
B13-8117_SED	EPA 8270C	Chrysene	44.8 ng/dry g	J CH
B13-8117_SED	EPA 8270C	Dibenz[a,h]anthracene	4.8 ng/dry g	J DL, CH
B13-8117_SED	EPA 8270C	Dibenzothiophene	3.1 ng/dry g	J DL
B13-8117_SED	EPA 8270C	Dicofol	0.1 ng/dry g	UJ BC, LC
B13-8117_SED	EPA 8270C	Endosulfan-II	0.1 ng/dry g	UJ LC
B13-8117_SED	EPA 8270C	Fluorene	3.5 ng/dry g	J DL
B13-8117_SED	EPA 8270C	Heptachlor	0.1 ng/dry g	UJ LC
B13-8117_SED	EPA 8270C	Indeno[1,2,3-c,d]pyrene	39.9 ng/dry g	J CH
B13-8117_SED	EPA 8270C	Methoxychlor	0.1 ng/dry g	UJ BC, LC
B13-8117_SED	EPA 8270C	Naphthalene	2.4 ng/dry g	U RB
B13-8117_SED	EPA 8270C	PCB008	0.1 ng/dry g	UJ BC, LC
B13-8117_SED	EPA 8270C	PCB044	0.44 ng/dry g	J CH
B13-8117_SED	EPA 8270C	PCB099	0.2 ng/dry g	J CH
B13-8117_SED	EPA 8270C	PCB101	1.22 ng/dry g	J CH
B13-8117_SED	EPA 8270C	PCB105	0.1 ng/dry g	UJ BC
B13-8117_SED	EPA 8270C	PCB110	0.46 ng/dry g	J CH
B13-8117_SED	EPA 8270C	PCB118	1.02 ng/dry g	J CH
B13-8117_SED	EPA 8270C	PCB126	0.1 ng/dry g	UJ BC
B13-8117_SED	EPA 8270C	PCB128	0.1 ng/dry g	UJ LV
B13-8117_SED	EPA 8270C	PCB149	1.5 ng/dry g	J CH
B13-8117_SED	EPA 8270C	PCB151	0.76 ng/dry g	J CH
B13-8117_SED	EPA 8270C	PCB153	2.12 ng/dry g	J BC
B13-8117_SED	EPA 8270C	PCB156	0.1 ng/dry g	UJ BC
B13-8117_SED	EPA 8270C	PCB168+132	0.4 ng/dry g	J CH
B13-8117_SED	EPA 8270C	PCB169	0.1 ng/dry g	UJ BC
B13-8117_SED	EPA 8270C	PCB187	0.98 ng/dry g	J CH
B13-8117_SED	EPA 8270C	PCB209	0.26 ng/dry g	J LV, LC
B13-8117_SED	EPA 8270C	Perthane	0.1 ng/dry g	UJ BC
B13-8117_SED	EPA 8270C	Perylene	7.3 ng/dry g	J CH
B13-8117_SED	EPA 8270C	Pyrene	54.7 ng/dry g	J LC
B13-8117_SED	EPA 8270C-NCI	Deltamethrin/Tralomethrin	0.5 ng/dry g	UJ LV
B13-8117_SED	EPA 8270C-NCI	I-Cyhalothrin	0.5 ng/dry g	UJ LV
B13-8117_SED	EPA 8270C-NCI	PBDE138	0.1 ng/dry g	UJ LC
B13-8117_SED	EPA 8270C-NCI	PBDE209	11.86 ng/dry g	J LC
B13-8117_SED	EPA 8270C-NCI	Permethrin, cis-	0.5 ng/dry g	UJ LV
B13-8117_SED	EPA 8270C-NCI	Resmethrin	0.5 ng/dry g	UJ LC
B13-8117_SED	EPA 9060	Total Nitrogen	0.29 % Dry Weight	J NQ
B13-8117_SED	EPA 9060	Total Organic Carbon	0.99 % Dry Weight	J NQ
B13-8117_SED	Plumb, 1981 and Teryl	Acid Volatile Sulfides	1.27 mg/dry kg	J NQ
B13-8118_SED	EPA 245.7	Mercury	0.6195 µg/dry g	J LP
B13-8118_SED	EPA 6020	Aluminum	31356.6 µg/dry g	J HP
B13-8118_SED	EPA 6020	Arsenic	11.207 µg/dry g	J HP
B13-8118_SED	EPA 6020	Beryllium	0.548 µg/dry g	J HP

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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8118_SED	EPA 6020	Cadmium	0.179 µg/dry g	J LP
B13-8118_SED	EPA 6020	Chromium	55.5499 µg/dry g	J HP
B13-8118_SED	EPA 6020	Iron (Fe)	31527.1 µg/dry g	J HP
B13-8118_SED	EPA 6020	Nickel	14.56 µg/dry g	J HP
B13-8118_SED	EPA 6020	Total Phosphorus	666.258 µg/dry g	J NQ
B13-8118_SED	EPA 8270C	1-Methylnaphthalene	5 ng/dry g	UJ NQ
B13-8118_SED	EPA 8270C	1-Methylphenanthrene	4.8 ng/dry g	J DL, NQ
B13-8118_SED	EPA 8270C	2,3,5-Trimethylnaphthalene	1.7 ng/dry g	J DL, NQ
B13-8118_SED	EPA 8270C	2,4'-DDD	0.1 ng/dry g	UJ NQ
B13-8118_SED	EPA 8270C	2,4'-DDE	0.1 ng/dry g	UJ NQ
B13-8118_SED	EPA 8270C	2,4'-DDT	0.1 ng/dry g	UJ NQ, BC
B13-8118_SED	EPA 8270C	2,6-Dimethylnaphthalene	5 ng/dry g	UJ NQ
B13-8118_SED	EPA 8270C	2-Methylnaphthalene	1.6 ng/dry g	J DL, NQ
B13-8118_SED	EPA 8270C	4,4'-DDD	0.1 ng/dry g	UJ NQ
B13-8118_SED	EPA 8270C	4,4'-DDE	0.1 ng/dry g	UJ NQ
B13-8118_SED	EPA 8270C	4,4'-DDMU	0.1 ng/dry g	UJ NQ
B13-8118_SED	EPA 8270C	4,4'-DDT	0.1 ng/dry g	UJ NQ, BC
B13-8118_SED	EPA 8270C	Acenaphthene	5 ng/dry g	UJ NQ
B13-8118_SED	EPA 8270C	Acenaphthylene	6.6 ng/dry g	J NQ
B13-8118_SED	EPA 8270C	Aldrin	0.1 ng/dry g	UJ NQ
B13-8118_SED	EPA 8270C	Anthracene	7.2 ng/dry g	J NQ
B13-8118_SED	EPA 8270C	Aroclor 1016	2 ng/dry g	UJ NQ
B13-8118_SED	EPA 8270C	Aroclor 1221	2 ng/dry g	UJ NQ
B13-8118_SED	EPA 8270C	Aroclor 1232	2 ng/dry g	UJ NQ
B13-8118_SED	EPA 8270C	Aroclor 1242	2 ng/dry g	UJ NQ
B13-8118_SED	EPA 8270C	Aroclor 1248	2 ng/dry g	UJ NQ
B13-8118_SED	EPA 8270C	Aroclor 1254	2 ng/dry g	UJ NQ
B13-8118_SED	EPA 8270C	Aroclor 1260	6.2 ng/dry g	J NQ
B13-8118_SED	EPA 8270C	Aroclor 1262	2 ng/dry g	UJ NQ
B13-8118_SED	EPA 8270C	Aroclor 1268	2 ng/dry g	UJ NQ
B13-8118_SED	EPA 8270C	Benz[a]anthracene	54.4 ng/dry g	J NQ
B13-8118_SED	EPA 8270C	Benzo[a]pyrene	93 ng/dry g	J NQ, LP
B13-8118_SED	EPA 8270C	Benzo[b]fluoranthene	57.3 ng/dry g	J NQ
B13-8118_SED	EPA 8270C	Benzo[e]pyrene	61.4 ng/dry g	J NQ
B13-8118_SED	EPA 8270C	Benzo[g,h,i]perylene	73.2 ng/dry g	J NQ
B13-8118_SED	EPA 8270C	Benzo[k]fluoranthene	29.5 ng/dry g	J NQ
B13-8118_SED	EPA 8270C	BHC-alpha	0.1 ng/dry g	UJ NQ
B13-8118_SED	EPA 8270C	BHC-beta	0.1 ng/dry g	UJ NQ, BC
B13-8118_SED	EPA 8270C	BHC-delta	0.1 ng/dry g	UJ NQ
B13-8118_SED	EPA 8270C	BHC-gamma	0.1 ng/dry g	UJ NQ
B13-8118_SED	EPA 8270C	Biphenyl	5 ng/dry g	UJ NQ
B13-8118_SED	EPA 8270C	Chlordane-alpha	0.1 ng/dry g	UJ NQ
B13-8118_SED	EPA 8270C	Chlordane-gamma	0.1 ng/dry g	UJ NQ
B13-8118_SED	EPA 8270C	Chrysene	70.3 ng/dry g	J NQ
B13-8118_SED	EPA 8270C	cis-Nonachlor	0.1 ng/dry g	UJ NQ
B13-8118_SED	EPA 8270C	DCPA (Dacthal)	0.1 ng/dry g	UJ NQ
B13-8118_SED	EPA 8270C	Dibenz[a,h]anthracene	12.8 ng/dry g	J NQ, LC, HP
B13-8118_SED	EPA 8270C	Dibenzothiophene	2.1 ng/dry g	J DL, NQ
B13-8118_SED	EPA 8270C	Dicofol	0.1 ng/dry g	UJ NQ, BC
B13-8118_SED	EPA 8270C	Dieldrin	0.1 ng/dry g	UJ NQ
B13-8118_SED	EPA 8270C	Endosulfan sulfate	0.1 ng/dry g	UJ NQ
B13-8118_SED	EPA 8270C	Endosulfan-I	0.1 ng/dry g	UJ NQ, LL
B13-8118_SED	EPA 8270C	Endosulfan-II	0.1 ng/dry g	UJ NQ, LL
B13-8118_SED	EPA 8270C	Endrin	0.1 ng/dry g	UJ NQ

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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8118_SED	EPA 8270C	Endrin aldehyde	0.1 ng/dry g	R LL
B13-8118_SED	EPA 8270C	Endrin ketone	0.1 ng/dry g	UJ NQ, BC
B13-8118_SED	EPA 8270C	Fluoranthene	53.3 ng/dry g	J NQ
B13-8118_SED	EPA 8270C	Fluorene	1.8 ng/dry g	J DL, NQ
B13-8118_SED	EPA 8270C	Heptachlor	0.1 ng/dry g	UJ NQ, BC
B13-8118_SED	EPA 8270C	Heptachlor epoxide	0.1 ng/dry g	UJ NQ
B13-8118_SED	EPA 8270C	Hexachlorobenzene	0.1 ng/dry g	UJ NQ
B13-8118_SED	EPA 8270C	Indeno[1,2,3-c,d]pyrene	61.3 ng/dry g	J NQ
B13-8118_SED	EPA 8270C	Methoxychlor	0.1 ng/dry g	UJ NQ, BC
B13-8118_SED	EPA 8270C	Mirex	0.1 ng/dry g	UJ NQ
B13-8118_SED	EPA 8270C	Naphthalene	3.1 ng/dry g	J DL, NQ
B13-8118_SED	EPA 8270C	Oxychlorane	0.1 ng/dry g	UJ NQ
B13-8118_SED	EPA 8270C	PCB018	0.1 ng/dry g	UJ LV, LC
B13-8118_SED	EPA 8270C	PCB044	0.1 ng/dry g	UJ LV, LC
B13-8118_SED	EPA 8270C	PCB049	0.1 ng/dry g	UJ LV, LC
B13-8118_SED	EPA 8270C	PCB052	0.1 ng/dry g	UJ LV, LC
B13-8118_SED	EPA 8270C	PCB087	0.17 ng/dry g	J LC
B13-8118_SED	EPA 8270C	PCB099	0.2 ng/dry g	J LC
B13-8118_SED	EPA 8270C	PCB101	0.76 ng/dry g	J LC
B13-8118_SED	EPA 8270C	PCB110	0.55 ng/dry g	J LC
B13-8118_SED	EPA 8270C	PCB119	0.1 ng/dry g	UJ LC
B13-8118_SED	EPA 8270C	PCB149	0.9 ng/dry g	J LC
B13-8118_SED	EPA 8270C	PCB151	0.24 ng/dry g	J LC
B13-8118_SED	EPA 8270C	PCB158	0.11 ng/dry g	J LC
B13-8118_SED	EPA 8270C	PCB169	1.05 ng/dry g	J HL
B13-8118_SED	EPA 8270C	PCB177	0.15 ng/dry g	J LC
B13-8118_SED	EPA 8270C	PCB183	0.18 ng/dry g	J LC
B13-8118_SED	EPA 8270C	PCB187	0.41 ng/dry g	J BC, LV, LC
B13-8118_SED	EPA 8270C	PCB199(200)	0.2 ng/dry g	UJ LV, LC
B13-8118_SED	EPA 8270C	PCB206	0.1 ng/dry g	UJ BC, LC
B13-8118_SED	EPA 8270C	PCB209	0.1 ng/dry g	UJ LC
B13-8118_SED	EPA 8270C	Perthane	0.1 ng/dry g	UJ NQ, BC
B13-8118_SED	EPA 8270C	Perylene	18 ng/dry g	J NQ, LP
B13-8118_SED	EPA 8270C	Phenanthrene	18.5 ng/dry g	J NQ
B13-8118_SED	EPA 8270C	Pyrene	83.6 ng/dry g	J NQ
B13-8118_SED	EPA 8270C	trans-Nonachlor	0.1 ng/dry g	UJ NQ
B13-8118_SED	EPA 8270C-NCI	Allethrin	0.5 ng/dry g	UJ NQ, BC
B13-8118_SED	EPA 8270C-NCI	Bifenthrin	0.5 ng/dry g	UJ NQ
B13-8118_SED	EPA 8270C-NCI	Cyfluthrin, total	0.5 ng/dry g	UJ NQ, BC
B13-8118_SED	EPA 8270C-NCI	Cypermethrin, total	0.5 ng/dry g	UJ NQ, BC
B13-8118_SED	EPA 8270C-NCI	Danitol (Fenprothrin)	0.5 ng/dry g	UJ NQ
B13-8118_SED	EPA 8270C-NCI	Deltamethrin/Tralomethrin	0.5 ng/dry g	R BC
B13-8118_SED	EPA 8270C-NCI	Esfenvalerate	0.5 ng/dry g	UJ NQ, BC
B13-8118_SED	EPA 8270C-NCI	Fenvalerate	0.5 ng/dry g	UJ NQ, BC
B13-8118_SED	EPA 8270C-NCI	Fipronil	0.5 ng/dry g	UJ NQ
B13-8118_SED	EPA 8270C-NCI	Fipronil Desulfinyl	0.5 ng/dry g	UJ NQ
B13-8118_SED	EPA 8270C-NCI	Fipronil Sulfide	0.5 ng/dry g	UJ NQ
B13-8118_SED	EPA 8270C-NCI	Fipronil Sulfone	0.5 ng/dry g	UJ NQ
B13-8118_SED	EPA 8270C-NCI	Fluvalinate	0.5 ng/dry g	UJ NQ, BC
B13-8118_SED	EPA 8270C-NCI	I-Cyhalothrin	0.5 ng/dry g	UJ NQ
B13-8118_SED	EPA 8270C-NCI	PBDE047	0.07 ng/dry g	J DL
B13-8118_SED	EPA 8270C-NCI	PBDE085	0.1 ng/dry g	UJ LC
B13-8118_SED	EPA 8270C-NCI	PBDE138	0.1 ng/dry g	UJ LC
B13-8118_SED	EPA 8270C-NCI	PBDE153	0.1 ng/dry g	UJ LC

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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8118_SED	EPA 8270C-NCI	PBDE183	0.1 ng/dry g	UJ LC
B13-8118_SED	EPA 8270C-NCI	PBDE209	0.1 ng/dry g	UJ LC
B13-8118_SED	EPA 8270C-NCI	Permethrin, cis-	0.5 ng/dry g	R BC
B13-8118_SED	EPA 8270C-NCI	Permethrin, trans-	0.5 ng/dry g	R BC
B13-8118_SED	EPA 8270C-NCI	Prallethrin	0.5 ng/dry g	UJ NQ
B13-8118_SED	EPA 8270C-NCI	Resmethrin	0.5 ng/dry g	UJ NQ, BC
B13-8118_SED	EPA 9060	Total Nitrogen	0.48 % Dry Weight	J NQ
B13-8118_SED	EPA 9060	Total Organic Carbon	1.09 % Dry Weight	J NQ
B13-8118_SED	Plumb, 1981 and Teryl	Acid Volatile Sulfides	4.29 mg/dry kg	J NQ
B13-8121_SED	EPA 6020	Aluminum	34657.8 µg/dry g	J HP
B13-8121_SED	EPA 6020	Antimony	0.629 µg/dry g	J HP
B13-8121_SED	EPA 6020	Barium	119.479 µg/dry g	J CH
B13-8121_SED	EPA 6020	Beryllium	0.586 µg/dry g	J HP
B13-8121_SED	EPA 6020	Cadmium	0.2151 µg/dry g	J LP
B13-8121_SED	EPA 6020	Chromium	66.2462 µg/dry g	J HP
B13-8121_SED	EPA 6020	Iron (Fe)	33104.2 µg/dry g	J HP
B13-8121_SED	EPA 6020	Total Phosphorus	705.285 µg/dry g	J NQ
B13-8121_SED	EPA 8270C	1-Methylnaphthalene	3.7 ng/dry g	J DL
B13-8121_SED	EPA 8270C	2,4'-DDT	1.13 ng/dry g	J LC
B13-8121_SED	EPA 8270C	2,6-Dimethylnaphthalene	4.2 ng/dry g	J DL
B13-8121_SED	EPA 8270C	4,4'-DDMU	0.1 ng/dry g	UJ BC
B13-8121_SED	EPA 8270C	4,4'-DDT	0.1 ng/dry g	UJ BC, LC
B13-8121_SED	EPA 8270C	Aroclor 1016	2 ng/dry g	UJ NQ
B13-8121_SED	EPA 8270C	Aroclor 1221	2 ng/dry g	UJ NQ
B13-8121_SED	EPA 8270C	Aroclor 1232	2 ng/dry g	UJ NQ
B13-8121_SED	EPA 8270C	Aroclor 1242	2 ng/dry g	UJ NQ
B13-8121_SED	EPA 8270C	Aroclor 1248	2 ng/dry g	UJ NQ
B13-8121_SED	EPA 8270C	Aroclor 1254	2 ng/dry g	UJ NQ
B13-8121_SED	EPA 8270C	Aroclor 1260	490.8 ng/dry g	J NQ
B13-8121_SED	EPA 8270C	Aroclor 1262	2 ng/dry g	UJ NQ
B13-8121_SED	EPA 8270C	Aroclor 1268	2 ng/dry g	UJ NQ
B13-8121_SED	EPA 8270C	Benz[a]anthracene	241 ng/dry g	J CH
B13-8121_SED	EPA 8270C	Benzo[b]fluoranthene	244 ng/dry g	J BC, CH
B13-8121_SED	EPA 8270C	Benzo[e]pyrene	173.5 ng/dry g	J CH
B13-8121_SED	EPA 8270C	Benzo[k]fluoranthene	215.7 ng/dry g	J LC
B13-8121_SED	EPA 8270C	BHC-beta	0.1 ng/dry g	UJ BC
B13-8121_SED	EPA 8270C	Chrysene	493.7 ng/dry g	J CH
B13-8121_SED	EPA 8270C	Dibenz[a,h]anthracene	133.6 ng/dry g	J CH
B13-8121_SED	EPA 8270C	Dicofol	0.1 ng/dry g	UJ BC, LC
B13-8121_SED	EPA 8270C	Endosulfan-II	0.1 ng/dry g	UJ LC
B13-8121_SED	EPA 8270C	Heptachlor	0.1 ng/dry g	UJ LC
B13-8121_SED	EPA 8270C	Indeno[1,2,3-c,d]pyrene	394.6 ng/dry g	J CH
B13-8121_SED	EPA 8270C	Methoxychlor	0.1 ng/dry g	UJ BC, LC
B13-8121_SED	EPA 8270C	PCB008	0.1 ng/dry g	UJ BC, LC
B13-8121_SED	EPA 8270C	PCB018	3.23 ng/dry g	J CH
B13-8121_SED	EPA 8270C	PCB044	8.48 ng/dry g	J CH
B13-8121_SED	EPA 8270C	PCB049	8.53 ng/dry g	J CH
B13-8121_SED	EPA 8270C	PCB052	22.14 ng/dry g	J CH
B13-8121_SED	EPA 8270C	PCB066	14.23 ng/dry g	J CH
B13-8121_SED	EPA 8270C	PCB070	14.69 ng/dry g	J CH
B13-8121_SED	EPA 8270C	PCB074	4.59 ng/dry g	J CH
B13-8121_SED	EPA 8270C	PCB087	14.69 ng/dry g	J CH
B13-8121_SED	EPA 8270C	PCB099	15.26 ng/dry g	J CH
B13-8121_SED	EPA 8270C	PCB101	40.06 ng/dry g	J CH

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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8121_SED	EPA 8270C	PCB105	10.26 ng/dry g	J BC
B13-8121_SED	EPA 8270C	PCB110	37.77 ng/dry g	J CH
B13-8121_SED	EPA 8270C	PCB118	26.34 ng/dry g	J CH
B13-8121_SED	EPA 8270C	PCB126	0.1 ng/dry g	UJ BC
B13-8121_SED	EPA 8270C	PCB128	5.72 ng/dry g	J LV
B13-8121_SED	EPA 8270C	PCB149	17.18 ng/dry g	J CH
B13-8121_SED	EPA 8270C	PCB151	4.17 ng/dry g	J CH
B13-8121_SED	EPA 8270C	PCB153	23.24 ng/dry g	J BC
B13-8121_SED	EPA 8270C	PCB156	4.75 ng/dry g	J BC
B13-8121_SED	EPA 8270C	PCB167	1.93 ng/dry g	J CH
B13-8121_SED	EPA 8270C	PCB168+132	11 ng/dry g	J CH
B13-8121_SED	EPA 8270C	PCB169	0.1 ng/dry g	UJ BC
B13-8121_SED	EPA 8270C	PCB187	5.89 ng/dry g	J CH
B13-8121_SED	EPA 8270C	PCB209	0.76 ng/dry g	J LV, LC
B13-8121_SED	EPA 8270C	Perthane	0.1 ng/dry g	UJ BC
B13-8121_SED	EPA 8270C	Perylene	40.7 ng/dry g	J CH
B13-8121_SED	EPA 8270C	Pyrene	620.9 ng/dry g	J LC
B13-8121_SED	EPA 8270C-NCI	Deltamethrin/Tralomethrin	0.5 ng/dry g	UJ LV
B13-8121_SED	EPA 8270C-NCI	I-Cyhalothrin	0.5 ng/dry g	UJ LV
B13-8121_SED	EPA 8270C-NCI	PBDE138	0.1 ng/dry g	UJ LC
B13-8121_SED	EPA 8270C-NCI	PBDE209	12.37 ng/dry g	J LC
B13-8121_SED	EPA 8270C-NCI	Permethrin, cis-	0.5 ng/dry g	UJ LV
B13-8121_SED	EPA 8270C-NCI	Resmethrin	0.5 ng/dry g	UJ LC
B13-8121_SED	EPA 9060	Total Nitrogen	0.06 % Dry Weight	J NQ
B13-8121_SED	EPA 9060	Total Organic Carbon	1.34 % Dry Weight	J NQ
B13-8121_SED	Plumb, 1981 and Teryl	Acid Volatile Sulfides	3.8 mg/dry kg	J NQ
B13-8122_SED	EPA 200.8	Nickel	0.0048 µmol/dry g	J DL
B13-8122_SED	EPA 245.7	Mercury	0.1716 µg/dry g	J LP
B13-8122_SED	EPA 6020	Aluminum	14144.5 µg/dry g	J HP
B13-8122_SED	EPA 6020	Arsenic	4.344 µg/dry g	J HP
B13-8122_SED	EPA 6020	Beryllium	0.187 µg/dry g	J HP
B13-8122_SED	EPA 6020	Cadmium	0.1372 µg/dry g	J LP
B13-8122_SED	EPA 6020	Chromium	28.1918 µg/dry g	J HP
B13-8122_SED	EPA 6020	Iron (Fe)	14982.5 µg/dry g	J HP
B13-8122_SED	EPA 6020	Nickel	6.19 µg/dry g	J HP
B13-8122_SED	EPA 6020	Total Phosphorus	276.556 µg/dry g	J NQ
B13-8122_SED	EPA 8270C	1-Methylnaphthalene	5 ng/dry g	UJ NQ
B13-8122_SED	EPA 8270C	1-Methylphenanthrene	1.5 ng/dry g	J DL, NQ
B13-8122_SED	EPA 8270C	2,3,5-Trimethylnaphthalene	1.1 ng/dry g	J DL, NQ
B13-8122_SED	EPA 8270C	2,4'-DDD	0.1 ng/dry g	UJ NQ
B13-8122_SED	EPA 8270C	2,4'-DDE	0.1 ng/dry g	UJ NQ
B13-8122_SED	EPA 8270C	2,4'-DDT	0.1 ng/dry g	UJ NQ, BC
B13-8122_SED	EPA 8270C	2,6-Dimethylnaphthalene	5 ng/dry g	UJ NQ
B13-8122_SED	EPA 8270C	2-Methylnaphthalene	5 ng/dry g	UJ NQ
B13-8122_SED	EPA 8270C	4,4'-DDD	0.1 ng/dry g	UJ NQ
B13-8122_SED	EPA 8270C	4,4'-DDE	0.1 ng/dry g	UJ NQ
B13-8122_SED	EPA 8270C	4,4'-DDMU	0.1 ng/dry g	UJ NQ
B13-8122_SED	EPA 8270C	4,4'-DDT	0.1 ng/dry g	UJ NQ, BC
B13-8122_SED	EPA 8270C	Acenaphthene	5 ng/dry g	UJ NQ
B13-8122_SED	EPA 8270C	Acenaphthylene	1.1 ng/dry g	J DL, NQ
B13-8122_SED	EPA 8270C	Aldrin	0.1 ng/dry g	UJ NQ
B13-8122_SED	EPA 8270C	Anthracene	1.2 ng/dry g	J DL, NQ
B13-8122_SED	EPA 8270C	Aroclor 1016	2 ng/dry g	UJ NQ
B13-8122_SED	EPA 8270C	Aroclor 1221	2 ng/dry g	UJ NQ



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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8122_SED	EPA 8270C	Aroclor 1232	2 ng/dry g	UJ NQ
B13-8122_SED	EPA 8270C	Aroclor 1242	2 ng/dry g	UJ NQ
B13-8122_SED	EPA 8270C	Aroclor 1248	2 ng/dry g	UJ NQ
B13-8122_SED	EPA 8270C	Aroclor 1254	2 ng/dry g	UJ NQ
B13-8122_SED	EPA 8270C	Aroclor 1260	5.7 ng/dry g	J NQ
B13-8122_SED	EPA 8270C	Aroclor 1262	2 ng/dry g	UJ NQ
B13-8122_SED	EPA 8270C	Aroclor 1268	2 ng/dry g	UJ NQ
B13-8122_SED	EPA 8270C	Benz[a]anthracene	8.7 ng/dry g	J NQ
B13-8122_SED	EPA 8270C	Benzo[a]pyrene	17.4 ng/dry g	J NQ, LP
B13-8122_SED	EPA 8270C	Benzo[b]fluoranthene	11.4 ng/dry g	J NQ
B13-8122_SED	EPA 8270C	Benzo[e]pyrene	12.1 ng/dry g	J NQ
B13-8122_SED	EPA 8270C	Benzo[g,h,i]perylene	16.7 ng/dry g	J NQ
B13-8122_SED	EPA 8270C	Benzo[k]fluoranthene	6.1 ng/dry g	J NQ
B13-8122_SED	EPA 8270C	BHC-alpha	0.1 ng/dry g	UJ NQ
B13-8122_SED	EPA 8270C	BHC-beta	0.1 ng/dry g	UJ NQ, BC
B13-8122_SED	EPA 8270C	BHC-delta	0.1 ng/dry g	UJ NQ
B13-8122_SED	EPA 8270C	BHC-gamma	0.1 ng/dry g	UJ NQ
B13-8122_SED	EPA 8270C	Biphenyl	5 ng/dry g	UJ NQ
B13-8122_SED	EPA 8270C	Chlordane-alpha	0.1 ng/dry g	UJ NQ
B13-8122_SED	EPA 8270C	Chlordane-gamma	0.1 ng/dry g	UJ NQ
B13-8122_SED	EPA 8270C	Chrysene	11.9 ng/dry g	J NQ
B13-8122_SED	EPA 8270C	cis-Nonachlor	0.1 ng/dry g	UJ NQ
B13-8122_SED	EPA 8270C	DCPA (Dacthal)	0.1 ng/dry g	UJ NQ
B13-8122_SED	EPA 8270C	Dibenz[a,h]anthracene	2.7 ng/dry g	J DL, NQ, LC, HP
B13-8122_SED	EPA 8270C	Dibenzothiophene	1 ng/dry g	J DL, NQ
B13-8122_SED	EPA 8270C	Dicofol	0.1 ng/dry g	UJ NQ, BC
B13-8122_SED	EPA 8270C	Dieldrin	0.1 ng/dry g	UJ NQ
B13-8122_SED	EPA 8270C	Endosulfan sulfate	0.1 ng/dry g	UJ NQ
B13-8122_SED	EPA 8270C	Endosulfan-I	0.1 ng/dry g	UJ NQ, LL
B13-8122_SED	EPA 8270C	Endosulfan-II	0.1 ng/dry g	UJ NQ, LL
B13-8122_SED	EPA 8270C	Endrin	0.1 ng/dry g	UJ NQ
B13-8122_SED	EPA 8270C	Endrin aldehyde	0.1 ng/dry g	R LL
B13-8122_SED	EPA 8270C	Endrin ketone	0.1 ng/dry g	UJ NQ, BC
B13-8122_SED	EPA 8270C	Fluoranthene	12.2 ng/dry g	J NQ
B13-8122_SED	EPA 8270C	Fluorene	5 ng/dry g	UJ NQ
B13-8122_SED	EPA 8270C	Heptachlor	0.1 ng/dry g	UJ NQ, BC
B13-8122_SED	EPA 8270C	Heptachlor epoxide	0.1 ng/dry g	UJ NQ
B13-8122_SED	EPA 8270C	Hexachlorobenzene	0.1 ng/dry g	UJ NQ
B13-8122_SED	EPA 8270C	Indeno[1,2,3-c,d]pyrene	13.4 ng/dry g	J NQ
B13-8122_SED	EPA 8270C	Methoxychlor	0.1 ng/dry g	UJ NQ, BC
B13-8122_SED	EPA 8270C	Mirex	0.1 ng/dry g	UJ NQ
B13-8122_SED	EPA 8270C	Naphthalene	1.5 ng/dry g	J DL, NQ
B13-8122_SED	EPA 8270C	Oxychlordane	0.1 ng/dry g	UJ NQ
B13-8122_SED	EPA 8270C	PCB018	0.1 ng/dry g	UJ LV, LC
B13-8122_SED	EPA 8270C	PCB044	0.1 ng/dry g	UJ LV, LC
B13-8122_SED	EPA 8270C	PCB049	0.1 ng/dry g	UJ LV, LC
B13-8122_SED	EPA 8270C	PCB052	0.1 ng/dry g	UJ LV, LC
B13-8122_SED	EPA 8270C	PCB087	0.34 ng/dry g	J LC
B13-8122_SED	EPA 8270C	PCB099	0.28 ng/dry g	J LC
B13-8122_SED	EPA 8270C	PCB101	0.87 ng/dry g	J LC
B13-8122_SED	EPA 8270C	PCB110	0.71 ng/dry g	J LC
B13-8122_SED	EPA 8270C	PCB119	0.1 ng/dry g	UJ LC
B13-8122_SED	EPA 8270C	PCB149	0.72 ng/dry g	J LC
B13-8122_SED	EPA 8270C	PCB151	0.2 ng/dry g	J LC

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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8122_SED	EPA 8270C	PCB156	0.08 ng/dry g	J DL
B13-8122_SED	EPA 8270C	PCB158	0.07 ng/dry g	J DL, LC
B13-8122_SED	EPA 8270C	PCB169	0.42 ng/dry g	J HL
B13-8122_SED	EPA 8270C	PCB177	0.11 ng/dry g	J LC
B13-8122_SED	EPA 8270C	PCB183	0.1 ng/dry g	J LC
B13-8122_SED	EPA 8270C	PCB187	0.26 ng/dry g	J BC, LV, LC
B13-8122_SED	EPA 8270C	PCB199(200)	0.2 ng/dry g	UJ LV, LC
B13-8122_SED	EPA 8270C	PCB206	0.1 ng/dry g	UJ BC, LC
B13-8122_SED	EPA 8270C	PCB209	0.1 ng/dry g	UJ LC
B13-8122_SED	EPA 8270C	Perthane	0.1 ng/dry g	UJ NQ, BC
B13-8122_SED	EPA 8270C	Perylene	3.4 ng/dry g	J DL, NQ, LP
B13-8122_SED	EPA 8270C	Phenanthrene	6.9 ng/dry g	J NQ
B13-8122_SED	EPA 8270C	Pyrene	16 ng/dry g	J NQ
B13-8122_SED	EPA 8270C	trans-Nonachlor	0.1 ng/dry g	UJ NQ
B13-8122_SED	EPA 8270C-NCI	Allethrin	0.5 ng/dry g	UJ NQ, BC
B13-8122_SED	EPA 8270C-NCI	Bifenthrin	0.5 ng/dry g	UJ NQ
B13-8122_SED	EPA 8270C-NCI	Cyfluthrin, total	0.5 ng/dry g	UJ NQ, BC
B13-8122_SED	EPA 8270C-NCI	Cypermethrin, total	0.5 ng/dry g	UJ NQ, BC
B13-8122_SED	EPA 8270C-NCI	Danitol (Fenpropathrin)	0.5 ng/dry g	UJ NQ
B13-8122_SED	EPA 8270C-NCI	Deltamethrin/Tralomethrin	0.5 ng/dry g	R BC
B13-8122_SED	EPA 8270C-NCI	Esfenvalerate	0.5 ng/dry g	UJ NQ, BC
B13-8122_SED	EPA 8270C-NCI	Fenvalerate	0.5 ng/dry g	UJ NQ, BC
B13-8122_SED	EPA 8270C-NCI	Fipronil	0.5 ng/dry g	UJ NQ
B13-8122_SED	EPA 8270C-NCI	Fipronil Desulfinyl	0.5 ng/dry g	UJ NQ
B13-8122_SED	EPA 8270C-NCI	Fipronil Sulfide	0.5 ng/dry g	UJ NQ
B13-8122_SED	EPA 8270C-NCI	Fipronil Sulfone	0.5 ng/dry g	UJ NQ
B13-8122_SED	EPA 8270C-NCI	Fluvalinate	0.5 ng/dry g	UJ NQ, BC
B13-8122_SED	EPA 8270C-NCI	I-Cyhalothrin	0.5 ng/dry g	UJ NQ
B13-8122_SED	EPA 8270C-NCI	PBDE085	0.1 ng/dry g	UJ LC
B13-8122_SED	EPA 8270C-NCI	PBDE138	0.1 ng/dry g	UJ LC
B13-8122_SED	EPA 8270C-NCI	PBDE153	0.1 ng/dry g	UJ LC
B13-8122_SED	EPA 8270C-NCI	PBDE183	0.1 ng/dry g	UJ LC
B13-8122_SED	EPA 8270C-NCI	PBDE209	0.1 ng/dry g	UJ LC
B13-8122_SED	EPA 8270C-NCI	Permethrin, cis-	0.5 ng/dry g	R BC
B13-8122_SED	EPA 8270C-NCI	Permethrin, trans-	0.5 ng/dry g	R BC
B13-8122_SED	EPA 8270C-NCI	Prallethrin	0.5 ng/dry g	UJ NQ
B13-8122_SED	EPA 8270C-NCI	Resmethrin	0.5 ng/dry g	UJ NQ, BC
B13-8122_SED	EPA 9060	Total Nitrogen	0.22 % Dry Weight	J NQ
B13-8122_SED	EPA 9060	Total Organic Carbon	0.3 % Dry Weight	J NQ
B13-8122_SED	Plumb, 1981 and Teryl	Acid Volatile Sulfides	4.61 mg/dry kg	J NQ
B13-8123_SED	EPA 200.8	Nickel	0.0057 µmol/dry g	J DL
B13-8123_SED	EPA 6020	Aluminum	17781.4 µg/dry g	J HP
B13-8123_SED	EPA 6020	Antimony	0.165 µg/dry g	J HP
B13-8123_SED	EPA 6020	Arsenic	5.819 µg/dry g	J HP
B13-8123_SED	EPA 6020	Barium	70.302 µg/dry g	J CH
B13-8123_SED	EPA 6020	Beryllium	0.254 µg/dry g	J HP
B13-8123_SED	EPA 6020	Cadmium	0.1299 µg/dry g	J LP
B13-8123_SED	EPA 6020	Chromium	34.0857 µg/dry g	J HP
B13-8123_SED	EPA 6020	Iron (Fe)	16825.3 µg/dry g	J HP
B13-8123_SED	EPA 6020	Nickel	7.26 µg/dry g	J HP
B13-8123_SED	EPA 6020	Total Phosphorus	384.299 µg/dry g	J NQ
B13-8123_SED	EPA 8270C	2,3,5-Trimethylnaphthalene	2.8 ng/dry g	J DL
B13-8123_SED	EPA 8270C	2,4'-DDT	0.1 ng/dry g	UJ LC
B13-8123_SED	EPA 8270C	2-Methylnaphthalene	2 ng/dry g	J DL

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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8123_SED	EPA 8270C	4,4'-DDMU	0.1 ng/dry g	UJ BC
B13-8123_SED	EPA 8270C	4,4'-DDT	0.1 ng/dry g	UJ BC, LC
B13-8123_SED	EPA 8270C	Acenaphthylene	2.9 ng/dry g	J DL
B13-8123_SED	EPA 8270C	Anthracene	3.9 ng/dry g	J DL
B13-8123_SED	EPA 8270C	Aroclor 1016	2 ng/dry g	UJ NQ
B13-8123_SED	EPA 8270C	Aroclor 1221	2 ng/dry g	UJ NQ
B13-8123_SED	EPA 8270C	Aroclor 1232	2 ng/dry g	UJ NQ
B13-8123_SED	EPA 8270C	Aroclor 1242	2 ng/dry g	UJ NQ
B13-8123_SED	EPA 8270C	Aroclor 1248	2 ng/dry g	UJ NQ
B13-8123_SED	EPA 8270C	Aroclor 1254	2 ng/dry g	UJ NQ
B13-8123_SED	EPA 8270C	Aroclor 1260	11.6 ng/dry g	J NQ
B13-8123_SED	EPA 8270C	Aroclor 1262	2 ng/dry g	UJ NQ
B13-8123_SED	EPA 8270C	Aroclor 1268	2 ng/dry g	UJ NQ
B13-8123_SED	EPA 8270C	Benz[a]anthracene	25.9 ng/dry g	J CH
B13-8123_SED	EPA 8270C	Benzo[b]fluoranthene	42.3 ng/dry g	J BC, CH
B13-8123_SED	EPA 8270C	Benzo[e]pyrene	34.7 ng/dry g	J CH
B13-8123_SED	EPA 8270C	Benzo[k]fluoranthene	37.9 ng/dry g	J LC
B13-8123_SED	EPA 8270C	BHC-beta	0.1 ng/dry g	UJ BC
B13-8123_SED	EPA 8270C	Chrysene	44.9 ng/dry g	J CH
B13-8123_SED	EPA 8270C	Dibenz[a,h]anthracene	6.7 ng/dry g	J CH
B13-8123_SED	EPA 8270C	Dibenzothiophene	1.5 ng/dry g	J DL
B13-8123_SED	EPA 8270C	Dicofol	0.1 ng/dry g	UJ BC, LC
B13-8123_SED	EPA 8270C	Endosulfan-II	0.1 ng/dry g	UJ LC
B13-8123_SED	EPA 8270C	Fluorene	2.3 ng/dry g	J DL
B13-8123_SED	EPA 8270C	Heptachlor	0.1 ng/dry g	UJ LC
B13-8123_SED	EPA 8270C	Indeno[1,2,3-c,d]pyrene	54.9 ng/dry g	J CH
B13-8123_SED	EPA 8270C	Methoxychlor	0.1 ng/dry g	UJ BC, LC
B13-8123_SED	EPA 8270C	Naphthalene	3.3 ng/dry g	J DL
B13-8123_SED	EPA 8270C	PCB008	0.1 ng/dry g	UJ BC, LC
B13-8123_SED	EPA 8270C	PCB099	0.44 ng/dry g	J CH
B13-8123_SED	EPA 8270C	PCB101	0.8 ng/dry g	J CH
B13-8123_SED	EPA 8270C	PCB105	0.1 ng/dry g	UJ BC
B13-8123_SED	EPA 8270C	PCB110	0.63 ng/dry g	J CH
B13-8123_SED	EPA 8270C	PCB126	0.1 ng/dry g	UJ BC
B13-8123_SED	EPA 8270C	PCB128	0.1 ng/dry g	UJ LV
B13-8123_SED	EPA 8270C	PCB149	1.16 ng/dry g	J CH
B13-8123_SED	EPA 8270C	PCB153	1.87 ng/dry g	J BC
B13-8123_SED	EPA 8270C	PCB156	0.1 ng/dry g	UJ BC
B13-8123_SED	EPA 8270C	PCB168+132	0.5 ng/dry g	J CH
B13-8123_SED	EPA 8270C	PCB169	0.1 ng/dry g	UJ BC
B13-8123_SED	EPA 8270C	PCB187	0.69 ng/dry g	J CH
B13-8123_SED	EPA 8270C	PCB209	0.1 ng/dry g	UJ LV, LC
B13-8123_SED	EPA 8270C	Perthane	0.1 ng/dry g	UJ BC
B13-8123_SED	EPA 8270C	Perylene	3.3 ng/dry g	J DL, CH
B13-8123_SED	EPA 8270C	Pyrene	42.6 ng/dry g	J LC
B13-8123_SED	EPA 8270C-NCI	Deltamethrin/Tralomethrin	0.5 ng/dry g	UJ LV
B13-8123_SED	EPA 8270C-NCI	I-Cyhalothrin	0.5 ng/dry g	UJ LV
B13-8123_SED	EPA 8270C-NCI	PBDE138	0.1 ng/dry g	UJ LC
B13-8123_SED	EPA 8270C-NCI	PBDE209	0.1 ng/dry g	UJ LC
B13-8123_SED	EPA 8270C-NCI	Permethrin, cis-	0.5 ng/dry g	UJ LV
B13-8123_SED	EPA 8270C-NCI	Resmethrin	0.5 ng/dry g	UJ LC
B13-8123_SED	EPA 9060	Total Nitrogen	0.01 % Dry Weight	UJ NQ
B13-8123_SED	EPA 9060	Total Organic Carbon	0.22 % Dry Weight	J NQ
B13-8123_SED	Plumb, 1981 and Teryl	Acid Volatile Sulfides	2.71 mg/dry kg	J NQ

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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8124_SED	EPA 200.8	Nickel	0.0063 µmol/dry g	J DL
B13-8124_SED	EPA 6020	Aluminum	18915.7 µg/dry g	J HP
B13-8124_SED	EPA 6020	Antimony	0.186 µg/dry g	J HP
B13-8124_SED	EPA 6020	Arsenic	5.592 µg/dry g	J HP
B13-8124_SED	EPA 6020	Barium	80.286 µg/dry g	J CH
B13-8124_SED	EPA 6020	Beryllium	0.274 µg/dry g	J HP
B13-8124_SED	EPA 6020	Cadmium	0.1569 µg/dry g	J LP
B13-8124_SED	EPA 6020	Chromium	38.0138 µg/dry g	J HP
B13-8124_SED	EPA 6020	Iron (Fe)	17805.9 µg/dry g	J HP
B13-8124_SED	EPA 6020	Nickel	8.02 µg/dry g	J HP
B13-8124_SED	EPA 6020	Total Phosphorus	383.122 µg/dry g	J NQ
B13-8124_SED	EPA 8270C	2,3,5-Trimethylnaphthalene	3 ng/dry g	J DL
B13-8124_SED	EPA 8270C	2,4'-DDT	0.1 ng/dry g	UJ LC
B13-8124_SED	EPA 8270C	4,4'-DDMU	0.1 ng/dry g	UJ BC
B13-8124_SED	EPA 8270C	4,4'-DDT	0.1 ng/dry g	UJ BC, LC
B13-8124_SED	EPA 8270C	Acenaphthylene	2.7 ng/dry g	J DL
B13-8124_SED	EPA 8270C	Anthracene	3.1 ng/dry g	J DL
B13-8124_SED	EPA 8270C	Aroclor 1016	2 ng/dry g	UJ NQ
B13-8124_SED	EPA 8270C	Aroclor 1221	2 ng/dry g	UJ NQ
B13-8124_SED	EPA 8270C	Aroclor 1232	2 ng/dry g	UJ NQ
B13-8124_SED	EPA 8270C	Aroclor 1242	2 ng/dry g	UJ NQ
B13-8124_SED	EPA 8270C	Aroclor 1248	2 ng/dry g	UJ NQ
B13-8124_SED	EPA 8270C	Aroclor 1254	2 ng/dry g	UJ NQ
B13-8124_SED	EPA 8270C	Aroclor 1260	19 ng/dry g	J NQ
B13-8124_SED	EPA 8270C	Aroclor 1262	2 ng/dry g	UJ NQ
B13-8124_SED	EPA 8270C	Aroclor 1268	2 ng/dry g	UJ NQ
B13-8124_SED	EPA 8270C	Benz[a]anthracene	23 ng/dry g	J CH
B13-8124_SED	EPA 8270C	Benzo[b]fluoranthene	43 ng/dry g	J BC, CH
B13-8124_SED	EPA 8270C	Benzo[e]pyrene	32.7 ng/dry g	J CH
B13-8124_SED	EPA 8270C	Benzo[k]fluoranthene	39.1 ng/dry g	J LC
B13-8124_SED	EPA 8270C	BHC-beta	0.1 ng/dry g	UJ BC
B13-8124_SED	EPA 8270C	Chrysene	40.2 ng/dry g	J CH
B13-8124_SED	EPA 8270C	Dibenz[a,h]anthracene	7.2 ng/dry g	J CH
B13-8124_SED	EPA 8270C	Dibenzothiophene	1.4 ng/dry g	J DL
B13-8124_SED	EPA 8270C	Dicofol	0.1 ng/dry g	UJ BC, LC
B13-8124_SED	EPA 8270C	Endosulfan-II	0.1 ng/dry g	UJ LC
B13-8124_SED	EPA 8270C	Fluorene	2.7 ng/dry g	J DL
B13-8124_SED	EPA 8270C	Heptachlor	0.1 ng/dry g	UJ LC
B13-8124_SED	EPA 8270C	Indeno[1,2,3-c,d]pyrene	51.7 ng/dry g	J CH
B13-8124_SED	EPA 8270C	Methoxychlor	0.1 ng/dry g	UJ BC, LC
B13-8124_SED	EPA 8270C	Naphthalene	3.2 ng/dry g	J DL
B13-8124_SED	EPA 8270C	PCB008	0.1 ng/dry g	UJ BC, LC
B13-8124_SED	EPA 8270C	PCB099	0.55 ng/dry g	J CH
B13-8124_SED	EPA 8270C	PCB101	1.11 ng/dry g	J CH
B13-8124_SED	EPA 8270C	PCB105	0.1 ng/dry g	UJ BC
B13-8124_SED	EPA 8270C	PCB110	0.93 ng/dry g	J CH
B13-8124_SED	EPA 8270C	PCB118	1.54 ng/dry g	J CH
B13-8124_SED	EPA 8270C	PCB126	0.1 ng/dry g	UJ BC
B13-8124_SED	EPA 8270C	PCB128	0.1 ng/dry g	UJ LV
B13-8124_SED	EPA 8270C	PCB149	1.46 ng/dry g	J CH
B13-8124_SED	EPA 8270C	PCB151	0.38 ng/dry g	J CH
B13-8124_SED	EPA 8270C	PCB153	1.8 ng/dry g	J BC
B13-8124_SED	EPA 8270C	PCB156	0.1 ng/dry g	UJ BC
B13-8124_SED	EPA 8270C	PCB168+132	0.6 ng/dry g	J CH

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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8124_SED	EPA 8270C	PCB169	0.1 ng/dry g	UJ BC
B13-8124_SED	EPA 8270C	PCB187	0.88 ng/dry g	J CH
B13-8124_SED	EPA 8270C	PCB209	0.1 ng/dry g	UJ LV, LC
B13-8124_SED	EPA 8270C	Perthane	0.1 ng/dry g	UJ BC
B13-8124_SED	EPA 8270C	Perylene	3.7 ng/dry g	J DL, CH
B13-8124_SED	EPA 8270C	Pyrene	44.9 ng/dry g	J LC
B13-8124_SED	EPA 8270C-NCI	Deltamethrin/Tralomethrin	0.5 ng/dry g	UJ LV
B13-8124_SED	EPA 8270C-NCI	I-Cyhalothrin	0.5 ng/dry g	UJ LV
B13-8124_SED	EPA 8270C-NCI	PBDE138	0.1 ng/dry g	UJ LC
B13-8124_SED	EPA 8270C-NCI	PBDE209	0.1 ng/dry g	UJ LC
B13-8124_SED	EPA 8270C-NCI	Permethrin, cis-	0.5 ng/dry g	UJ LV
B13-8124_SED	EPA 8270C-NCI	Resmethrin	0.5 ng/dry g	UJ LC
B13-8124_SED	EPA 9060	Total Nitrogen	0.01 % Dry Weight	UJ NQ
B13-8124_SED	EPA 9060	Total Organic Carbon	0.4 % Dry Weight	J NQ
B13-8124_SED	Plumb, 1981 and Teryl	Acid Volatile Sulfides	5.7 mg/dry kg	J NQ
B13-8127_SED	EPA 6020	Aluminum	62748.8 µg/dry g	J HP, HD
B13-8127_SED	EPA 6020	Antimony	0.425 µg/dry g	J HP
B13-8127_SED	EPA 6020	Barium	165.157 µg/dry g	J CH
B13-8127_SED	EPA 6020	Beryllium	1.077 µg/dry g	J HP
B13-8127_SED	EPA 6020	Cadmium	0.2928 µg/dry g	J LP
B13-8127_SED	EPA 6020	Chromium	121.3146 µg/dry g	J HP
B13-8127_SED	EPA 6020	Iron (Fe)	57535 µg/dry g	J HP, HD
B13-8127_SED	EPA 6020	Silver	1.11 µg/dry g	J LM, HD
B13-8127_SED	EPA 6020	Total Phosphorus	986.319 µg/dry g	J NQ
B13-8127_SED	EPA 8270C	2,3,5-Trimethylnaphthalene	3.3 ng/dry g	J DL
B13-8127_SED	EPA 8270C	2,4'-DDT	0.1 ng/dry g	UJ LC
B13-8127_SED	EPA 8270C	4,4'-DDMU	0.1 ng/dry g	UJ BC
B13-8127_SED	EPA 8270C	4,4'-DDT	0.1 ng/dry g	UJ BC, LC
B13-8127_SED	EPA 8270C	Acenaphthylene	2.6 ng/dry g	J DL
B13-8127_SED	EPA 8270C	Anthracene	3.5 ng/dry g	J DL
B13-8127_SED	EPA 8270C	Aroclor 1016	2 ng/dry g	UJ NQ
B13-8127_SED	EPA 8270C	Aroclor 1221	2 ng/dry g	UJ NQ
B13-8127_SED	EPA 8270C	Aroclor 1232	2 ng/dry g	UJ NQ
B13-8127_SED	EPA 8270C	Aroclor 1242	2 ng/dry g	UJ NQ
B13-8127_SED	EPA 8270C	Aroclor 1248	2 ng/dry g	UJ NQ
B13-8127_SED	EPA 8270C	Aroclor 1254	2 ng/dry g	UJ NQ
B13-8127_SED	EPA 8270C	Aroclor 1260	31.9 ng/dry g	J NQ
B13-8127_SED	EPA 8270C	Aroclor 1262	2 ng/dry g	UJ NQ
B13-8127_SED	EPA 8270C	Aroclor 1268	2 ng/dry g	UJ NQ
B13-8127_SED	EPA 8270C	Benz[a]anthracene	20.8 ng/dry g	J CH
B13-8127_SED	EPA 8270C	Benzo[b]fluoranthene	36.8 ng/dry g	J BC, CH
B13-8127_SED	EPA 8270C	Benzo[e]pyrene	31.1 ng/dry g	J CH
B13-8127_SED	EPA 8270C	Benzo[k]fluoranthene	35.1 ng/dry g	J LC
B13-8127_SED	EPA 8270C	BHC-beta	0.1 ng/dry g	UJ BC
B13-8127_SED	EPA 8270C	Chrysene	25.7 ng/dry g	J CH
B13-8127_SED	EPA 8270C	Dibenz[a,h]anthracene	6.8 ng/dry g	J CH
B13-8127_SED	EPA 8270C	Dibenzothiophene	1.9 ng/dry g	J DL
B13-8127_SED	EPA 8270C	Dicofol	0.1 ng/dry g	UJ BC, LC
B13-8127_SED	EPA 8270C	Endosulfan-II	0.1 ng/dry g	UJ LC
B13-8127_SED	EPA 8270C	Fluorene	2.5 ng/dry g	J DL
B13-8127_SED	EPA 8270C	Heptachlor	0.1 ng/dry g	UJ LC
B13-8127_SED	EPA 8270C	Indeno[1,2,3-c,d]pyrene	60.8 ng/dry g	J CH
B13-8127_SED	EPA 8270C	Methoxychlor	0.1 ng/dry g	UJ BC, LC
B13-8127_SED	EPA 8270C	Naphthalene	2.7 ng/dry g	J DL

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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8127_SED	EPA 8270C	PCB008	0.1 ng/dry g	UJ BC, LC
B13-8127_SED	EPA 8270C	PCB049	3.02 ng/dry g	J CH
B13-8127_SED	EPA 8270C	PCB052	3.91 ng/dry g	J CH
B13-8127_SED	EPA 8270C	PCB099	0.89 ng/dry g	J CH
B13-8127_SED	EPA 8270C	PCB101	1.56 ng/dry g	J CH
B13-8127_SED	EPA 8270C	PCB105	0.1 ng/dry g	UJ BC
B13-8127_SED	EPA 8270C	PCB118	3.1 ng/dry g	J CH
B13-8127_SED	EPA 8270C	PCB126	0.1 ng/dry g	UJ BC
B13-8127_SED	EPA 8270C	PCB128	0.1 ng/dry g	UJ LV
B13-8127_SED	EPA 8270C	PCB149	1.25 ng/dry g	J CH
B13-8127_SED	EPA 8270C	PCB151	0.66 ng/dry g	J CH
B13-8127_SED	EPA 8270C	PCB153	2.41 ng/dry g	J BC
B13-8127_SED	EPA 8270C	PCB156	0.1 ng/dry g	UJ BC
B13-8127_SED	EPA 8270C	PCB168+132	0.4 ng/dry g	J CH
B13-8127_SED	EPA 8270C	PCB169	0.1 ng/dry g	UJ BC
B13-8127_SED	EPA 8270C	PCB187	1.28 ng/dry g	J CH
B13-8127_SED	EPA 8270C	PCB209	0.1 ng/dry g	UJ LV, LC
B13-8127_SED	EPA 8270C	Perthane	0.1 ng/dry g	UJ BC
B13-8127_SED	EPA 8270C	Perylene	3.4 ng/dry g	J DL, CH
B13-8127_SED	EPA 8270C	Pyrene	40.5 ng/dry g	J LC
B13-8127_SED	EPA 8270C-NCI	Deltamethrin/Tralomethrin	0.5 ng/dry g	UJ LV
B13-8127_SED	EPA 8270C-NCI	I-Cyhalothrin	0.5 ng/dry g	UJ LV
B13-8127_SED	EPA 8270C-NCI	PBDE138	0.1 ng/dry g	UJ LC
B13-8127_SED	EPA 8270C-NCI	PBDE209	7.5 ng/dry g	J LC
B13-8127_SED	EPA 8270C-NCI	Permethrin, cis-	0.5 ng/dry g	UJ LV
B13-8127_SED	EPA 8270C-NCI	Resmethrin	0.5 ng/dry g	UJ LC
B13-8127_SED	EPA 9060	Total Nitrogen	0.3 % Dry Weight	J NQ
B13-8127_SED	EPA 9060	Total Organic Carbon	1.82 % Dry Weight	J NQ
B13-8127_SED	Plumb, 1981 and Teryl	Acid Volatile Sulfides	87.43 mg/dry kg	J NQ
B13-8128_SED	EPA 6020	Aluminum	36031 µg/dry g	J HP
B13-8128_SED	EPA 6020	Antimony	0.265 µg/dry g	J HP
B13-8128_SED	EPA 6020	Arsenic	9.846 µg/dry g	J HP
B13-8128_SED	EPA 6020	Barium	145.346 µg/dry g	J CH
B13-8128_SED	EPA 6020	Beryllium	0.559 µg/dry g	J HP
B13-8128_SED	EPA 6020	Cadmium	0.1663 µg/dry g	J LP
B13-8128_SED	EPA 6020	Chromium	88.4202 µg/dry g	J HP
B13-8128_SED	EPA 6020	Iron (Fe)	33074.9 µg/dry g	J HP
B13-8128_SED	EPA 6020	Nickel	15.47 µg/dry g	J HP
B13-8128_SED	EPA 6020	Total Phosphorus	565.016 µg/dry g	J NQ
B13-8128_SED	EPA 8270C	2,3,5-Trimethylnaphthalene	2.8 ng/dry g	J DL
B13-8128_SED	EPA 8270C	2,4'-DDT	0.1 ng/dry g	UJ LC
B13-8128_SED	EPA 8270C	4,4'-DDMU	0.1 ng/dry g	UJ BC
B13-8128_SED	EPA 8270C	4,4'-DDT	0.1 ng/dry g	UJ BC, LC
B13-8128_SED	EPA 8270C	Acenaphthylene	2.7 ng/dry g	J DL
B13-8128_SED	EPA 8270C	Aroclor 1016	2 ng/dry g	UJ NQ
B13-8128_SED	EPA 8270C	Aroclor 1221	2 ng/dry g	UJ NQ
B13-8128_SED	EPA 8270C	Aroclor 1232	2 ng/dry g	UJ NQ
B13-8128_SED	EPA 8270C	Aroclor 1242	2 ng/dry g	UJ NQ
B13-8128_SED	EPA 8270C	Aroclor 1248	2 ng/dry g	UJ NQ
B13-8128_SED	EPA 8270C	Aroclor 1254	2 ng/dry g	UJ NQ
B13-8128_SED	EPA 8270C	Aroclor 1260	61.5 ng/dry g	J NQ
B13-8128_SED	EPA 8270C	Aroclor 1262	2 ng/dry g	UJ NQ
B13-8128_SED	EPA 8270C	Aroclor 1268	2 ng/dry g	UJ NQ
B13-8128_SED	EPA 8270C	Benz[a]anthracene	28.7 ng/dry g	J CH

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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8128_SED	EPA 8270C	Benzo[b]fluoranthene	58.5 ng/dry g	J BC, CH
B13-8128_SED	EPA 8270C	Benzo[e]pyrene	42.8 ng/dry g	J CH
B13-8128_SED	EPA 8270C	Benzo[k]fluoranthene	52.3 ng/dry g	J LC
B13-8128_SED	EPA 8270C	BHC-beta	0.1 ng/dry g	UJ BC
B13-8128_SED	EPA 8270C	Chrysene	46.4 ng/dry g	J CH
B13-8128_SED	EPA 8270C	Dibenz[a,h]anthracene	11.8 ng/dry g	J CH
B13-8128_SED	EPA 8270C	Dibenzothiophene	2 ng/dry g	J DL
B13-8128_SED	EPA 8270C	Dicofol	0.1 ng/dry g	UJ BC, LC
B13-8128_SED	EPA 8270C	Endosulfan-II	0.1 ng/dry g	UJ LC
B13-8128_SED	EPA 8270C	Fluorene	2.8 ng/dry g	J DL
B13-8128_SED	EPA 8270C	Heptachlor	0.1 ng/dry g	UJ LC
B13-8128_SED	EPA 8270C	Indeno[1,2,3-c,d]pyrene	89.6 ng/dry g	J CH
B13-8128_SED	EPA 8270C	Methoxychlor	0.1 ng/dry g	UJ BC, LC
B13-8128_SED	EPA 8270C	Naphthalene	3.3 ng/dry g	J DL
B13-8128_SED	EPA 8270C	PCB008	0.1 ng/dry g	UJ BC, LC
B13-8128_SED	EPA 8270C	PCB044	1.19 ng/dry g	J CH
B13-8128_SED	EPA 8270C	PCB049	4.82 ng/dry g	J CH
B13-8128_SED	EPA 8270C	PCB052	4.58 ng/dry g	J CH
B13-8128_SED	EPA 8270C	PCB099	1.22 ng/dry g	J CH
B13-8128_SED	EPA 8270C	PCB101	3.17 ng/dry g	J CH
B13-8128_SED	EPA 8270C	PCB105	1.15 ng/dry g	J BC
B13-8128_SED	EPA 8270C	PCB110	2.36 ng/dry g	J CH
B13-8128_SED	EPA 8270C	PCB118	2.6 ng/dry g	J CH
B13-8128_SED	EPA 8270C	PCB126	0.1 ng/dry g	UJ BC
B13-8128_SED	EPA 8270C	PCB128	0.1 ng/dry g	UJ LV
B13-8128_SED	EPA 8270C	PCB149	3.59 ng/dry g	J CH
B13-8128_SED	EPA 8270C	PCB151	0.94 ng/dry g	J CH
B13-8128_SED	EPA 8270C	PCB153	4.7 ng/dry g	J BC
B13-8128_SED	EPA 8270C	PCB156	0.1 ng/dry g	UJ BC
B13-8128_SED	EPA 8270C	PCB168+132	1.1 ng/dry g	J CH
B13-8128_SED	EPA 8270C	PCB169	0.1 ng/dry g	UJ BC
B13-8128_SED	EPA 8270C	PCB187	2.53 ng/dry g	J CH
B13-8128_SED	EPA 8270C	PCB209	0.1 ng/dry g	UJ LV, LC
B13-8128_SED	EPA 8270C	Perthane	0.1 ng/dry g	UJ BC
B13-8128_SED	EPA 8270C	Perylene	5.2 ng/dry g	J CH
B13-8128_SED	EPA 8270C	Pyrene	65.8 ng/dry g	J LC
B13-8128_SED	EPA 8270C-NCI	Deltamethrin/Tralomethrin	0.5 ng/dry g	UJ LV
B13-8128_SED	EPA 8270C-NCI	I-Cyhalothrin	0.5 ng/dry g	UJ LV
B13-8128_SED	EPA 8270C-NCI	PBDE138	0.1 ng/dry g	UJ LC
B13-8128_SED	EPA 8270C-NCI	PBDE209	17.59 ng/dry g	J LC
B13-8128_SED	EPA 8270C-NCI	Permethrin, cis-	0.5 ng/dry g	UJ LV
B13-8128_SED	EPA 8270C-NCI	Resmethrin	0.5 ng/dry g	UJ LC
B13-8128_SED	EPA 9060	Total Nitrogen	0.05 % Dry Weight	J NQ
B13-8128_SED	EPA 9060	Total Organic Carbon	0.91 % Dry Weight	J NQ
B13-8128_SED	Plumb, 1981 and Teryl	Acid Volatile Sulfides	10.05 mg/dry kg	J NQ
B13-8145_SED	EPA 6020	Aluminum	15662.9 µg/dry g	J CH, HP
B13-8145_SED	EPA 6020	Antimony	0.2 µg/dry g	J HP
B13-8145_SED	EPA 6020	Beryllium	0.303 µg/dry g	J HP
B13-8145_SED	EPA 6020	Cadmium	0.1482 µg/dry g	J LP
B13-8145_SED	EPA 6020	Chromium	26.2175 µg/dry g	J HP
B13-8145_SED	EPA 6020	Iron (Fe)	18607.7 µg/dry g	J CH, HP
B13-8145_SED	EPA 6020	Total Phosphorus	732.177 µg/dry g	J NQ
B13-8145_SED	EPA 8270C	1-Methylnaphthalene	5 ng/dry g	UJ NQ
B13-8145_SED	EPA 8270C	1-Methylphenanthrene	5 ng/dry g	UJ NQ

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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8145_SED	EPA 8270C	2,3,5-Trimethylnaphthalene	5 ng/dry g	UJ NQ
B13-8145_SED	EPA 8270C	2,4'-DDD	0.1 ng/dry g	UJ NQ
B13-8145_SED	EPA 8270C	2,4'-DDE	0.1 ng/dry g	UJ NQ
B13-8145_SED	EPA 8270C	2,4'-DDT	0.1 ng/dry g	UJ NQ
B13-8145_SED	EPA 8270C	2,6-Dimethylnaphthalene	5 ng/dry g	UJ NQ, LC
B13-8145_SED	EPA 8270C	2-Methylnaphthalene	5 ng/dry g	UJ NQ
B13-8145_SED	EPA 8270C	4,4'-DDD	0.1 ng/dry g	UJ NQ
B13-8145_SED	EPA 8270C	4,4'-DDE	0.87 ng/dry g	J NQ
B13-8145_SED	EPA 8270C	4,4'-DDMU	0.1 ng/dry g	UJ NQ
B13-8145_SED	EPA 8270C	4,4'-DDT	0.1 ng/dry g	UJ NQ
B13-8145_SED	EPA 8270C	Acenaphthene	5 ng/dry g	UJ NQ
B13-8145_SED	EPA 8270C	Acenaphthylene	5 ng/dry g	UJ NQ
B13-8145_SED	EPA 8270C	Aldrin	0.1 ng/dry g	UJ NQ
B13-8145_SED	EPA 8270C	Anthracene	3.8 ng/dry g	J DL, NQ
B13-8145_SED	EPA 8270C	Aroclor 1016	2 ng/dry g	UJ NQ
B13-8145_SED	EPA 8270C	Aroclor 1221	2 ng/dry g	UJ NQ
B13-8145_SED	EPA 8270C	Aroclor 1232	2 ng/dry g	UJ NQ
B13-8145_SED	EPA 8270C	Aroclor 1242	2 ng/dry g	UJ NQ
B13-8145_SED	EPA 8270C	Aroclor 1248	2 ng/dry g	UJ NQ
B13-8145_SED	EPA 8270C	Aroclor 1254	2 ng/dry g	UJ NQ
B13-8145_SED	EPA 8270C	Aroclor 1260	2.4 ng/dry g	J NQ
B13-8145_SED	EPA 8270C	Aroclor 1262	2 ng/dry g	UJ NQ
B13-8145_SED	EPA 8270C	Aroclor 1268	2 ng/dry g	UJ NQ
B13-8145_SED	EPA 8270C	Benz[a]anthracene	8.2 ng/dry g	J NQ, CH
B13-8145_SED	EPA 8270C	Benzo[a]pyrene	8 ng/dry g	J NQ, LC, CH
B13-8145_SED	EPA 8270C	Benzo[b]fluoranthene	6.7 ng/dry g	J NQ, LC, CH, HL
B13-8145_SED	EPA 8270C	Benzo[e]pyrene	5.7 ng/dry g	J NQ, LV, LC
B13-8145_SED	EPA 8270C	Benzo[g,h,i]perylene	10.5 ng/dry g	J NQ
B13-8145_SED	EPA 8270C	Benzo[k]fluoranthene	4.8 ng/dry g	J DL, NQ, LC, CH
B13-8145_SED	EPA 8270C	BHC-alpha	0.1 ng/dry g	UJ NQ
B13-8145_SED	EPA 8270C	BHC-beta	0.1 ng/dry g	UJ NQ
B13-8145_SED	EPA 8270C	BHC-delta	0.1 ng/dry g	UJ NQ
B13-8145_SED	EPA 8270C	BHC-gamma	0.1 ng/dry g	UJ NQ
B13-8145_SED	EPA 8270C	Biphenyl	5 ng/dry g	UJ NQ
B13-8145_SED	EPA 8270C	Chlordane-alpha	0.35 ng/dry g	J NQ
B13-8145_SED	EPA 8270C	Chlordane-gamma	0.81 ng/dry g	J NQ
B13-8145_SED	EPA 8270C	Chrysene	10.2 ng/dry g	J NQ, CH
B13-8145_SED	EPA 8270C	cis-Nonachlor	0.13 ng/dry g	J NQ
B13-8145_SED	EPA 8270C	DCPA (Dacthal)	0.1 ng/dry g	UJ BC, NQ
B13-8145_SED	EPA 8270C	Dibenz[a,h]anthracene	2.6 ng/dry g	J DL, NQ, HC
B13-8145_SED	EPA 8270C	Dibenzothiophene	1 ng/dry g	J DL, NQ
B13-8145_SED	EPA 8270C	Dicofol	0.1 ng/dry g	UJ BC, NQ, LC
B13-8145_SED	EPA 8270C	Dieldrin	0.1 ng/dry g	UJ NQ
B13-8145_SED	EPA 8270C	Endosulfan sulfate	0.1 ng/dry g	UJ NQ
B13-8145_SED	EPA 8270C	Endosulfan-I	0.1 ng/dry g	UJ NQ
B13-8145_SED	EPA 8270C	Endosulfan-II	0.1 ng/dry g	UJ BC, NQ
B13-8145_SED	EPA 8270C	Endrin	0.1 ng/dry g	UJ NQ
B13-8145_SED	EPA 8270C	Endrin aldehyde	0.1 ng/dry g	UJ NQ
B13-8145_SED	EPA 8270C	Endrin ketone	0.1 ng/dry g	UJ NQ
B13-8145_SED	EPA 8270C	Fluoranthene	20.6 ng/dry g	J NQ
B13-8145_SED	EPA 8270C	Fluorene	5 ng/dry g	UJ NQ
B13-8145_SED	EPA 8270C	Heptachlor	0.1 ng/dry g	UJ NQ, LC
B13-8145_SED	EPA 8270C	Heptachlor epoxide	0.1 ng/dry g	UJ NQ
B13-8145_SED	EPA 8270C	Hexachlorobenzene	0.1 ng/dry g	UJ NQ



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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8145_SED	EPA 8270C	Indeno[1,2,3-c,d]pyrene	9.8 ng/dry g	J NQ, HC
B13-8145_SED	EPA 8270C	Methoxychlor	0.1 ng/dry g	UJ NQ
B13-8145_SED	EPA 8270C	Mirex	0.1 ng/dry g	UJ NQ
B13-8145_SED	EPA 8270C	Naphthalene	5 ng/dry g	UJ NQ
B13-8145_SED	EPA 8270C	Oxychlordane	0.1 ng/dry g	UJ NQ
B13-8145_SED	EPA 8270C	PCB003	0.1 ng/dry g	UJ NQ
B13-8145_SED	EPA 8270C	PCB005	0.1 ng/dry g	UJ NQ
B13-8145_SED	EPA 8270C	PCB008	0.1 ng/dry g	UJ NQ
B13-8145_SED	EPA 8270C	PCB015	0.1 ng/dry g	UJ NQ
B13-8145_SED	EPA 8270C	PCB018	0.1 ng/dry g	UJ NQ
B13-8145_SED	EPA 8270C	PCB027	0.1 ng/dry g	UJ NQ
B13-8145_SED	EPA 8270C	PCB028	0.1 ng/dry g	UJ NQ
B13-8145_SED	EPA 8270C	PCB029	0.1 ng/dry g	UJ NQ
B13-8145_SED	EPA 8270C	PCB031	0.1 ng/dry g	UJ NQ
B13-8145_SED	EPA 8270C	PCB033	0.1 ng/dry g	UJ NQ
B13-8145_SED	EPA 8270C	PCB037	0.1 ng/dry g	UJ NQ
B13-8145_SED	EPA 8270C	PCB044	0.1 ng/dry g	UJ NQ
B13-8145_SED	EPA 8270C	PCB049	0.1 ng/dry g	UJ NQ
B13-8145_SED	EPA 8270C	PCB052	0.1 ng/dry g	UJ NQ
B13-8145_SED	EPA 8270C	PCB056(060)	0.2 ng/dry g	UJ NQ
B13-8145_SED	EPA 8270C	PCB066	0.1 ng/dry g	UJ NQ
B13-8145_SED	EPA 8270C	PCB070	0.1 ng/dry g	UJ NQ
B13-8145_SED	EPA 8270C	PCB074	0.1 ng/dry g	UJ NQ
B13-8145_SED	EPA 8270C	PCB077	0.1 ng/dry g	UJ NQ
B13-8145_SED	EPA 8270C	PCB081	0.1 ng/dry g	UJ NQ
B13-8145_SED	EPA 8270C	PCB087	0.1 ng/dry g	UJ NQ
B13-8145_SED	EPA 8270C	PCB095	0.1 ng/dry g	UJ NQ
B13-8145_SED	EPA 8270C	PCB097	0.1 ng/dry g	UJ NQ
B13-8145_SED	EPA 8270C	PCB099	0.1 ng/dry g	UJ NQ
B13-8145_SED	EPA 8270C	PCB101	0.29 ng/dry g	J NQ
B13-8145_SED	EPA 8270C	PCB105	0.1 ng/dry g	UJ NQ
B13-8145_SED	EPA 8270C	PCB110	0.38 ng/dry g	J NQ
B13-8145_SED	EPA 8270C	PCB114	0.1 ng/dry g	UJ NQ
B13-8145_SED	EPA 8270C	PCB118	0.39 ng/dry g	J NQ
B13-8145_SED	EPA 8270C	PCB119	0.1 ng/dry g	UJ NQ
B13-8145_SED	EPA 8270C	PCB123	0.1 ng/dry g	UJ NQ
B13-8145_SED	EPA 8270C	PCB126	0.1 ng/dry g	UJ NQ
B13-8145_SED	EPA 8270C	PCB128	0.1 ng/dry g	UJ NQ
B13-8145_SED	EPA 8270C	PCB137	0.1 ng/dry g	UJ NQ
B13-8145_SED	EPA 8270C	PCB138	0.46 ng/dry g	J NQ
B13-8145_SED	EPA 8270C	PCB141	0.1 ng/dry g	UJ NQ
B13-8145_SED	EPA 8270C	PCB149	0.1 ng/dry g	J NQ
B13-8145_SED	EPA 8270C	PCB151	0.1 ng/dry g	UJ NQ
B13-8145_SED	EPA 8270C	PCB153	0.28 ng/dry g	J NQ
B13-8145_SED	EPA 8270C	PCB156	0.1 ng/dry g	UJ NQ
B13-8145_SED	EPA 8270C	PCB157	0.1 ng/dry g	UJ NQ
B13-8145_SED	EPA 8270C	PCB158	0.1 ng/dry g	UJ NQ
B13-8145_SED	EPA 8270C	PCB167	0.1 ng/dry g	UJ NQ
B13-8145_SED	EPA 8270C	PCB168+132	0.2 ng/dry g	UJ NQ
B13-8145_SED	EPA 8270C	PCB169	0.1 ng/dry g	UJ NQ
B13-8145_SED	EPA 8270C	PCB170	0.1 ng/dry g	UJ NQ
B13-8145_SED	EPA 8270C	PCB174	0.1 ng/dry g	UJ NQ
B13-8145_SED	EPA 8270C	PCB177	0.1 ng/dry g	UJ NQ
B13-8145_SED	EPA 8270C	PCB180	0.1 ng/dry g	UJ NQ

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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8145_SED	EPA 8270C	PCB183	0.1 ng/dry g	UJ NQ
B13-8145_SED	EPA 8270C	PCB187	0.1 ng/dry g	UJ NQ
B13-8145_SED	EPA 8270C	PCB189	0.1 ng/dry g	UJ NQ
B13-8145_SED	EPA 8270C	PCB194	0.1 ng/dry g	UJ NQ
B13-8145_SED	EPA 8270C	PCB195	0.1 ng/dry g	UJ NQ
B13-8145_SED	EPA 8270C	PCB199(200)	0.2 ng/dry g	UJ NQ
B13-8145_SED	EPA 8270C	PCB201	0.1 ng/dry g	UJ NQ
B13-8145_SED	EPA 8270C	PCB203	0.1 ng/dry g	UJ NQ
B13-8145_SED	EPA 8270C	PCB206	0.1 ng/dry g	UJ NQ
B13-8145_SED	EPA 8270C	PCB209	0.1 ng/dry g	UJ NQ
B13-8145_SED	EPA 8270C	Perthane	0.1 ng/dry g	UJ NQ
B13-8145_SED	EPA 8270C	Perylene	2.7 ng/dry g	J DL, NQ, LV, LC, CH
B13-8145_SED	EPA 8270C	Phenanthrene	12 ng/dry g	J NQ
B13-8145_SED	EPA 8270C	Pyrene	19.7 ng/dry g	J NQ
B13-8145_SED	EPA 8270C	trans-Nonachlor	0.7 ng/dry g	J NQ
B13-8145_SED	EPA 8270C-NCI	Allethrin	0.5 ng/dry g	UJ NQ
B13-8145_SED	EPA 8270C-NCI	Bifenthrin	0.5 ng/dry g	UJ NQ, LC
B13-8145_SED	EPA 8270C-NCI	Cyfluthrin, total	0.5 ng/dry g	UJ NQ
B13-8145_SED	EPA 8270C-NCI	Cypermethrin, total	0.5 ng/dry g	UJ NQ
B13-8145_SED	EPA 8270C-NCI	Danitol (Fenpropathrin)	0.5 ng/dry g	UJ NQ
B13-8145_SED	EPA 8270C-NCI	Deltamethrin/Tralomethrin	0.5 ng/dry g	UJ BC, NQ
B13-8145_SED	EPA 8270C-NCI	Esfenvalerate	0.5 ng/dry g	UJ NQ
B13-8145_SED	EPA 8270C-NCI	Fenvalerate	0.5 ng/dry g	UJ NQ
B13-8145_SED	EPA 8270C-NCI	Fipronil	0.5 ng/dry g	UJ NQ, LC
B13-8145_SED	EPA 8270C-NCI	Fipronil Desulfinyl	0.5 ng/dry g	UJ NQ, LC
B13-8145_SED	EPA 8270C-NCI	Fipronil Sulfide	0.5 ng/dry g	UJ NQ, LC, LL
B13-8145_SED	EPA 8270C-NCI	Fipronil Sulfone	0.5 ng/dry g	UJ BC, NQ
B13-8145_SED	EPA 8270C-NCI	Fluvalinate	0.5 ng/dry g	UJ NQ
B13-8145_SED	EPA 8270C-NCI	I-Cyhalothrin	0.5 ng/dry g	UJ NQ
B13-8145_SED	EPA 8270C-NCI	PBDE209	0.1 ng/dry g	UJ BC
B13-8145_SED	EPA 8270C-NCI	Permethrin, cis-	0.5 ng/dry g	UJ NQ, LV
B13-8145_SED	EPA 8270C-NCI	Permethrin, trans-	0.5 ng/dry g	UJ BC, NQ
B13-8145_SED	EPA 8270C-NCI	Prallethrin	0.5 ng/dry g	UJ NQ, LC
B13-8145_SED	EPA 8270C-NCI	Resmethrin	0.5 ng/dry g	UJ NQ, LV, LC, LL
B13-8145_SED	EPA 9060	Total Nitrogen	0.06 % Dry Weight	J NQ
B13-8145_SED	EPA 9060	Total Organic Carbon	1.31 % Dry Weight	J NQ
B13-8145_SED	Plumb, 1981 and Teryl	Acid Volatile Sulfides	32.01 mg/dry kg	J NQ, HM
B13-8145_SED	SM 4500-NH3 D	Ammonia-N	5.41 mg/dry kg	J LC, HM
B13-8146_SED	EPA 6020	Aluminum	20272 µg/dry g	J CH, HP
B13-8146_SED	EPA 6020	Antimony	0.275 µg/dry g	J HP
B13-8146_SED	EPA 6020	Beryllium	0.388 µg/dry g	J HP
B13-8146_SED	EPA 6020	Cadmium	0.3629 µg/dry g	J LP
B13-8146_SED	EPA 6020	Chromium	32.6866 µg/dry g	J HP
B13-8146_SED	EPA 6020	Iron (Fe)	21032.2 µg/dry g	J CH, HP
B13-8146_SED	EPA 6020	Total Phosphorus	892.91 µg/dry g	J NQ
B13-8146_SED	EPA 8270C	1-Methylnaphthalene	5 ng/dry g	UJ NQ
B13-8146_SED	EPA 8270C	1-Methylphenanthrene	2.8 ng/dry g	J DL, NQ
B13-8146_SED	EPA 8270C	2,3,5-Trimethylnaphthalene	5 ng/dry g	UJ NQ
B13-8146_SED	EPA 8270C	2,4'-DDD	0.1 ng/dry g	UJ NQ
B13-8146_SED	EPA 8270C	2,4'-DDE	0.1 ng/dry g	UJ NQ
B13-8146_SED	EPA 8270C	2,4'-DDT	0.1 ng/dry g	UJ NQ
B13-8146_SED	EPA 8270C	2,6-Dimethylnaphthalene	5 ng/dry g	UJ NQ, LC
B13-8146_SED	EPA 8270C	2-Methylnaphthalene	5 ng/dry g	UJ NQ
B13-8146_SED	EPA 8270C	4,4'-DDD	0.1 ng/dry g	UJ NQ

**TABLE 2**  
**Qualifiers Added to the Sediment Samples During Validation**  
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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8146_SED	EPA 8270C	4,4'-DDE	0.92 ng/dry g	J NQ
B13-8146_SED	EPA 8270C	4,4'-DDMU	0.1 ng/dry g	UJ NQ
B13-8146_SED	EPA 8270C	4,4'-DDT	0.1 ng/dry g	UJ NQ
B13-8146_SED	EPA 8270C	Acenaphthene	5 ng/dry g	UJ NQ
B13-8146_SED	EPA 8270C	Acenaphthylene	2.2 ng/dry g	J DL, NQ
B13-8146_SED	EPA 8270C	Aldrin	0.1 ng/dry g	UJ NQ
B13-8146_SED	EPA 8270C	Anthracene	27.2 ng/dry g	J NQ
B13-8146_SED	EPA 8270C	Aroclor 1016	2 ng/dry g	UJ NQ
B13-8146_SED	EPA 8270C	Aroclor 1221	2 ng/dry g	UJ NQ
B13-8146_SED	EPA 8270C	Aroclor 1232	2 ng/dry g	UJ NQ
B13-8146_SED	EPA 8270C	Aroclor 1242	2 ng/dry g	UJ NQ
B13-8146_SED	EPA 8270C	Aroclor 1248	2 ng/dry g	UJ NQ
B13-8146_SED	EPA 8270C	Aroclor 1254	2 ng/dry g	UJ NQ
B13-8146_SED	EPA 8270C	Aroclor 1260	2 ng/dry g	UJ NQ
B13-8146_SED	EPA 8270C	Aroclor 1262	2 ng/dry g	UJ NQ
B13-8146_SED	EPA 8270C	Aroclor 1268	2 ng/dry g	UJ NQ
B13-8146_SED	EPA 8270C	Benz[a]anthracene	39.1 ng/dry g	J NQ, CH
B13-8146_SED	EPA 8270C	Benzo[a]pyrene	40.7 ng/dry g	J NQ, LC, CH
B13-8146_SED	EPA 8270C	Benzo[b]fluoranthene	33.4 ng/dry g	J NQ, LC, CH, HL
B13-8146_SED	EPA 8270C	Benzo[e]pyrene	20.6 ng/dry g	J NQ, LV, LC
B13-8146_SED	EPA 8270C	Benzo[g,h,i]perylene	18.8 ng/dry g	J NQ
B13-8146_SED	EPA 8270C	Benzo[k]fluoranthene	24.3 ng/dry g	J NQ, LC, CH
B13-8146_SED	EPA 8270C	BHC-alpha	0.1 ng/dry g	UJ NQ
B13-8146_SED	EPA 8270C	BHC-beta	0.1 ng/dry g	UJ NQ
B13-8146_SED	EPA 8270C	BHC-delta	0.1 ng/dry g	UJ NQ
B13-8146_SED	EPA 8270C	BHC-gamma	0.1 ng/dry g	UJ NQ
B13-8146_SED	EPA 8270C	Biphenyl	5 ng/dry g	UJ NQ
B13-8146_SED	EPA 8270C	Chlordane-alpha	0.1 ng/dry g	UJ NQ
B13-8146_SED	EPA 8270C	Chlordane-gamma	0.1 ng/dry g	UJ NQ
B13-8146_SED	EPA 8270C	Chrysene	64.8 ng/dry g	J NQ, CH
B13-8146_SED	EPA 8270C	cis-Nonachlor	0.1 ng/dry g	UJ NQ
B13-8146_SED	EPA 8270C	DCPA (Dacthal)	0.1 ng/dry g	UJ BC, NQ
B13-8146_SED	EPA 8270C	Dibenz[a,h]anthracene	8.9 ng/dry g	J NQ, HC
B13-8146_SED	EPA 8270C	Dibenzothiophene	5 ng/dry g	UJ NQ
B13-8146_SED	EPA 8270C	Dicofol	0.1 ng/dry g	UJ BC, NQ, LC
B13-8146_SED	EPA 8270C	Dieldrin	0.1 ng/dry g	UJ NQ
B13-8146_SED	EPA 8270C	Endosulfan sulfate	0.1 ng/dry g	UJ NQ
B13-8146_SED	EPA 8270C	Endosulfan-I	0.1 ng/dry g	UJ NQ
B13-8146_SED	EPA 8270C	Endosulfan-II	0.1 ng/dry g	UJ BC, NQ
B13-8146_SED	EPA 8270C	Endrin	0.1 ng/dry g	UJ NQ
B13-8146_SED	EPA 8270C	Endrin aldehyde	0.1 ng/dry g	UJ NQ
B13-8146_SED	EPA 8270C	Endrin ketone	0.1 ng/dry g	UJ NQ
B13-8146_SED	EPA 8270C	Fluoranthene	27.4 ng/dry g	J NQ
B13-8146_SED	EPA 8270C	Fluorene	2.2 ng/dry g	J DL, NQ
B13-8146_SED	EPA 8270C	Heptachlor	0.1 ng/dry g	UJ NQ, LC
B13-8146_SED	EPA 8270C	Heptachlor epoxide	0.1 ng/dry g	UJ NQ
B13-8146_SED	EPA 8270C	Hexachlorobenzene	0.1 ng/dry g	UJ NQ
B13-8146_SED	EPA 8270C	Indeno[1,2,3-c,d]pyrene	31.2 ng/dry g	J NQ, HC
B13-8146_SED	EPA 8270C	Methoxychlor	0.1 ng/dry g	UJ NQ
B13-8146_SED	EPA 8270C	Mirex	0.1 ng/dry g	UJ NQ
B13-8146_SED	EPA 8270C	Naphthalene	1.1 ng/dry g	J DL, NQ, HD
B13-8146_SED	EPA 8270C	Oxychlordane	0.1 ng/dry g	UJ NQ
B13-8146_SED	EPA 8270C	PCB003	0.1 ng/dry g	UJ NQ
B13-8146_SED	EPA 8270C	PCB005	0.1 ng/dry g	UJ NQ

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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8146_SED	EPA 8270C	PCB008	0.1 ng/dry g	UJ NQ
B13-8146_SED	EPA 8270C	PCB015	0.1 ng/dry g	UJ NQ
B13-8146_SED	EPA 8270C	PCB018	0.1 ng/dry g	UJ NQ
B13-8146_SED	EPA 8270C	PCB027	0.1 ng/dry g	UJ NQ
B13-8146_SED	EPA 8270C	PCB028	0.1 ng/dry g	UJ NQ
B13-8146_SED	EPA 8270C	PCB029	0.1 ng/dry g	UJ NQ
B13-8146_SED	EPA 8270C	PCB031	0.1 ng/dry g	UJ NQ
B13-8146_SED	EPA 8270C	PCB033	0.1 ng/dry g	UJ NQ
B13-8146_SED	EPA 8270C	PCB037	0.1 ng/dry g	UJ NQ
B13-8146_SED	EPA 8270C	PCB044	0.1 ng/dry g	UJ NQ
B13-8146_SED	EPA 8270C	PCB049	0.1 ng/dry g	UJ NQ
B13-8146_SED	EPA 8270C	PCB052	0.1 ng/dry g	UJ NQ
B13-8146_SED	EPA 8270C	PCB056(060)	0.2 ng/dry g	UJ NQ
B13-8146_SED	EPA 8270C	PCB066	0.1 ng/dry g	UJ NQ
B13-8146_SED	EPA 8270C	PCB070	0.1 ng/dry g	UJ NQ
B13-8146_SED	EPA 8270C	PCB074	0.1 ng/dry g	UJ NQ
B13-8146_SED	EPA 8270C	PCB077	0.1 ng/dry g	UJ NQ
B13-8146_SED	EPA 8270C	PCB081	0.1 ng/dry g	UJ NQ
B13-8146_SED	EPA 8270C	PCB087	0.1 ng/dry g	UJ NQ
B13-8146_SED	EPA 8270C	PCB095	0.1 ng/dry g	UJ NQ
B13-8146_SED	EPA 8270C	PCB097	0.1 ng/dry g	UJ NQ
B13-8146_SED	EPA 8270C	PCB099	0.1 ng/dry g	UJ NQ
B13-8146_SED	EPA 8270C	PCB101	0.1 ng/dry g	UJ NQ
B13-8146_SED	EPA 8270C	PCB105	0.1 ng/dry g	UJ NQ
B13-8146_SED	EPA 8270C	PCB110	0.1 ng/dry g	UJ NQ
B13-8146_SED	EPA 8270C	PCB114	0.1 ng/dry g	UJ NQ
B13-8146_SED	EPA 8270C	PCB118	0.1 ng/dry g	UJ NQ
B13-8146_SED	EPA 8270C	PCB119	0.1 ng/dry g	UJ NQ
B13-8146_SED	EPA 8270C	PCB123	0.1 ng/dry g	UJ NQ
B13-8146_SED	EPA 8270C	PCB126	0.1 ng/dry g	UJ NQ
B13-8146_SED	EPA 8270C	PCB128	0.1 ng/dry g	UJ NQ
B13-8146_SED	EPA 8270C	PCB137	0.1 ng/dry g	UJ NQ
B13-8146_SED	EPA 8270C	PCB138	0.1 ng/dry g	UJ NQ
B13-8146_SED	EPA 8270C	PCB141	0.1 ng/dry g	UJ NQ
B13-8146_SED	EPA 8270C	PCB149	0.1 ng/dry g	UJ NQ
B13-8146_SED	EPA 8270C	PCB151	0.1 ng/dry g	UJ NQ
B13-8146_SED	EPA 8270C	PCB153	0.1 ng/dry g	UJ NQ
B13-8146_SED	EPA 8270C	PCB156	0.1 ng/dry g	UJ NQ
B13-8146_SED	EPA 8270C	PCB157	0.1 ng/dry g	UJ NQ
B13-8146_SED	EPA 8270C	PCB158	0.1 ng/dry g	UJ NQ
B13-8146_SED	EPA 8270C	PCB167	0.1 ng/dry g	UJ NQ
B13-8146_SED	EPA 8270C	PCB168+132	0.2 ng/dry g	UJ NQ
B13-8146_SED	EPA 8270C	PCB169	0.1 ng/dry g	UJ NQ
B13-8146_SED	EPA 8270C	PCB170	0.1 ng/dry g	UJ NQ
B13-8146_SED	EPA 8270C	PCB174	0.1 ng/dry g	UJ NQ
B13-8146_SED	EPA 8270C	PCB177	0.1 ng/dry g	UJ NQ
B13-8146_SED	EPA 8270C	PCB180	0.1 ng/dry g	UJ NQ
B13-8146_SED	EPA 8270C	PCB183	0.1 ng/dry g	UJ NQ
B13-8146_SED	EPA 8270C	PCB187	0.1 ng/dry g	UJ NQ
B13-8146_SED	EPA 8270C	PCB189	0.1 ng/dry g	UJ NQ
B13-8146_SED	EPA 8270C	PCB194	0.1 ng/dry g	UJ NQ
B13-8146_SED	EPA 8270C	PCB195	0.1 ng/dry g	UJ NQ
B13-8146_SED	EPA 8270C	PCB199(200)	0.2 ng/dry g	UJ NQ
B13-8146_SED	EPA 8270C	PCB201	0.1 ng/dry g	UJ NQ

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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8146_SED	EPA 8270C	PCB203	0.1 ng/dry g	UJ NQ
B13-8146_SED	EPA 8270C	PCB206	0.1 ng/dry g	UJ NQ
B13-8146_SED	EPA 8270C	PCB209	0.1 ng/dry g	UJ NQ
B13-8146_SED	EPA 8270C	Perthane	0.1 ng/dry g	UJ NQ
B13-8146_SED	EPA 8270C	Perylene	9.1 ng/dry g	J NQ, LV, LC, CH
B13-8146_SED	EPA 8270C	Phenanthrene	17.6 ng/dry g	J NQ
B13-8146_SED	EPA 8270C	Pyrene	25.9 ng/dry g	J NQ
B13-8146_SED	EPA 8270C	trans-Nonachlor	0.1 ng/dry g	UJ NQ
B13-8146_SED	EPA 8270C-NCI	Allethrin	0.5 ng/dry g	UJ NQ
B13-8146_SED	EPA 8270C-NCI	Bifenthrin	0.5 ng/dry g	UJ NQ, LC
B13-8146_SED	EPA 8270C-NCI	Cyfluthrin, total	0.5 ng/dry g	UJ NQ
B13-8146_SED	EPA 8270C-NCI	Cypermethrin, total	0.5 ng/dry g	UJ NQ
B13-8146_SED	EPA 8270C-NCI	Danitol (Fenpropathrin)	0.5 ng/dry g	UJ NQ
B13-8146_SED	EPA 8270C-NCI	Deltamethrin/Tralomethrin	0.5 ng/dry g	UJ BC, NQ
B13-8146_SED	EPA 8270C-NCI	Esfenvalerate	0.5 ng/dry g	UJ NQ
B13-8146_SED	EPA 8270C-NCI	Fenvalerate	0.5 ng/dry g	UJ NQ
B13-8146_SED	EPA 8270C-NCI	Fipronil	0.5 ng/dry g	UJ NQ, LC
B13-8146_SED	EPA 8270C-NCI	Fipronil Desulfinyl	0.5 ng/dry g	UJ NQ, LC
B13-8146_SED	EPA 8270C-NCI	Fipronil Sulfide	0.5 ng/dry g	UJ NQ, LC, LL
B13-8146_SED	EPA 8270C-NCI	Fipronil Sulfone	0.5 ng/dry g	UJ BC, NQ
B13-8146_SED	EPA 8270C-NCI	Fluvalinate	0.5 ng/dry g	UJ NQ
B13-8146_SED	EPA 8270C-NCI	I-Cyhalothrin	0.5 ng/dry g	UJ NQ
B13-8146_SED	EPA 8270C-NCI	PBDE209	0.1 ng/dry g	UJ BC
B13-8146_SED	EPA 8270C-NCI	Permethrin, cis-	0.5 ng/dry g	UJ NQ, LV
B13-8146_SED	EPA 8270C-NCI	Permethrin, trans-	0.5 ng/dry g	UJ BC, NQ
B13-8146_SED	EPA 8270C-NCI	Prallethrin	0.5 ng/dry g	UJ NQ, LC
B13-8146_SED	EPA 8270C-NCI	Resmethrin	0.5 ng/dry g	UJ NQ, LV, LC, LL
B13-8146_SED	EPA 9060	Total Nitrogen	0.12 % Dry Weight	J NQ
B13-8146_SED	EPA 9060	Total Organic Carbon	1.61 % Dry Weight	J NQ
B13-8146_SED	Plumb, 1981 and Teryl	Acid Volatile Sulfides	8.09 mg/dry kg	J NQ
B13-8146_SED	SM 4500-NH3 D	Ammonia-N	2.97 mg/dry kg	J LC
B13-8151_SED	EPA 6020	Aluminum	30565.3 µg/dry g	J CH, HP
B13-8151_SED	EPA 6020	Antimony	0.365 µg/dry g	J HP
B13-8151_SED	EPA 6020	Beryllium	0.587 µg/dry g	J HP
B13-8151_SED	EPA 6020	Cadmium	0.2501 µg/dry g	J LP
B13-8151_SED	EPA 6020	Chromium	50.9315 µg/dry g	J HP
B13-8151_SED	EPA 6020	Iron (Fe)	32936.1 µg/dry g	J CH, HP
B13-8151_SED	EPA 6020	Total Phosphorus	706.448 µg/dry g	J NQ
B13-8151_SED	EPA 8270C	1-Methylnaphthalene	5 ng/dry g	UJ NQ
B13-8151_SED	EPA 8270C	1-Methylphenanthrene	2.2 ng/dry g	J DL, NQ
B13-8151_SED	EPA 8270C	2,3,5-Trimethylnaphthalene	5 ng/dry g	UJ NQ
B13-8151_SED	EPA 8270C	2,4'-DDD	0.1 ng/dry g	UJ NQ
B13-8151_SED	EPA 8270C	2,4'-DDE	0.1 ng/dry g	UJ NQ
B13-8151_SED	EPA 8270C	2,4'-DDT	0.1 ng/dry g	UJ NQ
B13-8151_SED	EPA 8270C	2,6-Dimethylnaphthalene	5 ng/dry g	UJ NQ, LC
B13-8151_SED	EPA 8270C	2-Methylnaphthalene	5 ng/dry g	UJ NQ
B13-8151_SED	EPA 8270C	4,4'-DDD	0.1 ng/dry g	UJ NQ
B13-8151_SED	EPA 8270C	4,4'-DDE	0.1 ng/dry g	UJ NQ
B13-8151_SED	EPA 8270C	4,4'-DDMU	0.1 ng/dry g	UJ NQ
B13-8151_SED	EPA 8270C	4,4'-DDT	0.1 ng/dry g	UJ NQ
B13-8151_SED	EPA 8270C	Acenaphthene	5 ng/dry g	UJ NQ
B13-8151_SED	EPA 8270C	Acenaphthylene	5 ng/dry g	UJ NQ
B13-8151_SED	EPA 8270C	Aldrin	0.1 ng/dry g	UJ NQ
B13-8151_SED	EPA 8270C	Anthracene	10 ng/dry g	J NQ

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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8151_SED	EPA 8270C	Aroclor 1016	2 ng/dry g	UJ NQ
B13-8151_SED	EPA 8270C	Aroclor 1221	2 ng/dry g	UJ NQ
B13-8151_SED	EPA 8270C	Aroclor 1232	2 ng/dry g	UJ NQ
B13-8151_SED	EPA 8270C	Aroclor 1242	2 ng/dry g	UJ NQ
B13-8151_SED	EPA 8270C	Aroclor 1248	2 ng/dry g	UJ NQ
B13-8151_SED	EPA 8270C	Aroclor 1254	2 ng/dry g	UJ NQ
B13-8151_SED	EPA 8270C	Aroclor 1260	4.6 ng/dry g	J NQ
B13-8151_SED	EPA 8270C	Aroclor 1262	2 ng/dry g	UJ NQ
B13-8151_SED	EPA 8270C	Aroclor 1268	2 ng/dry g	UJ NQ
B13-8151_SED	EPA 8270C	Benzo[a]anthracene	13.6 ng/dry g	J NQ, CH
B13-8151_SED	EPA 8270C	Benzo[a]pyrene	20.5 ng/dry g	J NQ, LC, CH
B13-8151_SED	EPA 8270C	Benzo[b]fluoranthene	20 ng/dry g	J NQ, LC, CH, HL
B13-8151_SED	EPA 8270C	Benzo[e]pyrene	11.3 ng/dry g	J NQ, LV, LC
B13-8151_SED	EPA 8270C	Benzo[g,h,i]perylene	13.6 ng/dry g	J NQ
B13-8151_SED	EPA 8270C	Benzo[k]fluoranthene	14.7 ng/dry g	J NQ, LC, CH
B13-8151_SED	EPA 8270C	BHC-alpha	0.1 ng/dry g	UJ NQ
B13-8151_SED	EPA 8270C	BHC-beta	0.1 ng/dry g	UJ NQ
B13-8151_SED	EPA 8270C	BHC-delta	0.1 ng/dry g	UJ NQ
B13-8151_SED	EPA 8270C	BHC-gamma	0.1 ng/dry g	UJ NQ
B13-8151_SED	EPA 8270C	Biphenyl	5 ng/dry g	UJ NQ
B13-8151_SED	EPA 8270C	Chlordane-alpha	0.1 ng/dry g	UJ NQ
B13-8151_SED	EPA 8270C	Chlordane-gamma	0.1 ng/dry g	UJ NQ
B13-8151_SED	EPA 8270C	Chrysene	19.4 ng/dry g	J NQ, CH
B13-8151_SED	EPA 8270C	cis-Nonachlor	0.1 ng/dry g	UJ NQ
B13-8151_SED	EPA 8270C	DCPA (Dacthal)	0.1 ng/dry g	UJ BC, NQ
B13-8151_SED	EPA 8270C	Dibenz[a,h]anthracene	3.8 ng/dry g	J DL, NQ, HC
B13-8151_SED	EPA 8270C	Dibenzothiophene	1.4 ng/dry g	J DL, NQ
B13-8151_SED	EPA 8270C	Dicofol	0.1 ng/dry g	UJ BC, NQ, LC
B13-8151_SED	EPA 8270C	Dieldrin	0.1 ng/dry g	UJ NQ
B13-8151_SED	EPA 8270C	Endosulfan sulfate	0.1 ng/dry g	UJ NQ
B13-8151_SED	EPA 8270C	Endosulfan-I	0.1 ng/dry g	UJ NQ
B13-8151_SED	EPA 8270C	Endosulfan-II	0.1 ng/dry g	UJ BC, NQ
B13-8151_SED	EPA 8270C	Endrin	0.1 ng/dry g	UJ NQ
B13-8151_SED	EPA 8270C	Endrin aldehyde	0.1 ng/dry g	UJ NQ
B13-8151_SED	EPA 8270C	Endrin ketone	0.1 ng/dry g	UJ NQ
B13-8151_SED	EPA 8270C	Fluoranthene	13.8 ng/dry g	J NQ
B13-8151_SED	EPA 8270C	Fluorene	2.1 ng/dry g	J DL, NQ
B13-8151_SED	EPA 8270C	Heptachlor	0.1 ng/dry g	UJ NQ, LC
B13-8151_SED	EPA 8270C	Heptachlor epoxide	0.1 ng/dry g	UJ NQ
B13-8151_SED	EPA 8270C	Hexachlorobenzene	0.1 ng/dry g	UJ NQ
B13-8151_SED	EPA 8270C	Indeno[1,2,3-c,d]pyrene	19.8 ng/dry g	J NQ, HC
B13-8151_SED	EPA 8270C	Methoxychlor	0.1 ng/dry g	UJ NQ
B13-8151_SED	EPA 8270C	Mirex	0.1 ng/dry g	UJ NQ
B13-8151_SED	EPA 8270C	Naphthalene	1.1 ng/dry g	J DL, NQ, HD
B13-8151_SED	EPA 8270C	Oxychlordane	0.1 ng/dry g	UJ NQ
B13-8151_SED	EPA 8270C	PCB003	0.1 ng/dry g	UJ NQ
B13-8151_SED	EPA 8270C	PCB005	0.1 ng/dry g	UJ NQ
B13-8151_SED	EPA 8270C	PCB008	0.1 ng/dry g	UJ NQ
B13-8151_SED	EPA 8270C	PCB015	0.1 ng/dry g	UJ NQ
B13-8151_SED	EPA 8270C	PCB018	0.1 ng/dry g	UJ NQ
B13-8151_SED	EPA 8270C	PCB027	0.1 ng/dry g	UJ NQ
B13-8151_SED	EPA 8270C	PCB028	0.1 ng/dry g	UJ NQ
B13-8151_SED	EPA 8270C	PCB029	0.1 ng/dry g	UJ NQ
B13-8151_SED	EPA 8270C	PCB031	0.1 ng/dry g	UJ NQ

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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8151_SED	EPA 8270C	PCB033	0.1 ng/dry g	UJ NQ
B13-8151_SED	EPA 8270C	PCB037	0.1 ng/dry g	UJ NQ
B13-8151_SED	EPA 8270C	PCB044	0.1 ng/dry g	UJ NQ
B13-8151_SED	EPA 8270C	PCB049	0.1 ng/dry g	UJ NQ
B13-8151_SED	EPA 8270C	PCB052	0.1 ng/dry g	UJ NQ
B13-8151_SED	EPA 8270C	PCB056(060)	0.2 ng/dry g	UJ NQ
B13-8151_SED	EPA 8270C	PCB066	0.1 ng/dry g	UJ NQ
B13-8151_SED	EPA 8270C	PCB070	0.1 ng/dry g	UJ NQ
B13-8151_SED	EPA 8270C	PCB074	0.1 ng/dry g	UJ NQ
B13-8151_SED	EPA 8270C	PCB077	0.1 ng/dry g	UJ NQ
B13-8151_SED	EPA 8270C	PCB081	0.1 ng/dry g	UJ NQ
B13-8151_SED	EPA 8270C	PCB087	0.1 ng/dry g	UJ NQ
B13-8151_SED	EPA 8270C	PCB095	0.27 ng/dry g	J NQ
B13-8151_SED	EPA 8270C	PCB097	0.1 ng/dry g	UJ NQ
B13-8151_SED	EPA 8270C	PCB099	0.1 ng/dry g	UJ NQ
B13-8151_SED	EPA 8270C	PCB101	0.95 ng/dry g	J NQ
B13-8151_SED	EPA 8270C	PCB105	0.1 ng/dry g	UJ NQ
B13-8151_SED	EPA 8270C	PCB110	1.04 ng/dry g	J NQ
B13-8151_SED	EPA 8270C	PCB114	0.1 ng/dry g	UJ NQ
B13-8151_SED	EPA 8270C	PCB118	0.1 ng/dry g	UJ NQ
B13-8151_SED	EPA 8270C	PCB119	0.1 ng/dry g	UJ NQ
B13-8151_SED	EPA 8270C	PCB123	0.1 ng/dry g	UJ NQ
B13-8151_SED	EPA 8270C	PCB126	0.1 ng/dry g	UJ NQ
B13-8151_SED	EPA 8270C	PCB128	0.1 ng/dry g	UJ NQ
B13-8151_SED	EPA 8270C	PCB137	0.1 ng/dry g	UJ NQ
B13-8151_SED	EPA 8270C	PCB138	0.1 ng/dry g	UJ NQ
B13-8151_SED	EPA 8270C	PCB141	0.1 ng/dry g	UJ NQ
B13-8151_SED	EPA 8270C	PCB149	0.43 ng/dry g	J NQ
B13-8151_SED	EPA 8270C	PCB151	0.1 ng/dry g	UJ NQ
B13-8151_SED	EPA 8270C	PCB153	1 ng/dry g	J NQ
B13-8151_SED	EPA 8270C	PCB156	0.1 ng/dry g	UJ NQ
B13-8151_SED	EPA 8270C	PCB157	0.1 ng/dry g	UJ NQ
B13-8151_SED	EPA 8270C	PCB158	0.1 ng/dry g	UJ NQ
B13-8151_SED	EPA 8270C	PCB167	0.1 ng/dry g	UJ NQ
B13-8151_SED	EPA 8270C	PCB168+132	0.2 ng/dry g	UJ NQ
B13-8151_SED	EPA 8270C	PCB169	0.1 ng/dry g	UJ NQ
B13-8151_SED	EPA 8270C	PCB170	0.1 ng/dry g	UJ NQ
B13-8151_SED	EPA 8270C	PCB174	0.1 ng/dry g	UJ NQ
B13-8151_SED	EPA 8270C	PCB177	0.1 ng/dry g	UJ NQ
B13-8151_SED	EPA 8270C	PCB180	0.1 ng/dry g	UJ NQ
B13-8151_SED	EPA 8270C	PCB183	0.1 ng/dry g	UJ NQ
B13-8151_SED	EPA 8270C	PCB187	0.1 ng/dry g	UJ NQ
B13-8151_SED	EPA 8270C	PCB189	0.1 ng/dry g	UJ NQ
B13-8151_SED	EPA 8270C	PCB194	0.1 ng/dry g	UJ NQ
B13-8151_SED	EPA 8270C	PCB195	0.1 ng/dry g	UJ NQ
B13-8151_SED	EPA 8270C	PCB199(200)	0.2 ng/dry g	UJ NQ
B13-8151_SED	EPA 8270C	PCB201	0.1 ng/dry g	UJ NQ
B13-8151_SED	EPA 8270C	PCB203	0.1 ng/dry g	UJ NQ
B13-8151_SED	EPA 8270C	PCB206	0.1 ng/dry g	UJ NQ
B13-8151_SED	EPA 8270C	PCB209	0.1 ng/dry g	UJ NQ
B13-8151_SED	EPA 8270C	Perthane	0.1 ng/dry g	UJ NQ
B13-8151_SED	EPA 8270C	Perylene	4.7 ng/dry g	J DL, NQ, LV, LC, CH
B13-8151_SED	EPA 8270C	Phenanthrene	14.5 ng/dry g	J NQ
B13-8151_SED	EPA 8270C	Pyrene	13.4 ng/dry g	J NQ

**TABLE 2**  
**Qualifiers Added to the Sediment Samples During Validation**  
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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8151_SED	EPA 8270C	trans-Nonachlor	0.1 ng/dry g	UJ NQ
B13-8151_SED	EPA 8270C-NCI	Allethrin	0.5 ng/dry g	UJ NQ
B13-8151_SED	EPA 8270C-NCI	Bifenthrin	0.5 ng/dry g	UJ NQ, LC
B13-8151_SED	EPA 8270C-NCI	Cyfluthrin, total	0.5 ng/dry g	UJ NQ
B13-8151_SED	EPA 8270C-NCI	Cypermethrin, total	0.5 ng/dry g	UJ NQ
B13-8151_SED	EPA 8270C-NCI	Danitol (Fenpropathrin)	0.5 ng/dry g	UJ NQ
B13-8151_SED	EPA 8270C-NCI	Deltamethrin/Tralomethrin	0.5 ng/dry g	UJ BC, NQ
B13-8151_SED	EPA 8270C-NCI	Esfenvalerate	0.5 ng/dry g	UJ NQ
B13-8151_SED	EPA 8270C-NCI	Fenvalerate	0.5 ng/dry g	UJ NQ
B13-8151_SED	EPA 8270C-NCI	Fipronil	0.5 ng/dry g	UJ NQ, LC
B13-8151_SED	EPA 8270C-NCI	Fipronil Desulfinyl	0.5 ng/dry g	UJ NQ, LC
B13-8151_SED	EPA 8270C-NCI	Fipronil Sulfide	0.5 ng/dry g	UJ NQ, LC, LL
B13-8151_SED	EPA 8270C-NCI	Fipronil Sulfone	0.5 ng/dry g	UJ BC, NQ
B13-8151_SED	EPA 8270C-NCI	Fluvalinate	0.5 ng/dry g	UJ NQ
B13-8151_SED	EPA 8270C-NCI	I-Cyhalothrin	0.5 ng/dry g	UJ NQ
B13-8151_SED	EPA 8270C-NCI	PBDE209	0.1 ng/dry g	UJ BC
B13-8151_SED	EPA 8270C-NCI	Permethrin, cis-	0.5 ng/dry g	UJ NQ, LV
B13-8151_SED	EPA 8270C-NCI	Permethrin, trans-	0.5 ng/dry g	UJ BC, NQ
B13-8151_SED	EPA 8270C-NCI	Prallethrin	0.5 ng/dry g	UJ NQ, LC
B13-8151_SED	EPA 8270C-NCI	Resmethrin	0.5 ng/dry g	UJ NQ, LV, LC, LL
B13-8151_SED	EPA 9060	Total Nitrogen	0.01 % Dry Weight	R NQ
B13-8151_SED	EPA 9060	Total Organic Carbon	1 % Dry Weight	J NQ
B13-8151_SED	Plumb, 1981 and Teryl	Acid Volatile Sulfides	99.85 mg/dry kg	J NQ
B13-8151_SED	SM 4500-NH3 D	Ammonia-N	7.46 mg/dry kg	J LC
B13-8152_SED	EPA 200.8	Copper	0.0076 µmol/dry g	J DL
B13-8152_SED	EPA 6020	Aluminum	2830 µg/dry g	J CH, HP
B13-8152_SED	EPA 6020	Antimony	0.044 µg/dry g	J DL, HP
B13-8152_SED	EPA 6020	Beryllium	0.05 µg/dry g	J HP
B13-8152_SED	EPA 6020	Cadmium	0.0245 µg/dry g	J LP
B13-8152_SED	EPA 6020	Chromium	4.884 µg/dry g	J HP
B13-8152_SED	EPA 6020	Iron (Fe)	3441.2 µg/dry g	J CH, HP
B13-8152_SED	EPA 6020	Selenium	0.034 µg/dry g	J DL
B13-8152_SED	EPA 6020	Total Phosphorus	171.707 µg/dry g	J NQ
B13-8152_SED	EPA 8270C	1-Methylnaphthalene	5 ng/dry g	UJ NQ
B13-8152_SED	EPA 8270C	1-Methylphenanthrene	5 ng/dry g	UJ NQ
B13-8152_SED	EPA 8270C	2,3,5-Trimethylnaphthalene	5 ng/dry g	UJ NQ
B13-8152_SED	EPA 8270C	2,4'-DDD	0.1 ng/dry g	UJ NQ
B13-8152_SED	EPA 8270C	2,4'-DDE	0.1 ng/dry g	UJ NQ
B13-8152_SED	EPA 8270C	2,4'-DDT	0.1 ng/dry g	UJ NQ
B13-8152_SED	EPA 8270C	2,6-Dimethylnaphthalene	5 ng/dry g	UJ NQ, LC
B13-8152_SED	EPA 8270C	2-Methylnaphthalene	5 ng/dry g	UJ NQ
B13-8152_SED	EPA 8270C	4,4'-DDD	0.1 ng/dry g	UJ NQ
B13-8152_SED	EPA 8270C	4,4'-DDE	0.22 ng/dry g	J NQ
B13-8152_SED	EPA 8270C	4,4'-DDMU	0.1 ng/dry g	UJ NQ
B13-8152_SED	EPA 8270C	4,4'-DDT	0.1 ng/dry g	UJ NQ
B13-8152_SED	EPA 8270C	Acenaphthene	5 ng/dry g	UJ NQ
B13-8152_SED	EPA 8270C	Acenaphthylene	5 ng/dry g	UJ NQ
B13-8152_SED	EPA 8270C	Aldrin	0.1 ng/dry g	UJ NQ
B13-8152_SED	EPA 8270C	Anthracene	1.2 ng/dry g	J DL, NQ
B13-8152_SED	EPA 8270C	Aroclor 1016	2 ng/dry g	UJ NQ
B13-8152_SED	EPA 8270C	Aroclor 1221	2 ng/dry g	UJ NQ
B13-8152_SED	EPA 8270C	Aroclor 1232	2 ng/dry g	UJ NQ
B13-8152_SED	EPA 8270C	Aroclor 1242	2 ng/dry g	UJ NQ
B13-8152_SED	EPA 8270C	Aroclor 1248	2 ng/dry g	UJ NQ



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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8152_SED	EPA 8270C	Aroclor 1254	2 ng/dry g	UJ NQ
B13-8152_SED	EPA 8270C	Aroclor 1260	2 ng/dry g	UJ NQ
B13-8152_SED	EPA 8270C	Aroclor 1262	2 ng/dry g	UJ NQ
B13-8152_SED	EPA 8270C	Aroclor 1268	2 ng/dry g	UJ NQ
B13-8152_SED	EPA 8270C	Benz[a]anthracene	1.5 ng/dry g	J DL, NQ, CH
B13-8152_SED	EPA 8270C	Benzo[a]pyrene	2 ng/dry g	J DL, NQ, LC, CH
B13-8152_SED	EPA 8270C	Benzo[b]fluoranthene	1.7 ng/dry g	J DL, NQ, LC, CH, HL
B13-8152_SED	EPA 8270C	Benzo[e]pyrene	1.2 ng/dry g	J DL, NQ, LV, LC
B13-8152_SED	EPA 8270C	Benzo[g,h,i]perylene	2.6 ng/dry g	J DL, NQ
B13-8152_SED	EPA 8270C	Benzo[k]fluoranthene	1.5 ng/dry g	J DL, NQ, LC, CH
B13-8152_SED	EPA 8270C	BHC-alpha	0.1 ng/dry g	UJ NQ
B13-8152_SED	EPA 8270C	BHC-beta	0.1 ng/dry g	UJ NQ
B13-8152_SED	EPA 8270C	BHC-delta	0.1 ng/dry g	UJ NQ
B13-8152_SED	EPA 8270C	BHC-gamma	0.1 ng/dry g	UJ NQ
B13-8152_SED	EPA 8270C	Biphenyl	5 ng/dry g	UJ NQ
B13-8152_SED	EPA 8270C	Chlordane-alpha	0.68 ng/dry g	J NQ
B13-8152_SED	EPA 8270C	Chlordane-gamma	1.02 ng/dry g	J NQ
B13-8152_SED	EPA 8270C	Chrysene	2.9 ng/dry g	J DL, NQ, CH
B13-8152_SED	EPA 8270C	cis-Nonachlor	0.1 ng/dry g	UJ NQ
B13-8152_SED	EPA 8270C	DCPA (Dacthal)	0.1 ng/dry g	UJ BC, NQ
B13-8152_SED	EPA 8270C	Dibenz[a,h]anthracene	5 ng/dry g	UJ NQ
B13-8152_SED	EPA 8270C	Dibenzothiophene	5 ng/dry g	UJ NQ
B13-8152_SED	EPA 8270C	Dicofol	0.1 ng/dry g	UJ BC, NQ, LC
B13-8152_SED	EPA 8270C	Dieldrin	0.1 ng/dry g	UJ NQ
B13-8152_SED	EPA 8270C	Endosulfan sulfate	0.1 ng/dry g	UJ NQ
B13-8152_SED	EPA 8270C	Endosulfan-I	0.1 ng/dry g	UJ NQ
B13-8152_SED	EPA 8270C	Endosulfan-II	0.1 ng/dry g	UJ BC, NQ
B13-8152_SED	EPA 8270C	Endrin	0.1 ng/dry g	UJ NQ
B13-8152_SED	EPA 8270C	Endrin aldehyde	0.1 ng/dry g	UJ NQ
B13-8152_SED	EPA 8270C	Endrin ketone	0.1 ng/dry g	UJ NQ
B13-8152_SED	EPA 8270C	Fluoranthene	3.9 ng/dry g	J DL, NQ
B13-8152_SED	EPA 8270C	Fluorene	5 ng/dry g	UJ NQ
B13-8152_SED	EPA 8270C	Heptachlor	0.1 ng/dry g	UJ NQ, LC
B13-8152_SED	EPA 8270C	Heptachlor epoxide	0.1 ng/dry g	UJ NQ
B13-8152_SED	EPA 8270C	Hexachlorobenzene	0.1 ng/dry g	UJ NQ
B13-8152_SED	EPA 8270C	Indeno[1,2,3-c,d]pyrene	3.5 ng/dry g	J DL, NQ, HC
B13-8152_SED	EPA 8270C	Methoxychlor	0.1 ng/dry g	UJ NQ
B13-8152_SED	EPA 8270C	Mirex	0.1 ng/dry g	UJ NQ
B13-8152_SED	EPA 8270C	Naphthalene	5 ng/dry g	UJ NQ
B13-8152_SED	EPA 8270C	Oxychlordane	0.1 ng/dry g	UJ NQ
B13-8152_SED	EPA 8270C	PCB003	0.1 ng/dry g	UJ NQ
B13-8152_SED	EPA 8270C	PCB005	0.1 ng/dry g	UJ NQ
B13-8152_SED	EPA 8270C	PCB008	0.1 ng/dry g	UJ NQ
B13-8152_SED	EPA 8270C	PCB015	0.1 ng/dry g	UJ NQ
B13-8152_SED	EPA 8270C	PCB018	0.1 ng/dry g	UJ NQ
B13-8152_SED	EPA 8270C	PCB027	0.1 ng/dry g	UJ NQ
B13-8152_SED	EPA 8270C	PCB028	0.1 ng/dry g	UJ NQ
B13-8152_SED	EPA 8270C	PCB029	0.1 ng/dry g	UJ NQ
B13-8152_SED	EPA 8270C	PCB031	0.1 ng/dry g	UJ NQ
B13-8152_SED	EPA 8270C	PCB033	0.1 ng/dry g	UJ NQ
B13-8152_SED	EPA 8270C	PCB037	0.1 ng/dry g	UJ NQ
B13-8152_SED	EPA 8270C	PCB044	0.1 ng/dry g	UJ NQ
B13-8152_SED	EPA 8270C	PCB049	0.1 ng/dry g	UJ NQ
B13-8152_SED	EPA 8270C	PCB052	0.1 ng/dry g	UJ NQ

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**Qualifiers Added to the Sediment Samples During Validation**  
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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8152_SED	EPA 8270C	PCB056(060)	0.2 ng/dry g	UJ NQ
B13-8152_SED	EPA 8270C	PCB066	0.1 ng/dry g	UJ NQ
B13-8152_SED	EPA 8270C	PCB070	0.1 ng/dry g	UJ NQ
B13-8152_SED	EPA 8270C	PCB074	0.1 ng/dry g	UJ NQ
B13-8152_SED	EPA 8270C	PCB077	0.1 ng/dry g	UJ NQ
B13-8152_SED	EPA 8270C	PCB081	0.1 ng/dry g	UJ NQ
B13-8152_SED	EPA 8270C	PCB087	0.1 ng/dry g	UJ NQ
B13-8152_SED	EPA 8270C	PCB095	0.1 ng/dry g	UJ NQ
B13-8152_SED	EPA 8270C	PCB097	0.1 ng/dry g	UJ NQ
B13-8152_SED	EPA 8270C	PCB099	0.1 ng/dry g	UJ NQ
B13-8152_SED	EPA 8270C	PCB101	0.1 ng/dry g	UJ NQ
B13-8152_SED	EPA 8270C	PCB105	0.1 ng/dry g	UJ NQ
B13-8152_SED	EPA 8270C	PCB110	0.1 ng/dry g	UJ NQ
B13-8152_SED	EPA 8270C	PCB114	0.1 ng/dry g	UJ NQ
B13-8152_SED	EPA 8270C	PCB118	0.1 ng/dry g	UJ NQ
B13-8152_SED	EPA 8270C	PCB119	0.1 ng/dry g	UJ NQ
B13-8152_SED	EPA 8270C	PCB123	0.1 ng/dry g	UJ NQ
B13-8152_SED	EPA 8270C	PCB126	0.1 ng/dry g	UJ NQ
B13-8152_SED	EPA 8270C	PCB128	0.1 ng/dry g	UJ NQ
B13-8152_SED	EPA 8270C	PCB137	0.1 ng/dry g	UJ NQ
B13-8152_SED	EPA 8270C	PCB138	0.1 ng/dry g	UJ NQ
B13-8152_SED	EPA 8270C	PCB141	0.1 ng/dry g	UJ NQ
B13-8152_SED	EPA 8270C	PCB149	0.1 ng/dry g	UJ NQ
B13-8152_SED	EPA 8270C	PCB151	0.1 ng/dry g	UJ NQ
B13-8152_SED	EPA 8270C	PCB153	0.1 ng/dry g	UJ NQ
B13-8152_SED	EPA 8270C	PCB156	0.1 ng/dry g	UJ NQ
B13-8152_SED	EPA 8270C	PCB157	0.1 ng/dry g	UJ NQ
B13-8152_SED	EPA 8270C	PCB158	0.1 ng/dry g	UJ NQ
B13-8152_SED	EPA 8270C	PCB167	0.1 ng/dry g	UJ NQ
B13-8152_SED	EPA 8270C	PCB168+132	0.2 ng/dry g	UJ NQ
B13-8152_SED	EPA 8270C	PCB169	0.1 ng/dry g	UJ NQ
B13-8152_SED	EPA 8270C	PCB170	0.1 ng/dry g	UJ NQ
B13-8152_SED	EPA 8270C	PCB174	0.1 ng/dry g	UJ NQ
B13-8152_SED	EPA 8270C	PCB177	0.1 ng/dry g	UJ NQ
B13-8152_SED	EPA 8270C	PCB180	0.1 ng/dry g	UJ NQ
B13-8152_SED	EPA 8270C	PCB183	0.1 ng/dry g	UJ NQ
B13-8152_SED	EPA 8270C	PCB187	0.1 ng/dry g	UJ NQ
B13-8152_SED	EPA 8270C	PCB189	0.1 ng/dry g	UJ NQ
B13-8152_SED	EPA 8270C	PCB194	0.1 ng/dry g	UJ NQ
B13-8152_SED	EPA 8270C	PCB195	0.1 ng/dry g	UJ NQ
B13-8152_SED	EPA 8270C	PCB199(200)	0.2 ng/dry g	UJ NQ
B13-8152_SED	EPA 8270C	PCB201	0.1 ng/dry g	UJ NQ
B13-8152_SED	EPA 8270C	PCB203	0.1 ng/dry g	UJ NQ
B13-8152_SED	EPA 8270C	PCB206	0.1 ng/dry g	UJ NQ
B13-8152_SED	EPA 8270C	PCB209	0.1 ng/dry g	UJ NQ
B13-8152_SED	EPA 8270C	Perthane	0.1 ng/dry g	UJ NQ
B13-8152_SED	EPA 8270C	Perylene	5 ng/dry g	UJ NQ, LV, LC
B13-8152_SED	EPA 8270C	Phenanthrene	3.9 ng/dry g	J DL, NQ
B13-8152_SED	EPA 8270C	Pyrene	3.6 ng/dry g	J DL, NQ
B13-8152_SED	EPA 8270C	trans-Nonachlor	0.38 ng/dry g	J NQ
B13-8152_SED	EPA 8270C-NCI	Allethrin	0.5 ng/dry g	UJ NQ
B13-8152_SED	EPA 8270C-NCI	Bifenthrin	0.5 ng/dry g	UJ NQ, LC
B13-8152_SED	EPA 8270C-NCI	Cyfluthrin, total	0.5 ng/dry g	UJ NQ
B13-8152_SED	EPA 8270C-NCI	Cypermethrin, total	0.5 ng/dry g	UJ NQ

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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8152_SED	EPA 8270C-NCI	Danitol (Fenpropathrin)	0.5 ng/dry g	UJ NQ
B13-8152_SED	EPA 8270C-NCI	Deltamethrin/Tralomethrin	0.5 ng/dry g	UJ BC, NQ
B13-8152_SED	EPA 8270C-NCI	Esfenvalerate	0.5 ng/dry g	UJ NQ
B13-8152_SED	EPA 8270C-NCI	Fenvalerate	0.5 ng/dry g	UJ NQ
B13-8152_SED	EPA 8270C-NCI	Fipronil	0.5 ng/dry g	UJ NQ, LC
B13-8152_SED	EPA 8270C-NCI	Fipronil Desulfinyl	0.5 ng/dry g	UJ NQ, LC
B13-8152_SED	EPA 8270C-NCI	Fipronil Sulfide	0.5 ng/dry g	UJ NQ, LC, LL
B13-8152_SED	EPA 8270C-NCI	Fipronil Sulfone	0.5 ng/dry g	UJ BC, NQ
B13-8152_SED	EPA 8270C-NCI	Fluvalinate	0.5 ng/dry g	UJ NQ
B13-8152_SED	EPA 8270C-NCI	I-Cyhalothrin	0.5 ng/dry g	UJ NQ
B13-8152_SED	EPA 8270C-NCI	PBDE209	0.1 ng/dry g	UJ BC
B13-8152_SED	EPA 8270C-NCI	Permethrin, cis-	0.5 ng/dry g	UJ NQ, LV
B13-8152_SED	EPA 8270C-NCI	Permethrin, trans-	0.5 ng/dry g	UJ BC, NQ
B13-8152_SED	EPA 8270C-NCI	Prallethrin	0.5 ng/dry g	UJ NQ, LC
B13-8152_SED	EPA 8270C-NCI	Resmethrin	0.5 ng/dry g	UJ NQ, LV, LC, LL
B13-8152_SED	EPA 9060	Total Nitrogen	0.04 % Dry Weight	J NQ
B13-8152_SED	EPA 9060	Total Organic Carbon	2.99 % Dry Weight	J NQ
B13-8152_SED	Plumb, 1981 and Teryl	Acid Volatile Sulfides	0.08 mg/dry kg	J DL, NQ
B13-8152_SED	SM 4500-NH3 D	Ammonia-N	1.87 mg/dry kg	J LC
B13-8156_SED	EPA 6020	Aluminum	19156.7 µg/dry g	J CH, HP
B13-8156_SED	EPA 6020	Antimony	0.164 µg/dry g	J HP
B13-8156_SED	EPA 6020	Beryllium	0.393 µg/dry g	J HP
B13-8156_SED	EPA 6020	Cadmium	0.2348 µg/dry g	J LP
B13-8156_SED	EPA 6020	Chromium	37.5169 µg/dry g	J HP
B13-8156_SED	EPA 6020	Iron (Fe)	24942.4 µg/dry g	J CH, HP
B13-8156_SED	EPA 6020	Total Phosphorus	562.799 µg/dry g	J NQ
B13-8156_SED	EPA 8270C	1-Methylnaphthalene	5 ng/dry g	UJ NQ
B13-8156_SED	EPA 8270C	1-Methylphenanthrene	4 ng/dry g	J DL, NQ
B13-8156_SED	EPA 8270C	2,3,5-Trimethylnaphthalene	5 ng/dry g	UJ NQ
B13-8156_SED	EPA 8270C	2,4'-DDD	0.1 ng/dry g	UJ NQ
B13-8156_SED	EPA 8270C	2,4'-DDE	0.1 ng/dry g	UJ NQ
B13-8156_SED	EPA 8270C	2,4'-DDT	0.1 ng/dry g	UJ NQ
B13-8156_SED	EPA 8270C	2,6-Dimethylnaphthalene	5 ng/dry g	UJ NQ, LC
B13-8156_SED	EPA 8270C	2-Methylnaphthalene	5 ng/dry g	UJ NQ
B13-8156_SED	EPA 8270C	4,4'-DDD	0.1 ng/dry g	UJ NQ
B13-8156_SED	EPA 8270C	4,4'-DDE	0.1 ng/dry g	UJ NQ
B13-8156_SED	EPA 8270C	4,4'-DDMU	0.1 ng/dry g	UJ NQ
B13-8156_SED	EPA 8270C	4,4'-DDT	0.1 ng/dry g	UJ NQ
B13-8156_SED	EPA 8270C	Acenaphthene	5 ng/dry g	UJ NQ
B13-8156_SED	EPA 8270C	Acenaphthylene	5.5 ng/dry g	J NQ
B13-8156_SED	EPA 8270C	Aldrin	0.1 ng/dry g	UJ NQ
B13-8156_SED	EPA 8270C	Anthracene	31.2 ng/dry g	J NQ
B13-8156_SED	EPA 8270C	Aroclor 1016	2 ng/dry g	UJ NQ
B13-8156_SED	EPA 8270C	Aroclor 1221	2 ng/dry g	UJ NQ
B13-8156_SED	EPA 8270C	Aroclor 1232	2 ng/dry g	UJ NQ
B13-8156_SED	EPA 8270C	Aroclor 1242	2 ng/dry g	UJ NQ
B13-8156_SED	EPA 8270C	Aroclor 1248	2 ng/dry g	UJ NQ
B13-8156_SED	EPA 8270C	Aroclor 1254	2 ng/dry g	UJ NQ
B13-8156_SED	EPA 8270C	Aroclor 1260	2 ng/dry g	UJ NQ
B13-8156_SED	EPA 8270C	Aroclor 1262	2 ng/dry g	UJ NQ
B13-8156_SED	EPA 8270C	Aroclor 1268	2 ng/dry g	UJ NQ
B13-8156_SED	EPA 8270C	Benz[a]anthracene	64.4 ng/dry g	J NQ, CH
B13-8156_SED	EPA 8270C	Benzo[a]pyrene	257.2 ng/dry g	J NQ, LC, CH
B13-8156_SED	EPA 8270C	Benzo[b]fluoranthene	228.7 ng/dry g	J NQ, LC, CH, HL

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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8156_SED	EPA 8270C	Benzo[e]pyrene	129 ng/dry g	J NQ, LV, LC
B13-8156_SED	EPA 8270C	Benzo[g,h,i]perylene	75.5 ng/dry g	J NQ
B13-8156_SED	EPA 8270C	Benzo[k]fluoranthene	156.9 ng/dry g	J NQ, LC, CH
B13-8156_SED	EPA 8270C	BHC-alpha	0.1 ng/dry g	UJ NQ
B13-8156_SED	EPA 8270C	BHC-beta	0.1 ng/dry g	UJ NQ
B13-8156_SED	EPA 8270C	BHC-delta	0.1 ng/dry g	UJ NQ
B13-8156_SED	EPA 8270C	BHC-gamma	0.1 ng/dry g	UJ NQ
B13-8156_SED	EPA 8270C	Biphenyl	5 ng/dry g	UJ NQ
B13-8156_SED	EPA 8270C	Chlordane-alpha	0.1 ng/dry g	UJ NQ
B13-8156_SED	EPA 8270C	Chlordane-gamma	0.1 ng/dry g	UJ NQ
B13-8156_SED	EPA 8270C	Chrysene	104.7 ng/dry g	J NQ, CH
B13-8156_SED	EPA 8270C	cis-Nonachlor	0.1 ng/dry g	UJ NQ
B13-8156_SED	EPA 8270C	DCPA (Dacthal)	0.1 ng/dry g	UJ BC, NQ
B13-8156_SED	EPA 8270C	Dibenz[a,h]anthracene	32.1 ng/dry g	J NQ, HC
B13-8156_SED	EPA 8270C	Dibenzothiophene	1.1 ng/dry g	J DL, NQ
B13-8156_SED	EPA 8270C	Dicofol	0.1 ng/dry g	UJ BC, NQ, LC
B13-8156_SED	EPA 8270C	Dieldrin	0.1 ng/dry g	UJ NQ
B13-8156_SED	EPA 8270C	Endosulfan sulfate	0.1 ng/dry g	UJ NQ
B13-8156_SED	EPA 8270C	Endosulfan-I	0.1 ng/dry g	UJ NQ
B13-8156_SED	EPA 8270C	Endosulfan-II	0.1 ng/dry g	UJ BC, NQ
B13-8156_SED	EPA 8270C	Endrin	0.1 ng/dry g	UJ NQ
B13-8156_SED	EPA 8270C	Endrin aldehyde	0.1 ng/dry g	UJ NQ
B13-8156_SED	EPA 8270C	Endrin ketone	0.1 ng/dry g	UJ NQ
B13-8156_SED	EPA 8270C	Fluoranthene	12.4 ng/dry g	J NQ
B13-8156_SED	EPA 8270C	Fluorene	1.9 ng/dry g	J DL, NQ
B13-8156_SED	EPA 8270C	Heptachlor	0.1 ng/dry g	UJ NQ, LC
B13-8156_SED	EPA 8270C	Heptachlor epoxide	0.1 ng/dry g	UJ NQ
B13-8156_SED	EPA 8270C	Hexachlorobenzene	0.1 ng/dry g	UJ NQ
B13-8156_SED	EPA 8270C	Indeno[1,2,3-c,d]pyrene	125 ng/dry g	J NQ, HC
B13-8156_SED	EPA 8270C	Methoxychlor	0.1 ng/dry g	UJ NQ
B13-8156_SED	EPA 8270C	Mirex	0.1 ng/dry g	UJ NQ
B13-8156_SED	EPA 8270C	Naphthalene	5 ng/dry g	UJ NQ
B13-8156_SED	EPA 8270C	Oxychlordane	0.1 ng/dry g	UJ NQ
B13-8156_SED	EPA 8270C	PCB003	0.1 ng/dry g	UJ NQ
B13-8156_SED	EPA 8270C	PCB005	0.1 ng/dry g	UJ NQ
B13-8156_SED	EPA 8270C	PCB008	0.1 ng/dry g	UJ NQ
B13-8156_SED	EPA 8270C	PCB015	0.1 ng/dry g	UJ NQ
B13-8156_SED	EPA 8270C	PCB018	0.1 ng/dry g	UJ NQ
B13-8156_SED	EPA 8270C	PCB027	0.1 ng/dry g	UJ NQ
B13-8156_SED	EPA 8270C	PCB028	0.1 ng/dry g	UJ NQ
B13-8156_SED	EPA 8270C	PCB029	0.1 ng/dry g	UJ NQ
B13-8156_SED	EPA 8270C	PCB031	0.1 ng/dry g	UJ NQ
B13-8156_SED	EPA 8270C	PCB033	0.1 ng/dry g	UJ NQ
B13-8156_SED	EPA 8270C	PCB037	0.1 ng/dry g	UJ NQ
B13-8156_SED	EPA 8270C	PCB044	0.1 ng/dry g	UJ NQ
B13-8156_SED	EPA 8270C	PCB049	0.1 ng/dry g	UJ NQ
B13-8156_SED	EPA 8270C	PCB052	0.1 ng/dry g	UJ NQ
B13-8156_SED	EPA 8270C	PCB056(060)	0.2 ng/dry g	UJ NQ
B13-8156_SED	EPA 8270C	PCB066	0.1 ng/dry g	UJ NQ
B13-8156_SED	EPA 8270C	PCB070	0.1 ng/dry g	UJ NQ
B13-8156_SED	EPA 8270C	PCB074	0.1 ng/dry g	UJ NQ
B13-8156_SED	EPA 8270C	PCB077	0.1 ng/dry g	UJ NQ
B13-8156_SED	EPA 8270C	PCB081	0.1 ng/dry g	UJ NQ
B13-8156_SED	EPA 8270C	PCB087	0.1 ng/dry g	UJ NQ

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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8156_SED	EPA 8270C	PCB095	0.1 ng/dry g	UJ NQ
B13-8156_SED	EPA 8270C	PCB097	0.1 ng/dry g	UJ NQ
B13-8156_SED	EPA 8270C	PCB099	0.1 ng/dry g	UJ NQ
B13-8156_SED	EPA 8270C	PCB101	0.1 ng/dry g	UJ NQ
B13-8156_SED	EPA 8270C	PCB105	0.1 ng/dry g	UJ NQ
B13-8156_SED	EPA 8270C	PCB110	0.1 ng/dry g	UJ NQ
B13-8156_SED	EPA 8270C	PCB114	0.1 ng/dry g	UJ NQ
B13-8156_SED	EPA 8270C	PCB118	0.1 ng/dry g	UJ NQ
B13-8156_SED	EPA 8270C	PCB119	0.1 ng/dry g	UJ NQ
B13-8156_SED	EPA 8270C	PCB123	0.1 ng/dry g	UJ NQ
B13-8156_SED	EPA 8270C	PCB126	0.1 ng/dry g	UJ NQ
B13-8156_SED	EPA 8270C	PCB128	0.1 ng/dry g	UJ NQ
B13-8156_SED	EPA 8270C	PCB137	0.1 ng/dry g	UJ NQ
B13-8156_SED	EPA 8270C	PCB138	0.1 ng/dry g	UJ NQ
B13-8156_SED	EPA 8270C	PCB141	0.1 ng/dry g	UJ NQ
B13-8156_SED	EPA 8270C	PCB149	0.1 ng/dry g	UJ NQ
B13-8156_SED	EPA 8270C	PCB151	0.1 ng/dry g	UJ NQ
B13-8156_SED	EPA 8270C	PCB153	0.1 ng/dry g	UJ NQ
B13-8156_SED	EPA 8270C	PCB156	0.1 ng/dry g	UJ NQ
B13-8156_SED	EPA 8270C	PCB157	0.1 ng/dry g	UJ NQ
B13-8156_SED	EPA 8270C	PCB158	0.1 ng/dry g	UJ NQ
B13-8156_SED	EPA 8270C	PCB167	0.1 ng/dry g	UJ NQ
B13-8156_SED	EPA 8270C	PCB168+132	0.2 ng/dry g	UJ NQ
B13-8156_SED	EPA 8270C	PCB169	0.1 ng/dry g	UJ NQ
B13-8156_SED	EPA 8270C	PCB170	0.1 ng/dry g	UJ NQ
B13-8156_SED	EPA 8270C	PCB174	0.1 ng/dry g	UJ NQ
B13-8156_SED	EPA 8270C	PCB177	0.1 ng/dry g	UJ NQ
B13-8156_SED	EPA 8270C	PCB180	0.1 ng/dry g	UJ NQ
B13-8156_SED	EPA 8270C	PCB183	0.1 ng/dry g	UJ NQ
B13-8156_SED	EPA 8270C	PCB187	0.1 ng/dry g	UJ NQ
B13-8156_SED	EPA 8270C	PCB189	0.1 ng/dry g	UJ NQ
B13-8156_SED	EPA 8270C	PCB194	0.1 ng/dry g	UJ NQ
B13-8156_SED	EPA 8270C	PCB195	0.1 ng/dry g	UJ NQ
B13-8156_SED	EPA 8270C	PCB199(200)	0.2 ng/dry g	UJ NQ
B13-8156_SED	EPA 8270C	PCB201	0.1 ng/dry g	UJ NQ
B13-8156_SED	EPA 8270C	PCB203	0.1 ng/dry g	UJ NQ
B13-8156_SED	EPA 8270C	PCB206	0.1 ng/dry g	UJ NQ
B13-8156_SED	EPA 8270C	PCB209	0.1 ng/dry g	UJ NQ
B13-8156_SED	EPA 8270C	Perthane	0.1 ng/dry g	UJ NQ
B13-8156_SED	EPA 8270C	Perylene	60.5 ng/dry g	J NQ, LV, LC, CH
B13-8156_SED	EPA 8270C	Phenanthrene	15 ng/dry g	J NQ
B13-8156_SED	EPA 8270C	Pyrene	16.6 ng/dry g	J NQ
B13-8156_SED	EPA 8270C	trans-Nonachlor	0.1 ng/dry g	UJ NQ
B13-8156_SED	EPA 8270C-NCI	Allethrin	0.5 ng/dry g	UJ NQ
B13-8156_SED	EPA 8270C-NCI	Bifenthrin	0.5 ng/dry g	UJ NQ, LC
B13-8156_SED	EPA 8270C-NCI	Cyfluthrin, total	0.5 ng/dry g	UJ NQ
B13-8156_SED	EPA 8270C-NCI	Cypermethrin, total	0.5 ng/dry g	UJ NQ
B13-8156_SED	EPA 8270C-NCI	Danitol (Fenpropathrin)	0.5 ng/dry g	UJ NQ
B13-8156_SED	EPA 8270C-NCI	Deltamethrin/Tralomethrin	0.5 ng/dry g	UJ BC, NQ
B13-8156_SED	EPA 8270C-NCI	Esfenvalerate	0.5 ng/dry g	UJ NQ
B13-8156_SED	EPA 8270C-NCI	Fenvalerate	0.5 ng/dry g	UJ NQ
B13-8156_SED	EPA 8270C-NCI	Fipronil	0.5 ng/dry g	UJ NQ, LC
B13-8156_SED	EPA 8270C-NCI	Fipronil Desulfinyl	0.5 ng/dry g	UJ NQ, LC
B13-8156_SED	EPA 8270C-NCI	Fipronil Sulfide	0.5 ng/dry g	UJ NQ, LC, LL

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B13-8156_SED	EPA 8270C-NCI	Fipronil Sulfone	0.5 ng/dry g	UJ BC, NQ
B13-8156_SED	EPA 8270C-NCI	Fluvalinate	0.5 ng/dry g	UJ NQ
B13-8156_SED	EPA 8270C-NCI	I-Cyhalothrin	0.5 ng/dry g	UJ NQ
B13-8156_SED	EPA 8270C-NCI	PBDE209	0.1 ng/dry g	UJ BC
B13-8156_SED	EPA 8270C-NCI	Permethrin, cis-	0.5 ng/dry g	UJ NQ, LV
B13-8156_SED	EPA 8270C-NCI	Permethrin, trans-	0.5 ng/dry g	UJ BC, NQ
B13-8156_SED	EPA 8270C-NCI	Prallethrin	0.5 ng/dry g	UJ NQ, LC
B13-8156_SED	EPA 8270C-NCI	Resmethrin	0.5 ng/dry g	UJ NQ, LV, LC, LL
B13-8156_SED	EPA 9060	Total Nitrogen	0.53 % Dry Weight	J NQ
B13-8156_SED	EPA 9060	Total Organic Carbon	6.39 % Dry Weight	J NQ
B13-8156_SED	Plumb, 1981 and Teryl	Acid Volatile Sulfides	24.37 mg/dry kg	J NQ
B13-8156_SED	SM 4500-NH3 D	Ammonia-N	5.7 mg/dry kg	J LC
B13-8157_SED	EPA 6020	Aluminum	32718.5 µg/dry g	J CH, HP
B13-8157_SED	EPA 6020	Antimony	0.232 µg/dry g	J HP
B13-8157_SED	EPA 6020	Beryllium	0.579 µg/dry g	J HP
B13-8157_SED	EPA 6020	Cadmium	0.1999 µg/dry g	J LP
B13-8157_SED	EPA 6020	Chromium	44.075 µg/dry g	J HP
B13-8157_SED	EPA 6020	Iron (Fe)	31319.9 µg/dry g	J CH, HP
B13-8157_SED	EPA 6020	Total Phosphorus	588.419 µg/dry g	J NQ
B13-8157_SED	EPA 8270C	1-Methylnaphthalene	5 ng/dry g	UJ NQ
B13-8157_SED	EPA 8270C	1-Methylphenanthrene	1.5 ng/dry g	J DL, NQ
B13-8157_SED	EPA 8270C	2,3,5-Trimethylnaphthalene	5 ng/dry g	UJ NQ
B13-8157_SED	EPA 8270C	2,4'-DDD	0.1 ng/dry g	UJ NQ
B13-8157_SED	EPA 8270C	2,4'-DDE	0.1 ng/dry g	UJ NQ
B13-8157_SED	EPA 8270C	2,4'-DDT	0.1 ng/dry g	UJ NQ
B13-8157_SED	EPA 8270C	2,6-Dimethylnaphthalene	5 ng/dry g	UJ NQ, LC
B13-8157_SED	EPA 8270C	2-Methylnaphthalene	5 ng/dry g	UJ NQ
B13-8157_SED	EPA 8270C	4,4'-DDD	0.1 ng/dry g	UJ NQ
B13-8157_SED	EPA 8270C	4,4'-DDE	0.1 ng/dry g	UJ NQ
B13-8157_SED	EPA 8270C	4,4'-DDMU	0.1 ng/dry g	UJ NQ
B13-8157_SED	EPA 8270C	4,4'-DDT	0.1 ng/dry g	UJ NQ
B13-8157_SED	EPA 8270C	Acenaphthene	5 ng/dry g	UJ NQ
B13-8157_SED	EPA 8270C	Acenaphthylene	5 ng/dry g	UJ NQ
B13-8157_SED	EPA 8270C	Aldrin	0.1 ng/dry g	UJ NQ
B13-8157_SED	EPA 8270C	Anthracene	1.8 ng/dry g	J DL, NQ
B13-8157_SED	EPA 8270C	Aroclor 1016	2 ng/dry g	UJ NQ
B13-8157_SED	EPA 8270C	Aroclor 1221	2 ng/dry g	UJ NQ
B13-8157_SED	EPA 8270C	Aroclor 1232	2 ng/dry g	UJ NQ
B13-8157_SED	EPA 8270C	Aroclor 1242	2 ng/dry g	UJ NQ
B13-8157_SED	EPA 8270C	Aroclor 1248	2 ng/dry g	UJ NQ
B13-8157_SED	EPA 8270C	Aroclor 1254	2 ng/dry g	UJ NQ
B13-8157_SED	EPA 8270C	Aroclor 1260	2 ng/dry g	UJ NQ
B13-8157_SED	EPA 8270C	Aroclor 1262	2 ng/dry g	UJ NQ
B13-8157_SED	EPA 8270C	Aroclor 1268	2 ng/dry g	UJ NQ
B13-8157_SED	EPA 8270C	Benz[a]anthracene	2.2 ng/dry g	J DL, NQ
B13-8157_SED	EPA 8270C	Benzo[a]pyrene	1.9 ng/dry g	J DL, NQ, LC
B13-8157_SED	EPA 8270C	Benzo[b]fluoranthene	1.8 ng/dry g	J DL, NQ, LC, HL
B13-8157_SED	EPA 8270C	Benzo[e]pyrene	1.3 ng/dry g	J DL, NQ, LV, LC
B13-8157_SED	EPA 8270C	Benzo[g,h,i]perylene	2.8 ng/dry g	J DL, NQ
B13-8157_SED	EPA 8270C	Benzo[k]fluoranthene	1.7 ng/dry g	J DL, NQ, LC
B13-8157_SED	EPA 8270C	BHC-alpha	0.1 ng/dry g	UJ NQ
B13-8157_SED	EPA 8270C	BHC-beta	0.1 ng/dry g	UJ NQ
B13-8157_SED	EPA 8270C	BHC-delta	0.1 ng/dry g	UJ NQ
B13-8157_SED	EPA 8270C	BHC-gamma	0.1 ng/dry g	UJ NQ

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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8157_SED	EPA 8270C	Biphenyl	5 ng/dry g	UJ NQ
B13-8157_SED	EPA 8270C	Chlordane-alpha	0.1 ng/dry g	UJ NQ
B13-8157_SED	EPA 8270C	Chlordane-gamma	0.1 ng/dry g	UJ NQ
B13-8157_SED	EPA 8270C	Chrysene	2.9 ng/dry g	J DL, NQ
B13-8157_SED	EPA 8270C	cis-Nonachlor	0.1 ng/dry g	UJ NQ
B13-8157_SED	EPA 8270C	DCPA (Dacthal)	0.1 ng/dry g	UJ BC, NQ
B13-8157_SED	EPA 8270C	Dibenz[a,h]anthracene	5 ng/dry g	UJ NQ
B13-8157_SED	EPA 8270C	Dibenzothiophene	5 ng/dry g	UJ NQ
B13-8157_SED	EPA 8270C	Dicofol	0.1 ng/dry g	UJ BC, NQ, LC
B13-8157_SED	EPA 8270C	Dieldrin	0.1 ng/dry g	UJ NQ
B13-8157_SED	EPA 8270C	Endosulfan sulfate	0.1 ng/dry g	UJ NQ
B13-8157_SED	EPA 8270C	Endosulfan-I	0.1 ng/dry g	UJ NQ
B13-8157_SED	EPA 8270C	Endosulfan-II	0.1 ng/dry g	UJ BC, NQ
B13-8157_SED	EPA 8270C	Endrin	0.1 ng/dry g	UJ NQ
B13-8157_SED	EPA 8270C	Endrin aldehyde	0.1 ng/dry g	UJ NQ
B13-8157_SED	EPA 8270C	Endrin ketone	0.1 ng/dry g	UJ NQ
B13-8157_SED	EPA 8270C	Fluoranthene	5.6 ng/dry g	J NQ
B13-8157_SED	EPA 8270C	Fluorene	5 ng/dry g	UJ NQ
B13-8157_SED	EPA 8270C	Heptachlor	0.1 ng/dry g	UJ NQ, LC
B13-8157_SED	EPA 8270C	Heptachlor epoxide	0.1 ng/dry g	UJ NQ
B13-8157_SED	EPA 8270C	Hexachlorobenzene	0.1 ng/dry g	UJ NQ
B13-8157_SED	EPA 8270C	Indeno[1,2,3-c,d]pyrene	3.4 ng/dry g	J DL, NQ, HC
B13-8157_SED	EPA 8270C	Methoxychlor	0.1 ng/dry g	UJ NQ
B13-8157_SED	EPA 8270C	Mirex	0.1 ng/dry g	UJ NQ
B13-8157_SED	EPA 8270C	Naphthalene	5 ng/dry g	UJ NQ
B13-8157_SED	EPA 8270C	Oxychlordane	0.1 ng/dry g	UJ NQ
B13-8157_SED	EPA 8270C	PCB003	0.1 ng/dry g	UJ NQ
B13-8157_SED	EPA 8270C	PCB005	0.1 ng/dry g	UJ NQ
B13-8157_SED	EPA 8270C	PCB008	0.1 ng/dry g	UJ NQ
B13-8157_SED	EPA 8270C	PCB015	0.1 ng/dry g	UJ NQ
B13-8157_SED	EPA 8270C	PCB018	0.1 ng/dry g	UJ NQ
B13-8157_SED	EPA 8270C	PCB027	0.1 ng/dry g	UJ NQ
B13-8157_SED	EPA 8270C	PCB028	0.1 ng/dry g	UJ NQ
B13-8157_SED	EPA 8270C	PCB029	0.1 ng/dry g	UJ NQ
B13-8157_SED	EPA 8270C	PCB031	0.1 ng/dry g	UJ NQ
B13-8157_SED	EPA 8270C	PCB033	0.1 ng/dry g	UJ NQ
B13-8157_SED	EPA 8270C	PCB037	0.1 ng/dry g	UJ NQ
B13-8157_SED	EPA 8270C	PCB044	0.1 ng/dry g	UJ NQ
B13-8157_SED	EPA 8270C	PCB049	0.1 ng/dry g	UJ NQ
B13-8157_SED	EPA 8270C	PCB052	0.1 ng/dry g	UJ NQ
B13-8157_SED	EPA 8270C	PCB056(060)	0.2 ng/dry g	UJ NQ
B13-8157_SED	EPA 8270C	PCB066	0.1 ng/dry g	UJ NQ
B13-8157_SED	EPA 8270C	PCB070	0.1 ng/dry g	UJ NQ
B13-8157_SED	EPA 8270C	PCB074	0.1 ng/dry g	UJ NQ
B13-8157_SED	EPA 8270C	PCB077	0.1 ng/dry g	UJ NQ
B13-8157_SED	EPA 8270C	PCB081	0.1 ng/dry g	UJ NQ
B13-8157_SED	EPA 8270C	PCB087	0.1 ng/dry g	UJ NQ
B13-8157_SED	EPA 8270C	PCB095	0.1 ng/dry g	UJ NQ
B13-8157_SED	EPA 8270C	PCB097	0.1 ng/dry g	UJ NQ
B13-8157_SED	EPA 8270C	PCB099	0.1 ng/dry g	UJ NQ
B13-8157_SED	EPA 8270C	PCB101	0.1 ng/dry g	UJ NQ
B13-8157_SED	EPA 8270C	PCB105	0.1 ng/dry g	UJ NQ
B13-8157_SED	EPA 8270C	PCB110	0.1 ng/dry g	UJ NQ
B13-8157_SED	EPA 8270C	PCB114	0.1 ng/dry g	UJ NQ

**TABLE 2**  
**Qualifiers Added to the Sediment Samples During Validation**  
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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8157_SED	EPA 8270C	PCB118	0.1 ng/dry g	UJ NQ
B13-8157_SED	EPA 8270C	PCB119	0.1 ng/dry g	UJ NQ
B13-8157_SED	EPA 8270C	PCB123	0.1 ng/dry g	UJ NQ
B13-8157_SED	EPA 8270C	PCB126	0.1 ng/dry g	UJ NQ
B13-8157_SED	EPA 8270C	PCB128	0.1 ng/dry g	UJ NQ
B13-8157_SED	EPA 8270C	PCB137	0.1 ng/dry g	UJ NQ
B13-8157_SED	EPA 8270C	PCB138	0.1 ng/dry g	UJ NQ
B13-8157_SED	EPA 8270C	PCB141	0.1 ng/dry g	UJ NQ
B13-8157_SED	EPA 8270C	PCB149	0.1 ng/dry g	UJ NQ
B13-8157_SED	EPA 8270C	PCB151	0.1 ng/dry g	UJ NQ
B13-8157_SED	EPA 8270C	PCB153	0.1 ng/dry g	UJ NQ
B13-8157_SED	EPA 8270C	PCB156	0.1 ng/dry g	UJ NQ
B13-8157_SED	EPA 8270C	PCB157	0.1 ng/dry g	UJ NQ
B13-8157_SED	EPA 8270C	PCB158	0.1 ng/dry g	UJ NQ
B13-8157_SED	EPA 8270C	PCB167	0.1 ng/dry g	UJ NQ
B13-8157_SED	EPA 8270C	PCB168+132	0.2 ng/dry g	UJ NQ
B13-8157_SED	EPA 8270C	PCB169	0.1 ng/dry g	UJ NQ
B13-8157_SED	EPA 8270C	PCB170	0.1 ng/dry g	UJ NQ
B13-8157_SED	EPA 8270C	PCB174	0.1 ng/dry g	UJ NQ
B13-8157_SED	EPA 8270C	PCB177	0.1 ng/dry g	UJ NQ
B13-8157_SED	EPA 8270C	PCB180	0.1 ng/dry g	UJ NQ
B13-8157_SED	EPA 8270C	PCB183	0.1 ng/dry g	UJ NQ
B13-8157_SED	EPA 8270C	PCB187	0.1 ng/dry g	UJ NQ
B13-8157_SED	EPA 8270C	PCB189	0.1 ng/dry g	UJ NQ
B13-8157_SED	EPA 8270C	PCB194	0.1 ng/dry g	UJ NQ
B13-8157_SED	EPA 8270C	PCB195	0.1 ng/dry g	UJ NQ
B13-8157_SED	EPA 8270C	PCB199(200)	0.2 ng/dry g	UJ NQ
B13-8157_SED	EPA 8270C	PCB201	0.1 ng/dry g	UJ NQ
B13-8157_SED	EPA 8270C	PCB203	0.1 ng/dry g	UJ NQ
B13-8157_SED	EPA 8270C	PCB206	0.1 ng/dry g	UJ NQ
B13-8157_SED	EPA 8270C	PCB209	0.1 ng/dry g	UJ NQ
B13-8157_SED	EPA 8270C	Perthane	0.1 ng/dry g	UJ NQ
B13-8157_SED	EPA 8270C	Perylene	5 ng/dry g	UJ NQ, LV, LC
B13-8157_SED	EPA 8270C	Phenanthrene	7.6 ng/dry g	J NQ
B13-8157_SED	EPA 8270C	Pyrene	4.3 ng/dry g	J DL, NQ
B13-8157_SED	EPA 8270C	trans-Nonachlor	0.1 ng/dry g	UJ NQ
B13-8157_SED	EPA 8270C-NCI	Allethrin	0.5 ng/dry g	UJ NQ
B13-8157_SED	EPA 8270C-NCI	Bifenthrin	0.5 ng/dry g	UJ NQ, LC
B13-8157_SED	EPA 8270C-NCI	Cyfluthrin, total	0.5 ng/dry g	UJ NQ
B13-8157_SED	EPA 8270C-NCI	Cypermethrin, total	0.5 ng/dry g	UJ NQ
B13-8157_SED	EPA 8270C-NCI	Danitol (Fenpropathrin)	0.5 ng/dry g	UJ NQ
B13-8157_SED	EPA 8270C-NCI	Deltamethrin/Tralomethrin	0.5 ng/dry g	UJ BC, NQ
B13-8157_SED	EPA 8270C-NCI	Esfenvalerate	0.5 ng/dry g	UJ NQ
B13-8157_SED	EPA 8270C-NCI	Fenvalerate	0.5 ng/dry g	UJ NQ
B13-8157_SED	EPA 8270C-NCI	Fipronil	0.5 ng/dry g	UJ NQ, LC
B13-8157_SED	EPA 8270C-NCI	Fipronil Desulfinyl	0.5 ng/dry g	UJ NQ, LC
B13-8157_SED	EPA 8270C-NCI	Fipronil Sulfide	0.5 ng/dry g	UJ NQ, LC, LL
B13-8157_SED	EPA 8270C-NCI	Fipronil Sulfone	0.5 ng/dry g	UJ BC, NQ
B13-8157_SED	EPA 8270C-NCI	Fluvalinate	0.5 ng/dry g	UJ NQ
B13-8157_SED	EPA 8270C-NCI	I-Cyhalothrin	0.5 ng/dry g	UJ NQ
B13-8157_SED	EPA 8270C-NCI	PBDE209	0.1 ng/dry g	UJ BC
B13-8157_SED	EPA 8270C-NCI	Permethrin, cis-	0.5 ng/dry g	UJ NQ, LV
B13-8157_SED	EPA 8270C-NCI	Permethrin, trans-	0.5 ng/dry g	UJ BC, NQ
B13-8157_SED	EPA 8270C-NCI	Prallethrin	0.5 ng/dry g	UJ NQ, LC



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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8157_SED	EPA 8270C-NCI	Resmethrin	0.5 ng/dry g	UJ NQ, LV, LC, LL
B13-8157_SED	EPA 9060	Total Nitrogen	0.09 % Dry Weight	J NQ
B13-8157_SED	EPA 9060	Total Organic Carbon	2.09 % Dry Weight	J NQ
B13-8157_SED	Plumb, 1981 and Teryl	Acid Volatile Sulfides	180.29 mg/dry kg	J NQ
B13-8157_SED	SM 4500-NH3 D	Ammonia-N	5.86 mg/dry kg	J LC
B13-8159_SED	EPA 6020	Aluminum	52121.3 µg/dry g	J CH, HP
B13-8159_SED	EPA 6020	Antimony	0.499 µg/dry g	J HP
B13-8159_SED	EPA 6020	Beryllium	1.184 µg/dry g	J HP
B13-8159_SED	EPA 6020	Cadmium	0.2424 µg/dry g	J LP
B13-8159_SED	EPA 6020	Chromium	55.7947 µg/dry g	J HP
B13-8159_SED	EPA 6020	Iron (Fe)	44487.9 µg/dry g	J CH, HP
B13-8159_SED	EPA 6020	Total Phosphorus	802.902 µg/dry g	J NQ
B13-8159_SED	EPA 8270C	1-Methylnaphthalene	5 ng/dry g	UJ NQ
B13-8159_SED	EPA 8270C	1-Methylphenanthrene	1.6 ng/dry g	J DL, NQ
B13-8159_SED	EPA 8270C	2,3,5-Trimethylnaphthalene	5 ng/dry g	UJ NQ
B13-8159_SED	EPA 8270C	2,4'-DDD	0.1 ng/dry g	UJ NQ
B13-8159_SED	EPA 8270C	2,4'-DDE	0.1 ng/dry g	UJ NQ
B13-8159_SED	EPA 8270C	2,4'-DDT	0.1 ng/dry g	UJ NQ
B13-8159_SED	EPA 8270C	2,6-Dimethylnaphthalene	5 ng/dry g	UJ NQ, LC
B13-8159_SED	EPA 8270C	2-Methylnaphthalene	5 ng/dry g	UJ NQ
B13-8159_SED	EPA 8270C	4,4'-DDD	0.1 ng/dry g	UJ NQ
B13-8159_SED	EPA 8270C	4,4'-DDE	0.1 ng/dry g	UJ NQ
B13-8159_SED	EPA 8270C	4,4'-DDMU	0.1 ng/dry g	UJ NQ
B13-8159_SED	EPA 8270C	4,4'-DDT	0.1 ng/dry g	UJ NQ
B13-8159_SED	EPA 8270C	Acenaphthene	5 ng/dry g	UJ NQ
B13-8159_SED	EPA 8270C	Acenaphthylene	5 ng/dry g	UJ NQ
B13-8159_SED	EPA 8270C	Aldrin	0.1 ng/dry g	UJ NQ
B13-8159_SED	EPA 8270C	Anthracene	2.8 ng/dry g	J DL, NQ
B13-8159_SED	EPA 8270C	Aroclor 1016	2 ng/dry g	UJ NQ
B13-8159_SED	EPA 8270C	Aroclor 1221	2 ng/dry g	UJ NQ
B13-8159_SED	EPA 8270C	Aroclor 1232	2 ng/dry g	UJ NQ
B13-8159_SED	EPA 8270C	Aroclor 1242	2 ng/dry g	UJ NQ
B13-8159_SED	EPA 8270C	Aroclor 1248	2 ng/dry g	UJ NQ
B13-8159_SED	EPA 8270C	Aroclor 1254	2 ng/dry g	UJ NQ
B13-8159_SED	EPA 8270C	Aroclor 1260	2 ng/dry g	UJ NQ
B13-8159_SED	EPA 8270C	Aroclor 1262	2 ng/dry g	UJ NQ
B13-8159_SED	EPA 8270C	Aroclor 1268	2 ng/dry g	UJ NQ
B13-8159_SED	EPA 8270C	Benz[a]anthracene	7.3 ng/dry g	J NQ, CH
B13-8159_SED	EPA 8270C	Benzo[a]pyrene	6.2 ng/dry g	J NQ, LC, CH
B13-8159_SED	EPA 8270C	Benzo[b]fluoranthene	5.8 ng/dry g	J NQ, LC, CH, HL
B13-8159_SED	EPA 8270C	Benzo[e]pyrene	4.2 ng/dry g	J DL, NQ, LV, LC
B13-8159_SED	EPA 8270C	Benzo[g,h,i]perylene	5.3 ng/dry g	J NQ
B13-8159_SED	EPA 8270C	Benzo[k]fluoranthene	4.3 ng/dry g	J DL, NQ, LC, CH
B13-8159_SED	EPA 8270C	BHC-alpha	0.1 ng/dry g	UJ NQ
B13-8159_SED	EPA 8270C	BHC-beta	0.1 ng/dry g	UJ NQ
B13-8159_SED	EPA 8270C	BHC-delta	0.1 ng/dry g	UJ NQ
B13-8159_SED	EPA 8270C	BHC-gamma	0.1 ng/dry g	UJ NQ
B13-8159_SED	EPA 8270C	Biphenyl	1 ng/dry g	J DL, NQ
B13-8159_SED	EPA 8270C	Chlordane-alpha	0.1 ng/dry g	UJ NQ
B13-8159_SED	EPA 8270C	Chlordane-gamma	0.1 ng/dry g	UJ NQ
B13-8159_SED	EPA 8270C	Chrysene	7.9 ng/dry g	J NQ, CH
B13-8159_SED	EPA 8270C	cis-Nonachlor	0.1 ng/dry g	UJ NQ
B13-8159_SED	EPA 8270C	DCPA (Dacthal)	0.1 ng/dry g	UJ BC, NQ
B13-8159_SED	EPA 8270C	Dibenz[a,h]anthracene	5 ng/dry g	UJ NQ

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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8159_SED	EPA 8270C	Dibenzothiophene	1.3 ng/dry g	J DL, NQ
B13-8159_SED	EPA 8270C	Dicofol	0.1 ng/dry g	UJ BC, NQ, LC
B13-8159_SED	EPA 8270C	Dieldrin	0.1 ng/dry g	UJ NQ
B13-8159_SED	EPA 8270C	Endosulfan sulfate	0.1 ng/dry g	UJ NQ
B13-8159_SED	EPA 8270C	Endosulfan-I	0.1 ng/dry g	UJ NQ
B13-8159_SED	EPA 8270C	Endosulfan-II	0.1 ng/dry g	UJ BC, NQ
B13-8159_SED	EPA 8270C	Endrin	0.1 ng/dry g	UJ NQ
B13-8159_SED	EPA 8270C	Endrin aldehyde	0.1 ng/dry g	UJ NQ
B13-8159_SED	EPA 8270C	Endrin ketone	0.1 ng/dry g	UJ NQ
B13-8159_SED	EPA 8270C	Fluoranthene	20.6 ng/dry g	J NQ
B13-8159_SED	EPA 8270C	Fluorene	1.9 ng/dry g	J DL, NQ
B13-8159_SED	EPA 8270C	Heptachlor	0.1 ng/dry g	UJ NQ, LC
B13-8159_SED	EPA 8270C	Heptachlor epoxide	0.1 ng/dry g	UJ NQ
B13-8159_SED	EPA 8270C	Hexachlorobenzene	0.1 ng/dry g	UJ NQ
B13-8159_SED	EPA 8270C	Indeno[1,2,3-c,d]pyrene	6.4 ng/dry g	J NQ, HC
B13-8159_SED	EPA 8270C	Methoxychlor	0.1 ng/dry g	UJ NQ
B13-8159_SED	EPA 8270C	Mirex	0.1 ng/dry g	UJ NQ
B13-8159_SED	EPA 8270C	Naphthalene	1.4 ng/dry g	J DL, NQ, HD
B13-8159_SED	EPA 8270C	Oxychlorane	0.1 ng/dry g	UJ NQ
B13-8159_SED	EPA 8270C	PCB003	0.1 ng/dry g	UJ NQ
B13-8159_SED	EPA 8270C	PCB005	0.1 ng/dry g	UJ NQ
B13-8159_SED	EPA 8270C	PCB008	0.1 ng/dry g	UJ NQ
B13-8159_SED	EPA 8270C	PCB015	0.1 ng/dry g	UJ NQ
B13-8159_SED	EPA 8270C	PCB018	0.1 ng/dry g	UJ NQ
B13-8159_SED	EPA 8270C	PCB027	0.1 ng/dry g	UJ NQ
B13-8159_SED	EPA 8270C	PCB028	0.1 ng/dry g	UJ NQ
B13-8159_SED	EPA 8270C	PCB029	0.1 ng/dry g	UJ NQ
B13-8159_SED	EPA 8270C	PCB031	0.1 ng/dry g	UJ NQ
B13-8159_SED	EPA 8270C	PCB033	0.1 ng/dry g	UJ NQ
B13-8159_SED	EPA 8270C	PCB037	0.1 ng/dry g	UJ NQ
B13-8159_SED	EPA 8270C	PCB044	0.1 ng/dry g	UJ NQ
B13-8159_SED	EPA 8270C	PCB049	0.1 ng/dry g	UJ NQ
B13-8159_SED	EPA 8270C	PCB052	0.1 ng/dry g	UJ NQ
B13-8159_SED	EPA 8270C	PCB056(060)	0.2 ng/dry g	UJ NQ
B13-8159_SED	EPA 8270C	PCB066	0.1 ng/dry g	UJ NQ
B13-8159_SED	EPA 8270C	PCB070	0.1 ng/dry g	UJ NQ
B13-8159_SED	EPA 8270C	PCB074	0.1 ng/dry g	UJ NQ
B13-8159_SED	EPA 8270C	PCB077	0.1 ng/dry g	UJ NQ
B13-8159_SED	EPA 8270C	PCB081	0.1 ng/dry g	UJ NQ
B13-8159_SED	EPA 8270C	PCB087	0.1 ng/dry g	UJ NQ
B13-8159_SED	EPA 8270C	PCB095	0.1 ng/dry g	UJ NQ
B13-8159_SED	EPA 8270C	PCB097	0.1 ng/dry g	UJ NQ
B13-8159_SED	EPA 8270C	PCB099	0.1 ng/dry g	UJ NQ
B13-8159_SED	EPA 8270C	PCB101	0.1 ng/dry g	UJ NQ
B13-8159_SED	EPA 8270C	PCB105	0.1 ng/dry g	UJ NQ
B13-8159_SED	EPA 8270C	PCB110	0.1 ng/dry g	UJ NQ
B13-8159_SED	EPA 8270C	PCB114	0.1 ng/dry g	UJ NQ
B13-8159_SED	EPA 8270C	PCB118	0.1 ng/dry g	UJ NQ
B13-8159_SED	EPA 8270C	PCB119	0.1 ng/dry g	UJ NQ
B13-8159_SED	EPA 8270C	PCB123	0.1 ng/dry g	UJ NQ
B13-8159_SED	EPA 8270C	PCB126	0.1 ng/dry g	UJ NQ
B13-8159_SED	EPA 8270C	PCB128	0.1 ng/dry g	UJ NQ
B13-8159_SED	EPA 8270C	PCB137	0.1 ng/dry g	UJ NQ
B13-8159_SED	EPA 8270C	PCB138	0.1 ng/dry g	UJ NQ

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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8159_SED	EPA 8270C	PCB141	0.1 ng/dry g	UJ NQ
B13-8159_SED	EPA 8270C	PCB149	0.1 ng/dry g	UJ NQ
B13-8159_SED	EPA 8270C	PCB151	0.1 ng/dry g	UJ NQ
B13-8159_SED	EPA 8270C	PCB153	0.1 ng/dry g	UJ NQ
B13-8159_SED	EPA 8270C	PCB156	0.1 ng/dry g	UJ NQ
B13-8159_SED	EPA 8270C	PCB157	0.1 ng/dry g	UJ NQ
B13-8159_SED	EPA 8270C	PCB158	0.1 ng/dry g	UJ NQ
B13-8159_SED	EPA 8270C	PCB167	0.1 ng/dry g	UJ NQ
B13-8159_SED	EPA 8270C	PCB168+132	0.2 ng/dry g	UJ NQ
B13-8159_SED	EPA 8270C	PCB169	0.1 ng/dry g	UJ NQ
B13-8159_SED	EPA 8270C	PCB170	0.1 ng/dry g	UJ NQ
B13-8159_SED	EPA 8270C	PCB174	0.1 ng/dry g	UJ NQ
B13-8159_SED	EPA 8270C	PCB177	0.1 ng/dry g	UJ NQ
B13-8159_SED	EPA 8270C	PCB180	0.1 ng/dry g	UJ NQ
B13-8159_SED	EPA 8270C	PCB183	0.1 ng/dry g	UJ NQ
B13-8159_SED	EPA 8270C	PCB187	0.1 ng/dry g	UJ NQ
B13-8159_SED	EPA 8270C	PCB189	0.1 ng/dry g	UJ NQ
B13-8159_SED	EPA 8270C	PCB194	0.1 ng/dry g	UJ NQ
B13-8159_SED	EPA 8270C	PCB195	0.1 ng/dry g	UJ NQ
B13-8159_SED	EPA 8270C	PCB199(200)	0.2 ng/dry g	UJ NQ
B13-8159_SED	EPA 8270C	PCB201	0.1 ng/dry g	UJ NQ
B13-8159_SED	EPA 8270C	PCB203	0.1 ng/dry g	UJ NQ
B13-8159_SED	EPA 8270C	PCB206	0.1 ng/dry g	UJ NQ
B13-8159_SED	EPA 8270C	PCB209	0.1 ng/dry g	UJ NQ
B13-8159_SED	EPA 8270C	Perthane	0.1 ng/dry g	UJ NQ
B13-8159_SED	EPA 8270C	Perylene	2 ng/dry g	J DL, NQ, LV, LC, CH
B13-8159_SED	EPA 8270C	Phenanthrene	12.9 ng/dry g	J NQ
B13-8159_SED	EPA 8270C	Pyrene	18.2 ng/dry g	J NQ
B13-8159_SED	EPA 8270C	trans-Nonachlor	0.1 ng/dry g	UJ NQ
B13-8159_SED	EPA 8270C-NCI	Allethrin	0.5 ng/dry g	UJ NQ
B13-8159_SED	EPA 8270C-NCI	Bifenthrin	0.5 ng/dry g	UJ NQ, LC
B13-8159_SED	EPA 8270C-NCI	Cyfluthrin, total	0.5 ng/dry g	UJ NQ
B13-8159_SED	EPA 8270C-NCI	Cypermethrin, total	0.5 ng/dry g	UJ NQ
B13-8159_SED	EPA 8270C-NCI	Danitol (Fenpropathrin)	0.5 ng/dry g	UJ NQ
B13-8159_SED	EPA 8270C-NCI	Deltamethrin/Tralomethrin	0.5 ng/dry g	UJ BC, NQ
B13-8159_SED	EPA 8270C-NCI	Esfenvalerate	0.5 ng/dry g	UJ NQ
B13-8159_SED	EPA 8270C-NCI	Fenvalerate	0.5 ng/dry g	UJ NQ
B13-8159_SED	EPA 8270C-NCI	Fipronil	0.5 ng/dry g	UJ NQ, LC
B13-8159_SED	EPA 8270C-NCI	Fipronil Desulfinyl	0.5 ng/dry g	UJ NQ, LC
B13-8159_SED	EPA 8270C-NCI	Fipronil Sulfide	0.5 ng/dry g	UJ NQ, LC, LL
B13-8159_SED	EPA 8270C-NCI	Fipronil Sulfone	0.5 ng/dry g	UJ BC, NQ
B13-8159_SED	EPA 8270C-NCI	Fluvalinate	0.5 ng/dry g	UJ NQ
B13-8159_SED	EPA 8270C-NCI	I-Cyhalothrin	0.5 ng/dry g	UJ NQ
B13-8159_SED	EPA 8270C-NCI	PBDE209	0.1 ng/dry g	UJ BC
B13-8159_SED	EPA 8270C-NCI	Permethrin, cis-	0.5 ng/dry g	UJ NQ, LV
B13-8159_SED	EPA 8270C-NCI	Permethrin, trans-	0.5 ng/dry g	UJ BC, NQ
B13-8159_SED	EPA 8270C-NCI	Prallethrin	0.5 ng/dry g	UJ NQ, LC
B13-8159_SED	EPA 8270C-NCI	Resmethrin	0.5 ng/dry g	UJ NQ, LV, LC, LL
B13-8159_SED	EPA 9060	Total Nitrogen	0.14 % Dry Weight	J NQ
B13-8159_SED	EPA 9060	Total Organic Carbon	2.42 % Dry Weight	J NQ
B13-8159_SED	Plumb, 1981 and Teryl	Acid Volatile Sulfides	190.18 mg/dry kg	J NQ
B13-8159_SED	SM 4500-NH3 D	Ammonia-N	6.08 mg/dry kg	J LC
B13-8160_SED	EPA 200.8	Cadmium	0.0019 µmol/dry g	J DL
B13-8160_SED	EPA 6020	Aluminum	30271.3 µg/dry g	J CH, HP

**TABLE 2**  
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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8160_SED	EPA 6020	Antimony	0.442 µg/dry g	J HP
B13-8160_SED	EPA 6020	Beryllium	0.848 µg/dry g	J HP
B13-8160_SED	EPA 6020	Cadmium	0.3038 µg/dry g	J LP
B13-8160_SED	EPA 6020	Chromium	41.6714 µg/dry g	J HP
B13-8160_SED	EPA 6020	Iron (Fe)	34072 µg/dry g	J CH, HP
B13-8160_SED	EPA 6020	Total Phosphorus	748.119 µg/dry g	J NQ
B13-8160_SED	EPA 8270C	1-Methylnaphthalene	5 ng/dry g	UJ NQ
B13-8160_SED	EPA 8270C	1-Methylphenanthrene	5 ng/dry g	UJ NQ
B13-8160_SED	EPA 8270C	2,3,5-Trimethylnaphthalene	5 ng/dry g	UJ NQ
B13-8160_SED	EPA 8270C	2,4'-DDD	0.1 ng/dry g	UJ NQ
B13-8160_SED	EPA 8270C	2,4'-DDE	0.1 ng/dry g	UJ NQ
B13-8160_SED	EPA 8270C	2,4'-DDT	0.1 ng/dry g	UJ NQ
B13-8160_SED	EPA 8270C	2,6-Dimethylnaphthalene	5 ng/dry g	UJ NQ, LC
B13-8160_SED	EPA 8270C	2-Methylnaphthalene	5 ng/dry g	UJ NQ
B13-8160_SED	EPA 8270C	4,4'-DDD	0.1 ng/dry g	UJ NQ
B13-8160_SED	EPA 8270C	4,4'-DDE	0.1 ng/dry g	UJ NQ
B13-8160_SED	EPA 8270C	4,4'-DDMU	0.1 ng/dry g	UJ NQ
B13-8160_SED	EPA 8270C	4,4'-DDT	0.1 ng/dry g	UJ NQ
B13-8160_SED	EPA 8270C	Acenaphthene	5 ng/dry g	UJ NQ
B13-8160_SED	EPA 8270C	Acenaphthylene	5 ng/dry g	UJ NQ
B13-8160_SED	EPA 8270C	Aldrin	0.1 ng/dry g	UJ NQ
B13-8160_SED	EPA 8270C	Anthracene	1.7 ng/dry g	J DL, NQ
B13-8160_SED	EPA 8270C	Aroclor 1016	2 ng/dry g	UJ NQ
B13-8160_SED	EPA 8270C	Aroclor 1221	2 ng/dry g	UJ NQ
B13-8160_SED	EPA 8270C	Aroclor 1232	2 ng/dry g	UJ NQ
B13-8160_SED	EPA 8270C	Aroclor 1242	2 ng/dry g	UJ NQ
B13-8160_SED	EPA 8270C	Aroclor 1248	2 ng/dry g	UJ NQ
B13-8160_SED	EPA 8270C	Aroclor 1254	2 ng/dry g	UJ NQ
B13-8160_SED	EPA 8270C	Aroclor 1260	2 ng/dry g	UJ NQ
B13-8160_SED	EPA 8270C	Aroclor 1262	2 ng/dry g	UJ NQ
B13-8160_SED	EPA 8270C	Aroclor 1268	2 ng/dry g	UJ NQ
B13-8160_SED	EPA 8270C	Benz[a]anthracene	3.6 ng/dry g	J DL, NQ, CH
B13-8160_SED	EPA 8270C	Benzo[a]pyrene	5.2 ng/dry g	J NQ, LC, CH
B13-8160_SED	EPA 8270C	Benzo[b]fluoranthene	4.9 ng/dry g	J DL, NQ, LC, CH, HL
B13-8160_SED	EPA 8270C	Benzo[e]pyrene	3.7 ng/dry g	J DL, NQ, LV, LC
B13-8160_SED	EPA 8270C	Benzo[g,h,i]perylene	6.1 ng/dry g	J NQ
B13-8160_SED	EPA 8270C	Benzo[k]fluoranthene	3.3 ng/dry g	J DL, NQ, LC, CH
B13-8160_SED	EPA 8270C	BHC-alpha	0.1 ng/dry g	UJ NQ
B13-8160_SED	EPA 8270C	BHC-beta	0.1 ng/dry g	UJ NQ
B13-8160_SED	EPA 8270C	BHC-delta	0.1 ng/dry g	UJ NQ
B13-8160_SED	EPA 8270C	BHC-gamma	0.1 ng/dry g	UJ NQ
B13-8160_SED	EPA 8270C	Biphenyl	5 ng/dry g	UJ NQ
B13-8160_SED	EPA 8270C	Chlordane-alpha	0.1 ng/dry g	UJ NQ
B13-8160_SED	EPA 8270C	Chlordane-gamma	0.1 ng/dry g	UJ NQ
B13-8160_SED	EPA 8270C	Chrysene	5.5 ng/dry g	J NQ, CH
B13-8160_SED	EPA 8270C	cis-Nonachlor	0.1 ng/dry g	UJ NQ
B13-8160_SED	EPA 8270C	DCPA (Dacthal)	0.1 ng/dry g	UJ BC, NQ
B13-8160_SED	EPA 8270C	Dibenz[a,h]anthracene	1.2 ng/dry g	J DL, NQ, HC
B13-8160_SED	EPA 8270C	Dibenzothiophene	5 ng/dry g	UJ NQ
B13-8160_SED	EPA 8270C	Dicofol	0.1 ng/dry g	UJ BC, NQ, LC
B13-8160_SED	EPA 8270C	Dieldrin	0.1 ng/dry g	UJ NQ
B13-8160_SED	EPA 8270C	Endosulfan sulfate	0.1 ng/dry g	UJ NQ
B13-8160_SED	EPA 8270C	Endosulfan-I	0.1 ng/dry g	UJ NQ
B13-8160_SED	EPA 8270C	Endosulfan-II	0.1 ng/dry g	UJ BC, NQ

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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8160_SED	EPA 8270C	Endrin	0.1 ng/dry g	UJ NQ
B13-8160_SED	EPA 8270C	Endrin aldehyde	0.1 ng/dry g	UJ NQ
B13-8160_SED	EPA 8270C	Endrin ketone	0.1 ng/dry g	UJ NQ
B13-8160_SED	EPA 8270C	Fluoranthene	8.6 ng/dry g	J NQ
B13-8160_SED	EPA 8270C	Fluorene	5 ng/dry g	UJ NQ
B13-8160_SED	EPA 8270C	Heptachlor	0.1 ng/dry g	UJ NQ, LC
B13-8160_SED	EPA 8270C	Heptachlor epoxide	0.1 ng/dry g	UJ NQ
B13-8160_SED	EPA 8270C	Hexachlorobenzene	0.1 ng/dry g	UJ NQ
B13-8160_SED	EPA 8270C	Indeno[1,2,3-c,d]pyrene	7.5 ng/dry g	J NQ, HC
B13-8160_SED	EPA 8270C	Methoxychlor	0.1 ng/dry g	UJ NQ
B13-8160_SED	EPA 8270C	Mirex	0.1 ng/dry g	UJ NQ
B13-8160_SED	EPA 8270C	Naphthalene	1 ng/dry g	J DL, NQ, HD
B13-8160_SED	EPA 8270C	Oxychlordan	0.1 ng/dry g	UJ NQ
B13-8160_SED	EPA 8270C	PCB003	0.1 ng/dry g	UJ NQ
B13-8160_SED	EPA 8270C	PCB005	0.1 ng/dry g	UJ NQ
B13-8160_SED	EPA 8270C	PCB008	0.1 ng/dry g	UJ NQ
B13-8160_SED	EPA 8270C	PCB015	0.1 ng/dry g	UJ NQ
B13-8160_SED	EPA 8270C	PCB018	0.1 ng/dry g	UJ NQ
B13-8160_SED	EPA 8270C	PCB027	0.1 ng/dry g	UJ NQ
B13-8160_SED	EPA 8270C	PCB028	0.1 ng/dry g	UJ NQ
B13-8160_SED	EPA 8270C	PCB029	0.1 ng/dry g	UJ NQ
B13-8160_SED	EPA 8270C	PCB031	0.1 ng/dry g	UJ NQ
B13-8160_SED	EPA 8270C	PCB033	0.1 ng/dry g	UJ NQ
B13-8160_SED	EPA 8270C	PCB037	0.1 ng/dry g	UJ NQ
B13-8160_SED	EPA 8270C	PCB044	0.1 ng/dry g	UJ NQ
B13-8160_SED	EPA 8270C	PCB049	0.1 ng/dry g	UJ NQ
B13-8160_SED	EPA 8270C	PCB052	0.1 ng/dry g	UJ NQ
B13-8160_SED	EPA 8270C	PCB056(060)	0.2 ng/dry g	UJ NQ
B13-8160_SED	EPA 8270C	PCB066	0.1 ng/dry g	UJ NQ
B13-8160_SED	EPA 8270C	PCB070	0.1 ng/dry g	UJ NQ
B13-8160_SED	EPA 8270C	PCB074	0.1 ng/dry g	UJ NQ
B13-8160_SED	EPA 8270C	PCB077	0.1 ng/dry g	UJ NQ
B13-8160_SED	EPA 8270C	PCB081	0.1 ng/dry g	UJ NQ
B13-8160_SED	EPA 8270C	PCB087	0.1 ng/dry g	UJ NQ
B13-8160_SED	EPA 8270C	PCB095	0.1 ng/dry g	UJ NQ
B13-8160_SED	EPA 8270C	PCB097	0.1 ng/dry g	UJ NQ
B13-8160_SED	EPA 8270C	PCB099	0.1 ng/dry g	UJ NQ
B13-8160_SED	EPA 8270C	PCB101	0.1 ng/dry g	UJ NQ
B13-8160_SED	EPA 8270C	PCB105	0.1 ng/dry g	UJ NQ
B13-8160_SED	EPA 8270C	PCB110	0.1 ng/dry g	UJ NQ
B13-8160_SED	EPA 8270C	PCB114	0.1 ng/dry g	UJ NQ
B13-8160_SED	EPA 8270C	PCB118	0.1 ng/dry g	UJ NQ
B13-8160_SED	EPA 8270C	PCB119	0.1 ng/dry g	UJ NQ
B13-8160_SED	EPA 8270C	PCB123	0.1 ng/dry g	UJ NQ
B13-8160_SED	EPA 8270C	PCB126	0.1 ng/dry g	UJ NQ
B13-8160_SED	EPA 8270C	PCB128	0.1 ng/dry g	UJ NQ
B13-8160_SED	EPA 8270C	PCB137	0.1 ng/dry g	UJ NQ
B13-8160_SED	EPA 8270C	PCB138	0.1 ng/dry g	UJ NQ
B13-8160_SED	EPA 8270C	PCB141	0.1 ng/dry g	UJ NQ
B13-8160_SED	EPA 8270C	PCB149	0.1 ng/dry g	UJ NQ
B13-8160_SED	EPA 8270C	PCB151	0.1 ng/dry g	UJ NQ
B13-8160_SED	EPA 8270C	PCB153	0.1 ng/dry g	UJ NQ
B13-8160_SED	EPA 8270C	PCB156	0.1 ng/dry g	UJ NQ
B13-8160_SED	EPA 8270C	PCB157	0.1 ng/dry g	UJ NQ

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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8160_SED	EPA 8270C	PCB158	0.1 ng/dry g	UJ NQ
B13-8160_SED	EPA 8270C	PCB167	0.1 ng/dry g	UJ NQ
B13-8160_SED	EPA 8270C	PCB168+132	0.2 ng/dry g	UJ NQ
B13-8160_SED	EPA 8270C	PCB169	0.1 ng/dry g	UJ NQ
B13-8160_SED	EPA 8270C	PCB170	0.1 ng/dry g	UJ NQ
B13-8160_SED	EPA 8270C	PCB174	0.1 ng/dry g	UJ NQ
B13-8160_SED	EPA 8270C	PCB177	0.1 ng/dry g	UJ NQ
B13-8160_SED	EPA 8270C	PCB180	0.1 ng/dry g	UJ NQ
B13-8160_SED	EPA 8270C	PCB183	0.1 ng/dry g	UJ NQ
B13-8160_SED	EPA 8270C	PCB187	0.1 ng/dry g	UJ NQ
B13-8160_SED	EPA 8270C	PCB189	0.1 ng/dry g	UJ NQ
B13-8160_SED	EPA 8270C	PCB194	0.1 ng/dry g	UJ NQ
B13-8160_SED	EPA 8270C	PCB195	0.1 ng/dry g	UJ NQ
B13-8160_SED	EPA 8270C	PCB199(200)	0.2 ng/dry g	UJ NQ
B13-8160_SED	EPA 8270C	PCB201	0.1 ng/dry g	UJ NQ
B13-8160_SED	EPA 8270C	PCB203	0.1 ng/dry g	UJ NQ
B13-8160_SED	EPA 8270C	PCB206	0.1 ng/dry g	UJ NQ
B13-8160_SED	EPA 8270C	PCB209	0.1 ng/dry g	UJ NQ
B13-8160_SED	EPA 8270C	Perthane	0.1 ng/dry g	UJ NQ
B13-8160_SED	EPA 8270C	Perylene	1.5 ng/dry g	J DL, NQ, LV, LC, CH
B13-8160_SED	EPA 8270C	Phenanthrene	8 ng/dry g	J NQ
B13-8160_SED	EPA 8270C	Pyrene	8.3 ng/dry g	J NQ
B13-8160_SED	EPA 8270C	trans-Nonachlor	0.1 ng/dry g	UJ NQ
B13-8160_SED	EPA 8270C-NCI	Allethrin	0.5 ng/dry g	UJ NQ
B13-8160_SED	EPA 8270C-NCI	Bifenthrin	1.59 ng/dry g	J NQ, LC
B13-8160_SED	EPA 8270C-NCI	Cyfluthrin, total	0.5 ng/dry g	UJ NQ
B13-8160_SED	EPA 8270C-NCI	Cypermethrin, total	0.5 ng/dry g	UJ NQ
B13-8160_SED	EPA 8270C-NCI	Danitol (Fenpropathrin)	0.5 ng/dry g	UJ NQ
B13-8160_SED	EPA 8270C-NCI	Deltamethrin/Tralomethrin	0.5 ng/dry g	UJ BC, NQ
B13-8160_SED	EPA 8270C-NCI	Esfenvalerate	0.5 ng/dry g	UJ NQ
B13-8160_SED	EPA 8270C-NCI	Fenvalerate	0.5 ng/dry g	UJ NQ
B13-8160_SED	EPA 8270C-NCI	Fipronil	0.5 ng/dry g	UJ NQ, LC
B13-8160_SED	EPA 8270C-NCI	Fipronil Desulfinyl	0.5 ng/dry g	UJ NQ, LC
B13-8160_SED	EPA 8270C-NCI	Fipronil Sulfide	0.5 ng/dry g	UJ NQ, LC, LL
B13-8160_SED	EPA 8270C-NCI	Fipronil Sulfone	0.5 ng/dry g	UJ BC, NQ
B13-8160_SED	EPA 8270C-NCI	Fluvalinate	0.5 ng/dry g	UJ NQ
B13-8160_SED	EPA 8270C-NCI	I-Cyhalothrin	0.5 ng/dry g	UJ NQ
B13-8160_SED	EPA 8270C-NCI	PBDE017	0.05 ng/dry g	J DL
B13-8160_SED	EPA 8270C-NCI	PBDE209	0.1 ng/dry g	UJ BC
B13-8160_SED	EPA 8270C-NCI	Permethrin, cis-	0.5 ng/dry g	UJ NQ, LV
B13-8160_SED	EPA 8270C-NCI	Permethrin, trans-	0.5 ng/dry g	UJ BC, NQ
B13-8160_SED	EPA 8270C-NCI	Prallethrin	0.5 ng/dry g	UJ NQ, LC
B13-8160_SED	EPA 8270C-NCI	Resmethrin	0.5 ng/dry g	UJ NQ, LV, LC, LL
B13-8160_SED	EPA 9060	Total Nitrogen	0.1 % Dry Weight	J NQ
B13-8160_SED	EPA 9060	Total Organic Carbon	2.1 % Dry Weight	J NQ
B13-8160_SED	Plumb, 1981 and Teryl	Acid Volatile Sulfides	85.91 mg/dry kg	J NQ
B13-8160_SED	SM 4500-NH3 D	Ammonia-N	9.62 mg/dry kg	J LC
B13-8163_SED	EPA 200.8	Cadmium	0.002 µmol/dry g	J DL
B13-8163_SED	EPA 6020	Aluminum	27114 µg/dry g	J CH, HP
B13-8163_SED	EPA 6020	Antimony	0.628 µg/dry g	J HP
B13-8163_SED	EPA 6020	Beryllium	0.817 µg/dry g	J HP
B13-8163_SED	EPA 6020	Cadmium	0.3262 µg/dry g	J LP
B13-8163_SED	EPA 6020	Chromium	28.8573 µg/dry g	J HP
B13-8163_SED	EPA 6020	Iron (Fe)	24265.4 µg/dry g	J CH, HP

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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8163_SED	EPA 6020	Total Phosphorus	537.256 µg/dry g	J NQ
B13-8163_SED	EPA 8270C	1-Methylnaphthalene	5 ng/dry g	UJ NQ
B13-8163_SED	EPA 8270C	1-Methylphenanthrene	2.6 ng/dry g	J DL, NQ
B13-8163_SED	EPA 8270C	2,3,5-Trimethylnaphthalene	5 ng/dry g	UJ NQ
B13-8163_SED	EPA 8270C	2,4'-DDD	0.1 ng/dry g	UJ NQ
B13-8163_SED	EPA 8270C	2,4'-DDE	0.1 ng/dry g	UJ NQ
B13-8163_SED	EPA 8270C	2,4'-DDT	0.1 ng/dry g	UJ NQ
B13-8163_SED	EPA 8270C	2,6-Dimethylnaphthalene	5 ng/dry g	UJ NQ, LC
B13-8163_SED	EPA 8270C	2-Methylnaphthalene	5 ng/dry g	UJ NQ
B13-8163_SED	EPA 8270C	4,4'-DDD	0.1 ng/dry g	UJ NQ
B13-8163_SED	EPA 8270C	4,4'-DDE	1.76 ng/dry g	J NQ
B13-8163_SED	EPA 8270C	4,4'-DDMU	0.1 ng/dry g	UJ NQ
B13-8163_SED	EPA 8270C	4,4'-DDT	0.1 ng/dry g	UJ NQ
B13-8163_SED	EPA 8270C	Acenaphthene	5 ng/dry g	UJ NQ
B13-8163_SED	EPA 8270C	Acenaphthylene	5 ng/dry g	UJ NQ
B13-8163_SED	EPA 8270C	Aldrin	0.1 ng/dry g	UJ NQ
B13-8163_SED	EPA 8270C	Anthracene	4.6 ng/dry g	J DL, NQ
B13-8163_SED	EPA 8270C	Aroclor 1016	2 ng/dry g	UJ NQ
B13-8163_SED	EPA 8270C	Aroclor 1221	2 ng/dry g	UJ NQ
B13-8163_SED	EPA 8270C	Aroclor 1232	2 ng/dry g	UJ NQ
B13-8163_SED	EPA 8270C	Aroclor 1242	2 ng/dry g	UJ NQ
B13-8163_SED	EPA 8270C	Aroclor 1248	2 ng/dry g	UJ NQ
B13-8163_SED	EPA 8270C	Aroclor 1254	2 ng/dry g	UJ NQ
B13-8163_SED	EPA 8270C	Aroclor 1260	2 ng/dry g	UJ NQ
B13-8163_SED	EPA 8270C	Aroclor 1262	2 ng/dry g	UJ NQ
B13-8163_SED	EPA 8270C	Aroclor 1268	2 ng/dry g	UJ NQ
B13-8163_SED	EPA 8270C	Benz[a]anthracene	21.8 ng/dry g	J NQ, CH
B13-8163_SED	EPA 8270C	Benzo[a]pyrene	22.6 ng/dry g	J NQ, LC, CH
B13-8163_SED	EPA 8270C	Benzo[b]fluoranthene	21.8 ng/dry g	J NQ, LC, CH, HL
B13-8163_SED	EPA 8270C	Benzo[e]pyrene	16.6 ng/dry g	J NQ, LV, LC
B13-8163_SED	EPA 8270C	Benzo[g,h,i]perylene	27.5 ng/dry g	J NQ
B13-8163_SED	EPA 8270C	Benzo[k]fluoranthene	16.7 ng/dry g	J NQ, LC, CH
B13-8163_SED	EPA 8270C	BHC-alpha	0.1 ng/dry g	UJ NQ
B13-8163_SED	EPA 8270C	BHC-beta	0.1 ng/dry g	UJ NQ
B13-8163_SED	EPA 8270C	BHC-delta	0.1 ng/dry g	UJ NQ
B13-8163_SED	EPA 8270C	BHC-gamma	0.1 ng/dry g	UJ NQ
B13-8163_SED	EPA 8270C	Biphenyl	5 ng/dry g	UJ NQ
B13-8163_SED	EPA 8270C	Chlordane-alpha	1.79 ng/dry g	J NQ
B13-8163_SED	EPA 8270C	Chlordane-gamma	2.5 ng/dry g	J NQ
B13-8163_SED	EPA 8270C	Chrysene	32.5 ng/dry g	J NQ, CH
B13-8163_SED	EPA 8270C	cis-Nonachlor	0.86 ng/dry g	J NQ
B13-8163_SED	EPA 8270C	DCPA (Dacthal)	0.1 ng/dry g	UJ BC, NQ
B13-8163_SED	EPA 8270C	Dibenz[a,h]anthracene	6.6 ng/dry g	J NQ, HC
B13-8163_SED	EPA 8270C	Dibenzothiophene	1.4 ng/dry g	J DL, NQ
B13-8163_SED	EPA 8270C	Dicofol	0.1 ng/dry g	UJ BC, NQ, LC
B13-8163_SED	EPA 8270C	Dieldrin	0.1 ng/dry g	UJ NQ
B13-8163_SED	EPA 8270C	Endosulfan sulfate	0.1 ng/dry g	UJ NQ
B13-8163_SED	EPA 8270C	Endosulfan-I	0.1 ng/dry g	UJ NQ
B13-8163_SED	EPA 8270C	Endosulfan-II	0.1 ng/dry g	UJ BC, NQ
B13-8163_SED	EPA 8270C	Endrin	0.1 ng/dry g	UJ NQ
B13-8163_SED	EPA 8270C	Endrin aldehyde	0.1 ng/dry g	UJ NQ
B13-8163_SED	EPA 8270C	Endrin ketone	0.1 ng/dry g	UJ NQ
B13-8163_SED	EPA 8270C	Fluoranthene	55.6 ng/dry g	J NQ
B13-8163_SED	EPA 8270C	Fluorene	1.2 ng/dry g	J DL, NQ

**TABLE 2**  
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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8163_SED	EPA 8270C	Heptachlor	0.1 ng/dry g	UJ NQ, LC
B13-8163_SED	EPA 8270C	Heptachlor epoxide	0.1 ng/dry g	UJ NQ
B13-8163_SED	EPA 8270C	Hexachlorobenzene	0.1 ng/dry g	UJ NQ
B13-8163_SED	EPA 8270C	Indeno[1,2,3-c,d]pyrene	30.7 ng/dry g	J NQ, HC
B13-8163_SED	EPA 8270C	Methoxychlor	0.1 ng/dry g	UJ NQ
B13-8163_SED	EPA 8270C	Mirex	0.1 ng/dry g	UJ NQ
B13-8163_SED	EPA 8270C	Naphthalene	1.4 ng/dry g	J DL, NQ, HD
B13-8163_SED	EPA 8270C	Oxychlorane	0.1 ng/dry g	UJ NQ
B13-8163_SED	EPA 8270C	PCB003	0.1 ng/dry g	UJ NQ
B13-8163_SED	EPA 8270C	PCB005	0.1 ng/dry g	UJ NQ
B13-8163_SED	EPA 8270C	PCB008	0.1 ng/dry g	UJ NQ
B13-8163_SED	EPA 8270C	PCB015	0.1 ng/dry g	UJ NQ
B13-8163_SED	EPA 8270C	PCB018	0.1 ng/dry g	UJ NQ
B13-8163_SED	EPA 8270C	PCB027	0.1 ng/dry g	UJ NQ
B13-8163_SED	EPA 8270C	PCB028	0.1 ng/dry g	UJ NQ
B13-8163_SED	EPA 8270C	PCB029	0.1 ng/dry g	UJ NQ
B13-8163_SED	EPA 8270C	PCB031	0.1 ng/dry g	UJ NQ
B13-8163_SED	EPA 8270C	PCB033	0.1 ng/dry g	UJ NQ
B13-8163_SED	EPA 8270C	PCB037	0.1 ng/dry g	UJ NQ
B13-8163_SED	EPA 8270C	PCB044	0.1 ng/dry g	UJ NQ
B13-8163_SED	EPA 8270C	PCB049	0.1 ng/dry g	UJ NQ
B13-8163_SED	EPA 8270C	PCB052	0.1 ng/dry g	UJ NQ
B13-8163_SED	EPA 8270C	PCB056(060)	0.2 ng/dry g	UJ NQ
B13-8163_SED	EPA 8270C	PCB066	0.1 ng/dry g	UJ NQ
B13-8163_SED	EPA 8270C	PCB070	0.1 ng/dry g	UJ NQ
B13-8163_SED	EPA 8270C	PCB074	0.1 ng/dry g	UJ NQ
B13-8163_SED	EPA 8270C	PCB077	0.1 ng/dry g	UJ NQ
B13-8163_SED	EPA 8270C	PCB081	0.1 ng/dry g	UJ NQ
B13-8163_SED	EPA 8270C	PCB087	0.1 ng/dry g	UJ NQ
B13-8163_SED	EPA 8270C	PCB095	0.1 ng/dry g	UJ NQ
B13-8163_SED	EPA 8270C	PCB097	0.1 ng/dry g	UJ NQ
B13-8163_SED	EPA 8270C	PCB099	0.1 ng/dry g	UJ NQ
B13-8163_SED	EPA 8270C	PCB101	0.1 ng/dry g	UJ NQ
B13-8163_SED	EPA 8270C	PCB105	0.1 ng/dry g	UJ NQ
B13-8163_SED	EPA 8270C	PCB110	0.1 ng/dry g	UJ NQ
B13-8163_SED	EPA 8270C	PCB114	0.1 ng/dry g	UJ NQ
B13-8163_SED	EPA 8270C	PCB118	0.1 ng/dry g	UJ NQ
B13-8163_SED	EPA 8270C	PCB119	0.1 ng/dry g	UJ NQ
B13-8163_SED	EPA 8270C	PCB123	0.1 ng/dry g	UJ NQ
B13-8163_SED	EPA 8270C	PCB126	0.1 ng/dry g	UJ NQ
B13-8163_SED	EPA 8270C	PCB128	0.1 ng/dry g	UJ NQ
B13-8163_SED	EPA 8270C	PCB137	0.1 ng/dry g	UJ NQ
B13-8163_SED	EPA 8270C	PCB138	0.1 ng/dry g	UJ NQ
B13-8163_SED	EPA 8270C	PCB141	0.1 ng/dry g	UJ NQ
B13-8163_SED	EPA 8270C	PCB149	0.1 ng/dry g	UJ NQ
B13-8163_SED	EPA 8270C	PCB151	0.1 ng/dry g	UJ NQ
B13-8163_SED	EPA 8270C	PCB153	0.1 ng/dry g	UJ NQ
B13-8163_SED	EPA 8270C	PCB156	0.1 ng/dry g	UJ NQ
B13-8163_SED	EPA 8270C	PCB157	0.1 ng/dry g	UJ NQ
B13-8163_SED	EPA 8270C	PCB158	0.1 ng/dry g	UJ NQ
B13-8163_SED	EPA 8270C	PCB167	0.1 ng/dry g	UJ NQ
B13-8163_SED	EPA 8270C	PCB168+132	0.2 ng/dry g	UJ NQ
B13-8163_SED	EPA 8270C	PCB169	0.1 ng/dry g	UJ NQ
B13-8163_SED	EPA 8270C	PCB170	0.1 ng/dry g	UJ NQ



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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8163_SED	EPA 8270C	PCB174	0.1 ng/dry g	UJ NQ
B13-8163_SED	EPA 8270C	PCB177	0.1 ng/dry g	UJ NQ
B13-8163_SED	EPA 8270C	PCB180	0.1 ng/dry g	UJ NQ
B13-8163_SED	EPA 8270C	PCB183	0.1 ng/dry g	UJ NQ
B13-8163_SED	EPA 8270C	PCB187	0.1 ng/dry g	UJ NQ
B13-8163_SED	EPA 8270C	PCB189	0.1 ng/dry g	UJ NQ
B13-8163_SED	EPA 8270C	PCB194	0.1 ng/dry g	UJ NQ
B13-8163_SED	EPA 8270C	PCB195	0.1 ng/dry g	UJ NQ
B13-8163_SED	EPA 8270C	PCB199(200)	0.2 ng/dry g	UJ NQ
B13-8163_SED	EPA 8270C	PCB201	0.1 ng/dry g	UJ NQ
B13-8163_SED	EPA 8270C	PCB203	0.1 ng/dry g	UJ NQ
B13-8163_SED	EPA 8270C	PCB206	0.1 ng/dry g	UJ NQ
B13-8163_SED	EPA 8270C	PCB209	0.1 ng/dry g	UJ NQ
B13-8163_SED	EPA 8270C	Perthane	0.1 ng/dry g	UJ NQ
B13-8163_SED	EPA 8270C	Perylene	7.1 ng/dry g	J NQ, LV, LC, CH
B13-8163_SED	EPA 8270C	Phenanthrene	22.9 ng/dry g	J NQ
B13-8163_SED	EPA 8270C	Pyrene	48.7 ng/dry g	J NQ
B13-8163_SED	EPA 8270C	trans-Nonachlor	1.95 ng/dry g	J NQ
B13-8163_SED	EPA 8270C-NCI	Allethrin	0.5 ng/dry g	UJ NQ
B13-8163_SED	EPA 8270C-NCI	Bifenthrin	0.78 ng/dry g	J NQ, LC
B13-8163_SED	EPA 8270C-NCI	Cyfluthrin, total	0.5 ng/dry g	UJ NQ
B13-8163_SED	EPA 8270C-NCI	Cypermethrin, total	0.5 ng/dry g	UJ NQ
B13-8163_SED	EPA 8270C-NCI	Danitol (Fenpropathrin)	0.5 ng/dry g	UJ NQ
B13-8163_SED	EPA 8270C-NCI	Deltamethrin/Tralomethrin	0.5 ng/dry g	UJ BC, NQ
B13-8163_SED	EPA 8270C-NCI	Esfenvalerate	0.5 ng/dry g	UJ NQ
B13-8163_SED	EPA 8270C-NCI	Fenvalerate	0.5 ng/dry g	UJ NQ
B13-8163_SED	EPA 8270C-NCI	Fipronil	0.5 ng/dry g	UJ NQ, LC
B13-8163_SED	EPA 8270C-NCI	Fipronil Desulfinyl	0.5 ng/dry g	UJ NQ, LC
B13-8163_SED	EPA 8270C-NCI	Fipronil Sulfide	0.5 ng/dry g	UJ NQ, LC, LL
B13-8163_SED	EPA 8270C-NCI	Fipronil Sulfone	0.5 ng/dry g	UJ BC, NQ
B13-8163_SED	EPA 8270C-NCI	Fluvalinate	0.5 ng/dry g	UJ NQ
B13-8163_SED	EPA 8270C-NCI	I-Cyhalothrin	0.5 ng/dry g	UJ NQ
B13-8163_SED	EPA 8270C-NCI	PBDE153	0.05 ng/dry g	J DL
B13-8163_SED	EPA 8270C-NCI	PBDE209	0.1 ng/dry g	UJ BC
B13-8163_SED	EPA 8270C-NCI	Permethrin, cis-	0.5 ng/dry g	UJ NQ, LV
B13-8163_SED	EPA 8270C-NCI	Permethrin, trans-	0.5 ng/dry g	UJ BC, NQ
B13-8163_SED	EPA 8270C-NCI	Prallethrin	0.5 ng/dry g	UJ NQ, LC
B13-8163_SED	EPA 8270C-NCI	Resmethrin	0.5 ng/dry g	UJ NQ, LV, LC, LL
B13-8163_SED	EPA 9060	Total Nitrogen	0.12 % Dry Weight	J NQ
B13-8163_SED	EPA 9060	Total Organic Carbon	2.24 % Dry Weight	J NQ
B13-8163_SED	Plumb, 1981 and Teryl	Acid Volatile Sulfides	137.45 mg/dry kg	J NQ
B13-8163_SED	SM 4500-NH3 D	Ammonia-N	7.87 mg/dry kg	J LC
B13-8233_SED	EPA 6020	Aluminum	41528.4 µg/dry g	J CH, HP
B13-8233_SED	EPA 6020	Antimony	0.37 µg/dry g	J HP
B13-8233_SED	EPA 6020	Beryllium	0.767 µg/dry g	J HP
B13-8233_SED	EPA 6020	Chromium	65.9446 µg/dry g	J HP
B13-8233_SED	EPA 6020	Iron (Fe)	42545.7 µg/dry g	J CH, HP
B13-8233_SED	EPA 6020	Nickel	23.89 µg/dry g	J HP
B13-8233_SED	EPA 6020	Total Phosphorus	977.412 µg/dry g	J NQ
B13-8233_SED	EPA 8270C	1-Methylnaphthalene	5 ng/dry g	UJ NQ
B13-8233_SED	EPA 8270C	1-Methylphenanthrene	1.7 ng/dry g	J DL, NQ
B13-8233_SED	EPA 8270C	2,3,5-Trimethylnaphthalene	5 ng/dry g	UJ NQ
B13-8233_SED	EPA 8270C	2,4'-DDD	0.1 ng/dry g	UJ NQ
B13-8233_SED	EPA 8270C	2,4'-DDE	0.1 ng/dry g	UJ NQ

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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8233_SED	EPA 8270C	2,4'-DDT	0.1 ng/dry g	UJ NQ
B13-8233_SED	EPA 8270C	2,6-Dimethylnaphthalene	5 ng/dry g	UJ NQ, LC
B13-8233_SED	EPA 8270C	2-Methylnaphthalene	5 ng/dry g	UJ NQ
B13-8233_SED	EPA 8270C	4,4'-DDD	0.1 ng/dry g	UJ NQ
B13-8233_SED	EPA 8270C	4,4'-DDE	1.73 ng/dry g	J NQ
B13-8233_SED	EPA 8270C	4,4'-DDMU	0.1 ng/dry g	UJ NQ
B13-8233_SED	EPA 8270C	4,4'-DDT	0.1 ng/dry g	UJ NQ
B13-8233_SED	EPA 8270C	Acenaphthene	5 ng/dry g	UJ NQ
B13-8233_SED	EPA 8270C	Acenaphthylene	5 ng/dry g	UJ NQ
B13-8233_SED	EPA 8270C	Aldrin	0.1 ng/dry g	UJ NQ
B13-8233_SED	EPA 8270C	Anthracene	2.7 ng/dry g	J DL, NQ
B13-8233_SED	EPA 8270C	Aroclor 1016	2 ng/dry g	UJ NQ
B13-8233_SED	EPA 8270C	Aroclor 1221	2 ng/dry g	UJ NQ
B13-8233_SED	EPA 8270C	Aroclor 1232	2 ng/dry g	UJ NQ
B13-8233_SED	EPA 8270C	Aroclor 1242	2 ng/dry g	UJ NQ
B13-8233_SED	EPA 8270C	Aroclor 1248	2 ng/dry g	UJ NQ
B13-8233_SED	EPA 8270C	Aroclor 1254	2 ng/dry g	UJ NQ
B13-8233_SED	EPA 8270C	Aroclor 1260	4 ng/dry g	J NQ
B13-8233_SED	EPA 8270C	Aroclor 1262	2 ng/dry g	UJ NQ
B13-8233_SED	EPA 8270C	Aroclor 1268	2 ng/dry g	UJ NQ
B13-8233_SED	EPA 8270C	Benzo[a]anthracene	5.4 ng/dry g	J NQ, CH
B13-8233_SED	EPA 8270C	Benzo[a]pyrene	6.4 ng/dry g	J NQ, LC
B13-8233_SED	EPA 8270C	Benzo[b]fluoranthene	5.6 ng/dry g	J NQ, LC, HL
B13-8233_SED	EPA 8270C	Benzo[e]pyrene	4.4 ng/dry g	J DL, NQ, LV, LC
B13-8233_SED	EPA 8270C	Benzo[g,h,i]perylene	9.6 ng/dry g	J NQ
B13-8233_SED	EPA 8270C	Benzo[k]fluoranthene	3.4 ng/dry g	J DL, NQ, LC
B13-8233_SED	EPA 8270C	BHC-alpha	0.1 ng/dry g	UJ NQ
B13-8233_SED	EPA 8270C	BHC-beta	0.1 ng/dry g	UJ NQ
B13-8233_SED	EPA 8270C	BHC-delta	0.1 ng/dry g	UJ NQ
B13-8233_SED	EPA 8270C	BHC-gamma	0.1 ng/dry g	UJ NQ
B13-8233_SED	EPA 8270C	Biphenyl	5 ng/dry g	UJ NQ
B13-8233_SED	EPA 8270C	Chlordane-alpha	0.1 ng/dry g	UJ NQ
B13-8233_SED	EPA 8270C	Chlordane-gamma	0.1 ng/dry g	UJ NQ
B13-8233_SED	EPA 8270C	Chrysene	6.7 ng/dry g	J NQ, CH
B13-8233_SED	EPA 8270C	cis-Nonachlor	0.1 ng/dry g	UJ NQ
B13-8233_SED	EPA 8270C	DCPA (Dacthal)	0.1 ng/dry g	UJ BC, NQ
B13-8233_SED	EPA 8270C	Dibenz[a,h]anthracene	3.3 ng/dry g	J DL, NQ, HC
B13-8233_SED	EPA 8270C	Dibenzothiophene	5 ng/dry g	UJ NQ
B13-8233_SED	EPA 8270C	Dicofol	0.1 ng/dry g	UJ BC, NQ, LC
B13-8233_SED	EPA 8270C	Dieldrin	0.1 ng/dry g	UJ NQ
B13-8233_SED	EPA 8270C	Endosulfan sulfate	0.1 ng/dry g	UJ NQ
B13-8233_SED	EPA 8270C	Endosulfan-I	0.1 ng/dry g	UJ NQ
B13-8233_SED	EPA 8270C	Endosulfan-II	0.1 ng/dry g	UJ BC, NQ
B13-8233_SED	EPA 8270C	Endrin	0.1 ng/dry g	UJ NQ
B13-8233_SED	EPA 8270C	Endrin aldehyde	0.1 ng/dry g	UJ NQ
B13-8233_SED	EPA 8270C	Endrin ketone	0.1 ng/dry g	UJ NQ
B13-8233_SED	EPA 8270C	Fluoranthene	12.8 ng/dry g	J NQ
B13-8233_SED	EPA 8270C	Fluorene	1.2 ng/dry g	J DL, NQ
B13-8233_SED	EPA 8270C	Heptachlor	0.1 ng/dry g	UJ NQ, LC
B13-8233_SED	EPA 8270C	Heptachlor epoxide	0.1 ng/dry g	UJ NQ
B13-8233_SED	EPA 8270C	Hexachlorobenzene	0.1 ng/dry g	UJ NQ
B13-8233_SED	EPA 8270C	Indeno[1,2,3-c,d]pyrene	9.7 ng/dry g	J NQ, HC
B13-8233_SED	EPA 8270C	Methoxychlor	0.1 ng/dry g	UJ NQ
B13-8233_SED	EPA 8270C	Mirex	0.1 ng/dry g	UJ NQ

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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8233_SED	EPA 8270C	Naphthalene	1 ng/dry g	J DL, NQ, HD
B13-8233_SED	EPA 8270C	Oxychlorthane	0.1 ng/dry g	UJ NQ
B13-8233_SED	EPA 8270C	PCB003	0.1 ng/dry g	UJ NQ
B13-8233_SED	EPA 8270C	PCB005	0.1 ng/dry g	UJ NQ
B13-8233_SED	EPA 8270C	PCB008	0.1 ng/dry g	UJ NQ
B13-8233_SED	EPA 8270C	PCB015	0.1 ng/dry g	UJ NQ
B13-8233_SED	EPA 8270C	PCB018	0.1 ng/dry g	UJ NQ
B13-8233_SED	EPA 8270C	PCB027	0.1 ng/dry g	UJ NQ
B13-8233_SED	EPA 8270C	PCB028	0.1 ng/dry g	UJ NQ
B13-8233_SED	EPA 8270C	PCB029	0.1 ng/dry g	UJ NQ
B13-8233_SED	EPA 8270C	PCB031	0.1 ng/dry g	UJ NQ
B13-8233_SED	EPA 8270C	PCB033	0.1 ng/dry g	UJ NQ
B13-8233_SED	EPA 8270C	PCB037	0.1 ng/dry g	UJ NQ
B13-8233_SED	EPA 8270C	PCB044	0.1 ng/dry g	UJ NQ
B13-8233_SED	EPA 8270C	PCB049	0.1 ng/dry g	UJ NQ
B13-8233_SED	EPA 8270C	PCB052	0.1 ng/dry g	UJ NQ
B13-8233_SED	EPA 8270C	PCB056(060)	0.2 ng/dry g	UJ NQ
B13-8233_SED	EPA 8270C	PCB066	0.1 ng/dry g	UJ NQ
B13-8233_SED	EPA 8270C	PCB070	0.1 ng/dry g	UJ NQ
B13-8233_SED	EPA 8270C	PCB074	0.1 ng/dry g	UJ NQ
B13-8233_SED	EPA 8270C	PCB077	0.1 ng/dry g	UJ NQ
B13-8233_SED	EPA 8270C	PCB081	0.1 ng/dry g	UJ NQ
B13-8233_SED	EPA 8270C	PCB087	0.1 ng/dry g	UJ NQ
B13-8233_SED	EPA 8270C	PCB095	0.33 ng/dry g	J NQ
B13-8233_SED	EPA 8270C	PCB097	0.1 ng/dry g	UJ NQ
B13-8233_SED	EPA 8270C	PCB099	0.1 ng/dry g	UJ NQ
B13-8233_SED	EPA 8270C	PCB101	0.1 ng/dry g	UJ NQ
B13-8233_SED	EPA 8270C	PCB105	0.1 ng/dry g	UJ NQ
B13-8233_SED	EPA 8270C	PCB110	0.53 ng/dry g	J NQ
B13-8233_SED	EPA 8270C	PCB114	0.1 ng/dry g	UJ NQ
B13-8233_SED	EPA 8270C	PCB118	0.42 ng/dry g	J NQ
B13-8233_SED	EPA 8270C	PCB119	0.1 ng/dry g	UJ NQ
B13-8233_SED	EPA 8270C	PCB123	0.1 ng/dry g	UJ NQ
B13-8233_SED	EPA 8270C	PCB126	0.1 ng/dry g	UJ NQ
B13-8233_SED	EPA 8270C	PCB128	0.1 ng/dry g	UJ NQ
B13-8233_SED	EPA 8270C	PCB137	0.1 ng/dry g	UJ NQ
B13-8233_SED	EPA 8270C	PCB138	1.02 ng/dry g	J NQ
B13-8233_SED	EPA 8270C	PCB141	0.1 ng/dry g	UJ NQ
B13-8233_SED	EPA 8270C	PCB149	0.27 ng/dry g	J NQ
B13-8233_SED	EPA 8270C	PCB151	0.1 ng/dry g	UJ NQ
B13-8233_SED	EPA 8270C	PCB153	0.62 ng/dry g	J NQ
B13-8233_SED	EPA 8270C	PCB156	0.1 ng/dry g	UJ NQ
B13-8233_SED	EPA 8270C	PCB157	0.1 ng/dry g	UJ NQ
B13-8233_SED	EPA 8270C	PCB158	0.1 ng/dry g	UJ NQ
B13-8233_SED	EPA 8270C	PCB167	0.1 ng/dry g	UJ NQ
B13-8233_SED	EPA 8270C	PCB168+132	0.2 ng/dry g	UJ NQ
B13-8233_SED	EPA 8270C	PCB169	0.1 ng/dry g	UJ NQ
B13-8233_SED	EPA 8270C	PCB170	0.1 ng/dry g	UJ NQ
B13-8233_SED	EPA 8270C	PCB174	0.1 ng/dry g	UJ NQ
B13-8233_SED	EPA 8270C	PCB177	0.1 ng/dry g	UJ NQ
B13-8233_SED	EPA 8270C	PCB180	0.1 ng/dry g	UJ NQ
B13-8233_SED	EPA 8270C	PCB183	0.1 ng/dry g	UJ NQ
B13-8233_SED	EPA 8270C	PCB187	0.1 ng/dry g	UJ NQ
B13-8233_SED	EPA 8270C	PCB189	0.1 ng/dry g	UJ NQ

**TABLE 2**  
**Qualifiers Added to the Sediment Samples During Validation**  
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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8233_SED	EPA 8270C	PCB194	0.1 ng/dry g	UJ NQ
B13-8233_SED	EPA 8270C	PCB195	0.1 ng/dry g	UJ NQ
B13-8233_SED	EPA 8270C	PCB199(200)	0.2 ng/dry g	UJ NQ
B13-8233_SED	EPA 8270C	PCB201	0.1 ng/dry g	UJ NQ
B13-8233_SED	EPA 8270C	PCB203	0.1 ng/dry g	UJ NQ
B13-8233_SED	EPA 8270C	PCB206	0.1 ng/dry g	UJ NQ
B13-8233_SED	EPA 8270C	PCB209	0.1 ng/dry g	UJ NQ
B13-8233_SED	EPA 8270C	Perthane	0.1 ng/dry g	UJ NQ
B13-8233_SED	EPA 8270C	Perylene	2.3 ng/dry g	J DL, NQ, LV, LC
B13-8233_SED	EPA 8270C	Phenanthrene	9.3 ng/dry g	J NQ
B13-8233_SED	EPA 8270C	Pyrene	11.8 ng/dry g	J NQ
B13-8233_SED	EPA 8270C	trans-Nonachlor	0.1 ng/dry g	UJ NQ
B13-8233_SED	EPA 8270C-NCI	Allethrin	0.5 ng/dry g	UJ NQ
B13-8233_SED	EPA 8270C-NCI	Bifenthrin	0.5 ng/dry g	UJ NQ, LC
B13-8233_SED	EPA 8270C-NCI	Cyfluthrin, total	0.5 ng/dry g	UJ NQ
B13-8233_SED	EPA 8270C-NCI	Cypermethrin, total	0.5 ng/dry g	UJ NQ
B13-8233_SED	EPA 8270C-NCI	Danitol (Fenpropathrin)	0.5 ng/dry g	UJ NQ
B13-8233_SED	EPA 8270C-NCI	Deltamethrin/Tralomethrin	0.5 ng/dry g	UJ BC, NQ
B13-8233_SED	EPA 8270C-NCI	Esfenvalerate	0.5 ng/dry g	UJ NQ
B13-8233_SED	EPA 8270C-NCI	Fenvalerate	0.5 ng/dry g	UJ NQ
B13-8233_SED	EPA 8270C-NCI	Fipronil	0.5 ng/dry g	UJ NQ, LC
B13-8233_SED	EPA 8270C-NCI	Fipronil Desulfinyl	0.5 ng/dry g	UJ NQ, LC
B13-8233_SED	EPA 8270C-NCI	Fipronil Sulfide	0.5 ng/dry g	UJ NQ, LC, LL
B13-8233_SED	EPA 8270C-NCI	Fipronil Sulfone	0.5 ng/dry g	UJ BC, NQ
B13-8233_SED	EPA 8270C-NCI	Fluvalinate	0.5 ng/dry g	UJ NQ
B13-8233_SED	EPA 8270C-NCI	I-Cyhalothrin	0.5 ng/dry g	UJ NQ
B13-8233_SED	EPA 8270C-NCI	PBDE209	0.1 ng/dry g	UJ BC
B13-8233_SED	EPA 8270C-NCI	Permethrin, cis-	0.5 ng/dry g	UJ NQ, LV
B13-8233_SED	EPA 8270C-NCI	Permethrin, trans-	0.5 ng/dry g	UJ BC, NQ
B13-8233_SED	EPA 8270C-NCI	Prallethrin	0.5 ng/dry g	UJ NQ, LC
B13-8233_SED	EPA 8270C-NCI	Resmethrin	0.5 ng/dry g	UJ NQ, LV, LC, LL
B13-8233_SED	EPA 9060	Total Nitrogen	0.13 % Dry Weight	J NQ
B13-8233_SED	EPA 9060	Total Organic Carbon	2.72 % Dry Weight	J NQ
B13-8233_SED	Plumb, 1981 and Teryl	Acid Volatile Sulfides	174.63 mg/dry kg	J NQ
B13-8233_SED	SM 4500-NH3 D	Ammonia-N	3.95 mg/dry kg	J LC, LM
B13-8236_SED	EPA 6020	Aluminum	35384.5 µg/dry g	J CH, HP
B13-8236_SED	EPA 6020	Antimony	0.256 µg/dry g	J HP
B13-8236_SED	EPA 6020	Beryllium	0.625 µg/dry g	J HP
B13-8236_SED	EPA 6020	Chromium	54.9885 µg/dry g	J HP
B13-8236_SED	EPA 6020	Iron (Fe)	35802 µg/dry g	J CH, HP
B13-8236_SED	EPA 6020	Nickel	20.31 µg/dry g	J HP
B13-8236_SED	EPA 6020	Total Phosphorus	728.906 µg/dry g	J NQ
B13-8236_SED	EPA 8270C	1-Methylnaphthalene	5 ng/dry g	UJ NQ
B13-8236_SED	EPA 8270C	1-Methylphenanthrene	1 ng/dry g	J DL, NQ
B13-8236_SED	EPA 8270C	2,3,5-Trimethylnaphthalene	5 ng/dry g	UJ NQ
B13-8236_SED	EPA 8270C	2,4'-DDD	0.1 ng/dry g	UJ NQ
B13-8236_SED	EPA 8270C	2,4'-DDE	0.1 ng/dry g	UJ NQ
B13-8236_SED	EPA 8270C	2,4'-DDT	0.1 ng/dry g	UJ NQ
B13-8236_SED	EPA 8270C	2,6-Dimethylnaphthalene	5 ng/dry g	UJ NQ, LC
B13-8236_SED	EPA 8270C	2-Methylnaphthalene	5 ng/dry g	UJ NQ
B13-8236_SED	EPA 8270C	4,4'-DDD	0.1 ng/dry g	UJ NQ
B13-8236_SED	EPA 8270C	4,4'-DDE	0.63 ng/dry g	J NQ, HD
B13-8236_SED	EPA 8270C	4,4'-DDMU	0.1 ng/dry g	UJ NQ
B13-8236_SED	EPA 8270C	4,4'-DDT	0.1 ng/dry g	UJ NQ

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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8236_SED	EPA 8270C	Acenaphthene	5 ng/dry g	UJ NQ
B13-8236_SED	EPA 8270C	Acenaphthylene	5 ng/dry g	UJ NQ
B13-8236_SED	EPA 8270C	Aldrin	0.1 ng/dry g	UJ NQ, LM
B13-8236_SED	EPA 8270C	Anthracene	2.1 ng/dry g	J DL, NQ
B13-8236_SED	EPA 8270C	Aroclor 1016	2 ng/dry g	UJ NQ
B13-8236_SED	EPA 8270C	Aroclor 1221	2 ng/dry g	UJ NQ
B13-8236_SED	EPA 8270C	Aroclor 1232	2 ng/dry g	UJ NQ
B13-8236_SED	EPA 8270C	Aroclor 1242	2 ng/dry g	UJ NQ
B13-8236_SED	EPA 8270C	Aroclor 1248	2 ng/dry g	UJ NQ
B13-8236_SED	EPA 8270C	Aroclor 1254	2 ng/dry g	UJ NQ
B13-8236_SED	EPA 8270C	Aroclor 1260	2 ng/dry g	UJ NQ
B13-8236_SED	EPA 8270C	Aroclor 1262	2 ng/dry g	UJ NQ
B13-8236_SED	EPA 8270C	Aroclor 1268	2 ng/dry g	UJ NQ
B13-8236_SED	EPA 8270C	Benz[a]anthracene	6.2 ng/dry g	J NQ, CH
B13-8236_SED	EPA 8270C	Benzo[a]pyrene	3.4 ng/dry g	J DL, NQ, LC
B13-8236_SED	EPA 8270C	Benzo[b]fluoranthene	3.7 ng/dry g	J DL, NQ, LC, HL
B13-8236_SED	EPA 8270C	Benzo[e]pyrene	2.4 ng/dry g	J DL, NQ, LV, LC
B13-8236_SED	EPA 8270C	Benzo[g,h,i]perylene	3.6 ng/dry g	J DL, NQ
B13-8236_SED	EPA 8270C	Benzo[k]fluoranthene	2 ng/dry g	J DL, NQ, LC
B13-8236_SED	EPA 8270C	BHC-alpha	0.1 ng/dry g	UJ NQ
B13-8236_SED	EPA 8270C	BHC-beta	0.1 ng/dry g	UJ NQ
B13-8236_SED	EPA 8270C	BHC-delta	0.1 ng/dry g	UJ NQ
B13-8236_SED	EPA 8270C	BHC-gamma	0.1 ng/dry g	UJ NQ
B13-8236_SED	EPA 8270C	Biphenyl	5 ng/dry g	UJ NQ
B13-8236_SED	EPA 8270C	Chlordane-alpha	0.1 ng/dry g	UJ NQ
B13-8236_SED	EPA 8270C	Chlordane-gamma	0.1 ng/dry g	UJ NQ
B13-8236_SED	EPA 8270C	Chrysene	7.1 ng/dry g	J NQ, CH
B13-8236_SED	EPA 8270C	cis-Nonachlor	0.1 ng/dry g	UJ NQ
B13-8236_SED	EPA 8270C	DCPA (Dacthal)	0.1 ng/dry g	UJ BC, NQ
B13-8236_SED	EPA 8270C	Dibenz[a,h]anthracene	1.8 ng/dry g	J DL, NQ, HC
B13-8236_SED	EPA 8270C	Dibenzothiophene	1.2 ng/dry g	J DL, NQ
B13-8236_SED	EPA 8270C	Dicofol	0.1 ng/dry g	UJ BC, NQ, LC
B13-8236_SED	EPA 8270C	Dieldrin	0.1 ng/dry g	UJ NQ
B13-8236_SED	EPA 8270C	Endosulfan sulfate	0.1 ng/dry g	UJ NQ
B13-8236_SED	EPA 8270C	Endosulfan-I	0.1 ng/dry g	UJ NQ, LM
B13-8236_SED	EPA 8270C	Endosulfan-II	0.1 ng/dry g	UJ BC, NQ, LM
B13-8236_SED	EPA 8270C	Endrin	0.1 ng/dry g	UJ NQ
B13-8236_SED	EPA 8270C	Endrin aldehyde	0.1 ng/dry g	R LL, LM
B13-8236_SED	EPA 8270C	Endrin ketone	0.1 ng/dry g	UJ NQ
B13-8236_SED	EPA 8270C	Fluoranthene	14.6 ng/dry g	J NQ, HD
B13-8236_SED	EPA 8270C	Fluorene	1.1 ng/dry g	J DL, NQ
B13-8236_SED	EPA 8270C	Heptachlor	0.1 ng/dry g	UJ NQ, LC
B13-8236_SED	EPA 8270C	Heptachlor epoxide	0.1 ng/dry g	UJ NQ
B13-8236_SED	EPA 8270C	Hexachlorobenzene	0.1 ng/dry g	UJ NQ
B13-8236_SED	EPA 8270C	Indeno[1,2,3-c,d]pyrene	4.1 ng/dry g	J DL, NQ, HC
B13-8236_SED	EPA 8270C	Methoxychlor	0.1 ng/dry g	UJ NQ
B13-8236_SED	EPA 8270C	Mirex	0.1 ng/dry g	UJ NQ
B13-8236_SED	EPA 8270C	Naphthalene	5 ng/dry g	UJ NQ
B13-8236_SED	EPA 8270C	Oxychlordane	0.1 ng/dry g	UJ NQ
B13-8236_SED	EPA 8270C	PCB003	0.1 ng/dry g	UJ NQ
B13-8236_SED	EPA 8270C	PCB005	0.1 ng/dry g	UJ NQ
B13-8236_SED	EPA 8270C	PCB008	0.1 ng/dry g	UJ NQ
B13-8236_SED	EPA 8270C	PCB015	0.1 ng/dry g	UJ NQ
B13-8236_SED	EPA 8270C	PCB018	0.1 ng/dry g	UJ NQ

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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8236_SED	EPA 8270C	PCB027	0.1 ng/dry g	UJ NQ
B13-8236_SED	EPA 8270C	PCB028	0.1 ng/dry g	UJ NQ
B13-8236_SED	EPA 8270C	PCB029	0.1 ng/dry g	UJ NQ
B13-8236_SED	EPA 8270C	PCB031	0.1 ng/dry g	UJ NQ
B13-8236_SED	EPA 8270C	PCB033	0.1 ng/dry g	UJ NQ
B13-8236_SED	EPA 8270C	PCB037	0.1 ng/dry g	UJ NQ
B13-8236_SED	EPA 8270C	PCB044	0.1 ng/dry g	UJ NQ
B13-8236_SED	EPA 8270C	PCB049	0.1 ng/dry g	UJ NQ
B13-8236_SED	EPA 8270C	PCB052	0.1 ng/dry g	UJ NQ
B13-8236_SED	EPA 8270C	PCB056(060)	0.2 ng/dry g	UJ NQ
B13-8236_SED	EPA 8270C	PCB066	0.1 ng/dry g	UJ NQ
B13-8236_SED	EPA 8270C	PCB070	0.1 ng/dry g	UJ NQ
B13-8236_SED	EPA 8270C	PCB074	0.1 ng/dry g	UJ NQ
B13-8236_SED	EPA 8270C	PCB077	0.1 ng/dry g	UJ NQ
B13-8236_SED	EPA 8270C	PCB081	0.1 ng/dry g	UJ NQ
B13-8236_SED	EPA 8270C	PCB087	0.1 ng/dry g	UJ NQ
B13-8236_SED	EPA 8270C	PCB095	0.1 ng/dry g	UJ NQ
B13-8236_SED	EPA 8270C	PCB097	0.1 ng/dry g	UJ NQ
B13-8236_SED	EPA 8270C	PCB099	0.1 ng/dry g	UJ NQ
B13-8236_SED	EPA 8270C	PCB101	0.1 ng/dry g	UJ NQ
B13-8236_SED	EPA 8270C	PCB105	0.1 ng/dry g	UJ NQ
B13-8236_SED	EPA 8270C	PCB110	0.1 ng/dry g	UJ NQ
B13-8236_SED	EPA 8270C	PCB114	0.1 ng/dry g	UJ NQ
B13-8236_SED	EPA 8270C	PCB118	0.1 ng/dry g	UJ NQ
B13-8236_SED	EPA 8270C	PCB119	0.1 ng/dry g	UJ NQ
B13-8236_SED	EPA 8270C	PCB123	0.1 ng/dry g	UJ NQ
B13-8236_SED	EPA 8270C	PCB126	0.1 ng/dry g	UJ NQ
B13-8236_SED	EPA 8270C	PCB128	0.1 ng/dry g	UJ NQ
B13-8236_SED	EPA 8270C	PCB137	0.1 ng/dry g	UJ NQ
B13-8236_SED	EPA 8270C	PCB138	0.1 ng/dry g	UJ NQ
B13-8236_SED	EPA 8270C	PCB141	0.1 ng/dry g	UJ NQ
B13-8236_SED	EPA 8270C	PCB149	0.1 ng/dry g	UJ NQ
B13-8236_SED	EPA 8270C	PCB151	0.1 ng/dry g	UJ NQ
B13-8236_SED	EPA 8270C	PCB153	0.1 ng/dry g	UJ NQ
B13-8236_SED	EPA 8270C	PCB156	0.1 ng/dry g	UJ NQ
B13-8236_SED	EPA 8270C	PCB157	0.1 ng/dry g	UJ NQ
B13-8236_SED	EPA 8270C	PCB158	0.1 ng/dry g	UJ NQ
B13-8236_SED	EPA 8270C	PCB167	0.1 ng/dry g	UJ NQ
B13-8236_SED	EPA 8270C	PCB168+132	0.2 ng/dry g	UJ NQ
B13-8236_SED	EPA 8270C	PCB169	0.1 ng/dry g	UJ NQ
B13-8236_SED	EPA 8270C	PCB170	0.1 ng/dry g	UJ NQ
B13-8236_SED	EPA 8270C	PCB174	0.1 ng/dry g	UJ NQ
B13-8236_SED	EPA 8270C	PCB177	0.1 ng/dry g	UJ NQ
B13-8236_SED	EPA 8270C	PCB180	0.1 ng/dry g	UJ NQ
B13-8236_SED	EPA 8270C	PCB183	0.1 ng/dry g	UJ NQ
B13-8236_SED	EPA 8270C	PCB187	0.1 ng/dry g	UJ NQ
B13-8236_SED	EPA 8270C	PCB189	0.1 ng/dry g	UJ NQ
B13-8236_SED	EPA 8270C	PCB194	0.1 ng/dry g	UJ NQ
B13-8236_SED	EPA 8270C	PCB195	0.1 ng/dry g	UJ NQ
B13-8236_SED	EPA 8270C	PCB199(200)	0.2 ng/dry g	UJ NQ
B13-8236_SED	EPA 8270C	PCB201	0.1 ng/dry g	UJ NQ
B13-8236_SED	EPA 8270C	PCB203	0.1 ng/dry g	UJ NQ
B13-8236_SED	EPA 8270C	PCB206	0.1 ng/dry g	UJ NQ
B13-8236_SED	EPA 8270C	PCB209	0.1 ng/dry g	UJ NQ

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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8236_SED	EPA 8270C	Perthane	0.1 ng/dry g	UJ NQ
B13-8236_SED	EPA 8270C	Perylene	1.2 ng/dry g	J DL, NQ, LV, LC
B13-8236_SED	EPA 8270C	Phenanthrene	8.8 ng/dry g	J NQ
B13-8236_SED	EPA 8270C	Pyrene	13.3 ng/dry g	J NQ, HD
B13-8236_SED	EPA 8270C	trans-Nonachlor	0.1 ng/dry g	UJ NQ
B13-8236_SED	EPA 8270C-NCI	Allethrin	0.5 ng/dry g	UJ NQ
B13-8236_SED	EPA 8270C-NCI	Bifenthrin	0.5 ng/dry g	UJ NQ, LC
B13-8236_SED	EPA 8270C-NCI	Cyfluthrin, total	0.5 ng/dry g	UJ NQ
B13-8236_SED	EPA 8270C-NCI	Cypermethrin, total	0.5 ng/dry g	UJ NQ
B13-8236_SED	EPA 8270C-NCI	Danitol (Fenpropathrin)	0.5 ng/dry g	UJ NQ
B13-8236_SED	EPA 8270C-NCI	Deltamethrin/Tralomethrin	0.5 ng/dry g	UJ BC, NQ
B13-8236_SED	EPA 8270C-NCI	Esfenvalerate	0.5 ng/dry g	UJ NQ
B13-8236_SED	EPA 8270C-NCI	Fenvalerate	0.5 ng/dry g	UJ NQ
B13-8236_SED	EPA 8270C-NCI	Fipronil	0.5 ng/dry g	UJ NQ, LC, LM
B13-8236_SED	EPA 8270C-NCI	Fipronil Desulfinyl	0.5 ng/dry g	UJ NQ, LC, LM
B13-8236_SED	EPA 8270C-NCI	Fipronil Sulfide	0.5 ng/dry g	UJ NQ, LC, LL, LM
B13-8236_SED	EPA 8270C-NCI	Fipronil Sulfone	0.5 ng/dry g	UJ BC, NQ
B13-8236_SED	EPA 8270C-NCI	Fluvalinate	0.5 ng/dry g	UJ NQ
B13-8236_SED	EPA 8270C-NCI	I-Cyhalothrin	0.5 ng/dry g	UJ NQ
B13-8236_SED	EPA 8270C-NCI	PBDE099	0.1 ng/dry g	UJ HD
B13-8236_SED	EPA 8270C-NCI	PBDE209	0.1 ng/dry g	UJ BC, LM
B13-8236_SED	EPA 8270C-NCI	Permethrin, cis-	0.5 ng/dry g	UJ NQ, LV
B13-8236_SED	EPA 8270C-NCI	Permethrin, trans-	0.5 ng/dry g	UJ BC, NQ
B13-8236_SED	EPA 8270C-NCI	Prallethrin	0.5 ng/dry g	UJ NQ, LC, LM
B13-8236_SED	EPA 8270C-NCI	Resmethrin	0.5 ng/dry g	UJ NQ, LV, LC, LL, LM
B13-8236_SED	EPA 9060	Total Nitrogen	0.08 % Dry Weight	J NQ
B13-8236_SED	EPA 9060	Total Organic Carbon	2.49 % Dry Weight	J NQ
B13-8236_SED	Plumb, 1981 and Teryl	Acid Volatile Sulfides	74.85 mg/dry kg	J NQ
B13-8236_SED	SM 4500-NH3 D	Ammonia-N	4.36 mg/dry kg	J LC
B13-8239_SED	EPA 6020	Aluminum	21140.2 µg/dry g	J CH, HP
B13-8239_SED	EPA 6020	Antimony	0.184 µg/dry g	J HP
B13-8239_SED	EPA 6020	Beryllium	0.427 µg/dry g	J HP
B13-8239_SED	EPA 6020	Chromium	41.6437 µg/dry g	J HP
B13-8239_SED	EPA 6020	Iron (Fe)	26810.9 µg/dry g	J CH, HP
B13-8239_SED	EPA 6020	Nickel	16.88 µg/dry g	J HP
B13-8239_SED	EPA 6020	Total Phosphorus	574.024 µg/dry g	J NQ
B13-8239_SED	EPA 8270C	1-Methylnaphthalene	5 ng/dry g	UJ NQ
B13-8239_SED	EPA 8270C	1-Methylphenanthrene	5 ng/dry g	UJ NQ
B13-8239_SED	EPA 8270C	2,3,5-Trimethylnaphthalene	5 ng/dry g	UJ NQ
B13-8239_SED	EPA 8270C	2,4'-DDD	0.1 ng/dry g	UJ NQ
B13-8239_SED	EPA 8270C	2,4'-DDE	0.1 ng/dry g	UJ NQ
B13-8239_SED	EPA 8270C	2,4'-DDT	0.1 ng/dry g	UJ NQ
B13-8239_SED	EPA 8270C	2,6-Dimethylnaphthalene	5 ng/dry g	UJ NQ, LC
B13-8239_SED	EPA 8270C	2-Methylnaphthalene	5 ng/dry g	UJ NQ
B13-8239_SED	EPA 8270C	4,4'-DDD	0.1 ng/dry g	UJ NQ
B13-8239_SED	EPA 8270C	4,4'-DDE	0.8 ng/dry g	J NQ
B13-8239_SED	EPA 8270C	4,4'-DDMU	0.1 ng/dry g	UJ NQ
B13-8239_SED	EPA 8270C	4,4'-DDT	0.1 ng/dry g	UJ NQ
B13-8239_SED	EPA 8270C	Acenaphthene	5 ng/dry g	UJ NQ
B13-8239_SED	EPA 8270C	Acenaphthylene	5 ng/dry g	UJ NQ
B13-8239_SED	EPA 8270C	Aldrin	0.1 ng/dry g	UJ NQ
B13-8239_SED	EPA 8270C	Anthracene	1.7 ng/dry g	J DL, NQ
B13-8239_SED	EPA 8270C	Aroclor 1016	2 ng/dry g	UJ NQ
B13-8239_SED	EPA 8270C	Aroclor 1221	2 ng/dry g	UJ NQ

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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8239_SED	EPA 8270C	Aroclor 1232	2 ng/dry g	UJ NQ
B13-8239_SED	EPA 8270C	Aroclor 1242	2 ng/dry g	UJ NQ
B13-8239_SED	EPA 8270C	Aroclor 1248	2 ng/dry g	UJ NQ
B13-8239_SED	EPA 8270C	Aroclor 1254	2 ng/dry g	UJ NQ
B13-8239_SED	EPA 8270C	Aroclor 1260	2 ng/dry g	UJ NQ
B13-8239_SED	EPA 8270C	Aroclor 1262	2 ng/dry g	UJ NQ
B13-8239_SED	EPA 8270C	Aroclor 1268	2 ng/dry g	UJ NQ
B13-8239_SED	EPA 8270C	Benz[a]anthracene	1.7 ng/dry g	J DL, NQ, CH
B13-8239_SED	EPA 8270C	Benzo[a]pyrene	1.8 ng/dry g	J DL, NQ, LC
B13-8239_SED	EPA 8270C	Benzo[b]fluoranthene	2.1 ng/dry g	J DL, NQ, LC, HL
B13-8239_SED	EPA 8270C	Benzo[e]pyrene	1.3 ng/dry g	J DL, NQ, LV, LC
B13-8239_SED	EPA 8270C	Benzo[g,h,i]perylene	2.1 ng/dry g	J DL, NQ
B13-8239_SED	EPA 8270C	Benzo[k]fluoranthene	1.4 ng/dry g	J DL, NQ, LC
B13-8239_SED	EPA 8270C	BHC-alpha	0.1 ng/dry g	UJ NQ
B13-8239_SED	EPA 8270C	BHC-beta	0.1 ng/dry g	UJ NQ
B13-8239_SED	EPA 8270C	BHC-delta	0.1 ng/dry g	UJ NQ
B13-8239_SED	EPA 8270C	BHC-gamma	0.1 ng/dry g	UJ NQ
B13-8239_SED	EPA 8270C	Biphenyl	5 ng/dry g	UJ NQ
B13-8239_SED	EPA 8270C	Chlordane-alpha	0.1 ng/dry g	UJ NQ
B13-8239_SED	EPA 8270C	Chlordane-gamma	0.1 ng/dry g	UJ NQ
B13-8239_SED	EPA 8270C	Chrysene	3 ng/dry g	J DL, NQ, CH
B13-8239_SED	EPA 8270C	cis-Nonachlor	0.1 ng/dry g	UJ NQ
B13-8239_SED	EPA 8270C	DCPA (Dacthal)	0.1 ng/dry g	UJ BC, NQ
B13-8239_SED	EPA 8270C	Dibenz[a,h]anthracene	1.2 ng/dry g	J DL, NQ, HC
B13-8239_SED	EPA 8270C	Dibenzothiophene	5 ng/dry g	UJ NQ
B13-8239_SED	EPA 8270C	Dicofol	0.1 ng/dry g	UJ BC, NQ, LC
B13-8239_SED	EPA 8270C	Dieldrin	0.1 ng/dry g	UJ NQ
B13-8239_SED	EPA 8270C	Endosulfan sulfate	0.1 ng/dry g	UJ NQ
B13-8239_SED	EPA 8270C	Endosulfan-I	0.1 ng/dry g	UJ NQ
B13-8239_SED	EPA 8270C	Endosulfan-II	0.1 ng/dry g	UJ BC, NQ
B13-8239_SED	EPA 8270C	Endrin	0.1 ng/dry g	UJ NQ
B13-8239_SED	EPA 8270C	Endrin aldehyde	0.1 ng/dry g	UJ NQ
B13-8239_SED	EPA 8270C	Endrin ketone	0.1 ng/dry g	UJ NQ
B13-8239_SED	EPA 8270C	Fluoranthene	7.7 ng/dry g	J NQ
B13-8239_SED	EPA 8270C	Fluorene	5 ng/dry g	UJ NQ
B13-8239_SED	EPA 8270C	Heptachlor	0.1 ng/dry g	UJ NQ, LC
B13-8239_SED	EPA 8270C	Heptachlor epoxide	0.1 ng/dry g	UJ NQ
B13-8239_SED	EPA 8270C	Hexachlorobenzene	0.1 ng/dry g	UJ NQ
B13-8239_SED	EPA 8270C	Indeno[1,2,3-c,d]pyrene	2.1 ng/dry g	J DL, NQ, HC
B13-8239_SED	EPA 8270C	Methoxychlor	0.1 ng/dry g	UJ NQ
B13-8239_SED	EPA 8270C	Mirex	0.1 ng/dry g	UJ NQ
B13-8239_SED	EPA 8270C	Naphthalene	5 ng/dry g	UJ NQ
B13-8239_SED	EPA 8270C	Oxychlordane	0.1 ng/dry g	UJ NQ
B13-8239_SED	EPA 8270C	PCB003	0.1 ng/dry g	UJ NQ
B13-8239_SED	EPA 8270C	PCB005	0.1 ng/dry g	UJ NQ
B13-8239_SED	EPA 8270C	PCB008	0.1 ng/dry g	UJ NQ
B13-8239_SED	EPA 8270C	PCB015	0.1 ng/dry g	UJ NQ
B13-8239_SED	EPA 8270C	PCB018	0.1 ng/dry g	UJ NQ
B13-8239_SED	EPA 8270C	PCB027	0.1 ng/dry g	UJ NQ
B13-8239_SED	EPA 8270C	PCB028	0.1 ng/dry g	UJ NQ
B13-8239_SED	EPA 8270C	PCB029	0.1 ng/dry g	UJ NQ
B13-8239_SED	EPA 8270C	PCB031	0.1 ng/dry g	UJ NQ
B13-8239_SED	EPA 8270C	PCB033	0.1 ng/dry g	UJ NQ
B13-8239_SED	EPA 8270C	PCB037	0.1 ng/dry g	UJ NQ



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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8239_SED	EPA 8270C	PCB044	0.1 ng/dry g	UJ NQ
B13-8239_SED	EPA 8270C	PCB049	0.1 ng/dry g	UJ NQ
B13-8239_SED	EPA 8270C	PCB052	0.1 ng/dry g	UJ NQ
B13-8239_SED	EPA 8270C	PCB056(060)	0.2 ng/dry g	UJ NQ
B13-8239_SED	EPA 8270C	PCB066	0.1 ng/dry g	UJ NQ
B13-8239_SED	EPA 8270C	PCB070	0.1 ng/dry g	UJ NQ
B13-8239_SED	EPA 8270C	PCB074	0.1 ng/dry g	UJ NQ
B13-8239_SED	EPA 8270C	PCB077	0.1 ng/dry g	UJ NQ
B13-8239_SED	EPA 8270C	PCB081	0.1 ng/dry g	UJ NQ
B13-8239_SED	EPA 8270C	PCB087	0.1 ng/dry g	UJ NQ
B13-8239_SED	EPA 8270C	PCB095	0.1 ng/dry g	UJ NQ
B13-8239_SED	EPA 8270C	PCB097	0.1 ng/dry g	UJ NQ
B13-8239_SED	EPA 8270C	PCB099	0.1 ng/dry g	UJ NQ
B13-8239_SED	EPA 8270C	PCB101	0.1 ng/dry g	UJ NQ
B13-8239_SED	EPA 8270C	PCB105	0.1 ng/dry g	UJ NQ
B13-8239_SED	EPA 8270C	PCB110	0.1 ng/dry g	UJ NQ
B13-8239_SED	EPA 8270C	PCB114	0.1 ng/dry g	UJ NQ
B13-8239_SED	EPA 8270C	PCB118	0.1 ng/dry g	UJ NQ
B13-8239_SED	EPA 8270C	PCB119	0.1 ng/dry g	UJ NQ
B13-8239_SED	EPA 8270C	PCB123	0.1 ng/dry g	UJ NQ
B13-8239_SED	EPA 8270C	PCB126	0.1 ng/dry g	UJ NQ
B13-8239_SED	EPA 8270C	PCB128	0.1 ng/dry g	UJ NQ
B13-8239_SED	EPA 8270C	PCB137	0.1 ng/dry g	UJ NQ
B13-8239_SED	EPA 8270C	PCB138	0.1 ng/dry g	UJ NQ
B13-8239_SED	EPA 8270C	PCB141	0.1 ng/dry g	UJ NQ
B13-8239_SED	EPA 8270C	PCB149	0.1 ng/dry g	UJ NQ
B13-8239_SED	EPA 8270C	PCB151	0.1 ng/dry g	UJ NQ
B13-8239_SED	EPA 8270C	PCB153	0.1 ng/dry g	UJ NQ
B13-8239_SED	EPA 8270C	PCB156	0.1 ng/dry g	UJ NQ
B13-8239_SED	EPA 8270C	PCB157	0.1 ng/dry g	UJ NQ
B13-8239_SED	EPA 8270C	PCB158	0.1 ng/dry g	UJ NQ
B13-8239_SED	EPA 8270C	PCB167	0.1 ng/dry g	UJ NQ
B13-8239_SED	EPA 8270C	PCB168+132	0.2 ng/dry g	UJ NQ
B13-8239_SED	EPA 8270C	PCB169	0.1 ng/dry g	UJ NQ
B13-8239_SED	EPA 8270C	PCB170	0.1 ng/dry g	UJ NQ
B13-8239_SED	EPA 8270C	PCB174	0.1 ng/dry g	UJ NQ
B13-8239_SED	EPA 8270C	PCB177	0.1 ng/dry g	UJ NQ
B13-8239_SED	EPA 8270C	PCB180	0.1 ng/dry g	UJ NQ
B13-8239_SED	EPA 8270C	PCB183	0.1 ng/dry g	UJ NQ
B13-8239_SED	EPA 8270C	PCB187	0.1 ng/dry g	UJ NQ
B13-8239_SED	EPA 8270C	PCB189	0.1 ng/dry g	UJ NQ
B13-8239_SED	EPA 8270C	PCB194	0.1 ng/dry g	UJ NQ
B13-8239_SED	EPA 8270C	PCB195	0.1 ng/dry g	UJ NQ
B13-8239_SED	EPA 8270C	PCB199(200)	0.2 ng/dry g	UJ NQ
B13-8239_SED	EPA 8270C	PCB201	0.1 ng/dry g	UJ NQ
B13-8239_SED	EPA 8270C	PCB203	0.1 ng/dry g	UJ NQ
B13-8239_SED	EPA 8270C	PCB206	0.1 ng/dry g	UJ NQ
B13-8239_SED	EPA 8270C	PCB209	0.1 ng/dry g	UJ NQ
B13-8239_SED	EPA 8270C	Perthane	0.1 ng/dry g	UJ NQ
B13-8239_SED	EPA 8270C	Perylene	2.5 ng/dry g	J DL, NQ, LV, LC
B13-8239_SED	EPA 8270C	Phenanthrene	5.9 ng/dry g	J NQ
B13-8239_SED	EPA 8270C	Pyrene	5.8 ng/dry g	J NQ
B13-8239_SED	EPA 8270C	trans-Nonachlor	0.1 ng/dry g	UJ NQ
B13-8239_SED	EPA 8270C-NCI	Allethrin	0.5 ng/dry g	UJ NQ

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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8239_SED	EPA 8270C-NCI	Bifenthrin	0.5 ng/dry g	UJ NQ, LC
B13-8239_SED	EPA 8270C-NCI	Cyfluthrin, total	0.5 ng/dry g	UJ NQ
B13-8239_SED	EPA 8270C-NCI	Cypermethrin, total	0.5 ng/dry g	UJ NQ
B13-8239_SED	EPA 8270C-NCI	Danitol (Fenpropathrin)	0.5 ng/dry g	UJ NQ
B13-8239_SED	EPA 8270C-NCI	Deltamethrin/Tralomethrin	0.5 ng/dry g	UJ BC, NQ
B13-8239_SED	EPA 8270C-NCI	Esfenvalerate	0.5 ng/dry g	UJ NQ
B13-8239_SED	EPA 8270C-NCI	Fenvalerate	0.5 ng/dry g	UJ NQ
B13-8239_SED	EPA 8270C-NCI	Fipronil	0.5 ng/dry g	UJ NQ, LC
B13-8239_SED	EPA 8270C-NCI	Fipronil Desulfinyl	0.5 ng/dry g	UJ NQ, LC
B13-8239_SED	EPA 8270C-NCI	Fipronil Sulfide	0.5 ng/dry g	UJ NQ, LC, LL
B13-8239_SED	EPA 8270C-NCI	Fipronil Sulfone	0.5 ng/dry g	UJ BC, NQ
B13-8239_SED	EPA 8270C-NCI	Fluvalinate	0.5 ng/dry g	UJ NQ
B13-8239_SED	EPA 8270C-NCI	I-Cyhalothrin	0.5 ng/dry g	UJ NQ
B13-8239_SED	EPA 8270C-NCI	PBDE209	0.1 ng/dry g	UJ BC
B13-8239_SED	EPA 8270C-NCI	Permethrin, cis-	0.5 ng/dry g	UJ NQ, LV
B13-8239_SED	EPA 8270C-NCI	Permethrin, trans-	0.5 ng/dry g	UJ BC, NQ
B13-8239_SED	EPA 8270C-NCI	Prallethrin	0.5 ng/dry g	UJ NQ, LC
B13-8239_SED	EPA 8270C-NCI	Resmethrin	0.5 ng/dry g	UJ NQ, LV, LC, LL
B13-8239_SED	EPA 9060	Total Nitrogen	0.08 % Dry Weight	J NQ
B13-8239_SED	EPA 9060	Total Organic Carbon	2.11 % Dry Weight	J NQ
B13-8239_SED	Plumb, 1981 and Teryl	Acid Volatile Sulfides	405.09 mg/dry kg	J NQ
B13-8239_SED	SM 4500-NH3 D	Ammonia-N	6.26 mg/dry kg	J LC
B13-8259_SED	EPA 6020	Aluminum	28163.7 µg/dry g	J CH, HP
B13-8259_SED	EPA 6020	Antimony	0.302 µg/dry g	J HP
B13-8259_SED	EPA 6020	Beryllium	0.656 µg/dry g	J HP
B13-8259_SED	EPA 6020	Chromium	51.607 µg/dry g	J HP
B13-8259_SED	EPA 6020	Iron (Fe)	24258.2 µg/dry g	J CH, HP
B13-8259_SED	EPA 6020	Nickel	16.67 µg/dry g	J HP
B13-8259_SED	EPA 6020	Total Phosphorus	762.381 µg/dry g	J NQ
B13-8259_SED	EPA 8270C	1-Methylnaphthalene	5 ng/dry g	UJ NQ
B13-8259_SED	EPA 8270C	1-Methylphenanthrene	2.1 ng/dry g	J DL, NQ
B13-8259_SED	EPA 8270C	2,3,5-Trimethylnaphthalene	5 ng/dry g	UJ NQ
B13-8259_SED	EPA 8270C	2,4'-DDD	0.1 ng/dry g	UJ NQ
B13-8259_SED	EPA 8270C	2,4'-DDE	0.1 ng/dry g	UJ NQ
B13-8259_SED	EPA 8270C	2,4'-DDT	0.1 ng/dry g	UJ NQ
B13-8259_SED	EPA 8270C	2,6-Dimethylnaphthalene	5 ng/dry g	UJ NQ, LC
B13-8259_SED	EPA 8270C	2-Methylnaphthalene	5 ng/dry g	UJ NQ
B13-8259_SED	EPA 8270C	4,4'-DDD	0.1 ng/dry g	UJ NQ
B13-8259_SED	EPA 8270C	4,4'-DDE	1.07 ng/dry g	J NQ
B13-8259_SED	EPA 8270C	4,4'-DDMU	0.1 ng/dry g	UJ NQ
B13-8259_SED	EPA 8270C	4,4'-DDT	0.1 ng/dry g	UJ NQ
B13-8259_SED	EPA 8270C	Acenaphthene	1.1 ng/dry g	J DL, NQ
B13-8259_SED	EPA 8270C	Acenaphthylene	5 ng/dry g	UJ NQ
B13-8259_SED	EPA 8270C	Aldrin	0.1 ng/dry g	UJ NQ
B13-8259_SED	EPA 8270C	Anthracene	4 ng/dry g	J DL, NQ
B13-8259_SED	EPA 8270C	Aroclor 1016	2 ng/dry g	UJ NQ
B13-8259_SED	EPA 8270C	Aroclor 1221	2 ng/dry g	UJ NQ
B13-8259_SED	EPA 8270C	Aroclor 1232	2 ng/dry g	UJ NQ
B13-8259_SED	EPA 8270C	Aroclor 1242	2 ng/dry g	UJ NQ
B13-8259_SED	EPA 8270C	Aroclor 1248	2 ng/dry g	UJ NQ
B13-8259_SED	EPA 8270C	Aroclor 1254	2 ng/dry g	UJ NQ
B13-8259_SED	EPA 8270C	Aroclor 1260	1.3 ng/dry g	J DL, NQ
B13-8259_SED	EPA 8270C	Aroclor 1262	2 ng/dry g	UJ NQ
B13-8259_SED	EPA 8270C	Aroclor 1268	2 ng/dry g	UJ NQ

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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8259_SED	EPA 8270C	Benz[a]anthracene	8.8 ng/dry g	J NQ, CH
B13-8259_SED	EPA 8270C	Benzo[a]pyrene	8.9 ng/dry g	J NQ, LC
B13-8259_SED	EPA 8270C	Benzo[b]fluoranthene	7.7 ng/dry g	J NQ, LC, HL
B13-8259_SED	EPA 8270C	Benzo[e]pyrene	6.2 ng/dry g	J NQ, LV, LC
B13-8259_SED	EPA 8270C	Benzo[g,h,i]perylene	9.8 ng/dry g	J NQ
B13-8259_SED	EPA 8270C	Benzo[k]fluoranthene	4.8 ng/dry g	J DL, NQ, LC
B13-8259_SED	EPA 8270C	BHC-alpha	0.1 ng/dry g	UJ NQ
B13-8259_SED	EPA 8270C	BHC-beta	0.1 ng/dry g	UJ NQ
B13-8259_SED	EPA 8270C	BHC-delta	0.1 ng/dry g	UJ NQ
B13-8259_SED	EPA 8270C	BHC-gamma	0.1 ng/dry g	UJ NQ
B13-8259_SED	EPA 8270C	Biphenyl	5 ng/dry g	UJ NQ
B13-8259_SED	EPA 8270C	Chlordane-alpha	0.1 ng/dry g	UJ NQ
B13-8259_SED	EPA 8270C	Chlordane-gamma	0.1 ng/dry g	UJ NQ
B13-8259_SED	EPA 8270C	Chrysene	9.5 ng/dry g	J NQ, CH
B13-8259_SED	EPA 8270C	cis-Nonachlor	0.1 ng/dry g	UJ NQ
B13-8259_SED	EPA 8270C	DCPA (Dacthal)	0.1 ng/dry g	UJ BC, NQ
B13-8259_SED	EPA 8270C	Dibenz[a,h]anthracene	3.2 ng/dry g	J DL, NQ, HC
B13-8259_SED	EPA 8270C	Dibenzothiophene	1.3 ng/dry g	J DL, NQ
B13-8259_SED	EPA 8270C	Dicofol	0.1 ng/dry g	UJ BC, NQ, LC
B13-8259_SED	EPA 8270C	Dieldrin	0.1 ng/dry g	UJ NQ
B13-8259_SED	EPA 8270C	Endosulfan sulfate	0.1 ng/dry g	UJ NQ
B13-8259_SED	EPA 8270C	Endosulfan-I	0.1 ng/dry g	UJ NQ
B13-8259_SED	EPA 8270C	Endosulfan-II	0.1 ng/dry g	UJ BC, NQ
B13-8259_SED	EPA 8270C	Endrin	0.1 ng/dry g	UJ NQ
B13-8259_SED	EPA 8270C	Endrin aldehyde	0.1 ng/dry g	UJ NQ
B13-8259_SED	EPA 8270C	Endrin ketone	0.1 ng/dry g	UJ NQ
B13-8259_SED	EPA 8270C	Fluoranthene	23 ng/dry g	J NQ
B13-8259_SED	EPA 8270C	Fluorene	1.8 ng/dry g	J DL, NQ
B13-8259_SED	EPA 8270C	Heptachlor	0.1 ng/dry g	UJ NQ, LC
B13-8259_SED	EPA 8270C	Heptachlor epoxide	0.1 ng/dry g	UJ NQ
B13-8259_SED	EPA 8270C	Hexachlorobenzene	0.1 ng/dry g	UJ NQ
B13-8259_SED	EPA 8270C	Indeno[1,2,3-c,d]pyrene	11.9 ng/dry g	J NQ, HC
B13-8259_SED	EPA 8270C	Methoxychlor	0.1 ng/dry g	UJ NQ
B13-8259_SED	EPA 8270C	Mirex	0.1 ng/dry g	UJ NQ
B13-8259_SED	EPA 8270C	Naphthalene	1.2 ng/dry g	J DL, NQ, HD
B13-8259_SED	EPA 8270C	Oxychlordane	0.1 ng/dry g	UJ NQ
B13-8259_SED	EPA 8270C	PCB003	0.1 ng/dry g	UJ NQ
B13-8259_SED	EPA 8270C	PCB005	0.1 ng/dry g	UJ NQ
B13-8259_SED	EPA 8270C	PCB008	0.1 ng/dry g	UJ NQ
B13-8259_SED	EPA 8270C	PCB015	0.1 ng/dry g	UJ NQ
B13-8259_SED	EPA 8270C	PCB018	0.1 ng/dry g	UJ NQ
B13-8259_SED	EPA 8270C	PCB027	0.1 ng/dry g	UJ NQ
B13-8259_SED	EPA 8270C	PCB028	0.1 ng/dry g	UJ NQ
B13-8259_SED	EPA 8270C	PCB029	0.1 ng/dry g	UJ NQ
B13-8259_SED	EPA 8270C	PCB031	0.1 ng/dry g	UJ NQ
B13-8259_SED	EPA 8270C	PCB033	0.1 ng/dry g	UJ NQ
B13-8259_SED	EPA 8270C	PCB037	0.1 ng/dry g	UJ NQ
B13-8259_SED	EPA 8270C	PCB044	0.1 ng/dry g	UJ NQ
B13-8259_SED	EPA 8270C	PCB049	0.1 ng/dry g	UJ NQ
B13-8259_SED	EPA 8270C	PCB052	0.1 ng/dry g	UJ NQ
B13-8259_SED	EPA 8270C	PCB056(060)	0.2 ng/dry g	UJ NQ
B13-8259_SED	EPA 8270C	PCB066	0.1 ng/dry g	UJ NQ
B13-8259_SED	EPA 8270C	PCB070	0.1 ng/dry g	UJ NQ
B13-8259_SED	EPA 8270C	PCB074	0.1 ng/dry g	UJ NQ

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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8259_SED	EPA 8270C	PCB077	0.1 ng/dry g	UJ NQ
B13-8259_SED	EPA 8270C	PCB081	0.1 ng/dry g	UJ NQ
B13-8259_SED	EPA 8270C	PCB087	0.1 ng/dry g	UJ NQ
B13-8259_SED	EPA 8270C	PCB095	0.1 ng/dry g	UJ NQ
B13-8259_SED	EPA 8270C	PCB097	0.1 ng/dry g	UJ NQ
B13-8259_SED	EPA 8270C	PCB099	0.1 ng/dry g	UJ NQ
B13-8259_SED	EPA 8270C	PCB101	0.24 ng/dry g	J NQ
B13-8259_SED	EPA 8270C	PCB105	0.1 ng/dry g	UJ NQ
B13-8259_SED	EPA 8270C	PCB110	0.34 ng/dry g	J NQ
B13-8259_SED	EPA 8270C	PCB114	0.1 ng/dry g	UJ NQ
B13-8259_SED	EPA 8270C	PCB118	0.1 ng/dry g	UJ NQ
B13-8259_SED	EPA 8270C	PCB119	0.1 ng/dry g	UJ NQ
B13-8259_SED	EPA 8270C	PCB123	0.1 ng/dry g	UJ NQ
B13-8259_SED	EPA 8270C	PCB126	0.1 ng/dry g	UJ NQ
B13-8259_SED	EPA 8270C	PCB128	0.1 ng/dry g	UJ NQ
B13-8259_SED	EPA 8270C	PCB137	0.1 ng/dry g	UJ NQ
B13-8259_SED	EPA 8270C	PCB138	0.3 ng/dry g	J NQ
B13-8259_SED	EPA 8270C	PCB141	0.1 ng/dry g	UJ NQ
B13-8259_SED	EPA 8270C	PCB149	0.1 ng/dry g	UJ NQ
B13-8259_SED	EPA 8270C	PCB151	0.1 ng/dry g	UJ NQ
B13-8259_SED	EPA 8270C	PCB153	0.2 ng/dry g	J NQ
B13-8259_SED	EPA 8270C	PCB156	0.1 ng/dry g	UJ NQ
B13-8259_SED	EPA 8270C	PCB157	0.1 ng/dry g	UJ NQ
B13-8259_SED	EPA 8270C	PCB158	0.1 ng/dry g	UJ NQ
B13-8259_SED	EPA 8270C	PCB167	0.1 ng/dry g	UJ NQ
B13-8259_SED	EPA 8270C	PCB168+132	0.2 ng/dry g	UJ NQ
B13-8259_SED	EPA 8270C	PCB169	0.1 ng/dry g	UJ NQ
B13-8259_SED	EPA 8270C	PCB170	0.1 ng/dry g	UJ NQ
B13-8259_SED	EPA 8270C	PCB174	0.1 ng/dry g	UJ NQ
B13-8259_SED	EPA 8270C	PCB177	0.1 ng/dry g	UJ NQ
B13-8259_SED	EPA 8270C	PCB180	0.1 ng/dry g	UJ NQ
B13-8259_SED	EPA 8270C	PCB183	0.1 ng/dry g	UJ NQ
B13-8259_SED	EPA 8270C	PCB187	0.1 ng/dry g	UJ NQ
B13-8259_SED	EPA 8270C	PCB189	0.1 ng/dry g	UJ NQ
B13-8259_SED	EPA 8270C	PCB194	0.1 ng/dry g	UJ NQ
B13-8259_SED	EPA 8270C	PCB195	0.1 ng/dry g	UJ NQ
B13-8259_SED	EPA 8270C	PCB199(200)	0.2 ng/dry g	UJ NQ
B13-8259_SED	EPA 8270C	PCB201	0.1 ng/dry g	UJ NQ
B13-8259_SED	EPA 8270C	PCB203	0.1 ng/dry g	UJ NQ
B13-8259_SED	EPA 8270C	PCB206	0.1 ng/dry g	UJ NQ
B13-8259_SED	EPA 8270C	PCB209	0.1 ng/dry g	UJ NQ
B13-8259_SED	EPA 8270C	Perthane	0.1 ng/dry g	UJ NQ
B13-8259_SED	EPA 8270C	Perylene	5.2 ng/dry g	J NQ, LV, LC
B13-8259_SED	EPA 8270C	Phenanthrene	18.4 ng/dry g	J NQ
B13-8259_SED	EPA 8270C	Pyrene	19.3 ng/dry g	J NQ
B13-8259_SED	EPA 8270C	trans-Nonachlor	0.1 ng/dry g	UJ NQ
B13-8259_SED	EPA 8270C-NCI	Allethrin	0.5 ng/dry g	UJ NQ
B13-8259_SED	EPA 8270C-NCI	Bifenthrin	0.5 ng/dry g	UJ NQ, LC
B13-8259_SED	EPA 8270C-NCI	Cyfluthrin, total	0.5 ng/dry g	UJ NQ
B13-8259_SED	EPA 8270C-NCI	Cypermethrin, total	0.5 ng/dry g	UJ NQ
B13-8259_SED	EPA 8270C-NCI	Danitol (Fenpropathrin)	0.5 ng/dry g	UJ NQ
B13-8259_SED	EPA 8270C-NCI	Deltamethrin/Tralomethrin	0.5 ng/dry g	UJ BC, NQ
B13-8259_SED	EPA 8270C-NCI	Esfenvalerate	0.5 ng/dry g	UJ NQ
B13-8259_SED	EPA 8270C-NCI	Fenvalerate	0.5 ng/dry g	UJ NQ

**TABLE 2**  
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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8259_SED	EPA 8270C-NCI	Fipronil	0.5 ng/dry g	UJ NQ, LC
B13-8259_SED	EPA 8270C-NCI	Fipronil Desulfinyl	0.5 ng/dry g	UJ NQ, LC
B13-8259_SED	EPA 8270C-NCI	Fipronil Sulfide	0.5 ng/dry g	UJ NQ, LC, LL
B13-8259_SED	EPA 8270C-NCI	Fipronil Sulfone	0.5 ng/dry g	UJ BC, NQ
B13-8259_SED	EPA 8270C-NCI	Fluvalinate	0.5 ng/dry g	UJ NQ
B13-8259_SED	EPA 8270C-NCI	I-Cyhalothrin	0.5 ng/dry g	UJ NQ
B13-8259_SED	EPA 8270C-NCI	PBDE028	0.08 ng/dry g	J DL
B13-8259_SED	EPA 8270C-NCI	PBDE154	0.07 ng/dry g	J DL, HP
B13-8259_SED	EPA 8270C-NCI	PBDE209	0.1 ng/dry g	UJ BC
B13-8259_SED	EPA 8270C-NCI	Permethrin, cis-	0.5 ng/dry g	UJ NQ, LV
B13-8259_SED	EPA 8270C-NCI	Permethrin, trans-	0.5 ng/dry g	UJ BC, NQ
B13-8259_SED	EPA 8270C-NCI	Prallethrin	0.5 ng/dry g	UJ NQ, LC
B13-8259_SED	EPA 8270C-NCI	Resmethrin	0.5 ng/dry g	UJ NQ, LV, LC, LL
B13-8259_SED	EPA 9060	Total Nitrogen	0.11 % Dry Weight	J NQ
B13-8259_SED	EPA 9060	Total Organic Carbon	1.31 % Dry Weight	J NQ
B13-8259_SED	Plumb, 1981 and Teryl	Acid Volatile Sulfides	59.09 mg/dry kg	J NQ
B13-8259_SED	SM 4500-NH3 D	Ammonia-N	2.31 mg/dry kg	J LC
B13-8263_SED	EPA 6020	Aluminum	12027.5 µg/dry g	J CH, HP
B13-8263_SED	EPA 6020	Antimony	0.211 µg/dry g	J HP
B13-8263_SED	EPA 6020	Beryllium	0.288 µg/dry g	J HP
B13-8263_SED	EPA 6020	Chromium	34.3016 µg/dry g	J HP
B13-8263_SED	EPA 6020	Iron (Fe)	12887.2 µg/dry g	J CH, HP
B13-8263_SED	EPA 6020	Nickel	14.97 µg/dry g	J HP
B13-8263_SED	EPA 6020	Total Phosphorus	606.013 µg/dry g	J NQ
B13-8263_SED	EPA 8270C	1-Methylnaphthalene	5 ng/dry g	UJ NQ
B13-8263_SED	EPA 8270C	1-Methylphenanthrene	1.4 ng/dry g	J DL, NQ
B13-8263_SED	EPA 8270C	2,3,5-Trimethylnaphthalene	5 ng/dry g	UJ NQ
B13-8263_SED	EPA 8270C	2,4'-DDD	0.1 ng/dry g	UJ NQ
B13-8263_SED	EPA 8270C	2,4'-DDE	0.1 ng/dry g	UJ NQ
B13-8263_SED	EPA 8270C	2,4'-DDT	0.1 ng/dry g	UJ NQ
B13-8263_SED	EPA 8270C	2,6-Dimethylnaphthalene	5 ng/dry g	UJ NQ, LC
B13-8263_SED	EPA 8270C	2-Methylnaphthalene	5 ng/dry g	UJ NQ
B13-8263_SED	EPA 8270C	4,4'-DDD	0.1 ng/dry g	UJ NQ
B13-8263_SED	EPA 8270C	4,4'-DDE	1.56 ng/dry g	J NQ
B13-8263_SED	EPA 8270C	4,4'-DDMU	0.1 ng/dry g	UJ NQ
B13-8263_SED	EPA 8270C	4,4'-DDT	0.1 ng/dry g	UJ NQ
B13-8263_SED	EPA 8270C	Acenaphthene	5 ng/dry g	UJ NQ
B13-8263_SED	EPA 8270C	Acenaphthylene	5 ng/dry g	UJ NQ
B13-8263_SED	EPA 8270C	Aldrin	0.1 ng/dry g	UJ NQ
B13-8263_SED	EPA 8270C	Anthracene	5.4 ng/dry g	J NQ
B13-8263_SED	EPA 8270C	Aroclor 1016	2 ng/dry g	UJ NQ
B13-8263_SED	EPA 8270C	Aroclor 1221	2 ng/dry g	UJ NQ
B13-8263_SED	EPA 8270C	Aroclor 1232	2 ng/dry g	UJ NQ
B13-8263_SED	EPA 8270C	Aroclor 1242	2 ng/dry g	UJ NQ
B13-8263_SED	EPA 8270C	Aroclor 1248	2 ng/dry g	UJ NQ
B13-8263_SED	EPA 8270C	Aroclor 1254	2 ng/dry g	UJ NQ
B13-8263_SED	EPA 8270C	Aroclor 1260	2 ng/dry g	UJ NQ
B13-8263_SED	EPA 8270C	Aroclor 1262	2 ng/dry g	UJ NQ
B13-8263_SED	EPA 8270C	Aroclor 1268	2 ng/dry g	UJ NQ
B13-8263_SED	EPA 8270C	Benz[a]anthracene	10.1 ng/dry g	J NQ, CH
B13-8263_SED	EPA 8270C	Benzo[a]pyrene	9.7 ng/dry g	J NQ, LC
B13-8263_SED	EPA 8270C	Benzo[b]fluoranthene	7.4 ng/dry g	J NQ, LC, HL
B13-8263_SED	EPA 8270C	Benzo[e]pyrene	5.3 ng/dry g	J NQ, LV, LC
B13-8263_SED	EPA 8270C	Benzo[g,h,i]perylene	8.1 ng/dry g	J NQ

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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8263_SED	EPA 8270C	Benzo[k]fluoranthene	5.3 ng/dry g	J NQ, LC
B13-8263_SED	EPA 8270C	BHC-alpha	0.1 ng/dry g	UJ NQ
B13-8263_SED	EPA 8270C	BHC-beta	0.1 ng/dry g	UJ NQ
B13-8263_SED	EPA 8270C	BHC-delta	0.1 ng/dry g	UJ NQ
B13-8263_SED	EPA 8270C	BHC-gamma	0.1 ng/dry g	UJ NQ
B13-8263_SED	EPA 8270C	Biphenyl	5 ng/dry g	UJ NQ
B13-8263_SED	EPA 8270C	Chlordane-alpha	0.1 ng/dry g	UJ NQ
B13-8263_SED	EPA 8270C	Chlordane-gamma	0.1 ng/dry g	UJ NQ
B13-8263_SED	EPA 8270C	Chrysene	10 ng/dry g	J NQ, CH
B13-8263_SED	EPA 8270C	cis-Nonachlor	0.1 ng/dry g	UJ NQ
B13-8263_SED	EPA 8270C	DCPA (Dacthal)	0.1 ng/dry g	UJ BC, NQ
B13-8263_SED	EPA 8270C	Dibenz[a,h]anthracene	2.6 ng/dry g	J DL, NQ, HC
B13-8263_SED	EPA 8270C	Dibenzothiophene	1.2 ng/dry g	J DL, NQ
B13-8263_SED	EPA 8270C	Dicofol	0.1 ng/dry g	UJ BC, NQ, LC
B13-8263_SED	EPA 8270C	Dieldrin	0.1 ng/dry g	UJ NQ
B13-8263_SED	EPA 8270C	Endosulfan sulfate	0.1 ng/dry g	UJ NQ
B13-8263_SED	EPA 8270C	Endosulfan-I	0.1 ng/dry g	UJ NQ
B13-8263_SED	EPA 8270C	Endosulfan-II	0.1 ng/dry g	UJ BC, NQ
B13-8263_SED	EPA 8270C	Endrin	0.1 ng/dry g	UJ NQ
B13-8263_SED	EPA 8270C	Endrin aldehyde	0.1 ng/dry g	UJ NQ
B13-8263_SED	EPA 8270C	Endrin ketone	0.1 ng/dry g	UJ NQ
B13-8263_SED	EPA 8270C	Fluoranthene	23.4 ng/dry g	J NQ
B13-8263_SED	EPA 8270C	Fluorene	1.6 ng/dry g	J DL, NQ
B13-8263_SED	EPA 8270C	Heptachlor	0.1 ng/dry g	UJ NQ, LC
B13-8263_SED	EPA 8270C	Heptachlor epoxide	0.1 ng/dry g	UJ NQ
B13-8263_SED	EPA 8270C	Hexachlorobenzene	0.1 ng/dry g	UJ NQ
B13-8263_SED	EPA 8270C	Indeno[1,2,3-c,d]pyrene	9.4 ng/dry g	J NQ, HC
B13-8263_SED	EPA 8270C	Methoxychlor	0.1 ng/dry g	UJ NQ
B13-8263_SED	EPA 8270C	Mirex	0.1 ng/dry g	UJ NQ
B13-8263_SED	EPA 8270C	Naphthalene	5 ng/dry g	UJ NQ
B13-8263_SED	EPA 8270C	Oxychlordane	0.1 ng/dry g	UJ NQ
B13-8263_SED	EPA 8270C	PCB003	0.1 ng/dry g	UJ NQ
B13-8263_SED	EPA 8270C	PCB005	0.1 ng/dry g	UJ NQ
B13-8263_SED	EPA 8270C	PCB008	0.1 ng/dry g	UJ NQ
B13-8263_SED	EPA 8270C	PCB015	0.1 ng/dry g	UJ NQ
B13-8263_SED	EPA 8270C	PCB018	0.1 ng/dry g	UJ NQ
B13-8263_SED	EPA 8270C	PCB027	0.1 ng/dry g	UJ NQ
B13-8263_SED	EPA 8270C	PCB028	0.1 ng/dry g	UJ NQ
B13-8263_SED	EPA 8270C	PCB029	0.1 ng/dry g	UJ NQ
B13-8263_SED	EPA 8270C	PCB031	0.1 ng/dry g	UJ NQ
B13-8263_SED	EPA 8270C	PCB033	0.1 ng/dry g	UJ NQ
B13-8263_SED	EPA 8270C	PCB037	0.1 ng/dry g	UJ NQ
B13-8263_SED	EPA 8270C	PCB044	0.1 ng/dry g	UJ NQ
B13-8263_SED	EPA 8270C	PCB049	0.1 ng/dry g	UJ NQ
B13-8263_SED	EPA 8270C	PCB052	0.1 ng/dry g	UJ NQ
B13-8263_SED	EPA 8270C	PCB056(060)	0.2 ng/dry g	UJ NQ
B13-8263_SED	EPA 8270C	PCB066	0.1 ng/dry g	UJ NQ
B13-8263_SED	EPA 8270C	PCB070	0.1 ng/dry g	UJ NQ
B13-8263_SED	EPA 8270C	PCB074	0.1 ng/dry g	UJ NQ
B13-8263_SED	EPA 8270C	PCB077	0.1 ng/dry g	UJ NQ
B13-8263_SED	EPA 8270C	PCB081	0.1 ng/dry g	UJ NQ
B13-8263_SED	EPA 8270C	PCB087	0.1 ng/dry g	UJ NQ
B13-8263_SED	EPA 8270C	PCB095	0.1 ng/dry g	UJ NQ
B13-8263_SED	EPA 8270C	PCB097	0.1 ng/dry g	UJ NQ

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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8263_SED	EPA 8270C	PCB099	0.1 ng/dry g	UJ NQ
B13-8263_SED	EPA 8270C	PCB101	0.1 ng/dry g	UJ NQ
B13-8263_SED	EPA 8270C	PCB105	0.1 ng/dry g	UJ NQ
B13-8263_SED	EPA 8270C	PCB110	0.1 ng/dry g	UJ NQ
B13-8263_SED	EPA 8270C	PCB114	0.1 ng/dry g	UJ NQ
B13-8263_SED	EPA 8270C	PCB118	0.1 ng/dry g	UJ NQ
B13-8263_SED	EPA 8270C	PCB119	0.1 ng/dry g	UJ NQ
B13-8263_SED	EPA 8270C	PCB123	0.1 ng/dry g	UJ NQ
B13-8263_SED	EPA 8270C	PCB126	0.1 ng/dry g	UJ NQ
B13-8263_SED	EPA 8270C	PCB128	0.1 ng/dry g	UJ NQ
B13-8263_SED	EPA 8270C	PCB137	0.1 ng/dry g	UJ NQ
B13-8263_SED	EPA 8270C	PCB138	0.1 ng/dry g	UJ NQ
B13-8263_SED	EPA 8270C	PCB141	0.1 ng/dry g	UJ NQ
B13-8263_SED	EPA 8270C	PCB149	0.1 ng/dry g	UJ NQ
B13-8263_SED	EPA 8270C	PCB151	0.1 ng/dry g	UJ NQ
B13-8263_SED	EPA 8270C	PCB153	0.1 ng/dry g	UJ NQ
B13-8263_SED	EPA 8270C	PCB156	0.1 ng/dry g	UJ NQ
B13-8263_SED	EPA 8270C	PCB157	0.1 ng/dry g	UJ NQ
B13-8263_SED	EPA 8270C	PCB158	0.1 ng/dry g	UJ NQ
B13-8263_SED	EPA 8270C	PCB167	0.1 ng/dry g	UJ NQ
B13-8263_SED	EPA 8270C	PCB168+132	0.2 ng/dry g	UJ NQ
B13-8263_SED	EPA 8270C	PCB169	0.1 ng/dry g	UJ NQ
B13-8263_SED	EPA 8270C	PCB170	0.1 ng/dry g	UJ NQ
B13-8263_SED	EPA 8270C	PCB174	0.1 ng/dry g	UJ NQ
B13-8263_SED	EPA 8270C	PCB177	0.1 ng/dry g	UJ NQ
B13-8263_SED	EPA 8270C	PCB180	0.1 ng/dry g	UJ NQ
B13-8263_SED	EPA 8270C	PCB183	0.1 ng/dry g	UJ NQ
B13-8263_SED	EPA 8270C	PCB187	0.1 ng/dry g	UJ NQ
B13-8263_SED	EPA 8270C	PCB189	0.1 ng/dry g	UJ NQ
B13-8263_SED	EPA 8270C	PCB194	0.1 ng/dry g	UJ NQ
B13-8263_SED	EPA 8270C	PCB195	0.1 ng/dry g	UJ NQ
B13-8263_SED	EPA 8270C	PCB199(200)	0.2 ng/dry g	UJ NQ
B13-8263_SED	EPA 8270C	PCB201	0.1 ng/dry g	UJ NQ
B13-8263_SED	EPA 8270C	PCB203	0.1 ng/dry g	UJ NQ
B13-8263_SED	EPA 8270C	PCB206	0.1 ng/dry g	UJ NQ
B13-8263_SED	EPA 8270C	PCB209	0.1 ng/dry g	UJ NQ
B13-8263_SED	EPA 8270C	Perthane	0.1 ng/dry g	UJ NQ
B13-8263_SED	EPA 8270C	Perylene	18.9 ng/dry g	J NQ, LV, LC
B13-8263_SED	EPA 8270C	Phenanthrene	15.5 ng/dry g	J NQ
B13-8263_SED	EPA 8270C	Pyrene	20 ng/dry g	J NQ
B13-8263_SED	EPA 8270C	trans-Nonachlor	0.1 ng/dry g	UJ NQ
B13-8263_SED	EPA 8270C-NCI	Allethrin	0.5 ng/dry g	UJ NQ
B13-8263_SED	EPA 8270C-NCI	Bifenthrin	0.5 ng/dry g	UJ NQ, LC
B13-8263_SED	EPA 8270C-NCI	Cyfluthrin, total	0.5 ng/dry g	UJ NQ
B13-8263_SED	EPA 8270C-NCI	Cypermethrin, total	0.5 ng/dry g	UJ NQ
B13-8263_SED	EPA 8270C-NCI	Danitol (Fenpropathrin)	0.5 ng/dry g	UJ NQ
B13-8263_SED	EPA 8270C-NCI	Deltamethrin/Tralomethrin	0.5 ng/dry g	UJ BC, NQ
B13-8263_SED	EPA 8270C-NCI	Esfenvalerate	0.5 ng/dry g	UJ NQ
B13-8263_SED	EPA 8270C-NCI	Fenvalerate	0.5 ng/dry g	UJ NQ
B13-8263_SED	EPA 8270C-NCI	Fipronil	0.5 ng/dry g	UJ NQ, LC
B13-8263_SED	EPA 8270C-NCI	Fipronil Desulfinyl	0.5 ng/dry g	UJ NQ, LC
B13-8263_SED	EPA 8270C-NCI	Fipronil Sulfide	0.5 ng/dry g	UJ NQ, LC, LL
B13-8263_SED	EPA 8270C-NCI	Fipronil Sulfone	0.5 ng/dry g	UJ BC, NQ
B13-8263_SED	EPA 8270C-NCI	Fluvalinate	0.5 ng/dry g	UJ NQ

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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8263_SED	EPA 8270C-NCI	I-Cyhalothrin	0.5 ng/dry g	UJ NQ
B13-8263_SED	EPA 8270C-NCI	PBDE153	0.05 ng/dry g	J DL
B13-8263_SED	EPA 8270C-NCI	PBDE154	0.08 ng/dry g	J DL, HP
B13-8263_SED	EPA 8270C-NCI	PBDE209	0.1 ng/dry g	UJ BC
B13-8263_SED	EPA 8270C-NCI	Permethrin, cis-	0.5 ng/dry g	UJ NQ, LV
B13-8263_SED	EPA 8270C-NCI	Permethrin, trans-	0.5 ng/dry g	UJ BC, NQ
B13-8263_SED	EPA 8270C-NCI	Prallethrin	0.5 ng/dry g	UJ NQ, LC
B13-8263_SED	EPA 8270C-NCI	Resmethrin	0.5 ng/dry g	UJ NQ, LV, LC, LL
B13-8263_SED	EPA 9060	Total Nitrogen	0.03 % Dry Weight	J NQ
B13-8263_SED	EPA 9060	Total Organic Carbon	1.63 % Dry Weight	J NQ
B13-8263_SED	Plumb, 1981 and Teryl	Acid Volatile Sulfides	58.1 mg/dry kg	J NQ
B13-8263_SED	SM 4500-NH3 D	Ammonia-N	3.18 mg/dry kg	J LC
B13-8265_SED	EPA 6020	Aluminum	20312.5 µg/dry g	J CH, HP
B13-8265_SED	EPA 6020	Antimony	0.287 µg/dry g	J HP
B13-8265_SED	EPA 6020	Beryllium	0.474 µg/dry g	J HP
B13-8265_SED	EPA 6020	Chromium	49.8047 µg/dry g	J HP
B13-8265_SED	EPA 6020	Iron (Fe)	17696.7 µg/dry g	J CH, HP
B13-8265_SED	EPA 6020	Nickel	17.35 µg/dry g	J HP
B13-8265_SED	EPA 6020	Total Phosphorus	968.251 µg/dry g	J NQ
B13-8265_SED	EPA 8270C	1-Methylnaphthalene	5 ng/dry g	UJ NQ
B13-8265_SED	EPA 8270C	1-Methylphenanthrene	5 ng/dry g	UJ NQ
B13-8265_SED	EPA 8270C	2,3,5-Trimethylnaphthalene	5 ng/dry g	UJ NQ
B13-8265_SED	EPA 8270C	2,4'-DDD	0.1 ng/dry g	UJ NQ
B13-8265_SED	EPA 8270C	2,4'-DDE	0.1 ng/dry g	UJ NQ
B13-8265_SED	EPA 8270C	2,4'-DDT	0.1 ng/dry g	UJ NQ
B13-8265_SED	EPA 8270C	2,6-Dimethylnaphthalene	5 ng/dry g	UJ NQ, LC
B13-8265_SED	EPA 8270C	2-Methylnaphthalene	5 ng/dry g	UJ NQ
B13-8265_SED	EPA 8270C	4,4'-DDD	0.1 ng/dry g	UJ NQ
B13-8265_SED	EPA 8270C	4,4'-DDE	1.8 ng/dry g	J NQ
B13-8265_SED	EPA 8270C	4,4'-DDMU	0.1 ng/dry g	UJ NQ
B13-8265_SED	EPA 8270C	4,4'-DDT	0.1 ng/dry g	UJ NQ
B13-8265_SED	EPA 8270C	Acenaphthene	5 ng/dry g	UJ NQ
B13-8265_SED	EPA 8270C	Acenaphthylene	5 ng/dry g	UJ NQ
B13-8265_SED	EPA 8270C	Aldrin	0.1 ng/dry g	UJ NQ
B13-8265_SED	EPA 8270C	Anthracene	1.7 ng/dry g	J DL, NQ
B13-8265_SED	EPA 8270C	Aroclor 1016	2 ng/dry g	UJ NQ
B13-8265_SED	EPA 8270C	Aroclor 1221	2 ng/dry g	UJ NQ
B13-8265_SED	EPA 8270C	Aroclor 1232	2 ng/dry g	UJ NQ
B13-8265_SED	EPA 8270C	Aroclor 1242	2 ng/dry g	UJ NQ
B13-8265_SED	EPA 8270C	Aroclor 1248	2 ng/dry g	UJ NQ
B13-8265_SED	EPA 8270C	Aroclor 1254	2 ng/dry g	UJ NQ
B13-8265_SED	EPA 8270C	Aroclor 1260	1.9 ng/dry g	J DL, NQ
B13-8265_SED	EPA 8270C	Aroclor 1262	2 ng/dry g	UJ NQ
B13-8265_SED	EPA 8270C	Aroclor 1268	2 ng/dry g	UJ NQ
B13-8265_SED	EPA 8270C	Benz[a]anthracene	3.8 ng/dry g	J DL, NQ, CH
B13-8265_SED	EPA 8270C	Benzo[a]pyrene	4.2 ng/dry g	J DL, NQ, LC
B13-8265_SED	EPA 8270C	Benzo[b]fluoranthene	4 ng/dry g	J DL, NQ, LC, HL
B13-8265_SED	EPA 8270C	Benzo[e]pyrene	3.4 ng/dry g	J DL, NQ, LV, LC
B13-8265_SED	EPA 8270C	Benzo[g,h,i]perylene	5.8 ng/dry g	J NQ
B13-8265_SED	EPA 8270C	Benzo[k]fluoranthene	2.5 ng/dry g	J DL, NQ, LC
B13-8265_SED	EPA 8270C	BHC-alpha	0.1 ng/dry g	UJ NQ
B13-8265_SED	EPA 8270C	BHC-beta	0.1 ng/dry g	UJ NQ
B13-8265_SED	EPA 8270C	BHC-delta	0.1 ng/dry g	UJ NQ
B13-8265_SED	EPA 8270C	BHC-gamma	0.1 ng/dry g	UJ NQ



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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8265_SED	EPA 8270C	Biphenyl	5 ng/dry g	UJ NQ
B13-8265_SED	EPA 8270C	Chlordane-alpha	0.1 ng/dry g	UJ NQ
B13-8265_SED	EPA 8270C	Chlordane-gamma	0.1 ng/dry g	UJ NQ
B13-8265_SED	EPA 8270C	Chrysene	5.7 ng/dry g	J NQ, CH
B13-8265_SED	EPA 8270C	cis-Nonachlor	0.1 ng/dry g	UJ NQ
B13-8265_SED	EPA 8270C	DCPA (Dacthal)	0.1 ng/dry g	UJ BC, NQ
B13-8265_SED	EPA 8270C	Dibenz[a,h]anthracene	1.3 ng/dry g	J DL, NQ, HC
B13-8265_SED	EPA 8270C	Dibenzothiophene	5 ng/dry g	UJ NQ
B13-8265_SED	EPA 8270C	Dicofol	0.1 ng/dry g	UJ BC, NQ, LC
B13-8265_SED	EPA 8270C	Dieldrin	0.1 ng/dry g	UJ NQ
B13-8265_SED	EPA 8270C	Endosulfan sulfate	0.1 ng/dry g	UJ NQ
B13-8265_SED	EPA 8270C	Endosulfan-I	0.1 ng/dry g	UJ NQ
B13-8265_SED	EPA 8270C	Endosulfan-II	0.1 ng/dry g	UJ BC, NQ
B13-8265_SED	EPA 8270C	Endrin	0.1 ng/dry g	UJ NQ
B13-8265_SED	EPA 8270C	Endrin aldehyde	0.1 ng/dry g	UJ NQ
B13-8265_SED	EPA 8270C	Endrin ketone	0.1 ng/dry g	UJ NQ
B13-8265_SED	EPA 8270C	Fluoranthene	11.1 ng/dry g	J NQ
B13-8265_SED	EPA 8270C	Fluorene	1.1 ng/dry g	J DL, NQ
B13-8265_SED	EPA 8270C	Heptachlor	0.1 ng/dry g	UJ NQ, LC
B13-8265_SED	EPA 8270C	Heptachlor epoxide	0.1 ng/dry g	UJ NQ
B13-8265_SED	EPA 8270C	Hexachlorobenzene	0.1 ng/dry g	UJ NQ
B13-8265_SED	EPA 8270C	Indeno[1,2,3-c,d]pyrene	5.9 ng/dry g	J NQ, HC
B13-8265_SED	EPA 8270C	Methoxychlor	0.1 ng/dry g	UJ NQ
B13-8265_SED	EPA 8270C	Mirex	0.1 ng/dry g	UJ NQ
B13-8265_SED	EPA 8270C	Naphthalene	5 ng/dry g	UJ NQ
B13-8265_SED	EPA 8270C	Oxychlordane	0.1 ng/dry g	UJ NQ
B13-8265_SED	EPA 8270C	PCB003	0.1 ng/dry g	UJ NQ
B13-8265_SED	EPA 8270C	PCB005	0.1 ng/dry g	UJ NQ
B13-8265_SED	EPA 8270C	PCB008	0.1 ng/dry g	UJ NQ
B13-8265_SED	EPA 8270C	PCB015	0.1 ng/dry g	UJ NQ
B13-8265_SED	EPA 8270C	PCB018	0.1 ng/dry g	UJ NQ
B13-8265_SED	EPA 8270C	PCB027	0.1 ng/dry g	UJ NQ
B13-8265_SED	EPA 8270C	PCB028	0.1 ng/dry g	UJ NQ
B13-8265_SED	EPA 8270C	PCB029	0.1 ng/dry g	UJ NQ
B13-8265_SED	EPA 8270C	PCB031	0.1 ng/dry g	UJ NQ
B13-8265_SED	EPA 8270C	PCB033	0.1 ng/dry g	UJ NQ
B13-8265_SED	EPA 8270C	PCB037	0.1 ng/dry g	UJ NQ
B13-8265_SED	EPA 8270C	PCB044	0.1 ng/dry g	UJ NQ
B13-8265_SED	EPA 8270C	PCB049	0.1 ng/dry g	UJ NQ
B13-8265_SED	EPA 8270C	PCB052	0.1 ng/dry g	UJ NQ
B13-8265_SED	EPA 8270C	PCB056(060)	0.2 ng/dry g	UJ NQ
B13-8265_SED	EPA 8270C	PCB066	0.1 ng/dry g	UJ NQ
B13-8265_SED	EPA 8270C	PCB070	0.1 ng/dry g	UJ NQ
B13-8265_SED	EPA 8270C	PCB074	0.1 ng/dry g	UJ NQ
B13-8265_SED	EPA 8270C	PCB077	0.1 ng/dry g	UJ NQ
B13-8265_SED	EPA 8270C	PCB081	0.1 ng/dry g	UJ NQ
B13-8265_SED	EPA 8270C	PCB087	0.1 ng/dry g	UJ NQ
B13-8265_SED	EPA 8270C	PCB095	0.13 ng/dry g	J NQ
B13-8265_SED	EPA 8270C	PCB097	0.1 ng/dry g	UJ NQ
B13-8265_SED	EPA 8270C	PCB099	0.1 ng/dry g	UJ NQ
B13-8265_SED	EPA 8270C	PCB101	0.41 ng/dry g	J NQ
B13-8265_SED	EPA 8270C	PCB105	0.1 ng/dry g	UJ NQ
B13-8265_SED	EPA 8270C	PCB110	0.55 ng/dry g	J NQ
B13-8265_SED	EPA 8270C	PCB114	0.1 ng/dry g	UJ NQ

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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8265_SED	EPA 8270C	PCB118	0.45 ng/dry g	J NQ
B13-8265_SED	EPA 8270C	PCB119	0.1 ng/dry g	UJ NQ
B13-8265_SED	EPA 8270C	PCB123	0.1 ng/dry g	UJ NQ
B13-8265_SED	EPA 8270C	PCB126	0.1 ng/dry g	UJ NQ
B13-8265_SED	EPA 8270C	PCB128	0.1 ng/dry g	UJ NQ
B13-8265_SED	EPA 8270C	PCB137	0.1 ng/dry g	UJ NQ
B13-8265_SED	EPA 8270C	PCB138	0.1 ng/dry g	UJ NQ
B13-8265_SED	EPA 8270C	PCB141	0.1 ng/dry g	UJ NQ
B13-8265_SED	EPA 8270C	PCB149	0.1 ng/dry g	UJ NQ
B13-8265_SED	EPA 8270C	PCB151	0.1 ng/dry g	UJ NQ
B13-8265_SED	EPA 8270C	PCB153	0.1 ng/dry g	UJ NQ
B13-8265_SED	EPA 8270C	PCB156	0.1 ng/dry g	UJ NQ
B13-8265_SED	EPA 8270C	PCB157	0.1 ng/dry g	UJ NQ
B13-8265_SED	EPA 8270C	PCB158	0.1 ng/dry g	UJ NQ
B13-8265_SED	EPA 8270C	PCB167	0.1 ng/dry g	UJ NQ
B13-8265_SED	EPA 8270C	PCB168+132	0.2 ng/dry g	UJ NQ
B13-8265_SED	EPA 8270C	PCB169	0.1 ng/dry g	UJ NQ
B13-8265_SED	EPA 8270C	PCB170	0.1 ng/dry g	UJ NQ
B13-8265_SED	EPA 8270C	PCB174	0.1 ng/dry g	UJ NQ
B13-8265_SED	EPA 8270C	PCB177	0.1 ng/dry g	UJ NQ
B13-8265_SED	EPA 8270C	PCB180	0.1 ng/dry g	UJ NQ
B13-8265_SED	EPA 8270C	PCB183	0.1 ng/dry g	UJ NQ
B13-8265_SED	EPA 8270C	PCB187	0.1 ng/dry g	UJ NQ
B13-8265_SED	EPA 8270C	PCB189	0.1 ng/dry g	UJ NQ
B13-8265_SED	EPA 8270C	PCB194	0.1 ng/dry g	UJ NQ
B13-8265_SED	EPA 8270C	PCB195	0.1 ng/dry g	UJ NQ
B13-8265_SED	EPA 8270C	PCB199(200)	0.2 ng/dry g	UJ NQ
B13-8265_SED	EPA 8270C	PCB201	0.1 ng/dry g	UJ NQ
B13-8265_SED	EPA 8270C	PCB203	0.1 ng/dry g	UJ NQ
B13-8265_SED	EPA 8270C	PCB206	0.1 ng/dry g	UJ NQ
B13-8265_SED	EPA 8270C	PCB209	0.1 ng/dry g	UJ NQ
B13-8265_SED	EPA 8270C	Perthane	0.1 ng/dry g	UJ NQ
B13-8265_SED	EPA 8270C	Perylene	34.2 ng/dry g	J NQ, LV, LC
B13-8265_SED	EPA 8270C	Phenanthrene	7.1 ng/dry g	J NQ
B13-8265_SED	EPA 8270C	Pyrene	10.5 ng/dry g	J NQ
B13-8265_SED	EPA 8270C	trans-Nonachlor	0.1 ng/dry g	UJ NQ
B13-8265_SED	EPA 8270C-NCI	Allethrin	0.5 ng/dry g	UJ NQ
B13-8265_SED	EPA 8270C-NCI	Bifenthrin	0.37 ng/dry g	J DL, NQ, LC
B13-8265_SED	EPA 8270C-NCI	Cyfluthrin, total	0.5 ng/dry g	UJ NQ
B13-8265_SED	EPA 8270C-NCI	Cypermethrin, total	0.5 ng/dry g	UJ NQ
B13-8265_SED	EPA 8270C-NCI	Danitol (Fenpropathrin)	0.5 ng/dry g	UJ NQ
B13-8265_SED	EPA 8270C-NCI	Deltamethrin/Tralomethrin	0.5 ng/dry g	UJ BC, NQ
B13-8265_SED	EPA 8270C-NCI	Esfenvalerate	0.5 ng/dry g	UJ NQ
B13-8265_SED	EPA 8270C-NCI	Fenvalerate	0.5 ng/dry g	UJ NQ
B13-8265_SED	EPA 8270C-NCI	Fipronil	0.5 ng/dry g	UJ NQ, LC
B13-8265_SED	EPA 8270C-NCI	Fipronil Desulfinyl	0.5 ng/dry g	UJ NQ, LC
B13-8265_SED	EPA 8270C-NCI	Fipronil Sulfide	0.5 ng/dry g	UJ NQ, LC, LL
B13-8265_SED	EPA 8270C-NCI	Fipronil Sulfone	0.5 ng/dry g	UJ BC, NQ
B13-8265_SED	EPA 8270C-NCI	Fluvalinate	0.5 ng/dry g	UJ NQ
B13-8265_SED	EPA 8270C-NCI	l-Cyhalothrin	0.5 ng/dry g	UJ NQ
B13-8265_SED	EPA 8270C-NCI	PBDE154	0.1 ng/dry g	J HP
B13-8265_SED	EPA 8270C-NCI	PBDE209	0.1 ng/dry g	UJ BC
B13-8265_SED	EPA 8270C-NCI	Permethrin, cis-	0.5 ng/dry g	UJ NQ, LV
B13-8265_SED	EPA 8270C-NCI	Permethrin, trans-	0.5 ng/dry g	UJ BC, NQ

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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8265_SED	EPA 8270C-NCI	Prallethrin	0.5 ng/dry g	UJ NQ, LC
B13-8265_SED	EPA 8270C-NCI	Resmethrin	0.5 ng/dry g	UJ NQ, LV, LC, LL
B13-8265_SED	EPA 9060	Total Nitrogen	0.05 % Dry Weight	J NQ
B13-8265_SED	EPA 9060	Total Organic Carbon	1.72 % Dry Weight	J NQ
B13-8265_SED	Plumb, 1981 and Teryl	Acid Volatile Sulfides	102.79 mg/dry kg	J NQ
B13-8265_SED	SM 4500-NH3 D	Ammonia-N	1.78 mg/dry kg	J LC
B13-8267_SED	EPA 6020	Aluminum	32301.8 µg/dry g	J CH, HP
B13-8267_SED	EPA 6020	Antimony	0.481 µg/dry g	J HP
B13-8267_SED	EPA 6020	Beryllium	0.747 µg/dry g	J HP
B13-8267_SED	EPA 6020	Chromium	67.2514 µg/dry g	J HP
B13-8267_SED	EPA 6020	Iron (Fe)	27688.4 µg/dry g	J CH, HP
B13-8267_SED	EPA 6020	Nickel	22.69 µg/dry g	J HP
B13-8267_SED	EPA 6020	Total Phosphorus	935.481 µg/dry g	J NQ
B13-8267_SED	EPA 8270C	1-Methylnaphthalene	5 ng/dry g	UJ NQ
B13-8267_SED	EPA 8270C	1-Methylphenanthrene	5 ng/dry g	UJ NQ
B13-8267_SED	EPA 8270C	2,3,5-Trimethylnaphthalene	5 ng/dry g	UJ NQ
B13-8267_SED	EPA 8270C	2,4'-DDD	0.1 ng/dry g	UJ NQ
B13-8267_SED	EPA 8270C	2,4'-DDE	0.1 ng/dry g	UJ NQ
B13-8267_SED	EPA 8270C	2,4'-DDT	0.1 ng/dry g	UJ NQ
B13-8267_SED	EPA 8270C	2,6-Dimethylnaphthalene	5 ng/dry g	UJ NQ, LC
B13-8267_SED	EPA 8270C	2-Methylnaphthalene	1 ng/dry g	J DL, NQ
B13-8267_SED	EPA 8270C	4,4'-DDD	0.1 ng/dry g	UJ NQ
B13-8267_SED	EPA 8270C	4,4'-DDE	2.66 ng/dry g	J NQ
B13-8267_SED	EPA 8270C	4,4'-DDMU	0.1 ng/dry g	UJ NQ
B13-8267_SED	EPA 8270C	4,4'-DDT	0.1 ng/dry g	UJ NQ
B13-8267_SED	EPA 8270C	Acenaphthene	1.1 ng/dry g	J DL, NQ
B13-8267_SED	EPA 8270C	Acenaphthylene	5 ng/dry g	UJ NQ
B13-8267_SED	EPA 8270C	Aldrin	0.1 ng/dry g	UJ NQ
B13-8267_SED	EPA 8270C	Anthracene	11.1 ng/dry g	J NQ
B13-8267_SED	EPA 8270C	Aroclor 1016	2 ng/dry g	UJ NQ
B13-8267_SED	EPA 8270C	Aroclor 1221	2 ng/dry g	UJ NQ
B13-8267_SED	EPA 8270C	Aroclor 1232	2 ng/dry g	UJ NQ
B13-8267_SED	EPA 8270C	Aroclor 1242	2 ng/dry g	UJ NQ
B13-8267_SED	EPA 8270C	Aroclor 1248	2 ng/dry g	UJ NQ
B13-8267_SED	EPA 8270C	Aroclor 1254	2 ng/dry g	UJ NQ
B13-8267_SED	EPA 8270C	Aroclor 1260	6.9 ng/dry g	J NQ
B13-8267_SED	EPA 8270C	Aroclor 1262	2 ng/dry g	UJ NQ
B13-8267_SED	EPA 8270C	Aroclor 1268	2 ng/dry g	UJ NQ
B13-8267_SED	EPA 8270C	Benz[a]anthracene	63.9 ng/dry g	J NQ, CH
B13-8267_SED	EPA 8270C	Benzo[a]pyrene	68.3 ng/dry g	J NQ, LC
B13-8267_SED	EPA 8270C	Benzo[b]fluoranthene	55.7 ng/dry g	J NQ, LC, HL
B13-8267_SED	EPA 8270C	Benzo[e]pyrene	38.4 ng/dry g	J NQ, LV, LC
B13-8267_SED	EPA 8270C	Benzo[g,h,i]perylene	70 ng/dry g	J NQ
B13-8267_SED	EPA 8270C	Benzo[k]fluoranthene	33.9 ng/dry g	J NQ, LC
B13-8267_SED	EPA 8270C	BHC-alpha	0.1 ng/dry g	UJ NQ
B13-8267_SED	EPA 8270C	BHC-beta	0.1 ng/dry g	UJ NQ
B13-8267_SED	EPA 8270C	BHC-delta	0.1 ng/dry g	UJ NQ
B13-8267_SED	EPA 8270C	BHC-gamma	0.1 ng/dry g	UJ NQ
B13-8267_SED	EPA 8270C	Biphenyl	5 ng/dry g	UJ NQ
B13-8267_SED	EPA 8270C	Chlordane-alpha	0.35 ng/dry g	J NQ
B13-8267_SED	EPA 8270C	Chlordane-gamma	0.85 ng/dry g	J NQ
B13-8267_SED	EPA 8270C	Chrysene	77.1 ng/dry g	J NQ, CH
B13-8267_SED	EPA 8270C	cis-Nonachlor	0.13 ng/dry g	J NQ
B13-8267_SED	EPA 8270C	DCPA (Dacthal)	0.1 ng/dry g	UJ BC, NQ

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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8267_SED	EPA 8270C	Dibenz[a,h]anthracene	19.6 ng/dry g	J NQ, HC
B13-8267_SED	EPA 8270C	Dibenzothiophene	2.2 ng/dry g	J DL, NQ
B13-8267_SED	EPA 8270C	Dicofol	0.1 ng/dry g	UJ BC, NQ, LC
B13-8267_SED	EPA 8270C	Dieldrin	0.1 ng/dry g	UJ NQ
B13-8267_SED	EPA 8270C	Endosulfan sulfate	0.1 ng/dry g	UJ NQ
B13-8267_SED	EPA 8270C	Endosulfan-I	0.1 ng/dry g	UJ NQ
B13-8267_SED	EPA 8270C	Endosulfan-II	0.1 ng/dry g	UJ BC, NQ
B13-8267_SED	EPA 8270C	Endrin	0.1 ng/dry g	UJ NQ
B13-8267_SED	EPA 8270C	Endrin aldehyde	0.1 ng/dry g	UJ NQ
B13-8267_SED	EPA 8270C	Endrin ketone	0.1 ng/dry g	UJ NQ
B13-8267_SED	EPA 8270C	Fluoranthene	127.9 ng/dry g	J NQ
B13-8267_SED	EPA 8270C	Fluorene	2.3 ng/dry g	J DL, NQ
B13-8267_SED	EPA 8270C	Heptachlor	0.1 ng/dry g	UJ NQ, LC
B13-8267_SED	EPA 8270C	Heptachlor epoxide	0.1 ng/dry g	UJ NQ
B13-8267_SED	EPA 8270C	Hexachlorobenzene	0.1 ng/dry g	UJ NQ
B13-8267_SED	EPA 8270C	Indeno[1,2,3-c,d]pyrene	93.3 ng/dry g	J NQ, HC
B13-8267_SED	EPA 8270C	Methoxychlor	0.1 ng/dry g	UJ NQ
B13-8267_SED	EPA 8270C	Mirex	0.1 ng/dry g	UJ NQ
B13-8267_SED	EPA 8270C	Naphthalene	1.9 ng/dry g	J DL, NQ, HD
B13-8267_SED	EPA 8270C	Oxychlorodane	0.1 ng/dry g	UJ NQ
B13-8267_SED	EPA 8270C	PCB003	0.1 ng/dry g	UJ NQ
B13-8267_SED	EPA 8270C	PCB005	0.1 ng/dry g	UJ NQ
B13-8267_SED	EPA 8270C	PCB008	0.1 ng/dry g	UJ NQ
B13-8267_SED	EPA 8270C	PCB015	0.1 ng/dry g	UJ NQ
B13-8267_SED	EPA 8270C	PCB018	0.1 ng/dry g	UJ NQ
B13-8267_SED	EPA 8270C	PCB027	0.1 ng/dry g	UJ NQ
B13-8267_SED	EPA 8270C	PCB028	0.1 ng/dry g	UJ NQ
B13-8267_SED	EPA 8270C	PCB029	0.1 ng/dry g	UJ NQ
B13-8267_SED	EPA 8270C	PCB031	0.1 ng/dry g	UJ NQ
B13-8267_SED	EPA 8270C	PCB033	0.1 ng/dry g	UJ NQ
B13-8267_SED	EPA 8270C	PCB037	0.1 ng/dry g	UJ NQ
B13-8267_SED	EPA 8270C	PCB044	0.1 ng/dry g	UJ NQ
B13-8267_SED	EPA 8270C	PCB049	0.1 ng/dry g	UJ NQ
B13-8267_SED	EPA 8270C	PCB052	0.1 ng/dry g	UJ NQ
B13-8267_SED	EPA 8270C	PCB056(060)	0.2 ng/dry g	UJ NQ
B13-8267_SED	EPA 8270C	PCB066	0.1 ng/dry g	UJ NQ
B13-8267_SED	EPA 8270C	PCB070	0.1 ng/dry g	UJ NQ
B13-8267_SED	EPA 8270C	PCB074	0.1 ng/dry g	UJ NQ
B13-8267_SED	EPA 8270C	PCB077	0.1 ng/dry g	UJ NQ
B13-8267_SED	EPA 8270C	PCB081	0.1 ng/dry g	UJ NQ
B13-8267_SED	EPA 8270C	PCB087	0.1 ng/dry g	UJ NQ
B13-8267_SED	EPA 8270C	PCB095	0.3 ng/dry g	J NQ
B13-8267_SED	EPA 8270C	PCB097	0.1 ng/dry g	UJ NQ
B13-8267_SED	EPA 8270C	PCB099	0.48 ng/dry g	J NQ
B13-8267_SED	EPA 8270C	PCB101	0.95 ng/dry g	J NQ
B13-8267_SED	EPA 8270C	PCB105	0.1 ng/dry g	UJ NQ
B13-8267_SED	EPA 8270C	PCB110	0.75 ng/dry g	J NQ
B13-8267_SED	EPA 8270C	PCB114	0.1 ng/dry g	UJ NQ
B13-8267_SED	EPA 8270C	PCB118	0.85 ng/dry g	J NQ
B13-8267_SED	EPA 8270C	PCB119	0.1 ng/dry g	UJ NQ
B13-8267_SED	EPA 8270C	PCB123	0.1 ng/dry g	UJ NQ
B13-8267_SED	EPA 8270C	PCB126	0.1 ng/dry g	UJ NQ
B13-8267_SED	EPA 8270C	PCB128	0.1 ng/dry g	UJ NQ
B13-8267_SED	EPA 8270C	PCB137	0.1 ng/dry g	UJ NQ

**TABLE 2**  
**Qualifiers Added to the Sediment Samples During Validation**  
**Regional Harbor Monitoring Program**  
**San Diego, California**

Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8267_SED	EPA 8270C	PCB138	1 ng/dry g	J NQ
B13-8267_SED	EPA 8270C	PCB141	0.1 ng/dry g	UJ NQ
B13-8267_SED	EPA 8270C	PCB149	0.41 ng/dry g	J NQ
B13-8267_SED	EPA 8270C	PCB151	0.1 ng/dry g	UJ NQ
B13-8267_SED	EPA 8270C	PCB153	0.81 ng/dry g	J NQ
B13-8267_SED	EPA 8270C	PCB156	0.1 ng/dry g	UJ NQ
B13-8267_SED	EPA 8270C	PCB157	0.1 ng/dry g	UJ NQ
B13-8267_SED	EPA 8270C	PCB158	0.1 ng/dry g	UJ NQ
B13-8267_SED	EPA 8270C	PCB167	0.1 ng/dry g	UJ NQ
B13-8267_SED	EPA 8270C	PCB168+132	0.2 ng/dry g	UJ NQ
B13-8267_SED	EPA 8270C	PCB169	0.1 ng/dry g	UJ NQ
B13-8267_SED	EPA 8270C	PCB170	0.1 ng/dry g	UJ NQ
B13-8267_SED	EPA 8270C	PCB174	0.1 ng/dry g	UJ NQ
B13-8267_SED	EPA 8270C	PCB177	0.1 ng/dry g	UJ NQ
B13-8267_SED	EPA 8270C	PCB180	0.1 ng/dry g	UJ NQ
B13-8267_SED	EPA 8270C	PCB183	0.1 ng/dry g	UJ NQ
B13-8267_SED	EPA 8270C	PCB187	0.1 ng/dry g	UJ NQ
B13-8267_SED	EPA 8270C	PCB189	0.1 ng/dry g	UJ NQ
B13-8267_SED	EPA 8270C	PCB194	0.1 ng/dry g	UJ NQ
B13-8267_SED	EPA 8270C	PCB195	0.1 ng/dry g	UJ NQ
B13-8267_SED	EPA 8270C	PCB199(200)	0.2 ng/dry g	UJ NQ
B13-8267_SED	EPA 8270C	PCB201	0.1 ng/dry g	UJ NQ
B13-8267_SED	EPA 8270C	PCB203	0.1 ng/dry g	UJ NQ
B13-8267_SED	EPA 8270C	PCB206	0.1 ng/dry g	UJ NQ
B13-8267_SED	EPA 8270C	PCB209	0.1 ng/dry g	UJ NQ
B13-8267_SED	EPA 8270C	Perthane	0.1 ng/dry g	UJ NQ
B13-8267_SED	EPA 8270C	Perylene	22.6 ng/dry g	J NQ, LV, LC
B13-8267_SED	EPA 8270C	Phenanthrene	36.1 ng/dry g	J NQ
B13-8267_SED	EPA 8270C	Pyrene	122.7 ng/dry g	J NQ
B13-8267_SED	EPA 8270C	trans-Nonachlor	0.31 ng/dry g	J NQ
B13-8267_SED	EPA 8270C-NCI	Allethrin	0.5 ng/dry g	UJ NQ
B13-8267_SED	EPA 8270C-NCI	Bifenthrin	1.19 ng/dry g	J NQ, LC
B13-8267_SED	EPA 8270C-NCI	Cyfluthrin, total	0.5 ng/dry g	UJ NQ
B13-8267_SED	EPA 8270C-NCI	Cypermethrin, total	0.5 ng/dry g	UJ NQ
B13-8267_SED	EPA 8270C-NCI	Danitol (Fenpropathrin)	0.5 ng/dry g	UJ NQ
B13-8267_SED	EPA 8270C-NCI	Deltamethrin/Tralomethrin	0.5 ng/dry g	UJ BC, NQ
B13-8267_SED	EPA 8270C-NCI	Esfenvalerate	0.5 ng/dry g	UJ NQ
B13-8267_SED	EPA 8270C-NCI	Fenvalerate	0.5 ng/dry g	UJ NQ
B13-8267_SED	EPA 8270C-NCI	Fipronil	0.5 ng/dry g	UJ NQ, LC
B13-8267_SED	EPA 8270C-NCI	Fipronil Desulfinyl	0.5 ng/dry g	UJ NQ, LC
B13-8267_SED	EPA 8270C-NCI	Fipronil Sulfide	0.5 ng/dry g	UJ NQ, LC, LL
B13-8267_SED	EPA 8270C-NCI	Fipronil Sulfone	0.5 ng/dry g	UJ BC, NQ
B13-8267_SED	EPA 8270C-NCI	Fluvalinate	0.5 ng/dry g	UJ NQ
B13-8267_SED	EPA 8270C-NCI	I-Cyhalothrin	0.5 ng/dry g	UJ NQ
B13-8267_SED	EPA 8270C-NCI	PBDE154	0.27 ng/dry g	J HP
B13-8267_SED	EPA 8270C-NCI	PBDE209	0.1 ng/dry g	UJ BC
B13-8267_SED	EPA 8270C-NCI	Permethrin, cis-	0.5 ng/dry g	UJ NQ, LV
B13-8267_SED	EPA 8270C-NCI	Permethrin, trans-	0.5 ng/dry g	UJ BC, NQ
B13-8267_SED	EPA 8270C-NCI	Prallethrin	0.5 ng/dry g	UJ NQ, LC
B13-8267_SED	EPA 8270C-NCI	Resmethrin	0.5 ng/dry g	UJ NQ, LV, LC, LL
B13-8267_SED	EPA 9060	Total Nitrogen	0.12 % Dry Weight	J NQ
B13-8267_SED	EPA 9060	Total Organic Carbon	2.59 % Dry Weight	J NQ
B13-8267_SED	Plumb, 1981 and Teryl	Acid Volatile Sulfides	173.22 mg/dry kg	J NQ
B13-8267_SED	SM 4500-NH3 D	Ammonia-N	4.22 mg/dry kg	J LC

**TABLE 2**  
**Qualifiers Added to the Sediment Samples During Validation**  
**Regional Harbor Monitoring Program**  
**San Diego, California**

Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8500_SED	EPA 6020	Aluminum	17403.3 µg/dry g	J HP
B13-8500_SED	EPA 6020	Antimony	0.409 µg/dry g	J HP
B13-8500_SED	EPA 6020	Arsenic	6.095 µg/dry g	J HP
B13-8500_SED	EPA 6020	Barium	60.913 µg/dry g	J CH
B13-8500_SED	EPA 6020	Beryllium	0.346 µg/dry g	J HP
B13-8500_SED	EPA 6020	Cadmium	0.4343 µg/dry g	J LP
B13-8500_SED	EPA 6020	Chromium	36.5939 µg/dry g	J HP
B13-8500_SED	EPA 6020	Iron (Fe)	16508.7 µg/dry g	J HP
B13-8500_SED	EPA 6020	Nickel	10.42 µg/dry g	J HP
B13-8500_SED	EPA 6020	Total Phosphorus	471.086 µg/dry g	J NQ
B13-8500_SED	EPA 8270C	1-Methylnaphthalene	2 ng/dry g	J DL
B13-8500_SED	EPA 8270C	2,3,5-Trimethylnaphthalene	3.5 ng/dry g	J DL
B13-8500_SED	EPA 8270C	2,4'-DDT	0.1 ng/dry g	UJ LC
B13-8500_SED	EPA 8270C	2,6-Dimethylnaphthalene	2.1 ng/dry g	J DL
B13-8500_SED	EPA 8270C	2-Methylnaphthalene	4.4 ng/dry g	J DL
B13-8500_SED	EPA 8270C	4,4'-DDMU	0.1 ng/dry g	UJ BC
B13-8500_SED	EPA 8270C	4,4'-DDT	0.1 ng/dry g	UJ BC, LC
B13-8500_SED	EPA 8270C	Acenaphthene	4.1 ng/dry g	J DL
B13-8500_SED	EPA 8270C	Acenaphthylene	4.8 ng/dry g	J DL
B13-8500_SED	EPA 8270C	Aroclor 1016	2 ng/dry g	UJ NQ
B13-8500_SED	EPA 8270C	Aroclor 1221	2 ng/dry g	UJ NQ
B13-8500_SED	EPA 8270C	Aroclor 1232	2 ng/dry g	UJ NQ
B13-8500_SED	EPA 8270C	Aroclor 1242	2 ng/dry g	UJ NQ
B13-8500_SED	EPA 8270C	Aroclor 1248	2 ng/dry g	UJ NQ
B13-8500_SED	EPA 8270C	Aroclor 1254	2 ng/dry g	UJ NQ
B13-8500_SED	EPA 8270C	Aroclor 1260	162.7 ng/dry g	J NQ
B13-8500_SED	EPA 8270C	Aroclor 1262	2 ng/dry g	UJ NQ
B13-8500_SED	EPA 8270C	Aroclor 1268	2 ng/dry g	UJ NQ
B13-8500_SED	EPA 8270C	Benz[a]anthracene	81.5 ng/dry g	J CH
B13-8500_SED	EPA 8270C	Benzo[b]fluoranthene	110.6 ng/dry g	J BC, CH
B13-8500_SED	EPA 8270C	Benzo[e]pyrene	83.9 ng/dry g	J CH
B13-8500_SED	EPA 8270C	Benzo[k]fluoranthene	94.7 ng/dry g	J LC
B13-8500_SED	EPA 8270C	BHC-beta	0.1 ng/dry g	UJ BC
B13-8500_SED	EPA 8270C	Chrysene	122.3 ng/dry g	J CH
B13-8500_SED	EPA 8270C	Dibenz[a,h]anthracene	43.8 ng/dry g	J CH
B13-8500_SED	EPA 8270C	Dicofol	0.1 ng/dry g	UJ BC, LC
B13-8500_SED	EPA 8270C	Endosulfan-II	0.1 ng/dry g	UJ LC
B13-8500_SED	EPA 8270C	Heptachlor	0.1 ng/dry g	UJ LC
B13-8500_SED	EPA 8270C	Indeno[1,2,3-c,d]pyrene	204.6 ng/dry g	J CH
B13-8500_SED	EPA 8270C	Methoxychlor	0.1 ng/dry g	UJ BC, LC
B13-8500_SED	EPA 8270C	PCB008	0.69 ng/dry g	J BC, LC
B13-8500_SED	EPA 8270C	PCB018	4.82 ng/dry g	J CH
B13-8500_SED	EPA 8270C	PCB028	4.93 ng/dry g	J CH
B13-8500_SED	EPA 8270C	PCB044	5.41 ng/dry g	J CH
B13-8500_SED	EPA 8270C	PCB049	5.49 ng/dry g	J CH
B13-8500_SED	EPA 8270C	PCB052	9.54 ng/dry g	J CH
B13-8500_SED	EPA 8270C	PCB066	9.28 ng/dry g	J CH
B13-8500_SED	EPA 8270C	PCB070	7.64 ng/dry g	J CH
B13-8500_SED	EPA 8270C	PCB074	3.77 ng/dry g	J CH
B13-8500_SED	EPA 8270C	PCB087	1.87 ng/dry g	J CH
B13-8500_SED	EPA 8270C	PCB099	4.07 ng/dry g	J CH
B13-8500_SED	EPA 8270C	PCB101	8.36 ng/dry g	J CH
B13-8500_SED	EPA 8270C	PCB105	2.55 ng/dry g	J BC
B13-8500_SED	EPA 8270C	PCB110	6.81 ng/dry g	J CH

**TABLE 2**  
**Qualifiers Added to the Sediment Samples During Validation**  
**Regional Harbor Monitoring Program**  
**San Diego, California**

Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8500_SED	EPA 8270C	PCB118	5.11 ng/dry g	J CH
B13-8500_SED	EPA 8270C	PCB126	0.1 ng/dry g	UJ BC
B13-8500_SED	EPA 8270C	PCB128	0.1 ng/dry g	UJ LV
B13-8500_SED	EPA 8270C	PCB149	3.93 ng/dry g	J CH
B13-8500_SED	EPA 8270C	PCB151	1.4 ng/dry g	J CH
B13-8500_SED	EPA 8270C	PCB153	6.85 ng/dry g	J BC
B13-8500_SED	EPA 8270C	PCB156	0.1 ng/dry g	UJ BC
B13-8500_SED	EPA 8270C	PCB168+132	1.7 ng/dry g	J CH
B13-8500_SED	EPA 8270C	PCB169	0.1 ng/dry g	UJ BC
B13-8500_SED	EPA 8270C	PCB187	2.78 ng/dry g	J CH
B13-8500_SED	EPA 8270C	PCB209	0.49 ng/dry g	J LV, LC
B13-8500_SED	EPA 8270C	Perthane	0.1 ng/dry g	UJ BC
B13-8500_SED	EPA 8270C	Perylene	18.6 ng/dry g	J CH
B13-8500_SED	EPA 8270C	Pyrene	213.3 ng/dry g	J LC
B13-8500_SED	EPA 8270C-NCI	Deltamethrin/Tralomethrin	0.5 ng/dry g	UJ LV
B13-8500_SED	EPA 8270C-NCI	I-Cyhalothrin	0.5 ng/dry g	UJ LV
B13-8500_SED	EPA 8270C-NCI	PBDE138	0.1 ng/dry g	UJ LC
B13-8500_SED	EPA 8270C-NCI	PBDE209	23.68 ng/dry g	J LC
B13-8500_SED	EPA 8270C-NCI	Permethrin, cis-	0.5 ng/dry g	UJ LV
B13-8500_SED	EPA 8270C-NCI	Resmethrin	0.5 ng/dry g	UJ LC

**TABLE 2**  
**Qualifiers Added to the Sediment Samples During Validation**  
**Regional Harbor Monitoring Program**  
**San Diego, California**

Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8500_SED	EPA 9060	Total Nitrogen	0.35 % Dry Weight	J NQ
B13-8500_SED	EPA 9060	Total Organic Carbon	1.64 % Dry Weight	J NQ
B13-8500_SED	Plumb, 1981 and Teryl	Acid Volatile Sulfides	32.27 mg/dry kg	J NQ

**Notes:**

µg/g = micrograms per gram

µmol/dry gram = micromoles per dry gram

mg/dry kg = milligrams per dry kilogram

ng/dry g = nanograms per dry gram

PBDE = polybrominated biphenyl ether

PCB = polychlorinated biphenyl

**Qualifiers:**

J = The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

R = The sample result is rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

U = The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

UJ = The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

**Reason Codes:**

BC = The initial calibration (ICAL) curve did not meet method-specified criteria.

CH = High continuing calibration verification (CCV) recovery. Analytical result may be biased high.

DL = The analyte concentration was between the method detection limit (MDL) and the reporting limit (RL).

HD = Potential analytical imprecision.

HL = High LCS recovery. Analytical result may be biased high.

HM = High MS recovery. Analytical result may be biased high.

HP = High certified reference material (CRM) recovery. Analytical result may be biased high.

HV = High initial calibration verification (ICV) recovery. Analytical result may be biased high.

LC = Low CCV recovery. Analytical result may be biased low.

LL = Low LCS recovery. Analytical result may be biased low.

LM = Low MS recovery. Analytical result may be biased low.

LP = Low CRM recovery. Analytical result may be biased low.

LS = Low surrogate recovery. Analytical result may be biased low.

LV = Low ICV recovery. Analytical result may be biased low.

NC = Calibration verification standard concentrations were outside the calibration range.

NQ = There is a lack of QC for this analyte.

RB = The analyte was detected in the sample and its associated equipment blank and the concentration detected in the sample is less than five times the concentration detected in the blank.



**TABLE 3**  
**Qualifiers Added to the Water Samples During Validation**  
**Regional Harbor Monitoring Program**  
**San Diego, California**

Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8013	EPA 1640	Aluminum, Dissolved	6 µg/L	UJ LC
B13-8013	EPA 1640	Manganese, Dissolved	16.48 µg/L	J LC
B13-8013	EPA 1640	Thallium, Dissolved	0.008 µg/L	J DL
B13-8013	EPA 1640	Titanium, Dissolved	7.376 µg/L	J LC
B13-8013	EPA 1640	Antimony, Dissolved	0.22 µg/L	J LC, TD
B13-8013	EPA 1640	Beryllium, Dissolved	0.01 µg/L	UJ LC
B13-8013	EPA 1640	Chromium, Dissolved	0.0678 µg/L	J LC
B13-8013	EPA 1640	Cobalt, Dissolved	0.116 µg/L	J LC
B13-8013	EPA 1640	Vanadium, Dissolved	3.29 µg/L	J LC
B13-8013	EPA 1640	Zinc, Dissolved	17.5182 µg/L	J LC
B13-8013	EPA 1640	Aluminum, Total	751.7 µg/L	J LC
B13-8013	EPA 1640	Manganese, Total	26.15 µg/L	J LC
B13-8013	EPA 1640	Titanium, Total	45.808 µg/L	J LC
B13-8013	EPA 1640	Antimony, Total	0.11 µg/L	J LC, TD
B13-8013	EPA 1640	Beryllium, Total	0.016 µg/L	J LC
B13-8013	EPA 1640	Chromium, Total	1.091 µg/L	J LC
B13-8013	EPA 1640	Cobalt, Total	0.286 µg/L	J LC
B13-8013	EPA 1640	Vanadium, Total	4.91 µg/L	J LC
B13-8013	EPA 1640	Zinc, Total	20.1248 µg/L	J LC
B13-8013	EPA 1640	Iron (Fe), Dissolved	0.8 µg/L	J DL
B13-8013	EPA 1640	Lead, Dissolved	0.035 µg/L	J HD
B13-8013	EPA 1640	Copper, Dissolved	5.211 µg/L	J HD
B13-8013	EPA 1640	Selenium, Dissolved	0.02 µg/L	J CH
B13-8013	EPA 1640	Selenium, Total	0.028 µg/L	J CH
B13-8013	EPA 415.3	Total Organic Carbon	1.1 mg/L	J DL, NQ
B13-8013	EPA 415.3	Dissolved Organic Carbon	1.6 mg/L	J DL, NQ
B13-8013	EPA 625	Anthracene	1.3 ng/L	J DL
B13-8013	EPA 625	Pyrene	2.3 ng/L	J DL
B13-8013	EPA 625	Benzo[e]pyrene	1.3 ng/L	J DL, LC
B13-8013	EPA 625	Benzo[b]fluoranthene	1.6 ng/L	J DL, LC
B13-8013	EPA 625	Fluoranthene	3.1 ng/L	J DL
B13-8013	EPA 625	Benzo[k]fluoranthene	1.1 ng/L	J DL
B13-8013	EPA 625	Acenaphthylene	4.7 ng/L	J DL
B13-8013	EPA 625	Chrysene	1.4 ng/L	J DL
B13-8013	EPA 625	Benzo[a]pyrene	1.6 ng/L	J DL, LC
B13-8013	EPA 625	Benz[a]anthracene	3 ng/L	J DL
B13-8013	EPA 625	2,6-Dimethylnaphthalene	1.2 ng/L	J DL
B13-8013	EPA 625	Phenanthrene	1.5 ng/L	J DL
B13-8013	EPA 625	1-Methylnaphthalene	1 ng/L	J DL, LC
B13-8013	EPA 625	Naphthalene	1.7 ng/L	J DL, LC
B13-8013	EPA 625	2-Methylnaphthalene	1.3 ng/L	J DL, LC
B13-8013	SM 5540-C	Methylene Blue Active Substance	0.042 mg/L	J LV, HD
B13-8014	EPA 1640	Aluminum, Dissolved	6 µg/L	UJ LC
B13-8014	EPA 1640	Manganese, Dissolved	15.8 µg/L	J LC
B13-8014	EPA 1640	Thallium, Dissolved	0.007 µg/L	J DL
B13-8014	EPA 1640	Titanium, Dissolved	8.251 µg/L	J LC
B13-8014	EPA 1640	Antimony, Dissolved	0.22 µg/L	J LC, TD
B13-8014	EPA 1640	Beryllium, Dissolved	0.01 µg/L	UJ LC
B13-8014	EPA 1640	Chromium, Dissolved	0.1209 µg/L	J LC
B13-8014	EPA 1640	Cobalt, Dissolved	0.085 µg/L	J LC
B13-8014	EPA 1640	Vanadium, Dissolved	3.05 µg/L	J LC
B13-8014	EPA 1640	Zinc, Dissolved	9.2379 µg/L	J LC
B13-8014	EPA 1640	Aluminum, Total	178.9 µg/L	J LC
B13-8014	EPA 1640	Manganese, Total	18.81 µg/L	J LC
B13-8014	EPA 1640	Tin, Total	0.009 µg/L	J DL
B13-8014	EPA 1640	Titanium, Total	15.451 µg/L	J LC
B13-8014	EPA 1640	Antimony, Total	0.12 µg/L	J LC, TD
B13-8014	EPA 1640	Beryllium, Total	0.006 µg/L	J DL, LC

**TABLE 3**  
**Qualifiers Added to the Water Samples During Validation**  
**Regional Harbor Monitoring Program**  
**San Diego, California**

Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8014	EPA 1640	Chromium, Total	0.3736 µg/L	J LC
B13-8014	EPA 1640	Cobalt, Total	0.128 µg/L	J LC
B13-8014	EPA 1640	Vanadium, Total	3.47 µg/L	J LC
B13-8014	EPA 1640	Zinc, Total	10.4585 µg/L	J LC
B13-8014	EPA 1640	Iron (Fe), Dissolved	0.7 µg/L	J DL
B13-8014	EPA 1640	Selenium, Dissolved	0.028 µg/L	J CH
B13-8014	EPA 1640	Selenium, Total	0.026 µg/L	J CH
B13-8014	EPA 200.8	Barium, Dissolved	13.64 µg/L	J TD
B13-8014	EPA 200.8	Barium, Total	10.95 µg/L	J TD
B13-8014	EPA 415.3	Total Organic Carbon	1.3 mg/L	J DL, NQ
B13-8014	EPA 415.3	Dissolved Organic Carbon	1.8 mg/L	J DL, NQ
B13-8014	EPA 625	Pyrene	1 ng/L	J DL
B13-8014	EPA 625	Benzo[e]pyrene	5 ng/L	UJ LC
B13-8014	EPA 625	Benzo[b]fluoranthene	5 ng/L	UJ LC
B13-8014	EPA 625	Fluoranthene	1 ng/L	J DL
B13-8014	EPA 625	Benzo[a]pyrene	5 ng/L	UJ LC
B13-8014	EPA 625	Benz[a]anthracene	2 ng/L	J DL
B13-8014	EPA 625	1-Methylnaphthalene	5 ng/L	UJ LC
B13-8014	EPA 625	Naphthalene	1.3 ng/L	J DL, LC
B13-8014	EPA 625	2-Methylnaphthalene	5 ng/L	UJ LC
B13-8014	SM 4500-NO3 E	Nitrate-N	0.01 mg/L	J DL
B13-8014	SM 5540-C	Methylene Blue Active Substance	0.036 mg/L	J LV, HD
B13-8017	EPA 1640	Aluminum, Dissolved	6 µg/L	UJ LC
B13-8017	EPA 1640	Silver, Dissolved	0.05 µg/L	U FB, RB
B13-8017	EPA 1640	Thallium, Dissolved	0.006 µg/L	J DL
B13-8017	EPA 1640	Titanium, Dissolved	14.309 µg/L	J LC
B13-8017	EPA 1640	Arsenic, Dissolved	1.223 µg/L	J LC
B13-8017	EPA 1640	Beryllium, Dissolved	0.01 µg/L	UJ LC
B13-8017	EPA 1640	Chromium, Dissolved	0.1551 µg/L	J LC
B13-8017	EPA 1640	Vanadium, Dissolved	3.21 µg/L	J LC
B13-8017	EPA 1640	Aluminum, Total	322.1 µg/L	J LC
B13-8017	EPA 1640	Silver, Total	0.06 µg/L	U FB, RB
B13-8017	EPA 1640	Thallium, Total	0.006 µg/L	J DL
B13-8017	EPA 1640	Tin, Total	0.057 µg/L	U RB
B13-8017	EPA 1640	Titanium, Total	26.188 µg/L	J LC
B13-8017	EPA 1640	Arsenic, Total	1.356 µg/L	J LC
B13-8017	EPA 1640	Beryllium, Total	0.009 µg/L	J DL, LC
B13-8017	EPA 1640	Chromium, Total	0.6143 µg/L	J LC
B13-8017	EPA 1640	Vanadium, Total	3.73 µg/L	J LC
B13-8017	EPA 1640	Iron (Fe), Dissolved	1 µg/L	UJ LC
B13-8017	EPA 1640	Nickel, Dissolved	0.6249 µg/L	J LC
B13-8017	EPA 1640	Copper, Dissolved	2.88 µg/L	J LC
B13-8017	EPA 1640	Selenium, Dissolved	0.032 µg/L	J LC
B13-8017	EPA 1640	Iron (Fe), Total	160.9 µg/L	J LC
B13-8017	EPA 1640	Nickel, Total	0.799 µg/L	J LC
B13-8017	EPA 1640	Copper, Total	3.499 µg/L	J LC
B13-8017	EPA 1640	Selenium, Total	0.038 µg/L	J LC
B13-8017	EPA 415.3	Dissolved Organic Carbon	0.80 mg/L	J DL, NQ
B13-8017	EPA 415.3	Total Organic Carbon	1.1 mg/L	J DL, NQ
B13-8017	EPA 625	Anthracene	1.7 ng/L	J DL
B13-8017	EPA 625	Pyrene	1.6 ng/L	J DL, HV, LC
B13-8017	EPA 625	Benzo[e]pyrene	5 ng/L	UJ LC
B13-8017	EPA 625	Indeno[1,2,3-c,d]pyrene	5 ng/L	UJ LC
B13-8017	EPA 625	Perylene	5 ng/L	UJ LC
B13-8017	EPA 625	Benzo[b]fluoranthene	5 ng/L	UJ LC
B13-8017	EPA 625	Fluoranthene	2.2 ng/L	J DL, HV, LC
B13-8017	EPA 625	Benzo[k]fluoranthene	5 ng/L	UJ LC
B13-8017	EPA 625	Chrysene	1.7 ng/L	J DL, LC

**TABLE 3**  
**Qualifiers Added to the Water Samples During Validation**  
**Regional Harbor Monitoring Program**  
**San Diego, California**

Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8017	EPA 625	Benzo[a]pyrene	5 ng/L	UJ BC, LC
B13-8017	EPA 625	Dibenz[a,h]anthracene	5 ng/L	UJ LC
B13-8017	EPA 625	Benz[a]anthracene	2.1 ng/L	J DL, LC
B13-8017	EPA 625	2,6-Dimethylnaphthalene	5 ng/L	UJ LV
B13-8017	EPA 625	Phenanthrene	1.7 ng/L	J DL
B13-8017	EPA 625	1-Methylnaphthalene	5 ng/L	UJ LV, LL
B13-8017	EPA 625	Naphthalene	1.5 ng/L	J DL, BC, LV, LL
B13-8017	EPA 625	2-Methylnaphthalene	1.7 ng/L	J DL, LV, LL
B13-8017	EPA 625	Biphenyl	5 ng/L	UJ LV
B13-8017	SM 5540-C	Methylene Blue Active Substance	0.007 mg/L	J DL, LV
B13-8018	EPA 1640	Aluminum, Dissolved	3.2 µg/L	J DL
B13-8018	EPA 1640	Beryllium, Dissolved	0.01 µg/L	UJ LC
B13-8018	EPA 1640	Chromium, Dissolved	0.0773 µg/L	J HD
B13-8018	EPA 1640	Silver, Total	0.01 µg/L	J DL
B13-8018	EPA 1640	Beryllium, Total	0.01 µg/L	UJ LC
B13-8018	EPA 1640	Selenium, Dissolved	0.02 µg/L	J HD
B13-8018	EPA 1640	Selenium, Total	0.032 µg/L	J HD
B13-8018	EPA 200.8	Barium, Dissolved	11.85 µg/L	J CH
B13-8018	EPA 200.8	Barium, Total	12.09 µg/L	J CH
B13-8018	EPA 415.3	Total Organic Carbon	1.2 mg/L	J DL, NQ
B13-8018	EPA 415.3	Dissolved Organic Carbon	1.3 mg/L	J DL, NQ
B13-8018	EPA 625	Anthracene	5 ng/L	UJ NQ
B13-8018	EPA 625	Pyrene	5 ng/L	UJ NQ
B13-8018	EPA 625	Dibenzothiophene	5 ng/L	UJ NQ
B13-8018	EPA 625	Benzo[g,h,i]perylene	5 ng/L	UJ NQ
B13-8018	EPA 625	Benzo[e]pyrene	5 ng/L	UJ NQ
B13-8018	EPA 625	Indeno[1,2,3-c,d]pyrene	5 ng/L	UJ NQ
B13-8018	EPA 625	Perylene	5 ng/L	UJ NQ
B13-8018	EPA 625	Benzo[b]fluoranthene	5 ng/L	UJ NQ
B13-8018	EPA 625	Fluoranthene	1.7 ng/L	J DL, NQ
B13-8018	EPA 625	Benzo[k]fluoranthene	5 ng/L	UJ NQ
B13-8018	EPA 625	Acenaphthylene	5 ng/L	UJ NQ
B13-8018	EPA 625	Chrysene	5 ng/L	UJ NQ
B13-8018	EPA 625	2,3,5-Trimethylnaphthalene	5 ng/L	UJ NQ
B13-8018	EPA 625	Benzo[a]pyrene	5 ng/L	UJ NQ
B13-8018	EPA 625	Dibenz[a,h]anthracene	5 ng/L	UJ NQ
B13-8018	EPA 625	Benz[a]anthracene	5 ng/L	UJ NQ
B13-8018	EPA 625	2,6-Dimethylnaphthalene	5 ng/L	UJ NQ
B13-8018	EPA 625	1-Methylphenanthrene	5 ng/L	UJ NQ
B13-8018	EPA 625	Acenaphthene	5 ng/L	UJ NQ
B13-8018	EPA 625	Phenanthrene	1.4 ng/L	J DL, NQ
B13-8018	EPA 625	Fluorene	5 ng/L	UJ NQ
B13-8018	EPA 625	1-Methylnaphthalene	5 ng/L	UJ NQ
B13-8018	EPA 625	Naphthalene	1.8 ng/L	J DL, NQ
B13-8018	EPA 625	2-Methylnaphthalene	1.3 ng/L	J DL, NQ
B13-8018	EPA 625	Biphenyl	5 ng/L	UJ NQ
B13-8018	SM 5540-C	Methylene Blue Active Substance	0.051 mg/L	J LC, LM
B13-8020	EPA 1640	Aluminum, Dissolved	6 µg/L	UJ LC
B13-8020	EPA 1640	Silver, Dissolved	0.04 µg/L	U FB, RB
B13-8020	EPA 1640	Thallium, Dissolved	0.007 µg/L	J DL
B13-8020	EPA 1640	Tin, Dissolved	0.034 µg/L	U RB
B13-8020	EPA 1640	Titanium, Dissolved	13.984 µg/L	J LC
B13-8020	EPA 1640	Arsenic, Dissolved	1.135 µg/L	J LC
B13-8020	EPA 1640	Beryllium, Dissolved	0.01 µg/L	UJ LC
B13-8020	EPA 1640	Chromium, Dissolved	0.1078 µg/L	J LC
B13-8020	EPA 1640	Vanadium, Dissolved	3.08 µg/L	J LC
B13-8020	EPA 1640	Aluminum, Total	386.3 µg/L	J LC
B13-8020	EPA 1640	Silver, Total	0.07 µg/L	U FB, RB

**TABLE 3**  
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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8020	EPA 1640	Thallium, Total	0.008 µg/L	J DL
B13-8020	EPA 1640	Tin, Total	0.051 µg/L	U RB
B13-8020	EPA 1640	Titanium, Total	35.273 µg/L	J LC
B13-8020	EPA 1640	Arsenic, Total	1.325 µg/L	J LC
B13-8020	EPA 1640	Beryllium, Total	0.009 µg/L	J DL, LC
B13-8020	EPA 1640	Chromium, Total	0.7637 µg/L	J LC
B13-8020	EPA 1640	Vanadium, Total	3.89 µg/L	J LC
B13-8020	EPA 1640	Iron (Fe), Dissolved	1 µg/L	UJ LC
B13-8020	EPA 1640	Nickel, Dissolved	0.6418 µg/L	J LC
B13-8020	EPA 1640	Antimony, Dissolved	0.18 µg/L	J TD
B13-8020	EPA 1640	Copper, Dissolved	2.863 µg/L	J LC
B13-8020	EPA 1640	Selenium, Dissolved	0.034 µg/L	J LC
B13-8020	EPA 1640	Iron (Fe), Total	160.9 µg/L	J LC
B13-8020	EPA 1640	Nickel, Total	0.8034 µg/L	J LC
B13-8020	EPA 1640	Antimony, Total	0.14 µg/L	J TD
B13-8020	EPA 1640	Copper, Total	3.652 µg/L	J LC
B13-8020	EPA 1640	Selenium, Total	0.03 µg/L	J LC
B13-8020	EPA 415.3	Dissolved Organic Carbon	0.86 mg/L	J DL, NQ
B13-8020	EPA 415.3	Total Organic Carbon	0.98 mg/L	J DL, NQ
B13-8020	EPA 625	Anthracene	2.2 ng/L	J DL
B13-8020	EPA 625	Pyrene	2.2 ng/L	J DL, HV, LC
B13-8020	EPA 625	Benzo[e]pyrene	1.2 ng/L	J DL, LC
B13-8020	EPA 625	Indeno[1,2,3-c,d]pyrene	5 ng/L	UJ LC
B13-8020	EPA 625	Perylene	5 ng/L	UJ LC
B13-8020	EPA 625	Benzo[b]fluoranthene	2.2 ng/L	J DL, HV, LC
B13-8020	EPA 625	Fluoranthene	4.7 ng/L	J DL, HV, LC
B13-8020	EPA 625	Benzo[k]fluoranthene	1.5 ng/L	J DL, LC
B13-8020	EPA 625	Chrysene	1.7 ng/L	J DL, LC
B13-8020	EPA 625	Benzo[a]pyrene	5 ng/L	UJ BC, LC
B13-8020	EPA 625	Dibenz[a,h]anthracene	5 ng/L	UJ LC
B13-8020	EPA 625	Benz[a]anthracene	1.1 ng/L	J DL, LC
B13-8020	EPA 625	2,6-Dimethylnaphthalene	5 ng/L	UJ LV
B13-8020	EPA 625	Acenaphthene	2 ng/L	J DL
B13-8020	EPA 625	Phenanthrene	2.9 ng/L	J DL
B13-8020	EPA 625	Fluorene	1.6 ng/L	J DL
B13-8020	EPA 625	1-Methylnaphthalene	5 ng/L	UJ LV, LL
B13-8020	EPA 625	Naphthalene	1 ng/L	J DL, BC, LV, LL
B13-8020	EPA 625	2-Methylnaphthalene	5 ng/L	UJ LV, LL
B13-8020	EPA 625	Biphenyl	5 ng/L	UJ LV
B13-8020	SM 5540-C	Methylene Blue Active Substance	0.019 mg/L	J DL, LV
B13-8028	EPA 1640	Aluminum, Dissolved	6 µg/L	UJ LC
B13-8028	EPA 1640	Manganese, Dissolved	11.45 µg/L	J LC
B13-8028	EPA 1640	Thallium, Dissolved	0.008 µg/L	J DL
B13-8028	EPA 1640	Tin, Dissolved	0.02 µg/L	J TD
B13-8028	EPA 1640	Titanium, Dissolved	9.161 µg/L	J LC
B13-8028	EPA 1640	Antimony, Dissolved	0.24 µg/L	J LC, TD
B13-8028	EPA 1640	Beryllium, Dissolved	0.01 µg/L	UJ LC
B13-8028	EPA 1640	Chromium, Dissolved	0.0789 µg/L	J LC
B13-8028	EPA 1640	Cobalt, Dissolved	0.094 µg/L	J LC
B13-8028	EPA 1640	Vanadium, Dissolved	2.9 µg/L	J LC
B13-8028	EPA 1640	Zinc, Dissolved	7.1473 µg/L	J LC
B13-8028	EPA 1640	Aluminum, Total	77.9 µg/L	J LC
B13-8028	EPA 1640	Manganese, Total	13.42 µg/L	J LC
B13-8028	EPA 1640	Tin, Total	0.01 µg/L	J TD
B13-8028	EPA 1640	Titanium, Total	10.515 µg/L	J LC
B13-8028	EPA 1640	Antimony, Total	0.09 µg/L	J LC, TD
B13-8028	EPA 1640	Beryllium, Total	0.01 µg/L	UJ LC
B13-8028	EPA 1640	Chromium, Total	0.2349 µg/L	J LC

**TABLE 3**  
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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8028	EPA 1640	Cobalt, Total	0.108 µg/L	J LC
B13-8028	EPA 1640	Vanadium, Total	2.98 µg/L	J LC
B13-8028	EPA 1640	Zinc, Total	7.3981 µg/L	J LC
B13-8028	EPA 1640	Iron (Fe), Dissolved	0.6 µg/L	J DL
B13-8028	EPA 1640	Selenium, Dissolved	0.021 µg/L	J CH
B13-8028	EPA 1640	Selenium, Total	0.025 µg/L	J CH
B13-8028	EPA 415.3	Total Organic Carbon	1.4 mg/L	J DL, NQ
B13-8028	EPA 415.3	Dissolved Organic Carbon	1.8 mg/L	J DL, NQ
B13-8028	EPA 625	Pyrene	1.1 ng/L	J DL
B13-8028	EPA 625	Benzo[e]pyrene	5 ng/L	UJ LC
B13-8028	EPA 625	Benzo[b]fluoranthene	5 ng/L	UJ LC
B13-8028	EPA 625	Fluoranthene	2.2 ng/L	J DL
B13-8028	EPA 625	Benzo[a]pyrene	5 ng/L	UJ LC
B13-8028	EPA 625	Benz[a]anthracene	2 ng/L	J DL
B13-8028	EPA 625	Acenaphthene	1.1 ng/L	J DL
B13-8028	EPA 625	Phenanthrene	1.5 ng/L	J DL
B13-8028	EPA 625	1-Methylnaphthalene	5 ng/L	UJ LC
B13-8028	EPA 625	Naphthalene	1.5 ng/L	J DL, LC
B13-8028	EPA 625	2-Methylnaphthalene	1.3 ng/L	J DL, LC
B13-8028	SM 5540-C	Methylene Blue Active Substance	0.046 mg/L	J LV, HD
B13-8029	EPA 1640	Aluminum, Dissolved	6 µg/L	UJ LC
B13-8029	EPA 1640	Silver, Dissolved	0.05 µg/L	U FB, RB
B13-8029	EPA 1640	Tin, Dissolved	0.01 µg/L	U RB
B13-8029	EPA 1640	Titanium, Dissolved	11.063 µg/L	J LC
B13-8029	EPA 1640	Arsenic, Dissolved	1.216 µg/L	J LC
B13-8029	EPA 1640	Beryllium, Dissolved	0.01 µg/L	UJ LC
B13-8029	EPA 1640	Chromium, Dissolved	0.0885 µg/L	J LC
B13-8029	EPA 1640	Vanadium, Dissolved	3.17 µg/L	J LC
B13-8029	EPA 1640	Aluminum, Total	145.2 µg/L	J LC
B13-8029	EPA 1640	Silver, Total	0.06 µg/L	U FB, RB
B13-8029	EPA 1640	Thallium, Total	0.005 µg/L	J DL
B13-8029	EPA 1640	Tin, Total	0.026 µg/L	U RB
B13-8029	EPA 1640	Titanium, Total	16.958 µg/L	J LC
B13-8029	EPA 1640	Arsenic, Total	1.213 µg/L	J LC
B13-8029	EPA 1640	Beryllium, Total	0.01 µg/L	UJ LC
B13-8029	EPA 1640	Chromium, Total	0.361 µg/L	UJ FB, LC
B13-8029	EPA 1640	Vanadium, Total	3.44 µg/L	J LC
B13-8029	EPA 1640	Iron (Fe), Dissolved	1 µg/L	UJ LC
B13-8029	EPA 1640	Nickel, Dissolved	0.6523 µg/L	J LC
B13-8029	EPA 1640	Copper, Dissolved	2.739 µg/L	J LC
B13-8029	EPA 1640	Selenium, Dissolved	0.026 µg/L	J LC
B13-8029	EPA 1640	Iron (Fe), Total	69.3 µg/L	J LC
B13-8029	EPA 1640	Nickel, Total	0.6954 µg/L	J LC
B13-8029	EPA 1640	Copper, Total	3.103 µg/L	J LC
B13-8029	EPA 1640	Selenium, Total	0.031 µg/L	J LC
B13-8029	EPA 415.3	Dissolved Organic Carbon	0.72 mg/L	J DL, NQ
B13-8029	EPA 415.3	Total Organic Carbon	0.97 mg/L	J DL, NQ
B13-8029	EPA 625	Anthracene	2 ng/L	J DL
B13-8029	EPA 625	Pyrene	1.6 ng/L	J DL, HV, LC
B13-8029	EPA 625	Benzo[e]pyrene	5 ng/L	UJ LC
B13-8029	EPA 625	Indeno[1,2,3-c,d]pyrene	5 ng/L	UJ LC
B13-8029	EPA 625	Perylene	5 ng/L	UJ LC
B13-8029	EPA 625	Benzo[b]fluoranthene	5 ng/L	UJ LC
B13-8029	EPA 625	Fluoranthene	4 ng/L	J DL, HV, LC
B13-8029	EPA 625	Benzo[k]fluoranthene	5 ng/L	UJ LC
B13-8029	EPA 625	Chrysene	5 ng/L	UJ LC
B13-8029	EPA 625	Benzo[a]pyrene	5 ng/L	UJ BC, LC
B13-8029	EPA 625	Dibenz[a,h]anthracene	5 ng/L	UJ LC

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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8029	EPA 625	Benz[a]anthracene	5 ng/L	UJ LC
B13-8029	EPA 625	2,6-Dimethylnaphthalene	5 ng/L	UJ LV
B13-8029	EPA 625	Acenaphthene	1.9 ng/L	J DL
B13-8029	EPA 625	Phenanthrene	2.4 ng/L	J DL
B13-8029	EPA 625	Fluorene	1.3 ng/L	J DL
B13-8029	EPA 625	1-Methylnaphthalene	5 ng/L	UJ LV, LL
B13-8029	EPA 625	Naphthalene	1.2 ng/L	J DL, BC, LV, LL
B13-8029	EPA 625	2-Methylnaphthalene	1.8 ng/L	J DL, LV, LL
B13-8029	EPA 625	Biphenyl	5 ng/L	UJ LV
B13-8029	SM 4500-NH3 D	Ammonia-N	0.04 mg/L	J DL
B13-8029	SM 4500-NO3 E	Nitrate-N	0.02 mg/L	J DL
B13-8029	SM 5540-C	Methylene Blue Active Substance	0.011 mg/L	J DL, LV
B13-8030	EPA 1640	Aluminum, Dissolved	6 µg/L	UJ LC
B13-8030	EPA 1640	Manganese, Dissolved	11.69 µg/L	J LC
B13-8030	EPA 1640	Thallium, Dissolved	0.008 µg/L	J DL
B13-8030	EPA 1640	Titanium, Dissolved	9.491 µg/L	J LC
B13-8030	EPA 1640	Antimony, Dissolved	0.19 µg/L	J LC, TD
B13-8030	EPA 1640	Beryllium, Dissolved	0.01 µg/L	UJ LC
B13-8030	EPA 1640	Chromium, Dissolved	0.0785 µg/L	J LC
B13-8030	EPA 1640	Cobalt, Dissolved	0.097 µg/L	J LC
B13-8030	EPA 1640	Vanadium, Dissolved	2.85 µg/L	J LC
B13-8030	EPA 1640	Zinc, Dissolved	6.6744 µg/L	J LC
B13-8030	EPA 1640	Aluminum, Total	68.2 µg/L	J LC
B13-8030	EPA 1640	Manganese, Total	13.79 µg/L	J LC
B13-8030	EPA 1640	Titanium, Total	10.246 µg/L	J LC
B13-8030	EPA 1640	Antimony, Total	0.12 µg/L	J LC, TD
B13-8030	EPA 1640	Beryllium, Total	0.01 µg/L	UJ LC
B13-8030	EPA 1640	Chromium, Total	0.225 µg/L	J LC
B13-8030	EPA 1640	Cobalt, Total	0.112 µg/L	J LC
B13-8030	EPA 1640	Vanadium, Total	2.94 µg/L	J LC
B13-8030	EPA 1640	Zinc, Total	7.9199 µg/L	J LC
B13-8030	EPA 1640	Iron (Fe), Dissolved	0.6 µg/L	J DL
B13-8030	EPA 1640	Selenium, Dissolved	0.023 µg/L	J CH
B13-8030	EPA 1640	Selenium, Total	0.025 µg/L	J CH
B13-8030	EPA 415.3	Total Organic Carbon	1.5 mg/L	J DL, NQ
B13-8030	EPA 415.3	Dissolved Organic Carbon	2.0 mg/L	J DL, NQ
B13-8030	EPA 625	Pyrene	1.3 ng/L	J DL
B13-8030	EPA 625	Benzo[e]pyrene	5 ng/L	UJ LC
B13-8030	EPA 625	Benzo[b]fluoranthene	5 ng/L	UJ LC
B13-8030	EPA 625	Fluoranthene	2.5 ng/L	J DL
B13-8030	EPA 625	Benzo[a]pyrene	5 ng/L	UJ LC
B13-8030	EPA 625	Benz[a]anthracene	2.3 ng/L	J DL
B13-8030	EPA 625	Phenanthrene	1.8 ng/L	J DL
B13-8030	EPA 625	1-Methylnaphthalene	5 ng/L	UJ LC
B13-8030	EPA 625	Naphthalene	1 ng/L	J DL, LC
B13-8030	EPA 625	2-Methylnaphthalene	1.2 ng/L	J DL, LC
B13-8030	SM 4500-NO3 E	Nitrate-N	0.01 mg/L	J DL
B13-8030	SM 5540-C	Methylene Blue Active Substance	0.045 mg/L	J LV, HD
B13-8031	EPA 1640	Aluminum, Dissolved	6 µg/L	UJ LC
B13-8031	EPA 1640	Manganese, Dissolved	8.22 µg/L	J LC
B13-8031	EPA 1640	Silver, Dissolved	0.01 µg/L	J DL
B13-8031	EPA 1640	Titanium, Dissolved	7.576 µg/L	J LC
B13-8031	EPA 1640	Antimony, Dissolved	0.11 µg/L	J LC
B13-8031	EPA 1640	Beryllium, Dissolved	0.01 µg/L	UJ LC
B13-8031	EPA 1640	Chromium, Dissolved	0.0863 µg/L	J LC
B13-8031	EPA 1640	Cobalt, Dissolved	0.106 µg/L	J LC, LL
B13-8031	EPA 1640	Vanadium, Dissolved	2.48 µg/L	J LC
B13-8031	EPA 1640	Zinc, Dissolved	3.8901 µg/L	J LC

**TABLE 3**  
**Qualifiers Added to the Water Samples During Validation**  
**Regional Harbor Monitoring Program**  
**San Diego, California**

Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8031	EPA 1640	Aluminum, Total	68.3 µg/L	J LC
B13-8031	EPA 1640	Manganese, Total	10.94 µg/L	J LC
B13-8031	EPA 1640	Titanium, Total	9.909 µg/L	J LC
B13-8031	EPA 1640	Antimony, Total	0.12 µg/L	J LC
B13-8031	EPA 1640	Beryllium, Total	0.01 µg/L	UJ LC
B13-8031	EPA 1640	Chromium, Total	0.195 µg/L	J LC
B13-8031	EPA 1640	Cobalt, Total	0.106 µg/L	J LC, LL
B13-8031	EPA 1640	Vanadium, Total	2.6 µg/L	J LC
B13-8031	EPA 1640	Zinc, Total	4.8237 µg/L	J LC
B13-8031	EPA 1640	Selenium, Dissolved	0.022 µg/L	J CH
B13-8031	EPA 1640	Selenium, Total	0.029 µg/L	J CH
B13-8031	EPA 415.3	Dissolved Organic Carbon	0.86 mg/L	J DL, NQ
B13-8031	EPA 415.3	Total Organic Carbon	1.2 mg/L	J DL, NQ
B13-8031	EPA 625	Anthracene	1.5 ng/L	J DL
B13-8031	EPA 625	Pyrene	1.3 ng/L	J DL
B13-8031	EPA 625	Dibenzothiophene	5 ng/L	UJ LL
B13-8031	EPA 625	Benzo[e]pyrene	5 ng/L	UJ LC
B13-8031	EPA 625	Benzo[b]fluoranthene	5 ng/L	UJ LC
B13-8031	EPA 625	Fluoranthene	2.3 ng/L	J DL
B13-8031	EPA 625	Acenaphthylene	5 ng/L	UJ LL
B13-8031	EPA 625	2,3,5-Trimethylnaphthalene	5 ng/L	UJ LL
B13-8031	EPA 625	Benzo[a]pyrene	5 ng/L	UJ LC
B13-8031	EPA 625	Benz[a]anthracene	1.9 ng/L	J DL
B13-8031	EPA 625	2,6-Dimethylnaphthalene	5 ng/L	UJ LL
B13-8031	EPA 625	Acenaphthene	1.4 ng/L	J DL, LL
B13-8031	EPA 625	Phenanthrene	2.3 ng/L	J DL
B13-8031	EPA 625	Fluorene	5 ng/L	UJ LL
B13-8031	EPA 625	1-Methylnaphthalene	5 ng/L	UJ LC, LL
B13-8031	EPA 625	Naphthalene	1.3 ng/L	J DL, LC, LL
B13-8031	EPA 625	2-Methylnaphthalene	1.1 ng/L	J DL, LC, LL
B13-8031	EPA 625	Biphenyl	5 ng/L	UJ LL
B13-8033	EPA 1640	Aluminum, Dissolved	6 µg/L	UJ LC
B13-8033	EPA 1640	Thallium, Dissolved	0.009 µg/L	J DL
B13-8033	EPA 1640	Titanium, Dissolved	6.791 µg/L	J LC
B13-8033	EPA 1640	Antimony, Dissolved	0.13 µg/L	J LC
B13-8033	EPA 1640	Beryllium, Dissolved	0.01 µg/L	UJ LC
B13-8033	EPA 1640	Aluminum, Total	87.6 µg/L	J LC
B13-8033	EPA 1640	Thallium, Total	0.006 µg/L	J DL
B13-8033	EPA 1640	Titanium, Total	11.841 µg/L	J LC
B13-8033	EPA 1640	Antimony, Total	0.11 µg/L	J LC
B13-8033	EPA 1640	Beryllium, Total	0.007 µg/L	J DL, LC
B13-8033	EPA 1640	Selenium, Dissolved	0.019 µg/L	J CH
B13-8033	EPA 1640	Selenium, Total	0.02 µg/L	J CH
B13-8033	EPA 415.3	Dissolved Organic Carbon	0.60 mg/L	J DL, NQ
B13-8033	EPA 415.3	Total Organic Carbon	1.1 mg/L	J DL, NQ
B13-8033	EPA 625	Anthracene	1.6 ng/L	J DL
B13-8033	EPA 625	Benzo[e]pyrene	5 ng/L	UJ LC
B13-8033	EPA 625	Benzo[b]fluoranthene	5 ng/L	UJ LC
B13-8033	EPA 625	Fluoranthene	2.7 ng/L	J DL
B13-8033	EPA 625	Chrysene	5 ng/L	UJ LC
B13-8033	EPA 625	Benzo[a]pyrene	5 ng/L	UJ LC
B13-8033	EPA 625	Benz[a]anthracene	2.1 ng/L	J DL
B13-8033	EPA 625	Acenaphthene	1.1 ng/L	J DL
B13-8033	EPA 625	Phenanthrene	1.9 ng/L	J DL
B13-8033	EPA 625	1-Methylnaphthalene	5 ng/L	UJ LC
B13-8033	EPA 625	Naphthalene	5 ng/L	UJ LC, LL
B13-8033	EPA 625	2-Methylnaphthalene	5 ng/L	UJ LC
B13-8033	EPA 625	Biphenyl	5 ng/L	UJ LC

**TABLE 3**  
**Qualifiers Added to the Water Samples During Validation**  
**Regional Harbor Monitoring Program**  
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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8033	SM 5540-C	Methylene Blue Active Substance	0.037 mg/L	J HV, LC
B13-8036	EPA 1640	Aluminum, Dissolved	6 µg/L	UJ LC
B13-8036	EPA 1640	Manganese, Dissolved	10.54 µg/L	J LC
B13-8036	EPA 1640	Thallium, Dissolved	0.009 µg/L	J DL
B13-8036	EPA 1640	Titanium, Dissolved	6.908 µg/L	J LC
B13-8036	EPA 1640	Antimony, Dissolved	0.19 µg/L	J LC, TD
B13-8036	EPA 1640	Beryllium, Dissolved	0.01 µg/L	UJ LC
B13-8036	EPA 1640	Chromium, Dissolved	0.0511 µg/L	J LC
B13-8036	EPA 1640	Cobalt, Dissolved	0.089 µg/L	J LC
B13-8036	EPA 1640	Vanadium, Dissolved	2.78 µg/L	J LC
B13-8036	EPA 1640	Zinc, Dissolved	6.7504 µg/L	J LC
B13-8036	EPA 1640	Aluminum, Total	72.3 µg/L	J LC
B13-8036	EPA 1640	Manganese, Total	12.66 µg/L	J LC
B13-8036	EPA 1640	Thallium, Total	0.009 µg/L	J DL
B13-8036	EPA 1640	Tin, Total	0.006 µg/L	J DL
B13-8036	EPA 1640	Titanium, Total	11.073 µg/L	J LC
B13-8036	EPA 1640	Antimony, Total	0.12 µg/L	J LC, TD
B13-8036	EPA 1640	Beryllium, Total	0.01 µg/L	UJ LC
B13-8036	EPA 1640	Chromium, Total	0.2321 µg/L	J LC
B13-8036	EPA 1640	Cobalt, Total	0.103 µg/L	J LC
B13-8036	EPA 1640	Vanadium, Total	2.92 µg/L	J LC
B13-8036	EPA 1640	Zinc, Total	6.6113 µg/L	J LC
B13-8036	EPA 1640	Iron (Fe), Dissolved	0.5 µg/L	J DL
B13-8036	EPA 1640	Selenium, Dissolved	0.021 µg/L	J CH
B13-8036	EPA 1640	Selenium, Total	0.029 µg/L	J CH
B13-8036	EPA 415.3	Total Organic Carbon	2.2 mg/L	J DL, NQ
B13-8036	EPA 415.3	Dissolved Organic Carbon	2.2 mg/L	J DL, NQ
B13-8036	EPA 625	Anthracene	1.3 ng/L	J DL
B13-8036	EPA 625	Pyrene	1 ng/L	J DL
B13-8036	EPA 625	Benzo[e]pyrene	5 ng/L	UJ LC
B13-8036	EPA 625	Benzo[b]fluoranthene	5 ng/L	UJ LC
B13-8036	EPA 625	Fluoranthene	2.5 ng/L	J DL
B13-8036	EPA 625	Benzo[a]pyrene	5 ng/L	UJ LC
B13-8036	EPA 625	Benz[a]anthracene	2.4 ng/L	J DL
B13-8036	EPA 625	Acenaphthene	1.2 ng/L	J DL
B13-8036	EPA 625	Phenanthrene	1.7 ng/L	J DL
B13-8036	EPA 625	Fluorene	1 ng/L	J DL
B13-8036	EPA 625	1-Methylnaphthalene	5 ng/L	UJ LC
B13-8036	EPA 625	Naphthalene	1.2 ng/L	J DL, LC
B13-8036	EPA 625	2-Methylnaphthalene	1.4 ng/L	J DL, LC
B13-8036	SM 4500-NO3 E	Nitrate-N	0.02 mg/L	J DL
B13-8036	SM 5540-C	Methylene Blue Active Substance	0.045 mg/L	J LV, HD
B13-8038	EPA 1640	Aluminum, Dissolved	6 µg/L	UJ LC
B13-8038	EPA 1640	Manganese, Dissolved	10.75 µg/L	J LC
B13-8038	EPA 1640	Thallium, Dissolved	0.009 µg/L	J DL
B13-8038	EPA 1640	Tin, Dissolved	0.006 µg/L	J DL
B13-8038	EPA 1640	Titanium, Dissolved	7.698 µg/L	J LC
B13-8038	EPA 1640	Antimony, Dissolved	0.19 µg/L	J LC, TD
B13-8038	EPA 1640	Beryllium, Dissolved	0.01 µg/L	UJ LC
B13-8038	EPA 1640	Chromium, Dissolved	0.0763 µg/L	J LC
B13-8038	EPA 1640	Cobalt, Dissolved	0.087 µg/L	J LC
B13-8038	EPA 1640	Vanadium, Dissolved	2.82 µg/L	J LC
B13-8038	EPA 1640	Zinc, Dissolved	5.277 µg/L	J LC
B13-8038	EPA 1640	Aluminum, Total	75.9 µg/L	J LC
B13-8038	EPA 1640	Manganese, Total	12.97 µg/L	J LC
B13-8038	EPA 1640	Titanium, Total	10.224 µg/L	J LC
B13-8038	EPA 1640	Antimony, Total	0.12 µg/L	J LC, TD
B13-8038	EPA 1640	Beryllium, Total	0.01 µg/L	UJ LC



**TABLE 3**  
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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8038	EPA 1640	Chromium, Total	0.2228 µg/L	J LC
B13-8038	EPA 1640	Cobalt, Total	0.103 µg/L	J LC
B13-8038	EPA 1640	Vanadium, Total	3 µg/L	J LC
B13-8038	EPA 1640	Zinc, Total	5.7867 µg/L	J LC
B13-8038	EPA 1640	Selenium, Dissolved	0.02 µg/L	J CH
B13-8038	EPA 1640	Selenium, Total	0.024 µg/L	J CH
B13-8038	EPA 415.3	Total Organic Carbon	1.4 mg/L	J DL, NQ
B13-8038	EPA 415.3	Dissolved Organic Carbon	2.3 mg/L	J DL, NQ
B13-8038	EPA 625	Anthracene	1.5 ng/L	J DL
B13-8038	EPA 625	Pyrene	1.3 ng/L	J DL
B13-8038	EPA 625	Benzo[e]pyrene	5 ng/L	UJ LC
B13-8038	EPA 625	Benzo[b]fluoranthene	5 ng/L	UJ LC
B13-8038	EPA 625	Fluoranthene	2.3 ng/L	J DL
B13-8038	EPA 625	Benzo[a]pyrene	5 ng/L	UJ LC
B13-8038	EPA 625	Benz[a]anthracene	2.3 ng/L	J DL
B13-8038	EPA 625	2,6-Dimethylnaphthalene	1.2 ng/L	J DL
B13-8038	EPA 625	Acenaphthene	1.3 ng/L	J DL
B13-8038	EPA 625	Phenanthrene	1.8 ng/L	J DL
B13-8038	EPA 625	Fluorene	1.3 ng/L	J DL
B13-8038	EPA 625	1-Methylnaphthalene	5 ng/L	UJ LC
B13-8038	EPA 625	Naphthalene	1.3 ng/L	J DL, LC
B13-8038	EPA 625	2-Methylnaphthalene	1.2 ng/L	J DL, LC
B13-8038	SM 4500-NO3 E	Nitrate-N	0.01 mg/L	J DL
B13-8038	SM 5540-C	Methylene Blue Active Substance	0.045 mg/L	J LV, HD
B13-8040	EPA 1640	Aluminum, Dissolved	6 µg/L	UJ LC
B13-8040	EPA 1640	Manganese, Dissolved	15.89 µg/L	J LC
B13-8040	EPA 1640	Tin, Dissolved	0.007 µg/L	J DL
B13-8040	EPA 1640	Titanium, Dissolved	7.178 µg/L	J LC
B13-8040	EPA 1640	Antimony, Dissolved	0.22 µg/L	J LC, TD
B13-8040	EPA 1640	Beryllium, Dissolved	0.01 µg/L	UJ LC
B13-8040	EPA 1640	Chromium, Dissolved	0.0381 µg/L	J LC
B13-8040	EPA 1640	Cobalt, Dissolved	0.108 µg/L	J LC
B13-8040	EPA 1640	Vanadium, Dissolved	2.92 µg/L	J LC
B13-8040	EPA 1640	Zinc, Dissolved	5.7964 µg/L	J LC
B13-8040	EPA 1640	Aluminum, Total	91.5 µg/L	J LC
B13-8040	EPA 1640	Manganese, Total	17.95 µg/L	J LC
B13-8040	EPA 1640	Titanium, Total	10.634 µg/L	J LC
B13-8040	EPA 1640	Antimony, Total	0.12 µg/L	J LC, TD
B13-8040	EPA 1640	Beryllium, Total	0.01 µg/L	UJ LC
B13-8040	EPA 1640	Chromium, Total	0.193 µg/L	J LC
B13-8040	EPA 1640	Cobalt, Total	0.123 µg/L	J LC
B13-8040	EPA 1640	Vanadium, Total	3.02 µg/L	J LC
B13-8040	EPA 1640	Zinc, Total	6.0928 µg/L	J LC
B13-8040	EPA 1640	Selenium, Dissolved	0.035 µg/L	J CH
B13-8040	EPA 1640	Selenium, Total	0.021 µg/L	J CH
B13-8040	EPA 415.3	Total Organic Carbon	1.3 mg/L	J DL, NQ
B13-8040	EPA 415.3	Dissolved Organic Carbon	2.4 mg/L	J DL, NQ
B13-8040	EPA 625	Pyrene	1 ng/L	J DL
B13-8040	EPA 625	Benzo[e]pyrene	5 ng/L	UJ LC
B13-8040	EPA 625	Benzo[b]fluoranthene	5 ng/L	UJ LC
B13-8040	EPA 625	Fluoranthene	2.5 ng/L	J DL
B13-8040	EPA 625	Benzo[a]pyrene	5 ng/L	UJ LC
B13-8040	EPA 625	Benz[a]anthracene	2 ng/L	J DL
B13-8040	EPA 625	Acenaphthene	1.1 ng/L	J DL
B13-8040	EPA 625	Phenanthrene	1.7 ng/L	J DL
B13-8040	EPA 625	1-Methylnaphthalene	5 ng/L	UJ LC
B13-8040	EPA 625	Naphthalene	5 ng/L	UJ LC
B13-8040	EPA 625	2-Methylnaphthalene	5 ng/L	UJ LC

**TABLE 3**  
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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8040	SM 4500-NO3 E	Nitrate-N	0.02 mg/L	J DL
B13-8040	SM 5540-C	Methylene Blue Active Substance	0.04 mg/L	J LV, HD
B13-8045	EPA 1640	Aluminum, Dissolved	6 µg/L	UJ LC
B13-8045	EPA 1640	Manganese, Dissolved	7.05 µg/L	J LC
B13-8045	EPA 1640	Thallium, Dissolved	0.009 µg/L	J DL
B13-8045	EPA 1640	Tin, Dissolved	0.008 µg/L	J DL
B13-8045	EPA 1640	Titanium, Dissolved	5.729 µg/L	J LC
B13-8045	EPA 1640	Antimony, Dissolved	0.11 µg/L	J LC, TD
B13-8045	EPA 1640	Beryllium, Dissolved	0.01 µg/L	UJ LC
B13-8045	EPA 1640	Chromium, Dissolved	0.0534 µg/L	J LC
B13-8045	EPA 1640	Cobalt, Dissolved	0.091 µg/L	J LC, LL
B13-8045	EPA 1640	Vanadium, Dissolved	2.31 µg/L	J LC
B13-8045	EPA 1640	Zinc, Dissolved	5.1099 µg/L	J LC
B13-8045	EPA 1640	Aluminum, Total	52.4 µg/L	J LC
B13-8045	EPA 1640	Manganese, Total	10.37 µg/L	J LC
B13-8045	EPA 1640	Titanium, Total	9.016 µg/L	J LC
B13-8045	EPA 1640	Antimony, Total	0.09 µg/L	J LC, TD
B13-8045	EPA 1640	Beryllium, Total	0.005 µg/L	J DL, LC
B13-8045	EPA 1640	Chromium, Total	0.1476 µg/L	J LC
B13-8045	EPA 1640	Cobalt, Total	0.103 µg/L	J LC, LL
B13-8045	EPA 1640	Vanadium, Total	2.47 µg/L	J LC
B13-8045	EPA 1640	Zinc, Total	5.2057 µg/L	J LC
B13-8045	EPA 1640	Selenium, Dissolved	0.017 µg/L	J CH
B13-8045	EPA 1640	Selenium, Total	0.019 µg/L	J CH
B13-8045	EPA 415.3	Dissolved Organic Carbon	2.5 mg/L	UJ NQ
B13-8045	EPA 415.3	Total Organic Carbon	1.3 mg/L	J DL, NQ
B13-8045	EPA 625	Anthracene	1.5 ng/L	J DL
B13-8045	EPA 625	Dibenzothiophene	5 ng/L	UJ LL
B13-8045	EPA 625	Benzo[e]pyrene	5 ng/L	UJ LC
B13-8045	EPA 625	Benzo[b]fluoranthene	5 ng/L	UJ LC
B13-8045	EPA 625	Fluoranthene	2.4 ng/L	J DL
B13-8045	EPA 625	Acenaphthylene	5 ng/L	UJ LL
B13-8045	EPA 625	2,3,5-Trimethylnaphthalene	5 ng/L	UJ LL
B13-8045	EPA 625	Benzo[a]pyrene	5 ng/L	UJ LC
B13-8045	EPA 625	Benz[a]anthracene	1.7 ng/L	J DL
B13-8045	EPA 625	2,6-Dimethylnaphthalene	5 ng/L	UJ LL
B13-8045	EPA 625	Acenaphthene	1.2 ng/L	J DL, LL
B13-8045	EPA 625	Phenanthrene	2.2 ng/L	J DL
B13-8045	EPA 625	Fluorene	1 ng/L	J DL, LL
B13-8045	EPA 625	1-Methylnaphthalene	5 ng/L	UJ LC, LL
B13-8045	EPA 625	Naphthalene	5 ng/L	UJ LC, LL
B13-8045	EPA 625	2-Methylnaphthalene	5 ng/L	UJ LC, LL
B13-8045	EPA 625	Biphenyl	5 ng/L	UJ LL
B13-8049	EPA 1640	Aluminum, Dissolved	6 µg/L	UJ LC
B13-8049	EPA 1640	Titanium, Dissolved	12.932 µg/L	J LC
B13-8049	EPA 1640	Arsenic, Dissolved	1.282 µg/L	J LC
B13-8049	EPA 1640	Beryllium, Dissolved	0.01 µg/L	UJ LC
B13-8049	EPA 1640	Chromium, Dissolved	0.1512 µg/L	J LC
B13-8049	EPA 1640	Vanadium, Dissolved	2.9 µg/L	J LC
B13-8049	EPA 1640	Aluminum, Total	89.8 µg/L	J LC
B13-8049	EPA 1640	Titanium, Total	16.58 µg/L	J LC
B13-8049	EPA 1640	Arsenic, Total	1.16 µg/L	J LC
B13-8049	EPA 1640	Beryllium, Total	0.01 µg/L	UJ LC
B13-8049	EPA 1640	Chromium, Total	0.3245 µg/L	J LC
B13-8049	EPA 1640	Vanadium, Total	3.09 µg/L	J LC
B13-8049	EPA 1640	Iron (Fe), Dissolved	1 µg/L	UJ LC
B13-8049	EPA 1640	Nickel, Dissolved	0.5895 µg/L	J LC
B13-8049	EPA 1640	Copper, Dissolved	3.068 µg/L	J LC

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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8049	EPA 1640	Selenium, Dissolved	0.022 µg/L	J LC
B13-8049	EPA 1640	Iron (Fe), Total	30.4 µg/L	J LC
B13-8049	EPA 1640	Nickel, Total	0.6832 µg/L	J LC
B13-8049	EPA 1640	Copper, Total	3.37 µg/L	J LC
B13-8049	EPA 1640	Selenium, Total	0.018 µg/L	J LC
B13-8049	EPA 415.3	Dissolved Organic Carbon	0.62 mg/L	J DL, NQ
B13-8049	EPA 415.3	Total Organic Carbon	1.0 mg/L	J DL, NQ
B13-8049	EPA 625	Anthracene	2.8 ng/L	J DL
B13-8049	EPA 625	Pyrene	2.3 ng/L	J DL, HV, LC
B13-8049	EPA 625	Benzo[e]pyrene	1.1 ng/L	J DL, LC
B13-8049	EPA 625	Indeno[1,2,3-c,d]pyrene	5 ng/L	UJ LC
B13-8049	EPA 625	Perylene	5 ng/L	UJ LC
B13-8049	EPA 625	Benzo[b]fluoranthene	2.8 ng/L	J DL, HV, LC
B13-8049	EPA 625	Fluoranthene	7.4 ng/L	J HV, LC
B13-8049	EPA 625	Benzo[k]fluoranthene	1.4 ng/L	J DL, LC
B13-8049	EPA 625	Chrysene	1.5 ng/L	J DL, LC
B13-8049	EPA 625	Benzo[a]pyrene	5 ng/L	UJ BC, LC
B13-8049	EPA 625	Dibenz[a,h]anthracene	5 ng/L	UJ LC
B13-8049	EPA 625	Benz[a]anthracene	5 ng/L	UJ LC
B13-8049	EPA 625	2,6-Dimethylnaphthalene	5 ng/L	UJ LV
B13-8049	EPA 625	Acenaphthene	3.5 ng/L	J DL
B13-8049	EPA 625	Phenanthrene	3.7 ng/L	J DL
B13-8049	EPA 625	Fluorene	2 ng/L	J DL
B13-8049	EPA 625	1-Methylnaphthalene	5 ng/L	UJ LV, LL
B13-8049	EPA 625	Naphthalene	1.1 ng/L	J DL, BC, LV, LL
B13-8049	EPA 625	2-Methylnaphthalene	5 ng/L	UJ LV, LL
B13-8049	EPA 625	Biphenyl	5 ng/L	UJ LV
B13-8049	SM 4500-NH3 D	Ammonia-N	0.03 mg/L	J DL
B13-8049	SM 4500-NO3 E	Nitrate-N	0.02 mg/L	J DL
B13-8049	SM 5540-C	Methylene Blue Active Substance	0.015 mg/L	J DL, LV
B13-8050	EPA 1640	Aluminum, Dissolved	6 µg/L	UJ LC
B13-8050	EPA 1640	Titanium, Dissolved	13.034 µg/L	J LC
B13-8050	EPA 1640	Arsenic, Dissolved	1.423 µg/L	J LC
B13-8050	EPA 1640	Beryllium, Dissolved	0.01 µg/L	UJ LC
B13-8050	EPA 1640	Chromium, Dissolved	0.1477 µg/L	J LC
B13-8050	EPA 1640	Vanadium, Dissolved	2.98 µg/L	J LC
B13-8050	EPA 1640	Aluminum, Total	102.5 µg/L	J LC
B13-8050	EPA 1640	Titanium, Total	18 µg/L	J LC
B13-8050	EPA 1640	Arsenic, Total	1.257 µg/L	J LC
B13-8050	EPA 1640	Beryllium, Total	0.01 µg/L	UJ LC
B13-8050	EPA 1640	Chromium, Total	0.345 µg/L	J LC
B13-8050	EPA 1640	Vanadium, Total	3.13 µg/L	J LC
B13-8050	EPA 1640	Iron (Fe), Dissolved	1 µg/L	UJ LC
B13-8050	EPA 1640	Nickel, Dissolved	0.5907 µg/L	J LC
B13-8050	EPA 1640	Copper, Dissolved	2.951 µg/L	J LC
B13-8050	EPA 1640	Selenium, Dissolved	0.021 µg/L	J LC
B13-8050	EPA 1640	Iron (Fe), Total	42.1 µg/L	J LC
B13-8050	EPA 1640	Nickel, Total	0.6796 µg/L	J LC
B13-8050	EPA 1640	Copper, Total	3.439 µg/L	J LC
B13-8050	EPA 1640	Selenium, Total	0.027 µg/L	J LC
B13-8050	EPA 415.3	Dissolved Organic Carbon	0.64 mg/L	J DL, NQ
B13-8050	EPA 415.3	Total Organic Carbon	0.88 mg/L	J DL, NQ
B13-8050	EPA 625	Anthracene	2.3 ng/L	J DL
B13-8050	EPA 625	Pyrene	2.5 ng/L	J DL, HV, LC
B13-8050	EPA 625	Benzo[e]pyrene	5 ng/L	UJ LC
B13-8050	EPA 625	Indeno[1,2,3-c,d]pyrene	5 ng/L	UJ LC
B13-8050	EPA 625	Perylene	5 ng/L	UJ LC
B13-8050	EPA 625	Benzo[b]fluoranthene	1.7 ng/L	J DL, HV, LC

**TABLE 3**  
**Qualifiers Added to the Water Samples During Validation**  
**Regional Harbor Monitoring Program**  
**San Diego, California**

Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8050	EPA 625	Fluoranthene	8.1 ng/L	J HV, LC
B13-8050	EPA 625	Benzo[k]fluoranthene	1.3 ng/L	J DL, LC
B13-8050	EPA 625	Chrysene	1.2 ng/L	J DL, LC
B13-8050	EPA 625	Benzo[a]pyrene	5 ng/L	UJ BC, LC
B13-8050	EPA 625	Dibenz[a,h]anthracene	5 ng/L	UJ LC
B13-8050	EPA 625	Benz[a]anthracene	5 ng/L	UJ LC
B13-8050	EPA 625	2,6-Dimethylnaphthalene	5 ng/L	UJ LV
B13-8050	EPA 625	Acenaphthene	3.1 ng/L	J DL
B13-8050	EPA 625	Phenanthrene	3.5 ng/L	J DL
B13-8050	EPA 625	Fluorene	1.9 ng/L	J DL
B13-8050	EPA 625	1-Methylnaphthalene	5 ng/L	UJ LV, LL
B13-8050	EPA 625	Naphthalene	1 ng/L	J DL, BC, LV, LL
B13-8050	EPA 625	2-Methylnaphthalene	5 ng/L	UJ LV, LL
B13-8050	EPA 625	Biphenyl	5 ng/L	UJ LV
B13-8050	SM 5540-C	Methylene Blue Active Substance	0.029 mg/L	J LV
B13-8052	EPA 1640	Aluminum, Dissolved	6 µg/L	UJ LC
B13-8052	EPA 1640	Manganese, Dissolved	7.39 µg/L	J LC
B13-8052	EPA 1640	Thallium, Dissolved	0.009 µg/L	J DL
B13-8052	EPA 1640	Tin, Dissolved	0.008 µg/L	J DL
B13-8052	EPA 1640	Titanium, Dissolved	7.907 µg/L	J LC
B13-8052	EPA 1640	Antimony, Dissolved	0.17 µg/L	J LC, TD
B13-8052	EPA 1640	Beryllium, Dissolved	0.01 µg/L	UJ LC
B13-8052	EPA 1640	Chromium, Dissolved	0.0411 µg/L	J LC
B13-8052	EPA 1640	Cobalt, Dissolved	0.074 µg/L	J LC
B13-8052	EPA 1640	Vanadium, Dissolved	2.75 µg/L	J LC
B13-8052	EPA 1640	Zinc, Dissolved	4.3493 µg/L	J LC
B13-8052	EPA 1640	Aluminum, Total	271.8 µg/L	J LC
B13-8052	EPA 1640	Manganese, Total	11.24 µg/L	J LC
B13-8052	EPA 1640	Titanium, Total	21.633 µg/L	J LC
B13-8052	EPA 1640	Antimony, Total	0.1 µg/L	J LC, TD
B13-8052	EPA 1640	Beryllium, Total	0.005 µg/L	J DL, LC
B13-8052	EPA 1640	Chromium, Total	0.6354 µg/L	J LC
B13-8052	EPA 1640	Cobalt, Total	0.139 µg/L	J LC
B13-8052	EPA 1640	Vanadium, Total	3.25 µg/L	J LC
B13-8052	EPA 1640	Zinc, Total	6.0579 µg/L	J LC
B13-8052	EPA 1640	Selenium, Dissolved	0.015 µg/L	J CH
B13-8052	EPA 1640	Selenium, Total	0.022 µg/L	J CH
B13-8052	EPA 415.3	Total Organic Carbon	2.8 mg/L	J NQ
B13-8052	EPA 415.3	Dissolved Organic Carbon	2.2 mg/L	J DL, NQ
B13-8052	EPA 625	Anthracene	3 ng/L	J DL
B13-8052	EPA 625	Pyrene	1.9 ng/L	J DL
B13-8052	EPA 625	Benzo[e]pyrene	5 ng/L	UJ LC
B13-8052	EPA 625	Benzo[b]fluoranthene	5 ng/L	UJ LC
B13-8052	EPA 625	Fluoranthene	2.4 ng/L	J DL
B13-8052	EPA 625	Benzo[a]pyrene	5 ng/L	UJ LC
B13-8052	EPA 625	Benz[a]anthracene	3.6 ng/L	J DL
B13-8052	EPA 625	Acenaphthene	1.2 ng/L	J DL
B13-8052	EPA 625	Phenanthrene	2.2 ng/L	J DL
B13-8052	EPA 625	Fluorene	1.1 ng/L	J DL
B13-8052	EPA 625	1-Methylnaphthalene	5 ng/L	UJ LC
B13-8052	EPA 625	Naphthalene	1.7 ng/L	J DL, LC
B13-8052	EPA 625	2-Methylnaphthalene	1.5 ng/L	J DL, LC
B13-8052	EPA 625	Biphenyl	1.1 ng/L	J DL
B13-8052	SM 4500-NO3 E	Nitrate-N	0.02 mg/L	J DL
B13-8052	SM 5540-C	Methylene Blue Active Substance	0.041 mg/L	J LV, HD
B13-8053	EPA 1640	Beryllium, Dissolved	0.01 µg/L	UJ LC
B13-8053	EPA 1640	Beryllium, Total	0.01 µg/L	UJ LC
B13-8053	EPA 1640	Selenium, Dissolved	0.017 µg/L	J HD

**TABLE 3**  
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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8053	EPA 1640	Selenium, Total	0.025 µg/L	J HD
B13-8053	EPA 200.8	Barium, Dissolved	8.67 µg/L	J CH
B13-8053	EPA 200.8	Barium, Total	9.92 µg/L	J CH
B13-8053	EPA 415.3	Total Organic Carbon	0.86 mg/L	J DL, NQ
B13-8053	EPA 415.3	Dissolved Organic Carbon	1.1 mg/L	J DL, NQ
B13-8053	EPA 625	Anthracene	1.7 ng/L	J DL, NQ
B13-8053	EPA 625	Pyrene	2.4 ng/L	J DL, NQ
B13-8053	EPA 625	Dibenzothiophene	5 ng/L	UJ NQ
B13-8053	EPA 625	Benzo[g,h,i]perylene	5 ng/L	UJ NQ
B13-8053	EPA 625	Benzo[e]pyrene	1.4 ng/L	J DL, NQ
B13-8053	EPA 625	Indeno[1,2,3-c,d]pyrene	5 ng/L	UJ NQ
B13-8053	EPA 625	Perylene	5 ng/L	UJ NQ
B13-8053	EPA 625	Benzo[b]fluoranthene	5 ng/L	UJ NQ
B13-8053	EPA 625	Fluoranthene	6.6 ng/L	J NQ
B13-8053	EPA 625	Benzo[k]fluoranthene	5 ng/L	UJ NQ
B13-8053	EPA 625	Acenaphthylene	5 ng/L	UJ NQ
B13-8053	EPA 625	Chrysene	5 ng/L	UJ NQ
B13-8053	EPA 625	2,3,5-Trimethylnaphthalene	5 ng/L	UJ NQ
B13-8053	EPA 625	Benzo[a]pyrene	5 ng/L	UJ NQ
B13-8053	EPA 625	Dibenz[a,h]anthracene	5 ng/L	UJ NQ
B13-8053	EPA 625	Benzo[a]anthracene	5 ng/L	UJ NQ
B13-8053	EPA 625	2,6-Dimethylnaphthalene	5 ng/L	UJ NQ
B13-8053	EPA 625	1-Methylphenanthrene	5 ng/L	UJ NQ
B13-8053	EPA 625	Acenaphthene	5.3 ng/L	J NQ
B13-8053	EPA 625	Phenanthrene	5.6 ng/L	J NQ
B13-8053	EPA 625	Fluorene	2.6 ng/L	J DL, NQ
B13-8053	EPA 625	1-Methylnaphthalene	5 ng/L	UJ NQ
B13-8053	EPA 625	Naphthalene	1.4 ng/L	J DL, NQ
B13-8053	EPA 625	2-Methylnaphthalene	1.1 ng/L	J DL, NQ
B13-8053	EPA 625	Biphenyl	5 ng/L	UJ NQ
B13-8053	SM 5540-C	Methylene Blue Active Substance	0.047 mg/L	J LC
B13-8056	EPA 1640	Aluminum, Dissolved	6 µg/L	UJ LC
B13-8056	EPA 1640	Tin, Dissolved	0.008 µg/L	J DL
B13-8056	EPA 1640	Titanium, Dissolved	13.111 µg/L	J LC
B13-8056	EPA 1640	Arsenic, Dissolved	1.107 µg/L	J LC
B13-8056	EPA 1640	Beryllium, Dissolved	0.01 µg/L	UJ LC
B13-8056	EPA 1640	Chromium, Dissolved	0.111 µg/L	J LC
B13-8056	EPA 1640	Vanadium, Dissolved	2.9 µg/L	J LC
B13-8056	EPA 1640	Aluminum, Total	106.4 µg/L	J LC
B13-8056	EPA 1640	Titanium, Total	17.581 µg/L	J LC
B13-8056	EPA 1640	Arsenic, Total	1.389 µg/L	J LC
B13-8056	EPA 1640	Beryllium, Total	0.01 µg/L	UJ LC
B13-8056	EPA 1640	Chromium, Total	0.3316 µg/L	J LC
B13-8056	EPA 1640	Vanadium, Total	3.07 µg/L	J LC
B13-8056	EPA 1640	Iron (Fe), Dissolved	1 µg/L	UJ LC
B13-8056	EPA 1640	Nickel, Dissolved	0.5664 µg/L	J LC
B13-8056	EPA 1640	Copper, Dissolved	3.012 µg/L	J LC
B13-8056	EPA 1640	Selenium, Dissolved	0.017 µg/L	J LC
B13-8056	EPA 1640	Iron (Fe), Total	40.8 µg/L	J LC
B13-8056	EPA 1640	Nickel, Total	0.6104 µg/L	J LC
B13-8056	EPA 1640	Copper, Total	3.253 µg/L	J LC
B13-8056	EPA 1640	Selenium, Total	0.021 µg/L	J LC
B13-8056	EPA 415.3	Dissolved Organic Carbon	0.60 mg/L	J DL, NQ
B13-8056	EPA 415.3	Total Organic Carbon	1.4 mg/L	J DL, NQ
B13-8056	EPA 625	Anthracene	2.6 ng/L	J DL
B13-8056	EPA 625	Pyrene	2.7 ng/L	J DL, HV, LC
B13-8056	EPA 625	Benzo[e]pyrene	1.5 ng/L	J DL, LC
B13-8056	EPA 625	Indeno[1,2,3-c,d]pyrene	5 ng/L	UJ LC

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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8056	EPA 625	Perylene	5 ng/L	UJ LC
B13-8056	EPA 625	Benzo[b]fluoranthene	2.2 ng/L	J DL, HV, LC
B13-8056	EPA 625	Fluoranthene	6.4 ng/L	J HV, LC
B13-8056	EPA 625	Benzo[k]fluoranthene	1.7 ng/L	J DL, LC
B13-8056	EPA 625	Chrysene	1.3 ng/L	J DL, LC
B13-8056	EPA 625	Benzo[a]pyrene	5 ng/L	UJ BC, LC
B13-8056	EPA 625	Dibenz[a,h]anthracene	5 ng/L	UJ LC
B13-8056	EPA 625	Benz[a]anthracene	5 ng/L	UJ LC
B13-8056	EPA 625	2,6-Dimethylnaphthalene	5 ng/L	UJ LV
B13-8056	EPA 625	Acenaphthene	2.7 ng/L	J DL
B13-8056	EPA 625	Phenanthrene	2.6 ng/L	J DL
B13-8056	EPA 625	Fluorene	2.1 ng/L	J DL
B13-8056	EPA 625	1-Methylnaphthalene	5 ng/L	UJ LV, LL
B13-8056	EPA 625	Naphthalene	5 ng/L	UJ BC, LV, LL
B13-8056	EPA 625	2-Methylnaphthalene	5 ng/L	UJ LV, LL
B13-8056	EPA 625	Biphenyl	5 ng/L	UJ LV
B13-8056	SM 4500-NO3 E	Nitrate-N	0.01 mg/L	J DL
B13-8056	SM 5540-C	Methylene Blue Active Substance	0.025 mg/L	UJ LV
B13-8058	EPA 1640	Aluminum, Dissolved	6 µg/L	UJ LC
B13-8058	EPA 1640	Manganese, Dissolved	7.4 µg/L	J LC
B13-8058	EPA 1640	Titanium, Dissolved	5.203 µg/L	J LC
B13-8058	EPA 1640	Antimony, Dissolved	0.13 µg/L	J LC, HD, TD
B13-8058	EPA 1640	Beryllium, Dissolved	0.01 µg/L	UJ LC
B13-8058	EPA 1640	Chromium, Dissolved	0.0922 µg/L	J LC
B13-8058	EPA 1640	Cobalt, Dissolved	0.08 µg/L	J LC, LL
B13-8058	EPA 1640	Vanadium, Dissolved	2.32 µg/L	J LC
B13-8058	EPA 1640	Zinc, Dissolved	3.9868 µg/L	J LC
B13-8058	EPA 1640	Aluminum, Total	264.6 µg/L	J LC
B13-8058	EPA 1640	Manganese, Total	12.48 µg/L	J LC
B13-8058	EPA 1640	Titanium, Total	21.899 µg/L	J LC
B13-8058	EPA 1640	Antimony, Total	0.1 µg/L	J LC, TD
B13-8058	EPA 1640	Beryllium, Total	0.007 µg/L	J DL, LC
B13-8058	EPA 1640	Chromium, Total	0.8489 µg/L	J LC
B13-8058	EPA 1640	Cobalt, Total	0.181 µg/L	J LC, LL
B13-8058	EPA 1640	Vanadium, Total	3.04 µg/L	J LC
B13-8058	EPA 1640	Zinc, Total	6.5113 µg/L	J LC
B13-8058	EPA 1640	Selenium, Dissolved	0.016 µg/L	J CH
B13-8058	EPA 1640	Selenium, Total	0.034 µg/L	J CH, HD
B13-8058	EPA 415.3	Dissolved Organic Carbon	0.40 mg/L	J DL, NQ
B13-8058	EPA 415.3	Total Organic Carbon	1.2 mg/L	J DL, NQ
B13-8058	EPA 625	Anthracene	1.6 ng/L	J DL
B13-8058	EPA 625	Pyrene	1.5 ng/L	J DL
B13-8058	EPA 625	Dibenzothiophene	5 ng/L	UJ LL
B13-8058	EPA 625	Benzo[e]pyrene	5 ng/L	UJ LC
B13-8058	EPA 625	Benzo[b]fluoranthene	1.3 ng/L	J DL, LC
B13-8058	EPA 625	Fluoranthene	2.6 ng/L	J DL
B13-8058	EPA 625	Benzo[k]fluoranthene	1.3 ng/L	J DL
B13-8058	EPA 625	Acenaphthylene	5 ng/L	UJ LL
B13-8058	EPA 625	2,3,5-Trimethylnaphthalene	5 ng/L	UJ LL
B13-8058	EPA 625	Benzo[a]pyrene	5 ng/L	UJ LC
B13-8058	EPA 625	Benz[a]anthracene	2.4 ng/L	J DL
B13-8058	EPA 625	2,6-Dimethylnaphthalene	5 ng/L	UJ LL
B13-8058	EPA 625	Acenaphthene	5 ng/L	UJ LL
B13-8058	EPA 625	Phenanthrene	1.7 ng/L	J DL
B13-8058	EPA 625	Fluorene	5 ng/L	UJ LL
B13-8058	EPA 625	1-Methylnaphthalene	5 ng/L	UJ LC, LL
B13-8058	EPA 625	Naphthalene	5 ng/L	UJ LC, LL
B13-8058	EPA 625	2-Methylnaphthalene	5 ng/L	UJ LC, LL

**TABLE 3**  
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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8058	EPA 625	Biphenyl	5 ng/L	UJ LL
B13-8058	SM 5540-C	Methylene Blue Active Substance	0.024 mg/L	J DL
B13-8060	EPA 1640	Aluminum, Dissolved	6 µg/L	UJ LC
B13-8060	EPA 1640	Manganese, Dissolved	7.55 µg/L	J LC
B13-8060	EPA 1640	Thallium, Dissolved	0.007 µg/L	J DL
B13-8060	EPA 1640	Tin, Dissolved	0.009 µg/L	J DL
B13-8060	EPA 1640	Titanium, Dissolved	7.744 µg/L	J LC
B13-8060	EPA 1640	Antimony, Dissolved	0.21 µg/L	J LC, TD
B13-8060	EPA 1640	Beryllium, Dissolved	0.01 µg/L	UJ LC
B13-8060	EPA 1640	Chromium, Dissolved	0.0499 µg/L	J LC
B13-8060	EPA 1640	Cobalt, Dissolved	0.068 µg/L	J LC
B13-8060	EPA 1640	Vanadium, Dissolved	2.61 µg/L	J LC
B13-8060	EPA 1640	Zinc, Dissolved	4.2776 µg/L	J LC
B13-8060	EPA 1640	Aluminum, Total	205.6 µg/L	J LC
B13-8060	EPA 1640	Manganese, Total	10.58 µg/L	J LC
B13-8060	EPA 1640	Titanium, Total	17.08 µg/L	J LC
B13-8060	EPA 1640	Antimony, Total	0.1 µg/L	J LC, TD
B13-8060	EPA 1640	Beryllium, Total	0.01 µg/L	UJ LC
B13-8060	EPA 1640	Chromium, Total	0.5264 µg/L	J LC
B13-8060	EPA 1640	Cobalt, Total	0.119 µg/L	J LC
B13-8060	EPA 1640	Vanadium, Total	3.04 µg/L	J LC
B13-8060	EPA 1640	Zinc, Total	5.5905 µg/L	J LC
B13-8060	EPA 1640	Selenium, Dissolved	0.023 µg/L	J CH
B13-8060	EPA 1640	Selenium, Total	0.019 µg/L	J CH
B13-8060	EPA 415.3	Total Organic Carbon	1.6 mg/L	J DL, NQ
B13-8060	EPA 415.3	Dissolved Organic Carbon	1.8 mg/L	J DL, NQ
B13-8060	EPA 625	Anthracene	1.5 ng/L	J DL
B13-8060	EPA 625	Pyrene	1 ng/L	J DL
B13-8060	EPA 625	Benzo[e]pyrene	5 ng/L	UJ LC
B13-8060	EPA 625	Benzo[b]fluoranthene	1.3 ng/L	J DL, LC
B13-8060	EPA 625	Fluoranthene	2.4 ng/L	J DL
B13-8060	EPA 625	Benzo[k]fluoranthene	1.2 ng/L	J DL
B13-8060	EPA 625	Benzo[a]pyrene	5 ng/L	UJ LC
B13-8060	EPA 625	Benz[a]anthracene	2.1 ng/L	J DL
B13-8060	EPA 625	1-Methylnaphthalene	5 ng/L	UJ LC
B13-8060	EPA 625	Naphthalene	5 ng/L	UJ LC
B13-8060	EPA 625	2-Methylnaphthalene	5 ng/L	UJ LC
B13-8060	SM 4500-NO3 E	Nitrate-N	0.02 mg/L	J DL
B13-8060	SM 5540-C	Methylene Blue Active Substance	0.049 mg/L	J LV, HD
B13-8064	EPA 1640	Aluminum, Dissolved	6 µg/L	UJ LC
B13-8064	EPA 1640	Thallium, Dissolved	0.005 µg/L	J DL
B13-8064	EPA 1640	Titanium, Dissolved	14.405 µg/L	J LC
B13-8064	EPA 1640	Arsenic, Dissolved	1.227 µg/L	J LC
B13-8064	EPA 1640	Beryllium, Dissolved	0.01 µg/L	UJ LC
B13-8064	EPA 1640	Chromium, Dissolved	0.1056 µg/L	J LC
B13-8064	EPA 1640	Vanadium, Dissolved	2.8 µg/L	J LC
B13-8064	EPA 1640	Aluminum, Total	39.3 µg/L	J LC
B13-8064	EPA 1640	Thallium, Total	0.006 µg/L	J DL
B13-8064	EPA 1640	Titanium, Total	12.576 µg/L	J LC
B13-8064	EPA 1640	Arsenic, Total	1.274 µg/L	J LC
B13-8064	EPA 1640	Beryllium, Total	0.01 µg/L	UJ LC
B13-8064	EPA 1640	Chromium, Total	0.3309 µg/L	J LC
B13-8064	EPA 1640	Vanadium, Total	2.9 µg/L	J LC
B13-8064	EPA 1640	Iron (Fe), Dissolved	1 µg/L	UJ LC
B13-8064	EPA 1640	Nickel, Dissolved	0.6189 µg/L	J LC
B13-8064	EPA 1640	Copper, Dissolved	3.338 µg/L	J LC
B13-8064	EPA 1640	Selenium, Dissolved	0.019 µg/L	J LC
B13-8064	EPA 1640	Iron (Fe), Total	18.1 µg/L	J LC

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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8064	EPA 1640	Nickel, Total	0.7671 µg/L	J LC
B13-8064	EPA 1640	Copper, Total	3.717 µg/L	J LC
B13-8064	EPA 1640	Selenium, Total	0.022 µg/L	J LC
B13-8064	EPA 415.3	Dissolved Organic Carbon	0.63 mg/L	J DL, NQ
B13-8064	EPA 415.3	Total Organic Carbon	1.0 mg/L	J DL, NQ
B13-8064	EPA 625	Anthracene	2.3 ng/L	J DL
B13-8064	EPA 625	Pyrene	2.6 ng/L	J DL, HV, LC
B13-8064	EPA 625	Benzo[e]pyrene	5 ng/L	UJ LC
B13-8064	EPA 625	Indeno[1,2,3-c,d]pyrene	5 ng/L	UJ LC
B13-8064	EPA 625	Perylene	5 ng/L	UJ LC
B13-8064	EPA 625	Benzo[b]fluoranthene	2.3 ng/L	J DL, HV, LC
B13-8064	EPA 625	Fluoranthene	7.2 ng/L	J HV, LC
B13-8064	EPA 625	Benzo[k]fluoranthene	1.4 ng/L	J DL, LC
B13-8064	EPA 625	Chrysene	5 ng/L	UJ LC
B13-8064	EPA 625	Benzo[a]pyrene	1.3 ng/L	J DL, BC, HV, LC
B13-8064	EPA 625	Dibenz[a,h]anthracene	5 ng/L	UJ LC
B13-8064	EPA 625	Benz[a]anthracene	5 ng/L	UJ LC
B13-8064	EPA 625	2,6-Dimethylnaphthalene	5 ng/L	UJ LV
B13-8064	EPA 625	Acenaphthene	3.1 ng/L	J DL
B13-8064	EPA 625	Phenanthrene	3.4 ng/L	J DL
B13-8064	EPA 625	Fluorene	1.8 ng/L	J DL
B13-8064	EPA 625	1-Methylnaphthalene	5 ng/L	UJ LV, LL
B13-8064	EPA 625	Naphthalene	5 ng/L	UJ BC, LV, LL
B13-8064	EPA 625	2-Methylnaphthalene	5 ng/L	UJ LV, LL
B13-8064	EPA 625	Biphenyl	5 ng/L	UJ LV
B13-8064	SM 5540-C	Methylene Blue Active Substance	0.007 mg/L	J DL, LV
B13-8065	EPA 1640	Aluminum, Dissolved	6 µg/L	UJ LC
B13-8065	EPA 1640	Tin, Dissolved	0.009 µg/L	J DL
B13-8065	EPA 1640	Titanium, Dissolved	12.816 µg/L	J LC
B13-8065	EPA 1640	Arsenic, Dissolved	1.197 µg/L	J LC
B13-8065	EPA 1640	Beryllium, Dissolved	0.01 µg/L	UJ LC
B13-8065	EPA 1640	Chromium, Dissolved	0.0932 µg/L	J LC
B13-8065	EPA 1640	Vanadium, Dissolved	2.61 µg/L	J LC
B13-8065	EPA 1640	Aluminum, Total	31.9 µg/L	J LC
B13-8065	EPA 1640	Titanium, Total	11.571 µg/L	J LC
B13-8065	EPA 1640	Arsenic, Total	1.189 µg/L	J LC
B13-8065	EPA 1640	Beryllium, Total	0.01 µg/L	UJ LC
B13-8065	EPA 1640	Chromium, Total	0.1942 µg/L	J LC
B13-8065	EPA 1640	Vanadium, Total	2.7 µg/L	J LC
B13-8065	EPA 1640	Iron (Fe), Dissolved	1 µg/L	UJ LC
B13-8065	EPA 1640	Nickel, Dissolved	0.6387 µg/L	J LC
B13-8065	EPA 1640	Copper, Dissolved	4 µg/L	J LC
B13-8065	EPA 1640	Selenium, Dissolved	0.013 µg/L	J DL, LC
B13-8065	EPA 1640	Iron (Fe), Total	16 µg/L	J LC
B13-8065	EPA 1640	Nickel, Total	0.6463 µg/L	J LC
B13-8065	EPA 1640	Copper, Total	4.273 µg/L	J LC
B13-8065	EPA 1640	Selenium, Total	0.021 µg/L	J LC
B13-8065	EPA 415.3	Dissolved Organic Carbon	0.78 mg/L	J DL, NQ
B13-8065	EPA 415.3	Total Organic Carbon	0.66 mg/L	J DL, NQ
B13-8065	EPA 625	Anthracene	2.2 ng/L	J DL
B13-8065	EPA 625	Pyrene	2.9 ng/L	J DL, HV, LC
B13-8065	EPA 625	Benzo[e]pyrene	5 ng/L	UJ LC
B13-8065	EPA 625	Indeno[1,2,3-c,d]pyrene	5 ng/L	UJ LC
B13-8065	EPA 625	Perylene	5 ng/L	UJ LC
B13-8065	EPA 625	Benzo[b]fluoranthene	5 ng/L	UJ LC
B13-8065	EPA 625	Fluoranthene	6.4 ng/L	J HV, LC
B13-8065	EPA 625	Benzo[k]fluoranthene	5 ng/L	UJ LC
B13-8065	EPA 625	Chrysene	5 ng/L	UJ LC



**TABLE 3**  
**Qualifiers Added to the Water Samples During Validation**  
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**San Diego, California**

Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8065	EPA 625	Benzo[a]pyrene	5 ng/L	UJ BC, LC
B13-8065	EPA 625	Dibenz[a,h]anthracene	5 ng/L	UJ LC
B13-8065	EPA 625	Benz[a]anthracene	5 ng/L	UJ LC
B13-8065	EPA 625	2,6-Dimethylnaphthalene	5 ng/L	UJ LV
B13-8065	EPA 625	Acenaphthene	2.8 ng/L	J DL
B13-8065	EPA 625	Phenanthrene	3.2 ng/L	J DL
B13-8065	EPA 625	Fluorene	2.1 ng/L	J DL
B13-8065	EPA 625	1-Methylnaphthalene	5 ng/L	UJ LV, LL
B13-8065	EPA 625	Naphthalene	5 ng/L	UJ BC, LV, LL
B13-8065	EPA 625	2-Methylnaphthalene	5 ng/L	UJ LV, LL
B13-8065	EPA 625	Biphenyl	5 ng/L	UJ LV
B13-8065	SM 4500-NO3 E	Nitrate-N	0.02 mg/L	J DL
B13-8065	SM 5540-C	Methylene Blue Active Substance	0.025 mg/L	UJ LV
B13-8066	EPA 1640	Aluminum, Dissolved	6 µg/L	UJ LC
B13-8066	EPA 1640	Thallium, Dissolved	0.007 µg/L	J DL
B13-8066	EPA 1640	Titanium, Dissolved	12.136 µg/L	J LC
B13-8066	EPA 1640	Arsenic, Dissolved	1.251 µg/L	J LC
B13-8066	EPA 1640	Beryllium, Dissolved	0.01 µg/L	UJ LC
B13-8066	EPA 1640	Chromium, Dissolved	0.1051 µg/L	J LC
B13-8066	EPA 1640	Vanadium, Dissolved	2.79 µg/L	J LC
B13-8066	EPA 1640	Aluminum, Total	56.2 µg/L	J LC
B13-8066	EPA 1640	Titanium, Total	15.151 µg/L	J LC
B13-8066	EPA 1640	Arsenic, Total	1.221 µg/L	J LC
B13-8066	EPA 1640	Beryllium, Total	0.01 µg/L	UJ LC
B13-8066	EPA 1640	Chromium, Total	0.2402 µg/L	J LC
B13-8066	EPA 1640	Vanadium, Total	2.79 µg/L	J LC
B13-8066	EPA 1640	Iron (Fe), Dissolved	1 µg/L	UJ LC
B13-8066	EPA 1640	Lead, Dissolved	0.0771 µg/L	J HD
B13-8066	EPA 1640	Nickel, Dissolved	0.5997 µg/L	J LC
B13-8066	EPA 1640	Antimony, Dissolved	0.17 µg/L	J TD
B13-8066	EPA 1640	Copper, Dissolved	3.416 µg/L	J LC
B13-8066	EPA 1640	Selenium, Dissolved	0.018 µg/L	J LC
B13-8066	EPA 1640	Iron (Fe), Total	24.5 µg/L	J LC
B13-8066	EPA 1640	Nickel, Total	0.7078 µg/L	J LC
B13-8066	EPA 1640	Antimony, Total	0.13 µg/L	J TD
B13-8066	EPA 1640	Copper, Total	4.011 µg/L	J LC
B13-8066	EPA 1640	Selenium, Total	0.024 µg/L	J LC
B13-8066	EPA 415.3	Dissolved Organic Carbon	0.64 mg/L	J DL, NQ
B13-8066	EPA 415.3	Total Organic Carbon	0.60 mg/L	J DL, NQ
B13-8066	EPA 625	Anthracene	2.7 ng/L	J DL
B13-8066	EPA 625	Pyrene	2.8 ng/L	J DL, HV, LC
B13-8066	EPA 625	Benzo[e]pyrene	1.6 ng/L	J DL, LC
B13-8066	EPA 625	Indeno[1,2,3-c,d]pyrene	5 ng/L	UJ LC
B13-8066	EPA 625	Perylene	1.5 ng/L	J DL, HV, LC
B13-8066	EPA 625	Benzo[b]fluoranthene	3 ng/L	J DL, HV, LC
B13-8066	EPA 625	Fluoranthene	6.7 ng/L	J HV, LC
B13-8066	EPA 625	Benzo[k]fluoranthene	1.5 ng/L	J DL, LC
B13-8066	EPA 625	Chrysene	5 ng/L	UJ LC
B13-8066	EPA 625	Benzo[a]pyrene	1.6 ng/L	J DL, BC, HV, LC
B13-8066	EPA 625	Dibenz[a,h]anthracene	5 ng/L	UJ LC
B13-8066	EPA 625	Benz[a]anthracene	5 ng/L	UJ LC
B13-8066	EPA 625	2,6-Dimethylnaphthalene	5 ng/L	UJ LV
B13-8066	EPA 625	Acenaphthene	2.8 ng/L	J DL
B13-8066	EPA 625	Phenanthrene	2.8 ng/L	J DL
B13-8066	EPA 625	Fluorene	1.9 ng/L	J DL
B13-8066	EPA 625	1-Methylnaphthalene	5 ng/L	UJ LV, LL
B13-8066	EPA 625	Naphthalene	5 ng/L	UJ BC, LV, LL
B13-8066	EPA 625	2-Methylnaphthalene	5 ng/L	UJ LV, LL

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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8066	EPA 625	Biphenyl	5 ng/L	UJ LV
B13-8066	SM 4500-NH3 D	Ammonia-N	0.04 mg/L	J DL
B13-8066	SM 4500-NO3 E	Nitrate-N	0.02 mg/L	J DL
B13-8066	SM 5540-C	Methylene Blue Active Substance	0.025 mg/L	UJ LV
B13-8068	EPA 1640	Aluminum, Dissolved	6 µg/L	UJ LC
B13-8068	EPA 1640	Manganese, Dissolved	5.83 µg/L	J LC
B13-8068	EPA 1640	Thallium, Dissolved	0.008 µg/L	J DL
B13-8068	EPA 1640	Tin, Dissolved	0.005 µg/L	J DL
B13-8068	EPA 1640	Titanium, Dissolved	6.23 µg/L	J LC
B13-8068	EPA 1640	Antimony, Dissolved	0.1 µg/L	J LC
B13-8068	EPA 1640	Beryllium, Dissolved	0.01 µg/L	UJ LC
B13-8068	EPA 1640	Chromium, Dissolved	0.1377 µg/L	J LC
B13-8068	EPA 1640	Cobalt, Dissolved	0.077 µg/L	J LC, LL
B13-8068	EPA 1640	Vanadium, Dissolved	2.21 µg/L	J LC
B13-8068	EPA 1640	Zinc, Dissolved	5.1408 µg/L	J LC
B13-8068	EPA 1640	Aluminum, Total	101.3 µg/L	J LC
B13-8068	EPA 1640	Manganese, Total	9.47 µg/L	J LC
B13-8068	EPA 1640	Titanium, Total	12.181 µg/L	J LC
B13-8068	EPA 1640	Antimony, Total	0.09 µg/L	J LC
B13-8068	EPA 1640	Beryllium, Total	0.006 µg/L	J DL, LC
B13-8068	EPA 1640	Chromium, Total	0.3008 µg/L	J LC
B13-8068	EPA 1640	Cobalt, Total	0.105 µg/L	J LC, LL
B13-8068	EPA 1640	Vanadium, Total	2.5 µg/L	J LC
B13-8068	EPA 1640	Zinc, Total	6.251 µg/L	J LC
B13-8068	EPA 1640	Selenium, Dissolved	0.02 µg/L	J CH
B13-8068	EPA 1640	Selenium, Total	0.023 µg/L	J CH
B13-8068	EPA 415.3	Dissolved Organic Carbon	0.35 mg/L	J DL, NQ
B13-8068	EPA 415.3	Total Organic Carbon	1.1 mg/L	J DL, NQ
B13-8068	EPA 625	Anthracene	2 ng/L	J DL
B13-8068	EPA 625	Pyrene	1.6 ng/L	J DL
B13-8068	EPA 625	Dibenzothiophene	5 ng/L	UJ LL
B13-8068	EPA 625	Benzo[e]pyrene	5 ng/L	UJ LC
B13-8068	EPA 625	Benzo[b]fluoranthene	1.3 ng/L	J DL, LC
B13-8068	EPA 625	Fluoranthene	4.1 ng/L	J DL
B13-8068	EPA 625	Acenaphthylene	5 ng/L	UJ LL
B13-8068	EPA 625	2,3,5-Trimethylnaphthalene	5 ng/L	UJ LL
B13-8068	EPA 625	Benzo[a]pyrene	5 ng/L	UJ LC
B13-8068	EPA 625	Benzo[a]anthracene	2 ng/L	J DL
B13-8068	EPA 625	2,6-Dimethylnaphthalene	5 ng/L	UJ LL
B13-8068	EPA 625	Acenaphthene	1.9 ng/L	J DL, LL
B13-8068	EPA 625	Phenanthrene	2.3 ng/L	J DL
B13-8068	EPA 625	Fluorene	1.1 ng/L	J DL, LL
B13-8068	EPA 625	1-Methylnaphthalene	5 ng/L	UJ LC, LL
B13-8068	EPA 625	Naphthalene	5 ng/L	UJ LC, LL
B13-8068	EPA 625	2-Methylnaphthalene	5 ng/L	UJ LC, LL
B13-8068	EPA 625	Biphenyl	5 ng/L	UJ LL
B13-8069	EPA 1640	Aluminum, Dissolved	6 µg/L	UJ LC
B13-8069	EPA 1640	Titanium, Dissolved	14.051 µg/L	J LC
B13-8069	EPA 1640	Arsenic, Dissolved	1.339 µg/L	J LC
B13-8069	EPA 1640	Beryllium, Dissolved	0.01 µg/L	UJ LC
B13-8069	EPA 1640	Chromium, Dissolved	0.114 µg/L	J LC
B13-8069	EPA 1640	Vanadium, Dissolved	2.71 µg/L	J LC
B13-8069	EPA 1640	Aluminum, Total	75.3 µg/L	J LC
B13-8069	EPA 1640	Titanium, Total	16.81 µg/L	J LC
B13-8069	EPA 1640	Arsenic, Total	1.239 µg/L	J LC
B13-8069	EPA 1640	Beryllium, Total	0.01 µg/L	UJ LC
B13-8069	EPA 1640	Chromium, Total	0.2957 µg/L	J LC
B13-8069	EPA 1640	Vanadium, Total	2.88 µg/L	J LC

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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8069	EPA 1640	Iron (Fe), Dissolved	0.7 µg/L	J DL, LC
B13-8069	EPA 1640	Nickel, Dissolved	0.5843 µg/L	J LC
B13-8069	EPA 1640	Antimony, Dissolved	0.15 µg/L	J TD
B13-8069	EPA 1640	Copper, Dissolved	3.212 µg/L	J LC
B13-8069	EPA 1640	Selenium, Dissolved	0.016 µg/L	J LC
B13-8069	EPA 1640	Iron (Fe), Total	33.6 µg/L	J LC
B13-8069	EPA 1640	Nickel, Total	0.6255 µg/L	J LC
B13-8069	EPA 1640	Antimony, Total	0.12 µg/L	J TD
B13-8069	EPA 1640	Copper, Total	3.734 µg/L	J LC
B13-8069	EPA 1640	Selenium, Total	0.021 µg/L	J LC
B13-8069	EPA 415.3	Dissolved Organic Carbon	0.62 mg/L	J DL, NQ
B13-8069	EPA 415.3	Total Organic Carbon	0.52 mg/L	J DL, NQ
B13-8069	EPA 625	Anthracene	2.4 ng/L	J DL
B13-8069	EPA 625	Pyrene	2.6 ng/L	J DL, HV, LC
B13-8069	EPA 625	Benzo[e]pyrene	5 ng/L	UJ LC
B13-8069	EPA 625	Indeno[1,2,3-c,d]pyrene	5 ng/L	UJ LC
B13-8069	EPA 625	Perylene	5 ng/L	UJ LC
B13-8069	EPA 625	Benzo[b]fluoranthene	2.3 ng/L	J DL, HV, LC
B13-8069	EPA 625	Fluoranthene	5.9 ng/L	J HV, LC
B13-8069	EPA 625	Benzo[k]fluoranthene	1.6 ng/L	J DL, LC
B13-8069	EPA 625	Chrysene	5 ng/L	UJ LC
B13-8069	EPA 625	Benzo[a]pyrene	5 ng/L	UJ BC, LC
B13-8069	EPA 625	Dibenz[a,h]anthracene	5 ng/L	UJ LC
B13-8069	EPA 625	Benz[a]anthracene	5 ng/L	UJ LC
B13-8069	EPA 625	2,6-Dimethylnaphthalene	5 ng/L	UJ LV
B13-8069	EPA 625	Acenaphthene	2.1 ng/L	J DL
B13-8069	EPA 625	Phenanthrene	2.1 ng/L	J DL
B13-8069	EPA 625	Fluorene	1.6 ng/L	J DL
B13-8069	EPA 625	1-Methylnaphthalene	5 ng/L	UJ LV, LL
B13-8069	EPA 625	Naphthalene	1.2 ng/L	J DL, BC, LV, LL
B13-8069	EPA 625	2-Methylnaphthalene	5 ng/L	UJ LV, LL
B13-8069	EPA 625	Biphenyl	5 ng/L	UJ LV
B13-8069	SM 4500-NO3 E	Nitrate-N	0.01 mg/L	J DL
B13-8069	SM 5540-C	Methylene Blue Active Substance	0.016 mg/L	J DL, LV
B13-8073	EPA 1640	Aluminum, Dissolved	6 µg/L	UJ LC
B13-8073	EPA 1640	Manganese, Dissolved	5.86 µg/L	J LC
B13-8073	EPA 1640	Thallium, Dissolved	0.008 µg/L	J DL
B13-8073	EPA 1640	Titanium, Dissolved	6.561 µg/L	J LC
B13-8073	EPA 1640	Antimony, Dissolved	0.15 µg/L	J LC, TD
B13-8073	EPA 1640	Beryllium, Dissolved	0.01 µg/L	UJ LC
B13-8073	EPA 1640	Chromium, Dissolved	0.108 µg/L	J LC
B13-8073	EPA 1640	Cobalt, Dissolved	0.044 µg/L	J LC, LL
B13-8073	EPA 1640	Vanadium, Dissolved	2.13 µg/L	J LC
B13-8073	EPA 1640	Zinc, Dissolved	10.1474 µg/L	J LC
B13-8073	EPA 1640	Aluminum, Total	43.9 µg/L	J LC
B13-8073	EPA 1640	Manganese, Total	8.93 µg/L	J LC
B13-8073	EPA 1640	Titanium, Total	10.289 µg/L	J LC
B13-8073	EPA 1640	Antimony, Total	0.12 µg/L	J LC, TD
B13-8073	EPA 1640	Beryllium, Total	0.01 µg/L	UJ LC
B13-8073	EPA 1640	Chromium, Total	0.2238 µg/L	J LC
B13-8073	EPA 1640	Cobalt, Total	0.074 µg/L	J LC, LL
B13-8073	EPA 1640	Vanadium, Total	2.25 µg/L	J LC
B13-8073	EPA 1640	Zinc, Total	11.4329 µg/L	J LC
B13-8073	EPA 1640	Iron (Fe), Dissolved	0.6 µg/L	J DL
B13-8073	EPA 1640	Selenium, Dissolved	0.018 µg/L	J CH
B13-8073	EPA 1640	Selenium, Total	0.023 µg/L	J CH
B13-8073	EPA 200.8	Barium, Dissolved	10.36 µg/L	J TD
B13-8073	EPA 200.8	Barium, Total	7.84 µg/L	J TD

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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8073	EPA 415.3	Dissolved Organic Carbon	1.3 mg/L	J DL, NQ
B13-8073	EPA 415.3	Total Organic Carbon	1.6 mg/L	J DL, NQ
B13-8073	EPA 625	Pyrene	1.1 ng/L	J DL
B13-8073	EPA 625	Benzo[e]pyrene	5 ng/L	UJ LC
B13-8073	EPA 625	Benzo[b]fluoranthene	5 ng/L	UJ LC
B13-8073	EPA 625	Fluoranthene	3.2 ng/L	J DL
B13-8073	EPA 625	Acenaphthylene	1.1 ng/L	J DL
B13-8073	EPA 625	Chrysene	5 ng/L	UJ LC
B13-8073	EPA 625	2,3,5-Trimethylnaphthalene	3.1 ng/L	J DL
B13-8073	EPA 625	Benzo[a]pyrene	5 ng/L	UJ LC
B13-8073	EPA 625	2,6-Dimethylnaphthalene	1.6 ng/L	J DL
B13-8073	EPA 625	Phenanthrene	1.1 ng/L	J DL
B13-8073	EPA 625	1-Methylnaphthalene	5 ng/L	UJ LC
B13-8073	EPA 625	Naphthalene	5 ng/L	UJ LC, LL
B13-8073	EPA 625	2-Methylnaphthalene	5 ng/L	UJ LC
B13-8073	EPA 625	Biphenyl	5 ng/L	UJ LC
B13-8073	SM 5540-C	Methylene Blue Active Substance	0.058 mg/L	J HV, LC
B13-8074	EPA 1640	Aluminum, Dissolved	4.1 µg/L	J DL
B13-8074	EPA 1640	Silver, Dissolved	0.08 µg/L	J HV, LC, HL, HD
B13-8074	EPA 1640	Titanium, Dissolved	11.351 µg/L	J LL
B13-8074	EPA 1640	Beryllium, Dissolved	0.01 µg/L	UJ LC
B13-8074	EPA 1640	Silver, Total	0.08 µg/L	J HV, LC, HL, HD
B13-8074	EPA 1640	Titanium, Total	14.446 µg/L	J LL
B13-8074	EPA 1640	Beryllium, Total	0.005 µg/L	J DL, LC
B13-8074	EPA 200.8	Barium, Dissolved	9.16 µg/L	J CH
B13-8074	EPA 200.8	Barium, Total	8.62 µg/L	J CH
B13-8074	EPA 245.7	Mercury, Dissolved	0.02 µg/L	UJ LC
B13-8074	EPA 245.7	Mercury, Total	0.02 µg/L	UJ LC
B13-8074	EPA 415.3	Total Organic Carbon	2.4 mg/L	J DL, NQ
B13-8074	EPA 415.3	Dissolved Organic Carbon	1.4 mg/L	J DL, NQ
B13-8074	EPA 625	Anthracene	2.4 ng/L	J DL
B13-8074	EPA 625	Pyrene	2.9 ng/L	J DL, HV, LC
B13-8074	EPA 625	Benzo[e]pyrene	5 ng/L	UJ LC
B13-8074	EPA 625	Indeno[1,2,3-c,d]pyrene	5 ng/L	UJ LC
B13-8074	EPA 625	Perylene	5 ng/L	UJ LC
B13-8074	EPA 625	Benzo[b]fluoranthene	5 ng/L	UJ LC
B13-8074	EPA 625	Fluoranthene	5.4 ng/L	J HV, LC
B13-8074	EPA 625	Benzo[k]fluoranthene	5 ng/L	UJ LC
B13-8074	EPA 625	Chrysene	5 ng/L	UJ LC
B13-8074	EPA 625	Benzo[a]pyrene	5 ng/L	UJ BC, LC
B13-8074	EPA 625	Dibenz[a,h]anthracene	5 ng/L	UJ LC
B13-8074	EPA 625	Benz[a]anthracene	5 ng/L	UJ LC
B13-8074	EPA 625	2,6-Dimethylnaphthalene	5 ng/L	UJ LV
B13-8074	EPA 625	Acenaphthene	2.3 ng/L	J DL
B13-8074	EPA 625	Phenanthrene	2.3 ng/L	J DL
B13-8074	EPA 625	Fluorene	1.6 ng/L	J DL
B13-8074	EPA 625	1-Methylnaphthalene	5 ng/L	UJ LV, LL
B13-8074	EPA 625	Naphthalene	5 ng/L	UJ BC, LV, LL
B13-8074	EPA 625	2-Methylnaphthalene	5 ng/L	UJ LV, LL
B13-8074	EPA 625	Biphenyl	5 ng/L	UJ LV
B13-8074	SM 4500-NO3 E	Nitrate-N	0.02 mg/L	J DL, CH
B13-8074	SM 5540-C	Methylene Blue Active Substance	0.029 mg/L	J HV
B13-8075	EPA 1640	Aluminum, Dissolved	4.2 µg/L	J DL
B13-8075	EPA 1640	Silver, Dissolved	0.08 µg/L	J HV, LC, HL, HD
B13-8075	EPA 1640	Titanium, Dissolved	12.646 µg/L	J LL
B13-8075	EPA 1640	Beryllium, Dissolved	0.01 µg/L	UJ LC
B13-8075	EPA 1640	Silver, Total	0.08 µg/L	J HV, LC, HL, HD
B13-8075	EPA 1640	Titanium, Total	10.95 µg/L	J LL

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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8075	EPA 1640	Beryllium, Total	0.01 µg/L	UJ LC
B13-8075	EPA 200.8	Barium, Dissolved	8.07 µg/L	J CH
B13-8075	EPA 200.8	Barium, Total	8.6 µg/L	J CH
B13-8075	EPA 245.7	Mercury, Dissolved	0.02 µg/L	UJ LC
B13-8075	EPA 245.7	Mercury, Total	0.02 µg/L	UJ LC
B13-8075	EPA 415.3	Total Organic Carbon	2.9 mg/L	J NQ
B13-8075	EPA 415.3	Dissolved Organic Carbon	1.5 mg/L	J DL, NQ
B13-8075	EPA 625	Anthracene	2.8 ng/L	J DL
B13-8075	EPA 625	Pyrene	2.5 ng/L	J DL, HV, LC
B13-8075	EPA 625	Benzo[e]pyrene	5 ng/L	UJ LC
B13-8075	EPA 625	Indeno[1,2,3-c,d]pyrene	5 ng/L	UJ LC
B13-8075	EPA 625	Perylene	5 ng/L	UJ LC
B13-8075	EPA 625	Benzo[b]fluoranthene	5 ng/L	UJ LC
B13-8075	EPA 625	Fluoranthene	5.8 ng/L	J HV, LC
B13-8075	EPA 625	Benzo[k]fluoranthene	5 ng/L	UJ LC
B13-8075	EPA 625	Chrysene	5 ng/L	UJ LC
B13-8075	EPA 625	Benzo[a]pyrene	5 ng/L	UJ BC, LC
B13-8075	EPA 625	Dibenz[a,h]anthracene	5 ng/L	UJ LC
B13-8075	EPA 625	Benz[a]anthracene	5 ng/L	UJ LC
B13-8075	EPA 625	2,6-Dimethylnaphthalene	5 ng/L	UJ LV
B13-8075	EPA 625	Acenaphthene	2.3 ng/L	J DL
B13-8075	EPA 625	Phenanthrene	2.4 ng/L	J DL
B13-8075	EPA 625	Fluorene	1.5 ng/L	J DL
B13-8075	EPA 625	1-Methylnaphthalene	5 ng/L	UJ LV, LL
B13-8075	EPA 625	Naphthalene	1.2 ng/L	J DL, BC, LV, LL
B13-8075	EPA 625	2-Methylnaphthalene	5 ng/L	UJ LV, LL
B13-8075	EPA 625	Biphenyl	5 ng/L	UJ LV
B13-8075	SM 4500-NH3 D	Ammonia-N	0.02 mg/L	J DL
B13-8075	SM 4500-NO3 E	Nitrate-N	0.01 mg/L	J DL, CH
B13-8076	EPA 1640	Aluminum, Dissolved	5 µg/L	J DL
B13-8076	EPA 1640	Silver, Dissolved	0.08 µg/L	J HV, LC, HL, HD
B13-8076	EPA 1640	Titanium, Dissolved	8.901 µg/L	J LL
B13-8076	EPA 1640	Beryllium, Dissolved	0.005 µg/L	J DL, LC
B13-8076	EPA 1640	Silver, Total	0.08 µg/L	J HV, LC, HL, HD
B13-8076	EPA 1640	Titanium, Total	14.364 µg/L	J LL
B13-8076	EPA 1640	Beryllium, Total	0.005 µg/L	J DL, LC
B13-8076	EPA 200.8	Barium, Dissolved	9.45 µg/L	J CH
B13-8076	EPA 200.8	Barium, Total	8.5 µg/L	J CH
B13-8076	EPA 245.7	Mercury, Dissolved	0.02 µg/L	UJ LC
B13-8076	EPA 245.7	Mercury, Total	0.02 µg/L	UJ LC
B13-8076	EPA 415.3	Total Organic Carbon	2.6 mg/L	J NQ
B13-8076	EPA 415.3	Dissolved Organic Carbon	1.4 mg/L	J DL, NQ
B13-8076	EPA 625	Anthracene	2.1 ng/L	J DL
B13-8076	EPA 625	Pyrene	3.1 ng/L	J DL, HV, LC
B13-8076	EPA 625	Benzo[e]pyrene	5 ng/L	UJ LC
B13-8076	EPA 625	Indeno[1,2,3-c,d]pyrene	5 ng/L	UJ LC
B13-8076	EPA 625	Perylene	5 ng/L	UJ LC
B13-8076	EPA 625	Benzo[b]fluoranthene	5 ng/L	UJ LC
B13-8076	EPA 625	Fluoranthene	6.4 ng/L	J HV, LC
B13-8076	EPA 625	Benzo[k]fluoranthene	5 ng/L	UJ LC
B13-8076	EPA 625	Chrysene	5 ng/L	UJ LC
B13-8076	EPA 625	Benzo[a]pyrene	5 ng/L	UJ BC, LC
B13-8076	EPA 625	Dibenz[a,h]anthracene	5 ng/L	UJ LC
B13-8076	EPA 625	Benz[a]anthracene	5 ng/L	UJ LC
B13-8076	EPA 625	2,6-Dimethylnaphthalene	5 ng/L	UJ LV
B13-8076	EPA 625	Acenaphthene	2.3 ng/L	J DL
B13-8076	EPA 625	Phenanthrene	2.3 ng/L	J DL
B13-8076	EPA 625	Fluorene	1.5 ng/L	J DL

**TABLE 3**  
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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8076	EPA 625	1-Methylnaphthalene	5 ng/L	UJ LV, LL
B13-8076	EPA 625	Naphthalene	5 ng/L	UJ BC, LV, LL
B13-8076	EPA 625	2-Methylnaphthalene	5 ng/L	UJ LV, LL
B13-8076	EPA 625	Biphenyl	5 ng/L	UJ LV
B13-8076	SM 4500-NO3 E	Nitrate-N	0.02 mg/L	J DL, CH
B13-8076	SM 5540-C	Methylene Blue Active Substance	0.04 mg/L	J HV
B13-8077	EPA 1640	Aluminum, Dissolved	4.1 µg/L	J DL
B13-8077	EPA 1640	Silver, Dissolved	0.08 µg/L	J HV, LC, HL, HD
B13-8077	EPA 1640	Titanium, Dissolved	12.414 µg/L	J LL
B13-8077	EPA 1640	Beryllium, Dissolved	0.006 µg/L	J DL, LC
B13-8077	EPA 1640	Silver, Total	0.08 µg/L	J HV, LC, HL, HD
B13-8077	EPA 1640	Titanium, Total	11.738 µg/L	J LL
B13-8077	EPA 1640	Beryllium, Total	0.01 µg/L	UJ LC
B13-8077	EPA 200.8	Barium, Dissolved	8.48 µg/L	J CH
B13-8077	EPA 200.8	Barium, Total	8.89 µg/L	J CH
B13-8077	EPA 245.7	Mercury, Dissolved	0.02 µg/L	UJ LC
B13-8077	EPA 245.7	Mercury, Total	0.02 µg/L	UJ LC
B13-8077	EPA 415.3	Total Organic Carbon	2.8 mg/L	J NQ
B13-8077	EPA 415.3	Dissolved Organic Carbon	1.8 mg/L	J DL, NQ
B13-8077	EPA 625	Anthracene	1.6 ng/L	J DL
B13-8077	EPA 625	Pyrene	1.9 ng/L	J DL, HV, LC
B13-8077	EPA 625	Benzo[e]pyrene	5 ng/L	UJ LC
B13-8077	EPA 625	Indeno[1,2,3-c,d]pyrene	5 ng/L	UJ LC
B13-8077	EPA 625	Perylene	5 ng/L	UJ LC
B13-8077	EPA 625	Benzo[b]fluoranthene	5 ng/L	UJ LC
B13-8077	EPA 625	Fluoranthene	5.5 ng/L	J HV, LC
B13-8077	EPA 625	Benzo[k]fluoranthene	5 ng/L	UJ LC
B13-8077	EPA 625	Chrysene	5 ng/L	UJ LC
B13-8077	EPA 625	Benzo[a]pyrene	5 ng/L	UJ BC, LC
B13-8077	EPA 625	Dibenz[a,h]anthracene	5 ng/L	UJ LC
B13-8077	EPA 625	Benz[a]anthracene	5 ng/L	UJ LC
B13-8077	EPA 625	2,6-Dimethylnaphthalene	5 ng/L	UJ LV
B13-8077	EPA 625	Acenaphthene	2.2 ng/L	J DL
B13-8077	EPA 625	Phenanthrene	2.1 ng/L	J DL
B13-8077	EPA 625	Fluorene	2.5 ng/L	J DL
B13-8077	EPA 625	1-Methylnaphthalene	5 ng/L	UJ LV, LL
B13-8077	EPA 625	Naphthalene	5 ng/L	UJ BC, LV, LL
B13-8077	EPA 625	2-Methylnaphthalene	5 ng/L	UJ LV, LL
B13-8077	EPA 625	Biphenyl	5 ng/L	UJ LV
B13-8077	SM 4500-NO3 E	Nitrate-N	0.02 mg/L	J DL, CH
B13-8077	SM 5540-C	Methylene Blue Active Substance	0.062 mg/L	J HV
B13-8078	EPA 1640	Aluminum, Dissolved	6 µg/L	UJ LC
B13-8078	EPA 1640	Manganese, Dissolved	2.83 µg/L	J LC
B13-8078	EPA 1640	Thallium, Dissolved	0.005 µg/L	J DL
B13-8078	EPA 1640	Tin, Dissolved	0.005 µg/L	J DL
B13-8078	EPA 1640	Titanium, Dissolved	9.34 µg/L	J LC, TD
B13-8078	EPA 1640	Antimony, Dissolved	0.18 µg/L	J LC, TD
B13-8078	EPA 1640	Beryllium, Dissolved	0.01 µg/L	UJ LC
B13-8078	EPA 1640	Chromium, Dissolved	0.0617 µg/L	J LC
B13-8078	EPA 1640	Cobalt, Dissolved	0.042 µg/L	J LC
B13-8078	EPA 1640	Vanadium, Dissolved	2.31 µg/L	J LC
B13-8078	EPA 1640	Zinc, Dissolved	5.2951 µg/L	J LC
B13-8078	EPA 1640	Aluminum, Total	27.9 µg/L	J LC
B13-8078	EPA 1640	Manganese, Total	5.56 µg/L	J LC
B13-8078	EPA 1640	Thallium, Total	0.009 µg/L	J DL
B13-8078	EPA 1640	Titanium, Total	7.522 µg/L	J LC, TD
B13-8078	EPA 1640	Antimony, Total	0.09 µg/L	J LC, TD
B13-8078	EPA 1640	Beryllium, Total	0.01 µg/L	UJ LC

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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8078	EPA 1640	Chromium, Total	0.1743 µg/L	J LC
B13-8078	EPA 1640	Cobalt, Total	0.04 µg/L	J LC
B13-8078	EPA 1640	Vanadium, Total	2.37 µg/L	J LC
B13-8078	EPA 1640	Zinc, Total	5.9535 µg/L	J LC
B13-8078	EPA 1640	Selenium, Dissolved	0.015 µg/L	J CH
B13-8078	EPA 1640	Selenium, Total	0.019 µg/L	J CH
B13-8078	EPA 415.3	Total Organic Carbon	0.80 mg/L	J DL, NQ
B13-8078	EPA 415.3	Dissolved Organic Carbon	2.1 mg/L	J DL, NQ
B13-8078	EPA 625	Anthracene	1.2 ng/L	J DL
B13-8078	EPA 625	Pyrene	1.2 ng/L	J DL
B13-8078	EPA 625	Benzo[e]pyrene	5 ng/L	UJ LC
B13-8078	EPA 625	Benzo[b]fluoranthene	5 ng/L	UJ LC
B13-8078	EPA 625	Fluoranthene	4.1 ng/L	J DL
B13-8078	EPA 625	Benzo[a]pyrene	5 ng/L	UJ LC
B13-8078	EPA 625	Benz[a]anthracene	2.3 ng/L	J DL
B13-8078	EPA 625	Acenaphthene	1.5 ng/L	J DL
B13-8078	EPA 625	Phenanthrene	1.5 ng/L	J DL
B13-8078	EPA 625	Fluorene	1 ng/L	J DL
B13-8078	EPA 625	1-Methylnaphthalene	5 ng/L	UJ LC
B13-8078	EPA 625	Naphthalene	5 ng/L	UJ LC
B13-8078	EPA 625	2-Methylnaphthalene	5 ng/L	UJ LC
B13-8078	SM 4500-NO3 E	Nitrate-N	0.02 mg/L	J DL
B13-8078	SM 5540-C	Methylene Blue Active Substance	0.038 mg/L	J LV, HD
B13-8085	EPA 1640	Aluminum, Dissolved	6 µg/L	UJ LC
B13-8085	EPA 1640	Thallium, Dissolved	0.007 µg/L	J DL
B13-8085	EPA 1640	Beryllium, Dissolved	0.007 µg/L	J DL, LC
B13-8085	EPA 1640	Cobalt, Dissolved	0.01 µg/L	J HD
B13-8085	EPA 1640	Aluminum, Total	64.2 µg/L	J LC
B13-8085	EPA 1640	Beryllium, Total	0.005 µg/L	J DL, LC
B13-8085	EPA 1640	Tin, Total	0.009 µg/L	J DL
B13-8085	EPA 1640	Selenium, Total	0.013 µg/L	J DL, HD
B13-8085	EPA 200.8	Barium, Dissolved	7.27 µg/L	J CH
B13-8085	EPA 200.8	Barium, Total	8.05 µg/L	J CH
B13-8085	EPA 415.3	Total Organic Carbon	0.53 mg/L	J DL, NQ
B13-8085	EPA 415.3	Dissolved Organic Carbon	1.1 mg/L	J DL, NQ
B13-8085	EPA 625	Anthracene	5 ng/L	UJ NQ
B13-8085	EPA 625	Pyrene	1.3 ng/L	J DL, NQ
B13-8085	EPA 625	Dibenzothiophene	5 ng/L	UJ NQ
B13-8085	EPA 625	Benzo[g,h,i]perylene	5 ng/L	UJ NQ
B13-8085	EPA 625	Benzo[e]pyrene	5 ng/L	UJ NQ
B13-8085	EPA 625	Indeno[1,2,3-c,d]pyrene	5 ng/L	UJ NQ
B13-8085	EPA 625	Perylene	5 ng/L	UJ NQ
B13-8085	EPA 625	Benzo[b]fluoranthene	5 ng/L	UJ NQ
B13-8085	EPA 625	Fluoranthene	2.5 ng/L	J DL, NQ
B13-8085	EPA 625	Benzo[k]fluoranthene	5 ng/L	UJ NQ
B13-8085	EPA 625	Acenaphthylene	5 ng/L	UJ NQ
B13-8085	EPA 625	Chrysene	5 ng/L	UJ NQ
B13-8085	EPA 625	2,3,5-Trimethylnaphthalene	5 ng/L	UJ NQ
B13-8085	EPA 625	Benzo[a]pyrene	5 ng/L	UJ NQ
B13-8085	EPA 625	Dibenz[a,h]anthracene	5 ng/L	UJ NQ
B13-8085	EPA 625	Benz[a]anthracene	5 ng/L	UJ NQ
B13-8085	EPA 625	2,6-Dimethylnaphthalene	5 ng/L	UJ NQ
B13-8085	EPA 625	1-Methylphenanthrene	5 ng/L	UJ NQ
B13-8085	EPA 625	Acenaphthene	5 ng/L	UJ NQ
B13-8085	EPA 625	Phenanthrene	1.5 ng/L	J DL, NQ
B13-8085	EPA 625	Fluorene	1.3 ng/L	J DL, NQ
B13-8085	EPA 625	1-Methylnaphthalene	5 ng/L	UJ NQ
B13-8085	EPA 625	Naphthalene	1.2 ng/L	J DL, NQ

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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8085	EPA 625	2-Methylnaphthalene	5 ng/L	UJ NQ
B13-8085	EPA 625	Biphenyl	5 ng/L	UJ NQ
B13-8085	SM 4500-NH3 D	Ammonia-N	0.05 mg/L	UJ NQ
B13-8085	SM 4500-NO3 E	Nitrate-N	0.05 mg/L	UJ NQ
B13-8085	SM 4500-P E	Total Orthophosphate as P	0.02 mg/L	J NQ
B13-8085	SM 5540-C	Methylene Blue Active Substance	0.036 mg/L	J NQ, HD
B13-8087	EPA 1640	Aluminum, Dissolved	6 µg/L	UJ LC
B13-8087	EPA 1640	Manganese, Dissolved	2.86 µg/L	J LC
B13-8087	EPA 1640	Silver, Dissolved	0.01 µg/L	J DL
B13-8087	EPA 1640	Thallium, Dissolved	0.009 µg/L	J DL
B13-8087	EPA 1640	Titanium, Dissolved	5.542 µg/L	J LC
B13-8087	EPA 1640	Antimony, Dissolved	0.11 µg/L	J LC
B13-8087	EPA 1640	Beryllium, Dissolved	0.01 µg/L	UJ LC
B13-8087	EPA 1640	Chromium, Dissolved	0.0934 µg/L	J LC
B13-8087	EPA 1640	Cobalt, Dissolved	0.032 µg/L	J LC, LL, HD
B13-8087	EPA 1640	Vanadium, Dissolved	2.11 µg/L	J LC
B13-8087	EPA 1640	Zinc, Dissolved	5.3483 µg/L	J LC
B13-8087	EPA 1640	Aluminum, Total	31.7 µg/L	J LC
B13-8087	EPA 1640	Manganese, Total	5.87 µg/L	J LC
B13-8087	EPA 1640	Thallium, Total	0.008 µg/L	J DL
B13-8087	EPA 1640	Titanium, Total	9.057 µg/L	J LC
B13-8087	EPA 1640	Antimony, Total	0.13 µg/L	J LC, HD
B13-8087	EPA 1640	Beryllium, Total	0.01 µg/L	UJ LC
B13-8087	EPA 1640	Chromium, Total	0.2354 µg/L	J LC
B13-8087	EPA 1640	Cobalt, Total	0.062 µg/L	J LC, LL
B13-8087	EPA 1640	Vanadium, Total	2.21 µg/L	J LC
B13-8087	EPA 1640	Zinc, Total	6.3685 µg/L	J LC
B13-8087	EPA 1640	Selenium, Dissolved	0.007 µg/L	J DL, CH
B13-8087	EPA 1640	Selenium, Total	0.012 µg/L	J DL, CH
B13-8087	EPA 200.8	Barium, Dissolved	8.12 µg/L	J TD
B13-8087	EPA 200.8	Barium, Total	6.48 µg/L	J TD
B13-8087	EPA 415.3	Dissolved Organic Carbon	0.82 mg/L	J DL, NQ
B13-8087	EPA 415.3	Total Organic Carbon	1.3 mg/L	J DL, NQ
B13-8087	EPA 625	Benzo[e]pyrene	5 ng/L	UJ LC
B13-8087	EPA 625	Benzo[b]fluoranthene	5 ng/L	UJ LC
B13-8087	EPA 625	Chrysene	5 ng/L	UJ LC
B13-8087	EPA 625	Benzo[a]pyrene	5 ng/L	UJ LC
B13-8087	EPA 625	Acenaphthene	1.9 ng/L	J DL
B13-8087	EPA 625	Phenanthrene	3.1 ng/L	J DL
B13-8087	EPA 625	1-Methylnaphthalene	5 ng/L	UJ LC
B13-8087	EPA 625	Naphthalene	1.1 ng/L	J DL, LC, LL
B13-8087	EPA 625	2-Methylnaphthalene	5 ng/L	UJ LC
B13-8087	EPA 625	Biphenyl	5 ng/L	UJ LC
B13-8087	SM 5540-C	Methylene Blue Active Substance	0.059 mg/L	J HV, LC
B13-8090	EPA 1640	Aluminum, Dissolved	6 µg/L	UJ LC
B13-8090	EPA 1640	Manganese, Dissolved	7.59 µg/L	J LC
B13-8090	EPA 1640	Silver, Dissolved	0.01 µg/L	J DL
B13-8090	EPA 1640	Titanium, Dissolved	6.38 µg/L	J LC
B13-8090	EPA 1640	Antimony, Dissolved	0.09 µg/L	J LC
B13-8090	EPA 1640	Beryllium, Dissolved	0.01 µg/L	UJ LC
B13-8090	EPA 1640	Chromium, Dissolved	0.1026 µg/L	J LC
B13-8090	EPA 1640	Cobalt, Dissolved	0.076 µg/L	J LC, LL
B13-8090	EPA 1640	Vanadium, Dissolved	2.22 µg/L	J LC
B13-8090	EPA 1640	Zinc, Dissolved	12.3026 µg/L	J LC
B13-8090	EPA 1640	Aluminum, Total	42.9 µg/L	J LC
B13-8090	EPA 1640	Manganese, Total	9.03 µg/L	J LC
B13-8090	EPA 1640	Silver, Total	0.01 µg/L	J DL
B13-8090	EPA 1640	Thallium, Total	0.008 µg/L	J DL



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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8090	EPA 1640	Titanium, Total	8.906 µg/L	J LC
B13-8090	EPA 1640	Antimony, Total	0.11 µg/L	J LC
B13-8090	EPA 1640	Beryllium, Total	0.01 µg/L	UJ LC
B13-8090	EPA 1640	Chromium, Total	0.224 µg/L	J LC
B13-8090	EPA 1640	Cobalt, Total	0.097 µg/L	J LC, LL
B13-8090	EPA 1640	Vanadium, Total	2.45 µg/L	J LC
B13-8090	EPA 1640	Zinc, Total	12.5101 µg/L	J LC
B13-8090	EPA 1640	Selenium, Dissolved	0.031 µg/L	J CH
B13-8090	EPA 1640	Selenium, Total	0.019 µg/L	J CH
B13-8090	EPA 200.8	Barium, Dissolved	10.91 µg/L	J TD
B13-8090	EPA 200.8	Barium, Total	7.92 µg/L	J TD
B13-8090	EPA 415.3	Dissolved Organic Carbon	0.31 mg/L	J DL, NQ
B13-8090	EPA 415.3	Total Organic Carbon	1.1 mg/L	J DL, NQ
B13-8090	EPA 625	Anthracene	2.9 ng/L	J DL
B13-8090	EPA 625	Pyrene	3.5 ng/L	J DL
B13-8090	EPA 625	Dibenzothiophene	5 ng/L	UJ LL
B13-8090	EPA 625	Benzo[e]pyrene	5 ng/L	UJ LC
B13-8090	EPA 625	Benzo[b]fluoranthene	1.4 ng/L	J DL, LC
B13-8090	EPA 625	Benzo[k]fluoranthene	1.9 ng/L	J DL
B13-8090	EPA 625	Acenaphthylene	5 ng/L	UJ LL
B13-8090	EPA 625	Chrysene	1.1 ng/L	J DL
B13-8090	EPA 625	2,3,5-Trimethylnaphthalene	5 ng/L	UJ LL
B13-8090	EPA 625	Benzo[a]pyrene	5 ng/L	UJ LC
B13-8090	EPA 625	Benz[a]anthracene	2.4 ng/L	J DL
B13-8090	EPA 625	2,6-Dimethylnaphthalene	5 ng/L	UJ LL
B13-8090	EPA 625	Acenaphthene	3.2 ng/L	J DL, LL
B13-8090	EPA 625	Phenanthrene	4.2 ng/L	J DL
B13-8090	EPA 625	Fluorene	2.2 ng/L	J DL, LL
B13-8090	EPA 625	1-Methylnaphthalene	5 ng/L	UJ LC, LL
B13-8090	EPA 625	Naphthalene	1.3 ng/L	J DL, LC, LL
B13-8090	EPA 625	2-Methylnaphthalene	5 ng/L	UJ LC, LL
B13-8090	EPA 625	Biphenyl	5 ng/L	UJ LL
B13-8093	EPA 1640	Aluminum, Dissolved	6 µg/L	UJ LC
B13-8093	EPA 1640	Thallium, Dissolved	0.006 µg/L	J DL
B13-8093	EPA 1640	Titanium, Dissolved	6.793 µg/L	J LC
B13-8093	EPA 1640	Antimony, Dissolved	0.13 µg/L	J LC
B13-8093	EPA 1640	Beryllium, Dissolved	0.01 µg/L	UJ LC
B13-8093	EPA 1640	Aluminum, Total	50 µg/L	J LC
B13-8093	EPA 1640	Thallium, Total	0.008 µg/L	J DL
B13-8093	EPA 1640	Titanium, Total	9.149 µg/L	J LC
B13-8093	EPA 1640	Antimony, Total	0.12 µg/L	J LC
B13-8093	EPA 1640	Beryllium, Total	0.005 µg/L	J DL, LC
B13-8093	EPA 1640	Selenium, Dissolved	0.018 µg/L	J CH
B13-8093	EPA 1640	Selenium, Total	0.018 µg/L	J CH
B13-8093	EPA 415.3	Dissolved Organic Carbon	0.76 mg/L	J DL, NQ
B13-8093	EPA 415.3	Total Organic Carbon	0.96 mg/L	J DL, NQ
B13-8093	EPA 625	Anthracene	2.5 ng/L	J DL
B13-8093	EPA 625	Pyrene	2.1 ng/L	J DL
B13-8093	EPA 625	Benzo[e]pyrene	5 ng/L	UJ LC
B13-8093	EPA 625	Benzo[b]fluoranthene	5 ng/L	UJ LC
B13-8093	EPA 625	Fluoranthene	3.8 ng/L	J DL
B13-8093	EPA 625	Chrysene	5 ng/L	UJ LC
B13-8093	EPA 625	Benzo[a]pyrene	5 ng/L	UJ LC
B13-8093	EPA 625	Benz[a]anthracene	4 ng/L	J DL
B13-8093	EPA 625	2,6-Dimethylnaphthalene	1.4 ng/L	J DL
B13-8093	EPA 625	Acenaphthene	1.9 ng/L	J DL
B13-8093	EPA 625	Phenanthrene	3 ng/L	J DL
B13-8093	EPA 625	Fluorene	1.3 ng/L	J DL

**TABLE 3**  
**Qualifiers Added to the Water Samples During Validation**  
**Regional Harbor Monitoring Program**  
**San Diego, California**

Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8093	EPA 625	1-Methylnaphthalene	5 ng/L	UJ LC
B13-8093	EPA 625	Naphthalene	1.2 ng/L	J DL, LC, LL
B13-8093	EPA 625	2-Methylnaphthalene	1.3 ng/L	J DL, LC
B13-8093	EPA 625	Biphenyl	5 ng/L	UJ LC
B13-8093	SM 5540-C	Methylene Blue Active Substance	0.033 mg/L	J HV, LC
B13-8095	EPA 1640	Aluminum, Dissolved	6 µg/L	UJ LC
B13-8095	EPA 1640	Thallium, Dissolved	0.006 µg/L	J DL
B13-8095	EPA 1640	Titanium, Dissolved	6.019 µg/L	J LC
B13-8095	EPA 1640	Antimony, Dissolved	0.17 µg/L	J LC, TD
B13-8095	EPA 1640	Beryllium, Dissolved	0.01 µg/L	UJ LC
B13-8095	EPA 1640	Aluminum, Total	20.9 µg/L	J LC
B13-8095	EPA 1640	Thallium, Total	0.007 µg/L	J DL
B13-8095	EPA 1640	Titanium, Total	8.323 µg/L	J LC
B13-8095	EPA 1640	Antimony, Total	0.1 µg/L	J LC, TD
B13-8095	EPA 1640	Beryllium, Total	0.01 µg/L	UJ LC
B13-8095	EPA 1640	Selenium, Dissolved	0.017 µg/L	J CH
B13-8095	EPA 1640	Selenium, Total	0.013 µg/L	J DL, CH
B13-8095	EPA 415.3	Dissolved Organic Carbon	0.97 mg/L	J DL, NQ
B13-8095	EPA 415.3	Total Organic Carbon	1.1 mg/L	J DL, NQ
B13-8095	EPA 625	Benzo[e]pyrene	5 ng/L	UJ LC
B13-8095	EPA 625	Benzo[b]fluoranthene	5 ng/L	UJ LC
B13-8095	EPA 625	Chrysene	5 ng/L	UJ LC
B13-8095	EPA 625	Benzo[a]pyrene	5 ng/L	UJ LC
B13-8095	EPA 625	2,6-Dimethylnaphthalene	1.1 ng/L	J DL
B13-8095	EPA 625	Fluorene	3.2 ng/L	J DL
B13-8095	EPA 625	1-Methylnaphthalene	5 ng/L	UJ LC
B13-8095	EPA 625	Naphthalene	1 ng/L	J DL, LC, LL
B13-8095	EPA 625	2-Methylnaphthalene	5 ng/L	UJ LC
B13-8095	EPA 625	Biphenyl	5 ng/L	UJ LC
B13-8095	SM 5540-C	Methylene Blue Active Substance	0.053 mg/L	J HV, LC
B13-8096	EPA 1640	Aluminum, Dissolved	6 µg/L	UJ LC
B13-8096	EPA 1640	Thallium, Dissolved	0.007 µg/L	J DL
B13-8096	EPA 1640	Titanium, Dissolved	5.799 µg/L	J LC
B13-8096	EPA 1640	Antimony, Dissolved	0.16 µg/L	J LC, TD
B13-8096	EPA 1640	Beryllium, Dissolved	0.01 µg/L	UJ LC
B13-8096	EPA 1640	Aluminum, Total	29.3 µg/L	J LC
B13-8096	EPA 1640	Thallium, Total	0.007 µg/L	J DL
B13-8096	EPA 1640	Tin, Total	0.008 µg/L	J DL
B13-8096	EPA 1640	Titanium, Total	8.418 µg/L	J LC
B13-8096	EPA 1640	Antimony, Total	0.1 µg/L	J LC, TD
B13-8096	EPA 1640	Beryllium, Total	0.01 µg/L	UJ LC
B13-8096	EPA 1640	Selenium, Dissolved	0.02 µg/L	J CH
B13-8096	EPA 1640	Selenium, Total	0.018 µg/L	J CH
B13-8096	EPA 415.3	Dissolved Organic Carbon	0.74 mg/L	J DL, NQ
B13-8096	EPA 415.3	Total Organic Carbon	0.96 mg/L	J DL, NQ
B13-8096	EPA 625	Anthracene	1.3 ng/L	J DL
B13-8096	EPA 625	Pyrene	1.5 ng/L	J DL
B13-8096	EPA 625	Benzo[e]pyrene	5 ng/L	UJ LC
B13-8096	EPA 625	Benzo[b]fluoranthene	5 ng/L	UJ LC
B13-8096	EPA 625	Fluoranthene	4.6 ng/L	J DL
B13-8096	EPA 625	Chrysene	5 ng/L	UJ LC
B13-8096	EPA 625	Benzo[a]pyrene	5 ng/L	UJ LC
B13-8096	EPA 625	Benz[a]anthracene	1.5 ng/L	J DL
B13-8096	EPA 625	Acenaphthene	2.2 ng/L	J DL
B13-8096	EPA 625	Phenanthrene	3.5 ng/L	J DL
B13-8096	EPA 625	Fluorene	1.8 ng/L	J DL
B13-8096	EPA 625	1-Methylnaphthalene	5 ng/L	UJ LC
B13-8096	EPA 625	Naphthalene	1.1 ng/L	J DL, LC, LL

**TABLE 3**  
**Qualifiers Added to the Water Samples During Validation**  
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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8096	EPA 625	2-Methylnaphthalene	1.3 ng/L	J DL, LC
B13-8096	EPA 625	Biphenyl	5 ng/L	UJ LC
B13-8096	SM 5540-C	Methylene Blue Active Substance	0.04 mg/L	J HV, LC
B13-8098	EPA 1640	Aluminum, Dissolved	6 µg/L	UJ LC
B13-8098	EPA 1640	Titanium, Dissolved	6.158 µg/L	J LC
B13-8098	EPA 1640	Antimony, Dissolved	0.17 µg/L	J LC, TD
B13-8098	EPA 1640	Beryllium, Dissolved	0.01 µg/L	UJ LC
B13-8098	EPA 1640	Aluminum, Total	23.1 µg/L	J LC
B13-8098	EPA 1640	Titanium, Total	8.684 µg/L	J LC
B13-8098	EPA 1640	Antimony, Total	0.12 µg/L	J LC, TD
B13-8098	EPA 1640	Beryllium, Total	0.01 µg/L	UJ LC
B13-8098	EPA 1640	Selenium, Dissolved	0.012 µg/L	J DL, CH
B13-8098	EPA 1640	Selenium, Total	0.009 µg/L	J DL, CH
B13-8098	EPA 415.3	Dissolved Organic Carbon	0.38 mg/L	J DL, NQ
B13-8098	EPA 415.3	Total Organic Carbon	1.1 mg/L	J DL, NQ
B13-8098	EPA 625	Anthracene	1.4 ng/L	J DL
B13-8098	EPA 625	Pyrene	1.6 ng/L	J DL
B13-8098	EPA 625	Benzo[e]pyrene	5 ng/L	UJ LC
B13-8098	EPA 625	Benzo[b]fluoranthene	5 ng/L	UJ LC
B13-8098	EPA 625	Fluoranthene	4.3 ng/L	J DL
B13-8098	EPA 625	Chrysene	5 ng/L	UJ LC
B13-8098	EPA 625	Benzo[a]pyrene	5 ng/L	UJ LC
B13-8098	EPA 625	Benz[a]anthracene	1.9 ng/L	J DL
B13-8098	EPA 625	Acenaphthene	2.2 ng/L	J DL
B13-8098	EPA 625	Phenanthrene	2.6 ng/L	J DL
B13-8098	EPA 625	Fluorene	1.6 ng/L	J DL
B13-8098	EPA 625	1-Methylnaphthalene	5 ng/L	UJ LC
B13-8098	EPA 625	Naphthalene	5 ng/L	UJ LC, LL
B13-8098	EPA 625	2-Methylnaphthalene	5 ng/L	UJ LC
B13-8098	EPA 625	Biphenyl	5 ng/L	UJ LC
B13-8098	SM 5540-C	Methylene Blue Active Substance	0.048 mg/L	J HV, LC
B13-8099	EPA 1640	Aluminum, Dissolved	6 µg/L	UJ LC
B13-8099	EPA 1640	Thallium, Dissolved	0.006 µg/L	J DL
B13-8099	EPA 1640	Titanium, Dissolved	7.805 µg/L	J LC
B13-8099	EPA 1640	Antimony, Dissolved	0.17 µg/L	J LC, TD
B13-8099	EPA 1640	Beryllium, Dissolved	0.01 µg/L	UJ LC
B13-8099	EPA 1640	Aluminum, Total	38.5 µg/L	J LC
B13-8099	EPA 1640	Thallium, Total	0.008 µg/L	J DL
B13-8099	EPA 1640	Titanium, Total	9.635 µg/L	J LC
B13-8099	EPA 1640	Antimony, Total	0.09 µg/L	J LC, TD
B13-8099	EPA 1640	Beryllium, Total	0.006 µg/L	J DL, LC
B13-8099	EPA 1640	Iron (Fe), Dissolved	0.5 µg/L	J DL
B13-8099	EPA 1640	Selenium, Dissolved	0.024 µg/L	J CH
B13-8099	EPA 1640	Selenium, Total	0.015 µg/L	J CH
B13-8099	EPA 415.3	Dissolved Organic Carbon	0.43 mg/L	J DL, NQ
B13-8099	EPA 415.3	Total Organic Carbon	1.0 mg/L	J DL, NQ
B13-8099	EPA 625	Anthracene	1.9 ng/L	J DL
B13-8099	EPA 625	Pyrene	1.8 ng/L	J DL
B13-8099	EPA 625	Benzo[e]pyrene	5 ng/L	UJ LC
B13-8099	EPA 625	Benzo[b]fluoranthene	1.6 ng/L	J DL, LC
B13-8099	EPA 625	Fluoranthene	4.9 ng/L	J DL
B13-8099	EPA 625	Benzo[k]fluoranthene	1.1 ng/L	J DL
B13-8099	EPA 625	Chrysene	5 ng/L	UJ LC
B13-8099	EPA 625	Benzo[a]pyrene	5 ng/L	UJ LC
B13-8099	EPA 625	Benz[a]anthracene	1.8 ng/L	J DL
B13-8099	EPA 625	2,6-Dimethylnaphthalene	1.3 ng/L	J DL
B13-8099	EPA 625	Acenaphthene	2.8 ng/L	J DL
B13-8099	EPA 625	Phenanthrene	3 ng/L	J DL

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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8099	EPA 625	Fluorene	1.7 ng/L	J DL
B13-8099	EPA 625	1-Methylnaphthalene	5 ng/L	UJ LC
B13-8099	EPA 625	Naphthalene	1.7 ng/L	J DL, LC, LL
B13-8099	EPA 625	2-Methylnaphthalene	5 ng/L	UJ LC
B13-8099	EPA 625	Biphenyl	5 ng/L	UJ LC
B13-8099	SM 5540-C	Methylene Blue Active Substance	0.038 mg/L	J HV, LC
B13-8100	EPA 1640	Aluminum, Dissolved	6 µg/L	UJ LC
B13-8100	EPA 1640	Thallium, Dissolved	0.006 µg/L	J DL
B13-8100	EPA 1640	Titanium, Dissolved	7.338 µg/L	J LC
B13-8100	EPA 1640	Antimony, Dissolved	0.15 µg/L	J LC, TD
B13-8100	EPA 1640	Beryllium, Dissolved	0.01 µg/L	UJ LC
B13-8100	EPA 1640	Aluminum, Total	27.5 µg/L	J LC
B13-8100	EPA 1640	Thallium, Total	0.006 µg/L	J DL
B13-8100	EPA 1640	Titanium, Total	8.257 µg/L	J LC
B13-8100	EPA 1640	Antimony, Total	0.09 µg/L	J LC, TD
B13-8100	EPA 1640	Beryllium, Total	0.01 µg/L	UJ LC
B13-8100	EPA 1640	Selenium, Dissolved	0.016 µg/L	J CH
B13-8100	EPA 1640	Selenium, Total	0.019 µg/L	J CH
B13-8100	EPA 415.3	Dissolved Organic Carbon	0.44 mg/L	J DL, NQ
B13-8100	EPA 415.3	Total Organic Carbon	0.98 mg/L	J DL, NQ
B13-8100	EPA 625	Anthracene	2.2 ng/L	J DL
B13-8100	EPA 625	Pyrene	2.1 ng/L	J DL
B13-8100	EPA 625	Benzo[e]pyrene	5 ng/L	UJ LC
B13-8100	EPA 625	Benzo[b]fluoranthene	5 ng/L	UJ LC
B13-8100	EPA 625	Chrysene	5 ng/L	UJ LC
B13-8100	EPA 625	Benzo[a]pyrene	5 ng/L	UJ LC
B13-8100	EPA 625	Benz[a]anthracene	1.9 ng/L	J DL
B13-8100	EPA 625	Acenaphthene	2.8 ng/L	J DL
B13-8100	EPA 625	Phenanthrene	3.4 ng/L	J DL
B13-8100	EPA 625	Fluorene	1.7 ng/L	J DL
B13-8100	EPA 625	1-Methylnaphthalene	5 ng/L	UJ LC
B13-8100	EPA 625	Naphthalene	1.2 ng/L	J DL, LC, LL
B13-8100	EPA 625	2-Methylnaphthalene	5 ng/L	UJ LC
B13-8100	EPA 625	Biphenyl	5 ng/L	UJ LC
B13-8100	SM 5540-C	Methylene Blue Active Substance	0.04 mg/L	J HV, LC
B13-8102	EPA 1640	Aluminum, Dissolved	6 µg/L	UJ LC
B13-8102	EPA 1640	Thallium, Dissolved	0.007 µg/L	J DL
B13-8102	EPA 1640	Beryllium, Dissolved	0.01 µg/L	UJ LC
B13-8102	EPA 1640	Aluminum, Total	40.6 µg/L	J LC
B13-8102	EPA 1640	Beryllium, Total	0.01 µg/L	UJ LC
B13-8102	EPA 1640	Selenium, Total	0.022 µg/L	J HD
B13-8102	EPA 200.8	Barium, Dissolved	7.93 µg/L	J CH
B13-8102	EPA 200.8	Barium, Total	6.97 µg/L	J CH
B13-8102	EPA 415.3	Total Organic Carbon	0.66 mg/L	J DL, NQ
B13-8102	EPA 415.3	Dissolved Organic Carbon	1.3 mg/L	J DL, NQ
B13-8102	EPA 625	Anthracene	5 ng/L	UJ NQ
B13-8102	EPA 625	Pyrene	1.1 ng/L	J DL, NQ
B13-8102	EPA 625	Dibenzothiophene	5 ng/L	UJ NQ
B13-8102	EPA 625	Benzo[g,h,i]perylene	5 ng/L	UJ NQ
B13-8102	EPA 625	Benzo[e]pyrene	5 ng/L	UJ NQ
B13-8102	EPA 625	Indeno[1,2,3-c,d]pyrene	5 ng/L	UJ NQ
B13-8102	EPA 625	Perylene	5 ng/L	UJ NQ
B13-8102	EPA 625	Benzo[b]fluoranthene	5 ng/L	UJ NQ
B13-8102	EPA 625	Fluoranthene	3.1 ng/L	J DL, NQ
B13-8102	EPA 625	Benzo[k]fluoranthene	5 ng/L	UJ NQ
B13-8102	EPA 625	Acenaphthylene	5 ng/L	UJ NQ
B13-8102	EPA 625	Chrysene	5 ng/L	UJ NQ
B13-8102	EPA 625	2,3,5-Trimethylnaphthalene	5 ng/L	UJ NQ

**TABLE 3**  
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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8102	EPA 625	Benzo[a]pyrene	5 ng/L	UJ NQ
B13-8102	EPA 625	Dibenz[a,h]anthracene	5 ng/L	UJ NQ
B13-8102	EPA 625	Benz[a]anthracene	5 ng/L	UJ NQ
B13-8102	EPA 625	2,6-Dimethylnaphthalene	5 ng/L	UJ NQ
B13-8102	EPA 625	1-Methylphenanthrene	5 ng/L	UJ NQ
B13-8102	EPA 625	Acenaphthene	2.2 ng/L	J DL, NQ
B13-8102	EPA 625	Phenanthrene	2.3 ng/L	J DL, NQ
B13-8102	EPA 625	Fluorene	2.1 ng/L	J DL, NQ
B13-8102	EPA 625	1-Methylnaphthalene	3.5 ng/L	J DL, NQ
B13-8102	EPA 625	Naphthalene	5.6 ng/L	J NQ
B13-8102	EPA 625	2-Methylnaphthalene	5.5 ng/L	J NQ
B13-8102	EPA 625	Biphenyl	5 ng/L	UJ NQ
B13-8102	SM 4500-NH3 D	Ammonia-N	0.05 mg/L	UJ NQ
B13-8102	SM 4500-NO3 E	Nitrate-N	0.05 mg/L	UJ NQ
B13-8102	SM 4500-P E	Total Orthophosphate as P	0.02 mg/L	J NQ
B13-8102	SM 5540-C	Methylene Blue Active Substance	0.046 mg/L	J NQ, HD
B13-8105	EPA 1640	Aluminum, Dissolved	6 µg/L	UJ LC
B13-8105	EPA 1640	Thallium, Dissolved	0.008 µg/L	J DL
B13-8105	EPA 1640	Beryllium, Dissolved	0.01 µg/L	UJ LC
B13-8105	EPA 1640	Aluminum, Total	223.6 µg/L	J LC
B13-8105	EPA 1640	Beryllium, Total	0.006 µg/L	J DL, LC
B13-8105	EPA 200.8	Barium, Dissolved	7.12 µg/L	J CH
B13-8105	EPA 200.8	Barium, Total	8.54 µg/L	J CH
B13-8105	EPA 415.3	Total Organic Carbon	1.7 mg/L	J DL, NQ
B13-8105	EPA 415.3	Dissolved Organic Carbon	1.1 mg/L	J DL, NQ
B13-8105	EPA 625	Anthracene	5 ng/L	UJ NQ
B13-8105	EPA 625	Pyrene	1.9 ng/L	J DL, NQ
B13-8105	EPA 625	Dibenzothiophene	5 ng/L	UJ NQ
B13-8105	EPA 625	Benzo[g,h,i]perylene	5 ng/L	UJ NQ
B13-8105	EPA 625	Benzo[e]pyrene	5 ng/L	UJ NQ
B13-8105	EPA 625	Indeno[1,2,3-c,d]pyrene	5 ng/L	UJ NQ
B13-8105	EPA 625	Perylene	5 ng/L	UJ NQ
B13-8105	EPA 625	Benzo[b]fluoranthene	5 ng/L	UJ NQ
B13-8105	EPA 625	Fluoranthene	3.8 ng/L	J DL, NQ
B13-8105	EPA 625	Benzo[k]fluoranthene	5 ng/L	UJ NQ
B13-8105	EPA 625	Acenaphthylene	5 ng/L	UJ NQ
B13-8105	EPA 625	Chrysene	5 ng/L	UJ NQ
B13-8105	EPA 625	2,3,5-Trimethylnaphthalene	5 ng/L	UJ NQ
B13-8105	EPA 625	Benzo[a]pyrene	5 ng/L	UJ NQ
B13-8105	EPA 625	Dibenz[a,h]anthracene	5 ng/L	UJ NQ
B13-8105	EPA 625	Benz[a]anthracene	5 ng/L	UJ NQ
B13-8105	EPA 625	2,6-Dimethylnaphthalene	5 ng/L	UJ NQ
B13-8105	EPA 625	1-Methylphenanthrene	5 ng/L	UJ NQ
B13-8105	EPA 625	Acenaphthene	5 ng/L	UJ NQ
B13-8105	EPA 625	Phenanthrene	1.7 ng/L	J DL, NQ
B13-8105	EPA 625	Fluorene	1.1 ng/L	J DL, NQ
B13-8105	EPA 625	1-Methylnaphthalene	5 ng/L	UJ NQ
B13-8105	EPA 625	Naphthalene	1.3 ng/L	J DL, NQ
B13-8105	EPA 625	2-Methylnaphthalene	5 ng/L	UJ NQ
B13-8105	EPA 625	Biphenyl	5 ng/L	UJ NQ
B13-8105	SM 4500-NH3 D	Ammonia-N	0.05 mg/L	UJ NQ
B13-8105	SM 4500-NO3 E	Nitrate-N	0.01 mg/L	J DL, NQ
B13-8105	SM 4500-P E	Total Orthophosphate as P	0.03 mg/L	J NQ
B13-8105	SM 5540-C	Methylene Blue Active Substance	0.035 mg/L	J NQ
B13-8106	EPA 1640	Aluminum, Dissolved	6 µg/L	UJ LC
B13-8106	EPA 1640	Thallium, Dissolved	0.006 µg/L	J DL
B13-8106	EPA 1640	Beryllium, Dissolved	0.006 µg/L	J DL, LC
B13-8106	EPA 1640	Aluminum, Total	64.6 µg/L	J LC

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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8106	EPA 1640	Silver, Total	0.01 µg/L	J DL
B13-8106	EPA 1640	Thallium, Total	0.008 µg/L	J DL
B13-8106	EPA 1640	Beryllium, Total	0.01 µg/L	UJ LC
B13-8106	EPA 1640	Selenium, Dissolved	0.011 µg/L	J DL, HD
B13-8106	EPA 1640	Selenium, Total	0.011 µg/L	J DL, HD
B13-8106	EPA 200.8	Barium, Dissolved	6.91 µg/L	J CH
B13-8106	EPA 200.8	Barium, Total	7.11 µg/L	J CH
B13-8106	EPA 415.3	Total Organic Carbon	0.70 mg/L	J DL, NQ
B13-8106	EPA 415.3	Dissolved Organic Carbon	1.9 mg/L	J DL, NQ
B13-8106	EPA 625	Anthracene	5 ng/L	UJ NQ
B13-8106	EPA 625	Pyrene	1.2 ng/L	J DL, NQ
B13-8106	EPA 625	Dibenzothiophene	5 ng/L	UJ NQ
B13-8106	EPA 625	Benzo[g,h,i]perylene	5 ng/L	UJ NQ
B13-8106	EPA 625	Benzo[e]pyrene	5 ng/L	UJ NQ
B13-8106	EPA 625	Indeno[1,2,3-c,d]pyrene	5 ng/L	UJ NQ
B13-8106	EPA 625	Perylene	5 ng/L	UJ NQ
B13-8106	EPA 625	Benzo[b]fluoranthene	5 ng/L	UJ NQ
B13-8106	EPA 625	Fluoranthene	3.6 ng/L	J DL, NQ
B13-8106	EPA 625	Benzo[k]fluoranthene	5 ng/L	UJ NQ
B13-8106	EPA 625	Acenaphthylene	5 ng/L	UJ NQ
B13-8106	EPA 625	Chrysene	5 ng/L	UJ NQ
B13-8106	EPA 625	2,3,5-Trimethylnaphthalene	5 ng/L	UJ NQ
B13-8106	EPA 625	Benzo[a]pyrene	5 ng/L	UJ NQ
B13-8106	EPA 625	Dibenz[a,h]anthracene	5 ng/L	UJ NQ
B13-8106	EPA 625	Benz[a]anthracene	5 ng/L	UJ NQ
B13-8106	EPA 625	2,6-Dimethylnaphthalene	5 ng/L	UJ NQ
B13-8106	EPA 625	1-Methylphenanthrene	5 ng/L	UJ NQ
B13-8106	EPA 625	Acenaphthene	5 ng/L	UJ NQ
B13-8106	EPA 625	Phenanthrene	2.6 ng/L	J DL, NQ
B13-8106	EPA 625	Fluorene	1.1 ng/L	J DL, NQ
B13-8106	EPA 625	1-Methylnaphthalene	1.3 ng/L	J DL, NQ
B13-8106	EPA 625	Naphthalene	1.7 ng/L	J DL, NQ
B13-8106	EPA 625	2-Methylnaphthalene	2.3 ng/L	J DL, NQ
B13-8106	EPA 625	Biphenyl	5 ng/L	UJ NQ
B13-8106	SM 4500-NH3 D	Ammonia-N	0.05 mg/L	UJ NQ
B13-8106	SM 4500-NO3 E	Nitrate-N	0.05 mg/L	UJ NQ
B13-8106	SM 4500-P E	Total Orthophosphate as P	0.02 mg/L	J NQ
B13-8106	SM 5540-C	Methylene Blue Active Substance	0.055 mg/L	J NQ, HD
B13-8108	EPA 1640	Aluminum, Dissolved	6 µg/L	UJ LC
B13-8108	EPA 1640	Thallium, Dissolved	0.008 µg/L	J DL
B13-8108	EPA 1640	Beryllium, Dissolved	0.01 µg/L	UJ LC
B13-8108	EPA 1640	Aluminum, Total	64 µg/L	J LC
B13-8108	EPA 1640	Silver, Total	0.01 µg/L	J DL
B13-8108	EPA 1640	Beryllium, Total	0.01 µg/L	UJ LC
B13-8108	EPA 1640	Selenium, Total	0.008 µg/L	J DL, HD
B13-8108	EPA 200.8	Barium, Dissolved	7.12 µg/L	J CH
B13-8108	EPA 200.8	Barium, Total	8.3 µg/L	J CH
B13-8108	EPA 415.3	Total Organic Carbon	0.82 mg/L	J DL, NQ
B13-8108	EPA 415.3	Dissolved Organic Carbon	0.79 mg/L	J DL, NQ
B13-8108	EPA 625	Anthracene	5 ng/L	UJ NQ
B13-8108	EPA 625	Pyrene	5 ng/L	UJ NQ
B13-8108	EPA 625	Dibenzothiophene	5 ng/L	UJ NQ
B13-8108	EPA 625	Benzo[g,h,i]perylene	5 ng/L	UJ NQ
B13-8108	EPA 625	Benzo[e]pyrene	5 ng/L	UJ NQ
B13-8108	EPA 625	Indeno[1,2,3-c,d]pyrene	5 ng/L	UJ NQ
B13-8108	EPA 625	Perylene	5 ng/L	UJ NQ
B13-8108	EPA 625	Benzo[b]fluoranthene	5 ng/L	UJ NQ
B13-8108	EPA 625	Fluoranthene	3.2 ng/L	J DL, NQ

**TABLE 3**  
**Qualifiers Added to the Water Samples During Validation**  
**Regional Harbor Monitoring Program**  
**San Diego, California**

Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8108	EPA 625	Benzo[k]fluoranthene	5 ng/L	UJ NQ
B13-8108	EPA 625	Acenaphthylene	5 ng/L	UJ NQ
B13-8108	EPA 625	Chrysene	5 ng/L	UJ NQ
B13-8108	EPA 625	2,3,5-Trimethylnaphthalene	5 ng/L	UJ NQ
B13-8108	EPA 625	Benzo[a]pyrene	5 ng/L	UJ NQ
B13-8108	EPA 625	Dibenz[a,h]anthracene	5 ng/L	UJ NQ
B13-8108	EPA 625	Benz[a]anthracene	5 ng/L	UJ NQ
B13-8108	EPA 625	2,6-Dimethylnaphthalene	5 ng/L	UJ NQ
B13-8108	EPA 625	1-Methylphenanthrene	5 ng/L	UJ NQ
B13-8108	EPA 625	Acenaphthene	5 ng/L	UJ NQ
B13-8108	EPA 625	Phenanthrene	2.3 ng/L	J DL, NQ
B13-8108	EPA 625	Fluorene	1 ng/L	J DL, NQ
B13-8108	EPA 625	1-Methylnaphthalene	1 ng/L	J DL, NQ
B13-8108	EPA 625	Naphthalene	1.7 ng/L	J DL, NQ
B13-8108	EPA 625	2-Methylnaphthalene	1.6 ng/L	J DL, NQ
B13-8108	EPA 625	Biphenyl	5 ng/L	UJ NQ
B13-8108	SM 4500-NH3 D	Ammonia-N	0.05 mg/L	UJ NQ
B13-8108	SM 4500-NO3 E	Nitrate-N	0.05 mg/L	UJ NQ
B13-8108	SM 4500-P E	Total Orthophosphate as P	0.02 mg/L	J NQ
B13-8108	SM 5540-C	Methylene Blue Active Substance	0.057 mg/L	J NQ, CH, HD
B13-8109	EPA 1640	Aluminum, Dissolved	6 µg/L	UJ LC
B13-8109	EPA 1640	Thallium, Dissolved	0.007 µg/L	J DL
B13-8109	EPA 1640	Titanium, Dissolved	6.713 µg/L	J LC
B13-8109	EPA 1640	Antimony, Dissolved	0.17 µg/L	J LC, TD
B13-8109	EPA 1640	Beryllium, Dissolved	0.01 µg/L	UJ LC
B13-8109	EPA 1640	Aluminum, Total	27.9 µg/L	J LC
B13-8109	EPA 1640	Thallium, Total	0.008 µg/L	J DL
B13-8109	EPA 1640	Titanium, Total	9.617 µg/L	J LC
B13-8109	EPA 1640	Antimony, Total	0.11 µg/L	J LC, HD, TD
B13-8109	EPA 1640	Beryllium, Total	0.007 µg/L	J DL, LC
B13-8109	EPA 1640	Selenium, Dissolved	0.01 µg/L	J DL, CH
B13-8109	EPA 1640	Selenium, Total	0.01 µg/L	J DL, CH
B13-8109	EPA 415.3	Dissolved Organic Carbon	0.43 mg/L	J DL, NQ
B13-8109	EPA 415.3	Total Organic Carbon	1.6 mg/L	J DL, NQ
B13-8109	EPA 625	Anthracene	1.6 ng/L	J DL
B13-8109	EPA 625	Pyrene	1.7 ng/L	J DL
B13-8109	EPA 625	Benzo[e]pyrene	5 ng/L	UJ LC
B13-8109	EPA 625	Benzo[b]fluoranthene	5 ng/L	UJ LC
B13-8109	EPA 625	Chrysene	5 ng/L	UJ LC
B13-8109	EPA 625	Benzo[a]pyrene	5 ng/L	UJ LC
B13-8109	EPA 625	Benz[a]anthracene	2.6 ng/L	J DL
B13-8109	EPA 625	Acenaphthene	1.8 ng/L	J DL
B13-8109	EPA 625	Phenanthrene	1.7 ng/L	J DL
B13-8109	EPA 625	Fluorene	1.1 ng/L	J DL
B13-8109	EPA 625	1-Methylnaphthalene	5 ng/L	UJ LC
B13-8109	EPA 625	Naphthalene	5 ng/L	UJ LC, LL
B13-8109	EPA 625	2-Methylnaphthalene	5 ng/L	UJ LC
B13-8109	EPA 625	Biphenyl	5 ng/L	UJ LC
B13-8109	SM 5540-C	Methylene Blue Active Substance	0.043 mg/L	J HV, LC
B13-8111	EPA 1640	Aluminum, Dissolved	6 µg/L	UJ LC
B13-8111	EPA 1640	Silver, Dissolved	0.01 µg/L	J DL
B13-8111	EPA 1640	Beryllium, Dissolved	0.006 µg/L	J DL, LC
B13-8111	EPA 1640	Aluminum, Total	102.4 µg/L	J LC
B13-8111	EPA 1640	Silver, Total	0.01 µg/L	J DL
B13-8111	EPA 1640	Beryllium, Total	0.006 µg/L	J DL, LC
B13-8111	EPA 1640	Selenium, Dissolved	0.016 µg/L	J HD
B13-8111	EPA 1640	Selenium, Total	0.015 µg/L	J HD
B13-8111	EPA 200.8	Barium, Dissolved	8.83 µg/L	J CH

**TABLE 3**  
**Qualifiers Added to the Water Samples During Validation**  
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**San Diego, California**

Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8111	EPA 200.8	Barium, Total	8.4 µg/L	J CH
B13-8111	EPA 415.3	Total Organic Carbon	1.1 mg/L	J DL, NQ
B13-8111	EPA 415.3	Dissolved Organic Carbon	0.80 mg/L	J DL, NQ
B13-8111	EPA 625	Anthracene	3.4 ng/L	J DL, NQ
B13-8111	EPA 625	Pyrene	6 ng/L	J NQ
B13-8111	EPA 625	Dibenzothiophene	5 ng/L	UJ NQ
B13-8111	EPA 625	Benzo[g,h,i]perylene	5 ng/L	UJ NQ
B13-8111	EPA 625	Benzo[e]pyrene	5 ng/L	UJ NQ
B13-8111	EPA 625	Indeno[1,2,3-c,d]pyrene	5 ng/L	UJ NQ
B13-8111	EPA 625	Perylene	5 ng/L	UJ NQ
B13-8111	EPA 625	Benzo[b]fluoranthene	5 ng/L	UJ NQ
B13-8111	EPA 625	Fluoranthene	12.3 ng/L	J NQ
B13-8111	EPA 625	Benzo[k]fluoranthene	5 ng/L	UJ NQ
B13-8111	EPA 625	Acenaphthylene	5 ng/L	UJ NQ
B13-8111	EPA 625	Chrysene	5 ng/L	UJ NQ
B13-8111	EPA 625	2,3,5-Trimethylnaphthalene	5 ng/L	UJ NQ
B13-8111	EPA 625	Benzo[a]pyrene	5 ng/L	UJ NQ
B13-8111	EPA 625	Dibenz[a,h]anthracene	5 ng/L	UJ NQ
B13-8111	EPA 625	Benz[a]anthracene	5 ng/L	UJ NQ
B13-8111	EPA 625	2,6-Dimethylnaphthalene	5 ng/L	UJ NQ
B13-8111	EPA 625	1-Methylphenanthrene	5 ng/L	UJ NQ
B13-8111	EPA 625	Acenaphthene	9.3 ng/L	J NQ
B13-8111	EPA 625	Phenanthrene	4.4 ng/L	J DL, NQ
B13-8111	EPA 625	Fluorene	3.1 ng/L	J DL, NQ
B13-8111	EPA 625	1-Methylnaphthalene	5 ng/L	UJ NQ
B13-8111	EPA 625	Naphthalene	1.5 ng/L	J DL, NQ
B13-8111	EPA 625	2-Methylnaphthalene	5 ng/L	UJ NQ
B13-8111	EPA 625	Biphenyl	5 ng/L	UJ NQ
B13-8111	SM 4500-NH3 D	Ammonia-N	0.05 mg/L	UJ NQ
B13-8111	SM 4500-NO3 E	Nitrate-N	0.01 mg/L	J DL, NQ
B13-8111	SM 4500-P E	Total Orthophosphate as P	0.02 mg/L	J NQ
B13-8111	SM 5540-C	Methylene Blue Active Substance	0.045 mg/L	J NQ, HD
B13-8112	EPA 1640	Aluminum, Dissolved	6 µg/L	UJ LC
B13-8112	EPA 1640	Beryllium, Dissolved	0.01 µg/L	UJ LC
B13-8112	EPA 1640	Zinc, Dissolved	7.6377 µg/L	J TD
B13-8112	EPA 1640	Aluminum, Total	133.3 µg/L	J LC
B13-8112	EPA 1640	Silver, Total	0.01 µg/L	J DL
B13-8112	EPA 1640	Thallium, Total	0.006 µg/L	J DL
B13-8112	EPA 1640	Beryllium, Total	0.01 µg/L	UJ LC
B13-8112	EPA 1640	Zinc, Total	6.008 µg/L	J TD
B13-8112	EPA 1640	Selenium, Dissolved	0.011 µg/L	J DL, HD
B13-8112	EPA 1640	Selenium, Total	0.018 µg/L	J HD
B13-8112	EPA 200.8	Barium, Dissolved	7.85 µg/L	J CH
B13-8112	EPA 200.8	Barium, Total	8.34 µg/L	J CH
B13-8112	EPA 415.3	Total Organic Carbon	1.4 mg/L	J DL, NQ
B13-8112	EPA 415.3	Dissolved Organic Carbon	0.76 mg/L	J DL, NQ
B13-8112	EPA 625	Anthracene	3.3 ng/L	J DL, NQ
B13-8112	EPA 625	Pyrene	5.5 ng/L	J NQ
B13-8112	EPA 625	Dibenzothiophene	5 ng/L	UJ NQ
B13-8112	EPA 625	Benzo[g,h,i]perylene	5 ng/L	UJ NQ
B13-8112	EPA 625	Benzo[e]pyrene	2 ng/L	J DL, NQ
B13-8112	EPA 625	Indeno[1,2,3-c,d]pyrene	5 ng/L	UJ NQ
B13-8112	EPA 625	Perylene	5 ng/L	UJ NQ
B13-8112	EPA 625	Benzo[b]fluoranthene	5 ng/L	UJ NQ
B13-8112	EPA 625	Fluoranthene	9.9 ng/L	J NQ
B13-8112	EPA 625	Benzo[k]fluoranthene	5 ng/L	UJ NQ
B13-8112	EPA 625	Acenaphthylene	5 ng/L	UJ NQ
B13-8112	EPA 625	Chrysene	5 ng/L	UJ NQ



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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8112	EPA 625	2,3,5-Trimethylnaphthalene	5 ng/L	UJ NQ
B13-8112	EPA 625	Benzo[a]pyrene	1.3 ng/L	J DL, NQ
B13-8112	EPA 625	Dibenz[a,h]anthracene	5 ng/L	UJ NQ
B13-8112	EPA 625	Benz[a]anthracene	5 ng/L	UJ NQ
B13-8112	EPA 625	2,6-Dimethylnaphthalene	5 ng/L	UJ NQ
B13-8112	EPA 625	1-Methylphenanthrene	5 ng/L	UJ NQ
B13-8112	EPA 625	Acenaphthene	4.3 ng/L	J DL, NQ
B13-8112	EPA 625	Phenanthrene	3.6 ng/L	J DL, NQ
B13-8112	EPA 625	Fluorene	1.5 ng/L	J DL, NQ
B13-8112	EPA 625	1-Methylnaphthalene	5 ng/L	UJ NQ
B13-8112	EPA 625	Naphthalene	1.5 ng/L	J DL, NQ
B13-8112	EPA 625	2-Methylnaphthalene	5 ng/L	UJ NQ
B13-8112	EPA 625	Biphenyl	5 ng/L	UJ NQ
B13-8112	SM 4500-NH3 D	Ammonia-N	0.05 mg/L	UJ NQ
B13-8112	SM 4500-NO3 E	Nitrate-N	0.05 mg/L	UJ NQ
B13-8112	SM 4500-P E	Total Orthophosphate as P	0.03 mg/L	J NQ
B13-8112	SM 5540-C	Methylene Blue Active Substance	0.054 mg/L	J NQ, HD
B13-8113	EPA 1640	Aluminum, Dissolved	6 µg/L	UJ LC
B13-8113	EPA 1640	Beryllium, Dissolved	0.01 µg/L	J LC
B13-8113	EPA 1640	Aluminum, Total	70.4 µg/L	J LC
B13-8113	EPA 1640	Thallium, Total	0.005 µg/L	J DL
B13-8113	EPA 1640	Beryllium, Total	0.01 µg/L	UJ LC
B13-8113	EPA 1640	Selenium, Dissolved	0.01 µg/L	J DL, HD
B13-8113	EPA 1640	Selenium, Total	0.015 µg/L	J HD
B13-8113	EPA 200.8	Barium, Dissolved	7.35 µg/L	J CH
B13-8113	EPA 200.8	Barium, Total	8.36 µg/L	J CH
B13-8113	EPA 415.3	Total Organic Carbon	1.1 mg/L	J DL, NQ
B13-8113	EPA 415.3	Dissolved Organic Carbon	1.2 mg/L	J DL, NQ
B13-8113	EPA 625	Anthracene	5 ng/L	UJ NQ
B13-8113	EPA 625	Pyrene	5 ng/L	UJ NQ
B13-8113	EPA 625	Dibenzothiophene	5 ng/L	UJ NQ
B13-8113	EPA 625	Benzo[g,h,i]perylene	5 ng/L	UJ NQ
B13-8113	EPA 625	Benzo[e]pyrene	5 ng/L	UJ NQ
B13-8113	EPA 625	Indeno[1,2,3-c,d]pyrene	5 ng/L	UJ NQ
B13-8113	EPA 625	Perylene	5 ng/L	UJ NQ
B13-8113	EPA 625	Benzo[b]fluoranthene	5 ng/L	UJ NQ
B13-8113	EPA 625	Fluoranthene	3 ng/L	J DL, NQ
B13-8113	EPA 625	Benzo[k]fluoranthene	5 ng/L	UJ NQ
B13-8113	EPA 625	Acenaphthylene	5 ng/L	UJ NQ
B13-8113	EPA 625	Chrysene	5 ng/L	UJ NQ
B13-8113	EPA 625	2,3,5-Trimethylnaphthalene	5 ng/L	UJ NQ
B13-8113	EPA 625	Benzo[a]pyrene	5 ng/L	UJ NQ
B13-8113	EPA 625	Dibenz[a,h]anthracene	5 ng/L	UJ NQ
B13-8113	EPA 625	Benz[a]anthracene	5 ng/L	UJ NQ
B13-8113	EPA 625	2,6-Dimethylnaphthalene	5 ng/L	UJ NQ
B13-8113	EPA 625	1-Methylphenanthrene	5 ng/L	UJ NQ
B13-8113	EPA 625	Acenaphthene	5 ng/L	UJ NQ
B13-8113	EPA 625	Phenanthrene	2.4 ng/L	J DL, NQ
B13-8113	EPA 625	Fluorene	1.3 ng/L	J DL, NQ
B13-8113	EPA 625	1-Methylnaphthalene	5 ng/L	UJ NQ
B13-8113	EPA 625	Naphthalene	1.9 ng/L	J DL, NQ
B13-8113	EPA 625	2-Methylnaphthalene	1.3 ng/L	J DL, NQ
B13-8113	EPA 625	Biphenyl	5 ng/L	UJ NQ
B13-8113	SM 4500-NH3 D	Ammonia-N	0.05 mg/L	UJ NQ
B13-8113	SM 4500-NO3 E	Nitrate-N	0.05 mg/L	UJ NQ
B13-8113	SM 4500-P E	Total Orthophosphate as P	0.02 mg/L	J NQ
B13-8113	SM 5540-C	Methylene Blue Active Substance	0.04 mg/L	J NQ, HD
B13-8116	EPA 1640	Aluminum, Dissolved	6 µg/L	UJ LC

**TABLE 3**  
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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8116	EPA 1640	Thallium, Dissolved	0.007 µg/L	J DL
B13-8116	EPA 1640	Beryllium, Dissolved	0.01 µg/L	UJ LC
B13-8116	EPA 1640	Aluminum, Total	86.8 µg/L	J LC
B13-8116	EPA 1640	Beryllium, Total	0.01 µg/L	UJ LC
B13-8116	EPA 1640	Selenium, Dissolved	0.011 µg/L	J DL, HD
B13-8116	EPA 1640	Selenium, Total	0.019 µg/L	J HD
B13-8116	EPA 200.8	Barium, Dissolved	8.25 µg/L	J CH
B13-8116	EPA 200.8	Barium, Total	9.66 µg/L	J CH
B13-8116	EPA 415.3	Total Organic Carbon	0.91 mg/L	J DL, NQ
B13-8116	EPA 415.3	Dissolved Organic Carbon	1.0 mg/L	J DL, NQ
B13-8116	EPA 625	Anthracene	5 ng/L	UJ NQ
B13-8116	EPA 625	Pyrene	1.1 ng/L	J DL, NQ
B13-8116	EPA 625	Dibenzothiophene	5 ng/L	UJ NQ
B13-8116	EPA 625	Benzo[g,h,i]perylene	5 ng/L	UJ NQ
B13-8116	EPA 625	Benzo[e]pyrene	5 ng/L	UJ NQ
B13-8116	EPA 625	Indeno[1,2,3-c,d]pyrene	5 ng/L	UJ NQ
B13-8116	EPA 625	Perylene	5 ng/L	UJ NQ
B13-8116	EPA 625	Benzo[b]fluoranthene	5 ng/L	UJ NQ
B13-8116	EPA 625	Fluoranthene	2.1 ng/L	J DL, NQ
B13-8116	EPA 625	Benzo[k]fluoranthene	5 ng/L	UJ NQ
B13-8116	EPA 625	Acenaphthylene	5 ng/L	UJ NQ
B13-8116	EPA 625	Chrysene	5 ng/L	UJ NQ
B13-8116	EPA 625	2,3,5-Trimethylnaphthalene	5 ng/L	UJ NQ
B13-8116	EPA 625	Benzo[a]pyrene	5 ng/L	UJ NQ
B13-8116	EPA 625	Dibenz[a,h]anthracene	5 ng/L	UJ NQ
B13-8116	EPA 625	Benz[a]anthracene	5 ng/L	UJ NQ
B13-8116	EPA 625	2,6-Dimethylnaphthalene	5 ng/L	UJ NQ
B13-8116	EPA 625	1-Methylphenanthrene	5 ng/L	UJ NQ
B13-8116	EPA 625	Acenaphthene	5 ng/L	UJ NQ
B13-8116	EPA 625	Phenanthrene	2.3 ng/L	J DL, NQ
B13-8116	EPA 625	Fluorene	5 ng/L	UJ NQ
B13-8116	EPA 625	1-Methylnaphthalene	1.2 ng/L	J DL, NQ
B13-8116	EPA 625	Naphthalene	1.8 ng/L	J DL, NQ
B13-8116	EPA 625	2-Methylnaphthalene	1.6 ng/L	J DL, NQ
B13-8116	EPA 625	Biphenyl	5 ng/L	UJ NQ
B13-8116	SM 4500-NH3 D	Ammonia-N	0.03 mg/L	J DL, NQ
B13-8116	SM 4500-NO3 E	Nitrate-N	0.05 mg/L	UJ NQ
B13-8116	SM 4500-P E	Total Orthophosphate as P	0.02 mg/L	J NQ
B13-8116	SM 5540-C	Methylene Blue Active Substance	0.063 mg/L	J NQ, HD
B13-8117	EPA 1640	Aluminum, Dissolved	6 µg/L	UJ LC
B13-8117	EPA 1640	Thallium, Dissolved	0.008 µg/L	J DL
B13-8117	EPA 1640	Beryllium, Dissolved	0.005 µg/L	J DL, LC
B13-8117	EPA 1640	Aluminum, Total	53.2 µg/L	J LC
B13-8117	EPA 1640	Beryllium, Total	0.007 µg/L	J DL, LC
B13-8117	EPA 1640	Selenium, Dissolved	0.008 µg/L	J DL, HD
B13-8117	EPA 1640	Selenium, Total	0.006 µg/L	J DL, HD
B13-8117	EPA 200.8	Barium, Dissolved	6.44 µg/L	J CH
B13-8117	EPA 200.8	Barium, Total	6.72 µg/L	J CH
B13-8117	EPA 415.3	Total Organic Carbon	1.2 mg/L	J DL, NQ
B13-8117	EPA 415.3	Dissolved Organic Carbon	1.0 mg/L	J DL, NQ
B13-8117	EPA 625	Anthracene	5 ng/L	UJ NQ
B13-8117	EPA 625	Pyrene	1 ng/L	J DL, NQ
B13-8117	EPA 625	Dibenzothiophene	5 ng/L	UJ NQ
B13-8117	EPA 625	Benzo[g,h,i]perylene	5 ng/L	UJ NQ
B13-8117	EPA 625	Benzo[e]pyrene	5 ng/L	UJ NQ
B13-8117	EPA 625	Indeno[1,2,3-c,d]pyrene	5 ng/L	UJ NQ
B13-8117	EPA 625	Perylene	5 ng/L	UJ NQ
B13-8117	EPA 625	Benzo[b]fluoranthene	5 ng/L	UJ NQ

**TABLE 3**  
**Qualifiers Added to the Water Samples During Validation**  
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**San Diego, California**

Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8117	EPA 625	Fluoranthene	2 ng/L	J DL, NQ
B13-8117	EPA 625	Benzo[k]fluoranthene	5 ng/L	UJ NQ
B13-8117	EPA 625	Acenaphthylene	5 ng/L	UJ NQ
B13-8117	EPA 625	Chrysene	5 ng/L	UJ NQ
B13-8117	EPA 625	2,3,5-Trimethylnaphthalene	5 ng/L	UJ NQ
B13-8117	EPA 625	Benzo[a]pyrene	5 ng/L	UJ NQ
B13-8117	EPA 625	Dibenz[a,h]anthracene	5 ng/L	UJ NQ
B13-8117	EPA 625	Benz[a]anthracene	5 ng/L	UJ NQ
B13-8117	EPA 625	2,6-Dimethylnaphthalene	5 ng/L	UJ NQ
B13-8117	EPA 625	1-Methylphenanthrene	5 ng/L	UJ NQ
B13-8117	EPA 625	Acenaphthene	5 ng/L	UJ NQ
B13-8117	EPA 625	Phenanthrene	1.7 ng/L	J DL, NQ
B13-8117	EPA 625	Fluorene	5 ng/L	UJ NQ
B13-8117	EPA 625	1-Methylnaphthalene	5 ng/L	UJ NQ
B13-8117	EPA 625	Naphthalene	1.2 ng/L	J DL, NQ
B13-8117	EPA 625	2-Methylnaphthalene	5 ng/L	UJ NQ
B13-8117	EPA 625	Biphenyl	5 ng/L	UJ NQ
B13-8117	SM 4500-NH3 D	Ammonia-N	0.05 mg/L	UJ NQ
B13-8117	SM 4500-NO3 E	Nitrate-N	0.05 mg/L	UJ NQ
B13-8117	SM 4500-P E	Total Orthophosphate as P	0.02 mg/L	J NQ
B13-8117	SM 5540-C	Methylene Blue Active Substance	0.053 mg/L	J NQ, HD
B13-8118	EPA 1640	Aluminum, Dissolved	6 µg/L	UJ LC
B13-8118	EPA 1640	Thallium, Dissolved	0.007 µg/L	J DL
B13-8118	EPA 1640	Titanium, Dissolved	6.409 µg/L	J LC
B13-8118	EPA 1640	Antimony, Dissolved	0.16 µg/L	J LC, TD
B13-8118	EPA 1640	Beryllium, Dissolved	0.01 µg/L	UJ LC
B13-8118	EPA 1640	Aluminum, Total	19.1 µg/L	J LC
B13-8118	EPA 1640	Thallium, Total	0.008 µg/L	J DL
B13-8118	EPA 1640	Titanium, Total	7.468 µg/L	J LC
B13-8118	EPA 1640	Antimony, Total	0.11 µg/L	J LC, TD
B13-8118	EPA 1640	Beryllium, Total	0.01 µg/L	UJ LC
B13-8118	EPA 1640	Selenium, Dissolved	0.015 µg/L	J CH
B13-8118	EPA 1640	Selenium, Total	0.013 µg/L	J DL, CH
B13-8118	EPA 415.3	Dissolved Organic Carbon	0.35 mg/L	J DL, NQ
B13-8118	EPA 415.3	Total Organic Carbon	1.0 mg/L	J DL, NQ
B13-8118	EPA 625	Pyrene	1.4 ng/L	J DL
B13-8118	EPA 625	Benzo[e]pyrene	5 ng/L	UJ LC
B13-8118	EPA 625	Benzo[b]fluoranthene	5 ng/L	UJ LC
B13-8118	EPA 625	Chrysene	5 ng/L	UJ LC
B13-8118	EPA 625	Benzo[a]pyrene	5 ng/L	UJ LC
B13-8118	EPA 625	Benz[a]anthracene	2.4 ng/L	J DL
B13-8118	EPA 625	Acenaphthene	2 ng/L	J DL
B13-8118	EPA 625	Phenanthrene	1.9 ng/L	J DL
B13-8118	EPA 625	Fluorene	1.6 ng/L	J DL
B13-8118	EPA 625	1-Methylnaphthalene	5 ng/L	UJ LC
B13-8118	EPA 625	Naphthalene	5 ng/L	UJ LC, LL
B13-8118	EPA 625	2-Methylnaphthalene	5 ng/L	UJ LC
B13-8118	EPA 625	Biphenyl	5 ng/L	UJ LC
B13-8118	SM 5540-C	Methylene Blue Active Substance	0.042 mg/L	J HV, LC
B13-8121	EPA 1640	Aluminum, Dissolved	6 µg/L	UJ LC
B13-8121	EPA 1640	Silver, Dissolved	0.01 µg/L	J DL
B13-8121	EPA 1640	Beryllium, Dissolved	0.01 µg/L	UJ LC
B13-8121	EPA 1640	Aluminum, Total	189.5 µg/L	J LC
B13-8121	EPA 1640	Thallium, Total	0.007 µg/L	J DL
B13-8121	EPA 1640	Beryllium, Total	0.01 µg/L	UJ LC
B13-8121	EPA 1640	Selenium, Dissolved	0.014 µg/L	J DL, HD
B13-8121	EPA 1640	Selenium, Total	0.006 µg/L	J DL, HD
B13-8121	EPA 200.8	Barium, Dissolved	7.91 µg/L	J CH

**TABLE 3**  
**Qualifiers Added to the Water Samples During Validation**  
**Regional Harbor Monitoring Program**  
**San Diego, California**

Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8121	EPA 200.8	Barium, Total	8.75 µg/L	J CH
B13-8121	EPA 245.7	Mercury, Total	0.01 µg/L	J DL
B13-8121	EPA 415.3	Total Organic Carbon	0.99 mg/L	J DL, NQ
B13-8121	EPA 415.3	Dissolved Organic Carbon	1.2 mg/L	J DL, NQ
B13-8121	EPA 625	Anthracene	1.4 ng/L	J DL, NQ
B13-8121	EPA 625	Pyrene	2.8 ng/L	J DL, NQ
B13-8121	EPA 625	Dibenzothiophene	5 ng/L	UJ NQ
B13-8121	EPA 625	Benzo[g,h,i]perylene	5 ng/L	UJ NQ
B13-8121	EPA 625	Benzo[e]pyrene	2 ng/L	J DL, NQ
B13-8121	EPA 625	Indeno[1,2,3-c,d]pyrene	5 ng/L	UJ NQ
B13-8121	EPA 625	Perylene	5 ng/L	UJ NQ
B13-8121	EPA 625	Benzo[b]fluoranthene	5 ng/L	UJ NQ
B13-8121	EPA 625	Fluoranthene	4.6 ng/L	J DL, NQ
B13-8121	EPA 625	Benzo[k]fluoranthene	5 ng/L	UJ NQ
B13-8121	EPA 625	Acenaphthylene	5 ng/L	UJ NQ
B13-8121	EPA 625	Chrysene	5 ng/L	UJ NQ
B13-8121	EPA 625	2,3,5-Trimethylnaphthalene	5 ng/L	UJ NQ
B13-8121	EPA 625	Benzo[a]pyrene	1.4 ng/L	J DL, NQ
B13-8121	EPA 625	Dibenz[a,h]anthracene	5 ng/L	UJ NQ
B13-8121	EPA 625	Benzo[a]anthracene	5 ng/L	UJ NQ
B13-8121	EPA 625	2,6-Dimethylnaphthalene	5 ng/L	UJ NQ
B13-8121	EPA 625	1-Methylphenanthrene	5 ng/L	UJ NQ
B13-8121	EPA 625	Acenaphthene	2.7 ng/L	J DL, NQ
B13-8121	EPA 625	Phenanthrene	1.5 ng/L	J DL, NQ
B13-8121	EPA 625	Fluorene	5 ng/L	UJ NQ
B13-8121	EPA 625	1-Methylnaphthalene	5 ng/L	UJ NQ
B13-8121	EPA 625	Naphthalene	1.5 ng/L	J DL, NQ
B13-8121	EPA 625	2-Methylnaphthalene	5 ng/L	UJ NQ
B13-8121	EPA 625	Biphenyl	5 ng/L	UJ NQ
B13-8121	SM 4500-NH3 D	Ammonia-N	0.02 mg/L	J DL, NQ
B13-8121	SM 4500-NO3 E	Nitrate-N	0.01 mg/L	J DL, NQ
B13-8121	SM 4500-P E	Total Orthophosphate as P	0.03 mg/L	J NQ
B13-8121	SM 5540-C	Methylene Blue Active Substance	0.058 mg/L	J NQ, HD
B13-8122	EPA 1640	Aluminum, Dissolved	6 µg/L	UJ LC
B13-8122	EPA 1640	Titanium, Dissolved	6.463 µg/L	J LC
B13-8122	EPA 1640	Antimony, Dissolved	0.14 µg/L	J LC, TD
B13-8122	EPA 1640	Beryllium, Dissolved	0.01 µg/L	UJ LC
B13-8122	EPA 1640	Aluminum, Total	24.4 µg/L	J LC
B13-8122	EPA 1640	Thallium, Total	0.005 µg/L	J DL
B13-8122	EPA 1640	Titanium, Total	8.406 µg/L	J LC
B13-8122	EPA 1640	Antimony, Total	0.1 µg/L	J LC, TD
B13-8122	EPA 1640	Beryllium, Total	0.01 µg/L	UJ LC
B13-8122	EPA 1640	Selenium, Dissolved	0.014 µg/L	J DL, CH
B13-8122	EPA 1640	Selenium, Total	0.009 µg/L	J DL, CH
B13-8122	EPA 415.3	Dissolved Organic Carbon	0.45 mg/L	J DL, NQ
B13-8122	EPA 415.3	Total Organic Carbon	0.94 mg/L	J DL, NQ
B13-8122	EPA 625	Anthracene	2 ng/L	J DL
B13-8122	EPA 625	Pyrene	1.2 ng/L	J DL
B13-8122	EPA 625	Benzo[e]pyrene	5 ng/L	UJ LC
B13-8122	EPA 625	Benzo[b]fluoranthene	5 ng/L	UJ LC
B13-8122	EPA 625	Chrysene	5 ng/L	UJ LC
B13-8122	EPA 625	Benzo[a]pyrene	5 ng/L	UJ LC
B13-8122	EPA 625	Benzo[a]anthracene	2.4 ng/L	J DL
B13-8122	EPA 625	Acenaphthene	2 ng/L	J DL
B13-8122	EPA 625	Phenanthrene	2.2 ng/L	J DL
B13-8122	EPA 625	Fluorene	1.3 ng/L	J DL
B13-8122	EPA 625	1-Methylnaphthalene	5 ng/L	UJ LC
B13-8122	EPA 625	Naphthalene	1.1 ng/L	J DL, LC, LL

**TABLE 3**  
**Qualifiers Added to the Water Samples During Validation**  
**Regional Harbor Monitoring Program**  
**San Diego, California**

Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8122	EPA 625	2-Methylnaphthalene	5 ng/L	UJ LC
B13-8122	EPA 625	Biphenyl	5 ng/L	UJ LC
B13-8122	SM 5540-C	Methylene Blue Active Substance	0.035 mg/L	J HV, LC
B13-8123	EPA 1640	Aluminum, Dissolved	6 µg/L	UJ LC
B13-8123	EPA 1640	Beryllium, Dissolved	0.01 µg/L	UJ LC
B13-8123	EPA 1640	Aluminum, Total	137.2 µg/L	J LC
B13-8123	EPA 1640	Silver, Total	0.01 µg/L	J DL
B13-8123	EPA 1640	Thallium, Total	0.006 µg/L	J DL
B13-8123	EPA 1640	Beryllium, Total	0.006 µg/L	J DL, LC
B13-8123	EPA 1640	Selenium, Dissolved	0.022 µg/L	J HD
B13-8123	EPA 1640	Tin, Total	0.006 µg/L	J DL
B13-8123	EPA 1640	Selenium, Total	0.021 µg/L	J HD
B13-8123	EPA 200.8	Barium, Dissolved	9 µg/L	J CH
B13-8123	EPA 200.8	Barium, Total	7.74 µg/L	J CH
B13-8123	EPA 415.3	Total Organic Carbon	1.1 mg/L	J DL, NQ
B13-8123	EPA 415.3	Dissolved Organic Carbon	0.91 mg/L	J DL, NQ
B13-8123	EPA 625	Anthracene	1.3 ng/L	J DL, NQ
B13-8123	EPA 625	Pyrene	1.9 ng/L	J DL, NQ
B13-8123	EPA 625	Dibenzothiophene	5 ng/L	UJ NQ
B13-8123	EPA 625	Benzo[g,h,i]perylene	5 ng/L	UJ NQ
B13-8123	EPA 625	Benzo[e]pyrene	5 ng/L	UJ NQ
B13-8123	EPA 625	Indeno[1,2,3-c,d]pyrene	5 ng/L	UJ NQ
B13-8123	EPA 625	Perylene	5 ng/L	UJ NQ
B13-8123	EPA 625	Benzo[b]fluoranthene	5 ng/L	UJ NQ
B13-8123	EPA 625	Fluoranthene	4.1 ng/L	J DL, NQ
B13-8123	EPA 625	Benzo[k]fluoranthene	5 ng/L	UJ NQ
B13-8123	EPA 625	Acenaphthylene	5 ng/L	UJ NQ
B13-8123	EPA 625	Chrysene	5 ng/L	UJ NQ
B13-8123	EPA 625	2,3,5-Trimethylnaphthalene	5 ng/L	UJ NQ
B13-8123	EPA 625	Benzo[a]pyrene	5 ng/L	UJ NQ
B13-8123	EPA 625	Dibenz[a,h]anthracene	5 ng/L	UJ NQ
B13-8123	EPA 625	Benz[a]anthracene	5 ng/L	UJ NQ
B13-8123	EPA 625	2,6-Dimethylnaphthalene	5 ng/L	UJ NQ
B13-8123	EPA 625	1-Methylphenanthrene	5 ng/L	UJ NQ
B13-8123	EPA 625	Acenaphthene	2.1 ng/L	J DL, NQ
B13-8123	EPA 625	Phenanthrene	1.6 ng/L	J DL, NQ
B13-8123	EPA 625	Fluorene	5 ng/L	UJ NQ
B13-8123	EPA 625	1-Methylnaphthalene	5 ng/L	UJ NQ
B13-8123	EPA 625	Naphthalene	1.4 ng/L	J DL, NQ
B13-8123	EPA 625	2-Methylnaphthalene	5 ng/L	UJ NQ
B13-8123	EPA 625	Biphenyl	5 ng/L	UJ NQ
B13-8123	SM 4500-NH3 D	Ammonia-N	0.05 mg/L	UJ NQ
B13-8123	SM 4500-NO3 E	Nitrate-N	0.05 mg/L	UJ NQ
B13-8123	SM 4500-P E	Total Orthophosphate as P	0.02 mg/L	J NQ
B13-8123	SM 5540-C	Methylene Blue Active Substance	0.051 mg/L	J NQ, HD
B13-8124	EPA 1640	Aluminum, Dissolved	6 µg/L	UJ LC
B13-8124	EPA 1640	Silver, Dissolved	0.01 µg/L	J DL
B13-8124	EPA 1640	Beryllium, Dissolved	0.01 µg/L	UJ LC
B13-8124	EPA 1640	Aluminum, Total	152.4 µg/L	J LC
B13-8124	EPA 1640	Silver, Total	0.01 µg/L	J DL
B13-8124	EPA 1640	Beryllium, Total	0.01 µg/L	UJ LC
B13-8124	EPA 1640	Selenium, Dissolved	0.022 µg/L	J HD
B13-8124	EPA 1640	Tin, Total	0.009 µg/L	J DL
B13-8124	EPA 1640	Selenium, Total	0.02 µg/L	J HD
B13-8124	EPA 200.8	Barium, Dissolved	7.79 µg/L	J CH
B13-8124	EPA 200.8	Barium, Total	8.48 µg/L	J CH
B13-8124	EPA 415.3	Total Organic Carbon	1.1 mg/L	J DL, NQ
B13-8124	EPA 415.3	Dissolved Organic Carbon	0.85 mg/L	J DL, NQ

**TABLE 3**  
**Qualifiers Added to the Water Samples During Validation**  
**Regional Harbor Monitoring Program**  
**San Diego, California**

Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8124	EPA 625	Anthracene	1.1 ng/L	J DL, NQ
B13-8124	EPA 625	Pyrene	1.9 ng/L	J DL, NQ
B13-8124	EPA 625	Dibenzothiophene	5 ng/L	UJ NQ
B13-8124	EPA 625	Benzo[g,h,i]perylene	5 ng/L	UJ NQ
B13-8124	EPA 625	Benzo[e]pyrene	1.7 ng/L	J DL, NQ
B13-8124	EPA 625	Indeno[1,2,3-c,d]pyrene	5 ng/L	UJ NQ
B13-8124	EPA 625	Perylene	5 ng/L	UJ NQ
B13-8124	EPA 625	Benzo[b]fluoranthene	5 ng/L	UJ NQ
B13-8124	EPA 625	Fluoranthene	4.1 ng/L	J DL, NQ
B13-8124	EPA 625	Benzo[k]fluoranthene	5 ng/L	UJ NQ
B13-8124	EPA 625	Acenaphthylene	5 ng/L	UJ NQ
B13-8124	EPA 625	Chrysene	5 ng/L	UJ NQ
B13-8124	EPA 625	2,3,5-Trimethylnaphthalene	5 ng/L	UJ NQ
B13-8124	EPA 625	Benzo[a]pyrene	5 ng/L	UJ NQ
B13-8124	EPA 625	Dibenz[a,h]anthracene	5 ng/L	UJ NQ
B13-8124	EPA 625	Benz[a]anthracene	5 ng/L	UJ NQ
B13-8124	EPA 625	2,6-Dimethylnaphthalene	5 ng/L	UJ NQ
B13-8124	EPA 625	1-Methylphenanthrene	5 ng/L	UJ NQ
B13-8124	EPA 625	Acenaphthene	1.8 ng/L	J DL, NQ
B13-8124	EPA 625	Phenanthrene	1.9 ng/L	J DL, NQ
B13-8124	EPA 625	Fluorene	1 ng/L	J DL, NQ
B13-8124	EPA 625	1-Methylnaphthalene	5 ng/L	UJ NQ
B13-8124	EPA 625	Naphthalene	1.7 ng/L	J DL, NQ
B13-8124	EPA 625	2-Methylnaphthalene	5 ng/L	UJ NQ
B13-8124	EPA 625	Biphenyl	5 ng/L	UJ NQ
B13-8124	SM 4500-NH3 D	Ammonia-N	0.05 mg/L	UJ NQ
B13-8124	SM 4500-NO3 E	Nitrate-N	0.05 mg/L	UJ NQ
B13-8124	SM 4500-P E	Total Orthophosphate as P	0.03 mg/L	J NQ
B13-8124	SM 5540-C	Methylene Blue Active Substance	0.043 mg/L	J NQ, HD
B13-8127	EPA 1640	Aluminum, Dissolved	6 µg/L	UJ LC
B13-8127	EPA 1640	Beryllium, Dissolved	0.01 µg/L	UJ LC
B13-8127	EPA 1640	Aluminum, Total	68.3 µg/L	J LC
B13-8127	EPA 1640	Beryllium, Total	0.01 µg/L	UJ LC
B13-8127	EPA 1640	Selenium, Dissolved	0.022 µg/L	J HD
B13-8127	EPA 1640	Tin, Total	0.008 µg/L	J DL
B13-8127	EPA 200.8	Barium, Dissolved	8.29 µg/L	J CH
B13-8127	EPA 200.8	Barium, Total	8.46 µg/L	J CH
B13-8127	EPA 415.3	Total Organic Carbon	1.0 mg/L	J DL, NQ
B13-8127	EPA 415.3	Dissolved Organic Carbon	1.9 mg/L	J DL, NQ
B13-8127	EPA 625	Anthracene	5 ng/L	UJ NQ
B13-8127	EPA 625	Pyrene	5 ng/L	UJ NQ
B13-8127	EPA 625	Dibenzothiophene	5 ng/L	UJ NQ
B13-8127	EPA 625	Benzo[g,h,i]perylene	5 ng/L	UJ NQ
B13-8127	EPA 625	Benzo[e]pyrene	5 ng/L	UJ NQ
B13-8127	EPA 625	Indeno[1,2,3-c,d]pyrene	5 ng/L	UJ NQ
B13-8127	EPA 625	Perylene	5 ng/L	UJ NQ
B13-8127	EPA 625	Benzo[b]fluoranthene	5 ng/L	UJ NQ
B13-8127	EPA 625	Fluoranthene	2.6 ng/L	J DL, NQ
B13-8127	EPA 625	Benzo[k]fluoranthene	5 ng/L	UJ NQ
B13-8127	EPA 625	Acenaphthylene	5 ng/L	UJ NQ
B13-8127	EPA 625	Chrysene	5 ng/L	UJ NQ
B13-8127	EPA 625	2,3,5-Trimethylnaphthalene	5 ng/L	UJ NQ
B13-8127	EPA 625	Benzo[a]pyrene	5 ng/L	UJ NQ
B13-8127	EPA 625	Dibenz[a,h]anthracene	5 ng/L	UJ NQ
B13-8127	EPA 625	Benz[a]anthracene	5 ng/L	UJ NQ
B13-8127	EPA 625	2,6-Dimethylnaphthalene	5 ng/L	UJ NQ
B13-8127	EPA 625	1-Methylphenanthrene	5 ng/L	UJ NQ
B13-8127	EPA 625	Acenaphthene	5 ng/L	UJ NQ

**TABLE 3**  
**Qualifiers Added to the Water Samples During Validation**  
**Regional Harbor Monitoring Program**  
**San Diego, California**

Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8127	EPA 625	Phenanthrene	2 ng/L	J DL, NQ
B13-8127	EPA 625	Fluorene	1 ng/L	J DL, NQ
B13-8127	EPA 625	1-Methylnaphthalene	5 ng/L	UJ NQ
B13-8127	EPA 625	Naphthalene	1.8 ng/L	J DL, NQ
B13-8127	EPA 625	2-Methylnaphthalene	1 ng/L	J DL, NQ
B13-8127	EPA 625	Biphenyl	5 ng/L	UJ NQ
B13-8127	SM 4500-NH3 D	Ammonia-N	0.05 mg/L	UJ NQ
B13-8127	SM 4500-NO3 E	Nitrate-N	0.05 mg/L	UJ NQ
B13-8127	SM 4500-P E	Total Orthophosphate as P	0.02 mg/L	J NQ
B13-8127	SM 5540-C	Methylene Blue Active Substance	0.049 mg/L	J NQ, HD
B13-8128	EPA 1640	Thallium, Total	0.006 µg/L	J DL
B13-8128	EPA 1640	Selenium, Dissolved	0.018 µg/L	J HD
B13-8128	EPA 1640	Selenium, Total	0.009 µg/L	J DL, HD
B13-8128	EPA 415.3	Total Organic Carbon	0.98 mg/L	J DL, NQ
B13-8128	EPA 415.3	Dissolved Organic Carbon	0.90 mg/L	J DL, NQ
B13-8128	EPA 625	Anthracene	1.1 ng/L	J DL
B13-8128	EPA 625	Pyrene	1.9 ng/L	J DL
B13-8128	EPA 625	Benzo[e]pyrene	1 ng/L	J DL
B13-8128	EPA 625	Fluoranthene	3.3 ng/L	J DL
B13-8128	EPA 625	Acenaphthene	1.3 ng/L	J DL
B13-8128	EPA 625	Phenanthrene	1.5 ng/L	J DL
B13-8128	EPA 625	Naphthalene	1.2 ng/L	J DL
B13-8128	SM 4500-NH3 D	Ammonia-N	0.05 mg/L	UJ NQ
B13-8128	SM 4500-NO3 E	Nitrate-N	0.01 mg/L	J DL, NQ
B13-8128	SM 4500-P E	Total Orthophosphate as P	0.03 mg/L	J NQ
B13-8128	SM 5540-C	Methylene Blue Active Substance	0.047 mg/L	J NQ, HD
B13-8145	EPA 1640	Aluminum, Dissolved	3.2 µg/L	J DL
B13-8145	EPA 1640	Silver, Dissolved	0.1 µg/L	J HV, LC, HL, HD
B13-8145	EPA 1640	Titanium, Dissolved	13.21 µg/L	J LL
B13-8145	EPA 1640	Silver, Total	0.09 µg/L	J HV, LC, HL, HD
B13-8145	EPA 1640	Titanium, Total	11.408 µg/L	J LL
B13-8145	EPA 1640	Beryllium, Total	0.005 µg/L	J DL
B13-8145	EPA 1640	Antimony, Dissolved	0.11 µg/L	J TD
B13-8145	EPA 1640	Antimony, Total	0.08 µg/L	J TD
B13-8145	EPA 1640	Selenium, Total	0.009 µg/L	J DL
B13-8145	EPA 200.8	Barium, Dissolved	5.84 µg/L	J CH
B13-8145	EPA 200.8	Barium, Total	5.3 µg/L	J CH
B13-8145	EPA 245.7	Mercury, Dissolved	0.02 µg/L	UJ LC
B13-8145	EPA 245.7	Mercury, Total	0.02 µg/L	UJ LC
B13-8145	EPA 415.3	Dissolved Organic Carbon	0.54 mg/L	J NQ
B13-8145	EPA 415.3	Total Organic Carbon	0.51 mg/L	J NQ
B13-8145	EPA 625	Dibenzothiophene	5 ng/L	UJ LV
B13-8145	EPA 625	Fluoranthene	1.6 ng/L	J DL
B13-8145	EPA 625	Acenaphthylene	5 ng/L	UJ LV, LC
B13-8145	EPA 625	2,3,5-Trimethylnaphthalene	5 ng/L	UJ LV
B13-8145	EPA 625	Benzo[a]pyrene	5 ng/L	UJ BC
B13-8145	EPA 625	2,6-Dimethylnaphthalene	5 ng/L	UJ LV, LC
B13-8145	EPA 625	Acenaphthene	5 ng/L	UJ LV, LC
B13-8145	EPA 625	Phenanthrene	1.5 ng/L	J DL
B13-8145	EPA 625	1-Methylnaphthalene	5 ng/L	UJ LV, LC
B13-8145	EPA 625	Naphthalene	5 ng/L	UJ BC, LV, LC, LL
B13-8145	EPA 625	2-Methylnaphthalene	5 ng/L	UJ LV, LC
B13-8145	EPA 625	Biphenyl	5 ng/L	UJ LV, LC
B13-8146	EPA 1640	Aluminum, Dissolved	3.8 µg/L	J DL
B13-8146	EPA 1640	Silver, Dissolved	0.09 µg/L	J HV, LC, HL, HD
B13-8146	EPA 1640	Titanium, Dissolved	13.338 µg/L	J LL, TD
B13-8146	EPA 1640	Silver, Total	0.1 µg/L	J HV, LC, HL, HD
B13-8146	EPA 1640	Titanium, Total	10.755 µg/L	J LL, TD

**TABLE 3**  
**Qualifiers Added to the Water Samples During Validation**  
**Regional Harbor Monitoring Program**  
**San Diego, California**

Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8146	EPA 1640	Antimony, Dissolved	0.11 µg/L	J TD
B13-8146	EPA 1640	Antimony, Total	0.09 µg/L	J TD
B13-8146	EPA 1640	Selenium, Total	0.013 µg/L	J DL
B13-8146	EPA 200.8	Barium, Dissolved	5.65 µg/L	J CH
B13-8146	EPA 200.8	Barium, Total	6.27 µg/L	J CH
B13-8146	EPA 245.7	Mercury, Dissolved	0.02 µg/L	UJ LC
B13-8146	EPA 245.7	Mercury, Total	0.02 µg/L	UJ LC
B13-8146	EPA 415.3	Dissolved Organic Carbon	0.57 mg/L	J NQ
B13-8146	EPA 415.3	Total Organic Carbon	0.16 mg/L	J DL, NQ
B13-8146	EPA 625	Dibenzothiophene	5 ng/L	UJ LV
B13-8146	EPA 625	Benzo[b]fluoranthene	4.9 ng/L	J DL, CH, HL
B13-8146	EPA 625	Acenaphthylene	5 ng/L	UJ LV, LC
B13-8146	EPA 625	Chrysene	1.7 ng/L	J DL, CH
B13-8146	EPA 625	2,3,5-Trimethylnaphthalene	5 ng/L	UJ LV
B13-8146	EPA 625	Benzo[a]pyrene	2.8 ng/L	J DL, BC, CH
B13-8146	EPA 625	Benz[a]anthracene	1.8 ng/L	J DL, CH
B13-8146	EPA 625	2,6-Dimethylnaphthalene	5 ng/L	UJ LV, LC
B13-8146	EPA 625	Acenaphthene	5 ng/L	UJ LV, LC
B13-8146	EPA 625	1-Methylnaphthalene	5 ng/L	UJ LV, LC
B13-8146	EPA 625	Naphthalene	5 ng/L	UJ BC, LV, LC, LL
B13-8146	EPA 625	2-Methylnaphthalene	5 ng/L	UJ LV, LC
B13-8146	EPA 625	Biphenyl	5 ng/L	UJ LV, LC
B13-8151	EPA 1640	Aluminum, Dissolved	4.2 µg/L	J DL
B13-8151	EPA 1640	Silver, Dissolved	0.1 µg/L	J HV, LC, HL, HD
B13-8151	EPA 1640	Titanium, Dissolved	15.147 µg/L	J LL
B13-8151	EPA 1640	Beryllium, Dissolved	0.005 µg/L	J DL
B13-8151	EPA 1640	Silver, Total	0.1 µg/L	J HV, LC, HL, HD
B13-8151	EPA 1640	Titanium, Total	14.329 µg/L	J LL
B13-8151	EPA 200.8	Barium, Dissolved	6.8 µg/L	J CH
B13-8151	EPA 200.8	Barium, Total	6.95 µg/L	J CH
B13-8151	EPA 245.7	Mercury, Dissolved	0.02 µg/L	UJ LC
B13-8151	EPA 245.7	Mercury, Total	0.02 µg/L	UJ LC
B13-8151	EPA 415.3	Dissolved Organic Carbon	0.55 mg/L	J NQ
B13-8151	EPA 415.3	Total Organic Carbon	0.064 mg/L	J DL, NQ
B13-8151	EPA 625	Pyrene	1.1 ng/L	J DL
B13-8151	EPA 625	Dibenzothiophene	5 ng/L	UJ LV
B13-8151	EPA 625	Fluoranthene	1.6 ng/L	J DL
B13-8151	EPA 625	Acenaphthylene	5 ng/L	UJ LV, LC
B13-8151	EPA 625	2,3,5-Trimethylnaphthalene	5 ng/L	UJ LV
B13-8151	EPA 625	Benzo[a]pyrene	5 ng/L	UJ BC
B13-8151	EPA 625	2,6-Dimethylnaphthalene	5 ng/L	UJ LV, LC
B13-8151	EPA 625	Acenaphthene	5 ng/L	UJ LV, LC
B13-8151	EPA 625	1-Methylnaphthalene	5 ng/L	UJ LV, LC
B13-8151	EPA 625	Naphthalene	5 ng/L	UJ BC, LV, LC, LL
B13-8151	EPA 625	2-Methylnaphthalene	5 ng/L	UJ LV, LC
B13-8151	EPA 625	Biphenyl	5 ng/L	UJ LV, LC
B13-8151	SM 4500-NH3 D	Ammonia-N	0.04 mg/L	J DL
B13-8151	SM 4500-NO3 E	Nitrate-N	0.01 mg/L	J DL
B13-8152	EPA 1640	Silver, Dissolved	0.02 µg/L	UJ LC
B13-8152	EPA 1640	Tin, Dissolved	0.009 µg/L	J DL
B13-8152	EPA 1640	Titanium, Dissolved	10.82 µg/L	J LL
B13-8152	EPA 1640	Silver, Total	0.02 µg/L	UJ LC
B13-8152	EPA 1640	Tin, Total	0.006 µg/L	J DL
B13-8152	EPA 1640	Titanium, Total	14.629 µg/L	J LL
B13-8152	EPA 1640	Beryllium, Total	0.005 µg/L	J DL
B13-8152	EPA 1640	Selenium, Dissolved	0.012 µg/L	J DL
B13-8152	EPA 1640	Selenium, Total	0.008 µg/L	J DL
B13-8152	EPA 200.8	Barium, Dissolved	5.3 µg/L	J CH



**TABLE 3**  
**Qualifiers Added to the Water Samples During Validation**  
**Regional Harbor Monitoring Program**  
**San Diego, California**

Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8152	EPA 200.8	Barium, Total	6.33 µg/L	J CH
B13-8152	EPA 245.7	Mercury, Dissolved	0.02 µg/L	UJ LC
B13-8152	EPA 245.7	Mercury, Total	0.02 µg/L	UJ LC
B13-8152	EPA 415.3	Dissolved Organic Carbon	0.49 mg/L	J DL, NQ
B13-8152	EPA 415.3	Total Organic Carbon	0.36 mg/L	J DL, NQ
B13-8152	EPA 625	Dibenzothiophene	5 ng/L	UJ LV
B13-8152	EPA 625	Fluoranthene	1.2 ng/L	J DL
B13-8152	EPA 625	Acenaphthylene	5 ng/L	UJ LV, LC
B13-8152	EPA 625	2,3,5-Trimethylnaphthalene	5 ng/L	UJ LV
B13-8152	EPA 625	Benzo[a]pyrene	5 ng/L	UJ BC
B13-8152	EPA 625	2,6-Dimethylnaphthalene	5 ng/L	UJ LV, LC
B13-8152	EPA 625	Acenaphthene	5 ng/L	UJ LV, LC
B13-8152	EPA 625	Phenanthrene	1.1 ng/L	J DL
B13-8152	EPA 625	1-Methylnaphthalene	1.4 ng/L	J DL, LV, LC
B13-8152	EPA 625	Naphthalene	3.9 ng/L	J DL, BC, LV, LC, LL, HD
B13-8152	EPA 625	2-Methylnaphthalene	2.3 ng/L	J DL, LV, LC
B13-8152	EPA 625	Biphenyl	5 ng/L	UJ LV, LC
B13-8156	EPA 1640	Silver, Dissolved	0.02 µg/L	UJ LC
B13-8156	EPA 1640	Titanium, Dissolved	11.49 µg/L	J LL
B13-8156	EPA 1640	Silver, Total	0.02 µg/L	UJ LC
B13-8156	EPA 1640	Tin, Total	0.009 µg/L	J DL
B13-8156	EPA 1640	Titanium, Total	13.675 µg/L	J LL
B13-8156	EPA 1640	Selenium, Dissolved	0.01 µg/L	J DL
B13-8156	EPA 200.8	Barium, Dissolved	5.03 µg/L	J CH
B13-8156	EPA 200.8	Barium, Total	6.11 µg/L	J CH
B13-8156	EPA 245.7	Mercury, Dissolved	0.02 µg/L	UJ LC
B13-8156	EPA 245.7	Mercury, Total	0.02 µg/L	UJ LC
B13-8156	EPA 415.3	Dissolved Organic Carbon	0.62 mg/L	J NQ
B13-8156	EPA 415.3	Total Organic Carbon	0.44 mg/L	J DL, NQ
B13-8156	EPA 625	Dibenzothiophene	5 ng/L	UJ LV
B13-8156	EPA 625	Fluoranthene	1 ng/L	J DL
B13-8156	EPA 625	Acenaphthylene	5 ng/L	UJ LV, LC
B13-8156	EPA 625	2,3,5-Trimethylnaphthalene	5 ng/L	UJ LV
B13-8156	EPA 625	Benzo[a]pyrene	5 ng/L	UJ BC
B13-8156	EPA 625	2,6-Dimethylnaphthalene	5 ng/L	UJ LV, LC
B13-8156	EPA 625	Acenaphthene	5 ng/L	UJ LV, LC
B13-8156	EPA 625	1-Methylnaphthalene	5 ng/L	UJ LV, LC
B13-8156	EPA 625	Naphthalene	5 ng/L	UJ BC, LV, LC, LL
B13-8156	EPA 625	2-Methylnaphthalene	5 ng/L	UJ LV, LC
B13-8156	EPA 625	Biphenyl	5 ng/L	UJ LV, LC
B13-8157	EPA 1640	Silver, Dissolved	0.02 µg/L	UJ LC
B13-8157	EPA 1640	Titanium, Dissolved	11.757 µg/L	J LL
B13-8157	EPA 1640	Beryllium, Dissolved	0.005 µg/L	J DL
B13-8157	EPA 1640	Silver, Total	0.02 µg/L	UJ LC
B13-8157	EPA 1640	Tin, Total	0.008 µg/L	J DL
B13-8157	EPA 1640	Titanium, Total	16.081 µg/L	J LL
B13-8157	EPA 1640	Selenium, Dissolved	0.04 µg/L	J TD
B13-8157	EPA 1640	Selenium, Total	0.013 µg/L	J DL, TD
B13-8157	EPA 200.8	Barium, Dissolved	9.05 µg/L	J CH
B13-8157	EPA 200.8	Barium, Total	8.81 µg/L	J CH
B13-8157	EPA 245.7	Mercury, Dissolved	0.02 µg/L	UJ LC
B13-8157	EPA 245.7	Mercury, Total	0.02 µg/L	UJ LC
B13-8157	EPA 415.3	Dissolved Organic Carbon	0.74 mg/L	J NQ
B13-8157	EPA 415.3	Total Organic Carbon	0.092 mg/L	J DL, NQ
B13-8157	EPA 625	Fluoranthene	1.5 ng/L	J DL
B13-8157	EPA 625	Naphthalene	5 ng/L	UJ BC, LV, LC, LL
B13-8157	SM 4500-NH3 D	Ammonia-N	0.03 mg/L	J DL
B13-8159	EPA 1640	Silver, Dissolved	0.02 µg/L	UJ LC

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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8159	EPA 1640	Titanium, Dissolved	11.603 µg/L	J LL
B13-8159	EPA 1640	Silver, Total	0.02 µg/L	UJ LC
B13-8159	EPA 1640	Titanium, Total	30.048 µg/L	J LL
B13-8159	EPA 1640	Molybdenum, Dissolved	9.406 µg/L	J TD
B13-8159	EPA 1640	Molybdenum, Total	7.341 µg/L	J TD
B13-8159	EPA 200.8	Barium, Dissolved	12.41 µg/L	J CH
B13-8159	EPA 200.8	Barium, Total	13.32 µg/L	J CH
B13-8159	EPA 245.7	Mercury, Dissolved	0.02 µg/L	UJ LC
B13-8159	EPA 245.7	Mercury, Total	0.02 µg/L	UJ LC
B13-8159	EPA 415.3	Dissolved Organic Carbon	0.98 mg/L	J NQ
B13-8159	EPA 415.3	Total Organic Carbon	0.78 mg/L	J NQ
B13-8159	EPA 625	Pyrene	1.6 ng/L	J DL
B13-8159	EPA 625	Dibenzothiophene	5 ng/L	UJ LV
B13-8159	EPA 625	Fluoranthene	2.1 ng/L	J DL
B13-8159	EPA 625	Acenaphthylene	5 ng/L	UJ LV, LC
B13-8159	EPA 625	2,3,5-Trimethylnaphthalene	5 ng/L	UJ LV
B13-8159	EPA 625	Benzo[a]pyrene	5 ng/L	UJ BC
B13-8159	EPA 625	2,6-Dimethylnaphthalene	5 ng/L	UJ LV, LC
B13-8159	EPA 625	Acenaphthene	5 ng/L	UJ LV, LC
B13-8159	EPA 625	1-Methylnaphthalene	5 ng/L	UJ LV, LC
B13-8159	EPA 625	Naphthalene	5 ng/L	UJ BC, LV, LC, LL
B13-8159	EPA 625	2-Methylnaphthalene	5 ng/L	UJ LV, LC
B13-8159	EPA 625	Biphenyl	5 ng/L	UJ LV, LC
B13-8160	EPA 1640	Silver, Dissolved	0.02 µg/L	UJ LC
B13-8160	EPA 1640	Tin, Dissolved	0.006 µg/L	J DL
B13-8160	EPA 1640	Titanium, Dissolved	17.661 µg/L	J LL
B13-8160	EPA 1640	Silver, Total	0.02 µg/L	UJ LC
B13-8160	EPA 1640	Titanium, Total	42.25 µg/L	J LL
B13-8160	EPA 1640	Molybdenum, Dissolved	9.603 µg/L	J TD
B13-8160	EPA 1640	Antimony, Dissolved	0.17 µg/L	J TD
B13-8160	EPA 1640	Molybdenum, Total	7.123 µg/L	J TD
B13-8160	EPA 1640	Antimony, Total	0.12 µg/L	J TD
B13-8160	EPA 200.8	Barium, Dissolved	11.74 µg/L	J CH
B13-8160	EPA 200.8	Barium, Total	12.44 µg/L	J CH
B13-8160	EPA 245.7	Mercury, Dissolved	0.02 µg/L	UJ LC
B13-8160	EPA 245.7	Mercury, Total	0.02 µg/L	UJ LC
B13-8160	EPA 415.3	Dissolved Organic Carbon	0.98 mg/L	J NQ
B13-8160	EPA 415.3	Total Organic Carbon	0.76 mg/L	J NQ
B13-8160	EPA 625	Pyrene	2.1 ng/L	J DL
B13-8160	EPA 625	Dibenzothiophene	5 ng/L	UJ LV
B13-8160	EPA 625	Fluoranthene	2.6 ng/L	J DL
B13-8160	EPA 625	Acenaphthylene	5 ng/L	UJ LV, LC
B13-8160	EPA 625	Chrysene	1.4 ng/L	J DL, CH
B13-8160	EPA 625	2,3,5-Trimethylnaphthalene	5 ng/L	UJ LV
B13-8160	EPA 625	Benzo[a]pyrene	5 ng/L	UJ BC
B13-8160	EPA 625	2,6-Dimethylnaphthalene	5 ng/L	UJ LV, LC
B13-8160	EPA 625	Acenaphthene	5 ng/L	UJ LV, LC
B13-8160	EPA 625	1-Methylnaphthalene	5 ng/L	UJ LV, LC
B13-8160	EPA 625	Naphthalene	5 ng/L	UJ BC, LV, LC, LL
B13-8160	EPA 625	2-Methylnaphthalene	5 ng/L	UJ LV, LC
B13-8160	EPA 625	Biphenyl	5 ng/L	UJ LV, LC
B13-8163	EPA 1640	Silver, Dissolved	0.02 µg/L	UJ LC
B13-8163	EPA 1640	Titanium, Dissolved	12.754 µg/L	J LL
B13-8163	EPA 1640	Beryllium, Dissolved	0.005 µg/L	J DL
B13-8163	EPA 1640	Silver, Total	0.02 µg/L	UJ LC
B13-8163	EPA 1640	Titanium, Total	14.427 µg/L	J LL
B13-8163	EPA 200.8	Barium, Dissolved	10.53 µg/L	J CH
B13-8163	EPA 200.8	Barium, Total	11.33 µg/L	J CH

**TABLE 3**  
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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8163	EPA 245.7	Mercury, Dissolved	0.02 µg/L	UJ LC
B13-8163	EPA 245.7	Mercury, Total	0.02 µg/L	UJ LC
B13-8163	EPA 415.3	Dissolved Organic Carbon	1.0 mg/L	J NQ
B13-8163	EPA 415.3	Total Organic Carbon	0.72 mg/L	J NQ
B13-8163	EPA 625	Dibenzothiophene	5 ng/L	UJ LV
B13-8163	EPA 625	Fluoranthene	1.5 ng/L	J DL
B13-8163	EPA 625	Acenaphthylene	5 ng/L	UJ LV, LC
B13-8163	EPA 625	2,3,5-Trimethylnaphthalene	5 ng/L	UJ LV
B13-8163	EPA 625	Benzo[a]pyrene	5 ng/L	UJ BC
B13-8163	EPA 625	2,6-Dimethylnaphthalene	5 ng/L	UJ LV, LC
B13-8163	EPA 625	Acenaphthene	5 ng/L	UJ LV, LC
B13-8163	EPA 625	Phenanthrene	1.2 ng/L	J DL
B13-8163	EPA 625	1-Methylnaphthalene	5 ng/L	UJ LV, LC
B13-8163	EPA 625	Naphthalene	4.1 ng/L	J DL, BC, LV, LC, LL, HD
B13-8163	EPA 625	2-Methylnaphthalene	1.9 ng/L	J DL, LV, LC
B13-8163	EPA 625	Biphenyl	5 ng/L	UJ LV, LC
B13-8233	EPA 1640	Aluminum, Dissolved	4.2 µg/L	J DL
B13-8233	EPA 1640	Silver, Dissolved	0.02 µg/L	J HV, LC
B13-8233	EPA 1640	Titanium, Dissolved	11.836 µg/L	J LL, HD
B13-8233	EPA 1640	Beryllium, Dissolved	0.01 µg/L	UJ LC
B13-8233	EPA 1640	Silver, Total	0.02 µg/L	J HV, LC
B13-8233	EPA 1640	Tin, Total	0.007 µg/L	J DL
B13-8233	EPA 1640	Titanium, Total	15.805 µg/L	J LL, HD
B13-8233	EPA 1640	Beryllium, Total	0.01 µg/L	UJ LC
B13-8233	EPA 1640	Lead, Dissolved	0.0183 µg/L	J HD
B13-8233	EPA 1640	Antimony, Dissolved	0.11 µg/L	J TD
B13-8233	EPA 1640	Selenium, Dissolved	0.006 µg/L	J DL
B13-8233	EPA 1640	Antimony, Total	0.09 µg/L	J TD
B13-8233	EPA 1640	Selenium, Total	0.011 µg/L	J DL
B13-8233	EPA 200.8	Barium, Dissolved	6.47 µg/L	J CH, LM
B13-8233	EPA 200.8	Barium, Total	7.34 µg/L	J CH
B13-8233	EPA 245.7	Mercury, Dissolved	0.02 µg/L	UJ LC
B13-8233	EPA 245.7	Mercury, Total	0.02 µg/L	UJ LC
B13-8233	EPA 415.3	Total Organic Carbon	0.58 mg/L	J NQ
B13-8233	EPA 415.3	Dissolved Organic Carbon	0.58 mg/L	J NQ
B13-8233	EPA 625	Pyrene	1.7 ng/L	J DL
B13-8233	EPA 625	Dibenzothiophene	5 ng/L	UJ LV
B13-8233	EPA 625	Fluoranthene	2.1 ng/L	J DL
B13-8233	EPA 625	Acenaphthylene	5 ng/L	UJ LV, LC
B13-8233	EPA 625	Chrysene	1.7 ng/L	J DL, CH
B13-8233	EPA 625	2,3,5-Trimethylnaphthalene	5 ng/L	UJ LV
B13-8233	EPA 625	Benzo[a]pyrene	5 ng/L	UJ BC
B13-8233	EPA 625	Benz[a]anthracene	1.2 ng/L	J DL, CH
B13-8233	EPA 625	2,6-Dimethylnaphthalene	5 ng/L	UJ LV, LC
B13-8233	EPA 625	Acenaphthene	5 ng/L	UJ LV, LC
B13-8233	EPA 625	1-Methylnaphthalene	5 ng/L	UJ LV, LC
B13-8233	EPA 625	Naphthalene	5 ng/L	UJ BC, LV, LC, LL
B13-8233	EPA 625	2-Methylnaphthalene	5 ng/L	UJ LV, LC
B13-8233	EPA 625	Biphenyl	5 ng/L	UJ LV, LC
B13-8233	SM 4500-NH3 D	Ammonia-N	0.07 mg/L	J HM
B13-8233	SM 4500-NO3 E	Nitrate-N	0.02 mg/L	J DL, CH
B13-8236	EPA 1640	Aluminum, Dissolved	4.8 µg/L	J DL
B13-8236	EPA 1640	Silver, Dissolved	0.03 µg/L	J HV, LC
B13-8236	EPA 1640	Titanium, Dissolved	12.247 µg/L	J LL, HD
B13-8236	EPA 1640	Beryllium, Dissolved	0.01 µg/L	UJ LC
B13-8236	EPA 1640	Silver, Total	0.02 µg/L	J HV, LC
B13-8236	EPA 1640	Titanium, Total	17.964 µg/L	J LL, HD
B13-8236	EPA 1640	Beryllium, Total	0.01 µg/L	UJ LC

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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8236	EPA 1640	Antimony, Dissolved	0.12 µg/L	J TD
B13-8236	EPA 1640	Selenium, Dissolved	0.006 µg/L	J DL
B13-8236	EPA 1640	Antimony, Total	0.08 µg/L	J TD
B13-8236	EPA 1640	Selenium, Total	0.007 µg/L	J DL
B13-8236	EPA 200.8	Barium, Dissolved	8.79 µg/L	J CH
B13-8236	EPA 200.8	Barium, Total	7.98 µg/L	J CH
B13-8236	EPA 245.7	Mercury, Dissolved	0.02 µg/L	UJ LC
B13-8236	EPA 245.7	Mercury, Total	0.02 µg/L	UJ LC
B13-8236	EPA 415.3	Total Organic Carbon	0.55 mg/L	J NQ
B13-8236	EPA 415.3	Dissolved Organic Carbon	0.57 mg/L	J NQ
B13-8236	EPA 625	Pyrene	2.1 ng/L	J DL
B13-8236	EPA 625	Dibenzothiophene	5 ng/L	UJ LV
B13-8236	EPA 625	Fluoranthene	3.1 ng/L	J DL
B13-8236	EPA 625	Acenaphthylene	5 ng/L	UJ LV, LC
B13-8236	EPA 625	Chrysene	1.8 ng/L	J DL, CH
B13-8236	EPA 625	2,3,5-Trimethylnaphthalene	5 ng/L	UJ LV
B13-8236	EPA 625	Benzo[a]pyrene	5 ng/L	UJ BC
B13-8236	EPA 625	Benz[a]anthracene	1.4 ng/L	J DL, CH
B13-8236	EPA 625	2,6-Dimethylnaphthalene	5 ng/L	UJ LV, LC
B13-8236	EPA 625	Acenaphthene	5 ng/L	UJ LV, LC
B13-8236	EPA 625	1-Methylnaphthalene	5 ng/L	UJ LV, LC
B13-8236	EPA 625	Naphthalene	1.4 ng/L	J DL, BC, LV, LC, LL, HD
B13-8236	EPA 625	2-Methylnaphthalene	5 ng/L	UJ LV, LC
B13-8236	EPA 625	Biphenyl	5 ng/L	UJ LV, LC
B13-8236	SM 4500-NH3 D	Ammonia-N	0.04 mg/L	J DL
B13-8236	SM 4500-NO3 E	Nitrate-N	0.02 mg/L	J DL, CH
B13-8239	EPA 1640	Aluminum, Dissolved	3.6 µg/L	J DL
B13-8239	EPA 1640	Silver, Dissolved	0.02 µg/L	J HV, LC
B13-8239	EPA 1640	Titanium, Dissolved	12.945 µg/L	J LL, HD
B13-8239	EPA 1640	Beryllium, Dissolved	0.01 µg/L	UJ LC
B13-8239	EPA 1640	Silver, Total	0.02 µg/L	J HV, LC
B13-8239	EPA 1640	Titanium, Total	17.139 µg/L	J LL, HD
B13-8239	EPA 1640	Beryllium, Total	0.01 µg/L	UJ LC
B13-8239	EPA 1640	Lead, Dissolved	0.1153 µg/L	J TD
B13-8239	EPA 1640	Antimony, Dissolved	0.1 µg/L	J TD
B13-8239	EPA 1640	Cadmium, Dissolved	0.0581 µg/L	J TD
B13-8239	EPA 1640	Selenium, Dissolved	0.009 µg/L	J DL
B13-8239	EPA 1640	Lead, Total	0.0629 µg/L	J TD
B13-8239	EPA 1640	Antimony, Total	0.08 µg/L	J TD
B13-8239	EPA 1640	Cadmium, Total	0.0261 µg/L	J TD
B13-8239	EPA 200.8	Barium, Dissolved	7.09 µg/L	J CH
B13-8239	EPA 200.8	Barium, Total	7.52 µg/L	J CH
B13-8239	EPA 245.7	Mercury, Dissolved	0.02 µg/L	UJ LC
B13-8239	EPA 245.7	Mercury, Total	0.02 µg/L	UJ LC
B13-8239	EPA 415.3	Total Organic Carbon	0.56 mg/L	J NQ
B13-8239	EPA 415.3	Dissolved Organic Carbon	0.50 mg/L	J NQ
B13-8239	EPA 625	Pyrene	1.3 ng/L	J DL
B13-8239	EPA 625	Dibenzothiophene	5 ng/L	UJ LV
B13-8239	EPA 625	Fluoranthene	2.5 ng/L	J DL
B13-8239	EPA 625	Acenaphthylene	5 ng/L	UJ LV, LC
B13-8239	EPA 625	Chrysene	1.3 ng/L	J DL, CH
B13-8239	EPA 625	2,3,5-Trimethylnaphthalene	5 ng/L	UJ LV
B13-8239	EPA 625	Benzo[a]pyrene	5 ng/L	UJ BC
B13-8239	EPA 625	Benz[a]anthracene	1.4 ng/L	J DL, CH
B13-8239	EPA 625	2,6-Dimethylnaphthalene	5 ng/L	UJ LV, LC
B13-8239	EPA 625	Acenaphthene	5 ng/L	UJ LV, LC
B13-8239	EPA 625	1-Methylnaphthalene	5 ng/L	UJ LV, LC
B13-8239	EPA 625	Naphthalene	1.2 ng/L	J DL, BC, LV, LC, LL, HD

**TABLE 3**  
**Qualifiers Added to the Water Samples During Validation**  
**Regional Harbor Monitoring Program**  
**San Diego, California**

Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8239	EPA 625	2-Methylnaphthalene	5 ng/L	UJ LV, LC
B13-8239	EPA 625	Biphenyl	5 ng/L	UJ LV, LC
B13-8239	SM 4500-NO3 E	Nitrate-N	0.01 mg/L	J DL, CH
B13-8259	EPA 1640	Aluminum, Dissolved	5 µg/L	J DL
B13-8259	EPA 1640	Silver, Dissolved	0.02 µg/L	J HV, LC
B13-8259	EPA 1640	Tin, Dissolved	0.008 µg/L	J DL
B13-8259	EPA 1640	Titanium, Dissolved	13.935 µg/L	J LL, HD
B13-8259	EPA 1640	Beryllium, Dissolved	0.01 µg/L	UJ LC
B13-8259	EPA 1640	Silver, Total	0.01 µg/L	J DL, HV, LC
B13-8259	EPA 1640	Tin, Total	0.009 µg/L	J DL
B13-8259	EPA 1640	Titanium, Total	14.915 µg/L	J LL, HD
B13-8259	EPA 1640	Beryllium, Total	0.01 µg/L	UJ LC
B13-8259	EPA 1640	Antimony, Dissolved	0.11 µg/L	J TD
B13-8259	EPA 1640	Selenium, Dissolved	0.01 µg/L	J DL
B13-8259	EPA 1640	Antimony, Total	0.08 µg/L	J TD
B13-8259	EPA 1664A	Oil & Grease	1 mg/L	UJ RT
B13-8259	EPA 200.8	Barium, Dissolved	6.78 µg/L	J CH
B13-8259	EPA 200.8	Barium, Total	6.97 µg/L	J CH
B13-8259	EPA 245.7	Mercury, Dissolved	0.02 µg/L	UJ RT, LC
B13-8259	EPA 245.7	Mercury, Total	0.02 µg/L	UJ RT, LC
B13-8259	EPA 415.3	Total Organic Carbon	0.51 mg/L	J NQ
B13-8259	EPA 415.3	Dissolved Organic Carbon	0.47 mg/L	J DL, NQ
B13-8259	EPA 624	Methyl tert-butyl ether	1.0 µg/L	UJ RT
B13-8259	EPA 625	Anthracene	5 ng/L	UJ RT
B13-8259	EPA 625	Pyrene	1.5 ng/L	J DL, RT
B13-8259	EPA 625	Dibenzothiophene	5 ng/L	UJ RT, LV
B13-8259	EPA 625	Benzo[g,h,i]perylene	5 ng/L	UJ RT
B13-8259	EPA 625	Benzo[e]pyrene	5 ng/L	UJ RT
B13-8259	EPA 625	Indeno[1,2,3-c,d]pyrene	5 ng/L	UJ RT
B13-8259	EPA 625	Perylene	5 ng/L	UJ RT
B13-8259	EPA 625	Benzo[b]fluoranthene	5 ng/L	UJ RT
B13-8259	EPA 625	Fluoranthene	1.4 ng/L	J DL, RT
B13-8259	EPA 625	Benzo[k]fluoranthene	5 ng/L	UJ RT
B13-8259	EPA 625	Acenaphthylene	5 ng/L	UJ RT, LV, LC
B13-8259	EPA 625	Chrysene	5 ng/L	UJ RT
B13-8259	EPA 625	2,3,5-Trimethylnaphthalene	5 ng/L	UJ RT, LV
B13-8259	EPA 625	Benzo[a]pyrene	5 ng/L	UJ RT, BC
B13-8259	EPA 625	Dibenz[a,h]anthracene	5 ng/L	UJ RT
B13-8259	EPA 625	Benzo[a]anthracene	1 ng/L	J DL, RT, CH
B13-8259	EPA 625	2,6-Dimethylnaphthalene	5 ng/L	UJ RT, LV, LC
B13-8259	EPA 625	1-Methylphenanthrene	5 ng/L	UJ RT
B13-8259	EPA 625	Acenaphthene	5 ng/L	UJ RT, LV, LC
B13-8259	EPA 625	Phenanthrene	5 ng/L	UJ RT
B13-8259	EPA 625	Fluorene	5 ng/L	UJ RT
B13-8259	EPA 625	1-Methylnaphthalene	5 ng/L	UJ RT, LV, LC
B13-8259	EPA 625	Naphthalene	5 ng/L	UJ RT, BC, LV, LC, LL
B13-8259	EPA 625	2-Methylnaphthalene	5 ng/L	UJ RT, LV, LC
B13-8259	EPA 625	Biphenyl	5 ng/L	UJ RT, LV, LC
B13-8259	SM 4500-NH3 D	Ammonia-N	0.05 mg/L	UJ RT
B13-8259	SM 4500-NO3 E	Nitrate-N	0.02 mg/L	J DL, RT, CH
B13-8259	SM 4500-P E	Total Orthophosphate as P	0.03 mg/L	J RT
B13-8259	SM 5540-C	Methylene Blue Active Substance	0.025 mg/L	UJ RT
B13-8263	EPA 1640	Aluminum, Dissolved	3.6 µg/L	J DL
B13-8263	EPA 1640	Silver, Dissolved	0.02 µg/L	J HV, LC
B13-8263	EPA 1640	Titanium, Dissolved	14.347 µg/L	J LL, HD
B13-8263	EPA 1640	Beryllium, Dissolved	0.01 µg/L	UJ LC
B13-8263	EPA 1640	Silver, Total	0.02 µg/L	J HV, LC
B13-8263	EPA 1640	Titanium, Total	17.895 µg/L	J LL, HD

**TABLE 3**  
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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8263	EPA 1640	Beryllium, Total	0.01 µg/L	UJ LC
B13-8263	EPA 1640	Antimony, Dissolved	0.1 µg/L	J TD
B13-8263	EPA 1640	Antimony, Total	0.07 µg/L	J TD
B13-8263	EPA 1640	Selenium, Total	0.011 µg/L	J DL
B13-8263	EPA 1664A	Oil & Grease	1 mg/L	UJ RT
B13-8263	EPA 200.8	Barium, Dissolved	5.85 µg/L	J CH
B13-8263	EPA 200.8	Barium, Total	6.58 µg/L	J CH
B13-8263	EPA 245.7	Mercury, Dissolved	0.02 µg/L	UJ RT, LC
B13-8263	EPA 245.7	Mercury, Total	0.02 µg/L	UJ RT, LC
B13-8263	EPA 415.3	Total Organic Carbon	0.49 mg/L	J DL, NQ
B13-8263	EPA 415.3	Dissolved Organic Carbon	0.54 mg/L	J NQ
B13-8263	EPA 624	Methyl tert-butyl ether	1.0 µg/L	UJ RT
B13-8263	EPA 625	Anthracene	5 ng/L	UJ RT
B13-8263	EPA 625	Pyrene	5 ng/L	UJ RT
B13-8263	EPA 625	Dibenzothiophene	5 ng/L	UJ RT, LV
B13-8263	EPA 625	Benzo[g,h,i]perylene	5 ng/L	UJ RT
B13-8263	EPA 625	Benzo[e]pyrene	5 ng/L	UJ RT
B13-8263	EPA 625	Indeno[1,2,3-c,d]pyrene	5 ng/L	UJ RT
B13-8263	EPA 625	Perylene	5 ng/L	UJ RT
B13-8263	EPA 625	Benzo[b]fluoranthene	5 ng/L	UJ RT
B13-8263	EPA 625	Fluoranthene	5 ng/L	UJ RT
B13-8263	EPA 625	Benzo[k]fluoranthene	5 ng/L	UJ RT
B13-8263	EPA 625	Acenaphthylene	5 ng/L	UJ RT, LV, LC
B13-8263	EPA 625	Chrysene	5 ng/L	UJ RT
B13-8263	EPA 625	2,3,5-Trimethylnaphthalene	5 ng/L	UJ RT, LV
B13-8263	EPA 625	Benzo[a]pyrene	5 ng/L	UJ RT, BC
B13-8263	EPA 625	Dibenz[a,h]anthracene	5 ng/L	UJ RT
B13-8263	EPA 625	Benz[a]anthracene	5 ng/L	UJ RT
B13-8263	EPA 625	2,6-Dimethylnaphthalene	5 ng/L	UJ RT, LV, LC
B13-8263	EPA 625	1-Methylphenanthrene	5 ng/L	UJ RT
B13-8263	EPA 625	Acenaphthene	5 ng/L	UJ RT, LV, LC
B13-8263	EPA 625	Phenanthrene	5 ng/L	UJ RT
B13-8263	EPA 625	Fluorene	5 ng/L	UJ RT
B13-8263	EPA 625	1-Methylnaphthalene	5 ng/L	UJ RT, LV, LC
B13-8263	EPA 625	Naphthalene	5 ng/L	UJ RT, BC, LV, LC, LL
B13-8263	EPA 625	2-Methylnaphthalene	5 ng/L	UJ RT, LV, LC
B13-8263	EPA 625	Biphenyl	5 ng/L	UJ RT, LV, LC
B13-8263	SM 4500-NH3 D	Ammonia-N	0.05 mg/L	UJ RT
B13-8263	SM 4500-NO3 E	Nitrate-N	0.05 mg/L	UJ RT
B13-8263	SM 4500-P E	Total Orthophosphate as P	0.03 mg/L	J RT
B13-8263	SM 5540-C	Methylene Blue Active Substance	0.025 mg/L	UJ RT
B13-8265	EPA 1640	Aluminum, Dissolved	3.8 µg/L	J DL
B13-8265	EPA 1640	Silver, Dissolved	0.02 µg/L	J HV, LC
B13-8265	EPA 1640	Tin, Dissolved	0.314 µg/L	J TD
B13-8265	EPA 1640	Titanium, Dissolved	10.544 µg/L	J LL, HD
B13-8265	EPA 1640	Beryllium, Dissolved	0.022 µg/L	J LC, TD
B13-8265	EPA 1640	Silver, Total	0.01 µg/L	J DL, HV, LC
B13-8265	EPA 1640	Tin, Total	0.01 µg/L	UJ TD
B13-8265	EPA 1640	Titanium, Total	14.959 µg/L	J LL, HD
B13-8265	EPA 1640	Beryllium, Total	0.01 µg/L	UJ LC, TD
B13-8265	EPA 1640	Antimony, Dissolved	0.11 µg/L	J TD
B13-8265	EPA 1640	Selenium, Dissolved	0.013 µg/L	J DL
B13-8265	EPA 1640	Antimony, Total	0.09 µg/L	J TD
B13-8265	EPA 1640	Selenium, Total	0.013 µg/L	J DL
B13-8265	EPA 1664A	Oil & Grease	1 mg/L	UJ RT
B13-8265	EPA 200.8	Barium, Dissolved	4.72 µg/L	J CH
B13-8265	EPA 200.8	Barium, Total	7.32 µg/L	J CH
B13-8265	EPA 245.7	Mercury, Dissolved	0.02 µg/L	UJ RT, LC

**TABLE 3**  
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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8265	EPA 245.7	Mercury, Total	0.02 µg/L	UJ RT, LC
B13-8265	EPA 415.3	Total Organic Carbon	0.50 mg/L	J NQ
B13-8265	EPA 415.3	Dissolved Organic Carbon	0.49 mg/L	J DL, NQ
B13-8265	EPA 624	Methyl tert-butyl ether	1.0 µg/L	UJ RT
B13-8265	EPA 625	Anthracene	5 ng/L	UJ RT
B13-8265	EPA 625	Pyrene	1 ng/L	J DL, RT
B13-8265	EPA 625	Dibenzothiophene	5 ng/L	UJ RT, LV
B13-8265	EPA 625	Benzo[g,h,i]perylene	5 ng/L	UJ RT
B13-8265	EPA 625	Benzo[e]pyrene	5 ng/L	UJ RT
B13-8265	EPA 625	Indeno[1,2,3-c,d]pyrene	5 ng/L	UJ RT
B13-8265	EPA 625	Perylene	5 ng/L	UJ RT
B13-8265	EPA 625	Benzo[b]fluoranthene	5 ng/L	UJ RT
B13-8265	EPA 625	Fluoranthene	1.5 ng/L	J DL, RT
B13-8265	EPA 625	Benzo[k]fluoranthene	5 ng/L	UJ RT
B13-8265	EPA 625	Acenaphthylene	5 ng/L	UJ RT, LV, LC
B13-8265	EPA 625	Chrysene	5 ng/L	UJ RT
B13-8265	EPA 625	2,3,5-Trimethylnaphthalene	5 ng/L	UJ RT, LV
B13-8265	EPA 625	Benzo[a]pyrene	5 ng/L	UJ RT, BC
B13-8265	EPA 625	Dibenz[a,h]anthracene	5 ng/L	UJ RT
B13-8265	EPA 625	Benzo[a]anthracene	5 ng/L	UJ RT
B13-8265	EPA 625	2,6-Dimethylnaphthalene	5 ng/L	UJ RT, LV, LC
B13-8265	EPA 625	1-Methylphenanthrene	5 ng/L	UJ RT
B13-8265	EPA 625	Acenaphthene	5 ng/L	UJ RT, LV, LC
B13-8265	EPA 625	Phenanthrene	5 ng/L	UJ RT
B13-8265	EPA 625	Fluorene	5 ng/L	UJ RT
B13-8265	EPA 625	1-Methylnaphthalene	5 ng/L	UJ RT, LV, LC
B13-8265	EPA 625	Naphthalene	1.6 ng/L	J DL, RT, BC, LV, LC, LL, HD
B13-8265	EPA 625	2-Methylnaphthalene	5 ng/L	UJ RT, LV, LC
B13-8265	EPA 625	Biphenyl	5 ng/L	UJ RT, LV, LC
B13-8265	SM 4500-NH3 D	Ammonia-N	0.03 mg/L	J DL, RT
B13-8265	SM 4500-NO3 E	Nitrate-N	0.05 mg/L	UJ RT
B13-8265	SM 4500-P E	Total Orthophosphate as P	0.03 mg/L	J RT
B13-8265	SM 5540-C	Methylene Blue Active Substance	0.008 mg/L	J DL, RT, HV
B13-8267	EPA 1640	Aluminum, Dissolved	3.4 µg/L	J DL
B13-8267	EPA 1640	Silver, Dissolved	0.02 µg/L	J HV, LC
B13-8267	EPA 1640	Titanium, Dissolved	13.896 µg/L	J LL, HD
B13-8267	EPA 1640	Beryllium, Dissolved	0.01 µg/L	UJ LC
B13-8267	EPA 1640	Silver, Total	0.02 µg/L	J HV, LC
B13-8267	EPA 1640	Titanium, Total	18.998 µg/L	J LL, HD
B13-8267	EPA 1640	Beryllium, Total	0.01 µg/L	UJ LC
B13-8267	EPA 1640	Molybdenum, Dissolved	8.703 µg/L	J TD
B13-8267	EPA 1640	Antimony, Dissolved	0.1 µg/L	J TD
B13-8267	EPA 1640	Selenium, Dissolved	0.011 µg/L	J DL
B13-8267	EPA 1640	Molybdenum, Total	6.86 µg/L	J TD
B13-8267	EPA 1640	Antimony, Total	0.08 µg/L	J TD
B13-8267	EPA 1640	Selenium, Total	0.013 µg/L	J DL
B13-8267	EPA 1664A	Oil & Grease	1 mg/L	UJ RT
B13-8267	EPA 200.8	Barium, Dissolved	7.17 µg/L	J CH, TD
B13-8267	EPA 200.8	Barium, Total	5.54 µg/L	J CH, TD
B13-8267	EPA 245.7	Mercury, Dissolved	0.02 µg/L	UJ RT, LC
B13-8267	EPA 245.7	Mercury, Total	0.02 µg/L	UJ RT, LC
B13-8267	EPA 415.3	Total Organic Carbon	0.54 mg/L	J NQ
B13-8267	EPA 415.3	Dissolved Organic Carbon	0.48 mg/L	J DL, NQ
B13-8267	EPA 624	Methyl tert-butyl ether	1.0 µg/L	UJ RT
B13-8267	EPA 625	Anthracene	5 ng/L	UJ RT
B13-8267	EPA 625	Pyrene	1.4 ng/L	J DL, RT
B13-8267	EPA 625	Dibenzothiophene	5 ng/L	UJ RT, LV
B13-8267	EPA 625	Benzo[g,h,i]perylene	5 ng/L	UJ RT

**TABLE 3**  
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**Regional Harbor Monitoring Program**  
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Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8267	EPA 625	Benzo[e]pyrene	5 ng/L	UJ RT
B13-8267	EPA 625	Indeno[1,2,3-c,d]pyrene	5 ng/L	UJ RT
B13-8267	EPA 625	Perylene	5 ng/L	UJ RT
B13-8267	EPA 625	Benzo[b]fluoranthene	5 ng/L	UJ RT
B13-8267	EPA 625	Fluoranthene	1.6 ng/L	J DL, RT
B13-8267	EPA 625	Benzo[k]fluoranthene	5 ng/L	UJ RT
B13-8267	EPA 625	Acenaphthylene	5 ng/L	UJ RT, LV, LC
B13-8267	EPA 625	Chrysene	1.1 ng/L	J DL, RT, CH
B13-8267	EPA 625	2,3,5-Trimethylnaphthalene	5 ng/L	UJ RT, LV
B13-8267	EPA 625	Benzo[a]pyrene	5 ng/L	UJ RT, BC
B13-8267	EPA 625	Dibenz[a,h]anthracene	5 ng/L	UJ RT
B13-8267	EPA 625	Benz[a]anthracene	1.3 ng/L	J DL, RT, CH
B13-8267	EPA 625	2,6-Dimethylnaphthalene	5 ng/L	UJ RT, LV, LC
B13-8267	EPA 625	1-Methylphenanthrene	5 ng/L	UJ RT
B13-8267	EPA 625	Acenaphthene	5 ng/L	UJ RT, LV, LC
B13-8267	EPA 625	Phenanthrene	5 ng/L	UJ RT
B13-8267	EPA 625	Fluorene	5 ng/L	UJ RT
B13-8267	EPA 625	1-Methylnaphthalene	5 ng/L	UJ RT, LV, LC
B13-8267	EPA 625	Naphthalene	5 ng/L	UJ RT, BC, LV, LC, LL
B13-8267	EPA 625	2-Methylnaphthalene	5 ng/L	UJ RT, LV, LC
B13-8267	EPA 625	Biphenyl	5 ng/L	UJ RT, LV, LC
B13-8267	SM 4500-NH3 D	Ammonia-N	0.2 mg/L	J RT
B13-8267	SM 4500-NO3 E	Nitrate-N	0.01 mg/L	J DL, RT, CH
B13-8267	SM 4500-P E	Total Orthophosphate as P	0.03 mg/L	J RT
B13-8267	SM 5540-C	Methylene Blue Active Substance	0.008 mg/L	J DL, RT, HV
B13-8500	EPA 1640	Aluminum, Dissolved	6 µg/L	UJ LC
B13-8500	EPA 1640	Silver, Dissolved	0.01 µg/L	J DL
B13-8500	EPA 1640	Beryllium, Dissolved	0.01 µg/L	UJ LC
B13-8500	EPA 1640	Aluminum, Total	141.6 µg/L	J LC
B13-8500	EPA 1640	Thallium, Total	0.008 µg/L	J DL
B13-8500	EPA 1640	Beryllium, Total	0.01 µg/L	UJ LC
B13-8500	EPA 1640	Selenium, Dissolved	0.013 µg/L	J DL, HD
B13-8500	EPA 1640	Selenium, Total	0.006 µg/L	J DL, HD
B13-8500	EPA 200.8	Barium, Dissolved	9.4 µg/L	J CH
B13-8500	EPA 200.8	Barium, Total	8.39 µg/L	J CH
B13-8500	EPA 415.3	Total Organic Carbon	1.3 mg/L	J DL, NQ
B13-8500	EPA 415.3	Dissolved Organic Carbon	0.77 mg/L	J DL, NQ
B13-8500	EPA 625	Anthracene	1.5 ng/L	J DL, NQ
B13-8500	EPA 625	Pyrene	2 ng/L	J DL, NQ
B13-8500	EPA 625	Dibenzothiophene	5 ng/L	UJ NQ
B13-8500	EPA 625	Benzo[g,h,i]perylene	5 ng/L	UJ NQ
B13-8500	EPA 625	Benzo[e]pyrene	2.3 ng/L	J DL, NQ
B13-8500	EPA 625	Indeno[1,2,3-c,d]pyrene	5 ng/L	UJ NQ
B13-8500	EPA 625	Perylene	5 ng/L	UJ NQ
B13-8500	EPA 625	Benzo[b]fluoranthene	5 ng/L	UJ NQ
B13-8500	EPA 625	Fluoranthene	5.9 ng/L	J NQ
B13-8500	EPA 625	Benzo[k]fluoranthene	5 ng/L	UJ NQ
B13-8500	EPA 625	Acenaphthylene	5 ng/L	UJ NQ
B13-8500	EPA 625	Chrysene	5 ng/L	UJ NQ
B13-8500	EPA 625	2,3,5-Trimethylnaphthalene	5 ng/L	UJ NQ
B13-8500	EPA 625	Benzo[a]pyrene	5 ng/L	UJ NQ
B13-8500	EPA 625	Dibenz[a,h]anthracene	5 ng/L	UJ NQ
B13-8500	EPA 625	Benz[a]anthracene	5 ng/L	UJ NQ
B13-8500	EPA 625	2,6-Dimethylnaphthalene	5 ng/L	UJ NQ
B13-8500	EPA 625	1-Methylphenanthrene	5 ng/L	UJ NQ
B13-8500	EPA 625	Acenaphthene	3.4 ng/L	J DL, NQ
B13-8500	EPA 625	Phenanthrene	1.9 ng/L	J DL, NQ
B13-8500	EPA 625	Fluorene	5 ng/L	UJ NQ



**TABLE 3**  
**Qualifiers Added to the Water Samples During Validation**  
**Regional Harbor Monitoring Program**  
**San Diego, California**

Sample ID	Method	Analyte	Concentration	Qualifiers and Reason Codes
B13-8500	EPA 625	1-Methylnaphthalene	5 ng/L	UJ NQ
B13-8500	EPA 625	Naphthalene	3.3 ng/L	J DL, NQ
B13-8500	EPA 625	2-Methylnaphthalene	5 ng/L	UJ NQ
B13-8500	EPA 625	Biphenyl	5 ng/L	UJ NQ
B13-8500	SM 4500-NH3 D	Ammonia-N	0.05 mg/L	UJ NQ
B13-8500	SM 4500-NO3 E	Nitrate-N	0.05 mg/L	UJ NQ
B13-8500	SM 4500-P E	Total Orthophosphate as P	0.02 mg/L	J NQ
B13-8500	SM 5540-C	Methylene Blue Active Substance	0.046 mg/L	J NQ, HD

**Notes:**

µg/L = micrograms per liter

mg/L = milligrams per liter

ng/L = nanograms per liter

**Qualifiers:**

J = The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

U = The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

UJ = The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

**Reason Codes:**

BC = The initial calibration (ICAL) curve did not meet method-specified criteria.

CH = High continuing calibration verification (CCV) recovery. Analytical result may be biased high.

DL = The analyte concentration was between the method detection limit (MDL) and the reporting limit (RL).

FB = The analyte was detected in the sample and its associated field blank and the concentration detected in the sample is less than five times the concentration detected in the blank.

HD = Potential analytical imprecision.

HL = High LCS recovery. Analytical result may be biased high.

HM = High MS recovery. Analytical result may be biased high.

HV = High initial calibration verification (ICV) recovery. Analytical result may be biased high.

LC = Low CCV recovery. Analytical result may be biased low.

LL = Low LCS recovery. Analytical result may be biased low.

LM = Low MS recovery. Analytical result may be biased low.

LP = Low CRM Recovery. Analytical result may be biased low.

LS = Low surrogate. Analytical result may be biased low.

LV = Low ICV recovery. Analytical result may be biased low.

NC = Calibration verification standard concentrations were outside the calibration range.

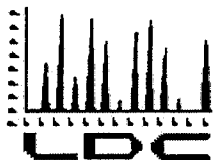
NQ = There is a lack of QC for this analyte.

RB = The analyte was detected in the sample and its associated equipment blank and the concentration detected in the sample is less than five times the concentration detected in the blank.

RT = Elevated sample receipt temperature.

TD = The dissolved metals concentration is significantly higher than the total metal concentration.

Level IV Data Validation  
Report  
Laboratory Data Consultants



## LABORATORY DATA CONSULTANTS, INC.

2701 Loker Ave. West, Suite 220, Carlsbad, CA 92010 Bus: 760-827-1100 Fax: 760-827-1099

AMEC  
9210 Sky Park Court, Suite 200  
San Diego, CA 92123  
ATTN: Mr. Rolf Schottle

April 7, 2015

SUBJECT: RHMP B'13, Data Validation

Dear Mr. Schottle,

Enclosed are the final validation reports for the fractions listed below. These SDGs were received on January 8, 2015. Attachment 1 is a summary of the samples that were reviewed for each analysis.

**LDC Project #33507:**

<b><u>SDG #</u></b>	<b><u>Fraction</u></b>
1307002-005	Polynuclear Aromatic Hydrocarbons, Fipronil & Degradates,
1307002-010	Polychlorinated Diphenyl Ether as Congeners, Synthetic Pyrethroid Pesticides, Chlorinated Pesticides, Polychlorinated Biphenyls as Aroclors, Polychlorinated Biphenyls as Congeners, Metals, Wet Chemistry

The data validation was performed under EPA Level IV guidelines. The analyses were validated using the following documents, as applicable to each method:

- Final Quality Assurance Project Plan, Regional Harbor Monitoring Program, San Diego, California, August 2013
- USEPA, Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review, June 2008
- USEPA Contract Laboratory National Functional Guidelines for Inorganic Superfund Data Review, January 2010
- EPA SW 846, Third Edition, Test Methods for Evaluating Solid Waste, update 1, July 1992; update IIA, August 1993; update II, September 1994; update IIB, January 1995; update III, December 1996; update IIIA, April 1998; IIIB, November 2004; Update IV, February 2007

Please feel free to contact us if you have any questions.

Sincerely,

Pei Geng  
Project Manager/Senior Chemist

[illegible]

## Laboratory Data Consultants, Inc. Data Validation Report

**Project/Site Name:** RHMP B'13

**LDC Report Date:** January 28, 2015

**Parameters:** Polynuclear Aromatic Hydrocarbons

**Validation Level:** EPA Level IV

**Laboratory:** PHYSIS Environmental Laboratories, Inc.

**Sample Delivery Group (SDG):** 1307002-005

Sample Identification	Laboratory Sample Identification	Matrix	Collection Date
B13-8020	22064-R1	Water	8/11/13
B13-8017	22065-R1	Water	8/11/13
B13-8064	22068-R1	Water	8/11/13
B13-8050	22069-R1	Water	8/11/13
B13-8029	22070-R1	Water	8/11/13
B13-8069	22071-R1	Water	8/11/13
B13-8056	22072-R1	Water	8/11/13
B13-8049	22073-R1	Water	8/11/13

## Introduction

This Data Validation Report (DVR) presents data validation findings and results for the associated samples listed on the cover page. Data validation was performed in accordance with Final Quality Assurance Project Plan, Regional Harbor Monitoring Program, San Diego, California (August 2013) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines (CLPNFG) for Superfund Organic Methods Data Review (June 2008). Where specific guidance was not available, the data has been evaluated in a conservative manner consistent with industry standards using professional experience.

The analyses were performed by the following method:

Polynuclear Aromatic Hydrocarbons (PAHs) by Environmental Protection Agency (EPA) Method 625

All sample results were subjected to Level IV evaluation, which is comprised of the QC summary forms as well as the raw data, to confirm sample quantitation and identification.

The following are definitions of the data qualifiers utilized during data validation:

- J (Estimated): The compound or analyte was analyzed for and positively identified by the laboratory; however the reported concentration is estimated due to non-conformances discovered during data validation.
- U (Non-detected): The compound or analyte was analyzed for and positively identified by the laboratory; however the analyte should be considered as not detected at the reported concentration due to the presence of contaminants detected in the associated blank(s).
- UJ (Non-detected estimated): The compound or analyte was reported as not detected by the laboratory; however the reported quantitation/detection limit is estimated due to non-conformances discovered during data validation.
- R (Rejected): The sample results were rejected due to gross non-conformances discovered during data validation. Data qualified as rejected is not usable.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

## Qualification Code Reference

- BC The initial calibration (ICAL) curve did not meet method-specified criteria.
- CH High continuing calibration verification (CCV) recovery. Analytical results may be biased high.
- DL The analyte concentration was between the method detection limit (MDL) and the reporting limit (RL).
- FB The analyte was detected in the sample and its associated field blank and the concentration detected in the sample is less than five times the concentration detected in the blanks.
- H Holding time.
- HD Potential analytical imprecision.
- HL High LCS recovery. Analytical results may be biased high.
- HM High MS recovery. Analytical results may be biased high.
- HP High certified reference material (CRM) recovery. Analytical results may be biased high.
- HV High initial calibration verification (ICV) recovery. Analytical results may be biased high.
- LC Low CCV recovery. Analytical result may be biased low.
- LL Low LCS recovery. Analytical result may be biased low.
- LM Low MS recovery. Analytical result may be biased low.
- LP Low CRM recovery. Analytical result may be biased low.
- LS Low Surrogate recovery. Analytical results may be biased low.
- LV Low ICV recovery. Analytical result may be biased low.
- NC Calibration verification standard concentrations were outside the calibration range.
- NQ There is lack of QC for this analyte.
- RB The analyte was detected in the sample and its associated equipment blank and the concentration detected in the sample is less than five times the concentration detected in the blank.
- TD The dissolved metals concentration is significantly higher than the total metal concentration.
- \*# Unusual problems found with the data. The number following the asterisk (\*) will indicate the section in the validation report where a description of the problem can be found.

## I. Sample Receipt and Technical Holding Times

All samples were received in good condition and cooler temperatures upon receipt met validation criteria.

All technical holding time requirements were met.

## II. GC/MS Instrument Performance Check

A decafluorotriphenylphosphine (DFTPP) tune was performed at 12 hour intervals.

All ion abundance requirements were met.

## III. Initial Calibration and Initial Calibration Verification

An initial calibration was performed as required by the method.

A curve fit, based on the initial calibration, was established for quantitation. The coefficient of determination ( $r^2$ ) was greater than or equal to 0.990 with the following exceptions:

Date	Compound	$r^2$	Associated Samples	Flag	A or P
8/24/13	Naphthalene 2-Methylnaphthalene 1-Methylnaphthalene 2,6-Dimethylnaphthalene Acenaphthylene	0.941093 0.959740 0.965447 0.989779 0.989597	All samples in SDG 1307002-005	J (all detects) UJ (all non-detects)	A

The percent differences (%D) of the initial calibration verification (ICV) standard were less than or equal to 20.0% for all compounds with the following exceptions:

Date	Compound	%D	Associated Samples	Flag	A or P
8/24/13	Naphthalene 2-Methylnaphthalene Acenaphthene 1-Methylnaphthalene Biphenyl 2,6-Dimethylnaphthalene Acenaphthylene 2,3,5-Trimethylnaphthalene Dibenzothiophene	48 50 21 46 27 38 24 40 28	All samples in SDG 1307002-005	J (all detects) UJ (all non-detects)	A
8/24/13	Anthracene	49	All samples in SDG 1307002-005	J (all detects)	A



#### IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) were less than or equal to 20.0% for all compounds with the following exceptions:

Date	Compound	%D	Associated Samples	Flag	A or P
9/6/13	Naphthalene 2-Methylnaphthalene 1-Methylnaphthalene Biphenyl 2,6-Dimethylnaphthalene Fluoranthene Pyrene Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Perylene	28.81 26.78 24.52 22.28 21.42 34.84 25.05 24.65 20.25 23.53 24.54	All samples in SDG 1307002-005	J (all detects) UJ (all non-detects)	A

#### V. Laboratory Blanks

Laboratory blanks were analyzed as required by the method. No contaminants were found in the laboratory blanks.

#### VI. Field Blanks

Sample B13-NBEB was identified as an equipment blank. No contaminants were found.

Sample B13-FB was identified as a field blank. No contaminants were found.

#### VII. Surrogate Spikes

Surrogates were added to all samples as required by the method. All surrogate recoveries (%R) were within QC limits.

#### VIII. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

## IX. Laboratory Control Samples

Laboratory control samples (LCS) and laboratory control samples duplicates (LCSD) were analyzed as required by the method. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

LCS ID (Associated Samples)	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Flag	A or P
22063-BS1/BS2 (All samples in SDG 1307002-005)	1-Methylnaphthalene 2-Methylnaphthalene Naphthalene	68 (70-130) 66 (70-130) 63 (70-130)	68 (70-130) 67 (70-130) 62 (70-130)	- - -	J (all detects) UJ (all non-detects)	P

## X. Field Duplicates

No field duplicates were identified in this SDG.

## XI. Internal Standards

All internal standard areas and retention times were within QC limits with the following exceptions:

Sample	Compound	Finding	Flag	A or P
All samples in SDG 1307002-005	All TCL compounds	The internal standard recoveries could not be verified due to the difference in the extraction procedures between the calibration standards and samples.	J (all detects) UJ (all non-detects)	P

## XII. Compound Quantitation

All compound quantitations were within validation criteria with the following exceptions:

Samples	Compound	Finding	Flag	A or P
All samples in SDG 1307002-005	All TCL compounds	The laboratory indicated that the multiplier used to quantitate results was based on sample dry weight, initial, and final extract volumes. The multiplier cannot be verified since extract volumes were not provided.	J (all detects)	P

All compounds reported below the RL and above the MDL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG 1307002-005	Compound reported below the RL and above the MDL	J (all detects)	A

### **XIII. Target Compound Identifications**

All target compound identifications were within validation criteria.

### **XIV. System Performance**

The system performance was acceptable.

### **XV. Overall Assessment of Data**

The analysis was conducted within all specifications of the method. No results were rejected in this SDG.

Due to initial calibration  $r^2$ , ICV and continuing calibration %D, LCS/LCSD %R, internal standards, and compound quantitation, data were qualified as estimated in eight samples.

The quality control criteria reviewed, as discussed above, were met and are considered acceptable. Sample results that were found to be estimated (J/UJ) are usable for limited purposes only. Based upon the data validation, all other results are considered valid and usable for all purposes.

**RHMP B'13**
**Polynuclear Aromatic Hydrocarbons - Data Qualification Summary - SDG 1307002-005**

Sample	Compound	Flag	A or P	Reason (Code)
B13-8020 B13-8017 B13-8064 B13-8050 B13-8029 B13-8069 B13-8056 B13-8049	Naphthalene 2-Methylnaphthalene 1-Methylnaphthalene 2,6-Dimethylnaphthalene Acenaphthylene	J (all detects) UJ (all non-detects)	A	Initial calibration ( $r^2$ ) (BC)
B13-8020 B13-8017 B13-8064 B13-8050 B13-8029 B13-8069 B13-8056 B13-8049	Naphthalene 2-Methylnaphthalene Acenaphthene 1-Methylnaphthalene Biphenyl 2,6-Dimethylnaphthalene Acenaphthylene 2,3,5-Trimethylnaphthalene Dibenzothiophene	J (all detects) UJ (all non-detects)	A	Initial calibration verification (%D) (LV)
B13-8020 B13-8017 B13-8064 B13-8050 B13-8029 B13-8069 B13-8056 B13-8049	Anthracene	J (all detects)	A	Initial calibration verification (%D) (HV)
B13-8020 B13-8017 B13-8064 B13-8050 B13-8029 B13-8069 B13-8056 B13-8049	Naphthalene 2-Methylnaphthalene 1-Methylnaphthalene Biphenyl 2,6-Dimethylnaphthalene	J (all detects) UJ (all non-detects)	A	Continuing calibration (%D) (LC)
B13-8020 B13-8017 B13-8064 B13-8050 B13-8029 B13-8069 B13-8056 B13-8049	Fluoranthene Pyrene Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Perylene	J (all detects) UJ (all non-detects)	A	Continuing calibration (%D) (CH)
B13-8020 B13-8017 B13-8064 B13-8050 B13-8029 B13-8069 B13-8056 B13-8049	1-Methylnaphthalene 2-Methylnaphthalene Naphthalene	J (all detects) UJ (all non-detects)	P	Laboratory control samples (%R) (LL)

Sample	Compound	Flag	A or P	Reason (Code)
B13-8020 B13-8017 B13-8064 B13-8050 B13-8029 B13-8069 B13-8056 B13-8049	All TCL compounds	J (all detects) UJ (all non-detects)	P	Internal standards (*XI)
B13-8020 B13-8017 B13-8064 B13-8050 B13-8029 B13-8069 B13-8056 B13-8049	All TCL compounds	J (all detects)	P	Compound quantitation (*XII)
B13-8020 B13-8017 B13-8064 B13-8050 B13-8029 B13-8069 B13-8056 B13-8049	Compound reported below the RL and above the MDL	J (all detects)	A	Compound quantitation (DL)

#### **RHMP B'13**

#### **Polynuclear Aromatic Hydrocarbons - Laboratory Blank Data Qualification Summary - SDG 1307002-005**

No Sample Data Qualified in this SDG

#### **RHMP B'13**

#### **Polynuclear Aromatic Hydrocarbons - Field Blank Data Qualification Summary - SDG 1307002-005**

No Sample Data Qualified in this SDG

LDC #: 33507A2b

**VALIDATION COMPLETENESS WORKSHEET**

Date: 1/23/15

SDG #: 1307002-005

Level IV

Page: 1 of 1

Laboratory: PHYSIS Environmental Laboratories, Inc.

Reviewer: JVG

2nd Reviewer: u**METHOD:** GC/MS Polynuclear Aromatic Hydrocarbons (EPA Method 624)<sup>5</sup>

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Sample receipt/Technical holding times	A / A	
II.	GC/MS Instrument performance check	A	
III.	Initial calibration/ICV	SW, SW	ICAL <del>≤ 35</del> all r <sup>2</sup> ICV <del>≤ 20</del> ?
IV.	Continuing calibration	SW	≤ 20?
V.	Laboratory Blanks	A	EB = B13 - NB EB Grab
VI.	Field blanks	ND	FB = B13 - FB Grab } same 'SB 6
VII.	Surrogate spikes	A	
VIII.	Matrix spike/Matrix spike duplicates	N	CS
IX.	Laboratory control samples	SW	LCS 1b
X.	Field duplicates	N	
XI.	Internal standards	SW	
XII.	Compound quantitation RL/LOQ/LODs	A	
XIII.	Target compound identification	A	
XIV.	System performance	A	
XV.	Overall assessment of data	A	

Note: A = Acceptable  
N = Not provided/applicable  
SW = See worksheet

ND = No compounds detected  
R = Rinsate  
FB = Field blank

D = Duplicate  
TB = Trip blank  
EB = Equipment blank

SB = Source blank  
OTHER:

	Client ID	Lab ID	Matrix	Date
1	B13-8020	22064-R1	water	08/11/13
2	B13-8017	22065-R1	water	08/11/13
3	B13-8064	22068-R1	water	08/11/13
4	B13-8050	22069-R1	water	08/11/13
5	B13-8029	22070-R1	water	08/11/13
6	B13-8069	22071-R1	water	08/11/13
7	B13-8056	22072-R1	water	08/11/13
8	B13-8049	22073-R1	water	08/11/13
9				
10				
11				
12	B-4144 PB			
13				

LDC #: 33567 A 26

## VALIDATION FINDINGS CHECKLIST

Page: 1 of 2  
Reviewer: JVG  
2nd Reviewer: η**Method:** Semivolatiles (EPA Method 625)

Validation Area	Yes	No	NA	Findings/Comments
<b>I. Technical holding times</b>				
All technical holding times were met.	/			
Cooler temperature criteria was met.	/			
<b>II. GC/MS Instrument performance check</b>				
Were the DFTPP performance results reviewed and found to be within the specified criteria?	/			
Were all samples analyzed within the 12 hour clock criteria?	/			
<b>III. Initial calibration</b>				
Did the laboratory perform a 6 point calibration prior to sample analysis?	/			
Were all percent relative standard deviations (%RSD) $\leq 35\%$ ? $r^2 \geq 0.99$	/			
<b>IV. Continuing calibration</b> <u>ICV</u>				
Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?	/			
Were all percent differences (%D) $\leq 20\%$ ?		/		
<b>V. Blanks</b>				
Was a method blank associated with every sample in this SDG?	/			
Was a method blank analyzed for each matrix and concentration?	/			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		/		
<b>VI. Surrogate spikes</b>				
Were all surrogate %R within QC limits?	/			
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?			/	
<b>VII. Matrix spike/Matrix spike duplicates</b>				
Was a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for this SDG?		/		
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?			/	
<b>VIII. Laboratory control samples</b>				
Was an LCS analyzed for this SDG?	/			
Was an LCS analyzed per extraction batch?	/			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?		/		

LDC #: 33507 A<sup>26</sup>

## VALIDATION FINDINGS CHECKLIST

Page: 2 of 2  
Reviewer: JVG  
2nd Reviewer: M

Validation Area	Yes	No	NA	Findings/Comments
<b>IX. Regional Quality Assurance and Quality Control</b>				
Were performance evaluation (PE) samples performed?		/		
Were the performance evaluation (PE) samples within the acceptance limits.			/	
<b>X. Internal standards</b>				
Were internal standard area counts within -30% of the continuing standard or +50% of the initial calibration?			/	
Were retention times within $\pm 30$ seconds from the associated calibration standard?	/			
<b>XI. Target compound identification</b>				
Were relative retention times (RRT's) within $\pm 0.06$ RRT units of the standard?	/			
Did compound spectra meet specified EPA "Functional Guidelines" criteria?	/			
Were chromatogram peaks verified and accounted for?	/			
<b>XII. Compound quantitation/CRQLs</b>				
Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound?	/			
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	/			
<b>XIII. Tentatively identified compounds (TICs)</b>				
Were the major ions (> 10 percent relative intensity) in the reference spectrum evaluated in sample spectrum?		/		
Were relative intensities of the major ions within $\pm 20\%$ between the sample and the reference spectra?		/		
Did the raw data indicate that the laboratory performed a library search for all required peaks in the chromatograms (samples and blanks)?			/	
<b>XIV. System performance</b>				
System performance was found to be acceptable.	/			
<b>XV. Overall assessment of data</b>				
Overall assessment of data was found to be acceptable.	/			
<b>XVI. Field duplicates</b>				
Field duplicate pairs were identified in this SDG.		/		
Target compounds were detected in the field duplicates.			/	
<b>XVII. Field blanks</b>				
Field blanks were identified in this SDG.	/			
Target compounds were detected in the field blanks.		/		



## VALIDATION FINDINGS WORKSHEET

**METHOD:** GC/MS SVOA

A. Phenol	T. 4-Chloroaniline	MM. 4-Chlorophenyl-phenyl ether	FFF. Di-n-octylphthalate	YYY. 2,3,5-Trimethylnaphthalene
B. Bis (2-chloroethyl) ether	U. Hexachlorobutadiene	NN. Fluorene	GGG. Benzo(b)fluoranthene	ZZZ. Perylene
C. 2-Chlorophenol	V. 4-Chloro-3-methylphenol	OO. 4-Nitroaniline	HHH. Benzo(k)fluoranthene	AAAA. Dibenzothiophene
D. 1,3-Dichlorobenzene	W. 2-Methylnaphthalene	PP. 4,6-Dinitro-2-methylphenol	III. Benzo(a)pyrene	BBBB. Benzo(a)fluoranthene
E. 1,4-Dichlorobenzene	X. Hexachlorocyclopentadiene	QQ. N-Nitrosodiphenylamine	JJJ. Indeno(1,2,3-cd)pyrene	CCCC. Benzo(b)fluorene
F. 1,2-Dichlorobenzene	Y. 2,4,6-Trichlorophenol	RR. 4-Bromophenyl-phenylether	KKK. Dibenz(a,h)anthracene	DDDD. cis/trans-Decalin
G. 2-Methylphenol	Z. 2,4,5-Trichlorophenol	SS. Hexachlorobenzene	LLL. Benzo(g,h,i)perylene	EEEE. Biphenyl
H. 2,2'-Oxybis(1-chloropropane)	AA. 2-Chloronaphthalene	TT. Pentachlorophenol	MMM. Bis(2-Chloroisopropyl)ether	FFFF. Retene
I. 4-Methylphenol	BB. 2-Nitroaniline	UU. Phenanthrene	NNN. Aniline	GGGG. C30-Hopane
J. N-Nitroso-di-n-propylamine	CC. Dimethylphthalate	VV. Anthracene	OOO. N-Nitrosodimethylamine	HHHH. 1-Methylphenanthrene
K. Hexachloroethane	DD. Acenaphthylene	WW. Carbazole	PPP. Benzoic Acid	IIII. 1,4-Dioxane
L. Nitrobenzene	EE. 2,6-Dinitrotoluene	XX. Di-n-butylphthalate	QQQ. Benzyl alcohol	JJJJ. Acetophenone
M. Isophorone	FF. 3-Nitroaniline	YY. Fluoranthene	RRR. Pyridine	KKKK. Atrazine
N. 2-Nitrophenol	GG. Acenaphthene	ZZ. Pyrene	SSS. Benzidine	LLLL. Benzaldehyde
O. 2,4-Dimethylphenol	HH. 2,4-Dinitrophenol	AAA. Butylbenzylphthalate	TTT. 1-Methylnaphthalene	MMMM. Caprolactam
P. Bis(2-chloroethoxy)methane	II. 4-Nitrophenol	BBB. 3,3'-Dichlorobenzidine	UUU. Benzo(b)thiophene	NNNN.
Q. 2,4-Dichlorophenol	JJ. Dibenzofuran	CCC. Benzo(a)anthracene	VVV. Benzonaphthothiophene	OOOO.
R. 1,2,4-Trichlorobenzene	KK. 2,4-Dinitrotoluene	DDD. Chrysene	WWW. Benzo(e)pyrene	PPPP.
S. Naphthalene	LL. Diethylphthalate	EEE. Bis(2-ethylhexyl)phthalate	XXX. 2,6-Dimethylnaphthalene	QQQQ.



LDC #: 33507 A 26

## VALIDATION FINDINGS WORKSHEET

### Initial Calibration Verification

Page: \ of

Reviewer: JVG

2nd Reviewer: *N*

**METHOD:** GC/MS BNA (EPA SW-846 Method 8270C)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

YN N/A Was an initial calibration verification standard analyzed after each ICAL for each instrument?

Y (N) N/A Were all %D within the validation criteria of  $\leq 20$  %D ?

[illegible]

LDC #: 33587A 26

## VALIDATION FINDINGS WORKSHEET

### Continuing Calibration

Page: 1 of 1

Reviewer: JVG

2nd Reviewer: *1*

**METHOD:** GC/MS BNA (EPA SW-846 Method 8270C)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

~~N~~ N/A Was a continuing calibration standard analyzed at least once every 12 hours of sample analysis for each instrument?

Y N N/A Were percent differences (%D) and relative response factors (RRF) within method criteria for all CCC's and SPCC's ?

Y ☒ N ☐ N/A

Were all %D and RRFs within the validation criteria of  $\leq 20$  %D and  $\geq 0.05$  RRF ?

[illegible]

Note : Lab identifies opening  $\approx 10V$ .

LDC #: 33507 A26

## VALIDATION FINDINGS WORKSHEET

### Laboratory Control Samples (LCS)

Page: \ of \

Reviewer: JV6

2nd Reviewer:                     

**METHOD:** GC/MS <sup>PAH</sup> <sup>625</sup> (EPA SW 846 Method <sup>6270C</sup>)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a LCS required?

Y	N	N/A	Were the LCS/LCSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?

[illegible]

LDC #: 33507 B2b

## VALIDATION FINDINGS WORKSHEET

## Internal Standards

Page: 1 of 1

Reviewer: SV

2nd Reviewer:           

**METHOD:** GC/MS BNA (EPA SW-846 Method 8270)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were all internal standard area counts within -50 to +100 of the associated calibration standard?

(Y) N (N/A) Were the retention times of the internal standards within +/- 30 seconds of the retention times of the associated calibration standard?

[illegible]

\* QC limits are advisory

IS1 (DCB) = 1,4-Dichlorobenzene-d4

IS2 (NPT) = Naphthalene-d8

IS3 (ANT) = Acenaphthene-d10

IS4 (PHN) = Phenanthrene-d10

IS5 (CRY) = Chrysene-d12

IS6 (PRY) = Perylene-d12

(No code)

LDC # 33507A2b

**VALIDATION FINDINGS WORKSHEET**  
**Initial Calibration Calculation Verification**

Page: 1 of 2  
Reviewer: JVG  
2nd Reviewer: dl

METHOD: GCMS PAH (EPA SW Method 625)


Parameter: FluorantheneOrder of regression: Linear

Date	Instrument	Compound	Points	x area ratio	y conc ratio
23-Aug-13	GCMS1	Fluoranthene	Point 1	0.01379	0.0125
			Point 2	0.02149	0.0250
			Point 3	0.03869	0.0500
			Point 4	0.09574	0.1250
			Point 5	0.22762	0.2500
			Point 6	0.39032	0.5000

Regression Output: Regression Output:			Reported WLR	
Constant	b =	0.00000	b =	0.00000
Std Err of Y Est				
R Squared	r^2 =	0.99258	r^2 =	0.99258
No. of Observations		6.00		
Degrees of Freedom		4.00		
X Coefficient(s)	m1 =	0.79277	m1 =	0.8047
Std Err of Coef.	0.01			

LDC # 33507A2b

**VALIDATION FINDINGS WORKSHEET**  
**Initial Calibration Calculation Verification**

Page: 2 of 2  
Reviewer: JVG  
2nd Reviewer: 

METHOD: GCMS PAH (EPA SW Method 625)

Parameter: Benzo(g,h,i)peryleneOrder of regression: Linear

Date	Instrument	Compound	Points	x area ratio	y conc ratio
23-Aug-13	GCMS1	Benzo(g,h,i)perylene	Point 1	0.01884	0.0125
			Point 2	0.03352	0.0250
			Point 3	0.06527	0.0500
			Point 4	0.15104	0.1250
			Point 5	0.28264	0.2500
			Point 6	0.53638	0.5000

Regression Output: Regression Output:			Reported WLR	
Constant	b =	0.00000	b =	0.00000
Std Err of Y Est				
R Squared	r^2 =	0.999152	r^2 =	0.99915
No. of Observations		6.00		
Degrees of Freedom		4.00		
X Coefficient(s)	m1 =	1.05977	m1 =	1.0930
Std Err of Coef.	0.01			



**VALIDATION FINDINGS WORKSHEET**  
**Continuing Calibration Calculation Verification**

METHOD: GCMS PAH (EPA SW Method 625)

The percent difference (%D) of the initial calibration average Calibration Factors (CF) and the continuing calibration percent difference (%D) values were recalculated for the compounds identified below using the following calculation:

Where:

Percent difference (%D) =  $100 * (N - C) / N$

N = Initial Calibration Factor or Nominal Amount

C = Calibration Factor from Continuing Calibration Standard or Calculated Amount

#	Standard ID	Calibration Date	Compound (IS)	CCV Conc	Reported Conc	Recalculated Conc	Reported % D	Recalculated %D
1	PAH1000icv	9/6/2013	Flouranthene (d10-VV)	1000	1348.37	1348.34	34.84	34.83
			Benzo(g,h,i)perylene (d12- LLL)	1000	1143.48	1142.98	14.35	14.30

LDC #: 23507 A-26

# **VALIDATION FINDINGS WORKSHEET** **Surrogate Results Verification**

Page: 1 of 1Reviewer: JVG2nd reviewer:   **METHOD:** GC/MS Semivolatiles (EPA Method 625)

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery:  $SF/SS \times 100$ Where: SF = Surrogate Found  
SS = Surrogate SpikedSample ID: # |

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Nitrobenzene-d5 <u>d10 - GG</u>	<u>562</u>	<u>436.79</u>	<u>78</u>	<u>78</u>	<u>0</u>
2-Fluorobiphenyl <u>d10 - UU</u>	<u> </u>	<u>506.68</u>	<u>101</u>	<u>101</u>	<u> </u>
Terphenyl-d14 <u>d12 - DD</u>	<u> </u>	<u>600.33</u>	<u>107</u>	<u>107</u>	<u> </u>
Phenol-d5 <u>d8 - S</u>	<u> </u>	<u>357.82</u>	<u>64</u>	<u>64</u>	<u> </u>
2-Fluorophenol					
2,4,6-Tribromophenol					
2-Chlorophenol-d4					
1,2-Dichlorobenzene-d4					

Sample ID:   

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Nitrobenzene-d5					
2-Fluorobiphenyl					
Terphenyl-d14					
Phenol-d5					
2-Fluorophenol					
2,4,6-Tribromophenol					
2-Chlorophenol-d4					
1,2-Dichlorobenzene-d4					

Sample ID:   

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Nitrobenzene-d5					
2-Fluorobiphenyl					
Terphenyl-d14					
Phenol-d5					
2-Fluorophenol					
2,4,6-Tribromophenol					
2-Chlorophenol-d4					
1,2-Dichlorobenzene-d4					

LDC #: 03507A26

## VALIDATION FINDINGS WORKSHEET

Page: 1 of 1**Laboratory Control Sample/Laboratory Control Sample Duplicates Results Verification**Reviewer: JVG2nd Reviewer: [Signature]**METHOD:** GC/MS BNA (EPA Method 625)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery =  $100 * (SC/SA)$ 

Where: SSC = Spike concentration  
SA = Spike added

RPD =  $|LCSC - LCSDC| * 2 / (LCSC + LCSDC)$ 

LCSC = Laboratory control sample concentration LCSDC = Laboratory control sample duplicate concentration

LCS/LCSD samples: 22062-BS1/BS2

Compound	Spike Added (ng/L)		Spike Concentration (ng/L)		LCS		LCSD		LCS/LCSD	
					Percent Recovery		Percent Recovery		RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalculated
Phenol										
N-Nitroso-di-n-propylamine										
4-Chloro-3-methylphenol										
Acenaphthene	1000		781.1	770.9	78	78	77	77	1	1
Pentachlorophenol										
Pyrene	1000		1118.2	1109	112	112	111	111	1	1

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 32507 A25

## VALIDATION FINDINGS WORKSHEET

### Sample Calculation Verification

Page: 1 of 1

Reviewer: JVG

2nd reviewer: \_\_\_\_\_

**METHOD:** GC/MS BNA (EPA Method 625)

Y	N	N/A
Y	N	N/A

Were all reported results recalculated and verified for all level IV samples?

Were all recalculated results for detected target compounds agree within 10.0% of the reported results?

$$\text{Concentration} = \frac{(A_s)(I_s)(V_i)(DF)(2.0)}{(A_{is})(RRF)(V_o)(V_i)(\%S)}$$

$A_x$  = Area of the characteristic ion (EICP) for the compound to be measured

$A_{is}$  = Area of the characteristic ion (EICP) for the specific internal standard

$I_s$  = Amount of internal standard added in nanograms (ng)

$V_o$  = Volume or weight of sample extract in milliliters (ml) or grams (g).

$V_i$  = Volume of extract injected in microliters (ul)

$V_t$  = Volume of the concentrated extract in microliters (ul)

Df = Dilution Factor.

**%S = Percent solids, applicable to soil and solid matrices only.**

2.0 = Factor of 2 to account for GPC cleanup

Example:

Sample I.D. 1, Fluoranthene

$$\text{Conc.} = \frac{(46018) \times 2000}{(13618750)} \times 0.5618$$

$$= 4.72 \text{ ng/L}$$

[illegible]

## Laboratory Data Consultants, Inc. Data Validation Report

**Project/Site Name:** RHMP B'13

**LDC Report Date:** February 10, 2015

**Parameters:** Metals

**Validation Level:** EPA Level IV

**Laboratory:** PHYSIS Environmental Laboratories Inc.

**Sample Delivery Group (SDG):** 1307002-005

Sample Identification	Laboratory Sample Identification	Matrix	Collection Date
B13-8020	22064-R1	Water	08/11/13
B13-8017	22065-R1	Water	08/11/13
B13-8064	22068-R1	Water	08/12/13
B13-8050	22069-R1	Water	08/12/13
B13-8029	22070-R1	Water	08/11/13
B13-8069	22071-R1	Water	08/12/13
B13-8056	22072-R1	Water	08/12/13
B13-8049	22073-R1	Water	08/12/13
B13-8020F	22064-R1	Water	08/11/13
B13-8017F	22065-R1	Water	08/11/13
B13-8064F	22068-R1	Water	08/12/13
B13-8050F	22069-R1	Water	08/12/13
B13-8029F	22070-R1	Water	08/11/13
B13-8069F	22071-R1	Water	08/12/13
B13-8056F	22072-R1	Water	08/12/13
B13-8049F	22073-R1	Water	08/12/13
B13-8020MS	22064-R1MS	Water	08/11/13
B13-8020MSD	22064-R1MSD	Water	08/11/13
B13-8020FMS	22064-R1MS	Water	08/11/13
B13-8020FMSD	22064-R1MSD	Water	08/11/13
B13-8020DUP	22064-R2	Water	08/11/13
B13-8020FDUP	22064-R2	Water	08/11/13

Samples appended with "F" were analyzed for dissolved metals

## Introduction

This Data Validation Report (DVR) presents data validation findings and results for the associated samples listed on the cover page. Data validation was performed in accordance with Final Quality Assurance Project Plan, Regional Harbor Monitoring Program, San Diego, California (August 2013) and follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review (January 2010). Where specific guidance was not available, the data has been evaluated in a conservative manner consistent with industry standards using professional experience.

The analyses were performed by the following method:

Aluminum, Antimony, Arsenic, Barium, Beryllium, Cadmium, Chromium, Cobalt, Copper, Iron, Lead, Manganese, Mercury, Molybdenum, Nickel, Selenium, Silver, Thallium, Tin, Titanium, Vanadium, and Zinc by Environmental Protection Agency (EPA) Methods 1640, 200.8, and 245.7

All sample results were subjected to Level IV evaluation, which is comprised of the QC summary forms as well as the raw data, to confirm sample quantitation and identification.

The following are definitions of the data qualifiers utilized during data validation:

- J (Estimated): The compound or analyte was analyzed for and positively identified by the laboratory; however the reported concentration is estimated due to non-conformances discovered during data validation.
- U (Non-detect): The compound or analyte was analyzed for and positively identified by the laboratory; however the analyte should be considered non-detect at the reported concentration due to the presence of contaminants detected in the associated blank(s).
- UJ (Non-detected estimated): The compound or analyte was reported as not detected by the laboratory; however the reported quantitation/detection limit is estimated due to non-conformances discovered during data validation.
- R (Rejected): The sample results were rejected due to gross non-conformances discovered during data validation. Data qualified as rejected is not usable.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

## Qualification Code Reference

- BC The initial calibration (ICAL) curve did not meet method-specified criteria.
- CH High continuing calibration verification (CCV) recovery. Analytical results may be biased high.
- DL The analyte concentration was between the method detection limit (MDL) and the reporting limit (RL).
- FB The analyte was detected in the sample and its associated field blank and the concentration detected in the sample is less than five times the concentration detected in the blanks.
- H Holding time.
- HD Potential analytical imprecision.
- HL High LCS recovery. Analytical results may be biased high.
- HM High MS recovery. Analytical results may be biased high.
- HP High certified reference material (CRM) recovery. Analytical results may be biased high.
- HV High initial calibration verification (ICV) recovery. Analytical results may be biased high.
- LC Low CCV recovery. Analytical result may be biased low.
- LL Low LCS recovery. Analytical result may be biased low.
- LM Low MS recovery. Analytical result may be biased low.
- LP Low CRM recovery. Analytical result may be biased low.
- LS Low Surrogate recovery. Analytical results may be biased low.
- LV Low ICV recovery. Analytical result may be biased low.
- NC Calibration verification standard concentrations were outside the calibration range.
- NQ There is lack of QC for this analyte.
- RB The analyte was detected in the sample and its associated equipment blank and the concentration detected in the sample is less than five times the concentration detected in the blank.
- TD The dissolved metals concentration is significantly higher than the total metal concentration.
- \*# Unusual problems found with the data. The number following the asterisk (\*) will indicate the section in the validation report where a description of the problem can be found.

## I. Sample Receipt & Technical Holding Times

All samples were received in good condition and cooler temperatures upon receipt met validation criteria.

All technical holding time requirements were met with the following exceptions:

Sample	Analyte	Total Days From Sample Collection Until Analysis	Required Holding Time (in Days) From Sample Collection Until Analysis	Flag	A or P
B13-8020 B13-8017 B13-8029 B13-8020F B13-8017F B13-8029F	Mercury	44	28	UJ (all non-detects)	P
B13-8064 B13-8050 B13-8069 B13-8056 B13-8049 B13-8064F B13-8050F B13-8069F B13-8056F B13-8049F	Mercury	43	28	UJ (all non-detects)	P

## II. ICPMS Tune

The laboratory reported that the instrument tune was performed in July 2013 for analysis done in October 2013. Instrument tune should be performed daily.

## III. Instrument Calibration

Initial and continuing calibrations were performed as required by the method(s).

The initial calibration verification (ICV) and continuing calibration verification (CCV) standards were within QC limits with the following exceptions:

Date	Lab. Reference/ID	Analyte	%R (Limits)	Associated Samples	Flag	A or P
9/18/13	CCV (1:14)	Beryllium	71.870 (80-120)	All samples in SDG 1307002-005	J (all detects) UJ (all non-detects)	A

## IV. ICP Interference Check Sample (ICS) Analysis

ICP interference check sample analyses were not required by the method.



## V. Laboratory Blanks

Laboratory blanks were analyzed as required by the method. No contaminants were found in the laboratory blanks.

## VI. Field Blanks

Samples B13-NBEB and B13-NBEBF were identified as equipment blanks. No contaminants were found with the following exceptions:

Blank ID	Collection Date	Analyte	Concentration	Associated Samples
B13-NBEB	8/11/13	Arsenic Chromium Lead Manganese Molybdenum Nickel Silver Tin Zinc	0.005 ug/L 0.0162 ug/L 0.0032 ug/L 0.01 ug/L 0.007 ug/L 0.0237 ug/L 0.03 ug/L 0.04 ug/L 0.0763 ug/L	B13-8020 B13-8017 B13-8029
B13-NBEBF	8/11/13	Lead Manganese Molybdenum Silver Tin	0.0028 ug/L 0.03 ug/L 0.006 ug/L 0.02 ug/L 0.031 ug/L	B13-8020F B13-8017F B13-8029F

Samples B13-FB and B13-FBF were identified as field blanks. No contaminants were found with the following exceptions:

Blank ID	Collection Date	Analyte	Concentration	Associated Samples
B13-FB	8/11/13	Chromium Molybdenum Nickel Silver	0.0934 ug/L 0.01 ug/L 0.0216 ug/L 0.03 ug/L	B13-8020 B13-8017 B13-8029
B13-FBF	8/11/13	Molybdenum Silver	0.01 ug/L 0.03 ug/L	B13-8020F B13-8017F B13-8029F

Sample concentrations were compared to concentrations detected in the field blanks. The sample concentrations were either not detected or were significantly greater (>5X blank contaminants) than the concentrations found in the associated field blanks with the following exceptions:

Sample	Analyte	Reported Concentration	Modified Final Concentration
B13-8020	Silver Tin	0.07 ug/L 0.051 ug/L	0.07U ug/L 0.051U ug/L
B13-8017	Silver Tin	0.06 ug/L 0.057 ug/L	0.06U ug/L 0.057U ug/L
B13-8029	Chromium Silver Tin	0.361 ug/L 0.06 ug/L 0.026 ug/L	0.361U ug/L 0.06U ug/L 0.026U ug/L
B13-8020F	Silver Tin	0.04 ug/L 0.034 ug/L	0.04U ug/L 0.034U ug/L
B13-8017F	Silver	0.05 ug/L	0.05U ug/L
B13-8029F	Silver Tin	0.05 ug/L 0.01 ug/L	0.05U ug/L 0.01U ug/L

## VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) sample analysis was performed on an associated project sample. Percent recoveries (%R) were within QC limits. Relative percent differences (RPD) were within QC limits.

## VIII. Duplicate Sample Analysis

Duplicate (DUP) sample analysis was performed on an associated project sample. Results were within QC limits with the following exceptions:

DUP ID (Associated Samples)	Analyte	RPD (Limits)	Difference (Limits)	Flag	A or P
B13-8020FDUP (B13-8020F)	Zinc	48 (≤25)	-	J (all detects)	A

## IX. ICP Serial Dilution

ICP serial dilution was not performed for this SDG.

## X. Laboratory Control Samples (LCS) and Certified Reference Material (CRM) Samples

Laboratory control samples (LCS) and laboratory control samples duplicates (LCSD) were analyzed as required by the method. Percent recoveries (%R) were within QC limits. Relative percent differences (RPD) were within QC limits.

Certified reference material (CRM) samples were analyzed as required by the method. Percent recoveries (%R) of the certified reference material were within QC limits.

#### **XI. Field Duplicates**

No field duplicates were identified in this SDG.

#### **XII. Internal Standards (ICP-MS)**

All internal standard percent recoveries (%R) were within QC limits.

#### **XIII. Sample Result Verification**

All sample result verifications were acceptable.

The results for the dissolved metals sample analysis were greater than the total metals sample analysis as follows:

Analyte	Concentration (ug/L)	
	B13-8020	B13-8020F
Antimony	0.14	0.18

All analytes reported below the RL and above the MDL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG 1307002-010	Analytes reported below the RL and above the MDL	J (all detects)	A

#### **XIV. Overall Assessment of Data**

The analysis was conducted within all specifications of the method. No results were rejected in this SDG.

Due to holding times, calibration CCV %R, DUP RPD, and sample result verification, data were qualified as estimated in fourteen samples.

Due to field and equipment blank contamination, data were qualified as not detected in sixteen samples.

The quality control criteria reviewed, other than those discussed above, were met and are considered acceptable. Sample results that were found to be estimated (J) are usable for limited purposes only. Based upon the data validation all other results are considered valid and usable for all purposes.

**RHMP B'13**
**Metals - Data Qualification Summary - SDG 1307002-005**

Sample	Analyte	Flag	A or P	Reason (Code)
B13-8020 B13-8017 B13-8029 B13-8020F B13-8017F B13-8029F B13-8064 B13-8050 B13-8069 B13-8056 B13-8049 B13-8064F B13-8050F B13-8069F B13-8056F B13-8049F	Mercury	UJ (all non-detects)	P	Technical holding times (H)
B13-8020 B13-8017 B13-8064 B13-8050 B13-8029 B13-8069 B13-8056 B13-8049 B13-8020F B13-8017F B13-8064F B13-8050F B13-8029F B13-8069F B13-8056F B13-8049F	Beryllium	J (all detects) UJ (all non-detects)	A	Calibration (CCV %R) (LC)
B13-8020F	Zinc	J (all detects)	A	Duplicate sample analysis (RPD) (HD)
B13-8020 B13-8017 B13-8064 B13-8050 B13-8029 B13-8069 B13-8056 B13-8049 B13-8020F B13-8017F B13-8064F B13-8050F B13-8029F B13-8069F B13-8056F B13-8049F	Analytes reported below the RL and above the MDL	J (all detects)	A	Sample result verification (DL)

**RHMP B'13****Metals - Laboratory Blank Data Qualification Summary - SDG 1307002-005**

No Sample Data Qualified in this SDG

**RHMP B'13****Metals - Field Blank Data Qualification Summary - SDG 1307002-005**

Sample	Analyte	Modified Final Concentration	A or P	Code
B13-8020	Silver Tin	0.07U ug/L 0.051U ug/L	A	FB, RB
B13-8017	Silver Tin	0.06U ug/L 0.057U ug/L	A	FB, RB
B13-8029	Chromium Silver Tin	0.361U ug/L 0.06U ug/L 0.026U ug/L	A	FB, RB
B13-8020F	Silver Tin	0.04U ug/L 0.034U ug/L	A	FB, RB
B13-8017F	Silver	0.05U ug/L	A	FB, RB
B13-8029F	Silver Tin	0.05U ug/L 0.01U ug/L	A	FB, RB

LDC #: 33507A4

## VALIDATION COMPLETENESS WORKSHEET

Date: 1/15/15

SDG #: 1307002-005

Level IV

Page: 1 of 1

Laboratory: PHYSIS Environmental Laboratories Inc.

Reviewer: KUC

2nd Reviewer: A

METHOD: Metals (EPA Method 1640/200.8/245.7)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Sample receipt/Technical holding times	A SW	
II.	ICP/MS Tune	SW	
III.	Instrument Calibration	SW	
IV.	ICP Interference Check Sample (ICS) Analysis	<del>SW</del> A	<del>not required</del> not required
V.	Laboratory Blanks	A	
VI.	Field Blanks	SW	FB = B13-FB / B13-FBF + EB = B13-NB <sup>EB</sup> / B13-NB <sup>EB</sup> (in this SDG)
VII.	Matrix Spike/Matrix Spike Duplicates	A	MS/D
VIII.	Duplicate sample analysis	SW	DUP
IX.	ICP Serial Dilution	N	not performed
X.	Laboratory control samples	A	LCS/D / SRM
XI.	Field Duplicates	N	
XII.	Internal Standard (ICP-MS)	A	
XIII.	Sample Result Verification	SW	
XIV.	Overall Assessment of Data	<del>SW</del> A	

Note: A = Acceptable  
N = Not provided/applicable  
SW = See worksheet

ND = No compounds detected  
R = Rinsate  
FB = Field blank

D = Duplicate  
TB = Trip blank  
EB = Equipment blank

SB=Source blank  
OTHER:

Samples appended with 'F' analyzed as dissolved.

	Client ID	Lab ID	Matrix	Date
1	B13-8020	22064-R1	water	08/11/13
2	B13-8017	22065-R1	water	08/11/13
3	B13-8064	22068-R1	water	08/11/13 <sup>12</sup>
4	B13-8050	22069-R1	water	08/11/13 <sup>12</sup>
5	B13-8029	22070-R1	water	08/11/13
6	B13-8069	22071-R1	water	08/11/13 <sup>12</sup>
7	B13-8056	22072-R1	water	08/11/13 <sup>12</sup>
8	B13-8049	22073-R1	water	08/11/13 <sup>12</sup>
9	B13-8020F	22064-R1	water	08/11/13
10	B13-8017F	22065-R1	water	08/11/13
11	B13-8064F	22068-R1	water	08/11/13 <sup>12</sup>
12	B13-8050F	22069-R1	water	08/11/13 <sup>12</sup>
13	B13-8029F	22070-R1	water	08/11/13
14	B13-8069F	22071-R1	water	08/11/13 <sup>12</sup>
15	B13-8056F	22072-R1	water	08/11/13 <sup>12</sup>

LDC #: 33507A4

## VALIDATION COMPLETENESS WORKSHEET

SDG #: 1307002-005

Level IV

Laboratory: PHYSIS Environmental Laboratories Inc.

Date: 1/15/15

Page: 2 of 2

Reviewer: [Signature]

2nd Reviewer: [Signature]

METHOD: Metals (EPA Method 1640/200.8/245.7)

	Client ID	Lab ID	Matrix	Date
16	B13-8049F	22073-R1	water	08/11/13 <sup>12</sup>
17	B13-8020MS	22064-R1MS	water	08/11/13
18	B13-8020MSD	22064-R1MSD	water	08/11/13
19	B13-8020FMS	22064-R1MS	water	08/11/13
20	B13-8020FMSD	22064-R1MSD	water	08/11/13
21	# 1 DUP	22064-R2	↓	↓
22	# 9 DUP	22064-R2	↓	↓
23				
24				
25				

Notes:

1640/200.8/245.7

**Method:** Metals (EPA-SW-846 Method-6010/7000/6020)

Validation Area	Yes	No	NA	Findings/Comments
<b>I. Technical holding times</b>				
All technical holding times were met.	/	/		
Cooler temperature criteria was met.	/			
<b>II. ICP/MS Tune</b>				
Were all isotopes in the tuning solution mass resolution within 0.1 amu?	/			
Were %RSD of isotopes in the tuning solution $\leq 5\%$ ?	/			
<b>III. Calibration</b>				
Were all instruments calibrated daily, each set-up time?	/			
Were the proper number of standards used?	/			
Were all initial and continuing calibration verification %Rs within the 90-110% (80-120% for mercury) QC limits?	/			
Were all initial calibration correlation coefficients $\geq 0.995$ ?	/			
<b>IV. Blanks</b>				
Was a method blank associated with every sample in this SDG?	/			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		/		
<b>V. ICP Interference Check Sample</b>				
Were ICP interference check samples performed daily?		/		
Were the AB solution percent recoveries (%R) with the 80-120% QC limits?			/	
<b>VI. Matrix spike/Matrix spike duplicates</b>				
Were a matrix spike (MS) and duplicate (DUP) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD or MS/DUP. Soil / Water.	/			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the 75-125 QC limits? If the sample concentration exceeded the spike concentration by a factor of 4 or more, no action was taken.	/			
Were the MS/MSD or duplicate relative percent differences (RPD) $\leq 20\%$ for waters and $\leq 35\%$ for soil samples? A control limit of $\pm RL$ ( $\pm 2X RL$ for soil) was used for samples that were $\leq 5X$ the RL, including when only one of the duplicate sample values were $\leq 5X$ the RL.	/			
<b>VII. Laboratory control samples</b>				
Was an LCS analyzed for this SDG?	/			
Was an LCS analyzed per extraction batch?	/			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the 80-120% QC limits for water samples and laboratory established QC limits for soils?	/			



LDC #: 33507A4

## VALIDATION FINDINGS CHECKLIST

Page: 2 of 2  
Reviewer: kt  
2nd Reviewer: or

Validation Area	Yes	No	NA	Findings/Comments
<b>VIII. Internal Standards (EPA SW 846 Method 6020/EPA 200.8)</b>				
Were all the percent recoveries (%R) within the 30-120% (6020)/60-125% (200.8) of the intensity of the internal standard in the associated initial calibration?	/			
If the %Rs were outside the criteria, was a reanalysis performed?			/	
<b>IX. ICP Serial Dilution</b>				
Was an ICP serial dilution analyzed if analyte concentrations were > 50X the MDL (ICP)/>100X the MDL(ICP/MS)?		/		
Were all percent differences (%Ds) < 10%?			/	
Was there evidence of negative interference? If yes, professional judgement will be used to qualify the data.			/	
<b>X. Sample Result Verification</b>				
Were RLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	/			
<b>XI. Overall assessment of data</b>				
Overall assessment of data was found to be acceptable.	/			
<b>XII. Field duplicates</b>				
Field duplicate pairs were identified in this SDG.		/		
Target analytes were detected in the field duplicates.			/	
<b>XIII. Field blanks</b>				
Field blanks were identified in this SDG.	/			
Target analytes were detected in the field blanks.	/			

## VALIDATION FINDINGS WORKSHEET

Page: 1 of 1

### Sample Specific Element Reference

Reviewer: KK

2nd reviewer:                     

All circled elements are applicable to each sample.

[illegible]

Comments: ~~Mercury by CVAA if performed~~

LDC #: 33 507A4

## VALIDATION FINDINGS WORKSHEET

### Technical Holding Times

Page: 1 of 1

Reviewer: KL

2nd reviewer: an

Were samples preserved? Y ~~N~~ N/A

All circled dates have exceeded the technical holding time.

(Y) N N/A Were all cooler temperatures within validation criteria?

[illegible]

## Technical Holding Time Criteria

Mercury: 28 days preserved pH <2

All other metals 6 months preserved pH <2

Organic lead	Extracted within 14 days for soils and 7 days for waters, analyzed within 40 days of extraction. (no preservation)
--------------	--

**Tune (ICP-MS)**

Reviewer: KK

2nd Reviewer: 

**METHOD:** Metals (EPA SW846 Method 6020)

EPA Method  
200.8 / 245.7

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were all isotopes in the tuning solution mass resolution within 0.1amu?

Y N N/A Were %RSD of isotopes in the tuning solution  $\leq 5\%$ ?

[illegible]

## VALIDATION FINDINGS WORKSHEET

### Calibration

**METHOD:** Metals (EPA Method 1640/200.8/245.7)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A  
Y N N/A

Were all instruments calibrated daily, each set-up time, and were the proper number of standards used?

Were all initial and continuing calibration verification percent recoveries (%R) within the control limits of 90-110% for all analytes except mercury (80-120%) and cyanide (85-115%)?

**LEVEL IV ONLY:**

Y	N	N/A	Was a midrange cyanide standard distilled?
X	N	N/A	Are all correlation coefficients $\geq 0.995$ ?
Y	N	N/A	Were recalculated results acceptable? See Level IV Initial and Continuing Calibration Recalculation Worksheet for recalculations.

[illegible]

Comments:

# VALIDATION FINDINGS WORKSHEET Field Blanks

METHOD: Metals (EPA Method 1640/200.8/245.7)

Blank units: ug/l Associated sample units: ug/lSampling date: 8/11/13 Soil factor applied NAField blank type: (circle one) Field Blank / Rinsate / Other: Associated Samples: 1, 2, 5 (FB)

Analyte	Blank ID	Sample Identification									
	B13-FB (in this SDG)	Action Limit	1	2	5						
Cr	0.0934	0.467			0.361						
Mo	0.01	0.05									
Ni	0.0216	0.108									
Ag	0.03	0.15	0.07	0.06	0.06						

Blank units: ug/l Associated sample units: ug/lSampling date: 8/11/13 Soil factor applied NAField blank type: (circle one) Field Blank / Rinsate / Other: (EB) Associated Samples: 1, 2, 5 (RB)

Analyte	Blank ID	Sample Identification									
	B13-NBEB (in this SDG)	Action Limit	1	2	5						
As	0.005	0.025									
Cr	0.0162	0.081									
Pb	0.0032	0.016									
Mn	0.01	0.05									
Mo	0.007	0.035									
Ni	0.0237	0.1185									
Ag	0.03	0.15	See FB hit	See FB hit	See FB hit						
Sn	0.04	0.2	0.051	0.057	0.026						
Zn	0.0763	0.3815									

## VALIDATION FINDINGS WORKSHEET

Field BlanksReviewer: KH2nd Reviewer: SL

METHOD: Metals (EPA Method 1640/200.8/245.7)

Blank units: ug/l Associated sample units: ug/lSampling date: 8/11/13 Soil factor applied NAField blank type: (circle one) Field Blank / Rinsate / Other: \_\_\_\_\_ Associated Samples: 9, 10, 13 (FB)

Analyte	Blank ID	Sample Identification									
	B13-FBF (in this SDG)	Action Limit	9	10	13						
Mo	0.01	0.05									
Ag	0.03	0.15	0.04	0.05	0.05						

Blank units: ug/l Associated sample units: ug/lSampling date: 8/11/13 Soil factor applied NAField blank type: (circle one) Field Blank / Rinsate / Other: (EB) Associated Samples: 9, 10, 13 (RB)

Analyte	Blank ID	Sample Identification									
	B13-NBEBF (in this SDG)	Action Limit	9	10	13						
Pb	0.0028	0.014									
Mn	0.03	0.15									
Mo	0.006	0.03									
Ag	0.02	0.1	See FB hit	See FB hit	See FB hit						
Sn	0.031	0.155	0.034		0.01						

CIRCLED RESULTS WERE NOT QUALIFIED. ALL RESULTS NOT CIRCLED WERE QUALIFIED BY THE FOLLOWING STATEMENT:

Samples with analyte concentrations within five times the associated field blank concentration are listed above, these sample results were qualified as not detected, "U".

LDC #: 33507A4

## VALIDATION FINDINGS WORKSHEET

### Duplicate Analysis

Page: 1 of 1

Reviewer: KG

2nd Reviewer: Q

1640 / 200.8 / 245.7

**METHOD:** Trace Metals (EPA SW-846 Method 6010/6020/7000)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A

Was a duplicate sample analyzed for each matrix in this SDG? 25

Y(N) N/A

Were all duplicate sample relative percent differences (RPD)  $\leq 20\%$  for water samples and  $\leq 35\%$  for soil samples? If no, see qualifications below. A control limit of  $\pm$ R.L. ( $\pm 2X$  R.L. for soil) was used for sample values that were  $< 5X$  the R.L., including the case when only one of the duplicate sample values was  $< 5X$  R.L.. If field blanks were used for laboratory duplicates, note in the Overall Assessment.

**LEVEL IV ONLY:**

(Y) N N/A

Were recalculated results acceptable? See Level IV Recalculation Worksheet for recalculations.

[illegible]

Comments: \_\_\_\_\_



LDC #: 33507A4

## VALIDATION FINDINGS WORKSHEET

### Sample Result Verification

Page: 1 of 1

Reviewer: KK

2nd Reviewer C

**METHOD:**Metals (EPA Method 200.8/1613E)

1640 / 245.7  
~~1613E~~

[illegible]

Comments: \_\_\_\_\_

LDC #: 33507A-1

# **VALIDATION FINDINGS WORKSHEET** **Initial and Continuing Calibration Calculation Verification**

Page: 1 of 1  
 Reviewer: KE  
 2nd Reviewer: CA

1640/200.8/245.7

**METHOD:** ~~Trace Metals (EPA SW-846 Method 6010/6020/7000)~~

An initial and continuing calibration verification percent recovery (%R) was recalculated for each type of analysis using the following formula:

$$\%R = \frac{\text{Found}}{\text{True}} \times 100$$

Where, Found = concentration (in ug/L) of each analyte measured in the analysis of the ICV or CCV solution  
 True = concentration (in ug/L) of each analyte in the ICV or CCV source

Standard ID	Type of Analysis	Element	Found (ug/L)	True (ug/L)	Recalculated	Reported	Acceptable (Y/N)
					%R	%R	
	ICP (Initial calibration)						
ICV (17:04)	ICP/MS (Initial calibration)	Ba	101.048	100	101	101	Y
ICV (12:01) 9/24/13	CVAA (Initial calibration)	Hg	<sup>104</sup> <del>1020</del> mg/g	100	104	104	↓
	ICP (Continuing calibration)						
CCV (0:18)	ICP/MS (Continuing calibration)	Sr	101.787	100	102	102	Y
CCV (14:42) 9/24/13	CVAA (Continuing calibration)	Hg	<sup>102</sup> <del>9380</del> mg/g	100	102	102	↓
	GFAA (Initial calibration)						
	GFAA (Continuing calibration)						

Comments: Refer to Calibration Verification findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 33507 A 4

# VALIDATION FINDINGS WORKSHEET Level IV Recalculation Worksheet

Page: 1 of 1  
Reviewer: KK  
2nd Reviewer: OL

METHOD: EPA Method 1640/200.8/245.7  
~~Trace Metals (EPA SW-846 Method 6010/6020/7000)~~

Percent recoveries (%R) for an ICP interference check sample, a laboratory control sample and a matrix spike sample were recalculated using the following formula:

$$\%R = \frac{\text{Found}}{\text{True}} \times 100$$

Where, Found = Concentration of each analyte measured in the analysis of the sample. For the matrix spike calculation,  
Found = SSR (spiked sample result) - SR (sample result).  
True = Concentration of each analyte in the source.

A sample and duplicate relative percent difference (RPD) was recalculated using the following formula:

$$RPD = \frac{|S-D|}{(S+D)/2} \times 100$$

Where, S = Original sample concentration  
D = Duplicate sample concentration

An ICP serial dilution percent difference (%D) was recalculated using the following formula:

$$\%D = \frac{|I-SDR|}{I} \times 100$$

Where, I = Initial Sample Result (mg/L)  
SDR = Serial Dilution Result (mg/L) (Instrument Reading x 5)

Sample ID	Type of Analysis	Element	Found / S / I (units)	mg/L True / D / SDR (units)	Recalculated	Reported	Acceptable (Y/N)
					%R / RPD / %D	%R / RPD / %D	
NA	ICP interference check						
LCS	Laboratory control sample	<del>Hg</del> Al		<del>0.1</del> 20		<del>712</del> 114	
<del>17</del> 19	Matrix spike	Ba	(SSR-SR) 1030.455	1000	103	103	
21	Duplicate	Al	395.576 5.10	349.109	13*	14	
NA	ICP serial dilution						

Comments: Refer to appropriate worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results  
\* Calculation based on raw data

# VALIDATION FINDINGS WORKSHEET Sample Calculation Verification

Reviewer: KH  
 2nd reviewer: OC

**METHOD:** Trace Metals (EPA Method 1640/200.8/245.7)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Have results been reported and calculated correctly?  
Y N N/A Are results within the calibrated range of the instruments and within the linear range of the ICP?  
Y N N/A Are all detection limits below the CRDL?

Detected analyte results for Al were recalculated and verified using the following equation:

Concentration =  $\frac{(RD)(FV)(Dil)}{(In. Vol.)}$

Recalculation:

2: All Results Directly from raw data

RD = Raw data concentration  
 FV = Final volume (ml)  
 In. Vol. = Initial volume (ml) or weight (G)  
 Dil = Dilution factor

#	Sample ID	Analyte	Reported Concentration (ug/L)	Calculated Concentration (ug/L)	Acceptable (Y/N)
	1	Cd	0.0688	0.069	Y
	2	Al	322.1	322.1	
	3	Sb	0.15	0.15	
	4	Se	0.027	0.028*	
	5	Ti	16.958	16.958	
	6	Al	75.3	75.3	
	7	Mn	10.85	10.85	
	8	Fe	30.4	30.5*	
	9	Ba	8.78	8.78	
	10	Sb	0.17	0.17	
	11	Cu	3.338	3.338	
	12	Cu	2.951	2.951	
	13	Pb	0.0253	0.0253	
	14	Sn	0.03	0.03	
	15	Mn	7.94	7.94	
	16	As	1.282	1.282	Y

Note: \*Calculated from Raw Data All EPA Method 245.7 results non- detect

**Laboratory Data Consultants, Inc.**  
**Data Validation Report**

**Project/Site Name:** RHMP B'13

**LDC Report Date:** April 7, 2015

**Parameters:** Wet Chemistry

**Validation Level:** EPA Level IV

**Laboratory:** PHYSIS Environmental Laboratories Inc.

**Sample Delivery Group (SDG):** 1307002-005

<b>Sample Identification</b>	<b>Laboratory Sample Identification</b>	<b>Matrix</b>	<b>Collection Date</b>
B13-8020	22064-R1	Water	08/11/13
B13-8017	22065-R1	Water	08/11/13
B13-8064	22068-R1	Water	08/12/13
B13-8050	22069-R1	Water	08/12/13
B13-8029	22070-R1	Water	08/11/13
B13-8069	22071-R1	Water	08/12/13
B13-8056	22072-R1	Water	08/12/13
B13-8049	22073-R1	Water	08/12/13
B13-8020MS	22064-R1MS	Water	08/11/13
B13-8020MSD	22064-R1MSD	Water	08/11/13

## Introduction

This Data Validation Report (DVR) presents data validation findings and results for the associated samples listed on the cover page. Data validation was performed in accordance with Final Quality Assurance Project Plan, Regional Harbor Monitoring Program, San Diego, California (August 2013) and follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review (January 2010). Where specific guidance was not available, the data has been evaluated in a conservative manner consistent with industry standards using professional experience.

The analyses were performed by the following method:

Ammonia as Nitrogen by Standard Method 4500-NH<sub>3</sub> D  
Methylene Blue Active Substances (MBAS) by Standard Method 5540-C  
Nitrate as Nitrogen by Standard Method 4500-NO<sub>3</sub> E  
Oil & Grease by Environmental Protection Agency (EPA) Method 1664A  
Total Orthophosphate as Phosphorus by Standard Method 4500-P E

All sample results were subjected to Level IV evaluation, which is comprised of the QC summary forms as well as the raw data, to confirm sample quantitation and identification.

The following are definitions of the data qualifiers utilized during data validation:

- J (Estimated): The compound or analyte was analyzed for and positively identified by the laboratory; however the reported concentration is estimated due to non-conformances discovered during data validation.
- U (Non-detect): The compound or analyte was analyzed for and positively identified by the laboratory; however the analyte should be considered non-detect at the reported concentration due to the presence of contaminants detected in the associated blank(s).
- UJ (Non-detected estimated): The compound or analyte was reported as not detected by the laboratory; however the reported quantitation/detection limit is estimated due to non-conformances discovered during data validation.
- R (Rejected): The sample results were rejected due to gross non-conformances discovered during data validation. Data qualified as rejected is not usable.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

## Qualification Code Reference

- BC The initial calibration (ICAL) curve did not meet method-specified criteria.
- CH High continuing calibration verification (CCV) recovery. Analytical results may be biased high.
- DL The analyte concentration was between the method detection limit (MDL) and the reporting limit (RL).
- FB The analyte was detected in the sample and its associated field blank and the concentration detected in the sample is less than five times the concentration detected in the blanks.
- H Holding time.
- HD Potential analytical imprecision.
- HL High LCS recovery. Analytical results may be biased high.
- HM High MS recovery. Analytical results may be biased high.
- HP High certified reference material (CRM) recovery. Analytical results may be biased high.
- HV High initial calibration verification (ICV) recovery. Analytical results may be biased high.
- LC Low CCV recovery. Analytical result may be biased low.
- LL Low LCS recovery. Analytical result may be biased low.
- LM Low MS recovery. Analytical result may be biased low.
- LP Low CRM recovery. Analytical result may be biased low.
- LS Low Surrogate recovery. Analytical results may be biased low.
- LV Low ICV recovery. Analytical result may be biased low.
- NC Calibration verification standard concentrations were outside the calibration range.
- NQ There is lack of QC for this analyte.
- RB The analyte was detected in the sample and its associated equipment blank and the concentration detected in the sample is less than five times the concentration detected in the blank.
- TD The dissolved metals concentration is significantly higher than the total metal concentration.
- \*# Unusual problems found with the data. The number following the asterisk (\*) will indicate the section in the validation report where a description of the problem can be found.

## I. Sample Receipt & Technical Holding Times

All samples were received in good condition and cooler temperatures upon receipt met validation criteria.

All technical holding time requirements were met with the following exceptions:

Sample	Analyte	Total Time From Sample Collection Until Analysis	Required Holding Time From Sample Collection Until Analysis	Flag	A or P
B13-8020 B13-8017 B13-8029	Nitrate as N	26 days	48 hours	J (all detects) R (all non-detects)	P
B13-8064 B13-8050 B13-8069 B13-8056 B13-8049	Nitrate as N	25 days	48 hours	J (all detects) R (all non-detects)	P

## II. Initial Calibration

All criteria for the initial calibration of each method were met.

## III. Continuing Calibration

Continuing calibration frequency and analysis criteria were met for each method when applicable with the following exceptions:

Date	Lab. Reference/ID	Analyte	%R (Limits)	Associated Samples	Flag	A or P
8/13/13	ICV	MBAS	82.2 (90-110)	All samples in SDG 1307002-005	J (all detects) UJ (all non-detects)	P
9/5/13	ICV	Nitrate as N	89 (90-110)	All samples in SDG 1307002-005	J (all detects) UJ (all non-detects)	P
9/5/13	CCV	Nitrate as N	86.4 (90-110)	All samples in SDG 1307002-005	J (all detects) UJ (all non-detects)	P

## IV. Laboratory Blanks

Laboratory blanks were analyzed as required by the method(s). No contaminants were found in the laboratory blanks.

## V. Field Blanks

Sample B13-NBEB was identified as an equipment blank. No contaminants were found.



Sample B13-FB was identified as a field blank. No contaminants were found.

#### **VI. Matrix Spike/Matrix Spike Duplicates**

Matrix spike (MS) and matrix spike duplicate (MSD) sample analysis was performed on an associated project sample. Percent recoveries (%R) were within QC limits. Relative percent differences (RPD) were within QC limits.

#### **VII. Duplicates**

Duplicate (DUP) sample analysis was performed on an associated project sample. Results were within QC limits.

#### **VIII. Laboratory Control Samples**

Laboratory control samples (LCS) and laboratory control samples duplicates (LCSD) were analyzed as required by the method. Percent recoveries (%R) were within QC limits. Relative percent differences (RPD) were within QC limits.

#### **IX. Field Duplicates**

No field duplicates were identified in this SDG.

#### **X. Sample Result Verification**

All sample result verifications were acceptable.

All analytes reported below the RL and above the MDL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG 1307002-005	Analytes reported below the RL and above the MDL	J (all detects)	A

#### **XI. Overall Assessment of Data**

The analysis was conducted within all specifications of the method.

Due to holding times, data were rejected in three samples.

Due to holding times, ICV and continuing calibration %R, and sample result verification, data were qualified as estimated in nine samples.

The quality control criteria reviewed, other than those discussed above, were met and are considered acceptable. Sample results that were found to be rejected (R) are unusable for all purposes. Sample results that were found to be estimated (J) are usable for limited purposes only. Based upon the data validation all other results are considered valid and usable for all purposes.

**RHMP B'13****Wet Chemistry - Data Qualification Summary - SDG 1307002-005**

Sample	Analyte	Flag	A or P	Reason (Code)
B13-8020 B13-8017 B13-8029 B13-8064 B13-8050 B13-8069 B13-8056 B13-8049	Nitrate as N	J (all detects) R (all non-detects)	P	Technical holding times (H)
B13-8020 B13-8017 B13-8064 B13-8050 B13-8029 B13-8069 B13-8056 B13-8049	MBAS  Nitrate as N	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	P	Initial calibration verification (%R) (LV)
B13-8020 B13-8017 B13-8064 B13-8050 B13-8029 B13-8069 B13-8056 B13-8049	Nitrate as N	J (all detects) UJ (all non-detects)	P	Continuing calibration (%R) (LC)
B13-8020 B13-8017 B13-8064 B13-8050 B13-8029 B13-8069 B13-8056 B13-8049	Analytes reported below the RL and above the MDL	J (all detects)	A	Sample result verification (DL)

**RHMP B'13****Wet Chemistry - Laboratory Blank Data Qualification Summary - SDG 1307002-005**

No Sample Data Qualified in this SDG

**RHMP B'13****Wet Chemistry - Field Blank Data Qualification Summary - SDG 1307002-005**

No Sample Data Qualified in this SDG

LDC #: 33507A6

## VALIDATION COMPLETENESS WORKSHEET

SDG #: 1307002-005

Level IV

Laboratory: PHYSIS Environmental Laboratories, Inc.

Date: 1/10/15

Page: 1 of 1

Reviewer: *kk*2nd Reviewer: *or*

**METHOD: (Analyte)** Ammonia as N (SM 4500-NH3 D), MBAS (SM 5540-C), Nitrate as N (SM 4500-NO3 E), Oil & Grease (EPA 1664A), Total Orthophosphate as P (SM 4500-P E)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Sample receipt/Technical holding times	A <del>SW</del> <i>SW</i>	
II.	Initial calibration	A	
III.	Calibration verification	SW	
IV.	Laboratory Blanks	A	LCS/D <i>kk</i>
V.	Field blanks	ND	FB = B13-FB EB = B13-NBEB (in this SDG)
VI.	Matrix Spike/Matrix Spike Duplicates	A	MS/D (in this SDG)
VII.	Duplicate sample analysis	A	DUP <del>OK</del> by diff (in this SDG)
VIII.	Laboratory control samples	A	LCS/D
IX.	Field duplicates	N	
X.	Sample result verification	A	
XI.	Overall assessment of data	A	

Note: A = Acceptable  
N = Not provided/applicable  
SW = See worksheet

ND = No compounds detected  
R = Rinsate  
FB = Field blank

D = Duplicate  
TB = Trip blank  
EB = Equipment blank

SB=Source blank  
OTHER:

	Client ID	Lab ID	Matrix	Date
1	B13-8020	22064-R1	water	08/11/13
2	B13-8017	22065-R1	water	08/11/13
3	B13-8064	22068-R1	water	08/11/13 <sup>12</sup>
4	B13-8050	22069-R1	water	08/11/13 <sup>12</sup>
5	B13-8029	22070-R1	water	08/11/13
6	B13-8069	22071-R1	water	08/11/13 <sup>12</sup>
7	B13-8056	22072-R1	water	08/11/13 <sup>12</sup>
8	B13-8049	22073-R1	water	08/11/13 <sup>12</sup>
9	B13-8020MS	22064-R1MS	water	08/11/13
10	B13-8020MSD	22064-R1MSD	water	08/11/13
11	<del>#1 DUP B13-8052 b1b</del>	<del>22074-R1</del>	<del>water</del>	<del>8/12/13</del> <sup>12</sup>
12				
13				
14				
15				

Notes \_\_\_\_\_

Method: Inorganics (EPA Method See Cover)

Validation Area	Yes	No	NA	Findings/Comments
<b>I. Technical holding times</b>				
All technical holding times were met.	/	/		
Cooler temperature criteria was met.	/			
<b>II. Calibration</b>				
Were all instruments calibrated daily, each set-up time?	/			
Were the proper number of standards used?	/			
Were all initial calibration correlation coefficients $\geq 0.995$ ?	/			
Were all initial and continuing calibration verification %Rs within the 90-110% QC limits?		/		
Were titrant checks performed as required? (Level IV only)			/	
Were balance checks performed as required? (Level IV only)	/			
<b>III. Blanks</b>				
Was a method blank associated with every sample in this SDG?	/			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		/		
<b>IV. Matrix spike/Matrix spike duplicates and Duplicates</b>				
Were a matrix spike (MS) and duplicate (DUP) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD or MS/DUP. Soil / Water.	/			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the 75-125 QC limits? If the sample concentration exceeded the spike concentration by a factor of 4 or more, no action was taken.	/			
Were the MS/MSD or duplicate relative percent differences (RPD) $\leq 20\%$ for waters and $\leq 35\%$ for soil samples? A control limit of $\leq \text{CRDL}$ ( $\leq 2\text{X CRDL}$ for soil) was used for samples that were $\leq 5\text{X}$ the CRDL, including when only one of the duplicate sample values were $\leq 5\text{X}$ the CRDL.	/			
<b>V. Laboratory control samples</b>				
Was an LCS analyzed for this SDG?	/			
Was an LCS analyzed per extraction batch?	/			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the 80-120% (85-115% for Method 300.0) QC limits?	/			
<b>VI. Regional Quality Assurance and Quality Control</b>				
Were performance evaluation (PE) samples performed?			/	
Were the performance evaluation (PE) samples within the acceptance limits?			/	

## VALIDATION FINDINGS CHECKLIST

Validation Area	Yes	No	NA	Findings/Comments
<b>VII. Sample Result Verification</b>				
Were RLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	/			
Were detection limits < RL?	/			
<b>VIII. Overall assessment of data</b>				
Overall assessment of data was found to be acceptable.	/			
<b>IX. Field duplicates</b>				
Field duplicate pairs were identified in this SDG.		/		
Target analytes were detected in the field duplicates.			/	
<b>X. Field blanks</b>				
Field blanks were identified in this SDG.		/	/	
Target analytes were detected in the field blanks.				

## VALIDATION FINDINGS WORKSHEET

### Sample Specific Analysis Reference

All circled methods are applicable to each sample.

[illegible]

Comments: \_\_\_\_\_



## VALIDATION FINDINGS WORKSHEET

Reviewer: KK

2nd Reviewer: 9

**METHOD:** Inorganics, Method: See Cover

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were all instruments calibrated daily, each set-up time, and were the proper number of standards used?

Y N N/A Were all initial and continuing calibration verification percent recoveries (%R) within the control limits of 90-110% for all analytes except mercury (80-120%) and cyanide (85-115%)?

**LEVEL IV ONLY:**

Y N (N/A) Was a midrange cyanide standard distilled?

Are all correlation coefficients  $>0.995$ ?

Y N N/A Were recalculated results acceptable? See Level IV Initial and Continuing Calibration Recalculation Worksheet for recalculations.

[illegible]

Comments: \_\_\_\_\_



LDC #: 33507A0

# **Validation Findings Worksheet** **Initial and Continuing Calibration Calculation Verification**

Page: 1 of 1  
 Reviewer: RL  
 2nd Reviewer: CL

Method: Inorganics, Method See Cover

The correlation coefficient (r) for the calibration of total ortho phosphate ~~PO<sub>4</sub>-P~~ was recalculated. Calibration date: 1/26/13

An initial or continuing calibration verification percent recovery (%R) was recalculated for each type of analysis using the following formula:

$$\%R = \frac{\text{Found} \times 100}{\text{True}}$$

Where,

Found = concentration of each analyte measured in the analysis of the ICV or CCV solution

True = concentration of each analyte in the ICV or CCV source

Type of analysis	Analyte	Standard	Conc. (mg/L)	Abs	Recalculated	Reported	Acceptable (Y/N)
					r or r <sup>2</sup>	r or r <sup>2</sup>	
Initial calibration	Total O-PO <sub>4</sub> -P	s1	0	0	0.9999	0.9999	Y
		s2	0.1	0.062			
		s3	0.2	0.1356			
		s4	0.3	0.2045			
		s5	0.6	0.4055			
Calibration verification	MBAS	CCV	0.0960988	0.1	96.1	96.1	Y
Calibration verification	Total O-PO <sub>4</sub> -P	CCV	0.1944	0.2	97.2	97.2	↓
Calibration verification	NO <sub>3</sub> -N	CCV	0.432	0.50	86.4	86.4	

Comments: Refer to Calibration Verification findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

# VALIDATION FINDINGS WORKSHEET Level IV Recalculation Worksheet

 METHOD: Inorganics, Method See Cover

Percent recoveries (%R) for a laboratory control sample and a matrix spike sample were recalculated using the following formula:

$$\%R = \frac{\text{Found}}{\text{True}} \times 100$$

Where, Found = concentration of each analyte measured in the analysis of the sample. For the matrix spike calculation, Found = SSR (spiked sample result) - SR (sample result).  
 True = concentration of each analyte in the source.

A sample and duplicate relative percent difference (RPD) was recalculated using the following formula:

$$RPD = \frac{|S-D|}{(S+D)/2} \times 100$$

Where, S = Original sample concentration  
 D = Duplicate sample concentration

Sample ID	Type of Analysis	Element	mg/L Found / S (units)	mg/L True / D (units)	Recalculated	Reported	Acceptable (Y/N)
					%R / RPD	%R / RPD	
LCS	Laboratory control sample	NH <sub>3</sub> -N	0.232	0.25	93* <del>92</del>	<del>96</del> 92	Y
9	Matrix spike sample	MBAS	(SSR-SR) 0.1336	0.13	103*	105	
9/10	Duplicate sample	NO <sub>3</sub> -N	0.12713	0.10893	15*	217	Y

Comments: Refer to appropriate worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

\* Calculated from raw Data

Note: All Oil & Grease results non-detect

## Laboratory Data Consultants, Inc. Data Validation Report

**Project/Site Name:** RHMP B'13  
**LDC Report Date:** January 28, 2015  
**Parameters:** Polynuclear Aromatic Hydrocarbons  
**Validation Level:** EPA Level IV  
**Laboratory:** PHYSIS Environmental Laboratories, Inc.  
**Sample Delivery Group (SDG):** 1307002-010

Sample Identification	Laboratory Sample Identification	Matrix	Collection Date
B13-8013	22482-R1	Sediment	8/26/13
B13-8014	22483-R1	Sediment	8/26/13
B13-8028	22484-R1	Sediment	8/26/13
B13-8030	22485-R1	Sediment	8/26/13
B13-8036	22486-R1	Sediment	8/26/13
B13-8038	22487-R1	Sediment	8/26/13
B13-8040	22488-R1	Sediment	8/26/13
B13-8014MS	22483-R1MS	Sediment	8/26/13
B13-8014MSD	22483-R1MSD	Sediment	8/26/13
B13-8052	22489-R1	Sediment	8/27/13
B13-8014DUP	22483-R1DUP	Sediment	8/26/13

## Introduction

This Data Validation Report (DVR) presents data validation findings and results for the associated samples listed on the cover page. Data validation was performed in accordance with Final Quality Assurance Project Plan, Regional Harbor Monitoring Program, San Diego, California (August 2013) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines (CLPNFG) for Superfund Organic Methods Data Review (June 2008). Where specific guidance was not available, the data has been evaluated in a conservative manner consistent with industry standards using professional experience.

The analyses were performed by the following method:

Polynuclear Aromatic Hydrocarbons (PAHs) by Environmental Protection Agency (EPA) SW 846 Method 8270C

All sample results were subjected to Level IV evaluation, which is comprised of the QC summary forms as well as the raw data, to confirm sample quantitation and identification.

The following are definitions of the data qualifiers utilized during data validation:

- J (Estimated): The compound or analyte was analyzed for and positively identified by the laboratory; however the reported concentration is estimated due to non-conformances discovered during data validation.
- U (Non-detected): The compound or analyte was analyzed for and positively identified by the laboratory; however the analyte should be considered as not detected at the reported concentration due to the presence of contaminants detected in the associated blank(s).
- UJ (Non-detected estimated): The compound or analyte was reported as not detected by the laboratory; however the reported quantitation/detection limit is estimated due to non-conformances discovered during data validation.
- R (Rejected): The sample results were rejected due to gross non-conformances discovered during data validation. Data qualified as rejected is not usable.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

## Qualification Code Reference

- BC The initial calibration (ICAL) curve did not meet method-specified criteria.
- CH High continuing calibration verification (CCV) recovery. Analytical results may be biased high.
- DL The analyte concentration was between the method detection limit (MDL) and the reporting limit (RL).
- FB The analyte was detected in the sample and its associated field blank and the concentration detected in the sample is less than five times the concentration detected in the blanks.
- H Holding time.
- HD Potential analytical imprecision.
- HL High LCS recovery. Analytical results may be biased high.
- HM High MS recovery. Analytical results may be biased high.
- HP High certified reference material (CRM) recovery. Analytical results may be biased high.
- HV High initial calibration verification (ICV) recovery. Analytical results may be biased high.
- LC Low CCV recovery. Analytical result may be biased low.
- LL Low LCS recovery. Analytical result may be biased low.
- LM Low MS recovery. Analytical result may be biased low.
- LP Low CRM recovery. Analytical result may be biased low.
- LS Low Surrogate recovery. Analytical results may be biased low.
- LV Low ICV recovery. Analytical result may be biased low.
- NC Calibration verification standard concentrations were outside the calibration range.
- NQ There is lack of QC for this analyte.
- RB The analyte was detected in the sample and its associated equipment blank and the concentration detected in the sample is less than five times the concentration detected in the blank.
- TD The dissolved metals concentration is significantly higher than the total metal concentration.
- \*# Unusual problems found with the data. The number following the asterisk (\*) will indicate the section in the validation report where a description of the problem can be found.

## **I. Sample Receipt and Technical Holding Times**

All samples were received in good condition and cooler temperatures upon receipt met validation criteria.

All technical holding time requirements were met.

## **II. GC/MS Instrument Performance Check**

A decafluorotriphenylphosphine (DFTPP) tune was performed at 12 hour intervals.

All ion abundance requirements were met.

## **III. Initial Calibration and Initial Calibration Verification**

An initial calibration was performed as required by the method.

A curve fit, based on the initial calibration, was established for quantitation. The coefficient of determination ( $r^2$ ) was greater than or equal to 0.990.

The initial calibration verification standard data were not provided and therefore were not reviewed.

## **IV. Continuing Calibration**

Continuing calibration was performed at the required frequencies.

Percent differences (%D) were less than or equal to 20.0% for all compounds.

## **V. Laboratory Blanks**

Laboratory blanks were analyzed as required by the method. No contaminants were found in the laboratory blanks.

## **VI. Field Blanks**

No field blanks were identified in this SDG.

## **VII. Surrogate Spikes**

Surrogates were added to all samples as required by the method. All surrogate recoveries (%R) were within QC limits.

## **VIII. Matrix Spike/Matrix Spike Duplicates/Duplicates**

Matrix spike (MS) and matrix spike duplicate (MSD) sample analysis was performed on an associated project sample. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

were within QC limits.

## IX. Laboratory Control Samples/Standard Reference Material

Laboratory control samples (LCS) and laboratory control samples duplicates (LCSD) were analyzed as required by the method. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

Standard reference material (SRM) results were within QC limits with the following exceptions:

SRM ID	Compound	%R (Limits)	Associated Samples	Flag	A or P
SRM1944	Benzo(a)pyrene Perylene	58 (60-140) 54 (60-140)	All samples in SDG 1307002-010	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	P
SRM1944	Dibenzo(a,h)anthracene	168 (60-140)	B13-8013 B13-8028 B13-8030 B13-8036 B13-8038 B13-8040 B13-8052	J (all detects)	P
SRM1944	Dibenzo(a,h)anthracene	168 (60-140)	B13-8014	NA	-

Although the above listed %R flagged "NA" demonstrates a high bias, the affected compound in the associated sample was non-detected and did not warrant the qualification of the data.

## X. Field Duplicates

No field duplicates were identified in this SDG.

## XI. Internal Standards

All internal standard areas and retention times were within QC limits with the following exceptions:

Samples	Compound	Finding	Flag	A or P
All samples in SDG 1307002-010	All TCL compounds	The internal standard recoveries could not be verified due to the difference in the extraction procedures between the calibration standards and samples.	J (all detects) UJ (all non-detects)	P



## **XII. Compound Quantitation**

All compound quantitations were within validation criteria with the following exceptions:

Samples	Compound	Finding	Flag	A or P
All samples in SDG 1307002-010	All TCL compounds	The laboratory indicated that the multiplier used to quantitate results was based on sample dry weight, initial, and final extract volumes. The multiplier cannot be verified since extract volumes were not provided.	J (all detects)	P

All compounds reported below the RL and above the MDL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG 1307002-010	Compound reported below the RL and above the MDL	J (all detects)	A

## **XIII. Target Compound Identifications**

All target compound identifications were within validation criteria.

## **XIV. System Performance**

The system performance was acceptable.

## **XV. Overall Assessment of Data**

The analysis was conducted within all specifications of the method. No results were rejected in this SDG.

Due to SRM %R, internal standards, and compound quantitation, data were qualified as estimated in eight samples.

The quality control criteria reviewed, as discussed above, were met and are considered acceptable. Sample results that were found to be estimated (J/UJ) are usable for limited purposes only. Based upon the data validation, all other results are considered valid and usable for all purposes.

**RHMP B'13****Polynuclear Aromatic Hydrocarbons - Data Qualification Summary - SDG 1307002-010**

Sample	Compound	Flag	A or P	Reason (Code)
B13-8013 B13-8014 B13-8028 B13-8030 B13-8036 B13-8038 B13-8040 B13-8052	Benzo(a)pyrene  Perylene	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	P	Standard reference material (%R) (LP)
B13-8013 B13-8028 B13-8030 B13-8036 B13-8038 B13-8040 B13-8052	Dibenzo(a,h)anthracene	J (all detects)	P	Standard reference material (%R) (HP)
B13-8013 B13-8014 B13-8028 B13-8030 B13-8036 B13-8038 B13-8040 B13-8052	All TCL compounds	J (all detects) UJ (all non-detects)	P	Internal standards (*XI)
B13-8013 B13-8014 B13-8028 B13-8030 B13-8036 B13-8038 B13-8040 B13-8052	All TCL compounds	J (all detects)	P	Compound quantitation (*XII)
B13-8013 B13-8014 B13-8028 B13-8030 B13-8036 B13-8038 B13-8040 B13-8052	Compound reported below the RL and above the MDL	J (all detects)	A	Compound quantitation (DL)

**RHMP B'13****Polynuclear Aromatic Hydrocarbons - Laboratory Blank Data Qualification Summary - SDG 1307002-010**

No Sample Data Qualified in this SDG

**RHMP B'13**

**Polynuclear Aromatic Hydrocarbons - Field Blank Data Qualification Summary -  
SDG 1307002-010**

No Sample Data Qualified in this SDG

**METHOD:** GC/MS Polynuclear Aromatic Hydrocarbons (EPA SW846 Method 8270C)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Sample receipt/Technical holding times	A / A	
II.	GC/MS Instrument performance check	A	
III.	Initial calibration/ICV	A / <del>SW</del> N	ICAL $\leq 30/15\%$ r <sup>2</sup> 1.0 $\leq 20\%$
IV.	Continuing calibration	A	CCV $\leq 20\%$
V.	Laboratory Blanks	A	
VI.	Field blanks	N	
VII.	Surrogate spikes	A	
VIII.	Matrix spike/Matrix spike duplicates /LD	A / A	
IX.	Laboratory control samples /SRM	A / SW	LCS 1b
X.	Field duplicates	N	
XI.	Internal standards	SW	
XII.	Compound quantitation RL/LOQ/LODs	SW	
XIII.	Target compound identification	A	
XIV.	System performance	A	
XV.	Overall assessment of data	A	

Note: A = Acceptable  
N = Not provided/applicable  
SW = See worksheet

ND = No compounds detected  
R = Rinsate  
FB = Field blank

D = Duplicate  
TB = Trip blank  
EB = Equipment blank

SB=Source blank  
OTHER:

	Client ID	Lab ID	Matrix	Date
1	B13-8013	22482-R1	sediment	08/26/13
2	B13-8014	22483-R1	sediment	08/26/13
3	B13-8028	22484-R1	sediment	08/26/13
4	B13-8030	22485-R1	sediment	08/26/13
5	B13-8036	22486-R1	sediment	08/26/13
6	B13-8038	22487-R1	sediment	08/26/13
7	B13-8040	22488-R1	sediment	08/26/13
8	B13-8014MS	22483-R1MS	sediment	08/26/13
9	B13-8014MSD	22483-R1MSD	sediment	08/26/13
10	B13-8052	22489-R1	L	8/27/13
11	2dup			
12				
13	0-5136 / 22481-B1 PB			

## VALIDATION FINDINGS WORKSHEET

**METHOD:** GC/MS SVOA

A. Phenol	T. 4-Chloroaniline	MM. 4-Chlorophenyl-phenyl ether	FFF. Di-n-octylphthalate	YYY. 2,3,5-Trimethylnaphthalene
B. Bis (2-chloroethyl) ether	U. Hexachlorobutadiene	NN. Fluorene	GGG. Benzo(b)fluoranthene	ZZZ. Perylene
C. 2-Chlorophenol	V. 4-Chloro-3-methylphenol	OO. 4-Nitroaniline	HHH. Benzo(k)fluoranthene	AAAA. Dibenzothiophene
D. 1,3-Dichlorobenzene	W. 2-Methylnaphthalene	PP. 4,6-Dinitro-2-methylphenol	III. Benzo(a)pyrene	BBBB. Benzo(a)fluoranthene
E. 1,4-Dichlorobenzene	X. Hexachlorocyclopentadiene	QQ. N-Nitrosodiphenylamine	JJJ. Indeno(1,2,3-cd)pyrene	CCCC. Benzo(b)fluorene
F. 1,2-Dichlorobenzene	Y. 2,4,6-Trichlorophenol	RR. 4-Bromophenyl-phenylether	KKK. Dibenzo(a,h)anthracene	DDDD. cis/trans-Decalin
G. 2-Methylphenol	Z. 2,4,5-Trichlorophenol	SS. Hexachlorobenzene	LLL. Benzo(g,h,i)perylene	EEEE. Biphenyl
H. 2,2'-Oxybis(1-chloropropane)	AA. 2-Chloronaphthalene	TT. Pentachlorophenol	MMM. Bis(2-Chloroisopropyl)ether	FFFF. Retene
I. 4-Methylphenol	BB. 2-Nitroaniline	UU. Phenanthrene	NNN. Aniline	GGGG. C30-Hopane
J. N-Nitroso-di-n-propylamine	CC. Dimethylphthalate	VV. Anthracene	OOO. N-Nitrosodimethylamine	HHHH. 1-Methylphenanthrene
K. Hexachloroethane	DD. Acenaphthylene	WW. Carbazole	PPP. Benzoic Acid	IIII. 1,4-Dioxane
L. Nitrobenzene	EE. 2,6-Dinitrotoluene	XX. Di-n-butylphthalate	QQQ. Benzyl alcohol	JJJJ. Acetophenone
M. Isophorone	FF. 3-Nitroaniline	YY. Fluoranthene	RRR. Pyridine	KKKK. Atrazine
N. 2-Nitrophenol	GG. Acenaphthene	ZZ. Pyrene	SSS. Benzidine	LLLL. Benzaldehyde
O. 2,4-Dimethylphenol	HH. 2,4-Dinitrophenol	AAA. Butylbenzylphthalate	TTT. 1-Methylnaphthalene	MMMM. Caprolactam
P. Bis(2-chloroethoxy)methane	II. 4-Nitrophenol	BBB. 3,3'-Dichlorobenzidine	UUU. Benzo(b)thiophene	NNNN.
Q. 2,4-Dichlorophenol	JJ. Dibenzofuran	CCC. Benzo(a)anthracene	VVV. Benzonaphthothiophene	OOOO.
R. 1,2,4-Trichlorobenzene	KK. 2,4-Dinitrotoluene	DDD. Chrysene	WWW. Benzo(e)pyrene	PPPP.
S. Naphthalene	LL. Diethylphthalate	EEE. Bis(2-ethylhexyl)phthalate	XXX. 2,6-Dimethylnaphthalene	QQQQ.

**Method:** Semivolatiles (EPA SW 846 Method 8270C)

Validation Area	Yes	No	NA	Findings/Comments
<b>I. Technical holding times</b>				
All technical holding times were met.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Cooler temperature criteria was met.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>II. GC/MS Instrument performance check</b>				
Were the DFTPP performance results reviewed and found to be within the specified criteria?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were all samples analyzed within the 12 hour clock criteria?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>III. Initial calibration</b>				
Did the laboratory perform a 5 point calibration prior to sample analysis?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were all percent relative standard deviations (%RSD) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was a curve fit used for evaluation?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Did the initial calibration meet the curve fit acceptance criteria of $\geq 0.990$ ?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Were all percent relative standard deviations (%RSD) $\leq 30\%/15\%$ and relative response factors (RRF) $\geq 0.05$ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>IV. Continuing calibration</b>				
Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were all percent differences (%D) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were all percent differences (%D) $\leq 20\%$ and relative response factors (RRF) $\geq 0.05$ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>V. Blanks</b>				
Was a method blank associated with every sample in this SDG?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was a method blank analyzed for each matrix and concentration?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
<b>VI. Surrogate spikes</b>				
Were all surrogate %R within QC limits?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
If 2 or more base neutral or acid surrogates were outside QC limits, was a reanalysis performed to confirm %R?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
If any %R was less than 10 percent, was a reanalysis performed to confirm %R?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
<b>VII. Matrix spike/Matrix spike duplicates</b>				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was a MS/MSD analyzed every 20 samples of each matrix?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>VIII. Laboratory control samples</b>				
Was an LCS analyzed for this SDG?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Validation Area	Yes	No	NA	Findings/Comments
Was an LCS analyzed per extraction batch?	/			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	/			
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?		/		
Were the performance evaluation (PE) samples within the acceptance limits?			/	
X. Internal standards				
Were internal standard area counts within -50% or +100% of the associated calibration standard?	/		/	
Were retention times within + 30 seconds from the associated calibration standard?	/			
XI. Target compound identification				
Were relative retention times (RRT's) within + 0.06 RRT units of the standard?	/			
Did compound spectra meet specified EPA "Functional Guidelines" criteria?	/			
Were chromatogram peaks verified and accounted for?	/			
XII. Compound quantitation/CRQLs				
Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound?	/			
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	/			
XIII. Tentatively identified compounds (TICs)				
Were the major ions (> 10 percent relative intensity) in the reference spectrum evaluated in sample spectrum?		/		
Were relative intensities of the major ions within $\pm 20\%$ between the sample and the reference spectra?		/		
Did the raw data indicate that the laboratory performed a library search for all required peaks in the chromatograms (samples and blanks)?			/	
XIV. System performance				
System performance was found to be acceptable.	/			
XV. Overall assessment of data				
Overall assessment of data was found to be acceptable.	/			
XVI. Field duplicates				
Field duplicate pairs were identified in this SDG.		/		
Target compounds were detected in the field duplicates.			/	
XVII. Field blanks				
Field blanks were identified in this SDG.		/		
Target compounds were detected in the field blanks.			/	

LDC #: 33507 B26

## VALIDATION FINDINGS WORKSHEET

### Laboratory Control Samples (LCS)

SRM

Page: 1 of 1

Reviewer: JVC

2nd Reviewer:           

**METHOD:** GC/MS BNA (EPA SW 846 Method 8270C)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y	N	N/A	Was a LCS required?
---	---	-----	---------------------

Y	N	N/A	Were the LCS/LCSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?
---	---	-----	--

[illegible]







LDC # 33507B2b

**VALIDATION FINDINGS WORKSHEET**  
**Initial Calibration Calculation Verification**

Page: 1 of 2  
 Reviewer: JVG  
 2nd Reviewer: *rc*

METHOD: GCMS Semivolatiles (EPA SW 846 Method 8270C)


Parameter: ChryseneOrder of regression: Linear

Date	Instrument	Compound	Points	x area ratio	y conc ratio
4/11-12/14	GCMS3	Chrysene	Point 1	0.01426	0.0125
			Point 2	0.02888	0.0250
			Point 3	0.05481	0.0500
			Point 4	0.13836	0.1250
			Point 5	0.26134	0.2500
			Point 6	0.57875	0.5000

Regression Output: Regression Output:			Reported WLR	
Constant	b =	0.00000	b =	0.00000
Std Err of Y Est		0.04		
R Squared	r <sup>2</sup> =	0.99752	r <sup>2</sup> =	0.99752
No. of Observations		6.00		
Degrees of Freedom		4.00		
X Coefficient(s)	m1 =	1.14670	m1 =	1.1330
Std Err of Coef.	0.01			

LDC # 33507B2b

**VALIDATION FINDINGS WORKSHEET**  
**Initial Calibration Calculation Verification**

Page: 2 of 2  
 Reviewer: JVG  
 2nd Reviewer: 

METHOD: GCMS Semivolatiles (EPA SW 846 Method 8270C)


Parameter: Benzo(g,h,i)peryleneOrder of regression: Linear

Date	Instrument	Compound	Points	x area ratio	y conc ratio
4/11-12/14	GCMS3	Benzo(g,h,i)perylene	Point 1	0.01810	0.0125
			Point 2	0.03548	0.0250
			Point 3	0.07250	0.0500
			Point 4	0.18142	0.1250
			Point 5	0.35422	0.2500
			Point 6	0.70810	0.5000

Regression Output: Regression Output:			Reported WLR	
Constant	b =	0.00000	b =	0.00000
Std Err of Y Est		0.04		
R Squared	r^2 =	0.99996	r^2 =	0.99996
No. of Observations		6.00		
Degrees of Freedom		4.00		
X Coefficient(s)	m1 =	1.41396	m1 =	1.4180
Std Err of Coef.	0.01			

LDC#: 33507B2b

**VALIDATION FINDINGS WORKSHEET**  
**Continuing Calibration Calculation Verification**

Page: 1 of 1  
Reviewer: JVG  
2nd Reviewer: 

METHOD: GCMS Semivolatiles (EPA SW 846 Method 8270C)

The percent difference (%D) of the initial calibration average Calibration Factors (CF) and the continuing calibration percent difference (%D) values were recalculated for the compounds identified below using the following calculation:

Where:

Percent difference (%D) =  $100 * (N - C) / N$

N = Initial Calibration Factor or Nominal Amount

C = Calibration Factor from Continuing Calibration Standard or Calculated Amount

#	Standard ID	Calibration Date	Compound (IS)	CCV Conc	Reported Conc	Recalculated Conc	Reported % D	Recalculated %D
1	SPEX_500ICV	5/9/2014	Chrysene (IS1)	500.0	533.5	533.8	7	7
			Benzo(g,h,i)perylene (IS2)	500.0	567.5	567.6	14	14
2	PAH500CCV2	5/10/2014	Chrysene (IS1)	500.0	455.7	455.9	9	9
			Benzo(g,h,i)perylene (IS2)	500.0	479.7	479.8	4	4

# **VALIDATION FINDINGS WORKSHEET** **Surrogate Results Verification**

**METHOD:** GC/MS Semivolatiles (EPA SW 846 Method 8270C)

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS \* 100

Where: SF = Surrogate Found  
SS = Surrogate SpikedSample ID: # 1

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Nitrobenzene-d5	d10 - GG	1000	668.54	67	6
2-Fluorobiphenyl	d10 - UU	↓	672.85	67	↓
Terphenyl-d14	d12 - DDD	↓	766.72	77	↓
Phenol-d5	d8 - S	↓	638.45	64	↓
2-Fluorophenol					
2,4,6-Tribromophenol					
2-Chlorophenol-d4					
1,2-Dichlorobenzene-d4					

Sample ID: \_\_\_\_\_


	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Nitrobenzene-d5					
2-Fluorobiphenyl					
Terphenyl-d14					
Phenol-d5					
2-Fluorophenol					
2,4,6-Tribromophenol					
2-Chlorophenol-d4					
1,2-Dichlorobenzene-d4					

Sample ID: \_\_\_\_\_

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Nitrobenzene-d5					
2-Fluorobiphenyl					
Terphenyl-d14					
Phenol-d5					
2-Fluorophenol					
2,4,6-Tribromophenol					
2-Chlorophenol-d4					
1,2-Dichlorobenzene-d4					

LDC #: 33507 B26

# **VALIDATION FINDINGS WORKSHEET** **Matrix Spike/Matrix Spike Duplicates Results Verification**

Page: 1 of 1  
 Reviewer: JVG  
 2nd Reviewer: 

**METHOD:** GC/MS BNA (EPA SW 846 Method 8270C)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

$$\% \text{ Recovery} = 100 * (\text{SSC} - \text{SC}) / \text{SA}$$

Where: SSC = Spiked sample concentration  
 SA = Spike added

SC = Sample concentration

$$\text{RPD} = | \text{MSC} - \text{MSD} | * 2 / (\text{MSC} + \text{MSDC})$$

MSC = Matrix spike concentration

MSDC = Matrix spike duplicate concentration

MS/MSD samples: 8/9

Compound	Spike Added (ng/g)		Sample Concentration (ng/g)	Spiked Sample Concentration (ng/g)		Matrix Spike		Matrix Spike Duplicate		MS/MSD	
						Percent Recovery		Percent Recovery		RPD	
	MS	MSD		MS	MSD	Reported	Recalc	Reported	Recalc	Reported	Recalc
Phenol											
N-Nitroso-di-n-propylamine											
4-Chloro-3-methylphenol											
Acenaphthene	154.2	79.7	0	147.4	79.7	96	96	95	95	1	1
Pentachlorophenol											
Pyrene	154.2	79.7	0	174.9	92.6	110	110	109	109	1	1

Comments: Refer to Matrix Spike/Matrix Spike Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 33507 B26

## VALIDATION FINDINGS WORKSHEET

Page: 1 of 1Laboratory Control Sample/Laboratory Control Sample Duplicates Results VerificationReviewer: JVG2nd Reviewer: ✓**METHOD:** GC/MS BNA (EPA SW 846 Method 8270C)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery =  $100 * (SC/SA)$ 

Where: SSC = Spike concentration  
SA = Spike added

RPD =  $|LCSC - LCSDC| * 2 / (LCSC + LCSDC)$ 

LCSC = Laboratory control sample concentration LCSDC = Laboratory control sample duplicate concentration

LCS/LCSD samples: 22 481 - B51 / B52

Compound	Spike Added (ng/g)		Spike Concentration (ng/g)		LCS		LCSD		LCS/LCSD	
					Percent Recovery		Percent Recovery		RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc	Reported	Recalc	Reported	Recalculated
Phenol										
N-Nitroso-di-n-propylamine										
4-Chloro-3-methylphenol										
Acenaphthene	1000	100	863.2	930.7	86	86	93	93	8	8
Pentachlorophenol										
Pyrene	1000	1000	1053	1152.5	105	105	115	115	9	9

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.



## VALIDATION FINDINGS WORKSHEET

### Sample Calculation Verification

Reviewer: JVG

2nd reviewer: PC

**METHOD:** GC/MS BNA (EPA SW 846 Method 8270C)

Y	N	N/A
<del>Y</del>	<del>N</del>	N/A

Were all reported results recalculated and verified for all level IV samples?

Were all recalculated results for detected target compounds agree within 10.0% of the reported results?

$$\text{Concentration} = \frac{(A_v)(I_s)(V_i)(DF)(2.0)}{(A_{is})(RRF)(V_o)(V_i)(\%S)}$$

$A_x$  = Area of the characteristic ion (EICP) for the compound to be measured

$A_{is}$  = Area of the characteristic ion (EICP) for the specific internal standard

$I_s$  = Amount of internal standard added in nanograms (ng)

$V_o$  = Volume or weight of sample extract in milliliters (ml) or grams (g).

$V_1$  = Volume of extract injected in microliters (ul)

$V_t$  = Volume of the concentrated extract in microliters (ul)

Df = Dilution Factor.

%S = Percent solids, applicable to soil and solid matrices only.

2.0 = Factor of 2 to account for GPC cleanup

Example:

Sample I.D. 1, Chrysene

$$\text{Conc.} = \frac{(4635700) (2000) (0.22)}{(462325) (1.117) (1.133)} \times \frac{1}{1000}$$

$$= 39.6 \text{ ng/g}$$

[illegible]

## Laboratory Data Consultants, Inc. Data Validation Report

**Project/Site Name:** RHMP B'13

**LDC Report Date:** January 28, 2015

**Parameters:** Fipronil & Degradates

**Validation Level:** EPA Level IV

**Laboratory:** PHYSIS Environmental Laboratories, Inc.

**Sample Delivery Group (SDG):** 1307002-010

Sample Identification	Laboratory Sample Identification	Matrix	Collection Date
B13-8013	22482-R1	Sediment	8/26/13
B13-8014	22483-R1	Sediment	8/26/13
B13-8028	22484-R1	Sediment	8/26/13
B13-8030	22485-R1	Sediment	8/26/13
B13-8036	22486-R1	Sediment	8/26/13
B13-8038	22487-R1	Sediment	8/26/13
B13-8040	22488-R1	Sediment	8/26/13
B13-8013MS	22482-R1MS	Sediment	8/26/13
B13-8013MSD	22482-R1MSD	Sediment	8/26/13
B13-8052	22489-R1	Sediment	8/27/13
B13-8013DUP	22482-R1DUP	Sediment	8/26/13

## Introduction

This Data Validation Report (DVR) presents data validation findings and results for the associated samples listed on the cover page. Data validation was performed in accordance with Final Quality Assurance Project Plan, Regional Harbor Monitoring Program, San Diego, California (August 2013) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines (CLPNFG) for Superfund Organic Methods Data Review (June 2008). Where specific guidance was not available, the data has been evaluated in a conservative manner consistent with industry standards using professional experience.

The analyses were performed by the following method:

Fipronil and Degradates by Environmental Protection Agency (EPA) SW 846 Method 8270C-NCI

All sample results were subjected to Level IV evaluation, which is comprised of the QC summary forms as well as the raw data, to confirm sample quantitation and identification.

The following are definitions of the data qualifiers utilized during data validation:

- J (Estimated): The compound or analyte was analyzed for and positively identified by the laboratory; however the reported concentration is estimated due to non-conformances discovered during data validation.
- U (Non-detected): The compound or analyte was analyzed for and positively identified by the laboratory; however the analyte should be considered as not detected at the reported concentration due to the presence of contaminants detected in the associated blank(s).
- UJ (Non-detected estimated): The compound or analyte was reported as not detected by the laboratory; however the reported quantitation/detection limit is estimated due to non-conformances discovered during data validation.
- R (Rejected): The sample results were rejected due to gross non-conformances discovered during data validation. Data qualified as rejected is not usable.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

## Qualification Code Reference

- BC The initial calibration (ICAL) curve did not meet method-specified criteria.
- CH High continuing calibration verification (CCV) recovery. Analytical results may be biased high.
- DL The analyte concentration was between the method detection limit (MDL) and the reporting limit (RL).
- FB The analyte was detected in the sample and its associated field blank and the concentration detected in the sample is less than five times the concentration detected in the blanks.
- H Holding time.
- HD Potential analytical imprecision.
- HL High LCS recovery. Analytical results may be biased high.
- HM High MS recovery. Analytical results may be biased high.
- HP High certified reference material (CRM) recovery. Analytical results may be biased high.
- HV High initial calibration verification (ICV) recovery. Analytical results may be biased high.
- LC Low CCV recovery. Analytical result may be biased low.
- LL Low LCS recovery. Analytical result may be biased low.
- LM Low MS recovery. Analytical result may be biased low.
- LP Low CRM recovery. Analytical result may be biased low.
- LS Low Surrogate recovery. Analytical results may be biased low.
- LV Low ICV recovery. Analytical result may be biased low.
- NC Calibration verification standard concentrations were outside the calibration range.
- NQ There is lack of QC for this analyte.
- RB The analyte was detected in the sample and its associated equipment blank and the concentration detected in the sample is less than five times the concentration detected in the blank.
- TD The dissolved metals concentration is significantly higher than the total metal concentration.
- \*# Unusual problems found with the data. The number following the asterisk (\*) will indicate the section in the validation report where a description of the problem can be found.

## **I. Sample Receipt and Technical Holding Times**

All samples were received in good condition and cooler temperatures upon receipt met validation criteria.

All technical holding time requirements were met.

## **II. GC/MS Instrument Performance Check**

A decafluorotriphenylphosphine (DFTPP) tune was performed at 12 hour intervals.

All ion abundance requirements were met.

## **III. Initial Calibration and Initial Calibration Verification**

An initial calibration was performed as required by the method.

A curve fit, based on the initial calibration, was established for quantitation. The coefficient of determination ( $r^2$ ) was greater than or equal to 0.990.

The initial calibration verification standard data were not provided and therefore were not reviewed.

## **IV. Continuing Calibration**

Continuing calibration was performed at the required frequencies with the following exceptions:

Sample	Compound	Finding	Criteria	Flag	A or P
All samples in SDG 1307002-010	All TCL compounds	Continuing calibration was not analyzed before the sample analysis.	Continuing calibration should be analyzed prior to sample analysis	J (all detects) UJ (all non-detects)	P

## **V. Laboratory Blanks**

Laboratory blanks were analyzed as required by the method. No contaminants were found in the laboratory blanks.

## **VI. Field Blanks**

No field blanks were identified in this SDG.

## **VII. Surrogate Spikes**

Surrogates were not required by the method.

## VIII. Matrix Spike/Matrix Spike Duplicates/Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) sample analysis was performed on an associated project sample. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

Spike ID (Associated Samples)	Compound	MS (%R) (Limits)	MSD (%R) (Limits)	RPD (Limits)	Flag	A or P
B13-8013MS/MSD (B13-8013)	Fipronil desulfinyl	-	-	26 (≤25)	NA	-

Although the above listed RPD flagged "NA" demonstrates a high bias, the affected compound in the associated sample was non-detected and did not warrant the qualification of the data.

Duplicate (DUP) sample analyses were reviewed for each matrix as applicable. Results were within QC limits.

## IX. Laboratory Control Samples

Laboratory control samples (LCS) and laboratory control samples duplicates (LCSD) were analyzed as required by the method. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

LCS ID (Associated Samples)	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Flag	A or P
22481-BS1/BS2 (All samples in SDG 1307002-010)	Fipronil Fipronil desulfinyl	- -	- -	26 (≤25) 33 (≤25)	UJ (all non-detects) UJ (all non-detects)	P

## X. Field Duplicates

No field duplicates were identified in this SDG.

## XI. Internal Standards

All internal standard areas and retention times were within QC limits with the following exceptions:

Samples	Compound	Finding	Flag	A or P
All samples in SDG 1307002-010	All TCL compounds	The internal standard recoveries could not be verified due to the difference in the extraction procedures between the calibration standards and samples.	J (all detects) UJ (all non-detects)	P

## **XII. Compound Quantitation**

All compound quantitations were within validation criteria with the following exceptions:

Samples	Compound	Finding	Flag	A or P
All samples in SDG 1307002-010	All TCL compounds	The laboratory indicated that the multiplier used to quantitate results was based on sample dry weight, initial, and final extract volumes. The multiplier cannot be verified since extract volumes were not provided.	J (all detects)	P

All compounds reported below the RL and above the MDL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG 1307002-010	Compound reported below the RL and above the MDL	J (all detects)	A

## **XIII. Target Compound Identifications**

All target compound identifications were within validation criteria.

## **XIV. System Performance**

The system performance was acceptable.

## **XV. Overall Assessment of Data**

The analysis was conducted within all specifications of the method with the exceptions noted in Section IV. No results were rejected in this SDG.

Due to continuing calibration, LCS/LCSD RPD, internal standards, and compound quantitation, data were qualified as estimated in eight samples.

The quality control criteria reviewed, as discussed above, were met and are considered acceptable. Sample results that were found to be estimated (J/UJ) are usable for limited purposes only. Based upon the data validation, all other results are considered valid and usable for all purposes.

**RHMP B'13****Fipronil & Degradates - Data Qualification Summary - SDG 1307002-010**

Sample	Compound	Flag	A or P	Reason (Code)
B13-8013 B13-8014 B13-8028 B13-8030 B13-8036 B13-8038 B13-8040 B13-8052	All TCL compounds	J (all detects) UJ (all non-detects)	P	Continuing calibration (NQ)
B13-8013 B13-8014 B13-8028 B13-8030 B13-8036 B13-8038 B13-8040 B13-8052	Fipronil Fipronil desulfinyl	UJ (all non-detects) UJ (all non-detects)	P	Laboratory control samples (RPD) (HD)
B13-8013 B13-8014 B13-8028 B13-8030 B13-8036 B13-8038 B13-8040 B13-8052	All TCL compounds	J (all detects) UJ (all non-detects)	P	Internal standards (*XI)
B13-8013 B13-8014 B13-8028 B13-8030 B13-8036 B13-8038 B13-8040 B13-8052	All TCL compounds	J (all detects)	P	Compound quantitation (*XII)
B13-8013 B13-8014 B13-8028 B13-8030 B13-8036 B13-8038 B13-8040 B13-8052	Compound reported below the RL and above the MDL	J (all detects)	A	Compound quantitation (DL)

**RHMP B'13****Fipronil & Degradates - Laboratory Blank Data Qualification Summary - SDG 1307002-010**

No Sample Data Qualified in this SDG



**RHMP B'13**

**Fipronil & Degradates - Field Blank Data Qualification Summary - SDG 1307002-010**

No Sample Data Qualified in this SDG

LDC #: 33507B2c

**VALIDATION COMPLETENESS WORKSHEET**

Date: 1/21/15

SDG #: 1307002-010

Level IV

Page: 1 of 1

Laboratory: PHYSIS Environmental Laboratories, Inc.

Reviewer: SVK2nd Reviewer: RL**METHOD:** GC/MS Fipronil & Degradates(EPA SW846 Method 8270C-NCI)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Sample receipt/Technical holding times	A / A	
II.	GC/MS Instrument performance check	A	
III.	Initial calibration/ICV	A / A	ICAL $\leq 15\%$ ✓ $ICV \leq 20\%$
IV.	Continuing calibration	SW	COV $\leq 20\%$
V.	Laboratory Blanks	A	
VI.	Field blanks	N	
VII.	Surrogate spikes	N	
VIII.	Matrix spike/Matrix spike duplicates /LD	SW / A	
IX.	Laboratory control samples	SW	LCS ID
X.	Field duplicates	N	
XI.	Internal standards	SW	
XII.	Compound quantitation RL/LOQ/LODs	SA	results couldn't be verified - $\downarrow$ lots / 0
XIII.	Target compound identification	A	Test: results couldn't be verified - $\downarrow$ lots / 0
XIV.	System performance	A	
XV.	Overall assessment of data	A	

Note: A = Acceptable  
N = Not provided/applicable  
SW = See worksheet

ND = No compounds detected  
R = Rinsate  
FB = Field blank

D = Duplicate  
TB = Trip blank  
EB = Equipment blank

SB=Source blank  
OTHER:

	Client ID	Lab ID	Matrix	Date
1	B13-8013	22482-R1	sediment	08/26/13
2	B13-8014	22483-R1	sediment	08/26/13
3	B13-8028	22484-R1	sediment	08/26/13
4	B13-8030	22485-R1	sediment	08/26/13
5	B13-8036	22486-R1	sediment	08/26/13
6	B13-8038	22487-R1	sediment	08/26/13
7	B13-8040	22488-R1	sediment	08/26/13
8	B13-8013MS	22482-R1MS	sediment	08/26/13
9	B13-8013MSD	22482-R1MSD	sediment	08/26/13
10	B13-8052	22489-R1	$\downarrow$	8/27/13
11	IDWP			
12				
13	0-5034 / 22481-B1 PB			

**Method:** Semivolatiles (EPA SW 846 Method 8270C)

Validation Area	Yes	No	NA	Findings/Comments
<b>I. Technical holding times</b>				
All technical holding times were met.	/			
Cooler temperature criteria was met.	/			
<b>II. GC/MS Instrument performance check</b>				
Were the DFTPP performance results reviewed and found to be within the specified criteria?	/			
Were all samples analyzed within the 12 hour clock criteria?	/			
<b>III. Initial calibration</b>				
Did the laboratory perform a 5 point calibration prior to sample analysis?	/			
Were all percent relative standard deviations (%RSD) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	/		/	
Was a curve fit used for evaluation?	/	/		
Did the initial calibration meet the curve fit acceptance criteria of $\geq 0.990$ ?	/		/	
Were all percent relative standard deviations (%RSD) $\leq 30\%/15\%$ and relative response factors (RRF) $\geq 0.05$ ?			/	
<b>IV. Continuing calibration</b>				
Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?	/		/	JVG
Were all percent differences (%D) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	.		/	
Were all percent differences (%D) $\leq 20\%$ and relative response factors (RRF) $\geq 0.05$ ?	/		/	
<b>V. Blanks</b>				
Was a method blank associated with every sample in this SDG?	/			
Was a method blank analyzed for each matrix and concentration?	/			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		/		
<b>VI. Surrogate spikes</b>				
Were all surrogate %R within QC limits?	.	/		
If 2 or more base neutral or acid surrogates were outside QC limits, was a reanalysis performed to confirm %R?			/	
If any %R was less than 10 percent, was a reanalysis performed to confirm %R?			/	
<b>VII. Matrix spike/Matrix spike duplicates</b>				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.	/			
Was a MS/MSD analyzed every 20 samples of each matrix?	/			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?		/		
<b>VIII. Laboratory control samples</b>				
Was an LCS analyzed for this SDG?	/			

Validation Area	Yes	No	NA	Findings/Comments
Was an LCS analyzed per extraction batch?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Were the performance evaluation (PE) samples within the acceptance limits?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
X. Internal standards				
Were internal standard area counts within -50% or +100% of the associated calibration standard?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Were retention times within + 30 seconds from the associated calibration standard?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
XI. Target compound identification				
Were relative retention times (RRT's) within + 0.06 RRT units of the standard?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Did compound spectra meet specified EPA "Functional Guidelines" criteria?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were chromatogram peaks verified and accounted for?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
XII. Compound quantitation/CRQLs				
Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
XIII. Tentatively identified compounds (TICs)				
Were the major ions (> 10 percent relative intensity) in the reference spectrum evaluated in sample spectrum?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Were relative intensities of the major ions within $\pm 20\%$ between the sample and the reference spectra?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Did the raw data indicate that the laboratory performed a library search for all required peaks in the chromatograms (samples and blanks)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
XIV. System performance				
System performance was found to be acceptable.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
XV. Overall assessment of data				
Overall assessment of data was found to be acceptable.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
XVI. Field duplicates				
Field duplicate pairs were identified in this SDG.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Target compounds were detected in the field duplicates.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
XVII. Field blanks				
Field blanks were identified in this SDG.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Target compounds were detected in the field blanks.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

LDC #: 33507 B 2C

## VALIDATION FINDINGS WORKSHEET

### Continuing Calibration

Page: 1 of 1

Reviewer: JVG

2nd Reviewer: 

**METHOD:** GC/MS BNA (EPA SW 846 Method 8270C)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y/N/N/A Was a continuing calibration standard analyzed at least once every 12 hours of sample analysis for each instrument?

Y N (N/A) Were percent differences (%D) and relative response factors (RRF) within method criteria for all CCC's and SPCC's ?

Y N (N/A) Were all %D and RRFs within the validation criteria of  $\leq 20$  %D and  $\geq 0.05$  RRF ?

[illegible]



LDC #: 33507 B2C

## VALIDATION FINDINGS WORKSHEET

### Laboratory Control Samples (LCS)

Page: 1 of 1

Reviewer: JN6

2nd Reviewer: AC

**METHOD:** GC/MS BNA (EPA SW 846 Method 8270C)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A

Was a LCS required?

Y N N/A

Were the LCS/LCSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?

[illegible]

LDC #: 33507 p 2 c

## VALIDATION FINDINGS WORKSHEET

Page: 1 of 1

Reviewer: JVG

2nd Reviewer:   A  

**METHOD:** GC/MS BNA (EPA SW 846 Method 8270C)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y	N	N/A	Were all internal standard area counts within -50 to +100 of the associated calibration standard?

Y	N	N/A	Were the retention times of the internal standards within +/- 30 seconds of the retention times of the associated calibration standard?
---	---	-----	---

[illegible]

\* QC limits are advisory

IS1 (DCB) = 1,4-Dichlorobenzene-d4

IS2 (NPT) = Naphthalene-d8

IS3 (ANT) = Acenaphthene-d10

IS4 (PHN) = Phenanthrene-d10

IS5 (CRY) = Chrysene-d12


IS6 (PRY) = Perylene-d12

(No Code)



LDC # 33507B2c

**VALIDATION FINDINGS WORKSHEET**  
**Initial Calibration Calculation Verification**

Page: 1 of 1  
 Reviewer: JVG  
 2nd Reviewer: 

METHOD: GCMS Semivolatiles (EPA SW 846 Method 8270C)

Parameter: Fipronil


Order of regression: Linear

Date	Instrument	Compound	Points	x area ratio	y conc ratio
9-Nov-13	GCMS1	Fipronil	Point 1	0.30800	0.025
			Point 2	0.65300	0.050
			Point 3	0.89428	0.100
			Point 4	2.49629	0.250
			Point 5	12.51529	1.000

Regression Output: Regression Output:			Reported WLR	
Constant	b =	0.00000	b =	0.00000
Std Err of Y Est		0.04		
R Squared	r^2 =	0.99691	r^2 =	0.99540
No. of Observations		6.00		
Degrees of Freedom		4.00		
X Coefficient(s)	m1 =	12.63941	m1 =	12.335779
Std Err of Coef.	0.01			

LDC #: 33507 β 2c

# **VALIDATION FINDINGS WORKSHEET** **Matrix Spike/Matrix Spike Duplicates Results Verification**

Page: 1 of 1  
 Reviewer: JVG  
 2nd Reviewer: 

**METHOD:** GC/MS BNA (EPA SW 846 Method 8270C)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery =  $100 * (SSC - SC) / SA$

Where: SSC = Spiked sample concentration  
 SA = Spike added

SC = Sample concentration

RPD =  $|MSC - MSC| * 2 / (MSC + MSDC)$

MSC = Matrix spike concentration

MSDC = Matrix spike duplicate concentration

MS/MSD samples: 8/9

Compound	Spike Added (ng/g)		Sample Concentration (ng/g)	Spiked Sample Concentration (ng/g)		Matrix Spike		Matrix Spike Duplicate		MS/MSD		
	MS	MSD		-----	MS	MSD	Percent Recovery		Percent Recovery		RPD	
							Reported	Recalc	Reported	Recalc	Reported	Recalc
Phenol Fipronil	143	140.6	0	210.89	165.72	147	147	118	118	✓	✓	
N-Nitroso-di-n-propylamine												
4-Chloro-3-methylphenol												
Acenaphthene												
Pentachlorophenol												
Pyrene												

Comments: Refer to Matrix Spike/Matrix Spike Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 03507 B2C

## VALIDATION FINDINGS WORKSHEET

Laboratory Control Sample/Laboratory Control Sample Duplicates Results VerificationPage: 1 of 1Reviewer: JVG2nd Reviewer: [Signature]**METHOD:** GC/MS BNA (EPA SW 846 Method 8270C)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery =  $100 * (SC/SA)$ 

Where: SSC = Spike concentration  
SA = Spike added

RPD =  $|LCSC - LCSDC| * 2 / (LCSC + LCSDC)$ 

LCSC = Laboratory control sample concentration LCSDC = Laboratory control sample duplicate concentration

LCS/LCSD samples: 22481 - B51/B57

Compound	Spike Added (ng/g)		Spike Concentration (ng/g)		LCS		LCSD		LCS/LCSD	
					Percent Recovery		Percent Recovery		RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc	Reported	Recalc	Reported	Recalculated
Phenol Fipronil	1000	1000	1109.2	1438.64	111	11	144	144	25	25
N-Nitroso-di-n-propylamine										
4-Chloro-3-methylphenol										
Acenaphthene										
Pentachlorophenol										
Pyrene										

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

## VALIDATION FINDINGS WORKSHEET

### Sample Calculation Verification

Page: 1 of 1

Reviewer: JVG

2nd reviewer:                     

**METHOD:** GC/MS BNA (EPA SW 846 Method 8270C)

Y	N	N/A
Y	N	N/A

Were all reported results recalculated and verified for all level IV samples?

Were all recalculated results for detected target compounds agree within 10.0% of the reported results?

$$\text{Concentration} = \frac{(A_v)(I_s)(V_i)(DF)(2.0)}{(A_s)(RRF)(V_o)(V_i)(\%S)}$$

$A_x$  = Area of the characteristic ion (EICP) for the compound to be measured

$A_{is}$  = Area of the characteristic ion (EICP) for the specific internal standard

$I_s$  = Amount of internal standard added in nanograms (ng)

$V_o$  = Volume or weight of sample extract in milliliters (ml) or grams (g).

$V_i$  = Volume of extract injected in microliters (ul)

$V_t$  = Volume of the concentrated extract in microliters (ul)

Df = Dilution Factor.

**%S** = Percent solids, applicable to soil and solid matrices only.

2.0 = Factor of 2 to account for GPC cleanup

**Example:**

Sample I.D. LM :

LCS      Triop      Fipronil

Conc. =  $\frac{(1609420)(1000)}{(917199)}$

---

$(12.335779)$

四

$$= 1109.2 \text{ ng/g}$$

[illegible]

**Laboratory Data Consultants, Inc.**  
**Data Validation Report**

**Project/Site Name:** RHMP B'13

**LDC Report Date:** April 2, 2015

**Parameters:** Polybrominated Diphenyl Ether as Congeners

**Validation Level:** EPA Level IV

**Laboratory:** PHYSIS Environmental Laboratories, Inc.

**Sample Delivery Group (SDG):** 1307002-010

<b>Sample Identification</b>	<b>Laboratory Sample Identification</b>	<b>Matrix</b>	<b>Collection Date</b>
B13-8013	22482-R1	Sediment	8/26/13
B13-8014	22483-R1	Sediment	8/26/13
B13-8028	22484-R1	Sediment	8/26/13
B13-8030	22485-R1	Sediment	8/26/13
B13-8036	22486-R1	Sediment	8/26/13
B13-8038	22487-R1	Sediment	8/26/13
B13-8040	22488-R1	Sediment	8/26/13
B13-8013MS	22482-R1MS	Sediment	8/26/13
B13-8013MSD	22482-R1MSD	Sediment	8/26/13
B13-8052	22489-R1	Sediment	8/27/13
B13-8013DUP	22482-R1DUP	Sediment	8/26/13

## Introduction

This Data Validation Report (DVR) presents data validation findings and results for the associated samples listed on the cover page. Data validation was performed in accordance with Final Quality Assurance Project Plan, Regional Harbor Monitoring Program, San Diego, California (August 2013) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines (CLPNFG) for Superfund Organic Methods Data Review (June 2008). Where specific guidance was not available, the data has been evaluated in a conservative manner consistent with industry standards using professional experience.

The analyses were performed by the following method:

Polybrominated Diphenyl Ether (PBDE) as Congeners by Environmental Protection Agency (EPA) SW 846 Method 8270C-NCI

All sample results were subjected to Level IV evaluation, which is comprised of the QC summary forms as well as the raw data, to confirm sample quantitation and identification.

The following are definitions of the data qualifiers utilized during data validation:

- J (Estimated): The compound or analyte was analyzed for and positively identified by the laboratory; however the reported concentration is estimated due to non-conformances discovered during data validation.
- U (Non-detected): The compound or analyte was analyzed for and positively identified by the laboratory; however the analyte should be considered as not detected at the reported concentration due to the presence of contaminants detected in the associated blank(s).
- UJ (Non-detected estimated): The compound or analyte was reported as not detected by the laboratory; however the reported quantitation/detection limit is estimated due to non-conformances discovered during data validation.
- R (Rejected): The sample results were rejected due to gross non-conformances discovered during data validation. Data qualified as rejected is not usable.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

## Qualification Code Reference

- BC The initial calibration (ICAL) curve did not meet method-specified criteria.
- CH High continuing calibration verification (CCV) recovery. Analytical results may be biased high.
- DL The analyte concentration was between the method detection limit (MDL) and the reporting limit (RL).
- FB The analyte was detected in the sample and its associated field blank and the concentration detected in the sample is less than five times the concentration detected in the blanks.
- H Holding time.
- HD Potential analytical imprecision.
- HL High LCS recovery. Analytical results may be biased high.
- HM High MS recovery. Analytical results may be biased high.
- HP High certified reference material (CRM) recovery. Analytical results may be biased high.
- HV High initial calibration verification (ICV) recovery. Analytical results may be biased high.
- LC Low CCV recovery. Analytical result may be biased low.
- LL Low LCS recovery. Analytical result may be biased low.
- LM Low MS recovery. Analytical result may be biased low.
- LP Low CRM recovery. Analytical result may be biased low.
- LS Low Surrogate recovery. Analytical results may be biased low.
- LV Low ICV recovery. Analytical result may be biased low.
- NC Calibration verification standard concentrations were outside the calibration range.
- NQ There is lack of QC for this analyte.
- RB The analyte was detected in the sample and its associated equipment blank and the concentration detected in the sample is less than five times the concentration detected in the blank.
- TD The dissolved metals concentration is significantly higher than the total metal concentration.
- \*# Unusual problems found with the data. The number following the asterisk (\*) will indicate the section in the validation report where a description of the problem can be found.

## I. Sample Receipt and Technical Holding Times

All samples were received in good condition and cooler temperatures upon receipt met validation criteria.

All technical holding time requirements were met.

## II. GC/MS Instrument Performance Check

A decafluorotriphenylphosphine (DFTPP) tune was performed at 12 hour intervals.

All ion abundance requirements were met.

## III. Initial Calibration and Initial Calibration Verification

An initial calibration was performed as required by the method.

The percent relative standard deviations (%RSD) were less than or equal to 15.0% for all compounds.

In the case where the laboratory used a calibration curve to evaluate the compounds, all coefficients of determination ( $r^2$ ) were greater than or equal to 0.990 with the following exceptions:

Date	Compound	$r^2$	Associated Samples	Flag	A or P
11/19/13	PBDE-028 PBDE-071 PBDE-047 PBDE-066 PBDE-100 PBDE-099 PBDE-138 PBDE-190 PBDE-209	0.98707602 0.98523171 0.97917394 0.98786304 0.98892358 0.98743149 0.98813454 0.97423915 0.97876818	All samples in SDG 1307002-010	J (all detects) UJ (all non-detects)	A

The initial calibration verification standard data were not provided and therefore were not reviewed.

Average relative response factors (RRF) for all compounds were within validation criteria.

## IV. Continuing Calibration

Continuing calibration was performed at the required frequencies with the following exceptions:



Sample	Compound	Finding	Criteria	Flag	A or P
All samples in SDG 1307002-010	All TCL compounds	Continuing calibration was not analyzed before the sample analysis.	Continuing calibration should be analyzed prior to sample analysis	J (all detects) UJ (all non-detects)	P

## V. Laboratory Blanks

Laboratory blanks were analyzed as required by the method. No contaminants were found in the laboratory blanks.

## VI. Field Blanks

No field blanks were identified in this SDG.

## VII. Surrogate Spikes

Surrogates were added to all samples as required by the method. All surrogate recoveries (%R) were within QC limits.

## VIII. Matrix Spike/Matrix Spike Duplicates/Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) sample analysis was performed on an associated project sample. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

Spike ID (Associated Samples)	Compound	MS (%R) (Limits)	MSD (%R) (Limits)	RPD (Limits)	Flag	A or P
B13-8013MS/MSD (B13-8013)	PBDE-066 PBDE-071	- -	- -	42 ( $\leq 25$ ) 40 ( $\leq 25$ )	J (all detects) J (all detects)	A
B13-8013MS/MSD (B13-8013)	PBDE-017 PBDE-028 PBDE-047 PBDE-049 PBDE-085 PBDE-099 PBDE-100 PBDE-138 PBDE-153 PBDE-154	166 (50-150) - - - - - - - - -	- - - - - - - - - -	40 ( $\leq 25$ ) 35 ( $\leq 25$ ) 36 ( $\leq 25$ ) 46 ( $\leq 25$ ) 35 ( $\leq 25$ ) 38 ( $\leq 25$ ) 36 ( $\leq 25$ ) 30 ( $\leq 25$ ) 42 ( $\leq 25$ ) 32 ( $\leq 25$ ) -	NA	-
B13-8013MS/MSD (B13-8013)	PBDE-209	-	47 (50-150)	-	UJ (all non-detects)	A

Although the above listed %R and RPD flagged "NA" demonstrates a high bias, the affected compound in the associated sample was non-detected and did not warrant the qualification of the data.

Duplicate (DUP) sample analyses were reviewed for each matrix as applicable. Results were within QC limits.

## IX. Laboratory Control Samples

Laboratory control samples (LCS) and laboratory control samples duplicates (LCSD) were analyzed as required by the method. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

## X. Field Duplicates

No field duplicates were identified in this SDG.

## XI. Internal Standards

All internal standard areas and retention times were within QC limits with the following exceptions:

Samples	Compound	Finding	Flag	A or P
All samples in SDG 1307002-010	All TCL compounds	The internal standard recoveries could not be verified due to the difference in the extraction procedures between the calibration standards and samples.	J (all detects) UJ (all non-detects)	P

## XII. Compound Quantitation

All compound quantitations were within validation criteria with the following exceptions:

Samples	Compound	Finding	Flag	A or P
All samples in SDG 1307002-010	All TCL compounds	The laboratory indicated that the multiplier used to quantitate results was based on sample dry weight, initial, and final extract volumes. The multiplier cannot be verified since extract volumes were not provided.	J (all detects)	P

All compounds reported below the RL and above the MDL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG 1307002-010	Compound reported below the RL and above the MDL	J (all detects)	A

### **XIII. Target Compound Identifications**

All target compound identifications were within validation criteria.

### **XIV. System Performance**

The system performance was acceptable.

### **XV. Overall Assessment of Data**

The analysis was conducted within all specifications of the method with the exception noted in Section IV. No results were rejected in this SDG.

Due to initial calibration  $r^2$ , continuing calibration %D, MS/MSD %R and RPD, internal standards, and compound quantitation, data were qualified as estimated in eight samples.

The quality control criteria reviewed, as discussed above, were met and are considered acceptable. Sample results that were found to be estimated (J/UJ) are usable for limited purposes only. Based upon the data validation, all other results are considered valid and usable for all purposes.

**RHMP B'13**
**Polybrominated Diphenyl Ether as Congeners - Data Qualification Summary -  
SDG 1307002-010**

Sample	Compound	Flag	A or P	Reason (Code)
B13-8013 B13-8014 B13-8028 B13-8030 B13-8036 B13-8038 B13-8040 B13-8052	PBDE-028 PBDE-071 PBDE-047 PBDE-066 PBDE-100 PBDE-099 PBDE-138 PBDE-190 PBDE-209	J (all detects) UJ (all non-detects)	A	Initial calibration ( $r^2$ ) (BC)
B13-8013 B13-8014 B13-8028 B13-8030 B13-8036 B13-8038 B13-8040 B13-8052	All TCL compounds	J (all detects) UJ (all non-detects)	P	Continuing calibration (NQ)
B13-8013	PBDE-066 PBDE-071	J (all detects) J (all detects)	A	Matrix spike/Matrix spike duplicate (RPD) (HD)
B13-8013	PBDE-209	UJ (all non-detects)	A	Matrix spike/Matrix spike duplicate (%R) (LM)
B13-8013 B13-8014 B13-8028 B13-8030 B13-8036 B13-8038 B13-8040 B13-8052	All TCL compounds	J (all detects) UJ (all non-detects)	P	Internal standards (*XI)
B13-8013 B13-8014 B13-8028 B13-8030 B13-8036 B13-8038 B13-8040 B13-8052	All TCL compounds	J (all detects)	P	Compound quantitation (*XII)
B13-8013 B13-8014 B13-8028 B13-8030 B13-8036 B13-8038 B13-8040 B13-8052	Compound reported below the RL and above the MDL	J (all detects)	A	Compound quantitation (DL)

**RHMP B'13**

**Polybrominated Diphenyl Ether as Congeners - Laboratory Blank Data Qualification Summary - SDG 1307002-010**

No Sample Data Qualified in this SDG

**RHMP B'13**

**Polybrominated Diphenyl Ether as Congeners - Field Blank Data Qualification Summary - SDG 1307002-010**

No Sample Data Qualified in this SDG

**METHOD:** GC/MS PBDE Congeners(EPA SW846 Method 8270C-NCI)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Sample receipt/Technical holding times	A / A	
II.	GC/MS Instrument performance check	A	
III.	Initial calibration/ICV	SW / N	ICAL $\leq 15\%$ r <sup>2</sup> <del>16</del> $\leq 20\%$
IV.	Continuing calibration	SW	$\leq 20\%$
V.	Laboratory Blanks	A	
VI.	Field blanks	N	
VII.	Surrogate spikes	SW / A	
VIII.	Matrix spike/Matrix spike duplicates / LD	SW / SW / A	
IX.	Laboratory control samples	A	LCS / b
X.	Field duplicates	N	
XI.	Internal standards	SW	
XII.	Compound quantitation RL/LOQ/LODs	A	
XIII.	Target compound identification	A	
XIV.	System performance	A	
XV.	Overall assessment of data	A	

Note: A = Acceptable  
N = Not provided/applicable  
SW = See worksheet

ND = No compounds detected  
R = Rinsate  
FB = Field blank

D = Duplicate  
TB = Trip blank  
EB = Equipment blank

SB=Source blank  
OTHER:

	Client ID	Lab ID	Matrix	Date
1	B13-8013	22482-R1	sediment	08/26/13
2	B13-8014	22483-R1	sediment	08/26/13
3	B13-8028	22484-R1	sediment	08/26/13
4	B13-8030	22485-R1	sediment	08/26/13
5	B13-8036	22486-R1	sediment	08/26/13
6	B13-8038	22487-R1	sediment	08/26/13
7	B13-8040	22488-R1	sediment	08/26/13
8	B13-8013MS	22482-R1MS	sediment	08/26/13
9	B13-8013MSD	22482-R1MSD	sediment	08/26/13
10	B13-8052	22489-R1	↓	8/27/13
11	1 Dup			
12				
13	0-5034 / 22481-B1 PB			

**Method:** Semivolatiles (EPA SW 846 Method 8270C)

Validation Area	Yes	No	NA	Findings/Comments
<b>I. Technical holding times</b>				
All technical holding times were met.	/			
Cooler temperature criteria was met.	/			
<b>II. GC/MS Instrument performance check</b>				
Were the DFTPP performance results reviewed and found to be within the specified criteria?	/			
Were all samples analyzed within the 12 hour clock criteria?	/			
<b>III. Initial calibration</b>				
Did the laboratory perform a 5 point calibration prior to sample analysis?	/			
Were all percent relative standard deviations (%RSD) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?			/	
Was a curve fit used for evaluation?	/	/		
Did the initial calibration meet the curve fit acceptance criteria of > 0.990?		/	/	
Were all percent relative standard deviations (%RSD) $\leq$ 30% <u>15%</u> and relative response factors (RRF) $\geq$ 0.05?			/	JVG
<b>IV. Continuing calibration</b>				
Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?	/	/		
Were all percent differences (%D) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	/		/	
Were all percent differences (%D) $\leq$ 20% and relative response factors (RRF) $\geq$ 0.05?		/		
<b>V. Blanks</b>				
Was a method blank associated with every sample in this SDG?	/			
Was a method blank analyzed for each matrix and concentration?	/			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		/		
<b>VI. Surrogate spikes</b>				
Were all surrogate %R within QC limits?	/			
If 2 or more base neutral or acid surrogates were outside QC limits, was a reanalysis performed to confirm %R?			/	
If any %R was less than 10 percent, was a reanalysis performed to confirm %R?			/	
<b>VII. Matrix spike/Matrix spike duplicates</b>				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.	/			
Was a MS/MSD analyzed every 20 samples of each matrix?	/			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?		/		
<b>VIII. Laboratory control samples</b>				
Was an LCS analyzed for this SDG?	/			

Validation Area	Yes	No	NA	Findings/Comments
Was an LCS analyzed per extraction batch?	/			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	/			
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?		/		
Were the performance evaluation (PE) samples within the acceptance limits?			/	
X. Internal standards				
Were internal standard area counts within -50% or +100% of the associated calibration standard?	/			
Were retention times within + 30 seconds from the associated calibration standard?	/			
XI. Target compound identification				
Were relative retention times (RRT's) within + 0.06 RRT units of the standard?	/			
Did compound spectra meet specified EPA "Functional Guidelines" criteria?	/			
Were chromatogram peaks verified and accounted for?	/			
XII. Compound quantitation/CRQLs				
Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound?	/			
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	/			
XIII. Tentatively identified compounds (TICs)				
Were the major ions (> 10 percent relative intensity) in the reference spectrum evaluated in sample spectrum?		/		
Were relative intensities of the major ions within $\pm 20\%$ between the sample and the reference spectra?		/		
Did the raw data indicate that the laboratory performed a library search for all required peaks in the chromatograms (samples and blanks)?			/	
XIV. System performance				
System performance was found to be acceptable.	/			
XV. Overall assessment of data				
Overall assessment of data was found to be acceptable.	/			
XVI. Field duplicates				
Field duplicate pairs were identified in this SDG.		/		
Target compounds were detected in the field duplicates.			/	
XVII. Field blanks				
Field blanks were identified in this SDG.		/		
Target compounds were detected in the field blanks.			/	



## Initial Calibration

Reviewer: JVG

2nd Reviewer:   A  

**METHOD:** GC/MS BNA (EPA SW 846 Method 8270C)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Ⓢ N N/A Did the laboratory conduct an acceptable 5 point calibration prior to sample analysis?

Y N N/A Were percent relative standard deviations (%RSD) and relative response factors (RRF) within method criteria for all CCC's and SPCC's?

Was a curve fit used for evaluation? If yes, what was the acceptance criteria used for evaluation?  $r^2 \geq 0.99$

~~Y/N~~ N/A Did the initial calibration meet the acceptance criteria?

Y (N) N/A Were all %RSDs and RRFs within the validation criteria of  $\leq 30$  %RSD and  $\geq 0.05$  RRF ?

[illegible]

LDC #: 33 507 B2d

## VALIDATION FINDINGS WORKSHEET

### Continuing Calibration

Page: 1 of 1

Reviewer: JVG

2nd Reviewer: AC

**METHOD:** GC/MS BNA (EPA SW 846 Method 8270C)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A

Was a continuing calibration standard analyzed at least once every 12 hours of sample analysis for each instrument?

YCN N/A

Were percent differences (%D) and relative response factors (RRF) within method criteria for all CCC's and SPCC's ?

Y N N/A

Were all %D and RRFs within the validation criteria of  $\leq 20$  %D and  $\geq 0.05$  RRF ?

[illegible]

LDC #: 33507 B2d

# **VALIDATION FINDINGS WORKSHEET** **Matrix Spike/Matrix Spike Duplicates**

Page: 1 of 1Reviewer: JVG2nd Reviewer: ↑**METHOD:** GC/MS BNA (EPA SW 846 Method 8270C)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

☒ N N/A Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.

☒ N N/A Was a MS/MSD analyzed every 20 samples of each matrix?

☒ N N/A Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?

#	Date	MS/MSD ID	Compound	MS %R (Limits)	MSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
		8/9	PBDE 017	166 (50-150)	( )	40 (25)	1 (ND)	J det / A (HM) (HD)
			028	( )	( )	35 ( )		(HD)
			047	( )	( )	36 ( )		
			049	( )	( )	46 ( )	↓	
			066	( )	( )	42 ( )	(Det)	
			071	( )	( )	40 ( )	↓	
			085	( )	( )	35 ( )	(ND)	
			099	( )	( )	38 ( )		
			100	( )	( )	36 ( )		
			138	( )	( )	30 ( )		
			153	( )	( )	42 ( )		
			154	( )	( )	32 (✓)		
			209	( )	47 (50-150)	( )	↓ ↓	J/uI/A (LM)
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		

	Compound	QC Limits (Soil)	RPD (Soil)	QC Limits (Water)	RPD (Water)		Compound	QC Limits (Soil)	RPD (Soil)	QC Limits (Water)	RPD (Water)
A.	Phenol	26-90%	< 35%	12-110%	< 42%	GG.	Acenaphthene	31-137%	< 19%	46-118%	< 31%
C.	2-Chlorophenol	25-102%	< 50%	27-123%	< 40%	II.	4-Nitrophenol	11-114%	< 50%	10-80%	< 50%
E.	1,4-Dichlorobenzene	28-104%	< 27%	36-97%	< 28%	KK.	2,4-Dinitrotoluene	28-89%	< 47%	24-96%	< 38%
J.	N-Nitroso-di-n-propylamine	41-126%	< 38%	41-116%	< 38%	TT.	Pentachlorophenol	17-109%	< 47%	9-103%	< 50%
R.	1,2,4-Trichlorobenzene	38-107%	< 23%	39-98%	< 28%	ZZ.	Pyrene	35-142%	< 36%	26-127%	< 31%
V.	4-Chloro-3-methylphenol	26-103%	< 33%	23-97%	< 42%						

LDC #: 33507 B2d

## VALIDATION FINDINGS WORKSHEET

Page: 1 of 1

Reviewer: JVG

2nd Reviewer:       X      

**METHOD:** GC/MS BNA (EPA SW 846 Method 8270C)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

~~X~~ ~~N~~ ~~NA~~ Were all internal standard area counts within -50 to +100 of the associated calibration standard?

Y/N N/A Were the retention times of the internal standards within +/- 30 seconds of the retention times of the associated calibration standard?

[illegible]

\* QC limits are advisory

IS1 (DCB) = 1,4-Dichlorobenzene-d4

IS2 (NPT) = Naphthalene-d8

IS3 (ANT) = Acenaphthene-d10

IS4 (PHN) = Phenanthrene-d10

IS5 (CRY) = Chrysene-d12

IS6 (PRY) = Perylene-d12

(N<sub>2</sub> code)

LDC # 33507B2d

**VALIDATION FINDINGS WORKSHEET**  
**Initial Calibration Calculation Verification**

Page: 1 of 1  
Reviewer: JVG  
2nd Reviewer:                     

METHOD: GCMS Semivolatiles (EPA SW 846 Method 8270C)

Parameter: PBDE071Order of regression: Linear

Date	Instrument	Compound	Points	x area ratio	y conc ratio
19-Nov-13	GCMS1	PBDE071	Point 1	0.00644	0.010
			Point 2	0.00154	0.025
			Point 3	0.02852	0.050
			Point 4	0.04548	0.075
			Point 5	0.06362	0.100
			Point 6	0.14775	0.200

Regression Output: Regression Output:			Reported WLR	
Constant	b =	0.00000	b =	0.00000
Std Err of Y Est		0.04		
R Squared	r^2 =	0.98862	r^2 =	0.98523
No. of Observations		6.00		
Degrees of Freedom		4.00		
X Coefficient(s)	m1 =	0.77857	m1 =	0.700071
Std Err of Coef.	0.01			

LDC #: 03507 B2d

# **VALIDATION FINDINGS WORKSHEET** **Surrogate Results Verification**

Page: 1 of 1

Reviewer: JVG

2nd reviewer: **METHOD:** GC/MS Semivolatiles (EPA SW 846 Method 8270C)

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS \* 100

Where: SF = Surrogate Found  
SS = Surrogate Spiked

Sample ID: 1

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Nitrobenzene-d5 DFPBDE	500	350.3	70	70	0
2-Fluorobiphenyl FPBDE	↓	464.79	93	93	↓
Terphenyl-d14					
Phenol-d5					
2-Fluorophenol					
2,4,6-Tribromophenol					
2-Chlorophenol-d4					
1,2-Dichlorobenzene-d4					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Nitrobenzene-d5					
2-Fluorobiphenyl					
Terphenyl-d14					
Phenol-d5					
2-Fluorophenol					
2,4,6-Tribromophenol					
2-Chlorophenol-d4					
1,2-Dichlorobenzene-d4					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Nitrobenzene-d5					
2-Fluorobiphenyl					
Terphenyl-d14					
Phenol-d5					
2-Fluorophenol					
2,4,6-Tribromophenol					
2-Chlorophenol-d4					
1,2-Dichlorobenzene-d4					

LDC #: 33507 B2d

# **VALIDATION FINDINGS WORKSHEET** **Matrix Spike/Matrix Spike Duplicates Results Verification**

Page: 1 of 1  
 Reviewer: JVG  
 2nd Reviewer: [Signature]

**METHOD:** GC/MS BNA (EPA SW 846 Method 8270C)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery =  $100 * (SSC - SC) / SA$

Where: SSC = Spiked sample concentration  
 SA = Spike added

SC = Sample concentration

RPD =  $|MSC - MSC| * 2 / (MSC + MSDC)$

MSC = Matrix spike concentration

MSDC = Matrix spike duplicate concentration

MS/MSD samples: 8 / 9

Compound	Spike Added (ng/g)		Sample Concentration (ng/g)	Spiked Sample Concentration (ng/g)		Matrix Spike		Matrix Spike Duplicate		MS/MSD	
	MS	MSD		MS	MSD	Percent Recovery		Percent Recovery		RPD	
						Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Phenol PBDE 071	14.3	14.36	0.25	17.47	11.47	120	120	80	80	40	41
N-Nitroso-di-n-propylamine PBDE 209	71.5	70.3	0	39.93	32.81	56	56	47	47	17	19
4-Chloro-3-methylphenol											
Acenaphthene											
Pentachlorophenol											
Pyrene											

Comments: Refer to Matrix Spike/Matrix Spike Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 33507 B2d

## VALIDATION FINDINGS WORKSHEET

Page: 1 of 1Laboratory Control Sample/Laboratory Control Sample Duplicates Results VerificationReviewer: JVG2nd Reviewer: EL**METHOD:** GC/MS BNA (EPA SW 846 Method 8270C)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery =  $100 * (SC/SA)$ 

Where: SSC = Spike concentration

SA = Spike added

RPD =  $|LCSC - LCSDC| * 2 / (LCSC + LCSDC)$ 

LCSC = Laboratory control sample concentration LCSDC = Laboratory control sample duplicate concentration

LCS/LCSD samples: 22481 - B51 / B52

Compound	Spike Added (ng/g)		Spike Concentration (ng/g)		LCS		LCSD		LCS/LCSD	
					Percent Recovery		Percent Recovery		RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc	Reported	Recalc	Reported	Recalculated
Phenol <u>PBDE071</u>	100	100	106.88	103.59	107	107	104	104	3	3
<del>N-Nitroso-di-n-propylamine</del> <u>PBDE209</u>	500	500	401	374	80	80	75	75	6	6
4-Chloro-3-methylphenol										
Acenaphthene										
Pentachlorophenol										
Pyrene										

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.



## VALIDATION FINDINGS WORKSHEET

### Sample Calculation Verification

**METHOD:** GC/MS BNA (EPA SW 846 Method 8270C)

Y	N	N/A
Y	N	N/A

Were all reported results recalculated and verified for all level IV samples?

Were all recalculated results for detected target compounds agree within 10.0% of the reported results?

$$\text{Concentration} = \frac{(A_u)(I_s)(V_i)(DF)(2.0)}{(A_s)(RRF)(V_o)(V_i)(\%S)}$$

$A_x$  = Area of the characteristic ion (EICP) for the compound to be measured

$A_{is}$  = Area of the characteristic ion (EICP) for the specific internal standard

$I_s$  = Amount of internal standard added in nanograms (ng)

$V_o$  = Volume or weight of sample extract in milliliters (ml) or grams (g).

$V_i$  = Volume of extract injected in microliters (ul)

$V_t$  = Volume of the concentrated extract in microliters (ul)

Df = Dilution Factor.

%S = Percent solids, applicable to soil and solid matrices only.

2.0 = Factor of 2 to account for GPC cleanup

Example:

Sample I.D. 1, PBDE 071

$$\text{Conc.} = \frac{(2220)(1050)(\quad)(\quad)(\quad)(\quad)}{(187853)(\quad)(\quad)(\quad)(\quad)} \times (0.1427)$$

$$= \frac{0.700071}{2.41}$$

[illegible]

**Laboratory Data Consultants, Inc.**  
**Data Validation Report**

**Project/Site Name:** RHMP B'13

**LDC Report Date:** March 27, 2015

**Parameters:** Synthetic Pyrethroid Pesticides

**Validation Level:** EPA Level IV

**Laboratory:** PHYSIS Environmental Laboratories, Inc.

**Sample Delivery Group (SDG):** 1307002-010

<b>Sample Identification</b>	<b>Laboratory Sample Identification</b>	<b>Matrix</b>	<b>Collection Date</b>
B13-8013	22482-R1	Sediment	8/26/13
B13-8014	22483-R1	Sediment	8/26/13
B13-8028	22484-R1	Sediment	8/26/13
B13-8030	22485-R1	Sediment	8/26/13
B13-8036	22486-R1	Sediment	8/26/13
B13-8038	22487-R1	Sediment	8/26/13
B13-8040	22488-R1	Sediment	8/26/13
B13-8014MS	22483-R1MS	Sediment	8/26/13
B13-8014MSD	22483-R1MSD	Sediment	8/26/13
B13-8052	22489-R1	Sediment	8/27/13
B13-8014DUP	22483-R1DUP	Sediment	8/26/13

## Introduction

This Data Validation Report (DVR) presents data validation findings and results for the associated samples listed on the cover page. Data validation was performed in accordance with Final Quality Assurance Project Plan, Regional Harbor Monitoring Program, San Diego, California (August 2013) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines (CLPNFG) for Superfund Organic Methods Data Review (June 2008). Where specific guidance was not available, the data has been evaluated in a conservative manner consistent with industry standards using professional experience.

The analyses were performed by the following method:

Synthetic Pyrethroid Pesticides by Environmental Protection Agency (EPA) SW 846 Method 8270C-NCI

All sample results were subjected to Level IV evaluation, which is comprised of the QC summary forms as well as the raw data, to confirm sample quantitation and identification.

The following are definitions of the data qualifiers utilized during data validation:

- J (Estimated): The compound or analyte was analyzed for and positively identified by the laboratory; however the reported concentration is estimated due to non-conformances discovered during data validation.
- U (Non-detected): The compound or analyte was analyzed for and positively identified by the laboratory; however the analyte should be considered as not detected at the reported concentration due to the presence of contaminants detected in the associated blank(s).
- UU (Non-detected estimated): The compound or analyte was reported as not detected by the laboratory; however the reported quantitation/detection limit is estimated due to non-conformances discovered during data validation.
- R (Rejected): The sample results were rejected due to gross non-conformances discovered during data validation. Data qualified as rejected is not usable.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

## Qualification Code Reference

- BC The initial calibration (ICAL) curve did not meet method-specified criteria.
- CH High continuing calibration verification (CCV) recovery. Analytical results may be biased high.
- DL The analyte concentration was between the method detection limit (MDL) and the reporting limit (RL).
- FB The analyte was detected in the sample and its associated field blank and the concentration detected in the sample is less than five times the concentration detected in the blanks.
- H Holding time.
- HD Potential analytical imprecision.
- HL High LCS recovery. Analytical results may be biased high.
- HM High MS recovery. Analytical results may be biased high.
- HP High certified reference material (CRM) recovery. Analytical results may be biased high.
- HV High initial calibration verification (ICV) recovery. Analytical results may be biased high.
- LC Low CCV recovery. Analytical result may be biased low.
- LL Low LCS recovery. Analytical result may be biased low.
- LM Low MS recovery. Analytical result may be biased low.
- LP Low CRM recovery. Analytical result may be biased low.
- LS Low Surrogate recovery. Analytical results may be biased low.
- LV Low ICV recovery. Analytical result may be biased low.
- NC Calibration verification standard concentrations were outside the calibration range.
- NQ There is lack of QC for this analyte.
- RB The analyte was detected in the sample and its associated equipment blank and the concentration detected in the sample is less than five times the concentration detected in the blank.
- TD The dissolved metals concentration is significantly higher than the total metal concentration.
- \*# Unusual problems found with the data. The number following the asterisk (\*) will indicate the section in the validation report where a description of the problem can be found.

## I. Sample Receipt and Technical Holding Times

All samples were received in good condition and cooler temperatures upon receipt met validation criteria.

All technical holding time requirements were met.

## II. GC/MS Instrument Performance Check

A decafluorotriphenylphosphine (DFTPP) tune was performed at 12 hour intervals.

All ion abundance requirements were met.

## III. Initial Calibration and Initial Calibration Verification

An initial calibration was performed as required by the method with the following exceptions:

Sample	Compound	Finding	Criteria
All samples in SDG 1307002-010	cis-Permethrin trans-Permethrin Deltamethrin	A three point calibration was performed.	A five point calibration is specified by the method.

For compounds where average relative response factors (RRFs) were utilized, percent relative standard deviations (%RSD) were less than or equal to 15.0% for all compounds.

In the case where the laboratory used a calibration curve to evaluate the compounds, all coefficients of determination ( $r^2$ ) were greater than or equal to 0.990 with the following exceptions:

Date	Compound	$r^2$	Associated Samples	Flag	A or P
4/28/14	Allethrin Restmethrin Fenvalerate Esfenvalerate Fluvalinate Deltamethrin/Tralomethrin	0.986275 0.988174 0.981597 0.975702 0.987941 0.960447	All samples in SDG 1307002-010	UU (all non-detects) UU (all non-detects) UU (all non-detects) UU (all non-detects) UU (all non-detects) UU (all non-detects)	A

The initial calibration verification standard data were not provided and therefore were not reviewed.

Average relative response factors (RRF) for all compounds were within validation criteria.

#### IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) were less than or equal to 20.0% for all compounds with the following exceptions:

Date	Standard	Compound	%D	Associated Samples	Affected Compound	Flag	A or P
4/28/14	PYR500ICV	Allethrin Prallethrin Resmethrin Bifenthrin Danitol (Fenpropathrin) Cyhalothrin trans-Permethrin Cyfluthrin-1 Cyfluthrin-2 Cyfluthrin-3 Cyfluthrin-4 Cypermethrin-1 Cypermethrin-2 Cypermethrin-3 Cypermethrin-4 Fenvalerate Esfenvalerate Fluvalinate Deltamethrin/Tralomethrin	118 89 50 79 66 47 45 41 40 68 80 66 59 64 64 64 57 60 60	B13-8013 B13-8014 B13-8028 B13-8030 B13-8036 B13-8038	Allethrin Prallethrin Resmethrin Bifenthrin Danitol (Fenpropathrin) Cyhalothrin trans-Permethrin Cyfluthrin Cypermethrin Fenvalerate Esfenvalerate Fluvalinate Deltamethrin/Tralomethrin	J (all detects) UJ (all non-detects)	A
4/29/14	PYR500CCV	Allethrin Resmethrin Cyhalothrin Cyfluthrin-2 Fluvalinate Deltamethrin/Tralomethrin	22 24 37 23 25 35	B13-8040	Allethrin Resmethrin Cyhalothrin Cyfluthrin Fluvalinate Deltamethrin/Tralomethrin	J (all detects) UJ (all non-detects)	A
4/30/14	PYR500CCV2	Allethrin Prallethrin Resmethrin Cyhalothrin Cyfluthrin-1 Cyfluthrin-2 Cyfluthrin-3 Cypermethrin-1 Cypermethrin-2 Fluvalinate Deltamethrin/Tralomethrin	41 24 39 46 23 26 23 21 21 31 54	B13-8052	Allethrin Prallethrin Resmethrin Cyhalothrin Cyfluthrin Cypermethrin Fluvalinate Deltamethrin/Tralomethrin	J (all detects) UJ (all non-detects)	A

All of the continuing calibration relative response factors (RRF) were within validation criteria.

#### V. Laboratory Blanks

Laboratory blanks were analyzed as required by the method. No contaminants were found in the laboratory blanks.

## VI. Field Blanks

No field blanks were identified in this SDG.

## VII. Surrogate Spikes

Surrogates were added to all samples as required by the method. All surrogate recoveries (%R) were within QC limits.

## VIII. Matrix Spike/Matrix Spike Duplicates/Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) sample analysis was performed on an associated project sample. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

Spike ID (Associated Samples)	Compound	MS (%R) (Limits)	MSD (%R) (Limits)	RPD (Limits)	Flag	A or P
B13-8014MS/MSD (B13-8014)	cis-Permethrin trans-Permethrin	- -	177 (50-150) 167 (50-150)	- -	NA	-

Although the above listed %Rs flagged "NA" demonstrates a high bias, the affected compounds in the associated sample was non-detected and did not warrant the qualification of the data.

Duplicate (DUP) sample analyses were reviewed for each matrix as applicable. Results were within QC limits.

## IX. Laboratory Control Samples

Laboratory control samples (LCS) and laboratory control samples duplicates (LCSD) were analyzed as required by the method. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

## X. Field Duplicates

No field duplicates were identified in this SDG.

## XI. Internal Standards

All internal standard areas and retention times were within QC limits with the following exceptions:

Samples	Compound	Finding	Flag	A or P
All samples in SDG 1307002-010	All TCL compounds	The internal standard recoveries could not be verified due to the difference in the extraction procedures between the calibration standards and samples.	J (all detects) UJ (all non-detects)	P

## **XII. Compound Quantitation**

All compound quantitations were within validation criteria with the following exceptions:

Samples	Compound	Finding	Flag	A or P
All samples in SDG 1307002-010	All TCL compounds	The laboratory indicated that the multiplier used to quantitate results was based on sample dry weight, initial, and final extract volumes. The multiplier cannot be verified since extract volumes were not provided.	J (all detects)	P

All compounds reported below the RL and above the MDL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG 1307002-010	Compound reported below the RL and above the MDL	J (all detects)	A

## **XIII. Target Compound Identifications**

All target compound identifications were within validation criteria.

## **XIV. System Performance**

The system performance was acceptable.

## **XV. Overall Assessment of Data**

The analysis was conducted within all specifications of the method. No results were rejected in this SDG.

Due to initial calibration  $r^2$ , continuing calibration %D, internal standards, and compound quantitation, data were qualified as estimated in eight samples.

The quality control criteria reviewed, as discussed above, were met and are considered acceptable. Sample results that were found to be estimated (J/UJ) are usable for limited purposes only. Based upon the data validation, all other results are considered valid and usable for all purposes.



**RHMP B'13**
**Synthetic Pyrethroid Pesticides - Data Qualification Summary - SDG 1307002-010**

Sample	Compound	Flag	A or P	Reason (Code)
B13-8013 B13-8014 B13-8028 B13-8030 B13-8036 B13-8038 B13-8040 B13-8052	Allethrin Restmethrin Fenvalerate Esfenvalerate Fluvalinate Deltamethrin/tralomethrin	UJ (all non-detects) UJ (all non-detects) UJ (all non-detects) UJ (all non-detects) UJ (all non-detects) UJ (all non-detects)	A	Initial calibration (r <sup>2</sup> ) (BC)
B13-8013 B13-8014 B13-8028 B13-8030 B13-8036 B13-8038	Allethrin Prallethrin Resmethrin Bifenthrin Danitol (Fenpropathrin) Cyhalothrin trans-Permethrin Cyfluthrin Cypermethrin Fenvalerate Esfenvalerate Fluvalinate Deltamethrin/Tralomethrin	J (all detects) UJ (all non-detects)	A	Continuing calibration (%D) (CH)
B13-8040	Allethrin Resmethrin Cyhalothrin Cyfluthrin Fluvalinate Deltamethrin/Tralomethrin	J (all detects) UJ (all non-detects)	A	Continuing calibration (%D) (CH)
B13-8052	Allethrin Prallethrin Resmethrin Cyhalothrin Cyfluthrin Cypermethrin Fluvalinate Deltamethrin/Tralomethrin	J (all detects) UJ (all non-detects)	A	Continuing calibration (%D) (CH)
B13-8013 B13-8014 B13-8028 B13-8030 B13-8036 B13-8038 B13-8040 B13-8052	All TCL compounds	J (all detects) UJ (all non-detects)	P	Internal standards (*XI)
B13-8013 B13-8014 B13-8028 B13-8030 B13-8036 B13-8038 B13-8040 B13-8052	All TCL compounds	J (all detects)	P	Compound quantitation (*XII)

Sample	Compound	Flag	A or P	Reason (Code)
B13-8013 B13-8014 B13-8028 B13-8030 B13-8036 B13-8038 B13-8040 B13-8052	Compound reported below the RL and above the MDL	J (all detects)	P	Compound quantitation (DL)

#### **RHMP B'13**

#### **Synthetic Pyrethroid Pesticides - Laboratory Blank Data Qualification Summary - SDG 1307002-010**

No Sample Data Qualified in this SDG

#### **RHMP B'13**

#### **Synthetic Pyrethroid Pesticides - Field Blank Data Qualification Summary - SDG 1307002-010**

No Sample Data Qualified in this SDG

**METHOD:** GC/MS Synthetic Pyrethroid Pesticides(EPA SW846 Method 8270C-NCI)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Sample receipt/Technical holding times	A / A	
II.	GC/MS Instrument performance check	A	
III.	Initial calibration/ <del>ICV</del>	SW/ <del>SW</del>	ICAL $\leq 15\%$ <del>ICV <math>\leq 20\%</math></del>
IV.	Continuing calibration	SW	$\leq 20\%$
V.	Laboratory Blanks	A	
VI.	Field blanks	N	
VII.	Surrogate spikes	N	
VIII.	Matrix spike/Matrix spike duplicates <u>LD</u>	SW/A	
IX.	Laboratory control samples	A	LCS <u>LD</u>
X.	Field duplicates	N	
XI.	Internal standards	SW	
XII.	Compound quantitation RL/LOQ/LODs	SW	
XIII.	Target compound identification	A	
XIV.	System performance	A	
XV.	Overall assessment of data	A	

Note: A = Acceptable  
N = Not provided/applicable  
SW = See worksheet

ND = No compounds detected  
R = Rinsate  
FB = Field blank

D = Duplicate  
TB = Trip blank  
EB = Equipment blank

SB=Source blank  
OTHER:

	Client ID	Lab ID	Matrix	Date
1	B13-8013	22482-R1	sediment	08/26/13
2	B13-8014	22483-R1	sediment	08/26/13
3	B13-8028	22484-R1	sediment	08/26/13
4	B13-8030	22485-R1	sediment	08/26/13
5	B13-8036	22486-R1	sediment	08/26/13
6	B13-8038	22487-R1	sediment	08/26/13
7	B13-8040	22488-R1	sediment	08/26/13
8	B13-8014MS	22483-R1MS	sediment	08/26/13
9	B13-8014MSD	22483-R1MSD	sediment	08/26/13
10	B13-8052	22489-R1	↓	8/27/13
11	2Dup			
12				
13	0-5136/22481-B1 PB			

**Method:** Semivolatiles (EPA SW 846 Method 8270C)

Validation Area	Yes	No	NA	Findings/Comments
<b>I. Technical holding times</b>				
All technical holding times were met.	/			
Cooler temperature criteria was met.	/			
<b>II. GC/MS Instrument performance check</b>				
Were the DFTPP performance results reviewed and found to be within the specified criteria?	/			
Were all samples analyzed within the 12 hour clock criteria?	/			
<b>III. Initial calibration</b>				
Did the laboratory perform a 5 point calibration prior to sample analysis?	/			
Were all percent relative standard deviations (%RSD) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?		/		
Was a curve fit used for evaluation?	/			
Did the initial calibration meet the curve fit acceptance criteria of $\geq 0.990$ ?		/		
Were all percent relative standard deviations (%RSD) $\leq 30\%/15\%$ and relative response factors (RRF) $\geq 0.05$ ?			/	
<b>IV. Continuing calibration</b>				
Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?	/			
Were all percent differences (%D) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	/			
Were all percent differences (%D) $\leq 20\%$ and relative response factors (RRF) $\geq 0.05$ ?		/		
<b>V. Blanks</b>				
Was a method blank associated with every sample in this SDG?	/			
Was a method blank analyzed for each matrix and concentration?	/		/	
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		/		
<b>VI. Surrogate spikes</b>				
Were all surrogate %R within QC limits?		/		
If 2 or more base neutral or acid surrogates were outside QC limits, was a reanalysis performed to confirm %R?		/		
If any %R was less than 10 percent, was a reanalysis performed to confirm %R?			/	
<b>VII. Matrix spike/Matrix spike duplicates</b>				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.	/			
Was a MS/MSD analyzed every 20 samples of each matrix?	/			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?		/		
<b>VIII. Laboratory control samples</b>				
Was an LCS analyzed for this SDG?	/			

Validation Area	Yes	No	NA	Findings/Comments
Was an LCS analyzed per extraction batch?	/			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	/			
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?		/		
Were the performance evaluation (PE) samples within the acceptance limits?			/	
X. Internal standards				
Were internal standard area counts within -50% or +100% of the associated calibration standard?	/		/	
Were retention times within + 30 seconds from the associated calibration standard?	/			
XI. Target compound identification				
Were relative retention times (RRT's) within + 0.06 RRT units of the standard?	/			
Did compound spectra meet specified EPA "Functional Guidelines" criteria?	/			
Were chromatogram peaks verified and accounted for?	/			
XII. Compound quantitation/CRQLs				
Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound?	/			
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	/			
XIII. Tentatively identified compounds (TICs)				
Were the major ions (> 10 percent relative intensity) in the reference spectrum evaluated in sample spectrum?		/		
Were relative intensities of the major ions within $\pm 20\%$ between the sample and the reference spectra?		/		
Did the raw data indicate that the laboratory performed a library search for all required peaks in the chromatograms (samples and blanks)?			/	
XIV. System performance				
System performance was found to be acceptable.	/			
XV. Overall assessment of data				
Overall assessment of data was found to be acceptable.	/			
XVI. Field duplicates				
Field duplicate pairs were identified in this SDG.		/		
Target compounds were detected in the field duplicates.			/	
XVII. Field blanks				
Field blanks were identified in this SDG.	-	/		
Target compounds were detected in the field blanks.			/	

**METHOD: GC/MS-BNA (EPA SW 846 Method 8270C)**

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y (N) N/A Did the laboratory conduct an acceptable 5 point calibration prior to sample analysis?

Y N N/A Were percent relative standard deviations (%RSD) and relative response factors (RRF) within method criteria for all CCC's and SPCC's?

(Y) N N/A Was a curve fit used for evaluation? If yes, what was the acceptance criteria used for evaluation?  $r^2 \geq 0.99$

Y	N	N/A	Did the initial calibration meet the acceptance criteria?
---	---	-----	---

Y N (N/A) Were all %RSDs and RRFs within the validation criteria of  $\leq 30$  %RSD and  $\geq 0.05$  RRF ?

[illegible]

LDC #: 33507 B2e

# VALIDATION FINDINGS WORKSHEET Continuing Calibration

Page: 1 of 1  
Reviewer: JVG  
2nd Reviewer: R

**METHOD:** GC/MS BNA (EPA SW 846 Method 8270C)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

- ☒ N N/A Was a continuing calibration standard analyzed at least once every 12 hours of sample analysis for each instrument?  
☒ N N/A Were percent differences (%D) and relative response factors (RRF) within method criteria for all CCC's and SPCC's ?  
☒ N N/A Were all %D and RRFs within the validation criteria of  $\leq 20$  %D and  $\geq 0.05$  RRF ?

#	Date	Standard ID	Compound	Finding %D (Limit: $\leq 20.0\%$ )	Finding RRF (Limit: $\geq 0.05$ )	Associated Samples	Qualifications
	4/28/14	PYR 500 ICV (ICV) (CN)	See attached			1-6, Att 22481-B1 PB	J/NJ/A (CH)
	4/29/14	PYR 500 CCV (CCV)				T-9, 11 22481-B1 PB	
	4/30/14	PYR 500 CCV2 (CCV)	✓			10	✓

(ICV = opening CCV)

(opening ccv) ~~REV~~

	Pyr500 ICV			Pyr500 CCV			Pyr500 CCV2			Pyr500 FCV		
	4/28/14 11:22 PM			4/29/14 3:20 PM			4/30/14 10:04 AM			4/30/14 9:17 PM		
	True Value	Measured Value	Drift	True Value	Measured Value	Drift	True Value	Measured Value	Drift	True Value	Measured Value	Drift
Parameter	(ng)	(ng)	Percent	(ng)	(ng)	Percent	(ng)	(ng)	Percent	(ng)	(ng)	Percent
PCB112	400	403	1	400	398	1	400	441	10	400	441	10
PCB198	400	386	4	400	349	13	400	387	3	400	363	9
Allethrin	500	1090 (+)	118	500	610	22	500	706	41	500	619	24
Prallethrin	500	946 (+)	89	500	600	20	500	618	24	500	679	36
Resmethrin	500	752 (+)	50	500	622	24	500	694	39	500	686	37
Bifenthrin	500	896 (+)	79	500	534	7	500	577	15	500	586	17
Danitol (Fenpropathrin)	500	829 (+)	66	500	534	7	500	591	18	500	579	16
Cyhalothrin-lambda	500	734 (+)	47	500	683	37	500	731	46	500	713	43
Permethrin-cis	134	151	13	134	136	2	134	142	6	134	143	7
Permethrin-trans	358	519 (+)	45	358	362	1	358	407	14	358	356	1
Cyfluthrin-1	500	707 (+)	41	500	562	12	500	616	23	500	577	15
Cyfluthrin-2	500	702 (+)	40	500	614	23	500	632	26	500	613	23
Cyfluthrin-3	500	838 (+)	68	500	590	18	500	616	23	500	571	14
Cyfluthrin-4	500	902 (+)	80	500	508	2	500	542	8	500	525	5
Cypermethrin-1	500	828 (+)	66	500	581	16	500	603	21	500	572	14
Cypermethrin-2	500	797 (+)	59	500	584	17	500	606	21	500	585	17
Cypermethrin-3	500	819 (+)	64	500	558	12	500	593	19	500	546	9
Cypermethrin-4	500	818 (+)	64	500	583	17	500	593	19	500	557	11
Fenvalerate	500	819 (+)	64	500	520	4	500	557	11	500	513	3
Esfenvalerate	500	783 (+)	57	500	565	13	500	600	20	500	558	12
Fluvalinate	500	801 (+)	60	500	627	25	500	655	31	500	615	23
Deltamethrin-Tralomethrin	500	798 (+)	60	500	677	35	500	771	54	500	723	45
Average	-	-	56	-	-	15	-	-	23	-	-	16

\* qual Cyfluthrin

\*\* qual Cypermethrin





LDC #: 3350782e

## VALIDATION FINDINGS WORKSHEET

Page: 1 of 1

Reviewer: JVG

2nd Reviewer:   a  

**METHOD:** GC/MS BNA (EPA SW 846 Method 8270C)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y	N	N/A	Were all internal standard area counts within -50 to +100 of the associated calibration standard?
---	---	-----	---

Y	N	N/A	Were the retention times of the internal standards within +/- 30 seconds of the retention times of the associated calibration standard?

[illegible]

\* QC limits are advisory

IS1 (DCB) = 1,4-Dichlorobenzene-d4

IS2 (NPT) = Naphthalene-d8

IS3 (ANT) = Acenaphthene-d10

IS4 (PHN) = Phenanthrene-d10

IS5 (CRY) = Chrysene-d12

IS6 (PRY) = Perylene-d12

(No Code)

LDC #: 33507 B2e

## VALIDATION FINDINGS WORKSHEET

### Compound Quantitation and Reported RLs

Page: 1 of 1  
Reviewer: JVG  
2nd Reviewer: *[Signature]*

**METHOD: GC/MS BNA (EPA SW 846 Method 8270C)**

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

(Y) N N/A Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound?


Y (N) N/A	Were compound quantitation and RLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?
-----------	---

[illegible]

Comments: See sample calculation verification worksheet for recalculations

LDC # 33507B2e

**VALIDATION FINDINGS WORKSHEET**  
**Initial Calibration Calculation Verification**

Page: 1 of 1  
Reviewer: JVG  
2nd Reviewer: 

METHOD: GCMS Pyrethroids (EPA SW 846 Method 8270C)

Parameter: BifenthrinOrder of regression: Linear

Date	Instrument	Compound	Points	x area ratio	y conc ratio
28-Apr-14	Q2	Bifenthrin	Point 1	0.00444	0.0250
			Point 2	0.00638	0.0500
			Point 3	0.01199	0.1000
			Point 4	0.02773	0.2500
			Point 5	0.05468	0.5000
			Point 6	0.11763	1.0000

Regression Output: Regression Output:			Reported WLR	
Constant	b =	0.00000	b =	0.00000
Std Err of Y Est				
R Squared	r^2 =	0.998102	r^2 =	0.99810
No. of Observations		6.00		
Degrees of Freedom		4.00		
X Coefficient(s)	m1 =	0.11587	m1 =	0.115800
Std Err of Coef.	0.01			

**VALIDATION FINDINGS WORKSHEET**  
**Continuing Calibration Calculation Verification**

METHOD: GCMS Pyrethroids (EPA SW 846 Method 8270C)

The percent difference (%D) of the initial calibration average Calibration Factors (CF) and the continuing calibration percent difference (%D) values were recalculated for the compounds identified below using the following calculation:

Where:

Percent difference (%D) =  $100 * (N - C) / N$

N = Initial Calibration Factor or Nominal Amount

C = Calibration Factor from Continuing Calibration Standard or Calculated Amount

#	Standard ID	Calibration Date	Compound (IS)	CCV Conc	Reported Conc	Recalculated Conc	Reported % D	Recalculated %D
1	PRY500icv	4/28/2014	Bifenthrin (2,21,5,5'-TBBP)	500	895.8	1108.6	79.0	121.7
2	PRY500ccv	4/29/2014	Bifenthrin (2,21,5,5'-TBBP)	500	534.0	591.1	7.0	18.2

LDC #: 33507 B2C

# **VALIDATION FINDINGS WORKSHEET** **Matrix Spike/Matrix Spike Duplicates Results Verification**

Page: 1 of 1

Reviewer: JVG

2nd Reviewer:   

**METHOD:** GC/MS <sup>Pyrene</sup> ~~BNA~~ (EPA SW 846 Method 8270C)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

$$\% \text{ Recovery} = 100 * (\text{SSC} - \text{SC}) / \text{SA}$$

Where: SSC = Spiked sample concentration  
SA = Spike added

SC = Sample concentration

$$\text{RPD} = | \text{MSC} - \text{MSD} | * 2 / (\text{MSC} + \text{MSD})$$

MSC = Matrix spike concentration

MSDC = Matrix spike duplicate concentration

MS/MSD samples: 8/9

Compound	Spike Added (ng/g)		Sample Concentration (ng/g)	Spiked Sample Concentration (ng/g)		Matrix Spike		Matrix Spike Duplicate		MS/MSD	
						Percent Recovery		Percent Recovery		RPD	
	MS	MSD		MS	MSD	Reported	Recalc	Reported	Recalc	Reported	Recalc
Phenol											
N-Nitroso-di-n-propylamine											
4-Chloro-3-methylphenol											
Acenaphthene											
Pentachlorophenol											
Pyrene											
Bifenthrin	154.2	159.4	0	191.8	216.94	124	124	136	136	9	6

Comments: Refer to Matrix Spike/Matrix Spike Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 33507 B2e

## VALIDATION FINDINGS WORKSHEET

Page: 1 of 1Laboratory Control Sample/Laboratory Control Sample Duplicates Results VerificationReviewer: JVG  
2nd Reviewer:   pyrethroids

METHOD: GC/MS BNA (EPA SW 846 Method 8270C)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery =  $100 * (SC/SA)$ Where: SSC = Spike concentration  
SA = Spike addedRPD =  $|LCSC - LCSDC| * 2 / (LCSC + LCSDC)$ 

LCSC = Laboratory control sample concentration LCSDC = Laboratory control sample duplicate concentration

LCS/LCSD samples: 22481-BS1/BS2

Compound	Spike Added (ng/g)		Spike Concentration (ng/g)		LCS		LCSD		LCS/LCSD	
					Percent Recovery		Percent Recovery		RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalculated
Phenol										
N-Nitroso-di-n-propylamine										
4-Chloro-3-methylphenol										
Acenaphthene										
Pentachlorophenol										
Pyrene										
Bifenthrin	1000	1000	1069.36	1109.76	107	67	111	111	4	4

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 33,507 B2e

## VALIDATION FINDINGS WORKSHEET

### Sample Calculation Verification

Page: 1 of 1

Reviewer: JVG

2nd reviewer: AA

**METHOD:** GC/MS BNA (EPA SW 846 Method 8270C)

Y	N	N/A
<del>Y</del>	N	N/A

Were all reported results recalculated and verified for all level IV samples?

Were all recalculated results for detected target compounds agree within 10.0% of the reported results?

$$\text{Concentration} = \frac{(A_s)(I_s)(V_t)(DF)(2.0)}{(A_{is})(RRF)(V_o)(V_i)(\%S)}$$

$A_x$  = Area of the characteristic ion (EICP) for the compound to be measured

$A_{is}$  = Area of the characteristic ion (EICP) for the specific internal standard

$I_s$  = Amount of internal standard added in nanograms (ng)

$V_o$  = Volume or weight of sample extract in milliliters (ml) or grams (g).

$V_i$  = Volume of extract injected in microliters (ul)

$V_t$  = Volume of the concentrated extract in microliters (ul)

Df = Dilution Factor.

%S = Percent solids, applicable to soil and solid matrices only.

2.0 = Factor of 2 to account for GPC cleanup

**Example:**

Sample I.D. 1, Permethrin

$$\text{Conc.} = \frac{(25484)(1000)(0.22)}{(270450)(2)} = 0.11587$$

$$= 1.797 \text{ ng/g}$$

[illegible]



## Laboratory Data Consultants, Inc. Data Validation Report

**Project/Site Name:** RHMP B'13

**LDC Report Date:** April 2, 2015

**Parameters:** Chlorinated Pesticides

**Validation Level:** EPA Level IV

**Laboratory:** PHYSIS Environmental Laboratories Inc.

**Sample Delivery Group (SDG):** 1307002-010

Sample Identification	Laboratory Sample Identification	Matrix	Collection Date
B13-8013	22482-R1	Sediment	8/26/13
B13-8014	22483-R1	Sediment	8/26/13
B13-8028	22484-R1	Sediment	8/26/13
B13-8030	22485-R1	Sediment	8/26/13
B13-8036	22486-R1	Sediment	8/26/13
B13-8038	22487-R1	Sediment	8/26/13
B13-8040	22488-R1	Sediment	8/26/13
B13-8013MS	22482-R1MS	Sediment	8/26/13
B13-8013MSD	22482-R1MSD	Sediment	8/26/13
B13-8014MS	22483-R1MS	Sediment	8/26/13
B13-8014MSD	22483-R1MSD	Sediment	8/26/13
B13-8052	22489-R1	Sediment	8/27/13
B13-8014DUP	22483-R1DUP	Sediment	8/26/13

## Introduction

This Data Validation Report (DVR) presents data validation findings and results for the associated samples listed on the cover page. Data validation was performed in accordance with Final Quality Assurance Project Plan, Regional Harbor Monitoring Program, San Diego, California (August 2013) a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines (CLPNFG) for Superfund Organic Methods Data Review (June 2008). Where specific guidance was not available, the data has been evaluated in a conservative manner consistent with industry standards using professional experience.

The analyses were performed by the following method:

Chlorinated Pesticides by Environmental Protection Agency (EPA) SW 846 Method 8270C

All sample results were subjected to Level IV evaluation, which is comprised of the QC summary forms as well as the raw data, to confirm sample quantitation and identification.

The following are definitions of the data qualifiers utilized during data validation:

- J (Estimated): The compound or analyte was analyzed for and positively identified by the laboratory; however the reported concentration is estimated due to non-conformances discovered during data validation.
- U (Non-detected): The compound or analyte was analyzed for and positively identified by the laboratory; however the analyte should be considered as not detected at the reported concentration due to the presence of contaminants detected in the associated blank(s).
- UJ (Non-detected estimated): The compound or analyte was reported as not detected by the laboratory; however the reported quantitation/detection limit is estimated due to non-conformances discovered during data validation.
- R (Rejected): The sample results were rejected due to gross non-conformances discovered during data validation. Data qualified as rejected is not usable.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

## Qualification Code Reference

- BC The initial calibration (ICAL) curve did not meet method-specified criteria.
- CH High continuing calibration verification (CCV) recovery. Analytical results may be biased high.
- DL The analyte concentration was between the method detection limit (MDL) and the reporting limit (RL).
- FB The analyte was detected in the sample and its associated field blank and the concentration detected in the sample is less than five times the concentration detected in the blanks.
- H Holding time.
- HD Potential analytical imprecision.
- HL High LCS recovery. Analytical results may be biased high.
- HM High MS recovery. Analytical results may be biased high.
- HP High certified reference material (CRM) recovery. Analytical results may be biased high.
- HV High initial calibration verification (ICV) recovery. Analytical results may be biased high.
- LC Low CCV recovery. Analytical result may be biased low.
- LL Low LCS recovery. Analytical result may be biased low.
- LM Low MS recovery. Analytical result may be biased low.
- LP Low CRM recovery. Analytical result may be biased low.
- LS Low Surrogate recovery. Analytical results may be biased low.
- LV Low ICV recovery. Analytical result may be biased low.
- NC Calibration verification standard concentrations were outside the calibration range.
- NQ There is lack of QC for this analyte.
- RB The analyte was detected in the sample and its associated equipment blank and the concentration detected in the sample is less than five times the concentration detected in the blank.
- TD The dissolved metals concentration is significantly higher than the total metal concentration.
- \*# Unusual problems found with the data. The number following the asterisk (\*) will indicate the section in the validation report where a description of the problem can be found.

## I. Sample Receipt and Technical Holding Times

All samples were received in good condition and cooler temperatures upon receipt met validation criteria.

All technical holding time requirements were met.

## II. GC Instrument Performance Check

A decafluorotriphenylphosphine (DFTPP) tune was performed at 12 hour intervals.

All ion abundance requirements were met..

## III. Initial Calibration and Initial Calibration Verification

An initial calibration was performed as required by the method.

A curve fit, based on the initial calibration, was established for quantitation. The coefficient of determination ( $r^2$ ) was greater than or equal to 0.990 with the following exceptions:

Date	Compound	$r^2$	Associated Samples	Flag	A or P
5/2/14- 5/3/14	Endrin aldehyde	0.986169	All samples in SDG 1307002-010	UJ (all non-detects)	A

The percent differences (%D) of the initial calibration verification (ICV) standard were less than or equal to 20.0% for all compounds with the following exceptions:

Date	Standard	Compound	%D	Associated Samples	Flag	A or P
5/3/14	OCBP500_PC B100ICV	alpha-BHC beta-BHC gamma-BHC trans-Nonachlor Dieldrin Endosulfan II 2,4'-DDT cis-Nonachlor Endosulfan sulfate 4,4'-DDT Endrin ketone Methoxychlor Mirex	22 67 24 24 24 30 63 26 29 85 60 60 46	All samples in SDG 1307002-010	J (all detects) UJ (all non-detects)	A

## IV. Continuing Calibration

Continuing calibration was performed at required frequencies.

The percent differences (%D) were less than or equal to 20.0% for all compounds with

the following exceptions:

Date	Standard	Compound	%D	Associated Samples	Flag	A or P
5/10/14	OCP500CCV	Heptachlor Oxychlorane Endrin aldehyde 4,4'-DDT Methoxychlor Dicofol	22 21 34 32 29 28	B13-8036 B13-8038 B13-8040 B13-8052	UJ (all non-detects) UJ (all non-detects) UJ (all non-detects) UJ (all non-detects) UJ (all non-detects) UJ (all non-detects)	A
5/9/14	OCP500FCV	Endrin	37	B13-8013 B13-8014 B13-8028 B13-8030	UJ (all non-detects)	A

## V. Laboratory Blanks

Laboratory blanks were analyzed as required by the method. No contaminants were found in the laboratory blanks.

## VI. Field Blanks

No field blanks were identified in this SDG.

## VII. Surrogate Spikes/Internal Standards

Surrogates were added to all samples as required by the method. All surrogate recoveries (%R) were within QC limits.

All internal standard areas and retention times were within QC limits with the following exceptions:

Samples	Compound	Finding	Flag	A or P
All samples in SDG 1307002-010	All TCL compounds	The internal standard recoveries could not be verified due to the difference in the extraction procedures between the calibration standards and samples.	J (all detects) UJ (all non-detects)	P

## VIII. Matrix Spike/Matrix Spike Duplicates/Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) sample analysis was performed on an associated project sample. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

Spike ID (Associated Samples)	Compound	MS (%R) (Limits)	MSD (%R) (Limits)	RPD (Limits)	Flag	A or P
B13-8014MS/MSD (B13-8014)	Endosulfan I	48 (50-150)	40 (50-150)	-	UJ (all non-detects)	A
B13-8013MS/MSD (B13-8013)	Toxaphene	-	-	30 ( $\leq 25$ )	NA	-

Although the above listed RPD flagged "NA" demonstrates a high bias, the affected compound in the associated sample was non-detected and did not warrant the qualification of the data.

Duplicate (DUP) sample analyses were reviewed for each matrix as applicable. Results were within QC limits.

## IX. Laboratory Control Samples/Standard Reference Material

Laboratory control samples (LCS) and laboratory control samples duplicates (LCSD) were analyzed as required by the method. Percent recoveries (%R) were within QC limits with the following exceptions:

LCS ID (Associated Samples)	Compound	LCS %R (Limits)	LCSD %R (Limits)	Flag	A or P
22481-BS1/BS2 (All samples in SDG 1307002-010)	Endosulfan I Endosulfan II	46 (70-130) 60 (70-130)	51 (70-130) 66 (70-130)	UJ (all non-detects) UJ (all non-detects)	P
22481-BS1/BS2 (All samples in SDG 1307002-010)	Endrin aldehyde	4 (70-130)	26 (70-130)	R (all non-detects)	P
22481-BS1/BS2 (All samples in SDG 1307002-010)	o,p'-DDD	-	141 (70-130)	NA	-

Although the above listed %R flagged "NA" demonstrate a high bias, the affected compound in the associated samples were non-detected and did not warrant the qualification of the data.

Relative percent differences (RPD) were within QC limits with the following exceptions:

LCS ID (Associated Samples)	Compound	RPD (Limits)	Flag	A or P
22481-BS1/BS2 (All samples in SDG 1307002-010)	Endrin aldehyde	147 ( $\leq 25$ )	R (all non-detects)	P

Standard reference material (SRM) results were within QC limits with the following exceptions:

SRM ID (Associated Samples)	Compound	%R (Limits)	Flag	A or P
SRM-1944 (All samples in SDG 1307002-010)	2,4'-DDE	173 (57-147)	NA	-

Although the above listed %R flagged "NA" demonstrate a high bias, the affected compound in the associated samples was non-detected and did not warrant the qualification of the data.

### X. Field Duplicates

No field duplicates were identified in this SDG.

### XI. Compound Quantitation

All compound quantitations were within validation criteria with the following exceptions:

Samples	Compound	Finding	Flag	A or P
All samples in SDG 1307002-010	All TCL compounds	The laboratory indicated that the multiplier used to quantitate results was based on sample dry weight, initial, and final extract volumes. The multiplier cannot be verified since extract volumes were not provided.	J (all detects)	P

All compounds reported below the RL and above the MDL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG 1307002-010	Compound reported below the RL and above the MDL	J (all detects)	A

### XII. Target Compound Identification

All target compound identifications met validation criteria.

### XIII. System Performance

The system performance was acceptable.

#### **XIV. Overall Assessment of Data**

The analysis was conducted within all specifications of the method.

Due to problems with the LCS %R and RPD, data were rejected in eight samples.

Due to initial calibration  $r^2$ , continuing calibration %D, internal standards, MS/MSD %R, LCS/LCSD %R, and compound quantitation, data were qualified as estimated in eight samples.

The quality control criteria reviewed, other than those discussed above, were met and are considered acceptable. Sample results that were found to be rejected (R) are unusable for all purposes. Sample results that were found to be estimated (J/UJ) are usable for limited purposes only. Based upon the data validation all other results are considered valid and usable for all purposes.



**RHMP B'13**
**Chlorinated Pesticides - Data Qualification Summary - SDG 1307002-010**

Sample	Compound	Flag	A or P	Reason (Code)
B13-8013 B13-8014 B13-8028 B13-8030 B13-8036 B13-8038 B13-8040 B13-8052	Endrin aldehyde	UJ (all non-detects)	A	Initial calibration ( $r^2$ ) (BC)
B13-8013 B13-8014 B13-8028 B13-8030 B13-8036 B13-8038 B13-8040 B13-8052	beta-BHC	J (all detects) UJ (all non-detects)	A	Initial calibration verification (%R) (HV)
B13-8013 B13-8014 B13-8028 B13-8030 B13-8036 B13-8038 B13-8040 B13-8052	alpha-BHC gamma-BHC trans-Nonachlor Dieldrin Endosulfan II 2,4'-DDT cis-Nonachlor Endosulfan sulfate 4,4'-DDT Endrin ketone Methoxychlor Mirex	J (all detects) UJ (all non-detects)	A	Initial calibration verification (%R) (LV)
B13-8036 B13-8038 B13-8040 B13-8052	Heptachlor Oxychlorane Endrin aldehyde 4,4'-DDT Methoxychlor Dicofol	UJ (all non-detects) UJ (all non-detects) UJ (all non-detects) UJ (all non-detects) UJ (all non-detects) UJ (all non-detects)	A	Continuing calibration (%D) (CH)
B13-8013 B13-8014 B13-8028 B13-8030	Endrin	UJ (all non-detects)	A	Continuing calibration (%D) (CH)
B13-8013 B13-8014 B13-8028 B13-8030 B13-8036 B13-8038 B13-8040 B13-8052	All TCL compounds	J (all detects) UJ (all non-detects)	P	Internal standards (*VII)
B13-8014	Endosulfan I	UJ (all non-detects)	A	Matrix spike/Matrix spike duplicate (%R) (LM)

Sample	Compound	Flag	A or P	Reason (Code)
B13-8013 B13-8014 B13-8028 B13-8030 B13-8036 B13-8038 B13-8040 B13-8052	Endosulfan I Endosulfan II	UJ (all non-detects) UJ (all non-detects)	P	Laboratory control samples (%R) (LL)
B13-8013 B13-8014 B13-8028 B13-8030 B13-8036 B13-8038 B13-8040 B13-8052	Endrin aldehyde	R (all non-detects)	P	Laboratory control samples (%R)(RPD) (HL)(HP)
B13-8013 B13-8014 B13-8028 B13-8030 B13-8036 B13-8038 B13-8040 B13-8052	All TCL compounds	J (all detects)	P	Compound quantitation (*XI)
B13-8013 B13-8014 B13-8028 B13-8030 B13-8036 B13-8038 B13-8040 B13-8052	Compound reported below the RL and above the MDL	J (all detects)	A	Compound quantitation (DL)

#### **RHMP B'13**

#### **Chlorinated Pesticides - Laboratory Blank Data Qualification Summary - SDG 1307002-010**

No Sample Data Qualified in this SDG

#### **RHMP B'13**

#### **Chlorinated Pesticides - Field Blank Data Qualification Summary - SDG 1307002-010**

No Sample Data Qualified in this SDG

LDC #: 33507B3a

**VALIDATION COMPLETENESS WORKSHEET**

Date: 1/21/15

SDG #: 1307002-010

Level IV

Page: 1 of 1

Laboratory: PHYSIS Environmental Laboratories Inc.

Reviewer: SVB

2nd Reviewer: A

**METHOD:** GC Chlorinated Pesticides (EPA SW846 Method 8270C)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Sample receipt/Technical holding times	A, A	
II.	GC Instrument Performance Check	A	
III.	Initial calibration/ICV	SW, SW	1 CAL $\leq 15\%$ r <sup>2</sup> 1 CV $\leq 20\%$
IV.	Continuing calibration	SW	CV $\leq 20\%$
V.	Laboratory Blanks	A	
VI.	Field blanks	N	
VII.	Surrogate spikes / IS	A/SW	
VIII.	Matrix spike/Matrix spike duplicates / LD	SW/A	
IX.	Laboratory control samples / SRM	SW	UCS 1b
X.	Field duplicates	N	
XI.	Compound quantitation/RL/LOQ/LODs	SA	add Text for results not verified - Not A
XII.	Target compound identification	A	
XIII.	Overall assessment of data	A	

Note: A = Acceptable  
N = Not provided/applicable  
SW = See worksheet

ND = No compounds detected  
R = Rinsate  
FB = Field blank

D = Duplicate  
TB = Trip blank  
EB = Equipment blank

SB=Source blank  
OTHER:

	Client ID	Lab ID	Matrix	Date
1	B13-8013	22482-R1	sediment	08/26/13
2	B13-8014	22483-R1	sediment	08/26/13
3	B13-8028	22484-R1	sediment	08/26/13
4	B13-8030	22485-R1	sediment	08/26/13
5	B13-8036	22486-R1	sediment	08/26/13
6	B13-8038	22487-R1	sediment	08/26/13
7	B13-8040	22488-R1	sediment	08/26/13
8	B13-8013MS	22482-R1MS	sediment	08/26/13
9	B13-8013MSD	22482-R1MSD	sediment	08/26/13
10	B13-8014MS	22483-R1MS	sediment	08/26/13
11	B13-8014MSD	22483-R1MSD	sediment	08/26/13
12	B13-8052	22489-R1	↓	8/27/13
13	2 Dup			
14				
15	0-5136/22481-B1 PB			
16	0-5034 (Toxaphene only)			

*Pest*  
**Method: Semivolatiles (EPA SW 846 Method 8270C)**

Validation Area	Yes	No	NA	Findings/Comments
<b>I. Technical holding times</b>				
All technical holding times were met.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Cooler temperature criteria was met.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>II. GC/MS Instrument performance check</b>				
Were the DFTPP performance results reviewed and found to be within the specified criteria?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were all samples analyzed within the 12 hour clock criteria?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>III. Initial calibration</b>				
Did the laboratory perform a 5 point calibration prior to sample analysis?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were all percent relative standard deviations (%RSD) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Was a curve fit used for evaluation?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Did the initial calibration meet the curve fit acceptance criteria of $\geq 0.990$ ?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Were all percent relative standard deviations (%RSD) $\leq 30\%/15\%$ and relative response factors (RRF) $\geq 0.05$ ?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
<b>IV. Continuing calibration</b>				
Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were all percent differences (%D) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Were all percent differences (%D) $\leq 20\%$ and relative response factors (RRF) $\geq 0.05$ ?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
<b>V. Blanks</b>				
Was a method blank associated with every sample in this SDG?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was a method blank analyzed for each matrix and concentration?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
<b>VI. Surrogate spikes</b>				
Were all surrogate %R within QC limits?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
If 2 or more base neutral or acid surrogates were outside QC limits, was a reanalysis performed to confirm %R?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
If any %R was less than 10 percent, was a reanalysis performed to confirm %R?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
<b>VII. Matrix spike/Matrix spike duplicates</b>				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was a MS/MSD analyzed every 20 samples of each matrix?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
<b>VIII. Laboratory control samples</b>				
Was an LCS analyzed for this SDG?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Validation Area	Yes	No	NA	Findings/Comments
Was an LCS analyzed per extraction batch?	/			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?		/		
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?		/		
Were the performance evaluation (PE) samples within the acceptance limits?			/	
X. Internal standards				
Were internal standard area counts within -50% or +100% of the associated calibration standard?	/			
Were retention times within + 30 seconds from the associated calibration standard?	/			
XI. Target compound identification				
Were relative retention times (RRT's) within + 0.06 RRT units of the standard?	/			
Did compound spectra meet specified EPA "Functional Guidelines" criteria?	/			
Were chromatogram peaks verified and accounted for?	/			
XII. Compound quantitation/CRQLs				
Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound?	/			
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	/			
XIII. Tentatively identified compounds (TICs)				
Were the major ions (> 10 percent relative intensity) in the reference spectrum evaluated in sample spectrum?		/		
Were relative intensities of the major ions within $\pm 20\%$ between the sample and the reference spectra?		/		
Did the raw data indicate that the laboratory performed a library search for all required peaks in the chromatograms (samples and blanks)?			/	
XIV. System performance				
System performance was found to be acceptable.	/			
XV. Overall assessment of data				
Overall assessment of data was found to be acceptable.	/			
XVI. Field duplicates				
Field duplicate pairs were identified in this SDG.		/		
Target compounds were detected in the field duplicates.			/	
XVII. Field blanks				
Field blanks were identified in this SDG.	.	/		
Target compounds were detected in the field blanks.			/	

## VALIDATION FINDINGS WORKSHEET

**METHOD:** Pesticide/PCBs (EPASW 846 Method 8081/8082)

A. alpha-BHC	I. Dieldrin	Q. Endrin ketone	Y. Aroclor-1242	GG. Chlordane
B. beta-BHC	J. 4,4'-DDE	R. Endrin aldehyde	Z. Aroclor-1248	HH. Chlordane (Technical)
C. delta-BHC	K. Endrin	S. alpha-Chlordane	AA. Aroclor-1254	II. Aroclor 1262
D. gamma-BHC	L. Endosulfan II	T. gamma-Chlordane	BB. Aroclor-1260	JJ. Aroclor 1268
E. Heptachlor	M. 4,4'-DDD	U. Toxaphene	CC. 2,4'-DDD	KK. Oxychlordane
F. Aldrin	N. Endosulfan sulfate	V. Aroclor-1016	DD. 2,4'-DDE	LL. trans-Nonachlor
G. Heptachlor epoxide	O. 4,4'-DDT	W. Aroclor-1221	EE. 2,4'-DDT	MM. cis-Nonachlor
H. Endosulfan I	P. Methoxychlor	X. Aroclor-1232	FF. Hexachlorobenzene	NN. Dico fol

OO Perthane  
PP Mirex

Notes: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

LDC #: 33507

## VALIDATION FINDINGS WORKSHEET

Page: \ of \

Reviewer: JVG

2nd Reviewer:   X  

**METHOD:** GC/MS <sup>Pesticides</sup> ~~BNA~~ (EPA SW 846 Method 8270C)

## Initial Calibration

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

⑤ Y N N/A Did the laboratory conduct an acceptable 5 point calibration prior to sample analysis?

Y/N/N/A Were percent relative standard deviations (%RSD) and relative response factors (RRF) within method criteria for all CCC's and SPCC's?

Y N N/A Was a curve fit used for evaluation? If yes, what was the acceptance criteria used for evaluation?  $\geq 0.99$

Y/N/N/A Did the initial calibration meet the acceptance criteria?

Y N **N/A** Were all %RSDs and RRFs within the validation criteria of  $\leq 30$  %RSD and  $\geq 0.05$  RRF ?

[illegible]

LDC #: 33507 B3a

## VALIDATION FINDINGS WORKSHEET

### Initial Calibration Verification

Page: 1 of     

Reviewer: JVG

2nd Reviewer: AR

**METHOD:** GC/MS <sup>Pest</sup> ~~BNA~~ (EPA SW 846 Method 8270C)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

(Y) N N/A Was an initial calibration verification standard analyzed after each ICAL for each instrument?

Y N N/A Were all %D within the validation criteria of  $\leq 20$  %D ?

[illegible]



LDC #: 33507 B7a

## VALIDATION FINDINGS WORKSHEET

### Continuing Calibration

Page: 1 of 1

Reviewer: JVG

2nd Reviewer: M

Pest

**METHOD: GC/MS BNA (EPA SW 846 Method 8270C)**

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

N N/A Was a continuing calibration standard analyzed at least once every 12 hours of sample analysis for each instrument?

Y N N/A Were percent differences (%D) and relative response factors (RRF) within method criteria for all CCC's and SPCC's ?

Y (N) N/A	Were all %D and RRFs within the validation criteria of $\leq 20$ %D and $\geq 0.05$ RRF ?
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[illegible]



LDC #: 33507 B3a

## VALIDATION FINDINGS WORKSHEET

### Laboratory Control Samples (LCS)

Page: \ of \

Reviewer: JVL

2nd Reviewer: AC

Peat

**METHOD: GC/MS-BNA (EPA SW 846 Method 8270C)**

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A

Was a LCS required?

Y N N/A

Were the LCS/LCSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?

[illegible]

LDC #: 33507 B3a

## VALIDATION FINDINGS WORKSHEET

Page: 1 of 1  
Reviewer: JVG  
2nd Reviewer: sc

**METHOD:** GC/MS BNA (EPA SW 846 Method 8270C)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were all internal standard area counts within -50 to +100 of the associated calibration standard?

Y N N/A Were the retention times of the internal standards within +/- 30 seconds of the retention times of the associated calibration standard?

[illegible]

\* QC limits are advisory

IS1 (DCB) = 1,4-Dichlorobenzene-d4

IS2 (NPT) = Naphthalene-d8

IS3 (ANT) = Acenaphthene-d10

IS4 (PHN) = Phenanthrene-d10

IS5 (CRY) = Chrysene-d12

IS6 (PRY) = Perylene-d12

(Nr code)

LDC # 33507B3a**VALIDATION FINDINGS WORKSHEET**  
**Initial Calibration Calculation Verification**Page: 2 of 2  
Reviewer: JVG  
2nd Reviewer: 7

METHOD: GCMS Pesticides (EPA SW 846 Method 8270C)


Parameter: g-BHCOrder of regression: Linear

Date	Instrument	Compound	Points	x area ratio	y conc ratio
5/02-03/14	GCMS3	g-BHC	Point 1	0.00308	0.0250
			Point 2	0.00704	0.0500
			Point 3	0.01555	0.1000
			Point 4	0.04425	0.2500
			Point 5	0.08838	0.5000
			Point 6	0.19071	1.0000

Regression Output: Regression Output:			Reported WLR	
Constant	b =	0.00000	b =	0.00000
Std Err of Y Est		0.04		
R Squared	r^2 =	0.99901	r^2 =	0.99914
No. of Observations		6.00		
Degrees of Freedom		4.00		
X Coefficient(s)	m1 =	0.19205	m1 =	0.1844
Std Err of Coef.	0.01			

LDC # 33507B3a

**VALIDATION FINDINGS WORKSHEET**  
**Initial Calibration Calculation Verification**

Page: 2 of 2  
 Reviewer: JVG  
 2nd Reviewer: 

METHOD: GCMS Pesticides (EPA SW 846 Method 8270C)

Parameter: 4,4'-DDEOrder of regression: Linear

Date	Instrument	Compound	Points	x area ratio	y conc ratio
5/02-03/14	GCMS3	4,4'-DDE	Point 1	0.08071	0.0250
			Point 2	0.16286	0.0500
			Point 3	0.35070	0.1000
			Point 4	0.91839	0.2500
			Point 5	1.90911	0.5000
			Point 6	3.95391	1.0000

Regression Output: Regression Output:			Reported WLR	
Constant	b =	0.00000	b =	0.00000
Std Err of Y Est		0.04		
R Squared	r^2 =	0.99970	r^2 =	0.99972
No. of Observations		6.00		
Degrees of Freedom		4.00		
X Coefficient(s)	m1 =	3.97860	m1 =	<del>3.9908</del> 3.908
Std Err of Coef.	0.01			

LDC #: 33507bra

# **VALIDATION FINDINGS WORKSHEET** **Surrogate Results Verification**

Page: 1 of 1Reviewer: JVG2nd reviewer: A**METHOD:** GC/MS Semivolatiles (EPA SW 846 Method 8270C)

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS \* 100

Where: SF = Surrogate Found  
SS = Surrogate Spiked

Sample ID: \_\_\_\_\_

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Nitrobenzene-d5 TCMX	400	372.47	93	93	0
2-Fluorobiphenyl PCB 030		374.71	94	94	1
Terphenyl-d14 112		381.56	95	95	
Phenol-d5 198		375.55	94	94	
2-Fluorophenol					
2,4,6-Tribromophenol					
2-Chlorophenol-d4					
1,2-Dichlorobenzene-d4					

Sample ID: \_\_\_\_\_

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Nitrobenzene-d5					
2-Fluorobiphenyl					
Terphenyl-d14					
Phenol-d5					
2-Fluorophenol					
2,4,6-Tribromophenol					
2-Chlorophenol-d4					
1,2-Dichlorobenzene-d4					

Sample ID: \_\_\_\_\_

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Nitrobenzene-d5					
2-Fluorobiphenyl					
Terphenyl-d14					
Phenol-d5					
2-Fluorophenol					
2,4,6-Tribromophenol					
2-Chlorophenol-d4					
1,2-Dichlorobenzene-d4					

LDC #: 33507 B3w

# **VALIDATION FINDINGS WORKSHEET** **Matrix Spike/Matrix Spike Duplicates Results Verification**

Page: 1 of 1  
 Reviewer: JVG  
 2nd Reviewer: R

**METHOD:** GC/MS BNA (EPA SW 846 Method 8270C)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery =  $100 * (SSC - SC) / SA$

Where: SSC = Spiked sample concentration  
 SA = Spike added

SC = Sample concentration

RPD =  $|MSC - MSC| * 2 / (MSC + MSDC)$

MSC = Matrix spike concentration

MSDC = Matrix spike duplicate concentration

MS/MSD samples: 10 / 11

Compound	Spike Added (ng/g)		Sample Concentration (ng/g)	Spiked Sample Concentration (ng/g)		Matrix Spike		Matrix Spike Duplicate		MS/MSD		
	MS	MSD		-----	MS	MSD	Percent Recovery		Percent Recovery		RPD	
							Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Phenol 9-BHC	154.2	159.4	0	175.23	182.53	114	114	115	115	1	1	
N-Nitroso-di-n-propylamine 4,4'-DDE	↓	↓	↓	143.48	149.62	93	93	94	94	1	1	
4-Chloro-3-methylphenol												
Acenaphthene												
Pentachlorophenol												
Pyrene												

Comments: Refer to Matrix Spike/Matrix Spike Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.



LDC #: 3757B39

## VALIDATION FINDINGS WORKSHEET

## Laboratory Control Sample/Laboratory Control Sample Duplicates Results Verification

Page: 1 of 1Reviewer: JVG2nd Reviewer: [Signature]

METHOD: GC/MS BNA (EPA SW 846 Method 8270C)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery =  $100 * (SC/SA)$ 

Where: SSC = Spike concentration  
SA = Spike added

RPD =  $|LCSC - LCSDC| * 2 / (LCSC + LCSDC)$ 

LCSC = Laboratory control sample concentration LCSDC = Laboratory control sample duplicate concentration

LCS/LCSD samples: 22 481 - BSI/BSD

Compound	Spike Added (ng/g)		Spike Concentration (ng/g)		LCS		LCSD		LCS/LCSD	
					Percent Recovery		Percent Recovery		RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc	Reported	Recalc	Reported	Recalculated
Phenol <u>g-BHC</u>	1000		1104.62	1126.67	110	110	113	113	3	3
N-Nitroso-di-n-propylamine <u>g-BDE</u>	↓		905.8	900.88	91	91	90	90	1	1
4-Chloro-3-methylphenol										
Acenaphthene										
Pentachlorophenol										
Pyrene										

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

## VALIDATION FINDINGS WORKSHEET

### Sample Calculation Verification

METHOD: GC/MS <sup>Pest</sup> ~~BNA~~ (EPA SW 846 Method 8270C)

## Laboratory Data Consultants, Inc. Data Validation Report

**Project/Site Name:** RHMP B'13

**LDC Report Date:** March 30, 2015

**Parameters:** Polychlorinated Biphenyls as Aroclors

**Validation Level:** EPA Level II

**Laboratory:** PHYSIS Environmental Laboratories, Inc.

**Sample Delivery Group (SDG):** 1307002-010

Sample Identification	Laboratory Sample Identification	Matrix	Collection Date
B13-8013	22482-R1	Sediment	8/26/13
B13-8014	22483-R1	Sediment	8/26/13
B13-8028	22484-R1	Sediment	8/26/13
B13-8030	22485-R1	Sediment	8/26/13
B13-8036	22486-R1	Sediment	8/26/13
B13-8038	22487-R1	Sediment	8/26/13
B13-8040	22488-R1	Sediment	8/26/13
B13-8052	22489-R1	Sediment	8/27/13
B13-8014DUP	22483-R1DUP	Sediment	8/26/13

## Introduction

This Data Validation Report (DVR) presents data validation findings and results for the associated samples listed on the cover page. Data validation was performed in accordance with Final Quality Assurance Project Plan, Regional Harbor Monitoring Program, San Diego, California (August 2013) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines (CLPNFG) for Superfund Organic Methods Data Review (June 2008). Where specific guidance was not available, the data has been evaluated in a conservative manner consistent with industry standards using professional experience.

The analyses were performed by the following method:

Polychlorinated Biphenyls (PCB) as Aroclors by Environmental Protection Agency (EPA) SW 846 Method 8270C

All sample results were subjected to Level IV evaluation, which is comprised of the QC summary forms as well as the raw data, to confirm sample quantitation and identification.

The following are definitions of the data qualifiers utilized during data validation:

- J (Estimated): The compound or analyte was analyzed for and positively identified by the laboratory; however the reported concentration is estimated due to non-conformances discovered during data validation.
- U (Non-detected): The compound or analyte was analyzed for and positively identified by the laboratory; however the analyte should be considered as not detected at the reported concentration due to the presence of contaminants detected in the associated blank(s).
- UJ (Non-detected estimated): The compound or analyte was reported as not detected by the laboratory; however the reported quantitation/detection limit is estimated due to non-conformances discovered during data validation.
- R (Rejected): The sample results were rejected due to gross non-conformances discovered during data validation. Data qualified as rejected is not usable.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

## Qualification Code Reference

- BC The initial calibration (ICAL) curve did not meet method-specified criteria.
- CH High continuing calibration verification (CCV) recovery. Analytical results may be biased high.
- DL The analyte concentration was between the method detection limit (MDL) and the reporting limit (RL).
- FB The analyte was detected in the sample and its associated field blank and the concentration detected in the sample is less than five times the concentration detected in the blanks.
- H Holding time.
- HD Potential analytical imprecision.
- HL High LCS recovery. Analytical results may be biased high.
- HM High MS recovery. Analytical results may be biased high.
- HP High certified reference material (CRM) recovery. Analytical results may be biased high.
- HV High initial calibration verification (ICV) recovery. Analytical results may be biased high.
- LC Low CCV recovery. Analytical result may be biased low.
- LL Low LCS recovery. Analytical result may be biased low.
- LM Low MS recovery. Analytical result may be biased low.
- LP Low CRM recovery. Analytical result may be biased low.
- LS Low Surrogate recovery. Analytical results may be biased low.
- LV Low ICV recovery. Analytical result may be biased low.
- NC Calibration verification standard concentrations were outside the calibration range.
- NQ There is lack of QC for this analyte.
- RB The analyte was detected in the sample and its associated equipment blank and the concentration detected in the sample is less than five times the concentration detected in the blank.
- TD The dissolved metals concentration is significantly higher than the total metal concentration.
- \*# Unusual problems found with the data. The number following the asterisk (\*) will indicate the section in the validation report where a description of the problem can be found.

## **I. Sample Receipt and Technical Holding Times**

All samples were received in good condition and cooler temperatures upon receipt met validation criteria.

All technical holding time requirements were met.

## **II. GC/MS Instrument Performance Check**

Instrument performance was not reviewed for Level II validation.

## **III. Initial Calibration and Initial Calibration Verification**

Initial calibration data were not reviewed for Level II validation.

## **IV. Continuing Calibration**

Continuing calibration data were not reviewed for Level II validation.

## **V. Laboratory Blanks**

Laboratory blanks were analyzed as required by the method. No contaminants were found in the laboratory blanks.

## **VI. Field Blanks**

No field blanks were identified in this SDG.

## **VII. Surrogates**

Surrogates were reported from the polybrominated diphenyl ether (PBDE) analysis. All surrogate recoveries (%R) were within QC limits.

## **VIII. Matrix Spike/Matrix Spike Duplicates/Duplicates**

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

Duplicate (DUP) sample analysis was performed on an associated project sample. Results were within QC limits with the following exceptions:

DUP ID (Associated Samples)	Compound	RPD (Limits)	Flag	A or P
B13-8014DUP (B13-8014)	Aroclor-1260	27 ( $\leq 25$ )	J (all detects)	A

## IX. Laboratory Control Samples

Laboratory control samples data were not provided and therefore were not reviewed.

## X. Field Duplicates

No field duplicates were identified in this SDG.

## XI. Compound Quantitation

All compounds reported below the RL and above the MDL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG 1307002-010	Compound reported below the RL and above the MDL	J (all detects)	A

Raw data were not reviewed for Level II validation.

## XII. Target Compound Identifications

Raw data were not reviewed for Level II validation.

## XIII. Overall Assessment of Data

The analysis was conducted within all specifications of the method with the following exceptions:

Sample	Compound	Finding	Flag	A or P
All samples in SDG 1307002-010	All TCL compounds	Level IV validation could not be performed. Calibrations and reported results cannot be verified due to insufficient raw data. Using professional judgment, all PCBs results were qualified as presumptive and estimated.	NJ (all detects) UJ (all non-detects)	P

No results were rejected in this SDG.

Due to duplicate RPD and compound quantitation, data were qualified as estimated in eight samples.

The quality control criteria reviewed, as discussed above, were met and are considered acceptable. Based upon the data validation, sample results that were found to be presumptive (N) and/or estimated (J) are usable for limited purposes only.

**RHMP B'13****Polychlorinated Biphenyls as Aroclors - Data Qualification Summary - SDG 1307002-010**

Sample	Compound	Flag	A or P	Reason (Code)
B13-8014	Aroclor-1260	J (all detects)	A	Duplicate sample analysis (RPD) (HD)
B13-8013 B13-8014 B13-8028 B13-8030 B13-8036 B13-8038 B13-8040 B13-8052	Compound reported below the RL and above the MDL	J (all detects)	A	Compound quantitation (DL)
B13-8013 B13-8014 B13-8028 B13-8030 B13-8036 B13-8038 B13-8040 B13-8052	All TCL compounds	NJ (all detects) UJ (all non-detects)	P	Overall assessment of data (NQ)

**RHMP B'13****Polychlorinated Biphenyls as Aroclors - Laboratory Blank Data Qualification Summary - SDG 1307002-010**

No Sample Data Qualified in this SDG

**RHMP B'13****Polychlorinated Biphenyls as Aroclors - Field Blank Data Qualification Summary - SDG 1307002-010**

No Sample Data Qualified in this SDG



LDC #: 33507B3b

## VALIDATION COMPLETENESS WORKSHEET

Date: 1/21/15

SDG #: 1307002-010

Level IV II

Page: 1 of 1

Laboratory: PHYSIS Environmental Laboratories Inc.Reviewer: JV62nd Reviewer: AMETHOD: GC PCB <sup>Arroclors</sup> ~~Areals~~ (EPA SW846 Method 8270C)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Sample receipt/Technical holding times	A / A	
II.	GC Instrument Performance Check	N	
III.	Initial calibration/ICV	N / N	ICAL $\leq 15\%$ ICV $\leq 20\%$
IV.	Continuing calibration	N	$\leq 20\%$
V.	Laboratory Blanks	A	
VI.	Field blanks	N	
VII.	Surrogate spikes	A <del>HS</del>	see PBDE
VIII.	Matrix spike/Matrix spike duplicates / LD	N / SW	
IX.	Laboratory control samples	SW	LCS No LCS provided, Not reviewed
X.	Field duplicates	N	
XI.	Compound quantitation/RL/LOQ/LODs	N	
XII.	Target compound identification	N	
XIII.	Overall assessment of data	SW	

Note: A = Acceptable  
N = Not provided/applicable  
SW = See worksheet

ND = No compounds detected  
R = Rinsate  
FB = Field blank

D = Duplicate  
TB = Trip blank  
EB = Equipment blank

SB=Source blank  
OTHER:

	Client ID	Lab ID	Matrix	Date
1	B13-8013	22482-R1	sediment	08/26/13
2	B13-8014	22483-R1	sediment	08/26/13
3	B13-8028	22484-R1	sediment	08/26/13
4	B13-8030	22485-R1	sediment	08/26/13
5	B13-8036	22486-R1	sediment	08/26/13
6	B13-8038	22487-R1	sediment	08/26/13
7	B13-8040	22488-R1	sediment	08/26/13
8	B13-8052	22489-R1	↓	8/27/13
9	2 Dup			
10				
11				
12	0-5136/22481-R1 PB			
13				
14				
15				
16				

LDC #: 33507 | 36

## VALIDATION FINDINGS WORKSHEET

### Duplicate Analysis

Page: 1 of 1

Reviewer: JVG

2nd Reviewer:                     

**METHOD:** GC/MS (EPA SW 846 Method 8270C)

~~Please~~ see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y/N N/A Was a duplicate sample analyzed for each matrix in this SDG?  
Y(N) N/A Were all duplicate sample relative percent differences (RPD)  $\leq 25\%$ ?

**LEVEL IV ONLY:**

Y N N/A Were recalculated results acceptable? See Level IV Recalculation Worksheet for recalculations.

[illegible]

Comments:

(~~No code~~) (~~No code~~)

LDC #: 33503 B3h

## VALIDATION FINDINGS WORKSHEET

### Overall Assessment of Data

Page: 1 of 1

Reviewer: JVG

2nd Reviewer:                     

**METHOD:** GC/MS BNA (EPA SW 846 Method 8270C)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

All available information pertaining to the data were reviewed using professional judgement to compliment the determination of the overall quality of the data.

Y (N) N/A Was the overall quality and usability of the data acceptable?

[illegible]

Comments:

## Laboratory Data Consultants, Inc. Data Validation Report

**Project/Site Name:** RHMP B'13

**LDC Report Date:** February 10, 2015

**Parameters:** Metals

**Validation Level:** EPA Level IV

**Laboratory:** PHYSIS Environmental Laboratories Inc.

**Sample Delivery Group (SDG):** 1307002-010

Sample Identification	Laboratory Sample Identification	Matrix	Collection Date
B13-8013	22482-R1	Sediment	08/26/13
B13-8014	22483-R1	Sediment	08/26/13
B13-8028	22484-R1	Sediment	08/26/13
B13-8030	22485-R1	Sediment	08/26/13
B13-8036	22486-R1	Sediment	08/26/13
B13-8038	22487-R1	Sediment	08/26/13
B13-8040	22488-R1	Sediment	08/26/13
B13-8052	22489-R1	Sediment	08/27/13
B13-8013SEM	22482-R1SEM	Sediment	08/26/13
B13-8014SEM	22483-R1SEM	Sediment	08/26/13
B13-8028SEM	22484-R1SEM	Sediment	08/26/13
B13-8030SEM	22485-R1SEM	Sediment	08/26/13
B13-8036SEM	22486-R1SEM	Sediment	08/26/13
B13-8038SEM	22487-R1SEM	Sediment	08/26/13
B13-8040SEM	22488-R1SEM	Sediment	08/26/13
B13-8052SEM	22489-R1SEM	Sediment	08/27/13
B13-8013MS	22482-R1MS	Sediment	08/26/13
B13-8013MSD	22482-R1MSD	Sediment	08/26/13
B13-8013DUP	22482-R1DUP	Sediment	08/26/13
B13-8013SEMMS	22482-R1SEMMS	Sediment	08/26/13
B13-8013SEMMSD	22482-R1SEMMSD	Sediment	08/26/13

Samples appended with "SEM" were analyzed for simultaneously extracted metals

## Introduction

This Data Validation Report (DVR) presents data validation findings and results for the associated samples listed on the cover page. Data validation was performed in accordance with Final Quality Assurance Project Plan, Regional Harbor Monitoring Program, San Diego, California (August 2013) and follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review (January 2010). Where specific guidance was not available, the data has been evaluated in a conservative manner consistent with industry standards using professional experience.

The analyses were performed by the following method:

Aluminum, Antimony, Arsenic, Barium, Beryllium, Cadmium, Chromium, Copper, Iron, Lead, Mercury, Nickel, Selenium, Silver, and Zinc by Environmental Protection Agency (EPA) SW 846 Method 6020 and EPA Methods 200.8 and 245.7

All sample results were subjected to Level IV evaluation, which is comprised of the QC summary forms as well as the raw data, to confirm sample quantitation and identification.

The following are definitions of the data qualifiers utilized during data validation:

- J (Estimated): The compound or analyte was analyzed for and positively identified by the laboratory; however the reported concentration is estimated due to non-conformances discovered during data validation.
- U (Non-detect): The compound or analyte was analyzed for and positively identified by the laboratory; however the analyte should be considered non-detect at the reported concentration due to the presence of contaminants detected in the associated blank(s).
- UJ (Non-detected estimated): The compound or analyte was reported as not detected by the laboratory; however the reported quantitation/detection limit is estimated due to non-conformances discovered during data validation.
- R (Rejected): The sample results were rejected due to gross non-conformances discovered during data validation. Data qualified as rejected is not usable.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

## Qualification Code Reference

- BC The initial calibration (ICAL) curve did not meet method-specified criteria.
- CH High continuing calibration verification (CCV) recovery. Analytical results may be biased high.
- DL The analyte concentration was between the method detection limit (MDL) and the reporting limit (RL).
- FB The analyte was detected in the sample and its associated field blank and the concentration detected in the sample is less than five times the concentration detected in the blanks.
- H Holding time.
- HD Potential analytical imprecision.
- HL High LCS recovery. Analytical results may be biased high.
- HM High MS recovery. Analytical results may be biased high.
- HP High certified reference material (CRM) recovery. Analytical results may be biased high.
- HV High initial calibration verification (ICV) recovery. Analytical results may be biased high.
- LC Low CCV recovery. Analytical result may be biased low.
- LL Low LCS recovery. Analytical result may be biased low.
- LM Low MS recovery. Analytical result may be biased low.
- LP Low CRM recovery. Analytical result may be biased low.
- LS Low Surrogate recovery. Analytical results may be biased low.
- LV Low ICV recovery. Analytical result may be biased low.
- NC Calibration verification standard concentrations were outside the calibration range.
- NQ There is lack of QC for this analyte.
- RB The analyte was detected in the sample and its associated equipment blank and the concentration detected in the sample is less than five times the concentration detected in the blank.
- TD The dissolved metals concentration is significantly higher than the total metal concentration.
- \*# Unusual problems found with the data. The number following the asterisk (\*) will indicate the section in the validation report where a description of the problem can be found.

## I. Sample Receipt & Technical Holding Times

All samples were received in good condition and cooler temperatures upon receipt met validation criteria.

All technical holding time requirements were met.

## II. ICPMS Tune

The laboratory reported that the instrument tune was performed in July 2013 for analysis done in October 2013. Instrument tune should be performed daily.

## III. Instrument Calibration

Initial and continuing calibrations were performed as required by the method(s) with the following exceptions:

Sample	Analyte	Finding	Criteria
B13-8013 B13-8014 B13-8028 B13-8030 B13-8036 B13-8038 B13-8040 B13-8052	Total phosphorus Aluminum Antimony Arsenic Barium Beryllium Cadmium Chromium Copper Iron Lead Nickel Selenium Silver Zinc	More than ten samples were run between CCVs.	No more than ten samples to be run between CCVs.

The initial calibration verification (ICV) and continuing calibration verification (CCV) standards were within QC limits.

## IV. ICP Interference Check Sample (ICS) Analysis

The ICP interference check sample was not performed by the laboratory. The laboratory used a reaction chamber with mixed gases as well as internal equations to compensate for any interferents.

## V. Laboratory Blanks

Laboratory blanks were analyzed as required by the method. No contaminants were found in the laboratory blanks.

## VI. Field Blanks

No field blanks were identified in this SDG.

## VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) sample analysis was performed on an associated project sample. Percent recoveries (%R) were within QC limits with the following exceptions:

Spike ID (Associated Samples)	Analyte	MS (%R) (Limits)	MSD (%R) (Limits)	Flag	A or P
B13-8013SEMMS/MSD (B13-8013SEM)	Silver	71 (75-125)	-	UJ (all non-detects)	A

Relative percent differences (RPD) were within QC limits.

## VIII. Duplicate Sample Analysis

Duplicate (DUP) sample analysis was performed on an associated project sample. Results were within QC limits with the following exceptions:

DUP ID (Associated Samples)	Analyte	RPD (Limits)	Difference (Limits)	Flag	A or P
B13-8013DUP (B13-8013)	Copper	38 ( $\leq 25$ )	-	J (all detects)	A

## IX. ICP Serial Dilution

ICP serial dilution was not performed for this SDG.

## X. Laboratory Control Samples (LCS) and Certified Reference Material (CRM) Samples

Laboratory control samples (LCS) and laboratory control samples duplicates (LCSD) were analyzed as required by the method. Percent recoveries (%R) were within QC limits. Relative percent differences (RPD) were within QC limits.

Certified reference material (CRM) samples were analyzed as required by the method. Percent recoveries (%R) of the certified reference material were within QC limits with the following exceptions:



CRM ID	Compound	%R (Limits)	Associated Samples	Flag	A or P
CRM-RTC 016-050	Aluminum Arsenic Beryllium Chromium Iron Nickel	318 (80-120) 126 (80-120) 197 (80-120) 294 (80-120) 127 (80-120) 129 (80-120)	B13-8013 B13-8014 B13-8028 B13-8030 B13-8036 B13-8038 B13-8040 B13-8052	J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects)	A
CRM-RTC 016-050	Cadmium	65 (80-120)	B13-8013 B13-8014 B13-8028 B13-8030 B13-8036 B13-8038 B13-8040 B13-8052	J (all detects)	A
CRM-ERA 540	Aluminum Antimony Iron	177 (80-120) 173 (80-120) 143 (80-120)	B13-8013 B13-8014 B13-8028 B13-8030 B13-8036 B13-8038 B13-8040 B13-8052	J (all detects) J (all detects) J (all detects)	A

#### XI. Field Duplicates

No field duplicates were identified in this SDG.

#### XII. Internal Standards (ICP-MS)

All internal standard percent recoveries (%R) were within QC limits.

#### XIII. Sample Result Verification

All sample result verifications were acceptable.

All analytes reported below the RL and above the MDL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG 1307002-010	Analytes reported below the RL and above the MDL	J (all detects)	A

#### XIV. Overall Assessment of Data

The analysis was conducted within all specifications of the method. No results were rejected in this SDG.

Due to MS/MSD %R, DUP RPD, CRM %R, and sample result verification, data were qualified as estimated in sixteen samples.

The quality control criteria reviewed, other than those discussed above, were met and are considered acceptable. Sample results that were found to be estimated (J) are usable for limited purposes only. Based upon the data validation all other results are considered valid and usable for all purposes.

**RHMP B'13****Metals - Data Qualification Summary - SDG 1307002-010**

Sample	Analyte	Flag	A or P	Reason (Code)
B13-8013SEM	Silver	UJ (all non-detects)	A	Matrix spike/Matrix spike duplicate (%R) (LM)
B13-8013	Copper	J (all detects)	A	Duplicate sample analysis (RPD) (HD)
B13-8013 B13-8014 B13-8028 B13-8030 B13-8036 B13-8038 B13-8040 B13-8052	Aluminum Arsenic Beryllium Chromium Iron Nickel Antimony	J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects)	A	Certified reference material (%R) (HP)
B13-8013 B13-8014 B13-8028 B13-8030 B13-8036 B13-8038 B13-8040 B13-8052	Cadmium	J (all detects)	A	Certified reference material (%R) (LP)
B13-8013 B13-8014 B13-8028 B13-8030 B13-8036 B13-8038 B13-8040 B13-8052 B13-8013SEM B13-8014SEM B13-8028SEM B13-8030SEM B13-8036SEM B13-8038SEM B13-8040SEM B13-8052SEM	Analytes reported below the RL and above the MDL	J (all detects)	A	Sample result verification (DL)

**RHMP B'13****Metals - Laboratory Blank Data Qualification Summary - SDG 1307002-010**

No Sample Data Qualified in this SDG

**RHMP B'13****Metals - Field Blank Data Qualification Summary - SDG 1307002-010**

No Sample Data Qualified in this SDG

LDC #: 33507B4

## VALIDATION COMPLETENESS WORKSHEET

SDG #: 1307002-010

Level IV

Laboratory: PHYSIS Environmental Laboratories Inc.

Date: 1/16/14

Page: 1 of 1

Reviewer: EK

2nd Reviewer: C

**METHOD:** Metals (EPA SW846 Method 6020/EPA Method 200.8/245.7)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Sample receipt/Technical holding times	A / A	
II.	ICP/MS Tune	SW	
III.	Instrument Calibration	SW	
IV.	ICP Interference Check Sample (ICS) Analysis	SW	not required
V.	Laboratory Blanks	A	
VI.	Field Blanks	N	
VII.	Matrix Spike/Matrix Spike Duplicates	SW	MS/D 17/18 8/2: Al, Fe > 4x
VIII.	Duplicate sample analysis	SW	DUP
IX.	ICP Serial Dilution	N	not performed
X.	Laboratory control samples	SW	LCS/D / CRM
XI.	Field Duplicates	N	
XII.	Internal Standard (ICP-MS)	A	
XIII.	Sample Result Verification	A	
XIV.	Overall Assessment of Data	SWA	

Note: A = Acceptable

ND = No compounds detected

D = Duplicate

SB=Source blank

N = Not provided/applicable

R = Rinsate

TB = Trip blank

OTHER:

SW = See worksheet

FB = Field blank

EB = Equipment blank

Samples appended with 'F' analyzed as dissolved.

	Client ID	Lab ID	Matrix	Date
1	B13-8013	22482-R1	sediment	08/26/13
2	B13-8014	22483-R1	sediment	08/26/13
3	B13-8028	22484-R1	sediment	08/26/13
4	B13-8030	22485-R1	sediment	08/26/13
5	B13-8036	22486-R1	sediment	08/26/13
6	B13-8038	22487-R1	sediment	08/26/13
7	B13-8040	22488-R1	sediment	08/26/13
8	B13-8052	22489-R1	Sediment	08/27/13
9	B13-8013SEM	22482-R1SEM	sediment	08/26/13
10	B13-8014SEM	22483-R1SEM	sediment	08/26/13
11	B13-8028SEM	22484-R1SEM	sediment	08/26/13
12	B13-8030SEM	22485-R1SEM	sediment	08/26/13
13	B13-8036SEM	22486-R1SEM	sediment	08/26/13
14	B13-8038SEM	22487-R1SEM	sediment	08/26/13
15	B13-8040SEM	22488-R1SEM	sediment	08/26/13

LDC #: 33507B4

## VALIDATION COMPLETENESS WORKSHEET

SDG #: 1307002-010

Level IV

Laboratory: PHYSIS Environmental Laboratories Inc.

Date: 1/16/14

Page: 2 of 2

Reviewer: PK

2nd Reviewer: [Signature]

METHOD: Metals (EPA SW846 Method 6020/EPA Method 200.8/245.7)

	Client ID	Lab ID	Matrix	Date
16	B13-8052SEM	22489-R1SEM	Sediment	08/27/13
17	B13-8013MS	22482-R1MS	sediment	08/26/13
18	B13-8013MSD	22482-R1MSD	sediment	08/26/13
19	B13-8013DUP	22482-R1DUP	sediment	08/26/13
20	B13-8013SEMMS	22482-R1SEMMS	sediment	08/26/13
21	B13-8013SEMMSD	22482-R1SEMMSD	sediment	08/26/13
22				
23				
24				
25				

Notes:

SEM = Simultaneous extracted metals

Method: Metals (EPA SW 846 Method 6010/7000/6020)

6020/EPA Method 200.8/245.7

Validation Area	Yes	No	NA	Findings/Comments
<b>I. Technical holding times</b>				
All technical holding times were met.	/			
Cooler temperature criteria was met.	/			
<b>II. ICP/MS Tune</b>				
Were all isotopes in the tuning solution mass resolution within 0.1 amu?	/			
Were %RSD of isotopes in the tuning solution $\leq 5\%$ ?	/			
<b>III. Calibration</b>				
Were all instruments calibrated daily, each set-up time?	/			
Were the proper number of standards used?	4/5	1/5		
Were all initial and continuing calibration verification %Rs within the 90-110% (80-120% for mercury) QC limits?	/			
Were all initial calibration correlation coefficients $\geq 0.995$ ?	/			
<b>IV. Blanks</b>				
Was a method blank associated with every sample in this SDG?	/			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		/		
<b>V. ICP Interference Check Sample</b>				
Were ICP interference check samples performed daily?				
Were the AB solution percent recoveries (%R) with the 80-120% QC limits?				
<b>VI. Matrix spike/Matrix spike duplicates</b>				
Were a matrix spike (MS) and duplicate (DUP) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD or MS/DUP. Soil / Water.	/			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the 75-125 QC limits? If the sample concentration exceeded the spike concentration by a factor of 4 or more, no action was taken.		/		
Were the MS/MSD or duplicate relative percent differences (RPD) $\leq 20\%$ for waters and $\leq 35\%$ for soil samples? A control limit of $\pm RL$ ( $\pm 2X RL$ for soil) was used for samples that were $\leq 5X$ the RL, including when only one of the duplicate sample values were $\leq 5X$ the RL.	/			
<b>VII. Laboratory control samples</b>				
Was an LCS analyzed for this SDG?	/			
Was an LCS analyzed per extraction batch?	/			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the 80-120% QC limits for water samples and laboratory established QC limits for soils?		/		

Validation Area	Yes	No	NA	Findings/Comments
<b>VIII. Internal Standards (EPA SW 846 Method 6020/EPA 200.8)</b>				
Were all the percent recoveries (%R) within the 30-120% (6020)/60-125% (200.8) of the intensity of the internal standard in the associated initial calibration?	/		/	
If the %Rs were outside the criteria, was a reanalysis performed?			/	
<b>IX. ICP Serial Dilution</b>				
Was an ICP serial dilution analyzed if analyte concentrations were > 50X the MDL (ICP)/>100X the MDL (ICP/MS)?		/		
Were all percent differences (%Ds) < 10%?			/	
Was there evidence of negative interference? If yes, professional judgement will be used to qualify the data.			/	
<b>X. Sample Result Verification</b>				
Were RLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	/			
<b>XI. Overall assessment of data</b>				
Overall assessment of data was found to be acceptable.	/			
<b>XII. Field duplicates</b>				
Field duplicate pairs were identified in this SDG.		/		
Target analytes were detected in the field duplicates.			/	
<b>XIII. Field blanks</b>				
Field blanks were identified in this SDG.		/		
Target analytes were detected in the field blanks.			/	

### Sample Specific Element Reference

Reviewer: KK

2nd reviewer:   A  

All circled elements are applicable to each sample.

[illegible]

Comments: Mercury by CVAA if performed



9/10 EPA Method  
200.8 / 245.7

Were %RSD of isotopes in the tuning solution  $\leq 5\%$ ?

[illegible]

LDC #: 33507B4

## VALIDATION FINDINGS WORKSHEET

## Calibration

Page: 1 of 1

Reviewer: KE

2nd Reviewer:                     

**METHOD:** Metals (EPA SW-846 Method 6010B/6020/7471A/7470A)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y	N	N/A	
			Were all instruments calibrated daily, each set-up time, and were the proper number of standards used?

Y N N/A Were all initial and continuing calibration verification percent recoveries (%R) within the control limits of 90-110% for all analytes except mercury (80-120%)?

**LEVEL IV ONLY:**

Y N (N/A) Was a midrange cyanide standard distilled?

Are all correlation coefficients  $\geq 0.995$ ?

Y/N N/A Were recalculated results acceptable? See Level IV Initial and Continuing Calibration Recalculation Worksheet for recalculations.

[illegible]

Comments: \_\_\_\_\_

LDC #: 33507BH

## VALIDATION FINDINGS WORKSHEET

### ICP Interference Check Sample

Page: 1 of 1

Reviewer: KH

2nd Reviewer: oz

~~METHOD: Trace Metals (EPA SW 846 Method 6010/6020/7000)~~

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were ICP interference check samples performed as required?

Y N N/A Were the AB solution percent recoveries (%R) within the control limits of 80-120% ?

**LEVEL IV ONLY:**

Y N N/A Were recalculated results acceptable? See Level IV Recalculation Worksheet for recalculations.

[illegible]

Comments: \_\_\_\_\_





LDC #: 33507B4

## VALIDATION FINDINGS WORKSHEET

### Laboratory Control Samples (LCS)

Page: 1 of 1

Reviewer: PK

2nd Reviewer:                     

**METHOD:** Trace Metals (EPA SW 846 Method 8010/6020/7000) / EPA Method 200.8 / 245.7

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a laboratory control sample (LCS) analyzed for each matrix in this SDG?

Y (N) N/A Were all aqueous LCS percent recoveries (%R) within the control limits of 80-120% and all soil LCS %R within laboratory established control limits.

**LEVEL IV ONLY:**

Y/N N/A Were recalculated results acceptable? See Level IV Recalculation Worksheet for recalculations.

[illegible]

Comments:

# **VALIDATION FINDINGS WORKSHEET** **Initial and Continuing Calibration Calculation Verification**

**METHOD:** Trace Metals (EPA SW 846 Method ~~6010/6020/7000~~ <sup>6020/EPA 200.8/245.7</sup>)

An initial and continuing calibration verification percent recovery (%R) was recalculated for each type of analysis using the following formula:

$$\%R = \frac{\text{Found}}{\text{True}} \times 100$$

Where, Found = concentration (in ug/L) of each analyte measured in the analysis of the ICV or CCV solution  
 True = concentration (in ug/L) of each analyte in the ICV or CCV source

Standard ID	Type of Analysis	Element	Found (ug/L)	True (ug/L)	Recalculated	Reported	Acceptable (Y/N)
					%R	%R	
	ICP (Initial calibration)						
ICV (15:45)	ICP/MS (Initial calibration)	Ni	<del>9.100</del> 100	100	100	100	Y
ICV (10/24/13)	CVAA (Initial calibration)	Hg	1020 ppt	1000 ppt	102	102	↓
	ICP (Continuing calibration)						
CCV (21:33)	ICP/MS (Continuing calibration)	Cu	102	100	102	102	Y
CCV (10/24/13)	CVAA (Continuing calibration)	Hg	938 ppt	1000 ppt	93.8	93.8	↓
	GFAA (Initial calibration)						
	GFAA (Continuing calibration)						

Comments: Refer to Calibration Verification findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 33507 B4

# VALIDATION FINDINGS WORKSHEET Level IV Recalculation Worksheet

Page: 1 of 1  
 Reviewer: KK  
 2nd Reviewer: 9

**METHOD:** Trace Metals (EPA SW 846 Method ~~6040/6020/7000~~) / EPA Method 200.8/245.7

Percent recoveries (%R) for an ICP interference check sample, a laboratory control sample and a matrix spike sample were recalculated using the following formula:

$$\%R = \frac{\text{Found}}{\text{True}} \times 100$$

Where, Found = Concentration of each analyte measured in the analysis of the sample. For the matrix spike calculation,  
 Found = SSR (spiked sample result) - SR (sample result).  
 True = Concentration of each analyte in the source.

A sample and duplicate relative percent difference (RPD) was recalculated using the following formula:

$$RPD = \frac{|S-D|}{(S+D)/2} \times 100$$

Where, S = Original sample concentration  
 D = Duplicate sample concentration

An ICP serial dilution percent difference (%D) was recalculated using the following formula:

$$\%D = \frac{|I-SDR|}{I} \times 100$$

Where, I = Initial Sample Result (mg/L)  
 SDR = Serial Dilution Result (mg/L) (Instrument Reading x 5)

Sample ID	Type of Analysis	Element	Found / S / I (units)	True / D / SDR (units)	Recalculated	Reported	Acceptable (Y/N)
					%R / RPD / %D	%R / RPD / %D	
<del>IC SAB</del> N/A	ICP interference check	Hg					
LCS	Laboratory control sample	Hg	0.971	1	97	97	Y
8 17	Matrix spike	Sb	(SSR-SR) 67.733	65.54	103	103	↓
17 19	Duplicate	Cr	52.358	50.572	3	3	
N/A	ICP serial dilution						

Comments: Refer to appropriate worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results



Sample Calculation VerificationReviewer: KK2nd reviewer: RMETHOD: ~~Trace Metals (EPA SW 846 Method 6010/6020/7000)~~ / EPA Method 200.8/245.7

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A

Have results been reported and calculated correctly?

Y N N/A

Are results within the calibrated range of the instruments and within the linear range of the ICP?

Y N N/A

Are all detection limits below the CRDL?

Detected analyte results for Cd were recalculated and verified using the following equation:Concentration =  $\frac{(RD)(FV)(Dil)}{(In. Vol.)}$ 

Recalculation:

RD = Raw data concentration  
 FV = Final volume (ml)  
 In. Vol. = Initial volume (ml) or weight (G)  
 Dil = Dilution factor

7: ~~(0.467 µg/g)~~ Straight from raw data 0.467 µg/g

#	Sample ID	Analyte	Reported Concentration (µg/g)	Calculated Concentration (µg/g)	Acceptable (Y/N)
	1	Al	34658	<del>34658</del> 34658	Y
	2	Sb	0.169	0.169	
	3	Ba Ni	<del>46432</del> 11.54	11.54	
	4	Al	22803	22803	
	5	Fe	25780.6	25780.6	
	6	Al	28703.9	28703.9	
	7	Cd	0.4671	0.467	
	8	Ag Hg	<del>0.6</del> 0.294	<del>0.6</del> 0.294	
	9	Zn (µmol/dry g)	2.8211 µmol/dry g	2.8211	
	10	Cu	0.0089	0.0089	
	11	Zn	1.1103	1.1103	
	12	Pb	0.0248	0.0248	
	13	Ni	0.0071	0.0071	
	14	Zn	1.1274	1.1274	
	15	Cd	0.0022	0.0022	
	16	Cu	0.2102	0.2102	

Note: \_\_\_\_\_

## Laboratory Data Consultants, Inc. Data Validation Report

**Project/Site Name:** RHMP B'13

**LDC Report Date:** March 27, 2015

**Parameters:** Wet Chemistry

**Validation Level:** EPA Level IV

**Laboratory:** PHYSIS Environmental Laboratories Inc.

**Sample Delivery Group (SDG):** 1307002-010

Sample Identification	Laboratory Sample Identification	Matrix	Collection Date
B13-8013	22482-R1	Sediment	08/26/13
B13-8014	22483-R1	Sediment	08/26/13
B13-8028	22484-R1	Sediment	08/26/13
B13-8030	22485-R1	Sediment	08/26/13
B13-8036	22486-R1	Sediment	08/26/13
B13-8038	22487-R1	Sediment	08/26/13
B13-8040	22488-R1	Sediment	08/26/13
B13-8013MS	22482-R1MS	Sediment	08/26/13
B13-8013MSD	22482-R1MSD	Sediment	08/26/13
B13-8013DUP	22482-R1DUP	Sediment	08/26/13
B13-8052	22489-R1	Sediment	08/27/13

## Introduction

This Data Validation Report (DVR) presents data validation findings and results for the associated samples listed on the cover page. Data validation was performed in accordance with Final Quality Assurance Project Plan, Regional Harbor Monitoring Program, San Diego, California (August 2013) and follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review (January 2010). Where specific guidance was not available, the data has been evaluated in a conservative manner consistent with industry standards using professional experience.

The analyses were performed by the following method:

Ammonia as Nitrogen by Standard Method 4500-NH<sub>3</sub> D  
Total Phosphorus by Environmental Protection Agency (EPA) SW 846 6020  
Acid Volatile Sulfide (AVS) by Method Plumb, 1981 and TERL

All sample results were subjected to Level IV evaluation, which is comprised of the QC summary forms as well as the raw data, to confirm sample quantitation and identification.

The following are definitions of the data qualifiers utilized during data validation:

- J (Estimated): The compound or analyte was analyzed for and positively identified by the laboratory; however the reported concentration is estimated due to non-conformances discovered during data validation.
- U (Non-detect): The compound or analyte was analyzed for and positively identified by the laboratory; however the analyte should be considered non-detect at the reported concentration due to the presence of contaminants detected in the associated blank(s).
- UJ (Non-detected estimated): The compound or analyte was reported as not detected by the laboratory; however the reported quantitation/detection limit is estimated due to non-conformances discovered during data validation.
- R (Rejected): The sample results were rejected due to gross non-conformances discovered during data validation. Data qualified as rejected is not usable.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

## Qualification Code Reference

- BC The initial calibration (ICAL) curve did not meet method-specified criteria.
- CH High continuing calibration verification (CCV) recovery. Analytical results may be biased high.
- DL The analyte concentration was between the method detection limit (MDL) and the reporting limit (RL).
- FB The analyte was detected in the sample and its associated field blank and the concentration detected in the sample is less than five times the concentration detected in the blanks.
- H Holding time.
- HD Potential analytical imprecision.
- HL High LCS recovery. Analytical results may be biased high.
- HM High MS recovery. Analytical results may be biased high.
- HP High certified reference material (CRM) recovery. Analytical results may be biased high.
- HV High initial calibration verification (ICV) recovery. Analytical results may be biased high.
- LC Low CCV recovery. Analytical result may be biased low.
- LL Low LCS recovery. Analytical result may be biased low.
- LM Low MS recovery. Analytical result may be biased low.
- LP Low CRM recovery. Analytical result may be biased low.
- LS Low Surrogate recovery. Analytical results may be biased low.
- LV Low ICV recovery. Analytical result may be biased low.
- NC Calibration verification standard concentrations were outside the calibration range.
- NQ There is lack of QC for this analyte.
- RB The analyte was detected in the sample and its associated equipment blank and the concentration detected in the sample is less than five times the concentration detected in the blank.
- TD The dissolved metals concentration is significantly higher than the total metal concentration.
- \*# Unusual problems found with the data. The number following the asterisk (\*) will indicate the section in the validation report where a description of the problem can be found.

## I. Sample Receipt & Technical Holding Times

All samples were received in good condition and cooler temperatures upon receipt met validation criteria.

All technical holding time requirements were met.

## II. Initial Calibration

All criteria for the initial calibration of each method were met.

## III. Continuing Calibration

Continuing calibration frequency and analysis criteria were met for each method when applicable.

## IV. Laboratory Blanks

Laboratory blanks were analyzed as required by the method(s). No contaminants were found in the laboratory blanks.

## V. Field Blanks

No field blanks were identified in this SDG.

## VI. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) sample analysis was performed on an associated project sample. Percent recoveries (%R) were within QC limits with the following exceptions:

Spike ID (Associated Samples)	Analyte	MS (%R) (Limits)	MSD (%R) (Limits)	Flag	A or P
B13-8013MS/MSD (B13-8013)	Acid volatile sulfide	159 (75-125)	228 (75-125)	J (all detects)	A

Relative percent differences (RPD) were within QC limits with the following exceptions:

Spike ID (Associated Samples)	Analyte	RPD (Limits)	Flag	A or P
B13-8013MS/MSD (B13-8013)	Acid volatile sulfide	36 (≤25)	J (all detects)	A

## VII. Duplicates

Duplicate (DUP) sample analysis was performed on an associated project sample. Results were within QC limits with the following exceptions:

DUP ID (Associated Samples)	Analyte	RPD (Limits)	Difference (Limits)	Flag	A or P
B13-8013DUP (B13-8013)	Ammonia as N	28 ( $\leq 25$ )	-	J (all detects)	A

## VIII. Laboratory Control Samples

Laboratory control samples (LCS) and laboratory control samples duplicates (LCSD) were analyzed as required by the method. Percent recoveries (%R) were within QC limits. Relative percent differences (RPD) were within QC limits.

## IX. Field Duplicates

No field duplicates were identified in this SDG.

## X. Sample Result Verification

All sample result verifications were acceptable.

All analytes reported below the RL and above the MDL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG 1307002-010	Analytes reported below the RL and above the MDL	J (all detects)	A

## XI. Overall Assessment of Data

The analysis was conducted within all specifications of the method. No results were rejected in this SDG.

Due to MS/MSD %R and RPD, DUP RPD, and sample result verification, data were qualified as estimated in eight samples.

The quality control criteria reviewed, other than those discussed above, were met and are considered acceptable. Sample results that were found to be estimated (J) are usable for limited purposes only. Based upon the data validation all other results are considered valid and usable for all purposes.

**RHMP B'13****Wet Chemistry - Data Qualification Summary - SDG 1307002-010**

Sample	Analyte	Flag	A or P	Reason (Code)
B13-8013	Acid volatile sulfide	J (all detects)	A	Matrix spike/Matrix spike duplicate (%R) (HM)
B13-8013	Acid volatile sulfide	J (all detects)	A	Matrix spike/Matrix spike duplicate (RPD) (HD)
B13-8013	Ammonia as N	J (all detects)	A	Duplicate sample analysis (RPD) (HD)
B13-8013 B13-8014 B13-8028 B13-8030 B13-8036 B13-8038 B13-8040 B13-8052	Analytes reported below the RL and above the MDL	J (all detects)	A	Sample result verification (DL)

**RHMP B'13****Wet Chemistry - Laboratory Blank Data Qualification Summary - SDG 1307002-010**

No Sample Data Qualified in this SDG

**RHMP B'13****Wet Chemistry - Field Blank Data Qualification Summary - SDG 1307002-010**

No Sample Data Qualified in this SDG

LDC #: 33507B6

**VALIDATION COMPLETENESS WORKSHEET**

SDG #: 1307002-010

Level IV

Laboratory: PHYSIS Environmental Laboratories, Inc.

Date: 1/19/15

Page: 1 of 1

Reviewer: *KK*2nd Reviewer: *OKM***METHOD: (Analyte)** Ammonia as N (SM 4500-NH3 D), Total Phosphorus (EPA SW846 6020), AVS (Plumb, 1981 and TERL)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Sample receipt/Technical holding times	A / A	
II	Initial calibration	A	
III.	Calibration verification	A	
IV	Laboratory Blanks	A	
V	Field blanks	N	
VI.	Matrix Spike/Matrix Spike Duplicates	SW	MS/D
VII.	Duplicate sample analysis	SW	DUP
VIII.	Laboratory control samples	A	LCS/D
IX.	Field duplicates	N	
X.	Sample result verification	A	
XI	Overall assessment of data	A	

Note: A = Acceptable  
N = Not provided/applicable  
SW = See worksheet

ND = No compounds detected  
R = Rinsate  
FB = Field blank

D = Duplicate  
TB = Trip blank  
EB = Equipment blank

SB=Source blank  
OTHER:

	Client ID	Lab ID	Matrix	Date
1	B13-8013	22482-R1	sediment	08/26/13
2	B13-8014	22483-R1	sediment	08/26/13
3	B13-8028	22484-R1	sediment	08/26/13
4	B13-8030	22485-R1	sediment	08/26/13
5	B13-8036	22486-R1	sediment	08/26/13
6	B13-8038	22487-R1	sediment	08/26/13
7	B13-8040	22488-R1	sediment	08/26/13
8	B13-8013MS	22482-R1MS	sediment	08/26/13
9	B13-8013MSD	22482-R1MSD	sediment	08/26/13
10	#1 DUP	22482-R1 DUP	sediment	08/26/13
11	B13-8052	22489-R1	sediment	08/27/13
12				
13				
14				
15				

Notes:



Method: Inorganics (EPA Method See C-11)

Validation Area	Yes	No	NA	Findings/Comments
<b>I. Technical holding times</b>				
All technical holding times were met.	/			
Cooler temperature criteria was met.	/			
<b>II. Calibration</b>				
Were all instruments calibrated daily, each set-up time?	/			
Were the proper number of standards used?	/			
Were all initial calibration correlation coefficients $\geq 0.995$ ?	/			
Were all initial and continuing calibration verification %Rs within the 90-110% QC limits?				
Were titrant checks performed as required? (Level IV only)				
Were balance checks performed as required? (Level IV only)				
<b>III. Blanks</b>				
Was a method blank associated with every sample in this SDG?	/			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		/		
<b>IV. Matrix spike/Matrix spike duplicates and Duplicates</b>				
Were a matrix spike (MS) and duplicate (DUP) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD or MS/DUP. Soil / Water.	/			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the 75-125 QC limits? If the sample concentration exceeded the spike concentration by a factor of 4 or more, no action was taken.		/		
Were the MS/MSD or duplicate relative percent differences (RPD) $\leq 20\%$ for waters and $\leq 35\%$ for soil samples? A control limit of $\leq \text{CRDL}$ ( $\leq 2\text{X CRDL}$ for soil) was used for samples that were $\leq 5\text{X}$ the CRDL, including when only one of the duplicate sample values were $\leq 5\text{X}$ the CRDL.		/		
<b>V. Laboratory control samples</b>				
Was an LCS analyzed for this SDG?	/			
Was an LCS analyzed per extraction batch?	/			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the 80-120% (85-115% for Method 300.0) QC limits?	/			
<b>VI. Regional Quality Assurance and Quality Control</b>				
Were performance evaluation (PE) samples performed?			/	
Were the performance evaluation (PE) samples within the acceptance limits?			/	

Validation Area	Yes	No	NA	Findings/Comments
<b>VII. Sample Result Verification</b>				
Were RLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	//			
Were detection limits < RL?				
<b>VIII. Overall assessment of data</b>				
Overall assessment of data was found to be acceptable.	/			
<b>IX. Field duplicates</b>				
Field duplicate pairs were identified in this SDG.			/	
Target analytes were detected in the field duplicates.			/	
<b>X. Field blanks</b>				
Field blanks were identified in this SDG.			/	
Target analytes were detected in the field blanks.			/	

## VALIDATION FINDINGS WORKSHEET

### Sample Specific Analysis Reference

All circled methods are applicable to each sample.

[illegible]

Comments: \_\_\_\_\_



## VALIDATION FINDINGS WORKSHEET

### Duplicate Analysis

Reviewer: KK

2nd Reviewer: 9

**METHOD:** Inorganics, Method See Cover

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

(Y) N N/A Was a duplicate sample analyzed for each matrix in this SDG?

Y (N) N/A Were all duplicate sample relative percent differences (RPD)  $\leq 20\%$  for water samples and  $\leq 35\%$  for soil samples? If no, see qualifications below. A control limit of +R.L. (+2X R.L. for soil) was used for sample values that were  $< 5X$  the R.L., including the case when only one of the duplicate sample values was  $< 5X$  R.L.. If field blanks were used for laboratory duplicates, note in the Overall Assessment.

**LEVEL IV ONLY:**

Y N N/A Were recalculated results acceptable? See Level IV Recalculation Worksheet for recalculations.

[illegible]

Comments: \_\_\_\_\_

**METHOD:** Inorganics, Method

Percent recoveries (%R) for a laboratory control sample and a matrix spike sample were recalculated using the following formula:

%R =  $\frac{\text{Found}}{\text{True}} \times 100$       Where,      Found = concentration of each analyte measured in the analysis of the sample. For the matrix spike calculation,  
    Found = SSR (spiked sample result) - SR (sample result).  
    True = concentration of each analyte in the source.

A sample and duplicate relative percent difference (RPD) was recalculated using the following formula:

$$RPD = \frac{|S-D|}{(S+D)/2} \times 100$$

Where, S = Original sample concentration  
D = Duplicate sample concentration

Sample ID	Type of Analysis	Element	mg/Kg Found/S (units)	mg/Kg True / D (units)	Recalculated	Reported	Acceptable (Y/N)
					%R / RPD	%R / RPD	
LCS	Laboratory control sample	AVS	9.45 <sup>4.978</sup>	8.29 0.2 mg/L	114	114	Y
<del>8/9</del> 8	Matrix spike sample	NH <sub>3</sub> -N	(SSR-SR) 7.085	5.34	133 <sup>2*</sup>	122	↓
8/9	Duplicate sample	↓	10.533	10.086	4*	3	

Comments: Refer to appropriate worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

\* calculate from raw data

### Sample Calculation Verification

**METHOD:** Inorganics, Method See Cover

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y	N	N/A
---	---	-----

Have results been reported and calculated correctly?

Y	N	N/A
---	---	-----

Are results within the calibrated range of the instruments?

Y	N	N/A
---	---	-----

Are all detection limits below the CRQL?

Compound (analyte) results for AVS reported with a positive detect were recalculated and verified using the following equation:

Concentration =

Recalculation:

$$\text{Concentration} = \frac{(\text{Abs} - \text{constant})(\text{initial weight})(1000)(\text{DF})}{\text{Slope} (\text{final weight}) (\% \text{ solid})} \quad \text{Recalculation:}$$

$$= \frac{[0.073 - (-0.001702)] (0.0022023) (1000) (5)}{0.196 (0.05508 \text{ L}) (0.5504624)} = 102.92359 \text{ mg/L}$$

[illegible]

Note: \* Calculated using raw data

**Laboratory Data Consultants, Inc.**  
**Data Validation Report**

**Project/Site Name:** RHMP B'13

**LDC Report Date:** March 27, 2015

**Parameters:** Polychlorinated Biphenyls as Congeners

**Validation Level:** EPA Level IV

**Laboratory:** PHYSIS Environmental Laboratories Inc.

**Sample Delivery Group (SDG):** 1307002-010

<b>Sample Identification</b>	<b>Laboratory Sample Identification</b>	<b>Matrix</b>	<b>Collection Date</b>
B13-8013	22482-R1	Sediment	08/26/13
B13-8014	22483-R1	Sediment	08/26/13
B13-8028	22484-R1	Sediment	08/26/13
B13-8030	22485-R1	Sediment	08/26/13
B13-8036	22486-R1	Sediment	08/26/13
B13-8038	22487-R1	Sediment	08/26/13
B13-8040	22488-R1	Sediment	08/26/13
B13-8014MS	22483-R1MS	Sediment	08/26/13
B13-8014MSD	22483-R1MSD	Sediment	08/26/13
B13-8052	22489-R1	Sediment	08/27/13
B13-8014DUP	22483-R2DUP	Sediment	08/26/13



## Introduction

This Data Validation Report (DVR) presents data validation findings and results for the associated samples listed on the cover page. Data validation was performed in accordance with a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines (CLPNFG) for Superfund Organic Methods Data Review (June 2008). Where specific guidance was not available, the data has been evaluated in a conservative manner consistent with industry standards using professional experience.

The analyses were performed by the following method:

Polychlorinated Biphenyls (PCBs) as Congeners by Environmental Protection Agency (EPA) SW 846 Method 8270C

All sample results were subjected to Level IV evaluation, which is comprised of the QC summary forms as well as the raw data, to confirm sample quantitation and identification.

The following are definitions of the data qualifiers utilized during data validation:

- J (Estimated): The compound or analyte was analyzed for and positively identified by the laboratory; however the reported concentration is estimated due to non-conformances discovered during data validation.
- U (Non-detect): The compound or analyte was analyzed for and positively identified by the laboratory; however the analyte should be considered non-detect at the reported concentration due to the presence of contaminants detected in the associated blank(s).
- UU (Non-detected estimated): The compound or analyte was reported as not detected by the laboratory; however the reported quantitation/detection limit is estimated due to non-conformances discovered during data validation.
- R (Rejected): The sample results were rejected due to gross non-conformances discovered during data validation. Data qualified as rejected is not usable.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

## Qualification Code Reference

- BC The initial calibration (ICAL) curve did not meet method-specified criteria.
- CH High continuing calibration verification (CCV) recovery. Analytical results may be biased high.
- DL The analyte concentration was between the method detection limit (MDL) and the reporting limit (RL).
- FB The analyte was detected in the sample and its associated field blank and the concentration detected in the sample is less than five times the concentration detected in the blanks.
- H Holding time.
- HD Potential analytical imprecision.
- HL High LCS recovery. Analytical results may be biased high.
- HM High MS recovery. Analytical results may be biased high.
- HP High certified reference material (CRM) recovery. Analytical results may be biased high.
- HV High initial calibration verification (ICV) recovery. Analytical results may be biased high.
- LC Low CCV recovery. Analytical result may be biased low.
- LL Low LCS recovery. Analytical result may be biased low.
- LM Low MS recovery. Analytical result may be biased low.
- LP Low CRM recovery. Analytical result may be biased low.
- LS Low Surrogate recovery. Analytical results may be biased low.
- LV Low ICV recovery. Analytical result may be biased low.
- NC Calibration verification standard concentrations were outside the calibration range.
- NQ There is lack of QC for this analyte.
- RB The analyte was detected in the sample and its associated equipment blank and the concentration detected in the sample is less than five times the concentration detected in the blank.
- TD The dissolved metals concentration is significantly higher than the total metal concentration.
- \*# Unusual problems found with the data. The number following the asterisk (\*) will indicate the section in the validation report where a description of the problem can be found.

## I. Sample Receipt and Technical Holding Times

All samples were received in good condition and cooler temperatures upon receipt met validation criteria.

All technical holding time requirements were met.

## II. Initial Calibration and Initial Calibration Verification

An initial calibration was performed as required by the method.

A curve fit, based on the initial calibration, was established for quantitation. The coefficient of determination ( $r^2$ ) was greater than or equal to 0.990 with the following exceptions:

Date	Compound	$r^2$	Associated Samples	Flag	A or P
05/03/14	PCB-128 PCB-195	0.975336 0.987011	All samples in SDG 1307002-010	UJ (all non-detects) UJ (all non-detects)	P

The percent differences (%D) of the initial calibration verification (ICV) standard were less than or equal to 20.0% for all compounds with the following exceptions:

Date	Standard	Compound	%D	Associated Samples	Flag	A or P
05/06/14	OCP500_PCB100_ICV	PCB-018 PCB-052 PCB-049 PCB-044 PCB-095 PCB-101 PCB-099 PCB-087 PCB-151 PCB-149 PCB-187 PCB-183 PCB-177 PCB-199(200) PCB-206	32 31 26 26 23 25 21 23 24 22 27 24 23 32 24	All samples in SDG 1307002-010	J (all detects) UJ (all non-detects)	P

## III. Continuing Calibration

Continuing calibration was performed at required frequencies with the following exceptions:

Samples	Compound	Finding	Criteria	Flag	A or P
B13-8013 B13-8014 B13-8028 B13-8030 B13-8014DUP	All TCL compounds	Continuing calibration was not analyzed before the sample analysis.	Continuing calibration should be analyzed prior to sample analysis	J (all detects) UJ (all non-detects)	P

The percent differences (%D) were less than or equal to 20.0% for all compounds with the following exceptions:

Date	Standard	Compound	%D	Associated Samples	Flag	A or P
05/10/14	PCB+6_100CCV2	PCB-018 PCB-028 PCB-052 PCB-049 PCB-044 PCB-074 PCB-070 PCB-095 PCB-101 PCB-099 PCB-119 PCB-087 PCB-110 PCB-151 PCB-149 PCB-118 PCB-153 PCB-138 PCB-158 PCB-187 PCB-183 PCB-177 PCB-199(200) PCB-194 PCB-206 PCB-209	37 23 35 31 32 27 24 22 33 28 27 29 26 31 33 22 24 23 23 30 26 27 39 23 33 27	All samples in SDG 1307002-010	J (all detects) UJ (all non-detects)	P

#### IV. Laboratory Blanks

Laboratory blanks were analyzed as required by the method. No contaminants were found in the laboratory blanks.

#### V. Field Blanks

No field blanks were identified in this SDG.

#### VI. Matrix Spike/Matrix Spike Duplicates/Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) sample analysis was performed on an associated project sample. Percent recoveries (%R) were within QC limits. Relative percent differences (RPD) were within QC limits.

Duplicate (DUP) sample analysis was performed on an associated project sample. Relative percent differences (RPD) were within QC limits with the following exceptions:

DUP ID (Associated Samples)	Compound	RPD (Limits)	Flag	A or P
B13-8014DUP (B13-8014)	PCB-153	29 ( $\leq 25$ )	J (all detects)	A

## VII. Laboratory Control Samples/Certified Reference Materials/Standard Reference Materials

Laboratory control samples (LCS) and laboratory control samples duplicates (LCSD) were analyzed as required by the method. Percent recoveries (%R) were within QC limits with the following exceptions:

LCS ID (Associated Samples)	Compound	LCS %R (Limits)	LCSD %R (Limits)	Flag	A or P
22481-BS1/BS2 (B13-8013 B13-8014 B13-8038)	PCB-169	153 (70-130)	158 (70-130)	J (all detects)	P
22481-BS1/BS2 (B13-8028 B13-8030 B13-8036 B13-8040 B13-8052)	PCB-169	153 (70-130)	158 (70-130)	NA	-
22481-BS1/BS2 (All samples in SDG 1307002-010)	PCB-123 PCB-126	- -	137 (70-130) 131 (70-130)	NA	-

Although the above listed %Rs flagged "NA" demonstrates a high bias, the affected compounds in the associated sample was non-detected and did not warrant the qualification of the data.

Relative percent differences (RPD) were within QC limits.

Certified reference material (CRM) samples were performed at the required frequency. CRM concentrations were within QC limits with the following exceptions:

CRM ID	Compound	Concentration (Limits)	Associated Samples	Flag	A or P
CRM-SRM 1944	PCB-018 PCB-028 PCB-049 PCB-052 PCB-087 PCB-095 PCB-099 PCB-101 PCB-110 PCB-128 PCB-138 PCB-149 PCB-151 PCB-153 PCB-156 PCB-180 PCB-187 PCB-195 PCB-206 PCB-209	39.62 ug/Kg (45.98-56.28) 70.19 ug/Kg (74.20-87.68) 39.93 ug/Kg (51.97-57.44) 69.4 ug/Kg (73.53-85.47) 24.3 ug/Kg (24.32-35.91) 44.13 ug/Kg (53.30-77.60) 31.5 ug/Kg (33.35-41.90) 49.04 ug/Kg (67.36-79.70) 40.16 ug/Kg (55.86-71.61) 7.44 ug/Kg (7.78-9.19) 43.59 ug/Kg (56.15-68.36) 35.16 ug/Kg (46.08-53.45) 12.64 ug/Kg (15.74-18.15) 47.96 ug/Kg (67.55-80.75) 5.22 ug/Kg (5.57-7.54) 39.78 ug/Kg (40.95-47.78) 22.47 ug/Kg (22.90-27.41) 2.78 ug/Kg (3.19-4.35) 6.31 ug/Kg (8.27-10.21) 5.94 ug/Kg (6.16-7.50)	All samples in SDG 1307002-010	J (all detects) UJ (all non-detects)	A

### VIII. Field Duplicates

No field duplicates were identified in this SDG.

### IX. Internal Standards

All internal standard areas and retention times were within QC limits with the following exceptions:

Samples	Compound	Finding	Flag	A or P
All samples in SDG 1307002-010	All TCL compounds	The internal standard recoveries could not be verified due to the difference in the extraction procedures between the calibration standards and samples.	J (all detects) UJ (all non-detects)	P

### X. Compound Quantitation

All compound quantitations were within validation criteria with the following exceptions:

Samples	Compound	Finding	Flag	A or P
All samples in SDG 1307002-010	All TCL compounds	The laboratory indicated that the multiplier used to quantitate results was based on sample dry weight, initial, and final extract volumes. The multiplier cannot be verified since extract volumes were not provided.	J (all detects)	P

All compounds reported below the RL and above the MDL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG 1307002-010	Compound reported below the RL and above the MDL	J (all detects)	A

#### **XI. Target Compound Identification**

All target compound identifications were within validation criteria.

#### **XII. Overall Assessment of Data**

The analysis was conducted within all specifications of the method with the exceptions noted in Section III. No results were rejected in this SDG.

Due to initial calibration  $r^2$ , ICV and continuing calibration %D, duplicate RPD, LCS/LCSD %R, CRM concentration, internal standards, and compound quantitation, data were qualified as estimated in eight samples.

The quality control criteria reviewed, other than those discussed above, were met and are considered acceptable. Sample results that were found to be estimated (J/UJ) are usable for limited purposes only. Based upon the data validation all other results are considered valid and usable for all purposes.

**RHMP B'13**
**Polychlorinated Biphenyls - Data Qualification Summary - SDG 1307002-010**

Sample	Compound	Flag	A or P	Reason (Code)
B13-8013 B13-8014 B13-8028 B13-8030 B13-8036 B13-8038 B13-8040 B13-8052	PCB-128 PCB-195	UJ (all non-detects) UJ (all non-detects)	P	Initial calibration ( $r^2$ ) (BC)
B13-8013 B13-8014 B13-8028 B13-8030 B13-8036 B13-8038 B13-8040 B13-8052	PCB-018 PCB-052 PCB-049 PCB-044 PCB-095 PCB-101 PCB-099 PCB-087 PCB-151 PCB-149 PCB-187 PCB-183 PCB-177 PCB-199(200) PCB-206	J (all detects) UJ (all non-detects)	P	Initial calibration verification (%D) (LV)
B13-8013 B13-8014 B13-8028 B13-8030	All TCL compounds	J (all detects) UJ (all non-detects)	P	Continuing calibration (frequency of analysis) (NQ)
B13-8013 B13-8014 B13-8028 B13-8030 B13-8036 B13-8038 B13-8040 B13-8052	PCB-018 PCB-028 PCB-052 PCB-049 PCB-044 PCB-074 PCB-070 PCB-095 PCB-101 PCB-099 PCB-119 PCB-087 PCB-110 PCB-151 PCB-149 PCB-118 PCB-153 PCB-138 PCB-158 PCB-187 PCB-183 PCB-177 PCB-199(200) PCB-194 PCB-206 PCB-209	J (all detects) UJ (all non-detects)	P	Continuing calibration (%D) (LC)
B13-8014	PCB-153	J (all detects)	A	Duplicate sample analysis (RPD) (HD)



Sample	Compound	Flag	A or P	Reason (Code)
B13-8013 B13-8014 B13-8038	PCB-169	J (all detects)	P	Laboratory control samples (%R) (HL)
B13-8013 B13-8014 B13-8028 B13-8030 B13-8036 B13-8038 B13-8040 B13-8052	PCB-018 PCB-028 PCB-049 PCB-052 PCB-087 PCB-095 PCB-099 PCB-101 PCB-110 PCB-128 PCB-138 PCB-149 PCB-151 PCB-153 PCB-156 PCB-180 PCB-187 PCB-195 PCB-206 PCB-209	J (all detects) UJ (all non-detects)	A	Certified reference materials (concentration) (LP)
B13-8013 B13-8014 B13-8028 B13-8030 B13-8036 B13-8038 B13-8040 B13-8052	All TCL compounds	J (all detects) UJ (all non-detects)	P	Internal standards (*IX)
B13-8013 B13-8014 B13-8028 B13-8030 B13-8036 B13-8038 B13-8040 B13-8052	All TCL compounds	J (all detects)	P	Compound quantitation (*X)
B13-8013 B13-8014 B13-8028 B13-8030 B13-8036 B13-8038 B13-8040 B13-8052	Compound reported below the RL and above the MDL	J (all detects)	A	Compound quantitation (DL)

# RHMP B'13

## Polychlorinated Biphenyls - Laboratory Blank Data Qualification Summary - SDG 1307002-010

No Sample Data Qualified in this SDG

**RHMP B'13**

**Polychlorinated Biphenyls - Field Blank Data Qualification Summary - SDG  
1307002-010**

No Sample Data Qualified in this SDG

LDC #: 33507B31

**VALIDATION COMPLETENESS WORKSHEET**

Date: 2-13-15

SDG #: 1307002-010

Level IV

Page: 1 of 1

Laboratory: PHYSIS Environmental Laboratories, Inc.

Reviewer: cm2nd Reviewer: RC**METHOD:** GC/MS Polychlorinated Biphenyl Congeners (EPA SW846 Method 8270C)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Sample receipt/Technical holding times	A / A	
II.	HRGC/HRMS Instrument performance check	A	
III.	Initial calibration/ICV	SW / SW	$r^2 \geq 20$
IV.	Continuing calibration	SW	$\leq 20$
V.	Laboratory Blanks	A	
VI.	Field blanks	N	
VII.	Matrix spike/Matrix spike duplicates /DUP	A / SW	D = 2+11
VIII.	Laboratory control samples /CRM-SPM	SW / SW	LCS / LCS D
IX.	Field duplicates	N	
X.	Internal standards	SW	
XI.	Compound quantitation RL/LOQ/LODs	ASW	
XII.	Target compound identification	A	
XIII.	System performance	A	
XIV.	Overall assessment of data	A	

Note: A = Acceptable  
N = Not provided/applicable  
SW = See worksheet

ND = No compounds detected  
R = Rinsate  
FB = Field blank

D = Duplicate  
TB = Trip blank  
EB = Equipment blank

SB=Source blank  
OTHER:

	Client ID	Lab ID	Matrix	Date
1	B13-8013	22482-R1	sediment	08/26/13
2	B13-8014	22483-R1	sediment	08/26/13
3	B13-8028	22484-R1	sediment	08/26/13
4	B13-8030	22485-R1	sediment	08/26/13
5	B13-8036	22486-R1	sediment	08/26/13
6	B13-8038	22487-R1	sediment	08/26/13
7	B13-8040	22488-R1	sediment	08/26/13
8	B13-8014MS	22483-R1MS	sediment	08/26/13
9	B13-8014MSD	22483-R1MSD	sediment	08/26/13
10	B13-8052	22489-R1	↓	8/27/13
11	B13-8014 DUP	22483-R2 DUP	↓	8/26/13
12				
13				
14	22481-B1 (MB)			

**Method:** PCB Congeners (EPA SW 846 Method 8270C)

Validation Area	Yes	No	NA	Findings/Comments
<b>I. Technical holding times</b>				
All technical holding times were met.	/			
Cooler temperature criteria was met.	/			
<b>II. GC/MS Instrument performance check</b>				
Were the DFTPP performance results reviewed and found to be within the specified criteria?	/			
Were all samples analyzed within the 12 hour clock criteria?	/			
<b>III. Initial calibration</b>				
Did the laboratory perform a 5 point calibration prior to sample analysis?	/			
Were all percent relative standard deviations (%RSD) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?			/	
Was a curve fit used for evaluation? If Yes, what was the acceptance criteria used?	/			
Did the initial calibration meet the curve fit acceptance criteria?		/		
Were all percent relative standard deviations (%RSD) $\leq$ 30% and relative response factors (RRF) $\geq$ 0.05?			/	
<b>IV. Continuing calibration</b>				
Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?	/			
Were all percent differences (%D) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?		/		
Were all percent differences (%D) $\leq$ 25% and relative response factors (RRF) $\geq$ 0.05?		/		
<b>V. Blanks</b>				
Was a method blank associated with every sample in this SDG?	/			
Was a method blank analyzed for each matrix and concentration?	/			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		/		
<b>VI. Surrogate spikes</b>				
Were all surrogate %R within QC limits?			/	
If 2 or more base neutral or acid surrogates were outside QC limits, was a reanalysis performed to confirm %R?			/	
If any %R was less than 10 percent, was a reanalysis performed to confirm %R?			/	
<b>VII. Matrix spike/Matrix spike duplicates</b>				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.	/			
Was a MS/MSD analyzed every 20 samples of each matrix?	/			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?	/			
<b>VIII. Laboratory control samples</b>				

Validation Area	Yes	No	NA	Findings/Comments
Was an LCS analyzed for this SDG?	/			
Was an LCS analyzed per extraction batch?	/			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?		/		
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?	(X)			
Were the performance evaluation (PE) samples within the acceptance limits?	/			
X. Internal standards				
Were internal standard area counts within -50% or +100% of the associated calibration standard?				
Were retention times within + 30 seconds from the associated calibration standard?				
XI. Target compound identification				
Were relative retention times (RRT's) within $\pm 0.06$ RRT units of the standard?	/			
Did compound spectra meet specified EPA "Functional Guidelines" criteria?	/			
Were chromatogram peaks verified and accounted for?	/			
XII. Compound quantitation/CRQLs				
Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound?	/			
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	/			
XIII. Tentatively identified compounds (TICs)				
Were the major ions (> 10 percent relative intensity) in the reference spectrum evaluated in sample spectrum?			/	
Were relative intensities of the major ions within $\pm 20\%$ between the sample and the reference spectra?			/	
Did the raw data indicate that the laboratory performed a library search for all required peaks in the chromatograms (samples and blanks)?			/	
XIV. System performance				
System performance was found to be acceptable.	/			
XV. Overall assessment of data				
Overall assessment of data was found to be acceptable.	/			

LDC #: 33507B31

## VALIDATION FINDINGS CHECKLIST

Page: 3 of 3  
Reviewer: pm  
2nd Reviewer: h

Validation Area	Yes	No	NA	Findings/Comments
XVI. Field duplicates				
Field duplicate pairs were identified in this SDG.		/		
Target compounds were detected in the field duplicates.			/	
XVII. Field blanks				
Field blanks were identified in this SDG.		/		
Target compounds were detected in the field blanks.			/	

## VALIDATION FINDINGS WORKSHEET

## Initial Calibration

**METHOD:** PCB Congeners (EPA SW 846 Method 8270C)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

⑤ N N/A Did the laboratory conduct an acceptable 5 point calibration prior to sample analysis?

Were percent relative standard deviations (%RSD) and relative response factors (RRF) within method criteria for all CCC's and SPCC's?

Was a curve fit used for evaluation? If yes, what was the acceptance criteria used for evaluation? 0.99

Did the initial calibration meet the acceptance criteria?

Were all %RSDs and RRFs within the validation criteria of  $\leq 30/15$  %RSD and  $\geq 0.05$  RRF ?

[illegible]

**METHOD:** PCB Congeners (EPA SW 846 Method 8270C)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

⑤ Y N N/A Was a routine calibration was performed at the beginning and end of each 12 hour period?

Y/N/N/A Were all percent differences (%D) of RRFs  $\leq 20$ ?

Y	N	N/A	Did all routine calibration standards meet the Ion Abundance Ratio criteria?

[illegible]





## VALIDATION FINDINGS WORKSHEET

## Routine Calibration

CCV

**METHOD:** PCB Congeners (EPA SW 846 Method 8270C)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

- Y N N/A Was a routine calibration was performed at the beginning and end of each 12 hour period?
- Y N N/A Were all percent differences (%D) of RRFs  $\leq 20$ ?
- Y N N/A Did all routine calibration standards meet the Ion Abundance Ratio criteria?

#	Date	Standard ID	Compound	Finding %D (Limit: $\leq 20\%$ )	Finding Ion Abundance Ratio	Associated Samples	Qualifications
	5/10/14	PCB+6-100CCV2	PCB018	37		5-7, 10	JUS/P (LC)
			028	23			
			052	35			
			049	31			
			044	32			
			074	27			
			070	24			
			095	22			
			101	33			
			099	28			
			119	27			
			087	29			
			110	26			
			151	31			
			149	33			
			118	22			
			153	24			
			138	23			
			158	23			
			187	30			
			183	26			
			177	27			
			199(200)	39			
			194	23			
			206	33			
			209	27			
							(det/ND)





LDC #: 33507B31

VALIDATION FINDINGS WORKSHEET  
Laboratory Control Samples (LCS) / SPMPage: 2 of 2  
Reviewer: SPM  
2nd Reviewer: K

METHOD: GC/MS PCB Congeners (EPA SW 846 Method 8270C)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A

Was a LCS required?

Y N N/A

Was a LCS analyzed every 20 samples for each matrix or whenever a sample extraction was performed?

Y N N/A

Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?

Code: LP

#	Date	Lab ID/Reference	Compound	Limits (µg/kg)		RPD (Limits)	Associated Samples	Qualifications
		CRM-SRM 1944	PCB018	39.62 ( 45.98-56.28 )	( )	( )	all	J/UJ/A (det/no)
			PCB028	70.19 ( 74.20-87.68 )	( )	( )		
			PCB049	39.93 ( 51.97-57.44 )	( )	( )		
			PCB052	69.4 ( 73.53-85.47 )	( )	( )		
			PCB087	24.3 ( 24.32-35.91 )	( )	( )		
			PCB095	44.13 ( 53.30-77.60 )	( )	( )		
			PCB099	31.5 ( 33.35-41.90 )	( )	( )		
			PCB101	49.04 ( 67.36 79.70 )	( )	( )		
			PCB110	40.16 ( 55.86-71.61 )	( )	( )		
			PCB128	7.44 ( 7.78-9.19 )	( )	( )		
			PCB138	43.59 ( 56.15-68.36 )	( )	( )		
			PCB149	35.16 ( 46.08-53.45 )	( )	( )		
			PCB151	12.64 ( 15.74-18.15 )	( )	( )		
			PCB153	47.96 ( 67.55-80.75 )	( )	( )		
			PCB156	5.22 ( 5.57-7.54 )	( )	( )		
			PCB180	39.78 ( 40.95-47.78 )	( )	( )		
			PCB187	22.47 ( 22.90-27.41 )	( )	( )		
			PCB195	2.78 ( 3.19-4.35 )	( )	( )		
			PCB206	6.31 ( 8.27-10.21 )	( )	( )		
			PCB209	5.94 ( 6.16-7.50 )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		



# **VALIDATION FINDINGS WORKSHEET** **Compound Quantitation and Reported CRQLs**

**METHOD:** PCB Congeners (EPA SW 846 Method 8270C)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A  
 X N N/A

Were the correct internal standard (IS), quantitation ions and relative response factors (RRF) used to quantitate the compound?  
 Compound quantitation and CRQLs were adjusted to reflect all sample dilutions and dry weight factors (if necessary).

#	Date	Compound	Finding	Associated Samples	Qualifications
		<del>PCB183</del>	result between MDL and RL	4 <del>ML</del>	Jdets/A (DL)
		<del>PCB158, PCB183</del>		5	
		<del>PCB099</del>		6	
		<del>PCB099, PCB141, PCB177, PCB203</del>		10	
		<del>N</del>			
		<del>#11</del>	Recal amt does not match reported amt Lab indicated that the multiplier used to quan results was based on sample dry wt, initial and final vol. The multiplier can't be verified since extract volumes were not provided.		Jdets/P

Comments: See sample calculation verification worksheet for recalculations

# **VALIDATION FINDINGS WORKSHEET** **Initial Calibration Calculation Verification**

**METHOD:** GC/MS PCB Congeners (EPA SW 846 Method 8270C)

The Relative Response Factor (RRF), average RRF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

$$RRF = (A_x)(C_{is}) / (A_{is})(C_x)$$

average RRF = sum of the RRFs/number of standards

$$\%RSD = 100 * (S/X)$$

$A_x$  = Area of compound,

$C_x$  = Concentration of compound,

$S$  = Standard deviation of the RRFs,

$A_{is}$  = Area of associated internal standard

$C_{is}$  = Concentration of internal standard

$X$  = Mean of the RRFs

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Reported	Recalculated	Reported	Recalculated	Reported	Recalculated
				Average RRF (initial)	Average RRF (initial)	RRF ( 50 std)	RRF ( 50 std)	%RSD	%RSD
1	Q PCB+6 140310.M	5/3/14	PCB 77 ( <sup>13</sup> C-PCB 77)	} see attached					
			PCB 105 ( <sup>13</sup> C-PCB 105)						
			PCB 167 ( <sup>13</sup> C-PCB 167)						
			PCB 189 ( <sup>13</sup> C-PCB 189)						
2			PCB 77 ( <sup>13</sup> C-PCB 77)						
			PCB 105 ( <sup>13</sup> C-PCB 105)						
			PCB 167 ( <sup>13</sup> C-PCB 167)						
			PCB 189 ( <sup>13</sup> C-PCB 189)						
3			PCB 77 ( <sup>13</sup> C-PCB 77)						
			PCB 105 ( <sup>13</sup> C-PCB 105)						
			PCB 167 ( <sup>13</sup> C-PCB 167)						
			PCB 189 ( <sup>13</sup> C-PCB 189)						

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.



LDC#: 33507B31

**VALIDATION FINDINGS WORKSHEET**  
**Initial Calibration Calculation Verification**

Page: 2 of 5  
Reviewer: gm  
2nd Reviewer: dt

Method: PCB Congeners by EPA SW 846 Method 8270C

Calibration Date	GC	Compound	Standard	(X) Response ratio	(Y) Concentration ratio
5/3/2014		PCB077	1	0.009079568	0.010
			2	0.025137887	0.025
			3	0.052419115	0.050
			4	0.079220903	0.075
			5	0.108358923	0.100
			6	0.210928602	0.200

Regression Output	Calculated	Reported
Constant	-0.001	0.000
Std Err of Y Est		
R Squared	0.9996	0.999496
Degrees of Freedom		
X Coefficient(s)	1.065	1.079
Std Err of Coef.		
Correlation Coefficient	0.9998	
Coefficient of Determination (r^2)	0.9996	

LDC#: 33507031

**VALIDATION FINDINGS WORKSHEET**  
**Initial Calibration Calculation Verification**

Page: 3 of 5Reviewer: SW2nd Reviewer: RL

Method: PCB Congeners by EPA SW 846 Method 8270C

Calibration Date	GC	Compound	Standard	(X) Response ratio	(Y) Concentration ratio
5/3/2014		PCB105	1	0.047997098	0.010
			2	0.119461333	0.025
			3	0.23803648	0.050
			4	0.375464382	0.075
			5	0.496314285	0.100
			6	0.947504614	0.200

Regression Output		<i>Calculated</i>	<i>Reported</i>
Constant		0.006	0.000
Std Err of Y Est			
R Squared		0.9989	0.999628
Degrees of Freedom			
X Coefficient(s)		4.753	5.852
Std Err of Coef.			
Correlation Coefficient		0.9995	
Coefficient of Determination (r^2)		0.9989	

LDC#: 33507B31

**VALIDATION FINDINGS WORKSHEET**  
**Initial Calibration Calculation Verification**

Page: 4 of 5  
Reviewer: gm  
2nd Reviewer: N

Method: PCB Congeners by EPA SW 846 Method 8270C

Calibration Date	GC	Compound	Standard	(X) Response ratio	(Y) Concentration ratio
5/3/2014		PCB167	1	0.036399703	0.010
			2	0.094518128	0.025
			3	0.194875549	0.050
			4	0.296982694	0.075
			5	0.433103699	0.100
			6	0.828332367	0.200

Regression Output	Calculated	Reported
Constant	-0.009	0.000
Std Err of Y Est		
R Squared	0.9985	0.994122
Degrees of Freedom		
X Coefficient(s)	4.209	4.544
Std Err of Coef.		
Correlation Coefficient	0.9993	
Coefficient of Determination (r^2)	0.9985	

LDC#: 33507B31

**VALIDATION FINDINGS WORKSHEET**  
**Initial Calibration Calculation Verification**

Page: 5 of 5  
Reviewer: gn  
2nd Reviewer: M

**Method: PCB Congeners by EPA SW 846 Method 8270C**

Calibration Date	GC	Compound	Standard	(X) Response ratio	(Y) Concentration ratio
5/3/2014		PCB189	1	0.028682285	0.010
			2	0.077104903	0.025
			3	0.150214525	0.050
			4	0.233015643	0.075
			5	0.339551635	0.100
			6	0.701748383	0.200

Regression Output	Calculated	Reported
Constant	-0.019	0.000
Std Err of Y Est		
R Squared	0.9981	0.992473
Degrees of Freedom		
X Coefficient(s)	3.570	3.192
Std Err of Coef.		
Correlation Coefficient	0.9991	
Coefficient of Determination (r^2)	0.9981	

LDC #: 33507B31

# **VALIDATION FINDINGS WORKSHEET** **Continuing Calibration Results Verification**

Page: 1 of 1  
 Reviewer: OK  
 2nd Reviewer: K

**METHOD:** PCB Congeners (EPA SW 846 Method 8270C)

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the compounds identified below using the following calculation:

$$\% \text{ Difference} = 100 * (\text{ave. RRF} - \text{RRF}) / \text{ave. RRF}$$

$$\text{RRF} = (A_x)(C_{is}) / (A_{is})(C_x)$$

Where: ave. RRF = initial calibration average RRF

RRF = continuing calibration RRF

A<sub>x</sub> = Area of compound,C<sub>x</sub> = Concentration of compound,A<sub>is</sub> = Area of associated internal standardC<sub>is</sub> = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Average RRF (initial)	Reported	Recalculated	Reported	Recalculated
					RRF (CC)	RRF (CC)	%D	%D
1	PCB+6 - 100CCV 2	5/10/14 11:31am	PCB 77 ( <sup>13</sup> C-PCB 77)	100	92	91.75	8	8
			PCB 105 ( <sup>13</sup> C-PCB 105)	↓	83	83.47	17	17
			PCB 167 ( <sup>13</sup> C-PCB 167)	↓	88	87.95	12	12
			PCB 189 ( <sup>13</sup> C-PCB 189)	↓	99	99.08	1	0.9
2			PCB 77 ( <sup>13</sup> C-PCB 77)					
			PCB 105 ( <sup>13</sup> C-PCB 105)					
			PCB 167 ( <sup>13</sup> C-PCB 167)					
			PCB 189 ( <sup>13</sup> C-PCB 189)					
3			PCB 77 ( <sup>13</sup> C-PCB 77)					
			PCB 105 ( <sup>13</sup> C-PCB 105)					
			PCB 167 ( <sup>13</sup> C-PCB 167)					
			PCB 189 ( <sup>13</sup> C-PCB 189)					
4			PCB 77 ( <sup>13</sup> C-PCB 77)					
			PCB 105 ( <sup>13</sup> C-PCB 105)					
			PCB 167 ( <sup>13</sup> C-PCB 167)					
			PCB 189 ( <sup>13</sup> C-PCB 189)					

Comments: Refer to Routine Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

# **VALIDATION FINDINGS WORKSHEET** **Matrix Spike/Matrix Spike Duplicates Results Verification**

**METHOD:** PCB Congeners (EPA SW 846 Method 8270C)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery =  $100 * (SSR - SR) / SA$

Where: SSR = Spiked sample result, SR = Sample result  
 SA = Spike added

RPD =  $|MSR - MSDR| * 2 / (MSR + MSDR)$

MSR = Matrix spike percent recovery    MSDR = Matrix spike duplicate percent recovery

MS/MSD samples: 8/9

Compound	Spike Added (ng/g)		Sample Concentration (ng/g)	Spiked Sample Concentration (ng/g)		Matrix Spike		Matrix Spike Duplicate		Reported	Recalculated
						Percent Recovery		Percent Recovery		RPD	RPD
	MS	MSD	-----	MS	MSD	Reported	Recalc	Reported	Recalc	----	----
PCB 77	30.84	31.88	ND	38.34	39.37	124	124	123	123	1	3
PCB 105	↓	↓	ND	33.28	34.85	108	108	109	109	1	5
PCB 167	↓	↓	ND	35.37	36.73	115	115	115	115	0	4
PCB 189	↓	↓	ND	37.38	38.27	121	121	120	120	1	2
									</		

Comments: Refer to Matrix Spike/Matrix Spike Duplicate findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

discrepancies in RPD due to calculation of concentrations vs. % recovery

LDC #: 33507B31

# **VALIDATION FINDINGS WORKSHEET** **Laboratory Control Sample Results Verification**

Page: 1 of 1  
 Reviewer: OK  
 2nd Reviewer: 11

**METHOD:** PCB Congeners (EPA SW 846 Method 8270C)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the laboratory control sample and laboratory control sample duplicate (if applicable) were recalculated for the compounds identified below using the following calculation:

% Recovery =  $100 * SSC/SA$ 

Where: SSC = Spiked sample concentration  
 SA = Spike added

RPD =  $LCS - LCSD / * 2/(LCS + LCSD)$ 

LCS = Laboratory control sample percent recovery

LCSD = Laboratory control sample duplicate percent recovery

LCS/LCSD ID: 22481-BS1/BS2

Compound	Spike Added (ng/g)		Spiked Sample Concentration (ng/g)		LCS		LCSD		LCS/LCSD	
					Percent Recovery		Percent Recovery		RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc	Reported	Recalc	Reported	Recalculated
PCB 77	200	200	256.7	246.62	128	128	123	123	4	4
PCB 105	↓	↓	216.89	221.29	108	108	111	111	3	2
PCB 167	↓	↓	228.4	239.86	114	114	120	120	5	5
PCB 189	↓	↓	245.46	251.94	123	123	126	126	2	2.6

Comments: Refer to Laboratory Control Sample findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

## VALIDATION FINDINGS WORKSHEET

### Sample Calculation Verification

**METHOD:** GC/MS SVOA (EPA SW 846 Method 8270C)

<del>Y</del>	N	N/A
<del>A</del>	N	N/A

Were all reported results recalculated and verified for all level IV samples?

Were all recalculated results for detected target compounds agree within 10.0% of the reported results?

$$\text{Concentration} = \frac{(A_x)(I_s)(V_i)(DF)(2.0)}{(A_{is})(RRF)(V_o)(V_i)(\%S)}$$

Example:

Sample I.D. 1, PCB110:

$$\text{Conc.} = \frac{9964 \times 1000 \times 0.100 \times 0.27}{(70.337)(1.194)0.4624} \times 1$$

$$= \frac{0.255495463}{0.261 \text{ ng/g}} \approx 0.26 \text{ ng/g}$$

~~2.0~~ = Factor of 2 to account for GPC cleanup

[illegible]