APPENDIX D. DATA VALIDATION REPORTS

LABORATORY DATA CONSULTANTS, INC.
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LDC #13005/13051/13058/13076/13080/13102

Windward Environmental, LLC
200 West Mercer Street, Suite 401
Seattle, WA 98119
ATTN: Ms. Susie McGroddy

June 7, 2005

SUBJECT: Lower Duwamish Waterway Group Tissue Sample Data Validation

Dear Ms. McGroddy,

This report details the revised findings of an EPA Level II and Level IV data validation review of Analytical chemistry results generated in support of the Lower Duwamish Waterway Group project. All analyses were performed by Columbia Analytical Services, Inc., with the exception of Inorganic Arsenic which was performed by BrooksRand Trace Metals Analysis & Products. Samples were analyzed for GC/MS Semivolatiles by EPA SW 846 Method 8270C-SIM, GC/MS Polynuclear Aromatic Hydrocarbons by EPA SW 846 Method 8270C-SIM, GC Butyltins by the Krone Method, GC Chlorinated Pesticides by EPA SW 846 Method 8081A, GC Polychlorinated Biphenyls by EPA SW 846 Method 8082, Metals by EPA SW 846 Methods 6010B/6020/7471A, Inorganic Arsenic by modified EPA Method 1632 and Total Lipids by NOAA Method. Samples are referenced under the following Sample Delivery Groups: K2409443, K2409813, 05BR0023, K2409445, K2409451, and K2409809. See the Sample Analysis Table (Attachment 1) for the number of samples reviewed and the Sample Validation Table.

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

Sincerely,

Stella S. Cuenco
Project Manager/Senior Chemist

CHEMICAL DATA QUALITY REVIEW FOR TISSUE SAMPLES

Lower Duwamish Waterway Group
LDC# 13005, 13051, 13058, 13076, 13080, 13102

This report details the findings of an EPA Level II and Level IV data validation review of Analytical chemistry results generated in support of the Lower Duwamish Waterway Group project. All analyses were performed by Columbia Analytical Services, Inc., with the exception of Inorganic Arsenic which was performed by BrooksRand Trace Metals Analysis & Products. Samples were analyzed for GC/MS Semivolatiles by EPA SW 846 Method 8270C-SIM, GC/MS Polynuclear Aromatic Hydrocarbons by EPA SW 846 Method 8270C-SIM, GC Butyltins by the Krone Method, GC Chlorinated Pesticides by EPA SW 846 Method 8081A, GC Polychlorinated Biphenyls by EPA SW 846 Method 8082, Metals by EPA SW 846 Methods 6010B/6020/7471A, Inorganic Arsenic by modified EPA Method 1632 and Total Lipids by NOAA Method. Samples are referenced under the following Sample Delivery Groups: K2409443, K2409813, 05BR0023, K2409445, K2409451, and K2409809. See the Sample Analysis Table (Attachment 1) for the number of samples reviewed and the Sample Validation Table (Attachment 2) for the sample identifications and analyses. Sample IDs ending in "**" underwent Level IV review.

The QC guidelines used for data qualification are those specified in the National Functional Guidelines for Organic Data Review (October 1999) and the National Functional Guidelines for Inorganic Data Review (July 2002). Specific QC criteria used follows the Fish and Crab Collection and Chemical Analyses Quality Assurance Project Plan (August 27, 2004). Where specific guidance is not available, the data has been evaluated in a conservative manner consistent with industry standards using professional experience.

The following items were evaluated during the review:

- Holding Times
- Sample Preservation
- Cooler Temperatures
- Instrument Calibration*
- Blanks
- Surrogates
- Matrix Spike/Matrix Spike Duplicates
- Internal Standards*
- Laboratory Control Samples
- Target Compound Identifications*
- Compound Quantitation and CRQLs*
- System Performance
- Field Duplicates

*Data were not reviewed for Level II.

Only issues which require comment or action are discussed in this report. Data deficiencies are arranged by method. Potential effects of data anomalies have been described where possible.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

***Overall Data Assessment**

Technical holding time exceedances, QC exceedances, compound identification, compound quantitation, instrument calibration and method blank contamination problems have warranted the qualification of a portion of the data set.

Zero percent (< 10%) recoveries in the LCS for 2,4-Dinitrophenol in SDGs K2409445 and K2409451 and Benzidine in SDGs K2409809, K2409445 and K2409451 have warranted the qualification of non-detected results as rejected (R) in the semivolatile analysis. These compounds are known to have poor recoveries when analyzed by method 8270C.

Low surrogate recovery (<10%) problems have warranted the qualification of non-detected results as rejected (R) for one sample in the butyltin analysis for SDG K2409451.

Low internal standard area count problems have warranted the qualification of non-detected results as rejected (R) for two samples in the semivolatile analysis for SDG K2409451.

Technical holding time problems have warranted the qualification of detected results as estimated (J) and non-detected results as estimated (UJ) for one sample in the semivolatile analyses in SDG K2409451.

Compound identification problems have warranted the qualification of detected results as presumptive and estimated (NJ) in the pesticide analyses for SDGs K2409445, K2409451 and K2409809.

Compound quantitation problems have warranted the qualification of detected results as estimated (J) in the semivolatile analysis for SDG K2409451, and in the pesticide, PCB and butyltin analyses for SDGs K2409445, K2409451 and K2409809.

Instrument calibration problems have warranted the qualification of detected results as estimated (J) and non-detected results as estimated (UJ) for several compounds in the semivolatile analysis for SDG K2409445 and the pesticide analyses for SDGs K2409445, K2409451 and K2409809.

Method blank contamination have warranted the qualification of several compounds as non-detected (U) in the semivolatile and polynuclear aromatic hydrocarbon analyses for SDGs K2409445, K2409451 and K2409809. Methoxychlor was qualified as non-detected (U) in the pesticide analysis and Nickel was qualified as non-detected (U) in the metals analysis for SDG K2409445.

Other QC accuracy and precision exceedances have warranted the qualification of detected results as estimated (J) and non-detected results as estimated (UJ) in the inorganic arsenic analysis in SDG 05BR0023 and semivolatile, pesticide, butyltin and metals analyses for SDGs K2409445, K2409451 and K2409809.

The required frequency of MS/MSD were not met for all organic analyses due to insufficient sample amount.

The required frequency of SRM analysis was not met for the inorganic arsenic analysis.

Field duplicates were not collected for this sampling event.

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. Sample results that were found to be rejected (R) are unusable for all purposes. Based upon the data validation all other results are considered valid and usable for all purposes.

Attachment 1

Job #04-08-06-21 **LDC #13005 (Windward Environmental, LLC - Seattle WA / Lower Duwamish Working Group)**

LDC	SDG#	DATE REC'D	DATE DUE	Arsenic (6010B)		Total Lipids (NOAA)																													
Matrix:	Tissue/Sediment			T	S	T	S	T	S	T	S	T	S	T	S	T	S	T	S	T	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S
A	K2409443	01/11/05	02/01/05	15	0	15	0																												
A	K2409443	01/11/05	02/01/05	5	0	5	0																												
Total	B			20	0	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	40

Shaded cells indicate Level IV validation (all other cells are Level II validation). These sample counts do not include MS/MSD, and DUPs

Level II

Attachment 1

Job #04-08-06-21 LDC #13051 (Windward Environmental, LLC - Seattle WA / Lower Duwamish Waterway Group)

LDC	SDG#	DATE REC'D	DATE DUE	Arsenic (6020)		Total Lipids (NOAA)																													
Matrix:	Tissue/Sediment			T	S	T	S	T	S	T	S	T	S	T	S	T	S	T	S	T	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S
A	K2409813	01/19/05	02/09/05	29	0	29	0																												
Total	B			29	0	29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	58

Shaded cells indicate Level IV validation (all other cells are Level II validation). These sample counts do not include MS/MSD, and DUPs

Attachment 1

Job #04-08-06-21 LDC #13058 (Windward Environmental, LLC - Seattle WA / Lower Duwamish Waterway Group)

LDC	SDG#	DATE REC'D	DATE DUE	Inorganic Arsenic (1632)																															
Matrix:	Tissue/Sediment			T	S	T	S	T	S	T	S	T	S	T	S	T	S	T	S	T	S	T	S	W	S	W	S	W	S	W	S	W	S	W	S
A	05BR0023	01/24/05	02/14/05	78	0																														
A	05BR0023	01/24/05	02/14/05	9	0																														
Total	B			87	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	87

Shaded cells indicate Level IV validation (all other cells are Level II validation). These sample counts do not include MS/MSD, and DUPs

Attachment 1

Job #04-08-06-21 LDC #13076 (Windward Environmental, LLC - Seattle WA / Lower Duwamish Waterway Group)

LDC	SDG#	DATE REC'D	DATE DUE	SVOA (8270C)		Pest. (8081A)		PCBs (8082)		Metals & Hg (SW846)		Butyl -tins (Krone)		Total Lipids (NOAA)																					
Matrix:	Tissue/Sediment			T	S	T	S	T	S	T	S	T	S	T	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S
A	K2409445	01/25/05	02/11/05	13	0	17	0	13	0	13	0	14	0	13	0																		
A	K2409445	01/25/05	02/11/05	11	0	15	0	11	0	11	0	11	0	11	0																		
Total	B			24	0	32	0	24	0	24	0	25	0	24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	153

Shaded cells indicate Leve IV validation (all other cells are Level II validation). These sample counts do not include MS/MSD, and DUPs

Attachment 1

Job #04-08-06-21 **LDC #13080 (Windward Environmental, LLC - Seattle WA / Lower Duwamish Waterway Group)**

LDC	SDG#	DATE REC'D	DATE DUE	SVOA (8270C -SIM)		PAHs (8270C -SIM)		Pest. (8081A)		PCBs (8082)		Metals & Hg (SW846)		Butyl -tins (Krone)		Total Lipids (NOAA)																			
Matrix:	Tissue/Sediment			T	S	T	S	T	S	T	S	T	S	T	S	T	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S
A	K2409451	01/28/05	02/11/05	56	0	45	0	74	0	53	0	53	0	53	0	53	0																		
A	K2409451	01/28/05	02/11/05	0	0	9	0	0	0	0	0	0	0	0	0	0	0																		
Total	B			56	0	54	0	74	0	53	0	53	0	53	0	53	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	396

Shaded cells indicate Level IV validation (all other cells are Level II validation). These sample counts do not include MS/MSD, and DUPs

13080ST.wpd

Level II

Attachment 1

Job #04-08-06-21 **LDC #13102 (Windward Environmental, LLC - Seattle WA / Lower Duwamish Waterway Group)**

LDC	SDG#	DATE REC'D	DATE DUE	SVOA (8270C -SIM)		PAHs (8270C -SIM)		Pest. (8081A)		PCBs (8082)		Metals & Hg (SW846)		Butyl -tins (Krone)		Total Lipids (NOAA)																			
Matrix:	Tissue/Sediment			T	S	T	S	T	S	T	S	T	S	T	S	T	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S
A	K2409809	02/01/05	02/23/05	31	0	32	0	31	0	31	0	31	0	31	0	31	0																
Total	B			31	0	32	0	31	0	31	0	31	0	31	0	31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	218

Shaded cells indicate Level IV validation (all other cells are Level II validation). These sample counts do not include MS/MSD, and DUPs

Attachment 2

SDG#: K2409443 VALIDATION SAMPLE TABLE **LDC#:** 13005A

Project Name: Lower Duwamish Waterway Group Parameters/Analytical Method Project #04-08-06-21

Client ID #	Lab ID #	Matrix	Date Collected	As (6020)	Total Lipids (NOAA)										
BL-ES-WB-comp-1**	K2409443-001**	tissue	09/14/04	X	X										
BL-ES-WB-comp-2	K2409443-002	tissue	09/14/04	X	X										
BL-ES-WB-comp-3	K2409443-003	tissue	09/14/04	X	X										
BL-ES-WB-comp-4	K2409443-004	tissue	09/14/04	X	X										
BL-ES-WB-comp-5	K2409443-005	tissue	09/14/04	X	X										
BL-ES-WB-comp-6**	K2409443-006**	tissue	09/14/04	X	X										
EP-ES-WB-comp-1	K2409443-007	tissue	09/16/04	X	X										
EP-ES-WB-comp-2	K2409443-008	tissue	09/16/04	X	X										
EP-ES-WB-comp-3	K2409443-009	tissue	09/16/04	X	X										
EP-ES-WB-comp-4**	K2409443-010**	tissue	09/16/04	X	X										
EP-ES-WB-comp-5	K2409443-011	tissue	09/16/04	X	X										
EP-ES-WB-comp-6	K2409443-012**	tissue	09/16/04	X	X										
BL-SC-EM-comp-1	K2409443-013	tissue	09/16/04	X	X										
BL-SC-EM-comp-2	K2409443-014	tissue	09/14/04	X	X										
BL-SC-EM-comp-3	K2409443-015	tissue	09/14/04	X	X										
BL-SC-HP-comp-1**	K2409443-016**	tissue	09/14/04	X	X										
EP-SC-EM-comp-1	K2409443-017	tissue	09/16/04	X	X										
EP-SC-EM-comp-2	K2409443-018	tissue	09/16/04	X	X										
EP-SC-EM-comp-3	K2409443-019	tissue	09/16/04	X	X										
EP-SC-HP-comp-1	K2409443-020	tissue	09/16/04	X	X										
BL-ES-WB-comp-5DUP	K2409443-005DUP	tissue	09/14/04		X										
BL-ES-WB-comp-5TRP	K2409443-005TRP	tissue	09/04/04		X										
EP-ES-WB-comp-4MS	K2409443-010MS	tissue	09/16/04	X											
EP-ES-WB-comp-4DUP	K2409443-010DUP	tissue	09/16/04	X											

Note: X = Validation was performed.

Attachment 2

SDG#: K2409813 VALIDATION SAMPLE TABLE **LDC#:** 13051A

Project Name: Lower Duwamish Waterway Group Parameters/Analytical Method Project #04-08-06-21

Client ID #	Lab ID #	Matrix	Date Collected	As (6020)	Total Lipids (NOAA)											
BL-SS-WB-comp-1	K2409813-001	tissue	09/14/04	X	X											
BL-SS-WB-comp-2	K2409813-002	tissue	09/14/04	X	X											
BL-SS-WB-comp-3	K2409813-003	tissue	09/14/04	X	X											
BL-SS-WB-comp-4	K2409813-004	tissue	09/14/04	X	X											
BL-SS-WB-comp-5	K2409813-005	tissue	09/14/04	X	X											
BL-SS-WB-comp-6	K2409813-006	tissue	09/14/04	X	X											
EP-SS-WB-comp-1	K2409813-007	tissue	09/16/04	X	X											
EP-SS-WB-comp-2	K2409813-008	tissue	09/16/04	X	X											
EP-SS-WB-comp-3	K2409813-009	tissue	09/14/04	X	X											
BL-ES-FL-comp-1	K2409813-010	tissue	09/14/04	X	X											
BL-ES-FL-comp-2	K2409813-011	tissue	09/14/04	X	X											
BL-ES-FL-comp-3	K2409813-012	tissue	09/14/04	X	X											
BL-ES-FL-comp-4	K2409813-013	tissue	09/14/04	X	X											
BL-ES-FL-comp-5	K2409813-014	tissue	09/14/04	X	X											
BL-ES-FL-comp-6	K2409813-015	tissue	09/14/04	X	X											
EP-ES-FL-comp-1	K2409813-016	tissue	09/16/04	X	X											
EP-ES-FL-comp-2	K2409813-017	tissue	09/16/04	X	X											
EP-ES-FL-comp-3	K2409813-018	tissue	09/16/04	X	X											
EP-ES-FL-comp-4	K2409813-019	tissue	09/16/04	X	X											
EP-ES-FL-comp-5	K2409813-020	tissue	09/16/04	X	X											
EP-ES-FL-comp-6	K2409813-021	tissue	09/16/04	X	X											
BL-DC-EM-comp-1	K2409813-022	tissue	09/14/04	X	X											
BL-DC-EM-comp-2	K2409813-023	tissue	09/14/04	X	X											
BL-DC-EM-comp-3	K2409813-024	tissue	09/14/04	X	X											
BL-DC-HP-comp-1	K2409813-025	tissue	09/14/04	X	X											

Note: X = Validation was performed.

SDG#: K2409813 VALIDATION SAMPLE TABLE **LDC#:** 13051A

Project Name: Lower Duwamish Waterway Group Parameters/Analytical Method Project #04-08-06-21

Client ID #	Lab ID #	Matrix	Date Collected	As (6020)	Total Lipids (NOAA)										
EP-DC-EM-comp-1	K2409813-026	tissue	09/16/04	X	X										
EP-DC-EM-comp-2	K2409813-027	tissue	09/16/04	X	X										
EP-DC-EM-comp-3	K2409813-028	tissue	09/16/04	X	X										
EP-DC-HP-comp-1	K2409813-029	tissue	09/16/04	X	X										
BL-ES-FL-comp-4MS	K2409813-013MS	tissue	09/14/04	X											
BL-ES-FL-comp-4DUP	K2409813-013DUP	tissue	09/14/04	X											
BL-ES-FL-comp-6DUP	K2409813-015DUP	tissue	09/14/04		X										
BL-ES-FL-comp-6TRP	K2409813-015TRP	tissue	09/14/04		X										
EP-ES-FL-comp-1DUP	K2409813-016DUP	tissue	09/16/04		X										
EP-ES-FL-comp-1TRP	K2409813-016TRP	tissue	09/16/04		X										
BL-DC-EM-comp-3MS	K2409813-024MS	tissue	09/14/04	X											
BL-DC-EM-comp-3DUP	K2409813-024DUP	tissue	09/14/04	X											

Note: X = Validation was performed.

Attachment 2

SDG#: 05BR0023 VALIDATION SAMPLE TABLE **LDC#:** 13058A

Project Name: Lower Duwamish Waterway Group Parameters/Analytical Method Project #04-08-06-21

Client ID #	Lab ID #	Matrix	Date Collected	Inorganic As (1632)											
LDW-T1-A-SS-WB-comp-1**	05BR0023-1	tissue	08/02/04	X											
LDW-T1-B-SS-WB-comp-1**	05BR0023-2	tissue	08/02/04	X											
LDW-T2-A-SS-WB-comp-1**	05BR0023-3	tissue	08/03/04	X											
LDW-T2-B-SS-WB-comp-1**	05BR0023-4	tissue	08/03/04	X											
LDW-T3-A-SS-WB-comp-1**	05BR0023-5	tissue	08/02/04	X											
LDW-T3-B-SS-WB-comp-1	05BR0023-6	tissue	08/03/04	X											
LDW-T4-A-SS-WB-comp-1	05BR0023-7	tissue	08/04/04	X											
LDW-T4-B-SS-WB-comp-1	05BR0023-8	tissue	08/04/04	X											
BL-SS-WB-comp-1	05BR0023-9	tissue	09/14/04	X											
BL-SS-WB-comp-2	05BR0023-10	tissue	09/14/04	X											
BL-SS-WB-comp-3	05BR0023-11	tissue	09/14/04	X											
BL-SS-WB-comp-4	05BR0023-12	tissue	09/14/04	X											
BL-SS-WB-comp-5	05BR0023-13	tissue	09/14/04	X											
BL-SS-WB-comp-6	05BR0023-14	tissue	09/14/04	X											
EP-SS-WB-comp-1	05BR0023-15	tissue	09/16/04	X											
EP-SS-WB-comp-2	05BR0023-16	tissue	09/16/04	X											
EP-SS-WB-comp-3	05BR0023-17	tissue	09/16/04	X											
LDW-M-M-PP-FL-comp-1	05BR0023-18	tissue	08/03/04	X											
LDW-M-M-SP-FL-comp-1	05BR0023-19	tissue	08/04/04	X											
BL-ES-FL-comp-1	05BR0023-20	tissue	09/14/04	X											
BL-ES-FL-comp-2	05BR0023-21	tissue	09/14/04	X											
BL-ES-FL-comp-3	05BR0023-22	tissue	09/14/04	X											
BL-ES-FL-comp-4	05BR0023-23	tissue	09/14/04	X											
BL-ES-FL-comp-5	05BR0023-24	tissue	09/14/04	X											
BL-ES-FL-comp-6	05BR0023-25	tissue	09/14/04	X											

Note: X = Validation was performed.

SDG#: 05BR0023 | VALIDATION SAMPLE TABLE | **LDC#:** 13058A

Project Name: Lower Duwamish Waterway Group | Parameters/Analytical Method | Project #04-08-06-21

Client ID #	Lab ID #	Matrix	Date Collected	Inorganic As (1632)											
EP-ES-FL-comp-1	05BR0023-25	tissue	09/16/04	X											
EP-ES-FL-comp-2	05BR0023-27	tissue	09/16/04	X											
EP-ES-FL-comp-3	05BR0023-23	tissue	09/16/04	X											
EP-ES-FL-comp-4	05BR0023-29	tissue	09/16/04	X											
EP-ES-FL-comp-5	05BR0023-30	tissue	09/16/04	X											
EP-ES-FL-comp-6	05BR0023-31	tissue	09/16/04	X											
LDW-T1-M-ES-FL-comp-1	05BR0023-32	tissue	08/02/04	X											
LDW-T1-M-ES-FL-comp-2	05BR0023-33	tissue	08/02/04	X											
LDW-T2-M-ES-FL-comp-1	05BR0023-34	tissue	08/03/04	X											
LDW-T2-M-ES-FL-comp-2	05BR0023-35	tissue	08/03/04	X											
LDW-T3-M-ES-FL-comp-1	05BR0023-36	tissue	08/03/04	X											
LDW-T3-M-ES-FL-comp-2	05BR0023-37	tissue	08/03/04	X											
LDW-T4-M-ES-FL-comp-1	05BR0023-38	tissue	09/02/04	X											
BL-ES-WB-comp-1	05BR0023-39	tissue	09/14/04	X											
BL-ES-WB-comp-2	05BR0023-40	tissue	09/14/04	X											
BL-ES-WB-comp-3**	05BR0023-41**	tissue	09/14/04	X											
BL-ES-WB-comp-4**	05BR0023-42**	tissue	09/14/04	X											
BL-ES-WB-comp-5**	05BR0023-43**	tissue	09/14/04	X											
BL-ES-WB-comp-6**	05BR0023-44**	tissue	09/14/04	X											
EP-ES-WB-comp-1**	05BR0023-45**	tissue	09/16/04	X											
EP-ES-WB-comp-2	05BR0023-46	tissue	09/16/04	X											
EP-ES-WB-comp-3	05BR0023-47	tissue	09/16/04	X											
EP-ES-WB-comp-4	05BR0023-48	tissue	09/16/04	X											
EP-ES-WB-comp-5	05BR0023-49	tissue	09/16/04	X											
EP-ES-WB-comp-6	05BR0023-50	tissue	09/16/04	X											
LDW-T1-M-ES-WB-comp-1	05BR0023-51	tissue	08/02/04	X											

Note: X = Validation was performed.

SDG#: 05BR0023 VALIDATION SAMPLE TABLE **LDC#:** 13058A

Project Name: Lower Duwamish Waterway Group Parameters/Analytical Method Project #04-08-06-21

Client ID #	Lab ID #	Matrix	Date Collected	Inorganic As (1632)											
LDW-T1-M-ES-WB-comp-2	05BR0023-52	tissue	08/05/04	X											
LDW-T2-M-ES-WB-comp-1	05BR0023-53	tissue	08/03/04	X											
LDW-T2-M-ES-WB-comp-2	05BR0023-54	tissue	08/03/04	X											
LDW-T3-M-ES-WB-comp-1	05BR0023-55	tissue	08/03/04	X											
LDW-T3-M-ES-WB-comp-2	05BR0023-56	tissue	08/03/04	X											
LDW-T4-M-ES-WB-comp-1	05BR0023-57	tissue	09/04/04	X											
LDW-T4-M-SF-WB-comp-1	05BR0023-58	tissue	08/04/04	X											
LDW-T4-M-SF-FL-comp-1	05BR0023-59	tissue	08/30/04	X											
BL-SC-EM-comp-1	05BR0023-60	tissue	09/14/04	X											
BL-SC-EM-comp-2	05BR0023-61	tissue	09/14/04	X											
BL-SC-EM-comp-3	05BR0023-62	tissue	09/14/04	X											
BL-SC-HP-comp-1	05BR0023-63	tissue	09/14/04	X											
EP-SC-EM-comp-1	05BR0023-64	tissue	09/16/04	X											
EP-SC-EM-comp-2	05BR0023-65	tissue	09/16/04	X											
EP-SC-EM-comp-3	05BR0023-66	tissue	09/16/04	X											
EP-SC-HP-comp-1	05BR0023-67	tissue	09/16/04	X											
LDW-T1-M-SC-EM-comp-1	05BR0023-68	tissue	08/30/04	X											
LDW-T1-M-SC-HP-comp-1	05BR0023-69	tissue	08/30/04	X											
LDW-T2-M-SC-EM-comp-1	05BR0023-70	tissue	08/31/04	X											
LDW-T2-M-SC-EM-comp-2	05BR0023-71	tissue	08/31/04	X											
LDW-T2-M-SC-HP-comp-1	05BR0023-72	tissue	08/31/04	X											
LDW-T2-M-SC-HP-comp-2	05BR0023-73	tissue	08/31/04	X											
LDW-T3-M-SC-EM-comp-1	05BR0023-74	tissue	09/03/04	X											
LDW-T3-M-SC-HP-comp-1	05BR0023-75	tissue	09/06/04	X											
BL-DC-EM-comp-1	05BR0023-76	tissue	09/14/04	X											
BL-DC-EM-comp-2	05BR0023-77	tissue	09/14/04	X											

Note: X = Validation was performed.

SDG#: 05BR0023 VALIDATION SAMPLE TABLE **LDC#:** 13058A

Project Name: Lower Duwamish Waterway Group Parameters/Analytical Method Project #04-08-06-21

Client ID #	Lab ID #	Matrix	Date Collected	Inorganic As (1632)											
BL-DC-EM-comp-3	05BR0023-78	tissue	09/14/04	X											
BL-DC-HP-comp-1	05BR0023-79	tissue	098/14/04	X											
EP-DC-EM-comp-1	05BR0023-80	tissue	09/16/04	X											
EP-DC-EM-comp-2	05BR0023-81	tissue	09/16/04	X											
EP-DC-EM-comp-3	05BR0023-82	tissue	09/16/04	X											
EP-DC-HP-comp-1	05BR0023-83	tissue	09/16/04	X											
LDW-T1-M-DC-EM-comp-1	05BR0023-84	tissue	08/30/04	X											
LDW-T1-M-DC-HP-comp-1	05BR0023-85	tissue	08/30/04	X											
LDW-T3-M-DC-EM-comp-1	05BR0023-86	tissue	08/30/04	X											
LDW-T3-M-DC-HP-comp-1	05BR0023-87	tissue	08/30/04	X											
BL-SS-WB-comp-3MS	05BR0023-11MS	tissue	09/14/04	X											
BL-SS-WB-comp-3MSD	05BR0023-11MSD	tissue	09/14/04	X											
BL-SS-WB-comp-3DUP	05BR0023-11DUP	tissue	09/14/04	X											
EP-SS-WB-comp-1MS	05BR0023-15MS	tissue	09/16/04	X											
EP-SS-WB-comp-1MSD	05BR0023-15MSD	tissue	09/16/04	X											
EP-SS-WB-comp-1DUP	05BR0023-15DUP	tissue	09/16/04	X											
BL-ES-FL-comp-3MS	05BR0023-22MS	tissue	09/14/04	X											
BL-ES-FL-comp-3MSD	05BR0023-22MSD	tissue	09/14/04	X											
BL-ES-FL-comp-3DUP	05BR0023-22DUP	tissue	09/14/04	X											
LDW-T1-M-ES-FL-comp-1MS	05BR0023-32MS	tissue	08/02/04	X											
LDW-T1-M-ES-FL-comp-1MSD	05BR0023-32MSD	tissue	08/02/04	X											
LDW-T1-M-ES-FL-comp-1DUP	05BR0023-32DUP	tissue	08/02/04	X											
EP-ES-WB-comp-1MS	05BR0023-45MS	tissue	09/16/04	X											
EP-ES-WB-comp-1MSD	05BR0023-45MSD	tissue	09/16/04	X											
EP-ES-WB-comp-1DUP	05BR0023-45DUP	tissue	09/16/04	X											
LDW-T2-M-ES-WB-comp-1MS	05BR0023-53MS	tissue	08/03/04	X											

Note: X = Validation was performed.

SDG#: 05BR0023 | VALIDATION SAMPLE TABLE | **LDC#:** 13058A

Project Name: Lower Duwamish Waterway Group | Parameters/Analytical Method | Project #04-08-06-21

Client ID #	Lab ID #	Matrix	Date Collected	Inorganic As (1632)											
LDW-T2-M-ES-WB-comp-1MSD	05BR0023-53MSD	tissue	08/03/04	X											
LDW-T2-M-ES-WB-comp-1DUP	05BR0023-53DUP	tissue	08/03/04	X											
EP-SC-EM-comp-3MS	05BR0023-66MS	tissue	09/16/04	X											
EP-SC-EM-comp-3MSD	05BR0023-66MSD	tissue	09/16/04	X											
EP-SC-EM-comp-3DUP	05BR0023-66DUP	tissue	09/16/04	X											
BL-DC-EM-comp-1MS	05BR0023-76MS	tissue	09/14/04	X											
BL-DC-EM-comp-1MSD	05BR0023-76MSD	tissue	09/14/04	X											
BL-DC-EM-comp-1DUP	05BR0023-76DUP	tissue	09/14/04	X											
EP-DC-EM-comp-2MS	05BR0023-81MS	tissue	09/16/04	X											
EP-DC-EM-comp-2MSD	05BR0023-81MSD	tissue	09/16/04	X											
EP-DC-EM-comp-2DUP	05BR0023-81DUP	tissue	09/16/04	X											

Note: X = Validation was performed.

Attachment 2

SDG#: K2409445 VALIDATION SAMPLE TABLE **LDC#:** 13076A

Project Name: Lower Duwamish Waterway Group Parameters/Analytical Method Project #04-08-06-21

Client ID #	Lab ID #	Matrix	Date Collected	SVOA (8270C)	PAHs (8270C -SIM)	Pest. (8081A)	PCBs (8082)	Metals (SW846	Butyl -tins (Krone)	Total Lipids (NOAA)					
LDW-T1-A-PS-WB-comp-1**	K2409445-001**	tissue	08/02/04	X		X	X	X	X	X					
LDW-T1-B-PS-WB-comp-1**	K2409445-002**	tissue	08/02/04	X		X	X	X	X	X					
LDW-T1-C-PS-WB-comp-1**	K2409445-003**	tissue	08/03/04	X		X	X	X	X	X					
LDW-T1-D-PS-WB-comp-1**	K2409445-004**	tissue	08/05/04	X		X	X	X	X	X					
LDW-T1-E-PS-WB-comp-1**	K2409445-005**	tissue	08/02/04	X		X	X	X	X	X					
LDW-T1-F-PS-WB-comp-1**	K2409445-006**	tissue	08/03/04	X		X	X	X	X	X					
LDW-T2-A-PS-WB-comp-1**	K2409445-007**	tissue	08/03/04	X		X	X	X	X	X					
LDW-T2-B-PS-WB-comp-1**	K2409445-008**	tissue	08/06/04	X		X	X	X	X	X					
LDW-T2-C-PS-WB-comp-1**	K2409445-009**	tissue	08/04/04	X		X	X	X	X	X					
LDW-T2-D-PS-WB-comp-1**	K2409445-010**	tissue	08/05/04	X		X	X	X	X	X					
LDW-T2-E-PS-WB-comp-1	K2409445-011	tissue	08/03/04	X		X	X	X	X	X					
LDW-T2-E-PS-WB-comp-1DL	K2409445-011DL	tissue	08/03/04			X									
LDW-T2-F-PS-WB-comp-1	K2409445-012	tissue	08/03/04	X		X	X	X	X	X					
LDW-T3-A-PS-WB-comp-1	K2409445-013	tissue	08/02/04	X		X	X	X	X	X					
LDW-T3-A-PS-WB-comp-1DL	K2409445-013DL	tissue	08/02/04			X									
LDW-T3-B-PS-WB-comp-1	K2409445-014	tissue	08/03/04	X		X	X	X	X	X					
LDW-T3-B-PS-WB-comp-1DL	K2409445-014DL	tissue	08/03/04			X									
LDW-T3-C-PS-WB-comp-1**	K2409445-015**	tissue	08/05/04	X		X	X	X	X	X					
LDW-T3-C-PS-WB-comp-1**	K2409445-015DL**	tissue	08/05/04			X									
LDW-T3-D-PS-WB-comp-1**	K2409445-016**	tissue	08/03/04	X		X	X	X	X	X					
LDW-T3-D-PS-WB-comp-1**	K2409445-016DL**	tissue	08/03/04			X									
LDW-T3-E-PS-WB-comp-1	K2409445-017	tissue	08/03/04	X		X	X	X	X	X					
LDW-T3-E-PS-WB-comp-1DL	K2409445-017DL	tissue	08/03/04			X									
LDW-T3-F-PS-WB-comp-1	K2409445-018	tissue	08/04/04	X		X	X	X	X	X					
LDW-T3-F-PS-WB-comp-1DL	K2409445-018DL	tissue	08/04/04			X									

Note: X = Validation was performed.

SDG#: K2409445 VALIDATION SAMPLE TABLE **LDC#:** 13076A

Project Name: Lower Duwamish Waterway Group Parameters/Analytical Method Project #04-08-06-21

Client ID #	Lab ID #	Matrix	Date Collected	SVOA (8270C)	PAHs (8270C -SIM)	Pest. (8081A)	PCBs (8082)	Metals (SW846	Butyl -tins (Krone)	Total Lipids (NOAA)					
LDW-T4-A-PS-WB-comp-1	K2409445-019	tissue	08/04/04	X		X	X	X	X	X					
LDW-T4-B-PS-WB-comp-1	K2409445-020	tissue	08/30/04	X		X	X	X	X	X					
LDW-T4-C-PS-WB-comp-1	K2409445-021	tissue	08/04/04	X		X	X	X	X	X					
LDW-T4-D-PS-WB-comp-1	K2409445-022	tissue	08/04/04	X		X	X	X	X	X					
LDW-T4-D-PS-WB-comp-1DL	K2409445-022DL	tissue	08/04/04			X									
LDW-T4-D-PS-WB-comp-2	K2409445-023	tissue	08/30/04	X		X	X	X	X	X					
LDW-T4-D-PS-WB-comp-2DL	K2409445-023DL	tissue	08/30/04						X						
LDW-T4-E-PS-WB-comp-1	K2409445-024	tissue	09/07/04	X		X	X	X	X	X					
LDW-T1-E-PS-WB-comp-1DUP	K2409445-005DUP	tissue	08/02/04	X											
LDW-T2-A-PS-WB-comp-1DUP	K2409445-007DUP	tissue	08/03/04			X	X			X					
LDW-T2-E-PS-WB-comp-1MS	K2409445-011MS	tissue	08/03/04					X							
LDW-T2-E-PS-WB-comp-1DUP	K2409445-011DUP	tissue	08/03/04					X							
LDW-T4-B-PS-WB-comp-1MS	K2409445-020MS	tissue	08/30/04					X							
LDW-T4-B-PS-WB-comp-1DUP	K2409445-020DUP	tissue	08/30/04					X	X						
LDW-T4-C-PS-WB-comp-1MS	K2409445-021MS	tissue	08/04/04					X							
LDW-T4-C-PS-WB-comp-1DUP	K2409445-021DUP	tissue	08/04/04					X							
LDW-T4-D-PS-WB-comp-1DUP	K2409445-022DUP	tissue	08/04/04			X	X			X					
LDW-T4-E-PS-WB-comp-1MS	K2409445-024MS	tissue	09/07/04					X							
LDW-T4-E-PS-WB-comp-1DUP	K2409445-024DUP	tissue	09/07/04					X							

Note: X = Validation was performed.

Attachment 2

SDG#: K2409451 VALIDATION SAMPLE TABLE **LDC#:** 13080A

Project Name: Lower Duwamish Waterway Group Parameters/Analytical Method Project #04-08-06-21

Client ID #	Lab ID #	Matrix	Date Collected	SVOA (8270C)	PAHs (8270C -SIM)	Pest. (8081A)	PCBs (8082)	Metals (SW846	Butyl -tins (Krone)	Total Lipids (NOAA)					
LDW-T1-A-SS-WB-comp-1**	K2409451-001**	tissue	08/02/04	X	X	X	X	X	X	X					
LDW-T1-B-SS-WB-comp-1**	K2409451-002**	tissue	08/02/04	X	X	X	X	X	X	X					
LDW-T1-C-SS-WB-comp-1**	K2409451-003**	tissue	08/03/04	X	X	X	X	X	X	X					
LDW-T1-C-SS-WB-comp-1DL	K2409451-003DL	tissue	08/03/04			X									
LDW-T1-D-SS-WB-comp-1**	K2409451-004**	tissue	08/05/04	X	X	X	X	X	X	X					
LDW-T1-D-SS-WB-comp-1DL	K2409451-004DL	tissue	08/05/04			X									
LDW-T1-E-SS-WB-comp-1**	K2409451-005**	tissue	08/02/04	X	X	X	X	X	X	X					
LDW-T1-F-SS-WB-comp-1**	K2409451-006**	tissue	08/03/04	X	X	X	X	X	X	X					
LDW-T1-F-SS-WB-comp-1DL	K2409451-006DL	tissue	08/03/04			X									
LDW-T2-A-SS-WB-comp-1**	K2409451-007**	tissue	08/03/04	X	X	X	X	X	X	X					
LDW-T2-A-SS-WB-comp-1DL	K2409451-007DL	tissue	08/03/04			X									
LDW-T2-B-SS-WB-comp-1**	K2409451-008**	tissue	08/03/04	X	X	X	X	X	X	X					
LDW-T2-B-SS-WB-comp-1DL	K2409451-008DL	tissue	08/03/04			X									
LDW-T2-C-SS-WB-comp-1**	K2409451-009**	tissue	08/04/04	X	X	X	X	X	X	X					
LDW-T2-C-SS-WB-comp-1DL	K2409451-009DL	tissue	08/04/04			X									
LDW-T2-D-SS-WB-comp-1	K2409451-010	tissue	08/04/04	X	X	X	X	X	X	X					
LDW-T2-E-SS-WB-comp-1	K2409451-011	tissue	08/03/04	X	X	X	X	X	X	X					
LDW-T2-E-SS-WB-comp-1DL	K2409451-011DL	tissue	08/03/04			X									
LDW-T2-F-SS-WB-comp-1	K2409451-012	tissue	08/03/04	X	X	X	X	X	X	X					
LDW-T2-F-SS-WB-comp-1DL	K2409451-012DL	tissue	08/03/04			X									
LDW-T3-A-SS-WB-comp-1	K2409451-013	tissue	08/02/04	X	X	X	X	X	X	X					
LDW-T3-A-SS-WB-comp-1DL	K2409451-013DL	tissue	08/02/04			X									
LDW-T3-B-SS-WB-comp-1	K2409451-014	tissue	08/03/04	X	X	X	X	X	X	X					
LDW-T3-B-SS-WB-comp-1DL	K2409451-014DL	tissue	08/03/04			X									
LDW-T3-C-SS-WB-comp-1	K2409451-015	tissue	08/03/04	X	X	X	X	X	X	X					

Note: X = Validation was performed.

SDG#: K2409451 VALIDATION SAMPLE TABLE **LDC#:** 13080A

Project Name: Lower Duwamish Waterway Group Parameters/Analytical Method Project #04-08-06-21

Client ID #	Lab ID #	Matrix	Date Collected	SVOA (8270C)	PAHs (8270C -SIM)	Pest. (8081A)	PCBs (8082)	Metals (SW846	Butyl -tins (Krone)	Total Lipids (NOAA)					
LDW-T3-C-SS-WB-comp-1DL	K2409451-015DL	tissue	08/03/04			X									
LDW-T3-D-SS-WB-comp-1	K2409451-016	tissue	08/02/04	X	X	X	X	X	X	X					
LDW-T3-D-SS-WB-comp-1DL	K2409451-016DL	tissue	08/02/04	X		X									
LDW-T3-E-SS-WB-comp-1	K2409451-017	tissue	08/03/04	X	X	X	X	X	X	X					
LDW-T3-E-SS-WB-comp-1DL	K2409451-017DL	tissue	08/03/04	X		X									
LDW-T3-F-SS-WB-comp-1	K2409451-018	tissue	08/04/04	X	X	X	X	X	X	X					
LDW-T3-F-SS-WB-comp-1DL	K2409451-018DL	tissue	08/04/04			X									
LDW-T4-A-SS-WB-comp-1	K2409451-019	tissue	08/04/04	X	X	X	X	X	X	X					
LDW-T4-B-SS-WB-comp-1	K2409451-020	tissue	08/04/04	X	X	X	X	X	X	X					
LDW-T4-B-SS-WB-comp-2	K2409451-021	tissue	08/04/04	X	X	X	X	X	X	X					
LDW-T4-C-SS-WB-comp-1	K2409451-022	tissue	08/03/04	X	X	X	X	X	X	X					
LDW-T4-C-SS-WB-comp-2	K2409451-023	tissue	08/04/04	X	X	X	X	X	X	X					
LDW-T4-D-SS-WB-comp-1	K2409451-024	tissue	08/04/04	X	X	X	X	X	X	X					
LDW-T3-M-ES-FL-comp-2	K2409451-025	tissue	08/03/04	X	X	X	X	X	X	X					
LDW-T3-M-ES-FL-comp-2DL	K2409451-025DL	tissue	08/03/04			X									
LDW-T1-M-ES-WB-comp-1	K2409451-026	tissue	08/02/04	X	X	X	X	X	X	X					
LDW-T1-M-ES-WB-comp-2	K2409451-027	tissue	08/05/04	X	X	X	X	X	X	X					
LDW-T1-M-ES-WB-comp-3	K2409451-028	tissue	08/02/04	X	X	X	X	X	X	X					
LDW-T1-M-ES-WB-comp-4	K2409451-029	tissue	08/02/04	X	X	X	X	X	X	X					
LDW-T1-M-ES-WB-comp-5	K2409451-030	tissue	08/02/04	X	X	X	X	X	X	X					
LDW-T1-M-ES-WB-comp-6	K2409451-031	tissue	08/02/04	X	X	X	X	X	X	X					
LDW-T2-M-ES-WB-comp-1	K2409451-032	tissue	08/03/04	X	X	X	X	X	X	X					
LDW-T2-M-ES-WB-comp-2	K2409451-033	tissue	08/03/04	X	X	X	X	X	X	X					
LDW-T2-M-ES-WB-comp-3	K2409451-034	tissue	08/03/04	X	X	X	X	X	X	X					
LDW-T4-M-ES-WB-comp-2	K2409451-035	tissue	08/30/04	X	X	X	X	X	X	X					
LDW-T4-M-ES-WB-comp-2DL	K2409451-035DL	tissue	08/30/04			X									

Note: X = Validation was performed.

SDG#: K2409451 VALIDATION SAMPLE TABLE **LDC#:** 13080A

Project Name: Lower Duwamish Waterway Group Parameters/Analytical Method Project #04-08-06-21

Client ID #	Lab ID #	Matrix	Date Collected	SVOA (8270C)	PAHs (8270C -SIM)	Pest. (8081A)	PCBs (8082)	Metals (SW846	Butyl -tins (Krone)	Total Lipids (NOAA)					
LDW-T1-M-SC-EM-comp-1	K2409451-036	tissue	08/30/04	X	X	X	X	X	X	X					
LDW-T1-M-SC-EM-comp-1DL	K2409451-036DL	tissue	08/30/04	X											
LDW-T1-M-SC-EM-comp-2	K2409451-037	tissue	08/30/04	X	X	X	X	X	X	X					
LDW-T1-M-SC-EM-comp-3	K2409451-038	tissue	08/30/04	X	X	X	X	X	X	X					
LDW-T1-M-SC-HP-comp-1	K2409451-039	tissue	08/30/04	X	X	X	X	X	X	X					
LDW-T1-M-SC-HP-comp-1DL	K2409451-039DL	tissue	08/30/04			X									
LDW-T2-M-SC-EM-comp-1	K2409451-040	tissue	08/31/04	X	X	X	X	X	X	X					
LDW-T2-M-SC-EM-comp-2	K2409451-041	tissue	08/31/04	X	X	X	X	X	X	X					
LDW-T2-M-SC-EM-comp-3	K2409451-042	tissue	08/31/04	X	X	X	X	X	X	X					
LDW-T2-M-SC-HP-comp-1	K2409451-043	tissue	08/31/04	X	X	X	X	X	X	X					
LDW-T2-M-SC-HP-comp-1DL	K2409451-043DL	tissue	08/31/04			X									
LDW-T2-M-SC-EM-comp-4	K2409451-044	tissue	08/31/04	X	X	X	X	X	X	X					
LDW-T2-M-SC-EM-comp-5	K2409451-045	tissue	08/31/04	X	X	X	X	X	X	X					
LDW-T2-M-SC-EM-comp-6	K2409451-046	tissue	08/31/04	X	X	X	X	X	X	X					
LDW-T2-M-SC-HP-comp-2	K2409451-047	tissue	08/31/04	X	X	X	X	X	X	X					
LDW-T2-M-SC-HP-comp-2DL	K2409451-047DL	tissue	08/31/04			X									
LDW-T3-M-SC-EM-comp-1	K2409451-048	tissue	09/03/04	X	X	X	X	X	X	X					
LDW-T3-M-SC-EM-comp-2	K2409451-049	tissue	09/03/04	X	X	X	X	X	X	X					
LDW-T3-M-SC-EM-comp-2DL	K2409451-049DL	tissue	09/03/04			X									
LDW-T3-M-SC-EM-comp-3	K2409451-050	tissue	09/03/04	X	X	X	X	X	X	X					
LDW-T3-M-SC-HP-comp-1	K2409451-051	tissue	09/30/04	X	X	X	X	X	X	X					
LDW-T3-M-SC-HP-comp-1DL	K2409451-051DL	tissue	09/30/04			X									
LDW-T4-M-DC-EM-comp-1	K2409451-052	tissue	08/31/04	X	X	X	X	X	X	X					
LDW-T4-M-DC-HP-comp-1	K2409451-053	tissue	08/31/04	X	X	X	X	X	X	X					
LDW-T4-M-DC-HP-comp-1DL	K2409451-053DL	tissue	08/31/04		X										
LDW-T2-C-SS-WB-comp-1DUP	K2409451-009DUP	tissue	08/04/04	X											

Note: X = Validation was performed.

SDG#: K2409451 VALIDATION SAMPLE TABLE **LDC#:** 13080A

Project Name: Lower Duwamish Waterway Group Parameters/Analytical Method Project #04-08-06-21

Client ID #	Lab ID #	Matrix	Date Collected	SVOA (8270C)	PAHs (8270C -SIM)	Pest. (8081A)	PCBs (8082)	Metals (SW846	Butyl -tins (Krone)	Total Lipids (NOAA)					
LDW-T2-F-SS-WB-comp-1DUP	K2409451-012DUP	tissue	08/03/04		X				X						
LDW-T4-B-SS-WB-comp-1MS	K2409451-020MS	tissue	08/04/04					X							
LDW-T4-B-SS-WB-comp-1DUP	K2409451-020DUP	tissue	08/04/04					X							
LDW-T3-M-ES-FL-comp-2MS	K2409451-025MS	tissue	08/03/04					X							
LDW-T3-M-ES-FL-comp-2DUP	K2409451-025DUP	tissue	08/03/04	X	X			X	X						
LDW-T1-M-ES-WB-comp-3MS	K2409451-028MS	tissue	08/02/04					X							
LDW-T1-M-ES-WB-comp-3DUP	K2409451-028DUP	tissue	08/02/04					X							
LDW-T4-M-ES-WB-comp-2MS	K2409451-035MS	tissue	08/30/04					X							
LDW-T4-M-ES-WB-comp-2DUP	K2409451-035DUP	tissue	08/30/04			X	X	X		X					
LDW-T2-M-SC-EM-comp-5DUP	K2409451-045DUP	tissue	08/31/04		X										
LDW-T2-M-SC-EM-comp-6DUP	K2409451-046DUP	tissue	08/31/04						X						
LDW-T3-M-SC-EM-comp-1MS	K2409451-048MS	tissue	09/03/04					X							
LDW-T3-M-SC-EM-comp-1DUP	K2409451-048DUP	tissue	09/03/04					X							
LDW-T4-M-DC-EM-comp-1DUP	K2409451-052DUP	tissue	08/31/04	X		X	X			X					

Note: X = Validation was performed.

Attachment 2

SDG#: K2409809 VALIDATION SAMPLE TABLE **LDC#:** 13102A

Project Name: Lower Duwamish Waterway Group Parameters/Analytical Method Project #04-08-06-21

Client ID #	Lab ID #	Matrix	Date Collected	SVOA (8270C -SIM)	PAHs (8270C -SIM)	Pest. (8081A)	PCBs (8082)	Metals (SW846	Butyl -tins (Krone)	Total Lipids (NOAA)					
LDW-M-M-PP-FL-comp-1	K2409809-001	tissue	08/03/04	X	X	X	X	X	X	X					
LDW-M-M-SP-FL-comp-1	K2409809-002	tissue	08/04/04	X	X	X	X	X	X	X					
LDW-T1-M-ES-FL-comp-1	K2409809-003	tissue	08/02/04	X	X	X	X	X	X	X					
LDW-T1-M-ES-FL-comp-2	K2409809-004	tissue	08/02/04	X	X	X	X	X	X	X					
LDW-T2-M-ES-FL-comp-1	K2409809-005	tissue	08/03/04	X	X	X	X	X	X	X					
LDW-T2-M-ES-FL-comp-2	K2409809-006	tissue	08/03/04	X	X	X	X	X	X	X					
LDW-T3-M-ES-FL-comp-1	K2409809-007	tissue	08/03/04	X	X	X	X	X	X	X					
LDW-T4-M-ES-FL-comp-1	K2409809-008	tissue	09/02/04	X	X	X	X	X	X	X					
LDW-T2-M-ES-WB-comp-4	K2409809-009	tissue	08/03/04	X	X	X	X	X	X	X					
LDW-T2-M-ES-WB-comp-5	K2409809-010	tissue	08/03/04	X	X	X	X	X	X	X					
LDW-T2-M-ES-WB-comp-6	K2409809-011	tissue	08/03/04	X	X	X	X	X	X	X					
LDW-T3-M-ES-WB-comp-1	K2409809-012	tissue	08/03/04	X	X	X	X	X	X	X					
LDW-T3-M-ES-WB-comp-2	K2409809-013	tissue	08/03/04	X	X	X	X	X	X	X					
LDW-T3-M-ES-WB-comp-3	K2409809-014	tissue	08/03/04	X	X	X	X	X	X	X					
LDW-T3-M-ES-WB-comp-4	K2409809-015	tissue	08/03/04	X	X	X	X	X	X	X					
LDW-T3-M-ES-WB-comp-5	K2409809-016	tissue	08/05/04	X	X	X	X	X	X	X					
LDW-T3-M-ES-WB-comp-6	K2409809-017	tissue	08/05/04	X	X	X	X	X	X	X					
LDW-T4-M-ES-WB-comp-1	K2409809-018	tissue	09/02/04	X	X	X	X	X	X	X					
LDW-T4-M-ES-WB-comp-3	K2409809-019	tissue	08/30/04	X	X	X	X	X	X	X					
LDW-T4-M-SF-WB-comp-1	K2409809-020	tissue	08/04/04	X	X	X	X	X	X	X					
LDW-T4-M-SF-WB-comp-2	K2409809-021	tissue	08/02/04	X	X	X	X	X	X	X					
LDW-T4-M-SF-WB-comp-3	K2409809-022	tissue	08/04/04	X	X	X	X	X	X	X					
LDW-T4-M-SF-FL-comp-1	K2409809-023	tissue	08/30/04	X	X	X	X	X	X	X					
LDW-T1-M-DC-EM-comp-1	K2409809-024	tissue	08/30/04	X	X	X	X	X	X	X					
LDW-T1-M-DC-EM-comp-2	K2409809-025	tissue	08/30/04	X	X	X	X	X	X	X					

Note: X = Validation was performed.

SDG#: K2409809 VALIDATION SAMPLE TABLE **LDC#:** 13102A

Project Name: Lower Duwamish Waterway Group Parameters/Analytical Method Project #04-08-06-21

Client ID #	Lab ID #	Matrix	Date Collected	SVOA (8270C -SIM)	PAHs (8270C -SIM)	Pest. (8081A)	PCBs (8082)	Metals (SW846	Butyl -tins (Krone)	Total Lipids (NOAA)					
LDW-T1-M-DC-EM-comp-3	K2409809-026	tissue	08/30/04	X	X	X	X	X	X	X					
LDW-T1-M-DC-HP-comp-1	K2409809-027	tissue	08/30/04	X	X	X	X	X	X	X					
LDW-T3-M-DC-EM-comp-1	K2409809-028	tissue	08/30/04	X	X	X	X	X	X	X					
LDW-T3-M-DC-EM-comp-2	K2409809-029	tissue	09/03/04	X	X	X	X	X	X	X					
LDW-T3-M-DC-EM-comp-3	K2409809-030	tissue	09/01/04	X	X	X	X	X	X	X					
LDW-T3-M-DC-HP-comp-1	K2409809-031	tissue	08/30/04	X	X	X	X	X	X	X					
LDW-T3-M-DC-HP-comp-1DL	K2409809-031DL	tissue	08/30/04		X										
LDW-T3-M-ES-FL-comp-1DUP	K2409809-007DUP	tissue	08/03/04		X										
LDW-T2-M-ES-WB-comp-6MS	K2409809-011MS	tissue	08/03/04					X							
LDW-T2-M-ES-WB-comp-6DUP	K2409809-011DUP	tissue	08/03/04					X							
LDW-T3-M-ES-WB-comp-3DUP	K2409809-014DUP	tissue	08/03/04	X		X	X			X					
LDW-T4-M-ES-WB-comp-3DUP	K2409809-019DUP	tissue	08/30/04						X						
LDW-T4-M-SF-WB-comp-1MS	K2409809-020MS	tissue	08/04/04					X							
LDW-T4-M-SF-WB-comp-1DUP	K2409809-020DUP	tissue	08/04/04					X							
LDW-T4-M-SF-WB-comp-3DUP	K2409809-022DUP	tissue	08/04/04		X										
LDW-T1-M-DC-EM-comp-1DUP	K2409809-024DUP	tissue	08/30/04	X		X	X			X					
LDW-T1-M-DC-EM-comp-2DUP	K2409809-025DUP	tissue	08/30/04						X						
LDW-T3-M-DC-EM-comp-3MS	K2409809-030MS	tissue	09/01/04					X							
LDW-T3-M-DC-EM-comp-3DUP	K2409809-030DUP	tissue	09/01/04					X							

Note: X = Validation was performed.

GC/MS Semivolatiles by EPA SW 846 Method 8270C using Selected Ion Monitoring (SIM)

*I. Technical Holding Times

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

Associated SDG	Sample	Analyte	Total Days From Sample Extraction Until Analysis	Required Holding Time (in Days) From Sample Extraction Until Analysis	Flag	A or P
K2409451	LDW-T3-D-SS-WB-comp-1DL	All TCL compounds	42	40	J (all detects) UJ (all non-detects)	A

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals. All ion abundance requirements were met.

Instrument performance check data were not reviewed for Level II.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 15.0% for each individual compound and less than or equal to 30.0% for calibration check compounds (CCCs).

In the case where %RSD was greater than 15.0%, the laboratory used a calibration curve to evaluate the compound. All coefficients of determination (r^2) were greater than or equal to 0.990 .

For the purposes of technical evaluation, all compounds were evaluated against the 30.0% (%RSD) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

Average relative response factors (RRF) for all semivolatile target compounds and system performance check compounds (SPCCs) were greater than or equal to 0.05 as required.

Initial calibration data were not reviewed for Level II.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs) with the following exceptions:

Associated SDG	Date	Compound	%D	Associated Samples	Flag	A or P
K2409445	1/14/05	Pentachlorophenol	28	LDW-T1-A-PS-WB-comp-1** LDW-T1-B-PS-WB-comp-1** LDW-T1-C-PS-WB-comp-1** LDW-T1-D-PS-WB-comp-1** LDW-T1-E-PS-WB-comp-1** LDW-T1-F-PS-WB-comp-1** LDW-T2-D-PS-WB-comp-1** LDW-T3-C-PS-WB-comp-1** KWG0419493-5	J (all detects) UJ (all non-detects)	P

For the purposes of technical evaluation, all compounds were evaluated against the 25.0% (%D) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

The percent difference (%D) of the second source calibration standard were less than or equal to 25.0% for all compounds with the following exceptions:

Associated SDG	Date	Compound	%D	Associated Samples	Flag	A or P
K2409445	1/14/05	Hexachlorocyclopentadiene Benzidine	32 38	LDW-T1-A-PS-WB-comp-1** LDW-T1-B-PS-WB-comp-1** LDW-T1-C-PS-WB-comp-1** LDW-T1-D-PS-WB-comp-1** LDW-T1-E-PS-WB-comp-1** LDW-T1-F-PS-WB-comp-1** LDW-T2-D-PS-WB-comp-1** LDW-T3-C-PS-WB-comp-1** KWG0419493-5	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	A

All of the continuing calibration RRF values were greater than or equal to 0.05 .

Continuing calibration data were not reviewed for Level II.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No semivolatile contaminants were found in the method blanks with the following exceptions:

Associated SDG	Method Blank ID	Extraction Date	Compound TIC (RT in minutes)	Concentration	Associated Samples
K2409445	KWG0419493-5	12/9/04	Di-n-butylphthalate 4-Nitrophenol Diethylphthalate	110 ug/Kg 19 ug/Kg 11 ug/Kg	LDW-T1-A-PS-WB-comp-1** LDW-T1-B-PS-WB-comp-1** LDW-T1-C-PS-WB-comp-1** LDW-T1-D-PS-WB-comp-1** LDW-T1-E-PS-WB-comp-1** LDW-T1-F-PS-WB-comp-1** LDW-T2-A-PS-WB-comp-1** LDW-T2-B-PS-WB-comp-1** LDW-T2-C-PS-WB-comp-1** LDW-T2-D-PS-WB-comp-1** LDW-T2-E-PS-WB-comp-1 LDW-T2-F-PS-WB-comp-1 LDW-T3-A-PS-WB-comp-1 LDW-T3-B-PS-WB-comp-1 LDW-T3-C-PS-WB-comp-1** LDW-T3-D-PS-WB-comp-1 LDW-T3-E-PS-WB-comp-1 LDW-T3-F-PS-WB-comp-1 LDW-T4-A-PS-WB-comp-1 LDW-T4-B-PS-WB-comp-1
K2409445	KWG0419523-5	12/10/04	Dimethylphthalate Di-n-butylphthalate Fluoranthene Phenanthrene Anthracene Pyrene Benzo(a)anthracene	6.2 ug/Kg 22 ug/Kg 20 ug/Kg 10 ug/Kg 7.7 ug/Kg 15 ug/Kg 5.0 ug/Kg	LDW-T4-C-PS-WB-comp-1 LDW-T4-D-PS-WB-comp-1 LDW-T4-D-PS-WB-comp-2 LDW-T4-E-PS-WB-comp-1
K2409451	KWG0419523-5	12/10/04	Dimethylphthalate Di-n-butylphthalate	6.2 ug/Kg 22 ug/Kg	LDW-T1-A-SS-WB-comp-1 LDW-T1-B-SS-WB-comp-1 LDW-T1-C-SS-WB-comp-1 LDW-T1-D-SS-WB-comp-1 LDW-T1-E-SS-WB-comp-1 LDW-T1-F-SS-WB-comp-1 LDW-T2-A-SS-WB-comp-1 LDW-T2-B-SS-WB-comp-1 LDW-T2-C-SS-WB-comp-1 LDW-T2-D-SS-WB-comp-1 LDW-T2-E-SS-WB-comp-1 LDW-T2-F-SS-WB-comp-1 LDW-T3-A-SS-WB-comp-1 LDW-T3-B-SS-WB-comp-1 LDW-T3-C-SS-WB-comp-1 LDW-T3-D-SS-WB-comp-1 LDW-T3-D-SS-WB-comp-1DL
K2409451	KWG0419801-3	12/15/04	Di-n-butylphthalate Bis(2-ethylhexyl)phthalate	33 ug/Kg 78 ug/Kg	LDW-T3-E-SS-WB-comp-1 LDW-T3-E-SS-WB-comp-1DL LDW-T3-F-SS-WB-comp-1 LDW-T4-A-SS-WB-comp-1 LDW-T4-B-SS-WB-comp-1 LDW-T4-B-SS-WB-comp-2 LDW-T4-C-SS-WB-comp-1 LDW-T4-C-SS-WB-comp-2 LDW-T4-D-SS-WB-comp-1 LDW-T3-M-ES-FL-comp-2 LDW-T1-M-ES-WB-comp-1 LDW-T1-M-ES-WB-comp-2 LDW-T1-M-ES-WB-comp-3 LDW-T1-M-ES-WB-comp-4 LDW-T1-M-ES-WB-comp-5 LDW-T1-M-ES-WB-comp-6 LDW-T2-M-ES-WB-comp-1 LDW-T2-M-ES-WB-comp-2 LDW-T2-M-ES-WB-comp-3 LDW-T4-M-ES-WB-comp-2

Associated SDG	Method Blank ID	Extraction Date	Compound TIC (RT in minutes)	Concentration	Associated Samples
K2409451	KWG0419913-3	12/16/04	Di-n-butylphthalate Bis(2-ethylhexyl)phthalate	22 ug/Kg 160 ug/Kg	LDW-T1-M-SC-EM-comp-1 LDW-T1-M-SC-EM-comp-1DL LDW-T1-M-SC-EM-comp-2 LDW-T1-M-SC-EM-comp-3 LDW-T1-M-SC-HP-comp-1 LDW-T2-M-SC-EM-comp-1 LDW-T2-M-SC-EM-comp-2 LDW-T2-M-SC-EM-comp-3 LDW-T2-M-SC-HP-comp-1 LDW-T2-M-SC-EM-comp-4 LDW-T2-M-SC-EM-comp-5 LDW-T2-M-SC-EM-comp-6 LDW-T2-M-SC-HP-comp-2 LDW-T3-M-SC-EM-comp-1 LDW-T3-M-SC-EM-comp-2 LDW-T3-M-SC-EM-comp-3 LDW-T3-M-SC-HP-comp-1 LDW-T4-M-DC-EM-comp-1 LDW-T4-M-DC-HP-comp-1
K2409809	KWG0420095-5	12/20/04	Di-n-butylphthalate	31 ug/Kg	LDW-M-M-PP-FL-comp-1 LDW-M-M-SP-FL-comp-1 LDW-T1-M-ES-FL-comp-1 LDW-T1-M-ES-FL-comp-2 LDW-T2-M-ES-FL-comp-1 LDW-T2-M-ES-FL-comp-2 LDW-T3-M-ES-FL-comp-1 LDW-T4-M-ES-FL-comp-1 LDW-T2-M-ES-WB-comp-4 LDW-T2-M-ES-WB-comp-5 LDW-T2-M-ES-WB-comp-6 LDW-T3-M-ES-WB-comp-1 LDW-T3-M-ES-WB-comp-2 LDW-T3-M-ES-WB-comp-3 LDW-T3-M-ES-WB-comp-4 LDW-T3-M-ES-WB-comp-5
K2409809	KWG0420096-3	12/20/04	Di-n-butylphthalate Di-n-octylphthalate	35 ug/Kg 130 ug/Kg	LDW-T3-M-ES-WB-comp-6 LDW-T4-M-ES-WB-comp-1 LDW-T4-M-ES-WB-comp-3 LDW-T4-M-SF-WB-comp-1 LDW-T4-M-SF-WB-comp-2 LDW-T4-M-SF-WB-comp-3 LDW-T4-M-SF-FL-comp-1 LDW-T1-M-DC-EM-comp-1 LDW-T1-M-DC-EM-comp-2 LDW-T1-M-DC-EM-comp-3 LDW-T1-M-DC-HP-comp-1 LDW-T3-M-DC-EM-comp-1 LDW-T3-M-DC-EM-comp-2 LDW-T3-M-DC-EM-comp-3 LDW-T3-M-DC-HP-comp-1

Sample concentrations were compared to concentrations detected in the method blanks. The sample concentrations were either not detected or were significantly greater (>10X for common contaminants, >5X for other contaminants) than the concentrations found in the associated method blanks with the following exceptions:

Associated SDG	Sample	Compound TIC (RT in minutes)	Reported Concentration	Modified Final Concentration
K2409445	LDW-T1–A-PS-WB-comp-1** (10x)	Di-n-butylphthalate Diethylphthalate	1300 ug/Kg 160 ug/Kg	2000U ug/Kg 800U ug/Kg
K2409445	LDW-T1-B-PS-WB-comp-1** (10x)	Di-n-butylphthalate Diethylphthalate	1300 ug/Kg 180 ug/Kg	2000U ug/Kg 800U ug/Kg
K2409445	LDW-T1-C-PS-WB-comp-1** (10x)	Di-n-butylphthalate Diethylphthalate	1300 ug/Kg 200 ug/Kg	2000U ug/Kg 800U ug/Kg
K2409445	LDW-T1-D-PS-WB-comp-1** (10x)	Di-n-butylphthalate Diethylphthalate	1300 ug/Kg 170 ug/Kg	2000U ug/Kg 800U ug/Kg
K2409445	LDW-T1-E-PS-WB-comp-1** (10x)	Di-n-butylphthalate Diethylphthalate	1300 ug/Kg 180 ug/Kg	2000U ug/Kg 790U ug/Kg
K2409445	LDW-T1-F-PS-WB-comp-1** (10x)	Di-n-butylphthalate Diethylphthalate	1300 ug/Kg 170 ug/Kg	2000U ug/Kg 800U ug/Kg
K2409445	LDW-T2-A-PS-WB-comp-1** (10x)	Di-n-butylphthalate Diethylphthalate	1300 ug/Kg 180 ug/Kg	2000U ug/Kg 800U ug/Kg
K2409445	LDW-T2-B-PS-WB-comp-1** (10x)	Di-n-butylphthalate Diethylphthalate	1300 ug/Kg 170 ug/Kg	2000U ug/Kg 790U ug/Kg
K2409445	LDW-T2-C-PS-WB-comp-1** (10x)	Di-n-butylphthalate Diethylphthalate	1300 ug/Kg 180 ug/Kg	2000U ug/Kg 800U ug/Kg
K2409445	LDW-T2-D-PS-WB-comp-1** (10x)	Di-n-butylphthalate Diethylphthalate	1300 ug/Kg 180 ug/Kg	2000U ug/Kg 800U ug/Kg
K2409445	LDW-T2-E-PS-WB-comp-1 (10x)	Di-n-butylphthalate Diethylphthalate	1300 ug/Kg 170 ug/Kg	2000U ug/Kg 790U ug/Kg
K2409445	LDW-T2-F-PS-WB-comp-1 (10x)	Di-n-butylphthalate Diethylphthalate	1300 ug/Kg 180 ug/Kg	2000U ug/Kg 790U ug/Kg
K2409445	LDW-T3-A-PS-WB-comp-1 (10x)	Di-n-butylphthalate Diethylphthalate	1300 ug/Kg 180 ug/Kg	2000U ug/Kg 800U ug/Kg
K2409445	LDW-T3-B-PS-WB-comp-1 (10x)	Di-n-butylphthalate Diethylphthalate	1300 ug/Kg 180 ug/Kg	2000U ug/Kg 790U ug/Kg
K2409445	LDW-T3-C-PS-WB-comp-1** (10x)	Di-n-butylphthalate	1300 ug/Kg	2000U ug/Kg
K2409445	LDW-T3-D-PS-WB-comp-1 (10x)	Di-n-butylphthalate Diethylphthalate	1300 ug/Kg 170 ug/Kg	2000U ug/Kg 800U ug/Kg
K2409445	LDW-T3-E-PS-WB-comp-1	Diethylphthalate	21 ug/Kg	80U ug/Kg

*Indicates change as the result of report review.

Associated SDG	Sample	Compound TIC (RT in minutes)	Reported Concentration	Modified Final Concentration
K2409445	LDW-T3-F-PS-WB-comp-1	Diethylphthalate	24 ug/Kg	80U ug/Kg
K2409445	LDW-T4-A-PS-WB-comp-1	Diethylphthalate	24 ug/Kg	79U ug/Kg
K2409445	LDW-T4-B-PS-WB-comp-1	Diethylphthalate	23 ug/Kg	80U ug/Kg
K2409445	LDW-T4-C-PS-WB-comp-1	Phenanthrene	15 ug/Kg	40U ug/Kg
K2409451	LDW-T2-C-SS-WB-comp-1	Dimethylphthalate	12 ug/Kg	57U ug/Kg
K2409451	LDW-T2-D-SS-WB-comp-1	Dimethylphthalate	11 ug/Kg	57U ug/Kg
K2409451	LDW-T2-F-SS-WB-comp-1	Dimethylphthalate	9.9 ug/Kg	58U ug/Kg
K2409451	LDW-T3-D-SS-WB-comp-1DL (50x)	Di-n-butylphthalate	1700 ug/Kg	2900U ug/Kg
K2409451	LDW-T3-M-ES-FL-comp-2 (10x)	Di-n-butylphthalate	160 ug/Kg	290U ug/Kg
K2409451	LDW-T1-M-ES-WB-comp-1 (10x)	Bis(2-ethylhexyl)phthalate	1100 ug/Kg	3600U ug/Kg
K2409451	LDW-T1-M-ES-WB-comp-2 (10x)	Bis(2-ethylhexyl)phthalate	1100 ug/Kg	3600U ug/Kg
K2409451	LDW-T1-M-SC-EM-comp-1	Di-n-butylphthalate Bis(2-ethylhexyl)phthalate	41 ug/Kg 240 ug/Kg	58U ug/Kg 720U ug/Kg
K2409451	LDW-T1-M-SC-EM-comp-2	Di-n-butylphthalate Bis(2-ethylhexyl)phthalate	34 ug/Kg 240 ug/Kg	57U ug/Kg 720U ug/Kg
K2409451	LDW-T1-M-SC-EM-comp-3	Di-n-butylphthalate Bis(2-ethylhexyl)phthalate	31 ug/Kg 260 ug/Kg	58U ug/Kg 720U ug/Kg
K2409451	LDW-T2-M-SC-EM-comp-4 (10x)	Di-n-butylphthalate	390 ug/Kg	1200U ug/Kg
K2409451	LDW-T3-M-SC-EM-comp-1 (10x)	Di-n-butylphthalate	240 ug/Kg	580U ug/Kg
K2409451	LDW-T4-M-DC-EM-comp-1 (10x)	Di-n-butylphthalate	280 ug/Kg	570U ug/Kg
K2409809	LDW-M-M-SP-FL-comp-1 (10x)	Di-n-butylphthalate	410 ug/Kg	1200U ug/Kg
K2409809	LDW-T1-M-ES-FL-comp-1 (10x)	Di-n-butylphthalate	420 ug/Kg	1200U ug/Kg
K2409809	LDW-T1-M-ES-FL-comp-2 (10x)	Di-n-butylphthalate	420 ug/Kg	1200U ug/Kg
K2409809	LDW-T2-M-ES-FL-comp-1 (10x)	Di-n-butylphthalate	410 ug/Kg	1200U ug/Kg

*Indicates change as the result of report review.

Associated SDG	Sample	Compound TIC (RT in minutes)	Reported Concentration	Modified Final Concentration
K2409809	LDW-T3-M-ES-FL-comp-1 (10x)	Di-n-butylphthalate	420 ug/Kg	1200U ug/Kg
K2409809	LDW-T4-M-ES-FL-comp-1 (10x)	Di-n-butylphthalate	420 ug/Kg	1200U ug/Kg
K2409809	LDW-T1-M-DC-EM-comp-1 (10x)	Di-n-butylphthalate	410 ug/Kg	1200U ug/Kg
K2409809	LDW-T1-M-DC-EM-comp-2 (10x)	Di-n-butylphthalate	400 ug/Kg	1200U ug/Kg
K2409809	LDW-T1-M-DC-EM-comp-3 (10x)	Di-n-butylphthalate	400 ug/Kg	1200U ug/Kg
K2409809	LDW-T3-M-DC-EM-comp-1 (10x)	Di-n-butylphthalate	400 ug/Kg	1200U ug/Kg
K2409809	LDW-T3-M-DC-EM-comp-2 (10x)	Di-n-butylphthalate	400 ug/Kg	1200U ug/Kg
K2409809	LDW-T3-M-DC-EM-comp-3 (10x)	Di-n-butylphthalate	410 ug/Kg	1200U ug/Kg

VI. Surrogate Spikes

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

VII. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there was insufficient sample volume for analysis of the matrix spike and matrix spike duplicate in SDGs K2409445, K2409451, and K2409809.

Duplicate (DUP) sample analyses were reviewed for each matrix as applicable. Results were within QC limits for SDGs K2409445, K2409451, and K2409809.

*VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

Associated SDG	LCS ID (Associated Samples)	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Flag	A or P
K2409445	KWG0419493-3/4 (LDW-T1-A-PS-WB-comp-1** LDW-T1-B-PS-WB-comp-1** LDW-T1-C-PS-WB-comp-1** LDW-T1-D-PS-WB-comp-1** LDW-T1-E-PS-WB-comp-1** LDW-T1-F-PS-WB-comp-1** LDW-T2-A-PS-WB-comp-1** LDW-T2-B-PS-WB-comp-1** LDW-T2-C-PS-WB-comp-1** LDW-T2-D-PS-WB-comp-1** LDW-T2-E-PS-WB-comp-1 LDW-T2-F-PS-WB-comp-1 LDW-T3-A-PS-WB-comp-1 LDW-T3-B-PS-WB-comp-1 LDW-T3-C-PS-WB-comp-1** LDW-T3-D-PS-WB-comp-1 LDW-T3-E-PS-WB-comp-1 LDW-T3-F-PS-WB-comp-1 LDW-T4-A-PS-WB-comp-1 LDW-T4-B-PS-WB-comp-1 KWG0419493-5)	Benzoic acid	148 (20-130)	160 (20-130)	-	J (all detects)	P
*K2409445	KWG0419493-3/4 (LDW-T1-A-PS-WB-comp-1** LDW-T1-B-PS-WB-comp-1** LDW-T1-C-PS-WB-comp-1** LDW-T1-D-PS-WB-comp-1** LDW-T1-E-PS-WB-comp-1** LDW-T1-F-PS-WB-comp-1** LDW-T2-A-PS-WB-comp-1** LDW-T2-B-PS-WB-comp-1** LDW-T2-C-PS-WB-comp-1** LDW-T2-D-PS-WB-comp-1** LDW-T2-E-PS-WB-comp-1 LDW-T2-F-PS-WB-comp-1 LDW-T3-A-PS-WB-comp-1 LDW-T3-B-PS-WB-comp-1 LDW-T3-C-PS-WB-comp-1** LDW-T3-D-PS-WB-comp-1 LDW-T3-E-PS-WB-comp-1 LDW-T3-F-PS-WB-comp-1 LDW-T4-A-PS-WB-comp-1 LDW-T4-B-PS-WB-comp-1 KWG0419493-5)	Benzidine	2 (20-130)	1 (20-130)	-	J (all detects) R (all non-detects)	P

Associated SDG	LCS ID (Associated Samples)	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Flag	A or P
K2409445 K2409451	KWG0419523-3/4 (LDW-T4-C-PS-WB-comp-1 LDW-T4-D-PS-WB-comp-1 LDW-T4-D-PS-WB-comp-2 LDW-T4-E-PS-WB-comp-1 LDW-T1-A-SS-WB-comp-1 LDW-T1-B-SS-WB-comp-1 LDW-T1-C-SS-WB-comp-1 LDW-T1-D-SS-WB-comp-1 LDW-T1-E-SS-WB-comp-1 LDW-T1-F-SS-WB-comp-1 LDW-T2-A-SS-WB-comp-1 LDW-T2-B-SS-WB-comp-1 LDW-T2-C-SS-WB-comp-1 LDW-T2-D-SS-WB-comp-1 LDW-T2-E-SS-WB-comp-1 LDW-T2-F-SS-WB-comp-1 LDW-T3-A-SS-WB-comp-1 LDW-T3-B-SS-WB-comp-1 LDW-T3-C-SS-WB-comp-1 LDW-T3-D-SS-WB-comp-1 LDW-T3-D-SS-WB-comp-1DL KWG0419523-5)	2,4-Dinitrophenol	0 (20-130)	0 (20-130)	-	J (all detects) R (all non-detects)	P
*K2409445 *K2409451	KWG0419523-3/4 (LDW-T4-C-PS-WB-comp-1 LDW-T4-D-PS-WB-comp-1 LDW-T4-D-PS-WB-comp-2 LDW-T4-E-PS-WB-comp-1 LDW-T1-A-SS-WB-comp-1 LDW-T1-B-SS-WB-comp-1 LDW-T1-C-SS-WB-comp-1 LDW-T1-D-SS-WB-comp-1 LDW-T1-E-SS-WB-comp-1 LDW-T1-F-SS-WB-comp-1 LDW-T2-A-SS-WB-comp-1 LDW-T2-B-SS-WB-comp-1 LDW-T2-C-SS-WB-comp-1 LDW-T2-D-SS-WB-comp-1 LDW-T2-E-SS-WB-comp-1 LDW-T2-F-SS-WB-comp-1 LDW-T3-A-SS-WB-comp-1 LDW-T3-B-SS-WB-comp-1 LDW-T3-C-SS-WB-comp-1 LDW-T3-D-SS-WB-comp-1 LDW-T3-D-SS-WB-comp-1DL KWG0419523-5)	Benzidine	3 (20-130)	3 (20-130)	-	J (all detects) R (all non-detects)	P

Associated SDG	LCS ID (Associated Samples)	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Flag	A or P
*K2409451	KWG0419801-1/2 (LDW-T3-D-SS-WB-comp-1 LDW-T3-D-SS-WB-comp-1DL LDW-T3-E-SS-WB-comp-1 LDW-T3-E-SS-WB-comp-1DL LDW-T3-F-SS-WB-comp-1 LDW-T4-A-SS-WB-comp-1 LDW-T4-B-SS-WB-comp-1 LDW-T4-B-SS-WB-comp-2 LDW-T4-C-SS-WB-comp-1 LDW-T4-C-SS-WB-comp-2 LDW-T4-D-SS-WB-comp-1 LDW-T3-M-ES-FL-comp-2 LDW-T1-M-ES-WB-comp-1 LDW-T1-M-ES-WB-comp-2 LDW-T1-M-ES-WB-comp-3 LDW-T1-M-ES-WB-comp-4 LDW-T1-M-ES-WB-comp-5 LDW-T1-M-ES-WB-comp-6 LDW-T2-M-ES-WB-comp-1 LDW-T2-M-ES-WB-comp-2 LDW-T2-M-ES-WB-comp-3 LDW-T4-M-ES-WB-comp-2 KWG0419801-3)	Benzidine	1 (20-130)	1 (20-130)	-	J (all detects) R (all non-detects)	P
*K2409451	KWG0419913-1/2 (LDW-T1-M-SC-EM-comp-1 LDW-T1-M-SC-EM-comp-1DL LDW-T1-M-SC-EM-comp-2 LDW-T1-M-SC-EM-comp-3 LDW-T1-M-SC-HP-comp-1 LDW-T2-M-SC-EM-comp-1 LDW-T2-M-SC-EM-comp-2 LDW-T2-M-SC-EM-comp-3 LDW-T2-M-SC-HP-comp-1 LDW-T2-M-SC-EM-comp-4 LDW-T2-M-SC-EM-comp-5 LDW-T2-M-SC-EM-comp-6 LDW-T2-M-SC-HP-comp-2 LDW-T3-M-SC-EM-comp-1 LDW-T3-M-SC-EM-comp-2 LDW-T3-M-SC-EM-comp-3 LDW-T3-M-SC-HP-comp-1 LDW-T4-M-DC-EM-comp-1 LDW-T4-M-DC-HP-comp-1 KWG419913-3)	Benzidine	1 (20-130)	1 (20-130)	58 (≤50)	J (all detects) R (all non-detects)	P
K2409809	KWG0420095-3/4 (LDW-M-M-PP-FL-comp-1 LDW-M-M-SP-FL-comp-1 LDW-T1-M-ES-FL-comp-1 LDW-T1-M-ES-FL-comp-2 LDW-T2-M-ES-FL-comp-1 LDW-T2-M-ES-FL-comp-2 LDW-T3-M-ES-FL-comp-1 LDW-T4-M-ES-FL-comp-1 LDW-T2-M-ES-WB-comp-4 LDW-T2-M-ES-WB-comp-5 LDW-T2-M-ES-WB-comp-6 LDW-T3-M-ES-WB-comp-1 LDW-T3-M-ES-WB-comp-2 LDW-T3-M-ES-WB-comp-3 LDW-T3-M-ES-WB-comp-4 LDW-T3-M-ES-WB-comp-5)	2-Chloronaphthalene	133 (20-130)	-	-	J (all detects)	P

*Indicates change as the result of report review.

Associated SDG	LCS ID (Associated Samples)	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Flag	A or P
K2409809	KWG0420095-3/4 (LDW-M-M-PP-FL-comp-1 LDW-M-M-SP-FL-comp-1 LDW-T1-M-ES-FL-comp-1 LDW-T1-M-ES-FL-comp-2 LDW-T2-M-ES-FL-comp-1 LDW-T2-M-ES-FL-comp-2 LDW-T3-M-ES-FL-comp-1 LDW-T4-M-ES-FL-comp-1 LDW-T2-M-ES-WB-comp-4 LDW-T2-M-ES-WB-comp-5 LDW-T2-M-ES-WB-comp-6 LDW-T3-M-ES-WB-comp-1 LDW-T3-M-ES-WB-comp-2 LDW-T3-M-ES-WB-comp-3 LDW-T3-M-ES-WB-comp-4 LDW-T3-M-ES-WB-comp-5)	Benzidine	0 (20-130)	0 (20-130)	-	J (all detects) R (all non-detects)	P
K2409809	KWG0420096-1/2 (LDW-T3-M-ES-WB-comp-6 LDW-T4-M-ES-WB-comp-1 LDW-T4-M-ES-WB-comp-3 LDW-T4-M-SF-WB-comp-1 LDW-T4-M-SF-WB-comp-2 LDW-T4-M-SF-WB-comp-3 LDW-T4-M-SF-FL-comp-1 LDW-T1-M-DC-EM-comp-1 LDW-T1-M-DC-EM-comp-2 LDW-T1-M-DC-EM-comp-3 LDW-T1-M-DC-HP-comp-1 LDW-T3-M-DC-EM-comp-1 LDW-T3-M-DC-EM-comp-2 LDW-T3-M-DC-EM-comp-3 LDW-T3-M-DC-HP-comp-1)	Benzidine	0 (20-130)	0 (20-130)	-	J (all detects) R (all non-detects)	P
K2409809	KWG0420096-1/2 (LDW-T3-M-ES-WB-comp-6 LDW-T4-M-ES-WB-comp-1 LDW-T4-M-ES-WB-comp-3 LDW-T4-M-SF-WB-comp-1 LDW-T4-M-SF-WB-comp-2 LDW-T4-M-SF-WB-comp-3 LDW-T4-M-SF-FL-comp-1 LDW-T1-M-DC-EM-comp-1 LDW-T1-M-DC-EM-comp-2 LDW-T1-M-DC-EM-comp-3 LDW-T1-M-DC-HP-comp-1 LDW-T3-M-DC-EM-comp-1 LDW-T3-M-DC-EM-comp-2 LDW-T3-M-DC-EM-comp-3 LDW-T3-M-DC-HP-comp-1)	Bis(2-ethylhexyl)phthalate	862 (20-130)	-	148 (≤50)	J (all detects) UJ (all non-detects)	P

*Standard reference material analyses were performed for the polynuclear aromatic hydrocarbons (PAHs).

IX. Regional Quality Assurance and Quality Control

Not applicable.

*X. Internal Standards

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

Associated SDG	Sample	Internal Standards	Area (Limits)	Compound	Flag	A or P
K2409451	LDW-T3-D-SS-WB-comp-1	Acenaphthene-d10	4692 (24059-96236)	Hexachlorocyclopentadiene 2,4,6-Trichlorophenol 2,4,5-Trichlorophenol 2-Chloronaphthalene 2-Nitroaniline Dimethylphthalate 2,6-Dinitrotoluene 2,4-Dinitrophenol 3-Nitroaniline 4-Nitrophenol 2,4-Dinitrotoluene 4-Chlorophenyl-phenyl ether Diethylphthalate 4-Nitroaniline 4,6-Dinitro-2-methylphenol N-Nitrosodiphenylamine	J (all detects) R (all non-detects)	A
K2409451	LDW-T3-E-SS-WB-comp-1	Acenaphthene-d10	5877 (24059-96236)	Hexachlorocyclopentadiene 2,4,6-Trichlorophenol 2,4,5-Trichlorophenol 2-Chloronaphthalene 2-Nitroaniline Dimethylphthalate 2,6-Dinitrotoluene 2,4-Dinitrophenol 3-Nitroaniline 4-Nitrophenol 2,4-Dinitrotoluene 4-Chlorophenyl-phenyl ether Diethylphthalate 4-Nitroaniline 4,6-Dinitro-2-methylphenol N-Nitrosodiphenylamine	J (all detects) R (all non-detects)	A

XI. Target Compound Identifications

All target compound identifications were within validation criteria.

Target compound identifications data were not reviewed for Level II.

XII. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria with the following exceptions:

Associated SDG	Sample	Compound	Finding	Criteria	Flag	A or P
K2409451	LDW-T3-D-SS-WB-comp-1	N-Nitrosodiphenylamine	Sample result exceeded calibration range.	Reported result should be within calibration range.	J (all detects)	A

Compound quantitation and CRQLs data were not reviewed for Level II.

XIII. Tentatively Identified Compounds (TICs)

Tentatively identified compounds were not reported by the laboratory for Level IV.

Tentatively identified compounds data were not reviewed for Level II.

XIV. System Performance

The system performance was acceptable.

System performance data were not reviewed for Level II

*XV. Overall Assessment

The overall assessment of data was acceptable. In the case where more than one result was reported for an individual sample, the least technically acceptable results were rejected as follows:

Associated SDG	Sample	Compound	Flag	A or P
*K2409451	LDW-T3-D-SS-WB-comp-1 LDW-T3-E-SS-WB-comp-1	Hexachlorocyclopentadiene 2,4,6-Trichlorophenol 2,4,5-Trichlorophenol 2-Chloronaphthalene 2-Nitroaniline Dimethylphthalate 2,6-Dinitrotoluene 2,4-Dinitrophenol 3-Nitroaniline 4-Nitrophenol 2,4-Dinitrotoluene 4-Chlorophenyl-phenyl ether Diethylphthalate 4-Nitroaniline 4,6-Dinitro-2-methylphenol N-Nitrosodiphenylamine	R R R R R R R R R R R	A
*K2409451	LDW-T3-D-SS-WB-comp-1DL LDW-T3-E-SS-WB-comp-1DL	All TCL compounds except Hexachlorocyclopentadiene 2,4,6-Trichlorophenol 2,4,5-Trichlorophenol 2-Chloronaphthalene 2-Nitroaniline Dimethylphthalate 2,6-Dinitrotoluene 2,4-Dinitrophenol 3-Nitroaniline 4-Nitrophenol 2,4-Dinitrotoluene 4-Chlorophenyl-phenyl ether Diethylphthalate 4-Nitroaniline 4,6-Dinitro-2-methylphenol N-Nitrosodiphenylamine	R	A
K2409451	LDW-T1-M-SC-EM-comp-1DL	All TCL compounds	R	A

XVI. Field Duplicates

No field duplicates were identified in these SDGs.

XVII. Field Blanks

No field blanks were identified in these SDGs.

Polynuclear Aromatic Hydrocarbons by EPA SW 846 Method 8270C using Selected Ion Monitoring (SIM).

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals. All ion abundance requirements were met.

Instrument performance check data were not reviewed for Level II.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 30.0% for all compounds.

Average relative response factors (RRF) for all target compounds were within validation criteria.

Initial calibration data were not reviewed for Level II.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

All of the continuing calibration percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were less than or equal to 25.0% .

The percent difference (%D) of the second source calibration standard were less than or equal to 25.0% for all compounds.

All of the continuing calibration RRF values were within validation criteria.

Continuing calibration data were not reviewed for Level II.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No polynuclear aromatic hydrocarbon contaminants were found in the method blanks with the following exceptions:

Associated SDG	Method Blank ID	Extraction Date	Compound TIC (RT in minutes)	Concentration	Associated Samples
K2409451	KWG0419697-5	12/13/04	Naphthalene Dibenzofuran Fluorene Phenanthrene Pyrene Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	1.1 ug/Kg 0.095 ug/Kg 0.078 ug/Kg 0.22 ug/Kg 0.18 ug/Kg 0.16 ug/Kg 0.13 ug/Kg 0.15 ug/Kg	LDW-T1-A-SS-WB-comp-1** LDW-T1-B-SS-WB-comp-1** LDW-T1-C-SS-WB-comp-1** LDW-T1-D-SS-WB-comp-1** LDW-T1-E-SS-WB-comp-1** LDW-T1-F-SS-WB-comp-1** LDW-T2-A-SS-WB-comp-1** LDW-T2-B-SS-WB-comp-1** LDW-T2-C-SS-WB-comp-1** LDW-T2-D-SS-WB-comp-1 LDW-T2-E-SS-WB-comp-1 LDW-T2-F-SS-WB-comp-1 LDW-T3-A-SS-WB-comp-1 LDW-T3-B-SS-WB-comp-1 LDW-T3-C-SS-WB-comp-1 LDW-T3-D-SS-WB-comp-1 LDW-T3-E-SS-WB-comp-1 LDW-T3-F-SS-WB-comp-1 LDW-T4-A-SS-WB-comp-1 LDW-T4-B-SS-WB-comp-1
K2409451	KWG0419756-7	12/14/04	Naphthalene 2-Methylnaphthalene Dibenzofuran Phenanthrene	1.1 ug/Kg 0.17 ug/Kg 0.055 ug/Kg 0.11 ug/Kg	LDW-T4-B-SS-WB-comp-2 LDW-T4-C-SS-WB-comp-1 LDW-T4-C-SS-WB-comp-2 LDW-T4-D-SS-WB-comp-1 LDW-T3-M-ES-FL-comp-2 LDW-T1-M-ES-WB-comp-1 LDW-T1-M-ES-WB-comp-2 LDW-T1-M-ES-WB-comp-3 LDW-T1-M-ES-WB-comp-4 LDW-T1-M-ES-WB-comp-5 LDW-T1-M-ES-WB-comp-6 LDW-T2-M-ES-WB-comp-1 LDW-T2-M-ES-WB-comp-2 LDW-T2-M-ES-WB-comp-3 LDW-T4-M-ES-WB-comp-2 LDW-T1-M-SC-EM-comp-1 LDW-T1-M-SC-EM-comp-2 LDW-T1-M-SC-EM-comp-3 LDW-T1-M-SC-HP-comp-1 LDW-T2-M-SC-EM-comp-1
K2409451	KWG0419798-4	12/15/04	Naphthalene 2-Methylnaphthalene Phenanthrene	1.1 ug/Kg 0.17 ug/Kg 0.15 ug/Kg	LDW-T2-M-SC-EM-comp-2 LDW-T2-M-SC-EM-comp-3 LDW-T2-M-SC-HP-comp-1 LDW-T2-M-SC-EM-comp-4 LDW-T2-M-SC-EM-comp-5 LDW-T2-M-SC-EM-comp-6 LDW-T2-M-SC-HP-comp-2 LDW-T3-M-SC-EM-comp-1 LDW-T3-M-SC-EM-comp-2 LDW-T3-M-SC-EM-comp-3 LDW-T3-M-SC-HP-comp-1 LDW-T4-M-DC-EM-comp-1 LDW-T4-M-DC-HP-comp-1 LDW-T4-M-DC-HP-comp-1DL

Associated SDG	Method Blank ID	Extraction Date	Compound TIC (RT in minutes)	Concentration	Associated Samples
K2409809	KWG0501179-3	1/24/05	Naphthalene 2-Methylnaphthalene Acenaphthylene Dibenzofuran Fluorene Phenanthrene Anthracene Fluoranthene Pyrene	0.28 ug/Kg 0.17 ug/Kg 0.055 ug/Kg 0.13 ug/Kg 0.12 ug/Kg 0.34 ug/Kg 0.15 ug/Kg 0.29 ug/Kg 0.19 ug/Kg	LDW-M-M-PP-FL-comp-1 LDW-M-M-SP-FL-comp-1 LDW-T1-M-ES-FL-comp-1 LDW-T1-M-ES-FL-comp-2 LDW-T2-M-ES-FL-comp-1 LDW-T2-M-ES-FL-comp-2 LDW-T3-M-ES-FL-comp-1 LDW-T4-M-ES-FL-comp-1 LDW-T2-M-ES-WB-comp-4 LDW-T2-M-ES-WB-comp-5 LDW-T2-M-ES-WB-comp-6 LDW-T3-M-ES-WB-comp-1 LDW-T3-M-ES-WB-comp-2 LDW-T3-M-ES-WB-comp-3 LDW-T3-M-ES-WB-comp-4 LDW-T3-M-ES-WB-comp-5 LDW-T3-M-ES-WB-comp-6 LDW-T4-M-ES-WB-comp-1 LDW-T4-M-ES-WB-comp-3 LDW-T4-M-SF-WB-comp-1
K2409809	KWG0420599-5	12/28/04	Naphthalene 2-Methylnaphthalene Phenanthrene	0.88 ug/Kg 0.24 ug/Kg 0.13 ug/Kg	LDW-T4-M-SF-WB-comp-2 LDW-T4-M-SF-WB-comp-3 LDW-T4-M-SF-FL-comp-1 LDW-T1-M-DC-EM-comp-1 LDW-T1-M-DC-EM-comp-2 LDW-T1-M-DC-EM-comp-3 LDW-T1-M-DC-HP-comp-1 LDW-T3-M-DC-EM-comp-1 LDW-T3-M-DC-EM-comp-2 LDW-T3-M-DC-EM-comp-3 LDW-T3-M-DC-HP-comp-1 LDW-T3-M-DC-HP-comp-1DL

Sample concentrations were compared to concentrations detected in the method blanks. The sample concentrations were either not detected or were significantly greater (>10X for common contaminants, >5X for other contaminants) than the concentrations found in the associated method blanks with the following exceptions:

Associated SDG	Sample	Compound TIC (RT in minutes)	Reported Concentration	Modified Final Concentration
K2409451	LDW-T1-A-SS-WB-comp-1**	Indeno(1,2,3-cd)pyrene Benzo(g,h,i)perylene	0.23 ug/Kg 0.29 ug/Kg	0.72U ug/Kg 0.72U ug/Kg
K2409451	LDW-T1-B-SS-WB-comp-1**	Naphthalene Indeno(1,2,3-cd)pyrene Benzo(g,h,i)perylene	4.9 ug/Kg 0.20 ug/Kg 0.26 ug/Kg	4.9U ug/Kg 0.72U ug/Kg 0.72U ug/Kg
K2409451	LDW-T1-C-SS-WB-comp-1**	Naphthalene Indeno(1,2,3-cd)pyrene Benzo(g,h,i)perylene	4.4 ug/Kg 0.25 ug/Kg 0.28 ug/Kg	4.4U ug/Kg 0.72U ug/Kg 0.72U ug/Kg
K2409451	LDW-T1-D-SS-WB-comp-1**	Naphthalene Indeno(1,2,3-cd)pyrene Benzo(g,h,i)perylene	4.0 ug/Kg 0.20 ug/Kg 0.29 ug/Kg	4.0U ug/Kg 0.72U ug/Kg 0.72U ug/Kg

Associated SDG	Sample	Compound TIC (RT in minutes)	Reported Concentration	Modified Final Concentration
K2409451	LDW-T1-E-SS-WB-comp-1**	Naphthalene Indeno(1,2,3-cd)pyrene Benzo(g,h,i)perylene	4.9 ug/Kg 0.32 ug/Kg 0.35 ug/Kg	4.9U ug/Kg 0.72U ug/Kg 0.72U ug/Kg
K2409451	LDW-T1-F-SS-WB-comp-1**	Naphthalene Indeno(1.2.3-cd)pyrene Benzo(g,h,i)perylene	3.8 ug/Kg 0.16 ug/Kg 0.20 ug/Kg	3.8U ug/Kg 0.72U ug/Kg 0.72U ug/Kg
K2409451	LDW-T2-A-SS-WB-comp-1**	Indeno(1,2,3-cd)pyrene Benzo(g,h,i)perylene	0.23 ug/Kg 0.26 ug/Kg	0.72U ug/Kg 0.72U ug/Kg
K2409451	LDW-T2-B-SS-WB-comp-1**	Naphthalene Dibenz(a,h)anthracene	4.9 ug/Kg 0.20 ug/Kg	4.9U ug/Kg 0.72U ug/Kg
K2409451	LDW-T2-C-SS-WB-comp-1**	Naphthalene Indeno(1,2,3-cd)pyrene Benzo(g,h,i)perylene	3.5 ug/Kg 0.15 ug/Kg 0.20 ug/Kg	3.5U ug/Kg 0.72U ug/Kg 0.72U ug/Kg
K2409451	LDW-T2-D-SS-WB-comp-1	Naphthalene Indeno(1,2,3-cd)pyrene Benzo(g,h,i)perylene	5.2 ug/Kg 0.27 ug/Kg 0.29 ug/Kg	5.2U ug/Kg 0.72U ug/Kg 0.72U ug/Kg
K2409451	LDW-T2-E-SS-WB-comp-1	Dibenz(a,h)anthracene	0.22 ug/Kg	0.72U ug/Kg
K2409451	LDW-T2-F-SS-WB-comp-1	Indeno(1,2,3-cd)pyrene Benzo(g,h,i)perylene	0.31 ug/Kg 0.34 ug/Kg	0.72U ug/Kg 0.72U ug/Kg
K2409451	LDW-T3-A-SS-WB-comp-1	Naphthalene Indeno(1,2,3-cd)pyrene Benzo(g,h,i)perylene	5.0 ug/Kg 0.27 ug/Kg 0.33 ug/Kg	5.0U ug/Kg 0.72U ug/Kg 0.72U ug/Kg
K2409451	LDW-T3-B-SS-WB-comp-1	Naphthalene Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	5.2 ug/Kg 0.67 ug/Kg 0.18 ug/Kg 0.67 ug/Kg	5.2U ug/Kg 0.72U ug/Kg 0.72U ug/Kg
K2409451	LDW-T3-C-SS-WB-comp-1	Naphthalene Indeno(1,2,3-cd)pyrene Benzo(g,h,i)perylene	4.7 ug/Kg 0.20 ug/Kg 0.20 ug/Kg	4.7U ug/Kg 0.72U ug/Kg 0.72U ug/Kg
K2409451	LDW-T3-D-SS-WB-comp-1	Naphthalene Indeno(1,2,3-cd)pyrene Benzo(g,h,i)perylene	5.3 ug/Kg 0.34 ug/Kg 0.41 ug/Kg	5.3U ug/Kg 0.72U ug/Kg 0.72U ug/Kg
K2409451	LDW-T3-E-SS-WB-comp-1	Naphthalene Indeno(1,2,3-cd)pyrene Benzo(g,h,i)perylene	4.3 ug/Kg 0.35 ug/Kg 0.42 ug/Kg	4.3U ug/Kg 0.72U ug/Kg 0.72U ug/Kg
K2409451	LDW-T3-F-SS-WB-comp-1	Dibenz(a,h)anthracene	0.22 ug/Kg	0.72U ug/Kg
K2409451	LDW-T4-A-SS-WB-comp-1	Naphthalene Indeno(1,2,3-cd)pyrene Benzo(g,h,i)perylene	3.8 ug/Kg 0.13 ug/Kg 0.18 ug/Kg	3.8U ug/Kg 0.72U ug/Kg 0.72U ug/Kg

*Indicates change as the result of report review.

Associated SDG	Sample	Compound TIC (RT in minutes)	Reported Concentration	Modified Final Concentration
K2409451	LDW-T4-B-SS-WB-comp-1	Naphthalene Indeno(1,2,3-cd)pyrene Benzo(g,h,i)perylene	3.7 ug/Kg 0.15 ug/Kg 0.16 ug/Kg	3.7U ug/Kg 0.72U ug/Kg 0.72U ug/Kg
K2409451	LDW-T4-B-SS-WB-comp-2	Naphthalene	4.5 ug/Kg	4.5U ug/Kg
K2409451	LDW-T4-C-SS-WB-comp-1	Naphthalene	4.0 ug/Kg	4.0U ug/Kg
K2409451	LDW-T4-C-SS-WB-comp-2	Naphthalene	3.0 ug/Kg	3.0U ug/Kg
K2409451	LDW-T4-D-SS-WB-comp-1	Naphthalene	3.9 ug/Kg	3.9U ug/Kg
K2409451	LDW-T3-M-ES-FL-comp-2	Naphthalene	4.0 ug/Kg	4.0U ug/Kg
K2409451	LDW-T1-M-ES-WB-comp-1	Naphthalene	5.1 ug/Kg	5.1U ug/Kg
K2409451	LDW-T1-M-ES-WB-comp-2	Naphthalene	5.5 ug/Kg	5.5U ug/Kg
K2409451	LDW-T4-M-ES-WB-comp-2	Naphthalene	4.8 ug/Kg	4.8U ug/Kg
K2409451	LDW-T1-M-SC-EM-comp-1	Naphthalene 2-Methylnaphthalene Dibenzofuran Phenanthrene	2.1 ug/Kg 0.45 ug/Kg 0.11 ug/Kg 0.38 ug/Kg	2.1U ug/Kg 1.5U ug/Kg 0.72U ug/Kg 0.72U ug/Kg
K2409451	LDW-T1-M-SC-EM-comp-2	Naphthalene 2-Methylnaphthalene Dibenzofuran	2.1 ug/Kg 0.52 ug/Kg 0.23 ug/Kg	2.1U ug/Kg 1.5U ug/Kg 0.72U ug/Kg
K2409451	LDW-T1-M-SC-EM-comp-3	Naphthalene 2-Methylnaphthalene Dibenzofuran Phenanthrene	2.2 ug/Kg 0.47 ug/Kg 0.13 ug/Kg 0.44 ug/Kg	2.2U ug/Kg 1.5U ug/Kg 0.72U ug/Kg 0.72U ug/Kg
K2409451	LDW-T1-M-SC-HP-comp-1	Naphthalene	3.5 ug/Kg	3.5U ug/Kg
K2409451	LDW-T2-M-SC-EM-comp-1	Naphthalene 2-Methylnaphthalene Dibenzofuran Phenanthrene	2.0 ug/Kg 0.44 ug/Kg 0.12 ug/Kg 0.40 ug/Kg	2.0U ug/Kg 1.5U ug/Kg 0.72U ug/Kg 0.72U ug/Kg
K2409451	LDW-T2-M-SC-EM-comp-2	Naphthalene 2-Methylnaphthalene Phenanthrene	1.4 ug/Kg 0.34 ug/Kg 0.38 ug/Kg	1.5U ug/Kg 1.5U ug/Kg 0.72U ug/Kg
K2409451	LDW-T2-M-SC-EM-comp-3	Naphthalene 2-Methylnaphthalene Phenanthrene	1.4 ug/Kg 0.40 ug/Kg 0.49 ug/Kg	1.5U ug/Kg 1.5U ug/Kg 0.72U ug/Kg
K2409451	LDW-T2-M-SC-HP-comp-1	Naphthalene 2-Methylnaphthalene	2.3 ug/Kg 0.81 ug/Kg	2.3U ug/Kg 1.5U ug/Kg

*Indicates change as the result of report review.

Associated SDG	Sample	Compound TIC (RT in minutes)	Reported Concentration	Modified Final Concentration
K2409451	LDW-T2-M-SC-EM-comp-4	Naphthalene 2-Methylnaphthalene Phenanthrene	1.6 ug/Kg 0.36 ug/Kg 0.31 ug/Kg	1.6U ug/Kg 1.5U ug/Kg 0.72U ug/Kg
K2409451	LDW-T2-M-SC-EM-comp-5	Naphthalene 2-Methylnaphthalene Phenanthrene	1.5 ug/Kg 0.31 ug/Kg 0.31 ug/Kg	1.5U ug/Kg 1.5U ug/Kg 0.72U ug/Kg
K2409451	LDW-T2-M-SC-EM-comp-6	Naphthalene 2-Methylnaphthalene Phenanthrene	1.6 ug/Kg 0.40 ug/Kg 0.40 ug/Kg	1.6U ug/Kg 1.5U ug/Kg 0.72U ug/Kg
K2409451	LDW-T2-M-SC-HP-comp-2	Naphthalene	2.8 ug/Kg	2.8U ug/Kg
K2409451	LDW-T3-M-SC-EM-comp-1	Naphthalene 2-Methylnaphthalene Phenanthrene	1.7 ug/Kg 0.51 ug/Kg 0.49 ug/Kg	1.7U ug/Kg 1.5U ug/Kg 0.72U ug/Kg
K2409451	LDW-T3-M-SC-EM-comp-2	Naphthalene 2-Methylnaphthalene Phenanthrene	1.6 ug/Kg 0.48 ug/Kg 0.51 ug/Kg	1.6U ug/Kg 1.5U ug/Kg 0.72U ug/Kg
K2409451	LDW-T3-M-SC-EM-comp-3	Naphthalene 2-Methylnaphthalene Phenanthrene	1.4 ug/Kg 0.39 ug/Kg 0.35 ug/Kg	1.4U ug/Kg 1.5U ug/Kg 0.72U ug/Kg
K2409451	LDW-T3-M-SC-HP-comp-1	Naphthalene 2-Methylnaphthalene	2.2 ug/Kg 0.81 ug/Kg	2.2U ug/Kg 1.5U ug/Kg
K2409451	LDW-T4-M-DC-EM-comp-1	Naphthalene 2-Methylnaphthalene Phenanthrene	1.5 ug/Kg 0.57 ug/Kg 0.75 ug/Kg	1.5U ug/Kg 1.5U ug/Kg 0.75U ug/Kg
K2409451	LDW-T4-M-DC-HP-comp-1	Naphthalene	4.4 ug/Kg	4.4U ug/Kg
K2409451	LDW-T4-M-DC-HP-comp-1DL (10x)	Naphthalene Phenanthrene	4.4 ug/Kg 4.7 ug/Kg	4.4U ug/Kg 7.2U ug/Kg
K2409809	LDW-M-M-PP-FL-comp-1	Acenaphthylene	0.26 ug/Kg	0.50U ug/Kg
K2409809	LDW-M-M-SP-FL-comp-1	Naphthalene Acenaphthylene Anthracene Fluoranthene Pyrene	1.3 ug/Kg 0.26 ug/Kg 0.41 ug/Kg 1.4 ug/Kg 0.48 ug/Kg	1.3U ug/Kg 0.50U ug/Kg 0.50U ug/Kg 1.4U ug/Kg 0.50U ug/Kg
K2409809	LDW-T1-M-ES-FL-comp-1	Phenanthrene Fluoranthene Pyrene	1.6 ug/Kg 1.2 ug/Kg 0.59 ug/Kg	1.6U ug/Kg 1.2U ug/Kg 0.59U ug/Kg
K2409809	LDW-T1-M-ES-FL-comp-2	Phenanthrene Fluoranthene Pyrene	1.6 ug/Kg 1.4 ug/Kg 0.91 ug/Kg	1.6U ug/Kg 1.4U ug/Kg 0.91U ug/Kg

Associated SDG	Sample	Compound TIC (RT in minutes)	Reported Concentration	Modified Final Concentration
K2409809	LDW-T2-M-ES-FL-comp-1	Pyrene	0.54 ug/Kg	0.54U ug/Kg
K2409809	LDW-T2-M-ES-FL-comp-2	Phenanthrene Fluoranthene Pyrene	1.6 ug/Kg 1.4 ug/Kg 0.54 ug/Kg	1.6U ug/Kg 1.4U ug/Kg 0.54U ug/Kg
K2409809	LDW-T3-M-ES-FL-comp-1	Phenanthrene Anthracene Fluoranthene Pyrene	0.95 ug/Kg 0.43 ug/Kg 0.97 ug/Kg 0.49 ug/Kg	0.95U ug/Kg 0.50U ug/Kg 0.97U ug/Kg 0.50U ug/Kg
K2409809	LDW-T4-M-ES-FL-comp-1	Phenanthrene Anthracene Fluoranthene Pyrene	0.89 ug/Kg 0.41 ug/Kg 0.87 ug/Kg 0.36 ug/Kg	0.89U ug/Kg 0.50U ug/Kg 0.87U ug/Kg 0.50U ug/Kg
K2409809	LDW-T4-M-SF-WB-comp-1	Anthracene	0.66 ug/Kg	0.66U ug/Kg
K2409809	LDW-T4-M-SF-WB-comp-2	Naphthalene	3.1 ug/Kg	3.1U ug/Kg
K2409809	LDW-T4-M-SF-WB-comp-3	Naphthalene	4.1 ug/Kg	4.1U ug/Kg
K2409809	LDW-T4-M-SF-FL-comp-1	Naphthalene	3.7 ug/Kg	3.7U ug/Kg
K2409809	LDW-T1-M-DC-EM-comp-1	Naphthalene	2.2 ug/Kg	2.2U ug/Kg
K2409809	LDW-T1-M-DC-EM-comp-2	Naphthalene 2-Methylnaphthalene Phenanthrene	2.1 ug/Kg 0.92 ug/Kg 0.62 ug/Kg	2.1U ug/Kg 1.5U ug/Kg 0.72U ug/Kg
K2409809	LDW-T1-M-DC-EM-comp-3	Naphthalene 2-Methylnaphthalene Phenanthrene	2.2 ug/Kg 0.90 ug/Kg 0.58 ug/Kg	2.2U ug/Kg 1.5U ug/Kg 0.71U ug/Kg
K2409809	LDW-T3-M-DC-EM-comp-1	Naphthalene 2-Methylnaphthalene	2.1 ug/Kg 1.1 ug/Kg	2.1U ug/Kg 1.5U ug/Kg
K2409809	LDW-T3-M-DC-EM-comp-2	Naphthalene 2-Methylnaphthalene Phenanthrene	2.0 ug/Kg 0.98 ug/Kg 0.55 ug/Kg	2.0U ug/Kg 1.5U ug/Kg 0.72U ug/Kg
K2409809	LDW-T3-M-DC-EM-comp-3	Naphthalene 2-Methylnaphthalene	2.1 ug/Kg 1.1 ug/Kg	2.1U ug/Kg 1.5U ug/Kg
K2409809	LDW-T3-M-DC-HP-comp-1DL (10x)	Naphthalene 2-Methylnaphthalene Phenanthrene	6.3 ug/Kg 3.6 ug/Kg 3.2 ug/Kg	15U ug/Kg 15U ug/Kg 7.2U ug/Kg

VI. Surrogate Spikes

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

VII. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there was insufficient sample volume for analysis of the matrix spike and matrix spike duplicate in SDGs K2409445, K2409451 and K2409809.

Duplicate (DUP) sample analyses were reviewed for each matrix as applicable. Results were within QC limits for SDGs K2409445, K2409451 and K2409809.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

No standard reference material analysis for Naphthalene, 2-Methylnaphthalene, Acenaphthylene, Dibenzofuran, Acenaphthene, Fluorene, Anthracene, and Dibenz(a,h)anthracene were associated with SDGs K2409451 and K2409809.

IX. Regional Quality Assurance and Quality Control

Not applicable.

*X. Internal Standards

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

Associated SDG	Sample	Internal Standards	Area (Limits)	Compound	Flag	A or P
K2409451	LDW-T4-M-DC-HP-comp-1	Perylene-d12	91451 (98107-392426)	Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	J (all detects) UJ (all non-detects)	A

XI. Target Compound Identifications

All target compound identifications were within validation criteria.

Target compound identifications data were not reviewed for Level II.

XII. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria.

Compound quantitation and CRQLs data were not reviewed for Level II.

XIII. Tentatively Identified Compounds (TICs)

Tentatively identified compounds were not reported by the laboratory for Level IV.

Tentatively identified compounds data were not reviewed for Level II.

XIV. System Performance

The system performance was acceptable.

System performance data were not reviewed for Level II.

XV. Overall Assessment

The overall assessment of data was acceptable. In the case where more than one result was reported for an individual sample, the least technically acceptable results were rejected as follows:

Associated SDG	Sample	Compound	Flag	A or P
K2409451	LDW-T4-M-DC-HP-comp-1	Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	R R R R R R	A
K2409451	LDW-T4-M-DC-HP-comp-1DL	All TCL compounds except Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	R	A
K2409809	LDW-T3-M-DC-HP-comp-1DL	All TCL compounds	R	A

XVI. Field Duplicates

No field duplicates were identified in these SDGs.

XVII. Field Blanks

No field blanks were identified in these SDGs.

GC Chlorinated Pesticides by EPA SW 846 Method 8081A

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

*II. GC/ECD Instrument Performance Check

Instrument performance was acceptable unless noted otherwise under initial calibration and continuing calibration sections.

*III. Initial Calibration

Initial calibration of single and multicomponent compounds was performed for the primary (quantitation) column and confirmation column as required by this method.

The percent relative standard deviations (%RSD) were less than or equal to 20.0% for selected compounds.

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

Retention time windows were evaluated and considered technically acceptable.

*IV. Continuing Calibration

Continuing calibration was performed at required frequencies.

The percent difference (%D) of the second source calibration standard were less than or equal to 15.0% for all compounds.

The percent differences (%D) of calibration factors in continuing standard mixtures were within the 15.0% QC limits with the following exceptions:

Associated SDG	Date	Standard	Column	Compound	%D	Associated Samples	Flag	A or P
K2409445	12/24/04	1223F067/70	DB-XLB	4,4'-DDD	15.2	LDW-T1-A-PS-WB-comp-1** LDW-T1-B-PS-WB-comp-1** LDW-T1-C-PS-WB-comp-1** LDW-T1-D-PS-WB-comp-1** LDW-T1-E-PS-WB-comp-1** LDW-T1-F-PS-WB-comp-1** KWG0419447-7	J (all detects) UJ (all non-detects)	A

Associated SDG	Date	Standard	Column	Compound	%D	Associated Samples	Flag	A or P
K2409445	12/24/04	1223F067/70	DB-35MS	2,4'-DDE 2,4'-DDD	16 17	LDW-T1-A-PS-WB-comp-1** LDW-T1-B-PS-WB-comp-1** LDW-T1-C-PS-WB-comp-1** LDW-T1-D-PS-WB-comp-1** LDW-T1-E-PS-WB-comp-1** LDW-T1-F-PS-WB-comp-1** KWG0419447-7	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	A
*K2409445	12/25/04	1223F102/105	DB-XLB	Dieldrin	15.2	LDW-T3-C-PS-WB-comp-1** LDW-T3-D-PS-WB-comp-1** LDW-T4-A-PS-WB-comp-1** LDW-T3-B-PS-WB-comp-1 LDW-T3-E-PS-WB-comp-1 LDW-T3-F-PS-WB-comp-1 LDW-T4-B-PS-WB-comp-1	J (all detects) UJ (all non-detects)	A
*K2409445	12/25/04	1223F102/105	DB-35MS	2,4'-DDE 2,4'-DDD	19 18	LDW-T3-C-PS-WB-comp-1** LDW-T3-D-PS-WB-comp-1** LDW-T4-A-PS-WB-comp-1** LDW-T3-B-PS-WB-comp-1 LDW-T3-E-PS-WB-comp-1 LDW-T3-F-PS-WB-comp-1 LDW-T4-B-PS-WB-comp-1	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	A
*K2409445	1/12/05	0110F077/80	DB-XLB	4,4'-DDE	15.1	LDW-T3-C-PS-WP-comp-1DL** LDW-T3-D-PS-WB-comp-1DL** LDW-T3-E-PS-WB-comp-1DL LDW-T3-F-PS-WB-comp-1DL LDW-T4-D-PS-WB-comp-1DL	J (all detects) UJ (all non-detects)	A
*K2409445	1/12/05	0110F077/80	DB-35MS	Hexachlorobenzene	16	LDW-T3-C-PS-WP-comp-1DL** LDW-T3-D-PS-WB-comp-1DL** LDW-T3-E-PS-WB-comp-1DL LDW-T3-F-PS-WB-comp-1DL LDW-T4-D-PS-WB-comp-1DL	J (all detects) UJ (all non-detects)	A
*K2409445	1/11/05	0110F061/64	DB-XLB	Mirex	17	LDW-T2-E-PS-WB-comp-1DL LDW-T3-A-PS-WB-comp-1DL LDW-T3-B-PS-WB-comp-1DL	J (all detects) UJ (all non-detects)	A
*K2409451	1/8/05	0107F026/29	DB-XLB	Mirex	19	LDW-T1-D-SS-WB-comp-1 LDW-T1-E-SS-WB-comp-1 LDW-T1-F-SS-WB-comp-1 LDW-T2-A-SS-WB-comp-1 LDW-T2-B-SS-WB-comp-1 LDW-T2-C-SS-WB-comp-1 LDW-T2-D-SS-WB-comp-1 LDW-T2-E-SS-WB-comp-1 LDW-T2-F-SS-WB-comp-1 LDW-T3-A-SS-WB-comp-1	J (all detects) UJ (all non-detects)	A
*K2409451	1/8/05	0107F043/46	DB-XLB	Mirex	18	LDW-T3-B-SS-WB-comp-1 LDW-T3-C-SS-WB-comp-1 LDW-T3-D-SS-WB-comp-1 LDW-T3-E-SS-WB-comp-1 LDW-T3-F-SS-WB-comp-1 LDW-T4-A-SS-WB-comp-1 LDW-T4-B-SS-WB-comp-1 LDW-T4-B-SS-WB-comp-2	J (all detects) UJ (all non-detects)	A

Associated SDG	Date	Standard	Column	Compound	%D	Associated Samples	Flag	A or P
*K2409451	1/10/05	0110F005/08	DB-XLB	4,4'-DDE Endrin 4,4'-DDT Methoxychlor Mirex Toxaphene	15.1 16 15.1 17 19 16	LDW-T4-C-SS-WB-comp-1 LDW-T4-C-SS-WB-comp-2 LDW-T4-D-SS-WB-comp-1 LDW-T3-M-ES-FL-comp-2 LDW-T1-M-ES-WB-comp-1 LDW-T1-M-ES-WB-comp-2 LDW-T1-M-ES-WB-comp-3 LDW-T1-M-ES-WB-comp-4 LDW-T1-M-ES-WB-comp-5 LDW-T1-M-ES-WB-comp-6	J (all detects) UJ (all non-detects)	A
*K2409451	1/10/05	0110F005/08	DB-35MS	Methoxychlor	16	LDW-T4-C-SS-WB-comp-1 LDW-T4-C-SS-WB-comp-2 LDW-T4-D-SS-WB-comp-1 LDW-T3-M-ES-FL-comp-2 LDW-T1-M-ES-WB-comp-1 LDW-T1-M-ES-WB-comp-2 LDW-T1-M-ES-WB-comp-3 LDW-T1-M-ES-WB-comp-4 LDW-T1-M-ES-WB-comp-5 LDW-T1-M-ES-WB-comp-6	J (all detects) UJ (all non-detects)	A
*K2409451	1/11/05	0110F022/25	DB-XLB	gamma-Chlordane Endosulfan I alpha-Chlordane Dieldrin 4,4'-DDE Endrin ketone Toxaphene Mirex	15.1 16 16 16 18 15.3 18 20	LDW-T2-M-ES-WB-comp-1 LDW-T2-M-ES-WB-comp-2 LDW-T2-M-ES-WB-comp-3 LDW-T4-M-ES-WB-comp-2 LDW-T1-M-SC-EM-comp-1	J (all detects) UJ (all non-detects)	A
*K2409451	1/11/05	0110F022/25	DB-35MS	2,4'-DDE	16	LDW-T2-M-ES-WB-comp-1 LDW-T2-M-ES-WB-comp-2 LDW-T2-M-ES-WB-comp-3 LDW-T4-M-ES-WB-comp-2 LDW-T1-M-SC-EM-comp-1	J (all detects) UJ (all non-detects)	A
*K2409451	1/11/05	0110F044/47	DB-XLB	gamma-Chlordane Endosulfan I alpha-Chlordane Dieldrin 4,4'-DDE Endrin Toxaphene Mirex	15.1 15.3 16 16 18 16 16 19	LDW-T1-M-SC-HP-comp-1 LDW-T2-M-SC-EM-comp-1 LDW-T2-M-SC-EM-comp-2 LDW-T2-M-SC-EM-comp-3 LDW-T2-M-SC-HP-comp-1 LDW-T2-M-SC-EM-comp-4 LDW-T2-M-SC-EM-comp-5 LDW-T2-M-SC-EM-comp-6 LDW-T2-M-SC-HP-comp-2 LDW-T3-M-SC-EM-comp-1	J (all detects) UJ (all non-detects)	A
*K2409451	1/11/05	0110F044/47	DB-35MS	Hexachlorobenzene	16	LDW-T1-M-SC-HP-comp-1 LDW-T2-M-SC-EM-comp-1 LDW-T2-M-SC-EM-comp-2 LDW-T2-M-SC-EM-comp-3 LDW-T2-M-SC-HP-comp-1 LDW-T2-M-SC-EM-comp-4 LDW-T2-M-SC-EM-comp-5 LDW-T2-M-SC-EM-comp-6 LDW-T2-M-SC-HP-comp-2 LDW-T3-M-SC-EM-comp-1	J (all detects) UJ (all non-detects)	A

*Indicates change as the result of report review.

Associated SDG	Date	Standard	Column	Compound	%D	Associated Samples	Flag	A or P
*K2409451	1/11/05	0110F061/64	DB-XLB	Mirex	17	LDW-T3-M-SC-EM-comp-2 LDW-T3-M-SC-EM-comp-3 LDW-T3-M-SC-HP-comp-1 LDW-T4-M-DC-EM-comp-1 LDW-T4-M-DC-HP-comp-1	J (all detects) UJ (all non-detects)	A
*K2409451	1/12/05	0112F007/10	DB-XLB	4,4'-DDE Mirex	16 16	LDW-T1-C-SS-WB-comp-1DL LDW-T1-D-SS-WB-comp-1DL LDW-T1-F-SS-WB-comp-1DL LDW-T2-A-SS-WB-comp-1DL LDW-T2-B-SS-WB-comp-1DL LDW-T2-C-SS-WB-comp-1DL LDW-T2-E-SS-WB-comp-1DL LDW-T2-F-SS-WB-comp-1DL LDW-T3-A-SS-WB-comp-1DL LDW-T3-B-SS-WB-comp-1DL	J (all detects) UJ (all non-detects)	A
*K2409451	1/12/05	0112F007/10	DB-35MS	2,4'-DDE	15.2	LDW-T1-C-SS-WB-comp-1DL LDW-T1-D-SS-WB-comp-1DL LDW-T1-F-SS-WB-comp-1DL LDW-T2-A-SS-WB-comp-1DL LDW-T2-B-SS-WB-comp-1DL LDW-T2-C-SS-WB-comp-1DL LDW-T2-E-SS-WB-comp-1DL LDW-T2-F-SS-WB-comp-1DL LDW-T3-A-SS-WB-comp-1DL LDW-T3-B-SS-WB-comp-1DL	J (all detects) UJ (all non-detects)	A
*K2409451	1/13/05	0112F024/27	DB-35MS	2,4'-DDE	16	LDW-T3-C-SS-WB-comp-1DL LDW-T3-D-SS-WB-comp-1DL LDW-T3-E-SS-WB-comp-1DL LDW-T3-F-SS-WB-comp-1DL LDW-T3-M-ES-FL-comp-2DL LDW-T4-M-ES-WB-comp-2DL LDW-T1-M-SC-HP-comp-1DL LDW-T2-M-SC-HP-comp-1DL LDW-T2-M-SC-HP-comp-2DL	J (all detects) UJ (all non-detects)	A
*K2409451	1/13/05	0112F041/44	DB-35MS	Endrin	15.3	LDW-T3-M-SC-HP-comp-1DL	J (all detects) UJ (all non-detects)	A
*K2409809	1/20/05	0120F004/07	DB-XLB	Endrin Toxaphene Mirex 4,4'-DDE	17 16 21 15.3	LDW-M-M-PP-FL-comp-1 LDW-M-M-SP-FL-comp-1 LDW-T1-M-ES-FL-comp-1 LDW-T1-M-ES-FL-comp-2 LDW-T2-M-ES-FL-comp-1 LDW-T2-M-ES-FL-comp-2 LDW-T3-M-ES-FL-comp-1 LDW-T4-M-ES-FL-comp-1	J (all detects) UJ (all non-detects)	A

The individual 4,4'-DDT and Endrin breakdowns (%BD) were less than or equal to 15.0%.

Retention times (RT) of all compounds in the calibration standards were within QC limits.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No chlorinated pesticide contaminants were found in the method blanks with the following exceptions:

Associated SDG	Method Blank ID	Extraction Date	Compound	Concentration	Associated Samples
K2409445 K2409451	KWG0419519-7	12/9/04	Methoxychlor	5.3 ug/Kg	LDW-T4-C-PS-WB-comp-1 LDW-T4-D-PS-WB-comp-1 LDW-T4-D-PS-WB-comp-1DL LDW-T4-D-PS-WB-comp-2 LDW-T4-E-PS-WB-comp-1 LDW-T1-A-SS-WB-comp-1 LDW-T1-B-SS-WB-comp-1 LDW-T1-C-SS-WB-comp-1 LDW-T1-C-SS-WB-comp-1DL LDW-T1-D-SS-WB-comp-1 LDW-T1-D-SS-WB-comp-1DL LDW-T1-E-SS-WB-comp-1 LDW-T1-F-SS-WB-comp-1 LDW-T1-F-SS-WB-comp-1DL LDW-T2-A-SS-WB-comp-1 LDW-T2-A-SS-WB-comp-1DL LDW-T2-B-SS-WB-comp-1 LDW-T2-B-SS-WB-comp-1DL LDW-T2-C-SS-WB-comp-1 LDW-T2-C-SS-WB-comp-1DL LDW-T2-D-SS-WB-comp-1 LDW-T2-E-SS-WB-comp-1 LDW-T2-E-SS-WB-comp-1DL LDW-T2-F-SS-WB-comp-1 LDW-T2-F-SS-WB-comp-1DL LDW-T3-A-SS-WB-comp-1 LDW-T3-A-SS-WB-comp-1DL LDW-T3-B-SS-WB-comp-1 LDW-T3-B-SS-WB-comp-1DL LDW-T3-C-SS-WB-comp-1 LDW-T3-C-SS-WB-comp-1DL LDW-T3-D-SS-WB-comp-1 LDW-T3-D-SS-WB-comp-1DL
K2409451	KWG0419584-7	12/10/04	Methoxychlor	2.0 ug/Kg	LDW-T3-E-SS-WB-comp-1 LDW-T3-E-SS-WB-comp-1DL LDW-T3-F-SS-WB-comp-1 LDW-T3-F-SS-WB-comp-1DL LDW-T4-A-SS-WB-comp-1 LDW-T4-B-SS-WB-comp-1 LDW-T4-B-SS-WB-comp-2 LDW-T4-C-SS-WB-comp-1 LDW-T4-C-SS-WB-comp-2 LDW-T4-D-SS-WB-comp-1 LDW-T3-M-ES-FL-comp-2 LDW-T3-M-ES-FL-comp-2DL LDW-T1-M-ES-WB-comp-1 LDW-T1-M-ES-WB-comp-2 LDW-T1-M-ES-WB-comp-3 LDW-T1-M-ES-WB-comp-4 LDW-T1-M-ES-WB-comp-5 LDW-T1-M-ES-WB-comp-6 LDW-T2-M-ES-WB-comp-1 LDW-T2-M-ES-WB-comp-2 LDW-T2-M-ES-WB-comp-3 LDW-T4-M-ES-WB-comp-2 LDW-T4-M-ES-WB-comp-2DL

Associated SDG	Method Blank ID	Extraction Date	Compound	Concentration	Associated Samples
K2409451	KWG0419714-7	12/15/04	Methoxychlor	1.4 ug/Kg	LDW-T1-M-SC-EM-comp-1 LDW-T1-M-SC-EM-comp-2 LDW-T1-M-SC-EM-comp-3 LDW-T1-M-SC-HP-comp-1 LDW-T1-M-SC-HP-comp-1DL LDW-T2-M-SC-EM-comp-1 LDW-T2-M-SC-EM-comp-2 LDW-T2-M-SC-EM-comp-3 LDW-T2-M-SC-HP-comp-1 LDW-T2-M-SC-HP-comp-1DL LDW-T2-M-SC-EM-comp-4 LDW-T2-M-SC-EM-comp-5 LDW-T2-M-SC-EM-comp-6 LDW-T2-M-SC-HP-comp-2 LDW-T2-M-SC-HP-comp-2DL LDW-T3-M-SC-EM-comp-1 LDW-T3-M-SC-EM-comp-2 LDW-T3-M-SC-EM-comp-2DL LDW-T3-M-SC-EM-comp-3 LDW-T3-M-SC-HP-comp-1 LDW-T3-M-SC-HP-comp-1DL LDW-T4-M-DC-EM-comp-1 LDW-T4-M-DC-HP-comp-1
K2409809	KWG0420007-7	12/20/04	Methoxychlor	0.84 ug/Kg	LDW-M-M-PP-FL-comp-1 LDW-M-M-SP-FL-comp-1 LDW-T1-M-ES-FL-comp-1 LDW-T1-M-ES-FL-comp-2 LDW-T2-M-ES-FL-comp-1 LDW-T2-M-ES-FL-comp-2 LDW-T3-M-ES-FL-comp-1 LDW-T4-M-ES-FL-comp-1 LDW-T2-M-ES-WB-comp-4 LDW-T2-M-ES-WB-comp-5 LDW-T2-M-ES-WB-comp-6 LDW-T3-M-ES-WB-comp-1 LDW-T3-M-ES-WB-comp-2 LDW-T3-M-ES-WB-comp-3 LDW-T3-M-ES-WB-comp-4 LDW-T3-M-ES-WB-comp-5

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

Associated SDG	Sample	Compound	Reported Concentration	Modified Final Concentration
K2409451	LDW-T4-D-SS-WB-comp-1	Methoxychlor	5.2 ug/Kg	5.2U ug/Kg

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits for SDGs K2409445 and K2409809.

Surrogates were added to all samples and blanks as required by the method. Surrogate recoveries (%R) were not within QC limits for sample LDW-T3-E-SS-WB-comp-1DL in SDG K2409451. Since the sample was diluted out, no data were qualified.

VII. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there was insufficient sample for analysis of the matrix spike and matrix spike duplicate for SDGs K2409445, K2409451, and K2409809.

Duplicate (DUP) sample analyses were reviewed for each matrix as applicable. Results were within QC limits in SDG K2409445, K2409451, and K2409809.

*VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

Associated SDG	LCS ID (Associated Samples)	Compound	LCS %R (Limits)	LCSD %R (Limits)	*RPD (Limits)	Flag	A or P
*K2409451	KWG0419714-3/4 (LDW-T1-M-SC-EM-comp-1 LDW-T1-M-SC-EM-comp-2 LDW-T1-M-SC-EM-comp-3 LDW-T1-M-SC-HP-comp-1 LDW-T1-M-SC-HP-comp-1DL LDW-T2-M-SC-EM-comp-1 LDW-T2-M-SC-EM-comp-2 LDW-T2-M-SC-EM-comp-3 LDW-T2-M-SC-HP-comp-1 LDW-T2-M-SC-HP-comp-1DL LDW-T2-M-SC-EM-comp-4 LDW-T2-M-SC-EM-comp-5 LDW-T2-M-SC-EM-comp-6 LDW-T2-M-SC-HP-comp-2 LDW-T2-M-SC-HP-comp-2DL LDW-T3-M-SC-EM-comp-1 LDW-T3-M-SC-EM-comp-2 LDW-T3-M-SC-EM-comp-2DL LDW-T3-M-SC-EM-comp-3 LDW-T3-M-SC-HP-comp-1 LDW-T3-M-SC-HP-comp-1DL LDW-T4-M-DC-EM-comp-1 LDW-T4-M-DC-HP-comp-1 KWG0419714-7)	beta-BHC	-	-	53 (≤50)	J (all detects) UJ (all non-detects)	P

*Corrected RPD Limit

Standard reference material were within QC limits with the following exceptions:

Associated SDG	SRM ID	Compound	Concentration (Limits)	Associated Samples	Flag	A or P
K2409445	1945-KWG0419447	beta-BHC	0.8 ug/Kg (3.3-14)	LDW-T1-A-PS-WB-comp-1** LDW-T1-B-PS-WB-comp-1** LDW-T1-C-PS-WB-comp-1** LDW-T1-D-PS-WB-comp-1** LDW-T1-E-PS-WB-comp-1** LDW-T1-F-PS-WB-comp-1** LDW-T2-A-PS-WB-comp-1** LDW-T2-B-PS-WB-comp-1** LDW-T2-C-PS-WB-comp-1** LDW-T2-D-PS-WB-comp-1** LDW-T2-E-PS-WB-comp-1 LDW-T2-E-PS-WB-comp-1DL LDW-T2-F-PS-WB-comp-1 LDW-T3-A-PS-WB-comp-1 LDW-T3-A-PS-WB-comp-1DL LDW-T3-B-PS-WB-comp-1 LDW-T3-B-PS-WB-comp-1DL LDW-T3-C-PS-WB-comp-1** LDW-T3-D-PS-WB-comp-1** LDW-T3-D-PS-WB-comp-1DL** LDW-T3-E-PS-WB-comp-1 LDW-T3-E-PS-WB-comp-1DL LDW-T3-F-PS-WB-comp-1 LDW-T3-F-PS-WB-comp-1DL LDW-T4-A-PS-WB-comp-1** LDW-T4-B-PS-WB-comp-1 LDW-T3-C-PS-WP-comp-1DL** KWG0419447-7	J (all detects) UJ (all non-detects)	P
K2409445	1945-KWG0419519	beta-BHC	0.8 ug/Kg (3.3-14)	LDW-T4-C-PS-WB-comp-1 LDW-T4-D-PS-WB-comp-1 LDW-T4-D-PS-WB-comp-1DL LDW-T4-D-PS-WB-comp-2 LDW-T4-E-PS-WB-comp-1 KWG0419519-7	J (all detects) UJ (all non-detects)	P
K2409451	1945-KWG0419519	delta-BHC beta-BHC	17 ug/Kg (1.3-8.2) 24 ug/Kg (3.3-14)	LDW-T1-A-SS-WB-comp-1 LDW-T1-B-SS-WB-comp-1 LDW-T1-C-SS-WB-comp-1 LDW-T1-C-SS-WB-comp-1DL LDW-T1-D-SS-WB-comp-1 LDW-T1-D-SS-WB-comp-1DL LDW-T1-E-SS-WB-comp-1 LDW-T1-F-SS-WB-comp-1 LDW-T1-F-SS-WB-comp-1DL LDW-T2-A-SS-WB-comp-1 LDW-T2-A-SS-WB-comp-1DL LDW-T2-B-SS-WB-comp-1 LDW-T2-B-SS-WB-comp-1DL LDW-T2-C-SS-WB-comp-1 LDW-T2-C-SS-WB-comp-1DL LDW-T2-D-SS-WB-comp-1 LDW-T2-E-SS-WB-comp-1 LDW-T2-E-SS-WB-comp-1DL LDW-T2-F-SS-WB-comp-1 LDW-T2-F-SS-WB-comp-1DL LDW-T3-A-SS-WB-comp-1 LDW-T3-A-SS-WB-comp-1DL LDW-T3-B-SS-WB-comp-1 LDW-T3-B-SS-WB-comp-1DL LDW-T3-C-SS-WB-comp-1 LDW-T3-C-SS-WB-comp-1DL LDW-T3-D-SS-WB-comp-1 LDW-T3-D-SS-WB-comp-1DL KWG0419519-7	J (all detects) J (all detects)	P

*Indicates change as the result of report review.

Associated SDG	SRM ID	Compound	Concentration (Limits)	Associated Samples	Flag	A or P
K2409451	1945-KWG0419519	Mirex	14 ug/Kg (22-99)	LDW-T1-A-SS-WB-comp-1 LDW-T1-B-SS-WB-comp-1 LDW-T1-C-SS-WB-comp-1 LDW-T1-C-SS-WB-comp-1DL LDW-T1-D-SS-WB-comp-1 LDW-T1-D-SS-WB-comp-1DL LDW-T1-E-SS-WB-comp-1 LDW-T1-F-SS-WB-comp-1 LDW-T1-F-SS-WB-comp-1DL LDW-T2-A-SS-WB-comp-1 LDW-T2-A-SS-WB-comp-1DL LDW-T2-B-SS-WB-comp-1 LDW-T2-B-SS-WB-comp-1DL LDW-T2-C-SS-WB-comp-1 LDW-T2-C-SS-WB-comp-1DL LDW-T2-D-SS-WB-comp-1 LDW-T2-E-SS-WB-comp-1 LDW-T2-E-SS-WB-comp-1DL LDW-T2-F-SS-WB-comp-1 LDW-T2-F-SS-WB-comp-1DL LDW-T3-A-SS-WB-comp-1 LDW-T3-A-SS-WB-comp-1DL LDW-T3-B-SS-WB-comp-1 LDW-T3-B-SS-WB-comp-1DL LDW-T3-C-SS-WB-comp-1 LDW-T3-C-SS-WB-comp-1DL LDW-T3-D-SS-WB-comp-1 LDW-T3-D-SS-WB-comp-1DL KWG0419519-7	J (all detects) UJ (all non-detects)	P
K2409451	1945-KWG0419584	Mirex	17 ug/Kg (22-99)	LDW-T3-E-SS-WB-comp-1 LDW-T3-E-SS-WB-comp-1DL LDW-T3-F-SS-WB-comp-1 LDW-T3-F-SS-WB-comp-1DL LDW-T4-A-SS-WB-comp-1 LDW-T4-B-SS-WB-comp-1 LDW-T4-B-SS-WB-comp-2 LDW-T4-C-SS-WB-comp-1 LDW-T4-C-SS-WB-comp-2 LDW-T4-D-SS-WB-comp-1 LDW-T3-M-ES-FL-comp-2 LDW-T3-M-ES-FL-comp-2DL LDW-T1-M-ES-WB-comp-1 LDW-T1-M-ES-WB-comp-2 LDW-T1-M-ES-WB-comp-3 LDW-T1-M-ES-WB-comp-4 LDW-T1-M-ES-WB-comp-5 LDW-T1-M-ES-WB-comp-6 LDW-T2-M-ES-WB-comp-1 LDW-T2-M-ES-WB-comp-2 LDW-T2-M-ES-WB-comp-3 LDW-T4-M-ES-WB-comp-2 LDW-T4-M-ES-WB-comp-2DL KWG0419584-7	J (all detects) UJ (all non-detects)	P

Associated SDG	SRM ID	Compound	Concentration (Limits)	Associated Samples	Flag	A or P
K2409451	1945-KWG0419714	Mirex 2,4'-DDT	16 ug/Kg (22-99) 16 ug/Kg (46-180)	LDW-T1-M-SC-EM-comp-1 LDW-T1-M-SC-EM-comp-2 LDW-T1-M-SC-EM-comp-3 LDW-T1-M-SC-HP-comp-1 LDW-T1-M-SC-HP-comp-1DL LDW-T2-M-SC-EM-comp-1 LDW-T2-M-SC-EM-comp-2 LDW-T2-M-SC-EM-comp-3 LDW-T2-M-SC-HP-comp-1 LDW-T2-M-SC-HP-comp-1DL LDW-T2-M-SC-EM-comp-4 LDW-T2-M-SC-EM-comp-5 LDW-T2-M-SC-EM-comp-6 LDW-T2-M-SC-HP-comp-2 LDW-T2-M-SC-HP-comp-2DL LDW-T3-M-SC-EM-comp-1 LDW-T3-M-SC-EM-comp-2 LDW-T3-M-SC-EM-comp-2DL LDW-T3-M-SC-EM-comp-3 LDW-T3-M-SC-HP-comp-1 LDW-T3-M-SC-HP-comp-1DL LDW-T4-M-DC-EM-comp-1 LDW-T4-M-DC-HP-comp-1 KWG0419714-7	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	P
K2409451	1945-KWG0419714	delta-BHC beta-BHC	20 ug/Kg (1.3-8.2) 31 ug/Kg (3.3-14)	LDW-T1-M-SC-EM-comp-1 LDW-T1-M-SC-EM-comp-2 LDW-T1-M-SC-EM-comp-3 LDW-T1-M-SC-HP-comp-1 LDW-T1-M-SC-HP-comp-1DL LDW-T2-M-SC-EM-comp-1 LDW-T2-M-SC-EM-comp-2 LDW-T2-M-SC-EM-comp-3 LDW-T2-M-SC-HP-comp-1 LDW-T2-M-SC-HP-comp-1DL LDW-T2-M-SC-EM-comp-4 LDW-T2-M-SC-EM-comp-5 LDW-T2-M-SC-EM-comp-6 LDW-T2-M-SC-HP-comp-2 LDW-T2-M-SC-HP-comp-2DL LDW-T3-M-SC-EM-comp-1 LDW-T3-M-SC-EM-comp-2 LDW-T3-M-SC-EM-comp-2DL LDW-T3-M-SC-EM-comp-3 LDW-T3-M-SC-HP-comp-1 LDW-T3-M-SC-HP-comp-1DL LDW-T4-M-DC-EM-comp-1 LDW-T4-M-DC-HP-comp-1 KWG0419714-7	J (all detects) J (all detects)	P
K2409809	1945-KWG0420007-2	delta-BHC	18 ug/Kg (1.3-8.2)	LDW-M-M-PP-FL-comp-1 LDW-M-M-SP-FL-comp-1 LDW-T1-M-ES-FL-comp-1 LDW-T1-M-ES-FL-comp-2 LDW-T2-M-ES-FL-comp-1 LDW-T2-M-ES-FL-comp-2 LDW-T3-M-ES-FL-comp-1 LDW-T4-M-ES-FL-comp-1 LDW-T2-M-ES-WB-comp-4 LDW-T2-M-ES-WB-comp-5 LDW-T2-M-ES-WB-comp-6 LDW-T3-M-ES-WB-comp-1 LDW-T3-M-ES-WB-comp-2 LDW-T3-M-ES-WB-comp-3 LDW-T3-M-ES-WB-comp-4 LDW-T3-M-ES-WB-comp-5 KWG0420007-7	J (all detects)	P

Associated SDG	SRM ID	Compound	Concentration (Limits)	Associated Samples	Flag	A or P
K2409809	1945-KWG0420007-2	beta-BHC	2.1 ug/Kg (3.3-14)	LDW-M-M-PP-FL-comp-1 LDW-M-M-SP-FL-comp-1 LDW-T1-M-ES-FL-comp-1 LDW-T1-M-ES-FL-comp-2 LDW-T2-M-ES-FL-comp-1 LDW-T2-M-ES-FL-comp-2 LDW-T3-M-ES-FL-comp-1 LDW-T4-M-ES-FL-comp-1 LDW-T2-M-ES-WB-comp-4 LDW-T2-M-ES-WB-comp-5 LDW-T2-M-ES-WB-comp-6 LDW-T3-M-ES-WB-comp-1 LDW-T3-M-ES-WB-comp-2 LDW-T3-M-ES-WB-comp-3 LDW-T3-M-ES-WB-comp-4 LDW-T3-M-ES-WB-comp-5 KWG0420007-7	J (all detects) UJ (all non-detects)	P
K2409809	1945-KWG0420097-2	delta-BHC 2,4'-DDD 2,4'-DDT 4,4'-DDT Dieldrin	15 ug/Kg (1.3-8.2) 45 ug/Kg (7.7-31) 540 ug/Kg (46-180) 510 ug/Kg (115-390) 120 ug/Kg (17-62)	LDW-T3-M-ES-WB-comp-6 LDW-T4-M-ES-WB-comp-1 LDW-T4-M-ES-WB-comp-3 LDW-T4-M-SF-WB-comp-1 LDW-T4-M-SF-WB-comp-2 LDW-T4-M-SF-WB-comp-3 LDW-T4-M-SF-FL-comp-1 LDW-T1-M-DC-EM-comp-1 LDW-T1-M-DC-EM-comp-2 LDW-T1-M-DC-EM-comp-3 LDW-T1-M-DC-HP-comp-1 LDW-T3-M-DC-EM-comp-1 LDW-T3-M-DC-EM-comp-2 LDW-T3-M-DC-EM-comp-3 LDW-T3-M-DC-HP-comp-1 KWG0420097-7	J (all detects) J (all detects) J (all detects) J (all detects) J (all detects)	P
K2409809	1945-KWG0420097-2	beta-BHC	1.5 ug/Kg (3.3-14)	LDW-T3-M-ES-WB-comp-6 LDW-T4-M-ES-WB-comp-1 LDW-T4-M-ES-WB-comp-3 LDW-T4-M-SF-WB-comp-1 LDW-T4-M-SF-WB-comp-2 LDW-T4-M-SF-WB-comp-3 LDW-T4-M-SF-FL-comp-1 LDW-T1-M-DC-EM-comp-1 LDW-T1-M-DC-EM-comp-2 LDW-T1-M-DC-EM-comp-3 LDW-T1-M-DC-HP-comp-1 LDW-T3-M-DC-EM-comp-1 LDW-T3-M-DC-EM-comp-2 LDW-T3-M-DC-EM-comp-3 LDW-T3-M-DC-HP-comp-1 KWG0420097-7	J (all detects) UJ (all non-detects)	P

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Pesticide Cleanup Checks

a. Florisil Cartridge Check

Although florisil cleanup was not required by the method, it was performed by the laboratory for EPA Level IV.

Florisil cartridge check data were not reviewed for Level II.

b. GPC Calibration

Although GPC cleanup was not required by the method, it was performed by the laboratory for EPA Level IV.

GPC cleanup data were not reviewed for Level II.

***XI. Target Compound Identification**

All target compound identifications were within validation criteria with the following exceptions:

Associated SDG	Sample	Compound	Finding	Flag	A or P
K2409445 K2409809 K2409451	All tissue samples in the SDGs	All detected compounds	Due to the presence of PCBs, all detected results were qualified as presumptive and estimated.	NJ (all detects)	A

PCBs are known to interfere with the analysis of organochlorine pesticides when present in the samples.

The retention times and area responses for all detected pesticide results were compared to the PCB interference check analyzed at the end of each analytical sequence. PCB interferences prevented adequate peak resolution and reporting limits had to be elevated for many target analytes. Since GC/MS confirmations were not requested, the data was qualified as noted above due to potential false positives.

XII. Compound Quantitation and Reported CRQLs

All compound quantitation and CRQLs were within validation criteria with the following exceptions:

Associated SDG	Sample	Compound	Finding	Criteria	Flag	A or P
K2409445 K2409451	LDW-T2-E-PS-WB-comp-1 LDW-T3-C-PS-WB-comp-1** LDW-T1-D-PS-WB-comp-1 LDW-T4-M-ES-WB-comp-2 LDW-T2-M-SC-HP-comp-2	2,4'-DDT	Sample result exceeded calibration range.	Reported result should be within calibration range.	J (all detects)	A
K2409445 K2409451	LDW-T3-B-PS-WB-comp-1 LDW-T3-D-PS-WB-comp-1** LDW-T3-E-PS-WB-comp-1 LDW-T1-C-SS-WB-comp-1 LDW-T1-D-SS-WB-comp-1 LDW-T3-B-SS-WB-comp-1 LDW-T3-F-SS-WB-comp-1	4,4'-DDT 2,4'-DDT	Sample result exceeded calibration range.	Reported result should be within calibration range.	J (all detects) J (all detects)	A

Associated SDG	Sample	Compound	Finding	Criteria	Flag	A or P
K2409445	LDW-T3-F-PS-WB-comp-1	4,4'-DDT Toxaphene 2,4'-DDT	Sample result exceeded calibration range.	Reported result should be within calibration range.	J (all detects) J (all detects) J (all detects)	A
K2409451	LDW-T1-F-SS-WB-comp-1 LDW-T2-B-SS-WB-comp-1 LDW-T3-D-SS-WB-comp-1	4,4'-DDT	Sample result exceeded calibration range.	Reported result should be within calibration range.	J (all detects)	A
K2409451	LDW-T2-E-SS-WB-comp-1	2,4'-DDE	Sample result exceeded calibration range.	Reported result should be within calibration range.	J (all detects)	A
K2409451	LDW-T3-M-SC-EM-comp-2	Methoxychlor	Sample result exceeded calibration range.	Reported result should be within calibration range.	J (all detects)	A

The sample results for detected compounds from the two columns were within 40.0% relative percent differences (RPD) with the following exceptions:

Associated SDG	Sample	Compound	%RPD	Flag	A or P
K2409445	LDW-T2-E-PS-WB-comp-1DL	2,4'-DDT	42	J (all detects)	A
K2409445	LDW-T3-A-PS-WB-comp-1DL	4,4'-DDE 4,4'-DDT 2,4'-DDT	67 48 63	J (all detects) J (all detects) J (all detects)	A
K2409445	LDW-T3-B-PS-WB-comp-1DL	2,4'-DDT	54	J (all detects)	A
K2409445	LDW-T3-C-PS-WP-comp-1DL**	Endosulfan I 4,4'-DDE 2,4'-DDT	125 68 67	J (all detects) J (all detects) J (all detects)	A
K2409445	LDW-T3-D-PS-WB-comp-1DL**	2,4'-DDT	73	J (all detects)	A
K2409445	LDW-T3-E-PS-WB-comp-1DL	2,4'-DDT	98	J (all detects)	A
K2409445	LDW-T3-F-PS-WB-comp-1DL	2,4'-DDT	78	J (all detects)	A
K2409445	LDW-T4-D-PS-WB-comp-1DL	Endrin aldehyde	53	J (all detects)	A
K2409445	LDW-T1-A-PS-WB-comp-1**	Endosulfan I 4,4'-DDE Endosulfan II Endrin aldehyde 4,4'-DDT	54 58 69 96 63	J (all detects) J (all detects) J (all detects) J (all detects) J (all detects)	A
K2409445	LDW-T1-B-PS-WB-comp-1**	Endosulfan I 4,4'-DDE Endrin aldehyde 4,4'-DDT	50 75 67 87	J (all detects) J (all detects) J (all detects) J (all detects)	A

Associated SDG	Sample	Compound	%RPD	Flag	A or P
K2409445	LDW-T1-C-PS-WB-comp-1**	Endosulfan I 4,4'-DDE Endosulfan II 2,4'-DDT	70 76 94 50	J (all detects) J (all detects) J (all detects) J (all detects)	A
K2409445	LDW-T1-D-PS-WB-comp-1**	beta-BHC Endosulfan I alpha-Chlordane 4,4'-DDE 4,4'-DDT	82 46 91 72 46	J (all detects) J (all detects) J (all detects) J (all detects) J (all detects)	A
K2409445	LDW-T1-E-PS-WB-comp-1**	4,4'-DDE 4,4'-DDT	74 50	J (all detects) J (all detects)	A
K2409445	LDW-T1-F-PS-WB-comp-1**	alpha-BHC alpha-Chlordane 2,4'-DDT	77 59 55	J (all detects) J (all detects) J (all detects)	A
K2409445	LDW-T2-A-PS-WB-comp-1**	Heptachlor 4,4'-DDE Endosulfan II 4,4'-DDT	82 67 98 61	J (all detects) J (all detects) J (all detects) J (all detects)	A
K2409445	LDW-T2-B-PS-WB-comp-1**	4,4'-DDE	84	J (all detects)	A
K2409445	LDW-T2-C-PS-WB-comp-1**	4,4'-DDE Endosulfan II 4,4'-DDT	84 96 57	J (all detects) J (all detects) J (all detects)	A
K2409445	LDW-T2-D-PS-WB-comp-1**	4,4'-DDE 4,4'-DDT	75 57	J (all detects) J (all detects)	A
K2409445	LDW-T2-E-PS-WB-comp-1	4,4'-DDE	50	J (all detects)	A
K2409445	LDW-T2-F-PS-WB-comp-1	4,4'-DDE Endrin aldehyde 4,4'-DDT	57 97 70	J (all detects) J (all detects) J (all detects)	A
K2409445	LDW-T3-A-PS-WB-comp-1	alpha-BHC 4,4'-DDE 4,4'-DDT 2,4'-DDT	80 83 48 53	J (all detects) J (all detects) J (all detects) J (all detects)	A
K2409445	LDW-T3-B-PS-WB-comp-1	2,4'-DDT	54	J (all detects)	A
K2409445	LDW-T3-C-PS-WB-comp-1**	Endosulfan I 4,4'-DDE 2,4'-DDT	73 59 67	J (all detects) J (all detects) J (all detects)	A
K2409445	LDW-T3-D-PS-WB-comp-1**	2,4'-DDT	73	J (all detects)	A
K2409445	LDW-T3-E-PS-WB-comp-1	4,4'-DDE 2,4'-DDD 2,4'-DDT	49 71 93	J (all detects) J (all detects) J (all detects)	A
K2409445	LDW-T3-F-PS-WB-comp-1	4,4'-DDE 2,4'-DDT	79 79	J (all detects) J (all detects)	A

*Indicates change as the result of report review.

Associated SDG	Sample	Compound	%RPD	Flag	A or P
K2409445	LDW-T4-A-PS-WB-comp-1**	4,4'-DDE 2,4'-DDT	58 54	J (all detects) J (all detects)	A
K2409445	LDW-T4-B-PS-WB-comp-1	4,4'-DDE 4,4'-DDT 2,4'-DDT	72 41 44	J (all detects) J (all detects) J (all detects)	A
K2409445	LDW-T4-C-PS-WB-comp-1	Endosulfan I alpha-Chlordane 4,4'-DDE Endrin aldehyde 4,4'-DDT	64 41 56 87 53	J (all detects) J (all detects) J (all detects) J (all detects) J (all detects)	A
K2409445	LDW-T4-D-PS-WB-comp-1	Endrin aldehyde	61	J (all detects)	A
K2409445	LDW-T4-D-PS-WB-comp-2	Endosulfan I alpha-Chlordane 4,4'-DDE Endosulfan II 2,4'-DDT	47 75 47 95 47	J (all detects) J (all detects) J (all detects) J (all detects) J (all detects)	A
K2409445	LDW-T4-E-PS-WB-comp-1	beta-BHC Heptachlor Endosulfan I alpha-Chlordane Dieldrin	98 92 50 97 95	J (all detects) J (all detects) J (all detects) J (all detects) J (all detects)	A
K2409451	LDW-T1-A-SS-WB-comp-1	alpha-Chlordane 4,4'-DDE Endosulfan II 2,4'-DDT	42 74 76 55	J (all detects) J (all detects) J (all detects) J (all detects)	A
K2409451	LDW-T1-B-SS-WB-comp-1	beta-BHC Heptachlor epoxide 4,4'-DDE Endosulfan II 2,4'-DDE 2,4'-DDT	48 09 82 90 61 54	J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects)	A
K2409451	LDW-T1-C-SS-WB-comp-1	alpha-Chlordane 4,4'-DDE	59 71	J (all detects) J (all detects)	A
K2409451	LDW-T1-D-SS-WB-comp-1	4,4'-DDE	78	J (all detects)	A
K2409451	LDW-T1-F-SS-WB-comp-1	alpha-Chlordane 4,4'-DDE 4,4'-DDD 4,4'-DDT	59 95 45 56	J (all detects) J (all detects) J (all detects) J (all detects)	A
K2409451	LDW-T1-F-SS-WB-comp-1	Endosulfan I alpha-Chlordane 4,4'-DDE Endrin	98 87 82 71	J (all detects) J (all detects) J (all detects) J (all detects)	A
K2409451	LDW-T2-A-SS-WB-comp-1	alpha-Chlordane 4,4'-DDE	82 68	J (all detects) J (all detects)	A
K2409451	LDW-T2-B-SS-WB-comp-1	beta-BHC Endrin Endrin aldehyde	60 71 64	J (all detects) J (all detects) J (all detects)	A

*Indicates change as the result of report review.

Associated SDG	Sample	Compound	%RPD	Flag	A or P
K2409451	LDW-T2-C-SS-WB-comp-1	alpha-Chlordane 4,4'-DDE Endrin 2,4'-DDT	86 64 84 49	J (all detects) J (all detects) J (all detects) J (all detects)	A
K2409451	LDW-T2-D-SS-WB-comp-1	Heptachlor epoxide 4,4'-DDE 4,4'-DDT	93 80 41	J (all detects) J (all detects) J (all detects)	A
K2409451	LDW-T2-F-SS-WB-comp-1	alpha-Chlordane 4,4'-DDE Endosulfan II	89 82 88	J (all detects) J (all detects) J (all detects)	A
K2409451	LDW-T3-A-SS-WB-comp-1	Hexachlorobenzene Endosulfan I alpha-Chlordane 4,4'-DDE Endosulfan II Endrin aldehyde	93 67 64 73 76 95	J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects)	A
K2409451	LDW-T3-B-SS-WB-comp-1	4,4'-DDE Endosulfan II 2,4'-DDT	86 87 54	J (all detects) J (all detects) J (all detects)	A
K2409451	LDW-T3-C-SS-WB-comp-1	gamma-BHC alpha-Chlordane Endosulfan II 2,4'-DDT	59 48 69 56	J (all detects) J (all detects) J (all detects) J (all detects)	A
K2409451	LDW-T3-D-SS-WB-comp-1	4,4'-DDE	75	J (all detects)	A
K2409451	LDW-T3-E-SS-WB-comp-1	gamma-Chlordane Endosulfan I alpha-Chlordane	98 54 61	J (all detects) J (all detects) J (all detects)	A
K2409451	LDW-T3-F-SS-WB-comp-1	Endosulfan I Endosulfan II	54 90	J (all detects) J (all detects)	A
K2409451	LDW-T4-A-SS-WB-comp-1	Endosulfan I alpha-Chlordane 4,4'-DDE 2,4'-DDT	49 62 78 49	J (all detects) J (all detects) J (all detects) J (all detects)	A
K2409451	LDW-T4-B-SS-WB-comp-1	Heptachlor epoxide Endosulfan I 4,4'-DDE Endosulfan II 2,4'-DDT	88 72 79 61 49	J (all detects) J (all detects) J (all detects) J (all detects) J (all detects)	A
K2409451	LDW-T4-B-SS-WB-comp-2	beta-BHC Heptachlor epoxide 4,4'-DDE Endrin 2,4'-DDT	56 78 84 63 74	J (all detects) J (all detects) J (all detects) J (all detects) J (all detects)	A
K2409451	LDW-T4-C-SS-WB-comp-1	alpha-Chlordane 4,4'-DDE Endrin	58 87 51	J (all detects) J (all detects) J (all detects)	A

Associated SDG	Sample	Compound	%RPD	Flag	A or P
K2409451	LDW-T4-C-SS-WB-comp-2	Aldrin Heptachlor epoxide alpha-Chlordane 4,4'-DDT	49 95 91 53	J (all detects) J (all detects) J (all detects) J (all detects)	A
K2409451	LDW-T4-D-SS-WB-comp-1	beta-BHC gamma-BHC alpha-Chlordane Endosulfan II 4,4'-DDD 4,4'-DDT Methoxychlor	75 76 98 84 51 61 97	J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects)	A
K2409451	LDW-T3-M-ES-FL-comp-2	Hexachlorobenzene Endosulfan I alpha-Chlordane Endosulfan II	88 71 96 97	J (all detects) J (all detects) J (all detects) J (all detects)	A
K2409451	LDW-T1-M-ES-WB-comp-1	beta-BHC 4,4'-DDE	61 100	J (all detects) J (all detects)	A
K2409451	LDW-T1-M-ES-WB-comp-2	Heptachlor epoxide 4,4'-DDE 4,4'-DDT	97 98 41	J (all detects) J (all detects) J (all detects)	A
K2409451	LDW-T1-M-ES-WB-comp-3	Heptachlor epoxide gamma-Chlordane 4,4'-DDT	95 43 44	J (all detects) J (all detects) J (all detects)	A
K2409451	LDW-T1-M-ES-WB-comp-4	beta-BHC Heptachlor epoxide gamma-Chlordane Endosulfan I	91 74 42 44	J (all detects) J (all detects) J (all detects) J (all detects)	A
K2409451	LDW-T1-M-ES-WB-comp-5	Heptachlor epoxide gamma-Chlordane 4,4'-DDE Endosulfan II 2,4'-DDT	94 44 93 93 45	J (all detects) J (all detects) J (all detects) J (all detects) J (all detects)	A
K2409451	LDW-T1-M-ES-WB-comp-6	Heptachlor epoxide 4,4'-DDE	86 97	J (all detects) J (all detects)	A
K2409451	LDW-T2-M-ES-WB-comp-1	Heptachlor epoxide gamma-Chlordane 4,4'-DDE	87 46 93	J (all detects) J (all detects) J (all detects)	A
K2409451	LDW-T2-M-ES-WB-comp-2	Heptachlor epoxide gamma-Chlordane Endosulfan I 4,4'-DDE	88 52 40 96	J (all detects) J (all detects) J (all detects) J (all detects)	A
K2409451	LDW-T2-M-ES-WB-comp-3	Heptachlor epoxide gamma-Chlordane 4,4'-DDE	72 43 90	J (all detects) J (all detects) J (all detects)	A
K2409451	LDW-T4-M-ES-WB-comp-2	gamma-BHC Aldrin Heptachlor epoxide 4,4'-DDE Endosulfan II	67 88 99 84 95	J (all detects) J (all detects) J (all detects) J (all detects) J (all detects)	A

Associated SDG	Sample	Compound	%RPD	Flag	A or P
K2409451	LDW-T1-M-SC-EM-comp-1	Heptachlor epoxide Endrin aldehyde 4,4'-DDT 2,4'-DDT	54 96 45 42	J (all detects) J (all detects) J (all detects) J (all detects)	A
K2409451	LDW-T1-M-SC-EM-comp-2	4,4'-DDE Methoxychlor	52 75	J (all detects) J (all detects)	A
K2409451	LDW-T1-M-SC-EM-comp-3	Endrin aldehyde 4,4'-DDT 2,4'-DDD	92 50 43	J (all detects) J (all detects) J (all detects)	A
K2409451	LDW-T1-M-SC-HP-comp-1	gamma-Chlordane 4,4'-DDE 2,4'-DDD	43 59 69	J (all detects) J (all detects) J (all detects)	A
K2409451	LDW-T2-M-SC-EM-comp-1	gamma-Chlordane 4,4' DDT 2,4'-DDD	47 42 95	J (all detects) J (all detects) J (all detects)	A
K2409451	LDW-T2-M-SC-EM-comp-2	gamma-Chlordane 4,4'-DDE Endrin aldehyde 4,4'-DDT	45 45 67 72	J (all detects) J (all detects) J (all detects) J (all detects)	A
K2409451	LDW-T2-M-SC-EM-comp-3	Heptachlor epoxide alpha-Chlordane 4,4'-DDE 4,4'-DDT 2,4'-DDD	50 74 45 59 87	J (all detects) J (all detects) J (all detects) J (all detects) J (all detects)	A
K2409451	LDW-T2-M-SC-HP-comp-1	gamma-Chlordane 4,4'-DDE	49 61	J (all detects) J (all detects)	A
K2409451	LDW-T2-M-SC-EM-comp-4	Heptachlor epoxide 4,4'-DDT 2,4'-DDD	53 41 96	J (all detects) J (all detects) J (all detects)	
K2409451	LDW-T2-M-SC-EM-comp-5	Heptachlor epoxide alpha-Chlordane 4,4'-DDE Endrin aldehyde 4,4'-DDT 2,4'-DDD	60 93 47 69 54 100	J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects)	A
K2409451	LDW-T2-M-SC-EM-comp-6	4,4'-DDE 4,4'-DDT	52 71	J (all detects) J (all detects)	A
K2409451	LDW-T2-M-SC-HP-comp-2	alpha-BHC gamma-Chlordane 4,4'-DDE	46 44 62	J (all detects) J (all detects) J (all detects)	A
K2409451	LDW-T3-M-SC-EM-comp-1	gamma-Chlordane 4,4'-DDE 2,4'-DDD	46 58 89	J (all detects) J (all detects) J (all detects)	A
K2409451	LDW-T3-M-SC-EM-comp-2	Heptachlor epoxide gamma-Chlordane 4,4'-DDE 2,4'-DDD	57 75 49 95	J (all detects) J (all detects) J (all detects) J (all detects)	A

Associated SDG	Sample	Compound	%RPD	Flag	A or P
K2409451	LDW-T3-M-SC-EM-comp-3	Heptachlor epoxide gamma-Chlordane 4,4'-DDT	71 61 81	J (all detects) J (all detects) J (all detects)	A
K2409451	LDW-T3-M-SC-HP-comp-1	gamma-Chlordane 4,4'-DDE	43 81	J (all detects) J (all detects)	A
K2409451	LDW-T4-M-DC-EM-comp-1	4,4'-DDT 2,4'-DDT	74 44	J (all detects) J (all detects)	A
K2409451	LDW-T4-M-DC-HP-comp-1	gamma-Chlordane 4,4'-DDE 4,4'-DDT 2,4'-DDT	48 72 54 93	J (all detects) J (all detects) J (all detects) J (all detects)	A
K2409451	LDW-T1-C-SS-WB-comp-1DL	4,4'-DDE	74	J (all detects)	A
K2409451	LDW-T1-D-SS-WB-comp-1DL	4,4'-DDE 2,4'-DDT	80 43	J (all detects) J (all detects)	A
K2409451	LDW-T1-F-SS-WB-comp-1DL	4,4'-DDE	78	J (all detects)	A
K2409451	LDW-T2-A-SS-WB-comp-1DL	4,4'-DDE	67	J (all detects)	A
K2409451	LDW-T2-B-SS-WB-comp-1DL	beta-BHC Endrin	50 44	J (all detects) J (all detects)	A
K2409451	LDW-T2-C-SS-WB-comp-1DL	4,4'-DDE Endrin 2,4'-DDT	59 97 65	J (all detects) J (all detects) J (all detects)	A
K2409451	LDW-T2-F-SS-WB-comp-1DL	4,4'-DDE Endosulfan II	60 96	J (all detects) J (all detects)	A
K2409451	LDW-T3-A-SS-WB-comp-1DL	Hexachlorobenzene Endosulfan I 4,4'-DDE Endosulfan II Endrin aldehyde 2,4'-DDT	48 95 93 106 77 64	J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects)	A
K2409451	LDW-T3-B-SS-WB-comp-1DL	4,4'-DDE Endrin Endosulfan II 2,4'-DDT	67 53 108 54	J (all detects) J (all detects) J (all detects) J (all detects)	A
K2409451	LDW-T3-C-SS-WB-comp-1DL	Endosulfan II 2,4'-DDT	65 60	J (all detects) J (all detects)	A
K2409451	LDW-T3-D-SS-WB-comp-1DL	4,4'-DDE	114	J (all detects)	A
K2409451	LDW-T3-E-SS-WB-comp-1DL	gamma-Chlordane	114	J (all detects)	A
K2409451	LDW-T3-F-SS-WB-comp-1DL	Endosulfan II 2,4'-DDT	98 70	J (all detects) J (all detects)	A

Associated SDG	Sample	Compound	%RPD	Flag	A or P
K2409451	LDW-T3-M-ES-FL-comp-2DL	Endosulfan I	75	J (all detects)	A
K2409451	LDW-T4-M-ES-WB-comp-2DL	gamma-BHC Heptachlor epoxide 4,4'-DDE	102 91 50	J (all detects) J (all detects) J (all detects)	A
K2409451	LDW-T1-M-SC-HP-comp-1DL	4,4'-DDE 2,4'-DDD	44 56	J (all detects) J (all detects)	A
K2409451	LDW-T2-M-SC-HP-comp-1DL	4,4'-DDE	41	J (all detects)	A
K2409451	LDW-T2-M-SC-HP-comp-2DL	4,4'-DDE	50	J (all detects)	A
K2409451	LDW-T3-M-SC-EM-comp-2DL	gamma-Chlordane 4,4'-DDE 2,4'-DDD	57 58 67	J (all detects) J (all detects) J (all detects)	A
K2409451	LDW-T3-M-SC-HP-comp-1DL	4,4'-DDT	45	J (all detects)	A
K2409809	LDW-M-M-PP-FL-comp-1	4,4'-DDE 4,4'-DDT	86 98	J (all detects) J (all detects)	A
K2409809	LDW-M-M-SP-FL-comp-1	4,4'-DDE 4,4'-DDT	64 78	J (all detects) J (all detects)	A
K2409809	LDW-T1-M-ES-FL-comp-1	4,4'-DDT	60	J (all detects)	A
K2409809	LDW-T1-M-ES-FL-comp-2	4,4'-DDT	51	J (all detects)	A
K2409809	LDW-T2-M-ES-FL-comp-1	4,4'-DDE Endrin aldehyde 4,4'-DDT	77 94 61	J (all detects) J (all detects) J (all detects)	A
K2409809	LDW-T2-M-ES-FL-comp-2	4,4'-DDE 4,4'-DDT	88 47	J (all detects) J (all detects)	A
K2409809	LDW-T3-M-ES-FL-comp-1	4,4'-DDE 4,4'-DDT 2,4'-DDT	93 52 46	J (all detects) J (all detects) J (all detects)	A
K2409809	LDW-T4-M-ES-FL-comp-1	4,4'-DDE 4,4'-DDT 2,4'-DDT	99 54 42	J (all detects) J (all detects) J (all detects)	A
K2409809	LDW-T2-M-ES-WB-comp-4	Heptachlor epoxide gamma-Chlordane Endosulfan I alpha-Chlordane 4,4'-DDE	98 51 53 50 91	J (all detects) J (all detects) J (all detects) J (all detects) J (all detects)	A
K2409809	LDW-T2-M-ES-WB-comp-5	Endosulfan I alpha-Chlordane 4,4'-DDE 4,4'-DDT	50 52 79 44	J (all detects) J (all detects) J (all detects) J (all detects)	A

Associated SDG	Sample	Compound	%RPD	Flag	A or P
K2409809	LDW-T2-M-ES-WB-comp-6	beta-BHC 4,4'-DDE Endrin aldehyde	62 88 98	J (all detects) J (all detects) J (all detects)	A
K2409809	LDW-T3-M-ES-WB-comp-1	Endosulfan I 4,4'-DDE	54 96	J (all detects) J (all detects)	A
K2409809	LDW-T3-M-ES-WB-comp-2	beta-BHC gamma-Chlordane Endosulfan I 4,4'-DDE Endosulfan II	86 42 69 97 67	J (all detects) J (all detects) J (all detects) J (all detects) J (all detects)	A
K2409809	LDW-T3-M-ES-WB-comp-3	Hexachlorobenzene Endosulfan I 4,4'-DDE Endosulfan II 2,4'-DDT	87 99 96 62 57	J (all detects) J (all detects) J (all detects) J (all detects) J (all detects)	A
K2409809	LDW-T3-M-ES-WB-comp-4	Heptachlor epoxide 4,4'-DDE	99 83	J (all detects) J (all detects)	A
K2409809	LDW-T3-M-ES-WB-comp-5	4,4'-DDE 2,4'-DDT	62 51	J (all detects) J (all detects)	A
K2409809	LDW-T3-M-ES-WB-comp-6	gamma-Chlordane Endosulfan I 4,4'-DDE Endrin	45 88 80 96	J (all detects) J (all detects) J (all detects) J (all detects)	A
K2409809	LDW-T4-M-ES-WB-comp-1	gamma-Chlordane 4,4'-DDE 2,4'-DDT	54 84 51	J (all detects) J (all detects) J (all detects)	A
K2409809	LDW-T4-M-ES-WB-comp-3	Heptachlor Heptachlor epoxide gamma-Chlordane Endosulfan I 4,4'-DDE 2,4'-DDT	95 71 47 50 78 55	J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects)	A
K2409809	LDW-T4-M-SF-WB-comp-1	Endrin Endrin aldehyde 2,4'-DDT	80 54 71	J (all detects) J (all detects) J (all detects)	A
K2409809	LDW-T4-M-SF-WB-comp-2	Endrin 2,4'-DDT	88 56	J (all detects) J (all detects)	A
K2409809	LDW-T4-M-SF-WB-comp-3	2,4'-DDE 2,4'-DDT	99 58	J (all detects) J (all detects)	A
K2409809	LDW-T4-M-SF-FL-comp-1	Endrin 2,4'-DDT	46 82	J (all detects) J (all detects)	A
K2409809	LDW-T1-M-DC-EM-comp-1	Heptachlor epoxide gamma-Chlordane 2,4'-DDD 2,4'-DDT	92 54 96 47	J (all detects) J (all detects) J (all detects) J (all detects)	A

Associated SDG	Sample	Compound	%RPD	Flag	A or P
K2409809	LDW-T1-M-DC-EM-comp-2	Heptachlor epoxide gamma-Chlordane 2,4'-DDT	69 72 49	J (all detects) J (all detects) J (all detects)	A
K2409809	LDW-T1-M-DC-EM-comp-3	Heptachlor epoxide gamma-Chlordane 2,4'-DDT	80 65 44	J (all detects) J (all detects) J (all detects)	A
K2409809	LDW-T1-M-DC-HP-comp-1	Heptachlor epoxide gamma-Chlordane	91 47	J (all detects) J (all detects)	A
K2409809	LDW-T3-M-DC-EM-comp-1	Heptachlor epoxide gamma-Chlordane 2,4'-DDT	89 43 44	J (all detects) J (all detects) J (all detects)	A
K2409809	LDW-T3-M-DC-EM-comp-2	gamma-Chlordane 2,4'-DDT	70 45	J (all detects) J (all detects)	A
K2409809	LDW-T3-M-DC-EM-comp-3	Heptachlor epoxide gamma-Chlordane 2,4'-DDT	90 60 45	J (all detects) J (all detects) J (all detects)	A
K2409809	LDW-T3-M-DC-HP-comp-1	gamma-Chlordane	52	J (all detects)	A

Compound quantitation and CRQLs data were not reviewed for Level II.

XIII. Overall Assessment of Data

The overall assessment of data was acceptable. In the case where more than one result was reported for an individual sample, the least technically acceptable results were rejected as follows:

Associated SDG	Sample	Compound	Flag	A or P
K2409445	LDW-T2-E-PS-WB-comp-1	gamma-Chlordane 4,4'-DDE 4,4'-DDD 4,4'-DDT 2,4'-DDT	R R R R R	A
K2409445	LDW-T2-E-PS-WB-comp-1DL	All TCL compounds except gamma-Chlordane 4,4'-DDE 4,4'-DDD 4,4'-DDT 2,4'-DDT	R	A
K2409445	LDW-T3-A-PS-WB-comp-1	gamma-Chlordane 4,4'-DDE 4,4'-DDD 4,4'-DDT 2,4'-DDT alpha-Chlordane	R R R R R R	A

Associated SDG	Sample	Compound	Flag	A or P
K2409445	LDW-T3-A-PS-WB-comp-1DL	All TCL compounds except gamma-Chlordane 4,4'-DDE 4,4'-DDD 4,4'-DDT 2,4'-DDT alpha-Chlordane	R	A
K2409445	LDW-T3-B-PS-WB-comp-1	gamma-BHC gamma-Chlordane 4,4'-DDD 4,4'-DDT 2,4'-DDT	R R R R R	A
K2409445	LDW-T3-B-PS-WB-comp-1DL	All TCL compounds except gamma-BHC gamma-Chlordane 4,4'-DDD 4,4'-DDT 2,4'-DDT	R	A
K2409445	LDW-T3-C-PS-WB-comp-1**	gamma-Chlordane Endosulfan I 4,4'-DDE 4,4'-DDD 4,4'-DDT 2,4'-DDT	R R R R R R	A
K2409445	LDW-T3-C-PS-WP-comp-1DL**	All TCL compounds except gamma-Chlordane Endosulfan I 4,4'-DDE 4,4'-DDD 4,4'-DDT 2,4'-DDT	R	A
K2409445	LDW-T3-D-PS-WB-comp-1**	Endosulfan II 4,4'-DDT Toxaphene 2,4'-DDD 2,4'-DDT	R R R R R	A
K2409445	LDW-T3-D-PS-WB-comp-1DL**	All TCL compounds except Endosulfan II 4,4'-DDT Toxaphene 2,4'-DDD 2,4'-DDT	R	A
K2409445	LDW-T3-E-PS-WB-comp-1	gamma-Chlordane Endosulfan I 4,4'-DDD 4,4'-DDT 2,4'-DDT	R R R R R	A
K2409445	LDW-T3-E-PS-WB-comp-1DL	All TCL compounds except gamma-Chlordane Endosulfan I 4,4'-DDD 4,4'-DDT 2,4'-DDT	R	A

Associated SDG	Sample	Compound	Flag	A or P
K2409445	LDW-T3-F-PS-WB-comp-1	gamma-Chlordane Endosulfan I Endosulfan II 4,4'-DDT 2,4'-DDT Toxaphene	R R R R R R	A
K2409445	LDW-T3-F-PS-WB-comp-1DL	All TCL compounds except gamma-Chlordane Endosulfan I Endosulfan II 4,4'-DDT 2,4'-DDT Toxaphene	R	A
K2409445	LDW-T4-D-PS-WB-comp-1	gamma-Chlordane Endosulfan I Endrin 4,4'-DDD Endrin aldehyde 4,4'-DDT 2,4'-DDT	R R R R R R R	A
K2409445	LDW-T4-D-PS-WB-comp-1DL	All TCL compounds except gamma-Chlordane Endosulfan I Endrin 4,4'-DDD Endrin aldehyde 4,4'-DDT 2,4'-DDT	R	A
K2409451	LDW-T1-C-SS-WB-comp-1	beta-BHC gamma-Chlordane 4,4'-DDE Endrin 4,4'-DDD 4,4'-DDT Methoxychlor 2,4'-DDT	R R R R R R R R	A
K2409451	LDW-T1-C-SS-WB-comp-1DL	All TCL compounds except beta-BHC gamma-Chlordane 4,4'-DDE Endrin 4,4'-DDD 4,4'-DDT Methoxychlor 2,4'-DDT	R	A
K2409451	LDW-T1-D-SS-WB-comp-1	gamma-Chlordane 4,4'-DDE 4,4'-DDD 4,4'-DDT Toxaphene 2,4'-DDE 2,4'-DDT	R R R R R R R	A

Associated SDG	Sample	Compound	Flag	A or P
K2409451	LDW-T1-D-SS-WB-comp-1DL	All TCL compounds except gamma-Chlordane 4,4'-DDE 4,4'-DDD 4,4'-DDT Toxaphene 2,4'-DDE 2,4'-DDT	R	A
K2409451	LDW-T1-F-SS-WB-comp-1	Dieldrin gamma-Chlordane Endrin 4,4'-DDD 4,4'-DDT 4,4'-DDE Toxaphene 2,4'-DDT	R R R R R R R R	A
K2409451	LDW-T1-F-SS-WB-comp-1DL	All TCL compounds except Dieldrin gamma-Chlordane Endrin 4,4'-DDD 4,4'-DDT 4,4'-DDE Toxaphene 2,4'-DDT	R	A
K2409451	LDW-T2-A-SS-WB-comp-1	alpha-BHC beta-BHC gamma-Chlordane Endosulfan I alpha-Chlordane Dieldrin 4,4'-DDE 4,4'-DDD 4,4'-DDT Toxaphene 2,4'-DDT	R R R R R R R R R R R	A
K2409451	LDW-T2-A-SS-WB-comp-1DL	All TCL compounds except alpha-BHC beta-BHC gamma-Chlordane Endosulfan I alpha-Chlordane Dieldrin 4,4'-DDE 4,4'-DDD 4,4'-DDT Toxaphene 2,4'-DDT	R	A
K2409451	LDW-T2-B-SS-WB-comp-1	beta-BHC gamma-Chlordane Endosulfan I Endrin 4,4'-DDD Endrin aldehyde 4,4'-DDT Toxaphene 2,4'-DDT	R R R R R R R R R	A

Associated SDG	Sample	Compound	Flag	A or P
K2409451	LDW-T2-B-SS-WB-comp-1DL	All TCL compounds except beta-BHC gamma-Chlordane Endosulfan I Endrin 4,4'-DDD Endrin aldehyde 4,4'-DDT Toxaphene 2,4'-DDT	R	A
K2409451	LDW-T2-C-SS-WB-comp-1	gamma-Chlordane Endosulfan I alpha-Chlordane 4,4'-DDE Endrin 4,4'-DDD Toxaphene 2,4'-DDT	R R R R R R R R	A
K2409451	LDW-T2-C-SS-WB-comp-1DL	All TCL compounds except gamma-Chlordane Endosulfan I alpha-Chlordane 4,4'-DDE Endrin 4,4'-DDD Toxaphene 2,4'-DDT	R	A
K2409451	LDW-T2-E-SS-WB-comp-1	gamma-Chlordane Endrin Endrin aldehyde 4,4'-DDT 2,4'-DDT Toxaphene	R R R R R R	A
K2409451	LDW-T2-E-SS-WB-comp-1DL	All TCL compounds except gamma-Chlordane Endrin Endrin aldehyde 4,4'-DDT 2,4'-DDT Toxaphene	R	A
K2409451	LDW-T2-F-SS-WB-comp-1	gamma-Chlordane alpha-Chlordane 4,4'-DDE Endosulfan II 4,4'-DDD 4,4'-DDT Toxaphene 2,4'-DDT	R R R R R R R R	A
K2409451	LDW-T2-F-SS-WB-comp-1DL	All TCL compounds except gamma-Chlordane alpha-Chlordane 4,4'-DDE Endosulfan II 4,4'-DDD 4,4'-DDT Toxaphene 2,4'-DDT	R	A

Associated SDG	Sample	Compound	Flag	A or P
K2409451	LDW-T3-A-SS-WB-comp-1	Hexachlorobenzene gamma-Chlordane Endosulfan I alpha-Chlordane Dieldrin 4,4'-DDE Endosulfan II 4,4'-DDD Endrin aldehyde Toxaphene 2,4'-DDT	R R R R R R R R R R R	A
K2409451	LDW-T3-A-SS-WB-comp-1DL	All TCL compounds except Hexachlorobenzene gamma-Chlordane Endosulfan I alpha-Chlordane Dieldrin 4,4'-DDE Endosulfan II 4,4'-DDD Endrin aldehyde Toxaphene 2,4'-DDT	R	A
K2409451	LDW-T3-B-SS-WB-comp-1	beta-BHC Heptachlor gamma-Chlordane 4,4'-DDE Endrin Endosulfan II 4,4'-DDD 4,4'-DDT Toxaphene 2,4'-DDE 2,4'-DDT	R R R R R R R R R R R	A
K2409451	LDW-T3-B-SS-WB-comp-1DL	All TCL compounds except beta-BHC Heptachlor gamma-Chlordane 4,4'-DDE Endrin Endosulfan II 4,4'-DDD 4,4'-DDT Toxaphene 2,4'-DDE 2,4'-DDT	R	A
K2409451	LDW-T3-C-SS-WB-comp-1	alpha-BHC beta-BHC gamma-Chlordane Endosulfan I Endosulfan II 4,4'-DDD 4,4'-DDT Toxaphene 2,4'-DDT	R R R R R R R R R	A

Associated SDG	Sample	Compound	Flag	A or P
K2409451	LDW-T3-C-SS-WB-comp-1DL	All TCL compounds except alpha-BHC beta-BHC gamma-Chlordane Endosulfan I Endosulfan II 4,4'-DDD 4,4'-DDT Toxaphene 2,4'-DDT	R	A
K2409451	LDW-T3-D-SS-WB-comp-1	gamma-Chlordane 4,4'-DDE Endosulfan II 4,4'-DDD 4,4'-DDT Toxaphene	R R R R R R	A
K2409451	LDW-T3-D-SS-WB-comp-1DL	All TCL compounds except gamma-Chlordane 4,4'-DDE Endosulfan II 4,4'-DDD 4,4'-DDT Toxaphene	R	A
K2409451	LDW-T3-E-SS-WB-comp-1	gamma-Chlordane 4,4'-DDT Toxaphene	R R R	A
K2409451	LDW-T3-E-SS-WB-comp-1DL	All TCL compounds except gamma-Chlordane 4,4'-DDT Toxaphene	R	A
K2409451	LDW-T3-F-SS-WB-comp-1	beta-BHC gamma-Chlordane Endosulfan II 4,4'-DDT 2,4'-DDE 2,4'-DDT	R R R R R R	A
K2409451	LDW-T3-F-SS-WB-comp-1DL	All TCL compounds except beta-BHC gamma-Chlordane Endosulfan II 4,4'-DDT 2,4'-DDE 2,4'-DDT	R	A
K2409451	LDW-T3-M-ES-FL-comp-2	beta-BHC gamma-Chlordane Endosulfan I Dieldrin 4,4'-DDD 4,4'-DDT 2,4'-DDT	R R R R R R R	A

Associated SDG	Sample	Compound	Flag	A or P
K2409451	LDW-T3-M-ES-FL-comp-2DL	All TCL compounds except beta-BHC gamma-Chlordane Endosulfan I Dieldrin 4,4'-DDD 4,4'-DDT 2,4'-DDT	R	A
K2409451	LDW-T4-M-ES-WB-comp-2	Hexachlorobenzene gamma-BHC Heptachlor epoxide gamma-Chlordane Endosulfan I Dieldrin 4,4'-DDE 4,4'-DDD 4,4'-DDT Methoxychlor 2,4'-DDT	R R R R R R R R R R R	A
K2409451	LDW-T4-M-ES-WB-comp-2DL	All TCL compounds except Hexachlorobenzene gamma-BHC Heptachlor epoxide gamma-Chlordane Endosulfan I Dieldrin 4,4'-DDE 4,4'-DDD 4,4'-DDT Methoxychlor 2,4'-DDT	R	A
K2409451	LDW-T1-M-SC-HP-comp-1	gamma-Chlordane Dieldrin 4,4'-DDE 4,4'-DDT Toxaphene 2,4'-DDE 2,4'-DDD 2,4'-DDT	R R R R R R R R	A
K2409451	LDW-T1-M-SC-HP-comp-1DL	All TCL compounds except gamma-Chlordane Dieldrin 4,4'-DDE 4,4'-DDT Toxaphene 2,4'-DDE 2,4'-DDD 2,4'-DDT	R	A
K2409451	LDW-T2-M-SC-HP-comp-1	gamma-Chlordane Dieldrin 4,4'-DDE Endrin 4,4'-DDT 2,4'-DDT	R R R R R R	A

Associated SDG	Sample	Compound	Flag	A or P
K2409451	LDW-T2-M-SC-HP-comp-1DL	All TCL compounds except gamma-Chlordane Dieldrin 4,4'-DDE Endrin 4,4'-DDT 2,4'-DDT	R	A
K2409451	LDW-T2-M-SC-HP-comp-2	gamma-Chlordane 4,4'-DDE Endosulfan sulfate 4,4'-DDT 2,4'-DDT	R R R R R	A
K2409451	LDW-T2-M-SC-HP-comp-2DL	All TCL compounds except gamma-Chlordane 4,4'-DDE Endosulfan sulfate 4.4'-DDT 2,4'-DDT	R	A
K2409451	LDW-T3-M-SC-EM-comp-2	Heptachlor epoxide gamma-Chlordane 4,4'-DDE Endrin aldehyde 4,4'-DDT Methoxychlor 2,4'-DDD 2,4'-DDT	R R R R R R R R	A
K2409451	LDW-T3-M-SC-EM-comp-2DL	All TCL compounds except Heptachlor epoxide gamma-Chlordane 4,4'-DDE Endrin aldehyde 4,4'-DDT Methoxychlor 2,4'-DDD 2,4'-DDT	R	A
K2409451	LDW-T3-M-SC-HP-comp-1	4,4'-DDD gamma-Chlordane Endosulfan I Dieldrin 4,4'-DDE 4,4'-DDT Toxaphene 2,4'-DDT	R R R R R R R R	A
K2409451	LDW-T3-M-SC-HP-comp-1DL	All TCL compounds except 4,4'-DDD gamma-Chlordane Endosulfan I Dieldrin 4,4'-DDE 4,4'-DDT Toxaphene 2,4'-DDT	R	A

XIV. Field Duplicates

No field duplicates were identified in this SDG.

XV. Field Blanks

No field blanks were identified in this SDG.

Polychlorinated Biphenyls by EPA SW 846 Method 8082

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/ECD Instrument Performance Check

Instrument performance was acceptable unless noted otherwise under initial calibration and continuing calibration sections.

Instrument performance check data were not reviewed for Level II.

III. Initial Calibration

Initial calibration of multicomponent compounds was performed for the primary (quantitation) column as required by the method.

The percent relative standard deviations (%RSD) were less than or equal to 20.0% for all compounds.

Retention time windows were evaluated and considered technically acceptable.

Initial calibration data were not reviewed for Level II.

IV. Continuing Calibration

Continuing calibration was performed at required frequencies.

The percent differences (%D) of calibration factors in continuing standard mixtures were within the 15.0% QC limits.

The percent difference (%D) of the second source calibration standard were less than or equal to 15.0% for all compounds.

Retention times (RT) of all compounds in the calibration standards were within QC limits.

Continuing calibration data were not reviewed for Level II.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No polychlorinated biphenyl contaminants were found in the method blanks.

VI. Surrogate Spikes

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

VII. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there was insufficient sample for analysis of the matrix spike and matrix spike duplicate for SDGs K2409445, K2409451, and K2409809.

Duplicate (DUP) sample analyses were reviewed for each matrix as applicable. Results were within QC limits in SDGs K2409445, K2409451, and K2409809.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits in SDGs K2409445, K2409451, and K2409809.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Pesticide Cleanup Checks

a. Florisil Cartridge Check

Although florisil cleanup was not required by the method, it was performed by the laboratory for EPA Level IV.

Florisil cartridge check data were not reviewed for Level II.

b. GPC Calibration

Although GPC cleanup was not required by the method, GPC cleanup was performed by the laboratory for EPA Level IV.

Although sulfuric acid cleanup was not required by the method, sulfuric acid cleanup was performed by the laboratory for EPA Level IV.

GPC and sulfuric acid cleanup data were not reviewed for Level II.

XI. Target Compound Identification

All target compound identifications were within validation criteria.

Target compound identifications data were not reviewed for Level II.

XII. Compound Quantitation and Reported CRQLs

All compound quantitation and CRQLs were within validation criteria.

The sample results for detected compounds from the two columns were within 40.0% relative percent differences (RPD) with the following exceptions:

Associated SDG	Sample	Compound	%RPD	Flag	A or P
K2409445	LDW-T1-B-PS-WB-comp-1**	Aroclor-1248	47	J (all detects)	A
K2409445	LDW-T2-C-PS-WB-comp-1**	Aroclor-1248	44	J (all detects)	A
K2409451	LDW T2-E-SS-WB-comp-1	Aroclor-1260	42	J (all detects)	A
K2409451	LDW-T2-M-ES-WB-comp-3	Aroclor-1248	41	J (all detects)	A
K2409451	LDW-T1-M-SC-EM-comp-1	Aroclor-1254	61	J (all detects)	A
K2409451	LDW-T1-M-SC-EM-comp-3	Aroclor-1254	51	J (all detects)	A
K2409451	LDW-T1-M-SC-HP-comp-1	Aroclor-1248 Aroclor-1254	57 43	J (all detects) J (all detects)	A
K2409451	LDW-T2-M-SC-EM-comp-2	Aroclor-1254	54	J (all detects)	A
K2409451	LDW T2 M SC EM comp 3	Aroclor-1254	53	J (all detects)	A
K2409451	LDW-T2-M-SC-HP-comp-1	Aroclor-1248 Aroclor-1254	41 41	J (all detects) J (all detects)	A
K2409451	LDW-T2-M-SC-EM-comp-5	Aroclor-1254	54	J (all detects)	A
K2409451	LDW-T2-M-SC-EM-comp-6	Aroclor-1254	55	J (all detects)	A
K2409451	LDW-T2-M-SC-HP-comp-2	Aroclor-1248 Aroclor-1254	44 41	J (all detects) J (all detects)	A
K2409451	LDW-T4-M-DC-EM-comp-1	Aroclor-1254	54	J (all detects)	A
K2409451	LDW-T1-B-SS-WB-comp-1	Aroclor-1254	43	J (all detects)	A
K2409809	LDW-T1-M-DC-EM-comp-2	Aroclor-1254	50	J (all detects)	A

Compound quantitation and CRQLs data were not reviewed for Level II.

***XIII. Overall Assessment of Data**

The overall assessment of data was acceptable.

XIV. Field Duplicates

No field duplicates were identified in these SDGs.

XV. Field Blanks

No field blanks were identified in these SDGs.

Metals by EPA SW 846 Methods 6010B/6020/7471A

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Calibration

An initial calibration was performed.

The frequency and analysis criteria of the initial calibration verification (ICV) and continuing calibration verification (CCV) were met.

Calibration data were not reviewed for Level II.

III. Blanks

Method blanks were reviewed for each matrix as applicable.

Data qualification by the initial, continuing and preparation blanks (ICB/CCB/PBs) was based on the maximum contaminant concentration in the ICB/CCB/PBs in the analysis of each analyte. No contaminant concentrations were found in the initial, continuing and preparation blanks with the following exceptions:

Associated SDG	Method Blank ID	Analyte	Maximum Concentration	Associated Samples
K2409445	ICB/CCB	Selenium	0.32 ug/L	All samples in SDG K2409445
K2409445	ICB/CCB	Nickel	0.216 ug/L	LDW-T1-A-PS-WB-comp-1** LDW-T1-B-PS-WB-comp-1** LDW-T1-C-PS-WB-comp-1** LDW-T1-D-PS-WB-comp-1** LDW-T1-E-PS-WB-comp-1** LDW-T1-F-PS-WB-comp-1** LDW-T2-A-PS-WB-comp-1**
K2409445	ICB/CCB	Nickel	0.256 ug/L	LDW-T2-B-PS-WB-comp-1** LDW-T2-C-PS-WB-comp-1** LDW-T2-D-PS-WB-comp-1** LDW-T3-C-PS-WB-comp-1**

Sample concentrations were compared to the maximum contaminant concentrations detected in the ICB/CCB/PBs. The sample concentrations were either not detected or were significantly greater (>5X blank contaminants) than the concentrations found in the associated method blanks with the following exceptions:

Associated SDG	Sample	Analyte	Reported Concentration	Modified Final Concentration
K2409445	LDW-T2-B-PS-WB-comp-1**	Nickel	0.130 mg/Kg	0.130U mg/Kg

IV. ICP Interference Check Sample (ICS) Analysis

The frequency of analysis was met.

The criteria for analysis were met.

ICP Interference check sample analysis data were not reviewed for Level II.

V. Matrix Spike Analysis

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

Associated SDG	Spike ID (Associated Samples)	Analyte	%R (Limits)	Flag	A or P
K2409809	LDW-T3-M-DC-EM-comp-3MS (LDW-T4-M-SF-WB-comp-2 LDW-T4-M-SF-WB-comp-3 LDW-T4-M-SF-FL-comp-1 LDW-T1-M-DC-EM-comp-1 LDW-T1-M-DC-EM-comp-2 LDW-T1-M-DC-EM-comp-3 LDW-T1-M-DC-HP-comp-1 LDW-T3-M-DC-EM-comp-1 LDW-T3-M-DC-EM-comp-2 LDW-T3-M-DC-EM-comp-3 LDW-T3-M-DC-HP-comp-1)	Silver	51 (60-130)	J (all detects) UJ (all non-detects)	A

Duplicate (DUP) sample analyses were reviewed for each matrix as applicable. Results were within QC limits.

VII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

Results were within QC limits with the following exceptions:

Associated SDG	LCS ID	Analyte	Concentration (Limits)	Associated Samples	Flag	A or P
K2409451	K2409451-LCS2	Nickel	3.73 mg/Kg (1.90-3.68)	LDW-T1-A-SS-WB-comp-1 LDW-T1-B-SS-WB-comp-1 LDW-T1-C-SS-WB-comp-1 LDW-T1-D-SS-WB-comp-1 LDW-T1-E-SS-WB-comp-1 LDW-T1-F-SS-WB-comp-1 LDW-T2-A-SS-WB-comp-1 LDW-T2-B-SS-WB-comp-1 LDW-T2-C-SS-WB-comp-1 LDW-T2-D-SS-WB-comp-1 LDW-T2-E-SS-WB-comp-1 LDW-T2-F-SS-WB-comp-1 LDW-T3-A-SS-WB-comp-1 LDW-T3-B-SS-WB-comp-1 LDW-T3-C-SS-WB-comp-1 LDW-T3-D-SS-WB-comp-1 LDW-T3-E-SS-WB-comp-1 LDW-T3-F-SS-WB-comp-1 LDW-T4-A-SS-WB-comp-1 LDW-T3-M-ES-FL-comp-2	J+ (all detects)	P
K2409451	K2409451-LCS6	Nickel	4.4 mg/Kg (1.90-3.68)	LDW-T4-M-ES-WB-comp-2 LDW-T2-M-SC-EM-comp-3 LDW-T2-M-SC-HP-comp-1 LDW-T2-M-SC-EM-comp-4 LDW-T2-M-SC-EM-comp-5 LDW-T2-M-SC-EM-comp-6 LDW-T2-M-SC-HP-comp-2 LDW-T3-M-SC-EM-comp-1 LDW-T3-M-SC-EM-comp-2 LDW-T3-M-SC-EM-comp-3 LDW-T3-M-SC-HP-comp-1 LDW-T4-M-DC-EM-comp-1 LDW-T4-M-DC-HP-comp-1	J+ (all detects)	P

No standard reference material analysis data were associated with the samples in SDG K2409445, K2409451, and K2409809 for Antimony, Molybdenum, Thallium, and Vanadium.

VIII. Internal Standards (ICP-MS)

All internal standard areas and retention times were within QC limits.

Internal standards data were not reviewed for Level II.

IX. Furnace Atomic Absorption QC

All graphite furnace atomic absorption QC were within validation criteria

X. ICP Serial Dilution

Although ICP serial dilution analysis was not required by the method, it was performed by the laboratory. The analysis criteria were met with the following exceptions:

Associated SDG	Diluted Sample	Analyte	%D (Limits)	Associated Samples	Flag	A or P
K2409451	LDW-T4-M-ES-WB-comp-2L	Cobalt	15 (≤10)	LDW-T4-M-ES-WB-comp-2 LDW-T2-M-SC-EM-comp-3 LDW-T2-M-SC-HP-comp-1 LDW-T2-M-SC-EM-comp-4 LDW-T2-M-SC-EM-comp-5 LDW-T2-M-SC-EM-comp-6 LDW-T2-M-SC-HP-comp-2 LDW-T3-M-SC-EM-comp-1 LDW-T3-M-SC-EM-comp-2 LDW-T3-M-SC-EM-comp-3 LDW-T3-M-SC-HP-comp-1 LDW-T4-M-DC-EM-comp-1 LDW-T4-M-DC-HP-comp-1	J (all detects) UJ (all non-detects)	A
K2409809	LDW-T3-M-DC-EM-comp-3L	Cobalt Copper Silver	17 (≤10) 15 (≤10) 16 (≤10)	LDW-T4-M-SF-WB-comp-2 LDW-T4-M-SF-WB-comp-3 LDW-T4-M-SF-FL-comp-1 LDW-T1-M-DC-EM-comp-1 LDW-T1-M-DC-EM-comp-2 LDW-T1-M-DC-EM-comp-3 LDW-T1-M-DC-HP-comp-1 LDW-T3-M-DC-EM-comp-1 LDW-T3-M-DC-EM-comp-2 LDW-T3-M-DC-EM-comp-3 LDW-T3-M-DC-HP-comp-1	J (all detects) UJ (all non-detects)	A

XI. Sample Result Verification

All sample result verifications met validation criteria.

Sample result verification data were not reviewed for Level II.

*XIII. Overall Assessment of Data

The overall assessment of data was acceptable.

XIII. Field Duplicates

No field duplicates were identified in these SDGs.

XIV. Field Blanks

No field blanks were identified in these SDGs.

Arsenic by EPA SW 846 Method 6020

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Calibration

An initial calibration was performed.

The frequency and analysis criteria of the initial calibration verification (ICV) and continuing calibration verification (CCV) were met.

Calibration data were not reviewed for Level II.

III. Blanks

Method blanks were reviewed for each matrix as applicable.

Data qualification by the initial, continuing and preparation blanks (ICB/CCB/PBs) was based on the maximum contaminant concentration in the ICB/CCB/PBs in the analysis of each analyte. No contaminant concentrations were found in the initial, continuing and preparation blanks with the following exceptions:

Associated SDG	Method Blank ID	Analyte	Maximum Concentration	Associated Samples
K2409443	ICB/CCB	Arsenic	0.22 ug/L	EP-ES-WB-comp-6** BL-SC-HP-comp-1**

Sample concentrations were compared to concentrations detected in the ICB/CCB/PBs. The sample concentrations were either not detected or were significantly greater (>5X blank contaminants) than the concentrations found in the associated method blanks.

IV. ICP Interference Check Sample (ICS) Analysis

The frequency of analysis was met.

The criteria for analysis were met.

ICP Interference check sample analysis data were not reviewed for Level II.

V. Matrix Spike Analysis

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits for SDGs K2409443, K2409813.

VI. Duplicate Sample Analysis

Duplicate (DUP) sample analyses were reviewed for each matrix as applicable. Results were within QC limits for SDGs K2409443 and K2409813.

VII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

Standard reference material were within QC limits for SDGs K2409443 and K2409813.

VIII. Internal Standards (ICP-MS)

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

ICP-MS data were not reviewed for Level II.

IX. Furnace Atomic Absorption QC

Graphite furnace atomic absorption was not utilized in this SDG.

X. ICP Serial Dilution

Although ICP serial dilution analysis was not required by the method, it was performed by the laboratory. The analysis criteria were met.

XI. Sample Result Verification

All sample result verifications met validation criteria for samples on which a Level IV review was performed. Raw data were not evaluated for the samples reviewed by Level II criteria.

*XIII. Overall Assessment of Data

The overall assessment of data was acceptable.

XIII. Field Duplicates

No field duplicates were identified in this SDG.

XIV. Field Blanks

No field blanks were identified in this SDG.

Inorganic Arsenic by modified EPA Method 1632

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Calibration

An initial calibration was performed.

The frequency and analysis criteria of the initial calibration verification (ICV) and continuing calibration verification (CCV) were met.

Calibration data were not reviewed for Level II.

III. Blanks

Method blanks were reviewed for each matrix as applicable.

Data qualification by the initial, continuing and preparation blanks (ICB/CCB/PBs) was based on the maximum contaminant concentration in the ICB/CCB/PBs in the analysis of each analyte. No contaminant concentrations were found in the initial, continuing and preparation blanks.

IV. ICP Interference Check Sample (ICS) Analysis

The frequency of analysis was met.

The criteria for analysis were met.

ICP Interference check sample analysis data were not reviewed for Level II.

V. Matrix Spike Analysis

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits for SDG 05BR0023 with the following exceptions:

Associated SDG	Spike ID (Associated Samples)	Analyte	MS (%R) (Limits)	MSD (%R) (Limits)	RPD (Limits)	Flag	A or P
05BR0023	EP-DC-EM-comp-2MS (EP-DC-EM-comp-2 EP-DC-EM-comp-3 EP-DC-HP-comp-1 LDW-T1-M-DC-EM-comp-1 LDW-T1-M-DC-HP-comp-1 LDW-T3-M-DC-EM-comp-1 LDW-T3-M-DC-HP-comp-1)	Inorganic arsenic	71.8 (75-125)	-	-	J- (all detects) UJ (all non-detects)	A

VI. Duplicate Sample Analysis

Duplicate (DUP) sample analyses were reviewed for each matrix as applicable. Results were within QC limits .

VII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

Standard reference material were within QC limits with the following exceptions:

Associated SDG	Sample	Analyte	Finding	Criteria
05BR0023	LDW-T1-A-SS-WB-comp-1** LDW-T1-B-SS-WB-comp-1** LDW-T2-A-SS-WB-comp-1** LDW-T2-B-SS-WB-comp-1** LDW-T3-A-SS-WB-comp-1 LDW-T3-B-SS-WB-comp-1 LDW-T4-A-SS-WB-comp-1 LDW-T4-B-SS-WB-comp-1 BL-SS-WB-comp-1 BL-SS-WB-comp-2 BL-SS-WB-comp-3 BL-SS-WB-comp-4 BL-SS-WB-comp-5 BL-SS-WB-comp-6 EP-SS-WB-comp-1 EP-SS-WB-comp-2 EP-SS-WB-comp-3 LDW-M-M-PP-FL-comp-1 LDW-M-M-SP-FL-comp-1 BL-ES-FL-comp-1 BL-ES-FL-comp-2 BL-ES-FL-comp-3 BL-ES-FL-comp-4 BL-ES-FL-comp-5 BL-ES-FL-comp-6 EP-ES-FL-comp-1 EP-ES-FL-comp-2 EP-ES-FL-comp-3 EP-ES-FL-comp-4 EP-ES-FL-comp-5 EP-ES-FL-comp-6 LDW-T1-M-ES-FL-comp-1 LDW-T1-M-ES-FL-comp-2 LDW-T2-M-ES-FL-comp-1 LDW-T2-M-ES-FL-comp-2 LDW-T3-M-ES-FL-comp-1 LDW-T3-M-ES-FL-comp-2 LDW-T4-M-ES-FL-comp-1 BL-ES-WB-comp-1 BL-ES-WB-comp-2	Inorganic arsenic	No SRM associated with these samples.	SRM required.

VIII. Internal Standards (ICP-MS)

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

ICP-MS data were not reviewed for Level II.

IX. Furnace Atomic Absorption QC

Graphite furnace atomic absorption was not utilized in this SDG.

X. ICP Serial Dilution

ICP serial dilution was not required by the method.

XI. Sample Result Verification

All sample result verifications met validation criteria.

Sample result verification data were not reviewed for Level II.

***XIII. Overall Assessment of Data**

The overall assessment of data was acceptable.

XIII. Field Duplicates

No field duplicates were identified in this SDG.

XIV. Field Blanks

No field blanks were identified in this SDG.

Total Lipids by NOAA Method

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Calibration

a. Initial Calibration

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

Initial calibration data were not reviewed for Level II.

b. Calibration Verification

Calibration verification frequency and analysis criteria were met for each method when applicable.

Continuing calibration data were not reviewed for Level II.

III. Blanks

Method blanks were reviewed for each matrix as applicable. No contaminant concentrations were found in the method blanks.

IV. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) analyses were not required by the method in these SDGs.

V. Duplicates/Triplicates

Duplicate (DUP) and triplicate (TRP) sample analyses were reviewed for each matrix as applicable in these SDGs. Relative percent differences (RPD) were within QC limits.

VI. Laboratory Control Samples

Laboratory control samples were not required by the method in these SDGs.

VII. Sample Result Verification

All sample result verifications met validation criteria.

Sample result verification data were not reviewed for Level II.

***XIII. Overall Assessment of Data**

The overall assessment of data was acceptable.

IX. Field Duplicates

No field duplicates were identified in these SDGs.

X. Field Blanks

No field blanks were identified in these SDGs.

GC Butyltins By Krone Method

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Calibration

a. Initial Calibration

Initial calibration of compounds was performed for the primary (quantitation) column and confirmation column as required by this method.

The percent relative standard deviations (%RSD) were less than or equal to 20.0% for all compounds.

Retention time windows were evaluated and considered technically acceptable for samples on which EPA Level IV review was performed.

Initial calibration data were not reviewed for Level II.

b. Calibration Verification

Calibration verification was performed at the required frequencies.

The percent differences (%D) of calibration factors in continuing standard mixtures were within the 25.0% QC limits.

The percent difference (%D) of the second source calibration standard were less than or equal to 25.0% for all compounds.

Retention times (RT) of all compounds in the calibration standards were within QC limits for samples on which EPA Level IV review was performed.

Continuing calibration data were not reviewed for Level II.

III. Blanks

Method blanks were reviewed for each matrix as applicable. No butyltin contaminants were found in the method blanks.

IV. Accuracy and Precision Data

a. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits with the following exceptions:

Associated SDG	Sample	Surrogate	%R (Limits)	Compound	Flag	A or P
K2409451	LDW-T2-M-ES-WB-comp-1	Tri-n-propyltin	7 (20-130)	All TCL compounds	J (all detects) R (all non-detects)	P
K2409451	LDW-T2-M-ES-WB-comp-2	Tri-n-propyltin	16 (20-130)	All TCL compounds	J (all detects) UJ (all non-detects)	P
K2409451	LDW-T2-M-ES-WB-comp-3	Tri-n-propyltin	16 (20-130)	All TCL compounds	J (all detects) UJ (all non-detects)	P

b. Matrix Spike/(Matrix Spike) Duplicates

The laboratory has indicated that there was insufficient sample for analysis of the matrix spike and matrix spike duplicate for SDGs K2409445, K2409451, and K2409809.

Duplicate (DUP) sample analyses were reviewed for each matrix as applicable. Results were within QC limits in SDGs K2409445, K2409451, and K2409809.

c. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

Associated SDG	LCS ID (Associated Samples)	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Flag	A or P
K2409451	KWG0419928-2/3 (LDW-T3-E-SS-WB-comp-1 LDW-T3-F-SS-WB-comp-1 LDW-T4-A-SS-WB-comp-1 LDW-T4-B-SS-WB-comp-1 LDW-T4-B-SS-WB-comp-2 LDW-T4-C-SS-WB-comp-1 LDW-T4-C-SS-WB-comp-2 LDW-T4-D-SS-WB-comp-1 LDW-T3-M-ES-FL-comp-2 LDW-T1-M-ES-WB-comp-1 LDW-T1-M-ES-WB-comp-2 LDW-T1-M-ES-WB-comp-3 LDW-T1-M-ES-WB-comp-4 LDW-T1-M-ES-WB-comp-5 LDW-T1-M-ES-WB-comp-6 LDW-T2-M-ES-WB-comp-1 LDW-T2-M-ES-WB-comp-2 LDW-T2-M-ES-WB-comp-3 LDW-T4-M-ES-WB-comp-2 LDW-T1-M-SC-EM-comp-1 KWG0419928-4)	n-Butyltin	19 (20-30)	16 (20-30)	-	J (all detects) UJ (all non-detects)	P
K2409809	KWG0420179-2/3 (LDW-M-M-PP-FL-comp-1 LDW-M-M-SP-FL-comp-1 LDW-T1-M-ES-FL-comp-1 LDW-T1-M-ES-FL-comp-2 LDW-T2-M-ES-FL-comp-1 LDW-T2-M-ES-FL-comp-2 LDW-T3-M-ES-FL-comp-1 LDW-T4-M-ES-FL-comp-1 LDW-T2-M-ES-WB-comp-4 LDW-T2-M-ES-WB-comp-5 LDW-T2-M-ES-WB-comp-6 LDW-T3-M-ES-WB-comp-1 LDW-T3-M-ES-WB-comp-2 LDW-T3-M-ES-WB-comp-3 LDW-T3-M-ES-WB-comp-4 LDW-T3-M-ES-WB-comp-5 LDW-T3-M-ES-WB-comp-6 LDW-T4-M-ES-WB-comp-1 LDW-T4-M-ES-WB-comp-3 LDW-T4-M-SF-WB-comp-1 KWG0420179-4)	n-Butyltin	18 (20-30)	15 (20-30)	-	J (all detects) UJ (all non-detects)	P

Standard reference material were within QC limits.

No standard reference material was analyzed for Tetra-n-butyltin in SDGs K2409445 and K2409451.

V. Target Compound Identification

All target compound identifications were within validation criteria.

Target compound identifications data were not reviewed for Level II.

VI. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria with the following exceptions:

Associated SDG	Sample	Compound	Finding	Criteria	Flag	A or P
K2409445	LDW-T4-D-PS-WB-comp-2	Tetra-n-butyltin Tri-n-butyltin Di-n-butyltin	Sample result exceeded calibration range.	Reported result should be within calibration range.	J (all detects) J (all detects) J (all detects)	A

The sample results for detected compounds from the two columns were within 40.0% relative percent differences (RPD) with the following exceptions:

Associated SDG	Sample	Compound	%RPD	Flag	A or P
K2409451	LDW-T3-C-SS-WB-comp-1	Di-n-butyltin	42	J (all detects)	A
K2409451	LDW-T1-M-ES-WB-comp-4	Tri-n-butyltin	100	J (all detects)	A
K2409451	LDW-T1-M-ES-WB-comp-5	Tri-n-butyltin Di-n-butyltin	56 45	J (all detects) J (all detects)	A
K2409451	LDW-T1-M-ES-WB-comp-6	Tri-n-butyltin	87	J (all detects)	A
K2409809	LDW-T3-M-ES-WB-comp-2	Di-n-butyltin	43	J (all detects)	A

Compound quantitation and CRQLs data were not reviewed for Level II.

VII. System Performance

The system performance was acceptable.

System performance data were not reviewed for Level II.

VIII. Overall Assessment of Data

The overall assessment of data was acceptable. In the case where more than one result was reported for an individual sample, the least technically acceptable results were rejected as follows:

Associated SDG	Sample	Compound	Flag	A or P
K2409445	LDW-T4-D-PS-WB-comp-2	Tetra-n-butyltin Tri-n-butyltin Di-n-butyltin	R	A

*Indicates change as the result of report review.

Associated SDG	Sample	Compound	Flag	A or P
K2409445	LDW-T4-D-PS-WB-comp-2DL	All TCL compounds except Tetra-n-butyltin Tri-n-butyltin Di-n-butyltin	R	A

IX. Field Duplicates

No field duplicates were identified in these SDGs.

X. Field Blanks

No field blanks were identified in these SDGs.