

APPENDIX D: RAW LABORATORY DATA

Total Solids

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
 Project: LDW Benthic Inverteb/04-08-06-21
 Sample Matrix: Sediment

Service Request: K2406170

Total Solids

Prep Method: NONE
 Analysis Method: PSEP
 Test Notes:

Units: PERCENT
 Basis: WET

Sample Name	Lab Code	Date Collected	Date Received	Date Analyzed	Result	Result Notes
LDW-B2a-S	K2406170-001	08/13/2004	08/18/2004	09/16/2004	50.0	
LDW-B6a-S	K2406170-002	08/15/2004	08/18/2004	09/16/2004	71.2	
LDW-B4a-S	K2406170-003	08/14/2004	08/18/2004	09/16/2004	53.7	
LDW-B1a-S	K2406170-004	08/12/2004	08/18/2004	09/16/2004	80.3	
LDW-B9b-S	K2406170-005	08/11/2004	08/18/2004	09/16/2004	54.2	

QA/QC Report

Client: Windward Environmental
 Project: LDW Benthic Inverteb/04-08-06-21
 Sample Matrix: Sediment

Service Request: K2406170
 Date Collected: 08/13/2004
 Date Received: 08/18/2004
 Date Analyzed: 09/16/2004

Duplicate Sample Summary
 Total Solids

Prep Method: NONE
 Analysis Method: PSEP
 Test Notes:

Units: PERCENT
 Basis: WET

Sample Name	Lab Code	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
LDW-B2a-S	K2406170-001	50.0	50.3	50.2	<1	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406170
Date Collected: 08/13/04
Date Received: 08/18/04
Date Extracted: NA
Date Analyzed: 09/16/04

Triplicate Summary
Inorganic Parameters

Sample Name: LDW-B2a-S
Lab Code: K2406170-001TRP
Test Notes:

Units: PERCENT
Basis: WET

Analyte	Prep Method	Analysis Method	Sample Result	Duplicate Sample Result	Triplicate Sample Result	Average	Relative Standard Deviation	Result Notes
Total Solids	NONE	PSEP	50.0	50.3	49.5	49.9	< 1	

Approved By: _____



Date: _____

9/22/04

DUP/020597p

Analytical Results

Client: Windward Environmental
 Project: LDW Benthic Inverteb/04-08-06-21
 Sample Matrix: Sediment

Service Request: K2406226

Total Solids

Prep Method: NONE
 Analysis Method: PSEP
 Test Notes:

Units: PERCENT
 Basis: WET

Sample Name	Lab Code	Date Collected	Date Received	Date Analyzed	Result	Result Notes
LDW-B7b-S	K2406226-001	08/13/2004	08/19/2004	09/16/2004	50.5	
LDW-B3b-S	K2406226-002	08/10/2004	08/19/2004	09/16/2004	66.4	

QA/QC Report

Client: Windward Environmental
Project: LDW Benthic Inverteb/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406226
Date Collected: 08/13/2004
Date Received: 08/19/2004
Date Analyzed: 09/16/2004

Duplicate Sample Summary
Total Solids

Prep Method: NONE
Analysis Method: PSEP
Test Notes:

Units: PERCENT
Basis: WET

Sample Name	Lab Code	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
LDW-B7b-S	K2406226-001	50.5	55.1	52.8	9	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406226
Date Collected: 08/13/04
Date Received: 08/19/04
Date Extracted: NA
Date Analyzed: 09/16/04

Triplicate Summary
Inorganic Parameters

Sample Name: LDW-B7b-S
Lab Code: K2406226-001TRP
Test Notes:

Units: PERCENT
Basis: WET

Analyte	Prep Method	Analysis Method	Sample Result	Duplicate Sample Result	Triplicate Sample Result	Average	Relative Standard Deviation	Result Notes
Total Solids	NONE	PSEP	50.5	55.1	51.8	52.5	5	

Approved By: _____



Date: _____

9/22/04

DUP/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406232
Date Collected: 08/15/04
Date Received: 08/19/04

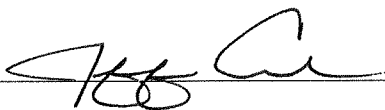
Solids, Total

Prep Method: NONE
Analysis Method: Freeze Dry
Test Notes:

Units: PERCENT
Basis: Wet

Sample Name	Lab Code	Date Analyzed	Result	Result Notes
LDW-B1a-T	K2406232-001	09/24/04	8.29	
LDW-B4a-T	K2406232-002	09/24/04	9.39	
LDW-B2a-T	K2406232-003	09/24/04	9.73	
LDW-B9b-T	K2406232-004	09/24/04	4.10	
LDW-B6a-T	K2406232-005	09/24/04	15.7	
LDW-B3b-T	K2406232-008	09/24/04	15.0	
LDW-B7b-T	K2406232-009	09/24/04	13.7	

Approved By: _____



Date: _____

10/15/04

1A/052595

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406232
Date Collected: NA
Date Received: NA
Date Extracted: NA
Date Analyzed: 09/24/04


Duplicate Summary
Total Metals

Sample Name: Batch QC
Lab Code: K2406581-001
Test Notes:

Units: PERCENT
Basis: Wet

Analyte	Prep Method	Analysis Method	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
Solids, Total	NA	Freeze Dry	6.89	6.51	6.70	6	

Approved By: _____



Date: _____

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Analytical Results

Client: Windward Environmental
 Project: LDW Benthic Inverteb/04-08-06-21
 Sample Matrix: Sediment

Service Request: K2406296

Total Solids

Prep Method: NONE
 Analysis Method: PSEP
 Test Notes:

Units: PERCENT
 Basis: WET

Sample Name	Lab Code	Date Collected	Date Received	Date Analyzed	Result	Result Notes
LDW-B6b-S	K2406296-001	08/18/2004	08/21/2004	09/16/2004	47.8	
LDW-B8b-S	K2406296-002	08/19/2004	08/21/2004	09/16/2004	47.0	
LDW-B10b-S	K2406296-003	08/19/2004	08/21/2004	09/16/2004	59.1	

QA/QC Report

Client: Windward Environmental
 Project: LDW Benthic Inverteb/04-08-06-21
 Sample Matrix: Sediment

Service Request: K2406296
 Date Collected: 08/18/2004
 Date Received: 08/21/2004
 Date Analyzed: 09/16/2004

Duplicate Sample Summary
 Total Solids

Prep Method: NONE
 Analysis Method: PSEP
 Test Notes:

Units: PERCENT
 Basis: WET

Sample Name	Lab Code	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
LDW-B6b-S	K2406296-001	47.8	47.9	47.9	<1	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406296
Date Collected: 08/18/04
Date Received: 08/21/04
Date Extracted: NA
Date Analyzed: 09/16/04

Triplicate Summary
 Inorganic Parameters

Sample Name: LDW-B6b-S
 Lab Code: K2406296-001TRP
 Test Notes:

Units: PERCENT
 Basis: WET

Analyte	Prep Method	Analysis Method	Sample Result	Duplicate Sample Result	Triplicate Sample Result	Average	Relative Standard Deviation	Result Notes
Total Solids	NONE	PSEP	47.8	47.9	48.2	48.0	< 1	

Approved By: _____

M. F. H.

Date: _____

9/22/04

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COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406297
Date Collected: 08/18/04
Date Received: 08/21/04

Solids, Total

Prep Method: NONE
Analysis Method: Freeze Dry
Test Notes:

Units: PERCENT
Basis: Wet

Sample Name	Lab Code	Date Analyzed	Result	Result Notes
LDW-B6b-T	K2406297-001	09/16/04	14.1	
LDW-B8b-T	K2406297-002	09/16/04	9.25	
LDW-B10b-T	K2406297-003	09/16/04	10.7	

Approved By: _____

Date: _____

10/15/04

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COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406297
Date Collected: 08/19/04
Date Received: 08/21/04
Date Extracted: NA
Date Analyzed: 09/16/04

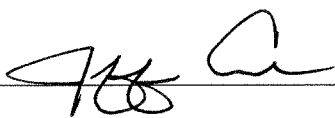
Duplicate Summary
Total Metals

Sample Name: LDW-B8b-T
Lab Code: K2406297-002D
Test Notes:

Units: PERCENT
Basis: Wet

Analyte	Prep Method	Analysis Method	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
Solids, Total	NA	Freeze Dry	9.25	9.69	9.47	5	

Approved By: _____



Date: _____

10/15/04

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Analytical Results

Client: Windward Environmental
 Project: Lower Duwamish Worki/04-08-06-21
 Sample Matrix: Sediment

Service Request: K2406516

Total Solids

Prep Method: NONE
 Analysis Method: PSEP
 Test Notes:

Units: PERCENT
 Basis: WET

Sample Name	Lab Code	Date Collected	Date Received	Date Analyzed	Result	Result Notes
LDW-C4-S	K2406516-001	08/27/2004	08/30/2004	08/31/2004	66.8	
LDW-C10-S2	K2406516-002	08/25/2004	08/30/2004	08/31/2004	51.5	
LDW-C10-S1	K2406516-003	08/25/2004	08/30/2004	08/31/2004	50.4	
LDW-C6-S	K2406516-004	08/25/2004	08/30/2004	08/31/2004	70.2	
LDW-C9-S	K2406516-005	08/25/2004	08/30/2004	08/31/2004	75.7	
LDW-C7-S1	K2406516-006	08/26/2004	08/30/2004	08/31/2004	78.0	
LDW-C3-S2	K2406516-007	08/27/2004	08/30/2004	08/31/2004	75.2	
LDW-C7-S2	K2406516-008	08/26/2004	08/30/2004	08/31/2004	78.3	
LDW-C8-S	K2406516-009	08/26/2004	08/30/2004	08/31/2004	60.3	
LDW-C5-S	K2406516-010	08/27/2004	08/30/2004	08/31/2004	74.1	
LDW-C3-S1	K2406516-011	08/27/2004	08/30/2004	08/31/2004	72.2	
LDW-C2-S1	K2406516-012	08/26/2004	08/30/2004	08/31/2004	55.9	
LDW-C2-S2	K2406516-013	08/26/2004	08/30/2004	08/31/2004	70.4	
LDW-C1-S	K2406516-014	08/26/2004	08/30/2004	08/31/2004	74.2	

QA/QC Report

Client: Windward Environmental
 Project: Lower Duwamish Worki/04-08-06-21
 Sample Matrix: Sediment

Service Request: K2406516
 Date Collected: 08/27/2004
 Date Received: 08/30/2004
 Date Analyzed: 08/31/2004

Duplicate Sample Summary
 Total Solids

Prep Method: NONE
 Analysis Method: PSEP
 Test Notes:

Units: PERCENT
 Basis: WET

Sample Name	Lab Code	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
LDW-C4-S	K2406516-001	66.8	69.1	68.0	3	

QA/QC Report

Client: Windward Environmental
 Project: Lower Duwamish Worki/04-08-06-21
 Sample Matrix: Sediment

Service Request: K2406516
 Date Collected: 08/27/2004
 Date Received: 08/30/2004
 Date Analyzed: 08/31/2004

Duplicate Sample Summary
 Total Solids

Prep Method: NONE
 Analysis Method: PSEP
 Test Notes:

Units: PERCENT
 Basis: WET

Sample Name	Lab Code	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
LDW-C5-S	K2406516-010	74.1	73.5	73.8	<1	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Windward Environmental
Project: Lower Duwamish Working Group/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406516
Date Collected: 08/27/04
Date Received: 08/30/04
Date Extracted: NA
Date Analyzed: 08/31/04

Triplicate Summary
Inorganic Parameters

Sample Name: LDW-C4-S
Lab Code: K2406516-001TRP
Test Notes:

Units: PERCENT
Basis: WET

Analyte	Prep Method	Analysis Method	Sample Result	Duplicate Sample Result	Triplicate Sample Result	Average	Relative Standard Deviation	Result Notes
Total Solids	NONE	PSEP	66.8	69.1	67.4	67.8	2	

Approved By: _____



Date: _____

9/1/04

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COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Windward Environmental
Project: Lower Duwamish Working Group/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406516
Date Collected: 08/27/04
Date Received: 08/30/04
Date Extracted: NA
Date Analyzed: 08/31/04

Triplicate Summary
 Inorganic Parameters

Sample Name: LDW-C5-S
 Lab Code: K2406516-010TRP
 Test Notes:

Units: PERCENT
 Basis: WET

Analyte	Prep Method	Analysis Method	Sample Result	Duplicate Sample Result	Triplicate Sample Result	Average	Relative Standard Deviation	Result Notes
Total Solids	NONE	PSEP	74.1	73.5	73.5	73.7	< 1	

Approved By: _____

M. J. H.

Date: _____

9/11/04

DUP/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406517
Date Collected: 8/26/04
Date Received: 8/28/04

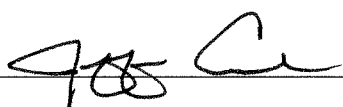
Solids, Total

Prep Method: NONE
Analysis Method: Freeze Dry
Test Notes:

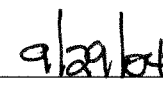
Units: PERCENT
Basis: Wet

Sample Name	Lab Code	Date Analyzed	Result	Result Notes
LDW-C8-T	K2406517-001	9/9/04	16.2	
LDW-C7-T2	K2406517-002	9/9/04	15.3	
LDW-C7-T1	K2406517-003	9/9/04	14.9	
LDW-C1-T	K2406517-004	9/9/04	13.7	
LDW-C2-T1	K2406517-005	9/9/04	13.2	
LDW-C2-T2	K2406517-006	9/9/04	15.7	
LDW-C10-T2	K2406517-007	9/9/04	12.8	
LDW-C10-T1	K2406517-008	9/9/04	13.7	
LDW-C5-T	K2406517-009	9/9/04	15.6	
LDW-C3-T2	K2406517-010	9/9/04	17.3	
LDW-C3-T1	K2406517-011	9/9/04	15.1	
LDW-C9-T	K2406517-012	9/9/04	15.6	
LDW-C6-T	K2406517-013	9/9/04	15.3	
LDW-C4-T	K2406517-014	9/9/04	13.6	

Approved By: _____



Date: _____



1A/052595

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406517
Date Collected: 8/26/04
Date Received: 8/28/04
Date Extracted: NA
Date Analyzed: 9/9/04

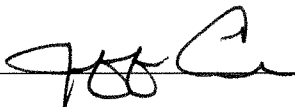
Duplicate Summary
Total Metals

Sample Name: LDW-C2-T2
Lab Code: K2406517-006D
Test Notes:

Units: PERCENT
Basis: Wet

Analyte	Prep Method	Analysis Method	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
Solids, Total	NA	Freeze Dry	15.7	15.6	15.6	<1	

Approved By: _____



Date: _____

9/29/04

DUP/052595

Analytical Results

Client: Windward Environmental
 Project: LDW Benthic Inverteb/04-08-06-21
 Sample Matrix: Sediment

Service Request: K2406519

Total Solids

Prep Method: NONE
 Analysis Method: PSEP
 Test Notes:

Units: PERCENT
 Basis: WET

Sample Name	Lab Code	Date Collected	Date Received	Date Analyzed	Result	Result Notes
LDW-B9a-S	K2406519-001	08/27/2004	08/30/2004	09/16/2004	52.6	
LDW-B3a-S	K2406519-005	08/26/2004	08/30/2004	09/16/2004	61.6	

QA/QC Report

Client: Windward Environmental
 Project: LDW Benthic Inverteb/04-08-06-21
 Sample Matrix: Sediment

Service Request: K2406519
 Date Collected: 08/27/2004
 Date Received: 08/30/2004
 Date Analyzed: 09/16/2004

Duplicate Sample Summary
 Total Solids

Prep Method: NONE
 Analysis Method: PSEP
 Test Notes:

Units: PERCENT
 Basis: WET

Sample Name	Lab Code	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
LDW-B9a-S	K2406519-001	52.6	52.4	52.5	<1	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406519
Date Collected: 08/27/04
Date Received: 08/30/04
Date Extracted: NA
Date Analyzed: 09/16/04

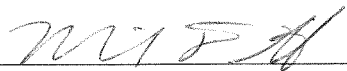
Triplicate Summary
Inorganic Parameters

Sample Name: LDW-B9a-S
Lab Code: K2406519-001TRP
Test Notes:

Units: PERCENT
Basis: WET

Analyte	Prep Method	Analysis Method	Sample Result	Duplicate Sample Result	Triplicate Sample Result	Average	Relative Standard Deviation	Result Notes
Total Solids	NONE	PSEP	52.6	52.4	52.1	52.4	< 1	

Approved By: _____



Date: _____

9/22/04

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COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Inverteb/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406580

Total Solids

Prep Method: NONE
Analysis Method: PSEP
Test Notes:

Units: PERCENT
Basis: WET

Sample Name	Lab Code	Date Collected	Date Received	Date Analyzed	Result	Result Notes
LDW-B7a-S	K2406580-001	08/30/2004	08/31/2004	09/16/2004	51.7	

QA/QC Report

Client: Windward Environmental
 Project: LDW Benthic Inverteb/04-08-06-21
 Sample Matrix: Sediment

Service Request: K2406580
 Date Collected: 08/30/2004
 Date Received: 08/31/2004
 Date Analyzed: 09/16/2004

Duplicate Sample Summary
 Total Solids

Prep Method: NONE
 Analysis Method: PSEP
 Test Notes:

Units: PERCENT
 Basis: WET

Sample Name	Lab Code	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
LDW-B7a-S	K2406580-001	51.7	51.6	51.7	<1	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406580
Date Collected: 08/30/04
Date Received: 08/31/04
Date Extracted: NA
Date Analyzed: 09/16/04


Triplicate Summary
Inorganic Parameters

Sample Name: LDW-B7a-S
Lab Code: K2406580-001TRP
Test Notes:

Units: PERCENT
Basis: WET

Analyte	Prep Method	Analysis Method	Sample Result	Duplicate Sample Result	Triplicate Sample Result	Average	Relative Standard Deviation	Result Notes
Total Solids	NONE	PSEP	51.7	51.6	51.6	51.6	< 1	

Approved By: _____



Date: _____

9/22/04

DUP/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406581
Date Collected: 08/30/04
Date Received: 08/31/04

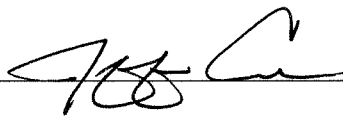
Solids, Total

Prep Method: NONE
Analysis Method: Freeze Dry
Test Notes:

Units: PERCENT
Basis: Wet

Sample Name	Lab Code	Date Analyzed	Result	Result Notes
LDW-B7a-T	K2406581-001	09/24/04	6.89	

Approved By: _____



Date: _____

10/15/04

1A/052595

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406581
Date Collected: 08/30/04
Date Received: 08/31/04
Date Extracted: NA
Date Analyzed: 09/24/04

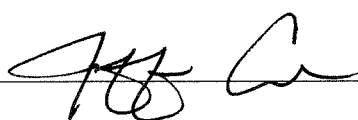
Duplicate Summary
Total Metals

Sample Name: LDW-B7a-T
Lab Code: K2406581-001D
Test Notes:

Units: PERCENT
Basis: Wet

Analyte	Prep Method	Analysis Method	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
Solids, Total	NA	Freeze Dry	6.89	6.51	6.70	6	

Approved By: _____



Date: _____

10/15/04

DUP/052595

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406932
Date Collected: 08/17/04
Date Received: 08/20/04

Solids, Total

Prep Method: NONE
Analysis Method: Freeze Dry
Test Notes:

Units: PERCENT
Basis: Wet

Sample Name	Lab Code	Date Analyzed	Result	Result Notes
LDW-B8a-T	K2406932-006	09/16/04	6.92	
LDW-B10a-T	K2406932-009	09/16/04	10.1	

Approved By: _____ Date: _____

1A/052595

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406932
Date Collected: 08/17/04
Date Received: 08/20/04
Date Extracted: NA
Date Analyzed: 09/16/04

Duplicate Summary
Total Metals

Sample Name: LDW-B8a-T
Lab Code: K2406932-006D
Test Notes:

Units: PERCENT
Basis: Wet

Analyte	Prep Method	Analysis Method	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
Solids, Total	NA	Freeze Dry	6.92	6.30	6.61	9	

Approved By: _____ Date: _____

DUP/052595

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Inverteb/04-08-06-21
Sample Matrix: Sediment

Service Request: K2407012

Total Solids

Prep Method: NONE
Analysis Method: PSEP
Test Notes:

Units: PERCENT
Basis: Wet

Sample Name	Lab Code	Date Collected	Date Received	Date Analyzed	Result	Result Notes
LDW-B5a-S	K2407012-003	08/16/2004	08/18/2004	09/21/2004	76.9	
LDW-B8a-S	K2407012-006	08/17/2004	09/20/2004	09/21/2004	53.6	
LDW-B10a-S	K2407012-009	08/25/2004	08/30/2004	09/21/2004	63.0	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Windward Environmental
Project: LDW Benthic Inverteb/04-08-06-21
Sample Matrix: Sediment

Service Request: K2407012
Date Collected: 08/16/2004
Date Received: 08/18/2004
Date Analyzed: 09/21/2004

Duplicate Sample Summary
Total Solids

Prep Method: NONE
Analysis Method: PSEP
Test Notes:

Units: PERCENT
Basis: Wet

Sample Name	Lab Code	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
LDW-B5a-S	K2407012-003	76.9	77.3	77.1	<1	

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2407216
Date Collected: 08/26/04
Date Received: 08/30/04

Solids, Total

Prep Method: NONE
Analysis Method: Freeze Dry
Test Notes:

Units: PERCENT
Basis: Wet

Sample Name	Lab Code	Date Analyzed	Result	Result Notes
LDW-B3a-T	K2407216-001	09/24/04	9.75	
LDW-B9a-T	K2407216-002	09/24/04	7.65	

Approved By: _____



Date: _____

10/15/04

1A/052595

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2407452
Date Collected: 9/24/04
Date Received: 9/25/04

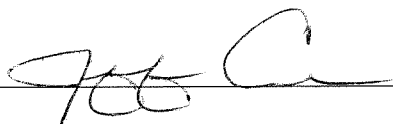
Solids, Total

Prep Method: NONE
Analysis Method: Freeze Dry
Test Notes:

Units: PERCENT
Basis: Wet

Sample Name	Lab Code	Date Analyzed	Result	Result Notes
LDW-B5a-T	K2407452-001	10/21/04	15.2	

Approved By: _____



Date: _____

11/3/04

1A/052595

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Windward Environmental
Project: LDW/04-08-06-22
Sample Matrix: Tissue

Service Request: K2407455
Date Collected: 9/23/04
Date Received: 9/25/04

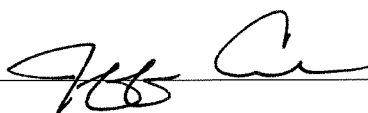
Solids, Total

Prep Method: NONE
Analysis Method: Freeze Dry
Test Notes:

Units: PERCENT
Basis: Wet

Sample Name	Lab Code	Date Analyzed	Result	Result Notes
BI-C-T1	K2407455-001	10/7/04	19.2	
BI-C-T2	K2407455-002	10/7/04	18.6	
BI-C-T3	K2407455-003	10/7/04	17.1	
BI-C-T4	K2407455-004	10/7/04	21.0	
BI-C-T5	K2407455-005	10/7/04	19.7	
BI-C-T6	K2407455-006	10/7/04	18.8	
SP-C-T1	K2407455-007	10/7/04	15.2	
SP-C-T2	K2407455-008	10/7/04	20.9	
SP-C-T3	K2407455-009	10/7/04	22.5	
SP-C-T4	K2407455-010	10/7/04	22.2	
SP-C-T5	K2407455-011	10/7/04	22.0	
SP-C-T6	K2407455-012	10/7/04	21.9	

Approved By: _____



Date: _____

10/25/04

1A/052595

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Windward Environmental
Project: LDW/04-08-06-22
Sample Matrix: Tissue

Service Request: K2407455
Date Collected: 9/23/04
Date Received: 9/25/04
Date Extracted: NA
Date Analyzed: 10/7/04

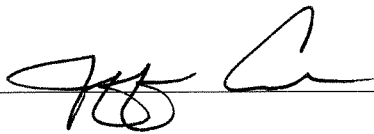
Duplicate Summary
Total Metals

Sample Name: BI-C-T3
Lab Code: K2407455-003D
Test Notes:

Units: PERCENT
Basis: Wet

Analyte	Prep Method	Analysis Method	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
Solids, Total	NA	Freeze Dry	17.1	17.4	17.2	2	

Approved By: _____



Date: _____

10/25/04

DUP/052595

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
 Project: LDW/04-08-06-22
 Sample Matrix: Sediment

Service Request: K2407469

Total Solids

Prep Method: NONE
 Analysis Method: 160.3M
 Test Notes:

Units: PERCENT
 Basis: Wet

Sample Name	Lab Code	Date Collected	Date Received	Date Analyzed	Result	Result Notes
SP-C-S1	K2407469-001	09/23/2004	09/27/2004	09/30/2004	85.1	
SP-C-S2	K2407469-002	09/23/2004	09/27/2004	09/30/2004	77.2	
SP-C-S3	K2407469-003	09/23/2004	09/27/2004	09/30/2004	79.5	
SP-C-S4	K2407469-004	09/23/2004	09/27/2004	09/30/2004	75.9	
SP-C-S5	K2407469-005	09/23/2004	09/27/2004	09/30/2004	76.0	
SP-C-S6	K2407469-006	09/23/2004	09/27/2004	09/30/2004	80.1	
B1-C-S1	K2407469-007	09/23/2004	09/27/2004	09/30/2004	74.6	
B1-C-S2	K2407469-008	09/24/2004	09/27/2004	09/30/2004	72.4	
B1-C-S3	K2407469-009	09/24/2004	09/27/2004	09/30/2004	74.1	
B1-C-S4	K2407469-010	09/24/2004	09/27/2004	09/30/2004	73.3	
B1-C-S5	K2407469-011	09/24/2004	09/27/2004	09/30/2004	73.8	
B1-C-S6	K2407469-012	09/23/2004	09/27/2004	09/30/2004	75.0	

QA/QC Report

Client: Windward Environmental
Project: LDW/04-08-06-22
Sample Matrix: Sediment

Service Request: K2407469
Date Collected: 09/23/2004
Date Received: 09/27/2004
Date Analyzed: 09/30/2004

Duplicate Sample Summary
Total Solids

Prep Method: NONE
Analysis Method: 160.3M
Test Notes:

Units: PERCENT
Basis: Wet

Sample Name	Lab Code	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
SP-C-S1	K2407469-001	85.1	82.9	84.0	3	

00011

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Windward Environmental
Project: LDW/04-08-06-22
Sample Matrix: Sediment

Service Request: K2407469
Date Collected: 09/24/2004
Date Received: 09/27/2004
Date Analyzed: 09/30/2004

Duplicate Sample Summary
Total Solids

Prep Method: NONE
Analysis Method: 160.3M
Test Notes:

Units: PERCENT
Basis: Wet

Sample Name	Lab Code	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
B1-C-S4	K2407469-010	73.3	73.1	73.2	<1	

00012

Analytical Results

Client: Windward Environmental
Project: LDWG/04-08-06-22
Sample Matrix: Sediment

Service Request: K2407471

Total Solids

Prep Method: NONE
Analysis Method: 160.3M
Test Notes:

Units: PERCENT
Basis: Wet

Sample Name	Lab Code	Date Collected	Date Received	Date Analyzed	Result	Result Notes
LDW-BL-S-1	K2407471-001	09/16/2004	09/27/2004	09/30/2004	64.5	
LDW-EP-S1	K2407471-003	09/17/2004	09/27/2004	09/30/2004	77.1	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Windward Environmental
Project: LDWG/04-08-06-22
Sample Matrix: Sediment

Service Request: K2407471
Date Collected: 09/16/2004
Date Received: 09/27/2004
Date Analyzed: 09/30/2004

Duplicate Sample Summary
Total Solids

Prep Method: NONE
Analysis Method: 160.3M
Test Notes:

Units: PERCENT
Basis: Wet

Sample Name	Lab Code	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
LDW-BL-S-1	K2407471-001	64.5	64.8	64.7	<1	

00011

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Sediment

Service Request: K2407473

Total Solids

Prep Method: NONE
Analysis Method: PSEP
Test Notes:

Units: PERCENT
Basis: Wet

Sample Name	Lab Code	Date Collected	Date Received	Date Analyzed	Result	Result Notes
LDW-B5a-S	K2407473-001	09/24/2004	09/27/2004	10/04/2004	64.9	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Sediment

Service Request: K2407473
Date Collected: 09/24/2004
Date Received: 09/27/2004
Date Analyzed: 10/04/2004

Duplicate Sample Summary
Total Solids

Prep Method: NONE
Analysis Method: PSEP
Test Notes:

Units: PERCENT
Basis: Wet

Sample Name	Lab Code	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
LDW-B5a-S	K2407473-001	64.9	66.3	65.6	2	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Sediment

Service Request: K2407473
Date Collected: 09/24/04
Date Received: 09/27/04
Date Extracted: NA
Date Analyzed: 10/04/04

Triplicate Summary
Inorganic Parameters

Sample Name: LDW-B5a-S
Lab Code: K2407473-001TRP
Test Notes:

Units: PERCENT
Basis: WET

Analyte	Prep Method	Analysis Method	Sample Result	Duplicate Sample Result	Triplicate Sample Result	Average	Relative Standard Deviation	Result Notes
Total Solids	NONE	PSEP	64.9	66.3	68.6	66.6	3	

Approved By: MSH Date: 10/6/04

DUP/020597p

Analytical Results

Client: Windward Environmental
 Project: LDW Benthic Inverteb/04-08-06-21
 Sample Matrix: Sediment

Service Request: K2407595

Total Solids

Prep Method: NONE
 Analysis Method: 160.3M
 Test Notes:

Units: PERCENT
 Basis: Wet

Sample Name	Lab Code	Date Collected	Date Received	Date Analyzed	Result	Result Notes
LDW-B1b-S	K2407595-001	09/27/2004	09/30/2004	10/05/2004	75.2	
LDW-B2b-S	K2407595-002	09/27/2004	09/30/2004	10/05/2004	66.4	
LDW-B4b-S	K2407595-003	09/28/2004	09/30/2004	10/05/2004	45.9	
LDW-B5b-S	K2407595-004	09/28/2004	09/30/2004	10/05/2004	57.8	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Windward Environmental
Project: LDW Benthic Inverteb/04-08-06-21
Sample Matrix: Sediment

Service Request: K2407595
Date Collected: 09/27/2004
Date Received: 09/30/2004
Date Analyzed: 10/05/2004

Duplicate Sample Summary
Total Solids

Prep Method: NONE
Analysis Method: 160.3M
Test Notes:

Units: PERCENT
Basis: Wet

Sample Name	Lab Code	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
LDW-B1b-S	K2407595-001	75.2	75.2	75.2	<1	

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2407596
Date Collected: 9/28/04
Date Received: 9/30/04

Solids, Total

Prep Method: NONE
Analysis Method: Freeze Dry
Test Notes:

Units: PERCENT
Basis: Wet

Sample Name	Lab Code	Date Analyzed	Result	Result Notes
LDW-B4b-T	K2407596-001	10/21/04	12.7	
LDW-B5b-T	K2407596-002	10/21/04	11.6	
LDW-B1b-T	K2407596-003	10/21/04	16.6	
LDW-B2b-T	K2407596-004	10/21/04	15.5	

Approved By: _____



Date: _____

11/3/04

1A/052595

Metals

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client: Windward Environmental

Service Request: K2406170

Project No.: 04-08-06-21

Date Collected: 08/13/04

Project Name: LDW Benthic Invertebrate Survey

Date Received: 08/18/04

Matrix: SEDIMENT

Units: MG/KG

Basis: Dry

Sample Name: LDW-B2a-S

Lab Code: K2406170-001

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Antimony	6020	0.06	0.03	5	10/05/04	10/7/04	0.56		N
Arsenic	6020	0.55	0.05	5	10/5/04	10/9/04	9.26		
Cadmium	6020	0.055	0.008	5	10/5/04	10/9/04	0.214		
Chromium	6010B	2.2	0.7	2	10/5/04	10/11/04	27.4		
Cobalt	6010B	2.2	2.2	2	10/5/04	10/11/04	6.6		
Copper	6010B	2.2	1.0	2	10/5/04	10/11/04	43.5		
Lead	6020	0.05	0.02	5	10/5/04	10/9/04	35.8		
Mercury	7471A	0.020	0.008	1	9/17/04	9/18/04	0.085		
Molybdenum	6020	0.219	0.009	5	10/5/04	10/9/04	0.664		
Nickel	6010B	4.4	3.3	2	10/5/04	10/11/04	21.8		
Selenium	6020	1.1	0.1	5	10/5/04	10/9/04	0.7	B	
Silver	6020	0.022	0.003	5	10/05/04	10/7/04	0.285		
Thallium	6020	0.022	0.002	5	10/5/04	10/9/04	0.094		
Vanadium	6010B	2.2	1.0	2	10/5/04	10/11/04	48.1		
Zinc	6010B	2.2	0.6	2	10/5/04	10/11/04	103		

% Solids: 50.0

Comments:

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client: Windward Environmental

Service Request: K2406170

Project No.: 04-08-06-21

Date Collected: 08/15/04

Project Name: LDW Benthic Invertebrate Survey

Date Received: 08/18/04

Matrix: SEDIMENT

Units: MG/KG

Basis: Dry

Sample Name: LDW-B6a-S

Lab Code: K2406170-002

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Antimony	6020	0.06	0.03	5	10/05/04	10/7/04	0.90		N
Arsenic	6020	0.59	0.06	5	10/5/04	10/9/04	5.26		
Cadmium	6020	0.059	0.008	5	10/5/04	10/9/04	0.140		
Chromium	6010B	2.3	0.7	2	10/5/04	10/11/04	14.9		
Cobalt	6010B	2.3	2.3	2	10/5/04	10/11/04	4.9		
Copper	6010B	2.3	1.0	2	10/5/04	10/11/04	25.5		
Lead	6020	0.06	0.02	5	10/5/04	10/9/04	44.6		
Mercury	7471A	0.014	0.005	1	9/17/04	9/18/04	0.059		
Molybdenum	6020	0.234	0.009	5	10/5/04	10/9/04	0.562		
Nickel	6010B	4.6	3.4	2	10/5/04	10/11/04	12.5		
Selenium	6020	1.2	0.1	5	10/5/04	10/9/04	0.5	B	
Silver	6020	0.023	0.003	5	10/05/04	10/7/04	0.088		
Thallium	6020	0.023	0.002	5	10/5/04	10/9/04	0.055		
Vanadium	6010B	2.3	1.0	2	10/5/04	10/11/04	37.3		
Zinc	6010B	2.3	0.6	2	10/5/04	10/11/04	65.6		

% Solids: 71.2

Comments:

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client: Windward Environmental

Service Request: K2406170

Project No.: 04-08-06-21

Date Collected: 08/14/04

Project Name: LDW Benthic Invertebrate Survey

Date Received: 08/18/04

Matrix: SEDIMENT

Units: MG/KG

Basis: Dry

Sample Name: LDW-B4a-S

Lab Code: K2406170-003

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Antimony	6020	0.05	0.03	5	10/05/04	10/7/04	20.3		N
Arsenic	6020	0.51	0.05	5	10/5/04	10/9/04	46.5		
Cadmium	6020	0.051	0.007	5	10/5/04	10/9/04	0.323		
Chromium	6010B	2.1	0.6	2	10/5/04	10/11/04	31.9		
Cobalt	6010B	2.1	2.1	2	10/5/04	10/11/04	9.8		
Copper	6010B	2.1	0.9	2	10/5/04	10/11/04	189		
Lead	6020	0.05	0.02	5	10/5/04	10/9/04	67.8		
Mercury	7471A	0.016	0.006	1	9/17/04	9/18/04	0.115		
Molybdenum	6020	0.205	0.008	5	10/5/04	10/9/04	5.210		
Nickel	6010B	4.1	3.1	2	10/5/04	10/11/04	16.9		
Selenium	6020	1.0	0.1	5	10/5/04	10/9/04	0.7	B	
Silver	6020	0.021	0.003	5	10/05/04	10/7/04	0.545		
Thallium	6020	0.021	0.002	5	10/5/04	10/9/04	0.095		
Vanadium	6010B	2.1	0.9	2	10/5/04	10/11/04	54.8		
Zinc	6010B	2.1	0.5	2	10/5/04	10/11/04	291		

% Solids: 53.7

Comments:

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client: Windward Environmental

Service Request: K2406170

Project No.: 04-08-06-21

Date Collected: 08/12/04

Project Name: LDW Benthic Invertebrate Survey

Date Received: 08/18/04

Matrix: SEDIMENT

Units: MG/KG

Basis: Dry

Sample Name: LDW-Bla-S

Lab Code: K2406170-004

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Antimony	6020	0.06	0.04	5	10/05/04	10/7/04	1.05		N
Arsenic	6020	0.62	0.06	5	10/5/04	10/9/04	3.90		
Cadmium	6020	0.062	0.009	5	10/5/04	10/9/04	0.066		
Chromium	6010B	2.4	0.7	2	10/5/04	10/11/04	18.1		
Cobalt	6010B	2.4	2.4	2	10/5/04	10/11/04	6.1		
Copper	6010B	2.4	1.1	2	10/5/04	10/11/04	50.2		
Lead	6020	0.06	0.02	5	10/5/04	10/9/04	38.2		
Mercury	7471A	0.016	0.006	1	9/17/04	9/18/04	0.079		
Molybdenum	6020	0.247	0.010	5	10/5/04	10/9/04	0.501		
Nickel	6010B	4.8	3.6	2	10/5/04	10/11/04	15.9		
Selenium	6020	1.2	0.1	5	10/5/04	10/9/04	0.2	B	
Silver	6020	0.024	0.004	5	10/05/04	10/7/04	0.046		
Thallium	6020	0.025	0.002	5	10/5/04	10/9/04	0.032		
Vanadium	6010B	2.4	1.1	2	10/5/04	10/11/04	45.7		
Zinc	6010B	2.4	0.6	2	10/5/04	10/11/04	75.1		

% Solids: 80.3

Comments:

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client: Windward Environmental

Service Request: K2406170

Project No.: 04-08-06-21

Date Collected: 08/11/04

Project Name: LDW Benthic Invertebrate Survey

Date Received: 08/18/04

Matrix: SEDIMENT

Units: MG/KG

Basis: Dry

Sample Name: LDW-B9b-S

Lab Code: K2406170-005

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Antimony	6020	0.05	0.03	5	10/05/04	10/7/04	0.21		N
Arsenic	6020	0.51	0.05	5	10/5/04	10/9/04	8.85		
Cadmium	6020	0.051	0.007	5	10/5/04	10/9/04	0.222		
Chromium	6010B	2.0	0.6	2	10/5/04	10/11/04	25.1		
Cobalt	6010B	2.0	2.0	2	10/5/04	10/11/04	9.1		
Copper	6010B	2.0	0.9	2	10/5/04	10/11/04	31.0		
Lead	6020	0.05	0.02	5	10/5/04	10/9/04	19.0		
Mercury	7471A	0.019	0.008	1	9/17/04	9/18/04	0.133		
Molybdenum	6020	0.205	0.008	5	10/5/04	10/9/04	0.770		
Nickel	6010B	4.0	3.0	2	10/5/04	10/11/04	15.6		
Selenium	6020	1.0	0.1	5	10/5/04	10/9/04	0.7	B	
Silver	6020	0.020	0.003	5	10/05/04	10/7/04	0.184		
Thallium	6020	0.021	0.002	5	10/5/04	10/9/04	0.069		
Vanadium	6010B	2.0	0.9	2	10/5/04	10/11/04	62.7		
Zinc	6010B	2.0	0.5	2	10/5/04	10/11/04	80.6		

% Solids: 54.2

Comments:

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client: Windward Environmental
 Project No.: 04-08-06-21
 Project Name: LDW Benthic Invertebrate Survey
 Matrix: SEDIMENT

Service Request: K2406226
 Date Collected: 08/13/04
 Date Received: 08/19/04
 Units: MG/KG
 Basis: Dry

Sample Name: LDW-B7b-S

Lab Code: K2406226-001

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Antimony	6020	0.06	0.03	5	10/05/04	10/7/04	0.38		N
Arsenic	6020	0.55	0.06	5	10/5/04	10/9/04	8.78		
Cadmium	6020	0.055	0.008	5	10/5/04	10/9/04	0.261		
Chromium	6010B	2.2	0.7	2	10/5/04	10/11/04	32.7		
Cobalt	6010B	2.2	2.2	2	10/5/04	10/11/04	9.4		
Copper	6010B	2.2	1.0	2	10/5/04	10/11/04	39.6		
Lead	6020	0.06	0.02	5	10/5/04	10/9/04	23.3		
Mercury	7471A	0.019	0.007	1	9/17/04	9/18/04	0.203		
Molybdenum	6020	0.220	0.009	5	10/5/04	10/9/04	0.472		
Nickel	6010B	4.4	3.3	2	10/5/04	10/11/04	18.4		
Selenium	6020	1.1	0.1	5	10/5/04	10/9/04	0.6	B	
Silver	6020	0.022	0.003	5	10/05/04	10/7/04	0.215		
Thallium	6020	0.022	0.002	5	10/5/04	10/9/04	0.108		
Vanadium	6010B	2.2	1.0	2	10/5/04	10/11/04	72.6		
Zinc	6010B	2.2	0.6	2	10/5/04	10/11/04	102		

% Solids: 50.5

Comments:

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client: Windward Environmental
 Project No.: 04-08-06-21
 Project Name: LDW Benthic Invertebrate Survey
 Matrix: SEDIMENT

Service Request: K2406226
 Date Collected: 08/10/04
 Date Received: 08/19/04
 Units: MG/KG
 Basis: Dry

Sample Name: LDW-B3b-S

Lab Code: K2406226-002

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Antimony	6020	0.05	0.03	5	10/05/04	10/7/04	122		N
Arsenic	6020	5.23	0.52	50	10/5/04	10/9/04	725		
Cadmium	6020	0.052	0.007	5	10/5/04	10/9/04	1.670		
Chromium	6010B	2.1	0.6	2	10/5/04	10/11/04	42.5		
Cobalt	6010B	2.1	2.1	2	10/5/04	10/11/04	31.5		
Copper	6010B	2.1	0.9	2	10/5/04	10/11/04	495		
Lead	6020	0.52	0.21	50	10/5/04	10/9/04	437		
Mercury	7471A	0.020	0.008	1	9/17/04	9/18/04	0.059		
Molybdenum	6020	0.209	0.008	5	10/5/04	10/9/04	62.0		
Nickel	6010B	4.2	3.1	2	10/5/04	10/11/04	22.9		
Selenium	6020	1.1	0.1	5	10/5/04	10/9/04	1.4		
Silver	6020	0.021	0.003	5	10/05/04	10/7/04	0.891		
Thallium	6020	0.021	0.002	5	10/5/04	10/9/04	0.236		
Vanadium	6010B	2.1	0.9	2	10/5/04	10/11/04	47.8		
Zinc	6010B	2.1	0.5	2	10/5/04	10/11/04	2080		

% Solids: 66.4

Comments:

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client: Windward Environmental
 Project No.: 04-08-06-21
 Project Name: LDW Benthic Invertebrate Survey
 Matrix: TISSUE

Service Request: K2406232
 Date Collected: 08/15/04
 Date Received: 08/19/04
 Units: mg/kg
 Basis: Wet

Sample Name: LDW-B1a-T

Lab Code: K2406232-001

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Antimony	6020	0.0042	0.0004	5	9/27/04	10/07/04	0.0074		
Arsenic	6020	0.042	0.003	5	9/27/04	10/07/04	0.623		
Cadmium	6020	0.0017	0.0004	5	9/27/04	10/07/04	0.0269		
Chromium	6010B	0.04	0.03	1	9/27/04	10/08/04	0.08		
Cobalt	6020	0.0017	0.0002	5	9/27/04	10/07/04	0.0514		
Copper	6020	0.008	0.006	5	9/27/04	10/07/04	4.380		
Lead	6020	0.0017	0.0006	5	9/27/04	10/07/04	0.5060		
Mercury	7471A	0.004	0.002	1	9/20/04	09/21/04	0.016		
Molybdenum	6020	0.0042	0.0003	5	9/27/04	10/07/04	0.0563		
Nickel	6020	0.017	0.003	5	9/27/04	10/07/04	0.094		
Selenium	7742	0.008	0.005	2	9/27/04	10/13/04	0.085		
Silver	6020	0.0017	0.0003	5	9/27/04	10/07/04	0.0129		
Thallium	6020	0.0017	0.0002	5	9/27/04	10/07/04	0.0006	B	
Vanadium	6010B	0.08	0.06	1	9/27/04	10/08/04	0.26		
Zinc	6010B	0.08	0.03	1	9/27/04	10/08/04	8.22		

% Solids: NA

Comments:

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client: Windward Environmental

Service Request: K2406232

Project No.: 04-08-06-21

Date Collected: 08/14/04

Project Name: LDW Benthic Invertebrate Survey

Date Received: 08/19/04

Matrix: TISSUE

Units: mg/kg

Basis: Wet

Sample Name: LDW-B4a-T

Lab Code: K2406232-002

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Antimony	6020	0.0047	0.0005	5	9/27/04	10/07/04	0.0943		
Arsenic	6020	0.047	0.003	5	9/27/04	10/07/04	2.450		
Cadmium	6020	0.0019	0.0005	5	9/27/04	10/07/04	0.0377		
Chromium	6010B	0.05	0.03	1	9/27/04	10/08/04	0.18		
Cobalt	6020	0.0019	0.0002	5	9/27/04	10/07/04	0.1370		
Copper	6020	0.009	0.007	5	9/27/04	10/07/04	9.280		
Lead	6020	0.0019	0.0007	5	9/27/04	10/07/04	0.5190		
Mercury	7471A	0.004	0.002	1	9/20/04	09/21/04	0.006		
Molybdenum	6020	0.0047	0.0003	5	9/27/04	10/07/04	0.1420		
Nickel	6020	0.019	0.003	5	9/27/04	10/07/04	0.184		
Selenium	7742	0.009	0.006	2	9/27/04	10/13/04	0.150		
Silver	6020	0.0019	0.0004	5	9/27/04	10/07/04	0.0827		
Thallium	6020	0.0019	0.0002	5	9/27/04	10/07/04	0.0015	B	
Vanadium	6010B	0.09	0.07	1	9/27/04	10/08/04	0.48		
Zinc	6010B	0.09	0.03	1	9/27/04	10/08/04	27.7		

% Solids: NA

Comments:

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client: Windward Environmental
 Project No.: 04-08-06-21
 Project Name: LDW Benthic Invertebrate Survey
 Matrix: TISSUE

Service Request: K2406232
 Date Collected: 08/14/04
 Date Received: 08/19/04
 Units: mg/kg
 Basis: Wet

Sample Name: LDW-B2a-T

Lab Code: K2406232-003

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Antimony	6020	0.0049	0.0005	5	9/27/04	10/07/04	0.0128		
Arsenic	6020	0.049	0.003	5	9/27/04	10/07/04	1.820		
Cadmium	6020	0.0019	0.0005	5	9/27/04	10/07/04	0.0361		
Chromium	6010B	0.05	0.03	1	9/27/04	10/08/04	0.27		
Cobalt	6020	0.0019	0.0002	5	9/27/04	10/07/04	0.1510		
Copper	6020	0.010	0.007	5	9/27/04	10/07/04	3.040		
Lead	6020	0.0019	0.0007	5	9/27/04	10/07/04	0.4880		
Mercury	7471A	0.004	0.002	1	9/20/04	09/21/04	0.007		
Molybdenum	6020	0.0049	0.0003	5	9/27/04	10/07/04	0.1440		
Nickel	6020	0.019	0.003	5	9/27/04	10/07/04	0.385		
Selenium	7742	0.010	0.006	2	9/27/04	10/13/04	0.179		
Silver	6020	0.0019	0.0004	5	9/27/04	10/07/04	0.0240		
Thallium	6020	0.0019	0.0002	5	9/27/04	10/07/04	0.0011	B	
Vanadium	6010B	0.10	0.07	1	9/27/04	10/08/04	0.54		
Zinc	6010B	0.10	0.03	1	9/27/04	10/08/04	17.5		

% Solids: NA

Comments:

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client: Windward Environmental

Service Request: K2406232

Project No.: 04-08-06-21

Date Collected: 08/11/04

Project Name: LDW Benthic Invertebrate Survey

Date Received: 08/19/04

Matrix: TISSUE

Units: mg/kg

Basis: Wet

Sample Name: LDW-B9b-T

Lab Code: K2406232-004

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Antimony	6020	0.0032	0.0003	5	9/27/04	10/07/04	0.0013	B	
Arsenic	6020	0.032	0.002	5	9/27/04	10/07/04	0.573		
Cadmium	6020	0.0013	0.0003	5	9/27/04	10/07/04	0.0175		
Chromium	6010B	0.03	0.02	1	9/27/04	10/08/04	0.15		
Cobalt	6020	0.0013	0.0001	5	9/27/04	10/07/04	0.0908		
Copper	6020	0.006	0.004	5	9/27/04	10/07/04	1.940		
Lead	6020	0.0013	0.0004	5	9/27/04	10/07/04	0.1430		
Mercury	7471A	0.003	0.001	1	9/20/04	09/21/04	0.005		
Molybdenum	6020	0.0032	0.0002	5	9/27/04	10/07/04	0.0613		
Nickel	6020	0.013	0.002	5	9/27/04	10/07/04	0.170		
Selenium	7742	0.006	0.004	2	9/27/04	10/13/04	0.055		
Silver	6020	0.0013	0.0003	5	9/27/04	10/07/04	0.0126		
Thallium	6020	0.0013	0.0001	5	9/27/04	10/07/04	0.0009	B	
Vanadium	6010B	0.06	0.04	1	9/27/04	10/08/04	0.40		
Zinc	6010B	0.06	0.02	1	9/27/04	10/08/04	9.55		

% Solids: NA

Comments:

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client: Windward Environmental
 Project No.: 04-08-06-21
 Project Name: LDW Benthic Invertebrate Survey
 Matrix: TISSUE

Service Request: K2406232
 Date Collected: 08/15/04
 Date Received: 08/19/04
 Units: mg/kg
 Basis: Wet

Sample Name: LDW-B6a-T

Lab Code: K2406232-005

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Antimony	6020	0.0078	0.0008	5	9/27/04	10/07/04	0.0354		
Arsenic	6020	0.078	0.005	5	9/27/04	10/07/04	1.710		
Cadmium	6020	0.0031	0.0008	5	9/27/04	10/07/04	0.0303		
Chromium	6010B	0.08	0.05	1	9/27/04	10/08/04	0.41		
Cobalt	6020	0.0031	0.0003	5	9/27/04	10/07/04	0.2920		
Copper	6020	0.016	0.011	5	9/27/04	10/07/04	3.850		
Lead	6020	0.0031	0.0011	5	9/27/04	10/07/04	1.5600		
Mercury	7471A	0.004	0.002	1	9/20/04	09/21/04	0.005		
Molybdenum	6020	0.0078	0.0005	5	9/27/04	10/07/04	0.1870		
Nickel	6020	0.031	0.005	5	9/27/04	10/07/04	0.355		
Selenium	7742	0.016	0.009	2	9/27/04	10/13/04	0.178		
Silver	6020	0.0031	0.0006	5	9/27/04	10/07/04	0.0302		
Thallium	6020	0.0031	0.0003	5	9/27/04	10/07/04	0.0022	B	
Vanadium	6010B	0.16	0.11	1	9/27/04	10/08/04	1.13		
Zinc	6010B	0.16	0.05	1	9/27/04	10/08/04	43.6		

% Solids: NA

Comments:

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client: Windward Environmental

Service Request: K2406232

Project No.: 04-08-06-21

Date Collected: 08/10/04

Project Name: LDW Benthic Invertebrate Survey

Date Received: 08/19/04

Matrix: TISSUE

Units: mg/kg

Basis: Wet

Sample Name: LDW-B3b-T

Lab Code: K2406232-008

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Antimony	6020	0.0075	0.0007	5	9/27/04	10/07/04	0.1720		
Arsenic	6020	0.075	0.004	5	9/27/04	10/07/04	17.4		
Cadmium	6020	0.0030	0.0007	5	9/27/04	10/07/04	0.1030		
Chromium	6010B	0.07	0.04	1	9/27/04	10/08/04	1.93		
Cobalt	6020	0.0030	0.0003	5	9/27/04	10/07/04	0.5520		
Copper	6020	0.015	0.011	5	9/27/04	10/07/04	13.2		
Lead	6020	0.0030	0.0011	5	9/27/04	10/07/04	4.7000		
Mercury	7471A	0.003	0.001	1	9/20/04	09/21/04	0.014		
Molybdenum	6020	0.0075	0.0004	5	9/27/04	10/07/04	0.4110		
Nickel	6020	0.030	0.004	5	9/27/04	10/07/04	0.939		
Selenium	7742	0.015	0.009	2	9/27/04	10/13/04	0.323		
Silver	6020	0.0030	0.0006	5	9/27/04	10/07/04	0.0907		
Thallium	6020	0.0030	0.0003	5	9/27/04	10/07/04	0.0049		
Vanadium	6010B	0.15	0.11	1	9/27/04	10/08/04	2.48		
Zinc	6010B	0.15	0.04	1	9/27/04	10/08/04	42.3		

% Solids: NA

Comments:

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client: Windward Environmental
 Project No.: 04-08-06-21
 Project Name: LDW Benthic Invertebrate Survey
 Matrix: TISSUE

Service Request: K2406232
 Date Collected: 08/13/04
 Date Received: 08/19/04
 Units: mg/kg
 Basis: Wet

Sample Name: LDW-B7b-T

Lab Code: K2406232-009

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Antimony	6020	0.0068	0.0007	5	9/27/04	10/07/04	0.0022	B	
Arsenic	6020	0.068	0.004	5	9/27/04	10/07/04	3.070		
Cadmium	6020	0.0027	0.0007	5	9/27/04	10/07/04	0.0424		
Chromium	6010B	0.07	0.04	1	9/27/04	10/08/04	1.20		
Cobalt	6020	0.0027	0.0003	5	9/27/04	10/07/04	0.3640		
Copper	6020	0.014	0.010	5	9/27/04	10/07/04	5.100		
Lead	6020	0.0027	0.0010	5	9/27/04	10/07/04	1.0300		
Mercury	7471A	0.003	0.001	1	9/20/04	09/21/04	0.008		
Molybdenum	6020	0.0068	0.0004	5	9/27/04	10/07/04	0.1280		
Nickel	6020	0.027	0.004	5	9/27/04	10/07/04	0.736		
Selenium	7742	0.014	0.008	2	9/27/04	10/13/04	0.328		
Silver	6020	0.0027	0.0005	5	9/27/04	10/07/04	0.0397		
Thallium	6020	0.0027	0.0003	5	9/27/04	10/07/04	0.0056		
Vanadium	6010B	0.14	0.10	1	9/27/04	10/08/04	3.04		
Zinc	6010B	0.14	0.04	1	9/27/04	10/08/04	15.7		

% Solids: NA

Comments:

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client: Windward Environmental
 Project No.: 04-08-06-21
 Project Name: LDW Benthic Invertebrate Survey
 Matrix: SEDIMENT

Service Request: K2406296
 Date Collected: 08/18/04
 Date Received: 08/21/04
 Units: MG/KG
 Basis: Dry

Sample Name: LDW-B6b-S

Lab Code: K2406296-001

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Antimony	6020	0.05	0.03	5	10/05/04	10/7/04	0.72		N
Arsenic	6020	0.48	0.05	5	10/5/04	10/9/04	13.6		
Cadmium	6020	0.048	0.007	5	10/5/04	10/9/04	0.492		
Chromium	6010B	1.9	0.6	2	10/5/04	10/11/04	33.8		
Cobalt	6010B	1.9	1.9	2	10/5/04	10/11/04	11.2		
Copper	6010B	1.9	0.9	2	10/5/04	10/11/04	80.8		
Lead	6020	0.05	0.02	5	10/5/04	10/9/04	40.9		
Mercury	7471A	0.012	0.005	1	9/16/04	9/16/04	0.177		
Molybdenum	6020	0.190	0.008	5	10/5/04	10/9/04	0.731		
Nickel	6010B	3.8	2.8	2	10/5/04	10/11/04	23.8		
Selenium	6020	1.0	0.1	5	10/5/04	10/9/04	0.9	B	
Silver	6020	0.019	0.003	5	10/05/04	10/7/04	0.460		
Thallium	6020	0.019	0.002	5	10/5/04	10/9/04	0.121		
Vanadium	6010B	1.9	0.9	2	10/5/04	10/11/04	70.7		
Zinc	6010B	1.9	0.5	2	10/5/04	10/11/04	157		

8 Solids: 47.8

Comments:

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client: Windward Environmental
 Project No.: 04-08-06-21
 Project Name: LDW Benthic Invertebrate Survey
 Matrix: SEDIMENT

Service Request: K2406296
 Date Collected: 08/19/04
 Date Received: 08/21/04
 Units: MG/KG
 Basis: Dry

Sample Name: LDW-B8b-S

Lab Code: K2406296-002

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Antimony	6020	0.05	0.03	5	10/05/04	10/7/04	0.16		N
Arsenic	6020	0.48	0.05	5	10/5/04	10/9/04	7.55		
Cadmium	6020	0.048	0.007	5	10/5/04	10/9/04	0.191		
Chromium	6010B	1.9	0.6	2	10/5/04	10/11/04	24.5		
Cobalt	6010B	1.9	1.9	2	10/5/04	10/11/04	8.6		
Copper	6010B	1.9	0.9	2	10/5/04	10/11/04	32.7		
Lead	6020	0.05	0.02	5	10/5/04	10/9/04	12.7		
Mercury	7471A	0.012	0.005	1	9/16/04	9/16/04	0.095		
Molybdenum	6020	0.193	0.008	5	10/5/04	10/9/04	0.505		
Nickel	6010B	3.8	2.9	2	10/5/04	10/11/04	17.3		
Selenium	6020	1.0	0.1	5	10/5/04	10/9/04	0.7	B	
Silver	6020	0.019	0.003	5	10/05/04	10/7/04	0.128		
Thallium	6020	0.019	0.002	5	10/5/04	10/9/04	0.073		
Vanadium	6010B	1.9	0.9	2	10/5/04	10/11/04	60.9		
Zinc	6010B	1.9	0.5	2	10/5/04	10/11/04	82.1		

* Solids: 47.0

Comments:

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client: Windward Environmental
 Project No.: 04-08-06-21
 Project Name: LDW Benthic Invertebrate Survey
 Matrix: SEDIMENT

Service Request: K2406296
 Date Collected: 08/19/04
 Date Received: 08/21/04
 Units: MG/KG
 Basis: Dry

Sample Name: LDW-B10b-S

Lab Code: K2406296-003

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Antimony	6020	0.05	0.03	5	10/05/04	10/7/04	0.09		N
Arsenic	6020	0.47	0.05	5	10/5/04	10/9/04	5.05		
Cadmium	6020	0.047	0.007	5	10/5/04	10/9/04	0.068		
Chromium	6010B	1.9	0.6	2	10/5/04	10/11/04	16.1		
Cobalt	6010B	1.9	1.9	2	10/5/04	10/11/04	6.9		
Copper	6010B	1.9	0.8	2	10/5/04	10/11/04	17.2		
Lead	6020	0.05	0.02	5	10/5/04	10/9/04	6.40		
Mercury	7471A	0.009	0.004	1	9/16/04	9/16/04	0.030		
Molybdenum	6020	0.186	0.007	5	10/5/04	10/9/04	0.399		
Nickel	6010B	3.8	2.8	2	10/5/04	10/11/04	11.4		
Selenium	6020	0.9	0.1	5	10/5/04	10/9/04	0.7	B	
Silver	6020	0.019	0.003	5	10/05/04	10/7/04	0.055		
Thallium	6020	0.019	0.002	5	10/5/04	10/9/04	0.040		
Vanadium	6010B	1.9	0.8	2	10/5/04	10/11/04	46.1		
Zinc	6010B	1.9	0.5	2	10/5/04	10/11/04	51.4		

* Solids: 59.1

Comments:

METALS

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INORGANIC ANALYSIS DATA SHEET

Client: Windward Environmental
 Project No.: 04-08-06-21
 Project Name: LDW Benthic Invertebrate Survey
 Matrix: TISSUE

Service Request: K2406297
 Date Collected: 08/18/04
 Date Received: 08/21/04
 Units: MG/KG
 Basis: Wet

Sample Name: LDW-B6b-T

Lab Code: K2406297-001

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Antimony	6020	0.0070	0.0007	5	9/22/04	10/7/04	0.0061	B	
Arsenic	6020	0.070	0.004	5	9/22/04	10/7/04	4.450		
Cadmium	6020	0.0028	0.0007	5	9/22/04	10/7/04	0.0501		
Chromium	6010B	0.07	0.04	1	9/22/04	9/24/04	1.08		
Cobalt	6020	0.0028	0.0003	5	9/22/04	10/7/04	0.3400		
Copper	6020	0.014	0.010	5	9/22/04	10/7/04	4.780		
Lead	6020	0.0028	0.0010	5	9/22/04	10/7/04	1.8100		
Mercury	7471A	0.004	0.002	1	9/16/04	9/16/04	0.010		
Molybdenum	6020	0.0070	0.0004	5	9/22/04	10/7/04	0.1350		
Nickel	6020	0.028	0.004	5	9/22/04	10/7/04	0.688		
Selenium	7742	0.014	0.008	2	9/22/04	10/13/04	0.368		
Silver	6020	0.0028	0.0006	5	9/22/04	10/7/04	0.0427		
Thallium	6020	0.0028	0.0003	5	9/22/04	10/7/04	0.0049		
Vanadium	6010B	0.14	0.10	1	9/22/04	9/24/04	2.80		
Zinc	6010B	0.14	0.04	1	9/22/04	9/24/04	21.7		

% Solids: NA

Comments:

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client: Windward Environmental
 Project No.: 04-08-06-21
 Project Name: LDW Benthic Invertebrate Survey
 Matrix: TISSUE

Service Request: K2406297
 Date Collected: 08/19/04
 Date Received: 08/21/04
 Units: MG/KG
 Basis: Wet

Sample Name: LDW-B8b-T

Lab Code: K2406297-002

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Antimony	6020	0.0046	0.0005	5	9/22/04	10/7/04	0.0049		
Arsenic	6020	0.046	0.003	5	9/22/04	10/7/04	1.990		
Cadmium	6020	0.0019	0.0005	5	9/22/04	10/7/04	0.0397		
Chromium	6010B	0.05	0.03	1	9/22/04	9/24/04	0.59		
Cobalt	6020	0.0019	0.0002	5	9/22/04	10/7/04	0.2280		
Copper	6020	0.009	0.006	5	9/22/04	10/7/04	5.250		
Lead	6020	0.0019	0.0006	5	9/22/04	10/7/04	0.2170		
Mercury	7471A	0.004	0.002	1	9/16/04	9/16/04	0.006		
Molybdenum	6020	0.0046	0.0003	5	9/22/04	10/7/04	0.1210		
Nickel	6020	0.019	0.003	5	9/22/04	10/7/04	0.660		
Selenium	7742	0.009	0.006	2	9/22/04	10/13/04	0.153		
Silver	6020	0.0019	0.0004	5	9/22/04	10/7/04	0.0295		
Thallium	6020	0.0019	0.0002	5	9/22/04	10/7/04	0.0018	B	
Vanadium	6010B	0.09	0.06	1	9/22/04	9/24/04	0.82		
Zinc	6010B	0.09	0.03	1	9/22/04	9/24/04	19.7		

% Solids: NA

Comments:

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client: Windward Environmental
 Project No.: 04-08-06-21
 Project Name: LDW Benthic Invertebrate Survey
 Matrix: TISSUE

Service Request: K2406297
 Date Collected: 08/19/04
 Date Received: 08/21/04
 Units: MG/KG
 Basis: Wet

Sample Name: LDW-B10b-T

Lab Code: K2406297-003

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Antimony	6020	0.0053	0.0005	5	9/22/04	10/7/04	0.0046	B	
Arsenic	6020	0.053	0.003	5	9/22/04	10/7/04	0.843		
Cadmium	6020	0.0021	0.0005	5	9/22/04	10/7/04	0.0599		
Chromium	6010B	0.05	0.03	1	9/22/04	9/24/04	0.28		
Cobalt	6020	0.0021	0.0002	5	9/22/04	10/7/04	0.1290		
Copper	6020	0.011	0.007	5	9/22/04	10/7/04	9.050		
Lead	6020	0.0021	0.0007	5	9/22/04	10/7/04	0.2020		
Mercury	7471A	0.004	0.002	1	9/16/04	9/16/04	0.004		
Molybdenum	6020	0.0053	0.0003	5	9/22/04	10/7/04	0.0758		
Nickel	6020	0.021	0.003	5	9/22/04	10/7/04	1.060		
Selenium	7742	0.011	0.006	2	9/22/04	10/13/04	0.086		
Silver	6020	0.0021	0.0004	5	9/22/04	10/7/04	0.0279		
Thallium	6020	0.0021	0.0002	5	9/22/04	10/7/04	0.0012	B	
Vanadium	6010B	0.11	0.07	1	9/22/04	9/24/04	0.49		
Zinc	6010B	0.11	0.03	1	9/22/04	9/24/04	11.1		

% Solids: NA

Comments:

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client: Windward Environmental
 Project No.: 04-08-06-21
 Project Name: LDW Benthic Invertebrate Survey
 Matrix: SEDIMENT

Service Request: K2406516
 Date Collected: 08/27/04
 Date Received: 08/30/04
 Units: MG/KG
 Basis: Dry

Sample Name: LDW-C4-S

Lab Code: K2406516-001

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Antimony	6020	0.05	0.02	5	9/9/04	9/17/04	20.2		N
Arsenic	6020	0.54	0.05	5	9/9/04	9/29/04	49.0		
Cadmium	6020	0.05	0.01	5	9/9/04	9/29/04	0.20		
Chromium	6020	0.21	0.04	5	9/9/04	9/29/04	19.9		
Cobalt	6020	0.02	0.01	5	9/9/04	9/29/04	5.43		
Copper	6020	0.11	0.02	5	9/9/04	9/29/04	118		
Lead	6020	0.05	0.02	5	9/9/04	9/29/04	59.6		*
Mercury	7471A	0.013	0.005	1	9/17/04	9/18/04	0.041		
Molybdenum	6020	0.054	0.009	5	9/9/04	9/29/04	3.710		*
Nickel	6020	0.21	0.04	5	9/9/04	9/29/04	9.73		
Selenium	6020	1.1	0.1	5	9/9/04	9/29/04	0.5	B	
Silver	6020	0.021	0.003	5	9/9/04	9/17/04	0.485		
Thallium	6020	0.021	0.002	5	9/9/04	9/29/04	0.053		
Vanadium	6010B	2.1	0.9	2	9/9/04	9/30/04	43.5		
Zinc	6010B	2.1	0.5	2	9/9/04	9/30/04	236		*N

‡ Solids: 66.8

Comments:

METALS

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INORGANIC ANALYSIS DATA SHEET

Client: Windward Environmental
 Project No.: 04-08-06-21
 Project Name: LDW Benthic Invertebrate Survey
 Matrix: SEDIMENT

Service Request: K2406516
 Date Collected: 08/25/04
 Date Received: 08/30/04
 Units: MG/KG
 Basis: Dry

Sample Name: LDW-C10-S2

Lab Code: K2406516-002

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Antimony	6020	0.05	0.02	5	9/9/04	9/17/04	0.79		N
Arsenic	6020	1.07	0.11	10	9/9/04	9/29/04	10.8		
Cadmium	6020	0.11	0.01	10	9/9/04	9/29/04	0.16		
Chromium	6020	0.43	0.09	10	9/9/04	9/29/04	14.7		
Cobalt	6020	0.04	0.02	10	9/9/04	9/29/04	7.37		
Copper	6020	0.21	0.04	10	9/9/04	9/29/04	22.9		
Lead	6020	0.11	0.04	10	9/9/04	9/29/04	33.0		*
Mercury	7471A	0.015	0.006	1	9/17/04	9/18/04	0.036		
Molybdenum	6020	0.107	0.017	10	9/9/04	9/29/04	0.902		*
Nickel	6020	0.43	0.09	10	9/9/04	9/29/04	11.4		
Selenium	6020	2.1	0.2	10	9/9/04	9/29/04	0.6	B	
Silver	6020	0.021	0.003	5	9/9/04	9/17/04	0.155		
Thallium	6020	0.043	0.004	10	9/9/04	9/29/04	0.111		
Vanadium	6010B	2.1	1.0	2	9/9/04	9/30/04	65.1		
Zinc	6010B	2.1	0.5	2	9/9/04	9/30/04	143		*N

% Solids: 51.5

Comments:

METALS

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INORGANIC ANALYSIS DATA SHEET

Client: Windward Environmental
 Project No.: 04-08-06-21
 Project Name: LDW Benthic Invertebrate Survey
 Matrix: SEDIMENT

Service Request: K2406516
 Date Collected: 08/25/04
 Date Received: 08/30/04
 Units: MG/KG
 Basis: Dry

Sample Name: LDW-C10-S1

Lab Code: K2406516-003

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Antimony	6020	0.05	0.02	5	9/9/04	9/17/04	2.17		N
Arsenic	6020	1.09	0.11	10	9/9/04	9/29/04	11.9		
Cadmium	6020	0.11	0.02	10	9/9/04	9/29/04	0.21		
Chromium	6020	0.44	0.09	10	9/9/04	9/29/04	17.4		
Cobalt	6020	0.04	0.02	10	9/9/04	9/29/04	7.92		
Copper	6020	0.22	0.04	10	9/9/04	9/29/04	26.7		
Lead	6020	0.11	0.04	10	9/9/04	9/29/04	34.2		*
Mercury	7471A	0.016	0.006	1	9/17/04	9/18/04	0.042		
Molybdenum	6020	0.109	0.017	10	9/9/04	9/29/04	0.994		*
Nickel	6020	0.44	0.09	10	9/9/04	9/29/04	14.3		
Selenium	6020	2.2	0.2	10	9/9/04	9/29/04	0.6	B	
Silver	6020	0.022	0.003	5	9/9/04	9/17/04	0.157		
Thallium	6020	0.044	0.004	10	9/9/04	9/29/04	0.060		
Vanadium	6010B	2.2	1.0	2	9/9/04	9/30/04	64.8		
Zinc	6010B	2.2	0.5	2	9/9/04	9/30/04	136		*N

% Solids: 50.4

Comments:

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client: Windward Environmental
 Project No.: 04-08-06-21
 Project Name: LDW Benthic Invertebrate Survey
 Matrix: SEDIMENT

Service Request: K2406516
 Date Collected: 08/25/04
 Date Received: 08/30/04
 Units: MG/KG
 Basis: Dry

Sample Name: LDW-C6-S

Lab Code: K2406516-004

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Antimony	6020	0.06	0.02	5	9/9/04	9/17/04	2.04		N
Arsenic	6020	0.59	0.06	5	9/9/04	9/29/04	5.52		
Cadmium	6020	0.06	0.01	5	9/9/04	9/29/04	0.12		
Chromium	6020	0.24	0.05	5	9/9/04	9/29/04	12.0		
Cobalt	6020	0.02	0.01	5	9/9/04	9/29/04	3.91		
Copper	6020	0.12	0.02	5	9/9/04	9/29/04	22.1		
Lead	6020	0.06	0.02	5	9/9/04	9/29/04	91.5		*
Mercury	7471A	0.015	0.006	1	9/17/04	9/18/04	0.038		
Molybdenum	6020	0.059	0.010	5	9/9/04	9/29/04	0.543		*
Nickel	6020	0.24	0.05	5	9/9/04	9/29/04	8.96		
Selenium	6020	1.2	0.1	5	9/9/04	9/29/04	0.4	B	
Silver	6020	0.023	0.004	5	9/9/04	9/17/04	0.083		
Thallium	6020	0.024	0.002	5	9/9/04	9/29/04	0.047		
Vanadium	6010B	2.3	1.1	2	9/9/04	9/30/04	45.1		
Zinc	6010B	2.3	0.6	2	9/9/04	9/30/04	64.8		*N

% Solids: 70.2

Comments:

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client: Windward Environmental
 Project No.: 04-08-06-21
 Project Name: LDW Benthic Invertebrate Survey
 Matrix: SEDIMENT

Service Request: K2406516
 Date Collected: 08/25/04
 Date Received: 08/30/04
 Units: MG/KG
 Basis: Dry

Sample Name: LDW-C9-S

Lab Code: K2406516-005

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Antimony	6020	0.05	0.02	5	9/9/04	9/17/04	0.45		N
Arsenic	6020	0.53	0.05	5	9/9/04	9/29/04	3.94		
Cadmium	6020	0.05	0.01	5	9/9/04	9/29/04	0.06		
Chromium	6020	0.21	0.04	5	9/9/04	9/29/04	12.2		
Cobalt	6020	0.02	0.01	5	9/9/04	9/29/04	3.88		
Copper	6020	0.11	0.02	5	9/9/04	9/29/04	18.0		
Lead	6020	0.05	0.02	5	9/9/04	9/29/04	51.2		*
Mercury	7471A	0.017	0.007	1	9/17/04	9/18/04	0.076		
Molybdenum	6020	0.053	0.008	5	9/9/04	9/29/04	0.486		*
Nickel	6020	0.21	0.04	5	9/9/04	9/29/04	11.3		
Selenium	6020	1.1	0.1	5	9/9/04	9/29/04	0.3	B	
Silver	6020	0.022	0.003	5	9/9/04	9/17/04	0.084		
Thallium	6020	0.021	0.002	5	9/9/04	9/29/04	0.037		
Vanadium	6010B	2.2	1.0	2	9/9/04	9/30/04	41.8		
Zinc	6010B	2.2	0.5	2	9/9/04	9/30/04	55.8		*N

% Solids: 75.7

Comments:

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client: Windward Environmental
 Project No.: 04-08-06-21
 Project Name: LDW Benthic Invertebrate Survey
 Matrix: SEDIMENT

Service Request: K2406516
 Date Collected: 08/26/04
 Date Received: 08/30/04
 Units: MG/KG
 Basis: Dry

Sample Name: LDW-C7-S1

Lab Code: K2406516-006

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Antimony	6020	0.05	0.02	5	9/9/04	9/17/04	6.12		N
Arsenic	6020	0.53	0.05	5	9/9/04	9/29/04	6.17		
Cadmium	6020	0.05	0.01	5	9/9/04	9/29/04	0.31		
Chromium	6020	0.21	0.04	5	9/9/04	9/29/04	11.6		
Cobalt	6020	0.02	0.01	5	9/9/04	9/29/04	3.99		
Copper	6020	0.11	0.02	5	9/9/04	9/29/04	22.0		
Lead	6020	0.05	0.02	5	9/9/04	9/29/04	32.0		*
Mercury	7471A	0.017	0.007	1	9/17/04	9/18/04	0.030		
Molybdenum	6020	0.053	0.008	5	9/9/04	9/29/04	1.150		*
Nickel	6020	0.21	0.04	5	9/9/04	9/29/04	13.1		
Selenium	6020	1.1	0.1	5	9/9/04	9/29/04	0.4	B	
Silver	6020	0.021	0.003	5	9/9/04	9/17/04	0.510		
Thallium	6020	0.021	0.002	5	9/9/04	9/29/04	0.050		
Vanadium	6010B	2.1	1.0	2	9/9/04	9/30/04	45.9		
Zinc	6010B	2.1	0.5	2	9/9/04	9/30/04	101		*N

% Solids: 78.0

Comments:

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client: Windward Environmental
 Project No.: 04-08-06-21
 Project Name: LDW Benthic Invertebrate Survey
 Matrix: SEDIMENT

Service Request: K2406516
 Date Collected: 08/27/04
 Date Received: 08/30/04
 Units: MG/KG
 Basis: Dry

Sample Name: LDW-C3-S2

Lab Code: K2406516-007

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Antimony	6020	0.05	0.02	5	9/9/04	9/17/04	1.04		N
Arsenic	6020	0.55	0.05	5	9/9/04	9/29/04	3.94		
Cadmium	6020	0.05	0.01	5	9/9/04	9/29/04	0.18		
Chromium	6020	0.22	0.04	5	9/9/04	9/29/04	11.6		
Cobalt	6020	0.02	0.01	5	9/9/04	9/29/04	2.97		
Copper	6020	0.11	0.02	5	9/9/04	9/29/04	22.4		
Lead	6020	0.05	0.02	5	9/9/04	9/29/04	59.0		*
Mercury	7471A	0.019	0.008	1	9/17/04	9/18/04	0.029		
Molybdenum	6020	0.055	0.009	5	9/9/04	9/29/04	0.619		*
Nickel	6020	0.22	0.04	5	9/9/04	9/29/04	9.20		
Selenium	6020	1.1	0.1	5	9/9/04	9/29/04	0.3	B	
Silver	6020	0.021	0.003	5	9/9/04	9/17/04	0.070		
Thallium	6020	0.022	0.002	5	9/9/04	9/29/04	0.055		
Vanadium	6010B	2.1	1.0	2	9/9/04	9/30/04	37.5		
Zinc	6010B	2.1	0.5	2	9/9/04	9/30/04	198		*N

% Solids: 75.2

Comments:

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client: Windward Environmental
 Project No.: 04-08-06-21
 Project Name: LDW Benthic Invertebrate Survey
 Matrix: SEDIMENT

Service Request: K2406516
 Date Collected: 08/26/04
 Date Received: 08/30/04
 Units: MG/KG
 Basis: Dry

Sample Name: LDW-C7-S2

Lab Code: K2406516-008

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Antimony	6020	0.05	0.02	5	9/9/04	9/17/04	0.33		N
Arsenic	6020	0.53	0.05	5	9/9/04	9/29/04	6.80		
Cadmium	6020	0.05	0.01	5	9/9/04	9/29/04	0.19		
Chromium	6020	0.21	0.04	5	9/9/04	9/29/04	13.1		
Cobalt	6020	0.02	0.01	5	9/9/04	9/29/04	4.24		
Copper	6020	0.11	0.02	5	9/9/04	9/29/04	20.9		
Lead	6020	0.05	0.02	5	9/9/04	9/29/04	17.5		*
Mercury	7471A	0.018	0.007	1	9/17/04	9/18/04	0.039		
Molybdenum	6020	0.053	0.008	5	9/9/04	9/29/04	0.390		*
Nickel	6020	0.21	0.04	5	9/9/04	9/29/04	13.6		
Selenium	6020	1.1	0.1	5	9/9/04	9/29/04	0.4	B	
Silver	6020	0.021	0.003	5	9/9/04	9/17/04	0.139		
Thallium	6020	0.021	0.002	5	9/9/04	9/29/04	0.053		
Vanadium	6010B	2.1	1.0	2	9/9/04	9/30/04	31.1		
Zinc	6010B	2.1	0.5	2	9/9/04	9/30/04	60.3		*N

% Solids: 78.3

Comments:

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client: Windward Environmental
 Project No.: 04-08-06-21
 Project Name: LDW Benthic Invertebrate Survey
 Matrix: SEDIMENT

Service Request: K2406516
 Date Collected: 08/26/04
 Date Received: 08/30/04
 Units: MG/KG
 Basis: Dry

Sample Name: LDW-C8-S

Lab Code: K2406516-009

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Antimony	6020	0.06	0.02	5	9/9/04	9/17/04	2.64		N
Arsenic	6020	0.59	0.06	5	9/9/04	9/29/04	10.5		
Cadmium	6020	0.06	0.01	5	9/9/04	9/29/04	1.40		
Chromium	6020	0.24	0.05	5	9/9/04	9/29/04	27.4		
Cobalt	6020	0.02	0.01	5	9/9/04	9/29/04	5.78		
Copper	6020	0.12	0.02	5	9/9/04	9/29/04	54.0		
Lead	6020	0.06	0.02	5	9/9/04	9/29/04	181		*
Mercury	7471A	0.019	0.007	1	9/17/04	9/18/04	0.211		
Molybdenum	6020	0.059	0.009	5	9/9/04	9/29/04	2.430		*
Nickel	6020	0.24	0.05	5	9/9/04	9/29/04	19.6		
Selenium	6020	1.2	0.1	5	9/9/04	9/29/04	0.6	B	
Silver	6020	0.024	0.004	5	9/9/04	9/17/04	0.980		
Thallium	6020	0.024	0.002	5	9/9/04	9/29/04	0.079		
Vanadium	6010B	2.4	1.1	2	9/9/04	9/30/04	54.9		
Zinc	6010B	2.4	0.6	2	9/9/04	9/30/04	275		*N

% Solids: 60.3

Comments:

METALS

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INORGANIC ANALYSIS DATA SHEET

Client: Windward Environmental
 Project No.: 04-08-06-21
 Project Name: LDW Benthic Invertebrate Survey
 Matrix: SEDIMENT

Service Request: K2406516
 Date Collected: 08/27/04
 Date Received: 08/30/04
 Units: MG/KG
 Basis: Dry

Sample Name: LDW-C5-S

Lab Code: K2406516-010

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Antimony	6020	0.05	0.02	5	9/9/04	9/17/04	0.67		N
Arsenic	6020	0.55	0.05	5	9/9/04	9/29/04	4.72		
Cadmium	6020	0.05	0.01	5	9/9/04	9/29/04	0.07		
Chromium	6020	0.22	0.04	5	9/9/04	9/29/04	10.4		
Cobalt	6020	0.02	0.01	5	9/9/04	9/29/04	3.92		
Copper	6020	0.11	0.02	5	9/9/04	9/29/04	17.4		
Lead	6020	0.05	0.02	5	9/9/04	9/29/04	22.5		*
Mercury	7471A	0.010	0.004	1	9/17/04	9/18/04	0.021		
Molybdenum	6020	0.055	0.009	5	9/9/04	9/29/04	0.495		*
Nickel	6020	0.22	0.04	5	9/9/04	9/29/04	11.3		
Selenium	6020	1.1	0.1	5	9/9/04	9/29/04	0.3	B	
Silver	6020	0.022	0.003	5	9/9/04	9/17/04	0.077		
Thallium	6020	0.022	0.002	5	9/9/04	9/29/04	0.044		
Vanadium	6010B	2.2	1.0	2	9/9/04	9/30/04	41.5		
Zinc	6010B	2.2	0.5	2	9/9/04	9/30/04	70.4		*N

% Solids: 74.1

Comments:

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client: Windward Environmental
 Project No.: 04-08-06-21
 Project Name: LDW Benthic Invertebrate Survey
 Matrix: SEDIMENT

Service Request: K2406516
 Date Collected: 08/27/04
 Date Received: 08/30/04
 Units: MG/KG
 Basis: Dry

Sample Name: LDW-C3-S1

Lab Code: K2406516-011

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Antimony	6020	0.06	0.02	5	9/9/04	9/17/04	2.28		N
Arsenic	6020	0.55	0.06	5	9/9/04	9/29/04	4.63		
Cadmium	6020	0.06	0.01	5	9/9/04	9/29/04	0.22		
Chromium	6020	0.22	0.04	5	9/9/04	9/29/04	12.2		
Cobalt	6020	0.02	0.01	5	9/9/04	9/29/04	3.12		
Copper	6020	0.11	0.02	5	9/9/04	9/29/04	98.5		
Lead	6020	0.06	0.02	5	9/9/04	9/29/04	134		*
Mercury	7471A	0.011	0.005	1	9/17/04	9/18/04	0.047		
Molybdenum	6020	0.055	0.009	5	9/9/04	9/29/04	0.455		*
Nickel	6020	0.22	0.04	5	9/9/04	9/29/04	8.36		
Selenium	6020	1.1	0.1	5	9/9/04	9/29/04	0.4	B	
Silver	6020	0.023	0.003	5	9/9/04	9/17/04	0.094		
Thallium	6020	0.022	0.002	5	9/9/04	9/29/04	0.054		
Vanadium	6010B	2.3	1.0	2	9/9/04	9/30/04	39.6		
Zinc	6010B	2.3	0.6	2	9/9/04	9/30/04	199		*N

% Solids: 72.2

Comments:

METALS

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INORGANIC ANALYSIS DATA SHEET

Client: Windward Environmental
 Project No.: 04-08-06-21
 Project Name: LDW Benthic Invertebrate Survey
 Matrix: SEDIMENT

Service Request: K2406516
 Date Collected: 08/26/04
 Date Received: 08/30/04
 Units: MG/KG
 Basis: Dry

Sample Name: LDW-C2-S1

Lab Code: K2406516-012

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Antimony	6020	0.05	0.02	5	9/9/04	9/17/04	0.76		N
Arsenic	6020	0.49	0.05	5	9/9/04	9/29/04	5.79		
Cadmium	6020	0.05	0.01	5	9/9/04	9/29/04	0.14		
Chromium	6020	0.20	0.04	5	9/9/04	9/29/04	11.4		
Cobalt	6020	0.02	0.01	5	9/9/04	9/29/04	3.26		
Copper	6020	0.10	0.02	5	9/9/04	9/29/04	21.6		
Lead	6020	0.05	0.02	5	9/9/04	9/29/04	10.9		*
Mercury	7471A	0.015	0.006	1	9/17/04	9/18/04	0.041		
Molybdenum	6020	0.049	0.008	5	9/9/04	9/29/04	1.250		*
Nickel	6020	0.20	0.04	5	9/9/04	9/29/04	6.40		
Selenium	6020	1.0	0.1	5	9/9/04	9/29/04	0.6	B	
Silver	6020	0.020	0.003	5	9/9/04	9/17/04	0.164		
Thallium	6020	0.020	0.002	5	9/9/04	9/29/04	0.064		
Vanadium	6010B	2.0	0.9	2	9/9/04	9/30/04	44.7		
Zinc	6010B	2.0	0.5	2	9/9/04	9/30/04	45.8		*N

% Solids: 55.9

Comments:

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client: Windward Environmental
 Project No.: 04-08-06-21
 Project Name: LDW Benthic Invertebrate Survey
 Matrix: SEDIMENT

Service Request: K2406516
 Date Collected: 08/26/04
 Date Received: 08/30/04
 Units: MG/KG
 Basis: Dry

Sample Name: LDW-C2-S2

Lab Code: K2406516-013

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Antimony	6020	0.06	0.02	5	9/9/04	9/17/04	0.15		N
Arsenic	6020	0.59	0.06	5	9/9/04	9/29/04	3.13		
Cadmium	6020	0.06	0.01	5	9/9/04	9/29/04	0.11		
Chromium	6020	0.24	0.05	5	9/9/04	9/29/04	9.84		
Cobalt	6020	0.02	0.01	5	9/9/04	9/29/04	3.07		
Copper	6020	0.12	0.02	5	9/9/04	9/29/04	14.8		
Lead	6020	0.06	0.02	5	9/9/04	9/29/04	7.94		*
Mercury	7471A	0.018	0.007	1	9/17/04	9/18/04	0.066		
Molybdenum	6020	0.059	0.009	5	9/9/04	9/29/04	0.666		*
Nickel	6020	0.24	0.05	5	9/9/04	9/29/04	6.31		
Selenium	6020	1.2	0.1	5	9/9/04	9/29/04	0.4	B	
Silver	6020	0.024	0.004	5	9/9/04	9/17/04	0.117		
Thallium	6020	0.024	0.002	5	9/9/04	9/29/04	0.049		
Vanadium	6010B	2.4	1.1	2	9/9/04	9/30/04	43.7		
Zinc	6010B	2.4	0.6	2	9/9/04	9/30/04	36.4		*N

% Solids: 70.4

Comments:

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client: Windward Environmental
 Project No.: 04-08-06-21
 Project Name: LDW Benthic Invertebrate Survey
 Matrix: SEDIMENT

Service Request: K2406516
 Date Collected: 08/26/04
 Date Received: 08/30/04
 Units: MG/KG
 Basis: Dry

Sample Name: LDW-C1-S

Lab Code: K2406516-014

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Antimony	6020	0.06	0.02	5	9/9/04	9/17/04	0.21		N
Arsenic	6020	0.55	0.05	5	9/9/04	9/29/04	3.53		
Cadmium	6020	0.05	0.01	5	9/9/04	9/29/04	0.05	B	
Chromium	6020	0.22	0.04	5	9/9/04	9/29/04	9.10		
Cobalt	6020	0.02	0.01	5	9/9/04	9/29/04	3.83		
Copper	6020	0.11	0.02	5	9/9/04	9/29/04	17.6		
Lead	6020	0.05	0.02	5	9/9/04	9/29/04	13.1		*
Mercury	7471A	0.014	0.006	1	9/17/04	9/18/04	0.053		
Molybdenum	6020	0.055	0.009	5	9/9/04	9/29/04	0.494		*
Nickel	6020	0.22	0.04	5	9/9/04	9/29/04	7.52		
Selenium	6020	1.1	0.1	5	9/9/04	9/29/04	0.4	B	
Silver	6020	0.022	0.003	5	9/9/04	9/17/04	0.040		
Thallium	6020	0.022	0.002	5	9/9/04	9/29/04	0.036		
Vanadium	6010B	2.2	1.0	2	9/9/04	9/30/04	44.2		
Zinc	6010B	2.2	0.6	2	9/9/04	9/30/04	42.6		*N

% Solids: 74.2

Comments:

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client: Windward Environmental

Service Request: K2406517

Project No.: 04-08-06-21

Date Collected: 08/26/04

Project Name: LDW

Date Received: 08/28/04

Matrix: TISSUE

Units: MG/KG

Basis: Wet

Sample Name: LDW-C8-T

Lab Code: K2406517-001

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Antimony	6020	0.008	0.001	5	9/9/04	9/20/04	0.072		
Arsenic	6020	0.081	0.005	5	9/9/04	9/20/04	5.440		
Cadmium	6020	0.003	0.001	5	9/9/04	9/20/04	0.148		
Chromium	6010B	0.08	0.05	1	9/9/04	9/13/04	1.32		
Cobalt	6020	0.0033	0.0003	5	9/9/04	9/20/04	0.3530		
Copper	6020	0.02	0.01	5	9/9/04	9/20/04	5.39		
Lead	6020	0.003	0.001	5	9/9/04	9/20/04	6.370		
Mercury	7471A	0.004	0.002	1	9/21/04	9/21/04	0.022		
Molybdenum	6020	0.0081	0.0005	5	9/9/04	9/20/04	0.3070		
Nickel	6020	0.033	0.005	5	9/9/04	9/20/04	1.090		
Selenium	7742	0.016	0.010	2	9/9/04	9/28/04	0.239		
Silver	6020	0.003	0.001	5	9/9/04	9/20/04	0.093		
Thallium	6020	0.0033	0.0003	5	9/9/04	9/20/04	0.0042		
Vanadium	6010B	0.16	0.11	1	9/9/04	9/13/04	2.65		
Zinc	6010B	0.16	0.05	1	9/9/04	9/13/04	32.3		

* Solids: NA

Comments:

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client: Windward Environmental

Service Request: K2406517

Project No.: 04-08-06-21

Date Collected: 08/26/04

Project Name: LDW

Date Received: 08/28/04

Matrix: TISSUE

Units: MG/KG

Basis: Wet

Sample Name: LDW-C7-T2

Lab Code: K2406517-002

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Antimony	6020	0.008	0.001	5	9/9/04	9/20/04	0.023		
Arsenic	6020	0.077	0.005	5	9/9/04	9/20/04	3.860		
Cadmium	6020	0.003	0.001	5	9/9/04	9/20/04	0.111		
Chromium	6010B	0.08	0.05	1	9/9/04	9/13/04	0.75		
Cobalt	6020	0.0031	0.0003	5	9/9/04	9/20/04	0.2560		
Copper	6020	0.02	0.01	5	9/9/04	9/20/04	4.02		
Lead	6020	0.003	0.001	5	9/9/04	9/20/04	1.140		
Mercury	7471A	0.003	0.001	1	9/21/04	9/21/04	0.014		
Molybdenum	6020	0.0077	0.0005	5	9/9/04	9/20/04	0.2080		
Nickel	6020	0.031	0.005	5	9/9/04	9/20/04	0.614		
Selenium	7742	0.015	0.009	2	9/9/04	9/28/04	0.237		
Silver	6020	0.003	0.001	5	9/9/04	9/20/04	0.056		
Thallium	6020	0.0031	0.0003	5	9/9/04	9/20/04	0.0020	B	
Vanadium	6010B	0.15	0.11	1	9/9/04	9/13/04	1.33		
Zinc	6010B	0.15	0.05	1	9/9/04	9/13/04	21.6		

% Solids: NA

Comments:

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client: Windward Environmental

Service Request: K2406517

Project No.: 04-08-06-21

Date Collected: 08/26/04

Project Name: LDW

Date Received: 08/28/04

Matrix: TISSUE

Units: MG/KG

Basis: Wet

Sample Name: LDW-C7-T1

Lab Code: K2406517-003

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Antimony	6020	0.007	0.001	5	9/9/04	9/20/04	0.022		
Arsenic	6020	0.075	0.004	5	9/9/04	9/20/04	2.820		
Cadmium	6020	0.003	0.001	5	9/9/04	9/20/04	0.124		
Chromium	6010B	0.07	0.04	1	9/9/04	9/13/04	0.88		
Cobalt	6020	0.0030	0.0003	5	9/9/04	9/20/04	0.2630		
Copper	6020	0.01	0.01	5	9/9/04	9/20/04	4.12		
Lead	6020	0.003	0.001	5	9/9/04	9/20/04	1.130		
Mercury	7471A	0.004	0.002	1	9/21/04	9/21/04	0.015		
Molybdenum	6020	0.0075	0.0004	5	9/9/04	9/20/04	0.2190		
Nickel	6020	0.030	0.004	5	9/9/04	9/20/04	0.642		
Selenium	7742	0.015	0.009	2	9/9/04	9/28/04	0.261		
Silver	6020	0.003	0.001	5	9/9/04	9/20/04	0.056		
Thallium	6020	0.0030	0.0003	5	9/9/04	9/20/04	0.0013	B	
Vanadium	6010B	0.15	0.10	1	9/9/04	9/13/04	1.15		
Zinc	6010B	0.15	0.04	1	9/9/04	9/13/04	24.6		

% Solids: NA

Comments:

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client: Windward Environmental

Service Request: K2406517

Project No.: 04-08-06-21

Date Collected: 08/26/04

Project Name: LDW

Date Received: 08/28/04

Matrix: TISSUE

Units: MG/KG

Basis: Wet

Sample Name: LDW-C1-T

Lab Code: K2406517-004

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Antimony	6020	0.007	0.001	5	9/9/04	9/20/04	0.011		
Arsenic	6020	0.069	0.004	5	9/9/04	9/20/04	1.300		
Cadmium	6020	0.003	0.001	5	9/9/04	9/20/04	0.123		
Chromium	6010B	0.07	0.04	1	9/9/04	9/13/04	0.54		
Cobalt	6020	0.0028	0.0003	5	9/9/04	9/20/04	0.2820		
Copper	6020	0.01	0.01	5	9/9/04	9/20/04	6.03		
Lead	6020	0.003	0.001	5	9/9/04	9/20/04	0.446		
Mercury	7471A	0.004	0.002	1	9/21/04	9/21/04	0.015		
Molybdenum	6020	0.0069	0.0004	5	9/9/04	9/20/04	0.2280		
Nickel	6020	0.028	0.004	5	9/9/04	9/20/04	0.539		
Selenium	7742	0.014	0.008	2	9/9/04	9/28/04	0.313		
Silver	6020	0.003	0.001	5	9/9/04	9/20/04	0.021		
Thallium	6020	0.0028	0.0003	5	9/9/04	9/20/04	0.0009	B	
Vanadium	6010B	0.14	0.10	1	9/9/04	9/13/04	0.69		
Zinc	6010B	0.14	0.04	1	9/9/04	9/13/04	19.3		

% Solids: NA

Comments:

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client: Windward Environmental

Service Request: K2406517

Project No.: 04-08-06-21

Date Collected: 08/26/04

Project Name: LDW

Date Received: 08/28/04

Matrix: TISSUE

Units: MG/KG

Basis: Wet

Sample Name: LDW-C2-T1

Lab Code: K2406517-005

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Antimony	6020	0.007	0.001	5	9/9/04	9/20/04	0.010		
Arsenic	6020	0.066	0.004	5	9/9/04	9/20/04	1.840		
Cadmium	6020	0.003	0.001	5	9/9/04	9/20/04	0.064		
Chromium	6010B	0.07	0.04	1	9/9/04	9/13/04	0.36		
Cobalt	6020	0.0026	0.0003	5	9/9/04	9/20/04	0.1470		
Copper	6020	0.01	0.01	5	9/9/04	9/20/04	4.00		
Lead	6020	0.003	0.001	5	9/9/04	9/20/04	0.368		
Mercury	7471A	0.004	0.002	1	9/21/04	9/21/04	0.011		
Molybdenum	6020	0.0066	0.0004	5	9/9/04	9/20/04	0.1990		
Nickel	6020	0.026	0.004	5	9/9/04	9/20/04	0.313		
Selenium	7742	0.013	0.008	2	9/9/04	9/28/04	0.259		
Silver	6020	0.003	0.001	5	9/9/04	9/20/04	0.019		
Thallium	6020	0.0026	0.0003	5	9/9/04	9/20/04	0.0011	B	
Vanadium	6010B	0.13	0.09	1	9/9/04	9/13/04	1.05		
Zinc	6010B	0.13	0.04	1	9/9/04	9/13/04	16.1		

* Solids: NA

Comments:

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client: Windward Environmental

Service Request: K2406517

Project No.: 04-08-06-21

Date Collected: 08/26/04

Project Name: LDW

Date Received: 08/28/04

Matrix: TISSUE

Units: MG/KG

Basis: Wet

Sample Name: LDW-C2-T2

Lab Code: K2406517-006

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Antimony	6020	0.008	0.001	5	9/9/04	9/20/04	0.006	B	
Arsenic	6020	0.079	0.005	5	9/9/04	9/20/04	1.870		
Cadmium	6020	0.003	0.001	5	9/9/04	9/20/04	0.087		
Chromium	6010B	0.08	0.05	1	9/9/04	9/13/04	0.59		
Cobalt	6020	0.0032	0.0003	5	9/9/04	9/20/04	0.2420		
Copper	6020	0.02	0.01	5	9/9/04	9/20/04	6.65		
Lead	6020	0.003	0.001	5	9/9/04	9/20/04	0.372		
Mercury	7471A	0.004	0.001	1	9/21/04	9/21/04	0.008		
Molybdenum	6020	0.0079	0.0005	5	9/9/04	9/20/04	0.2300		
Nickel	6020	0.032	0.005	5	9/9/04	9/20/04	0.696		
Selenium	7742	0.016	0.009	2	9/9/04	9/28/04	0.267		
Silver	6020	0.003	0.001	5	9/9/04	9/20/04	0.024		
Thallium	6020	0.0032	0.0003	5	9/9/04	9/20/04	0.0015	B	
Vanadium	6010B	0.16	0.11	1	9/9/04	9/13/04	1.00		
Zinc	6010B	0.16	0.05	1	9/9/04	9/13/04	22.5		

% Solids: NA

Comments:

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client: Windward Environmental

Service Request: K2406517

Project No.: 04-08-06-21

Date Collected: 08/25/04

Project Name: LDW

Date Received: 08/28/04

Matrix: TISSUE

Units: MG/KG

Basis: Wet

Sample Name: LDW-C10-T2

Lab Code: K2406517-007

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Antimony	6020	0.006	0.001	5	9/9/04	9/20/04	0.026		
Arsenic	6020	0.064	0.004	5	9/9/04	9/20/04	2.810		
Cadmium	6020	0.003	0.001	5	9/9/04	9/20/04	0.092		
Chromium	6010B	0.06	0.04	1	9/9/04	9/13/04	0.48		
Cobalt	6020	0.0026	0.0003	5	9/9/04	9/20/04	0.6220		
Copper	6020	0.01	0.01	5	9/9/04	9/20/04	3.96		
Lead	6020	0.003	0.001	5	9/9/04	9/20/04	0.597		
Mercury	7471A	0.004	0.002	1	9/21/04	9/21/04	0.019		
Molybdenum	6020	0.0064	0.0004	5	9/9/04	9/20/04	0.3100		
Nickel	6020	0.026	0.004	5	9/9/04	9/20/04	0.493		
Selenium	7742	0.013	0.008	2	9/9/04	9/28/04	0.294		
Silver	6020	0.003	0.001	5	9/9/04	9/20/04	0.028		
Thallium	6020	0.0026	0.0003	5	9/9/04	9/20/04	0.0014	B	
Vanadium	6010B	0.13	0.09	1	9/9/04	9/13/04	1.13		
Zinc	6010B	0.13	0.04	1	9/9/04	9/13/04	24.9		

* Solids: NA

Comments:

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client: Windward Environmental

Service Request: K2406517

Project No.: 04-08-06-21

Date Collected: 08/25/04

Project Name: LDW

Date Received: 08/28/04

Matrix: TISSUE

Units: MG/KG

Basis: Wet

Sample Name: LDW-C10-T1

Lab Code: K2406517-008

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Antimony	6020	0.007	0.001	5	9/9/04	9/20/04	0.043		
Arsenic	6020	0.068	0.004	5	9/9/04	9/20/04	4.070		
Cadmium	6020	0.003	0.001	5	9/9/04	9/20/04	0.066		
Chromium	6010B	0.07	0.04	1	9/9/04	9/13/04	0.57		
Cobalt	6020	0.0027	0.0003	5	9/9/04	9/20/04	0.7110		
Copper	6020	0.01	0.01	5	9/9/04	9/20/04	4.20		
Lead	6020	0.003	0.001	5	9/9/04	9/20/04	0.877		
Mercury	7471A	0.004	0.002	1	9/21/04	9/21/04	0.019		
Molybdenum	6020	0.0068	0.0004	5	9/9/04	9/20/04	0.3610		
Nickel	6020	0.027	0.004	5	9/9/04	9/20/04	0.573		
Selenium	7742	0.014	0.008	2	9/9/04	9/28/04	0.301		
Silver	6020	0.003	0.001	5	9/9/04	9/20/04	0.031		
Thallium	6020	0.0027	0.0003	5	9/9/04	9/20/04	0.0019	B	
Vanadium	6010B	0.14	0.10	1	9/9/04	9/13/04	1.61		
Zinc	6010B	0.14	0.04	1	9/9/04	9/13/04	20.6		

* Solids: NA

Comments:

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client: Windward Environmental

Service Request: K2406517

Project No.: 04-08-06-21

Date Collected: 08/27/04

Project Name: LDW

Date Received: 08/28/04

Matrix: TISSUE

Units: MG/KG

Basis: Wet

Sample Name: LDW-C5-T

Lab Code: K2406517-009

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Antimony	6020	0.008	0.001	5	9/9/04	9/20/04	0.029		
Arsenic	6020	0.078	0.005	5	9/9/04	9/20/04	2.280		
Cadmium	6020	0.003	0.001	5	9/9/04	9/20/04	0.100		
Chromium	6010B	0.08	0.05	1	9/9/04	9/13/04	0.70		
Cobalt	6020	0.0031	0.0003	5	9/9/04	9/20/04	0.3150		
Copper	6020	0.02	0.01	5	9/9/04	9/20/04	6.41		
Lead	6020	0.003	0.001	5	9/9/04	9/20/04	1.970		
Mercury	7471A	0.004	0.002	1	9/21/04	9/21/04	0.018		
Molybdenum	6020	0.0078	0.0005	5	9/9/04	9/20/04	0.2890		
Nickel	6020	0.031	0.005	5	9/9/04	9/20/04	0.542		
Selenium	7742	0.016	0.009	2	9/9/04	9/28/04	0.373		
Silver	6020	0.003	0.001	5	9/9/04	9/20/04	0.026		
Thallium	6020	0.0031	0.0003	5	9/9/04	9/20/04	0.0014	B	
Vanadium	6010B	0.16	0.11	1	9/9/04	9/13/04	1.24		
Zinc	6010B	0.16	0.05	1	9/9/04	9/13/04	22.7		

* Solids: NA

Comments:

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client: Windward Environmental

Service Request: K2406517

Project No.: 04-08-06-21

Date Collected: 08/27/04

Project Name: LDW

Date Received: 08/28/04

Matrix: TISSUE

Units: MG/KG

Basis: Wet

Sample Name: LDW-C3-T2

Lab Code: K2406517-010

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Antimony	6020	0.009	0.001	5	9/9/04	9/20/04	0.096		
Arsenic	6020	0.087	0.005	5	9/9/04	9/20/04	4.640		
Cadmium	6020	0.003	0.001	5	9/9/04	9/20/04	0.080		
Chromium	6010B	0.09	0.05	1	9/9/04	9/13/04	0.93		
Cobalt	6020	0.0035	0.0003	5	9/9/04	9/20/04	0.2710		
Copper	6020	0.02	0.01	5	9/9/04	9/20/04	6.24		
Lead	6020	0.003	0.001	5	9/9/04	9/20/04	4.570		
Mercury	7471A	0.004	0.002	1	9/21/04	9/21/04	0.020		
Molybdenum	6020	0.0087	0.0005	5	9/9/04	9/20/04	0.2320		
Nickel	6020	0.035	0.005	5	9/9/04	9/20/04	0.744		
Selenium	7742	0.017	0.011	2	9/9/04	9/28/04	0.292		
Silver	6020	0.003	0.001	5	9/9/04	9/20/04	0.016		
Thallium	6020	0.0035	0.0003	5	9/9/04	9/20/04	0.0021	B	
Vanadium	6010B	0.17	0.12	1	9/9/04	9/13/04	1.65		
Zinc	6010B	0.17	0.05	1	9/9/04	9/13/04	30.1		

% Solids: NA

Comments:

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client: Windward Environmental

Service Request: K2406517

Project No.: 04-08-06-21

Date Collected: 08/27/04

Project Name: LDW

Date Received: 08/28/04

Matrix: TISSUE

Units: MG/KG

Basis: Wet

Sample Name: LDW-C3-T1

Lab Code: K2406517-011

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Antimony	6020	0.008	0.001	5	9/9/04	9/20/04	0.062		
Arsenic	6020	0.076	0.005	5	9/9/04	9/20/04	2.010		
Cadmium	6020	0.003	0.001	5	9/9/04	9/20/04	0.124		
Chromium	6010B	0.08	0.05	1	9/9/04	9/13/04	0.58		
Cobalt	6020	0.0030	0.0003	5	9/9/04	9/20/04	0.2740		
Copper	6020	0.02	0.01	5	9/9/04	9/20/04	7.30		
Lead	6020	0.003	0.001	5	9/9/04	9/20/04	3.940		
Mercury	7471A	0.004	0.002	1	9/21/04	9/21/04	0.016		
Molybdenum	6020	0.0076	0.0005	5	9/9/04	9/20/04	0.2130		
Nickel	6020	0.030	0.005	5	9/9/04	9/20/04	0.539		
Selenium	7742	0.015	0.009	2	9/9/04	9/28/04	0.261		
Silver	6020	0.003	0.001	5	9/9/04	9/20/04	0.013		
Thallium	6020	0.0030	0.0003	5	9/9/04	9/20/04	0.0014	B	
Vanadium	6010B	0.15	0.11	1	9/9/04	9/13/04	1.08		
Zinc	6010B	0.15	0.05	1	9/9/04	9/13/04	23.5		

% Solids: NA

Comments:

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client: Windward Environmental

Service Request: K2406517

Project No.: 04-08-06-21

Date Collected: 08/25/04

Project Name: LDW

Date Received: 08/28/04

Matrix: TISSUE

Units: MG/KG

Basis: Wet

Sample Name: LDW-C9-T

Lab Code: K2406517-012

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Antimony	6020	0.008	0.001	5	9/9/04	9/20/04	0.010		
Arsenic	6020	0.078	0.005	5	9/9/04	9/20/04	1.480		
Cadmium	6020	0.003	0.001	5	9/9/04	9/20/04	0.122		
Chromium	6010B	0.08	0.05	1	9/9/04	9/13/04	0.49		
Cobalt	6020	0.0031	0.0003	5	9/9/04	9/20/04	0.2640		
Copper	6020	0.02	0.01	5	9/9/04	9/20/04	6.59		
Lead	6020	0.003	0.001	5	9/9/04	9/20/04	1.590		
Mercury	7471A	0.004	0.002	1	9/21/04	9/21/04	0.020		
Molybdenum	6020	0.0078	0.0005	5	9/9/04	9/20/04	0.2340		
Nickel	6020	0.031	0.005	5	9/9/04	9/20/04	0.480		
Selenium	7742	0.016	0.009	2	9/9/04	9/28/04	0.318		
Silver	6020	0.003	0.001	5	9/9/04	9/20/04	0.060		
Thallium	6020	0.0031	0.0003	5	9/9/04	9/20/04	0.0011	B	
Vanadium	6010B	0.16	0.11	1	9/9/04	9/13/04	0.68		
Zinc	6010B	0.16	0.05	1	9/9/04	9/13/04	27.1		

% Solids: NA

Comments:

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client: Windward Environmental

Service Request: K2406517

Project No.: 04-08-06-21

Date Collected: 08/25/04

Project Name: LDW

Date Received: 08/28/04

Matrix: TISSUE

Units: MG/KG

Basis: Wet

Sample Name: LDW-C6-T

Lab Code: K2406517-013

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Antimony	6020	0.008	0.001	5	9/9/04	9/20/04	0.052		
Arsenic	6020	0.076	0.005	5	9/9/04	9/20/04	2.730		
Cadmium	6020	0.003	0.001	5	9/9/04	9/20/04	0.069		
Chromium	6010B	0.08	0.05	1	9/9/04	9/13/04	0.38		
Cobalt	6020	0.0031	0.0003	5	9/9/04	9/20/04	0.3560		
Copper	6020	0.02	0.01	5	9/9/04	9/20/04	3.50		
Lead	6020	0.003	0.001	5	9/9/04	9/20/04	2.310		
Mercury	7471A	0.004	0.002	1	9/21/04	9/21/04	0.014		
Molybdenum	6020	0.0076	0.0005	5	9/9/04	9/20/04	0.1750		
Nickel	6020	0.031	0.005	5	9/9/04	9/20/04	0.590		
Selenium	7742	0.015	0.009	2	9/9/04	9/28/04	0.215		
Silver	6020	0.003	0.001	5	9/9/04	9/20/04	0.012		
Thallium	6020	0.0031	0.0003	5	9/9/04	9/20/04	0.0010	B	
Vanadium	6010B	0.15	0.11	1	9/9/04	9/13/04	1.07		
Zinc	6010B	0.15	0.05	1	9/9/04	9/13/04	19.1		

% Solids: NA

Comments:

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client: Windward Environmental

Service Request: K2406517

Project No.: 04-08-06-21

Date Collected: 08/27/04

Project Name: LDW

Date Received: 08/28/04

Matrix: TISSUE

Units: MG/KG

Basis: Wet

Sample Name: LDW-C4-T

Lab Code: K2406517-014

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Antimony	6020	0.007	0.001	5	9/9/04	9/20/04	0.252		
Arsenic	6020	0.068	0.004	5	9/9/04	9/20/04	5.870		
Cadmium	6020	0.003	0.001	5	9/9/04	9/20/04	0.083		
Chromium	6010B	0.07	0.04	1	9/9/04	9/24/04	0.77		
Cobalt	6020	0.0027	0.0003	5	9/9/04	9/20/04	0.3300		
Copper	6020	0.01	0.01	5	9/9/04	9/20/04	6.27		
Lead	6020	0.003	0.001	5	9/9/04	9/20/04	1.700		
Mercury	7471A	0.004	0.001	1	9/21/04	9/21/04	0.018		
Molybdenum	6020	0.0068	0.0004	5	9/9/04	9/20/04	0.2550		
Nickel	6020	0.027	0.004	5	9/9/04	9/20/04	0.490		
Selenium	7742	0.014	0.008	2	9/9/04	9/28/04	0.269		
Silver	6020	0.003	0.001	5	9/9/04	9/20/04	0.038		
Thallium	6020	0.0027	0.0003	5	9/9/04	9/20/04	0.0011	B	
Vanadium	6010B	0.14	0.10	1	9/9/04	9/24/04	1.20		
Zinc	6010B	0.14	0.04	1	9/9/04	9/24/04	27.7		

* Solids: NA

Comments:

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client: Windward Environmental

Service Request: K2406519

Project No.: 04-08-06-21

Date Collected: 08/27/04

Project Name: LDW Benthic Invertebrate Survey

Date Received: 08/30/04

Matrix: SEDIMENT

Units: MG/KG

Basis: Dry

Sample Name: LDW-B9a-S

Lab Code: K2406519-001

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Antimony	6020	0.05	0.02	5	10/11/04	10/14/04	0.20		N
Arsenic	6020	0.53	0.05	5	10/11/04	10/15/04	6.71		
Cadmium	6020	0.053	0.007	5	10/11/04	10/15/04	0.201		
Chromium	6010B	2.1	0.5	2	10/11/04	10/16/04	21.1		
Cobalt	6010B	2.1	0.3	2	10/11/04	10/16/04	9.6		
Copper	6010B	2.1	2.1	2	10/11/04	10/16/04	24.9		
Lead	6020	0.05	0.02	5	10/11/04	10/15/04	13.8		
Mercury	7471A	0.010	0.004	1	9/21/04	9/22/04	0.110		
Molybdenum	6020	0.053	0.008	5	10/11/04	10/15/04	0.655		
Nickel	6010B	4.2	0.4	2	10/11/04	10/16/04	17.1		
Selenium	6020	1.1	0.1	5	10/11/04	10/15/04	0.8	B	
Silver	6020	0.021	0.003	5	10/11/04	10/14/04	0.125		
Thallium	6020	0.021	0.002	5	10/11/04	10/15/04	0.075		
Vanadium	6010B	2.1	0.6	2	10/11/04	10/16/04	55.1		
Zinc	6010B	2.1	0.3	2	10/11/04	10/16/04	70.7		

% Solids: 52.6

Comments:

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client: Windward Environmental

Service Request: K2406519

Project No.: 04-08-06-21

Date Collected: 08/26/04

Project Name: LDW Benthic Invertebrate Survey

Date Received: 08/30/04

Matrix: SEDIMENT

Units: MG/KG

Basis: Dry

Sample Name: LDW-B3a-S

Lab Code: K2406519-005

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Antimony	6020	0.06	0.02	5	10/11/04	10/14/04	0.16		N
Arsenic	6020	0.57	0.06	5	10/11/04	10/15/04	5.77		
Cadmium	6020	0.057	0.008	5	10/11/04	10/15/04	0.109		
Chromium	6010B	2.3	0.6	2	10/11/04	10/16/04	13.4		
Cobalt	6010B	2.3	0.3	2	10/11/04	10/16/04	5.1		
Copper	6010B	2.3	2.3	2	10/11/04	10/16/04	18.7		
Lead	6020	0.06	0.02	5	10/11/04	10/15/04	9.13		
Mercury	7471A	0.011	0.004	1	9/21/04	9/22/04	0.025		
Molybdenum	6020	0.057	0.009	5	10/11/04	10/15/04	0.977		
Nickel	6010B	4.6	0.5	2	10/11/04	10/16/04	6.7		
Selenium	6020	1.1	0.1	5	10/11/04	10/15/04	0.7	B	
Silver	6020	0.023	0.003	5	10/11/04	10/14/04	0.086		
Thallium	6020	0.023	0.002	5	10/11/04	10/15/04	0.052		
Vanadium	6010B	2.3	0.7	2	10/11/04	10/16/04	41.5		
Zinc	6010B	2.3	0.3	2	10/11/04	10/16/04	37.8		

% Solids: 61.6

Comments:

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client: Windward Environmental
 Project No.: 04-08-06-21
 Project Name: LDW Benthic Invertebrate Survey
 Matrix: SEDIMENT

Service Request: K2406580
 Date Collected: 08/30/04
 Date Received: 08/31/04
 Units: MG/KG
 Basis: Dry

Sample Name: LDW-B7a-S

Lab Code: K2406580-001

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Antimony	6020	0.05	0.03	5	10/05/04	10/7/04	0.26		N
Arsenic	6020	0.53	0.05	5	10/5/04	10/9/04	6.56		
Cadmium	6020	0.053	0.007	5	10/5/04	10/9/04	0.176		
Chromium	6010B	2.2	0.6	2	10/5/04	10/11/04	22.9		
Cobalt	6010B	2.2	2.2	2	10/5/04	10/11/04	6.5		
Copper	6010B	2.2	1.0	2	10/5/04	10/11/04	30.9		
Lead	6020	0.05	0.02	5	10/5/04	10/9/04	21.4		
Mercury	7471A	0.019	0.007	1	9/17/04	9/18/04	0.060		
Molybdenum	6020	0.211	0.008	5	10/5/04	10/9/04	0.749		
Nickel	6010B	4.3	3.2	2	10/5/04	10/11/04	11.7		
Selenium	6020	1.1	0.1	5	10/5/04	10/9/04	0.6	B	
Silver	6020	0.022	0.003	5	10/05/04	10/7/04	0.139		
Thallium	6020	0.021	0.002	5	10/5/04	10/9/04	0.057		
Vanadium	6010B	2.2	1.0	2	10/5/04	10/11/04	50.4		
Zinc	6010B	2.2	0.5	2	10/5/04	10/11/04	81.6		

% Solids: 51.7

Comments:

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client: Windward Environmental
 Project No.: 04-08-06-21
 Project Name: LDW Benthic Invertebrate Survey
 Matrix: TISSUE

Service Request: K2406581
 Date Collected: 08/30/04
 Date Received: 08/31/04
 Units: MG/KG
 Basis: Wet

Sample Name: LDW-B7a-T

Lab Code: K2406581-001

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Antimony	6020	0.0035	0.0003	5	9/27/04	10/7/04	0.0076		
Arsenic	6020	0.035	0.002	5	9/27/04	10/7/04	0.923		
Cadmium	6020	0.0014	0.0003	5	9/27/04	10/7/04	0.0308		
Chromium	6010B	0.03	0.02	1	9/27/04	10/8/04	3.90		
Cobalt	6020	0.0014	0.0001	5	9/27/04	10/7/04	0.1440		
Copper	6020	0.007	0.005	5	9/27/04	10/7/04	3.500		
Lead	6020	0.0014	0.0005	5	9/27/04	10/7/04	14.6		
Mercury	7471A	0.0037	0.0015	1	9/20/04	9/21/04	0.0040		
Molybdenum	6020	0.0035	0.0002	5	9/27/04	10/7/04	0.1260		
Nickel	6020	0.014	0.002	5	9/27/04	10/7/04	0.157		
Selenium	7742	0.007	0.004	2	9/27/04	10/13/04	0.120		
Silver	6020	0.0014	0.0003	5	9/27/04	10/7/04	0.0268		
Thallium	6020	0.0014	0.0001	5	9/27/04	10/7/04	0.0010	B	
Vanadium	6010B	0.07	0.05	1	9/27/04	10/8/04	0.42		
Zinc	6010B	0.07	0.02	1	9/27/04	10/8/04	25.7		

‡ Solids: NA

Comments:

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client: Windward Environmental
 Project No.: 04-08-06-21
 Project Name: LDW Benthic Invertebrate Survey
 Matrix: TISSUE

Service Request: K2406932
 Date Collected: 08/17/04
 Date Received: 08/20/04
 Units: MG/KG
 Basis: Wet

Sample Name: LDW-B8a-T

Lab Code: K2406932-006

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Antimony	6020	0.0037	0.0004	5	9/22/04	10/7/04	0.0107		
Arsenic	6020	0.037	0.002	5	9/22/04	10/7/04	0.788		
Cadmium	6020	0.0015	0.0004	5	9/22/04	10/7/04	0.0549		
Chromium	6010B	0.04	0.02	1	9/22/04	9/24/04	0.31		
Cobalt	6020	0.0015	0.0001	5	9/22/04	10/7/04	0.1280		
Copper	6020	0.007	0.005	5	9/22/04	10/7/04	4.370		
Lead	6020	0.0015	0.0005	5	9/22/04	10/7/04	0.5320		
Mercury	7471A	0.004	0.002	1	9/20/04	9/21/04	0.024		
Molybdenum	6020	0.0037	0.0002	5	9/22/04	10/7/04	0.1010		
Nickel	6020	0.015	0.002	5	9/22/04	10/7/04	0.253		
Selenium	7742	0.007	0.004	2	9/22/04	10/13/04	0.089		
Silver	6020	0.0015	0.0003	5	9/22/04	10/7/04	0.1650		
Thallium	6020	0.0015	0.0001	5	9/22/04	10/7/04	0.0011	B	
Vanadium	6010B	0.07	0.05	1	9/22/04	9/24/04	0.54		
Zinc	6010B	0.07	0.02	1	9/22/04	9/24/04	22.9		

% Solids: NA

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: Windward Environmental
Project No.: 04-08-06-21
Project Name: LDW Benthic Invertebrate Survey
Matrix: TISSUE

Service Request: K2406932
Date Collected: 08/25/04
Date Received: 08/31/04
Units: MG/KG
Basis: Wet

Sample Name: LDW-B10a-T

Lab Code: K2406932-009

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Antimony	6020	0.0050	0.0005	5	9/22/04	10/7/04	0.0057		
Arsenic	6020	0.050	0.003	5	9/22/04	10/7/04	0.809		
Cadmium	6020	0.0020	0.0005	5	9/22/04	10/7/04	0.0264		
Chromium	6010B	0.05	0.03	1	9/22/04	9/24/04	0.23		
Cobalt	6020	0.0020	0.0002	5	9/22/04	10/7/04	0.1070		
Copper	6020	0.010	0.007	5	9/22/04	10/7/04	4.820		
Lead	6020	0.0020	0.0007	5	9/22/04	10/7/04	0.4090		
Mercury	7471A	0.004	0.002	1	9/20/04	9/21/04	0.044		
Molybdenum	6020	0.0050	0.0003	5	9/22/04	10/7/04	0.0667		
Nickel	6020	0.020	0.003	5	9/22/04	10/7/04	0.235		
Selenium	7742	0.010	0.006	2	9/22/04	10/13/04	0.092		
Silver	6020	0.0020	0.0004	5	9/22/04	10/7/04	0.0202		
Thallium	6020	0.0020	0.0002	5	9/22/04	10/7/04	0.0014	B	
Vanadium	6010B	0.10	0.07	1	9/22/04	9/24/04	0.65		
Zinc	6010B	0.10	0.03	1	9/22/04	9/24/04	10.3		

% Solids: NA

Comments:

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client: Windward Environmental
 Project No.: 04-08-06-21
 Project Name: LDW Benthic Invertebrate Survey
 Matrix: SEDIMENT

Service Request: K2407012
 Date Collected: 08/17/04
 Date Received: 09/20/04
 Units: mg/kg
 Basis: Dry

Sample Name: LDW-B8a-S

Lab Code: K2407012-006

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Antimony	6020	0.05	0.03	5	10/05/04	10/07/04	1.68		N
Arsenic	6020	0.51	0.05	5	10/5/04	10/09/04	7.89		
Cadmium	6020	0.051	0.007	5	10/5/04	10/09/04	0.693		
Chromium	6010B	2.0	0.6	2	10/5/04	10/11/04	26.9		
Cobalt	6010B	2.0	2.0	2	10/5/04	10/11/04	5.7		
Copper	6010B	2.0	0.9	2	10/5/04	10/11/04	56.9		
Lead	6020	0.05	0.02	5	10/5/04	10/09/04	52.5		
Mercury	7471A	0.012	0.005	1	9/21/04	09/22/04	0.524		N
Molybdenum	6020	0.203	0.008	5	10/5/04	10/09/04	1.260		
Nickel	6010B	4.1	3.1	2	10/5/04	10/11/04	18.7		
Selenium	6020	1.0	0.1	5	10/5/04	10/09/04	0.9	B	
Silver	6020	0.020	0.003	5	10/05/04	10/07/04	0.257		
Thallium	6020	0.020	0.002	5	10/5/04	10/09/04	0.036		
Vanadium	6010B	2.0	0.9	2	10/5/04	10/11/04	34.9		
Zinc	6010B	2.0	0.5	2	10/5/04	10/11/04	130		

% Solids: 53.6

Comments:

METALS

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INORGANIC ANALYSIS DATA SHEET

Client: Windward Environmental
 Project No.: 04-08-06-21
 Project Name: LDW Benthic Invertebrate Survey
 Matrix: SEDIMENT

Service Request: K2407012
 Date Collected: 08/25/04
 Date Received: 08/30/04
 Units: mg/kg
 Basis: Dry

Sample Name: LDW-B10a-S

Lab Code: K2407012-009

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Antimony	6020	0.06	0.03	5	10/05/04	10/07/04	1.72		N
Arsenic	6020	0.56	0.06	5	10/5/04	10/09/04	9.23		
Cadmium	6020	0.056	0.008	5	10/5/04	10/09/04	0.118		
Chromium	6010B	2.3	0.7	2	10/5/04	10/11/04	17.9		
Cobalt	6010B	2.3	2.3	2	10/5/04	10/11/04	6.3		
Copper	6010B	2.3	1.0	2	10/5/04	10/11/04	46.7		
Lead	6020	0.06	0.02	5	10/5/04	10/09/04	20.9		
Mercury	7471A	0.009	0.004	1	9/21/04	09/22/04	0.060		N
Molybdenum	6020	0.225	0.009	5	10/5/04	10/09/04	0.979		
Nickel	6010B	4.5	3.4	2	10/5/04	10/11/04	11.3		
Selenium	6020	1.1	0.1	5	10/5/04	10/09/04	0.6	B	
Silver	6020	0.023	0.003	5	10/05/04	10/07/04	0.090		
Thallium	6020	0.023	0.002	5	10/5/04	10/09/04	0.046		
Vanadium	6010B	2.3	1.0	2	10/5/04	10/11/04	50.7		
Zinc	6010B	2.3	0.6	2	10/5/04	10/11/04	211		

% Solids: 63.0

Comments:

METALS

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INORGANIC ANALYSIS DATA SHEET

Client: Windward Environmental
 Project No.: 04-08-06-21
 Project Name: LDW Benthic Invertebrate Survey
 Matrix: TISSUE

Service Request: K2407216
 Date Collected: 08/26/04
 Date Received: 08/30/04
 Units: mg/kg
 Basis: Wet

Sample Name: LDW-B3a-T

Lab Code: K2407216-001

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Antimony	6020	0.0048	0.0005	5	9/27/04	10/07/04	0.0031	B	
Arsenic	6020	0.048	0.003	5	9/27/04	10/07/04	0.915		
Cadmium	6020	0.0019	0.0005	5	9/27/04	10/07/04	0.0677		
Chromium	6010B	0.05	0.03	1	9/27/04	10/08/04	0.18		
Cobalt	6020	0.0019	0.0002	5	9/27/04	10/07/04	0.1340		
Copper	6020	0.010	0.007	5	9/27/04	10/07/04	7.860		
Lead	6020	0.0019	0.0007	5	9/27/04	10/07/04	0.1790		
Mercury	7471A	0.004	0.002	1	9/20/04	09/21/04	0.002	U	
Molybdenum	6020	0.0048	0.0003	5	9/27/04	10/07/04	0.0953		
Nickel	6020	0.019	0.003	5	9/27/04	10/07/04	0.206		
Selenium	7742	0.010	0.006	2	9/27/04	10/13/04	0.148		
Silver	6020	0.0019	0.0004	5	9/27/04	10/07/04	0.0346		
Thallium	6020	0.0019	0.0002	5	9/27/04	10/07/04	0.0021		
Vanadium	6010B	0.10	0.07	1	9/27/04	10/08/04	0.58		
Zinc	6010B	0.10	0.03	1	9/27/04	10/08/04	17.4		

* Solids: NA

Comments:

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client: Windward Environmental
 Project No.: 04-08-06-21
 Project Name: LDW Benthic Invertebrate Survey
 Matrix: TISSUE

Service Request: K2407216
 Date Collected: 08/27/04
 Date Received: 08/30/04
 Units: mg/kg
 Basis: Wet

Sample Name: LDW-B9a-T

Lab Code: K2407216-002

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Antimony	6020	0.0045	0.0004	5	9/27/04	10/07/04	0.0014	B	
Arsenic	6020	0.045	0.003	5	9/27/04	10/07/04	0.947		
Cadmium	6020	0.0018	0.0004	5	9/27/04	10/07/04	0.0211		
Chromium	6010B	0.04	0.03	1	9/27/04	10/08/04	0.27		
Cobalt	6020	0.0018	0.0002	5	9/27/04	10/07/04	0.1360		
Copper	6020	0.009	0.006	5	9/27/04	10/07/04	2.610		
Lead	6020	0.0018	0.0006	5	9/27/04	10/07/04	0.1820		
Mercury	7471A	0.004	0.002	1	9/20/04	09/21/04	0.002	B	
Molybdenum	6020	0.0045	0.0003	5	9/27/04	10/07/04	0.0720		
Nickel	6020	0.018	0.003	5	9/27/04	10/07/04	0.234		
Selenium	7742	0.009	0.005	2	9/27/04	10/13/04	0.092		
Silver	6020	0.0018	0.0004	5	9/27/04	10/07/04	0.0132		
Thallium	6020	0.0018	0.0002	5	9/27/04	10/07/04	0.0015	B	
Vanadium	6010B	0.09	0.06	1	9/27/04	10/08/04	0.75		
Zinc	6010B	0.09	0.03	1	9/27/04	10/08/04	12.9		

* Solids: NA

Comments:

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client: Windward Environmental

Service Request: K2407452

Project No.: 04-08-06-21

Date Collected: 09/24/04

Project Name: LDW Benthic Invertebrate Survey

Date Received: 09/25/04

Matrix: TISSUE

Units: MG/KG

Basis: Wet

Sample Name: LDW-B5a-T

Lab Code: K2407452-001

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Antimony	6020	0.010	0.001	5	10/25/04	10/28/04	0.017		
Arsenic	6020	0.100	0.006	5	10/25/04	10/28/04	1.770		
Cadmium	6020	0.004	0.001	5	10/25/04	10/28/04	0.055		
Chromium	6010B	0.10	0.06	1	10/25/04	10/29/04	2.80		
Cobalt	6020	0.0040	0.0004	5	10/25/04	10/28/04	0.3070		
Copper	6010B	0.20	0.14	1	10/25/04	10/29/04	21.8		
Lead	6020	0.004	0.001	5	10/25/04	10/28/04	2.260		
Mercury	7471A	0.008	0.003	1	10/19/04	10/20/04	0.010		
Molybdenum	6020	0.0100	0.0006	5	10/25/04	10/28/04	0.1780		
Nickel	6020	0.040	0.006	5	10/25/04	10/28/04	0.888		
Selenium	7742	0.020	0.008	2	10/25/04	11/1/04	0.214		
Silver	6020	0.0040	0.0008	5	10/25/04	10/28/04	0.0333		
Thallium	6020	0.0040	0.0004	5	10/25/04	10/28/04	0.0028	B	
Vanadium	6010B	0.20	0.14	1	10/25/04	10/29/04	1.55		
Zinc	6010B	0.20	0.06	1	10/25/04	10/29/04	31.6		

* Solids: NA

Comments:

00016

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client: Windward Environmental

Service Request: K2407473

Project No.: 04-08-06-21

Date Collected: 09/24/04

Project Name: LDW

Date Received: 09/27/04

Matrix: SEDIMENT

Units: mg/kg

Basis: Dry

Sample Name: LDW-B5a-S

Lab Code: K2407473-001

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Antimony	6020	0.06	0.02	5	10/07/04	10/14/04	0.63		N
Arsenic	6020	0.54	0.05	5	10/07/04	10/18/04	8.66		*
Cadmium	6020	0.054	0.008	5	10/07/04	10/18/04	0.311		
Chromium	6010B	2.2	0.6	2	10/07/04	10/19/04	29.0		
Cobalt	6010B	2.2	0.3	2	10/07/04	10/19/04	7.8		
Copper	6010B	2.2	2.2	2	10/07/04	10/19/04	37.5		
Lead	6020	0.05	0.02	5	10/07/04	10/18/04	80.3		
Mercury	7471A	0.015	0.006	1	10/08/04	10/11/04	0.160		
Molybdenum	6020	0.054	0.009	5	10/07/04	10/18/04	2.370		*
Nickel	6010B	4.4	0.4	2	10/07/04	10/19/04	16.1		
Selenium	6020	1.1	0.1	5	10/07/04	10/18/04	0.3	B	
Silver	6020	0.022	0.003	5	10/07/04	10/14/04	0.135		*
Thallium	6020	0.022	0.002	5	10/07/04	10/18/04	0.069		
Vanadium	6010B	2.2	0.7	2	10/07/04	10/19/04	47.5		
Zinc	6010B	2.2	0.3	2	10/07/04	10/19/04	121		

‡ Solids: 64.9

Comments:

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client: Windward Environmental
 Project No.: 04-08-06-21
 Project Name: LDW Benthic Invertebrate Survey
 Matrix: SEDIMENT

Service Request: K2407595
 Date Collected: 09/27/04
 Date Received: 09/30/04
 Units: MG/KG
 Basis: Dry

Sample Name: LDW-B1b-S

Lab Code: K2407595-001

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Antimony	6020	0.05	0.02	5	10/07/04	10/14/04	0.38		N
Arsenic	6020	0.55	0.05	5	10/07/04	10/18/04	5.34		*
Cadmium	6020	0.055	0.008	5	10/07/04	10/18/04	0.071		
Chromium	6010B	2.1	0.5	2	10/07/04	10/19/04	10.5		
Cobalt	6010B	2.1	0.3	2	10/07/04	10/19/04	4.7		
Copper	6010B	2.1	2.1	2	10/07/04	10/19/04	15.1		
Lead	6020	0.05	0.02	5	10/07/04	10/18/04	17.5		
Mercury	7471A	0.014	0.005	1	10/19/04	10/21/04	0.051		
Molybdenum	6020	0.055	0.009	5	10/07/04	10/18/04	0.543		*
Nickel	6010B	4.2	0.4	2	10/07/04	10/19/04	7.0		
Selenium	6020	1.1	0.1	5	10/07/04	10/18/04	0.4	B	
Silver	6020	0.021	0.003	5	10/07/04	10/14/04	0.054		*
Thallium	6020	0.022	0.002	5	10/07/04	10/18/04	0.060		
Vanadium	6010B	2.1	0.6	2	10/07/04	10/19/04	27.7		
Zinc	6010B	2.1	0.3	2	10/07/04	10/19/04	36.6		

% Solids: 75.2

Comments:

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client: Windward Environmental
 Project No.: 04-08-06-21
 Project Name: LDW Benthic Invertebrate Survey
 Matrix: SEDIMENT

Service Request: K2407595
 Date Collected: 09/27/04
 Date Received: 09/30/04
 Units: MG/KG
 Basis: Dry

Sample Name: LDW-B2b-S

Lab Code: K2407595-002

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Antimony	6020	0.05	0.02	5	10/07/04	10/14/04	2.01		N
Arsenic	6020	0.53	0.05	5	10/07/04	10/18/04	7.86		*
Cadmium	6020	0.053	0.007	5	10/07/04	10/18/04	0.417		
Chromium	6010B	2.1	0.5	2	10/07/04	10/19/04	24.6		
Cobalt	6010B	2.1	0.3	2	10/07/04	10/19/04	8.7		
Copper	6010B	2.1	2.1	2	10/07/04	10/19/04	54.9		
Lead	6020	0.05	0.02	5	10/07/04	10/18/04	44.6		
Mercury	7471A	0.015	0.006	1	10/19/04	10/21/04	0.146		
Molybdenum	6020	0.053	0.009	5	10/07/04	10/18/04	0.625		*
Nickel	6010B	4.3	0.4	2	10/07/04	10/19/04	16.2		
Selenium	6020	1.1	0.1	5	10/07/04	10/18/04	0.5	B	
Silver	6020	0.021	0.003	5	10/07/04	10/14/04	0.389		*
Thallium	6020	0.021	0.002	5	10/07/04	10/18/04	0.096		
Vanadium	6010B	2.1	0.6	2	10/07/04	10/19/04	47.9		
Zinc	6010B	2.1	0.3	2	10/07/04	10/19/04	109		

% Solids: 66.4

Comments:

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client: Windward Environmental

Service Request: K2407595

Project No.: 04-08-06-21

Date Collected: 09/28/04

Project Name: LDW Benthic Invertebrate Survey

Date Received: 09/30/04

Matrix: SEDIMENT

Units: MG/KG

Basis: Dry

Sample Name: LDW-B4b-S

Lab Code: K2407595-003

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Antimony	6020	0.05	0.02	5	10/07/04	10/14/04	1.04		N
Arsenic	6020	0.50	0.05	5	10/07/04	10/18/04	10.3		*
Cadmium	6020	0.050	0.007	5	10/07/04	10/18/04	0.580		
Chromium	6010B	2.0	0.5	2	10/07/04	10/19/04	37.7		
Cobalt	6010B	2.0	0.3	2	10/07/04	10/19/04	12.0		
Copper	6010B	2.0	2.0	2	10/07/04	10/19/04	86.6		
Lead	6020	0.05	0.02	5	10/07/04	10/18/04	79.4		
Mercury	7471A	0.016	0.006	1	10/19/04	10/21/04	0.291		
Molybdenum	6020	0.050	0.008	5	10/07/04	10/18/04	1.010		*
Nickel	6010B	3.9	0.4	2	10/07/04	10/19/04	24.8		
Selenium	6020	1.0	0.1	5	10/07/04	10/18/04	0.8	B	
Silver	6020	0.020	0.003	5	10/07/04	10/14/04	0.497		*
Thallium	6020	0.020	0.002	5	10/07/04	10/18/04	0.151		
Vanadium	6010B	2.0	0.6	2	10/07/04	10/19/04	72.5		
Zinc	6010B	2.0	0.3	2	10/07/04	10/19/04	155		

* Solids: 45.9

Comments:

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client: Windward Environmental
 Project No.: 04-08-06-21
 Project Name: LDW Benthic Invertebrate Survey
 Matrix: SEDIMENT

Service Request: K2407595
 Date Collected: 09/28/04
 Date Received: 09/30/04
 Units: MG/KG
 Basis: Dry

Sample Name: LDW-B5b-S

Lab Code: K2407595-004

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Antimony	6020	0.05	0.02	5	10/07/04	10/14/04	0.59		N
Arsenic	6020	0.48	0.05	5	10/07/04	10/18/04	6.74		*
Cadmium	6020	0.048	0.007	5	10/07/04	10/18/04	0.257		
Chromium	6010B	1.9	0.5	2	10/07/04	10/19/04	20.3		
Cobalt	6010B	1.9	0.3	2	10/07/04	10/19/04	7.1		
Copper	6010B	1.9	1.9	2	10/07/04	10/19/04	42.0		
Lead	6020	0.05	0.02	5	10/07/04	10/18/04	30.8		
Mercury	7471A	0.016	0.006	1	10/19/04	10/21/04	0.095		
Molybdenum	6020	0.048	0.008	5	10/07/04	10/18/04	1.080		*
Nickel	6010B	3.8	0.4	2	10/07/04	10/19/04	14.0		
Selenium	6020	1.0	0.1	5	10/07/04	10/18/04	0.8	B	
Silver	6020	0.019	0.003	5	10/07/04	10/14/04	0.236		*
Thallium	6020	0.019	0.002	5	10/07/04	10/18/04	0.092		
Vanadium	6010B	1.9	0.6	2	10/07/04	10/19/04	43.3		
Zinc	6010B	1.9	0.3	2	10/07/04	10/19/04	93.9		

* Solids: 57.8

Comments:

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client: Windward Environmental
 Project No.: 04-08-06-21
 Project Name: LDW Benthic Invertebrate Survey
 Matrix: TISSUE

Service Request: K2407596
 Date Collected: 09/28/04
 Date Received: 09/30/04
 Units: mg/kg
 Basis: Wet

Sample Name: LDW-B4b-T

Lab Code: K2407596-001

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Antimony	6020	0.006	0.001	5	10/25/04	10/28/04	0.008		
Arsenic	6020	0.064	0.004	5	10/25/04	10/28/04	1.890		
Cadmium	6020	0.003	0.001	5	10/25/04	10/28/04	0.072		
Chromium	6010B	0.06	0.04	1	10/25/04	10/29/04	1.82		
Cobalt	6020	0.0025	0.0003	5	10/25/04	10/28/04	0.3710		
Copper	6010B	0.13	0.09	1	10/25/04	10/29/04	19.2		
Lead	6020	0.003	0.001	5	10/25/04	10/28/04	2.390		
Mercury	7471A	0.010	0.004	1	10/19/04	10/20/04	0.015		
Molybdenum	6020	0.0064	0.0004	5	10/25/04	10/28/04	0.1760		
Nickel	6020	0.025	0.004	5	10/25/04	10/28/04	2.950		
Selenium	6020	0.127	0.025	5	10/25/04	10/28/04	0.648		
Selenium	7742	0.013	0.005	2	10/25/04	11/01/04	0.358		
Silver	6020	0.003	0.001	5	10/25/04	10/28/04	0.095		
Thallium	6020	0.0025	0.0003	5	10/25/04	10/28/04	0.0068		
Vanadium	6010B	0.13	0.09	1	10/25/04	10/29/04	2.70		
Zinc	6010B	0.13	0.04	1	10/25/04	10/29/04	19.6		

* Solids: NA

Comments:

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client: Windward Environmental
 Project No.: 04-08-06-21
 Project Name: LDW Benthic Invertebrate Survey
 Matrix: TISSUE

Service Request: K2407596
 Date Collected: 09/28/04
 Date Received: 09/30/04
 Units: mg/kg
 Basis: Wet

Sample Name: LDW-B5b-T

Lab Code: K2407596-002

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Antimony	6020	0.006	0.001	5	10/25/04	10/28/04	0.016		
Arsenic	6020	0.058	0.003	5	10/25/04	10/28/04	1.120		
Cadmium	6020	0.002	0.001	5	10/25/04	10/28/04	0.048		
Chromium	6010B	0.06	0.03	1	10/25/04	10/29/04	0.84		
Cobalt	6020	0.0023	0.0002	5	10/25/04	10/28/04	0.1460		
Copper	6010B	0.12	0.08	1	10/25/04	10/29/04	10.3		
Lead	6020	0.002	0.001	5	10/25/04	10/28/04	0.821		
Mercury	7471A	0.009	0.004	1	10/19/04	10/20/04	0.004	U	
Molybdenum	6020	0.0058	0.0003	5	10/25/04	10/28/04	0.1240		
Nickel	6020	0.023	0.003	5	10/25/04	10/28/04	0.778		
Selenium	6020	0.116	0.023	5	10/25/04	10/28/04	0.604		
Selenium	7742	0.012	0.005	2	10/25/04	11/01/04	0.263		
Silver	6020	0.002	0.000	5	10/25/04	10/28/04	0.054		
Thallium	6020	0.0023	0.0002	5	10/25/04	10/28/04	0.0024		
Vanadium	6010B	0.12	0.08	1	10/25/04	10/29/04	1.13		
Zinc	6010B	0.12	0.03	1	10/25/04	10/29/04	26.4		

% Solids: NA

Comments:

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client: Windward Environmental
 Project No.: 04-08-06-21
 Project Name: LDW Benthic Invertebrate Survey
 Matrix: TISSUE

Service Request: K2407596
 Date Collected: 09/27/04
 Date Received: 09/30/04
 Units: mg/kg
 Basis: Wet

Sample Name: LDW-B1b-T

Lab Code: K2407596-003

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Antimony	6020	0.011	0.001	5	10/25/04	10/28/04	0.019		
Arsenic	6020	0.106	0.006	5	10/25/04	10/28/04	1.400		
Cadmium	6020	0.004	0.001	5	10/25/04	10/28/04	0.172		
Chromium	6010B	0.11	0.06	1	10/25/04	10/29/04	2.66		
Cobalt	6020	0.0042	0.0004	5	10/25/04	10/28/04	0.3050		
Copper	6010B	0.21	0.15	1	10/25/04	10/29/04	20.6		
Lead	6020	0.004	0.001	5	10/25/04	10/28/04	1.390		
Mercury	7471A	0.007	0.003	1	10/19/04	10/20/04	0.009		
Molybdenum	6020	0.0106	0.0006	5	10/25/04	10/28/04	0.4330		
Nickel	6020	0.042	0.006	5	10/25/04	10/28/04	1.630		
Selenium	6020	0.212	0.042	5	10/25/04	10/28/04	1.130		
Selenium	7742	0.021	0.008	2	10/25/04	11/01/04	0.603		
Silver	6020	0.004	0.001	5	10/25/04	10/28/04	0.073		
Thallium	6020	0.0042	0.0004	5	10/25/04	10/28/04	0.0032	B	
Vanadium	6010B	0.21	0.15	1	10/25/04	10/29/04	1.97		
Zinc	6010B	0.21	0.06	1	10/25/04	10/29/04	14.4		

* Solids: NA

Comments:

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client: Windward Environmental
 Project No.: 04-08-06-21
 Project Name: LDW Benthic Invertebrate Survey
 Matrix: TISSUE

Service Request: K2407596
 Date Collected: 09/27/04
 Date Received: 09/30/04
 Units: mg/kg
 Basis: Wet

Sample Name: LDW-B2b-T

Lab Code: K2407596-004

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Antimony	6020	0.010	0.001	5	10/25/04	10/28/04	0.029		
Arsenic	6020	0.101	0.006	5	10/25/04	10/28/04	1.320		
Cadmium	6020	0.004	0.001	5	10/25/04	10/28/04	0.202		
Chromium	6010B	0.10	0.06	1	10/25/04	10/29/04	1.32		
Cobalt	6020	0.0040	0.0004	5	10/25/04	10/28/04	0.2130		
Copper	6010B	0.20	0.14	1	10/25/04	10/29/04	15.5		
Lead	6020	0.004	0.001	5	10/25/04	10/28/04	1.410		
Mercury	7471A	0.010	0.004	1	10/19/04	10/20/04	0.012		
Molybdenum	6020	0.0101	0.0006	5	10/25/04	10/28/04	0.2490		
Nickel	6020	0.040	0.006	5	10/25/04	10/28/04	0.957		
Selenium	6020	0.201	0.040	5	10/25/04	10/28/04	0.749		
Selenium	7742	0.020	0.008	2	10/25/04	11/01/04	0.434		
Silver	6020	0.004	0.001	5	10/25/04	10/28/04	0.112		
Thallium	6020	0.0040	0.0004	5	10/25/04	10/28/04	0.0030	B	
Vanadium	6010B	0.20	0.14	1	10/25/04	10/29/04	1.10		
Zinc	6010B	0.20	0.06	1	10/25/04	10/29/04	20.7		

% Solids: NA

Comments:

Lipids

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Woodward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406232
Date Collected: 8/15/2004
Date Received: 8/19/2004

Lipids, Total

Prep Method: EPA 3540
 Analysis Method: NOAA
 Test Notes:

Units: PERCENT
 Basis: AS RECEIVED

Sample Name	Lab Code	MRL	Date Extracted	Date Analyzed	Result	Result Notes
LDW-B1a-T	K2406232-001	0.25	9/29/2004	10/13/2004	0.97	
LDW-B4a-T	K2406232-002	0.25	9/29/2004	10/13/2004	0.79	
LDW-B2a-T	K2406232-003	0.25	9/29/2004	10/13/2004	0.99	
LDW-B9b-T	K2406232-004	0.25	9/29/2004	10/13/2004	0.51	
LDW-B6a-T	K2406232-005	0.24	9/29/2004	10/13/2004	1.4	
LDW-B3b-T	K2406232-008	0.25	9/29/2004	10/13/2004	1.3	
LDW-B7b-T	K2406232-009	0.25	9/29/2004	10/13/2004	1.1	

Approved By:

Carl Jones

Date:

10-19-04

1A/092099p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Windward Environmental
 Project: LDW/04-08-06-21
 Sample Matrix: Tissue

Service Request: K2406517
 Date Collected: 8/26/2004
 Date Received: 8/28/2004

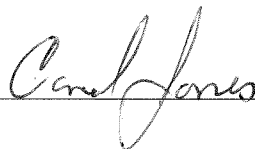
Lipids, Total

Prep Method: EPA 3540
 Analysis Method: NOAA
 Test Notes:

Units: PERCENT
 Basis: AS RECEIVED

Sample Name	Lab Code	MRL	Date Extracted	Date Analyzed	Result	Result Notes
LDW-C8-T	K2406517-001	0.025	9/10/2004	9/20/2004	0.80	
LDW-C7-T2	K2406517-002	0.025	9/10/2004	9/20/2004	0.83	
LDW-C7-T1	K2406517-003	0.025	9/10/2004	9/20/2004	0.78	
LDW-C1-T	K2406517-004	0.025	9/10/2004	9/20/2004	0.65	
LDW-C2-T1	K2406517-005	0.025	9/10/2004	9/20/2004	0.60	
LDW-C2-T2	K2406517-006	0.025	9/10/2004	9/20/2004	0.68	
LDW-C10-T2	K2406517-007	0.025	9/10/2004	9/20/2004	0.57	
LDW-C10-T1	K2406517-008	0.025	9/10/2004	9/20/2004	0.55	
LDW-C5-T	K2406517-009	0.025	9/10/2004	9/20/2004	0.79	
LDW-C3-T2	K2406517-010	0.025	9/10/2004	9/20/2004	0.76	
LDW-C3-T1	K2406517-011	0.025	9/10/2004	9/20/2004	0.64	
LDW-C9-T	K2406517-012	0.025	9/10/2004	9/20/2004	0.79	
LDW-C6-T	K2406517-013	0.025	9/10/2004	9/20/2004	0.81	
LDW-C4-T	K2406517-014	0.025	9/10/2004	9/20/2004	0.75	

Approved By:



Date:

9-23-04

1A/092099p

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406517
Date Collected: 8/26/2004
Date Received: 8/28/2004
Date Extracted: 9/10/2004
Date Analyzed: 9/20/2004

Duplicate Summary
 Lipids, Total

Sample Name: LDW-C2-T2
 Lab Code: K2406517-006
 Test Notes:

Units: PERCENT
 Basis: AS RECEIVED

Lab Code	Prep Method	Analysis Method	MRL	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
K2406517-006	EPA 3540	NOAA	0.025	0.68	0.71	0.70	4	

Approved By: Carl Jones Date: 9-23-04
DUP (22) /091599p

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Tissue

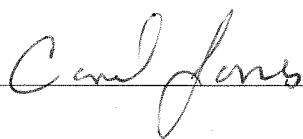
Service Request: K2406517
Date Collected: 8/26/2004
Date Received: 8/28/2004
Date Extracted: 9/10/2004
Date Analyzed: 9/20/2004

Triplicate Summary
 Lipids, Total

Sample Name: LDW-C2-T2
 Lab Code: K2406517-006
 Test Notes:

Units: PERCENT
 Basis: AS RECEIVED

Lab Code	Prep Method	Analysis Method	MRL	Sample Result	Duplicate Sample Result	Triplicate Sample Result	Average	Percent Relative Standard Deviation	Result Notes
K2406517-006	EPA 3540	NOAA	0.025	0.68	0.63	0.56	0.62	10	

Approved By: 

Date: 9-23-04

DUP/091599p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406581
Date Collected: 8/30/2004
Date Received: 8/31/2004

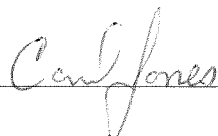
Lipids, Total

Prep Method: EPA 3540
Analysis Method: NOAA
Test Notes:

Units: PERCENT
Basis: AS RECEIVED

Sample Name	Lab Code	MRL	Date Extracted	Date Analyzed	Result	Result Notes
LDW-B37a-T	K2406581-001	0.33	9/29/2004	10/13/2004	0.66	

Approved By: _____



Date: 10-19-04

1A/092099p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406932
Date Collected: 8/17/2004
Date Received: 8/20/2004

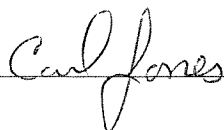
Lipids, Total

Prep Method: EPA 3540
Analysis Method: NOAA
Test Notes:

Units: PERCENT
Basis: AS RECEIVED

Sample Name	Lab Code	MRL	Date Extracted	Date Analyzed	Result	Result Notes
LDW-B8a-T	K2406932-006	0.25	9/29/2004	10/13/2004	0.35	
LDW-B10a-T	K2406932-009	0.25	9/29/2004	10/13/2004	0.95	

Approved By: _____



Date: _____

10-19-04

1A/092099p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2407216
Date Collected: 8/26/2004
Date Received: 8/30/2004

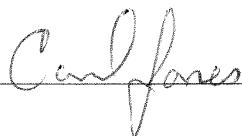
Lipids, Total

Prep Method: EPA 3540
Analysis Method: NOAA
Test Notes:

Units: PERCENT
Basis: AS RECEIVED

Sample Name	Lab Code	MRL	Date Extracted	Date Analyzed	Result	Result Notes
LDW-B3a-T	K2407216-001	0.25	9/29/2004	10/13/2004	0.87	
LDW-B9a-T	K2407216-002	0.25	9/29/2004	10/13/2004	0.91	

Approved By: _____



Date: 10-19-04

1A/092099p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2407452
Date Collected: 9/24/2004
Date Received: 9/25/2004

Lipids, Total

Prep Method: EPA 3540
Analysis Method: NOAA
Test Notes:

Units: PERCENT
Basis: AS RECEIVED

Sample Name	Lab Code	MRL	Date Extracted	Date Analyzed	Result	Result Notes
LDW-B5a-T	K2407452-001	0.35	10/15/2004	11/3/2004	1.1	

Approved By: _____

Carol Jones

Date: _____

11-3-04

1A/092099p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Windward Environmental
Project: LDW/04-08-06-22
Sample Matrix: Tissue

Service Request: K2407455
Date Collected: 9/23/2004
Date Received: 9/25/2004

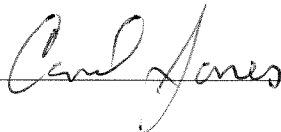
Lipids, Total

Prep Method: TISSUEMIZER
Analysis Method: NOAA
Test Notes:

Units: PERCENT
Basis: AS RECEIVED

Sample Name	Lab Code	MRL	Date Extracted	Date Analyzed	Result	Result Notes
BI-C-T1	K2407455-001		11/4/2004	11/4/2004	0.67	
BI-C-T2	K2407455-002		11/4/2004	11/4/2004	0.64	
BI-C-T3	K2407455-003		11/4/2004	11/4/2004	0.66	
BI-C-T4	K2407455-004		11/4/2004	11/4/2004	0.88	
BI-C-T5	K2407455-005		11/4/2004	11/4/2004	0.83	
BI-C-T6	K2407455-006		11/4/2004	11/4/2004	0.73	
SP-C-T1	K2407455-007		11/4/2004	11/4/2004	0.40	
SP-C-T2	K2407455-008		11/4/2004	11/4/2004	0.20	
SP-C-T3	K2407455-009		11/4/2004	11/4/2004	0.21	
SP-C-T4	K2407455-010		11/4/2004	11/4/2004	0.26	
SP-C-T5	K2407455-011		11/4/2004	11/4/2004	0.26	
SP-C-T6	K2407455-012		11/4/2004	11/4/2004	0.23	

Approved By:



Date: 11-4-04

1A/092099p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2407596
Date Collected: 9/28/2004
Date Received: 9/30/2004

Lipids, Total

Prep Method: EPA 3540
Analysis Method: NOAA
Test Notes:

Units: PERCENT
Basis: AS RECEIVED

Sample Name	Lab Code	MRL	Date Extracted	Date Analyzed	Result	Result Notes
LDW-B4b-T	K2407596-001	0.25	10/15/2004	11/3/2004	0.84	
LDW-B5b-T	K2407596-002	0.25	10/15/2004	11/3/2004	1.0	
LDW-B1b-T	K2407596-003	0.25	10/15/2004	11/3/2004	0.82	
LDW-B2b-T	K2407596-004	0.25	10/15/2004	11/3/2004	0.69	

Approved By: Carl Jones

Date: 11-3-04

1A/092099p

Butyltins

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406170
Date Collected: 08/13/2004
Date Received: 08/18/2004
Date Extracted: 09/22/2004
Date Analyzed: 09/28/2004

Butyltins (as cation)

Sample Name: LDW-B2a-S
Lab Code: K2406170-001
File ID: J:\GC26\DATA\092804\0928F030.D
Instrument ID: GC26

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: METHOD
Analysis Method: Krone

Extraction Lot: KWG0414228
Calibration ID: CAL3856

Column1: RTX-1
Column2: RTX-35

Sample Amount: 20.11 g
% Solids: 50.0
Dilution Factor: 1

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
1461-25-2	Tetra-n-butyltin	0.56 J	2.0	0.24	
688-73-3	Tri-n-butyltin	22	2.0	0.32	
1002-53-5	Di-n-butyltin	14	2.0	0.082	
2406-65-7	n-Butyltin	8.6	2.0	0.15	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	97	20-130	09/28/04	Acceptable

Comments: _____

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406170
Date Collected: 08/15/2004
Date Received: 08/18/2004
Date Extracted: 09/22/2004
Date Analyzed: 09/28/2004

Butyltins (as cation)

Sample Name: LDW-B6a-S
Lab Code: K2406170-002
File ID: J:\GC26\DATA\092804\0928F031.D
Instrument ID: GC26

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: METHOD
Analysis Method: Krone

Extraction Lot: KWG0414228
Calibration ID: CAL3856

Column1: RTX-1
Column2: RTX-35

Sample Amount: 20.14 g
% Solids: 71.2
Dilution Factor: 1

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
1461-25-2	Tetra-n-butyltin	0.17 U	1.4	0.17	
688-73-3	Tri-n-butyltin	2.3	1.4	0.23	
1002-53-5	Di-n-butyltin	2.6	1.4	0.058	
2406-65-7	n-Butyltin	1.1 J	1.4	0.10	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	87	20-130	09/28/04	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406170
Date Collected: 08/14/2004
Date Received: 08/18/2004
Date Extracted: 09/22/2004
Date Analyzed: 10/01/2004

Butyltins (as cation)

Sample Name: LDW-B4a-S
Lab Code: K2406170-003
File ID: J:\GC26\DATA\100104\1001F022.D
Instrument ID: GC26

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: METHOD
Analysis Method: Krone

Extraction Lot: KWG0414228
Calibration ID: CAL3856

Column1: RTX-1
Column2: RTX-35

Sample Amount: 20.06 g
% Solids: 53.7
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
1461-25-2	Tetra-n-butyltin	0.74	J	1.9	0.23	
688-73-3	Tri-n-butyltin	32		1.9	0.30	
1002-53-5	Di-n-butyltin	15		1.9	0.077	
2406-65-7	n-Butyltin	4.9		1.9	0.14	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	66	20-130	10/01/04	Acceptable

Comments: _____

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406170
Date Collected: 08/12/2004
Date Received: 08/18/2004
Date Extracted: 09/22/2004
Date Analyzed: 09/29/2004

Butyltins (as cation)

Sample Name: LDW-B1a-S
Lab Code: K2406170-004
File ID: J:\GC26\DATA\092804\0928F41A.D
Instrument ID: GC26

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: METHOD
Analysis Method: Krone

Extraction Lot: KWG0414228
Calibration ID: CAL3856

Sample Amount: 20.08 g
% Solids: 80.3
Dilution Factor: 1

Column1: RTX-1
Column2: RTX-35

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
1461-25-2	Tetra-n-butyltin	0.15	U	1.3	0.15	
688-73-3	Tri-n-butyltin	0.35	J	1.3	0.20	
1002-53-5	Di-n-butyltin	0.44	J	1.3	0.052	
2406-65-7	n-Butyltin	0.23	J	1.3	0.089	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	93	20-130	09/29/04	Acceptable

Comments: _____

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406170
Date Collected: 08/11/2004
Date Received: 08/18/2004
Date Extracted: 09/22/2004
Date Analyzed: 09/29/2004

Butyltins (as cation)

Sample Name: LDW-B9b-S
Lab Code: K2406170-005
File ID: J:\GC26\DATA\092804\0928F039.D
Instrument ID: GC26

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: METHOD
Analysis Method: Krone

Extraction Lot: KWG0414228
Calibration ID: CAL3856

Column1: RTX-1
Column2: RTX-35

Sample Amount: 20.07 g
% Solids: 54.2
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
1461-25-2	Tetra-n-butyltin	0.23	U	1.9	0.23	
688-73-3	Tri-n-butyltin	6.7		1.9	0.30	
1002-53-5	Di-n-butyltin	10		1.9	0.076	
2406-65-7	n-Butyltin	4.4		1.9	0.14	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	80	20-130	09/29/04	Acceptable

Comments: _____

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406170
Date Extracted: 09/22/2004
Date Analyzed: 09/29/2004

Duplicate Sample Summary
Butyltins (as cation)

Sample Name: LDW-B1a-S
Lab Code: K2406170-004
Extraction Method: METHOD
Analysis Method: Krone

Units: ug/Kg
Basis: Dry
Level: Low
Extraction Lot: KWG0414228

Analyte Name	MRL	MDL	Sample Result	LDW-B1a-SDUP KWG0414228-1 Duplicate Sample		Relative Percent Difference	RPD Limit
				Result	Average		
Tetra-n-butyltin	1.3	0.15	ND	ND	ND	-	50
Tri-n-butyltin	1.3	0.20	0.35	ND	NC	NC	50
Di-n-butyltin	1.3	0.052	0.44	0.34	0.39	28 #	50
n-Butyltin	1.3	0.089	0.23	0.30	0.26	25 #	50

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406226
Date Collected: 08/13/2004
Date Received: 08/19/2004
Date Extracted: 09/22/2004
Date Analyzed: 09/29/2004

Butyltins (as cation)

Sample Name: LDW-B7b-S
Lab Code: K2406226-001
File ID: J:\GC26\DATA\092804\0928F040.D
Instrument ID: GC26

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: METHOD
Analysis Method: Krone

Extraction Lot: KWG0414228
Calibration ID: CAL3856

Sample Amount: 20.13 g
% Solids: 50.5
Dilution Factor: 1

Column1: RTX-1
Column2: RTX-35

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
1461-25-2	Tetra-n-butyltin	0.27	J	2.0	0.24	
688-73-3	Tri-n-butyltin	13		2.0	0.32	
1002-53-5	Di-n-butyltin	8.7		2.0	0.082	
2406-65-7	n-Butyltin	4.3		2.0	0.15	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	77	20-130	09/29/04	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406226
Date Collected: 08/10/2004
Date Received: 08/19/2004
Date Extracted: 09/22/2004
Date Analyzed: 09/29/2004

Butyltins (as cation)

Sample Name: LDW-B3b-S
Lab Code: K2406226-002
File ID: J:\GC26\DATA\092804\0928F041.D
Instrument ID: GC26
Extraction Method: METHOD
Analysis Method: Krone
Sample Amount: 20.20 g
% Solids: 66.4
Dilution Factor: 1

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Lot: KWG0414228
Calibration ID: CAL3856
Column1: RTX-1
Column2: RTX-35

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
1461-25-2	Tetra-n-butyltin	3.0		1.5	0.19	
688-73-3	Tri-n-butyltin	280	E	1.5	0.25	
1002-53-5	Di-n-butyltin	330	E	1.5	0.062	
2406-65-7	n-Butyltin	100	E	1.5	0.11	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	99	20-130	09/29/04	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406226
Date Collected: 08/10/2004
Date Received: 08/19/2004
Date Extracted: 09/22/2004
Date Analyzed: 10/01/2004

Butyltins (as cation)

Sample Name: LDW-B3b-SDL
Lab Code: K2406226-002
File ID: J:\GC26\DATA\100104\1001F025.D
Instrument ID: GC26

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: METHOD
Analysis Method: Krone

Extraction Lot: KWG0414228
Calibration ID: CAL3856

Sample Amount: 20.20 g
% Solids: 66.4
Dilution Factor: 10

Column1: RTX-1
Column2: RTX-35

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
1461-25-2	Tetra-n-butyltin	3.8	JD	15	1.9	
688-73-3	Tri-n-butyltin	320	D	15	2.5	
1002-53-5	Di-n-butyltin	360	D	15	0.62	
2406-65-7	n-Butyltin	120	D	15	1.1	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	103	20-130	10/01/04	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406232
Date Collected: 08/15/2004
Date Received: 08/19/2004
Date Extracted: 09/30/2004
Date Analyzed: 10/05/2004

Butyltins (as cation)

Sample Name: LDW-B1a-T
Lab Code: K2406232-001
File ID: J:\GC26\DATA\100504\1005F022.D
Instrument ID: GC26

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: METHOD
Analysis Method: GC-FPD

Extraction Lot: KWG0414914
Calibration ID: CAL3856

Sample Amount: 2.00 g
% Solids: NA
Dilution Factor: 1

Column1: RTX-1
Column2: RTX-35

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
1461-25-2	Tetra-n-butyltin	1.9	U	5.0	1.9	
688-73-3	Tri-n-butyltin	1.7	U	5.0	1.7	
1002-53-5	Di-n-butyltin	1.8	U	5.0	1.8	
2406-65-7	n-Butyltin	1.9	U	5.0	1.9	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	58	20-130	10/05/04	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406232
Date Collected: 08/14/2004
Date Received: 08/19/2004
Date Extracted: 09/30/2004
Date Analyzed: 10/05/2004

Butyltins (as cation)

Sample Name: LDW-B4a-T
Lab Code: K2406232-002
File ID: J:\GC26\DATA\100504\1005F023.D
Instrument ID: GC26

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: METHOD
Analysis Method: GC-FPD

Extraction Lot: KWG0414914
Calibration ID: CAL3856

Sample Amount: 2.03 g
% Solids: NA
Dilution Factor: 1

Column1: RTX-1
Column2: RTX-35

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
1461-25-2	Tetra-n-butyltin	1.9	U	5.0	1.9	
688-73-3	Tri-n-butyltin	30		5.0	1.7	
1002-53-5	Di-n-butyltin	8.9		5.0	1.8	
2406-65-7	n-Butyltin	6.1		5.0	1.9	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	55	20-130	10/05/04	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406232
Date Collected: 08/14/2004
Date Received: 08/19/2004
Date Extracted: 09/30/2004
Date Analyzed: 10/05/2004

Butyltins (as cation)

Sample Name: LDW-B2a-T
Lab Code: K2406232-003
File ID: J:\GC26\DATA\100504\1005F024.D
Instrument ID: GC26

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: METHOD
Analysis Method: GC-FPD

Extraction Lot: KWG0414914
Calibration ID: CAL3856

Sample Amount: 2.18 g
% Solids: NA
Dilution Factor: 1

Column1: RTX-1
Column2: RTX-35

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
1461-25-2	Tetra-n-butyltin	1.8	U	4.6	1.8	
688-73-3	Tri-n-butyltin	27		4.6	1.6	
1002-53-5	Di-n-butyltin	6.6		4.6	1.7	
2406-65-7	n-Butyltin	1.8	U	4.6	1.8	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	54	20-130	10/05/04	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406232
Date Collected: 08/11/2004
Date Received: 08/19/2004
Date Extracted: 09/30/2004
Date Analyzed: 10/05/2004

Butyltins (as cation)

Sample Name: LDW-B9b-T
Lab Code: K2406232-004
File ID: J:\GC26\DATA\100504\1005F025.D
Instrument ID: GC26

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: METHOD
Analysis Method: GC-FPD

Extraction Lot: KWG0414914
Calibration ID: CAL3856

Sample Amount: 2.05 g
% Solids: NA
Dilution Factor: 1

Column1: RTX-1
Column2: RTX-35

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
1461-25-2	Tetra-n-butyltin	1.9	U	4.9	1.9	
688-73-3	Tri-n-butyltin	7.0		4.9	1.7	
1002-53-5	Di-n-butyltin	1.8	U	4.9	1.8	
2406-65-7	n-Butyltin	1.9	U	4.9	1.9	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	53	20-130	10/05/04	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406232
Date Collected: 08/15/2004
Date Received: 08/19/2004
Date Extracted: 09/30/2004
Date Analyzed: 10/05/2004

Butyltins (as cation)

Sample Name: LDW-B6a-T
Lab Code: K2406232-005
File ID: J:\GC26\DATA\100504\1005F026.D
Instrument ID: GC26

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: METHOD
Analysis Method: GC-FPD

Extraction Lot: KWG0414914
Calibration ID: CAL3856

Sample Amount: 2.06 g
% Solids: NA
Dilution Factor: 1

Column1: RTX-1
Column2: RTX-35

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
1461-25-2	Tetra-n-butyltin	1.9 U	4.9	1.9	
688-73-3	Tri-n-butyltin	15	4.9	1.7	
1002-53-5	Di-n-butyltin	3.6 J	4.9	1.7	
2406-65-7	n-Butyltin	1.9 U	4.9	1.9	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	56	20-130	10/05/04	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406232
Date Collected: 08/10/2004
Date Received: 08/19/2004
Date Extracted: 09/30/2004
Date Analyzed: 10/05/2004

Butyltins (as cation)

Sample Name: LDW-B3b-T
Lab Code: K2406232-008
File ID: J:\GC26\DATA\100504\1005F027.D
Instrument ID: GC26

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: METHOD
Analysis Method: GC-FPD

Extraction Lot: KWG0414914
Calibration ID: CAL3856

Sample Amount: 2.00 g
% Solids: NA
Dilution Factor: 1

Column1: RTX-1
Column2: RTX-35

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
1461-25-2	Tetra-n-butyltin	1.9	U	5.0	1.9	
688-73-3	Tri-n-butyltin	46		5.0	1.7	
1002-53-5	Di-n-butyltin	24		5.0	1.8	
2406-65-7	n-Butyltin	6.5		5.0	1.9	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	56	20-130	10/05/04	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406232
Date Collected: 08/13/2004
Date Received: 08/19/2004
Date Extracted: 09/30/2004
Date Analyzed: 10/05/2004

Butyltins (as cation)

Sample Name: LDW-B7b-T
Lab Code: K2406232-009
File ID: J:\GC26\DATA\100504\1005F028.D
Instrument ID: GC26

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: METHOD
Analysis Method: GC-FPD

Extraction Lot: KWG0414914
Calibration ID: CAL3856

Sample Amount: 2.25 g
% Solids: NA
Dilution Factor: 1

Column1: RTX-1
Column2: RTX-35

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
1461-25-2	Tetra-n-butyltin	1.7 U	4.5	1.7	
688-73-3	Tri-n-butyltin	37	4.5	1.5	
1002-53-5	Di-n-butyltin	18	4.5	1.6	
2406-65-7	n-Butyltin	4.7	4.5	1.7	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	57	20-130	10/05/04	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406296
Date Collected: 08/18/2004
Date Received: 08/21/2004
Date Extracted: 09/22/2004
Date Analyzed: 10/01/2004

Butyltins (as cation)

Sample Name: LDW-B6b-S
Lab Code: K2406296-001
File ID: J:\GC26\DATA\100104\1001F016.D
Instrument ID: GC26

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: METHOD
Analysis Method: Krone

Extraction Lot: KWG0414230
Calibration ID: CAL3856

Sample Amount: 20.02 g
% Solids: 47.8
Dilution Factor: 1

Column1: RTX-1
Column2: RTX-35

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
1461-25-2	Tetra-n-butyltin	0.46	J	2.1	0.26	
688-73-3	Tri-n-butyltin	20		2.1	0.34	
1002-53-5	Di-n-butyltin	12		2.1	0.086	
2406-65-7	n-Butyltin	8.2		2.1	0.15	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	56	20-130	10/01/04	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406296
Date Collected: 08/19/2004
Date Received: 08/21/2004
Date Extracted: 09/22/2004
Date Analyzed: 09/28/2004

Butyltins (as cation)

Sample Name: LDW-B8b-S
Lab Code: K2406296-002
File ID: J:\GC26\DATA\092804\0928F011.D
Instrument ID: GC26
Extraction Method: METHOD
Analysis Method: Krone
Sample Amount: 20.05 g
% Solids: 47.0
Dilution Factor: 1

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Lot: KWG0414230
Calibration ID: CAL3856
Column1: RTX-1
Column2: RTX-35

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
1461-25-2	Tetra-n-butyltin	0.26 U	2.2	0.26	
688-73-3	Tri-n-butyltin	1.7 J	2.2	0.35	
1002-53-5	Di-n-butyltin	1.4 J	2.2	0.088	
2406-65-7	n-Butyltin	1.0 J	2.2	0.16	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	56	20-130	09/28/04	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406296
Date Collected: 08/19/2004
Date Received: 08/21/2004
Date Extracted: 09/22/2004
Date Analyzed: 09/28/2004

Butyltins (as cation)

Sample Name: LDW-B10b-S
Lab Code: K2406296-003
File ID: J:\GC26\DATA\092804\0928F012.D
Instrument ID: GC26
Extraction Method: METHOD
Analysis Method: Krone
Sample Amount: 20.00 g
% Solids: 59.1
Dilution Factor: 1

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Lot: KWG0414230
Calibration ID: CAL3856

Column1: RTX-1
Column2: RTX-35

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
1461-25-2	Tetra-n-butyltin	0.21	U	1.7	0.21	
688-73-3	Tri-n-butyltin	2.3		1.7	0.28	
1002-53-5	Di-n-butyltin	1.7	J	1.7	0.070	
2406-65-7	n-Butyltin	0.46	J	1.7	0.13	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	69	20-130	09/28/04	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406297
Date Collected: 08/18/2004
Date Received: 08/21/2004
Date Extracted: 09/30/2004
Date Analyzed: 10/05/2004

Butyltins (as cation)

Sample Name: LDW-B6b-T
Lab Code: K2406297-001
File ID: J:\GC26\DATA\100504\1005F035.D
Instrument ID: GC26

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: METHOD
Analysis Method: GC-FPD

Extraction Lot: KWG0414914
Calibration ID: CAL3856

Sample Amount: 1.07 g
% Solids: NA
Dilution Factor: 1

Column1: RTX-1
Column2: RTX-35

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
1461-25-2	Tetra-n-butyltin	3.6	U	9.4	3.6	
688-73-3	Tri-n-butyltin	35		9.4	3.1	
1002-53-5	Di-n-butyltin	7.3	J	9.4	3.3	
2406-65-7	n-Butyltin	3.6	U	9.4	3.6	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	53	20-130	10/05/04	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406297
Date Collected: 08/19/2004
Date Received: 08/21/2004
Date Extracted: 09/30/2004
Date Analyzed: 10/06/2004

Butyltins (as cation)

Sample Name: LDW-B8b-T
Lab Code: K2406297-002
File ID: J:\GC26\DATA\100504\1005F036.D
Instrument ID: GC26

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: METHOD
Analysis Method: GC-FPD

Extraction Lot: KWG0414914
Calibration ID: CAL3856

Sample Amount: 2.05 g
% Solids: NA
Dilution Factor: 1

Column1: RTX-1
Column2: RTX-35

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
1461-25-2	Tetra-n-butyltin	1.9	U	4.9	1.9	
688-73-3	Tri-n-butyltin	13		4.9	1.7	
1002-53-5	Di-n-butyltin	1.8	U	4.9	1.8	
2406-65-7	n-Butyltin	1.9	U	4.9	1.9	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	57	20-130	10/06/04	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406297
Date Collected: 08/19/2004
Date Received: 08/21/2004
Date Extracted: 09/30/2004
Date Analyzed: 10/06/2004

Butyltins (as cation)

Sample Name: LDW-B10b-T
Lab Code: K2406297-003
File ID: J:\GC26\DATA\100504\1005F037.D
Instrument ID: GC26

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: METHOD
Analysis Method: GC-FPD

Extraction Lot: KWG0414914
Calibration ID: CAL3856

Sample Amount: 2.02 g
% Solids: NA
Dilution Factor: 1

Column1: RTX-1
Column2: RTX-35

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
1461-25-2	Tetra-n-butyltin	1.9	U	5.0	1.9	
688-73-3	Tri-n-butyltin	7.9		5.0	1.7	
1002-53-5	Di-n-butyltin	1.8	U	5.0	1.8	
2406-65-7	n-Butyltin	1.9	U	5.0	1.9	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	49	20-130	10/06/04	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: Lower Duwamish Working Group/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406516
Date Collected: 08/27/2004
Date Received: 08/30/2004
Date Extracted: 09/01/2004
Date Analyzed: 09/09/2004

Butyltins (as cation)

Sample Name: LDW-C4-S
Lab Code: K2406516-001
File ID: J:\GC26\DATA\090904\0909F017.D
Instrument ID: GC26

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: METHOD
Analysis Method: Krone

Extraction Lot: KWG0413046
Calibration ID: CAL3801

Sample Amount: 20.15 g
% Solids: 66.8
Dilution Factor: 1

Column1: RTX-1
Column2: RTX-35

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
1461-25-2	Tetra-n-butyltin	0.18	U	1.5	0.18	
688-73-3	Tri-n-butyltin	3.4		1.5	0.24	
1002-53-5	Di-n-butyltin	3.1		1.5	0.062	
2406-65-7	n-Butyltin	2.0		1.5	0.11	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	46	20-130	09/09/04	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: Lower Duwamish Working Group/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406516
Date Collected: 08/25/2004
Date Received: 08/30/2004
Date Extracted: 09/01/2004
Date Analyzed: 09/09/2004

Butyltins (as cation)

Sample Name: LDW-C10-S2
Lab Code: K2406516-002
File ID: J:\GC26\DATA\090904\0909F018.D
Instrument ID: GC26

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: METHOD
Analysis Method: Krone

Extraction Lot: KWG0413046
Calibration ID: CAL3801

Sample Amount: 20.05 g
% Solids: 51.5
Dilution Factor: 1

Column1: RTX-1
Column2: RTX-35

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
1461-25-2	Tetra-n-butyltin	0.24	U	2.0	0.24	
688-73-3	Tri-n-butyltin	2.7		2.0	0.32	
1002-53-5	Di-n-butyltin	1.6	J	2.0	0.080	
2406-65-7	n-Butyltin	1.2	J	2.0	0.14	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	51	20-130	09/09/04	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: Lower Duwamish Working Group/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406516
Date Collected: 08/25/2004
Date Received: 08/30/2004
Date Extracted: 09/01/2004
Date Analyzed: 09/09/2004

Butyltins (as cation)

Sample Name: LDW-C10-S1
Lab Code: K2406516-003
File ID: J:\GC26\DATA\090904\0909F019.D
Instrument ID: GC26
Extraction Method: METHOD
Analysis Method: Krone
Sample Amount: 20.10 g
% Solids: 50.4
Dilution Factor: 1

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Lot: KWG0413046
Calibration ID: CAL3801
Column1: RTX-1
Column2: RTX-35

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
1461-25-2	Tetra-n-butyltin	0.24	U	2.0	0.24	
688-73-3	Tri-n-butyltin	3.8		2.0	0.32	
1002-53-5	Di-n-butyltin	2.8		2.0	0.082	
2406-65-7	n-Butyltin	2.5		2.0	0.15	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	60	20-130	09/09/04	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: Lower Duwamish Working Group/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406516
Date Collected: 08/25/2004
Date Received: 08/30/2004
Date Extracted: 09/01/2004
Date Analyzed: 09/09/2004

Butyltins (as cation)

Sample Name: LDW-C6-S
Lab Code: K2406516-004
File ID: J:\GC26\DATA\090904\0909F020.D
Instrument ID: GC26

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: METHOD
Analysis Method: Krone

Extraction Lot: KWG0413046
Calibration ID: CAL3801

Sample Amount: 20.06 g
% Solids: 70.2
Dilution Factor: 1

Column1: RTX-1
Column2: RTX-35

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
1461-25-2	Tetra-n-butyltin	0.18	U	1.5	0.18	
688-73-3	Tri-n-butyltin	1.8		1.5	0.23	
1002-53-5	Di-n-butyltin	1.4	J	1.5	0.059	
2406-65-7	n-Butyltin	2.3		1.5	0.11	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	52	20-130	09/09/04	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: Lower Duwamish Working Group/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406516
Date Collected: 08/25/2004
Date Received: 08/30/2004
Date Extracted: 09/01/2004
Date Analyzed: 09/09/2004

Butyltins (as cation)

Sample Name: LDW-C9-S
Lab Code: K2406516-005
File ID: J:\GC26\DATA\090904\0909F021.D
Instrument ID: GC26

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: METHOD
Analysis Method: Krone

Extraction Lot: KWG0413046
Calibration ID: CAL3801

Sample Amount: 20.26 g
% Solids: 75.7
Dilution Factor: 1

Column1: RTX-1
Column2: RTX-35

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
1461-25-2	Tetra-n-butyltin	0.16	U	1.4	0.16	
688-73-3	Tri-n-butyltin	1.3	J	1.4	0.22	
1002-53-5	Di-n-butyltin	1.3	J	1.4	0.055	
2406-65-7	n-Butyltin	0.60	J	1.4	0.094	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	53	20-130	09/09/04	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: Lower Duwamish Working Group/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406516
Date Collected: 08/26/2004
Date Received: 08/30/2004
Date Extracted: 09/01/2004
Date Analyzed: 09/09/2004

Butyltins (as cation)

Sample Name: LDW-C7-S1
Lab Code: K2406516-006
File ID: J:\GC26\DATA\090904\0909F024.D
Instrument ID: GC26

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: METHOD
Analysis Method: Krone

Extraction Lot: KWG0413046
Calibration ID: CAL3801

Sample Amount: 20.14 g
% Solids: 78.0
Dilution Factor: 1

Column1: RTX-1
Column2: RTX-35

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
1461-25-2	Tetra-n-butyltin	0.16	U	1.3	0.16	
688-73-3	Tri-n-butyltin	2.0		1.3	0.21	
1002-53-5	Di-n-butyltin	1.9		1.3	0.053	
2406-65-7	n-Butyltin	0.63	J	1.3	0.092	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	55	20-130	09/09/04	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: Lower Duwamish Working Group/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406516
Date Collected: 08/27/2004
Date Received: 08/30/2004
Date Extracted: 09/01/2004
Date Analyzed: 09/09/2004

Butyltins (as cation)

Sample Name: LDW-C3-S2
Lab Code: K2406516-007
File ID: J:\GC26\DATA\090904\0909F025.D
Instrument ID: GC26

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: METHOD
Analysis Method: Krone

Extraction Lot: KWG0413046
Calibration ID: CAL3801

Sample Amount: 20.14 g
% Solids: 75.2
Dilution Factor: 1

Column1: RTX-1
Column2: RTX-35

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
1461-25-2	Tetra-n-butyltin	0.16 U	1.4	0.16	
688-73-3	Tri-n-butyltin	0.39 J	1.4	0.22	
1002-53-5	Di-n-butyltin	0.42 J	1.4	0.055	
2406-65-7	n-Butyltin	0.64 J	1.4	0.095	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	56	20-130	09/09/04	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: Lower Duwamish Working Group/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406516
Date Collected: 08/26/2004
Date Received: 08/30/2004
Date Extracted: 09/01/2004
Date Analyzed: 09/09/2004

Butyltins (as cation)

Sample Name: LDW-C7-S2
Lab Code: K2406516-008
File ID: J:\GC26\DATA\090904\0909F029.D
Instrument ID: GC26
Extraction Method: METHOD
Analysis Method: Krone
Sample Amount: 20.03 g
% Solids: 78.3
Dilution Factor: 1

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Lot: KWG0413046
Calibration ID: CAL3801
Column1: RTX-1
Column2: RTX-35

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
1461-25-2	Tetra-n-butyltin	0.16	U	1.3	0.16	
688-73-3	Tri-n-butyltin	1.1	J	1.3	0.21	
1002-53-5	Di-n-butyltin	1.5		1.3	0.053	
2406-65-7	n-Butyltin	0.68	J	1.3	0.091	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	62	20-130	09/09/04	Acceptable

Comments: _____

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COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: Lower Duwamish Working Group/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406516
Date Collected: 08/26/2004
Date Received: 08/30/2004
Date Extracted: 09/01/2004
Date Analyzed: 09/09/2004

Butyltins (as cation)

Sample Name: LDW-C8-S
Lab Code: K2406516-009
File ID: J:\GC26\DATA\090904\0909F030.D
Instrument ID: GC26

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: METHOD
Analysis Method: Krone

Extraction Lot: KWG0413046
Calibration ID: CAL3801

Sample Amount: 20.06 g
% Solids: 60.3
Dilution Factor: 1

Column1: RTX-1
Column2: RTX-35

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
1461-25-2	Tetra-n-butyltin	0.20	U	1.7	0.20	
688-73-3	Tri-n-butyltin	7.0		1.7	0.27	
1002-53-5	Di-n-butyltin	9.8		1.7	0.068	
2406-65-7	n-Butyltin	5.9		1.7	0.12	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	60	20-130	09/09/04	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: Lower Duwamish Working Group/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406516
Date Collected: 08/27/2004
Date Received: 08/30/2004
Date Extracted: 09/01/2004
Date Analyzed: 09/09/2004

Butyltins (as cation)

Sample Name: LDW-C5-S
Lab Code: K2406516-010
File ID: J:\GC26\DATA\090904\0909F031.D
Instrument ID: GC26

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: METHOD
Analysis Method: Krone

Extraction Lot: KWG0413046
Calibration ID: CAL3801

Sample Amount: 20.19 g
% Solids: 74.1
Dilution Factor: 1

Column1: RTX-1
Column2: RTX-35

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
1461-25-2	Tetra-n-butyltin	0.17	U	1.4	0.17	
688-73-3	Tri-n-butyltin	6.5		1.4	0.22	
1002-53-5	Di-n-butyltin	2.9		1.4	0.056	
2406-65-7	n-Butyltin	0.85	J	1.4	0.096	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	55	20-130	09/09/04	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: Lower Duwamish Working Group/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406516
Date Collected: 08/27/2004
Date Received: 08/30/2004
Date Extracted: 09/01/2004
Date Analyzed: 09/09/2004

Butyltins (as cation)

Sample Name: LDW-C3-S1
Lab Code: K2406516-011
File ID: J:\GC26\DATA\090904\0909F032.D
Instrument ID: GC26
Extraction Method: METHOD
Analysis Method: Krone
Sample Amount: 20.18 g
% Solids: 72.2
Dilution Factor: 1

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Lot: KWG0413046
Calibration ID: CAL3801
Column1: RTX-1
Column2: RTX-35

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
1461-25-2	Tetra-n-butyltin	0.17 U	1.4	0.17	
688-73-3	Tri-n-butyltin	0.74 J	1.4	0.23	
1002-53-5	Di-n-butyltin	0.83 J	1.4	0.057	
2406-65-7	n-Butyltin	1.4	1.4	0.099	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	70	20-130	09/09/04	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: Lower Duwamish Working Group/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406516
Date Collected: 08/26/2004
Date Received: 08/30/2004
Date Extracted: 09/01/2004
Date Analyzed: 09/09/2004

Butyltins (as cation)

Sample Name: LDW-C2-S1
Lab Code: K2406516-012
File ID: J:\GC26\DATA\090904\0909F033.D
Instrument ID: GC26

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: METHOD
Analysis Method: Krone

Extraction Lot: KWG0413046
Calibration ID: CAL3801

Sample Amount: 20.25 g
% Solids: 55.9
Dilution Factor: 1

Column1: RTX-1
Column2: RTX-35

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
1461-25-2	Tetra-n-butyltin	0.22	U	1.8	0.22	
688-73-3	Tri-n-butyltin	4.3		1.8	0.29	
1002-53-5	Di-n-butyltin	2.5		1.8	0.074	
2406-65-7	n-Butyltin	0.66	J	1.8	0.13	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	56	20-130	09/09/04	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: Lower Duwamish Working Group/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406516
Date Collected: 08/26/2004
Date Received: 08/30/2004
Date Extracted: 09/01/2004
Date Analyzed: 09/10/2004

Butyltins (as cation)

Sample Name: LDW-C2-S2
Lab Code: K2406516-013
File ID: J:\GC26\DATA\090904\0909F034.D
Instrument ID: GC26

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: METHOD
Analysis Method: Krone

Extraction Lot: KWG0413046
Calibration ID: CAL3801

Sample Amount: 20.07 g
% Solids: 70.4
Dilution Factor: 1

Column1: RTX-1
Column2: RTX-35

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
1461-25-2	Tetra-n-butyltin	0.18	U	1.5	0.18	
688-73-3	Tri-n-butyltin	1.4	J	1.5	0.23	
1002-53-5	Di-n-butyltin	1.4	J	1.5	0.059	
2406-65-7	n-Butyltin	2.0		1.5	0.11	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	62	20-130	09/10/04	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: Lower Duwamish Working Group/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406516
Date Collected: 08/26/2004
Date Received: 08/30/2004
Date Extracted: 09/01/2004
Date Analyzed: 09/10/2004

Butyltins (as cation)

Sample Name: LDW-C1-S
Lab Code: K2406516-014
File ID: J:\GC26\DATA\090904\0909F036.D
Instrument ID: GC26

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: METHOD
Analysis Method: Krone

Extraction Lot: KWG0413046
Calibration ID: CAL3801

Sample Amount: 20.02 g
% Solids: 74.2
Dilution Factor: 1

Column1: RTX-1
Column2: RTX-35

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
1461-25-2	Tetra-n-butyltin	0.17	U	1.4	0.17	
688-73-3	Tri-n-butyltin	0.28	J	1.4	0.22	
1002-53-5	Di-n-butyltin	0.43	J	1.4	0.056	
2406-65-7	n-Butyltin	0.31	J	1.4	0.096	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	49	20-130	09/10/04	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Windward Environmental
Project: Lower Duwamish Working Group/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406516
Date Extracted: 09/01/2004
Date Analyzed: 09/10/2004

Duplicate Sample Summary
Butyltins (as cation)

Sample Name: LDW-C2-S2
Lab Code: K2406516-013
Extraction Method: METHOD
Analysis Method: Krone

Units: ug/Kg
Basis: Dry
Level: Low
Extraction Lot: KWG0413046

Analyte Name	MRL	MDL	Sample Result	LDW-C2-S2DUP KWG0413046-1 Duplicate Sample		Relative Percent Difference	RPD Limit
				Result	Average		
Tetra-n-butyltin	1.5	0.18	ND	ND	ND	-	50
Tri-n-butyltin	1.5	0.23	1.4	0.92	1.2	41 #	50
Di-n-butyltin	1.5	0.059	1.4	0.96	1.2	34 #	50
n-Butyltin	1.5	0.11	2.0	0.42	1.2	130 #	50

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406517
Date Collected: 08/26/2004
Date Received: 08/28/2004
Date Extracted: 09/13/2004
Date Analyzed: 09/16/2004

Butyltins (as cation)

Sample Name: LDW-C8-T
Lab Code: K2406517-001
File ID: J:\GC26\DATA\091604\0916F007.D
Instrument ID: GC26

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: METHOD
Analysis Method: GC-FPD

Extraction Lot: KWG0413746
Calibration ID: CAL3801

Sample Amount: 10.04 g
% Solids: NA
Dilution Factor: 1

Column1: RTX-1
Column2: RTX-35

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
1461-25-2	Tetra-n-butyltin	0.38	U	1.0	0.38	
688-73-3	Tri-n-butyltin	140	E	1.0	0.33	
1002-53-5	Di-n-butyltin	4.9	P	1.0	0.35	
2406-65-7	n-Butyltin	2.2		1.0	0.38	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	42	20-130	09/16/04	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406517
Date Collected: 08/26/2004
Date Received: 08/28/2004
Date Extracted: 09/13/2004
Date Analyzed: 09/18/2004

Butyltins (as cation)

Sample Name: LDW-C8-TDL
Lab Code: K2406517-001
File ID: J:\GC26\DATA\091804\0918F005.D
Instrument ID: GC26

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: METHOD
Analysis Method: GC-FPD

Extraction Lot: KWG0413746
Calibration ID: CAL3801

Sample Amount: 10.04 g
% Solids: NA
Dilution Factor: 10

Column1: RTX-1
Column2: RTX-35

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
1461-25-2	Tetra-n-butyltin	3.8 U	10	3.8	
688-73-3	Tri-n-butyltin	150 D	10	3.3	
1002-53-5	Di-n-butyltin	4.2 JPD	10	3.5	
2406-65-7	n-Butyltin	3.8 U	10	3.8	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	40	20-130	09/18/04	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406517
Date Collected: 08/26/2004
Date Received: 08/28/2004
Date Extracted: 09/13/2004
Date Analyzed: 09/16/2004

Butyltins (as cation)

Sample Name: LDW-C7-T2
Lab Code: K2406517-002
File ID: J:\GC26\DATA\091604\0916F008.D
Instrument ID: GC26

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: METHOD
Analysis Method: GC-FPD

Extraction Lot: KWG0413746
Calibration ID: CAL3801

Sample Amount: 10.26 g
% Solids: NA
Dilution Factor: 1

Column1: RTX-1
Column2: RTX-35

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
1461-25-2	Tetra-n-butyltin	0.38 U	0.98	0.38	
688-73-3	Tri-n-butyltin	160 E	0.98	0.33	
1002-53-5	Di-n-butyltin	2.6	0.98	0.35	
2406-65-7	n-Butyltin	0.65 J	0.98	0.38	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	40	20-130	09/16/04	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406517
Date Collected: 08/26/2004
Date Received: 08/28/2004
Date Extracted: 09/13/2004
Date Analyzed: 09/18/2004

Butyltins (as cation)

Sample Name: LDW-C7-T2DL
Lab Code: K2406517-002
File ID: J:\GC26\DATA\091804\0918F006.D
Instrument ID: GC26

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: METHOD
Analysis Method: GC-FPD

Extraction Lot: KWG0413746
Calibration ID: CAL3801

Sample Amount: 10.26 g
% Solids: NA
Dilution Factor: 10

Column1: RTX-1
Column2: RTX-35

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
1461-25-2	Tetra-n-butyltin	3.8	U	9.8	3.8	
688-73-3	Tri-n-butyltin	160	D	9.8	3.3	
1002-53-5	Di-n-butyltin	3.5	U	9.8	3.5	
2406-65-7	n-Butyltin	3.8	U	9.8	3.8	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	43	20-130	09/18/04	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406517
Date Collected: 08/26/2004
Date Received: 08/28/2004
Date Extracted: 09/13/2004
Date Analyzed: 09/16/2004

Butyltins (as cation)

Sample Name: LDW-C7-T1
Lab Code: K2406517-003
File ID: J:\GC26\DATA\091604\0916F009.D
Instrument ID: GC26

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: METHOD
Analysis Method: GC-FPD

Extraction Lot: KWG0413746
Calibration ID: CAL3801

Sample Amount: 10.30 g
% Solids: NA
Dilution Factor: 1

Column1: RTX-1
Column2: RTX-35

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
1461-25-2	Tetra-n-butyltin	0.38	U	0.98	0.38	
688-73-3	Tri-n-butyltin	200	E	0.98	0.33	
1002-53-5	Di-n-butyltin	3.3		0.98	0.35	
2406-65-7	n-Butyltin	0.79	J	0.98	0.38	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	42	20-130	09/16/04	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406517
Date Collected: 08/26/2004
Date Received: 08/28/2004
Date Extracted: 09/13/2004
Date Analyzed: 09/18/2004

Butyltins (as cation)

Sample Name: LDW-C7-T1DL
Lab Code: K2406517-003
File ID: J:\GC26\DATA\091804\0918F007.D
Instrument ID: GC26

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: METHOD
Analysis Method: GC-FPD

Extraction Lot: KWG0413746
Calibration ID: CAL3801

Sample Amount: 10.30 g
% Solids: NA
Dilution Factor: 10

Column1: RTX-1
Column2: RTX-35

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
1461-25-2	Tetra-n-butyltin	3.8	U	9.8	3.8	
688-73-3	Tri-n-butyltin	210	D	9.8	3.3	
1002-53-5	Di-n-butyltin	3.5	U	9.8	3.5	
2406-65-7	n-Butyltin	3.8	U	9.8	3.8	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	42	20-130	09/18/04	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406517
Date Collected: 08/26/2004
Date Received: 08/28/2004
Date Extracted: 09/13/2004
Date Analyzed: 09/16/2004

Butyltins (as cation)

Sample Name: LDW-C1-T
Lab Code: K2406517-004
File ID: J:\GC26\DATA\091604\0916F010.D
Instrument ID: GC26
Extraction Method: METHOD
Analysis Method: GC-FPD

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Lot: KWG0413746
Calibration ID: CAL3801

Sample Amount: 10.23 g
% Solids: NA
Dilution Factor: 1

Column1: RTX-1
Column2: RTX-35

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
1461-25-2	Tetra-n-butyltin	0.38	U	0.98	0.38	
688-73-3	Tri-n-butyltin	330	E	0.98	0.33	
1002-53-5	Di-n-butyltin	3.0		0.98	0.35	
2406-65-7	n-Butyltin	1.4		0.98	0.38	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	43	20-130	09/16/04	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406517
Date Collected: 08/26/2004
Date Received: 08/28/2004
Date Extracted: 09/13/2004
Date Analyzed: 09/18/2004

Butyltins (as cation)

Sample Name: LDW-C1-TDL
Lab Code: K2406517-004
File ID: J:\GC26\DATA\091804\0918F008.D
Instrument ID: GC26

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: METHOD
Analysis Method: GC-FPD

Extraction Lot: KWG0413746
Calibration ID: CAL3801

Sample Amount: 10.23 g
% Solids: NA
Dilution Factor: 10

Column1: RTX-1
Column2: RTX-35

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
1461-25-2	Tetra-n-butyltin	3.8	U	9.8	3.8	
688-73-3	Tri-n-butyltin	350	D	9.8	3.3	
1002-53-5	Di-n-butyltin	3.7	JD	9.8	3.5	
2406-65-7	n-Butyltin	3.8	U	9.8	3.8	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	43	20-130	09/18/04	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406517
Date Collected: 08/26/2004
Date Received: 08/28/2004
Date Extracted: 09/13/2004
Date Analyzed: 09/16/2004

Butyltins (as cation)

Sample Name: LDW-C2-T1
Lab Code: K2406517-005
File ID: J:\GC26\DATA\091604\0916F011.D
Instrument ID: GC26

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: METHOD
Analysis Method: GC-FPD

Extraction Lot: KWG0413746
Calibration ID: CAL3801

Sample Amount: 10.15 g
% Solids: NA
Dilution Factor: 1

Column1: RTX-1
Column2: RTX-35

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
1461-25-2	Tetra-n-butyltin	0.38	U	0.99	0.38	
688-73-3	Tri-n-butyltin	200	E	0.99	0.33	
1002-53-5	Di-n-butyltin	2.4		0.99	0.35	
2406-65-7	n-Butyltin	1.1		0.99	0.38	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	46	20-130	09/16/04	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406517
Date Collected: 08/26/2004
Date Received: 08/28/2004
Date Extracted: 09/13/2004
Date Analyzed: 09/18/2004

Butyltins (as cation)

Sample Name: LDW-C2-T1DL
Lab Code: K2406517-005
File ID: J:\GC26\DATA\091804\0918F009.D
Instrument ID: GC26
Extraction Method: METHOD
Analysis Method: GC-FPD

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Lot: KWG0413746
Calibration ID: CAL3801

Sample Amount: 10.15 g
% Solids: NA
Dilution Factor: 10

Column1: RTX-1
Column2: RTX-35

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
1461-25-2	Tetra-n-butyltin	3.8	U	9.9	3.8	
688-73-3	Tri-n-butyltin	200	D	9.9	3.3	
1002-53-5	Di-n-butyltin	3.5	U	9.9	3.5	
2406-65-7	n-Butyltin	3.8	U	9.9	3.8	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	42	20-130	09/18/04	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406517
Date Collected: 08/26/2004
Date Received: 08/28/2004
Date Extracted: 09/13/2004
Date Analyzed: 09/16/2004

Butyltins (as cation)

Sample Name: LDW-C2-T2
Lab Code: K2406517-006
File ID: J:\GC26\DATA\091604\0916F012.D
Instrument ID: GC26

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: METHOD
Analysis Method: GC-FPD

Extraction Lot: KWG0413746
Calibration ID: CAL3801

Sample Amount: 10.10 g
% Solids: NA
Dilution Factor: 1

Column1: RTX-1
Column2: RTX-35

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
1461-25-2	Tetra-n-butyltin	0.38	U	1.0	0.38	
688-73-3	Tri-n-butyltin	260	E	1.0	0.33	
1002-53-5	Di-n-butyltin	3.3		1.0	0.35	
2406-65-7	n-Butyltin	1.0		1.0	0.38	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	46	20-130	09/16/04	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406517
Date Collected: 08/26/2004
Date Received: 08/28/2004
Date Extracted: 09/13/2004
Date Analyzed: 09/18/2004

Butyltins (as cation)

Sample Name: LDW-C2-T2DL
Lab Code: K2406517-006
File ID: J:\GC26\DATA\091804\0918F010.D
Instrument ID: GC26

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: METHOD
Analysis Method: GC-FPD

Extraction Lot: KWG0413746
Calibration ID: CAL3801

Sample Amount: 10.10 g
% Solids: NA
Dilution Factor: 10

Column1: RTX-1
Column2: RTX-35

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
1461-25-2	Tetra-n-butyltin	3.8	U	10	3.8	
688-73-3	Tri-n-butyltin	290	D	10	3.3	
1002-53-5	Di-n-butyltin	3.8	JD	10	3.5	
2406-65-7	n-Butyltin	3.8	U	10	3.8	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	46	20-130	09/18/04	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406517
Date Collected: 08/25/2004
Date Received: 08/28/2004
Date Extracted: 09/13/2004
Date Analyzed: 09/16/2004

Butyltins (as cation)

Sample Name: LDW-C10-T2
Lab Code: K2406517-007
File ID: J:\GC26\DATA\091604\0916F019.D
Instrument ID: GC26

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: METHOD
Analysis Method: GC-FPD

Extraction Lot: KWG0413746
Calibration ID: CAL3801

Sample Amount: 10.02 g
% Solids: NA
Dilution Factor: 1

Column1: RTX-1
Column2: RTX-35

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
1461-25-2	Tetra-n-butyltin	0.38	U	1.0	0.38	
688-73-3	Tri-n-butyltin	240	E	1.0	0.33	
1002-53-5	Di-n-butyltin	3.8		1.0	0.35	
2406-65-7	n-Butyltin	1.3		1.0	0.38	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	44	20-130	09/16/04	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406517
Date Collected: 08/25/2004
Date Received: 08/28/2004
Date Extracted: 09/13/2004
Date Analyzed: 09/20/2004

Butyltins (as cation)

Sample Name: LDW-C10-T2DL
Lab Code: K2406517-007
File ID: J:\GC26\DATA\092004\0920F004.D
Instrument ID: GC26

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: METHOD
Analysis Method: GC-FPD

Extraction Lot: KWG0413746
Calibration ID: CAL3801

Sample Amount: 10.02 g
% Solids: NA
Dilution Factor: 10

Column1: RTX-1
Column2: RTX-35

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
1461-25-2	Tetra-n-butyltin	3.8	U	10	3.8	
688-73-3	Tri-n-butyltin	420	D	10	3.3	
1002-53-5	Di-n-butyltin	4.4	JD	10	3.5	
2406-65-7	n-Butyltin	3.8	U	10	3.8	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	46	20-130	09/20/04	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406517
Date Collected: 08/25/2004
Date Received: 08/28/2004
Date Extracted: 09/13/2004
Date Analyzed: 09/16/2004

Butyltins (as cation)

Sample Name: LDW-C10-T1
Lab Code: K2406517-008
File ID: J:\GC26\DATA\091604\0916F020.D
Instrument ID: GC26
Extraction Method: METHOD
Analysis Method: GC-FPD

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Lot: KWG0413746
Calibration ID: CAL3801

Sample Amount: 10.22 g
% Solids: NA
Dilution Factor: 1

Column1: RTX-1
Column2: RTX-35

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
1461-25-2	Tetra-n-butyltin	0.38	U	0.98	0.38	
688-73-3	Tri-n-butyltin	390	E	0.98	0.33	
1002-53-5	Di-n-butyltin	4.8		0.98	0.35	
2406-65-7	n-Butyltin	1.5		0.98	0.38	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	42	20-130	09/16/04	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406517
Date Collected: 08/25/2004
Date Received: 08/28/2004
Date Extracted: 09/13/2004
Date Analyzed: 09/22/2004

Butyltins (as cation)

Sample Name: LDW-C10-T1DL
Lab Code: K2406517-008
File ID: J:\GC26\DATA\092204\0922F005.D
Instrument ID: GC26

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: METHOD
Analysis Method: GC-FPD

Extraction Lot: KWG0413746
Calibration ID: CAL3801

Sample Amount: 10.22 g
% Solids: NA
Dilution Factor: 10

Column1: RTX-1
Column2: RTX-35

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
1461-25-2	Tetra-n-butyltin	3.8	U	9.8	3.8	
688-73-3	Tri-n-butyltin	390	D	9.8	3.3	
1002-53-5	Di-n-butyltin	5.4	JD	9.8	3.5	
2406-65-7	n-Butyltin	3.8	U	9.8	3.8	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	37	20-130	09/22/04	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406517
Date Collected: 08/27/2004
Date Received: 08/28/2004
Date Extracted: 09/13/2004
Date Analyzed: 09/16/2004

Butyltins (as cation)

Sample Name: LDW-C5-T
Lab Code: K2406517-009
File ID: J:\GC26\DATA\091604\0916F021.D
Instrument ID: GC26

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: METHOD
Analysis Method: GC-FPD

Extraction Lot: KWG0413746
Calibration ID: CAL3801

Sample Amount: 10.11 g
% Solids: NA
Dilution Factor: 1

Column1: RTX-1
Column2: RTX-35

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
1461-25-2	Tetra-n-butyltin	0.38	U	0.99	0.38	
688-73-3	Tri-n-butyltin	260	E	0.99	0.33	
1002-53-5	Di-n-butyltin	7.2		0.99	0.35	
2406-65-7	n-Butyltin	2.5		0.99	0.38	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	45	20-130	09/16/04	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406517
Date Collected: 08/27/2004
Date Received: 08/28/2004
Date Extracted: 09/13/2004
Date Analyzed: 09/20/2004

Butyltins (as cation)

Sample Name: LDW-C5-TDL
Lab Code: K2406517-009
File ID: J:\GC26\DATA\092004\0920F006.D
Instrument ID: GC26

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: METHOD
Analysis Method: GC-FPD

Extraction Lot: KWG0413746
Calibration ID: CAL3801

Sample Amount: 10.11 g
% Solids: NA
Dilution Factor: 20

Column1: RTX-1
Column2: RTX-35

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
1461-25-2	Tetra-n-butyltin	7.6	U	20	7.6	
688-73-3	Tri-n-butyltin	660	D	20	6.6	
1002-53-5	Di-n-butyltin	10	JD	20	7.0	
2406-65-7	n-Butyltin	7.6	U	20	7.6	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	48	20-130	09/20/04	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406517
Date Collected: 08/27/2004
Date Received: 08/28/2004
Date Extracted: 09/13/2004
Date Analyzed: 09/16/2004

Butyltins (as cation)

Sample Name: LDW-C3-T2
Lab Code: K2406517-010
File ID: J:\GC26\DATA\091604\0916F022.D
Instrument ID: GC26

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: METHOD
Analysis Method: GC-FPD

Extraction Lot: KWG0413746
Calibration ID: CAL3801

Sample Amount: 10.18 g
% Solids: NA
Dilution Factor: 1

Column1: RTX-1
Column2: RTX-35

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
1461-25-2	Tetra-n-butyltin	0.38	U	0.99	0.38	
688-73-3	Tri-n-butyltin	180	E	0.99	0.33	
1002-53-5	Di-n-butyltin	2.6		0.99	0.35	
2406-65-7	n-Butyltin	1.0		0.99	0.38	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	43	20-130	09/16/04	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406517
Date Collected: 08/27/2004
Date Received: 08/28/2004
Date Extracted: 09/13/2004
Date Analyzed: 09/20/2004

Butyltins (as cation)

Sample Name: LDW-C3-T2DL
Lab Code: K2406517-010
File ID: J:\GC26\DATA\092004\0920F007.D
Instrument ID: GC26

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: METHOD
Analysis Method: GC-FPD

Extraction Lot: KWG0413746
Calibration ID: CAL3801

Sample Amount: 10.18 g
% Solids: NA
Dilution Factor: 10

Column1: RTX-1
Column2: RTX-35

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
1461-25-2	Tetra-n-butyltin	3.8	U	9.9	3.8	
688-73-3	Tri-n-butyltin	300	D	9.9	3.3	
1002-53-5	Di-n-butyltin	4.0	JD	9.9	3.5	
2406-65-7	n-Butyltin	3.8	U	9.9	3.8	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	50	20-130	09/20/04	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406517
Date Collected: 08/27/2004
Date Received: 08/28/2004
Date Extracted: 09/13/2004
Date Analyzed: 09/16/2004

Butyltins (as cation)

Sample Name: LDW-C3-T1
Lab Code: K2406517-011
File ID: J:\GC26\DATA\091604\0916F023.D
Instrument ID: GC26

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: METHOD
Analysis Method: GC-FPD

Extraction Lot: KWG0413746
Calibration ID: CAL3801

Sample Amount: 10.18 g
% Solids: NA
Dilution Factor: 1

Column1: RTX-1
Column2: RTX-35

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
1461-25-2	Tetra-n-butyltin	0.38	U	0.99	0.38	
688-73-3	Tri-n-butyltin	180	E	0.99	0.33	
1002-53-5	Di-n-butyltin	1.8		0.99	0.35	
2406-65-7	n-Butyltin	0.78	J	0.99	0.38	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	40	20-130	09/16/04	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406517
Date Collected: 08/27/2004
Date Received: 08/28/2004
Date Extracted: 09/13/2004
Date Analyzed: 09/20/2004

Butyltins (as cation)

Sample Name: LDW-C3-T1DL
Lab Code: K2406517-011
File ID: J:\GC26\DATA\092004\0920F008.D
Instrument ID: GC26

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: METHOD
Analysis Method: GC-FPD

Extraction Lot: KWG0413746
Calibration ID: CAL3801

Sample Amount: 10.18 g
% Solids: NA
Dilution Factor: 10

Column1: RTX-1
Column2: RTX-35

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
1461-25-2	Tetra-n-butyltin	3.8	U	9.9	3.8	
688-73-3	Tri-n-butyltin	290	D	9.9	3.3	
1002-53-5	Di-n-butyltin	3.5	U	9.9	3.5	
2406-65-7	n-Butyltin	3.8	U	9.9	3.8	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	47	20-130	09/20/04	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406517
Date Collected: 08/25/2004
Date Received: 08/28/2004
Date Extracted: 09/13/2004
Date Analyzed: 09/16/2004

Butyltins (as cation)

Sample Name: LDW-C9-T
Lab Code: K2406517-012
File ID: J:\GC26\DATA\091604\0916F024.D
Instrument ID: GC26

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: METHOD
Analysis Method: GC-FPD

Extraction Lot: KWG0413746
Calibration ID: CAL3801

Sample Amount: 10.41 g
% Solids: NA
Dilution Factor: 1

Column1: RTX-1
Column2: RTX-35

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
1461-25-2	Tetra-n-butyltin	0.38	U	0.97	0.38	
688-73-3	Tri-n-butyltin	210	E	0.97	0.33	
1002-53-5	Di-n-butyltin	2.6	P	0.97	0.35	
2406-65-7	n-Butyltin	0.72	J	0.97	0.38	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	44	20-130	09/16/04	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406517
Date Collected: 08/25/2004
Date Received: 08/28/2004
Date Extracted: 09/13/2004
Date Analyzed: 09/20/2004

Butyltins (as cation)

Sample Name: LDW-C9-TDL
Lab Code: K2406517-012
File ID: J:\GC26\DATA\092004\0920F009.D
Instrument ID: GC26

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: METHOD
Analysis Method: GC-FPD

Extraction Lot: KWG0413746
Calibration ID: CAL3801

Sample Amount: 10.41 g
% Solids: NA
Dilution Factor: 10

Column1: RTX-1
Column2: RTX-35

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
1461-25-2	Tetra-n-butyltin	3.8	U	9.7	3.8	
688-73-3	Tri-n-butyltin	420	D	9.7	3.3	
1002-53-5	Di-n-butyltin	4.1	JPD	9.7	3.5	
2406-65-7	n-Butyltin	3.8	U	9.7	3.8	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	50	20-130	09/20/04	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406517
Date Collected: 08/25/2004
Date Received: 08/28/2004
Date Extracted: 09/13/2004
Date Analyzed: 09/16/2004

Butyltins (as cation)

Sample Name: LDW-C6-T
Lab Code: K2406517-013
File ID: J:\GC26\DATA\091604\0916F025.D
Instrument ID: GC26
Extraction Method: METHOD
Analysis Method: GC-FPD

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Lot: KWG0413746
Calibration ID: CAL3801

Sample Amount: 10.27 g
% Solids: NA
Dilution Factor: 1

Column1: RTX-1
Column2: RTX-35

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
1461-25-2	Tetra-n-butyltin	0.38	U	0.98	0.38	
688-73-3	Tri-n-butyltin	150	E	0.98	0.33	
1002-53-5	Di-n-butyltin	1.9		0.98	0.35	
2406-65-7	n-Butyltin	0.57	J	0.98	0.38	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	42	20-130	09/16/04	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406517
Date Collected: 08/25/2004
Date Received: 08/28/2004
Date Extracted: 09/13/2004
Date Analyzed: 09/20/2004

Butyltins (as cation)

Sample Name: LDW-C6-TDL
Lab Code: K2406517-013
File ID: J:\GC26\DATA\092004\0920F010.D
Instrument ID: GC26
Extraction Method: METHOD
Analysis Method: GC-FPD

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Lot: KWG0413746
Calibration ID: CAL3801

Sample Amount: 10.27 g
% Solids: NA
Dilution Factor: 10

Column1: RTX-1
Column2: RTX-35

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
1461-25-2	Tetra-n-butyltin	3.8	U	9.8	3.8	
688-73-3	Tri-n-butyltin	160	D	9.8	3.3	
1002-53-5	Di-n-butyltin	3.5	U	9.8	3.5	
2406-65-7	n-Butyltin	3.8	U	9.8	3.8	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	42	20-130	09/20/04	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406517
Date Collected: 08/27/2004
Date Received: 08/28/2004
Date Extracted: 09/13/2004
Date Analyzed: 09/16/2004

Butyltins (as cation)

Sample Name: LDW-C4-T
Lab Code: K2406517-014
File ID: J:\GC26\DATA\091604\0916F026.D
Instrument ID: GC26

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: METHOD
Analysis Method: GC-FPD

Extraction Lot: KWG0413746
Calibration ID: CAL3801

Sample Amount: 10.03 g
% Solids: NA
Dilution Factor: 1

Column1: RTX-1
Column2: RTX-35

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
1461-25-2	Tetra-n-butyltin	0.38	U	1.0	0.38	
688-73-3	Tri-n-butyltin	250	E	1.0	0.33	
1002-53-5	Di-n-butyltin	3.9	Ui	3.9	3.9	
2406-65-7	n-Butyltin	1.9		1.0	0.38	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	45	20-130	09/16/04	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406517
Date Collected: 08/27/2004
Date Received: 08/28/2004
Date Extracted: 09/13/2004
Date Analyzed: 09/20/2004

Butyltins (as cation)

Sample Name: LDW-C4-TDL
Lab Code: K2406517-014
File ID: J:\GC26\DATA\092004\0920F011.D
Instrument ID: GC26

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: METHOD
Analysis Method: GC-FPD

Extraction Lot: KWG0413746
Calibration ID: CAL3801

Sample Amount: 10.03 g
% Solids: NA
Dilution Factor: 20

Column1: RTX-1
Column2: RTX-35

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
1461-25-2	Tetra-n-butyltin	7.6	U	20	7.6	
688-73-3	Tri-n-butyltin	560	D	20	6.6	
1002-53-5	Di-n-butyltin	7.0	U	20	7.0	
2406-65-7	n-Butyltin	7.6	U	20	7.6	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	47	20-130	09/20/04	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406517
Date Extracted: 09/13/2004
Date Analyzed: 09/16/2004 -
 09/18/2004

**Duplicate Sample Summary
 Butyltins (as cation)**

Sample Name: LDW-C2-T2
Lab Code: K2406517-006
Extraction Method: METHOD
Analysis Method: GC-FPD

Units: ug/Kg
Basis: Wet
Level: Low
Extraction Lot: KWG0413746

Analyte Name	MRL	MDL	Sample Result	LDW-C2-T2DUP KWG0413746-1 Duplicate Sample		Relative Percent Difference	RPD Limit
				Result	Average		
Tetra-n-butyltin	1.0	0.38	ND	ND	ND	-	50
Tri-n-butyltin	10	3.3	290	240	260	19	50
Di-n-butyltin	1.0	0.35	3.3	3.2	3.3	4	50
n-Butyltin	1.0	0.38	1.0	0.99	1.0	1 #	50

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406519
Date Collected: 08/27/2004
Date Received: 08/30/2004
Date Extracted: 09/22/2004
Date Analyzed: 10/01/2004

Butyltins (as cation)

Sample Name: LDW-B9a-S
Lab Code: K2406519-001
File ID: J:\GC26\DATA\100104\1001F017.D
Instrument ID: GC26

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: METHOD
Analysis Method: Krone

Extraction Lot: KWG0414230
Calibration ID: CAL3856

Sample Amount: 20.20 g
% Solids: 52.6
Dilution Factor: 1

Column1: RTX-1
Column2: RTX-35

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
1461-25-2	Tetra-n-butyltin	0.23	U	1.9	0.23	
688-73-3	Tri-n-butyltin	1.6	J	1.9	0.31	
1002-53-5	Di-n-butyltin	2.0		1.9	0.078	
2406-65-7	n-Butyltin	1.2	J	1.9	0.14	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	45	20-130	10/01/04	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406519
Date Collected: 08/26/2004
Date Received: 08/30/2004
Date Extracted: 09/22/2004
Date Analyzed: 09/28/2004

Butyltins (as cation)

Sample Name: LDW-B3a-S
Lab Code: K2406519-005
File ID: J:\GC26\DATA\092804\0928F014.D
Instrument ID: GC26
Extraction Method: METHOD
Analysis Method: Krone
Sample Amount: 20.33 g
% Solids: 61.6
Dilution Factor: 1

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Lot: KWG0414230
Calibration ID: CAL3856
Column1: RTX-1
Column2: RTX-35

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
1461-25-2	Tetra-n-butyltin	0.20	U	1.6	0.20	
688-73-3	Tri-n-butyltin	2.1		1.6	0.26	
1002-53-5	Di-n-butyltin	2.2		1.6	0.067	
2406-65-7	n-Butyltin	0.12	J	1.6	0.12	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	56	20-130	09/28/04	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406580
Date Collected: 08/30/2004
Date Received: 08/31/2004
Date Extracted: 09/22/2004
Date Analyzed: 10/01/2004

Butyltins (as cation)

Sample Name: LDW-B7a-S
Lab Code: K2406580-001
File ID: J:\GC26\DATA\100104\1001F018.D
Instrument ID: GC26

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: METHOD
Analysis Method: Krone

Extraction Lot: KWG0414230
Calibration ID: CAL3856

Sample Amount: 20.12 g
% Solids: 51.7
Dilution Factor: 1

Column1: RTX-1
Column2: RTX-35

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
1461-25-2	Tetra-n-butyltin	0.24	U	2.0	0.24	
688-73-3	Tri-n-butyltin	6.9		2.0	0.31	
1002-53-5	Di-n-butyltin	6.0		2.0	0.080	
2406-65-7	n-Butyltin	3.4		2.0	0.14	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	66	20-130	10/01/04	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406581
Date Collected: 08/30/2004
Date Received: 08/31/2004
Date Extracted: 09/30/2004
Date Analyzed: 10/06/2004

Butyltins (as cation)

Sample Name: LDW-B7a-T
Lab Code: K2406581-001
File ID: J:\GC26\DATA\100504\1005F038.D
Instrument ID: GC26

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: METHOD
Analysis Method: GC-FPD

Extraction Lot: KWG0414914
Calibration ID: CAL3856

Sample Amount: 1.50 g
% Solids: NA
Dilution Factor: 1

Column1: RTX-1
Column2: RTX-35

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
1461-25-2	Tetra-n-butyltin	2.6	U	6.7	2.6	
688-73-3	Tri-n-butyltin	30		6.7	2.2	
1002-53-5	Di-n-butyltin	6.1	J	6.7	2.4	
2406-65-7	n-Butyltin	2.6	U	6.7	2.6	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	55	20-130	10/06/04	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406932
Date Collected: 08/17/2004
Date Received: 08/20/2004
Date Extracted: 09/30/2004
Date Analyzed: 10/06/2004

Butyltins (as cation)

Sample Name: LDW-B8a-T
Lab Code: K2406932-006
File ID: J:\GC26\DATA\100504\1005F039.D
Instrument ID: GC26

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: METHOD
Analysis Method: GC-FPD

Extraction Lot: KWG0414914
Calibration ID: CAL3856

Sample Amount: 2.06 g
% Solids: NA
Dilution Factor: 1

Column1: RTX-1
Column2: RTX-35

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
1461-25-2	Tetra-n-butyltin	1.9 U	4.9	1.9	
688-73-3	Tri-n-butyltin	18	4.9	1.7	
1002-53-5	Di-n-butyltin	2.2 J	4.9	1.7	
2406-65-7	n-Butyltin	2.4 J	4.9	1.9	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	52	20-130	10/06/04	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406932
Date Collected: 08/25/2004
Date Received: 08/31/2004
Date Extracted: 09/30/2004
Date Analyzed: 10/06/2004

Butyltins (as cation)

Sample Name: LDW-B10a-T
Lab Code: K2406932-009
File ID: J:\GC26\DATA\100504\1005F040.D
Instrument ID: GC26

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: METHOD
Analysis Method: GC-FPD

Extraction Lot: KWG0414914
Calibration ID: CAL3856

Sample Amount: 2.20 g
% Solids: NA
Dilution Factor: 1

Column1: RTX-1
Column2: RTX-35

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
1461-25-2	Tetra-n-butyltin	1.8 U	4.6	1.8	
688-73-3	Tri-n-butyltin	3.8 J	4.6	1.5	
1002-53-5	Di-n-butyltin	2.5 J	4.6	1.6	
2406-65-7	n-Butyltin	1.8 U	4.6	1.8	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	58	20-130	10/06/04	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2407012
Date Collected: 08/17/2004
Date Received: 09/20/2004

Butyltins (as cation)

Sample Name: LDW-B8a-S
Lab Code: K2407012-006
Extraction Method: METHOD
Analysis Method: Krone

Units: ug/Kg
Basis: Dry
Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	1.9	0.23	1	09/22/04	09/28/04	KWG0414230	
Tri-n-butyltin	5.8		1.9	0.30	1	09/22/04	09/28/04	KWG0414230	
Di-n-butyltin	6.2		1.9	0.077	1	09/22/04	09/28/04	KWG0414230	
n-Butyltin	8.3		1.9	0.14	1	09/22/04	09/28/04	KWG0414230	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	85	20-130	09/28/04	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
 Project: LDW Benthic Invertebrate Survey/04-08-06-21
 Sample Matrix: Sediment

Service Request: K2407012
 Date Collected: 08/25/2004
 Date Received: 08/30/2004

Butyltins (as cation)

Sample Name: LDW-B10a-S
 Lab Code: K2407012-009
 Extraction Method: METHOD
 Analysis Method: Krone

Units: ug/Kg
 Basis: Dry
 Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	1.6	0.20	1	09/22/04	09/28/04	KWG0414230	
Tri-n-butyltin	3.6		1.6	0.26	1	09/22/04	09/28/04	KWG0414230	
Di-n-butyltin	2.2		1.6	0.066	1	09/22/04	09/28/04	KWG0414230	
n-Butyltin	1.2	J	1.6	0.12	1	09/22/04	09/28/04	KWG0414230	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	70	20-130	09/28/04	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2407216
Date Collected: 08/26/2004
Date Received: 08/30/2004
Date Extracted: 09/30/2004
Date Analyzed: 10/06/2004

Butyltins (as cation)

Sample Name: LDW-B3a-T
Lab Code: K2407216-001
File ID: J:\GC26\DATA\100504\1005F041.D
Instrument ID: GC26

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: METHOD
Analysis Method: GC-FPD

Extraction Lot: KWG0414914
Calibration ID: CAL3856

Sample Amount: 2.01 g
% Solids: NA
Dilution Factor: 1

Column1: RTX-1
Column2: RTX-35

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
1461-25-2	Tetra-n-butyltin	1.9	U	5.0	1.9	
688-73-3	Tri-n-butyltin	12		5.0	1.7	
1002-53-5	Di-n-butyltin	4.0	J	5.0	1.8	
2406-65-7	n-Butyltin	1.9	U	5.0	1.9	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	61	20-130	10/06/04	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2407216
Date Collected: 08/27/2004
Date Received: 08/30/2004
Date Extracted: 09/30/2004
Date Analyzed: 10/06/2004

Butyltins (as cation)

Sample Name: LDW-B9a-T
Lab Code: K2407216-002
File ID: J:\GC26\DATA\100504\1005F042.D
Instrument ID: GC26

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: METHOD
Analysis Method: GC-FPD

Extraction Lot: KWG0414914
Calibration ID: CAL3856

Sample Amount: 2.11 g
% Solids: NA
Dilution Factor: 1

Column1: RTX-1
Column2: RTX-35

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
1461-25-2	Tetra-n-butyltin	1.9	U	4.8	1.9	
688-73-3	Tri-n-butyltin	7.4		4.8	1.6	
1002-53-5	Di-n-butyltin	1.7	U	4.8	1.7	
2406-65-7	n-Butyltin	1.9	U	4.8	1.9	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	59	20-130	10/06/04	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2407452
Date Collected: 09/24/2004
Date Received: 09/25/2004
Date Extracted: 10/24/2004
Date Analyzed: 10/27/2004

Butyltins (as cation)

Sample Name: LDW-B5a-T
Lab Code: K2407452-001
File ID: J:\GC26\DATA\102704\1027F025.D
Instrument ID: GC26
Extraction Method: METHOD
Analysis Method: GC-FPD
Sample Amount: 1.41 g
% Solids: NA
Dilution Factor: 1

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Lot: KWG0415205
Calibration ID: CAL3856
Column1: RTX-1
Column2: RTX-35

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
1461-25-2	Tetra-n-butyltin	2.7	U	7.1	2.7	
688-73-3	Tri-n-butyltin	22		7.1	2.4	
1002-53-5	Di-n-butyltin	4.6	J	7.1	2.5	
2406-65-7	n-Butyltin	4.3	J	7.1	2.7	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	48	20-130	10/27/04	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Sediment

Service Request: K2407473
Date Collected: 09/24/2004
Date Received: 09/27/2004
Date Extracted: 10/07/2004
Date Analyzed: 10/13/2004

Butyltins (as cation)

Sample Name: LDW-B5a-S
Lab Code: K2407473-001
File ID: J:\GC26\DATA\101304\1013F004.D
Instrument ID: GC26

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: METHOD
Analysis Method: Krone

Extraction Lot: KWG0415330
Calibration ID: CAL3856

Sample Amount: 20.25 g
% Solids: 64.9
Dilution Factor: 1

Column1: RTX-1
Column2: RTX-35

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
1461-25-2	Tetra-n-butyltin	0.19 U	1.6	0.19	
688-73-3	Tri-n-butyltin	6.4	1.6	0.25	
1002-53-5	Di-n-butyltin	10	1.6	0.064	
2406-65-7	n-Butyltin	5.2	1.6	0.11	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	90	20-130	10/13/04	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2407595
Date Collected: 09/27/2004
Date Received: 09/30/2004
Date Extracted: 10/07/2004
Date Analyzed: 10/11/2004

Butyltins (as cation)

Sample Name: LDW-B1b-S
Lab Code: K2407595-001
File ID: J:\GC26\DATA\101104\1011F020.D
Instrument ID: GC26
Extraction Method: METHOD
Analysis Method: Krone

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Lot: KWG0415330
Calibration ID: CAL3856

Column1: RTX-1
Column2: RTX-35

Sample Amount: 20.10 g
% Solids: 75.2
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
1461-25-2	Tetra-n-butyltin	58		1.4	0.16	
688-73-3	Tri-n-butyltin	790	E	1.4	0.22	
1002-53-5	Di-n-butyltin	110	E	1.4	0.055	
2406-65-7	n-Butyltin	4.0		1.4	0.095	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	109	20-130	10/11/04	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2407595
Date Collected: 09/27/2004
Date Received: 09/30/2004
Date Extracted: 10/07/2004
Date Analyzed: 10/11/2004

Butyltins (as cation)

Sample Name: LDW-B2b-S
Lab Code: K2407595-002
File ID: J:\GC26\DATA\101104\1011F021.D
Instrument ID: GC26

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: METHOD
Analysis Method: Krone

Extraction Lot: KWG0415330
Calibration ID: CAL3856

Sample Amount: 20.21 g
% Solids: 66.4
Dilution Factor: 1

Column1: RTX-1
Column2: RTX-35

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
1461-25-2	Tetra-n-butyltin	1.6		1.5	0.19	
688-73-3	Tri-n-butyltin	63		1.5	0.25	
1002-53-5	Di-n-butyltin	26		1.5	0.062	
2406-65-7	n-Butyltin	14		1.5	0.11	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	109	20-130	10/11/04	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2407595
Date Collected: 09/28/2004
Date Received: 09/30/2004
Date Extracted: 10/07/2004
Date Analyzed: 10/11/2004

Butyltins (as cation)

Sample Name: LDW-B4b-S
Lab Code: K2407595-003
File ID: J:\GC26\DATA\101104\1011F022.D
Instrument ID: GC26

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: METHOD
Analysis Method: Krone

Extraction Lot: KWG0415330
Calibration ID: CAL3856

Sample Amount: 20.03 g
% Solids: 45.9
Dilution Factor: 1

Column1: RTX-1
Column2: RTX-35

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
1461-25-2	Tetra-n-butyltin	2.0	J	2.2	0.27	
688-73-3	Tri-n-butyltin	96		2.2	0.35	
1002-53-5	Di-n-butyltin	44		2.2	0.090	
2406-65-7	n-Butyltin	48		2.2	0.16	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	128	20-130	10/11/04	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2407595
Date Collected: 09/28/2004
Date Received: 09/30/2004
Date Extracted: 10/07/2004
Date Analyzed: 10/13/2004

Butyltins (as cation)

Sample Name: LDW-B5b-S
Lab Code: K2407595-004
File ID: J:\GC26\DATA\101304\1013F005.D
Instrument ID: GC26

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: METHOD
Analysis Method: Krone

Extraction Lot: KWG0415330
Calibration ID: CAL3856

Sample Amount: 20.09 g
% Solids: 57.8
Dilution Factor: 1

Column1: RTX-1
Column2: RTX-35

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
1461-25-2	Tetra-n-butyltin	0.89 J	1.8	0.21	
688-73-3	Tri-n-butyltin	28	1.8	0.28	
1002-53-5	Di-n-butyltin	14	1.8	0.071	
2406-65-7	n-Butyltin	14	1.8	0.13	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	74	20-130	10/13/04	Acceptable

Comments: _____

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2407595
Date Extracted: 10/07/2004
Date Analyzed: 10/13/2004

Duplicate Sample Summary
Butyltins (as cation)

Sample Name: LDW-B5b-S
Lab Code: K2407595-004
Extraction Method: METHOD
Analysis Method: Krone

Units: ug/Kg
Basis: Dry
Level: Low
Extraction Lot: KWG0415330

Analyte Name	MRL	MDL	Sample Result	LDW-B5b-SDUP KWG0415330-1 Duplicate Sample		Relative Percent Difference	RPD Limit
				Result	Average		
Tetra-n-butyltin	1.8	0.21	0.89	0.58	0.73	43 #	50
Tri-n-butyltin	1.8	0.28	28	31	29	11	50
Di-n-butyltin	1.8	0.071	14	21	17	42	50
n-Butyltin	1.8	0.13	14	14	14	1	50

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2407596
Date Collected: 09/28/2004
Date Received: 09/30/2004
Date Extracted: 10/24/2004
Date Analyzed: 10/27/2004

Butyltins (as cation)

Sample Name: LDW-B4b-T
Lab Code: K2407596-001
File ID: J:\GC26\DATA\102704\1027F026.D
Instrument ID: GC26

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: METHOD
Analysis Method: GC-FPD

Extraction Lot: KWG0415205
Calibration ID: CAL3856

Sample Amount: 6.65 g
% Solids: NA
Dilution Factor: 1

Column1: RTX-1
Column2: RTX-35

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
1461-25-2	Tetra-n-butyltin	0.58	U	1.6	0.58	
688-73-3	Tri-n-butyltin	46		1.6	0.50	
1002-53-5	Di-n-butyltin	20		1.6	0.53	
2406-65-7	n-Butyltin	8.5		1.6	0.58	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	45	20-130	10/27/04	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2407596
Date Collected: 09/28/2004
Date Received: 09/30/2004
Date Extracted: 10/24/2004
Date Analyzed: 10/27/2004

Butyltins (as cation)

Sample Name: LDW-B5b-T
Lab Code: K2407596-002
File ID: J:\GC26\DATA\102704\1027F027.D
Instrument ID: GC26

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: METHOD
Analysis Method: GC-PPD

Extraction Lot: KWG0415205
Calibration ID: CAL3856

Sample Amount: 4.20 g
% Solids: NA
Dilution Factor: 1

Column1: RTX-1
Column2: RTX-35

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
1461-25-2	Tetra-n-butyltin	0.91	U	2.4	0.91	
688-73-3	Tri-n-butyltin	33		2.4	0.79	
1002-53-5	Di-n-butyltin	7.1		2.4	0.84	
2406-65-7	n-Butyltin	4.1		2.4	0.91	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	50	20-130	10/27/04	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2407596
Date Collected: 09/27/2004
Date Received: 09/30/2004
Date Extracted: 10/24/2004
Date Analyzed: 10/27/2004

Butyltins (as cation)

Sample Name: LDW-B1b-T
Lab Code: K2407596-003
File ID: J:\GC26\DATA\102704\1027F028.D
Instrument ID: GC26
Extraction Method: METHOD
Analysis Method: GC-FPD

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Lot: KWG0415205
Calibration ID: CAL3856

Column1: RTX-1
Column2: RTX-35

Sample Amount: 0.91 g
% Solids: NA
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
1461-25-2	Tetra-n-butyltin	4.2	U	11	4.2	
688-73-3	Tri-n-butyltin	92		11	3.7	
1002-53-5	Di-n-butyltin	21		11	3.9	
2406-65-7	n-Butyltin	30		11	4.2	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	47	20-130	10/27/04	Acceptable

Comments: _____

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2407596
Date Collected: 09/27/2004
Date Received: 09/30/2004
Date Extracted: 10/24/2004
Date Analyzed: 10/27/2004

Butyltins (as cation)

Sample Name: LDW-B2b-T
Lab Code: K2407596-004
File ID: J:\GC26\DATA\102704\1027F029.D
Instrument ID: GC26
Extraction Method: METHOD
Analysis Method: GC-FPD

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Lot: KWG0415205
Calibration ID: CAL3856

Column1: RTX-1
Column2: RTX-35

Sample Amount: 1.13 g
% Solids: NA
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
1461-25-2	Tetra-n-butyltin	3.4	U	8.9	3.4	
688-73-3	Tri-n-butyltin	77		8.9	3.0	
1002-53-5	Di-n-butyltin	22		8.9	3.1	
2406-65-7	n-Butyltin	8.5	J	8.9	3.4	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	45	20-130	10/27/04	Acceptable

Comments: _____

Organochlorine Pesticides
EPA Method 8081

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406170
Date Collected: 08/13/2004
Date Received: 08/18/2004
Date Extracted: 09/23/2004
Date Analyzed: 10/07/2004

Organochlorine Pesticides

Sample Name: LDW-B2a-S
Lab Code: K2406170-001
File ID: J:\GC23\DATA\100604\1006F035.D
Instrument ID: GC23

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8081A

Extraction Lot: KWG0414494
Calibration ID: CAL3865

Sample Amount: 40.07 g
% Solids: 50.0
Dilution Factor: 1

Column1: DB XLB
Column2: DB-35MS

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
319-84-6	alpha-BHC	0.17	U	1.0	0.17	
118-74-1	Hexachlorobenzene	0.32	U	1.0	0.32	
319-85-7	beta-BHC	0.44	U	1.0	0.44	
58-89-9	gamma-BHC (Lindane)	0.82	Ui	1.0	0.82	
319-86-8	delta-BHC	0.28	U	1.0	0.28	
76-44-8	Heptachlor	1.0	Ui	1.0	1.0	
309-00-2	Aldrin	0.50	U	1.0	0.50	
1024-57-3	Heptachlor Epoxide	0.28	U	1.0	0.28	
5103-74-2	gamma-Chlordane†	3.5	Ui	3.5	3.5	
959-98-8	Endosulfan I	0.22	U	1.0	0.22	
5103-71-9	alpha-Chlordane	0.24	J	1.0	0.13	
60-57-1	Dieldrin	1.0	Ui	1.0	1.0	
72-55-9	4,4'-DDE	1.0	Ui	1.0	1.0	
72-20-8	Endrin	0.48	U	1.0	0.48	
33213-65-9	Endosulfan II	1.0	Ui	1.0	1.0	
72-54-8	4,4'-DDD	0.40	JP	1.0	0.19	
7421-93-4	Endrin Aldehyde	0.32	U	1.0	0.32	
1031-07-8	Endosulfan Sulfate	0.42	U	1.0	0.42	
50-29-3	4,4'-DDT	5.5		1.0	0.34	
53494-70-5	Endrin Ketone	1.0	Ui	1.0	1.0	
72-43-5	Methoxychlor	0.65	Ui	1.0	0.65	
8001-35-2	Toxaphene	110	Ui	110	110	
3424-82-6	2,4'-DDE	1.5	Ui	1.5	1.5	
53-19-0	2,4'-DDD	1.6	Ui	1.6	1.6	
789-02-6	2,4'-DDT	5.4		1.0	0.16	
2385-85-5	Mirex	0.14	U	1.0	0.14	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406170
Date Collected: 08/13/2004
Date Received: 08/18/2004
Date Extracted: 09/23/2004
Date Analyzed: 10/07/2004

Organochlorine Pesticides

Sample Name: LDW-B2a-S
Lab Code: K2406170-001
File ID: J:\GC23\DATA\100604\1006F035.D
Instrument ID: GC23
Extraction Method: EPA 3540C
Analysis Method: 8081A
Sample Amount: 40.07 g
% Solids: 50.0
Dilution Factor: 1

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Lot: KWG0414494
Calibration ID: CAL3865

Column1: DB XLB
Column2: DB-35MS

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tetrachloro-m-xylene	78	50-150	10/07/04	Acceptable
Decachlorobiphenyl	65	50-150	10/07/04	Acceptable

† Analyte Comments

gamma-Chlordane For this analyte (CAS Registry No. 5103-74-2), USEPA has corrected the name to be beta-Chlordane, also known as trans-Chlordane.

Comments: _____

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406170
Date Collected: 08/15/2004
Date Received: 08/18/2004
Date Extracted: 09/23/2004
Date Analyzed: 10/07/2004

Organochlorine Pesticides

Sample Name: LDW-B6a-S
Lab Code: K2406170-002
File ID: J:\GC23\DATA\100604\1006F036.D
Instrument ID: GC23

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8081A

Extraction Lot: KWG0414494
Calibration ID: CAL3865

Sample Amount: 28.12 g
% Solids: 71.2
Dilution Factor: 1

Column1: DB XLB
Column2: DB-35MS

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
319-84-6	alpha-BHC	0.12	U	1.0	0.12	
118-74-1	Hexachlorobenzene	0.23	U	1.0	0.23	
319-85-7	beta-BHC	0.31	U	1.0	0.31	
58-89-9	gamma-BHC (Lindane)	0.18	J	1.0	0.14	
319-86-8	delta-BHC	0.26	Ui	1.0	0.26	
76-44-8	Heptachlor	0.14	U	1.0	0.14	
309-00-2	Aldrin	1.0	Ui	1.0	1.0	
1024-57-3	Heptachlor Epoxide	1.0	Ui	1.0	1.0	
5103-74-2	gamma-Chlordane†	3.7	Ui	3.7	3.7	
959-98-8	Endosulfan I	0.16	U	1.0	0.16	
5103-71-9	alpha-Chlordane	0.25	JP	1.0	0.088	
60-57-1	Dieldrin	1.0	Ui	1.0	1.0	
72-55-9	4,4'-DDE	5.3	P	1.0	0.11	
72-20-8	Endrin	0.34	U	1.0	0.34	
33213-65-9	Endosulfan II	1.0	Ui	1.0	1.0	
72-54-8	4,4'-DDD	4.7		1.0	0.14	
7421-93-4	Endrin Aldehyde	1.0	Ui	1.0	1.0	
1031-07-8	Endosulfan Sulfate	0.30	U	1.0	0.30	
50-29-3	4,4'-DDT	9.3		1.0	0.24	
53494-70-5	Endrin Ketone	1.2	Ui	1.2	1.2	
72-43-5	Methoxychlor	1.0	Ui	1.0	1.0	
8001-35-2	Toxaphene	180	Ui	180	180	
3424-82-6	2,4'-DDE	1.0	Ui	1.0	1.0	
53-19-0	2,4'-DDD	3.1	Ui	3.1	3.1	
789-02-6	2,4'-DDT	7.6		1.0	0.12	
2385-85-5	Mirex	0.096	U	1.0	0.096	

Comments:

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406170
Date Collected: 08/15/2004
Date Received: 08/18/2004
Date Extracted: 09/23/2004
Date Analyzed: 10/07/2004

Organochlorine Pesticides

Sample Name: LDW-B6a-S
Lab Code: K2406170-002
File ID: J:\GC23\DATA\100604\1006F036.D
Instrument ID: GC23

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8081A

Extraction Lot: KWG0414494
Calibration ID: CAL3865

Sample Amount: 28.12 g
% Solids: 71.2
Dilution Factor: 1

Column1: DB XLB
Column2: DB-35MS

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tetrachloro-m-xylene	75	50-150	10/07/04	Acceptable
Decachlorobiphenyl	61	50-150	10/07/04	Acceptable

† Analyte Comments

gamma-Chlordane For this analyte (CAS Registry No. 5103-74-2), USEPA has corrected the name to be beta-Chlordane, also known as trans-Chlordane.

Comments: _____

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406170
Date Collected: 08/14/2004
Date Received: 08/18/2004
Date Extracted: 09/23/2004
Date Analyzed: 10/07/2004

Organochlorine Pesticides

Sample Name: LDW-B4a-S
Lab Code: K2406170-003
File ID: J:\GC23\DATA\100604\1006F039.D
Instrument ID: GC23

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8081A

Extraction Lot: KWG0414494
Calibration ID: CAL3865

Sample Amount: 37.25 g
% Solids: 53.7
Dilution Factor: 1

Column1: DB XLB
Column2: DB-35MS

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
319-84-6	alpha-BHC	0.16	U	1.0	0.16	
118-74-1	Hexachlorobenzene	5.3		1.0	0.30	
319-85-7	beta-BHC	0.41	U	1.0	0.41	
58-89-9	gamma-BHC (Lindane)	1.0		1.0	0.19	
319-86-8	delta-BHC	1.0	Ui	1.0	1.0	
76-44-8	Heptachlor	0.19	U	1.0	0.19	
309-00-2	Aldrin	0.47	U	1.0	0.47	
1024-57-3	Heptachlor Epoxide	0.27	U	1.0	0.27	
5103-74-2	gamma-Chlordane†	4.6	Ui	4.6	4.6	
959-98-8	Endosulfan I	1.0	Ui	1.0	1.0	
5103-71-9	alpha-Chlordane	0.12	U	1.0	0.12	
60-57-1	Dieldrin	0.16	U	1.0	0.16	
72-55-9	4,4'-DDE	3.5	P	1.0	0.15	
72-20-8	Endrin	0.45	U	1.0	0.45	
33213-65-9	Endosulfan II	3.0	Ui	3.0	3.0	
72-54-8	4,4'-DDD	1.0	Ui	1.0	1.0	
7421-93-4	Endrin Aldehyde	1.7	Ui	1.7	1.7	
1031-07-8	Endosulfan Sulfate	0.40	U	1.0	0.40	
50-29-3	4,4'-DDT	9.3		1.0	0.32	
53494-70-5	Endrin Ketone	1.0	Ui	1.0	1.0	
72-43-5	Methoxychlor	1.0	Ui	1.0	1.0	
8001-35-2	Toxaphene	170	Ui	170	170	
3424-82-6	2,4'-DDE	1.0	Ui	1.0	1.0	
53-19-0	2,4'-DDD	1.9	Ui	1.9	1.9	
789-02-6	2,4'-DDT	8.8		1.0	0.15	
2385-85-5	Mirex	0.13	U	1.0	0.13	

Comments:

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406170
Date Collected: 08/14/2004
Date Received: 08/18/2004
Date Extracted: 09/23/2004
Date Analyzed: 10/07/2004

Organochlorine Pesticides

Sample Name: LDW-B4a-S
Lab Code: K2406170-003
File ID: J:\GC23\DATA\100604\1006F039.D
Instrument ID: GC23
Extraction Method: EPA 3540C
Analysis Method: 8081A

Sample Amount: 37.25 g
% Solids: 53.7
Dilution Factor: 1

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Lot: KWG0414494
Calibration ID: CAL3865

Column1: DB XLB
Column2: DB-35MS

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tetrachloro-m-xylene	94	50-150	10/07/04	Acceptable
Decachlorobiphenyl	63	50-150	10/07/04	Acceptable

† Analyte Comments

gamma-Chlordane For this analyte (CAS Registry No. 5103-74-2), USEPA has corrected the name to be beta-Chlordane, also known as trans-Chlordane.

Comments: _____

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406170
Date Collected: 08/12/2004
Date Received: 08/18/2004
Date Extracted: 09/23/2004
Date Analyzed: 10/07/2004

Organochlorine Pesticides

Sample Name: LDW-B1a-S
Lab Code: K2406170-004
File ID: J:\GC23\DATA\100604\1006F040.D
Instrument ID: GC23

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8081A

Extraction Lot: KWG0414494
Calibration ID: CAL3865

Sample Amount: 24.96 g
% Solids: 80.3
Dilution Factor: 1

Column1: DB XLB
Column2: DB-35MS

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
319-84-6	alpha-BHC	0.11	U	1.0	0.11	
118-74-1	Hexachlorobenzene	0.20	U	1.0	0.20	
319-85-7	beta-BHC	0.28	U	1.0	0.28	
58-89-9	gamma-BHC (Lindane)	1.0	Ui	1.0	1.0	
319-86-8	delta-BHC	0.18	U	1.0	0.18	
76-44-8	Heptachlor	0.13	U	1.0	0.13	
309-00-2	Aldrin	0.32	U	1.0	0.32	
1024-57-3	Heptachlor Epoxide	0.18	U	1.0	0.18	
5103-74-2	gamma-Chlordane†	0.13	Ui	1.0	0.13	
959-98-8	Endosulfan I	0.14	U	1.0	0.14	
5103-71-9	alpha-Chlordane	0.16	Ui	1.0	0.16	
60-57-1	Dieldrin	0.11	U	1.0	0.11	
72-55-9	4,4'-DDE	0.42	Ui	1.0	0.42	
72-20-8	Endrin	0.30	U	1.0	0.30	
33213-65-9	Endosulfan II	0.076	U	1.0	0.076	
72-54-8	4,4'-DDD	0.46	J	1.0	0.12	
7421-93-4	Endrin Aldehyde	0.20	U	1.0	0.20	
1031-07-8	Endosulfan Sulfate	0.27	U	1.0	0.27	
50-29-3	4,4'-DDT	0.42	Ui	1.0	0.42	
53494-70-5	Endrin Ketone	0.074	U	1.0	0.074	
72-43-5	Methoxychlor	0.84	J	1.0	0.24	*
8001-35-2	Toxaphene	11	Ui	50	11	
3424-82-6	2,4'-DDE	0.23	Ui	1.0	0.23	
53-19-0	2,4'-DDD	0.20	U	1.0	0.20	
789-02-6	2,4'-DDT	0.44	JP	1.0	0.10	
2385-85-5	Mirex	0.085	U	1.0	0.085	

* See Case Narrative

Comments: _____

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406170
Date Collected: 08/12/2004
Date Received: 08/18/2004
Date Extracted: 09/23/2004
Date Analyzed: 10/07/2004

Organochlorine Pesticides

Sample Name: LDW-B1a-S
Lab Code: K2406170-004
File ID: J:\GC23\DATA\100604\1006F040.D
Instrument ID: GC23

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8081A

Extraction Lot: KWG0414494
Calibration ID: CAL3865

Sample Amount: 24.96 g
% Solids: 80.3
Dilution Factor: 1

Column1: DB XLB
Column2: DB-35MS

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tetrachloro-m-xylene	70	50-150	10/07/04	Acceptable
Decachlorobiphenyl	58	50-150	10/07/04	Acceptable

† Analyte Comments

gamma-Chlordane For this analyte (CAS Registry No. 5103-74-2), USEPA has corrected the name to be beta-Chlordane, also known as trans-Chlordane.

Comments: _____

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406170
Date Collected: 08/11/2004
Date Received: 08/18/2004
Date Extracted: 09/23/2004
Date Analyzed: 10/07/2004

Organochlorine Pesticides

Sample Name: LDW-B9b-S
Lab Code: K2406170-005
File ID: J:\GC23\DATA\100604\1006F050.D
Instrument ID: GC23

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8081A

Extraction Lot: KWG0414494
Calibration ID: CAL3865

Sample Amount: 37.03 g
% Solids: 54.2
Dilution Factor: 1

Column1: DB XLB
Column2: DB-35MS

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
319-84-6	alpha-BHC	0.16	U	1.0	0.16	
118-74-1	Hexachlorobenzene	0.30	U	1.0	0.30	
319-85-7	beta-BHC	0.41	U	1.0	0.41	
58-89-9	gamma-BHC (Lindane)	0.19	U	1.0	0.19	
319-86-8	delta-BHC	0.26	U	1.0	0.26	
76-44-8	Heptachlor	0.18	U	1.0	0.18	
309-00-2	Aldrin	0.47	U	1.0	0.47	
1024-57-3	Heptachlor Epoxide	0.26	U	1.0	0.26	
5103-74-2	gamma-Chlordane†	3.8		1.0	0.071	
959-98-8	Endosulfan I	0.21	U	1.0	0.21	
5103-71-9	alpha-Chlordane	0.13	Ui	1.0	0.13	
60-57-1	Dieldrin	0.16	U	1.0	0.16	
72-55-9	4,4'-DDE	1.0	Ui	1.0	1.0	
72-20-8	Endrin	0.45	U	1.0	0.45	
33213-65-9	Endosulfan II	1.0	Ui	1.0	1.0	
72-54-8	4,4'-DDD	1.8		1.0	0.18	
7421-93-4	Endrin Aldehyde	1.0	Ui	1.0	1.0	
1031-07-8	Endosulfan Sulfate	0.39	U	1.0	0.39	
50-29-3	4,4'-DDT	8.2		1.0	0.32	
53494-70-5	Endrin Ketone	1.0	Ui	1.0	1.0	
72-43-5	Methoxychlor	0.67	Ui	1.0	0.67	
8001-35-2	Toxaphene	73	Ui	73	73	
3424-82-6	2,4'-DDE	2.2	Ui	2.2	2.2	
53-19-0	2,4'-DDD	1.8	Ui	1.8	1.8	
789-02-6	2,4'-DDT	7.2		1.0	0.15	
2385-85-5	Mirex	1.0	Ui	1.0	1.0	

Comments:

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406170
Date Collected: 08/11/2004
Date Received: 08/18/2004
Date Extracted: 09/23/2004
Date Analyzed: 10/07/2004

Organochlorine Pesticides

Sample Name: LDW-B9b-S
Lab Code: K2406170-005
File ID: J:\GC23\DATA\100604\1006F050.D
Instrument ID: GC23

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8081A

Extraction Lot: KWG0414494
Calibration ID: CAL3865

Sample Amount: 37.03 g
% Solids: 54.2
Dilution Factor: 1

Column1: DB XLB
Column2: DB-35MS

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tetrachloro-m-xylene	67	50-150	10/07/04	Acceptable
Decachlorobiphenyl	63	50-150	10/07/04	Acceptable

† Analyte Comments

gamma-Chlordane For this analyte (CAS Registry No. 5103-74-2), USEPA has corrected the name to be beta-Chlordane, also known as trans-Chlordane.

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406226
Date Collected: 08/13/2004
Date Received: 08/19/2004
Date Extracted: 09/23/2004
Date Analyzed: 10/07/2004

Organochlorine Pesticides

Sample Name: LDW-B7b-S
Lab Code: K2406226-001
File ID: J:\GC23\DATA\100604\1006F051.D
Instrument ID: GC23
Extraction Method: EPA 3540C
Analysis Method: 8081A
Sample Amount: 39.66 g
% Solids: 50.5
Dilution Factor: 1

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Lot: KWG0414494
Calibration ID: CAL3865
Column1: DB XLB
Column2: DB-35MS

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
319-84-6	alpha-BHC	0.17 U	1.0	0.17	
118-74-1	Hexachlorobenzene	0.32 U	1.0	0.32	
319-85-7	beta-BHC	0.44 U	1.0	0.44	
58-89-9	gamma-BHC (Lindane)	0.20 U	1.0	0.20	
319-86-8	delta-BHC	0.28 U	1.0	0.28	
76-44-8	Heptachlor	0.20 U	1.0	0.20	
309-00-2	Aldrin	0.50 U	1.0	0.50	
1024-57-3	Heptachlor Epoxide	1.0 Ui	1.0	1.0	
5103-74-2	gamma-Chlordane†	3.2	1.0	0.076	
959-98-8	Endosulfan I	0.22 U	1.0	0.22	
5103-71-9	alpha-Chlordane	0.23 Ui	1.0	0.23	
60-57-1	Dieldrin	0.17 U	1.0	0.17	
72-55-9	4,4'-DDE	1.0 Ui	1.0	1.0	
72-20-8	Endrin	0.48 U	1.0	0.48	
33213-65-9	Endosulfan II	1.0 Ui	1.0	1.0	
72-54-8	4,4'-DDD	1.1	1.0	0.19	
7421-93-4	Endrin Aldehyde	1.0 Ui	1.0	1.0	
1031-07-8	Endosulfan Sulfate	1.0 Ui	1.0	1.0	
50-29-3	4,4'-DDT	13 P	1.0	0.34	
53494-70-5	Endrin Ketone	1.2 Ui	1.2	1.2	
72-43-5	Methoxychlor	0.83 Ui	1.0	0.83	
8001-35-2	Toxaphene	140 Ui	140	140	
3424-82-6	2,4'-DDE	1.0 Ui	1.0	1.0	
53-19-0	2,4'-DDD	1.0 Ui	1.0	1.0	
789-02-6	2,4'-DDT	5.4	1.0	0.16	
2385-85-5	Mirex	0.14 U	1.0	0.14	

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406226
Date Collected: 08/13/2004
Date Received: 08/19/2004
Date Extracted: 09/23/2004
Date Analyzed: 10/07/2004

Organochlorine Pesticides

Sample Name: LDW-B7b-S
Lab Code: K2406226-001
File ID: J:\GC23\DATA\100604\1006F051.D
Instrument ID: GC23

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8081A

Extraction Lot: KWG0414494
Calibration ID: CAL3865

Sample Amount: 39.66 g
% Solids: 50.5
Dilution Factor: 1

Column1: DB XLB
Column2: DB-35MS

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tetrachloro-m-xylene	77	50-150	10/07/04	Acceptable
Decachlorobiphenyl	61	50-150	10/07/04	Acceptable

† Analyte Comments

gamma-Chlordane For this analyte (CAS Registry No. 5103-74-2), USEPA has corrected the name to be beta-Chlordane, also known as trans-Chlordane.

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406226
Date Collected: 08/10/2004
Date Received: 08/19/2004
Date Extracted: 09/23/2004
Date Analyzed: 10/07/2004

Organochlorine Pesticides

Sample Name: LDW-B3b-S
Lab Code: K2406226-002
File ID: J:\GC23\DATA\100604\1006F052.D
Instrument ID: GC23

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8081A

Extraction Lot: KWG0414494
Calibration ID: CAL3865

Sample Amount: 30.19 g
% Solids: 66.4
Dilution Factor: 1

Column1: DB XLB
Column2: DB-35MS

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
319-84-6	alpha-BHC	0.30	Ui	1.0	0.30	
118-74-1	Hexachlorobenzene	1.0	Ui	1.0	1.0	
319-85-7	beta-BHC	0.48	Ui	1.0	0.48	
58-89-9	gamma-BHC (Lindane)	1.0	Ui	1.0	1.0	
319-86-8	delta-BHC	0.37	Ui	1.0	0.37	
76-44-8	Heptachlor	0.15	U	1.0	0.15	
309-00-2	Aldrin	1.6		1.0	0.38	
1024-57-3	Heptachlor Epoxide	1.0	Ui	1.0	1.0	
5103-74-2	gamma-Chlordane†	6.2	Ui	6.2	6.2	
959-98-8	Endosulfan I	0.17	U	1.0	0.17	
5103-71-9	alpha-Chlordane	0.15	Ui	1.0	0.15	
60-57-1	Dieldrin	0.13	U	1.0	0.13	
72-55-9	4,4'-DDE	1.2	Ui	1.2	1.2	
72-20-8	Endrin	0.37	U	1.0	0.37	
33213-65-9	Endosulfan II	1.0	Ui	1.0	1.0	
72-54-8	4,4'-DDD	1.9		1.0	0.15	
7421-93-4	Endrin Aldehyde	1.0	Ui	1.0	1.0	
1031-07-8	Endosulfan Sulfate	0.32	U	1.0	0.32	
50-29-3	4,4'-DDT	11		1.0	0.26	
53494-70-5	Endrin Ketone	1.6	Ui	1.6	1.6	
72-43-5	Methoxychlor	1.0	Ui	1.0	1.0	
8001-35-2	Toxaphene	130	Ui	130	130	
3424-82-6	2,4'-DDE	1.0	Ui	1.0	1.0	
53-19-0	2,4'-DDD	2.3	Ui	2.3	2.3	
789-02-6	2,4'-DDT	8.5		1.0	0.13	
2385-85-5	Mirex	0.11	U	1.0	0.11	

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406226
Date Collected: 08/10/2004
Date Received: 08/19/2004
Date Extracted: 09/23/2004
Date Analyzed: 10/07/2004

Organochlorine Pesticides

Sample Name: LDW-B3b-S
Lab Code: K2406226-002
File ID: J:\GC23\DATA\100604\1006F052.D
Instrument ID: GC23

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8081A

Extraction Lot: KWG0414494
Calibration ID: CAL3865

Sample Amount: 30.19 g
% Solids: 66.4
Dilution Factor: 1

Column1: DB XLB
Column2: DB-35MS

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tetrachloro-m-xylene	77	50-150	10/07/04	Acceptable
Decachlorobiphenyl	66	50-150	10/07/04	Acceptable

† Analyte Comments

gamma-Chlordane For this analyte (CAS Registry No. 5103-74-2), USEPA has corrected the name to be beta-Chlordane, also known as trans-Chlordane.

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406232
Date Collected: 08/15/2004
Date Received: 08/19/2004
Date Extracted: 09/29/2004
Date Analyzed: 10/09/2004

Organochlorine Pesticides

Sample Name: LDW-B1a-T
Lab Code: K2406232-001
File ID: J:\GC23\DATA\100804\1008F029.D
Instrument ID: GC23

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8081A

Extraction Lot: KWG0414867
Calibration ID: CAL3865

Sample Amount: 2.02 g
% Solids: NA
Dilution Factor: 1

Column1: DB XLB
Column2: DB-35MS

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
319-84-6	alpha-BHC	1.6	U	10	1.6	
118-74-1	Hexachlorobenzene	3.4	U	10	3.4	
319-85-7	beta-BHC	2.1	U	10	2.1	
58-89-9	gamma-BHC (Lindane)	2.8	U	10	2.8	
319-86-8	delta-BHC	3.4	U	10	3.4	
76-44-8	Heptachlor	4.5	U	10	4.5	
309-00-2	Aldrin	2.0	U	10	2.0	
1024-57-3	Heptachlor Epoxide	2.4	Ui	10	2.4	
5103-74-2	gamma-Chlordane†	1.4	U	10	1.4	
959-98-8	Endosulfan I	1.3	U	10	1.3	
5103-71-9	alpha-Chlordane	3.6	U	10	3.6	
60-57-1	Dieldrin	1.1	U	10	1.1	
72-55-9	4,4'-DDE	1.2	U	10	1.2	
72-20-8	Endrin	0.99	U	10	0.99	
33213-65-9	Endosulfan II	3.5	U	10	3.5	
72-54-8	4,4'-DDD	1.3	U	10	1.3	
7421-93-4	Endrin Aldehyde	1.7	U	10	1.7	
1031-07-8	Endosulfan Sulfate	2.7	U	10	2.7	
50-29-3	4,4'-DDT	4.4	J	10	3.8	
53494-70-5	Endrin Ketone	2.9	U	10	2.9	
72-43-5	Methoxychlor	2.7	U	10	2.7	
8001-35-2	Toxaphene	88	Ui	500	88	
3424-82-6	2,4'-DDE	0.96	U	10	0.96	
53-19-0	2,4'-DDD	4.1	JP	10	1.8	
789-02-6	2,4'-DDT	7.4	JP	10	2.2	
2385-85-5	Mirex	2.7	U	10	2.7	

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406232
Date Collected: 08/15/2004
Date Received: 08/19/2004
Date Extracted: 09/29/2004
Date Analyzed: 10/09/2004

Organochlorine Pesticides

Sample Name: LDW-B1a-T
Lab Code: K2406232-001
File ID: J:\GC23\DATA\100804\1008F029.D
Instrument ID: GC23
Extraction Method: EPA 3540C
Analysis Method: 8081A

Sample Amount: 2.02 g
% Solids: NA
Dilution Factor: 1

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Lot: KWG0414867
Calibration ID: CAL3865

Column1: DB XLB
Column2: DB-35MS

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tetrachloro-m-xylene	79	30-150	10/09/04	Acceptable
Decachlorobiphenyl	68	30-150	10/09/04	Acceptable

† Analyte Comments

gamma-Chlordane For this analyte (CAS Registry No. 5103-74-2), USEPA has corrected the name to be beta-Chlordane, also known as trans-Chlordane.

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406232
Date Collected: 08/14/2004
Date Received: 08/19/2004
Date Extracted: 09/29/2004
Date Analyzed: 10/09/2004

Organochlorine Pesticides

Sample Name: LDW-B4a-T
Lab Code: K2406232-002
File ID: J:\GC23\DATA\100804\1008F030.D
Instrument ID: GC23

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8081A

Extraction Lot: KWG0414867
Calibration ID: CAL3865

Sample Amount: 2.03 g
% Solids: NA
Dilution Factor: 1

Column1: DB XLB
Column2: DB-35MS

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
118-74-1	Hexachlorobenzene	3.4 U	9.9	3.4	
319-84-6	alpha-BHC	3.0 Ui	9.9	3.0	
319-85-7	beta-BHC	7.9 J	9.9	2.1	
58-89-9	gamma-BHC (Lindane)	2.8 U	9.9	2.8	
319-86-8	delta-BHC	4.2 Ui	9.9	4.2	
76-44-8	Heptachlor	4.5 U	9.9	4.5	
309-00-2	Aldrin	2.0 U	9.9	2.0	
1024-57-3	Heptachlor Epoxide	4.3 Ui	9.9	4.3	
5103-74-2	gamma-Chlordane†	3.1 J	9.9	1.4	
959-98-8	Endosulfan I	1.9 Ui	9.9	1.9	
5103-71-9	alpha-Chlordane	3.6 U	9.9	3.6	
60-57-1	Dieldrin	5.1 Ui	9.9	5.1	
72-55-9	4,4'-DDE	1.4 J	9.9	1.2	
72-20-8	Endrin	2.4 Ui	9.9	2.4	
33213-65-9	Endosulfan II	3.5 U	9.9	3.5	
72-54-8	4,4'-DDD	1.3 U	9.9	1.3	
7421-93-4	Endrin Aldehyde	1.7 U	9.9	1.7	
1031-07-8	Endosulfan Sulfate	2.7 U	9.9	2.7	
50-29-3	4,4'-DDT	5.8 J	9.9	3.8	
53494-70-5	Endrin Ketone	2.9 U	9.9	2.9	
72-43-5	Methoxychlor	2.7 U	9.9	2.7	
8001-35-2	Toxaphene	500 Ui	500	500	
3424-82-6	2,4'-DDE	0.95 U	9.9	0.95	
53-19-0	2,4'-DDD	16 Ui	16	16	
789-02-6	2,4'-DDT	9.9 Ui	9.9	9.9	
2385-85-5	Mirex	2.7 U	9.9	2.7	

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406232
Date Collected: 08/14/2004
Date Received: 08/19/2004
Date Extracted: 09/29/2004
Date Analyzed: 10/09/2004

Organochlorine Pesticides

Sample Name: LDW-B4a-T
Lab Code: K2406232-002
File ID: J:\GC23\DATA\100804\1008F030.D
Instrument ID: GC23

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8081A

Extraction Lot: KWG0414867
Calibration ID: CAL3865

Sample Amount: 2.03 g
% Solids: NA
Dilution Factor: 1

Column1: DB XLB
Column2: DB-35MS

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tetrachloro-m-xylene	91	30-150	10/09/04	Acceptable
Decachlorobiphenyl	67	30-150	10/09/04	Acceptable

† Analyte Comments

gamma-Chlordane For this analyte (CAS Registry No. 5103-74-2), USEPA has corrected the name to be beta-Chlordane, also known as trans-Chlordane.

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406232
Date Collected: 08/14/2004
Date Received: 08/19/2004
Date Extracted: 09/29/2004
Date Analyzed: 10/09/2004

Organochlorine Pesticides

Sample Name: LDW-B2a-T
Lab Code: K2406232-003
File ID: J:\GC23\DATA\100804\1008F031.D
Instrument ID: GC23

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8081A

Extraction Lot: KWG0414867
Calibration ID: CAL3865

Sample Amount: 2.02 g
% Solids: NA
Dilution Factor: 1

Column1: DB XLB
Column2: DB-35MS

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
319-84-6	alpha-BHC	1.6	U	10	1.6	
118-74-1	Hexachlorobenzene	3.4	U	10	3.4	
319-85-7	beta-BHC	12	Ui	12	12	
58-89-9	gamma-BHC (Lindane)	2.8	U	10	2.8	
319-86-8	delta-BHC	3.4	U	10	3.4	
76-44-8	Heptachlor	4.5	U	10	4.5	
309-00-2	Aldrin	2.0	U	10	2.0	
1024-57-3	Heptachlor Epoxide	10	Ui	10	10	
5103-74-2	gamma-Chlordane†	3.3	Ui	10	3.3	
959-98-8	Endosulfan I	3.9	J	10	1.3	
5103-71-9	alpha-Chlordane	3.6	U	10	3.6	
60-57-1	Dieldrin	10	Ui	10	10	
72-55-9	4,4'-DDE	3.0	Ui	10	3.0	
72-20-8	Endrin	1.7	Ui	10	1.7	
33213-65-9	Endosulfan II	8.0	J	10	3.5	
72-54-8	4,4'-DDD	1.3	U	10	1.3	
7421-93-4	Endrin Aldehyde	1.7	U	10	1.7	
1031-07-8	Endosulfan Sulfate	2.7	U	10	2.7	
50-29-3	4,4'-DDT	10		10	3.8	
53494-70-5	Endrin Ketone	2.9	U	10	2.9	
72-43-5	Methoxychlor	5.6	J	10	2.7	*
8001-35-2	Toxaphene	500	Ui	500	500	
3424-82-6	2,4'-DDE	2.3	Ui	10	2.3	
53-19-0	2,4'-DDD	11	Ui	11	11	
789-02-6	2,4'-DDT	10	Ui	10	10	
2385-85-5	Mirex	2.7	U	10	2.7	

* See Case Narrative

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406232
Date Collected: 08/14/2004
Date Received: 08/19/2004
Date Extracted: 09/29/2004
Date Analyzed: 10/09/2004

Organochlorine Pesticides

Sample Name: LDW-B2a-T
Lab Code: K2406232-003
File ID: J:\GC23\DATA\100804\1008F031.D
Instrument ID: GC23

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8081A

Extraction Lot: KWG0414867
Calibration ID: CAL3865

Sample Amount: 2.02 g
% Solids: NA
Dilution Factor: 1

Column1: DB XLB
Column2: DB-35MS

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tetrachloro-m-xylene	86	30-150	10/09/04	Acceptable
Decachlorobiphenyl	65	30-150	10/09/04	Acceptable

† Analyte Comments

gamma-Chlordane For this analyte (CAS Registry No. 5103-74-2), USEPA has corrected the name to be beta-Chlordane, also known as trans-Chlordane.

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406232
Date Collected: 08/11/2004
Date Received: 08/19/2004
Date Extracted: 09/29/2004
Date Analyzed: 10/09/2004

Organochlorine Pesticides

Sample Name: LDW-B9b-T
Lab Code: K2406232-004
File ID: J:\GC23\DATA\100804\1008F032.D
Instrument ID: GC23

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8081A

Extraction Lot: KWG0414867
Calibration ID: CAL3865

Sample Amount: 2.04 g
% Solids: NA
Dilution Factor: 1

Column1: DB XLB
Column2: DB-35MS

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
118-74-1	Hexachlorobenzene	3.4	U	9.9	3.4	
319-84-6	alpha-BHC	1.6	U	9.9	1.6	
319-85-7	beta-BHC	2.1	U	9.9	2.1	
58-89-9	gamma-BHC (Lindane)	2.8	U	9.9	2.8	
319-86-8	delta-BHC	3.4	U	9.9	3.4	
76-44-8	Heptachlor	4.5	U	9.9	4.5	
309-00-2	Aldrin	2.0	U	9.9	2.0	
1024-57-3	Heptachlor Epoxide	3.2	Ui	9.9	3.2	
5103-74-2	gamma-Chlordane†	3.7	JP	9.9	1.4	
959-98-8	Endosulfan I	2.2	Ui	9.9	2.2	
5103-71-9	alpha-Chlordane	3.6	U	9.9	3.6	
60-57-1	Dieldrin	6.4	Ui	9.9	6.4	
72-55-9	4,4'-DDE	2.7	JP	9.9	1.2	
72-20-8	Endrin	1.1	Ui	9.9	1.1	
33213-65-9	Endosulfan II	3.5	U	9.9	3.5	
72-54-8	4,4'-DDD	1.3	U	9.9	1.3	
7421-93-4	Endrin Aldehyde	1.7	U	9.9	1.7	
1031-07-8	Endosulfan Sulfate	2.7	U	9.9	2.7	
50-29-3	4,4'-DDT	6.8	J	9.9	3.8	
53494-70-5	Endrin Ketone	2.9	U	9.9	2.9	
72-43-5	Methoxychlor	2.7	U	9.9	2.7	
8001-35-2	Toxaphene	140	Ui	500	140	
3424-82-6	2,4'-DDE	1.2	Ui	9.9	1.2	
53-19-0	2,4'-DDD	1.8	U	9.9	1.8	
789-02-6	2,4'-DDT	9.9	J	9.9	2.2	
2385-85-5	Mirex	2.7	U	9.9	2.7	

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406232
Date Collected: 08/11/2004
Date Received: 08/19/2004
Date Extracted: 09/29/2004
Date Analyzed: 10/09/2004

Organochlorine Pesticides

Sample Name: LDW-B9b-T
Lab Code: K2406232-004
File ID: J:\GC23\DATA\100804\1008F032.D
Instrument ID: GC23

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8081A

Extraction Lot: KWG0414867
Calibration ID: CAL3865

Sample Amount: 2.04 g
% Solids: NA
Dilution Factor: 1

Column1: DB XLB
Column2: DB-35MS

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tetrachloro-m-xylene	83	30-150	10/09/04	Acceptable
Decachlorobiphenyl	68	30-150	10/09/04	Acceptable

† Analyte Comments

gamma-Chlordane For this analyte (CAS Registry No. 5103-74-2), USEPA has corrected the name to be beta-Chlordane, also known as trans-Chlordane.

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406232
Date Collected: 08/15/2004
Date Received: 08/19/2004
Date Extracted: 09/29/2004
Date Analyzed: 10/09/2004

Organochlorine Pesticides

Sample Name: LDW-B6a-T
Lab Code: K2406232-005
File ID: J:\GC23\DATA\100804\1008F033.D
Instrument ID: GC23

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8081A

Extraction Lot: KWG0414867
Calibration ID: CAL3865

Sample Amount: 2.06 g
% Solids: NA
Dilution Factor: 1

Column1: DB XLB
Column2: DB-35MS

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
319-84-6	alpha-BHC	1.8 Ui	9.8	1.8	
118-74-1	Hexachlorobenzene	9.8 Ui	9.8	9.8	
319-85-7	beta-BHC	13 P	9.8	2.1	
58-89-9	gamma-BHC (Lindane)	9.8 Ui	9.8	9.8	
319-86-8	delta-BHC	3.4 U	9.8	3.4	
76-44-8	Heptachlor	4.4 U	9.8	4.4	
309-00-2	Aldrin	2.0 U	9.8	2.0	
1024-57-3	Heptachlor Epoxide	9.8 Ui	9.8	9.8	
5103-74-2	gamma-Chlordane†	5.5 Ui	9.8	5.5	
959-98-8	Endosulfan I	1.3 U	9.8	1.3	
5103-71-9	alpha-Chlordane	3.5 U	9.8	3.5	
60-57-1	Dieldrin	9.8 Ui	9.8	9.8	
72-55-9	4,4'-DDE	5.3 Ui	9.8	5.3	
72-20-8	Endrin	0.97 U	9.8	0.97	
33213-65-9	Endosulfan II	6.8 J	9.8	3.4	
72-54-8	4,4'-DDD	2.5 J	9.8	1.3	
7421-93-4	Endrin Aldehyde	1.7 U	9.8	1.7	
1031-07-8	Endosulfan Sulfate	2.7 U	9.8	2.7	
50-29-3	4,4'-DDT	12 P	9.8	3.7	
53494-70-5	Endrin Ketone	2.9 U	9.8	2.9	
72-43-5	Methoxychlor	9.8 Ui	9.8	9.8	
8001-35-2	Toxaphene	310 Ui	490	310	
3424-82-6	2,4'-DDE	3.0 JP	9.8	0.94	
53-19-0	2,4'-DDD	9.8 Ui	9.8	9.8	
789-02-6	2,4'-DDT	10 Ui	10	10	
2385-85-5	Mirex	2.7 U	9.8	2.7	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406232
Date Collected: 08/15/2004
Date Received: 08/19/2004
Date Extracted: 09/29/2004
Date Analyzed: 10/09/2004

Organochlorine Pesticides

Sample Name: LDW-B6a-T
Lab Code: K2406232-005
File ID: J:\GC23\DATA\100804\1008F033.D
Instrument ID: GC23
Extraction Method: EPA 3540C
Analysis Method: 8081A

Sample Amount: 2.06 g
% Solids: NA
Dilution Factor: 1

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Lot: KWG0414867
Calibration ID: CAL3865

Column1: DB XLB
Column2: DB-35MS

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tetrachloro-m-xylene	97	30-150	10/09/04	Acceptable
Decachlorobiphenyl	66	30-150	10/09/04	Acceptable

† Analyte Comments

gamma-Chlordane For this analyte (CAS Registry No. 5103-74-2), USEPA has corrected the name to be beta-Chlordane, also known as trans-Chlordane.

Comments: _____

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406232
Date Collected: 08/10/2004
Date Received: 08/19/2004
Date Extracted: 09/29/2004
Date Analyzed: 10/09/2004

Organochlorine Pesticides

Sample Name: LDW-B3b-T
Lab Code: K2406232-008
File ID: J:\GC23\DATA\100804\1008F034.D
Instrument ID: GC23

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8081A

Extraction Lot: KWG0414867
Calibration ID: CAL3865

Sample Amount: 2.00 g
% Solids: NA
Dilution Factor: 1

Column1: DB XLB
Column2: DB-35MS

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
319-84-6	alpha-BHC	21		10	1.6	
118-74-1	Hexachlorobenzene	3.4	U	10	3.4	
319-85-7	beta-BHC	2.1	U	10	2.1	
58-89-9	gamma-BHC (Lindane)	2.8	U	10	2.8	
319-86-8	delta-BHC	3.4	U	10	3.4	
76-44-8	Heptachlor	4.5	U	10	4.5	
309-00-2	Aldrin	10	Ui	10	10	
1024-57-3	Heptachlor Epoxide	10	Ui	10	10	
5103-74-2	gamma-Chlordane†	22	P	10	1.4	
959-98-8	Endosulfan I	1.3	U	10	1.3	
5103-71-9	alpha-Chlordane	12	P	10	3.6	
60-57-1	Dieldrin	5.1	Ui	10	5.1	
72-55-9	4,4'-DDE	9.0	J	10	1.2	
72-20-8	Endrin	8.2	Ui	10	8.2	
33213-65-9	Endosulfan II	10	Ui	10	10	
72-54-8	4,4'-DDD	2.8	Ui	10	2.8	
7421-93-4	Endrin Aldehyde	1.7	U	10	1.7	
1031-07-8	Endosulfan Sulfate	58	Ui	58	58	
50-29-3	4,4'-DDT	17	Ui	17	17	
53494-70-5	Endrin Ketone	6.5	JP	10	2.9	
72-43-5	Methoxychlor	3.0	Ui	10	3.0	
8001-35-2	Toxaphene	940	Ui	940	940	
3424-82-6	2,4'-DDE	11	P	10	0.96	
53-19-0	2,4'-DDD	10	Ui	10	10	
789-02-6	2,4'-DDT	28	Ui	28	28	
2385-85-5	Mirex	2.7	U	10	2.7	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406232
Date Collected: 08/10/2004
Date Received: 08/19/2004
Date Extracted: 09/29/2004
Date Analyzed: 10/09/2004

Organochlorine Pesticides

Sample Name: LDW-B3b-T
Lab Code: K2406232-008
File ID: J:\GC23\DATA\100804\1008F034.D
Instrument ID: GC23
Extraction Method: EPA 3540C
Analysis Method: 8081A

Sample Amount: 2.00 g
% Solids: NA
Dilution Factor: 1

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Lot: KWG0414867
Calibration ID: CAL3865

Column1: DB XLB
Column2: DB-35MS

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tetrachloro-m-xylene	132	30-150	10/09/04	Acceptable
Decachlorobiphenyl	66	30-150	10/09/04	Acceptable

† Analyte Comments

gamma-Chlordane For this analyte (CAS Registry No. 5103-74-2), USEPA has corrected the name to be beta-Chlordane, also known as trans-Chlordane.

Comments: _____

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406232
Date Collected: 08/13/2004
Date Received: 08/19/2004
Date Extracted: 09/29/2004
Date Analyzed: 10/09/2004

Organochlorine Pesticides

Sample Name: LDW-B7b-T
Lab Code: K2406232-009
File ID: J:\GC23\DATA\100804\1008F035.D
Instrument ID: GC23

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8081A

Extraction Lot: KWG0414867
Calibration ID: CAL3865

Sample Amount: 2.03 g
% Solids: NA
Dilution Factor: 1

Column1: DB XLB
Column2: DB-35MS

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
319-84-6	alpha-BHC	1.6	U	9.9	1.6	
118-74-1	Hexachlorobenzene	3.4	U	9.9	3.4	
319-85-7	beta-BHC	11	Ui	11	11	
58-89-9	gamma-BHC (Lindane)	2.8	U	9.9	2.8	
319-86-8	delta-BHC	3.4	U	9.9	3.4	
76-44-8	Heptachlor	4.5	U	9.9	4.5	
309-00-2	Aldrin	9.9	Ui	9.9	9.9	
1024-57-3	Heptachlor Epoxide	5.6	Ui	9.9	5.6	
5103-74-2	gamma-Chlordane†	4.3	JP	9.9	1.4	
959-98-8	Endosulfan I	7.4	Ui	9.9	7.4	
5103-71-9	alpha-Chlordane	3.6	U	9.9	3.6	
60-57-1	Dieldrin	1.1	U	9.9	1.1	
72-55-9	4,4'-DDE	3.7	J	9.9	1.2	
72-20-8	Endrin	3.8	Ui	9.9	3.8	
33213-65-9	Endosulfan II	16	P	9.9	3.5	
72-54-8	4,4'-DDD	1.6	Ui	9.9	1.6	
7421-93-4	Endrin Aldehyde	1.7	U	9.9	1.7	
1031-07-8	Endosulfan Sulfate	190	Ui	190	190	
50-29-3	4,4'-DDT	10		9.9	3.8	
53494-70-5	Endrin Ketone	3.0	Ui	9.9	3.0	
72-43-5	Methoxychlor	4.4	Ui	9.9	4.4	
8001-35-2	Toxaphene	280	Ui	500	280	
3424-82-6	2,4'-DDE	9.9	Ui	9.9	9.9	
53-19-0	2,4'-DDD	9.9	Ui	9.9	9.9	
789-02-6	2,4'-DDT	12	Ui	12	12	
2385-85-5	Mirex	2.7	U	9.9	2.7	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406232
Date Collected: 08/13/2004
Date Received: 08/19/2004
Date Extracted: 09/29/2004
Date Analyzed: 10/09/2004

Organochlorine Pesticides

Sample Name: LDW-B7b-T
Lab Code: K2406232-009
File ID: J:\GC23\DATA\100804\1008F035.D
Instrument ID: GC23
Extraction Method: EPA 3540C
Analysis Method: 8081A

Sample Amount: 2.03 g
% Solids: NA
Dilution Factor: 1

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Lot: KWG0414867
Calibration ID: CAL3865

Column1: DB XLB
Column2: DB-35MS

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tetrachloro-m-xylene	120	30-150	10/09/04	Acceptable
Decachlorobiphenyl	67	30-150	10/09/04	Acceptable

† Analyte Comments

gamma-Chlordane For this analyte (CAS Registry No. 5103-74-2), USEPA has corrected the name to be beta-Chlordane, also known as trans-Chlordane.

Comments: _____

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406296
Date Collected: 08/18/2004
Date Received: 08/21/2004
Date Extracted: 09/23/2004
Date Analyzed: 10/07/2004

Organochlorine Pesticides

Sample Name: LDW-B6b-S
Lab Code: K2406296-001
File ID: J:\GC23\DATA\100604\1006F056.D
Instrument ID: GC23

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8081A

Extraction Lot: KWG0414494
Calibration ID: CAL3865

Sample Amount: 40.07 g
% Solids: 50.0
Dilution Factor: 1

Column1: DB XLB
Column2: DB-35MS

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
319-84-6	alpha-BHC	0.17 U	1.0	0.17	
118-74-1	Hexachlorobenzene	1.9	1.0	0.32	
319-85-7	beta-BHC	1.2 Ui	1.2	1.2	
58-89-9	gamma-BHC (Lindane)	0.34 Ui	1.0	0.34	
319-86-8	delta-BHC	0.28 U	1.0	0.28	
76-44-8	Heptachlor	1.0 Ui	1.0	1.0	
309-00-2	Aldrin	0.50 U	1.0	0.50	
1024-57-3	Heptachlor Epoxide	1.1 Ui	1.1	1.1	
5103-74-2	gamma-Chlordane†	4.5 Ui	4.5	4.5	
959-98-8	Endosulfan I	0.22 U	1.0	0.22	
5103-71-9	alpha-Chlordane	0.24 J	1.0	0.13	
60-57-1	Dieldrin	0.17 U	1.0	0.17	
72-55-9	4,4'-DDE	1.1 Ui	1.1	1.1	
72-20-8	Endrin	0.48 U	1.0	0.48	
33213-65-9	Endosulfan II	1.0 Ui	1.0	1.0	
72-54-8	4,4'-DDD	2.0 P	1.0	0.19	
7421-93-4	Endrin Aldehyde	0.32 U	1.0	0.32	
1031-07-8	Endosulfan Sulfate	0.42 U	1.0	0.42	
50-29-3	4,4'-DDT	12	1.0	0.34	
53494-70-5	Endrin Ketone	1.4 P	1.0	0.12	
72-43-5	Methoxychlor	1.3 Ui	1.3	1.3	
8001-35-2	Toxaphene	110 Ui	110	110	
3424-82-6	2,4'-DDE	1.6 Ui	1.6	1.6	
53-19-0	2,4'-DDD	2.2 Ui	2.2	2.2	
789-02-6	2,4'-DDT	8.4	1.0	0.16	
2385-85-5	Mirex	0.14 U	1.0	0.14	

Comments: _____

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406296
Date Collected: 08/18/2004
Date Received: 08/21/2004
Date Extracted: 09/23/2004
Date Analyzed: 10/07/2004

Organochlorine Pesticides

Sample Name: LDW-B6b-S
Lab Code: K2406296-001
File ID: J:\GC23\DATA\100604\1006F056.D
Instrument ID: GC23

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8081A

Extraction Lot: KWG0414494
Calibration ID: CAL3865

Sample Amount: 40.07 g
% Solids: 50.0
Dilution Factor: 1

Column1: DB XLB
Column2: DB-35MS

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tetrachloro-m-xylene	84	50-150	10/07/04	Acceptable
Decachlorobiphenyl	55	50-150	10/07/04	Acceptable

† Analyte Comments

gamma-Chlordane For this analyte (CAS Registry No. 5103-74-2), USEPA has corrected the name to be beta-Chlordane, also known as trans-Chlordane.

Comments: _____

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406296
Date Collected: 08/19/2004
Date Received: 08/21/2004
Date Extracted: 09/23/2004
Date Analyzed: 10/07/2004

Organochlorine Pesticides

Sample Name: LDW-B8b-S
Lab Code: K2406296-002
File ID: J:\GC23\DATA\100604\1006F057.D
Instrument ID: GC23
Extraction Method: EPA 3540C
Analysis Method: 8081A

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Lot: KWG0414494
Calibration ID: CAL3865

Sample Amount: 28.12 g
% Solids: 71.2
Dilution Factor: 1

Column1: DB XLB
Column2: DB-35MS

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
319-84-6	alpha-BHC	0.12	U	1.0	0.12	
118-74-1	Hexachlorobenzene	0.67	Ui	1.0	0.67	
319-85-7	beta-BHC	0.31	U	1.0	0.31	
58-89-9	gamma-BHC (Lindane)	0.14	U	1.0	0.14	
319-86-8	delta-BHC	0.74	Ui	1.0	0.74	
76-44-8	Heptachlor	1.0	Ui	1.0	1.0	
309-00-2	Aldrin	0.36	U	1.0	0.36	
1024-57-3	Heptachlor Epoxide	1.0	Ui	1.0	1.0	
5103-74-2	gamma-Chlordane†	1.3	Ui	1.3	1.3	
959-98-8	Endosulfan I	0.16	U	1.0	0.16	
5103-71-9	alpha-Chlordane	1.0	Ui	1.0	1.0	
60-57-1	Dieldrin	0.12	U	1.0	0.12	
72-55-9	4,4'-DDE	0.66	J	1.0	0.11	
72-20-8	Endrin	0.34	U	1.0	0.34	
33213-65-9	Endosulfan II	0.086	U	1.0	0.086	
72-54-8	4,4'-DDD	0.63	J	1.0	0.14	
7421-93-4	Endrin Aldehyde	0.23	U	1.0	0.23	
1031-07-8	Endosulfan Sulfate	0.30	U	1.0	0.30	
50-29-3	4,4'-DDT	2.5		1.0	0.24	
53494-70-5	Endrin Ketone	1.0	Ui	1.0	1.0	
72-43-5	Methoxychlor	0.27	U	1.0	0.27	
8001-35-2	Toxaphene	120	Ui	120	120	
3424-82-6	2,4'-DDE	1.0	Ui	1.0	1.0	
53-19-0	2,4'-DDD	0.23	U	1.0	0.23	
789-02-6	2,4'-DDT	1.4		1.0	0.12	
2385-85-5	Mirex	0.096	U	1.0	0.096	

Comments:

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406296
Date Collected: 08/19/2004
Date Received: 08/21/2004
Date Extracted: 09/23/2004
Date Analyzed: 10/07/2004

Organochlorine Pesticides

Sample Name: LDW-B8b-S
Lab Code: K2406296-002
File ID: J:\GC23\DATA\100604\1006F057.D
Instrument ID: GC23
Extraction Method: EPA 3540C
Analysis Method: 8081A

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Lot: KWG0414494
Calibration ID: CAL3865

Sample Amount: 28.12 g
% Solids: 71.2
Dilution Factor: 1

Column1: DB XLB
Column2: DB-35MS

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tetrachloro-m-xylene	80	50-150	10/07/04	Acceptable
Decachlorobiphenyl	62	50-150	10/07/04	Acceptable

† Analyte Comments

gamma-Chlordane For this analyte (CAS Registry No. 5103-74-2), USEPA has corrected the name to be beta-Chlordane, also known as trans-Chlordane.

Comments:

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406296
Date Collected: 08/19/2004
Date Received: 08/21/2004
Date Extracted: 09/23/2004
Date Analyzed: 10/07/2004

Organochlorine Pesticides

Sample Name: LDW-B10b-S
Lab Code: K2406296-003
File ID: J:\GC23\DATA\100604\1006F058.D
Instrument ID: GC23

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8081A

Extraction Lot: KWG0414494
Calibration ID: CAL3865

Sample Amount: 37.25 g
% Solids: 53.7
Dilution Factor: 1

Column1: DB XLB
Column2: DB-35MS

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
319-84-6	alpha-BHC	0.16 U	1.0	0.16	
118-74-1	Hexachlorobenzene	1.0 Ui	1.0	1.0	
319-85-7	beta-BHC	0.41 U	1.0	0.41	
58-89-9	gamma-BHC (Lindane)	2.1 Ui	2.1	2.1	
319-86-8	delta-BHC	0.27 U	1.0	0.27	
76-44-8	Heptachlor	0.19 U	1.0	0.19	
309-00-2	Aldrin	0.50 Ui	1.0	0.50	
1024-57-3	Heptachlor Epoxide	1.0 Ui	1.0	1.0	
5103-74-2	gamma-Chlordane†	1.0 Ui	1.0	1.0	
959-98-8	Endosulfan I	0.21 U	1.0	0.21	
5103-71-9	alpha-Chlordane	0.48 Ui	1.0	0.48	
60-57-1	Dieldrin	0.16 U	1.0	0.16	
72-55-9	4,4'-DDE	0.28 J	1.0	0.15	
72-20-8	Endrin	0.45 U	1.0	0.45	
33213-65-9	Endosulfan II	0.12 U	1.0	0.12	
72-54-8	4,4'-DDD	0.39 J	1.0	0.18	
7421-93-4	Endrin Aldehyde	0.30 U	1.0	0.30	
1031-07-8	Endosulfan Sulfate	1.0 Ui	1.0	1.0	
50-29-3	4,4'-DDT	1.4 P	1.0	0.32	
53494-70-5	Endrin Ketone	1.0 Ui	1.0	1.0	
72-43-5	Methoxychlor	0.36 U	1.0	0.36	
8001-35-2	Toxaphene	50 Ui	50	50	
3424-82-6	2,4'-DDE	0.13 U	1.0	0.13	
53-19-0	2,4'-DDD	0.30 U	1.0	0.30	
789-02-6	2,4'-DDT	0.65 J	1.0	0.15	
2385-85-5	Mirex	0.13 U	1.0	0.13	

Comments:

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406296
Date Collected: 08/19/2004
Date Received: 08/21/2004
Date Extracted: 09/23/2004
Date Analyzed: 10/07/2004

Organochlorine Pesticides

Sample Name: LDW-B10b-S
Lab Code: K2406296-003
File ID: J:\GC23\DATA\100604\1006F058.D
Instrument ID: GC23

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8081A

Extraction Lot: KWG0414494
Calibration ID: CAL3865

Sample Amount: 37.25 g
% Solids: 53.7
Dilution Factor: 1

Column1: DB XLB
Column2: DB-35MS

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tetrachloro-m-xylene	79	50-150	10/07/04	Acceptable
Decachlorobiphenyl	61	50-150	10/07/04	Acceptable

† Analyte Comments

gamma-Chlordane For this analyte (CAS Registry No. 5103-74-2), USEPA has corrected the name to be beta-Chlordane, also known as trans-Chlordane.

Comments: _____

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406297
Date Collected: 08/18/2004
Date Received: 08/21/2004
Date Extracted: 09/29/2004
Date Analyzed: 10/09/2004

Organochlorine Pesticides

Sample Name: LDW-B6b-T
Lab Code: K2406297-001
File ID: J:\GC23\DATA\100804\1008F045.D
Instrument ID: GC23

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8081A

Extraction Lot: KWG0414867
Calibration ID: CAL3865

Sample Amount: 1.13 g
% Solids: NA
Dilution Factor: 1

Column1: DB XLB
Column2: DB-35MS

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
319-84-6	alpha-BHC	2.9 U	18	2.9	
118-74-1	Hexachlorobenzene	6.1 U	18	6.1	
319-85-7	beta-BHC	7.4 Ui	18	7.4	
58-89-9	gamma-BHC (Lindane)	5.0 U	18	5.0	
319-86-8	delta-BHC	6.1 U	18	6.1	
76-44-8	Heptachlor	8.0 U	18	8.0	
309-00-2	Aldrin	3.6 U	18	3.6	
1024-57-3	Heptachlor Epoxide	18 Ui	18	18	
5103-74-2	gamma-Chlordane†	2.5 U	18	2.5	
959-98-8	Endosulfan I	30	18	2.4	
5103-71-9	alpha-Chlordane	6.4 U	18	6.4	
60-57-1	Dieldrin	2.0 U	18	2.0	
72-55-9	4,4'-DDE	3.9 JP	18	2.2	
72-20-8	Endrin	12 Ui	18	12	
33213-65-9	Endosulfan II	6.2 U	18	6.2	
72-54-8	4,4'-DDD	2.4 U	18	2.4	
7421-93-4	Endrin Aldehyde	3.1 U	18	3.1	
1031-07-8	Endosulfan Sulfate	87 Ui	87	87	
50-29-3	4,4'-DDT	27 P	18	6.8	
53494-70-5	Endrin Ketone	5.2 U	18	5.2	
72-43-5	Methoxychlor	42	18	4.8	*
8001-35-2	Toxaphene	310 Ui	890	310	
3424-82-6	2,4'-DDE	2.9 Ui	18	2.9	
53-19-0	2,4'-DDD	17 JP	18	3.2	
789-02-6	2,4'-DDT	44 P	18	3.9	
2385-85-5	Mirex	4.8 U	18	4.8	

* See Case Narrative

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406297
Date Collected: 08/18/2004
Date Received: 08/21/2004
Date Extracted: 09/29/2004
Date Analyzed: 10/09/2004

Organochlorine Pesticides

Sample Name: LDW-B6b-T
Lab Code: K2406297-001
File ID: J:\GC23\DATA\100804\1008F045.D
Instrument ID: GC23

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8081A

Extraction Lot: KWG0414867
Calibration ID: CAL3865

Sample Amount: 1.13 g
% Solids: NA
Dilution Factor: 1

Column1: DB XLB
Column2: DB-35MS

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tetrachloro-m-xylene	86	30-150	10/09/04	Acceptable
Decachlorobiphenyl	69	30-150	10/09/04	Acceptable

† Analyte Comments

gamma-Chlordane For this analyte (CAS Registry No. 5103-74-2), USEPA has corrected the name to be beta-Chlordane, also known as trans-Chlordane.

Comments: _____

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406297
Date Collected: 08/19/2004
Date Received: 08/21/2004
Date Extracted: 09/29/2004
Date Analyzed: 10/09/2004

Organochlorine Pesticides

Sample Name: LDW-B8b-T
Lab Code: K2406297-002
File ID: J:\GC23\DATA\100804\1008F046.D
Instrument ID: GC23

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8081A

Extraction Lot: KWG0414867
Calibration ID: CAL3865

Sample Amount: 2.07 g
% Solids: NA
Dilution Factor: 1

Column1: DB XLB
Column2: DB-35MS

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
118-74-1	Hexachlorobenzene	3.3	U	9.7	3.3	
319-84-6	alpha-BHC	1.6	U	9.7	1.6	
319-85-7	beta-BHC	2.3	Ui	9.7	2.3	
58-89-9	gamma-BHC (Lindane)	2.8	U	9.7	2.8	
319-86-8	delta-BHC	3.3	U	9.7	3.3	
76-44-8	Heptachlor	4.4	U	9.7	4.4	
309-00-2	Aldrin	2.0	U	9.7	2.0	
1024-57-3	Heptachlor Epoxide	9.7	Ui	9.7	9.7	
5103-74-2	gamma-Chlordane†	1.4	JP	9.7	1.4	
959-98-8	Endosulfan I	1.3	U	9.7	1.3	
5103-71-9	alpha-Chlordane	3.5	U	9.7	3.5	
60-57-1	Dieldrin	2.6	Ui	9.7	2.6	
72-55-9	4,4'-DDE	2.2	J	9.7	1.2	
72-20-8	Endrin	0.96	U	9.7	0.96	
33213-65-9	Endosulfan II	13		9.7	3.4	
72-54-8	4,4'-DDD	1.3	U	9.7	1.3	
7421-93-4	Endrin Aldehyde	9.7	Ui	9.7	9.7	
1031-07-8	Endosulfan Sulfate	2.7	U	9.7	2.7	
50-29-3	4,4'-DDT	3.7	U	9.7	3.7	
53494-70-5	Endrin Ketone	2.9	U	9.7	2.9	
72-43-5	Methoxychlor	2.7	U	9.7	2.7	
8001-35-2	Toxaphene	210	Ui	490	210	
3424-82-6	2,4'-DDE	0.93	U	9.7	0.93	
53-19-0	2,4'-DDD	1.8	U	9.7	1.8	
789-02-6	2,4'-DDT	2.2	U	9.7	2.2	
2385-85-5	Mirex	2.7	U	9.7	2.7	

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406297
Date Collected: 08/19/2004
Date Received: 08/21/2004
Date Extracted: 09/29/2004
Date Analyzed: 10/09/2004

Organochlorine Pesticides

Sample Name: LDW-B8b-T
Lab Code: K2406297-002
File ID: J:\GC23\DATA\100804\1008F046.D
Instrument ID: GC23

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8081A

Extraction Lot: KWG0414867
Calibration ID: CAL3865

Sample Amount: 2.07 g
% Solids: NA
Dilution Factor: 1

Column1: DB XLB
Column2: DB-35MS

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tetrachloro-m-xylene	85	30-150	10/09/04	Acceptable
Decachlorobiphenyl	72	30-150	10/09/04	Acceptable

† Analyte Comments

gamma-Chlordane For this analyte (CAS Registry No. 5103-74-2), USEPA has corrected the name to be beta-Chlordane, also known as trans-Chlordane.

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406297
Date Collected: 08/19/2004
Date Received: 08/21/2004
Date Extracted: 09/29/2004
Date Analyzed: 10/09/2004

Organochlorine Pesticides

Sample Name: LDW-B10b-T
Lab Code: K2406297-003
File ID: J:\GC23\DATA\100804\1008F047.D
Instrument ID: GC23

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8081A

Extraction Lot: KWG0414867
Calibration ID: CAL3865

Sample Amount: 2.01 g
% Solids: NA
Dilution Factor: 1

Column1: DB XLB
Column2: DB-35MS

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
319-84-6	alpha-BHC	1.6	U	10	1.6	
118-74-1	Hexachlorobenzene	3.4	U	10	3.4	
319-85-7	beta-BHC	3.4	Ui	10	3.4	
58-89-9	gamma-BHC (Lindane)	2.8	U	10	2.8	
319-86-8	delta-BHC	3.4	U	10	3.4	
76-44-8	Heptachlor	4.5	U	10	4.5	
309-00-2	Aldrin	2.0	U	10	2.0	
1024-57-3	Heptachlor Epoxide	2.8	J	10	1.5	
5103-74-2	gamma-Chlordane†	1.4	U	10	1.4	
959-98-8	Endosulfan I	1.3	U	10	1.3	
5103-71-9	alpha-Chlordane	3.6	U	10	3.6	
60-57-1	Dieldrin	1.1	U	10	1.1	
72-55-9	4,4'-DDE	2.1	J	10	1.2	
72-20-8	Endrin	0.99	U	10	0.99	
33213-65-9	Endosulfan II	3.5	U	10	3.5	
72-54-8	4,4'-DDD	1.3	U	10	1.3	
7421-93-4	Endrin Aldehyde	1.7	U	10	1.7	
1031-07-8	Endosulfan Sulfate	2.7	U	10	2.7	
50-29-3	4,4'-DDT	5.2	J	10	3.8	
53494-70-5	Endrin Ketone	2.9	U	10	2.9	
72-43-5	Methoxychlor	2.7	U	10	2.7	
8001-35-2	Toxaphene	500	Ui	500	500	
3424-82-6	2,4'-DDE	0.96	U	10	0.96	
53-19-0	2,4'-DDD	1.8	U	10	1.8	
789-02-6	2,4'-DDT	8.0	JP	10	2.2	
2385-85-5	Mirex	2.7	U	10	2.7	

Comments: _____

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406297
Date Collected: 08/19/2004
Date Received: 08/21/2004
Date Extracted: 09/29/2004
Date Analyzed: 10/09/2004

Organochlorine Pesticides

Sample Name: LDW-B10b-T
Lab Code: K2406297-003
File ID: J:\GC23\DATA\100804\1008F047.D
Instrument ID: GC23

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8081A

Extraction Lot: KWG0414867
Calibration ID: CAL3865

Sample Amount: 2.01 g
% Solids: NA
Dilution Factor: 1

Column1: DB XLB
Column2: DB-35MS

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tetrachloro-m-xylene	156	30-150	10/09/04	Outside Control Limits
Decachlorobiphenyl	142	30-150	10/09/04	Acceptable

† Analyte Comments

gamma-Chlordane For this analyte (CAS Registry No. 5103-74-2), USEPA has corrected the name to be beta-Chlordane, also known as trans-Chlordane.

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406516
Date Collected: 08/27/2004
Date Received: 08/30/2004
Date Extracted: 09/01/2004
Date Analyzed: 09/17/2004

Organochlorine Pesticides

Sample Name: LDW-C4-S
Lab Code: K2406516-001
File ID: J:\GC23\DATA\091604\0916F038.D
Instrument ID: GC23

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8081A

Extraction Lot: KWG0413102
Calibration ID: CAL3753

Sample Amount: 30.80 g
% Solids: 66.8
Dilution Factor: 1

Column1: DB XLB
Column2: DB-35MS

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
319-84-6	alpha-BHC	0.14	Ui	0.98	0.14	
118-74-1	Hexachlorobenzene	4.3		0.98	0.24	
319-85-7	beta-BHC	0.33	U	0.98	0.33	
58-89-9	gamma-BHC (Lindane)	0.15	U	0.98	0.15	
319-86-8	delta-BHC	0.21	U	0.98	0.21	
76-44-8	Heptachlor	0.98	Ui	0.98	0.98	
309-00-2	Aldrin	0.81	J	0.98	0.38	
1024-57-3	Heptachlor Epoxide	0.98	Ui	0.98	0.98	
5103-74-2	gamma-Chlordane†	2.3	Ui	2.3	2.3	
959-98-8	Endosulfan I	0.98	Ui	0.98	0.98	
5103-71-9	alpha-Chlordane	0.093	U	0.98	0.093	
60-57-1	Dieldrin	3.8	Ui	3.8	3.8	
72-55-9	4,4'-DDE	1.6	P	0.98	0.12	
72-20-8	Endrin	0.36	U	0.98	0.36	
33213-65-9	Endosulfan II	0.092	U	0.98	0.092	
72-54-8	4,4'-DDD	0.98	Ui	0.98	0.98	
7421-93-4	Endrin Aldehyde	0.98	Ui	0.98	0.98	
1031-07-8	Endosulfan Sulfate	0.98	Ui	0.98	0.98	
50-29-3	4,4'-DDT	4.8		0.98	0.26	
53494-70-5	Endrin Ketone	0.98	Ui	0.98	0.98	
72-43-5	Methoxychlor	0.29	U	0.98	0.29	
8001-35-2	Toxaphene	170	Ui	170	170	
3424-82-6	2,4'-DDE	1.4	Ui	1.4	1.4	
53-19-0	2,4'-DDD	1.9	Ui	1.9	1.9	
789-02-6	2,4'-DDT	4.0		0.98	0.12	
2385-85-5	Mirex	1.4	Ui	1.4	1.4	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406516
Date Collected: 08/27/2004
Date Received: 08/30/2004
Date Extracted: 09/01/2004
Date Analyzed: 09/17/2004

Organochlorine Pesticides

Sample Name: LDW-C4-S
Lab Code: K2406516-001
File ID: J:\GC23\DATA\091604\0916F038.D
Instrument ID: GC23

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8081A

Extraction Lot: KWG0413102
Calibration ID: CAL3753

Sample Amount: 30.80 g
% Solids: 66.8
Dilution Factor: 1

Column1: DB XLB
Column2: DB-35MS

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tetrachloro-m-xylene	90	50-150	09/17/04	Acceptable
Decachlorobiphenyl	72	50-150	09/17/04	Acceptable

† Analyte Comments

gamma-Chlordane For this analyte (CAS Registry No. 5103-74-2), USEPA has corrected the name to be beta-Chlordane, also known as trans-Chlordane.

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406516
Date Collected: 08/25/2004
Date Received: 08/30/2004
Date Extracted: 09/01/2004
Date Analyzed: 09/17/2004

Organochlorine Pesticides

Sample Name: LDW-C10-S2
Lab Code: K2406516-002
File ID: J:\GC23\DATA\091604\0916F069.D
Instrument ID: GC23

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8081A

Extraction Lot: KWG0413102
Calibration ID: CAL3753

Sample Amount: 39.69 g
% Solids: 51.5
Dilution Factor: 1

Column1: DB XLB
Column2: DB-35MS

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
319-84-6	alpha-BHC	0.56	Ui	0.98	0.56	
118-74-1	Hexachlorobenzene	1.3		0.98	0.32	
319-85-7	beta-BHC	0.43	U	0.98	0.43	
58-89-9	gamma-BHC (Lindane)	7.3	Ui	7.3	7.3	
319-86-8	delta-BHC	0.28	U	0.98	0.28	
76-44-8	Heptachlor	0.89	J	0.98	0.19	
309-00-2	Aldrin	0.49	U	0.98	0.49	
1024-57-3	Heptachlor Epoxide	0.62	Ui	0.98	0.62	
5103-74-2	gamma-Chlordane†	96	UiE	96	96	
959-98-8	Endosulfan I	1.5	Ui	1.5	1.5	
5103-71-9	alpha-Chlordane	0.98	Ui	0.98	0.98	
60-57-1	Dieldrin	91	UiE	91	91	
72-55-9	4,4'-DDE	0.98	Ui	0.98	0.98	
72-20-8	Endrin	2.0	Ui	2.0	2.0	
33213-65-9	Endosulfan II	6.6	Ui	6.6	6.6	
72-54-8	4,4'-DDD	6.9	Ui	6.9	6.9	
7421-93-4	Endrin Aldehyde	53	UiE	53	53	
1031-07-8	Endosulfan Sulfate	0.98	Ui	0.98	0.98	
50-29-3	4,4'-DDT	20		0.98	0.34	
53494-70-5	Endrin Ketone	110	E	0.98	0.12	
72-43-5	Methoxychlor	4.0	Ui	4.0	4.0	
8001-35-2	Toxaphene	2900	UiE	2900	2900	
3424-82-6	2,4'-DDE	1.1	Ui	1.1	1.1	
53-19-0	2,4'-DDD	130	E	0.98	0.32	
789-02-6	2,4'-DDT	67	UiE	67	67	
2385-85-5	Mirex	1.0	P	0.98	0.14	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406516
Date Collected: 08/25/2004
Date Received: 08/30/2004
Date Extracted: 09/01/2004
Date Analyzed: 09/17/2004

Organochlorine Pesticides

Sample Name: LDW-C10-S2
Lab Code: K2406516-002
File ID: J:\GC23\DATA\091604\0916F069.D
Instrument ID: GC23

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8081A

Extraction Lot: KWG0413102
Calibration ID: CAL3753

Sample Amount: 39.69 g
% Solids: 51.5
Dilution Factor: 1

Column1: DB XLB
Column2: DB-35MS

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tetrachloro-m-xylene	80	50-150	09/17/04	Acceptable
Decachlorobiphenyl	46	50-150	09/17/04	Outside Control Limits

† Analyte Comments

gamma-Chlordane For this analyte (CAS Registry No. 5103-74-2), USEPA has corrected the name to be beta-Chlordane, also known as trans-Chlordane.

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406516
Date Collected: 08/25/2004
Date Received: 08/30/2004
Date Extracted: 09/01/2004
Date Analyzed: 09/24/2004

Organochlorine Pesticides

Sample Name: LDW-C10-S2DL
Lab Code: K2406516-002
File ID: J:\GC23\DATA\092404\0924F018.D
Instrument ID: GC23

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8081A

Extraction Lot: KWG0413102
Calibration ID: CAL3844

Sample Amount: 39.69 g
% Solids: 51.5
Dilution Factor: 100

Column1: DB XLB
Column2: DB-35MS

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
319-84-6	alpha-BHC	17	U	98	17	
118-74-1	Hexachlorobenzene	32	U	98	32	
319-85-7	beta-BHC	43	U	98	43	
58-89-9	gamma-BHC (Lindane)	20	U	98	20	
319-86-8	delta-BHC	28	U	98	28	
76-44-8	Heptachlor	19	U	98	19	
309-00-2	Aldrin	49	U	98	49	
1024-57-3	Heptachlor Epoxide	28	U	98	28	
5103-74-2	gamma-Chlordane†	170	Ui	170	170	
959-98-8	Endosulfan I	22	U	98	22	
5103-71-9	alpha-Chlordane	13	U	98	13	
60-57-1	Dieldrin	16	U	98	16	
72-55-9	4,4'-DDE	15	U	98	15	
72-20-8	Endrin	47	U	98	47	
33213-65-9	Endosulfan II	21	Ui	98	21	
72-54-8	4,4'-DDD	19	U	98	19	
7421-93-4	Endrin Aldehyde	170	Ui	170	170	
1031-07-8	Endosulfan Sulfate	41	U	98	41	
50-29-3	4,4'-DDT	890	D	98	34	
53494-70-5	Endrin Ketone	280	Ui	280	280	
72-43-5	Methoxychlor	82	Ui	98	82	
8001-35-2	Toxaphene	37000	Ui	37000	37000	
3424-82-6	2,4'-DDE	14	U	98	14	
53-19-0	2,4'-DDD	340	D	98	32	
789-02-6	2,4'-DDT	160	Ui	160	160	
2385-85-5	Mirex	26000	UiE	26000	26000	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406516
Date Collected: 08/25/2004
Date Received: 08/30/2004
Date Extracted: 09/01/2004
Date Analyzed: 09/24/2004

Organochlorine Pesticides

Sample Name: LDW-C10-S2DL
Lab Code: K2406516-002
File ID: J:\GC23\DATA\092404\0924F018.D
Instrument ID: GC23

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8081A

Extraction Lot: KWG0413102
Calibration ID: CAL3844

Sample Amount: 39.69 g
% Solids: 51.5
Dilution Factor: 100

Column1: DB XLB
Column2: DB-35MS

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tetrachloro-m-xylene	0	50-150	09/24/04	Outside Control Limits
Decachlorobiphenyl	0	50-150	09/24/04	Outside Control Limits

† Analyte Comments

gamma-Chlordane For this analyte (CAS Registry No. 5103-74-2), USEPA has corrected the name to be beta-Chlordane, also known as trans-Chlordane.

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406516
Date Collected: 08/25/2004
Date Received: 08/30/2004
Date Extracted: 09/01/2004
Date Analyzed: 09/17/2004

Organochlorine Pesticides

Sample Name: LDW-C10-S1
Lab Code: K2406516-003
File ID: J:\GC23\DATA\091604\0916F070.D
Instrument ID: GC23

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8081A

Extraction Lot: KWG0413102
Calibration ID: CAL3753

Sample Amount: 40.00 g
% Solids: 50.4
Dilution Factor: 1

Column1: DB XLB
Column2: DB-35MS

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
319-84-6	alpha-BHC	0.81	J	1.0	0.17	
118-74-1	Hexachlorobenzene	1.3	Ui	1.3	1.3	
319-85-7	beta-BHC	2.5		1.0	0.44	
58-89-9	gamma-BHC (Lindane)	9.9	Ui	9.9	9.9	
319-86-8	delta-BHC	1.0	Ui	1.0	1.0	
76-44-8	Heptachlor	1.0	Ui	1.0	1.0	
309-00-2	Aldrin	0.50	U	1.0	0.50	
1024-57-3	Heptachlor Epoxide	1.0	Ui	1.0	1.0	
5103-74-2	gamma-Chlordane†	49	UiE	49	49	
959-98-8	Endosulfan I	0.22	U	1.0	0.22	
5103-71-9	alpha-Chlordane	1.0	Ui	1.0	1.0	
60-57-1	Dieldrin	41	UiE	41	41	
72-55-9	4,4'-DDE	1.0	Ui	1.0	1.0	
72-20-8	Endrin	0.48	U	1.0	0.48	
33213-65-9	Endosulfan II	5.7	Ui	5.7	5.7	
72-54-8	4,4'-DDD	2.1	Ui	2.1	2.1	
7421-93-4	Endrin Aldehyde	25	Ui	25	25	
1031-07-8	Endosulfan Sulfate	0.42	U	1.0	0.42	
50-29-3	4,4'-DDT	0.34	U	1.0	0.34	
53494-70-5	Endrin Ketone	59	UiE	59	59	
72-43-5	Methoxychlor	18	Ui	18	18	
8001-35-2	Toxaphene	4300	UiE	4300	4300	
3424-82-6	2,4'-DDE	4.8	Ui	4.8	4.8	
53-19-0	2,4'-DDD	68	PE	1.0	0.32	
789-02-6	2,4'-DDT	32	Ui	32	32	
2385-85-5	Mirex	5.2	Ui	5.2	5.2	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406516
Date Collected: 08/25/2004
Date Received: 08/30/2004
Date Extracted: 09/01/2004
Date Analyzed: 09/17/2004

Organochlorine Pesticides

Sample Name: LDW-C10-S1
Lab Code: K2406516-003
File ID: J:\GC23\DATA\091604\0916F070.D
Instrument ID: GC23

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8081A

Extraction Lot: KWG0413102
Calibration ID: CAL3753

Sample Amount: 40.00 g
% Solids: 50.4
Dilution Factor: 1

Column1: DB XLB
Column2: DB-35MS

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tetrachloro-m-xylene	76	50-150	09/17/04	Acceptable
Decachlorobiphenyl	51	50-150	09/17/04	Acceptable

† Analyte Comments

gamma-Chlordane For this analyte (CAS Registry No. 5103-74-2), USEPA has corrected the name to be beta-Chlordane, also known as trans-Chlordane.

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406516
Date Collected: 08/25/2004
Date Received: 08/30/2004
Date Extracted: 09/01/2004
Date Analyzed: 09/25/2004

Organochlorine Pesticides

Sample Name: LDW-C10-S1DL
Lab Code: K2406516-003
File ID: J:\GC23\DATA\092404\0924F019.D
Instrument ID: GC23

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8081A

Extraction Lot: KWG0413102
Calibration ID: CAL3844

Sample Amount: 40.00 g
% Solids: 50.4
Dilution Factor: 10

Column1: DB XLB
Column2: DB-35MS

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
319-84-6	alpha-BHC	1.8	Ui	10	1.8	
118-74-1	Hexachlorobenzene	3.2	U	10	3.2	
319-85-7	beta-BHC	8.0	Ui	10	8.0	
58-89-9	gamma-BHC (Lindane)	17	Ui	17	17	
319-86-8	delta-BHC	2.8	U	10	2.8	
76-44-8	Heptachlor	14	Ui	14	14	
309-00-2	Aldrin	5.0	U	10	5.0	
1024-57-3	Heptachlor Epoxide	20	Ui	20	20	
5103-74-2	gamma-Chlordane†	92	Ui	92	92	
959-98-8	Endosulfan I	6.5	Ui	10	6.5	
5103-71-9	alpha-Chlordane	1.3	U	10	1.3	
60-57-1	Dieldrin	71	Ui	71	71	
72-55-9	4,4'-DDE	28	Ui	28	28	
72-20-8	Endrin	4.8	U	10	4.8	
33213-65-9	Endosulfan II	13	Ui	13	13	
72-54-8	4,4'-DDD	9.0	Ui	10	9.0	
7421-93-4	Endrin Aldehyde	3.2	U	10	3.2	
1031-07-8	Endosulfan Sulfate	4.2	U	10	4.2	
50-29-3	4,4'-DDT	380	D	10	3.4	
53494-70-5	Endrin Ketone	130	Ui	130	130	
72-43-5	Methoxychlor	50	Ui	50	50	
8001-35-2	Toxaphene	15000	UiE	15000	15000	
3424-82-6	2,4'-DDE	15	Ui	15	15	
53-19-0	2,4'-DDD	170	PD	10	3.2	
789-02-6	2,4'-DDT	55	Ui	55	55	
2385-85-5	Mirex	2.5	Ui	10	2.5	

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406516
Date Collected: 08/25/2004
Date Received: 08/30/2004
Date Extracted: 09/01/2004
Date Analyzed: 09/25/2004

Organochlorine Pesticides

Sample Name: LDW-C10-S1DL
Lab Code: K2406516-003
File ID: J:\GC23\DATA\092404\0924F019.D
Instrument ID: GC23

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8081A

Extraction Lot: KWG0413102
Calibration ID: CAL3844

Sample Amount: 40.00 g
% Solids: 50.4
Dilution Factor: 10

Column1: DB XLB
Column2: DB-35MS

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tetrachloro-m-xylene	113	50-150	09/25/04	Acceptable
Decachlorobiphenyl	83	50-150	09/25/04	Acceptable

† Analyte Comments

gamma-Chlordane For this analyte (CAS Registry No. 5103-74-2), USEPA has corrected the name to be beta-Chlordane, also known as trans-Chlordane.

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406516
Date Collected: 08/25/2004
Date Received: 08/30/2004
Date Extracted: 09/01/2004
Date Analyzed: 10/04/2004

Organochlorine Pesticides

Sample Name: LDW-C10-S1DL
Lab Code: K2406516-003
File ID: J:\GC23\DATA\100104\1001F094.D
Instrument ID: GC23

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8081A

Extraction Lot: KWG0413102
Calibration ID: CAL3865

Sample Amount: 40.00 g
% Solids: 50.4
Dilution Factor: 200

Column1: DB XLB
Column2: DB-35MS

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
319-84-6	alpha-BHC	33	U	200	33	
118-74-1	Hexachlorobenzene	64	U	200	64	
319-85-7	beta-BHC	88	U	200	88	
58-89-9	gamma-BHC (Lindane)	40	U	200	40	
319-86-8	delta-BHC	56	U	200	56	
76-44-8	Heptachlor	39	U	200	39	
309-00-2	Aldrin	100	U	200	100	
1024-57-3	Heptachlor Epoxide	56	U	200	56	
5103-74-2	gamma-Chlordane†	16	U	200	16	
959-98-8	Endosulfan I	44	U	200	44	
5103-71-9	alpha-Chlordane	25	U	200	25	
60-57-1	Dieldrin	33	U	200	33	
72-55-9	4,4'-DDE	31	U	200	31	
72-20-8	Endrin	96	U	200	96	
33213-65-9	Endosulfan II	25	U	200	25	
72-54-8	4,4'-DDD	37	U	200	37	
7421-93-4	Endrin Aldehyde	64	U	200	64	
1031-07-8	Endosulfan Sulfate	84	U	200	84	
50-29-3	4,4'-DDT	460	D	200	68	*
53494-70-5	Endrin Ketone	160	Ui	200	160	
72-43-5	Methoxychlor	76	U	200	76	
8001-35-2	Toxaphene	15000	Ui	15000	15000	
3424-82-6	2,4'-DDE	200	Ui	200	200	
53-19-0	2,4'-DDD	170	JPD	200	64	
789-02-6	2,4'-DDT	92	Ui	200	92	
2385-85-5	Mirex	27	U	200	27	

* See Case Narrative

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406516
Date Collected: 08/25/2004
Date Received: 08/30/2004
Date Extracted: 09/01/2004
Date Analyzed: 10/04/2004

Organochlorine Pesticides

Sample Name: LDW-C10-S1DL
Lab Code: K2406516-003
File ID: J:\GC23\DATA\100104\1001F094.D
Instrument ID: GC23

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8081A

Extraction Lot: KWG0413102
Calibration ID: CAL3865

Sample Amount: 40.00 g
% Solids: 50.4
Dilution Factor: 200

Column1: DB XLB
Column2: DB-35MS

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tetrachloro-m-xylene	0	50-150	10/04/04	Outside Control Limits
Decachlorobiphenyl	0	50-150	10/04/04	Outside Control Limits

† Analyte Comments

gamma-Chlordane For this analyte (CAS Registry No. 5103-74-2), USEPA has corrected the name to be beta-Chlordane, also known as trans-Chlordane.

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406516
Date Collected: 08/25/2004
Date Received: 08/30/2004
Date Extracted: 09/01/2004
Date Analyzed: 09/17/2004

Organochlorine Pesticides

Sample Name: LDW-C6-S
Lab Code: K2406516-004
File ID: J:\GC23\DATA\091604\0916F039.D
Instrument ID: GC23

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8081A

Extraction Lot: KWG0413102
Calibration ID: CAL3753

Sample Amount: 28.90 g
% Solids: 70.2
Dilution Factor: 1

Column1: DB XLB
Column2: DB-35MS

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
319-84-6	alpha-BHC	0.12	U	0.99	0.12	
118-74-1	Hexachlorobenzene	0.23	U	0.99	0.23	
319-85-7	beta-BHC	0.32	U	0.99	0.32	
58-89-9	gamma-BHC (Lindane)	0.15	U	0.99	0.15	
319-86-8	delta-BHC	0.20	U	0.99	0.20	
76-44-8	Heptachlor	0.14	U	0.99	0.14	
309-00-2	Aldrin	0.39	J	0.99	0.36	
1024-57-3	Heptachlor Epoxide	0.20	U	0.99	0.20	
5103-74-2	gamma-Chlordane†	1.1		0.99	0.055	
959-98-8	Endosulfan I	0.29	J	0.99	0.16	
5103-71-9	alpha-Chlordane	0.11	Ui	0.99	0.11	
60-57-1	Dieldrin	0.13	Ui	0.99	0.13	
72-55-9	4,4'-DDE	0.54	JP	0.99	0.11	*
72-20-8	Endrin	0.35	U	0.99	0.35	
33213-65-9	Endosulfan II	0.71	Ui	0.99	0.71	
72-54-8	4,4'-DDD	0.61	J	0.99	0.14	
7421-93-4	Endrin Aldehyde	0.23	U	0.99	0.23	
1031-07-8	Endosulfan Sulfate	0.30	U	0.99	0.30	
50-29-3	4,4'-DDT	3.0		0.99	0.25	
53494-70-5	Endrin Ketone	0.99	Ui	0.99	0.99	
72-43-5	Methoxychlor	0.28	U	0.99	0.28	
8001-35-2	Toxaphene	51	Ui	51	51	
3424-82-6	2,4'-DDE	0.99	Ui	0.99	0.99	
53-19-0	2,4'-DDD	0.99	Ui	0.99	0.99	
789-02-6	2,4'-DDT	2.1		0.99	0.12	
2385-85-5	Mirex	0.99	Ui	0.99	0.99	

* See Case Narrative

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406516
Date Collected: 08/25/2004
Date Received: 08/30/2004
Date Extracted: 09/01/2004
Date Analyzed: 09/17/2004

Organochlorine Pesticides

Sample Name: LDW-C6-S
Lab Code: K2406516-004
File ID: J:\GC23\DATA\091604\0916F039.D
Instrument ID: GC23

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8081A

Extraction Lot: KWG0413102
Calibration ID: CAL3753

Sample Amount: 28.90 g
% Solids: 70.2
Dilution Factor: 1

Column1: DB XLB
Column2: DB-35MS

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tetrachloro-m-xylene	83	50-150	09/17/04	Acceptable
Decachlorobiphenyl	69	50-150	09/17/04	Acceptable

† Analyte Comments

gamma-Chlordane For this analyte (CAS Registry No. 5103-74-2), USEPA has corrected the name to be beta-Chlordane, also known as trans-Chlordane.

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406516
Date Collected: 08/25/2004
Date Received: 08/30/2004
Date Extracted: 09/01/2004
Date Analyzed: 09/17/2004

Organochlorine Pesticides

Sample Name: LDW-C9-S
Lab Code: K2406516-005
File ID: J:\GC23\DATA\091604\0916F040.D
Instrument ID: GC23

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8081A

Extraction Lot: KWG0413102
Calibration ID: CAL3753

Sample Amount: 27.46 g
% Solids: 75.7
Dilution Factor: 1

Column1: DB XLB
Column2: DB-35MS

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
319-84-6	alpha-BHC	0.11	U	0.97	0.11	
118-74-1	Hexachlorobenzene	0.80	J	0.97	0.22	
319-85-7	beta-BHC	0.30	U	0.97	0.30	
58-89-9	gamma-BHC (Lindane)	0.14	U	0.97	0.14	
319-86-8	delta-BHC	0.19	U	0.97	0.19	
76-44-8	Heptachlor	0.13	U	0.97	0.13	
309-00-2	Aldrin	0.34	U	0.97	0.34	
1024-57-3	Heptachlor Epoxide	0.19	U	0.97	0.19	
5103-74-2	gamma-Chlordane†	0.47	J	0.97	0.051	
959-98-8	Endosulfan I	0.18	J	0.97	0.15	
5103-71-9	alpha-Chlordane	0.10	JP	0.97	0.082	
60-57-1	Dieldrin	0.11	U	0.97	0.11	
72-55-9	4,4'-DDE	0.62	Ui	0.97	0.62	
72-20-8	Endrin	0.32	U	0.97	0.32	
33213-65-9	Endosulfan II	0.40	Ui	0.97	0.40	
72-54-8	4,4'-DDD	0.30	J	0.97	0.13	
7421-93-4	Endrin Aldehyde	0.22	U	0.97	0.22	
1031-07-8	Endosulfan Sulfate	0.28	U	0.97	0.28	
50-29-3	4,4'-DDT	1.9		0.97	0.23	
53494-70-5	Endrin Ketone	0.97	Ui	0.97	0.97	
72-43-5	Methoxychlor	0.26	U	0.97	0.26	
8001-35-2	Toxaphene	47	Ui	49	47	
3424-82-6	2,4'-DDE	0.97	Ui	0.97	0.97	
53-19-0	2,4'-DDD	1.6	P	0.97	0.22	
789-02-6	2,4'-DDT	1.3		0.97	0.11	
2385-85-5	Mirex	0.97	Ui	0.97	0.97	

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406516
Date Collected: 08/25/2004
Date Received: 08/30/2004
Date Extracted: 09/01/2004
Date Analyzed: 09/17/2004

Organochlorine Pesticides

Sample Name: LDW-C9-S
Lab Code: K2406516-005
File ID: J:\GC23\DATA\091604\0916F040.D
Instrument ID: GC23

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8081A

Extraction Lot: KWG0413102
Calibration ID: CAL3753

Sample Amount: 27.46 g
% Solids: 75.7
Dilution Factor: 1

Column1: DB XLB
Column2: DB-35MS

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tetrachloro-m-xylene	81	50-150	09/17/04	Acceptable
Decachlorobiphenyl	68	50-150	09/17/04	Acceptable

† Analyte Comments

gamma-Chlordane For this analyte (CAS Registry No. 5103-74-2), USEPA has corrected the name to be beta-Chlordane, also known as trans-Chlordane.

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406516
Date Collected: 08/26/2004
Date Received: 08/30/2004
Date Extracted: 09/01/2004
Date Analyzed: 09/18/2004

Organochlorine Pesticides

Sample Name: LDW-C7-S1
Lab Code: K2406516-006
File ID: J:\GC23\DATA\091604\0916F071.D
Instrument ID: GC23

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8081A

Extraction Lot: KWG0413102
Calibration ID: CAL3753

Sample Amount: 26.03 g
% Solids: 78.0
Dilution Factor: 1

Column1: DB XLB
Column2: DB-35MS

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
319-84-6	alpha-BHC	0.11	U	0.99	0.11	
118-74-1	Hexachlorobenzene	0.45	Ui	0.99	0.45	
319-85-7	beta-BHC	0.99	Ui	0.99	0.99	
58-89-9	gamma-BHC (Lindane)	0.84	JP	0.99	0.13	
319-86-8	delta-BHC	0.42	JP	0.99	0.18	
76-44-8	Heptachlor	0.99	Ui	0.99	0.99	
309-00-2	Aldrin	0.33	U	0.99	0.33	
1024-57-3	Heptachlor Epoxide	0.99	Ui	0.99	0.99	
5103-74-2	gamma-Chlordane†	18		0.99	0.049	
959-98-8	Endosulfan I	13	P	0.99	0.15	
5103-71-9	alpha-Chlordane	0.080	U	0.99	0.080	
60-57-1	Dieldrin	0.99	Ui	0.99	0.99	
72-55-9	4,4'-DDE	0.99	Ui	0.99	0.99	
72-20-8	Endrin	2.4		0.99	0.31	
33213-65-9	Endosulfan II	1.2	Ui	1.2	1.2	
72-54-8	4,4'-DDD	0.63	J	0.99	0.12	
7421-93-4	Endrin Aldehyde	4.8	P	0.99	0.21	
1031-07-8	Endosulfan Sulfate	0.27	U	0.99	0.27	
50-29-3	4,4'-DDT	29		0.99	0.22	
53494-70-5	Endrin Ketone	1.3	Ui	1.3	1.3	
72-43-5	Methoxychlor	1.1	Ui	1.1	1.1	
8001-35-2	Toxaphene	240	Ui	240	240	
3424-82-6	2,4'-DDE	14	Ui	14	14	
53-19-0	2,4'-DDD	8.1	Ui	8.1	8.1	
789-02-6	2,4'-DDT	29		0.99	0.11	
2385-85-5	Mirex	0.088	U	0.99	0.088	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406516
Date Collected: 08/26/2004
Date Received: 08/30/2004
Date Extracted: 09/01/2004
Date Analyzed: 09/18/2004

Organochlorine Pesticides

Sample Name: LDW-C7-S1
Lab Code: K2406516-006
File ID: J:\GC23\DATA\091604\0916F071.D
Instrument ID: GC23

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8081A

Extraction Lot: KWG0413102
Calibration ID: CAL3753

Sample Amount: 26.03 g
% Solids: 78.0
Dilution Factor: 1

Column1: DB XLB
Column2: DB-35MS

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tetrachloro-m-xylene	79	50-150	09/18/04	Acceptable
Decachlorobiphenyl	52	50-150	09/18/04	Acceptable

† Analyte Comments

gamma-Chlordane For this analyte (CAS Registry No. 5103-74-2), USEPA has corrected the name to be beta-Chlordane, also known as trans-Chlordane.

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406516
Date Collected: 08/26/2004
Date Received: 08/30/2004
Date Extracted: 09/01/2004
Date Analyzed: 09/25/2004

Organochlorine Pesticides

Sample Name: LDW-C7-SIDL
Lab Code: K2406516-006
File ID: J:\GC23\DATA\092404\0924F020.D
Instrument ID: GC23

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8081A

Extraction Lot: KWG0413102
Calibration ID: CAL3844

Sample Amount: 26.03 g
% Solids: 78.0
Dilution Factor: 10

Column1: DB XLB
Column2: DB-35MS

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
319-84-6	alpha-BHC	1.1	U	9.9	1.1	
118-74-1	Hexachlorobenzene	2.1	U	9.9	2.1	
319-85-7	beta-BHC	2.9	U	9.9	2.9	
58-89-9	gamma-BHC (Lindane)	1.8	JPD	9.9	1.3	
319-86-8	delta-BHC	1.8	U	9.9	1.8	
76-44-8	Heptachlor	2.4	Ui	9.9	2.4	
309-00-2	Aldrin	3.3	U	9.9	3.3	
1024-57-3	Heptachlor Epoxide	6.3	Ui	9.9	6.3	
5103-74-2	gamma-Chlordane†	35	D	9.9	0.49	
959-98-8	Endosulfan I	27	PD	9.9	1.5	
5103-71-9	alpha-Chlordane	0.80	U	9.9	0.80	
60-57-1	Dieldrin	89	Ui	89	89	
72-55-9	4,4'-DDE	1.4	Ui	9.9	1.4	
72-20-8	Endrin	4.6	JD	9.9	3.1	
33213-65-9	Endosulfan II	2.6	Ui	9.9	2.6	
72-54-8	4,4'-DDD	4.4	JD	9.9	1.2	
7421-93-4	Endrin Aldehyde	9.3	JPD	9.9	2.1	
1031-07-8	Endosulfan Sulfate	2.7	U	9.9	2.7	
50-29-3	4,4'-DDT	62	D	9.9	2.2	
53494-70-5	Endrin Ketone	3.7	Ui	9.9	3.7	
72-43-5	Methoxychlor	2.5	U	9.9	2.5	
8001-35-2	Toxaphene	570	Ui	570	570	
3424-82-6	2,4'-DDE	15	Ui	15	15	
53-19-0	2,4'-DDD	19	Ui	19	19	
789-02-6	2,4'-DDT	55	D	9.9	1.1	
2385-85-5	Mirex	0.88	U	9.9	0.88	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406516
Date Collected: 08/26/2004
Date Received: 08/30/2004
Date Extracted: 09/01/2004
Date Analyzed: 09/25/2004

Organochlorine Pesticides

Sample Name: LDW-C7-S1DL
Lab Code: K2406516-006
File ID: J:\GC23\DATA\092404\0924F020.D
Instrument ID: GC23

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8081A

Extraction Lot: KWG0413102
Calibration ID: CAL3844

Sample Amount: 26.03 g
% Solids: 78.0
Dilution Factor: 10

Column1: DB XLB
Column2: DB-35MS

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tetrachloro-m-xylene	118	50-150	09/25/04	Acceptable
Decachlorobiphenyl	94	50-150	09/25/04	Acceptable

† Analyte Comments

gamma-Chlordane For this analyte (CAS Registry No. 5103-74-2), USEPA has corrected the name to be beta-Chlordane, also known as trans-Chlordane.

Comments: _____

Analytical Results

Client: Windward Environmental
 Project: LDW Benthic Invertebrate Survey/04-08-06-21
 Sample Matrix: Sediment

Service Request: K2406516
 Date Collected: 08/27/2004
 Date Received: 08/30/2004
 Date Extracted: 09/01/2004
 Date Analyzed: 09/17/2004

Organochlorine Pesticides

Sample Name: LDW-C3-S2
 Lab Code: K2406516-007
 File ID: J:\GC23\DATA\091604\0916F050.D
 Instrument ID: GC23

Units: ug/Kg
 Basis: Dry
 Level: Low

Extraction Method: EPA 3540C
 Analysis Method: 8081A

Extraction Lot: KWG0413102
 Calibration ID: CAL3753

Sample Amount: 26.60 g
 % Solids: 75.2
 Dilution Factor: 1

Column1: DB XLB
 Column2: DB-35MS

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
319-84-6	alpha-BHC	0.12	U	1.0	0.12	
118-74-1	Hexachlorobenzene	0.41	Ui	1.0	0.41	
319-85-7	beta-BHC	0.30	U	1.0	0.30	
58-89-9	gamma-BHC (Lindane)	0.14	U	1.0	0.14	
319-86-8	delta-BHC	0.19	U	1.0	0.19	
76-44-8	Heptachlor	0.13	U	1.0	0.13	
309-00-2	Aldrin	0.34	U	1.0	0.34	
1024-57-3	Heptachlor Epoxide	0.19	U	1.0	0.19	
5103-74-2	gamma-Chlordane†	0.82	Ui	1.0	0.82	
959-98-8	Endosulfan I	0.15	U	1.0	0.15	
5103-71-9	alpha-Chlordane	0.083	U	1.0	0.083	
60-57-1	Dieldrin	0.57	Ui	1.0	0.57	
72-55-9	4,4'-DDE	2.6		1.0	0.11	
72-20-8	Endrin	0.32	U	1.0	0.32	
33213-65-9	Endosulfan II	0.082	U	1.0	0.082	
72-54-8	4,4'-DDD	0.96	J	1.0	0.13	
7421-93-4	Endrin Aldehyde	0.28	JP	1.0	0.22	
1031-07-8	Endosulfan Sulfate	0.63	J	1.0	0.28	
50-29-3	4,4'-DDT	7.9		1.0	0.23	
53494-70-5	Endrin Ketone	1.0	Ui	1.0	1.0	
72-43-5	Methoxychlor	1.7	Ui	1.7	1.7	
8001-35-2	Toxaphene	30	Ui	50	30	
3424-82-6	2,4'-DDE	1.0	Ui	1.0	1.0	
53-19-0	2,4'-DDD	1.0	Ui	1.0	1.0	
789-02-6	2,4'-DDT	1.8		1.0	0.11	
2385-85-5	Mirex	1.0	Ui	1.0	1.0	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406516
Date Collected: 08/27/2004
Date Received: 08/30/2004
Date Extracted: 09/01/2004
Date Analyzed: 09/17/2004

Organochlorine Pesticides

Sample Name: LDW-C3-S2
Lab Code: K2406516-007
File ID: J:\GC23\DATA\091604\0916F050.D
Instrument ID: GC23

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8081A

Extraction Lot: KWG0413102
Calibration ID: CAL3753

Sample Amount: 26.60 g
% Solids: 75.2
Dilution Factor: 1

Column1: DB XLB
Column2: DB-35MS

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tetrachloro-m-xylene	85	50-150	09/17/04	Acceptable
Decachlorobiphenyl	69	50-150	09/17/04	Acceptable

† Analyte Comments

gamma-Chlordane For this analyte (CAS Registry No. 5103-74-2), USEPA has corrected the name to be beta-Chlordane, also known as trans-Chlordane.

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406516
Date Collected: 08/26/2004
Date Received: 08/30/2004
Date Extracted: 09/01/2004
Date Analyzed: 09/17/2004

Organochlorine Pesticides

Sample Name: LDW-C7-S2
Lab Code: K2406516-008
File ID: J:\GC23\DATA\091604\0916F051.D
Instrument ID: GC23

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8081A

Extraction Lot: KWG0413102
Calibration ID: CAL3753

Sample Amount: 25.76 g
% Solids: 78.3
Dilution Factor: 1

Column1: DB XLB
Column2: DB-35MS

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
319-84-6	alpha-BHC	0.11	U	1.0	0.11	
118-74-1	Hexachlorobenzene	0.21	U	1.0	0.21	
319-85-7	beta-BHC	0.29	U	1.0	0.29	
58-89-9	gamma-BHC (Lindane)	0.13	U	1.0	0.13	
319-86-8	delta-BHC	0.35	Ui	1.0	0.35	
76-44-8	Heptachlor	1.0	Ui	1.0	1.0	
309-00-2	Aldrin	1.0	Ui	1.0	1.0	
1024-57-3	Heptachlor Epoxide	0.86	Ui	1.0	0.86	
5103-74-2	gamma-Chlordane†	5.5		1.0	0.049	
959-98-8	Endosulfan I	1.0	Ui	1.0	1.0	
5103-71-9	alpha-Chlordane	0.080	U	1.0	0.080	
60-57-1	Dieldrin	1.0	Ui	1.0	1.0	
72-55-9	4,4'-DDE	1.0	Ui	1.0	1.0	
72-20-8	Endrin	0.99	J	1.0	0.31	
33213-65-9	Endosulfan II	1.0	Ui	1.0	1.0	
72-54-8	4,4'-DDD	1.0		1.0	0.12	
7421-93-4	Endrin Aldehyde	2.4	P	1.0	0.21	
1031-07-8	Endosulfan Sulfate	0.27	U	1.0	0.27	
50-29-3	4,4'-DDT	13		1.0	0.22	
53494-70-5	Endrin Ketone	1.0	Ui	1.0	1.0	
72-43-5	Methoxychlor	0.25	U	1.0	0.25	
8001-35-2	Toxaphene	200	Ui	200	200	
3424-82-6	2,4'-DDE	3.9	Ui	3.9	3.9	
53-19-0	2,4'-DDD	3.1	Ui	3.1	3.1	
789-02-6	2,4'-DDT	11		1.0	0.11	
2385-85-5	Mirex	1.0	Ui	1.0	1.0	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406516
Date Collected: 08/26/2004
Date Received: 08/30/2004
Date Extracted: 09/01/2004
Date Analyzed: 09/17/2004

Organochlorine Pesticides

Sample Name: LDW-C7-S2
Lab Code: K2406516-008
File ID: J:\GC23\DATA\091604\0916F051.D
Instrument ID: GC23

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8081A

Extraction Lot: KWG0413102
Calibration ID: CAL3753

Sample Amount: 25.76 g
% Solids: 78.3
Dilution Factor: 1

Column1: DB XLB
Column2: DB-35MS

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tetrachloro-m-xylene	84	50-150	09/17/04	Acceptable
Decachlorobiphenyl	67	50-150	09/17/04	Acceptable

† Analyte Comments

gamma-Chlordane For this analyte (CAS Registry No. 5103-74-2), USEPA has corrected the name to be beta-Chlordane, also known as trans-Chlordane.

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406516
Date Collected: 08/26/2004
Date Received: 08/30/2004
Date Extracted: 09/01/2004
Date Analyzed: 09/18/2004

Organochlorine Pesticides

Sample Name: LDW-C8-S
Lab Code: K2406516-009
File ID: J:\GC23\DATA\091604\0916F072.D
Instrument ID: GC23

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8081A

Extraction Lot: KWG0413102
Calibration ID: CAL3753

Sample Amount: 33.67 g
% Solids: 60.3
Dilution Factor: 1

Column1: DB XLB
Column2: DB-35MS

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
319-84-6	alpha-BHC	0.14	U	0.99	0.14	
118-74-1	Hexachlorobenzene	1.1	Ui	1.1	1.1	
319-85-7	beta-BHC	0.99	Ui	0.99	0.99	
58-89-9	gamma-BHC (Lindane)	4.1	P	0.99	0.17	
319-86-8	delta-BHC	5.3		0.99	0.24	
76-44-8	Heptachlor	0.99	Ui	0.99	0.99	
309-00-2	Aldrin	6.8	Ui	6.8	6.8	
1024-57-3	Heptachlor Epoxide	1.9	Ui	1.9	1.9	
5103-74-2	gamma-Chlordane†	74	E	0.99	0.064	
959-98-8	Endosulfan I	36	P	0.99	0.19	
5103-71-9	alpha-Chlordane	0.11	U	0.99	0.11	
60-57-1	Dieldrin	1.1	Ui	1.1	1.1	
72-55-9	4,4'-DDE	1.4	Ui	1.4	1.4	
72-20-8	Endrin	3.5	Ui	3.5	3.5	
33213-65-9	Endosulfan II	5.5	Ui	5.5	5.5	
72-54-8	4,4'-DDD	2.5	P	0.99	0.16	
7421-93-4	Endrin Aldehyde	20	P	0.99	0.27	
1031-07-8	Endosulfan Sulfate	7.2	Ui	7.2	7.2	
50-29-3	4,4'-DDT	140	E	0.99	0.29	
53494-70-5	Endrin Ketone	7.9	Ui	7.9	7.9	
72-43-5	Methoxychlor	2.5	Ui	2.5	2.5	
8001-35-2	Toxaphene	1200	UiE	1200	1200	
3424-82-6	2,4'-DDE	42	UiE	42	42	
53-19-0	2,4'-DDD	25	Ui	25	25	
789-02-6	2,4'-DDT	160	E	0.99	0.14	
2385-85-5	Mirex	1.9	Ui	1.9	1.9	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406516
Date Collected: 08/26/2004
Date Received: 08/30/2004
Date Extracted: 09/01/2004
Date Analyzed: 09/18/2004

Organochlorine Pesticides

Sample Name: LDW-C8-S
Lab Code: K2406516-009
File ID: J:\GC23\DATA\091604\0916F072.D
Instrument ID: GC23

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8081A

Extraction Lot: KWG0413102
Calibration ID: CAL3753

Sample Amount: 33.67 g
% Solids: 60.3
Dilution Factor: 1

Column1: DB XLB
Column2: DB-35MS

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tetrachloro-m-xylene	62	50-150	09/18/04	Acceptable
Decachlorobiphenyl	51	50-150	09/18/04	Acceptable

† Analyte Comments

gamma-Chlordane For this analyte (CAS Registry No. 5103-74-2), USEPA has corrected the name to be beta-Chlordane, also known as trans-Chlordane.

Comments:

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406516
Date Collected: 08/26/2004
Date Received: 08/30/2004
Date Extracted: 09/01/2004
Date Analyzed: 09/25/2004

Organochlorine Pesticides

Sample Name: LDW-C8-SDL
Lab Code: K2406516-009
File ID: J:\GC23\DATA\092404\0924F021.D
Instrument ID: GC23

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8081A

Extraction Lot: KWG0413102
Calibration ID: CAL3844

Sample Amount: 33.67 g
% Solids: 60.3
Dilution Factor: 10

Column1: DB XLB
Column2: DB-35MS

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
319-84-6	alpha-BHC	1.4	U	9.9	1.4	
118-74-1	Hexachlorobenzene	2.7	U	9.9	2.7	
319-85-7	beta-BHC	3.7	U	9.9	3.7	
58-89-9	gamma-BHC (Lindane)	6.7	JPD	9.9	1.7	
319-86-8	delta-BHC	11	D	9.9	2.4	
76-44-8	Heptachlor	1.7	U	9.9	1.7	
309-00-2	Aldrin	12	Ui	12	12	
1024-57-3	Heptachlor Epoxide	7.5	Ui	9.9	7.5	
5103-74-2	gamma-Chlordane†	130	D	9.9	0.64	
959-98-8	Endosulfan I	71	PD	9.9	1.9	
5103-71-9	alpha-Chlordane	1.1	U	9.9	1.1	
60-57-1	Dieldrin	2.2	Ui	9.9	2.2	
72-55-9	4,4'-DDE	2.9	Ui	9.9	2.9	
72-20-8	Endrin	13	Ui	13	13	
33213-65-9	Endosulfan II	9.6	Ui	9.9	9.6	
72-54-8	4,4'-DDD	5.8	JPD	9.9	1.6	
7421-93-4	Endrin Aldehyde	41	PD	9.9	2.7	
1031-07-8	Endosulfan Sulfate	14	Ui	14	14	
50-29-3	4,4'-DDT	180	D	9.9	2.9	
53494-70-5	Endrin Ketone	18	Ui	18	18	
72-43-5	Methoxychlor	7.2	Ui	9.9	7.2	
8001-35-2	Toxaphene	2400	Ui	2400	2400	
3424-82-6	2,4'-DDE	12	Ui	12	12	
53-19-0	2,4'-DDD	54	Ui	54	54	
789-02-6	2,4'-DDT	240	D	9.9	1.4	
2385-85-5	Mirex	2.3	Ui	9.9	2.3	

Comments:

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406516
Date Collected: 08/26/2004
Date Received: 08/30/2004
Date Extracted: 09/01/2004
Date Analyzed: 09/25/2004

Organochlorine Pesticides

Sample Name: LDW-C8-SDL
Lab Code: K2406516-009
File ID: J:\GC23\DATA\092404\0924F021.D
Instrument ID: GC23

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8081A

Extraction Lot: KWG0413102
Calibration ID: CAL3844

Sample Amount: 33.67 g
% Solids: 60.3
Dilution Factor: 10

Column1: DB XLB
Column2: DB-35MS

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tetrachloro-m-xylene	93	50-150	09/25/04	Acceptable
Decachlorobiphenyl	85	50-150	09/25/04	Acceptable

† Analyte Comments

gamma-Chlordane For this analyte (CAS Registry No. 5103-74-2), USEPA has corrected the name to be beta-Chlordane, also known as trans-Chlordane.

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406516
Date Collected: 08/27/2004
Date Received: 08/30/2004
Date Extracted: 09/01/2004
Date Analyzed: 09/17/2004

Organochlorine Pesticides

Sample Name: LDW-C5-S
Lab Code: K2406516-010
File ID: J:\GC23\DATA\091604\0916F052.D
Instrument ID: GC23

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8081A

Extraction Lot: KWG0413102
Calibration ID: CAL3753

Sample Amount: 27.73 g
% Solids: 74.1
Dilution Factor: 1

Column1: DB XLB
Column2: DB-35MS

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
319-84-6	alpha-BHC	0.12	U	0.98	0.12	
118-74-1	Hexachlorobenzene	0.22	U	0.98	0.22	
319-85-7	beta-BHC	0.30	U	0.98	0.30	
58-89-9	gamma-BHC (Lindane)	0.14	U	0.98	0.14	
319-86-8	delta-BHC	0.19	U	0.98	0.19	
76-44-8	Heptachlor	0.14	U	0.98	0.14	
309-00-2	Aldrin	0.34	U	0.98	0.34	
1024-57-3	Heptachlor Epoxide	0.19	U	0.98	0.19	
5103-74-2	gamma-Chlordane†	1.1		0.98	0.052	
959-98-8	Endosulfan I	0.33	JP	0.98	0.15	
5103-71-9	alpha-Chlordane	0.13	J	0.98	0.084	
60-57-1	Dieldrin	0.70	Ui	0.98	0.70	
72-55-9	4,4'-DDE	0.71	Ui	0.98	0.71	
72-20-8	Endrin	0.33	U	0.98	0.33	
33213-65-9	Endosulfan II	0.67	Ui	0.98	0.67	
72-54-8	4,4'-DDD	0.44	J	0.98	0.13	
7421-93-4	Endrin Aldehyde	0.22	U	0.98	0.22	
1031-07-8	Endosulfan Sulfate	0.29	U	0.98	0.29	
50-29-3	4,4'-DDT	2.5		0.98	0.23	
53494-70-5	Endrin Ketone	0.98	Ui	0.98	0.98	
72-43-5	Methoxychlor	0.26	U	0.98	0.26	
8001-35-2	Toxaphene	31	Ui	49	31	
3424-82-6	2,4'-DDE	0.98	Ui	0.98	0.98	
53-19-0	2,4'-DDD	0.98	Ui	0.98	0.98	
789-02-6	2,4'-DDT	2.0		0.98	0.11	
2385-85-5	Mirex	1.4	Ui	1.4	1.4	

Comments:

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406516
Date Collected: 08/27/2004
Date Received: 08/30/2004
Date Extracted: 09/01/2004
Date Analyzed: 09/17/2004

Organochlorine Pesticides

Sample Name: LDW-C5-S
Lab Code: K2406516-010
File ID: J:\GC23\DATA\091604\0916F052.D
Instrument ID: GC23

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8081A

Extraction Lot: KWG0413102
Calibration ID: CAL3753

Sample Amount: 27.73 g
% Solids: 74.1
Dilution Factor: 1

Column1: DB XLB
Column2: DB-35MS

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tetrachloro-m-xylene	80	50-150	09/17/04	Acceptable
Decachlorobiphenyl	69	50-150	09/17/04	Acceptable

† Analyte Comments

gamma-Chlordane For this analyte (CAS Registry No. 5103-74-2), USEPA has corrected the name to be beta-Chlordane, also known as trans-Chlordane.

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406516
Date Collected: 08/27/2004
Date Received: 08/30/2004
Date Extracted: 09/01/2004
Date Analyzed: 09/17/2004

Organochlorine Pesticides

Sample Name: LDW-C3-S1
Lab Code: K2406516-011
File ID: J:\GC23\DATA\091604\0916F053.D
Instrument ID: GC23

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8081A

Extraction Lot: KWG0413102
Calibration ID: CAL3753

Sample Amount: 28.63 g
% Solids: 72.2
Dilution Factor: 1

Column1: DB XLB
Column2: DB-35MS

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
319-84-6	alpha-BHC	0.21	Ui	0.97	0.21	
118-74-1	Hexachlorobenzene	0.23	U	0.97	0.23	
319-85-7	beta-BHC	0.69	JP	0.97	0.31	
58-89-9	gamma-BHC (Lindane)	0.14	U	0.97	0.14	
319-86-8	delta-BHC	0.20	U	0.97	0.20	
76-44-8	Heptachlor	0.14	U	0.97	0.14	
309-00-2	Aldrin	0.35	U	0.97	0.35	
1024-57-3	Heptachlor Epoxide	0.20	U	0.97	0.20	
5103-74-2	gamma-Chlordane†	0.99		0.97	0.053	
959-98-8	Endosulfan I	0.26	J	0.97	0.16	
5103-71-9	alpha-Chlordane	0.086	U	0.97	0.086	
60-57-1	Dieldrin	0.73	Ui	0.97	0.73	
72-55-9	4,4'-DDE	1.1	P	0.97	0.11	
72-20-8	Endrin	0.34	U	0.97	0.34	
33213-65-9	Endosulfan II	0.085	U	0.97	0.085	
72-54-8	4,4'-DDD	0.30	J	0.97	0.13	
7421-93-4	Endrin Aldehyde	0.23	U	0.97	0.23	
1031-07-8	Endosulfan Sulfate	0.30	U	0.97	0.30	
50-29-3	4,4'-DDT	2.8		0.97	0.24	
53494-70-5	Endrin Ketone	0.22	Ui	0.97	0.22	
72-43-5	Methoxychlor	0.34	JP	0.97	0.27	
8001-35-2	Toxaphene	49	Ui	49	49	
3424-82-6	2,4'-DDE	0.97	Ui	0.97	0.97	
53-19-0	2,4'-DDD	0.97	Ui	0.97	0.97	
789-02-6	2,4'-DDT	1.9		0.97	0.12	
2385-85-5	Mirex	0.095	U	0.97	0.095	

Comments:

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406516
Date Collected: 08/27/2004
Date Received: 08/30/2004
Date Extracted: 09/01/2004
Date Analyzed: 09/17/2004

Organochlorine Pesticides

Sample Name: LDW-C3-S1
Lab Code: K2406516-011
File ID: J:\GC23\DATA\091604\0916F053.D
Instrument ID: GC23

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8081A

Extraction Lot: KWG0413102
Calibration ID: CAL3753

Sample Amount: 28.63 g
% Solids: 72.2
Dilution Factor: 1

Column1: DB XLB
Column2: DB-35MS

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tetrachloro-m-xylene	83	50-150	09/17/04	Acceptable
Decachlorobiphenyl	69	50-150	09/17/04	Acceptable

† Analyte Comments

gamma-Chlordane For this analyte (CAS Registry No. 5103-74-2), USEPA has corrected the name to be beta-Chlordane, also known as trans-Chlordane.

Comments: _____

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406516
Date Collected: 08/26/2004
Date Received: 08/30/2004
Date Extracted: 09/01/2004
Date Analyzed: 09/17/2004

Organochlorine Pesticides

Sample Name: LDW-C2-S1
Lab Code: K2406516-012
File ID: J:\GC23\DATA\091604\0916F054.D
Instrument ID: GC23
Extraction Method: EPA 3540C
Analysis Method: 8081A

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Lot: KWG0413102
Calibration ID: CAL3753

Sample Amount: 36.15 g
% Solids: 55.9
Dilution Factor: 1

Column1: DB XLB
Column2: DB-35MS

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
319-84-6	alpha-BHC	0.15	U	0.99	0.15	
118-74-1	Hexachlorobenzene	0.29	U	0.99	0.29	
319-85-7	beta-BHC	0.40	U	0.99	0.40	
58-89-9	gamma-BHC (Lindane)	0.18	U	0.99	0.18	
319-86-8	delta-BHC	0.26	U	0.99	0.26	
76-44-8	Heptachlor	0.29	Ui	0.99	0.29	
309-00-2	Aldrin	0.45	U	0.99	0.45	
1024-57-3	Heptachlor Epoxide	0.26	U	0.99	0.26	
5103-74-2	gamma-Chlordane†	1.4	P	0.99	0.068	
959-98-8	Endosulfan I	0.24	J	0.99	0.20	
5103-71-9	alpha-Chlordane	0.12	U	0.99	0.12	
60-57-1	Dieldrin	0.15	U	0.99	0.15	
72-55-9	4,4'-DDE	0.95	JP	0.99	0.14	
72-20-8	Endrin	0.43	U	0.99	0.43	
33213-65-9	Endosulfan II	0.11	U	0.99	0.11	
72-54-8	4,4'-DDD	0.47	J	0.99	0.17	
7421-93-4	Endrin Aldehyde	0.29	U	0.99	0.29	
1031-07-8	Endosulfan Sulfate	0.38	U	0.99	0.38	
50-29-3	4,4'-DDT	1.9		0.99	0.31	
53494-70-5	Endrin Ketone	0.99	Ui	0.99	0.99	
72-43-5	Methoxychlor	0.50	J	0.99	0.34	
8001-35-2	Toxaphene	25	Ui	50	25	
3424-82-6	2,4'-DDE	0.99	Ui	0.99	0.99	
53-19-0	2,4'-DDD	0.99	Ui	0.99	0.99	
789-02-6	2,4'-DDT	2.2		0.99	0.15	
2385-85-5	Mirex	0.22	Ui	0.99	0.22	

Comments:

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406516
Date Collected: 08/26/2004
Date Received: 08/30/2004
Date Extracted: 09/01/2004
Date Analyzed: 09/17/2004

Organochlorine Pesticides

Sample Name: LDW-C2-S1
Lab Code: K2406516-012
File ID: J:\GC23\DATA\091604\0916F054.D
Instrument ID: GC23

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8081A

Extraction Lot: KWG0413102
Calibration ID: CAL3753

Sample Amount: 36.15 g
% Solids: 55.9
Dilution Factor: 1

Column1: DB XLB
Column2: DB-35MS

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tetrachloro-m-xylene	78	50-150	09/17/04	Acceptable
Decachlorobiphenyl	66	50-150	09/17/04	Acceptable

† Analyte Comments

gamma-Chlordane

For this analyte (CAS Registry No. 5103-74-2), USEPA has corrected the name to be beta-Chlordane, also known as trans-Chlordane.

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406516
Date Collected: 08/26/2004
Date Received: 08/30/2004
Date Extracted: 09/01/2004
Date Analyzed: 09/17/2004

Organochlorine Pesticides

Sample Name: LDW-C2-S2
Lab Code: K2406516-013
File ID: J:\GC23\DATA\091604\0916F055.D
Instrument ID: GC23

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8081A

Extraction Lot: KWG0413102
Calibration ID: CAL3753

Sample Amount: 29.00 g
% Solids: 70.4
Dilution Factor: 1

Column1: DB XLB
Column2: DB-35MS

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
319-84-6	alpha-BHC	0.12	U	0.98	0.12	
118-74-1	Hexachlorobenzene	0.23	U	0.98	0.23	
319-85-7	beta-BHC	0.32	U	0.98	0.32	
58-89-9	gamma-BHC (Lindane)	0.15	U	0.98	0.15	
319-86-8	delta-BHC	0.20	U	0.98	0.20	
76-44-8	Heptachlor	0.14	U	0.98	0.14	
309-00-2	Aldrin	0.36	U	0.98	0.36	
1024-57-3	Heptachlor Epoxide	0.20	U	0.98	0.20	
5103-74-2	gamma-Chlordane†	1.5		0.98	0.054	
959-98-8	Endosulfan I	0.63	J	0.98	0.16	
5103-71-9	alpha-Chlordane	0.089	U	0.98	0.089	
60-57-1	Dieldrin	0.12	U	0.98	0.12	
72-55-9	4,4'-DDE	0.98	Ui	0.98	0.98	
72-20-8	Endrin	0.35	U	0.98	0.35	
33213-65-9	Endosulfan II	0.98	Ui	0.98	0.98	
72-54-8	4,4'-DDD	0.47	J	0.98	0.14	
7421-93-4	Endrin Aldehyde	0.23	U	0.98	0.23	
1031-07-8	Endosulfan Sulfate	0.30	U	0.98	0.30	
50-29-3	4,4'-DDT	3.6		0.98	0.25	
53494-70-5	Endrin Ketone	0.98	Ui	0.98	0.98	
72-43-5	Methoxychlor	0.90	Ui	0.98	0.90	
8001-35-2	Toxaphene	50	Ui	50	50	
3424-82-6	2,4'-DDE	0.98	Ui	0.98	0.98	
53-19-0	2,4'-DDD	0.98	Ui	0.98	0.98	
789-02-6	2,4'-DDT	3.4		0.98	0.12	
2385-85-5	Mirex	0.98	Ui	0.98	0.98	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406516
Date Collected: 08/26/2004
Date Received: 08/30/2004
Date Extracted: 09/01/2004
Date Analyzed: 09/17/2004

Organochlorine Pesticides

Sample Name: LDW-C2-S2
Lab Code: K2406516-013
File ID: J:\GC23\DATA\091604\0916F055.D
Instrument ID: GC23

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8081A

Extraction Lot: KWG0413102
Calibration ID: CAL3753

Sample Amount: 29.00 g
% Solids: 70.4
Dilution Factor: 1

Column1: DB XLB
Column2: DB-35MS

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tetrachloro-m-xylene	78	50-150	09/17/04	Acceptable
Decachlorobiphenyl	69	50-150	09/17/04	Acceptable

† Analyte Comments

gamma-Chlordane For this analyte (CAS Registry No. 5103-74-2), USEPA has corrected the name to be beta-Chlordane, also known as trans-Chlordane.

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406516
Date Collected: 08/26/2004
Date Received: 08/30/2004
Date Extracted: 09/01/2004
Date Analyzed: 09/17/2004

Organochlorine Pesticides

Sample Name: LDW-C1-S
Lab Code: K2406516-014
File ID: J:\GC23\DATA\091604\0916F059.D
Instrument ID: GC23

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8081A

Extraction Lot: KWG0413102
Calibration ID: CAL3753

Sample Amount: 27.14 g
% Solids: 74.2
Dilution Factor: 1

Column1: DB XLB
Column2: DB-35MS

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
319-84-6	alpha-BHC	0.12	U	1.0	0.12	
118-74-1	Hexachlorobenzene	0.22	U	1.0	0.22	
319-85-7	beta-BHC	0.30	U	1.0	0.30	
58-89-9	gamma-BHC (Lindane)	0.16	Ui	1.0	0.16	
319-86-8	delta-BHC	0.19	U	1.0	0.19	
76-44-8	Heptachlor	0.14	U	1.0	0.14	
309-00-2	Aldrin	0.34	U	1.0	0.34	
1024-57-3	Heptachlor Epoxide	0.19	U	1.0	0.19	
5103-74-2	gamma-Chlordane†	0.20	JP	1.0	0.052	
959-98-8	Endosulfan I	0.15	U	1.0	0.15	
5103-71-9	alpha-Chlordane	0.084	U	1.0	0.084	
60-57-1	Dieldrin	0.12	U	1.0	0.12	
72-55-9	4,4'-DDE	0.81	Ui	1.0	0.81	
72-20-8	Endrin	0.33	U	1.0	0.33	
33213-65-9	Endosulfan II	0.083	U	1.0	0.083	
72-54-8	4,4'-DDD	0.13	U	1.0	0.13	
7421-93-4	Endrin Aldehyde	0.22	U	1.0	0.22	
1031-07-8	Endosulfan Sulfate	0.29	U	1.0	0.29	
50-29-3	4,4'-DDT	0.48	J	1.0	0.23	
53494-70-5	Endrin Ketone	0.080	U	1.0	0.080	
72-43-5	Methoxychlor	0.96	J	1.0	0.26	
8001-35-2	Toxaphene	9.9	U	50	9.9	
3424-82-6	2,4'-DDE	0.16	Ui	1.0	0.16	
53-19-0	2,4'-DDD	0.22	U	1.0	0.22	
789-02-6	2,4'-DDT	0.24	J	1.0	0.11	
2385-85-5	Mirex	1.0	Ui	1.0	1.0	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406516
Date Collected: 08/26/2004
Date Received: 08/30/2004
Date Extracted: 09/01/2004
Date Analyzed: 09/17/2004

Organochlorine Pesticides

Sample Name: LDW-C1-S
Lab Code: K2406516-014
File ID: J:\GC23\DATA\091604\0916F059.D
Instrument ID: GC23
Extraction Method: EPA 3540C
Analysis Method: 8081A

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Lot: KWG0413102
Calibration ID: CAL3753

Sample Amount: 27.14 g
% Solids: 74.2
Dilution Factor: 1

Column1: DB XLB
Column2: DB-35MS

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tetrachloro-m-xylene	78	50-150	09/17/04	Acceptable
Decachlorobiphenyl	69	50-150	09/17/04	Acceptable

† Analyte Comments

gamma-Chlordane For this analyte (CAS Registry No. 5103-74-2), USEPA has corrected the name to be beta-Chlordane, also known as trans-Chlordane.

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406516
Date Extracted: 09/01/2004
Date Analyzed: 09/17/2004

**Duplicate Sample Summary
 Organochlorine Pesticides**

Sample Name: LDW-C2-S2
Lab Code: K2406516-013
Extraction Method: EPA 3540C
Analysis Method: 8081A

Units: ug/Kg
Basis: Dry
Level: Low
Extraction Lot: KWG0413102

Analyte Name	MRL	MDL	Sample Result	LDW-C2-S2DUP KWG0413102-1 Duplicate Sample		Relative Percent Difference	RPD Limit
				Result	Average		
alpha-BHC	0.98	0.12	ND	ND	ND	-	50
Hexachlorobenzene	0.98	0.23	ND	ND	ND	-	50
beta-BHC	0.98	0.32	ND	ND	ND	-	50
gamma-BHC (Lindane)	0.98	0.15	ND	ND	ND	-	50
delta-BHC	0.98	0.20	ND	ND	ND	-	50
Heptachlor	0.98	0.14	ND	ND	ND	-	50
Aldrin	0.98	0.36	ND	ND	ND	-	50
Heptachlor Epoxide	0.98	0.20	ND	ND	ND	-	50
gamma-Chlordane	0.98	0.054	1.5	1.4	1.4	1 #	50
Endosulfan I	0.98	0.16	0.63	ND	NC	NC	50
alpha-Chlordane	0.98	0.089	ND	ND	ND	-	50
Dieldrin	0.98	0.88	ND	ND	ND	-	50
4,4'-DDE	0.98	0.98	ND	ND	ND	-	50
Endrin	0.98	0.35	ND	ND	ND	-	50
Endosulfan II	0.98	0.98	ND	ND	ND	-	50
4,4'-DDD	0.98	0.14	0.47	0.37	0.42	23 #	50
Endrin Aldehyde	0.98	0.23	ND	ND	ND	-	50
Endosulfan Sulfate	0.98	0.30	ND	ND	ND	-	50
4,4'-DDT	0.98	0.25	3.6	2.9	3.2	21	50
Endrin Ketone	0.98	0.98	ND	ND	ND	-	50
Methoxychlor	0.98	0.42	ND	ND	ND	-	50
Toxaphene	49	48	ND	ND	ND	-	50
2,4'-DDE	0.98	0.98	ND	ND	ND	-	50
2,4'-DDD	0.98	0.98	ND	ND	ND	-	50
2,4'-DDT	0.98	0.12	3.4	3.1	3.2	10	50
Mirex	0.98	0.98	ND	ND	ND	-	50

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406517
Date Collected: 08/26/2004
Date Received: 08/28/2004
Date Extracted: 09/10/2004
Date Analyzed: 09/25/2004

Organochlorine Pesticides

Sample Name: LDW-C8-T
Lab Code: K2406517-001
File ID: J:\GC23\DATA\092404\0924F035.D
Instrument ID: GC23

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8081A

Extraction Lot: KWG0413712
Calibration ID: CAL3844

Sample Amount: 20.06 g
% Solids: NA
Dilution Factor: 1

Column1: DB XLB
Column2: DB-35MS

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
118-74-1	Hexachlorobenzene	1.0 Ui	1.0	1.0	
319-84-6	alpha-BHC	1.0 Ui	1.0	1.0	
319-85-7	beta-BHC	1.0 Ui	1.0	1.0	
58-89-9	gamma-BHC (Lindane)	0.28 U	1.0	0.28	
319-86-8	delta-BHC	2.2	1.0	0.34	
76-44-8	Heptachlor	0.45 U	1.0	0.45	
309-00-2	Aldrin	0.20 U	1.0	0.20	
1024-57-3	Heptachlor Epoxide	1.5 P	1.0	0.15	
5103-74-2	gamma-Chlordane†	9.3	1.0	0.14	
959-98-8	Endosulfan I	4.3 Ui	4.3	4.3	
5103-71-9	alpha-Chlordane	0.36 U	1.0	0.36	
60-57-1	Dieldrin	24 Ui	24	24	
72-55-9	4,4'-DDE	1.0 Ui	1.0	1.0	
72-20-8	Endrin	1.6 P	1.0	0.099	
33213-65-9	Endosulfan II	1.0 Ui	1.0	1.0	
72-54-8	4,4'-DDD	0.94 Ui	1.0	0.94	
7421-93-4	Endrin Aldehyde	3.6 Ui	3.6	3.6	
1031-07-8	Endosulfan Sulfate	0.27 U	1.0	0.27	
50-29-3	4,4'-DDT	12	1.0	0.38	*
53494-70-5	Endrin Ketone	1.0 Ui	1.0	1.0	*
72-43-5	Methoxychlor	1.0 Ui	1.0	1.0	*
8001-35-2	Toxaphene	100 Ui	100	100	
3424-82-6	2,4'-DDE	1.3 Ui	1.3	1.3	
53-19-0	2,4'-DDD	4.4 Ui	4.4	4.4	
789-02-6	2,4'-DDT	21 P	1.0	0.22	*
2385-85-5	Mirex	0.27 U	1.0	0.27	*

* See Case Narrative

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406517
Date Collected: 08/26/2004
Date Received: 08/28/2004
Date Extracted: 09/10/2004
Date Analyzed: 09/25/2004

Organochlorine Pesticides

Sample Name: LDW-C8-T
Lab Code: K2406517-001
File ID: J:\GC23\DATA\092404\0924F035.D
Instrument ID: GC23

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8081A

Extraction Lot: KWG0413712
Calibration ID: CAL3844

Sample Amount: 20.06 g
% Solids: NA
Dilution Factor: 1

Column1: DB XLB
Column2: DB-35MS

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tetrachloro-m-xylene	69	30-150	09/25/04	Acceptable
Decachlorobiphenyl	61	30-150	09/25/04	Acceptable

† **Analyte Comments**

gamma-Chlordane For this analyte (CAS Registry No. 5103-74-2), USEPA has corrected the name to be beta-Chlordane, also known as trans-Chlordane.

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406517
Date Collected: 08/26/2004
Date Received: 08/28/2004
Date Extracted: 09/10/2004
Date Analyzed: 09/25/2004

Organochlorine Pesticides

Sample Name: LDW-C7-T2
Lab Code: K2406517-002
File ID: J:\GC23\DATA\092404\0924F036.D
Instrument ID: GC23

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8081A

Extraction Lot: KWG0413712
Calibration ID: CAL3844

Sample Amount: 20.02 g
% Solids: NA
Dilution Factor: 1

Column1: DB XLB
Column2: DB-35MS

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
118-74-1	Hexachlorobenzene	0.38	JP	1.0	0.34	
319-84-6	alpha-BHC	0.40	Ui	1.0	0.40	
319-85-7	beta-BHC	1.0	Ui	1.0	1.0	
58-89-9	gamma-BHC (Lindane)	1.0	Ui	1.0	1.0	
319-86-8	delta-BHC	0.98	J	1.0	0.34	
76-44-8	Heptachlor	0.74	Ui	1.0	0.74	
309-00-2	Aldrin	1.0	Ui	1.0	1.0	
1024-57-3	Heptachlor Epoxide	1.0	Ui	1.0	1.0	
5103-74-2	gamma-Chlordane†	3.6	P	1.0	0.14	
959-98-8	Endosulfan I	2.8		1.0	0.13	*
5103-71-9	alpha-Chlordane	0.36	U	1.0	0.36	
60-57-1	Dieldrin	1.0	Ui	1.0	1.0	
72-55-9	4,4'-DDE	2.4		1.0	0.12	
72-20-8	Endrin	0.45	J	1.0	0.099	
33213-65-9	Endosulfan II	1.0	Ui	1.0	1.0	
72-54-8	4,4'-DDD	1.2		1.0	0.13	*
7421-93-4	Endrin Aldehyde	0.42	JP	1.0	0.17	*
1031-07-8	Endosulfan Sulfate	0.27	U	1.0	0.27	
50-29-3	4,4'-DDT	5.2		1.0	0.38	*
53494-70-5	Endrin Ketone	1.0	Ui	1.0	1.0	*
72-43-5	Methoxychlor	1.0	Ui	1.0	1.0	*
8001-35-2	Toxaphene	57	Ui	57	57	
3424-82-6	2,4'-DDE	1.2	Ui	1.2	1.2	
53-19-0	2,4'-DDD	2.9	Ui	2.9	2.9	
789-02-6	2,4'-DDT	6.9		1.0	0.22	
2385-85-5	Mirex	0.27	U	1.0	0.27	

* See Case Narrative

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406517
Date Collected: 08/26/2004
Date Received: 08/28/2004
Date Extracted: 09/10/2004
Date Analyzed: 09/25/2004

Organochlorine Pesticides

Sample Name: LDW-C7-T2
Lab Code: K2406517-002
File ID: J:\GC23\DATA\092404\0924F036.D
Instrument ID: GC23

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8081A

Extraction Lot: KWG0413712
Calibration ID: CAL3844

Sample Amount: 20.02 g
% Solids: NA
Dilution Factor: 1

Column1: DB XLB
Column2: DB-35MS

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tetrachloro-m-xylene	67	30-150	09/25/04	Acceptable
Decachlorobiphenyl	56	30-150	09/25/04	Acceptable

† **Analyte Comments**

gamma-Chlordane For this analyte (CAS Registry No. 5103-74-2), USEPA has corrected the name to be beta-Chlordane, also known as trans-Chlordane.

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406517
Date Collected: 08/26/2004
Date Received: 08/28/2004
Date Extracted: 09/10/2004
Date Analyzed: 09/25/2004

Organochlorine Pesticides

Sample Name: LDW-C7-T1
Lab Code: K2406517-003
File ID: J:\GC23\DATA\092404\0924F037.D
Instrument ID: GC23

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8081A

Extraction Lot: KWG0413712
Calibration ID: CAL3844

Sample Amount: 20.06 g
% Solids: NA
Dilution Factor: 1

Column1: DB XLB
Column2: DB-35MS

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
118-74-1	Hexachlorobenzene	1.0	P	1.0	0.34	
319-84-6	alpha-BHC	0.16	U	1.0	0.16	
319-85-7	beta-BHC	1.9	P	1.0	0.21	
58-89-9	gamma-BHC (Lindane)	0.28	U	1.0	0.28	
319-86-8	delta-BHC	0.51	J	1.0	0.34	
76-44-8	Heptachlor	0.45	U	1.0	0.45	
309-00-2	Aldrin	0.20	U	1.0	0.20	
1024-57-3	Heptachlor Epoxide	1.0	Ui	1.0	1.0	
5103-74-2	gamma-Chlordane†	3.5		1.0	0.14	
959-98-8	Endosulfan I	1.8	Ui	1.8	1.8	
5103-71-9	alpha-Chlordane	0.36	U	1.0	0.36	
60-57-1	Dieldrin	1.0	Ui	1.0	1.0	
72-55-9	4,4'-DDE	3.5	P	1.0	0.12	
72-20-8	Endrin	0.67	J	1.0	0.099	
33213-65-9	Endosulfan II	4.8	P	1.0	0.35	
72-54-8	4,4'-DDD	1.3		1.0	0.13	*
7421-93-4	Endrin Aldehyde	0.49	J	1.0	0.17	*
1031-07-8	Endosulfan Sulfate	0.27	U	1.0	0.27	
50-29-3	4,4'-DDT	4.1	P	1.0	0.38	*
53494-70-5	Endrin Ketone	0.64	Ui	1.0	0.64	*
72-43-5	Methoxychlor	0.27	U	1.0	0.27	
8001-35-2	Toxaphene	57	Ui	57	57	
3424-82-6	2,4'-DDE	1.2	Ui	1.2	1.2	
53-19-0	2,4'-DDD	2.3	Ui	2.3	2.3	
789-02-6	2,4'-DDT	7.1		1.0	0.22	
2385-85-5	Mirex	0.27	U	1.0	0.27	*

* See Case Narrative

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406517
Date Collected: 08/26/2004
Date Received: 08/28/2004
Date Extracted: 09/10/2004
Date Analyzed: 09/25/2004

Organochlorine Pesticides

Sample Name: LDW-C7-T1
Lab Code: K2406517-003
File ID: J:\GC23\DATA\092404\0924F037.D
Instrument ID: GC23

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8081A

Extraction Lot: KWG0413712
Calibration ID: CAL3844

Sample Amount: 20.06 g
% Solids: NA
Dilution Factor: 1

Column1: DB XLB
Column2: DB-35MS

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tetrachloro-m-xylene	75	30-150	09/25/04	Acceptable
Decachlorobiphenyl	41	30-150	09/25/04	Acceptable

† Analyte Comments

gamma-Chlordane For this analyte (CAS Registry No. 5103-74-2), USEPA has corrected the name to be beta-Chlordane, also known as trans-Chlordane.

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406517
Date Collected: 08/26/2004
Date Received: 08/28/2004
Date Extracted: 09/10/2004
Date Analyzed: 09/25/2004

Organochlorine Pesticides

Sample Name: LDW-C1-T
Lab Code: K2406517-004
File ID: J:\GC23\DATA\092404\0924F038.D
Instrument ID: GC23

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8081A

Extraction Lot: KWG0413712
Calibration ID: CAL3844

Sample Amount: 20.07 g
% Solids: NA
Dilution Factor: 1

Column1: DB XLB
Column2: DB-35MS

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
319-84-6	alpha-BHC	0.63	Ui	1.0	0.63	
118-74-1	Hexachlorobenzene	0.34	U	1.0	0.34	
319-85-7	beta-BHC	1.3	P	1.0	0.21	
58-89-9	gamma-BHC (Lindane)	0.44	Ui	1.0	0.44	
319-86-8	delta-BHC	0.34	U	1.0	0.34	
76-44-8	Heptachlor	0.45	U	1.0	0.45	
309-00-2	Aldrin	0.20	U	1.0	0.20	
1024-57-3	Heptachlor Epoxide	1.0	Ui	1.0	1.0	
5103-74-2	gamma-Chlordane†	1.3	P	1.0	0.14	
959-98-8	Endosulfan I	0.14	Ui	1.0	0.14	
5103-71-9	alpha-Chlordane	0.40	Ui	1.0	0.40	
60-57-1	Dieldrin	1.0	Ui	1.0	1.0	
72-55-9	4,4'-DDE	1.0	Ui	1.0	1.0	
72-20-8	Endrin	0.099	U	1.0	0.099	
33213-65-9	Endosulfan II	1.1	Ui	1.1	1.1	
72-54-8	4,4'-DDD	0.66	JP	1.0	0.13	*
7421-93-4	Endrin Aldehyde	0.17	U	1.0	0.17	
1031-07-8	Endosulfan Sulfate	0.27	U	1.0	0.27	
50-29-3	4,4'-DDT	1.0	P	1.0	0.38	*
53494-70-5	Endrin Ketone	0.29	U	1.0	0.29	*
72-43-5	Methoxychlor	0.27	U	1.0	0.27	
8001-35-2	Toxaphene	50	Ui	50	50	
3424-82-6	2,4'-DDE	0.72	Ui	1.0	0.72	
53-19-0	2,4'-DDD	1.0	Ui	1.0	1.0	
789-02-6	2,4'-DDT	2.1	P	1.0	0.22	
2385-85-5	Mirex	0.27	U	1.0	0.27	

* See Case Narrative

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406517
Date Collected: 08/26/2004
Date Received: 08/28/2004
Date Extracted: 09/10/2004
Date Analyzed: 09/25/2004

Organochlorine Pesticides

Sample Name: LDW-C1-T
Lab Code: K2406517-004
File ID: J:\GC23\DATA\092404\0924F038.D
Instrument ID: GC23

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8081A

Extraction Lot: KWG0413712
Calibration ID: CAL3844

Sample Amount: 20.07 g
% Solids: NA
Dilution Factor: 1

Column1: DB XLB
Column2: DB-35MS

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tetrachloro-m-xylene	71	30-150	09/25/04	Acceptable
Decachlorobiphenyl	50	30-150	09/25/04	Acceptable

† **Analyte Comments**

gamma-Chlordane For this analyte (CAS Registry No. 5103-74-2), USEPA has corrected the name to be beta-Chlordane, also known as trans-Chlordane.

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406517
Date Collected: 08/26/2004
Date Received: 08/28/2004
Date Extracted: 09/10/2004
Date Analyzed: 09/25/2004

Organochlorine Pesticides

Sample Name: LDW-C2-T1
Lab Code: K2406517-005
File ID: J:\GC23\DATA\092404\0924F039.D
Instrument ID: GC23

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8081A

Extraction Lot: KWG0413712
Calibration ID: CAL3844

Sample Amount: 20.05 g
% Solids: NA
Dilution Factor: 1

Column1: DB XLB
Column2: DB-35MS

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
118-74-1	Hexachlorobenzene	0.42	Ui	1.0	0.42	
319-84-6	alpha-BHC	0.16	U	1.0	0.16	
319-85-7	beta-BHC	0.76	J	1.0	0.21	
58-89-9	gamma-BHC (Lindane)	0.28	U	1.0	0.28	
319-86-8	delta-BHC	0.34	U	1.0	0.34	
76-44-8	Heptachlor	0.45	U	1.0	0.45	
309-00-2	Aldrin	0.95	JP	1.0	0.20	
1024-57-3	Heptachlor Epoxide	1.0	Ui	1.0	1.0	
5103-74-2	gamma-Chlordane†	0.99	J	1.0	0.14	
959-98-8	Endosulfan I	0.36	Ui	1.0	0.36	
5103-71-9	alpha-Chlordane	0.36	U	1.0	0.36	
60-57-1	Dieldrin	1.0	Ui	1.0	1.0	
72-55-9	4,4'-DDE	1.0	Ui	1.0	1.0	
72-20-8	Endrin	0.14	J	1.0	0.099	
33213-65-9	Endosulfan II	1.0	Ui	1.0	1.0	
72-54-8	4,4'-DDD	0.92	JP	1.0	0.13	*
7421-93-4	Endrin Aldehyde	0.17	U	1.0	0.17	
1031-07-8	Endosulfan Sulfate	0.27	U	1.0	0.27	
50-29-3	4,4'-DDT	0.84	JP	1.0	0.38	*
53494-70-5	Endrin Ketone	0.29	U	1.0	0.29	*
72-43-5	Methoxychlor	0.27	U	1.0	0.27	
8001-35-2	Toxaphene	22	Ui	50	22	
3424-82-6	2,4'-DDE	0.92	Ui	1.0	0.92	
53-19-0	2,4'-DDD	1.0	Ui	1.0	1.0	
789-02-6	2,4'-DDT	2.8		1.0	0.22	
2385-85-5	Mirex	0.27	U	1.0	0.27	*

* See Case Narrative

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406517
Date Collected: 08/26/2004
Date Received: 08/28/2004
Date Extracted: 09/10/2004
Date Analyzed: 09/25/2004

Organochlorine Pesticides

Sample Name: LDW-C2-T1
Lab Code: K2406517-005
File ID: J:\GC23\DATA\092404\0924F039.D
Instrument ID: GC23

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8081A

Extraction Lot: KWG0413712
Calibration ID: CAL3844

Sample Amount: 20.05 g
% Solids: NA
Dilution Factor: 1

Column1: DB XLB
Column2: DB-35MS

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tetrachloro-m-xylene	73	30-150	09/25/04	Acceptable
Decachlorobiphenyl	42	30-150	09/25/04	Acceptable

† **Analyte Comments**

gamma-Chlordane For this analyte (CAS Registry No. 5103-74-2), USEPA has corrected the name to be beta-Chlordane, also known as trans-Chlordane.

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406517
Date Collected: 08/26/2004
Date Received: 08/28/2004
Date Extracted: 09/10/2004
Date Analyzed: 09/25/2004

Organochlorine Pesticides

Sample Name: LDW-C2-T2
Lab Code: K2406517-006
File ID: J:\GC23\DATA\092404\0924F040.D
Instrument ID: GC23

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8081A

Extraction Lot: KWG0413712
Calibration ID: CAL3844

Sample Amount: 20.05 g
% Solids: NA
Dilution Factor: 1

Column1: DB XLB
Column2: DB-35MS

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
319-84-6	alpha-BHC	0.31	Ui	1.0	0.31	
118-74-1	Hexachlorobenzene	0.81	JP	1.0	0.34	
319-85-7	beta-BHC	0.41	JP	1.0	0.21	
58-89-9	gamma-BHC (Lindane)	0.51	J	1.0	0.28	
319-86-8	delta-BHC	0.34	U	1.0	0.34	
76-44-8	Heptachlor	0.45	U	1.0	0.45	
309-00-2	Aldrin	1.0	JP	1.0	0.20	
1024-57-3	Heptachlor Epoxide	1.0	Ui	1.0	1.0	
5103-74-2	gamma-Chlordane†	1.2		1.0	0.14	
959-98-8	Endosulfan I	0.56	JP	1.0	0.13	*
5103-71-9	alpha-Chlordane	0.36	U	1.0	0.36	
60-57-1	Dieldrin	1.0	Ui	1.0	1.0	
72-55-9	4,4'-DDE	1.3	Ui	1.3	1.3	
72-20-8	Endrin	0.17	J	1.0	0.099	
33213-65-9	Endosulfan II	1.0	Ui	1.0	1.0	
72-54-8	4,4'-DDD	1.1		1.0	0.13	*
7421-93-4	Endrin Aldehyde	0.17	U	1.0	0.17	
1031-07-8	Endosulfan Sulfate	0.27	U	1.0	0.27	
50-29-3	4,4'-DDT	1.6		1.0	0.38	*
53494-70-5	Endrin Ketone	0.29	U	1.0	0.29	*
72-43-5	Methoxychlor	0.27	U	1.0	0.27	
8001-35-2	Toxaphene	50	Ui	50	50	
3424-82-6	2,4'-DDE	0.92	Ui	1.0	0.92	
53-19-0	2,4'-DDD	2.0	P	1.0	0.18	
789-02-6	2,4'-DDT	2.6		1.0	0.22	
2385-85-5	Mirex	0.27	U	1.0	0.27	

* See Case Narrative

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406517
Date Collected: 08/26/2004
Date Received: 08/28/2004
Date Extracted: 09/10/2004
Date Analyzed: 09/25/2004

Organochlorine Pesticides

Sample Name: LDW-C2-T2
Lab Code: K2406517-006
File ID: J:\GC23\DATA\092404\0924F040.D
Instrument ID: GC23

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8081A

Extraction Lot: KWG0413712
Calibration ID: CAL3844

Sample Amount: 20.05 g
% Solids: NA
Dilution Factor: 1

Column1: DB XLB
Column2: DB-35MS

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tetrachloro-m-xylene	75	30-150	09/25/04	Acceptable
Decachlorobiphenyl	56	30-150	09/25/04	Acceptable

† Analyte Comments

gamma-Chlordane For this analyte (CAS Registry No. 5103-74-2), USEPA has corrected the name to be beta-Chlordane, also known as trans-Chlordane.

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406517
Date Collected: 08/25/2004
Date Received: 08/28/2004
Date Extracted: 09/10/2004
Date Analyzed: 09/25/2004

Organochlorine Pesticides

Sample Name: LDW-C10-T2
Lab Code: K2406517-007
File ID: J:\GC23\DATA\092404\0924F053.D
Instrument ID: GC23

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8081A

Extraction Lot: KWG0413712
Calibration ID: CAL3844

Sample Amount: 20.05 g
% Solids: NA
Dilution Factor: 1

Column1: DB XLB
Column2: DB-35MS

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
118-74-1	Hexachlorobenzene	0.91	JP	1.0	0.34	
319-84-6	alpha-BHC	1.0	Ui	1.0	1.0	
319-85-7	beta-BHC	1.6		1.0	0.21	
58-89-9	gamma-BHC (Lindane)	0.28	U	1.0	0.28	
319-86-8	delta-BHC	0.34	U	1.0	0.34	
76-44-8	Heptachlor	0.45	U	1.0	0.45	
309-00-2	Aldrin	0.60	Ui	1.0	0.60	
1024-57-3	Heptachlor Epoxide	0.15	U	1.0	0.15	
5103-74-2	gamma-Chlordane†	1.1	P	1.0	0.14	
959-98-8	Endosulfan I	0.59	Ui	1.0	0.59	
5103-71-9	alpha-Chlordane	0.36	U	1.0	0.36	
60-57-1	Dieldrin	0.11	U	1.0	0.11	
72-55-9	4,4'-DDE	0.93	Ui	1.0	0.93	
72-20-8	Endrin	0.23	JP	1.0	0.099	
33213-65-9	Endosulfan II	3.8		1.0	0.35	
72-54-8	4,4'-DDD	0.24	J	1.0	0.13	*
7421-93-4	Endrin Aldehyde	0.17	U	1.0	0.17	
1031-07-8	Endosulfan Sulfate	0.27	U	1.0	0.27	
50-29-3	4,4'-DDT	8.6	P	1.0	0.38	*
53494-70-5	Endrin Ketone	2.6	Ui	2.6	2.6	*
72-43-5	Methoxychlor	0.27	U	1.0	0.27	*
8001-35-2	Toxaphene	250	Ui	250	250	
3424-82-6	2,4'-DDE	1.5	Ui	1.5	1.5	
53-19-0	2,4'-DDD	4.8		1.0	0.18	
789-02-6	2,4'-DDT	3.5	Ui	3.5	3.5	
2385-85-5	Mirex	0.27	U	1.0	0.27	

* See Case Narrative

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406517
Date Collected: 08/25/2004
Date Received: 08/28/2004
Date Extracted: 09/10/2004
Date Analyzed: 09/25/2004

Organochlorine Pesticides

Sample Name: LDW-C10-T2
Lab Code: K2406517-007
File ID: J:\GC23\DATA\092404\0924F053.D
Instrument ID: GC23

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8081A

Extraction Lot: KWG0413712
Calibration ID: CAL3844

Sample Amount: 20.05 g
% Solids: NA
Dilution Factor: 1

Column1: DB XLB
Column2: DB-35MS

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tetrachloro-m-xylene	70	30-150	09/25/04	Acceptable
Decachlorobiphenyl	57	30-150	09/25/04	Acceptable

† Analyte Comments

gamma-Chlordane For this analyte (CAS Registry No. 5103-74-2), USEPA has corrected the name to be beta-Chlordane, also known as trans-Chlordane.

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406517
Date Collected: 08/25/2004
Date Received: 08/28/2004
Date Extracted: 09/10/2004
Date Analyzed: 09/25/2004

Organochlorine Pesticides

Sample Name: LDW-C10-T1
Lab Code: K2406517-008
File ID: J:\GC23\DATA\092404\0924F054.D
Instrument ID: GC23

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8081A

Extraction Lot: KWG0413712
Calibration ID: CAL3844

Sample Amount: 20.01 g
% Solids: NA
Dilution Factor: 1

Column1: DB XLB
Column2: DB-35MS

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
319-84-6	alpha-BHC	0.43	Ui	1.0	0.43	
118-74-1	Hexachlorobenzene	0.75	J	1.0	0.34	
319-85-7	beta-BHC	1.1	Ui	1.1	1.1	
58-89-9	gamma-BHC (Lindane)	2.5	P	1.0	0.28	
319-86-8	delta-BHC	0.34	U	1.0	0.34	
76-44-8	Heptachlor	0.45	U	1.0	0.45	
309-00-2	Aldrin	1.0	Ui	1.0	1.0	
1024-57-3	Heptachlor Epoxide	1.0	Ui	1.0	1.0	
5103-74-2	gamma-Chlordane†	1.2	P	1.0	0.14	
959-98-8	Endosulfan I	0.61	Ui	1.0	0.61	
5103-71-9	alpha-Chlordane	0.36	U	1.0	0.36	
60-57-1	Dieldrin	0.11	U	1.0	0.11	
72-55-9	4,4'-DDE	1.0	Ui	1.0	1.0	
72-20-8	Endrin	0.23	JP	1.0	0.099	
33213-65-9	Endosulfan II	4.6	P	1.0	0.35	
72-54-8	4,4'-DDD	0.23	J	1.0	0.13	*
7421-93-4	Endrin Aldehyde	0.17	U	1.0	0.17	
1031-07-8	Endosulfan Sulfate	1.0	Ui	1.0	1.0	
50-29-3	4,4'-DDT	8.9		1.0	0.38	*
53494-70-5	Endrin Ketone	2.4	Ui	2.4	2.4	*
72-43-5	Methoxychlor	0.27	U	1.0	0.27	*
8001-35-2	Toxaphene	240	Ui	240	240	
3424-82-6	2,4'-DDE	1.4	Ui	1.4	1.4	
53-19-0	2,4'-DDD	4.2		1.0	0.18	
789-02-6	2,4'-DDT	3.2	Ui	3.2	3.2	
2385-85-5	Mirex	0.27	U	1.0	0.27	

* See Case Narrative

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406517
Date Collected: 08/25/2004
Date Received: 08/28/2004
Date Extracted: 09/10/2004
Date Analyzed: 09/25/2004

Organochlorine Pesticides

Sample Name: LDW-C10-T1
Lab Code: K2406517-008
File ID: J:\GC23\DATA\092404\0924F054.D
Instrument ID: GC23

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8081A

Extraction Lot: KWG0413712
Calibration ID: CAL3844

Sample Amount: 20.01 g
% Solids: NA
Dilution Factor: 1

Column1: DB XLB
Column2: DB-35MS

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tetrachloro-m-xylene	72	30-150	09/25/04	Acceptable
Decachlorobiphenyl	57	30-150	09/25/04	Acceptable

† **Analyte Comments**

gamma-Chlordane For this analyte (CAS Registry No. 5103-74-2), USEPA has corrected the name to be beta-Chlordane, also known as trans-Chlordane.

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406517
Date Collected: 08/27/2004
Date Received: 08/28/2004
Date Extracted: 09/10/2004
Date Analyzed: 09/25/2004

Organochlorine Pesticides

Sample Name: LDW-C5-T
Lab Code: K2406517-009
File ID: J:\GC23\DATA\092404\0924F055.D
Instrument ID: GC23

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8081A

Extraction Lot: KWG0413712
Calibration ID: CAL3844

Sample Amount: 20.02 g
% Solids: NA
Dilution Factor: 1

Column1: DB XLB
Column2: DB-35MS

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
118-74-1	Hexachlorobenzene	0.88	J	1.0	0.34	
319-84-6	alpha-BHC	0.16	U	1.0	0.16	
319-85-7	beta-BHC	1.1		1.0	0.21	
58-89-9	gamma-BHC (Lindane)	0.99	JP	1.0	0.28	
319-86-8	delta-BHC	0.34	U	1.0	0.34	
76-44-8	Heptachlor	0.45	U	1.0	0.45	
309-00-2	Aldrin	0.51	Ui	1.0	0.51	
1024-57-3	Heptachlor Epoxide	1.5	P	1.0	0.15	
5103-74-2	gamma-Chlordane†	1.2		1.0	0.14	
959-98-8	Endosulfan I	0.56	Ui	1.0	0.56	
5103-71-9	alpha-Chlordane	0.36	U	1.0	0.36	
60-57-1	Dieldrin	5.0	P	1.0	0.11	*
72-55-9	4,4'-DDE	0.86	JP	1.0	0.12	
72-20-8	Endrin	0.27	JP	1.0	0.099	*
33213-65-9	Endosulfan II	1.0	Ui	1.0	1.0	
72-54-8	4,4'-DDD	0.54	J	1.0	0.13	*
7421-93-4	Endrin Aldehyde	0.17	U	1.0	0.17	
1031-07-8	Endosulfan Sulfate	0.37	Ui	1.0	0.37	
50-29-3	4,4'-DDT	2.1		1.0	0.38	*
53494-70-5	Endrin Ketone	0.29	U	1.0	0.29	*
72-43-5	Methoxychlor	0.27	U	1.0	0.27	*
8001-35-2	Toxaphene	50	Ui	50	50	
3424-82-6	2,4'-DDE	1.0	Ui	1.0	1.0	
53-19-0	2,4'-DDD	3.2	P	1.0	0.18	
789-02-6	2,4'-DDT	2.9		1.0	0.22	
2385-85-5	Mirex	0.27	U	1.0	0.27	

* See Case Narrative

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406517
Date Collected: 08/27/2004
Date Received: 08/28/2004
Date Extracted: 09/10/2004
Date Analyzed: 09/25/2004

Organochlorine Pesticides

Sample Name: LDW-C5-T
Lab Code: K2406517-009
File ID: J:\GC23\DATA\092404\0924F055.D
Instrument ID: GC23

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8081A

Extraction Lot: KWG0413712
Calibration ID: CAL3844

Sample Amount: 20.02 g
% Solids: NA
Dilution Factor: 1

Column1: DB XLB
Column2: DB-35MS

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tetrachloro-m-xylene	69	30-150	09/25/04	Acceptable
Decachlorobiphenyl	55	30-150	09/25/04	Acceptable

† **Analyte Comments**

gamma-Chlordane For this analyte (CAS Registry No. 5103-74-2), USEPA has corrected the name to be beta-Chlordane, also known as trans-Chlordane.

Comments: _____

Analytical Results

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406517
Date Collected: 08/27/2004
Date Received: 08/28/2004
Date Extracted: 09/10/2004
Date Analyzed: 09/25/2004

Organochlorine Pesticides

Sample Name: LDW-C3-T2
Lab Code: K2406517-010
File ID: J:\GC23\DATA\092404\0924F056.D
Instrument ID: GC23
Extraction Method: EPA 3540C
Analysis Method: 8081A

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Lot: KWG0413712
Calibration ID: CAL3844

Sample Amount: 20.03 g
% Solids: NA
Dilution Factor: 1

Column1: DB XLB
Column2: DB-35MS

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
118-74-1	Hexachlorobenzene	0.50	JP	1.0	0.34	
319-84-6	alpha-BHC	0.35	JP	1.0	0.16	
319-85-7	beta-BHC	1.1	P	1.0	0.21	
58-89-9	gamma-BHC (Lindane)	0.28	U	1.0	0.28	
319-86-8	delta-BHC	0.34	U	1.0	0.34	
76-44-8	Heptachlor	0.45	U	1.0	0.45	
309-00-2	Aldrin	0.77	JP	1.0	0.20	
1024-57-3	Heptachlor Epoxide	0.15	U	1.0	0.15	
5103-74-2	gamma-Chlordane†	1.0		1.0	0.14	
959-98-8	Endosulfan I	0.47	Ui	1.0	0.47	
5103-71-9	alpha-Chlordane	0.36	U	1.0	0.36	
60-57-1	Dieldrin	4.6	P	1.0	0.11	*
72-55-9	4,4'-DDE	1.1		1.0	0.12	
72-20-8	Endrin	0.14	JP	1.0	0.099	
33213-65-9	Endosulfan II	1.2	Ui	1.2	1.2	
72-54-8	4,4'-DDD	0.48	J	1.0	0.13	*
7421-93-4	Endrin Aldehyde	0.17	U	1.0	0.17	
1031-07-8	Endosulfan Sulfate	0.27	U	1.0	0.27	
50-29-3	4,4'-DDT	1.8		1.0	0.38	*
53494-70-5	Endrin Ketone	0.29	U	1.0	0.29	*
72-43-5	Methoxychlor	0.63	JP	1.0	0.27	*
8001-35-2	Toxaphene	50	Ui	50	50	
3424-82-6	2,4'-DDE	1.0	Ui	1.0	1.0	
53-19-0	2,4'-DDD	2.2	P	1.0	0.18	
789-02-6	2,4'-DDT	2.8		1.0	0.22	
2385-85-5	Mirex	0.27	U	1.0	0.27	

* See Case Narrative

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406517
Date Collected: 08/27/2004
Date Received: 08/28/2004
Date Extracted: 09/10/2004
Date Analyzed: 09/25/2004

Organochlorine Pesticides

Sample Name: LDW-C3-T2
Lab Code: K2406517-010
File ID: J:\GC23\DATA\092404\0924F056.D
Instrument ID: GC23

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8081A

Extraction Lot: KWG0413712
Calibration ID: CAL3844

Sample Amount: 20.03 g
% Solids: NA
Dilution Factor: 1

Column1: DB XLB
Column2: DB-35MS

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tetrachloro-m-xylene	73	30-150	09/25/04	Acceptable
Decachlorobiphenyl	59	30-150	09/25/04	Acceptable

† **Analyte Comments**

gamma-Chlordane For this analyte (CAS Registry No. 5103-74-2), USEPA has corrected the name to be beta-Chlordane, also known as trans-Chlordane.

Comments:

Analytical Results

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406517
Date Collected: 08/27/2004
Date Received: 08/28/2004
Date Extracted: 09/10/2004
Date Analyzed: 09/25/2004

Organochlorine Pesticides

Sample Name: LDW-C3-T1
Lab Code: K2406517-011
File ID: J:\GC23\DATA\092404\0924F057.D
Instrument ID: GC23

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8081A

Extraction Lot: KWG0413712
Calibration ID: CAL3844

Sample Amount: 20.01 g
% Solids: NA
Dilution Factor: 1

Column1: DB XLB
Column2: DB-35MS

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
118-74-1	Hexachlorobenzene	0.34	U	1.0	0.34	
319-84-6	alpha-BHC	0.16	U	1.0	0.16	
319-85-7	beta-BHC	0.88	JP	1.0	0.21	
58-89-9	gamma-BHC (Lindane)	0.53	Ui	1.0	0.53	
319-86-8	delta-BHC	0.34	U	1.0	0.34	
76-44-8	Heptachlor	0.45	U	1.0	0.45	
309-00-2	Aldrin	0.20	U	1.0	0.20	
1024-57-3	Heptachlor Epoxide	1.1	P	1.0	0.15	
5103-74-2	gamma-Chlordane†	1.1	P	1.0	0.14	
959-98-8	Endosulfan I	0.36	Ui	1.0	0.36	
5103-71-9	alpha-Chlordane	0.36	U	1.0	0.36	
60-57-1	Dieldrin	3.8	P	1.0	0.11	*
72-55-9	4,4'-DDE	1.3	P	1.0	0.12	
72-20-8	Endrin	0.099	U	1.0	0.099	
33213-65-9	Endosulfan II	4.8	P	1.0	0.35	
72-54-8	4,4'-DDD	0.45	J	1.0	0.13	*
7421-93-4	Endrin Aldehyde	0.17	U	1.0	0.17	
1031-07-8	Endosulfan Sulfate	0.27	U	1.0	0.27	
50-29-3	4,4'-DDT	1.7		1.0	0.38	*
53494-70-5	Endrin Ketone	0.29	U	1.0	0.29	*
72-43-5	Methoxychlor	1.0	Ui	1.0	1.0	*
8001-35-2	Toxaphene	27	Ui	50	27	
3424-82-6	2,4'-DDE	1.0	Ui	1.0	1.0	
53-19-0	2,4'-DDD	2.1	P	1.0	0.18	
789-02-6	2,4'-DDT	2.1		1.0	0.22	
2385-85-5	Mirex	0.27	U	1.0	0.27	

* See Case Narrative

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406517
Date Collected: 08/27/2004
Date Received: 08/28/2004
Date Extracted: 09/10/2004
Date Analyzed: 09/25/2004

Organochlorine Pesticides

Sample Name: LDW-C3-T1
Lab Code: K2406517-011
File ID: J:\GC23\DATA\092404\0924F057.D
Instrument ID: GC23

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8081A

Extraction Lot: KWG0413712
Calibration ID: CAL3844

Sample Amount: 20.01 g
% Solids: NA
Dilution Factor: 1

Column1: DB XLB
Column2: DB-35MS

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tetrachloro-m-xylene	71	30-150	09/25/04	Acceptable
Decachlorobiphenyl	56	30-150	09/25/04	Acceptable

† **Analyte Comments**

gamma-Chlordane For this analyte (CAS Registry No. 5103-74-2), USEPA has corrected the name to be beta-Chlordane, also known as trans-Chlordane.

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406517
Date Collected: 08/25/2004
Date Received: 08/28/2004
Date Extracted: 09/10/2004
Date Analyzed: 09/25/2004

Organochlorine Pesticides

Sample Name: LDW-C9-T
Lab Code: K2406517-012
File ID: J:\GC23\DATA\092404\0924F058.D
Instrument ID: GC23

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8081A

Extraction Lot: KWG0413712
Calibration ID: CAL3844

Sample Amount: 20.03 g
% Solids: NA
Dilution Factor: 1

Column1: DB XLB
Column2: DB-35MS

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
118-74-1	Hexachlorobenzene	0.34	U	1.0	0.34	
319-84-6	alpha-BHC	0.16	U	1.0	0.16	
319-85-7	beta-BHC	0.21	U	1.0	0.21	
58-89-9	gamma-BHC (Lindane)	0.28	U	1.0	0.28	
319-86-8	delta-BHC	0.34	U	1.0	0.34	
76-44-8	Heptachlor	0.45	U	1.0	0.45	
309-00-2	Aldrin	0.20	U	1.0	0.20	
1024-57-3	Heptachlor Epoxide	1.5	P	1.0	0.15	
5103-74-2	gamma-Chlordane†	1.5	P	1.0	0.14	
959-98-8	Endosulfan I	1.0	Ui	1.0	1.0	
5103-71-9	alpha-Chlordane	0.36	U	1.0	0.36	
60-57-1	Dieldrin	3.8		1.0	0.11	
72-55-9	4,4'-DDE	1.0	P	1.0	0.12	
72-20-8	Endrin	0.099	U	1.0	0.099	
33213-65-9	Endosulfan II	1.0	Ui	1.0	1.0	
72-54-8	4,4'-DDD	0.56	J	1.0	0.13	*
7421-93-4	Endrin Aldehyde	0.47	Ui	1.0	0.47	
1031-07-8	Endosulfan Sulfate	0.27	U	1.0	0.27	
50-29-3	4,4'-DDT	2.2		1.0	0.38	*
53494-70-5	Endrin Ketone	0.29	U	1.0	0.29	*
72-43-5	Methoxychlor	0.27	U	1.0	0.27	*
8001-35-2	Toxaphene	50	Ui	50	50	
3424-82-6	2,4'-DDE	1.0	Ui	1.0	1.0	
53-19-0	2,4'-DDD	3.1	P	1.0	0.18	
789-02-6	2,4'-DDT	3.0	P	1.0	0.22	
2385-85-5	Mirex	0.27	U	1.0	0.27	

* See Case Narrative

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406517
Date Collected: 08/25/2004
Date Received: 08/28/2004
Date Extracted: 09/10/2004
Date Analyzed: 09/25/2004

Organochlorine Pesticides

Sample Name: LDW-C9-T
Lab Code: K2406517-012
File ID: J:\GC23\DATA\092404\0924F058.D
Instrument ID: GC23

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8081A

Extraction Lot: KWG0413712
Calibration ID: CAL3844

Sample Amount: 20.03 g
% Solids: NA
Dilution Factor: 1

Column1: DB XLB
Column2: DB-35MS

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tetrachloro-m-xylene	76	30-150	09/25/04	Acceptable
Decachlorobiphenyl	55	30-150	09/25/04	Acceptable

† **Analyte Comments**

gamma-Chlordane For this analyte (CAS Registry No. 5103-74-2), USEPA has corrected the name to be beta-Chlordane, also known as trans-Chlordane.

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406517
Date Collected: 08/25/2004
Date Received: 08/28/2004
Date Extracted: 09/10/2004
Date Analyzed: 09/25/2004

Organochlorine Pesticides

Sample Name: LDW-C6-T
Lab Code: K2406517-013
File ID: J:\GC23\DATA\092404\0924F059.D
Instrument ID: GC23

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8081A

Extraction Lot: KWG0413712
Calibration ID: CAL3844

Sample Amount: 20.07 g
% Solids: NA
Dilution Factor: 1

Column1: DB XLB
Column2: DB-35MS

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
319-84-6	alpha-BHC	0.27	Ui	1.0	0.27	
118-74-1	Hexachlorobenzene	0.96	JP	1.0	0.34	
319-85-7	beta-BHC	0.78	J	1.0	0.21	
58-89-9	gamma-BHC (Lindane)	0.45	Ui	1.0	0.45	
319-86-8	delta-BHC	0.34	U	1.0	0.34	
76-44-8	Heptachlor	0.45	U	1.0	0.45	
309-00-2	Aldrin	0.53	Ui	1.0	0.53	
1024-57-3	Heptachlor Epoxide	1.2	P	1.0	0.15	
5103-74-2	gamma-Chlordane†	1.0		1.0	0.14	
959-98-8	Endosulfan I	0.83	Ui	1.0	0.83	
5103-71-9	alpha-Chlordane	0.36	U	1.0	0.36	
60-57-1	Dieldrin	1.0	Ui	1.0	1.0	
72-55-9	4,4'-DDE	0.84	JP	1.0	0.12	
72-20-8	Endrin	0.16	JP	1.0	0.099	
33213-65-9	Endosulfan II	1.1	Ui	1.1	1.1	
72-54-8	4,4'-DDD	0.49	J	1.0	0.13	*
7421-93-4	Endrin Aldehyde	0.17	U	1.0	0.17	
1031-07-8	Endosulfan Sulfate	0.27	U	1.0	0.27	
50-29-3	4,4'-DDT	1.4		1.0	0.38	*
53494-70-5	Endrin Ketone	0.29	U	1.0	0.29	*
72-43-5	Methoxychlor	0.27	U	1.0	0.27	*
8001-35-2	Toxaphene	50	Ui	50	50	
3424-82-6	2,4'-DDE	1.0	Ui	1.0	1.0	
53-19-0	2,4'-DDD	2.6	P	1.0	0.18	
789-02-6	2,4'-DDT	3.2	P	1.0	0.22	
2385-85-5	Mirex	0.27	U	1.0	0.27	

* See Case Narrative

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406517
Date Collected: 08/25/2004
Date Received: 08/28/2004
Date Extracted: 09/10/2004
Date Analyzed: 09/25/2004

Organochlorine Pesticides

Sample Name: LDW-C6-T
Lab Code: K2406517-013
File ID: J:\GC23\DATA\092404\0924F059.D
Instrument ID: GC23

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8081A

Extraction Lot: KWG0413712
Calibration ID: CAL3844

Sample Amount: 20.07 g
% Solids: NA
Dilution Factor: 1

Column1: DB XLB
Column2: DB-35MS

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tetrachloro-m-xylene	75	30-150	09/25/04	Acceptable
Decachlorobiphenyl	57	30-150	09/25/04	Acceptable

† **Analyte Comments**

gamma-Chlordane For this analyte (CAS Registry No. 5103-74-2), USEPA has corrected the name to be beta-Chlordane, also known as trans-Chlordane.

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406517
Date Collected: 08/27/2004
Date Received: 08/28/2004
Date Extracted: 09/10/2004
Date Analyzed: 09/25/2004

Organochlorine Pesticides

Sample Name: LDW-C4-T
Lab Code: K2406517-014
File ID: J:\GC23\DATA\092404\0924F060.D
Instrument ID: GC23

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8081A

Extraction Lot: KWG0413712
Calibration ID: CAL3844

Sample Amount: 20.04 g
% Solids: NA
Dilution Factor: 1

Column1: DB XLB
Column2: DB-35MS

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
118-74-1	Hexachlorobenzene	0.77	JP	1.0	0.34	
319-84-6	alpha-BHC	0.18	Ui	1.0	0.18	
319-85-7	beta-BHC	0.74	JP	1.0	0.21	
58-89-9	gamma-BHC (Lindane)	0.72	Ui	1.0	0.72	
319-86-8	delta-BHC	0.34	U	1.0	0.34	
76-44-8	Heptachlor	0.45	U	1.0	0.45	
309-00-2	Aldrin	0.20	U	1.0	0.20	
1024-57-3	Heptachlor Epoxide	0.46	Ui	1.0	0.46	
5103-74-2	gamma-Chlordane†	0.86	J	1.0	0.14	
959-98-8	Endosulfan I	0.43	Ui	1.0	0.43	
5103-71-9	alpha-Chlordane	0.36	U	1.0	0.36	
60-57-1	Dieldrin	1.0	Ui	1.0	1.0	
72-55-9	4,4'-DDE	0.70	JP	1.0	0.12	
72-20-8	Endrin	0.10	JP	1.0	0.099	
33213-65-9	Endosulfan II	1.0	Ui	1.0	1.0	
72-54-8	4,4'-DDD	0.40	J	1.0	0.13	*
7421-93-4	Endrin Aldehyde	0.17	U	1.0	0.17	
1031-07-8	Endosulfan Sulfate	0.59	Ui	1.0	0.59	
50-29-3	4,4'-DDT	1.2	P	1.0	0.38	*
53494-70-5	Endrin Ketone	0.29	U	1.0	0.29	*
72-43-5	Methoxychlor	1.0	Ui	1.0	1.0	*
8001-35-2	Toxaphene	32	Ui	50	32	
3424-82-6	2,4'-DDE	1.0	Ui	1.0	1.0	
53-19-0	2,4'-DDD	2.8	P	1.0	0.18	
789-02-6	2,4'-DDT	3.3	P	1.0	0.22	
2385-85-5	Mirex	0.27	U	1.0	0.27	

* See Case Narrative

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406517
Date Collected: 08/27/2004
Date Received: 08/28/2004
Date Extracted: 09/10/2004
Date Analyzed: 09/25/2004

Organochlorine Pesticides

Sample Name: LDW-C4-T
Lab Code: K2406517-014
File ID: J:\GC23\DATA\092404\0924F060.D
Instrument ID: GC23

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8081A

Extraction Lot: KWG0413712
Calibration ID: CAL3844

Sample Amount: 20.04 g
% Solids: NA
Dilution Factor: 1

Column1: DB XLB
Column2: DB-35MS

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tetrachloro-m-xylene	79	30-150	09/25/04	Acceptable
Decachlorobiphenyl	56	30-150	09/25/04	Acceptable

† **Analyte Comments**

gamma-Chlordane For this analyte (CAS Registry No. 5103-74-2), USEPA has corrected the name to be beta-Chlordane, also known as trans-Chlordane.

Comments:

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406517
Date Extracted: 09/10/2004
Date Analyzed: 09/25/2004

**Duplicate Sample Summary
Organochlorine Pesticides**

Sample Name: LDW-C2-T2
Lab Code: K2406517-006
Extraction Method: EPA 3540C
Analysis Method: 8081A

Units: ug/Kg
Basis: Wet
Level: Low
Extraction Lot: KWG0413712

Analyte Name	MRL	MDL	Sample Result	LDW-C2-T2DUP KWG0413712-1 Duplicate Sample		Relative Percent Difference	RPD Limit
				Result	Average		
Hexachlorobenzene	1.0	0.34	0.81	0.40	0.60	68 #	50
alpha-BHC	1.0	0.16	ND	ND	ND	-	50
beta-BHC	1.0	0.21	0.41	ND	NC	NC #	50
gamma-BHC (Lindane)	1.0	0.28	0.51	ND	NC	NC	50
delta-BHC	1.0	0.34	ND	ND	ND	-	50
Heptachlor	1.0	0.45	ND	ND	ND	-	50
Aldrin	1.0	0.20	1.0	ND	NC	NC	50
Heptachlor Epoxide	1.0	0.15	ND	ND	ND	-	50
gamma-Chlordane	1.0	0.14	1.2	0.96	1.1	22 #	50
Endosulfan I	1.0	0.13	0.56	0.49	0.52	14 #	50
alpha-Chlordane	1.0	0.36	ND	ND	ND	-	50
Dieldrin	1.0	0.11	ND	ND	ND	-	50
4,4'-DDE	1.0	0.12	ND	1.6	NC	NC	50
Endrin	1.0	0.099	0.17	0.24	0.21	32 #	50
Endosulfan II	1.0	1.0	ND	ND	ND	-	50
4,4'-DDD	1.0	0.13	1.1	1.7	1.4	40 #	50
Endrin Aldehyde	1.0	0.17	ND	ND	ND	-	50
Endosulfan Sulfate	1.0	0.27	ND	ND	ND	-	50
4,4'-DDT	1.0	0.38	1.6	2.1	1.8	27 #	50
Endrin Ketone	1.0	0.29	ND	ND	ND	-	50
Methoxychlor	1.0	0.27	ND	ND	ND	-	50
Toxaphene	50	50	ND	ND	ND	-	50
2,4'-DDE	1.2	1.2	ND	ND	ND	-	50
2,4'-DDD	1.0	0.18	2.0	2.0	2.0	2 #	50
2,4'-DDT	1.0	0.22	2.6	2.7	2.6	3	50
Mirex	1.0	0.27	ND	ND	ND	-	50

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406519
Date Collected: 08/27/2004
Date Received: 08/30/2004
Date Extracted: 09/23/2004
Date Analyzed: 10/07/2004

Organochlorine Pesticides

Sample Name: LDW-B9a-S
Lab Code: K2406519-001
File ID: J:\GC23\DATA\100604\1006F059.D
Instrument ID: GC23

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8081A

Extraction Lot: KWG0414494
Calibration ID: CAL3865

Sample Amount: 38.08 g
% Solids: 52.6
Dilution Factor: 1

Column1: DB XLB
Column2: DB-35MS

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
319-84-6	alpha-BHC	0.16 U	1.0	0.16	
118-74-1	Hexachlorobenzene	1.4 P	1.0	0.31	
319-85-7	beta-BHC	0.42 U	1.0	0.42	
58-89-9	gamma-BHC (Lindane)	1.2	1.0	0.19	
319-86-8	delta-BHC	0.27 U	1.0	0.27	
76-44-8	Heptachlor	0.19 U	1.0	0.19	
309-00-2	Aldrin	1.0 Ui	1.0	1.0	
1024-57-3	Heptachlor Epoxide	0.27 U	1.0	0.27	
5103-74-2	gamma-Chlordane†	2.0 Ui	2.0	2.0	
959-98-8	Endosulfan I	0.44 Ui	1.0	0.44	
5103-71-9	alpha-Chlordane	1.0 Ui	1.0	1.0	
60-57-1	Dieldrin	0.16 U	1.0	0.16	
72-55-9	4,4'-DDE	1.0 Ui	1.0	1.0	
72-20-8	Endrin	0.46 U	1.0	0.46	
33213-65-9	Endosulfan II	1.0 Ui	1.0	1.0	
72-54-8	4,4'-DDD	0.79 J	1.0	0.18	
7421-93-4	Endrin Aldehyde	0.31 U	1.0	0.31	
1031-07-8	Endosulfan Sulfate	0.40 U	1.0	0.40	
50-29-3	4,4'-DDT	5.4	1.0	0.33	
53494-70-5	Endrin Ketone	1.2 P	1.0	0.12	
72-43-5	Methoxychlor	0.37 U	1.0	0.37	
8001-35-2	Toxaphene	82 Ui	82	82	
3424-82-6	2,4'-DDE	1.0 Ui	1.0	1.0	
53-19-0	2,4'-DDD	1.0 Ui	1.0	1.0	
789-02-6	2,4'-DDT	3.9 P	1.0	0.16	
2385-85-5	Mirex	0.13 U	1.0	0.13	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406519
Date Collected: 08/27/2004
Date Received: 08/30/2004
Date Extracted: 09/23/2004
Date Analyzed: 10/07/2004

Organochlorine Pesticides

Sample Name: LDW-B9a-S
Lab Code: K2406519-001
File ID: J:\GC23\DATA\100604\1006F059.D
Instrument ID: GC23

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8081A

Extraction Lot: KWG0414494
Calibration ID: CAL3865

Sample Amount: 38.08 g
% Solids: 52.6
Dilution Factor: 1

Column1: DB XLB
Column2: DB-35MS

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tetrachloro-m-xylene	81	50-150	10/07/04	Acceptable
Decachlorobiphenyl	59	50-150	10/07/04	Acceptable

† Analyte Comments

gamma-Chlordane For this analyte (CAS Registry No. 5103-74-2), USEPA has corrected the name to be beta-Chlordane, also known as trans-Chlordane.

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406519
Date Collected: 08/26/2004
Date Received: 08/30/2004
Date Extracted: 09/23/2004
Date Analyzed: 10/07/2004

Organochlorine Pesticides

Sample Name: LDW-B3a-S
Lab Code: K2406519-005
File ID: J:\GC23\DATA\100604\1006F067.D
Instrument ID: GC23

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8081A

Extraction Lot: KWG0414494
Calibration ID: CAL3865

Sample Amount: 32.53 g
% Solids: 61.6
Dilution Factor: 1

Column1: DB XLB
Column2: DB-35MS

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
319-84-6	alpha-BHC	0.16	Ui	1.0	0.16	
118-74-1	Hexachlorobenzene	0.46	Ui	1.0	0.46	
319-85-7	beta-BHC	0.36	U	1.0	0.36	
58-89-9	gamma-BHC (Lindane)	0.81	Ui	1.0	0.81	
319-86-8	delta-BHC	0.23	U	1.0	0.23	
76-44-8	Heptachlor	0.16	U	1.0	0.16	
309-00-2	Aldrin	0.41	U	1.0	0.41	
1024-57-3	Heptachlor Epoxide	1.0	Ui	1.0	1.0	
5103-74-2	gamma-Chlordane†	1.0	Ui	1.0	1.0	
959-98-8	Endosulfan I	0.18	U	1.0	0.18	
5103-71-9	alpha-Chlordane	0.97	Ui	1.0	0.97	
60-57-1	Dieldrin	0.14	U	1.0	0.14	
72-55-9	4,4'-DDE	0.45	JP	1.0	0.13	
72-20-8	Endrin	0.39	U	1.0	0.39	
33213-65-9	Endosulfan II	0.10	U	1.0	0.10	
72-54-8	4,4'-DDD	0.31	JP	1.0	0.16	
7421-93-4	Endrin Aldehyde	0.43	Ui	1.0	0.43	
1031-07-8	Endosulfan Sulfate	0.35	U	1.0	0.35	
50-29-3	4,4'-DDT	1.6		1.0	0.28	
53494-70-5	Endrin Ketone	0.096	U	1.0	0.096	
72-43-5	Methoxychlor	0.31	U	1.0	0.31	
8001-35-2	Toxaphene	56	Ui	56	56	
3424-82-6	2,4'-DDE	0.12	U	1.0	0.12	
53-19-0	2,4'-DDD	0.26	U	1.0	0.26	
789-02-6	2,4'-DDT	1.3		1.0	0.13	
2385-85-5	Mirex	1.1	Ui	1.1	1.1	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406519
Date Collected: 08/26/2004
Date Received: 08/30/2004
Date Extracted: 09/23/2004
Date Analyzed: 10/07/2004

Organochlorine Pesticides

Sample Name: LDW-B3a-S
Lab Code: K2406519-005
File ID: J:\GC23\DATA\100604\1006F067.D
Instrument ID: GC23

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8081A

Extraction Lot: KWG0414494
Calibration ID: CAL3865

Sample Amount: 32.53 g
% Solids: 61.6
Dilution Factor: 1

Column1: DB XLB
Column2: DB-35MS

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tetrachloro-m-xylene	85	50-150	10/07/04	Acceptable
Decachlorobiphenyl	64	50-150	10/07/04	Acceptable

† Analyte Comments

gamma-Chlordane For this analyte (CAS Registry No. 5103-74-2), USEPA has corrected the name to be beta-Chlordane, also known as trans-Chlordane.

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406580
Date Collected: 08/30/2004
Date Received: 08/31/2004
Date Extracted: 09/23/2004
Date Analyzed: 10/07/2004

Organochlorine Pesticides

Sample Name: LDW-B7a-S
Lab Code: K2406580-001
File ID: J:\GC23\DATA\100604\1006F068.D
Instrument ID: GC23

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8081A

Extraction Lot: KWG0414494
Calibration ID: CAL3865

Sample Amount: 38.80 g
% Solids: 51.7
Dilution Factor: 1

Column1: DB XLB
Column2: DB-35MS

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
319-84-6	alpha-BHC	0.17	U	1.0	0.17	
118-74-1	Hexachlorobenzene	47	E	1.0	0.31	
319-85-7	beta-BHC	1.0	Ui	1.0	1.0	
58-89-9	gamma-BHC (Lindane)	0.68	Ui	1.0	0.68	
319-86-8	delta-BHC	0.28	U	1.0	0.28	
76-44-8	Heptachlor	1.0	Ui	1.0	1.0	
309-00-2	Aldrin	1.0	Ui	1.0	1.0	
1024-57-3	Heptachlor Epoxide	1.0	Ui	1.0	1.0	
5103-74-2	gamma-Chlordane†	1.6	Ui	1.6	1.6	
959-98-8	Endosulfan I	0.27	Ui	1.0	0.27	
5103-71-9	alpha-Chlordane	1.5	Ui	1.5	1.5	
60-57-1	Dieldrin	1.0	Ui	1.0	1.0	
72-55-9	4,4'-DDE	1.3	P	1.0	0.15	
72-20-8	Endrin	0.47	U	1.0	0.47	
33213-65-9	Endosulfan II	1.0	Ui	1.0	1.0	
72-54-8	4,4'-DDD	0.71	J	1.0	0.18	
7421-93-4	Endrin Aldehyde	0.31	U	1.0	0.31	
1031-07-8	Endosulfan Sulfate	23	Ui	23	23	
50-29-3	4,4'-DDT	7.7		1.0	0.33	
53494-70-5	Endrin Ketone	1.0	Ui	1.0	1.0	
72-43-5	Methoxychlor	1.0	Ui	1.0	1.0	
8001-35-2	Toxaphene	160	Ui	160	160	
3424-82-6	2,4'-DDE	1.0	Ui	1.0	1.0	
53-19-0	2,4'-DDD	1.2	Ui	1.2	1.2	
789-02-6	2,4'-DDT	4.3		1.0	0.16	
2385-85-5	Mirex	0.14	U	1.0	0.14	

Comments:

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406580
Date Collected: 08/30/2004
Date Received: 08/31/2004
Date Extracted: 09/23/2004
Date Analyzed: 10/07/2004

Organochlorine Pesticides

Sample Name: LDW-B7a-S
Lab Code: K2406580-001
File ID: J:\GC23\DATA\100604\1006F068.D
Instrument ID: GC23

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8081A

Extraction Lot: KWG0414494
Calibration ID: CAL3865

Sample Amount: 38.80 g
% Solids: 51.7
Dilution Factor: 1

Column1: DB XLB
Column2: DB-35MS

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tetrachloro-m-xylene	146	50-150	10/07/04	Acceptable
Decachlorobiphenyl	65	50-150	10/07/04	Acceptable

† Analyte Comments

gamma-Chlordane For this analyte (CAS Registry No. 5103-74-2), USEPA has corrected the name to be beta-Chlordane, also known as trans-Chlordane.

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406580
Date Collected: 08/30/2004
Date Received: 08/31/2004
Date Extracted: 09/23/2004
Date Analyzed: 10/17/2004

Organochlorine Pesticides

Sample Name: LDW-B7a-SDL
Lab Code: K2406580-001
File ID: J:\GC23\DATA\101504\1015F098.D
Instrument ID: GC23

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8081A

Extraction Lot: KWG0414494
Calibration ID: CAL3865

Sample Amount: 38.80 g
% Solids: 51.7
Dilution Factor: 10

Column1: DB XLB
Column2: DB-35MS

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
319-84-6	alpha-BHC	1.7	U	10	1.7	
118-74-1	Hexachlorobenzene	63	D	10	3.1	
319-85-7	beta-BHC	4.3	U	10	4.3	
58-89-9	gamma-BHC (Lindane)	2.0	U	10	2.0	
319-86-8	delta-BHC	2.8	U	10	2.8	
76-44-8	Heptachlor	1.9	U	10	1.9	
309-00-2	Aldrin	4.9	U	10	4.9	
1024-57-3	Heptachlor Epoxide	2.8	U	10	2.8	
5103-74-2	gamma-Chlordane†	1.7	JD	10	0.74	
959-98-8	Endosulfan I	2.2	U	10	2.2	
5103-71-9	alpha-Chlordane	1.2	U	10	1.2	
60-57-1	Dieldrin	1.6	U	10	1.6	
72-55-9	4,4'-DDE	2.3	JPD	10	1.5	
72-20-8	Endrin	4.7	U	10	4.7	
33213-65-9	Endosulfan II	1.2	U	10	1.2	
72-54-8	4,4'-DDD	3.5	JD	10	1.8	
7421-93-4	Endrin Aldehyde	3.1	U	10	3.1	
1031-07-8	Endosulfan Sulfate	25	D	10	4.1	
50-29-3	4,4'-DDT	12	D	10	3.3	
53494-70-5	Endrin Ketone	1.5	JD	10	1.2	
72-43-5	Methoxychlor	3.7	U	10	3.7	
8001-35-2	Toxaphene	340	JD	500	150	
3424-82-6	2,4'-DDE	11	D	10	1.4	
53-19-0	2,4'-DDD	3.1	U	10	3.1	
789-02-6	2,4'-DDT	6.3	JD	10	1.6	
2385-85-5	Mirex	1.4	U	10	1.4	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406580
Date Collected: 08/30/2004
Date Received: 08/31/2004
Date Extracted: 09/23/2004
Date Analyzed: 10/17/2004

Organochlorine Pesticides

Sample Name: LDW-B7a-SDL
Lab Code: K2406580-001
File ID: J:\GC23\DATA\101504\1015F098.D
Instrument ID: GC23

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8081A

Extraction Lot: KWG0414494
Calibration ID: CAL3865

Sample Amount: 38.80 g
% Solids: 51.7
Dilution Factor: 10

Column1: DB XLB
Column2: DB-35MS

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tetrachloro-m-xylene	83	50-150	10/17/04	Acceptable
Decachlorobiphenyl	80	50-150	10/17/04	Acceptable

† Analyte Comments

gamma-Chlordane For this analyte (CAS Registry No. 5103-74-2), USEPA has corrected the name to be beta-Chlordane, also known as trans-Chlordane.

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406581
Date Collected: 08/30/2004
Date Received: 08/31/2004
Date Extracted: 09/29/2004
Date Analyzed: 10/09/2004

Organochlorine Pesticides

Sample Name: LDW-B7a-T
Lab Code: K2406581-001
File ID: J:\GC23\DATA\100804\1008F048.D
Instrument ID: GC23

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8081A

Extraction Lot: KWG0414867
Calibration ID: CAL3865

Sample Amount: 1.52 g
% Solids: NA
Dilution Factor: 1

Column1: DB XLB
Column2: DB-35MS

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
319-84-6	alpha-BHC	2.2 U	14	2.2	
118-74-1	Hexachlorobenzene	4.5 U	14	4.5	
319-85-7	beta-BHC	9.2 Ui	14	9.2	
58-89-9	gamma-BHC (Lindane)	3.7 U	14	3.7	
319-86-8	delta-BHC	4.5 U	14	4.5	
76-44-8	Heptachlor	6.0 U	14	6.0	
309-00-2	Aldrin	2.7 U	14	2.7	
1024-57-3	Heptachlor Epoxide	6.6 JP	14	2.0	
5103-74-2	gamma-Chlordane†	3.9 J	14	1.9	
959-98-8	Endosulfan I	2.9 Ui	14	2.9	
5103-71-9	alpha-Chlordane	4.8 U	14	4.8	
60-57-1	Dieldrin	6.7 Ui	14	6.7	
72-55-9	4,4'-DDE	2.9 JP	14	1.6	
72-20-8	Endrin	8.4 Ui	14	8.4	
33213-65-9	Endosulfan II	4.7 U	14	4.7	
72-54-8	4,4'-DDD	1.8 U	14	1.8	
7421-93-4	Endrin Aldehyde	2.3 U	14	2.3	
1031-07-8	Endosulfan Sulfate	3.6 U	14	3.6	
50-29-3	4,4'-DDT	13 Ui	14	13	
53494-70-5	Endrin Ketone	3.9 U	14	3.9	
72-43-5	Methoxychlor	3.6 U	14	3.6	
8001-35-2	Toxaphene	270 Ui	660	270	
3424-82-6	2,4'-DDE	1.3 U	14	1.3	
53-19-0	2,4'-DDD	2.4 U	14	2.4	
789-02-6	2,4'-DDT	18 P	14	2.9	
2385-85-5	Mirex	3.6 U	14	3.6	

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406581
Date Collected: 08/30/2004
Date Received: 08/31/2004
Date Extracted: 09/29/2004
Date Analyzed: 10/09/2004

Organochlorine Pesticides

Sample Name: LDW-B7a-T
Lab Code: K2406581-001
File ID: J:\GC23\DATA\100804\1008F048.D
Instrument ID: GC23

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8081A

Extraction Lot: KWG0414867
Calibration ID: CAL3865

Sample Amount: 1.52 g
% Solids: NA
Dilution Factor: 1

Column1: DB XLB
Column2: DB-35MS

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tetrachloro-m-xylene	86	30-150	10/09/04	Acceptable
Decachlorobiphenyl	72	30-150	10/09/04	Acceptable

† Analyte Comments

gamma-Chlordane For this analyte (CAS Registry No. 5103-74-2), USEPA has corrected the name to be beta-Chlordane, also known as trans-Chlordane.

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406932
Date Collected: 08/17/2004
Date Received: 08/20/2004
Date Extracted: 09/29/2004
Date Analyzed: 10/09/2004

Organochlorine Pesticides

Sample Name: LDW-B8a-T
Lab Code: K2406932-006
File ID: J:\GC23\DATA\100804\1008F049.D
Instrument ID: GC23
Extraction Method: EPA 3540C
Analysis Method: 8081A

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Lot: KWG0414867
Calibration ID: CAL3865

Sample Amount: 2.02 g
% Solids: NA
Dilution Factor: 1

Column1: DB XLB
Column2: DB-35MS

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
118-74-1	Hexachlorobenzene	3.4 U	10	3.4	
319-84-6	alpha-BHC	1.6 U	10	1.6	
319-85-7	beta-BHC	10 Ui	10	10	
58-89-9	gamma-BHC (Lindane)	2.8 U	10	2.8	
319-86-8	delta-BHC	3.4 U	10	3.4	
76-44-8	Heptachlor	4.5 U	10	4.5	
309-00-2	Aldrin	2.0 U	10	2.0	
1024-57-3	Heptachlor Epoxide	6.8 Ui	10	6.8	
5103-74-2	gamma-Chlordane†	12 Ui	12	12	
959-98-8	Endosulfan I	10 Ui	10	10	
5103-71-9	alpha-Chlordane	3.6 U	10	3.6	
60-57-1	Dieldrin	1.1 U	10	1.1	
72-55-9	4,4'-DDE	1.2 U	10	1.2	
72-20-8	Endrin	10 Ui	10	10	
33213-65-9	Endosulfan II	9.4 Ui	10	9.4	
72-54-8	4,4'-DDD	1.3 U	10	1.3	
7421-93-4	Endrin Aldehyde	10 Ui	10	10	
1031-07-8	Endosulfan Sulfate	2.7 U	10	2.7	
50-29-3	4,4'-DDT	82	10	3.8	
53494-70-5	Endrin Ketone	16 Ui	16	16	
72-43-5	Methoxychlor	10 Ui	10	10	
8001-35-2	Toxaphene	2100 Ui	2100	2100	
3424-82-6	2,4'-DDE	45 Ui	45	45	
53-19-0	2,4'-DDD	43 P	10	1.8	
789-02-6	2,4'-DDT	34 Ui	34	34	
2385-85-5	Mirex	2.7 U	10	2.7	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406932
Date Collected: 08/17/2004
Date Received: 08/20/2004
Date Extracted: 09/29/2004
Date Analyzed: 10/09/2004

Organochlorine Pesticides

Sample Name: LDW-B8a-T
Lab Code: K2406932-006
File ID: J:\GC23\DATA\100804\1008F049.D
Instrument ID: GC23
Extraction Method: EPA 3540C
Analysis Method: 8081A

Sample Amount: 2.02 g
% Solids: NA
Dilution Factor: 1

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Lot: KWG0414867
Calibration ID: CAL3865

Column1: DB XLB
Column2: DB-35MS

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tetrachloro-m-xylene	86	30-150	10/09/04	Acceptable
Decachlorobiphenyl	72	30-150	10/09/04	Acceptable

† Analyte Comments

gamma-Chlordane For this analyte (CAS Registry No. 5103-74-2), USEPA has corrected the name to be beta-Chlordane, also known as trans-Chlordane.

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406932
Date Collected: 08/25/2004
Date Received: 08/31/2004
Date Extracted: 09/29/2004
Date Analyzed: 10/09/2004

Organochlorine Pesticides

Sample Name: LDW-B10a-T
Lab Code: K2406932-009
File ID: J:\GC23\DATA\100804\1008F050.D
Instrument ID: GC23

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8081A

Extraction Lot: KWG0414867
Calibration ID: CAL3865

Sample Amount: 2.01 g
% Solids: NA
Dilution Factor: 1

Column1: DB XLB
Column2: DB-35MS

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
319-84-6	alpha-BHC	7.3 Ui	10	7.3	
118-74-1	Hexachlorobenzene	3.4 U	10	3.4	
319-85-7	beta-BHC	2.1 U	10	2.1	
58-89-9	gamma-BHC (Lindane)	2.8 U	10	2.8	
319-86-8	delta-BHC	3.4 U	10	3.4	
76-44-8	Heptachlor	4.5 U	10	4.5	
309-00-2	Aldrin	2.0 U	10	2.0	
1024-57-3	Heptachlor Epoxide	3.3 Ui	10	3.3	
5103-74-2	gamma-Chlordane†	5.8 Ui	10	5.8	
959-98-8	Endosulfan I	3.8 JP	10	1.3	
5103-71-9	alpha-Chlordane	3.6 U	10	3.6	
60-57-1	Dieldrin	2.8 J	10	1.1	
72-55-9	4,4'-DDE	3.5 J	10	1.2	
72-20-8	Endrin	0.99 U	10	0.99	
33213-65-9	Endosulfan II	3.5 U	10	3.5	
72-54-8	4,4'-DDD	2.5 J	10	1.3	
7421-93-4	Endrin Aldehyde	1.7 U	10	1.7	
1031-07-8	Endosulfan Sulfate	2.7 U	10	2.7	
50-29-3	4,4'-DDT	4.5 J	10	3.8	
53494-70-5	Endrin Ketone	2.9 U	10	2.9	
72-43-5	Methoxychlor	2.7 U	10	2.7	
8001-35-2	Toxaphene	99 Ui	500	99	
3424-82-6	2,4'-DDE	5.8 JP	10	0.96	
53-19-0	2,4'-DDD	2.7 Ui	10	2.7	
789-02-6	2,4'-DDT	2.2 U	10	2.2	
2385-85-5	Mirex	2.7 U	10	2.7	

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406932
Date Collected: 08/25/2004
Date Received: 08/31/2004
Date Extracted: 09/29/2004
Date Analyzed: 10/09/2004

Organochlorine Pesticides

Sample Name: LDW-B10a-T
Lab Code: K2406932-009
File ID: J:\GC23\DATA\100804\1008F050.D
Instrument ID: GC23
Extraction Method: EPA 3540C
Analysis Method: 8081A
Sample Amount: 2.01 g
% Solids: NA
Dilution Factor: 1

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Lot: KWG0414867
Calibration ID: CAL3865
Column1: DB XLB
Column2: DB-35MS

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tetrachloro-m-xylene	86	30-150	10/09/04	Acceptable
Decachlorobiphenyl	70	30-150	10/09/04	Acceptable

† Analyte Comments

gamma-Chlordane For this analyte (CAS Registry No. 5103-74-2), USEPA has corrected the name to be beta-Chlordane, also known as trans-Chlordane.

Comments:

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2407012
Date Collected: 08/16/2004
Date Received: 08/18/2004
Date Extracted: 09/23/2004
Date Analyzed: 10/07/2004

Organochlorine Pesticides

Sample Name: LDW-B5a-S
Lab Code: K2407012-003
File ID: J:\GC23\DATA\100604\1006F069.D
Instrument ID: GC23

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8081A

Extraction Lot: KWG0414494
Calibration ID: CAL3865

Sample Amount: 26.08 g
% Solids: 76.9
Dilution Factor: 1

Column1: DB XLB
Column2: DB-35MS

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
319-84-6	alpha-BHC	0.11	U	1.0	0.11	
118-74-1	Hexachlorobenzene	0.21	U	1.0	0.21	
319-85-7	beta-BHC	0.29	U	1.0	0.29	
58-89-9	gamma-BHC (Lindane)	0.13	U	1.0	0.13	
319-86-8	delta-BHC	0.19	U	1.0	0.19	
76-44-8	Heptachlor	0.78	Ui	1.0	0.78	
309-00-2	Aldrin	0.33	U	1.0	0.33	
1024-57-3	Heptachlor Epoxide	0.92	Ui	1.0	0.92	
5103-74-2	gamma-Chlordane†	0.84	JP	1.0	0.050	
959-98-8	Endosulfan I	0.15	U	1.0	0.15	
5103-71-9	alpha-Chlordane	0.24	J	1.0	0.081	
60-57-1	Dieldrin	0.14	J	1.0	0.11	
72-55-9	4,4'-DDE	5.8		1.0	0.099	
72-20-8	Endrin	0.32	U	1.0	0.32	
33213-65-9	Endosulfan II	0.54	JP	1.0	0.080	
72-54-8	4,4'-DDD	12		1.0	0.13	
7421-93-4	Endrin Aldehyde	0.21	U	1.0	0.21	
1031-07-8	Endosulfan Sulfate	0.50	Ui	1.0	0.50	
50-29-3	4,4'-DDT	11		1.0	0.23	
53494-70-5	Endrin Ketone	1.0	Ui	1.0	1.0	
72-43-5	Methoxychlor	4.6		1.0	0.25	*
8001-35-2	Toxaphene	70	Ui	70	70	
3424-82-6	2,4'-DDE	1.0	Ui	1.0	1.0	
53-19-0	2,4'-DDD	5.5		1.0	0.21	
789-02-6	2,4'-DDT	4.7		1.0	0.11	
2385-85-5	Mirex	0.089	U	1.0	0.089	

* See Case Narrative

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2407012
Date Collected: 08/16/2004
Date Received: 08/18/2004
Date Extracted: 09/23/2004
Date Analyzed: 10/07/2004

Organochlorine Pesticides

Sample Name: LDW-B5a-S
Lab Code: K2407012-003
File ID: J:\GC23\DATA\100604\1006F069.D
Instrument ID: GC23

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8081A

Extraction Lot: KWG0414494
Calibration ID: CAL3865

Sample Amount: 26.08 g
% Solids: 76.9
Dilution Factor: 1

Column1: DB XLB
Column2: DB-35MS

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tetrachloro-m-xylene	73	50-150	10/07/04	Acceptable
Decachlorobiphenyl	64	50-150	10/07/04	Acceptable

† Analyte Comments

gamma-Chlordane For this analyte (CAS Registry No. 5103-74-2), USEPA has corrected the name to be beta-Chlordane, also known as trans-Chlordane.

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2407012
Date Collected: 08/17/2004
Date Received: 09/20/2004
Date Extracted: 09/23/2004
Date Analyzed: 10/07/2004

Organochlorine Pesticides

Sample Name: LDW-B8a-S
Lab Code: K2407012-006
File ID: J:\GC23\DATA\100604\1006F070.D
Instrument ID: GC23

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8081A

Extraction Lot: KWG0414494
Calibration ID: CAL3865

Sample Amount: 37.36 g
% Solids: 53.6
Dilution Factor: 1

Column1: DB XLB
Column2: DB-35MS

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
319-84-6	alpha-BHC	0.16 U	1.0	0.16	
118-74-1	Hexachlorobenzene	0.30 U	1.0	0.30	
319-85-7	beta-BHC	0.42 U	1.0	0.42	
58-89-9	gamma-BHC (Lindane)	1.6 Ui	1.6	1.6	
319-86-8	delta-BHC	0.33 Ui	1.0	0.33	
76-44-8	Heptachlor	1.0 Ui	1.0	1.0	
309-00-2	Aldrin	0.47 U	1.0	0.47	
1024-57-3	Heptachlor Epoxide	1.0 Ui	1.0	1.0	
5103-74-2	gamma-Chlordane†	11 Ui	11	11	
959-98-8	Endosulfan I	2.3 Ui	2.3	2.3	
5103-71-9	alpha-Chlordane	0.12 U	1.0	0.12	
60-57-1	Dieldrin	4.8 Ui	4.8	4.8	
72-55-9	4,4'-DDE	0.15 U	1.0	0.15	
72-20-8	Endrin	1.7 Ui	1.7	1.7	
33213-65-9	Endosulfan II	6.3 Ui	6.3	6.3	
72-54-8	4,4'-DDD	1.0 Ui	1.0	1.0	
7421-93-4	Endrin Aldehyde	0.30 U	1.0	0.30	
1031-07-8	Endosulfan Sulfate	0.40 U	1.0	0.40	
50-29-3	4,4'-DDT	0.32 U	1.0	0.32	
53494-70-5	Endrin Ketone	62 E	1.0	0.12	
72-43-5	Methoxychlor	22 Ui	22	22	
8001-35-2	Toxaphene	6300 E	50	14	
3424-82-6	2,4'-DDE	12 Ui	12	12	
53-19-0	2,4'-DDD	53 E	1.0	0.30	
789-02-6	2,4'-DDT	41 E	1.0	0.15	
2385-85-5	Mirex	1.0 Ui	1.0	1.0	

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2407012
Date Collected: 08/17/2004
Date Received: 09/20/2004
Date Extracted: 09/23/2004
Date Analyzed: 10/07/2004

Organochlorine Pesticides

Sample Name: LDW-B8a-S
Lab Code: K2407012-006
File ID: J:\GC23\DATA\100604\1006F070.D
Instrument ID: GC23

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8081A

Extraction Lot: KWG0414494
Calibration ID: CAL3865

Sample Amount: 37.36 g
% Solids: 53.6
Dilution Factor: 1

Column1: DB XLB
Column2: DB-35MS

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tetrachloro-m-xylene	68	50-150	10/07/04	Acceptable
Decachlorobiphenyl	59	50-150	10/07/04	Acceptable

† Analyte Comments

gamma-Chlordane For this analyte (CAS Registry No. 5103-74-2), USEPA has corrected the name to be beta-Chlordane, also known as trans-Chlordane.

Comments: _____

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2407012
Date Collected: 08/17/2004
Date Received: 09/20/2004
Date Extracted: 09/23/2004
Date Analyzed: 10/07/2004

Organochlorine Pesticides

Sample Name: LDW-B8a-SDL
Lab Code: K2407012-006
File ID: J:\GC23\DATA\100604\1006F071.D
Instrument ID: GC23

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8081A

Extraction Lot: KWG0414494
Calibration ID: CAL3865

Sample Amount: 31.83 g
% Solids: 63.0
Dilution Factor: 10

Column1: DB XLB
Column2: DB-35MS

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
319-84-6	alpha-BHC	1.8 JD	10	1.4	
118-74-1	Hexachlorobenzene	2.6 U	10	2.6	
319-85-7	beta-BHC	3.5 U	10	3.5	
58-89-9	gamma-BHC (Lindane)	2.0 Ui	10	2.0	
319-86-8	delta-BHC	10 Ui	10	10	
76-44-8	Heptachlor	10 Ui	10	10	
309-00-2	Aldrin	4.0 U	10	4.0	
1024-57-3	Heptachlor Epoxide	10 Ui	10	10	
5103-74-2	gamma-Chlordane†	13 Ui	13	13	
959-98-8	Endosulfan I	3.8 Ui	10	3.8	
5103-71-9	alpha-Chlordane	0.99 U	10	0.99	
60-57-1	Dieldrin	7.6 Ui	10	7.6	
72-55-9	4,4'-DDE	15 D	10	1.3	
72-20-8	Endrin	10 Ui	10	10	
33213-65-9	Endosulfan II	11 Ui	11	11	
72-54-8	4,4'-DDD	10 Ui	10	10	
7421-93-4	Endrin Aldehyde	2.6 U	10	2.6	
1031-07-8	Endosulfan Sulfate	3.4 U	10	3.4	
50-29-3	4,4'-DDT	240 D	10	2.7	
53494-70-5	Endrin Ketone	90 Ui	90	90	
72-43-5	Methoxychlor	35 Ui	35	35	
8001-35-2	Toxaphene	2800 Ui	2800	2800	
3424-82-6	2,4'-DDE	18 Ui	18	18	
53-19-0	2,4'-DDD	81 D	10	2.6	
789-02-6	2,4'-DDT	52 Ui	52	52	
2385-85-5	Mirex	10 Ui	10	10	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2407012
Date Collected: 08/17/2004
Date Received: 09/20/2004
Date Extracted: 09/23/2004
Date Analyzed: 10/07/2004

Organochlorine Pesticides

Sample Name: LDW-B8a-SDL
Lab Code: K2407012-006
File ID: J:\GC23\DATA\100604\1006F071.D
Instrument ID: GC23

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8081A

Extraction Lot: KWG0414494
Calibration ID: CAL3865

Sample Amount: 31.83 g
% Solids: 63.0
Dilution Factor: 10

Column1: DB XLB
Column2: DB-35MS

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tetrachloro-m-xylene	90	50-150	10/07/04	Acceptable
Decachlorobiphenyl	96	50-150	10/07/04	Acceptable

† Analyte Comments

gamma-Chlordane For this analyte (CAS Registry No. 5103-74-2), USEPA has corrected the name to be beta-Chlordane, also known as trans-Chlordane.

Comments: _____

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2407012
Date Collected: 08/25/2004
Date Received: 08/30/2004
Date Extracted: 09/23/2004
Date Analyzed: 10/07/2004

Organochlorine Pesticides

Sample Name: LDW-B10a-S
Lab Code: K2407012-009
File ID: J:\GC23\DATA\100604\1006F072.D
Instrument ID: GC23

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8081A

Extraction Lot: KWG0414494
Calibration ID: CAL3865

Sample Amount: 31.83 g
% Solids: 63.0
Dilution Factor: 1

Column1: DB XLB
Column2: DB-35MS

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
319-84-6	alpha-BHC	0.14	U	1.0	0.14	
118-74-1	Hexachlorobenzene	1.3	Ui	1.3	1.3	
319-85-7	beta-BHC	0.35	U	1.0	0.35	
58-89-9	gamma-BHC (Lindane)	2.8	Ui	2.8	2.8	
319-86-8	delta-BHC	0.23	U	1.0	0.23	
76-44-8	Heptachlor	0.16	U	1.0	0.16	
309-00-2	Aldrin	0.50	Ui	1.0	0.50	
1024-57-3	Heptachlor Epoxide	0.23	U	1.0	0.23	
5103-74-2	gamma-Chlordane†	1.9		1.0	0.061	
959-98-8	Endosulfan I	0.18	U	1.0	0.18	
5103-71-9	alpha-Chlordane	1.2		1.0	0.099	
60-57-1	Dieldrin	2.3		1.0	0.14	
72-55-9	4,4'-DDE	0.75	J	1.0	0.13	
72-20-8	Endrin	0.39	U	1.0	0.39	
33213-65-9	Endosulfan II	0.097	U	1.0	0.097	
72-54-8	4,4'-DDD	0.96	J	1.0	0.15	
7421-93-4	Endrin Aldehyde	0.69	Ui	1.0	0.69	
1031-07-8	Endosulfan Sulfate	0.34	U	1.0	0.34	
50-29-3	4,4'-DDT	3.5		1.0	0.27	
53494-70-5	Endrin Ketone	0.20	Ui	1.0	0.20	
72-43-5	Methoxychlor	0.31	U	1.0	0.31	
8001-35-2	Toxaphene	50	Ui	50	50	
3424-82-6	2,4'-DDE	1.0	Ui	1.0	1.0	
53-19-0	2,4'-DDD	1.6	P	1.0	0.26	
789-02-6	2,4'-DDT	1.4	P	1.0	0.13	
2385-85-5	Mirex	0.11	U	1.0	0.11	

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2407012
Date Collected: 08/25/2004
Date Received: 08/30/2004
Date Extracted: 09/23/2004
Date Analyzed: 10/07/2004

Organochlorine Pesticides

Sample Name: LDW-B10a-S
Lab Code: K2407012-009
File ID: J:\GC23\DATA\100604\1006F072.D
Instrument ID: GC23

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8081A

Extraction Lot: KWG0414494
Calibration ID: CAL3865

Sample Amount: 31.83 g
% Solids: 63.0
Dilution Factor: 1

Column1: DB XLB
Column2: DB-35MS

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tetrachloro-m-xylene	70	50-150	10/07/04	Acceptable
Decachlorobiphenyl	58	50-150	10/07/04	Acceptable

† Analyte Comments

gamma-Chlordane For this analyte (CAS Registry No. 5103-74-2), USEPA has corrected the name to be beta-Chlordane, also known as trans-Chlordane.

Comments: _____

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2407012
Date Extracted: 09/23/2004
Date Analyzed: 10/07/2004

**Duplicate Sample Summary
 Organochlorine Pesticides**

Sample Name: LDW-B5a-S
Lab Code: K2407012-003
Extraction Method: EPA 3540C
Analysis Method: 8081A

Units: ug/Kg
Basis: Dry
Level: Low
Extraction Lot: KWG0414494

Analyte Name	MRL	MDL	Sample Result	LDW-B5a-SDUP KWG0414494-1 Duplicate Sample		Relative Percent Difference	RPD Limit
				Result	Average		
alpha-BHC	1.0	0.13	ND	ND	ND	-	50
Hexachlorobenzene	1.0	0.45	ND	ND	ND	-	50
beta-BHC	1.0	0.29	ND	ND	ND	-	50
gamma-BHC (Lindane)	1.0	0.13	ND	ND	ND	-	50
delta-BHC	1.0	0.19	ND	ND	ND	-	50
Heptachlor	1.0	0.13	ND	ND	ND	-	50
Aldrin	1.0	1.0	ND	ND	ND	-	50
Heptachlor Epoxide	1.5	1.5	ND	ND	ND	-	50
gamma-Chlordane	1.0	0.050	0.84	1.1	0.98	29 #	50
Endosulfan I	1.0	0.15	ND	0.21	NC	NC	50
alpha-Chlordane	1.0	0.88	0.24	ND	NC	NC	50
Dieldrin	1.0	0.11	0.14	0.82	0.48	142 #	50
4,4'-DDE	1.0	0.099	5.8	11	8.6	64 *	50
Endrin	1.0	0.42	ND	ND	ND	-	50
Endosulfan II	1.0	1.0	0.54	ND	NC	NC *	50
4,4'-DDD	1.0	0.13	12	33	22	91 *	50
Endrin Aldehyde	1.0	1.0	ND	ND	ND	-	50
Endosulfan Sulfate	1.4	1.4	ND	ND	ND	-	50
4,4'-DDT	1.0	0.23	11	27	19	82 *	50
Endrin Ketone	1.0	1.0	ND	ND	ND	-	50
Methoxychlor	1.0	0.25	4.6	5.3	4.9	16	50
Toxaphene	120	120	ND	ND	ND	-	50
2,4'-DDE	1.5	1.5	ND	ND	ND	-	50
2,4'-DDD	1.0	0.21	5.5	13	9.0	78 *	50
2,4'-DDT	1.0	0.11	4.7	11	7.9	80 *	50
Mirex	1.0	1.0	ND	ND	ND	-	50

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2407216
Date Collected: 08/26/2004
Date Received: 08/30/2004
Date Extracted: 09/29/2004
Date Analyzed: 10/09/2004

Organochlorine Pesticides

Sample Name: LDW-B3a-T
Lab Code: K2407216-001
File ID: J:\GC23\DATA\100804\1008F051.D
Instrument ID: GC23

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8081A

Extraction Lot: KWG0414867
Calibration ID: CAL3865

Sample Amount: 2.02 g
% Solids: NA
Dilution Factor: 1

Column1: DB XLB
Column2: DB-35MS

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
118-74-1	Hexachlorobenzene	3.4 U	10	3.4	
319-84-6	alpha-BHC	1.6 U	10	1.6	
319-85-7	beta-BHC	13 P	10	2.1	
58-89-9	gamma-BHC (Lindane)	10 Ui	10	10	
319-86-8	delta-BHC	3.4 U	10	3.4	
76-44-8	Heptachlor	4.5 U	10	4.5	
309-00-2	Aldrin	2.0 U	10	2.0	
1024-57-3	Heptachlor Epoxide	1.5 U	10	1.5	
5103-74-2	gamma-Chlordane†	10 Ui	10	10	
959-98-8	Endosulfan I	10 Ui	10	10	
5103-71-9	alpha-Chlordane	3.6 U	10	3.6	
60-57-1	Dieldrin	1.1 U	10	1.1	
72-55-9	4,4'-DDE	2.5 Ui	10	2.5	
72-20-8	Endrin	0.99 U	10	0.99	
33213-65-9	Endosulfan II	3.5 U	10	3.5	
72-54-8	4,4'-DDD	1.3 U	10	1.3	
7421-93-4	Endrin Aldehyde	2.4 JP	10	1.7	
1031-07-8	Endosulfan Sulfate	2.7 U	10	2.7	
50-29-3	4,4'-DDT	6.3 J	10	3.8	
53494-70-5	Endrin Ketone	2.9 U	10	2.9	
72-43-5	Methoxychlor	2.7 U	10	2.7	
8001-35-2	Toxaphene	200 Ui	500	200	
3424-82-6	2,4'-DDE	10 Ui	10	10	
53-19-0	2,4'-DDD	6.9 J	10	1.8	
789-02-6	2,4'-DDT	17	10	2.2	
2385-85-5	Mirex	2.7 U	10	2.7	

Comments: _____

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2407216
Date Collected: 08/26/2004
Date Received: 08/30/2004
Date Extracted: 09/29/2004
Date Analyzed: 10/09/2004

Organochlorine Pesticides

Sample Name: LDW-B3a-T
Lab Code: K2407216-001
File ID: J:\GC23\DATA\100804\1008F051.D
Instrument ID: GC23

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8081A

Extraction Lot: KWG0414867
Calibration ID: CAL3865

Sample Amount: 2.02 g
% Solids: NA
Dilution Factor: 1

Column1: DB XLB
Column2: DB-35MS

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tetrachloro-m-xylene	82	30-150	10/09/04	Acceptable
Decachlorobiphenyl	68	30-150	10/09/04	Acceptable

† Analyte Comments

gamma-Chlordane For this analyte (CAS Registry No. 5103-74-2), USEPA has corrected the name to be beta-Chlordane, also known as trans-Chlordane.

Comments: _____

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2407216
Date Collected: 08/27/2004
Date Received: 08/30/2004
Date Extracted: 09/29/2004
Date Analyzed: 10/09/2004

Organochlorine Pesticides

Sample Name: LDW-B9a-T
Lab Code: K2407216-002
File ID: J:\GC23\DATA\100804\1008F052.D
Instrument ID: GC23

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8081A

Extraction Lot: KWG0414867
Calibration ID: CAL3865

Sample Amount: 2.04 g
% Solids: NA
Dilution Factor: 1

Column1: DB XLB
Column2: DB-35MS

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
118-74-1	Hexachlorobenzene	3.4	U	9.9	3.4	
319-84-6	alpha-BHC	1.6	U	9.9	1.6	
319-85-7	beta-BHC	10		9.9	2.1	
58-89-9	gamma-BHC (Lindane)	9.9	Ui	9.9	9.9	
319-86-8	delta-BHC	3.4	U	9.9	3.4	
76-44-8	Heptachlor	8.6	JP	9.9	4.5	
309-00-2	Aldrin	2.0	U	9.9	2.0	
1024-57-3	Heptachlor Epoxide	9.9	Ui	9.9	9.9	
5103-74-2	gamma-Chlordane†	9.9	Ui	9.9	9.9	
959-98-8	Endosulfan I	9.9	Ui	9.9	9.9	
5103-71-9	alpha-Chlordane	3.6	U	9.9	3.6	
60-57-1	Dieldrin	2.8	Ui	9.9	2.8	
72-55-9	4,4'-DDE	3.6	Ui	9.9	3.6	
72-20-8	Endrin	0.98	U	9.9	0.98	
33213-65-9	Endosulfan II	3.5	U	9.9	3.5	
72-54-8	4,4'-DDD	1.3	U	9.9	1.3	
7421-93-4	Endrin Aldehyde	11		9.9	1.7	
1031-07-8	Endosulfan Sulfate	2.7	U	9.9	2.7	
50-29-3	4,4'-DDT	3.8	U	9.9	3.8	
53494-70-5	Endrin Ketone	2.9	U	9.9	2.9	
72-43-5	Methoxychlor	2.7	U	9.9	2.7	
8001-35-2	Toxaphene	500	Ui	500	500	
3424-82-6	2,4'-DDE	9.9	Ui	9.9	9.9	
53-19-0	2,4'-DDD	21	Ui	21	21	
789-02-6	2,4'-DDT	16		9.9	2.2	
2385-85-5	Mirex	2.7	U	9.9	2.7	

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2407216
Date Collected: 08/27/2004
Date Received: 08/30/2004
Date Extracted: 09/29/2004
Date Analyzed: 10/09/2004

Organochlorine Pesticides

Sample Name: LDW-B9a-T
Lab Code: K2407216-002
File ID: J:\GC23\DATA\100804\1008F052.D
Instrument ID: GC23

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8081A

Extraction Lot: KWG0414867
Calibration ID: CAL3865

Sample Amount: 2.04 g
% Solids: NA
Dilution Factor: 1

Column1: DB XLB
Column2: DB-35MS

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tetrachloro-m-xylene	77	30-150	10/09/04	Acceptable
Decachlorobiphenyl	63	30-150	10/09/04	Acceptable

† Analyte Comments

gamma-Chlordane For this analyte (CAS Registry No. 5103-74-2), USEPA has corrected the name to be beta-Chlordane, also known as trans-Chlordane.

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2407452
Date Collected: 09/24/2004
Date Received: 09/25/2004
Date Extracted: 10/15/2004
Date Analyzed: 10/27/2004

Organochlorine Pesticides

Sample Name: LDW-B5a-T
Lab Code: K2407452-001
File ID: J:\GC23\DATA\102604\1026F036.D
Instrument ID: GC23

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8081A

Extraction Lot: KWG0416041
Calibration ID: CAL3906

Column1: DB XLB
Column2: DB-35MS

Sample Amount: 1.41 g
% Solids: NA
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
319-84-6	alpha-BHC	2.3	U	15	2.3	
118-74-1	Hexachlorobenzene	4.9	U	15	4.9	
319-85-7	beta-BHC	5.8	Ui	15	5.8	
58-89-9	gamma-BHC (Lindane)	4.0	U	15	4.0	
319-86-8	delta-BHC	4.9	U	15	4.9	
76-44-8	Heptachlor	6.4	U	15	6.4	
309-00-2	Aldrin	2.9	U	15	2.9	
1024-57-3	Heptachlor Epoxide	6.3	Ui	15	6.3	
5103-74-2	gamma-Chlordane†	16		15	2.0	
959-98-8	Endosulfan I	1.9	U	15	1.9	
5103-71-9	alpha-Chlordane	5.2	U	15	5.2	
60-57-1	Dieldrin	1.6	U	15	1.6	
72-55-9	4,4'-DDE	39		15	1.8	
72-20-8	Endrin	1.5	U	15	1.5	
33213-65-9	Endosulfan II	5.0	U	15	5.0	
72-54-8	4,4'-DDD	13	J	15	1.9	
7421-93-4	Endrin Aldehyde	9.8	Ui	15	9.8	
1031-07-8	Endosulfan Sulfate	3.9	U	15	3.9	
50-29-3	4,4'-DDT	45		15	5.4	
53494-70-5	Endrin Ketone	15	Ui	15	15	
72-43-5	Methoxychlor	3.9	U	15	3.9	
8001-35-2	Toxaphene	270	Ui	710	270	
3424-82-6	2,4'-DDE	15	Ui	15	15	
53-19-0	2,4'-DDD	15	Ui	15	15	
789-02-6	2,4'-DDT	70	P	15	3.2	
2385-85-5	Mirex	3.9	U	15	3.9	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2407452
Date Collected: 09/24/2004
Date Received: 09/25/2004
Date Extracted: 10/15/2004
Date Analyzed: 10/27/2004

Organochlorine Pesticides

Sample Name: LDW-B5a-T
Lab Code: K2407452-001
File ID: J:\GC23\DATA\102604\1026F036.D
Instrument ID: GC23
Extraction Method: EPA 3540C
Analysis Method: 8081A

Sample Amount: 1.41 g
% Solids: NA
Dilution Factor: 1

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Lot: KWG0416041
Calibration ID: CAL3906

Column1: DB XLB
Column2: DB-35MS

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tetrachloro-m-xylene	73	30-150	10/27/04	Acceptable
Decachlorobiphenyl	92	30-150	10/27/04	Acceptable

† **Analyte Comments**

gamma-Chlordane For this analyte (CAS Registry No. 5103-74-2), USEPA has corrected the name to be beta-Chlordane, also known as trans-Chlordane.

Comments: _____

00301

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Sediment

Service Request: K2407473
Date Collected: 09/24/2004
Date Received: 09/27/2004
Date Extracted: 10/18/2004
Date Analyzed: 10/27/2004

Organochlorine Pesticides

Sample Name: LDW-B5a-S
Lab Code: K2407473-001
File ID: J:\GC23\DATA\102704\1027F008.D
Instrument ID: GC23

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8081A

Extraction Lot: KWG0416171
Calibration ID: CAL3906

Sample Amount: 30.97 g
% Solids: 64.9
Dilution Factor: 1

Column1: DB XLB
Column2: DB-35MS

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
319-84-6	alpha-BHC	0.13 U	1.0	0.13	
118-74-1	Hexachlorobenzene	0.60 J	1.0	0.25	
319-85-7	beta-BHC	1.1 Ui	1.1	1.1	
58-89-9	gamma-BHC (Lindane)	1.3 P	1.0	0.16	
319-86-8	delta-BHC	1.5 Ui	1.5	1.5	
76-44-8	Heptachlor	0.15 U	1.0	0.15	
309-00-2	Aldrin	1.0 Ui	1.0	1.0	
1024-57-3	Heptachlor Epoxide	6.2 Ui	6.2	6.2	
5103-74-2	gamma-Chlordane†	16	1.0	0.059	
959-98-8	Endosulfan I	1.0 Ui	1.0	1.0	
5103-71-9	alpha-Chlordane	1.6	1.0	0.096	
60-57-1	Dieldrin	0.13 U	1.0	0.13	
72-55-9	4,4'-DDE	31	1.0	0.12	
72-20-8	Endrin	1.5 P	1.0	0.37	
33213-65-9	Endosulfan II	10 P	1.0	0.094	
72-54-8	4,4'-DDD	22	1.0	0.15	
7421-93-4	Endrin Aldehyde	4.7 Ui	4.7	4.7	*
1031-07-8	Endosulfan Sulfate	0.33 U	1.0	0.33	
50-29-3	4,4'-DDT	39	1.0	0.27	
53494-70-5	Endrin Ketone	6.0 Ui	6.0	6.0	
72-43-5	Methoxychlor	3.1 Ui	3.1	3.1	
8001-35-2	Toxaphene	54 Ui	54	54	
3424-82-6	2,4'-DDE	2.8 P	1.0	0.11	
53-19-0	2,4'-DDD	14 Ui	14	14	
789-02-6	2,4'-DDT	30	1.0	0.13	
2385-85-5	Mirex	0.11 U	1.0	0.11	

* See Case Narrative

Comments: _____

Analytical Results

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Sediment

Service Request: K2407473
Date Collected: 09/24/2004
Date Received: 09/27/2004
Date Extracted: 10/18/2004
Date Analyzed: 10/27/2004

Organochlorine Pesticides

Sample Name: LDW-B5a-S
Lab Code: K2407473-001
File ID: J:\GC23\DATA\102704\1027F008.D
Instrument ID: GC23

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8081A

Extraction Lot: KWG0416171
Calibration ID: CAL3906

Sample Amount: 30.97 g
% Solids: 64.9
Dilution Factor: 1

Column1: DB XLB
Column2: DB-35MS

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tetrachloro-m-xylene	69	50-150	10/27/04	Acceptable
Decachlorobiphenyl	88	50-150	10/27/04	Acceptable

† Analyte Comments

gamma-Chlordane For this analyte (CAS Registry No. 5103-74-2), USEPA has corrected the name to be beta-Chlordane, also known as trans-Chlordane.

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2407595
Date Collected: 09/27/2004
Date Received: 09/30/2004
Date Extracted: 10/18/2004
Date Analyzed: 10/27/2004

Organochlorine Pesticides

Sample Name: LDW-B1b-S
Lab Code: K2407595-001
File ID: J:\GC23\DATA\102604\1026F013.D
Instrument ID: GC23

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8081A

Extraction Lot: KWG0416171
Calibration ID: CAL3906

Sample Amount: 26.63 g
% Solids: 75.2
Dilution Factor: 1

Column1: DB XLB
Column2: DB-35MS

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
319-84-6	alpha-BHC	0.12	U	1.0	0.12	
118-74-1	Hexachlorobenzene	0.22	U	1.0	0.22	
319-85-7	beta-BHC	0.30	U	1.0	0.30	
58-89-9	gamma-BHC (Lindane)	0.14	U	1.0	0.14	
319-86-8	delta-BHC	0.19	U	1.0	0.19	
76-44-8	Heptachlor	0.13	U	1.0	0.13	
309-00-2	Aldrin	0.34	U	1.0	0.34	
1024-57-3	Heptachlor Epoxide	0.47	J	1.0	0.19	
5103-74-2	gamma-Chlordane†	0.80	Ui	1.0	0.80	
959-98-8	Endosulfan I	0.15	U	1.0	0.15	
5103-71-9	alpha-Chlordane	0.27	Ui	1.0	0.27	
60-57-1	Dieldrin	0.11	U	1.0	0.11	
72-55-9	4,4'-DDE	0.11	U	1.0	0.11	
72-20-8	Endrin	0.32	U	1.0	0.32	
33213-65-9	Endosulfan II	0.83	Ui	1.0	0.83	
72-54-8	4,4'-DDD	0.29	J	1.0	0.13	
7421-93-4	Endrin Aldehyde	0.22	U	1.0	0.22	*
1031-07-8	Endosulfan Sulfate	0.33	Ui	1.0	0.33	
50-29-3	4,4'-DDT	1.6		1.0	0.23	
53494-70-5	Endrin Ketone	0.83	JP	1.0	0.079	
72-43-5	Methoxychlor	0.26	U	1.0	0.26	
8001-35-2	Toxaphene	30	Ui	50	30	
3424-82-6	2,4'-DDE	1.0	Ui	1.0	1.0	
53-19-0	2,4'-DDD	0.55	Ui	1.0	0.55	
789-02-6	2,4'-DDT	1.8	P	1.0	0.11	
2385-85-5	Mirex	0.091	U	1.0	0.091	

* See Case Narrative

Comments:

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2407595
Date Collected: 09/27/2004
Date Received: 09/30/2004
Date Extracted: 10/18/2004
Date Analyzed: 10/27/2004

Organochlorine Pesticides

Sample Name: LDW-B1b-S
Lab Code: K2407595-001
File ID: J:\GC23\DATA\102604\1026F013.D
Instrument ID: GC23

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8081A

Extraction Lot: KWG0416171
Calibration ID: CAL3906

Sample Amount: 26.63 g
% Solids: 75.2
Dilution Factor: 1

Column1: DB XLB
Column2: DB-35MS

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tetrachloro-m-xylene	78	50-150	10/27/04	Acceptable
Decachlorobiphenyl	104	50-150	10/27/04	Acceptable

† Analyte Comments

gamma-Chlordane For this analyte (CAS Registry No. 5103-74-2), USEPA has corrected the name to be beta-Chlordane, also known as trans-Chlordane.

Comments:

Analytical Results

Client: Windward Environmental
 Project: LDW Benthic Invertebrate Survey/04-08-06-21
 Sample Matrix: Sediment

Service Request: K2407595
 Date Collected: 09/27/2004
 Date Received: 09/30/2004
 Date Extracted: 10/18/2004
 Date Analyzed: 10/27/2004

Organochlorine Pesticides

Sample Name: LDW-B2b-S
 Lab Code: K2407595-002
 File ID: J:\GC23\DATA\102604\1026F016.D
 Instrument ID: GC23

Units: ug/Kg
 Basis: Dry
 Level: Low

Extraction Method: EPA 3540C
 Analysis Method: 8081A

Extraction Lot: KWG0416171
 Calibration ID: CAL3906

Sample Amount: 30.20 g
 % Solids: 66.4
 Dilution Factor: 1

Column1: DB XLB
 Column2: DB-35MS

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
319-84-6	alpha-BHC	0.13 U	1.0	0.13	
118-74-1	Hexachlorobenzene	0.25 U	1.0	0.25	
319-85-7	beta-BHC	0.34 U	1.0	0.34	
58-89-9	gamma-BHC (Lindane)	0.61 J	1.0	0.15	
319-86-8	delta-BHC	0.22 U	1.0	0.22	
76-44-8	Heptachlor	0.15 U	1.0	0.15	
309-00-2	Aldrin	1.0 Ui	1.0	1.0	
1024-57-3	Heptachlor Epoxide	2.1 Ui	2.1	2.1	
5103-74-2	gamma-Chlordane†	7.1 P	1.0	0.058	
959-98-8	Endosulfan I	1.0 Ui	1.0	1.0	
5103-71-9	alpha-Chlordane	0.78 J	1.0	0.094	
60-57-1	Dieldrin	0.13 U	1.0	0.13	
72-55-9	4,4'-DDE	2.9 P	1.0	0.12	
72-20-8	Endrin	0.37 U	1.0	0.37	
33213-65-9	Endosulfan II	1.0 Ui	1.0	1.0	
72-54-8	4,4'-DDD	1.6	1.0	0.15	
7421-93-4	Endrin Aldehyde	1.0 Ui	1.0	1.0	*
1031-07-8	Endosulfan Sulfate	1.0 Ui	1.0	1.0	
50-29-3	4,4'-DDT	9.8	1.0	0.26	
53494-70-5	Endrin Ketone	1.0 Ui	1.0	1.0	
72-43-5	Methoxychlor	1.0 Ui	1.0	1.0	
8001-35-2	Toxaphene	140 Ui	140	140	
3424-82-6	2,4'-DDE	1.0 Ui	1.0	1.0	
53-19-0	2,4'-DDD	3.5 Ui	3.5	3.5	
789-02-6	2,4'-DDT	7.8	1.0	0.13	
2385-85-5	Mirex	0.37 J	1.0	0.11	

* See Case Narrative

Comments:

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2407595
Date Collected: 09/27/2004
Date Received: 09/30/2004
Date Extracted: 10/18/2004
Date Analyzed: 10/27/2004

Organochlorine Pesticides

Sample Name: LDW-B2b-S
Lab Code: K2407595-002
File ID: J:\GC23\DATA\102604\1026F016.D
Instrument ID: GC23
Extraction Method: EPA 3540C
Analysis Method: 8081A

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Lot: KWG0416171
Calibration ID: CAL3906

Sample Amount: 30.20 g
% Solids: 66.4
Dilution Factor: 1

Column1: DB XLB
Column2: DB-35MS

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tetrachloro-m-xylene	73	50-150	10/27/04	Acceptable
Decachlorobiphenyl	108	50-150	10/27/04	Acceptable

† Analyte Comments

gamma-Chlordane For this analyte (CAS Registry No. 5103-74-2), USEPA has corrected the name to be beta-Chlordane, also known as trans-Chlordane.

Comments:

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2407595
Date Collected: 09/28/2004
Date Received: 09/30/2004
Date Extracted: 10/18/2004
Date Analyzed: 10/27/2004

Organochlorine Pesticides

Sample Name: LDW-B4b-S
Lab Code: K2407595-003
File ID: J:\GC23\DATA\102704\1027F009.D
Instrument ID: GC23

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8081A

Extraction Lot: KWG0416171
Calibration ID: CAL3906

Sample Amount: 43.61 g
% Solids: 45.9
Dilution Factor: 1

Column1: DB XLB
Column2: DB-35MS

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
319-84-6	alpha-BHC	0.30 Ui	1.0	0.30	
118-74-1	Hexachlorobenzene	0.35 U	1.0	0.35	
319-85-7	beta-BHC	0.48 U	1.0	0.48	
58-89-9	gamma-BHC (Lindane)	0.22 U	1.0	0.22	
319-86-8	delta-BHC	1.0 Ui	1.0	1.0	
76-44-8	Heptachlor	2.4 Ui	2.4	2.4	
309-00-2	Aldrin	0.55 U	1.0	0.55	
1024-57-3	Heptachlor Epoxide	1.2 Ui	1.2	1.2	
5103-74-2	gamma-Chlordane†	2.7 Ui	2.7	2.7	
959-98-8	Endosulfan I	0.24 U	1.0	0.24	
5103-71-9	alpha-Chlordane	1.0 Ui	1.0	1.0	
60-57-1	Dieldrin	3.7 Ui	3.7	3.7	
72-55-9	4,4'-DDE	1.8	1.0	0.17	
72-20-8	Endrin	14 Ui	14	14	
33213-65-9	Endosulfan II	1.0 Ui	1.0	1.0	
72-54-8	4,4'-DDD	1.1	1.0	0.21	
7421-93-4	Endrin Aldehyde	12 Ui	12	12	*
1031-07-8	Endosulfan Sulfate	0.46 U	1.0	0.46	
50-29-3	4,4'-DDT	3.4 P	1.0	0.38	
53494-70-5	Endrin Ketone	5.0 Ui	5.0	5.0	
72-43-5	Methoxychlor	1.1 Ui	1.1	1.1	
8001-35-2	Toxaphene	270 Ui	270	270	
3424-82-6	2,4'-DDE	1.0 Ui	1.0	1.0	
53-19-0	2,4'-DDD	19 Ui	19	19	
789-02-6	2,4'-DDT	5.2 Ui	5.2	5.2	
2385-85-5	Mirex	13 Ui	13	13	

* See Case Narrative

Comments:

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2407595
Date Collected: 09/28/2004
Date Received: 09/30/2004
Date Extracted: 10/18/2004
Date Analyzed: 10/27/2004

Organochlorine Pesticides

Sample Name: LDW-B4b-S
Lab Code: K2407595-003
File ID: J:\GC23\DATA\102704\1027F009.D
Instrument ID: GC23

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8081A

Extraction Lot: KWG0416171
Calibration ID: CAL3906

Sample Amount: 43.61 g
% Solids: 45.9
Dilution Factor: 1

Column1: DB XLB
Column2: DB-35MS

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tetrachloro-m-xylene	59	50-150	10/27/04	Acceptable
Decachlorobiphenyl	82	50-150	10/27/04	Acceptable

† Analyte Comments

gamma-Chlordane For this analyte (CAS Registry No. 5103-74-2), USEPA has corrected the name to be beta-Chlordane, also known as trans-Chlordane.

Comments:

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2407595
Date Collected: 09/28/2004
Date Received: 09/30/2004
Date Extracted: 10/18/2004
Date Analyzed: 10/27/2004

Organochlorine Pesticides

Sample Name: LDW-B5b-S
Lab Code: K2407595-004
File ID: J:\GC23\DATA\102604\1026F020.D
Instrument ID: GC23

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8081A

Extraction Lot: KWG0416171
Calibration ID: CAL3906

Sample Amount: 34.64 g
% Solids: 57.8
Dilution Factor: 1

Column1: DB XLB
Column2: DB-35MS

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
319-84-6	alpha-BHC	0.15	U	1.0	0.15	
118-74-1	Hexachlorobenzene	0.28	U	1.0	0.28	
319-85-7	beta-BHC	0.39	U	1.0	0.39	
58-89-9	gamma-BHC (Lindane)	0.39	J	1.0	0.18	
319-86-8	delta-BHC	0.25	U	1.0	0.25	
76-44-8	Heptachlor	0.17	U	1.0	0.17	
309-00-2	Aldrin	0.44	U	1.0	0.44	
1024-57-3	Heptachlor Epoxide	4.9	P	1.0	0.25	
5103-74-2	gamma-Chlordane†	1.0	Ui	1.0	1.0	
959-98-8	Endosulfan I	1.0	Ui	1.0	1.0	
5103-71-9	alpha-Chlordane	0.50	Ui	1.0	0.50	
60-57-1	Dieldrin	1.3	Ui	1.3	1.3	
72-55-9	4,4'-DDE	1.2	P	1.0	0.14	
72-20-8	Endrin	0.42	U	1.0	0.42	
33213-65-9	Endosulfan II	1.0	Ui	1.0	1.0	
72-54-8	4,4'-DDD	0.90	J	1.0	0.17	
7421-93-4	Endrin Aldehyde	1.4	Ui	1.4	1.4	*
1031-07-8	Endosulfan Sulfate	1.2	Ui	1.2	1.2	
50-29-3	4,4'-DDT	7.2		1.0	0.30	
53494-70-5	Endrin Ketone	1.0	Ui	1.0	1.0	
72-43-5	Methoxychlor	1.0	Ui	1.0	1.0	
8001-35-2	Toxaphene	150	Ui	150	150	
3424-82-6	2,4'-DDE	1.0	Ui	1.0	1.0	
53-19-0	2,4'-DDD	7.7	P	1.0	0.28	
789-02-6	2,4'-DDT	5.6		1.0	0.14	
2385-85-5	Mirex	0.24	JP	1.0	0.12	

* See Case Narrative

Comments:

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2407595
Date Collected: 09/28/2004
Date Received: 09/30/2004
Date Extracted: 10/18/2004
Date Analyzed: 10/27/2004

Organochlorine Pesticides

Sample Name: LDW-B5b-S
Lab Code: K2407595-004
File ID: J:\GC23\DATA\102604\1026F020.D
Instrument ID: GC23

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8081A

Extraction Lot: KWG0416171
Calibration ID: CAL3906

Sample Amount: 34.64 g
% Solids: 57.8
Dilution Factor: 1

Column1: DB XLB
Column2: DB-35MS

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tetrachloro-m-xylene	72	50-150	10/27/04	Acceptable
Decachlorobiphenyl	92	50-150	10/27/04	Acceptable

† Analyte Comments

gamma-Chlordane For this analyte (CAS Registry No. 5103-74-2), USEPA has corrected the name to be beta-Chlordane, also known as trans-Chlordane.

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2407595
Date Extracted: 10/18/2004
Date Analyzed: 10/27/2004

**Duplicate Sample Summary
 Organochlorine Pesticides**

Sample Name: LDW-B5b-S
Lab Code: K2407595-004
Extraction Method: EPA 3540C
Analysis Method: 8081A

Units: ug/Kg
Basis: Dry
Level: Low
Extraction Lot: KWG0416171

Analyte Name	MRL	MDL	Sample Result	LDW-B5b-SDUP KWG0416171-1 Duplicate Sample		Relative Percent Difference	RPD Limit
				Result	Average		
alpha-BHC	1.0	0.15	ND	ND	ND	-	50
Hexachlorobenzene	1.0	0.28	ND	ND	ND	-	50
beta-BHC	1.0	0.39	ND	ND	ND	-	50
gamma-BHC (Lindane)	1.0	0.18	0.39	0.32	0.36	21 #	50
delta-BHC	1.0	0.25	ND	ND	ND	-	50
Heptachlor	1.0	0.17	ND	ND	ND	-	50
Aldrin	1.0	0.44	ND	ND	ND	-	50
Heptachlor Epoxide	1.0	1.0	4.9	ND	NC	NC	50
gamma-Chlordane	1.0	1.0	ND	ND	ND	-	50
Endosulfan I	1.0	1.0	ND	ND	ND	-	50
alpha-Chlordane	1.0	0.22	ND	ND	ND	-	50
Dieldrin	1.0	1.0	ND	ND	ND	-	50
4,4'-DDE	1.0	0.14	1.2	1.5	1.3	24 #	50
Endrin	1.0	0.42	ND	ND	ND	-	50
Endosulfan II	1.0	1.0	ND	ND	ND	-	50
4,4'-DDD	1.0	0.17	0.90	0.82	0.86	9 #	50
Endrin Aldehyde	1.0	0.99	ND	ND	ND	-	50
Endosulfan Sulfate	1.0	1.0	ND	ND	ND	-	50
4,4'-DDT	1.0	0.30	7.2	5.7	6.5	24	50
Endrin Ketone	1.0	1.0	ND	ND	ND	-	50
Methoxychlor	1.0	1.0	ND	ND	ND	-	50
Toxaphene	58	58	ND	ND	ND	-	50
2,4'-DDE	1.0	1.0	ND	ND	ND	-	50
2,4'-DDD	1.0	0.28	7.7	6.3	7.0	20	50
2,4'-DDT	1.0	0.14	5.6	4.6	5.1	20	50
Mirex	1.0	0.12	0.24	0.34	0.29	35 #	50

Results flagged with an asterisk (*) indicate values outside control criteria.
 Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2407596
Date Collected: 09/28/2004
Date Received: 09/30/2004
Date Extracted: 10/15/2004
Date Analyzed: 10/27/2004

Organochlorine Pesticides

Sample Name: LDW-B4b-T
Lab Code: K2407596-001
File ID: J:\GC23\DATA\102604\1026F037.D
Instrument ID: GC23

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8081A

Extraction Lot: KWG0416041
Calibration ID: CAL3906

Sample Amount: 2.03 g
% Solids: NA
Dilution Factor: 1

Column1: DB XLB
Column2: DB-35MS

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
118-74-1	Hexachlorobenzene	3.4 U	9.9	3.4	
319-84-6	alpha-BHC	1.6 U	9.9	1.6	
319-85-7	beta-BHC	2.1 U	9.9	2.1	
58-89-9	gamma-BHC (Lindane)	2.8 U	9.9	2.8	
319-86-8	delta-BHC	3.4 U	9.9	3.4	
76-44-8	Heptachlor	4.5 U	9.9	4.5	
309-00-2	Aldrin	2.0 U	9.9	2.0	
1024-57-3	Heptachlor Epoxide	6.0 J	9.9	1.5	
5103-74-2	gamma-Chlordane†	3.4 JP	9.9	1.4	
959-98-8	Endosulfan I	2.8 J	9.9	1.3	
5103-71-9	alpha-Chlordane	3.6 U	9.9	3.6	
60-57-1	Dieldrin	1.1 U	9.9	1.1	
72-55-9	4,4'-DDE	4.4 J	9.9	1.2	
72-20-8	Endrin	0.98 U	9.9	0.98	
33213-65-9	Endosulfan II	3.5 U	9.9	3.5	
72-54-8	4,4'-DDD	2.4 J	9.9	1.3	
7421-93-4	Endrin Aldehyde	1.7 U	9.9	1.7	
1031-07-8	Endosulfan Sulfate	27 Ui	27	27	
50-29-3	4,4'-DDT	14	9.9	3.8	
53494-70-5	Endrin Ketone	2.9 U	9.9	2.9	
72-43-5	Methoxychlor	2.7 U	9.9	2.7	
8001-35-2	Toxaphene	110 Ui	500	110	
3424-82-6	2,4'-DDE	2.5 Ui	9.9	2.5	
53-19-0	2,4'-DDD	9.9 Ui	9.9	9.9	
789-02-6	2,4'-DDT	18 P	9.9	2.2	
2385-85-5	Mirex	2.7 U	9.9	2.7	

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2407596
Date Collected: 09/28/2004
Date Received: 09/30/2004
Date Extracted: 10/15/2004
Date Analyzed: 10/27/2004

Organochlorine Pesticides

Sample Name: LDW-B4b-T
Lab Code: K2407596-001
File ID: J:\GC23\DATA\102604\1026F037.D
Instrument ID: GC23
Extraction Method: EPA 3540C
Analysis Method: 8081A

Sample Amount: 2.03 g
% Solids: NA
Dilution Factor: 1

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Lot: KWG0416041
Calibration ID: CAL3906

Column1: DB XLB
Column2: DB-35MS

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tetrachloro-m-xylene	68	30-150	10/27/04	Acceptable
Decachlorobiphenyl	89	30-150	10/27/04	Acceptable

† **Analyte Comments**

gamma-Chlordane For this analyte (CAS Registry No. 5103-74-2), USEPA has corrected the name to be beta-Chlordane, also known as trans-Chlordane.

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2407596
Date Collected: 09/28/2004
Date Received: 09/30/2004
Date Extracted: 10/15/2004
Date Analyzed: 10/27/2004

Organochlorine Pesticides

Sample Name: LDW-B5b-T
Lab Code: K2407596-002
File ID: J:\GC23\DATA\102604\1026F038.D
Instrument ID: GC23

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8081A

Extraction Lot: KWG0416041
Calibration ID: CAL3906

Sample Amount: 2.03 g
% Solids: NA
Dilution Factor: 1

Column1: DB XLB
Column2: DB-35MS

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
118-74-1	Hexachlorobenzene	3.4	U	9.9	3.4	
319-84-6	alpha-BHC	1.6	U	9.9	1.6	
319-85-7	beta-BHC	7.7	Ui	9.9	7.7	
58-89-9	gamma-BHC (Lindane)	2.8	U	9.9	2.8	
319-86-8	delta-BHC	3.4	U	9.9	3.4	
76-44-8	Heptachlor	4.5	U	9.9	4.5	
309-00-2	Aldrin	2.0	U	9.9	2.0	
1024-57-3	Heptachlor Epoxide	9.9	Ui	9.9	9.9	
5103-74-2	gamma-Chlordane†	1.4	U	9.9	1.4	
959-98-8	Endosulfan I	1.3	U	9.9	1.3	
5103-71-9	alpha-Chlordane	3.6	U	9.9	3.6	
60-57-1	Dieldrin	1.1	U	9.9	1.1	
72-55-9	4,4'-DDE	4.2	J	9.9	1.2	
72-20-8	Endrin	0.98	U	9.9	0.98	
33213-65-9	Endosulfan II	3.5	U	9.9	3.5	
72-54-8	4,4'-DDD	2.2	J	9.9	1.3	
7421-93-4	Endrin Aldehyde	1.7	U	9.9	1.7	
1031-07-8	Endosulfan Sulfate	2.7	U	9.9	2.7	
50-29-3	4,4'-DDT	18		9.9	3.8	
53494-70-5	Endrin Ketone	8.4	JP	9.9	2.9	
72-43-5	Methoxychlor	2.7	U	9.9	2.7	
8001-35-2	Toxaphene	150	Ui	500	150	
3424-82-6	2,4'-DDE	9.9	Ui	9.9	9.9	
53-19-0	2,4'-DDD	13	P	9.9	1.8	
789-02-6	2,4'-DDT	15	Ui	15	15	
2385-85-5	Mirex	2.7	U	9.9	2.7	

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2407596
Date Collected: 09/28/2004
Date Received: 09/30/2004
Date Extracted: 10/15/2004
Date Analyzed: 10/27/2004

Organochlorine Pesticides

Sample Name: LDW-B5b-T
Lab Code: K2407596-002
File ID: J:\GC23\DATA\102604\1026F038.D
Instrument ID: GC23
Extraction Method: EPA 3540C
Analysis Method: 8081A

Sample Amount: 2.03 g
% Solids: NA
Dilution Factor: 1

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Lot: KWG0416041
Calibration ID: CAL3906

Column1: DB XLB
Column2: DB-35MS

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tetrachloro-m-xylene	68	30-150	10/27/04	Acceptable
Decachlorobiphenyl	91	30-150	10/27/04	Acceptable

† Analyte Comments

gamma-Chlordane For this analyte (CAS Registry No. 5103-74-2), USEPA has corrected the name to be beta-Chlordane, also known as trans-Chlordane.

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2407596
Date Collected: 09/27/2004
Date Received: 09/30/2004
Date Extracted: 10/15/2004
Date Analyzed: 10/27/2004

Organochlorine Pesticides

Sample Name: LDW-B1b-T
Lab Code: K2407596-003
File ID: J:\GC23\DATA\102604\1026F040.D
Instrument ID: GC23

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8081A

Extraction Lot: KWG0416041
Calibration ID: CAL3906

Sample Amount: 2.01 g
% Solids: NA
Dilution Factor: 1

Column1: DB XLB
Column2: DB-35MS

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
118-74-1	Hexachlorobenzene	3.4 U	10	3.4	
319-84-6	alpha-BHC	1.6 U	10	1.6	
319-85-7	beta-BHC	7.5 Ui	10	7.5	
58-89-9	gamma-BHC (Lindane)	2.8 U	10	2.8	
319-86-8	delta-BHC	3.4 U	10	3.4	
76-44-8	Heptachlor	4.5 U	10	4.5	
309-00-2	Aldrin	2.0 U	10	2.0	
1024-57-3	Heptachlor Epoxide	10 Ui	10	10	
5103-74-2	gamma-Chlordane†	4.9 J	10	1.4	
959-98-8	Endosulfan I	1.3 U	10	1.3	
5103-71-9	alpha-Chlordane	3.6 U	10	3.6	
60-57-1	Dieldrin	1.1 U	10	1.1	
72-55-9	4,4'-DDE	5.0 JP	10	1.2	
72-20-8	Endrin	0.99 U	10	0.99	
33213-65-9	Endosulfan II	3.5 U	10	3.5	
72-54-8	4,4'-DDD	1.3 U	10	1.3	
7421-93-4	Endrin Aldehyde	1.7 U	10	1.7	
1031-07-8	Endosulfan Sulfate	2.7 U	10	2.7	
50-29-3	4,4'-DDT	11	10	3.8	
53494-70-5	Endrin Ketone	2.9 U	10	2.9	
72-43-5	Methoxychlor	6.3 J	10	2.7	
8001-35-2	Toxaphene	82 Ui	500	82	
3424-82-6	2,4'-DDE	1.1 Ui	10	1.1	
53-19-0	2,4'-DDD	2.0 Ui	10	2.0	
789-02-6	2,4'-DDT	10 Ui	10	10	
2385-85-5	Mirex	2.7 U	10	2.7	

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2407596
Date Collected: 09/27/2004
Date Received: 09/30/2004
Date Extracted: 10/15/2004
Date Analyzed: 10/27/2004

Organochlorine Pesticides

Sample Name: LDW-B1b-T
Lab Code: K2407596-003
File ID: J:\GC23\DATA\102604\1026F040.D
Instrument ID: GC23

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8081A

Extraction Lot: KWG0416041
Calibration ID: CAL3906

Sample Amount: 2.01 g
% Solids: NA
Dilution Factor: 1

Column1: DB XLB
Column2: DB-35MS

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tetrachloro-m-xylene	65	30-150	10/27/04	Acceptable
Decachlorobiphenyl	66	30-150	10/27/04	Acceptable

† Analyte Comments

gamma-Chlordane For this analyte (CAS Registry No. 5103-74-2), USEPA has corrected the name to be beta-Chlordane, also known as trans-Chlordane.

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2407596
Date Collected: 09/27/2004
Date Received: 09/30/2004
Date Extracted: 10/15/2004
Date Analyzed: 10/27/2004

Organochlorine Pesticides

Sample Name: LDW-B2b-T
Lab Code: K2407596-004
File ID: J:\GC23\DATA\102604\1026F041.D
Instrument ID: GC23

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8081A

Extraction Lot: KWG0416041
Calibration ID: CAL3906

Sample Amount: 2.02 g
% Solids: NA
Dilution Factor: 1

Column1: DB XLB
Column2: DB-35MS

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
118-74-1	Hexachlorobenzene	3.4 U	10	3.4	
319-84-6	alpha-BHC	1.6 U	10	1.6	
319-85-7	beta-BHC	6.8 Ui	10	6.8	
58-89-9	gamma-BHC (Lindane)	2.8 U	10	2.8	
319-86-8	delta-BHC	3.4 U	10	3.4	
76-44-8	Heptachlor	4.5 U	10	4.5	
309-00-2	Aldrin	2.0 U	10	2.0	
1024-57-3	Heptachlor Epoxide	1.5 U	10	1.5	
5103-74-2	gamma-Chlordane†	7.0 J	10	1.4	
959-98-8	Endosulfan I	1.3 U	10	1.3	
5103-71-9	alpha-Chlordane	3.6 U	10	3.6	
60-57-1	Dieldrin	1.1 U	10	1.1	
72-55-9	4,4'-DDE	5.5 J	10	1.2	
72-20-8	Endrin	0.99 U	10	0.99	
33213-65-9	Endosulfan II	3.5 U	10	3.5	
72-54-8	4,4'-DDD	3.9 J	10	1.3	
7421-93-4	Endrin Aldehyde	1.7 U	10	1.7	
1031-07-8	Endosulfan Sulfate	54 Ui	54	54	
50-29-3	4,4'-DDT	18	10	3.8	
53494-70-5	Endrin Ketone	2.9 U	10	2.9	
72-43-5	Methoxychlor	3.3 Ui	10	3.3	
8001-35-2	Toxaphene	200 Ui	500	200	
3424-82-6	2,4'-DDE	10 Ui	10	10	
53-19-0	2,4'-DDD	16 P	10	1.8	
789-02-6	2,4'-DDT	38 P	10	2.2	
2385-85-5	Mirex	2.7 U	10	2.7	

Comments: _____

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2407596
Date Collected: 09/27/2004
Date Received: 09/30/2004
Date Extracted: 10/15/2004
Date Analyzed: 10/27/2004

Organochlorine Pesticides

Sample Name: LDW-B2b-T
Lab Code: K2407596-004
File ID: J:\GC23\DATA\102604\1026F041.D
Instrument ID: GC23

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8081A

Extraction Lot: KWG0416041
Calibration ID: CAL3906

Sample Amount: 2.02 g
% Solids: NA
Dilution Factor: 1

Column1: DB XLB
Column2: DB-35MS

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tetrachloro-m-xylene	69	30-150	10/27/04	Acceptable
Decachlorobiphenyl	103	30-150	10/27/04	Acceptable

† Analyte Comments

gamma-Chlordane For this analyte (CAS Registry No. 5103-74-2), USEPA has corrected the name to be beta-Chlordane, also known as trans-Chlordane.

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2407596
Date Extracted: 10/15/2004
Date Analyzed: 10/27/2004

**Duplicate Sample Summary
 Organochlorine Pesticides**

Sample Name: LDW-B5b-T
Lab Code: K2407596-002
Extraction Method: EPA 3540C
Analysis Method: 8081A

Units: ug/Kg
Basis: Wet
Level: Low
Extraction Lot: KWG0416041

Analyte Name	MRL	MDL	Sample Result	LDW-B5b-TDUP KWG0416041-1 Duplicate Sample		Relative Percent Difference	RPD Limit
				Result	Average		
Hexachlorobenzene	9.9	3.4	ND	ND	ND	-	50
alpha-BHC	9.9	1.6	ND	ND	ND	-	50
beta-BHC	9.9	9.9	ND	ND	ND	-	50
gamma-BHC (Lindane)	9.9	9.9	ND	ND	ND	-	50
delta-BHC	9.9	3.4	ND	ND	ND	-	50
Heptachlor	9.9	4.5	ND	ND	ND	-	50
Aldrin	9.9	2.0	ND	ND	ND	-	50
Heptachlor Epoxide	9.9	9.9	ND	ND	ND	-	50
gamma-Chlordane	9.9	1.4	ND	ND	ND	-	50
Endosulfan I	9.9	1.3	ND	ND	ND	-	50
alpha-Chlordane	9.9	3.6	ND	ND	ND	-	50
Dieldrin	9.9	1.1	ND	ND	ND	-	50
4,4'-DDE	9.9	1.2	4.2	5.4	4.8	24 #	50
Endrin	9.9	0.98	ND	ND	ND	-	50
Endosulfan II	9.9	3.5	ND	ND	ND	-	50
4,4'-DDD	9.9	1.3	2.2	2.1	2.1	6 #	50
Endrin Aldehyde	9.9	1.7	ND	ND	ND	-	50
Endosulfan Sulfate	9.9	6.1	ND	ND	ND	-	50
4,4'-DDT	9.9	3.8	18	18	18	0 #	50
Endrin Ketone	9.9	2.9	8.4	ND	NC	NC	50
Methoxychlor	9.9	2.7	ND	ND	ND	-	50
Toxaphene	500	140	ND	ND	ND	-	50
2,4'-DDE	9.9	9.9	ND	ND	ND	-	50
2,4'-DDD	9.9	4.9	13	ND	NC	NC	50
2,4'-DDT	9.9	2.2	ND	83	NC	NC	50
Mirex	9.9	2.7	ND	ND	ND	-	50

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

**DDT Reanalysis
EPA Method 8270**

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406516
Date Collected: 8/25/04
Date Received: 8/30/04

Pesticide Confirmation by GC/MS

Sample Name: LDW-C10-S2
Lab Code: K2406516-002
Test Notes:

Units: ug/Kg
Basis: Dry

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
2,4-DDE	EPA 3540C	CAS SOP	25	5	9/1/04	12/27/04	ND	*
4,4-DDE	EPA 3540C	CAS SOP	39	5	9/1/04	12/27/04	ND	i,*
2,4-DDD	EPA 3540C	CAS SOP	25	5	9/1/04	12/27/04	ND	*
4,4-DDD	EPA 3540C	CAS SOP	51	5	9/1/04	12/27/04	ND	i,*
2,4-DDT	EPA 3540C	CAS SOP	25	5	9/1/04	12/27/04	ND	*
4,4-DDT	EPA 3540C	CAS SOP	39	5	9/1/04	12/27/04	ND	i,*

Approved By: _____ Date: 12/29/04

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406516
Date Collected: 8/25/04
Date Received: 8/30/04

Pesticide Confirmation by GC/MS

Sample Name: LDW-C10-S1
Lab Code: K2406516-003
Test Notes:

Units: ug/Kg
Basis: Dry

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
2,4-DDE	EPA 3540C	CAS SOP	9.9	2	9/1/04	12/27/04	ND	*
4,4-DDE	EPA 3540C	CAS SOP	12	2	9/1/04	12/27/04	ND	i,*
2,4-DDD	EPA 3540C	CAS SOP	12	2	9/1/04	12/27/04	ND	i,*
4,4-DDD	EPA 3540C	CAS SOP	29	2	9/1/04	12/27/04	ND	i,*
2,4-DDT	EPA 3540C	CAS SOP	12	2	9/1/04	12/27/04	ND	i,*
4,4-DDT	EPA 3540C	CAS SOP	9.9	2	9/1/04	12/27/04	ND	*

Approved By: _____

J

Date: _____

12/29/04

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406516
Date Collected: 8/26/04
Date Received: 8/30/04

Pesticide Confirmation by GC/MS

Sample Name: LDW-C7-S1
Lab Code: K2406516-006
Test Notes:

Units: ug/Kg
Basis: Dry

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
2,4-DDE	EPA 3540C	CAS SOP	25	5	9/1/04	12/28/04	ND	*
4,4-DDE	EPA 3540C	CAS SOP	25	5	9/1/04	12/28/04	ND	*
2,4-DDD	EPA 3540C	CAS SOP	25	5	9/1/04	12/28/04	ND	*
4,4-DDD	EPA 3540C	CAS SOP	25	5	9/1/04	12/28/04	ND	*
2,4-DDT	EPA 3540C	CAS SOP	25	5	9/1/04	12/28/04	ND	*
4,4-DDT	EPA 3540C	CAS SOP	25	5	9/1/04	12/28/04	ND	*

Approved By: _____ Date: 12/29/04

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406516
Date Collected: 8/26/04
Date Received: 8/30/04

Pesticide Confirmation by GC/MS

Sample Name: LDW-C8-S
Lab Code: K2406516-009
Test Notes:

Units: ug/Kg
Basis: Dry

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
2,4-DDE	EPA 3540C	CAS SOP	25	5	9/1/04	12/28/04	ND	*
4,4-DDE	EPA 3540C	CAS SOP	33	5	9/1/04	12/28/04	ND	i,*
2,4-DDD	EPA 3540C	CAS SOP	25	5	9/1/04	12/28/04	ND	*
4,4-DDD	EPA 3540C	CAS SOP	25	5	9/1/04	12/28/04	ND	*
2,4-DDT	EPA 3540C	CAS SOP	34	5	9/1/04	12/28/04	ND	i,*
4,4-DDT	EPA 3540C	CAS SOP	25	5	9/1/04	12/28/04	ND	*

Approved By: _____ Date: 12/29/04

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406932
Date Collected: 8/17/04
Date Received: 8/20/04

Pesticide Confirmation by GC/MS

Sample Name: LDW-B8a-T
Lab Code: K2406932-006
Test Notes:

Units: ug/Kg
Basis: Wet

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
2,4-DDE	EPA 3540C	CAS SOP	50	1	9/29/04	12/27/04	ND	*
4,4-DDE	EPA 3540C	CAS SOP	50	1	9/29/04	12/27/04	ND	*
2,4-DDD	EPA 3540C	CAS SOP	50	1	9/29/04	12/27/04	ND	*
4,4-DDD	EPA 3540C	CAS SOP	50	1	9/29/04	12/27/04	ND	*
2,4-DDT	EPA 3540C	CAS SOP	50	1	9/29/04	12/27/04	ND	*
4,4-DDT	EPA 3540C	CAS SOP	50	1	9/29/04	12/27/04	ND	*

Approved By: _____



Date: 9/10/05

1S22/091599p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2407012
Date Collected: 8/17/04
Date Received: 9/20/04

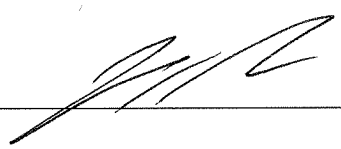
Pesticide Confirmation by GC/MS

Sample Name: LDW-B8a-S
Lab Code: K2407012-006
Test Notes:

Units: ug/Kg
Basis: Dry

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
2,4-DDE	EPA 3540C	CAS SOP	5	1	9/23/04	12/27/04	ND	*
4,4-DDE	EPA 3540C	CAS SOP	6.5	1	9/23/04	12/27/04	ND	i,*
2,4-DDD	EPA 3540C	CAS SOP	9.4	1	9/23/04	12/27/04	ND	i,*
4,4-DDD	EPA 3540C	CAS SOP	13	1	9/23/04	12/27/04	ND	i,*
2,4-DDT	EPA 3540C	CAS SOP	5	1	9/23/04	12/27/04	ND	*
4,4-DDT	EPA 3540C	CAS SOP	5	1	9/23/04	12/27/04	36	*

Approved By: _____



Date: _____

9/10/05

1S22/091599p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2407452
Date Collected: 9/24/04
Date Received: 9/25/04

Pesticide Confirmation by GC/MS

Sample Name: LDW-B5a-T
Lab Code: K2407452-001
Test Notes:

Units: ug/Kg
Basis: Wet

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
2,4-DDE	EPA 3540C	CAS SOP	71	1	10/15/04	12/27/04	ND	*
4,4-DDE	EPA 3540C	CAS SOP	71	1	10/15/04	12/27/04	ND	*
2,4-DDD	EPA 3540C	CAS SOP	71	1	10/15/04	12/27/04	95	*
4,4-DDD	EPA 3540C	CAS SOP	71	1	10/15/04	12/27/04	ND	*
2,4-DDT	EPA 3540C	CAS SOP	71	1	10/15/04	12/27/04	ND	*
4,4-DDT	EPA 3540C	CAS SOP	71	1	10/15/04	12/27/04	ND	*

Approved By: _____ Date: 12/29/04

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Sediment

Service Request: K2407473
Date Collected: 9/24/04
Date Received: 9/27/04

Pesticide Confirmation by GC/MS

Sample Name: LDW-B5a-S
Lab Code: K2407473-001
Test Notes:

Units: ug/Kg
Basis: Dry

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
2,4-DDE	EPA 3540C	CAS SOP	16	1	10/18/04	12/27/04	ND	i,*
4,4-DDE	EPA 3540C	CAS SOP	5	1	10/18/04	12/27/04	64	*
2,4-DDD	EPA 3540C	CAS SOP	5	1	10/18/04	12/27/04	16	*
4,4-DDD	EPA 3540C	CAS SOP	5	1	10/18/04	12/27/04	34	*
2,4-DDT	EPA 3540C	CAS SOP	5	1	10/18/04	12/27/04	5.5	*
4,4-DDT	EPA 3540C	CAS SOP	5	1	10/18/04	12/27/04	16	*

Approved By: _____ Date: _____

J *12/29/04*

Polychlorinated Biphenyls
PCB's
EPA Method 8082

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406170
Date Collected: 08/13/2004
Date Received: 08/18/2004
Date Extracted: 09/23/2004
Date Analyzed: 10/06/2004

Polychlorinated Biphenyls (PCBs)

Sample Name: LDW-B2a-S
Lab Code: K2406170-001
File ID: J:\GC09\DATA\100604A.B\1006F023.D
Instrument ID: GC09.i

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8082

Extraction Lot: KWG0414495
Calibration ID: CAL3870

Sample Amount: 40.07 g
% Solids: 50.0
Dilution Factor: 1

Column1: DB-35MS
Column2: DB-XLB

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
12674-11-2	Aroclor 1016	3.6 U	10	3.6	
11104-28-2	Aroclor 1221	3.6 U	20	3.6	
11141-16-5	Aroclor 1232	3.6 U	10	3.6	
53469-21-9	Aroclor 1242	3.6 U	10	3.6	
12672-29-6	Aroclor 1248	3.6 U	10	3.6	
11097-69-1	Aroclor 1254	80	10	3.6	
11096-82-5	Aroclor 1260	83	10	3.6	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Decachlorobiphenyl	61	50-150	10/06/04	Acceptable

Comments: _____

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406170
Date Collected: 08/15/2004
Date Received: 08/18/2004
Date Extracted: 09/23/2004
Date Analyzed: 10/06/2004

Polychlorinated Biphenyls (PCBs)

Sample Name: LDW-B6a-S
Lab Code: K2406170-002
File ID: J:\GC09\DATA\100604A.B\1006F024.D
Instrument ID: GC09.i

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8082

Extraction Lot: KWG0414495
Calibration ID: CAL3870

Column1: DB-35MS
Column2: DB-XLB

Sample Amount: 28.12 g
% Solids: 71.2
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
12674-11-2	Aroclor 1016	2.6	U	10	2.6	
11104-28-2	Aroclor 1221	2.6	U	20	2.6	
11141-16-5	Aroclor 1232	2.6	U	10	2.6	
53469-21-9	Aroclor 1242	2.6	U	10	2.6	
12672-29-6	Aroclor 1248	2.6	U	10	2.6	
11097-69-1	Aroclor 1254	150		10	2.6	
11096-82-5	Aroclor 1260	150		10	2.6	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Decachlorobiphenyl	58	50-150	10/06/04	Acceptable

Comments: _____

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406170
Date Collected: 08/14/2004
Date Received: 08/18/2004
Date Extracted: 09/23/2004
Date Analyzed: 10/06/2004

Polychlorinated Biphenyls (PCBs)

Sample Name: LDW-B4a-S
Lab Code: K2406170-003
File ID: J:\GC09\DATA\100604A.B\1006F025.D
Instrument ID: GC09.i

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8082

Extraction Lot: KWG0414495
Calibration ID: CAL3870

Sample Amount: 37.25 g
% Solids: 53.7
Dilution Factor: 1

Column1: DB-35MS
Column2: DB-XLB

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
12674-11-2	Aroclor 1016	3.4	U	10	3.4	
11104-28-2	Aroclor 1221	3.4	U	20	3.4	
11141-16-5	Aroclor 1232	3.4	U	10	3.4	
53469-21-9	Aroclor 1242	3.4	U	10	3.4	
12672-29-6	Aroclor 1248	3.4	U	10	3.4	
11097-69-1	Aroclor 1254	170		10	3.4	
11096-82-5	Aroclor 1260	160		10	3.4	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Decachlorobiphenyl	90	50-150	10/06/04	Acceptable

Comments: _____

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406170
Date Collected: 08/12/2004
Date Received: 08/18/2004
Date Extracted: 09/23/2004
Date Analyzed: 10/05/2004

Polychlorinated Biphenyls (PCBs)

Sample Name: LDW-B1a-S
Lab Code: K2406170-004
File ID: J:\GC09\DATA\100404.B\1004F024.D
Instrument ID: GC09.i

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8082

Extraction Lot: KWG0414495
Calibration ID: CAL3870

Column1: DB-35MS
Column2: DB-XLB

Sample Amount: 24.96 g
% Solids: 80.3
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
12674-11-2	Aroclor 1016	2.3	U	10	2.3	
11104-28-2	Aroclor 1221	2.3	U	20	2.3	
11141-16-5	Aroclor 1232	2.3	U	10	2.3	
53469-21-9	Aroclor 1242	2.3	U	10	2.3	
12672-29-6	Aroclor 1248	2.3	U	10	2.3	
11097-69-1	Aroclor 1254	2.3	U	10	2.3	
11096-82-5	Aroclor 1260	2.3	U	10	2.3	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Decachlorobiphenyl	63	50-150	10/05/04	Acceptable

Comments: _____

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406170
Date Collected: 08/11/2004
Date Received: 08/18/2004
Date Extracted: 09/23/2004
Date Analyzed: 10/06/2004

Polychlorinated Biphenyls (PCBs)

Sample Name: LDW-B9b-S
Lab Code: K2406170-005
File ID: J:\GC09\DATA\100604A.B\1006F026.D
Instrument ID: GC09.i

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8082

Extraction Lot: KWG0414495
Calibration ID: CAL3870

Sample Amount: 37.03 g
% Solids: 54.6
Dilution Factor: 1

Column1: DB-35MS
Column2: DB-XLB

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
12674-11-2	Aroclor 1016	3.3	U	9.9	3.3	
11104-28-2	Aroclor 1221	3.3	U	20	3.3	
11141-16-5	Aroclor 1232	3.3	U	9.9	3.3	
53469-21-9	Aroclor 1242	3.3	U	9.9	3.3	
12672-29-6	Aroclor 1248	3.3	U	9.9	3.3	
11097-69-1	Aroclor 1254	110		9.9	3.3	
11096-82-5	Aroclor 1260	100		9.9	3.3	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Decachlorobiphenyl	65	50-150	10/06/04	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406226
Date Collected: 08/13/2004
Date Received: 08/19/2004
Date Extracted: 09/23/2004
Date Analyzed: 10/06/2004

Polychlorinated Biphenyls (PCBs)

Sample Name: LDW-B7b-S
Lab Code: K2406226-001
File ID: J:\GC09\DATA\100604A.B\1006F027.D
Instrument ID: GC09.i

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8082

Extraction Lot: KWG0414495
Calibration ID: CAL3870

Sample Amount: 39.66 g
% Solids: 50.5
Dilution Factor: 1

Column1: DB-35MS
Column2: DB-XLB

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
12674-11-2	Aroclor 1016	3.6 U	10	3.6	
11104-28-2	Aroclor 1221	3.6 U	20	3.6	
11141-16-5	Aroclor 1232	3.6 U	10	3.6	
53469-21-9	Aroclor 1242	3.6 U	10	3.6	
12672-29-6	Aroclor 1248	3.6 U	10	3.6	
11097-69-1	Aroclor 1254	79	10	3.6	
11096-82-5	Aroclor 1260	88	10	3.6	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Decachlorobiphenyl	53	50-150	10/06/04	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406226
Date Collected: 08/10/2004
Date Received: 08/19/2004
Date Extracted: 09/23/2004
Date Analyzed: 10/06/2004

Polychlorinated Biphenyls (PCBs)

Sample Name: LDW-B3b-S
Lab Code: K2406226-002
File ID: J:\GC09\DATA\100604A.B\1006F028.D
Instrument ID: GC09.i

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8082

Extraction Lot: KWG0414495
Calibration ID: CAL3870

Sample Amount: 30.19 g
% Solids: 66.4
Dilution Factor: 1

Column1: DB-35MS
Column2: DB-XLB

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
12674-11-2	Aroclor 1016	2.8 U	10	2.8	
11104-28-2	Aroclor 1221	2.8 U	20	2.8	
11141-16-5	Aroclor 1232	2.8 U	10	2.8	
53469-21-9	Aroclor 1242	2.8 U	10	2.8	
12672-29-6	Aroclor 1248	2.8 U	10	2.8	
11097-69-1	Aroclor 1254	180	10	2.8	
11096-82-5	Aroclor 1260	170	10	2.8	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Decachlorobiphenyl	76	50-150	10/06/04	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406232
Date Collected: 08/15/2004
Date Received: 08/19/2004
Date Extracted: 09/29/2004
Date Analyzed: 10/05/2004

Polychlorinated Biphenyls (PCBs)

Sample Name: LDW-B1a-T
Lab Code: K2406232-001
File ID: J:\GC09\DATA\100504.B\1005F008.D
Instrument ID: GC09.i

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8082

Extraction Lot: KWG0414868
Calibration ID: CAL3870

Sample Amount: 2.02 g
% Solids: NA
Dilution Factor: 1

Column1: DB-35MS
Column2: DB-XLB

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
12674-11-2	Aroclor 1016	20	U	100	20	
11104-28-2	Aroclor 1221	31	U	200	31	
11141-16-5	Aroclor 1232	20	U	100	20	
53469-21-9	Aroclor 1242	35	U	100	35	
12672-29-6	Aroclor 1248	7.6	U	100	7.6	
11097-69-1	Aroclor 1254	66	J	100	15	
11096-82-5	Aroclor 1260	47	U	100	47	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Decachlorobiphenyl	64	38-150	10/05/04	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406232
Date Collected: 08/14/2004
Date Received: 08/19/2004
Date Extracted: 09/29/2004
Date Analyzed: 10/13/2004

Polychlorinated Biphenyls (PCBs)

Sample Name: LDW-B4a-T
Lab Code: K2406232-002
File ID: J:\GC09\DATA\101204.B\1012F019.D
Instrument ID: GC09.i

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8082

Extraction Lot: KWG0414868
Calibration ID: CAL3870

Sample Amount: 2.03 g
% Solids: NA
Dilution Factor: 1

Column1: DB-35MS
Column2: DB-XLB

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
12674-11-2	Aroclor 1016	20	U	99	20	
11104-28-2	Aroclor 1221	64	Ui	200	64	
11141-16-5	Aroclor 1232	30	Ui	99	30	
53469-21-9	Aroclor 1242	35	U	99	35	
12672-29-6	Aroclor 1248	99	Ui	99	99	
11097-69-1	Aroclor 1254	54	Ui	99	54	
11096-82-5	Aroclor 1260	87	Ui	99	87	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Decachlorobiphenyl	61	38-150	10/13/04	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406232
Date Collected: 08/14/2004
Date Received: 08/19/2004
Date Extracted: 09/29/2004
Date Analyzed: 10/05/2004

Polychlorinated Biphenyls (PCBs)

Sample Name: LDW-B2a-T
Lab Code: K2406232-003
File ID: J:\GC09\DATA\100504.B\1005F010.D
Instrument ID: GC09.i

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8082

Extraction Lot: KWG0414868
Calibration ID: CAL3870

Sample Amount: 2.02 g
% Solids: NA
Dilution Factor: 1

Column1: DB-35MS
Column2: DB-XLB

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
12674-11-2	Aroclor 1016	20	U	100	20	
11104-28-2	Aroclor 1221	31	U	200	31	
11141-16-5	Aroclor 1232	20	U	100	20	
53469-21-9	Aroclor 1242	35	U	100	35	
12672-29-6	Aroclor 1248	7.6	U	100	7.6	
11097-69-1	Aroclor 1254	180		100	15	
11096-82-5	Aroclor 1260	47	U	100	47	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Decachlorobiphenyl	62	38-150	10/05/04	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406232
Date Collected: 08/11/2004
Date Received: 08/19/2004
Date Extracted: 09/29/2004
Date Analyzed: 10/05/2004

Polychlorinated Biphenyls (PCBs)

Sample Name: LDW-B9b-T
Lab Code: K2406232-004
File ID: J:\GC09\DATA\100504.B\1005F011.D
Instrument ID: GC09.i

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8082

Extraction Lot: KWG0414868
Calibration ID: CAL3870

Sample Amount: 2.04 g
% Solids: NA
Dilution Factor: 1

Column1: DB-35MS
Column2: DB-XLB

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
12674-11-2	Aroclor 1016	20	U	99	20	
11104-28-2	Aroclor 1221	31	U	200	31	
11141-16-5	Aroclor 1232	20	U	99	20	
53469-21-9	Aroclor 1242	35	U	99	35	
12672-29-6	Aroclor 1248	7.5	U	99	7.5	
11097-69-1	Aroclor 1254	99	J	99	15	
11096-82-5	Aroclor 1260	47	U	99	47	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Decachlorobiphenyl	62	38-150	10/05/04	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406232
Date Collected: 08/15/2004
Date Received: 08/19/2004
Date Extracted: 09/29/2004
Date Analyzed: 10/05/2004

Polychlorinated Biphenyls (PCBs)

Sample Name: LDW-B6a-T
Lab Code: K2406232-005
File ID: J:\GC09\DATA\100504.B\1005F012.D
Instrument ID: GC09.i

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8082

Extraction Lot: KWG0414868
Calibration ID: CAL3870

Sample Amount: 2.06 g
% Solids: NA
Dilution Factor: 1

Column1: DB-35MS
Column2: DB-XLB

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
12674-11-2	Aroclor 1016	20 U	98	20	
11104-28-2	Aroclor 1221	31 U	200	31	
11141-16-5	Aroclor 1232	20 U	98	20	
53469-21-9	Aroclor 1242	34 U	98	34	
12672-29-6	Aroclor 1248	7.4 U	98	7.4	
11097-69-1	Aroclor 1254	220	98	15	
11096-82-5	Aroclor 1260	46 U	98	46	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Decachlorobiphenyl	64	38-150	10/05/04	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406232
Date Collected: 08/10/2004
Date Received: 08/19/2004
Date Extracted: 09/29/2004
Date Analyzed: 10/05/2004

Polychlorinated Biphenyls (PCBs)

Sample Name: LDW-B3b-T
Lab Code: K2406232-008
File ID: J:\GC09\DATA\100504.B\1005F015.D
Instrument ID: GC09.i

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8082

Extraction Lot: KWG0414868
Calibration ID: CAL3870

Sample Amount: 2.00 g
% Solids: NA
Dilution Factor: 1

Column1: DB-35MS
Column2: DB-XLB

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
12674-11-2	Aroclor 1016	20	U	100	20	
11104-28-2	Aroclor 1221	31	U	200	31	
11141-16-5	Aroclor 1232	20	U	100	20	
53469-21-9	Aroclor 1242	35	U	100	35	
12672-29-6	Aroclor 1248	7.6	U	100	7.6	
11097-69-1	Aroclor 1254	310		100	15	
11096-82-5	Aroclor 1260	47	U	100	47	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Decachlorobiphenyl	67	38-150	10/05/04	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406232
Date Collected: 08/13/2004
Date Received: 08/19/2004
Date Extracted: 09/29/2004
Date Analyzed: 10/06/2004

Polychlorinated Biphenyls (PCBs)

Sample Name: LDW-B7b-T
Lab Code: K2406232-009
File ID: J:\GC09\DATA\100504.B\1005F016.D
Instrument ID: GC09.i

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8082

Extraction Lot: KWG0414868
Calibration ID: CAL3870

Sample Amount: 2.03 g
% Solids: NA
Dilution Factor: 1

Column1: DB-35MS
Column2: DB-XLB

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
12674-11-2	Aroclor 1016	20	U	99	20	
11104-28-2	Aroclor 1221	31	U	200	31	
11141-16-5	Aroclor 1232	20	U	99	20	
53469-21-9	Aroclor 1242	35	U	99	35	
12672-29-6	Aroclor 1248	7.5	U	99	7.5	
11097-69-1	Aroclor 1254	180		99	15	
11096-82-5	Aroclor 1260	47	U	99	47	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Decachlorobiphenyl	62	38-150	10/06/04	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406296
Date Collected: 08/18/2004
Date Received: 08/21/2004
Date Extracted: 09/23/2004
Date Analyzed: 10/07/2004

Polychlorinated Biphenyls (PCBs)

Sample Name: LDW-B6b-S
Lab Code: K2406296-001
File ID: J:\GC09\DATA\100604A.B\1006F035.D
Instrument ID: GC09.i

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8082

Extraction Lot: KWG0414495
Calibration ID: CAL3870

Sample Amount: 41.93 g
% Solids: 47.8
Dilution Factor: 1

Column1: DB-35MS
Column2: DB-XLB

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
12674-11-2	Aroclor 1016	3.8 U	10	3.8	
11104-28-2	Aroclor 1221	3.8 U	20	3.8	
11141-16-5	Aroclor 1232	3.8 U	10	3.8	
53469-21-9	Aroclor 1242	3.8 U	10	3.8	
12672-29-6	Aroclor 1248	120	10	3.8	
11097-69-1	Aroclor 1254	150	10	3.8	
11096-82-5	Aroclor 1260	150	10	3.8	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Decachlorobiphenyl	53	50-150	10/07/04	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406296
Date Collected: 08/19/2004
Date Received: 08/21/2004
Date Extracted: 09/23/2004
Date Analyzed: 10/05/2004

Polychlorinated Biphenyls (PCBs)

Sample Name: LDW-B8b-S
Lab Code: K2406296-002
File ID: J:\GC09\DATA\100404.B\1004F035.D
Instrument ID: GC09.i

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8082

Extraction Lot: KWG0414495
Calibration ID: CAL3870

Sample Amount: 42.58 g
% Solids: 47.0
Dilution Factor: 1

Column1: DB-35MS
Column2: DB-XLB

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
12674-11-2	Aroclor 1016	3.9	U	10	3.9	
11104-28-2	Aroclor 1221	3.9	U	20	3.9	
11141-16-5	Aroclor 1232	3.9	U	10	3.9	
53469-21-9	Aroclor 1242	14	P	10	3.9	
12672-29-6	Aroclor 1248	3.9	U	10	3.9	
11097-69-1	Aroclor 1254	3.9	U	10	3.9	
11096-82-5	Aroclor 1260	23		10	3.9	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Decachlorobiphenyl	56	50-150	10/05/04	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406296
Date Collected: 08/19/2004
Date Received: 08/21/2004
Date Extracted: 09/23/2004
Date Analyzed: 10/05/2004

Polychlorinated Biphenyls (PCBs)

Sample Name: LDW-B10b-S
Lab Code: K2406296-003
File ID: J:\GC09\DATA\100404.B\1004F036.D
Instrument ID: GC09.i

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8082

Extraction Lot: KWG0414495
Calibration ID: CAL3870

Sample Amount: 33.96 g
% Solids: 59.1
Dilution Factor: 1

Column1: DB-35MS
Column2: DB-XLB

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
12674-11-2	Aroclor 1016	3.1	U	10	3.1	
11104-28-2	Aroclor 1221	3.1	U	20	3.1	
11141-16-5	Aroclor 1232	3.1	U	10	3.1	
53469-21-9	Aroclor 1242	10	Ui	10	10	
12672-29-6	Aroclor 1248	3.1	U	10	3.1	
11097-69-1	Aroclor 1254	3.1	U	10	3.1	
11096-82-5	Aroclor 1260	9.8	JP	10	3.1	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Decachlorobiphenyl	55	50-150	10/05/04	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406297
Date Collected: 08/18/2004
Date Received: 08/21/2004
Date Extracted: 09/29/2004
Date Analyzed: 10/06/2004

Polychlorinated Biphenyls (PCBs)

Sample Name: LDW-B6b-T
Lab Code: K2406297-001
File ID: J:\GC09\DATA\100504.B\1005F022.D
Instrument ID: GC09.i

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8082

Extraction Lot: KWG0414868
Calibration ID: CAL3870

Sample Amount: 1.13 g
% Solids: NA
Dilution Factor: 1

Column1: DB-35MS
Column2: DB-XLB

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
12674-11-2	Aroclor 1016	36	U	180	36	
11104-28-2	Aroclor 1221	55	U	360	55	
11141-16-5	Aroclor 1232	36	U	180	36	
53469-21-9	Aroclor 1242	62	U	180	62	
12672-29-6	Aroclor 1248	14	U	180	14	
11097-69-1	Aroclor 1254	220		180	27	
11096-82-5	Aroclor 1260	84	U	180	84	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Decachlorobiphenyl	64	38-150	10/06/04	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406297
Date Collected: 08/19/2004
Date Received: 08/21/2004
Date Extracted: 09/29/2004
Date Analyzed: 10/06/2004

Polychlorinated Biphenyls (PCBs)

Sample Name: LDW-B8b-T
Lab Code: K2406297-002
File ID: J:\GC09\DATA\100504.B\1005F023.D
Instrument ID: GC09.i

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8082

Extraction Lot: KWG0414868
Calibration ID: CAL3870

Sample Amount: 2.07 g
% Solids: NA
Dilution Factor: 1

Column1: DB-35MS
Column2: DB-XLB

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
12674-11-2	Aroclor 1016	20	U	97	20	
11104-28-2	Aroclor 1221	30	U	200	30	
11141-16-5	Aroclor 1232	20	U	97	20	
53469-21-9	Aroclor 1242	34	U	97	34	
12672-29-6	Aroclor 1248	7.4	U	97	7.4	
11097-69-1	Aroclor 1254	60	J	97	15	
11096-82-5	Aroclor 1260	46	U	97	46	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Decachlorobiphenyl	64	38-150	10/06/04	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406297
Date Collected: 08/19/2004
Date Received: 08/21/2004
Date Extracted: 09/29/2004
Date Analyzed: 10/06/2004

Polychlorinated Biphenyls (PCBs)

Sample Name: LDW-B10b-T
Lab Code: K2406297-003
File ID: J:\GC09\DATA\100504.B\1005F024.D
Instrument ID: GC09.i

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8082

Extraction Lot: KWG0414868
Calibration ID: CAL3870

Sample Amount: 2.01 g
% Solids: NA
Dilution Factor: 1

Column1: DB-35MS
Column2: DB-XLB

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
12674-11-2	Aroclor 1016	20	U	100	20	
11104-28-2	Aroclor 1221	31	U	200	31	
11141-16-5	Aroclor 1232	20	U	100	20	
53469-21-9	Aroclor 1242	35	U	100	35	
12672-29-6	Aroclor 1248	7.6	U	100	7.6	
11097-69-1	Aroclor 1254	74	J	100	15	
11096-82-5	Aroclor 1260	47	U	100	47	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Decachlorobiphenyl	121	38-150	10/06/04	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: Lower Duwamish Working Group/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406516
Date Collected: 08/27/2004
Date Received: 08/30/2004
Date Extracted: 09/01/2004
Date Analyzed: 09/09/2004

Polychlorinated Biphenyls (PCBs)

Sample Name: LDW-C4-S
Lab Code: K2406516-001
File ID: J:\GC09\DATA\090804.B\0908F015.D
Instrument ID: GC09.i

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8082

Extraction Lot: KWG0413103
Calibration ID: CAL3724

Sample Amount: 30.80 g
% Solids: 66.8
Dilution Factor: 1

Column1: DB-35MS
Column2: DB-XLB

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
12674-11-2	Aroclor 1016	2.7	U	9.8	2.7	
11104-28-2	Aroclor 1221	2.7	U	20	2.7	
11141-16-5	Aroclor 1232	2.7	U	9.8	2.7	
53469-21-9	Aroclor 1242	2.7	U	9.8	2.7	
12672-29-6	Aroclor 1248	2.7	U	9.8	2.7	
11097-69-1	Aroclor 1254	69		9.8	2.7	
11096-82-5	Aroclor 1260	57	Ui	57	57	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Decachlorobiphenyl	90	50-150	09/09/04	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: Lower Duwamish Working Group/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406516
Date Collected: 08/25/2004
Date Received: 08/30/2004
Date Extracted: 09/01/2004
Date Analyzed: 09/09/2004

Polychlorinated Biphenyls (PCBs)

Sample Name: LDW-C10-S2
Lab Code: K2406516-002
File ID: J:\GC09\DATA\090804.B\0908F038.D
Instrument ID: GC09.i

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8082

Extraction Lot: KWG0413103
Calibration ID: CAL3724

Sample Amount: 39.69 g
% Solids: 51.5
Dilution Factor: 20

Column1: DB-35MS
Column2: DB-XLB

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
12674-11-2	Aroclor 1016	70	U	200	70	
11104-28-2	Aroclor 1221	70	U	400	70	
11141-16-5	Aroclor 1232	70	U	200	70	
53469-21-9	Aroclor 1242	70	U	200	70	
12672-29-6	Aroclor 1248	70	U	200	70	
11097-69-1	Aroclor 1254	70	U	200	70	
11096-82-5	Aroclor 1260	15000	D	200	70	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Decachlorobiphenyl	67	50-150	09/09/04	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: Lower Duwamish Working Group/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406516
Date Collected: 08/25/2004
Date Received: 08/30/2004
Date Extracted: 09/01/2004
Date Analyzed: 09/09/2004

Polychlorinated Biphenyls (PCBs)

Sample Name: LDW-C10-S1
Lab Code: K2406516-003
File ID: J:\GC09\DATA\090804.B\0908F039.D
Instrument ID: GC09.i

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8082

Extraction Lot: KWG0413103
Calibration ID: CAL3724

Sample Amount: 40.00 g
% Solids: 50.4
Dilution Factor: 10

Column1: DB-35MS
Column2: DB-XLB

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
12674-11-2	Aroclor 1016	36	U	100	36	
11104-28-2	Aroclor 1221	36	U	200	36	
11141-16-5	Aroclor 1232	36	U	100	36	
53469-21-9	Aroclor 1242	36	U	100	36	
12672-29-6	Aroclor 1248	36	U	100	36	
11097-69-1	Aroclor 1254	36	U	100	36	
11096-82-5	Aroclor 1260	6600	D	100	36	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Decachlorobiphenyl	106	50-150	09/09/04	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: Lower Duwamish Working Group/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406516
Date Collected: 08/25/2004
Date Received: 08/30/2004
Date Extracted: 09/01/2004
Date Analyzed: 09/09/2004

Polychlorinated Biphenyls (PCBs)

Sample Name: LDW-C6-S
Lab Code: K2406516-004
File ID: J:\GC09\DATA\090804.B\0908F018.D
Instrument ID: GC09.i

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8082

Extraction Lot: KWG0413103
Calibration ID: CAL3724

Sample Amount: 28.90 g
% Solids: 70.2
Dilution Factor: 1

Column1: DB-35MS
Column2: DB-XLB

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
12674-11-2	Aroclor 1016	2.6	U	9.9	2.6	
11104-28-2	Aroclor 1221	2.6	U	20	2.6	
11141-16-5	Aroclor 1232	2.6	U	9.9	2.6	
53469-21-9	Aroclor 1242	2.6	U	9.9	2.6	
12672-29-6	Aroclor 1248	2.6	U	9.9	2.6	
11097-69-1	Aroclor 1254	28		9.9	2.6	
11096-82-5	Aroclor 1260	33		9.9	2.6	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Decachlorobiphenyl	57	50-150	09/09/04	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: Lower Duwamish Working Group/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406516
Date Collected: 08/25/2004
Date Received: 08/30/2004
Date Extracted: 09/01/2004
Date Analyzed: 09/09/2004

Polychlorinated Biphenyls (PCBs)

Sample Name: LDW-C9-S
Lab Code: K2406516-005
File ID: J:\GC09\DATA\090804.B\0908F019.D
Instrument ID: GC09.i

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8082

Extraction Lot: KWG0413103
Calibration ID: CAL3724

Sample Amount: 27.46 g
% Solids: 75.7
Dilution Factor: 1

Column1: DB-35MS
Column2: DB-XLB

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
12674-11-2	Aroclor 1016	2.4	U	9.7	2.4	
11104-28-2	Aroclor 1221	2.4	U	20	2.4	
11141-16-5	Aroclor 1232	2.4	U	9.7	2.4	
53469-21-9	Aroclor 1242	2.4	U	9.7	2.4	
12672-29-6	Aroclor 1248	2.4	U	9.7	2.4	
11097-69-1	Aroclor 1254	14		9.7	2.4	
11096-82-5	Aroclor 1260	21		9.7	2.4	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Decachlorobiphenyl	55	50-150	09/09/04	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: Lower Duwamish Working Group/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406516
Date Collected: 08/26/2004
Date Received: 08/30/2004
Date Extracted: 09/01/2004
Date Analyzed: 09/09/2004

Polychlorinated Biphenyls (PCBs)

Sample Name: LDW-C7-S1
Lab Code: K2406516-006
File ID: J:\GC09\DATA\090804.B\0908F040.D
Instrument ID: GC09.i

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8082

Extraction Lot: KWG0413103
Calibration ID: CAL3724

Sample Amount: 26.03 g
% Solids: 78.0
Dilution Factor: 10

Column1: DB-35MS
Column2: DB-XLB

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
12674-11-2	Aroclor 1016	24	U	99	24	
11104-28-2	Aroclor 1221	24	U	200	24	
11141-16-5	Aroclor 1232	24	U	99	24	
53469-21-9	Aroclor 1242	24	U	99	24	
12672-29-6	Aroclor 1248	24	U	99	24	
11097-69-1	Aroclor 1254	1000	D	99	24	
11096-82-5	Aroclor 1260	24	U	99	24	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Decachlorobiphenyl	61	50-150	09/09/04	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: Lower Duwamish Working Group/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406516
Date Collected: 08/27/2004
Date Received: 08/30/2004
Date Extracted: 09/01/2004
Date Analyzed: 09/09/2004

Polychlorinated Biphenyls (PCBs)

Sample Name: LDW-C3-S2
Lab Code: K2406516-007
File ID: J:\GC09\DATA\090804.B\0908F021.D
Instrument ID: GC09.i

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8082

Extraction Lot: KWG0413103
Calibration ID: CAL3724

Sample Amount: 26.60 g
% Solids: 75.2
Dilution Factor: 1

Column1: DB-35MS
Column2: DB-XLB

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
12674-11-2	Aroclor 1016	2.4	U	10	2.4	
11104-28-2	Aroclor 1221	2.4	U	20	2.4	
11141-16-5	Aroclor 1232	2.4	U	10	2.4	
53469-21-9	Aroclor 1242	2.4	U	10	2.4	
12672-29-6	Aroclor 1248	2.4	U	10	2.4	
11097-69-1	Aroclor 1254	11	Ui	11	11	
11096-82-5	Aroclor 1260	11	Ui	11	11	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Decachlorobiphenyl	59	50-150	09/09/04	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: Lower Duwamish Working Group/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406516
Date Collected: 08/26/2004
Date Received: 08/30/2004
Date Extracted: 09/01/2004
Date Analyzed: 09/09/2004

Polychlorinated Biphenyls (PCBs)

Sample Name: LDW-C7-S2
Lab Code: K2406516-008
File ID: J:\GC09\DATA\090804.B\0908F022.D
Instrument ID: GC09.i

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8082

Extraction Lot: KWG0413103
Calibration ID: CAL3724

Sample Amount: 25.76 g
% Solids: 78.3
Dilution Factor: 1

Column1: DB-35MS
Column2: DB-XLB

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
12674-11-2	Aroclor 1016	2.3	U	10	2.3	
11104-28-2	Aroclor 1221	2.3	U	20	2.3	
11141-16-5	Aroclor 1232	2.3	U	10	2.3	
53469-21-9	Aroclor 1242	2.3	U	10	2.3	
12672-29-6	Aroclor 1248	2.3	U	10	2.3	
11097-69-1	Aroclor 1254	180		10	2.3	
11096-82-5	Aroclor 1260	200	P	10	2.3	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Decachlorobiphenyl	58	50-150	09/09/04	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: Lower Duwamish Working Group/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406516
Date Collected: 08/26/2004
Date Received: 08/30/2004
Date Extracted: 09/01/2004
Date Analyzed: 09/09/2004

Polychlorinated Biphenyls (PCBs)

Sample Name: LDW-C8-S
Lab Code: K2406516-009
File ID: J:\GC09\DATA\090804.B\0908F041.D
Instrument ID: GC09.i

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8082

Extraction Lot: KWG0413103
Calibration ID: CAL3724

Sample Amount: 33.67 g
% Solids: 60.3
Dilution Factor: 10

Column1: DB-35MS
Column2: DB-XLB

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
12674-11-2	Aroclor 1016	30	U	99	30	
11104-28-2	Aroclor 1221	30	U	200	30	
11141-16-5	Aroclor 1232	30	U	99	30	
53469-21-9	Aroclor 1242	30	U	99	30	
12672-29-6	Aroclor 1248	30	U	99	30	
11097-69-1	Aroclor 1254	3300	D	99	30	
11096-82-5	Aroclor 1260	30	U	99	30	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Decachlorobiphenyl	76	50-150	09/09/04	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: Lower Duwamish Working Group/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406516
Date Collected: 08/27/2004
Date Received: 08/30/2004
Date Extracted: 09/01/2004
Date Analyzed: 09/09/2004

Polychlorinated Biphenyls (PCBs)

Sample Name: LDW-C5-S
Lab Code: K2406516-010
File ID: J:\GC09\DATA\090804.B\0908F027.D
Instrument ID: GC09.i

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8082

Extraction Lot: KWG0413103
Calibration ID: CAL3724

Sample Amount: 27.73 g
% Solids: 74.1
Dilution Factor: 1

Column1: DB-35MS
Column2: DB-XLB

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
12674-11-2	Aroclor 1016	2.5	U	9.8	2.5	
11104-28-2	Aroclor 1221	2.5	U	20	2.5	
11141-16-5	Aroclor 1232	2.5	U	9.8	2.5	
53469-21-9	Aroclor 1242	2.5	U	9.8	2.5	
12672-29-6	Aroclor 1248	2.5	U	9.8	2.5	
11097-69-1	Aroclor 1254	25		9.8	2.5	
11096-82-5	Aroclor 1260	28		9.8	2.5	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Decachlorobiphenyl	59	50-150	09/09/04	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: Lower Duwamish Working Group/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406516
Date Collected: 08/27/2004
Date Received: 08/30/2004
Date Extracted: 09/01/2004
Date Analyzed: 09/09/2004

Polychlorinated Biphenyls (PCBs)

Sample Name: LDW-C3-S1
Lab Code: K2406516-011
File ID: J:\GC09\DATA\090804.B\0908F028.D
Instrument ID: GC09.i

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8082

Extraction Lot: KWG0413103
Calibration ID: CAL3724

Sample Amount: 28.63 g
% Solids: 72.2
Dilution Factor: 1

Column1: DB-35MS
Column2: DB-XLB

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
12674-11-2	Aroclor 1016	2.5	U	9.7	2.5	
11104-28-2	Aroclor 1221	2.5	U	20	2.5	
11141-16-5	Aroclor 1232	2.5	U	9.7	2.5	
53469-21-9	Aroclor 1242	2.5	U	9.7	2.5	
12672-29-6	Aroclor 1248	2.5	U	9.7	2.5	
11097-69-1	Aroclor 1254	24		9.7	2.5	
11096-82-5	Aroclor 1260	28	P	9.7	2.5	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Decachlorobiphenyl	60	50-150	09/09/04	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: Lower Duwamish Working Group/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406516
Date Collected: 08/26/2004
Date Received: 08/30/2004
Date Extracted: 09/01/2004
Date Analyzed: 09/09/2004

Polychlorinated Biphenyls (PCBs)

Sample Name: LDW-C2-S1
Lab Code: K2406516-012
File ID: J:\GC09\DATA\090804.B\0908F029.D
Instrument ID: GC09.i

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8082

Extraction Lot: KWG0413103
Calibration ID: CAL3724

Sample Amount: 36.15 g
% Solids: 55.9
Dilution Factor: 1

Column1: DB-35MS
Column2: DB-XLB

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
12674-11-2	Aroclor 1016	3.3	U	9.9	3.3	
11104-28-2	Aroclor 1221	3.3	U	20	3.3	
11141-16-5	Aroclor 1232	3.3	U	9.9	3.3	
53469-21-9	Aroclor 1242	3.3	U	9.9	3.3	
12672-29-6	Aroclor 1248	3.3	U	9.9	3.3	
11097-69-1	Aroclor 1254	28		9.9	3.3	
11096-82-5	Aroclor 1260	28		9.9	3.3	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Decachlorobiphenyl	60	50-150	09/09/04	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: Lower Duwamish Working Group/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406516
Date Collected: 08/26/2004
Date Received: 08/30/2004
Date Extracted: 09/01/2004
Date Analyzed: 09/09/2004

Polychlorinated Biphenyls (PCBs)

Sample Name: LDW-C2-S2
Lab Code: K2406516-013
File ID: J:\GC09\DATA\090804.B\0908F030.D
Instrument ID: GC09.i

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8082

Extraction Lot: KWG0413103
Calibration ID: CAL3724

Sample Amount: 29.00 g
% Solids: 70.4
Dilution Factor: 1

Column1: DB-35MS
Column2: DB-XLB

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
12674-11-2	Aroclor 1016	2.6	U	9.8	2.6	
11104-28-2	Aroclor 1221	2.6	U	20	2.6	
11141-16-5	Aroclor 1232	2.6	U	9.8	2.6	
53469-21-9	Aroclor 1242	2.6	U	9.8	2.6	
12672-29-6	Aroclor 1248	2.6	U	9.8	2.6	
11097-69-1	Aroclor 1254	52		9.8	2.6	
11096-82-5	Aroclor 1260	52		9.8	2.6	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Decachlorobiphenyl	60	50-150	09/09/04	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: Lower Duwamish Working Group/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406516
Date Collected: 08/26/2004
Date Received: 08/30/2004
Date Extracted: 09/01/2004
Date Analyzed: 09/09/2004

Polychlorinated Biphenyls (PCBs)

Sample Name: LDW-C1-S
Lab Code: K2406516-014
File ID: J:\GC09\DATA\090804.B\0908F032.D
Instrument ID: GC09.i

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8082

Extraction Lot: KWG0413103
Calibration ID: CAL3724

Sample Amount: 27.14 g
% Solids: 74.2
Dilution Factor: 1

Column1: DB-35MS
Column2: DB-XLB

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
12674-11-2	Aroclor 1016	2.5	U	10	2.5	
11104-28-2	Aroclor 1221	2.5	U	20	2.5	
11141-16-5	Aroclor 1232	2.5	U	10	2.5	
53469-21-9	Aroclor 1242	2.5	U	10	2.5	
12672-29-6	Aroclor 1248	2.5	U	10	2.5	
11097-69-1	Aroclor 1254	2.5	U	10	2.5	
11096-82-5	Aroclor 1260	3.1	J	10	2.5	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Decachlorobiphenyl	59	50-150	09/09/04	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Windward Environmental
Project: Lower Duwamish Working Group/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406516
Date Extracted: 09/01/2004
Date Analyzed: 09/09/2004

Duplicate Sample Summary
Polychlorinated Biphenyls (PCBs)

Sample Name: LDW-C2-S2
Lab Code: K2406516-013
Extraction Method: EPA 3540C
Analysis Method: 8082

Units: ug/Kg
Basis: Dry
Level: Low
Extraction Lot: KWG0413103

Analyte Name	MRL	MDL	Sample Result	LDW-C2-S2DUP KWG0413103-1 Duplicate Sample		Relative Percent Difference	RPD Limit
				Result	Average		
Aroclor 1016	9.8	2.6	ND	ND	ND	-	50
Aroclor 1221	20	2.6	ND	ND	ND	-	50
Aroclor 1232	9.8	2.6	ND	ND	ND	-	50
Aroclor 1242	9.8	2.6	ND	ND	ND	-	50
Aroclor 1248	9.8	2.6	ND	ND	ND	-	50
Aroclor 1254	9.8	2.6	52	47	50	10	50
Aroclor 1260	9.8	2.6	52	46	49	12	50

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406517
Date Collected: 08/26/2004
Date Received: 08/28/2004
Date Extracted: 09/10/2004
Date Analyzed: 09/16/2004

Polychlorinated Biphenyls (PCBs)

Sample Name: LDW-C8-T
Lab Code: K2406517-001
File ID: J:\GC09\DATA\091504A.B\0915F035.D
Instrument ID: GC09.i

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8082

Extraction Lot: KWG0413714
Calibration ID: CAL3724

Sample Amount: 20.06 g
% Solids: NA
Dilution Factor: 1

Column1: DB-35MS
Column2: DB-XLB

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
12674-11-2	Aroclor 1016	2.0	U	10	2.0	
11104-28-2	Aroclor 1221	3.1	U	20	3.1	
11141-16-5	Aroclor 1232	2.0	U	10	2.0	
53469-21-9	Aroclor 1242	3.5	U	10	3.5	
12672-29-6	Aroclor 1248	190	P	10	0.76	
11097-69-1	Aroclor 1254	390		10	1.5	
11096-82-5	Aroclor 1260	4.7	U	10	4.7	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Decachlorobiphenyl	65	38-150	09/16/04	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406517
Date Collected: 08/26/2004
Date Received: 08/28/2004
Date Extracted: 09/10/2004
Date Analyzed: 09/16/2004

Polychlorinated Biphenyls (PCBs)

Sample Name: LDW-C7-T2
Lab Code: K2406517-002
File ID: J:\GC09\DATA\091504A.B\0915F036.D
Instrument ID: GC09.i

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8082

Extraction Lot: KWG0413714
Calibration ID: CAL3724

Sample Amount: 20.02 g
% Solids: NA
Dilution Factor: 1

Column1: DB-35MS
Column2: DB-XLB

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
12674-11-2	Aroclor 1016	2.0	U	10	2.0	
11104-28-2	Aroclor 1221	3.1	U	20	3.1	
11141-16-5	Aroclor 1232	2.0	U	10	2.0	
53469-21-9	Aroclor 1242	3.5	U	10	3.5	
12672-29-6	Aroclor 1248	75	P	10	0.76	
11097-69-1	Aroclor 1254	170		10	1.5	
11096-82-5	Aroclor 1260	4.7	U	10	4.7	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Decachlorobiphenyl	63	38-150	09/16/04	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406517
Date Collected: 08/26/2004
Date Received: 08/28/2004
Date Extracted: 09/10/2004
Date Analyzed: 09/16/2004

Polychlorinated Biphenyls (PCBs)

Sample Name: LDW-C7-T1
Lab Code: K2406517-003
File ID: J:\GC09\DATA\091504A.B\0915F037.D
Instrument ID: GC09.i

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8082

Extraction Lot: KWG0413714
Calibration ID: CAL3724

Sample Amount: 20.06 g
% Solids: NA
Dilution Factor: 1

Column1: DB-35MS
Column2: DB-XLB

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
12674-11-2	Aroclor 1016	2.0	U	10	2.0	
11104-28-2	Aroclor 1221	3.1	U	20	3.1	
11141-16-5	Aroclor 1232	2.0	U	10	2.0	
53469-21-9	Aroclor 1242	3.5	U	10	3.5	
12672-29-6	Aroclor 1248	64	P	10	0.76	
11097-69-1	Aroclor 1254	160		10	1.5	
11096-82-5	Aroclor 1260	4.7	U	10	4.7	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Decachlorobiphenyl	62	38-150	09/16/04	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406517
Date Collected: 08/26/2004
Date Received: 08/28/2004
Date Extracted: 09/10/2004
Date Analyzed: 09/16/2004

Polychlorinated Biphenyls (PCBs)

Sample Name: LDW-C1-T
Lab Code: K2406517-004
File ID: J:\GC09\DATA\091504A.B\0915F038.D
Instrument ID: GC09.i
Extraction Method: EPA 3540C
Analysis Method: 8082

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Lot: KWG0413714
Calibration ID: CAL3724

Sample Amount: 20.07 g
% Solids: NA
Dilution Factor: 1

Column1: DB-35MS
Column2: DB-XLB

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
12674-11-2	Aroclor 1016	2.0	U	10	2.0	
11104-28-2	Aroclor 1221	3.1	U	20	3.1	
11141-16-5	Aroclor 1232	2.0	U	10	2.0	
53469-21-9	Aroclor 1242	3.5	U	10	3.5	
12672-29-6	Aroclor 1248	0.76	U	10	0.76	
11097-69-1	Aroclor 1254	24		10	1.5	
11096-82-5	Aroclor 1260	4.7	U	10	4.7	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Decachlorobiphenyl	64	38-150	09/16/04	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406517
Date Collected: 08/26/2004
Date Received: 08/28/2004
Date Extracted: 09/10/2004
Date Analyzed: 09/16/2004

Polychlorinated Biphenyls (PCBs)

Sample Name: LDW-C2-T1
Lab Code: K2406517-005
File ID: J:\GC09\DATA\091504A.B\0915F039.D
Instrument ID: GC09.i

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8082

Extraction Lot: KWG0413714
Calibration ID: CAL3724

Sample Amount: 20.05 g
% Solids: NA
Dilution Factor: 1

Column1: DB-35MS
Column2: DB-XLB

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
12674-11-2	Aroclor 1016	2.0	U	10	2.0	
11104-28-2	Aroclor 1221	3.1	U	20	3.1	
11141-16-5	Aroclor 1232	2.0	U	10	2.0	
53469-21-9	Aroclor 1242	3.5	U	10	3.5	
12672-29-6	Aroclor 1248	0.76	U	10	0.76	
11097-69-1	Aroclor 1254	24		10	1.5	
11096-82-5	Aroclor 1260	4.7	U	10	4.7	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Decachlorobiphenyl	65	38-150	09/16/04	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406517
Date Collected: 08/26/2004
Date Received: 08/28/2004
Date Extracted: 09/10/2004
Date Analyzed: 09/16/2004

Polychlorinated Biphenyls (PCBs)

Sample Name: LDW-C2-T2
Lab Code: K2406517-006
File ID: J:\GC09\DATA\091504A.B\0915F040.D
Instrument ID: GC09.i

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8082

Extraction Lot: KWG0413714
Calibration ID: CAL3724

Sample Amount: 20.05 g
% Solids: NA
Dilution Factor: 1

Column1: DB-35MS
Column2: DB-XLB

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
12674-11-2	Aroclor 1016	2.0	U	10	2.0	
11104-28-2	Aroclor 1221	3.1	U	20	3.1	
11141-16-5	Aroclor 1232	2.0	U	10	2.0	
53469-21-9	Aroclor 1242	3.5	U	10	3.5	
12672-29-6	Aroclor 1248	0.76	U	10	0.76	
11097-69-1	Aroclor 1254	29		10	1.5	
11096-82-5	Aroclor 1260	4.7	U	10	4.7	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Decachlorobiphenyl	65	38-150	09/16/04	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406517
Date Collected: 08/25/2004
Date Received: 08/28/2004
Date Extracted: 09/10/2004
Date Analyzed: 09/16/2004

Polychlorinated Biphenyls (PCBs)

Sample Name: LDW-C10-T2
Lab Code: K2406517-007
File ID: J:\GC09\DATA\091504A.B\0915F047.D
Instrument ID: GC09.i

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8082

Extraction Lot: KWG0413714
Calibration ID: CAL3724

Sample Amount: 20.05 g
% Solids: NA
Dilution Factor: 1

Column1: DB-35MS
Column2: DB-XLB

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
12674-11-2	Aroclor 1016	2.0	U	10	2.0	
11104-28-2	Aroclor 1221	3.1	U	20	3.1	
11141-16-5	Aroclor 1232	2.0	U	10	2.0	
53469-21-9	Aroclor 1242	3.5	U	10	3.5	
12672-29-6	Aroclor 1248	0.76	U	10	0.76	
11097-69-1	Aroclor 1254	79		10	1.5	
11096-82-5	Aroclor 1260	250		10	4.7	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Decachlorobiphenyl	67	38-150	09/16/04	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406517
Date Collected: 08/25/2004
Date Received: 08/28/2004
Date Extracted: 09/10/2004
Date Analyzed: 09/16/2004

Polychlorinated Biphenyls (PCBs)

Sample Name: LDW-C10-T1
Lab Code: K2406517-008
File ID: J:\GC09\DATA\091504A.B\0915F048.D
Instrument ID: GC09.i
Extraction Method: EPA 3540C
Analysis Method: 8082

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Lot: KWG0413714
Calibration ID: CAL3724

Sample Amount: 20.01 g
% Solids: NA
Dilution Factor: 1

Column1: DB-35MS
Column2: DB-XLB

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
12674-11-2	Aroclor 1016	2.0	U	10	2.0	
11104-28-2	Aroclor 1221	3.1	U	20	3.1	
11141-16-5	Aroclor 1232	2.0	U	10	2.0	
53469-21-9	Aroclor 1242	3.5	U	10	3.5	
12672-29-6	Aroclor 1248	0.76	U	10	0.76	
11097-69-1	Aroclor 1254	77		10	1.5	
11096-82-5	Aroclor 1260	240		10	4.7	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Decachlorobiphenyl	68	38-150	09/16/04	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406517
Date Collected: 08/27/2004
Date Received: 08/28/2004
Date Extracted: 09/10/2004
Date Analyzed: 09/16/2004

Polychlorinated Biphenyls (PCBs)

Sample Name: LDW-C5-T
Lab Code: K2406517-009
File ID: J:\GC09\DATA\091504A.B\0915F049.D
Instrument ID: GC09.i

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8082

Extraction Lot: KWG0413714
Calibration ID: CAL3724

Sample Amount: 20.02 g
% Solids: NA
Dilution Factor: 1

Column1: DB-35MS
Column2: DB-XLB

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
12674-11-2	Aroclor 1016	2.0	U	10	2.0	
11104-28-2	Aroclor 1221	3.1	U	20	3.1	
11141-16-5	Aroclor 1232	2.0	U	10	2.0	
53469-21-9	Aroclor 1242	3.5	U	10	3.5	
12672-29-6	Aroclor 1248	0.76	U	10	0.76	
11097-69-1	Aroclor 1254	43		10	1.5	
11096-82-5	Aroclor 1260	4.7	U	10	4.7	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Decachlorobiphenyl	63	38-150	09/16/04	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406517
Date Collected: 08/27/2004
Date Received: 08/28/2004
Date Extracted: 09/10/2004
Date Analyzed: 09/16/2004

Polychlorinated Biphenyls (PCBs)

Sample Name: LDW-C3-T2
Lab Code: K2406517-010
File ID: J:\GC09\DATA\091504A.B\0915F050.D
Instrument ID: GC09.i

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8082

Extraction Lot: KWG0413714
Calibration ID: CAL3724

Sample Amount: 20.03 g
% Solids: NA
Dilution Factor: 1

Column1: DB-35MS
Column2: DB-XLB

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
12674-11-2	Aroclor 1016	2.0	U	10	2.0	
11104-28-2	Aroclor 1221	3.1	U	20	3.1	
11141-16-5	Aroclor 1232	2.0	U	10	2.0	
53469-21-9	Aroclor 1242	3.5	U	10	3.5	
12672-29-6	Aroclor 1248	0.76	U	10	0.76	
11097-69-1	Aroclor 1254	32		10	1.5	
11096-82-5	Aroclor 1260	4.7	U	10	4.7	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Decachlorobiphenyl	68	38-150	09/16/04	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406517
Date Collected: 08/27/2004
Date Received: 08/28/2004
Date Extracted: 09/10/2004
Date Analyzed: 09/16/2004

Polychlorinated Biphenyls (PCBs)

Sample Name: LDW-C3-T1
Lab Code: K2406517-011
File ID: J:\GC09\DATA\091504A.B\0915F051.D
Instrument ID: GC09.i

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8082

Extraction Lot: KWG0413714
Calibration ID: CAL3724

Sample Amount: 20.01 g
% Solids: NA
Dilution Factor: 1

Column1: DB-35MS
Column2: DB-XLB

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
12674-11-2	Aroclor 1016	2.0	U	10	2.0	
11104-28-2	Aroclor 1221	3.1	U	20	3.1	
11141-16-5	Aroclor 1232	2.0	U	10	2.0	
53469-21-9	Aroclor 1242	3.5	U	10	3.5	
12672-29-6	Aroclor 1248	0.76	U	10	0.76	
11097-69-1	Aroclor 1254	33		10	1.5	
11096-82-5	Aroclor 1260	4.7	U	10	4.7	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Decachlorobiphenyl	67	38-150	09/16/04	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406517
Date Collected: 08/25/2004
Date Received: 08/28/2004
Date Extracted: 09/10/2004
Date Analyzed: 09/16/2004

Polychlorinated Biphenyls (PCBs)

Sample Name: LDW-C9-T
Lab Code: K2406517-012
File ID: J:\GC09\DATA\091504A.B\0915F052.D
Instrument ID: GC09.i

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8082

Extraction Lot: KWG0413714
Calibration ID: CAL3724

Sample Amount: 20.03 g
% Solids: NA
Dilution Factor: 1

Column1: DB-35MS
Column2: DB-XLB

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
12674-11-2	Aroclor 1016	2.0	U	10	2.0	
11104-28-2	Aroclor 1221	3.1	U	20	3.1	
11141-16-5	Aroclor 1232	2.0	U	10	2.0	
53469-21-9	Aroclor 1242	3.5	U	10	3.5	
12672-29-6	Aroclor 1248	0.76	U	10	0.76	
11097-69-1	Aroclor 1254	50		10	1.5	
11096-82-5	Aroclor 1260	4.7	U	10	4.7	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Decachlorobiphenyl	69	38-150	09/16/04	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406517
Date Collected: 08/25/2004
Date Received: 08/28/2004
Date Extracted: 09/10/2004
Date Analyzed: 09/16/2004

Polychlorinated Biphenyls (PCBs)

Sample Name: LDW-C6-T
Lab Code: K2406517-013
File ID: J:\GC09\DATA\091504A.B\0915F053.D
Instrument ID: GC09.i

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8082

Extraction Lot: KWG0413714
Calibration ID: CAL3724

Sample Amount: 20.07 g
% Solids: NA
Dilution Factor: 1

Column1: DB-35MS
Column2: DB-XLB

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
12674-11-2	Aroclor 1016	2.0	U	10	2.0	
11104-28-2	Aroclor 1221	3.1	U	20	3.1	
11141-16-5	Aroclor 1232	2.0	U	10	2.0	
53469-21-9	Aroclor 1242	3.5	U	10	3.5	
12672-29-6	Aroclor 1248	0.76	U	10	0.76	
11097-69-1	Aroclor 1254	34		10	1.5	
11096-82-5	Aroclor 1260	4.7	U	10	4.7	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Decachlorobiphenyl	65	38-150	09/16/04	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406517
Date Collected: 08/27/2004
Date Received: 08/28/2004
Date Extracted: 09/10/2004
Date Analyzed: 09/16/2004

Polychlorinated Biphenyls (PCBs)

Sample Name: LDW-C4-T
Lab Code: K2406517-014
File ID: J:\GC09\DATA\091504A.B\0915F054.D
Instrument ID: GC09.i

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8082

Extraction Lot: KWG0413714
Calibration ID: CAL3724

Sample Amount: 20.04 g
% Solids: NA
Dilution Factor: 1

Column1: DB-35MS
Column2: DB-XLB

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
12674-11-2	Aroclor 1016	2.0	U	10	2.0	
11104-28-2	Aroclor 1221	3.1	U	20	3.1	
11141-16-5	Aroclor 1232	2.0	U	10	2.0	
53469-21-9	Aroclor 1242	3.5	U	10	3.5	
12672-29-6	Aroclor 1248	0.76	U	10	0.76	
11097-69-1	Aroclor 1254	31		10	1.5	
11096-82-5	Aroclor 1260	4.7	U	10	4.7	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Decachlorobiphenyl	65	38-150	09/16/04	Acceptable

Comments: _____

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406517
Date Extracted: 09/10/2004
Date Analyzed: 09/16/2004

**Duplicate Sample Summary
 Polychlorinated Biphenyls (PCBs)**

Sample Name: LDW-C2-T2
Lab Code: K2406517-006
Extraction Method: EPA 3540C
Analysis Method: 8082

Units: ug/Kg
Basis: Wet
Level: Low
Extraction Lot: KWG0413714

Analyte Name	MRL	MDL	Sample Result	LDW-C2-T2DUP KWG0413714-1 Duplicate Sample		Relative Percent Difference	RPD Limit
				Result	Average		
Aroclor 1016	10	2.0	ND	ND	ND	-	50
Aroclor 1221	20	3.1	ND	ND	ND	-	50
Aroclor 1232	10	2.0	ND	ND	ND	-	50
Aroclor 1242	10	3.5	ND	ND	ND	-	50
Aroclor 1248	10	0.76	ND	ND	ND	-	50
Aroclor 1254	10	1.5	29	29	29	0	50
Aroclor 1260	10	4.7	ND	ND	ND	-	50

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406519
Date Collected: 08/27/2004
Date Received: 08/30/2004
Date Extracted: 09/23/2004
Date Analyzed: 10/07/2004

Polychlorinated Biphenyls (PCBs)

Sample Name: LDW-B9a-S
Lab Code: K2406519-001
File ID: J:\GC09\DATA\100604A.B\1006F036.D
Instrument ID: GC09.i

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8082

Extraction Lot: KWG0414495
Calibration ID: CAL3870

Sample Amount: 38.08 g
% Solids: 52.6
Dilution Factor: 1

Column1: DB-35MS
Column2: DB-XLB

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
12674-11-2	Aroclor 1016	3.5	U	10	3.5	
11104-28-2	Aroclor 1221	3.5	U	20	3.5	
11141-16-5	Aroclor 1232	3.5	U	10	3.5	
53469-21-9	Aroclor 1242	180		10	3.5	
12672-29-6	Aroclor 1248	3.5	U	10	3.5	
11097-69-1	Aroclor 1254	85		10	3.5	
11096-82-5	Aroclor 1260	3.5	U	10	3.5	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Decachlorobiphenyl	54	50-150	10/07/04	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406519
Date Collected: 08/26/2004
Date Received: 08/30/2004
Date Extracted: 09/23/2004
Date Analyzed: 10/07/2004

Polychlorinated Biphenyls (PCBs)

Sample Name: LDW-B3a-S
Lab Code: K2406519-005
File ID: J:\GC09\DATA\100604A.B\1006F037.D
Instrument ID: GC09.i

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8082

Extraction Lot: KWG0414495
Calibration ID: CAL3870

Sample Amount: 32.53 g
% Solids: 61.6
Dilution Factor: 1

Column1: DB-35MS
Column2: DB-XLB

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
12674-11-2	Aroclor 1016	3.0	U	10	3.0	
11104-28-2	Aroclor 1221	3.0	U	20	3.0	
11141-16-5	Aroclor 1232	3.0	U	10	3.0	
53469-21-9	Aroclor 1242	3.0	U	10	3.0	
12672-29-6	Aroclor 1248	3.0	U	10	3.0	
11097-69-1	Aroclor 1254	22		10	3.0	
11096-82-5	Aroclor 1260	3.0	U	10	3.0	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Decachlorobiphenyl	54	50-150	10/07/04	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406580
Date Collected: 08/30/2004
Date Received: 08/31/2004
Date Extracted: 09/23/2004
Date Analyzed: 10/07/2004

Polychlorinated Biphenyls (PCBs)

Sample Name: LDW-B7a-S
Lab Code: K2406580-001
File ID: J:\GC09\DATA\100604A.B\1006F038.D
Instrument ID: GC09.i

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8082

Extraction Lot: KWG0414495
Calibration ID: CAL3870

Sample Amount: 38.80 g
% Solids: 51.7
Dilution Factor: 1

Column1: DB-35MS
Column2: DB-XLB

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
12674-11-2	Aroclor 1016	1.8	U	5.2	1.8	
11104-28-2	Aroclor 1221	1.8	U	11	1.8	
11141-16-5	Aroclor 1232	1.8	U	5.2	1.8	
53469-21-9	Aroclor 1242	1.8	U	5.2	1.8	
12672-29-6	Aroclor 1248	1.8	U	5.2	1.8	
11097-69-1	Aroclor 1254	26		5.2	1.8	
11096-82-5	Aroclor 1260	35		5.2	1.8	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Decachlorobiphenyl	61	50-150	10/07/04	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406581
Date Collected: 08/30/2004
Date Received: 08/31/2004
Date Extracted: 09/29/2004
Date Analyzed: 10/06/2004

Polychlorinated Biphenyls (PCBs)

Sample Name: LDW-B7a-T
Lab Code: K2406581-001
File ID: J:\GC09\DATA\100504.B\1005F025.D
Instrument ID: GC09.i

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8082

Extraction Lot: KWG0414868
Calibration ID: CAL3870

Sample Amount: 1.52 g
% Solids: NA
Dilution Factor: 1

Column1: DB-35MS
Column2: DB-XLB

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
12674-11-2	Aroclor 1016	27	U	140	27	
11104-28-2	Aroclor 1221	41	U	270	41	
11141-16-5	Aroclor 1232	27	U	140	27	
53469-21-9	Aroclor 1242	47	U	140	47	
12672-29-6	Aroclor 1248	10	U	140	10	
11097-69-1	Aroclor 1254	110	J	140	20	
11096-82-5	Aroclor 1260	62	U	140	62	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Decachlorobiphenyl	64	38-150	10/06/04	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406932
Date Collected: 08/17/2004
Date Received: 08/20/2004
Date Extracted: 09/29/2004
Date Analyzed: 10/06/2004

Polychlorinated Biphenyls (PCBs)

Sample Name: LDW-B8a-T
Lab Code: K2406932-006
File ID: J:\GC09\DATA\100504.B\1005F026.D
Instrument ID: GC09.i

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8082

Extraction Lot: KWG0414868
Calibration ID: CAL3870

Sample Amount: 2.02 g
% Solids: NA
Dilution Factor: 1

Column1: DB-35MS
Column2: DB-XLB

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
12674-11-2	Aroclor 1016	20	U	100	20	
11104-28-2	Aroclor 1221	31	U	200	31	
11141-16-5	Aroclor 1232	20	U	100	20	
53469-21-9	Aroclor 1242	35	U	100	35	
12672-29-6	Aroclor 1248	7.6	U	100	7.6	
11097-69-1	Aroclor 1254	15	U	100	15	
11096-82-5	Aroclor 1260	1400		100	47	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Decachlorobiphenyl	66	38-150	10/06/04	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406932
Date Collected: 08/25/2004
Date Received: 08/31/2004
Date Extracted: 09/29/2004
Date Analyzed: 10/06/2004

Polychlorinated Biphenyls (PCBs)

Sample Name: LDW-B10a-T
Lab Code: K2406932-009
File ID: J:\GC09\DATA\100504.B\1005F027.D
Instrument ID: GC09.i

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8082

Extraction Lot: KWG0414868
Calibration ID: CAL3870

Sample Amount: 2.01 g
% Solids: NA
Dilution Factor: 1

Column1: DB-35MS
Column2: DB-XLB

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
12674-11-2	Aroclor 1016	20	U	100	20	
11104-28-2	Aroclor 1221	31	U	200	31	
11141-16-5	Aroclor 1232	20	U	100	20	
53469-21-9	Aroclor 1242	35	U	100	35	
12672-29-6	Aroclor 1248	7.6	U	100	7.6	
11097-69-1	Aroclor 1254	62	J	100	15	
11096-82-5	Aroclor 1260	47	U	100	47	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Decachlorobiphenyl	65	38-150	10/06/04	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2407012
Date Collected: 08/16/2004
Date Received: 08/18/2004
Date Extracted: 09/23/2004
Date Analyzed: 10/05/2004

Polychlorinated Biphenyls (PCBs)

Sample Name: LDW-B5a-S
Lab Code: K2407012-003
File ID: J:\GC09\DATA\100404.B\1004F045.D
Instrument ID: GC09.i

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8082

Extraction Lot: KWG0414495
Calibration ID: CAL3870

Sample Amount: 26.08 g
% Solids: 76.9
Dilution Factor: 1

Column1: DB-35MS
Column2: DB-XLB

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
12674-11-2	Aroclor 1016	2.4	U	10	2.4	
11104-28-2	Aroclor 1221	2.4	U	20	2.4	
11141-16-5	Aroclor 1232	2.4	U	10	2.4	
53469-21-9	Aroclor 1242	2.4	U	10	2.4	
12672-29-6	Aroclor 1248	38		10	2.4	
11097-69-1	Aroclor 1254	2.4	U	10	2.4	
11096-82-5	Aroclor 1260	40	P	10	2.4	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Decachlorobiphenyl	55	50-150	10/05/04	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2407012
Date Collected: 08/17/2004
Date Received: 09/20/2004
Date Extracted: 09/23/2004
Date Analyzed: 10/07/2004

Polychlorinated Biphenyls (PCBs)

Sample Name: LDW-B8a-S
Lab Code: K2407012-006
File ID: J:\GC09\DATA\100604A.B\1006F039.D
Instrument ID: GC09.i

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8082

Extraction Lot: KWG0414495
Calibration ID: CAL3870

Sample Amount: 37.36 g
% Solids: 53.6
Dilution Factor: 10

Column1: DB-35MS
Column2: DB-XLB

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
12674-11-2	Aroclor 1016	34	U	100	34	
11104-28-2	Aroclor 1221	34	U	200	34	
11141-16-5	Aroclor 1232	34	U	100	34	
53469-21-9	Aroclor 1242	34	U	100	34	
12672-29-6	Aroclor 1248	34	U	100	34	
11097-69-1	Aroclor 1254	1300	PD	100	34	
11096-82-5	Aroclor 1260	4600	D	100	34	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Decachlorobiphenyl	98	50-150	10/07/04	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2407012
Date Collected: 08/25/2004
Date Received: 08/30/2004
Date Extracted: 09/23/2004
Date Analyzed: 10/05/2004

Polychlorinated Biphenyls (PCBs)

Sample Name: LDW-B10a-S
Lab Code: K2407012-009
File ID: J:\GC09\DATA\100404.B\1004F048.D
Instrument ID: GC09.i

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8082

Extraction Lot: KWG0414495
Calibration ID: CAL3870

Sample Amount: 31.83 g
% Solids: 63.0
Dilution Factor: 1

Column1: DB-35MS
Column2: DB-XLB

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
12674-11-2	Aroclor 1016	2.9	U	10	2.9	
11104-28-2	Aroclor 1221	2.9	U	20	2.9	
11141-16-5	Aroclor 1232	2.9	U	10	2.9	
53469-21-9	Aroclor 1242	2.9	U	10	2.9	
12672-29-6	Aroclor 1248	2.9	U	10	2.9	
11097-69-1	Aroclor 1254	2.9	U	10	2.9	
11096-82-5	Aroclor 1260	22		10	2.9	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Decachlorobiphenyl	50	50-150	10/05/04	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2407012
Date Collected: NA
Date Received: NA
Date Extracted: 09/23/2004
Date Analyzed: 10/05/2004

Polychlorinated Biphenyls (PCBs)

Sample Name: Method Blank
Lab Code: KWG0414495-6
File ID: J:\GC09\DATA\100404.B\1004F018.D
Instrument ID: GC09.i

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8082

Extraction Lot: KWG0414495
Calibration ID: CAL3870

Sample Amount: 42.58 g
% Solids: NA
Dilution Factor: 1

Column1: DB-35MS
Column2: DB-XLB

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
12674-11-2	Aroclor 1016	1.8	U	4.7	1.8	
11104-28-2	Aroclor 1221	1.8	U	9.4	1.8	
11141-16-5	Aroclor 1232	1.8	U	4.7	1.8	
53469-21-9	Aroclor 1242	1.8	U	4.7	1.8	
12672-29-6	Aroclor 1248	1.8	U	4.7	1.8	
11097-69-1	Aroclor 1254	1.8	U	4.7	1.8	
11096-82-5	Aroclor 1260	1.8	U	4.7	1.8	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Decachlorobiphenyl	66	50-150	10/05/04	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2407012
Date Extracted: 09/23/2004
Date Analyzed: 10/05/2004

**Duplicate Sample Summary
 Polychlorinated Biphenyls (PCBs)**

Sample Name: LDW-B5a-S
Lab Code: K2407012-003
Extraction Method: EPA 3540C
Analysis Method: 8082

Units: ug/Kg
Basis: Dry
Level: Low
Extraction Lot: KWG0414495

Analyte Name	MRL	MDL	Sample Result	LDW-B5a-SDUP KWG0414495-1 Duplicate Sample		Relative Percent Difference	RPD Limit
				Result	Average		
Aroclor 1016	10	2.4	ND	ND	ND	-	50
Aroclor 1221	20	2.4	ND	ND	ND	-	50
Aroclor 1232	10	2.4	ND	ND	ND	-	50
Aroclor 1242	10	2.4	ND	ND	ND	-	50
Aroclor 1248	10	2.4	38	61	49	45	50
Aroclor 1254	10	2.4	ND	ND	ND	-	50
Aroclor 1260	10	2.4	40	68	54	51 *	50

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2407216
Date Collected: 08/26/2004
Date Received: 08/30/2004
Date Extracted: 09/29/2004
Date Analyzed: 10/06/2004

Polychlorinated Biphenyls (PCBs)

Sample Name: LDW-B3a-T
Lab Code: K2407216-001
File ID: J:\GC09\DATA\100504.B\1005F028.D
Instrument ID: GC09.i

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8082

Extraction Lot: KWG0414868
Calibration ID: CAL3870

Sample Amount: 2.02 g
% Solids: NA
Dilution Factor: 1

Column1: DB-35MS
Column2: DB-XLB

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
12674-11-2	Aroclor 1016	20	U	100	20	
11104-28-2	Aroclor 1221	31	U	200	31	
11141-16-5	Aroclor 1232	20	U	100	20	
53469-21-9	Aroclor 1242	35	U	100	35	
12672-29-6	Aroclor 1248	7.6	U	100	7.6	
11097-69-1	Aroclor 1254	92	J	100	15	
11096-82-5	Aroclor 1260	47	U	100	47	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Decachlorobiphenyl	64	50-150	10/06/04	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2407216
Date Collected: 08/27/2004
Date Received: 08/30/2004
Date Extracted: 09/29/2004
Date Analyzed: 10/06/2004

Polychlorinated Biphenyls (PCBs)

Sample Name: LDW-B9a-T
Lab Code: K2407216-002
File ID: J:\GC09\DATA\100504.B\1005F029.D
Instrument ID: GC09.i

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8082

Extraction Lot: KWG0414868
Calibration ID: CAL3870

Sample Amount: 2.04 g
% Solids: NA
Dilution Factor: 1

Column1: DB-35MS
Column2: DB-XLB

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
12674-11-2	Aroclor 1016	20 U	99	20	
11104-28-2	Aroclor 1221	31 U	200	31	
11141-16-5	Aroclor 1232	20 U	99	20	
53469-21-9	Aroclor 1242	35 U	99	35	
12672-29-6	Aroclor 1248	7.5 U	99	7.5	
11097-69-1	Aroclor 1254	110	99	15	
11096-82-5	Aroclor 1260	47 U	99	47	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Decachlorobiphenyl	64	50-150	10/06/04	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2407452
Date Collected: 09/24/2004
Date Received: 09/25/2004
Date Extracted: 10/15/2004
Date Analyzed: 10/26/2004

Polychlorinated Biphenyls (PCBs)

Sample Name: LDW-B5a-T
Lab Code: K2407452-001
File ID: J:\GC09\DATA\102604.BA1026F005.D
Instrument ID: GC09.i

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8082

Extraction Lot: KWG0416042
Calibration ID: CAL3912

Sample Amount: 1.41 g
% Solids: NA
Dilution Factor: 1

Column1: DB-35MS
Column2: DB-XLB

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
12674-11-2	Aroclor 1016	29	U	150	29	
11104-28-2	Aroclor 1221	44	U	290	44	
11141-16-5	Aroclor 1232	29	U	150	29	
53469-21-9	Aroclor 1242	50	U	150	50	
12672-29-6	Aroclor 1248	11	U	150	11	
11097-69-1	Aroclor 1254	730		150	22	
11096-82-5	Aroclor 1260	660		150	67	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Decachlorobiphenyl	94	38-150	10/26/04	Acceptable

Comments: _____

00980

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Sediment

Service Request: K2407473
Date Collected: 09/24/2004
Date Received: 09/27/2004
Date Extracted: 10/08/2004
Date Analyzed: 10/18/2004

Polychlorinated Biphenyls (PCBs)

Sample Name: LDW-B5a-S
Lab Code: K2407473-001
File ID: J:\GC09\DATA\101804.B\1018F005.D
Instrument ID: GC09.i

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8082

Extraction Lot: KWG0415514
Calibration ID: CAL3870

Sample Amount: 30.87 g
% Solids: 64.9
Dilution Factor: 1

Column1: DB-35MS
Column2: DB-XLB

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
12674-11-2	Aroclor 1016	2.8	U	10	2.8	
11104-28-2	Aroclor 1221	2.8	U	20	2.8	
11141-16-5	Aroclor 1232	2.8	U	10	2.8	
53469-21-9	Aroclor 1242	2.8	U	10	2.8	
12672-29-6	Aroclor 1248	600		10	2.8	
11097-69-1	Aroclor 1254	630		10	2.8	
11096-82-5	Aroclor 1260	500		10	2.8	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Decachlorobiphenyl	76	50-150	10/18/04	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2407595
Date Collected: 09/27/2004
Date Received: 09/30/2004
Date Extracted: 10/08/2004
Date Analyzed: 10/15/2004

Polychlorinated Biphenyls (PCBs)

Sample Name: LDW-B1b-S
Lab Code: K2407595-001
File ID: J:\GC09\DATA\101504.B\1015F019.D
Instrument ID: GC09.i

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8082

Extraction Lot: KWG0415514
Calibration ID: CAL3870

Sample Amount: 26.65 g
% Solids: 75.2
Dilution Factor: 1

Column1: DB-35MS
Column2: DB-XLB

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
12674-11-2	Aroclor 1016	2.4	U	10	2.4	
11104-28-2	Aroclor 1221	2.4	U	20	2.4	
11141-16-5	Aroclor 1232	2.4	U	10	2.4	
53469-21-9	Aroclor 1242	8.5	J	10	2.4	
12672-29-6	Aroclor 1248	15	Ui	15	15	
11097-69-1	Aroclor 1254	19		10	2.4	
11096-82-5	Aroclor 1260	23		10	2.4	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Decachlorobiphenyl	63	50-150	10/15/04	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2407595
Date Collected: 09/27/2004
Date Received: 09/30/2004
Date Extracted: 10/08/2004
Date Analyzed: 10/15/2004

Polychlorinated Biphenyls (PCBs)

Sample Name: LDW-B2b-S
Lab Code: K2407595-002
File ID: J:\GC09\DATA\101504.B\1015F024.D
Instrument ID: GC09.i

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8082

Extraction Lot: KWG0415514
Calibration ID: CAL3870

Sample Amount: 30.20 g
% Solids: 66.4
Dilution Factor: 1

Column1: DB-35MS
Column2: DB-XLB

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
12674-11-2	Aroclor 1016	2.8	U	10	2.8	
11104-28-2	Aroclor 1221	2.8	U	20	2.8	
11141-16-5	Aroclor 1232	2.8	U	10	2.8	
53469-21-9	Aroclor 1242	170		10	2.8	
12672-29-6	Aroclor 1248	140	Ui	140	140	
11097-69-1	Aroclor 1254	190		10	2.8	
11096-82-5	Aroclor 1260	150		10	2.8	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Decachlorobiphenyl	72	50-150	10/15/04	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2407595
Date Collected: 09/28/2004
Date Received: 09/30/2004
Date Extracted: 10/08/2004
Date Analyzed: 10/15/2004

Polychlorinated Biphenyls (PCBs)

Sample Name: LDW-B4b-S
Lab Code: K2407595-003
File ID: J:\GC09\DATA\101504.B\1015F025.D
Instrument ID: GC09.i

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8082

Extraction Lot: KWG0415514
Calibration ID: CAL3870

Sample Amount: 43.62 g
% Solids: 45.9
Dilution Factor: 1

Column1: DB-35MS
Column2: DB-XLB

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
12674-11-2	Aroclor 1016	4.0	U	10	4.0	
11104-28-2	Aroclor 1221	4.0	U	20	4.0	
11141-16-5	Aroclor 1232	4.0	U	10	4.0	
53469-21-9	Aroclor 1242	100		10	4.0	
12672-29-6	Aroclor 1248	84	Ui	84	84	
11097-69-1	Aroclor 1254	150		10	4.0	
11096-82-5	Aroclor 1260	150		10	4.0	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Decachlorobiphenyl	52	50-150	10/15/04	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2407595
Date Collected: 09/28/2004
Date Received: 09/30/2004
Date Extracted: 10/08/2004
Date Analyzed: 10/18/2004

Polychlorinated Biphenyls (PCBs)

Sample Name: LDW-B5b-S
Lab Code: K2407595-004
File ID: J:\GC09\DATA\101804.B\1018F006.D
Instrument ID: GC09.i

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8082

Extraction Lot: KWG0415514
Calibration ID: CAL3870

Sample Amount: 34.64 g
% Solids: 57.8
Dilution Factor: 1

Column1: DB-35MS
Column2: DB-XLB

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
12674-11-2	Aroclor 1016	3.2	U	10	3.2	
11104-28-2	Aroclor 1221	3.2	U	20	3.2	
11141-16-5	Aroclor 1232	3.2	U	10	3.2	
53469-21-9	Aroclor 1242	3.2	U	10	3.2	
12672-29-6	Aroclor 1248	68		10	3.2	
11097-69-1	Aroclor 1254	120		10	3.2	
11096-82-5	Aroclor 1260	90		10	3.2	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Decachlorobiphenyl	70	50-150	10/18/04	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2407595
Date Extracted: 10/08/2004
Date Analyzed: 10/15/2004

**Duplicate Sample Summary
 Polychlorinated Biphenyls (PCBs)**

Sample Name: LDW-B1b-S
Lab Code: K2407595-001
Extraction Method: EPA 3540C
Analysis Method: 8082

Units: ug/Kg
Basis: Dry
Level: Low
Extraction Lot: KWG0415514

Analyte Name	MRL	MDL	Sample Result	LDW-B1b-SDUP KWG0415514-1 Duplicate Sample		Relative Percent Difference	RPD Limit
				Result	Average		
Aroclor 1016	10	2.4	ND	ND	ND	-	50
Aroclor 1221	20	2.4	ND	ND	ND	-	50
Aroclor 1232	10	2.4	ND	ND	ND	-	50
Aroclor 1242	10	2.4	8.5	9.1	8.8	6 #	50
Aroclor 1248	18	18	ND	ND	ND	-	50
Aroclor 1254	10	2.4	19	32	26	50 #	50
Aroclor 1260	10	2.4	23	29	26	23	50

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2407596
Date Collected: 09/28/2004
Date Received: 09/30/2004
Date Extracted: 10/15/2004
Date Analyzed: 10/24/2004

Polychlorinated Biphenyls (PCBs)

Sample Name: LDW-B4b-T
Lab Code: K2407596-001
File ID: J:\GC09\DATA\102504.B\1025F015.D
Instrument ID: GC09.i

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8082

Extraction Lot: KWG0416042
Calibration ID: CAL3912

Sample Amount: 2.03 g
% Solids: NA
Dilution Factor: 1

Column1: DB-35MS
Column2: DB-XLB

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
12674-11-2	Aroclor 1016	20	U	99	20	
11104-28-2	Aroclor 1221	31	U	200	31	
11141-16-5	Aroclor 1232	20	U	99	20	
53469-21-9	Aroclor 1242	35	U	99	35	
12672-29-6	Aroclor 1248	7.5	U	99	7.5	
11097-69-1	Aroclor 1254	160		99	15	
11096-82-5	Aroclor 1260	47	U	99	47	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Decachlorobiphenyl	83	38-150	10/24/04	Acceptable

Comments: _____

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2407596
Date Collected: 09/28/2004
Date Received: 09/30/2004
Date Extracted: 10/15/2004
Date Analyzed: 10/24/2004

Polychlorinated Biphenyls (PCBs)

Sample Name: LDW-B5b-T
Lab Code: K2407596-002
File ID: J:\GC09\DATA\102504.B\1025F016.D
Instrument ID: GC09.i

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8082

Extraction Lot: KWG0416042
Calibration ID: CAL3912

Sample Amount: 2.03 g
% Solids: NA
Dilution Factor: 1

Column1: DB-35MS
Column2: DB-XLB

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
12674-11-2	Aroclor 1016	20	U	99	20	
11104-28-2	Aroclor 1221	31	U	200	31	
11141-16-5	Aroclor 1232	20	U	99	20	
53469-21-9	Aroclor 1242	35	U	99	35	
12672-29-6	Aroclor 1248	7.5	U	99	7.5	
11097-69-1	Aroclor 1254	220		99	15	
11096-82-5	Aroclor 1260	47	U	99	47	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Decachlorobiphenyl	84	38-150	10/24/04	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2407596
Date Collected: 09/27/2004
Date Received: 09/30/2004
Date Extracted: 10/15/2004
Date Analyzed: 10/24/2004

Polychlorinated Biphenyls (PCBs)

Sample Name: LDW-B1b-T
Lab Code: K2407596-003
File ID: J:\GC09\DATA\102504.B\1025F018.D
Instrument ID: GC09.i

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8082

Extraction Lot: KWG0416042
Calibration ID: CAL3912

Sample Amount: 2.01 g
% Solids: NA
Dilution Factor: 1

Column1: DB-35MS
Column2: DB-XLB

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
12674-11-2	Aroclor 1016	20 U	100	20	
11104-28-2	Aroclor 1221	31 U	200	31	
11141-16-5	Aroclor 1232	20 U	100	20	
53469-21-9	Aroclor 1242	35 U	100	35	
12672-29-6	Aroclor 1248	7.6 U	100	7.6	
11097-69-1	Aroclor 1254	100	100	15	
11096-82-5	Aroclor 1260	47 U	100	47	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Decachlorobiphenyl	79	38-150	10/24/04	Acceptable

Comments: _____

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2407596
Date Collected: 09/27/2004
Date Received: 09/30/2004
Date Extracted: 10/15/2004
Date Analyzed: 10/25/2004

Polychlorinated Biphenyls (PCBs)

Sample Name: LDW-B2b-T
Lab Code: K2407596-004
File ID: J:\GC09\DATA\102504.B\1025F019.D
Instrument ID: GC09.i

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3540C
Analysis Method: 8082

Extraction Lot: KWG0416042
Calibration ID: CAL3912

Sample Amount: 2.02 g
% Solids: NA
Dilution Factor: 1

Column1: DB-35MS
Column2: DB-XLB

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
12674-11-2	Aroclor 1016	20	U	100	20	
11104-28-2	Aroclor 1221	31	U	200	31	
11141-16-5	Aroclor 1232	20	U	100	20	
53469-21-9	Aroclor 1242	35	U	100	35	
12672-29-6	Aroclor 1248	7.6	U	100	7.6	
11097-69-1	Aroclor 1254	240		100	15	
11096-82-5	Aroclor 1260	47	U	100	47	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Decachlorobiphenyl	84	38-150	10/25/04	Acceptable

Comments: _____

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2407596
Date Extracted: 10/15/2004
Date Analyzed: 10/24/2004

**Duplicate Sample Summary
 Polychlorinated Biphenyls (PCBs)**

Sample Name: LDW-B5b-T
Lab Code: K2407596-002
Extraction Method: EPA 3540C
Analysis Method: 8082

Units: ug/Kg
Basis: Wet
Level: Low
Extraction Lot: KWG0416042

Analyte Name	MRL	MDL	Sample Result	LDW-B5b-TDUP KWG0416042-1 Duplicate Sample		Relative Percent Difference	RPD Limit
				Result	Average		
Aroclor 1016	99	20	ND	ND	ND	-	50
Aroclor 1221	200	31	ND	ND	ND	-	50
Aroclor 1232	99	20	ND	ND	ND	-	50
Aroclor 1242	99	35	ND	ND	ND	-	50
Aroclor 1248	99	7.5	ND	ND	ND	-	50
Aroclor 1254	99	15	220	200	210	9	50
Aroclor 1260	99	47	ND	ND	ND	-	50

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

**Semi-Volatile Organic Compounds
EPA Method 8270C**

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406170
Date Collected: 08/13/2004
Date Received: 08/18/2004

Semi-Volatile Organic Compounds by GC/MS

Sample Name: LDW-B2a-S
Lab Code: K2406170-001
Extraction Method: EPA 3541
Analysis Method: 8270C

Units: ug/Kg
Basis: Dry
Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
N-Nitrosodimethylamine	ND	U	50	13	1	09/22/04	09/28/04	KWG0414281	
Aniline	ND	U	20	3.0	1	09/22/04	09/28/04	KWG0414281	
Bis(2-chloroethyl) Ether	ND	U	10	4.8	1	09/22/04	09/28/04	KWG0414281	
Phenol	34		30	3.8	1	09/22/04	09/28/04	KWG0414281	
2-Chlorophenol	ND	U	10	3.4	1	09/22/04	09/28/04	KWG0414281	
1,3-Dichlorobenzene	ND	U	10	3.2	1	09/22/04	09/28/04	KWG0414281	
1,4-Dichlorobenzene	ND	U	10	3.8	1	09/22/04	09/28/04	KWG0414281	
1,2-Dichlorobenzene	ND	U	10	2.6	1	09/22/04	09/28/04	KWG0414281	
Benzyl Alcohol	ND	U	10	7.4	1	09/22/04	09/28/04	KWG0414281	
Bis(2-chloroisopropyl) Ether	ND	U	10	2.4	1	09/22/04	09/28/04	KWG0414281	
2-Methylphenol	ND	U	10	6.8	1	09/22/04	09/28/04	KWG0414281	
Hexachloroethane	ND	U	10	4.4	1	09/22/04	09/28/04	KWG0414281	
N-Nitrosodi-n-propylamine	ND	U	10	6.4	1	09/22/04	09/28/04	KWG0414281	
4-Methylphenol†	ND	U	10	5.8	1	09/22/04	09/28/04	KWG0414281	
Nitrobenzene	ND	U	10	4.0	1	09/22/04	09/28/04	KWG0414281	
Isophorone	ND	U	10	3.2	1	09/22/04	09/28/04	KWG0414281	
2-Nitrophenol	ND	U	10	5.2	1	09/22/04	09/28/04	KWG0414281	
2,4-Dimethylphenol	ND	U	50	11	1	09/22/04	09/28/04	KWG0414281	*
Bis(2-chloroethoxy)methane	ND	U	10	2.6	1	09/22/04	09/28/04	KWG0414281	
2,4-Dichlorophenol	ND	U	10	3.6	1	09/22/04	09/28/04	KWG0414281	
Benzoic Acid	ND	U	200	200	1	09/22/04	09/28/04	KWG0414281	
1,2,4-Trichlorobenzene	ND	U	10	3.0	1	09/22/04	09/28/04	KWG0414281	
4-Chloroaniline	ND	U	10	4.2	1	09/22/04	09/28/04	KWG0414281	
Hexachlorobutadiene	ND	U	10	2.8	1	09/22/04	09/28/04	KWG0414281	
4-Chloro-3-methylphenol	ND	U	10	4.2	1	09/22/04	09/28/04	KWG0414281	
Hexachlorocyclopentadiene	ND	U	50	30	1	09/22/04	09/28/04	KWG0414281	
2,4,6-Trichlorophenol	ND	U	10	3.6	1	09/22/04	09/28/04	KWG0414281	
2,4,5-Trichlorophenol	ND	U	10	6.0	1	09/22/04	09/28/04	KWG0414281	
2-Chloronaphthalene	ND	U	10	7.2	1	09/22/04	09/28/04	KWG0414281	
2-Nitroaniline	ND	U	20	5.4	1	09/22/04	09/28/04	KWG0414281	
Dimethyl Phthalate	ND	U	10	3.6	1	09/22/04	09/28/04	KWG0414281	
2,6-Dinitrotoluene	ND	U	10	5.6	1	09/22/04	09/28/04	KWG0414281	
3-Nitroaniline	ND	U	20	5.2	1	09/22/04	09/28/04	KWG0414281	
2,4-Dinitrophenol	ND	U	200	72	1	09/22/04	09/28/04	KWG0414281	

Comments: _____

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406170
Date Collected: 08/13/2004
Date Received: 08/18/2004

Semi-Volatile Organic Compounds by GC/MS

Sample Name: LDW-B2a-S
Lab Code: K2406170-001
Extraction Method: EPA 3541
Analysis Method: 8270C

Units: ug/Kg
Basis: Dry
Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
4-Nitrophenol	ND	U	100	60	1	09/22/04	09/28/04	KWG0414281	
2,4-Dinitrotoluene	ND	U	10	5.6	1	09/22/04	09/28/04	KWG0414281	
4-Chlorophenyl Phenyl Ether	ND	U	10	4.0	1	09/22/04	09/28/04	KWG0414281	
Diethyl Phthalate	ND	U	10	7.0	1	09/22/04	09/28/04	KWG0414281	
4-Nitroaniline	ND	U	20	6.8	1	09/22/04	09/28/04	KWG0414281	
2-Methyl-4,6-dinitrophenol	ND	U	100	3.4	1	09/22/04	09/28/04	KWG0414281	
N-Nitrosodiphenylamine	ND	U	10	4.4	1	09/22/04	09/28/04	KWG0414281	
4-Bromophenyl Phenyl Ether	ND	U	10	2.8	1	09/22/04	09/28/04	KWG0414281	
Hexachlorobenzene	ND	U	10	4.2	1	09/22/04	09/28/04	KWG0414281	
Pentachlorophenol	ND	U	50	17	1	09/22/04	09/28/04	KWG0414281	
Carbazole	18		10	2.6	1	09/22/04	09/28/04	KWG0414281	
Di-n-butyl Phthalate	ND	U	10	5.2	1	09/22/04	09/28/04	KWG0414281	
Benzidine	ND	U	400	400	1	09/22/04	09/28/04	KWG0414281	*
Butyl Benzyl Phthalate	16		10	3.0	1	09/22/04	09/28/04	KWG0414281	
3,3'-Dichlorobenzidine	ND	U	100	7.4	1	09/22/04	09/28/04	KWG0414281	
Bis(2-ethylhexyl) Phthalate	53	J	200	3.4	1	09/22/04	09/28/04	KWG0414281	
Di-n-octyl Phthalate	ND	U	20	2.4	1	09/22/04	09/28/04	KWG0414281	

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	54	40-130	09/28/04	Acceptable
Phenol-d6	58	40-130	09/28/04	Acceptable
Nitrobenzene-d5	49	40-130	09/28/04	Acceptable
2-Fluorobiphenyl	26	40-130	09/28/04	Outside Control Limits
2,4,6-Tribromophenol	81	40-130	09/28/04	Acceptable
Terphenyl-d14	72	40-130	09/28/04	Acceptable

† Analyte Comments

4-Methylphenol This analyte cannot be separated from 3-Methylphenol.

Comments: _____

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406170
Date Collected: 08/15/2004
Date Received: 08/18/2004

Semi-Volatile Organic Compounds by GC/MS

Sample Name: LDW-B6a-S
Lab Code: K2406170-002
Extraction Method: EPA 3541
Analysis Method: 8270C

Units: ug/Kg
Basis: Dry
Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
N-Nitrosodimethylamine	ND	U	100	18	2	09/22/04	09/28/04	KWG0414281	
Aniline	ND	U	40	4.3	2	09/22/04	09/28/04	KWG0414281	
Bis(2-chloroethyl) Ether	ND	U	20	6.8	2	09/22/04	09/28/04	KWG0414281	
Phenol	31	JD	60	5.4	2	09/22/04	09/28/04	KWG0414281	
2-Chlorophenol	ND	U	20	4.8	2	09/22/04	09/28/04	KWG0414281	
1,3-Dichlorobenzene	ND	U	20	4.5	2	09/22/04	09/28/04	KWG0414281	
1,4-Dichlorobenzene	ND	U	20	5.4	2	09/22/04	09/28/04	KWG0414281	
1,2-Dichlorobenzene	ND	U	20	3.7	2	09/22/04	09/28/04	KWG0414281	
Benzyl Alcohol	ND	U	20	11	2	09/22/04	09/28/04	KWG0414281	
Bis(2-chloroisopropyl) Ether	ND	U	20	3.4	2	09/22/04	09/28/04	KWG0414281	
2-Methylphenol	ND	U	20	9.6	2	09/22/04	09/28/04	KWG0414281	
Hexachloroethane	ND	U	20	6.2	2	09/22/04	09/28/04	KWG0414281	
N-Nitrosodi-n-propylamine	ND	U	20	9.0	2	09/22/04	09/28/04	KWG0414281	
4-Methylphenol†	ND	U	20	8.2	2	09/22/04	09/28/04	KWG0414281	
Nitrobenzene	ND	U	20	5.7	2	09/22/04	09/28/04	KWG0414281	
Isophorone	ND	U	20	4.5	2	09/22/04	09/28/04	KWG0414281	
2-Nitrophenol	ND	U	20	7.4	2	09/22/04	09/28/04	KWG0414281	
2,4-Dimethylphenol	ND	U	100	16	2	09/22/04	09/28/04	KWG0414281	*
Bis(2-chloroethoxy)methane	ND	U	20	3.7	2	09/22/04	09/28/04	KWG0414281	
2,4-Dichlorophenol	ND	U	20	5.1	2	09/22/04	09/28/04	KWG0414281	
Benzoic Acid	ND	U	400	270	2	09/22/04	09/28/04	KWG0414281	
1,2,4-Trichlorobenzene	ND	U	20	4.3	2	09/22/04	09/28/04	KWG0414281	
4-Chloroaniline	ND	U	20	5.9	2	09/22/04	09/28/04	KWG0414281	
Hexachlorobutadiene	ND	U	20	4.0	2	09/22/04	09/28/04	KWG0414281	
4-Chloro-3-methylphenol	ND	U	20	5.9	2	09/22/04	09/28/04	KWG0414281	
Hexachlorocyclopentadiene	ND	U	100	43	2	09/22/04	09/28/04	KWG0414281	
2,4,6-Trichlorophenol	ND	U	20	5.1	2	09/22/04	09/28/04	KWG0414281	
2,4,5-Trichlorophenol	ND	U	20	8.5	2	09/22/04	09/28/04	KWG0414281	
2-Chloronaphthalene	ND	U	20	11	2	09/22/04	09/28/04	KWG0414281	
2-Nitroaniline	ND	U	40	7.6	2	09/22/04	09/28/04	KWG0414281	
Dimethyl Phthalate	ND	U	20	5.1	2	09/22/04	09/28/04	KWG0414281	
2,6-Dinitrotoluene	ND	U	20	7.9	2	09/22/04	09/28/04	KWG0414281	
3-Nitroaniline	ND	U	40	7.4	2	09/22/04	09/28/04	KWG0414281	
2,4-Dinitrophenol	ND	U	400	110	2	09/22/04	09/28/04	KWG0414281	

Comments: _____

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406170
Date Collected: 08/15/2004
Date Received: 08/18/2004

Semi-Volatile Organic Compounds by GC/MS

Sample Name: LDW-B6a-S
Lab Code: K2406170-002
Extraction Method: EPA 3541
Analysis Method: 8270C

Units: ug/Kg
Basis: Dry
Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
4-Nitrophenol	ND	U	200	85	2	09/22/04	09/28/04	KWG0414281	
2,4-Dinitrotoluene	ND	U	20	7.9	2	09/22/04	09/28/04	KWG0414281	
4-Chlorophenyl Phenyl Ether	ND	U	20	5.7	2	09/22/04	09/28/04	KWG0414281	
Diethyl Phthalate	ND	U	20	9.9	2	09/22/04	09/28/04	KWG0414281	
4-Nitroaniline	ND	U	40	9.6	2	09/22/04	09/28/04	KWG0414281	
2-Methyl-4,6-dinitrophenol	ND	U	200	4.8	2	09/22/04	09/28/04	KWG0414281	
N-Nitrosodiphenylamine	ND	U	20	6.2	2	09/22/04	09/28/04	KWG0414281	
4-Bromophenyl Phenyl Ether	ND	U	20	4.0	2	09/22/04	09/28/04	KWG0414281	
Hexachlorobenzene	ND	U	20	5.9	2	09/22/04	09/28/04	KWG0414281	
Pentachlorophenol	ND	U	100	24	2	09/22/04	09/28/04	KWG0414281	
Carbazole	6.3	JD	20	3.7	2	09/22/04	09/28/04	KWG0414281	
Di-n-butyl Phthalate	7.7	JD	20	7.4	2	09/22/04	09/28/04	KWG0414281	
Benzidine	ND	U	570	570	2	09/22/04	09/28/04	KWG0414281	*
Butyl Benzyl Phthalate	16	JD	20	4.3	2	09/22/04	09/28/04	KWG0414281	
3,3'-Dichlorobenzidine	ND	U	200	11	2	09/22/04	09/28/04	KWG0414281	
Bis(2-ethylhexyl) Phthalate	61	JD	400	4.8	2	09/22/04	09/28/04	KWG0414281	
Di-n-octyl Phthalate	ND	U	40	3.4	2	09/22/04	09/28/04	KWG0414281	

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	72	40-130	09/28/04	Acceptable
Phenol-d6	68	40-130	09/28/04	Acceptable
Nitrobenzene-d5	68	40-130	09/28/04	Acceptable
2-Fluorobiphenyl	54	40-130	09/28/04	Acceptable
2,4,6-Tribromophenol	81	40-130	09/28/04	Acceptable
Terphenyl-d14	91	40-130	09/28/04	Acceptable

† Analyte Comments

4-Methylphenol This analyte cannot be separated from 3-Methylphenol.

Comments: _____

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406170
Date Collected: 08/14/2004
Date Received: 08/18/2004

Semi-Volatile Organic Compounds by GC/MS

Sample Name: LDW-B4a-S
Lab Code: K2406170-003
Extraction Method: EPA 3541
Analysis Method: 8270C

Units: ug/Kg
Basis: Dry
Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
N-Nitrosodimethylamine	ND	U	100	23	2	09/22/04	09/28/04	KWG0414281	
Aniline	ND	U	40	5.6	2	09/22/04	09/28/04	KWG0414281	
Bis(2-chloroethyl) Ether	ND	U	20	9.0	2	09/22/04	09/28/04	KWG0414281	
Phenol	23	JD	60	7.1	2	09/22/04	09/28/04	KWG0414281	
2-Chlorophenol	ND	U	20	6.4	2	09/22/04	09/28/04	KWG0414281	
1,3-Dichlorobenzene	ND	U	20	6.0	2	09/22/04	09/28/04	KWG0414281	
1,4-Dichlorobenzene	ND	U	20	7.1	2	09/22/04	09/28/04	KWG0414281	
1,2-Dichlorobenzene	ND	U	20	4.9	2	09/22/04	09/28/04	KWG0414281	
Benzyl Alcohol	ND	U	20	14	2	09/22/04	09/28/04	KWG0414281	
Bis(2-chloroisopropyl) Ether	ND	U	20	4.5	2	09/22/04	09/28/04	KWG0414281	
2-Methylphenol	ND	U	20	13	2	09/22/04	09/28/04	KWG0414281	
Hexachloroethane	ND	U	20	8.2	2	09/22/04	09/28/04	KWG0414281	
N-Nitrosodi-n-propylamine	ND	U	20	12	2	09/22/04	09/28/04	KWG0414281	
4-Methylphenol†	ND	U	20	11	2	09/22/04	09/28/04	KWG0414281	
Nitrobenzene	ND	U	20	7.5	2	09/22/04	09/28/04	KWG0414281	
Isophorone	ND	U	20	6.0	2	09/22/04	09/28/04	KWG0414281	
2-Nitrophenol	ND	U	20	9.7	2	09/22/04	09/28/04	KWG0414281	
2,4-Dimethylphenol	ND	U	100	21	2	09/22/04	09/28/04	KWG0414281	*
Bis(2-chloroethoxy)methane	ND	U	20	4.9	2	09/22/04	09/28/04	KWG0414281	
2,4-Dichlorophenol	ND	U	20	6.8	2	09/22/04	09/28/04	KWG0414281	
Benzoic Acid	ND	U	400	360	2	09/22/04	09/28/04	KWG0414281	
1,2,4-Trichlorobenzene	ND	U	20	5.6	2	09/22/04	09/28/04	KWG0414281	
4-Chloroaniline	ND	U	20	7.9	2	09/22/04	09/28/04	KWG0414281	
Hexachlorobutadiene	ND	U	20	5.3	2	09/22/04	09/28/04	KWG0414281	
4-Chloro-3-methylphenol	ND	U	20	7.9	2	09/22/04	09/28/04	KWG0414281	
Hexachlorocyclopentadiene	ND	U	100	56	2	09/22/04	09/28/04	KWG0414281	
2,4,6-Trichlorophenol	ND	U	20	6.8	2	09/22/04	09/28/04	KWG0414281	
2,4,5-Trichlorophenol	ND	U	20	12	2	09/22/04	09/28/04	KWG0414281	
2-Chloronaphthalene	ND	U	20	14	2	09/22/04	09/28/04	KWG0414281	
2-Nitroaniline	ND	U	40	11	2	09/22/04	09/28/04	KWG0414281	
Dimethyl Phthalate	ND	U	20	6.8	2	09/22/04	09/28/04	KWG0414281	
2,6-Dinitrotoluene	ND	U	20	11	2	09/22/04	09/28/04	KWG0414281	
3-Nitroaniline	ND	U	40	9.7	2	09/22/04	09/28/04	KWG0414281	
2,4-Dinitrophenol	ND	U	400	140	2	09/22/04	09/28/04	KWG0414281	

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406170
Date Collected: 08/14/2004
Date Received: 08/18/2004

Semi-Volatile Organic Compounds by GC/MS

Sample Name: LDW-B4a-S
Lab Code: K2406170-003
Extraction Method: EPA 3541
Analysis Method: 8270C

Units: ug/Kg
Basis: Dry
Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
4-Nitrophenol	ND	U	200	120	2	09/22/04	09/28/04	KWG0414281	
2,4-Dinitrotoluene	ND	U	20	11	2	09/22/04	09/28/04	KWG0414281	
4-Chlorophenyl Phenyl Ether	ND	U	20	7.5	2	09/22/04	09/28/04	KWG0414281	
Diethyl Phthalate	ND	U	20	14	2	09/22/04	09/28/04	KWG0414281	
4-Nitroaniline	ND	U	40	13	2	09/22/04	09/28/04	KWG0414281	
2-Methyl-4,6-dinitrophenol	ND	U	200	6.4	2	09/22/04	09/28/04	KWG0414281	
N-Nitrosodiphenylamine	ND	U	20	8.2	2	09/22/04	09/28/04	KWG0414281	
4-Bromophenyl Phenyl Ether	ND	U	20	5.3	2	09/22/04	09/28/04	KWG0414281	
Hexachlorobenzene	ND	U	20	7.9	2	09/22/04	09/28/04	KWG0414281	
Pentachlorophenol	80	JD	100	32	2	09/22/04	09/28/04	KWG0414281	
Carbazole	25	D	20	4.9	2	09/22/04	09/28/04	KWG0414281	
Di-n-butyl Phthalate	16	JD	20	9.7	2	09/22/04	09/28/04	KWG0414281	
Benzidine	ND	U	750	750	2	09/22/04	09/28/04	KWG0414281	*
Butyl Benzyl Phthalate	21	D	20	5.6	2	09/22/04	09/28/04	KWG0414281	
3,3'-Dichlorobenzidine	ND	U	200	14	2	09/22/04	09/28/04	KWG0414281	
Bis(2-ethylhexyl) Phthalate	140	JD	400	6.4	2	09/22/04	09/28/04	KWG0414281	
Di-n-octyl Phthalate	ND	U	40	4.5	2	09/22/04	09/28/04	KWG0414281	

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	73	40-130	09/28/04	Acceptable
Phenol-d6	66	40-130	09/28/04	Acceptable
Nitrobenzene-d5	67	40-130	09/28/04	Acceptable
2-Fluorobiphenyl	62	40-130	09/28/04	Acceptable
2,4,6-Tribromophenol	97	40-130	09/28/04	Acceptable
Terphenyl-d14	92	40-130	09/28/04	Acceptable

† Analyte Comments

4-Methylphenol This analyte cannot be separated from 3-Methylphenol.

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406170
Date Collected: 08/12/2004
Date Received: 08/18/2004

Semi-Volatile Organic Compounds by GC/MS

Sample Name: LDW-B1a-S
Lab Code: K2406170-004
Extraction Method: EPA 3541
Analysis Method: 8270C

Units: ug/Kg
Basis: Dry
Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
N-Nitrosodimethylamine	ND	U	50	7.6	1	09/22/04	09/28/04	KWG0414281	
Aniline	ND	U	20	1.9	1	09/22/04	09/28/04	KWG0414281	
Bis(2-chloroethyl) Ether	ND	U	10	3.0	1	09/22/04	09/28/04	KWG0414281	
Phenol	78		30	2.4	1	09/22/04	09/28/04	KWG0414281	
2-Chlorophenol	ND	U	10	2.2	1	09/22/04	09/28/04	KWG0414281	
1,3-Dichlorobenzene	ND	U	10	2.0	1	09/22/04	09/28/04	KWG0414281	
1,4-Dichlorobenzene	ND	U	10	2.4	1	09/22/04	09/28/04	KWG0414281	
1,2-Dichlorobenzene	ND	U	10	1.7	1	09/22/04	09/28/04	KWG0414281	
Benzyl Alcohol	ND	U	10	4.7	1	09/22/04	09/28/04	KWG0414281	
Bis(2-chloroisopropyl) Ether	ND	U	10	1.5	1	09/22/04	09/28/04	KWG0414281	
2-Methylphenol	ND	U	10	4.3	1	09/22/04	09/28/04	KWG0414281	
Hexachloroethane	ND	U	10	2.8	1	09/22/04	09/28/04	KWG0414281	
N-Nitrosodi-n-propylamine	ND	U	10	4.0	1	09/22/04	09/28/04	KWG0414281	
4-Methylphenol†	ND	U	10	3.7	1	09/22/04	09/28/04	KWG0414281	
Nitrobenzene	ND	U	10	2.5	1	09/22/04	09/28/04	KWG0414281	
Isophorone	ND	U	10	2.0	1	09/22/04	09/28/04	KWG0414281	
2-Nitrophenol	ND	U	10	3.3	1	09/22/04	09/28/04	KWG0414281	
2,4-Dimethylphenol	ND	U	50	6.9	1	09/22/04	09/28/04	KWG0414281	*
Bis(2-chloroethoxy)methane	ND	U	10	1.7	1	09/22/04	09/28/04	KWG0414281	
2,4-Dichlorophenol	ND	U	10	2.3	1	09/22/04	09/28/04	KWG0414281	
Benzoic Acid	ND	U	200	120	1	09/22/04	09/28/04	KWG0414281	
1,2,4-Trichlorobenzene	ND	U	10	1.9	1	09/22/04	09/28/04	KWG0414281	
4-Chloroaniline	ND	U	10	2.7	1	09/22/04	09/28/04	KWG0414281	
Hexachlorobutadiene	ND	U	10	1.8	1	09/22/04	09/28/04	KWG0414281	
4-Chloro-3-methylphenol	ND	U	10	2.7	1	09/22/04	09/28/04	KWG0414281	
Hexachlorocyclopentadiene	ND	U	50	19	1	09/22/04	09/28/04	KWG0414281	
2,4,6-Trichlorophenol	ND	U	10	2.3	1	09/22/04	09/28/04	KWG0414281	
2,4,5-Trichlorophenol	ND	U	10	3.8	1	09/22/04	09/28/04	KWG0414281	
2-Chloronaphthalene	ND	U	10	4.5	1	09/22/04	09/28/04	KWG0414281	
2-Nitroaniline	ND	U	20	3.4	1	09/22/04	09/28/04	KWG0414281	
Dimethyl Phthalate	ND	U	10	2.3	1	09/22/04	09/28/04	KWG0414281	
2,6-Dinitrotoluene	ND	U	10	3.5	1	09/22/04	09/28/04	KWG0414281	
3-Nitroaniline	ND	U	20	3.3	1	09/22/04	09/28/04	KWG0414281	
2,4-Dinitrophenol	ND	U	200	45	1	09/22/04	09/28/04	KWG0414281	

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406170
Date Collected: 08/12/2004
Date Received: 08/18/2004

Semi-Volatile Organic Compounds by GC/MS

Sample Name: LDW-B1a-S
Lab Code: K2406170-004
Extraction Method: EPA 3541
Analysis Method: 8270C

Units: ug/Kg
Basis: Dry
Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
4-Nitrophenol	ND	U	100	38	1	09/22/04	09/28/04	KWG0414281	
2,4-Dinitrotoluene	ND	U	10	3.5	1	09/22/04	09/28/04	KWG0414281	
4-Chlorophenyl Phenyl Ether	ND	U	10	2.5	1	09/22/04	09/28/04	KWG0414281	
Diethyl Phthalate	ND	U	10	4.4	1	09/22/04	09/28/04	KWG0414281	
4-Nitroaniline	ND	U	20	4.3	1	09/22/04	09/28/04	KWG0414281	
2-Methyl-4,6-dinitrophenol	ND	U	100	2.2	1	09/22/04	09/28/04	KWG0414281	
N-Nitrosodiphenylamine	ND	U	10	2.8	1	09/22/04	09/28/04	KWG0414281	
4-Bromophenyl Phenyl Ether	ND	U	10	1.8	1	09/22/04	09/28/04	KWG0414281	
Hexachlorobenzene	ND	U	10	2.7	1	09/22/04	09/28/04	KWG0414281	
Pentachlorophenol	ND	U	50	11	1	09/22/04	09/28/04	KWG0414281	
Carbazole	4.7	J	10	1.7	1	09/22/04	09/28/04	KWG0414281	
Di-n-butyl Phthalate	5.8	J	10	3.3	1	09/22/04	09/28/04	KWG0414281	
Benzidine	ND	U	250	250	1	09/22/04	09/28/04	KWG0414281	*
Butyl Benzyl Phthalate	ND	U	10	1.9	1	09/22/04	09/28/04	KWG0414281	
3,3'-Dichlorobenzidine	ND	U	100	4.7	1	09/22/04	09/28/04	KWG0414281	
Bis(2-ethylhexyl) Phthalate	15	J	200	2.2	1	09/22/04	09/28/04	KWG0414281	
Di-n-octyl Phthalate	ND	U	20	1.5	1	09/22/04	09/28/04	KWG0414281	

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	62	40-130	09/28/04	Acceptable
Phenol-d6	64	40-130	09/28/04	Acceptable
Nitrobenzene-d5	64	40-130	09/28/04	Acceptable
2-Fluorobiphenyl	62	40-130	09/28/04	Acceptable
2,4,6-Tribromophenol	82	40-130	09/28/04	Acceptable
Terphenyl-d14	88	40-130	09/28/04	Acceptable

† Analyte Comments

4-Methylphenol This analyte cannot be separated from 3-Methylphenol.

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406170
Date Collected: 08/11/2004
Date Received: 08/18/2004

Semi-Volatile Organic Compounds by GC/MS

Sample Name: LDW-B9b-S
Lab Code: K2406170-005
Extraction Method: EPA 3541
Analysis Method: 8270C

Units: ug/Kg
Basis: Dry
Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
N-Nitrosodimethylamine	ND	U	50	12	1	09/22/04	09/28/04	KWG0414281	
Aniline	ND	U	20	2.8	1	09/22/04	09/28/04	KWG0414281	
Bis(2-chloroethyl) Ether	ND	U	10	4.5	1	09/22/04	09/28/04	KWG0414281	
Phenol	92		30	3.6	1	09/22/04	09/28/04	KWG0414281	
2-Chlorophenol	ND	U	10	3.2	1	09/22/04	09/28/04	KWG0414281	
1,3-Dichlorobenzene	ND	U	10	3.0	1	09/22/04	09/28/04	KWG0414281	
1,4-Dichlorobenzene	ND	U	10	3.6	1	09/22/04	09/28/04	KWG0414281	
1,2-Dichlorobenzene	ND	U	10	2.4	1	09/22/04	09/28/04	KWG0414281	
Benzyl Alcohol	ND	U	10	6.9	1	09/22/04	09/28/04	KWG0414281	
Bis(2-chloroisopropyl) Ether	ND	U	10	2.3	1	09/22/04	09/28/04	KWG0414281	
2-Methylphenol	ND	U	10	6.3	1	09/22/04	09/28/04	KWG0414281	
Hexachloroethane	ND	U	10	4.1	1	09/22/04	09/28/04	KWG0414281	
N-Nitrosodi-n-propylamine	ND	U	10	6.0	1	09/22/04	09/28/04	KWG0414281	
4-Methylphenol†	ND	U	10	5.4	1	09/22/04	09/28/04	KWG0414281	
Nitrobenzene	ND	U	10	3.7	1	09/22/04	09/28/04	KWG0414281	
Isophorone	ND	U	10	3.0	1	09/22/04	09/28/04	KWG0414281	
2-Nitrophenol	ND	U	10	4.8	1	09/22/04	09/28/04	KWG0414281	
2,4-Dimethylphenol	ND	U	50	11	1	09/22/04	09/28/04	KWG0414281	*
Bis(2-chloroethoxy)methane	ND	U	10	2.4	1	09/22/04	09/28/04	KWG0414281	
2,4-Dichlorophenol	ND	U	10	3.4	1	09/22/04	09/28/04	KWG0414281	
Benzoic Acid	ND	U	200	180	1	09/22/04	09/28/04	KWG0414281	
1,2,4-Trichlorobenzene	ND	U	10	2.8	1	09/22/04	09/28/04	KWG0414281	
4-Chloroaniline	ND	U	10	3.9	1	09/22/04	09/28/04	KWG0414281	
Hexachlorobutadiene	ND	U	10	2.6	1	09/22/04	09/28/04	KWG0414281	
4-Chloro-3-methylphenol	ND	U	10	3.9	1	09/22/04	09/28/04	KWG0414281	
Hexachlorocyclopentadiene	ND	U	50	28	1	09/22/04	09/28/04	KWG0414281	
2,4,6-Trichlorophenol	ND	U	10	3.4	1	09/22/04	09/28/04	KWG0414281	
2,4,5-Trichlorophenol	ND	U	10	5.6	1	09/22/04	09/28/04	KWG0414281	
2-Chloronaphthalene	ND	U	10	6.7	1	09/22/04	09/28/04	KWG0414281	
2-Nitroaniline	ND	U	20	5.0	1	09/22/04	09/28/04	KWG0414281	
Dimethyl Phthalate	19		10	3.4	1	09/22/04	09/28/04	KWG0414281	
2,6-Dinitrotoluene	ND	U	10	5.2	1	09/22/04	09/28/04	KWG0414281	
3-Nitroaniline	ND	U	20	4.8	1	09/22/04	09/28/04	KWG0414281	
2,4-Dinitrophenol	ND	U	200	67	1	09/22/04	09/28/04	KWG0414281	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406170
Date Collected: 08/11/2004
Date Received: 08/18/2004

Semi-Volatile Organic Compounds by GC/MS

Sample Name: LDW-B9b-S
Lab Code: K2406170-005
Extraction Method: EPA 3541
Analysis Method: 8270C

Units: ug/Kg
Basis: Dry
Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
4-Nitrophenol	ND	U	100	56	1	09/22/04	09/28/04	KWG0414281	
2,4-Dinitrotoluene	ND	U	10	5.2	1	09/22/04	09/28/04	KWG0414281	
4-Chlorophenyl Phenyl Ether	ND	U	10	3.7	1	09/22/04	09/28/04	KWG0414281	
Diethyl Phthalate	ND	U	10	6.5	1	09/22/04	09/28/04	KWG0414281	
4-Nitroaniline	ND	U	20	6.3	1	09/22/04	09/28/04	KWG0414281	
2-Methyl-4,6-dinitrophenol	ND	U	100	3.2	1	09/22/04	09/28/04	KWG0414281	
N-Nitrosodiphenylamine	ND	U	10	4.1	1	09/22/04	09/28/04	KWG0414281	
4-Bromophenyl Phenyl Ether	ND	U	10	2.6	1	09/22/04	09/28/04	KWG0414281	
Hexachlorobenzene	ND	U	10	3.9	1	09/22/04	09/28/04	KWG0414281	
Pentachlorophenol	ND	U	50	16	1	09/22/04	09/28/04	KWG0414281	
Carbazole	7.7	J	10	2.4	1	09/22/04	09/28/04	KWG0414281	
Di-n-butyl Phthalate	9.5	J	10	4.8	1	09/22/04	09/28/04	KWG0414281	
Benzidine	ND	U	370	370	1	09/22/04	09/28/04	KWG0414281	*
Butyl Benzyl Phthalate	18		10	2.8	1	09/22/04	09/28/04	KWG0414281	
3,3'-Dichlorobenzidine	ND	U	100	6.9	1	09/22/04	09/28/04	KWG0414281	
Bis(2-ethylhexyl) Phthalate	69	J	200	3.2	1	09/22/04	09/28/04	KWG0414281	
Di-n-octyl Phthalate	ND	U	20	2.3	1	09/22/04	09/28/04	KWG0414281	

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	56	40-130	09/28/04	Acceptable
Phenol-d6	59	40-130	09/28/04	Acceptable
Nitrobenzene-d5	55	40-130	09/28/04	Acceptable
2-Fluorobiphenyl	33	40-130	09/28/04	Outside Control Limits
2,4,6-Tribromophenol	73	40-130	09/28/04	Acceptable
Terphenyl-d14	69	40-130	09/28/04	Acceptable

† Analyte Comments

4-Methylphenol This analyte cannot be separated from 3-Methylphenol.

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406226
Date Collected: 08/13/2004
Date Received: 08/19/2004

Semi-Volatile Organic Compounds by GC/MS

Sample Name: LDW-B7b-S
Lab Code: K2406226-001
Extraction Method: EPA 3541
Analysis Method: 8270C

Units: ug/Kg
Basis: Dry
Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
N-Nitrosodimethylamine	ND	U	100	25	2	09/22/04	09/28/04	KWG0414281	
Aniline	ND	U	40	6.0	2	09/22/04	09/28/04	KWG0414281	
Bis(2-chloroethyl) Ether	ND	U	20	9.6	2	09/22/04	09/28/04	KWG0414281	
Phenol	10	JD	60	7.6	2	09/22/04	09/28/04	KWG0414281	
2-Chlorophenol	ND	U	20	6.8	2	09/22/04	09/28/04	KWG0414281	
1,3-Dichlorobenzene	ND	U	20	6.4	2	09/22/04	09/28/04	KWG0414281	
1,4-Dichlorobenzene	ND	U	20	7.6	2	09/22/04	09/28/04	KWG0414281	
1,2-Dichlorobenzene	ND	U	20	5.2	2	09/22/04	09/28/04	KWG0414281	
Benzyl Alcohol	ND	U	20	15	2	09/22/04	09/28/04	KWG0414281	
Bis(2-chloroisopropyl) Ether	ND	U	20	4.8	2	09/22/04	09/28/04	KWG0414281	
2-Methylphenol	ND	U	20	14	2	09/22/04	09/28/04	KWG0414281	
Hexachloroethane	ND	U	20	8.8	2	09/22/04	09/28/04	KWG0414281	
N-Nitrosodi-n-propylamine	ND	U	20	13	2	09/22/04	09/28/04	KWG0414281	
4-Methylphenol†	ND	U	20	12	2	09/22/04	09/28/04	KWG0414281	
Nitrobenzene	ND	U	20	8.0	2	09/22/04	09/28/04	KWG0414281	
Isophorone	ND	U	20	6.4	2	09/22/04	09/28/04	KWG0414281	
2-Nitrophenol	ND	U	20	11	2	09/22/04	09/28/04	KWG0414281	
2,4-Dimethylphenol	ND	U	100	22	2	09/22/04	09/28/04	KWG0414281	*
Bis(2-chloroethoxy)methane	ND	U	20	5.2	2	09/22/04	09/28/04	KWG0414281	
2,4-Dichlorophenol	ND	U	20	7.2	2	09/22/04	09/28/04	KWG0414281	
Benzoic Acid	ND	U	400	390	2	09/22/04	09/28/04	KWG0414281	
1,2,4-Trichlorobenzene	ND	U	20	6.0	2	09/22/04	09/28/04	KWG0414281	
4-Chloroaniline	ND	U	20	8.4	2	09/22/04	09/28/04	KWG0414281	
Hexachlorobutadiene	ND	U	20	5.6	2	09/22/04	09/28/04	KWG0414281	
4-Chloro-3-methylphenol	ND	U	20	8.4	2	09/22/04	09/28/04	KWG0414281	
Hexachlorocyclopentadiene	ND	U	100	60	2	09/22/04	09/28/04	KWG0414281	
2,4,6-Trichlorophenol	ND	U	20	7.2	2	09/22/04	09/28/04	KWG0414281	
2,4,5-Trichlorophenol	ND	U	20	12	2	09/22/04	09/28/04	KWG0414281	
2-Chloronaphthalene	ND	U	20	15	2	09/22/04	09/28/04	KWG0414281	
2-Nitroaniline	ND	U	40	11	2	09/22/04	09/28/04	KWG0414281	
Dimethyl Phthalate	ND	U	20	7.2	2	09/22/04	09/28/04	KWG0414281	
2,6-Dinitrotoluene	ND	U	20	12	2	09/22/04	09/28/04	KWG0414281	
3-Nitroaniline	ND	U	40	11	2	09/22/04	09/28/04	KWG0414281	
2,4-Dinitrophenol	ND	U	400	150	2	09/22/04	09/28/04	KWG0414281	

Comments:

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406226
Date Collected: 08/13/2004
Date Received: 08/19/2004

Semi-Volatile Organic Compounds by GC/MS

Sample Name: LDW-B7b-S
Lab Code: K2406226-001
Extraction Method: EPA 3541
Analysis Method: 8270C

Units: ug/Kg
Basis: Dry
Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
4-Nitrophenol	ND	U	200	120	2	09/22/04	09/28/04	KWG0414281	
2,4-Dinitrotoluene	ND	U	20	12	2	09/22/04	09/28/04	KWG0414281	
4-Chlorophenyl Phenyl Ether	ND	U	20	8.0	2	09/22/04	09/28/04	KWG0414281	
Diethyl Phthalate	ND	U	20	14	2	09/22/04	09/28/04	KWG0414281	
4-Nitroaniline	ND	U	40	14	2	09/22/04	09/28/04	KWG0414281	
2-Methyl-4,6-dinitrophenol	ND	U	200	6.8	2	09/22/04	09/28/04	KWG0414281	
N-Nitrosodiphenylamine	ND	U	20	8.8	2	09/22/04	09/28/04	KWG0414281	
4-Bromophenyl Phenyl Ether	ND	U	20	5.6	2	09/22/04	09/28/04	KWG0414281	
Hexachlorobenzene	ND	U	20	8.4	2	09/22/04	09/28/04	KWG0414281	
Pentachlorophenol	ND	U	100	34	2	09/22/04	09/28/04	KWG0414281	
Carbazole	29	D	20	5.2	2	09/22/04	09/28/04	KWG0414281	
Di-n-butyl Phthalate	ND	U	20	11	2	09/22/04	09/28/04	KWG0414281	
Benzidine	ND	U	800	800	2	09/22/04	09/28/04	KWG0414281	*
Butyl Benzyl Phthalate	9.3	JD	20	6.0	2	09/22/04	09/28/04	KWG0414281	
3,3'-Dichlorobenzidine	ND	U	200	15	2	09/22/04	09/28/04	KWG0414281	
Bis(2-ethylhexyl) Phthalate	65	JD	400	6.8	2	09/22/04	09/28/04	KWG0414281	
Di-n-octyl Phthalate	ND	U	40	4.8	2	09/22/04	09/28/04	KWG0414281	

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	51	40-130	09/28/04	Acceptable
Phenol-d6	54	40-130	09/28/04	Acceptable
Nitrobenzene-d5	40	40-130	09/28/04	Acceptable
2-Fluorobiphenyl	23	40-130	09/28/04	Outside Control Limits
2,4,6-Tribromophenol	73	40-130	09/28/04	Acceptable
Terphenyl-d14	65	40-130	09/28/04	Acceptable

† Analyte Comments

4-Methylphenol This analyte cannot be separated from 3-Methylphenol.

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406226
Date Collected: 08/10/2004
Date Received: 08/19/2004

Semi-Volatile Organic Compounds by GC/MS

Sample Name: LDW-B3b-S
Lab Code: K2406226-002
Extraction Method: EPA 3541
Analysis Method: 8270C

Units: ug/Kg
Basis: Dry
Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
N-Nitrosodimethylamine	ND	U	250	46	5	09/22/04	09/29/04	KWG0414281	
Aniline	ND	U	100	12	5	09/22/04	09/29/04	KWG0414281	
Bis(2-chloroethyl) Ether	ND	U	50	19	5	09/22/04	09/29/04	KWG0414281	
Phenol	52	JD	150	15	5	09/22/04	09/29/04	KWG0414281	
2-Chlorophenol	ND	U	50	13	5	09/22/04	09/29/04	KWG0414281	
1,3-Dichlorobenzene	ND	U	50	13	5	09/22/04	09/29/04	KWG0414281	
1,4-Dichlorobenzene	ND	U	50	15	5	09/22/04	09/29/04	KWG0414281	
1,2-Dichlorobenzene	ND	U	50	9.8	5	09/22/04	09/29/04	KWG0414281	
Benzyl Alcohol	ND	U	50	28	5	09/22/04	09/29/04	KWG0414281	
Bis(2-chloroisopropyl) Ether	ND	U	50	9.1	5	09/22/04	09/29/04	KWG0414281	
2-Methylphenol	ND	U	50	26	5	09/22/04	09/29/04	KWG0414281	
Hexachloroethane	ND	U	50	17	5	09/22/04	09/29/04	KWG0414281	
N-Nitrosodi-n-propylamine	ND	U	50	25	5	09/22/04	09/29/04	KWG0414281	
4-Methylphenol†	ND	U	50	22	5	09/22/04	09/29/04	KWG0414281	
Nitrobenzene	ND	U	50	16	5	09/22/04	09/29/04	KWG0414281	
Isophorone	ND	U	50	13	5	09/22/04	09/29/04	KWG0414281	
2-Nitrophenol	ND	U	50	20	5	09/22/04	09/29/04	KWG0414281	
2,4-Dimethylphenol	ND	U	250	42	5	09/22/04	09/29/04	KWG0414281	*
Bis(2-chloroethoxy)methane	ND	U	50	9.8	5	09/22/04	09/29/04	KWG0414281	
2,4-Dichlorophenol	ND	U	50	14	5	09/22/04	09/29/04	KWG0414281	
Benzoic Acid	ND	U	1000	730	5	09/22/04	09/29/04	KWG0414281	
1,2,4-Trichlorobenzene	ND	U	50	12	5	09/22/04	09/29/04	KWG0414281	
4-Chloroaniline	ND	U	50	16	5	09/22/04	09/29/04	KWG0414281	
Hexachlorobutadiene	ND	U	50	11	5	09/22/04	09/29/04	KWG0414281	
4-Chloro-3-methylphenol	ND	U	50	16	5	09/22/04	09/29/04	KWG0414281	
Hexachlorocyclopentadiene	ND	U	250	120	5	09/22/04	09/29/04	KWG0414281	
2,4,6-Trichlorophenol	ND	U	50	14	5	09/22/04	09/29/04	KWG0414281	
2,4,5-Trichlorophenol	ND	U	50	23	5	09/22/04	09/29/04	KWG0414281	
2-Chloronaphthalene	ND	U	50	28	5	09/22/04	09/29/04	KWG0414281	
2-Nitroaniline	ND	U	100	21	5	09/22/04	09/29/04	KWG0414281	
Dimethyl Phthalate	ND	U	50	14	5	09/22/04	09/29/04	KWG0414281	
2,6-Dinitrotoluene	ND	U	50	22	5	09/22/04	09/29/04	KWG0414281	
3-Nitroaniline	ND	U	100	20	5	09/22/04	09/29/04	KWG0414281	
2,4-Dinitrophenol	ND	U	1000	280	5	09/22/04	09/29/04	KWG0414281	

Comments: _____

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406226
Date Collected: 08/10/2004
Date Received: 08/19/2004

Semi-Volatile Organic Compounds by GC/MS

Sample Name: LDW-B3b-S
Lab Code: K2406226-002
Extraction Method: EPA 3541
Analysis Method: 8270C

Units: ug/Kg
Basis: Dry
Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
4-Nitrophenol	ND	U	500	230	5	09/22/04	09/29/04	KWG0414281	
2,4-Dinitrotoluene	ND	U	50	22	5	09/22/04	09/29/04	KWG0414281	
4-Chlorophenyl Phenyl Ether	ND	U	50	16	5	09/22/04	09/29/04	KWG0414281	
Diethyl Phthalate	ND	U	50	27	5	09/22/04	09/29/04	KWG0414281	
4-Nitroaniline	ND	U	100	26	5	09/22/04	09/29/04	KWG0414281	
2-Methyl-4,6-dinitrophenol	ND	U	500	13	5	09/22/04	09/29/04	KWG0414281	
N-Nitrosodiphenylamine	ND	U	50	17	5	09/22/04	09/29/04	KWG0414281	
4-Bromophenyl Phenyl Ether	ND	U	50	11	5	09/22/04	09/29/04	KWG0414281	
Hexachlorobenzene	ND	U	50	16	5	09/22/04	09/29/04	KWG0414281	
Pentachlorophenol	92	JD	250	65	5	09/22/04	09/29/04	KWG0414281	
Carbazole	54	D	50	9.8	5	09/22/04	09/29/04	KWG0414281	
Di-n-butyl Phthalate	ND	U	50	20	5	09/22/04	09/29/04	KWG0414281	
Benzidine	ND	U	1600	1600	5	09/22/04	09/29/04	KWG0414281	*
Butyl Benzyl Phthalate	27	JD	50	12	5	09/22/04	09/29/04	KWG0414281	
3,3'-Dichlorobenzidine	ND	U	500	28	5	09/22/04	09/29/04	KWG0414281	
Bis(2-ethylhexyl) Phthalate	260	JD	1000	13	5	09/22/04	09/29/04	KWG0414281	
Di-n-octyl Phthalate	ND	U	100	9.1	5	09/22/04	09/29/04	KWG0414281	

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	75	40-130	09/29/04	Acceptable
Phenol-d6	75	40-130	09/29/04	Acceptable
Nitrobenzene-d5	70	40-130	09/29/04	Acceptable
2-Fluorobiphenyl	68	40-130	09/29/04	Acceptable
2,4,6-Tribromophenol	103	40-130	09/29/04	Acceptable
Terphenyl-d14	104	40-130	09/29/04	Acceptable

† Analyte Comments

4-Methylphenol This analyte cannot be separated from 3-Methylphenol.

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406232
Date Collected: 08/15/2004
Date Received: 08/19/2004
Date Extracted: 09/28/2004
Date Analyzed: 10/01/2004

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: LDW-B1a-T
Lab Code: K2406232-001
File ID: J:\MS14\DATA\100104\1001F021.D
Instrument ID: MS14
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Lot: KWG0414745
Calibration ID: CAL3859

Sample Amount: 2.02 g
% Solids: NA
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
62-75-9	N-Nitrosodimethylamine	50	U	200	50	
62-53-3	Aniline	1200	U	4000	1200	*
111-44-4	Bis(2-chloroethyl) Ether	44	U	200	44	
108-95-2	Phenol	530		500	85	
95-57-8	2-Chlorophenol	55	U	400	55	
541-73-1	1,3-Dichlorobenzene	55	U	200	55	
106-46-7	1,4-Dichlorobenzene	55	U	200	55	
95-50-1	1,2-Dichlorobenzene	60	U	200	60	
100-51-6	Benzyl Alcohol	34	U	200	34	
39638-32-9	Bis(2-chloroisopropyl) Ether	55	U	200	55	
95-48-7	2-Methylphenol	270	U	400	270	
67-72-1	Hexachloroethane	43	U	200	43	
621-64-7	N-Nitrosodi-n-propylamine	41	U	200	41	
106-44-5	4-Methylphenol†	75	U	400	75	
98-95-3	Nitrobenzene	50	U	200	50	
78-59-1	Isophorone	29	U	200	29	
88-75-5	2-Nitrophenol	75	U	200	75	
105-67-9	2,4-Dimethylphenol	65	U	400	65	*
111-91-1	Bis(2-chloroethoxy)methane	25	U	200	25	
120-83-2	2,4-Dichlorophenol	60	U	400	60	
65-85-0	Benzoic Acid	950	U	4000	950	
120-82-1	1,2,4-Trichlorobenzene	50	U	200	50	
106-47-8	4-Chloroaniline	30	U	1000	30	
87-68-3	Hexachlorobutadiene	43	U	200	43	
59-50-7	4-Chloro-3-methylphenol	360	U	1000	360	
77-47-4	Hexachlorocyclopentadiene	25000	U	25000	25000	
88-06-2	2,4,6-Trichlorophenol	44	U	400	44	
95-95-4	2,4,5-Trichlorophenol	55	U	400	55	

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406232
Date Collected: 08/15/2004
Date Received: 08/19/2004
Date Extracted: 09/28/2004
Date Analyzed: 10/01/2004

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: LDW-B1a-T
Lab Code: K2406232-001
File ID: J:\MS14\DATA\100104\1001F021.D
Instrument ID: MS14

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Extraction Lot: KWG0414745
Calibration ID: CAL3859

Sample Amount: 2.02 g
% Solids: NA
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
91-58-7	2-Chloronaphthalene	30	U	200	30	
88-74-4	2-Nitroaniline	130	U	1000	130	
131-11-3	Dimethyl Phthalate	26	U	200	26	
606-20-2	2,6-Dinitrotoluene	35	U	200	35	
99-09-2	3-Nitroaniline	45	U	2000	45	
51-28-5	2,4-Dinitrophenol	120	U	4000	120	
100-02-7	4-Nitrophenol	38	U	2000	38	
121-14-2	2,4-Dinitrotoluene	43	U	400	43	
7005-72-3	4-Chlorophenyl Phenyl Ether	23	U	200	23	
84-66-2	Diethyl Phthalate	47	U	400	47	
100-01-6	4-Nitroaniline	130	U	1000	130	
534-52-1	2-Methyl-4,6-dinitrophenol	75	U	2000	75	
86-30-6	N-Nitrosodiphenylamine	48	U	200	48	
101-55-3	4-Bromophenyl Phenyl Ether	28	U	200	28	
118-74-1	Hexachlorobenzene	30	U	200	30	
87-86-5	Pentachlorophenol	160	U	2000	160	
86-74-8	Carbazole	170	U	1000	170	
84-74-2	Di-n-butyl Phthalate	80	U	200	80	
92-87-5	Benzidine	25000	U	25000	25000	*
85-68-7	Butyl Benzyl Phthalate	70	U	200	70	
91-94-1	3,3'-Dichlorobenzidine	3900	U	10000	3900	
117-81-7	Bis(2-ethylhexyl) Phthalate	270	U	2500	270	
117-84-0	Di-n-octyl Phthalate	65	U	200	65	

* See Case Narrative

Comments: _____

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406232
Date Collected: 08/15/2004
Date Received: 08/19/2004
Date Extracted: 09/28/2004
Date Analyzed: 10/01/2004

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: LDW-B1a-T
Lab Code: K2406232-001
File ID: J:\MS14\DATA\100104\1001F021.D
Instrument ID: MS14
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Lot: KWG0414745
Calibration ID: CAL3859

Sample Amount: 2.02 g
% Solids: NA
Dilution Factor: 1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	89	20-130	10/01/04	Acceptable
Phenol-d6	96	20-130	10/01/04	Acceptable
Nitrobenzene-d5	89	20-130	10/01/04	Acceptable
2-Fluorobiphenyl	83	20-130	10/01/04	Acceptable
2,4,6-Tribromophenol	93	20-130	10/01/04	Acceptable
Terphenyl-d14	99	20-130	10/01/04	Acceptable

† Analyte Comments

4-Methylphenol This analyte cannot be separated from 3-Methylphenol.

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406232
Date Collected: 08/15/2004
Date Received: 08/19/2004
Date Extracted: 09/28/2004
Date Analyzed: 10/04/2004

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: LDW-B1a-TRE
Lab Code: K2406232-001
File ID: J:\MS14\DATA\100404\1004F015.D
Instrument ID: MS14
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Lot: KWG0414745
Calibration ID: CAL3859

Sample Amount: 2.02 g
% Solids: NA
Dilution Factor: 1

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
62-75-9	N-Nitrosodimethylamine	50 U	200	50	*
62-53-3	Aniline	1200 U	4000	1200	*
111-44-4	Bis(2-chloroethyl) Ether	44 U	200	44	
108-95-2	Phenol	580	500	85	
95-57-8	2-Chlorophenol	55 U	400	55	
541-73-1	1,3-Dichlorobenzene	55 U	200	55	
106-46-7	1,4-Dichlorobenzene	55 U	200	55	
95-50-1	1,2-Dichlorobenzene	60 U	200	60	
100-51-6	Benzyl Alcohol	34 U	200	34	
39638-32-9	Bis(2-chloroisopropyl) Ether	55 U	200	55	
95-48-7	2-Methylphenol	270 U	400	270	
67-72-1	Hexachloroethane	43 U	200	43	
621-64-7	N-Nitrosodi-n-propylamine	41 U	200	41	
106-44-5	4-Methylphenol†	75 U	400	75	
98-95-3	Nitrobenzene	50 U	200	50	
78-59-1	Isophorone	29 U	200	29	
88-75-5	2-Nitrophenol	75 U	200	75	
105-67-9	2,4-Dimethylphenol	65 U	400	65	*
111-91-1	Bis(2-chloroethoxy)methane	25 U	200	25	
120-83-2	2,4-Dichlorophenol	60 U	400	60	
65-85-0	Benzoic Acid	950 U	4000	950	
120-82-1	1,2,4-Trichlorobenzene	50 U	200	50	
106-47-8	4-Chloroaniline	30 U	1000	30	
87-68-3	Hexachlorobutadiene	43 U	200	43	
59-50-7	4-Chloro-3-methylphenol	360 U	1000	360	
77-47-4	Hexachlorocyclopentadiene	25000 U	25000	25000	*
88-06-2	2,4,6-Trichlorophenol	44 U	400	44	
95-95-4	2,4,5-Trichlorophenol	55 U	400	55	

Comments: _____

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406232
Date Collected: 08/15/2004
Date Received: 08/19/2004
Date Extracted: 09/28/2004
Date Analyzed: 10/04/2004

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: LDW-B1a-TRE
Lab Code: K2406232-001
File ID: J:\MS14\DATA\I00404\I004F015.D
Instrument ID: MS14

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Extraction Lot: KWG0414745
Calibration ID: CAL3859

Sample Amount: 2.02 g
% Solids: NA
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
91-58-7	2-Chloronaphthalene	30	U	200	30	
88-74-4	2-Nitroaniline	130	U	1000	130	
131-11-3	Dimethyl Phthalate	26	U	200	26	
606-20-2	2,6-Dinitrotoluene	35	U	200	35	
99-09-2	3-Nitroaniline	45	U	2000	45	
51-28-5	2,4-Dinitrophenol	120	U	4000	120	
100-02-7	4-Nitrophenol	38	U	2000	38	*
121-14-2	2,4-Dinitrotoluene	43	U	400	43	
7005-72-3	4-Chlorophenyl Phenyl Ether	23	U	200	23	
84-66-2	Diethyl Phthalate	47	U	400	47	
100-01-6	4-Nitroaniline	130	U	1000	130	
534-52-1	2-Methyl-4,6-dinitrophenol	75	U	2000	75	*
86-30-6	N-Nitrosodiphenylamine	48	U	200	48	
101-55-3	4-Bromophenyl Phenyl Ether	28	U	200	28	
118-74-1	Hexachlorobenzene	30	U	200	30	
87-86-5	Pentachlorophenol	160	U	2000	160	
86-74-8	Carbazole	170	U	1000	170	
84-74-2	Di-n-butyl Phthalate	80	U	200	80	
92-87-5	Benzidine	25000	U	25000	25000	*
85-68-7	Butyl Benzyl Phthalate	70	U	200	70	
91-94-1	3,3'-Dichlorobenzidine	3900	U	10000	3900	
117-81-7	Bis(2-ethylhexyl) Phthalate	270	U	2500	270	
117-84-0	Di-n-octyl Phthalate	65	U	200	65	

* See Case Narrative

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406232
Date Collected: 08/15/2004
Date Received: 08/19/2004
Date Extracted: 09/28/2004
Date Analyzed: 10/04/2004

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: LDW-B1a-TRE
Lab Code: K2406232-001
File ID: J:\MS14\DATA\100404\1004F015.D
Instrument ID: MS14
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Lot: KWG0414745
Calibration ID: CAL3859

Sample Amount: 2.02 g
% Solids: NA
Dilution Factor: 1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	88	20-130	10/04/04	Acceptable
Phenol-d6	100	20-130	10/04/04	Acceptable
Nitrobenzene-d5	96	20-130	10/04/04	Acceptable
2-Fluorobiphenyl	83	20-130	10/04/04	Acceptable
2,4,6-Tribromophenol	94	20-130	10/04/04	Acceptable
Terphenyl-d14	93	20-130	10/04/04	Acceptable

† Analyte Comments

4-Methylphenol This analyte cannot be separated from 3-Methylphenol.

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406232
Date Collected: 08/14/2004
Date Received: 08/19/2004
Date Extracted: 09/28/2004
Date Analyzed: 10/01/2004

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: LDW-B4a-T
Lab Code: K2406232-002
File ID: J:\MS14\DATA\100104\1001F022.D
Instrument ID: MS14
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Lot: KWG0414745
Calibration ID: CAL3859

Sample Amount: 2.07 g
% Solids: NA
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
62-75-9	N-Nitrosodimethylamine	49	U	200	49	
62-53-3	Aniline	1200	U	3900	1200	*
111-44-4	Bis(2-chloroethyl) Ether	43	U	200	43	
108-95-2	Phenol	83	U	490	83	
95-57-8	2-Chlorophenol	54	U	390	54	
541-73-1	1,3-Dichlorobenzene	54	U	200	54	
106-46-7	1,4-Dichlorobenzene	54	U	200	54	
95-50-1	1,2-Dichlorobenzene	58	U	200	58	
100-51-6	Benzyl Alcohol	33	U	200	33	
39638-32-9	Bis(2-chloroisopropyl) Ether	54	U	200	54	
95-48-7	2-Methylphenol	260	U	390	260	
67-72-1	Hexachloroethane	42	U	200	42	
621-64-7	N-Nitrosodi-n-propylamine	40	U	200	40	
106-44-5	4-Methylphenol†	86	J	390	73	
98-95-3	Nitrobenzene	49	U	200	49	
78-59-1	Isophorone	29	U	200	29	
88-75-5	2-Nitrophenol	73	U	200	73	
105-67-9	2,4-Dimethylphenol	63	U	390	63	*
111-91-1	Bis(2-chloroethoxy)methane	25	U	200	25	
120-83-2	2,4-Dichlorophenol	58	U	390	58	
65-85-0	Benzoic Acid	2200	J	3900	920	
120-82-1	1,2,4-Trichlorobenzene	48	U	200	48	
106-47-8	4-Chloroaniline	29	U	970	29	
87-68-3	Hexachlorobutadiene	42	U	200	42	
59-50-7	4-Chloro-3-methylphenol	970	Ui	970	970	
77-47-4	Hexachlorocyclopentadiene	25000	U	25000	25000	
88-06-2	2,4,6-Trichlorophenol	43	U	390	43	
95-95-4	2,4,5-Trichlorophenol	54	U	390	54	

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406232
Date Collected: 08/14/2004
Date Received: 08/19/2004
Date Extracted: 09/28/2004
Date Analyzed: 10/01/2004

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: LDW-B4a-T
Lab Code: K2406232-002
File ID: J:\MS14\DATA\100104\1001F022.D
Instrument ID: MS14
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Lot: KWG0414745
Calibration ID: CAL3859

Sample Amount: 2.07 g
% Solids: NA
Dilution Factor: 1

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
91-58-7	2-Chloronaphthalene	29 U	200	29	
88-74-4	2-Nitroaniline	130 U	970	130	
131-11-3	Dimethyl Phthalate	25 U	200	25	
606-20-2	2,6-Dinitrotoluene	34 U	200	34	
99-09-2	3-Nitroaniline	43 U	2000	43	
51-28-5	2,4-Dinitrophenol	120 U	3900	120	
100-02-7	4-Nitrophenol	37 U	2000	37	
121-14-2	2,4-Dinitrotoluene	42 U	390	42	
7005-72-3	4-Chlorophenyl Phenyl Ether	22 U	200	22	
84-66-2	Diethyl Phthalate	46 U	390	46	
100-01-6	4-Nitroaniline	130 U	970	130	
534-52-1	2-Methyl-4,6-dinitrophenol	73 U	2000	73	
86-30-6	N-Nitrosodiphenylamine	46 U	200	46	
101-55-3	4-Bromophenyl Phenyl Ether	27 U	200	27	
118-74-1	Hexachlorobenzene	29 U	200	29	
87-86-5	Pentachlorophenol	150 U	2000	150	
86-74-8	Carbazole	160 U	970	160	
84-74-2	Di-n-butyl Phthalate	78 U	200	78	
92-87-5	Benzidine	25000 U	25000	25000	*
85-68-7	Butyl Benzyl Phthalate	68 U	200	68	
91-94-1	3,3'-Dichlorobenzidine	3800 U	9700	3800	
117-81-7	Bis(2-ethylhexyl) Phthalate	260 U	2500	260	
117-84-0	Di-n-octyl Phthalate	63 U	200	63	

* See Case Narrative

Comments: _____

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406232
Date Collected: 08/14/2004
Date Received: 08/19/2004
Date Extracted: 09/28/2004
Date Analyzed: 10/01/2004

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: LDW-B4a-T
Lab Code: K2406232-002
File ID: J:\MS14\DATA\100104\1001F022.D
Instrument ID: MS14
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Lot: KWG0414745
Calibration ID: CAL3859

Sample Amount: 2.07 g
% Solids: NA
Dilution Factor: 1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	88	20-130	10/01/04	Acceptable
Phenol-d6	97	20-130	10/01/04	Acceptable
Nitrobenzene-d5	93	20-130	10/01/04	Acceptable
2-Fluorobiphenyl	83	20-130	10/01/04	Acceptable
2,4,6-Tribromophenol	96	20-130	10/01/04	Acceptable
Terphenyl-d14	95	20-130	10/01/04	Acceptable

† Analyte Comments

4-Methylphenol This analyte cannot be separated from 3-Methylphenol.

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406232
Date Collected: 08/14/2004
Date Received: 08/19/2004
Date Extracted: 09/28/2004
Date Analyzed: 10/04/2004

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: LDW-B4a-TRE
Lab Code: K2406232-002
File ID: J:\MS14\DATA\100404\1004F016.D
Instrument ID: MS14

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Extraction Lot: KWG0414745
Calibration ID: CAL3859

Sample Amount: 2.07 g
% Solids: NA
Dilution Factor: 1

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
62-75-9	N-Nitrosodimethylamine	49 U	200	49	*
62-53-3	Aniline	1200 U	3900	1200	*
111-44-4	Bis(2-chloroethyl) Ether	43 U	200	43	
108-95-2	Phenol	83 U	490	83	
95-57-8	2-Chlorophenol	54 U	390	54	
541-73-1	1,3-Dichlorobenzene	54 U	200	54	
106-46-7	1,4-Dichlorobenzene	54 U	200	54	
95-50-1	1,2-Dichlorobenzene	58 U	200	58	
100-51-6	Benzyl Alcohol	33 U	200	33	
39638-32-9	Bis(2-chloroisopropyl) Ether	54 U	200	54	
95-48-7	2-Methylphenol	260 U	390	260	
67-72-1	Hexachloroethane	42 U	200	42	
621-64-7	N-Nitrosodi-n-propylamine	40 U	200	40	
106-44-5	4-Methylphenol†	73 U	390	73	
98-95-3	Nitrobenzene	49 U	200	49	
78-59-1	Isophorone	29 U	200	29	
88-75-5	2-Nitrophenol	73 U	200	73	
105-67-9	2,4-Dimethylphenol	63 U	390	63	*
111-91-1	Bis(2-chloroethoxy)methane	25 U	200	25	
120-83-2	2,4-Dichlorophenol	58 U	390	58	
65-85-0	Benzoic Acid	2700 J	3900	920	
120-82-1	1,2,4-Trichlorobenzene	48 U	200	48	
106-47-8	4-Chloroaniline	29 U	970	29	
87-68-3	Hexachlorobutadiene	42 U	200	42	
59-50-7	4-Chloro-3-methylphenol	350 U	970	350	
77-47-4	Hexachlorocyclopentadiene	25000 U	25000	25000	*
88-06-2	2,4,6-Trichlorophenol	43 U	390	43	
95-95-4	2,4,5-Trichlorophenol	54 U	390	54	

Comments:

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406232
Date Collected: 08/14/2004
Date Received: 08/19/2004
Date Extracted: 09/28/2004
Date Analyzed: 10/04/2004

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: LDW-B4a-TRE
Lab Code: K2406232-002
File ID: J:\MS14\DATA\100404\1004F016.D
Instrument ID: MS14

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Extraction Lot: KWG0414745
Calibration ID: CAL3859

Sample Amount: 2.07 g
% Solids: NA
Dilution Factor: 1

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
91-58-7	2-Chloronaphthalene	29 U	200	29	
88-74-4	2-Nitroaniline	130 U	970	130	
131-11-3	Dimethyl Phthalate	25 U	200	25	
606-20-2	2,6-Dinitrotoluene	34 U	200	34	
99-09-2	3-Nitroaniline	43 U	2000	43	
51-28-5	2,4-Dinitrophenol	120 U	3900	120	
100-02-7	4-Nitrophenol	37 U	2000	37	*
121-14-2	2,4-Dinitrotoluene	42 U	390	42	
7005-72-3	4-Chlorophenyl Phenyl Ether	22 U	200	22	
84-66-2	Diethyl Phthalate	46 U	390	46	
100-01-6	4-Nitroaniline	130 U	970	130	
534-52-1	2-Methyl-4,6-dinitrophenol	73 U	2000	73	*
86-30-6	N-Nitrosodiphenylamine	46 U	200	46	
101-55-3	4-Bromophenyl Phenyl Ether	27 U	200	27	
118-74-1	Hexachlorobenzene	29 U	200	29	
87-86-5	Pentachlorophenol	150 U	2000	150	
86-74-8	Carbazole	160 U	970	160	
84-74-2	Di-n-butyl Phthalate	78 U	200	78	
92-87-5	Benzidine	25000 U	25000	25000	*
85-68-7	Butyl Benzyl Phthalate	68 U	200	68	
91-94-1	3,3'-Dichlorobenzidine	3800 U	9700	3800	
117-81-7	Bis(2-ethylhexyl) Phthalate	260 U	2500	260	
117-84-0	Di-n-octyl Phthalate	63 U	200	63	

* See Case Narrative

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406232
Date Collected: 08/14/2004
Date Received: 08/19/2004
Date Extracted: 09/28/2004
Date Analyzed: 10/04/2004

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: LDW-B4a-TRE
Lab Code: K2406232-002
File ID: J:\MS14\DATA\100404\1004F016.D
Instrument ID: MS14
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Lot: KWG0414745
Calibration ID: CAL3859

Sample Amount: 2.07 g
% Solids: NA
Dilution Factor: 1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	85	20-130	10/04/04	Acceptable
Phenol-d6	96	20-130	10/04/04	Acceptable
Nitrobenzene-d5	93	20-130	10/04/04	Acceptable
2-Fluorobiphenyl	83	20-130	10/04/04	Acceptable
2,4,6-Tribromophenol	88	20-130	10/04/04	Acceptable
Terphenyl-d14	95	20-130	10/04/04	Acceptable

† Analyte Comments

4-Methylphenol This analyte cannot be separated from 3-Methylphenol.

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406232
Date Collected: 08/14/2004
Date Received: 08/19/2004
Date Extracted: 09/28/2004
Date Analyzed: 10/01/2004

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: LDW-B2a-T
Lab Code: K2406232-003
File ID: J:\MS14\DATA\100104\1001F023.D
Instrument ID: MS14
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Lot: KWG0414745
Calibration ID: CAL3859

Sample Amount: 2.02 g
% Solids: NA
Dilution Factor: 1

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
62-75-9	N-Nitrosodimethylamine	50 U	200	50	
62-53-3	Aniline	1200 U	4000	1200	*
111-44-4	Bis(2-chloroethyl) Ether	44 U	200	44	
108-95-2	Phenol	150 J	500	85	
95-57-8	2-Chlorophenol	55 U	400	55	
541-73-1	1,3-Dichlorobenzene	55 U	200	55	
106-46-7	1,4-Dichlorobenzene	55 U	200	55	
95-50-1	1,2-Dichlorobenzene	60 U	200	60	
100-51-6	Benzyl Alcohol	34 U	200	34	
39638-32-9	Bis(2-chloroisopropyl) Ether	55 U	200	55	
95-48-7	2-Methylphenol	270 U	400	270	
67-72-1	Hexachloroethane	43 U	200	43	
621-64-7	N-Nitrosodi-n-propylamine	41 U	200	41	
106-44-5	4-Methylphenol†	75 U	400	75	
98-95-3	Nitrobenzene	50 U	200	50	
78-59-1	Isophorone	29 U	200	29	
88-75-5	2-Nitrophenol	75 U	200	75	
105-67-9	2,4-Dimethylphenol	65 U	400	65	*
111-91-1	Bis(2-chloroethoxy)methane	25 U	200	25	
120-83-2	2,4-Dichlorophenol	60 U	400	60	
65-85-0	Benzoic Acid	3900 J	4000	950	
120-82-1	1,2,4-Trichlorobenzene	50 U	200	50	
106-47-8	4-Chloroaniline	30 U	1000	30	
87-68-3	Hexachlorobutadiene	43 U	200	43	
59-50-7	4-Chloro-3-methylphenol	360 U	1000	360	
77-47-4	Hexachlorocyclopentadiene	25000 U	25000	25000	
88-06-2	2,4,6-Trichlorophenol	44 U	400	44	
95-95-4	2,4,5-Trichlorophenol	55 U	400	55	

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406232
Date Collected: 08/14/2004
Date Received: 08/19/2004
Date Extracted: 09/28/2004
Date Analyzed: 10/01/2004

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: LDW-B2a-T
Lab Code: K2406232-003
File ID: J:\MS14\DATA\100104\1001F023.D
Instrument ID: MS14
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Lot: KWG0414745
Calibration ID: CAL3859

Sample Amount: 2.02 g
% Solids: NA
Dilution Factor: 1

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
91-58-7	2-Chloronaphthalene	30 U	200	30	
88-74-4	2-Nitroaniline	130 U	1000	130	
131-11-3	Dimethyl Phthalate	26 U	200	26	
606-20-2	2,6-Dinitrotoluene	35 U	200	35	
99-09-2	3-Nitroaniline	45 U	2000	45	
51-28-5	2,4-Dinitrophenol	120 U	4000	120	
100-02-7	4-Nitrophenol	38 U	2000	38	
121-14-2	2,4-Dinitrotoluene	43 U	400	43	
7005-72-3	4-Chlorophenyl Phenyl Ether	23 U	200	23	
84-66-2	Diethyl Phthalate	47 U	400	47	
100-01-6	4-Nitroaniline	130 U	1000	130	
534-52-1	2-Methyl-4,6-dinitrophenol	75 U	2000	75	
86-30-6	N-Nitrosodiphenylamine	48 U	200	48	
101-55-3	4-Bromophenyl Phenyl Ether	28 U	200	28	
118-74-1	Hexachlorobenzene	30 U	200	30	
87-86-5	Pentachlorophenol	160 U	2000	160	
86-74-8	Carbazole	170 U	1000	170	
84-74-2	Di-n-butyl Phthalate	80 U	200	80	
92-87-5	Benzidine	25000 U	25000	25000	*
85-68-7	Butyl Benzyl Phthalate	70 U	200	70	
91-94-1	3,3'-Dichlorobenzidine	3900 U	10000	3900	
117-81-7	Bis(2-ethylhexyl) Phthalate	270 U	2500	270	
117-84-0	Di-n-octyl Phthalate	65 U	200	65	

* See Case Narrative

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406232
Date Collected: 08/14/2004
Date Received: 08/19/2004
Date Extracted: 09/28/2004
Date Analyzed: 10/01/2004

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: LDW-B2a-T
Lab Code: K2406232-003
File ID: J:\MS14\DATA\100104\1001F023.D
Instrument ID: MS14
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Lot: KWG0414745
Calibration ID: CAL3859

Sample Amount: 2.02 g
% Solids: NA
Dilution Factor: 1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	90	20-130	10/01/04	Acceptable
Phenol-d6	98	20-130	10/01/04	Acceptable
Nitrobenzene-d5	96	20-130	10/01/04	Acceptable
2-Fluorobiphenyl	89	20-130	10/01/04	Acceptable
2,4,6-Tribromophenol	97	20-130	10/01/04	Acceptable
Terphenyl-d14	106	20-130	10/01/04	Acceptable

† Analyte Comments

4-Methylphenol This analyte cannot be separated from 3-Methylphenol.

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406232
Date Collected: 08/14/2004
Date Received: 08/19/2004
Date Extracted: 09/28/2004
Date Analyzed: 10/04/2004

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: LDW-B2a-TRE
Lab Code: K2406232-003
File ID: J:\MS14\DATA\100404\1004F017.D
Instrument ID: MS14
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Lot: KWG0414745
Calibration ID: CAL3859

Sample Amount: 2.02 g
% Solids: NA
Dilution Factor: 1

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
62-75-9	N-Nitrosodimethylamine	50 U	200	50	*
62-53-3	Aniline	1200 U	4000	1200	*
111-44-4	Bis(2-chloroethyl) Ether	44 U	200	44	
108-95-2	Phenol	85 U	500	85	
95-57-8	2-Chlorophenol	55 U	400	55	
541-73-1	1,3-Dichlorobenzene	55 U	200	55	
106-46-7	1,4-Dichlorobenzene	55 U	200	55	
95-50-1	1,2-Dichlorobenzene	60 U	200	60	
100-51-6	Benzyl Alcohol	34 U	200	34	
39638-32-9	Bis(2-chloroisopropyl) Ether	55 U	200	55	
95-48-7	2-Methylphenol	270 U	400	270	
67-72-1	Hexachloroethane	43 U	200	43	
621-64-7	N-Nitrosodi-n-propylamine	41 U	200	41	
106-44-5	4-Methylphenol†	75 U	400	75	
98-95-3	Nitrobenzene	50 U	200	50	
78-59-1	Isophorone	29 U	200	29	
88-75-5	2-Nitrophenol	75 U	200	75	
105-67-9	2,4-Dimethylphenol	65 U	400	65	*
111-91-1	Bis(2-chloroethoxy)methane	25 U	200	25	
120-83-2	2,4-Dichlorophenol	60 U	400	60	
65-85-0	Benzoic Acid	4200	4000	950	
120-82-1	1,2,4-Trichlorobenzene	50 U	200	50	
106-47-8	4-Chloroaniline	30 U	1000	30	
87-68-3	Hexachlorobutadiene	43 U	200	43	
59-50-7	4-Chloro-3-methylphenol	360 U	1000	360	
77-47-4	Hexachlorocyclopentadiene	25000 U	25000	25000	*
88-06-2	2,4,6-Trichlorophenol	44 U	400	44	
95-95-4	2,4,5-Trichlorophenol	55 U	400	55	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406232
Date Collected: 08/14/2004
Date Received: 08/19/2004
Date Extracted: 09/28/2004
Date Analyzed: 10/04/2004

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: LDW-B2a-TRE
Lab Code: K2406232-003
File ID: J:\MS14\DATA\100404\1004F017.D
Instrument ID: MS14

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Extraction Lot: KWG0414745
Calibration ID: CAL3859

Sample Amount: 2.02 g
% Solids: NA
Dilution Factor: 1

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
91-58-7	2-Chloronaphthalene	30 U	200	30	
88-74-4	2-Nitroaniline	130 U	1000	130	
131-11-3	Dimethyl Phthalate	26 U	200	26	
606-20-2	2,6-Dinitrotoluene	35 U	200	35	
99-09-2	3-Nitroaniline	45 U	2000	45	
51-28-5	2,4-Dinitrophenol	120 U	4000	120	
100-02-7	4-Nitrophenol	38 U	2000	38	*
121-14-2	2,4-Dinitrotoluene	43 U	400	43	
7005-72-3	4-Chlorophenyl Phenyl Ether	23 U	200	23	
84-66-2	Diethyl Phthalate	47 U	400	47	
100-01-6	4-Nitroaniline	130 U	1000	130	
534-52-1	2-Methyl-4,6-dinitrophenol	75 U	2000	75	*
86-30-6	N-Nitrosodiphenylamine	48 U	200	48	
101-55-3	4-Bromophenyl Phenyl Ether	28 U	200	28	
118-74-1	Hexachlorobenzene	30 U	200	30	
87-86-5	Pentachlorophenol	160 U	2000	160	
86-74-8	Carbazole	170 U	1000	170	
84-74-2	Di-n-butyl Phthalate	80 U	200	80	
92-87-5	Benzidine	25000 U	25000	25000	*
85-68-7	Butyl Benzyl Phthalate	70 U	200	70	
91-94-1	3,3'-Dichlorobenzidine	3900 U	10000	3900	
117-81-7	Bis(2-ethylhexyl) Phthalate	270 U	2500	270	
117-84-0	Di-n-octyl Phthalate	65 U	200	65	

* See Case Narrative

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406232
Date Collected: 08/14/2004
Date Received: 08/19/2004
Date Extracted: 09/28/2004
Date Analyzed: 10/04/2004

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: LDW-B2a-TRE
Lab Code: K2406232-003
File ID: J:\MS14\DATA\100404\1004F017.D
Instrument ID: MS14
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Lot: KWG0414745
Calibration ID: CAL3859

Sample Amount: 2.02 g
% Solids: NA
Dilution Factor: 1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	90	20-130	10/04/04	Acceptable
Phenol-d6	105	20-130	10/04/04	Acceptable
Nitrobenzene-d5	104	20-130	10/04/04	Acceptable
2-Fluorobiphenyl	89	20-130	10/04/04	Acceptable
2,4,6-Tribromophenol	92	20-130	10/04/04	Acceptable
Terphenyl-d14	101	20-130	10/04/04	Acceptable

† Analyte Comments

4-Methylphenol This analyte cannot be separated from 3-Methylphenol.

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
 Project: LDW Benthic Invertebrate Survey/04-08-06-21
 Sample Matrix: Tissue

Service Request: K2406232
 Date Collected: 08/11/2004
 Date Received: 08/19/2004
 Date Extracted: 09/28/2004
 Date Analyzed: 10/01/2004

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: LDW-B9b-T
 Lab Code: K2406232-004
 File ID: J:\MS14\DATA\100104\1001F024.D
 Instrument ID: MS14
 Extraction Method: EPA 3541
 Analysis Method: 8270C SIM

Units: ug/Kg
 Basis: Wet
 Level: Low

Extraction Lot: KWG0414745
 Calibration ID: CAL3859

Sample Amount: 2.05 g
 % Solids: NA
 Dilution Factor: 1

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
62-75-9	N-Nitrosodimethylamine	49 U	200	49	
62-53-3	Aniline	1200 U	4000	1200	*
111-44-4	Bis(2-chloroethyl) Ether	43 U	200	43	
108-95-2	Phenol	83 U	490	83	
95-57-8	2-Chlorophenol	54 U	400	54	
541-73-1	1,3-Dichlorobenzene	54 U	200	54	
106-46-7	1,4-Dichlorobenzene	54 U	200	54	
95-50-1	1,2-Dichlorobenzene	59 U	200	59	
100-51-6	Benzyl Alcohol	33 U	200	33	
39638-32-9	Bis(2-chloroisopropyl) Ether	54 U	200	54	
95-48-7	2-Methylphenol	260 U	400	260	
67-72-1	Hexachloroethane	42 U	200	42	
621-64-7	N-Nitrosodi-n-propylamine	40 U	200	40	
106-44-5	4-Methylphenol†	74 U	400	74	
98-95-3	Nitrobenzene	49 U	200	49	
78-59-1	Isophorone	29 U	200	29	
88-75-5	2-Nitrophenol	74 U	200	74	
105-67-9	2,4-Dimethylphenol	64 U	400	64	*
111-91-1	Bis(2-chloroethoxy)methane	25 U	200	25	
120-83-2	2,4-Dichlorophenol	59 U	400	59	
65-85-0	Benzoic Acid	1700 J	4000	930	
120-82-1	1,2,4-Trichlorobenzene	49 U	200	49	
106-47-8	4-Chloroaniline	29 U	980	29	
87-68-3	Hexachlorobutadiene	42 U	200	42	
59-50-7	4-Chloro-3-methylphenol	360 U	980	360	
77-47-4	Hexachlorocyclopentadiene	25000 U	25000	25000	
88-06-2	2,4,6-Trichlorophenol	43 U	400	43	
95-95-4	2,4,5-Trichlorophenol	54 U	400	54	

Comments: _____

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406232
Date Collected: 08/11/2004
Date Received: 08/19/2004
Date Extracted: 09/28/2004
Date Analyzed: 10/01/2004

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: LDW-B9b-T
Lab Code: K2406232-004
File ID: J:\MS14\DATA\100104\1001F024.D
Instrument ID: MS14

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Extraction Lot: KWG0414745
Calibration ID: CAL3859

Sample Amount: 2.05 g
% Solids: NA
Dilution Factor: 1

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
91-58-7	2-Chloronaphthalene	29 U	200	29	
88-74-4	2-Nitroaniline	130 U	980	130	
131-11-3	Dimethyl Phthalate	25 U	200	25	
606-20-2	2,6-Dinitrotoluene	35 U	200	35	
99-09-2	3-Nitroaniline	44 U	2000	44	
51-28-5	2,4-Dinitrophenol	120 U	4000	120	
100-02-7	4-Nitrophenol	37 U	2000	37	
121-14-2	2,4-Dinitrotoluene	42 U	400	42	
7005-72-3	4-Chlorophenyl Phenyl Ether	22 U	200	22	
84-66-2	Diethyl Phthalate	46 U	400	46	
100-01-6	4-Nitroaniline	130 U	980	130	
534-52-1	2-Methyl-4,6-dinitrophenol	74 U	2000	74	
86-30-6	N-Nitrosodiphenylamine	47 U	200	47	
101-55-3	4-Bromophenyl Phenyl Ether	27 U	200	27	
118-74-1	Hexachlorobenzene	29 U	200	29	
87-86-5	Pentachlorophenol	160 U	2000	160	
86-74-8	Carbazole	170 U	980	170	
84-74-2	Di-n-butyl Phthalate	79 U	200	79	
92-87-5	Benzidine	25000 U	25000	25000	*
85-68-7	Butyl Benzyl Phthalate	69 U	200	69	
91-94-1	3,3'-Dichlorobenzidine	3900 U	9800	3900	
117-81-7	Bis(2-ethylhexyl) Phthalate	260 U	2500	260	
117-84-0	Di-n-octyl Phthalate	64 U	200	64	

* See Case Narrative

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406232
Date Collected: 08/11/2004
Date Received: 08/19/2004
Date Extracted: 09/28/2004
Date Analyzed: 10/01/2004

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: LDW-B9b-T
Lab Code: K2406232-004
File ID: J:\MS14\DATA\100104\1001F024.D
Instrument ID: MS14
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Lot: KWG0414745
Calibration ID: CAL3859

Sample Amount: 2.05 g
% Solids: NA
Dilution Factor: 1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	82	20-130	10/01/04	Acceptable
Phenol-d6	91	20-130	10/01/04	Acceptable
Nitrobenzene-d5	87	20-130	10/01/04	Acceptable
2-Fluorobiphenyl	82	20-130	10/01/04	Acceptable
2,4,6-Tribromophenol	94	20-130	10/01/04	Acceptable
Terphenyl-d14	111	20-130	10/01/04	Acceptable

† Analyte Comments

4-Methylphenol This analyte cannot be separated from 3-Methylphenol.

Comments: _____

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406232
Date Collected: 08/11/2004
Date Received: 08/19/2004
Date Extracted: 09/28/2004
Date Analyzed: 10/04/2004

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: LDW-B9b-TRE
Lab Code: K2406232-004
File ID: J:\MS14\DATA\100404\1004F018.D
Instrument ID: MS14

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Extraction Lot: KWG0414745
Calibration ID: CAL3859

Sample Amount: 2.05 g
% Solids: NA
Dilution Factor: 1

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
62-75-9	N-Nitrosodimethylamine	49 U	200	49	*
62-53-3	Aniline	1200 U	4000	1200	*
111-44-4	Bis(2-chloroethyl) Ether	43 U	200	43	
108-95-2	Phenol	83 U	490	83	
95-57-8	2-Chlorophenol	54 U	400	54	
541-73-1	1,3-Dichlorobenzene	54 U	200	54	
106-46-7	1,4-Dichlorobenzene	54 U	200	54	
95-50-1	1,2-Dichlorobenzene	59 U	200	59	
100-51-6	Benzyl Alcohol	33 U	200	33	
39638-32-9	Bis(2-chloroisopropyl) Ether	54 U	200	54	
95-48-7	2-Methylphenol	260 U	400	260	
67-72-1	Hexachloroethane	42 U	200	42	
621-64-7	N-Nitrosodi-n-propylamine	40 U	200	40	
106-44-5	4-Methylphenol†	74 U	400	74	
98-95-3	Nitrobenzene	49 U	200	49	
78-59-1	Isophorone	29 U	200	29	
88-75-5	2-Nitrophenol	74 U	200	74	
105-67-9	2,4-Dimethylphenol	64 U	400	64	*
111-91-1	Bis(2-chloroethoxy)methane	25 U	200	25	
120-83-2	2,4-Dichlorophenol	59 U	400	59	
65-85-0	Benzoic Acid	1900 J	4000	930	
120-82-1	1,2,4-Trichlorobenzene	49 U	200	49	
106-47-8	4-Chloroaniline	29 U	980	29	
87-68-3	Hexachlorobutadiene	42 U	200	42	
59-50-7	4-Chloro-3-methylphenol	360 U	980	360	
77-47-4	Hexachlorocyclopentadiene	25000 U	25000	25000	*
88-06-2	2,4,6-Trichlorophenol	43 U	400	43	
95-95-4	2,4,5-Trichlorophenol	54 U	400	54	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406232
Date Collected: 08/11/2004
Date Received: 08/19/2004
Date Extracted: 09/28/2004
Date Analyzed: 10/04/2004

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: LDW-B9b-TRE
Lab Code: K2406232-004
File ID: J:\MS14\DATA\100404\1004F018.D
Instrument ID: MS14

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Extraction Lot: KWG0414745
Calibration ID: CAL3859

Sample Amount: 2.05 g
% Solids: NA
Dilution Factor: 1

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
91-58-7	2-Chloronaphthalene	29 U	200	29	
88-74-4	2-Nitroaniline	130 U	980	130	
131-11-3	Dimethyl Phthalate	25 U	200	25	
606-20-2	2,6-Dinitrotoluene	35 U	200	35	
99-09-2	3-Nitroaniline	44 U	2000	44	
51-28-5	2,4-Dinitrophenol	120 U	4000	120	
100-02-7	4-Nitrophenol	37 U	2000	37	*
121-14-2	2,4-Dinitrotoluene	42 U	400	42	
7005-72-3	4-Chlorophenyl Phenyl Ether	22 U	200	22	
84-66-2	Diethyl Phthalate	46 U	400	46	
100-01-6	4-Nitroaniline	130 U	980	130	
534-52-1	2-Methyl-4,6-dinitrophenol	74 U	2000	74	*
86-30-6	N-Nitrosodiphenylamine	47 U	200	47	
101-55-3	4-Bromophenyl Phenyl Ether	27 U	200	27	
118-74-1	Hexachlorobenzene	29 U	200	29	
87-86-5	Pentachlorophenol	160 U	2000	160	
86-74-8	Carbazole	170 U	980	170	
84-74-2	Di-n-butyl Phthalate	79 U	200	79	
92-87-5	Benzidine	25000 U	25000	25000	*
85-68-7	Butyl Benzyl Phthalate	69 U	200	69	
91-94-1	3,3'-Dichlorobenzidine	3900 U	9800	3900	
117-81-7	Bis(2-ethylhexyl) Phthalate	260 U	2500	260	
117-84-0	Di-n-octyl Phthalate	64 U	200	64	

* See Case Narrative

Comments: _____

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406232
Date Collected: 08/11/2004
Date Received: 08/19/2004
Date Extracted: 09/28/2004
Date Analyzed: 10/04/2004

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: LDW-B9b-TRE
Lab Code: K2406232-004
File ID: J:\MS14\DATA\100404\1004F018.D
Instrument ID: MS14
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Lot: KWG0414745
Calibration ID: CAL3859

Sample Amount: 2.05 g
% Solids: NA
Dilution Factor: 1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	80	20-130	10/04/04	Acceptable
Phenol-d6	93	20-130	10/04/04	Acceptable
Nitrobenzene-d5	90	20-130	10/04/04	Acceptable
2-Fluorobiphenyl	80	20-130	10/04/04	Acceptable
2,4,6-Tribromophenol	97	20-130	10/04/04	Acceptable
Terphenyl-d14	98	20-130	10/04/04	Acceptable

† Analyte Comments

4-Methylphenol This analyte cannot be separated from 3-Methylphenol.

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406232
Date Collected: 08/15/2004
Date Received: 08/19/2004
Date Extracted: 09/28/2004
Date Analyzed: 10/01/2004

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: LDW-B6a-T
Lab Code: K2406232-005
File ID: J:\MS14\DATA\100104\1001F025.D
Instrument ID: MS14

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Extraction Lot: KWG0414745
Calibration ID: CAL3859

Sample Amount: 2.05 g
% Solids: NA
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
62-75-9	N-Nitrosodimethylamine	49	U	200	49	
62-53-3	Aniline	1200	U	4000	1200	*
111-44-4	Bis(2-chloroethyl) Ether	43	U	200	43	
108-95-2	Phenol	120	J	490	83	
95-57-8	2-Chlorophenol	54	U	400	54	
541-73-1	1,3-Dichlorobenzene	54	U	200	54	
106-46-7	1,4-Dichlorobenzene	54	U	200	54	
95-50-1	1,2-Dichlorobenzene	59	U	200	59	
100-51-6	Benzyl Alcohol	33	U	200	33	
39638-32-9	Bis(2-chloroisopropyl) Ether	54	U	200	54	
95-48-7	2-Methylphenol	260	U	400	260	
67-72-1	Hexachloroethane	42	U	200	42	
621-64-7	N-Nitrosodi-n-propylamine	40	U	200	40	
106-44-5	4-Methylphenol†	74	U	400	74	
98-95-3	Nitrobenzene	49	U	200	49	
78-59-1	Isophorone	29	U	200	29	
88-75-5	2-Nitrophenol	74	U	200	74	
105-67-9	2,4-Dimethylphenol	64	U	400	64	*
111-91-1	Bis(2-chloroethoxy)methane	25	U	200	25	
120-83-2	2,4-Dichlorophenol	59	U	400	59	
65-85-0	Benzoic Acid	9500		4000	930	
120-82-1	1,2,4-Trichlorobenzene	49	U	200	49	
106-47-8	4-Chloroaniline	29	U	980	29	
87-68-3	Hexachlorobutadiene	42	U	200	42	
59-50-7	4-Chloro-3-methylphenol	360	U	980	360	
77-47-4	Hexachlorocyclopentadiene	25000	U	25000	25000	
88-06-2	2,4,6-Trichlorophenol	43	U	400	43	
95-95-4	2,4,5-Trichlorophenol	54	U	400	54	

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406232
Date Collected: 08/15/2004
Date Received: 08/19/2004
Date Extracted: 09/28/2004
Date Analyzed: 10/01/2004

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: LDW-B6a-T
Lab Code: K2406232-005
File ID: J:\MS14\DATA\100104\1001F025.D
Instrument ID: MS14
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Lot: KWG0414745
Calibration ID: CAL3859

Sample Amount: 2.05 g
% Solids: NA
Dilution Factor: 1

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
91-58-7	2-Chloronaphthalene	29 U	200	29	
88-74-4	2-Nitroaniline	130 U	980	130	
131-11-3	Dimethyl Phthalate	25 U	200	25	
606-20-2	2,6-Dinitrotoluene	35 U	200	35	
99-09-2	3-Nitroaniline	44 U	2000	44	
51-28-5	2,4-Dinitrophenol	120 U	4000	120	
100-02-7	4-Nitrophenol	37 U	2000	37	
121-14-2	2,4-Dinitrotoluene	42 U	400	42	
7005-72-3	4-Chlorophenyl Phenyl Ether	22 U	200	22	
84-66-2	Diethyl Phthalate	46 U	400	46	
100-01-6	4-Nitroaniline	130 U	980	130	
534-52-1	2-Methyl-4,6-dinitrophenol	74 U	2000	74	
86-30-6	N-Nitrosodiphenylamine	47 U	200	47	
101-55-3	4-Bromophenyl Phenyl Ether	27 U	200	27	
118-74-1	Hexachlorobenzene	29 U	200	29	
87-86-5	Pentachlorophenol	160 U	2000	160	
86-74-8	Carbazole	170 U	980	170	
84-74-2	Di-n-butyl Phthalate	79 U	200	79	
92-87-5	Benzidine	25000 U	25000	25000	*
85-68-7	Butyl Benzyl Phthalate	69 U	200	69	
91-94-1	3,3'-Dichlorobenzidine	3900 U	9800	3900	
117-81-7	Bis(2-ethylhexyl) Phthalate	260 U	2500	260	
117-84-0	Di-n-octyl Phthalate	64 U	200	64	

* See Case Narrative

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406232
Date Collected: 08/15/2004
Date Received: 08/19/2004
Date Extracted: 09/28/2004
Date Analyzed: 10/01/2004

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: LDW-B6a-T
Lab Code: K2406232-005
File ID: J:\MS14\DATA\100104\1001F025.D
Instrument ID: MS14
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Lot: KWG0414745
Calibration ID: CAL3859

Sample Amount: 2.05 g
% Solids: NA
Dilution Factor: 1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	85	20-130	10/01/04	Acceptable
Phenol-d6	91	20-130	10/01/04	Acceptable
Nitrobenzene-d5	88	20-130	10/01/04	Acceptable
2-Fluorobiphenyl	86	20-130	10/01/04	Acceptable
2,4,6-Tribromophenol	93	20-130	10/01/04	Acceptable
Terphenyl-d14	106	20-130	10/01/04	Acceptable

† Analyte Comments

4-Methylphenol This analyte cannot be separated from 3-Methylphenol.

Comments: _____

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406232
Date Collected: 08/15/2004
Date Received: 08/19/2004
Date Extracted: 09/28/2004
Date Analyzed: 10/04/2004

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: LDW-B6a-TRE
Lab Code: K2406232-005
File ID: J:\MS14\DATA\100404\1004F019.D
Instrument ID: MS14

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Extraction Lot: KWG0414745
Calibration ID: CAL3859

Sample Amount: 2.05 g
% Solids: NA
Dilution Factor: 1

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
62-75-9	N-Nitrosodimethylamine	49 U	200	49	*
62-53-3	Aniline	1200 U	4000	1200	*
111-44-4	Bis(2-chloroethyl) Ether	43 U	200	43	
108-95-2	Phenol	83 U	490	83	
95-57-8	2-Chlorophenol	54 U	400	54	
541-73-1	1,3-Dichlorobenzene	54 U	200	54	
106-46-7	1,4-Dichlorobenzene	54 U	200	54	
95-50-1	1,2-Dichlorobenzene	59 U	200	59	
100-51-6	Benzyl Alcohol	33 U	200	33	
39638-32-9	Bis(2-chloroisopropyl) Ether	54 U	200	54	
95-48-7	2-Methylphenol	260 U	400	260	
67-72-1	Hexachloroethane	42 U	200	42	
621-64-7	N-Nitrosodi-n-propylamine	40 U	200	40	
106-44-5	4-Methylphenol†	74 U	400	74	
98-95-3	Nitrobenzene	49 U	200	49	
78-59-1	Isophorone	29 U	200	29	
88-75-5	2-Nitrophenol	74 U	200	74	
105-67-9	2,4-Dimethylphenol	64 U	400	64	*
111-91-1	Bis(2-chloroethoxy)methane	25 U	200	25	
120-83-2	2,4-Dichlorophenol	59 U	400	59	
65-85-0	Benzoic Acid	9700	4000	930	
120-82-1	1,2,4-Trichlorobenzene	49 U	200	49	
106-47-8	4-Chloroaniline	29 U	980	29	
87-68-3	Hexachlorobutadiene	42 U	200	42	
59-50-7	4-Chloro-3-methylphenol	360 U	980	360	
77-47-4	Hexachlorocyclopentadiene	25000 U	25000	25000	*
88-06-2	2,4,6-Trichlorophenol	43 U	400	43	
95-95-4	2,4,5-Trichlorophenol	54 U	400	54	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406232
Date Collected: 08/15/2004
Date Received: 08/19/2004
Date Extracted: 09/28/2004
Date Analyzed: 10/04/2004

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: LDW-B6a-TRE
Lab Code: K2406232-005
File ID: J:\MS14\DATA\100404\1004F019.D
Instrument ID: MS14
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Lot: KWG0414745
Calibration ID: CAL3859

Sample Amount: 2.05 g
% Solids: NA
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
91-58-7	2-Chloronaphthalene	29	U	200	29	
88-74-4	2-Nitroaniline	130	U	980	130	
131-11-3	Dimethyl Phthalate	25	U	200	25	
606-20-2	2,6-Dinitrotoluene	35	U	200	35	
99-09-2	3-Nitroaniline	44	U	2000	44	
51-28-5	2,4-Dinitrophenol	120	U	4000	120	
100-02-7	4-Nitrophenol	37	U	2000	37	*
121-14-2	2,4-Dinitrotoluene	42	U	400	42	
7005-72-3	4-Chlorophenyl Phenyl Ether	22	U	200	22	
84-66-2	Diethyl Phthalate	46	U	400	46	
100-01-6	4-Nitroaniline	130	U	980	130	
534-52-1	2-Methyl-4,6-dinitrophenol	74	U	2000	74	*
86-30-6	N-Nitrosodiphenylamine	47	U	200	47	
101-55-3	4-Bromophenyl Phenyl Ether	27	U	200	27	
118-74-1	Hexachlorobenzene	29	U	200	29	
87-86-5	Pentachlorophenol	160	U	2000	160	
86-74-8	Carbazole	170	U	980	170	
84-74-2	Di-n-butyl Phthalate	79	U	200	79	
92-87-5	Benzidine	25000	U	25000	25000	*
85-68-7	Butyl Benzyl Phthalate	69	U	200	69	
91-94-1	3,3'-Dichlorobenzidine	3900	U	9800	3900	
117-81-7	Bis(2-ethylhexyl) Phthalate	260	U	2500	260	
117-84-0	Di-n-octyl Phthalate	64	U	200	64	

* See Case Narrative

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406232
Date Collected: 08/15/2004
Date Received: 08/19/2004
Date Extracted: 09/28/2004
Date Analyzed: 10/04/2004

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: LDW-B6a-TRE
Lab Code: K2406232-005
File ID: J:\MS14\DATA\100404\1004F019.D
Instrument ID: MS14
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Lot: KWG0414745
Calibration ID: CAL3859

Sample Amount: 2.05 g
% Solids: NA
Dilution Factor: 1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	86	20-130	10/04/04	Acceptable
Phenol-d6	99	20-130	10/04/04	Acceptable
Nitrobenzene-d5	97	20-130	10/04/04	Acceptable
2-Fluorobiphenyl	85	20-130	10/04/04	Acceptable
2,4,6-Tribromophenol	96	20-130	10/04/04	Acceptable
Terphenyl-d14	96	20-130	10/04/04	Acceptable

† Analyte Comments

4-Methylphenol This analyte cannot be separated from 3-Methylphenol.

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
 Project: LDW Benthic Invertebrate Survey/04-08-06-21
 Sample Matrix: Tissue

Service Request: K2406232
 Date Collected: 08/10/2004
 Date Received: 08/19/2004
 Date Extracted: 09/28/2004
 Date Analyzed: 10/01/2004

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: LDW-B3b-T
 Lab Code: K2406232-008
 File ID: J:\MS14\DATA\100104\1001F026.D
 Instrument ID: MS14
 Extraction Method: EPA 3541
 Analysis Method: 8270C SIM

Units: ug/Kg
 Basis: Wet
 Level: Low

Extraction Lot: KWG0414745
 Calibration ID: CAL3859

Sample Amount: 2.03 g
 % Solids: NA
 Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
62-75-9	N-Nitrosodimethylamine	50	U	200	50	
62-53-3	Aniline	1200	U	4000	1200	*
111-44-4	Bis(2-chloroethyl) Ether	43	U	200	43	
108-95-2	Phenol	260	J	500	84	
95-57-8	2-Chlorophenol	55	U	400	55	
541-73-1	1,3-Dichlorobenzene	55	U	200	55	
106-46-7	1,4-Dichlorobenzene	55	U	200	55	
95-50-1	1,2-Dichlorobenzene	60	U	200	60	
100-51-6	Benzyl Alcohol	51	J	200	34	
39638-32-9	Bis(2-chloroisopropyl) Ether	55	U	200	55	
95-48-7	2-Methylphenol	270	U	400	270	
67-72-1	Hexachloroethane	42	U	200	42	
621-64-7	N-Nitrosodi-n-propylamine	41	U	200	41	
106-44-5	4-Methylphenol†	150	J	400	74	
98-95-3	Nitrobenzene	50	U	200	50	
78-59-1	Isophorone	29	U	200	29	
88-75-5	2-Nitrophenol	74	U	200	74	
105-67-9	2,4-Dimethylphenol	65	U	400	65	*
111-91-1	Bis(2-chloroethoxy)methane	25	U	200	25	
120-83-2	2,4-Dichlorophenol	60	U	400	60	
65-85-0	Benzoic Acid	3700	J	4000	940	
120-82-1	1,2,4-Trichlorobenzene	49	U	200	49	
106-47-8	4-Chloroaniline	30	U	990	30	
87-68-3	Hexachlorobutadiene	42	U	200	42	
59-50-7	4-Chloro-3-methylphenol	360	U	990	360	
77-47-4	Hexachlorocyclopentadiene	25000	U	25000	25000	
88-06-2	2,4,6-Trichlorophenol	44	U	400	44	
95-95-4	2,4,5-Trichlorophenol	55	U	400	55	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406232
Date Collected: 08/10/2004
Date Received: 08/19/2004
Date Extracted: 09/28/2004
Date Analyzed: 10/01/2004

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: LDW-B3b-T
Lab Code: K2406232-008
File ID: J:\MS14\DATA\100104\1001F026.D
Instrument ID: MS14
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Lot: KWG0414745
Calibration ID: CAL3859

Sample Amount: 2.03 g
% Solids: NA
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
91-58-7	2-Chloronaphthalene	30	U	200	30	
88-74-4	2-Nitroaniline	130	U	990	130	
131-11-3	Dimethyl Phthalate	26	U	200	26	
606-20-2	2,6-Dinitrotoluene	35	U	200	35	
99-09-2	3-Nitroaniline	44	U	2000	44	
51-28-5	2,4-Dinitrophenol	120	U	4000	120	
100-02-7	4-Nitrophenol	37	U	2000	37	
121-14-2	2,4-Dinitrotoluene	42	U	400	42	
7005-72-3	4-Chlorophenyl Phenyl Ether	23	U	200	23	
84-66-2	Diethyl Phthalate	47	U	400	47	
100-01-6	4-Nitroaniline	130	U	990	130	
534-52-1	2-Methyl-4,6-dinitrophenol	74	U	2000	74	
86-30-6	N-Nitrosodiphenylamine	47	U	200	47	
101-55-3	4-Bromophenyl Phenyl Ether	28	U	200	28	
118-74-1	Hexachlorobenzene	30	U	200	30	
87-86-5	Pentachlorophenol	160	U	2000	160	
86-74-8	Carbazole	170	U	990	170	
84-74-2	Di-n-butyl Phthalate	79	U	200	79	
92-87-5	Benzidine	25000	U	25000	25000	*
85-68-7	Butyl Benzyl Phthalate	69	U	200	69	
91-94-1	3,3'-Dichlorobenzidine	3900	U	9900	3900	
117-81-7	Bis(2-ethylhexyl) Phthalate	270	U	2500	270	
117-84-0	Di-n-octyl Phthalate	65	U	200	65	

* See Case Narrative

Comments: _____

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406232
Date Collected: 08/10/2004
Date Received: 08/19/2004
Date Extracted: 09/28/2004
Date Analyzed: 10/01/2004

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: LDW-B3b-T
Lab Code: K2406232-008
File ID: J:\MS14\DATA\100104\1001F026.D
Instrument ID: MS14
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Lot: KWG0414745
Calibration ID: CAL3859

Sample Amount: 2.03 g
% Solids: NA
Dilution Factor: 1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	93	20-130	10/01/04	Acceptable
Phenol-d6	99	20-130	10/01/04	Acceptable
Nitrobenzene-d5	97	20-130	10/01/04	Acceptable
2-Fluorobiphenyl	89	20-130	10/01/04	Acceptable
2,4,6-Tribromophenol	92	20-130	10/01/04	Acceptable
Terphenyl-d14	109	20-130	10/01/04	Acceptable

† Analyte Comments

4-Methylphenol This analyte cannot be separated from 3-Methylphenol.

Comments: _____

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406232
Date Collected: 08/10/2004
Date Received: 08/19/2004
Date Extracted: 09/28/2004
Date Analyzed: 10/04/2004

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: LDW-B3b-TRE
Lab Code: K2406232-008
File ID: J:\MS14\DATA\100404\1004F020.D
Instrument ID: MS14

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Extraction Lot: KWG0414745
Calibration ID: CAL3859

Sample Amount: 2.03 g
% Solids: NA
Dilution Factor: 1

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
62-75-9	N-Nitrosodimethylamine	50 U	200	50	*
62-53-3	Aniline	1200 U	4000	1200	*
111-44-4	Bis(2-chloroethyl) Ether	43 U	200	43	
108-95-2	Phenol	300 J	500	84	
95-57-8	2-Chlorophenol	55 U	400	55	
541-73-1	1,3-Dichlorobenzene	55 U	200	55	
106-46-7	1,4-Dichlorobenzene	55 U	200	55	
95-50-1	1,2-Dichlorobenzene	60 U	200	60	
100-51-6	Benzyl Alcohol	100 J	200	34	
39638-32-9	Bis(2-chloroisopropyl) Ether	55 U	200	55	
95-48-7	2-Methylphenol	270 U	400	270	
67-72-1	Hexachloroethane	42 U	200	42	
621-64-7	N-Nitrosodi-n-propylamine	41 U	200	41	
106-44-5	4-Methylphenol†	140 J	400	74	
98-95-3	Nitrobenzene	50 U	200	50	
78-59-1	Isophorone	29 U	200	29	
88-75-5	2-Nitrophenol	74 U	200	74	
105-67-9	2,4-Dimethylphenol	65 U	400	65	*
111-91-1	Bis(2-chloroethoxy)methane	25 U	200	25	
120-83-2	2,4-Dichlorophenol	60 U	400	60	
65-85-0	Benzoic Acid	4000	4000	940	
120-82-1	1,2,4-Trichlorobenzene	49 U	200	49	
106-47-8	4-Chloroaniline	30 U	990	30	
87-68-3	Hexachlorobutadiene	42 U	200	42	
59-50-7	4-Chloro-3-methylphenol	360 U	990	360	
77-47-4	Hexachlorocyclopentadiene	25000 U	25000	25000	*
88-06-2	2,4,6-Trichlorophenol	44 U	400	44	
95-95-4	2,4,5-Trichlorophenol	55 U	400	55	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406232
Date Collected: 08/10/2004
Date Received: 08/19/2004
Date Extracted: 09/28/2004
Date Analyzed: 10/04/2004

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: LDW-B3b-TRE
Lab Code: K2406232-008
File ID: J:\MS14\DATA\100404\1004F020.D
Instrument ID: MS14

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Extraction Lot: KWG0414745
Calibration ID: CAL3859

Sample Amount: 2.03 g
% Solids: NA
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
91-58-7	2-Chloronaphthalene	30	U	200	30	
88-74-4	2-Nitroaniline	130	U	990	130	
131-11-3	Dimethyl Phthalate	26	U	200	26	
606-20-2	2,6-Dinitrotoluene	35	U	200	35	
99-09-2	3-Nitroaniline	44	U	2000	44	
51-28-5	2,4-Dinitrophenol	120	U	4000	120	
100-02-7	4-Nitrophenol	37	U	2000	37	*
121-14-2	2,4-Dinitrotoluene	42	U	400	42	
7005-72-3	4-Chlorophenyl Phenyl Ether	23	U	200	23	
84-66-2	Diethyl Phthalate	47	U	400	47	
100-01-6	4-Nitroaniline	130	U	990	130	
534-52-1	2-Methyl-4,6-dinitrophenol	74	U	2000	74	*
86-30-6	N-Nitrosodiphenylamine	47	U	200	47	
101-55-3	4-Bromophenyl Phenyl Ether	28	U	200	28	
118-74-1	Hexachlorobenzene	30	U	200	30	
87-86-5	Pentachlorophenol	160	U	2000	160	
86-74-8	Carbazole	170	U	990	170	
84-74-2	Di-n-butyl Phthalate	79	U	200	79	
92-87-5	Benzidine	25000	U	25000	25000	*
85-68-7	Butyl Benzyl Phthalate	69	U	200	69	
91-94-1	3,3'-Dichlorobenzidine	3900	U	9900	3900	
117-81-7	Bis(2-ethylhexyl) Phthalate	270	U	2500	270	
117-84-0	Di-n-octyl Phthalate	65	U	200	65	

* See Case Narrative

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406232
Date Collected: 08/10/2004
Date Received: 08/19/2004
Date Extracted: 09/28/2004
Date Analyzed: 10/04/2004

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: LDW-B3b-TRE
Lab Code: K2406232-008
File ID: J:\MS14\DATA\100404\1004F020.D
Instrument ID: MS14
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Lot: KWG0414745
Calibration ID: CAL3859

Sample Amount: 2.03 g
% Solids: NA
Dilution Factor: 1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	94	20-130	10/04/04	Acceptable
Phenol-d6	107	20-130	10/04/04	Acceptable
Nitrobenzene-d5	108	20-130	10/04/04	Acceptable
2-Fluorobiphenyl	87	20-130	10/04/04	Acceptable
2,4,6-Tribromophenol	98	20-130	10/04/04	Acceptable
Terphenyl-d14	98	20-130	10/04/04	Acceptable

† Analyte Comments

4-Methylphenol This analyte cannot be separated from 3-Methylphenol.

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406232
Date Collected: 08/13/2004
Date Received: 08/19/2004
Date Extracted: 09/28/2004
Date Analyzed: 10/01/2004

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: LDW-B7b-T
Lab Code: K2406232-009
File ID: J:\MS14\DATA\100104\1001F027.D
Instrument ID: MS14

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Extraction Lot: KWG0414745
Calibration ID: CAL3859

Sample Amount: 2.03 g
% Solids: NA
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
62-75-9	N-Nitrosodimethylamine	50	U	200	50	
62-53-3	Aniline	1200	U	4000	1200	*
111-44-4	Bis(2-chloroethyl) Ether	43	U	200	43	
108-95-2	Phenol	84	U	500	84	
95-57-8	2-Chlorophenol	55	U	400	55	
541-73-1	1,3-Dichlorobenzene	55	U	200	55	
106-46-7	1,4-Dichlorobenzene	55	U	200	55	
95-50-1	1,2-Dichlorobenzene	60	U	200	60	
100-51-6	Benzyl Alcohol	34	U	200	34	
39638-32-9	Bis(2-chloroisopropyl) Ether	55	U	200	55	
95-48-7	2-Methylphenol	270	U	400	270	
67-72-1	Hexachloroethane	42	U	200	42	
621-64-7	N-Nitrosodi-n-propylamine	41	U	200	41	
106-44-5	4-Methylphenol†	74	U	400	74	
98-95-3	Nitrobenzene	50	U	200	50	
78-59-1	Isophorone	29	U	200	29	
88-75-5	2-Nitrophenol	74	U	200	74	
105-67-9	2,4-Dimethylphenol	65	U	400	65	*
111-91-1	Bis(2-chloroethoxy)methane	25	U	200	25	
120-83-2	2,4-Dichlorophenol	60	U	400	60	
65-85-0	Benzoic Acid	2400	J	4000	940	
120-82-1	1,2,4-Trichlorobenzene	49	U	200	49	
106-47-8	4-Chloroaniline	30	U	990	30	
87-68-3	Hexachlorobutadiene	42	U	200	42	
59-50-7	4-Chloro-3-methylphenol	360	U	990	360	
77-47-4	Hexachlorocyclopentadiene	25000	U	25000	25000	
88-06-2	2,4,6-Trichlorophenol	44	U	400	44	
95-95-4	2,4,5-Trichlorophenol	55	U	400	55	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406232
Date Collected: 08/13/2004
Date Received: 08/19/2004
Date Extracted: 09/28/2004
Date Analyzed: 10/01/2004

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: LDW-B7b-T
Lab Code: K2406232-009
File ID: J:\MS14\DATA\100104\1001F027.D
Instrument ID: MS14
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Lot: KWG0414745
Calibration ID: CAL3859

Sample Amount: 2.03 g
% Solids: NA
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
91-58-7	2-Chloronaphthalene	30	U	200	30	
88-74-4	2-Nitroaniline	130	U	990	130	
131-11-3	Dimethyl Phthalate	26	U	200	26	
606-20-2	2,6-Dinitrotoluene	35	U	200	35	
99-09-2	3-Nitroaniline	44	U	2000	44	
51-28-5	2,4-Dinitrophenol	120	U	4000	120	
100-02-7	4-Nitrophenol	37	U	2000	37	
121-14-2	2,4-Dinitrotoluene	42	U	400	42	
7005-72-3	4-Chlorophenyl Phenyl Ether	23	U	200	23	
84-66-2	Diethyl Phthalate	47	U	400	47	
100-01-6	4-Nitroaniline	130	U	990	130	
534-52-1	2-Methyl-4,6-dinitrophenol	74	U	2000	74	
86-30-6	N-Nitrosodiphenylamine	47	U	200	47	
101-55-3	4-Bromophenyl Phenyl Ether	28	U	200	28	
118-74-1	Hexachlorobenzene	30	U	200	30	
87-86-5	Pentachlorophenol	160	U	2000	160	
86-74-8	Carbazole	170	U	990	170	
84-74-2	Di-n-butyl Phthalate	79	U	200	79	
92-87-5	Benzidine	25000	U	25000	25000	*
85-68-7	Butyl Benzyl Phthalate	69	U	200	69	
91-94-1	3,3'-Dichlorobenzidine	3900	U	9900	3900	
117-81-7	Bis(2-ethylhexyl) Phthalate	270	U	2500	270	
117-84-0	Di-n-octyl Phthalate	65	U	200	65	

* See Case Narrative

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406232
Date Collected: 08/13/2004
Date Received: 08/19/2004
Date Extracted: 09/28/2004
Date Analyzed: 10/01/2004

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: LDW-B7b-T
Lab Code: K2406232-009
File ID: J:\MS14\DATA\100104\1001F027.D
Instrument ID: MS14
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Lot: KWG0414745
Calibration ID: CAL3859

Sample Amount: 2.03 g
% Solids: NA
Dilution Factor: 1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	91	20-130	10/01/04	Acceptable
Phenol-d6	101	20-130	10/01/04	Acceptable
Nitrobenzene-d5	100	20-130	10/01/04	Acceptable
2-Fluorobiphenyl	89	20-130	10/01/04	Acceptable
2,4,6-Tribromophenol	90	20-130	10/01/04	Acceptable
Terphenyl-d14	107	20-130	10/01/04	Acceptable

† Analyte Comments

4-Methylphenol This analyte cannot be separated from 3-Methylphenol.

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406232
Date Collected: 08/13/2004
Date Received: 08/19/2004
Date Extracted: 09/28/2004
Date Analyzed: 10/04/2004

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: LDW-B7b-TRE
Lab Code: K2406232-009
File ID: J:\MS14\DATA\100404\1004F021.D
Instrument ID: MS14

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Extraction Lot: KWG0414745
Calibration ID: CAL3859

Sample Amount: 2.03 g
% Solids: NA
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
62-75-9	N-Nitrosodimethylamine	50	U	200	50	*
62-53-3	Aniline	1200	U	4000	1200	*
111-44-4	Bis(2-chloroethyl) Ether	43	U	200	43	
108-95-2	Phenol	84	U	500	84	
95-57-8	2-Chlorophenol	55	U	400	55	
541-73-1	1,3-Dichlorobenzene	55	U	200	55	
106-46-7	1,4-Dichlorobenzene	55	U	200	55	
95-50-1	1,2-Dichlorobenzene	60	U	200	60	
100-51-6	Benzyl Alcohol	34	U	200	34	
39638-32-9	Bis(2-chloroisopropyl) Ether	55	U	200	55	
95-48-7	2-Methylphenol	270	U	400	270	
67-72-1	Hexachloroethane	42	U	200	42	
621-64-7	N-Nitrosodi-n-propylamine	41	U	200	41	
106-44-5	4-Methylphenol†	77	J	400	74	
98-95-3	Nitrobenzene	50	U	200	50	
78-59-1	Isophorone	29	U	200	29	
88-75-5	2-Nitrophenol	74	U	200	74	
105-67-9	2,4-Dimethylphenol	65	U	400	65	*
111-91-1	Bis(2-chloroethoxy)methane	25	U	200	25	
120-83-2	2,4-Dichlorophenol	60	U	400	60	
65-85-0	Benzoic Acid	2700	J	4000	940	
120-82-1	1,2,4-Trichlorobenzene	49	U	200	49	
106-47-8	4-Chloroaniline	30	U	990	30	
87-68-3	Hexachlorobutadiene	42	U	200	42	
59-50-7	4-Chloro-3-methylphenol	360	U	990	360	
77-47-4	Hexachlorocyclopentadiene	25000	U	25000	25000	*
88-06-2	2,4,6-Trichlorophenol	44	U	400	44	
95-95-4	2,4,5-Trichlorophenol	55	U	400	55	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406232
Date Collected: 08/13/2004
Date Received: 08/19/2004
Date Extracted: 09/28/2004
Date Analyzed: 10/04/2004

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: LDW-B7b-TRE
Lab Code: K2406232-009
File ID: J:\MS14\DATA\100404\1004F021.D
Instrument ID: MS14
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Lot: KWG0414745
Calibration ID: CAL3859

Sample Amount: 2.03 g
% Solids: NA
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
91-58-7	2-Chloronaphthalene	30	U	200	30	
88-74-4	2-Nitroaniline	130	U	990	130	
131-11-3	Dimethyl Phthalate	26	U	200	26	
606-20-2	2,6-Dinitrotoluene	35	U	200	35	
99-09-2	3-Nitroaniline	44	U	2000	44	
51-28-5	2,4-Dinitrophenol	120	U	4000	120	
100-02-7	4-Nitrophenol	37	U	2000	37	*
121-14-2	2,4-Dinitrotoluene	42	U	400	42	
7005-72-3	4-Chlorophenyl Phenyl Ether	23	U	200	23	
84-66-2	Diethyl Phthalate	47	U	400	47	
100-01-6	4-Nitroaniline	130	U	990	130	
534-52-1	2-Methyl-4,6-dinitrophenol	74	U	2000	74	*
86-30-6	N-Nitrosodiphenylamine	47	U	200	47	
101-55-3	4-Bromophenyl Phenyl Ether	28	U	200	28	
118-74-1	Hexachlorobenzene	30	U	200	30	
87-86-5	Pentachlorophenol	160	U	2000	160	
86-74-8	Carbazole	170	U	990	170	
84-74-2	Di-n-butyl Phthalate	79	U	200	79	
92-87-5	Benzidine	25000	U	25000	25000	*
85-68-7	Butyl Benzyl Phthalate	69	U	200	69	
91-94-1	3,3'-Dichlorobenzidine	3900	U	9900	3900	
117-81-7	Bis(2-ethylhexyl) Phthalate	270	U	2500	270	
117-84-0	Di-n-octyl Phthalate	65	U	200	65	

* See Case Narrative

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406232
Date Collected: 08/13/2004
Date Received: 08/19/2004
Date Extracted: 09/28/2004
Date Analyzed: 10/04/2004

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: LDW-B7b-TRE
Lab Code: K2406232-009
File ID: J:\MS14\DATA\100404\1004F021.D
Instrument ID: MS14
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Lot: KWG0414745
Calibration ID: CAL3859

Sample Amount: 2.03 g
% Solids: NA
Dilution Factor: 1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	88	20-130	10/04/04	Acceptable
Phenol-d6	104	20-130	10/04/04	Acceptable
Nitrobenzene-d5	106	20-130	10/04/04	Acceptable
2-Fluorobiphenyl	87	20-130	10/04/04	Acceptable
2,4,6-Tribromophenol	87	20-130	10/04/04	Acceptable
Terphenyl-d14	97	20-130	10/04/04	Acceptable

† Analyte Comments

4-Methylphenol This analyte cannot be separated from 3-Methylphenol.

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406296
Date Collected: 08/18/2004
Date Received: 08/21/2004

Semi-Volatile Organic Compounds by GC/MS

Sample Name: LDW-B6b-S
Lab Code: K2406296-001
Extraction Method: EPA 3541
Analysis Method: 8270C

Units: ug/Kg
Basis: Dry
Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
N-Nitrosodimethylamine	ND	U	53	13	1	09/22/04	09/29/04	KWG0414281	
Aniline	13	J	21	3.2	1	09/22/04	09/29/04	KWG0414281	
Bis(2-chloroethyl) Ether	ND	U	11	5.1	1	09/22/04	09/29/04	KWG0414281	
Phenol	35		32	4.0	1	09/22/04	09/29/04	KWG0414281	
2-Chlorophenol	ND	U	11	3.6	1	09/22/04	09/29/04	KWG0414281	
1,3-Dichlorobenzene	ND	U	11	3.4	1	09/22/04	09/29/04	KWG0414281	
1,4-Dichlorobenzene	ND	U	11	4.0	1	09/22/04	09/29/04	KWG0414281	
1,2-Dichlorobenzene	ND	U	11	2.8	1	09/22/04	09/29/04	KWG0414281	
Benzyl Alcohol	13		11	7.8	1	09/22/04	09/29/04	KWG0414281	
Bis(2-chloroisopropyl) Ether	ND	U	11	2.6	1	09/22/04	09/29/04	KWG0414281	
2-Methylphenol	ND	U	11	7.2	1	09/22/04	09/29/04	KWG0414281	
Hexachloroethane	ND	U	11	4.7	1	09/22/04	09/29/04	KWG0414281	
N-Nitrosodi-n-propylamine	ND	U	11	6.7	1	09/22/04	09/29/04	KWG0414281	
4-Methylphenol†	6.2	J	11	6.1	1	09/22/04	09/29/04	KWG0414281	
Nitrobenzene	ND	U	11	4.2	1	09/22/04	09/29/04	KWG0414281	
Isophorone	ND	U	11	3.4	1	09/22/04	09/29/04	KWG0414281	
2-Nitrophenol	ND	U	11	5.5	1	09/22/04	09/29/04	KWG0414281	
2,4-Dimethylphenol	ND	U	53	12	1	09/22/04	09/29/04	KWG0414281	*
Bis(2-chloroethoxy)methane	ND	U	11	2.8	1	09/22/04	09/29/04	KWG0414281	
2,4-Dichlorophenol	ND	U	11	3.8	1	09/22/04	09/29/04	KWG0414281	
Benzoic Acid	ND	U	210	210	1	09/22/04	09/29/04	KWG0414281	
1,2,4-Trichlorobenzene	ND	U	11	3.2	1	09/22/04	09/29/04	KWG0414281	
4-Chloroaniline	ND	U	11	4.4	1	09/22/04	09/29/04	KWG0414281	
Hexachlorobutadiene	ND	U	11	3.0	1	09/22/04	09/29/04	KWG0414281	
4-Chloro-3-methylphenol	ND	U	11	4.4	1	09/22/04	09/29/04	KWG0414281	
Hexachlorocyclopentadiene	ND	U	53	32	1	09/22/04	09/29/04	KWG0414281	
2,4,6-Trichlorophenol	ND	U	11	3.8	1	09/22/04	09/29/04	KWG0414281	
2,4,5-Trichlorophenol	ND	U	11	6.3	1	09/22/04	09/29/04	KWG0414281	
2-Chloronaphthalene	ND	U	11	7.6	1	09/22/04	09/29/04	KWG0414281	
2-Nitroaniline	ND	U	21	5.7	1	09/22/04	09/29/04	KWG0414281	
Dimethyl Phthalate	6.4	J	11	3.8	1	09/22/04	09/29/04	KWG0414281	
2,6-Dinitrotoluene	ND	U	11	5.9	1	09/22/04	09/29/04	KWG0414281	
3-Nitroaniline	ND	U	21	5.5	1	09/22/04	09/29/04	KWG0414281	
2,4-Dinitrophenol	ND	U	210	76	1	09/22/04	09/29/04	KWG0414281	

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406296
Date Collected: 08/18/2004
Date Received: 08/21/2004

Semi-Volatile Organic Compounds by GC/MS

Sample Name: LDW-B6b-S
Lab Code: K2406296-001
Extraction Method: EPA 3541
Analysis Method: 8270C

Units: ug/Kg
Basis: Dry
Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
4-Nitrophenol	ND	U	110	63	1	09/22/04	09/29/04	KWG0414281	
2,4-Dinitrotoluene	ND	U	11	5.9	1	09/22/04	09/29/04	KWG0414281	
4-Chlorophenyl Phenyl Ether	ND	U	11	4.2	1	09/22/04	09/29/04	KWG0414281	
Diethyl Phthalate	ND	U	11	7.4	1	09/22/04	09/29/04	KWG0414281	
4-Nitroaniline	ND	U	21	7.2	1	09/22/04	09/29/04	KWG0414281	
2-Methyl-4,6-dinitrophenol	ND	U	110	3.6	1	09/22/04	09/29/04	KWG0414281	
N-Nitrosodiphenylamine	ND	U	11	4.7	1	09/22/04	09/29/04	KWG0414281	
4-Bromophenyl Phenyl Ether	ND	U	11	3.0	1	09/22/04	09/29/04	KWG0414281	
Hexachlorobenzene	ND	U	11	4.4	1	09/22/04	09/29/04	KWG0414281	
Pentachlorophenol	ND	U	53	18	1	09/22/04	09/29/04	KWG0414281	
Carbazole	41		11	2.8	1	09/22/04	09/29/04	KWG0414281	
Di-n-butyl Phthalate	37		11	5.5	1	09/22/04	09/29/04	KWG0414281	
Benzidine	ND	U	420	420	1	09/22/04	09/29/04	KWG0414281	*
Butyl Benzyl Phthalate	23		11	3.2	1	09/22/04	09/29/04	KWG0414281	
3,3'-Dichlorobenzidine	ND	U	110	7.8	1	09/22/04	09/29/04	KWG0414281	
Bis(2-ethylhexyl) Phthalate	160	J	210	3.6	1	09/22/04	09/29/04	KWG0414281	
Di-n-octyl Phthalate	ND	U	21	2.6	1	09/22/04	09/29/04	KWG0414281	

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	51	40-130	09/29/04	Acceptable
Phenol-d6	57	40-130	09/29/04	Acceptable
Nitrobenzene-d5	40	40-130	09/29/04	Acceptable
2-Fluorobiphenyl	37	40-130	09/29/04	Outside Control Limits
2,4,6-Tribromophenol	90	40-130	09/29/04	Acceptable
Terphenyl-d14	75	40-130	09/29/04	Acceptable

† Analyte Comments

4-Methylphenol This analyte cannot be separated from 3-Methylphenol.

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406296
Date Collected: 08/19/2004
Date Received: 08/21/2004

Semi-Volatile Organic Compounds by GC/MS

Sample Name: LDW-B8b-S
Lab Code: K2406296-002
Extraction Method: EPA 3541
Analysis Method: 8270C

Units: ug/Kg
Basis: Dry
Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
N-Nitrosodimethylamine	ND	U	54	13	1	09/22/04	09/29/04	KWG0414281	
Aniline	ND	U	22	3.2	1	09/22/04	09/29/04	KWG0414281	
Bis(2-chloroethyl) Ether	ND	U	11	5.2	1	09/22/04	09/29/04	KWG0414281	
Phenol	7.3	J	32	4.1	1	09/22/04	09/29/04	KWG0414281	
2-Chlorophenol	ND	U	11	3.7	1	09/22/04	09/29/04	KWG0414281	
1,3-Dichlorobenzene	ND	U	11	3.5	1	09/22/04	09/29/04	KWG0414281	
1,4-Dichlorobenzene	ND	U	11	4.1	1	09/22/04	09/29/04	KWG0414281	
1,2-Dichlorobenzene	ND	U	11	2.8	1	09/22/04	09/29/04	KWG0414281	
Benzyl Alcohol	ND	U	11	7.9	1	09/22/04	09/29/04	KWG0414281	
Bis(2-chloroisopropyl) Ether	ND	U	11	2.6	1	09/22/04	09/29/04	KWG0414281	
2-Methylphenol	ND	U	11	7.3	1	09/22/04	09/29/04	KWG0414281	
Hexachloroethane	ND	U	11	4.7	1	09/22/04	09/29/04	KWG0414281	
N-Nitrosodi-n-propylamine	ND	U	11	6.9	1	09/22/04	09/29/04	KWG0414281	
4-Methylphenol†	ND	U	11	6.2	1	09/22/04	09/29/04	KWG0414281	
Nitrobenzene	ND	U	11	4.3	1	09/22/04	09/29/04	KWG0414281	
Isophorone	ND	U	11	3.5	1	09/22/04	09/29/04	KWG0414281	
2-Nitrophenol	ND	U	11	5.6	1	09/22/04	09/29/04	KWG0414281	
2,4-Dimethylphenol	ND	U	54	12	1	09/22/04	09/29/04	KWG0414281	*
Bis(2-chloroethoxy)methane	ND	U	11	2.8	1	09/22/04	09/29/04	KWG0414281	
2,4-Dichlorophenol	ND	U	11	3.9	1	09/22/04	09/29/04	KWG0414281	
Benzoic Acid	ND	U	220	210	1	09/22/04	09/29/04	KWG0414281	
1,2,4-Trichlorobenzene	ND	U	11	3.2	1	09/22/04	09/29/04	KWG0414281	
4-Chloroaniline	ND	U	11	4.5	1	09/22/04	09/29/04	KWG0414281	
Hexachlorobutadiene	ND	U	11	3.0	1	09/22/04	09/29/04	KWG0414281	
4-Chloro-3-methylphenol	ND	U	11	4.5	1	09/22/04	09/29/04	KWG0414281	
Hexachlorocyclopentadiene	ND	U	54	32	1	09/22/04	09/29/04	KWG0414281	
2,4,6-Trichlorophenol	ND	U	11	3.9	1	09/22/04	09/29/04	KWG0414281	
2,4,5-Trichlorophenol	ND	U	11	6.4	1	09/22/04	09/29/04	KWG0414281	
2-Chloronaphthalene	ND	U	11	7.7	1	09/22/04	09/29/04	KWG0414281	
2-Nitroaniline	ND	U	22	5.8	1	09/22/04	09/29/04	KWG0414281	
Dimethyl Phthalate	4.7	J	11	3.9	1	09/22/04	09/29/04	KWG0414281	
2,6-Dinitrotoluene	ND	U	11	6.0	1	09/22/04	09/29/04	KWG0414281	
3-Nitroaniline	ND	U	22	5.6	1	09/22/04	09/29/04	KWG0414281	
2,4-Dinitrophenol	ND	U	220	77	1	09/22/04	09/29/04	KWG0414281	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406296
Date Collected: 08/19/2004
Date Received: 08/21/2004

Semi-Volatile Organic Compounds by GC/MS

Sample Name: LDW-B8b-S
Lab Code: K2406296-002
Extraction Method: EPA 3541
Analysis Method: 8270C

Units: ug/Kg
Basis: Dry
Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
4-Nitrophenol	ND	U	110	64	1	09/22/04	09/29/04	KWG0414281	
2,4-Dinitrotoluene	ND	U	11	6.0	1	09/22/04	09/29/04	KWG0414281	
4-Chlorophenyl Phenyl Ether	ND	U	11	4.3	1	09/22/04	09/29/04	KWG0414281	
Diethyl Phthalate	ND	U	11	7.5	1	09/22/04	09/29/04	KWG0414281	
4-Nitroaniline	ND	U	22	7.3	1	09/22/04	09/29/04	KWG0414281	
2-Methyl-4,6-dinitrophenol	ND	U	110	3.7	1	09/22/04	09/29/04	KWG0414281	
N-Nitrosodiphenylamine	ND	U	11	4.7	1	09/22/04	09/29/04	KWG0414281	
4-Bromophenyl Phenyl Ether	ND	U	11	3.0	1	09/22/04	09/29/04	KWG0414281	
Hexachlorobenzene	ND	U	11	4.5	1	09/22/04	09/29/04	KWG0414281	
Pentachlorophenol	ND	U	54	19	1	09/22/04	09/29/04	KWG0414281	
Carbazole	8.1	J	11	2.8	1	09/22/04	09/29/04	KWG0414281	
Di-n-butyl Phthalate	6.9	J	11	5.6	1	09/22/04	09/29/04	KWG0414281	
Benzidine	ND	U	430	430	1	09/22/04	09/29/04	KWG0414281	*
Butyl Benzyl Phthalate	9.2	J	11	3.2	1	09/22/04	09/29/04	KWG0414281	
3,3'-Dichlorobenzidine	ND	U	110	7.9	1	09/22/04	09/29/04	KWG0414281	
Bis(2-ethylhexyl) Phthalate	60	J	220	3.7	1	09/22/04	09/29/04	KWG0414281	
Di-n-octyl Phthalate	ND	U	22	2.6	1	09/22/04	09/29/04	KWG0414281	

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	47	40-130	09/29/04	Acceptable
Phenol-d6	50	40-130	09/29/04	Acceptable
Nitrobenzene-d5	38	40-130	09/29/04	Outside Control Limits
2-Fluorobiphenyl	25	40-130	09/29/04	Outside Control Limits
2,4,6-Tribromophenol	78	40-130	09/29/04	Acceptable
Terphenyl-d14	67	40-130	09/29/04	Acceptable

† Analyte Comments

4-Methylphenol This analyte cannot be separated from 3-Methylphenol.

Comments:

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406296
Date Collected: 08/19/2004
Date Received: 08/21/2004

Semi-Volatile Organic Compounds by GC/MS

Sample Name: LDW-B10b-S
Lab Code: K2406296-003
Extraction Method: EPA 3541
Analysis Method: 8270C

Units: ug/Kg
Basis: Dry
Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
N-Nitrosodimethylamine	ND	U	50	11	1	09/22/04	09/29/04	KWG0414281	
Aniline	ND	U	20	2.6	1	09/22/04	09/29/04	KWG0414281	
Bis(2-chloroethyl) Ether	ND	U	10	4.1	1	09/22/04	09/29/04	KWG0414281	
Phenol	10	J	30	3.3	1	09/22/04	09/29/04	KWG0414281	
2-Chlorophenol	ND	U	10	2.9	1	09/22/04	09/29/04	KWG0414281	
1,3-Dichlorobenzene	ND	U	10	2.8	1	09/22/04	09/29/04	KWG0414281	
1,4-Dichlorobenzene	ND	U	10	3.3	1	09/22/04	09/29/04	KWG0414281	
1,2-Dichlorobenzene	ND	U	10	2.2	1	09/22/04	09/29/04	KWG0414281	
Benzyl Alcohol	ND	U	10	6.3	1	09/22/04	09/29/04	KWG0414281	
Bis(2-chloroisopropyl) Ether	ND	U	10	2.1	1	09/22/04	09/29/04	KWG0414281	
2-Methylphenol	ND	U	10	5.8	1	09/22/04	09/29/04	KWG0414281	
Hexachloroethane	ND	U	10	3.8	1	09/22/04	09/29/04	KWG0414281	
N-Nitrosodi-n-propylamine	ND	U	10	5.5	1	09/22/04	09/29/04	KWG0414281	
4-Methylphenol†	ND	U	10	5.0	1	09/22/04	09/29/04	KWG0414281	
Nitrobenzene	ND	U	10	3.4	1	09/22/04	09/29/04	KWG0414281	
Isophorone	ND	U	10	2.8	1	09/22/04	09/29/04	KWG0414281	
2-Nitrophenol	ND	U	10	4.4	1	09/22/04	09/29/04	KWG0414281	
2,4-Dimethylphenol	ND	U	50	9.4	1	09/22/04	09/29/04	KWG0414281	*
Bis(2-chloroethoxy)methane	ND	U	10	2.2	1	09/22/04	09/29/04	KWG0414281	
2,4-Dichlorophenol	ND	U	10	3.1	1	09/22/04	09/29/04	KWG0414281	
Benzoic Acid	ND	U	200	170	1	09/22/04	09/29/04	KWG0414281	
1,2,4-Trichlorobenzene	ND	U	10	2.6	1	09/22/04	09/29/04	KWG0414281	
4-Chloroaniline	ND	U	10	3.6	1	09/22/04	09/29/04	KWG0414281	
Hexachlorobutadiene	ND	U	10	2.4	1	09/22/04	09/29/04	KWG0414281	
4-Chloro-3-methylphenol	ND	U	10	3.6	1	09/22/04	09/29/04	KWG0414281	
Hexachlorocyclopentadiene	ND	U	50	26	1	09/22/04	09/29/04	KWG0414281	
2,4,6-Trichlorophenol	ND	U	10	3.1	1	09/22/04	09/29/04	KWG0414281	
2,4,5-Trichlorophenol	ND	U	10	5.1	1	09/22/04	09/29/04	KWG0414281	
2-Chloronaphthalene	ND	U	10	6.1	1	09/22/04	09/29/04	KWG0414281	
2-Nitroaniline	ND	U	20	4.6	1	09/22/04	09/29/04	KWG0414281	
Dimethyl Phthalate	ND	U	10	3.1	1	09/22/04	09/29/04	KWG0414281	
2,6-Dinitrotoluene	ND	U	10	4.8	1	09/22/04	09/29/04	KWG0414281	
3-Nitroaniline	ND	U	20	4.4	1	09/22/04	09/29/04	KWG0414281	
2,4-Dinitrophenol	ND	U	200	61	1	09/22/04	09/29/04	KWG0414281	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406296
Date Collected: 08/19/2004
Date Received: 08/21/2004

Semi-Volatile Organic Compounds by GC/MS

Sample Name: LDW-B10b-S
Lab Code: K2406296-003
Extraction Method: EPA 3541
Analysis Method: 8270C

Units: ug/Kg
Basis: Dry
Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
4-Nitrophenol	ND	U	100	51	1	09/22/04	09/29/04	KWG0414281	
2,4-Dinitrotoluene	ND	U	10	4.8	1	09/22/04	09/29/04	KWG0414281	
4-Chlorophenyl Phenyl Ether	ND	U	10	3.4	1	09/22/04	09/29/04	KWG0414281	
Diethyl Phthalate	ND	U	10	6.0	1	09/22/04	09/29/04	KWG0414281	
4-Nitroaniline	ND	U	20	5.8	1	09/22/04	09/29/04	KWG0414281	
2-Methyl-4,6-dinitrophenol	ND	U	100	2.9	1	09/22/04	09/29/04	KWG0414281	
N-Nitrosodiphenylamine	ND	U	10	3.8	1	09/22/04	09/29/04	KWG0414281	
4-Bromophenyl Phenyl Ether	ND	U	10	2.4	1	09/22/04	09/29/04	KWG0414281	
Hexachlorobenzene	ND	U	10	3.6	1	09/22/04	09/29/04	KWG0414281	
Pentachlorophenol	ND	U	50	15	1	09/22/04	09/29/04	KWG0414281	
Carbazole	3.2	J	10	2.2	1	09/22/04	09/29/04	KWG0414281	
Di-n-butyl Phthalate	ND	U	10	4.4	1	09/22/04	09/29/04	KWG0414281	
Benzidine	ND	U	340	340	1	09/22/04	09/29/04	KWG0414281	*
Butyl Benzyl Phthalate	4.4	J	10	2.6	1	09/22/04	09/29/04	KWG0414281	
3,3'-Dichlorobenzidine	ND	U	100	6.3	1	09/22/04	09/29/04	KWG0414281	
Bis(2-ethylhexyl) Phthalate	35	J	200	2.9	1	09/22/04	09/29/04	KWG0414281	
Di-n-octyl Phthalate	ND	U	20	2.1	1	09/22/04	09/29/04	KWG0414281	

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	44	40-130	09/29/04	Acceptable
Phenol-d6	53	40-130	09/29/04	Acceptable
Nitrobenzene-d5	28	40-130	09/29/04	Outside Control Limits
2-Fluorobiphenyl	31	40-130	09/29/04	Outside Control Limits
2,4,6-Tribromophenol	90	40-130	09/29/04	Acceptable
Terphenyl-d14	79	40-130	09/29/04	Acceptable

† Analyte Comments

4-Methylphenol This analyte cannot be separated from 3-Methylphenol.

Comments: _____

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406297
Date Collected: 08/18/2004
Date Received: 08/21/2004
Date Extracted: 09/28/2004
Date Analyzed: 10/01/2004

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: LDW-B6b-T
Lab Code: K2406297-001
File ID: J:\MS14\DATA\100104\1001F013.D
Instrument ID: MS14

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Extraction Lot: KWG0414745
Calibration ID: CAL3859

Sample Amount: 2.04 g
% Solids: NA
Dilution Factor: 1

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
62-75-9	N-Nitrosodimethylamine	50 U	200	50	
62-53-3	Aniline	1200 U	4000	1200	*
111-44-4	Bis(2-chloroethyl) Ether	43 U	200	43	
108-95-2	Phenol	160 J	500	84	
95-57-8	2-Chlorophenol	54 U	400	54	
541-73-1	1,3-Dichlorobenzene	54 U	200	54	
106-46-7	1,4-Dichlorobenzene	54 U	200	54	
95-50-1	1,2-Dichlorobenzene	59 U	200	59	
100-51-6	Benzyl Alcohol	410	200	33	
39638-32-9	Bis(2-chloroisopropyl) Ether	54 U	200	54	
95-48-7	2-Methylphenol	260 U	400	260	
67-72-1	Hexachloroethane	42 U	200	42	
621-64-7	N-Nitrosodi-n-propylamine	41 U	200	41	
106-44-5	4-Methylphenol†	200 J	400	74	
98-95-3	Nitrobenzene	50 U	200	50	
78-59-1	Isophorone	29 U	200	29	
88-75-5	2-Nitrophenol	74 U	200	74	
105-67-9	2,4-Dimethylphenol	71 J	400	64	*
111-91-1	Bis(2-chloroethoxy)methane	25 U	200	25	
120-83-2	2,4-Dichlorophenol	59 U	400	59	
65-85-0	Benzoic Acid	1400 J	4000	940	
120-82-1	1,2,4-Trichlorobenzene	49 U	200	49	
106-47-8	4-Chloroaniline	53 J	990	29	
87-68-3	Hexachlorobutadiene	42 U	200	42	
59-50-7	4-Chloro-3-methylphenol	360 U	990	360	
77-47-4	Hexachlorocyclopentadiene	25000 U	25000	25000	
88-06-2	2,4,6-Trichlorophenol	47 J	400	44	
95-95-4	2,4,5-Trichlorophenol	75 J	400	54	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406297
Date Collected: 08/18/2004
Date Received: 08/21/2004
Date Extracted: 09/28/2004
Date Analyzed: 10/01/2004

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: LDW-B6b-T
Lab Code: K2406297-001
File ID: J:\MS14\DATA\100104\1001F013.D
Instrument ID: MS14
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Lot: KWG0414745
Calibration ID: CAL3859

Sample Amount: 2.04 g
% Solids: NA
Dilution Factor: 1

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
91-58-7	2-Chloronaphthalene	29 U	200	29	
88-74-4	2-Nitroaniline	130 U	990	130	
131-11-3	Dimethyl Phthalate	25 U	200	25	
606-20-2	2,6-Dinitrotoluene	35 U	200	35	
99-09-2	3-Nitroaniline	44 U	2000	44	
51-28-5	2,4-Dinitrophenol	120 U	4000	120	
100-02-7	4-Nitrophenol	280 J	2000	37	
121-14-2	2,4-Dinitrotoluene	42 U	400	42	
7005-72-3	4-Chlorophenyl Phenyl Ether	23 U	200	23	
84-66-2	Diethyl Phthalate	47 U	400	47	
100-01-6	4-Nitroaniline	130 U	990	130	
534-52-1	2-Methyl-4,6-dinitrophenol	74 U	2000	74	
86-30-6	N-Nitrosodiphenylamine	47 U	200	47	
101-55-3	4-Bromophenyl Phenyl Ether	27 U	200	27	
118-74-1	Hexachlorobenzene	29 U	200	29	
87-86-5	Pentachlorophenol	4700	2000	160	
86-74-8	Carbazole	170 U	990	170	
84-74-2	Di-n-butyl Phthalate	79 U	200	79	
92-87-5	Benzidine	25000 U	25000	25000	*
85-68-7	Butyl Benzyl Phthalate	69 U	200	69	
91-94-1	3,3'-Dichlorobenzidine	3900 U	9900	3900	
117-81-7	Bis(2-ethylhexyl) Phthalate	260 U	2500	260	
117-84-0	Di-n-octyl Phthalate	64 U	200	64	

* See Case Narrative

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406297
Date Collected: 08/18/2004
Date Received: 08/21/2004
Date Extracted: 09/28/2004
Date Analyzed: 10/01/2004

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: LDW-B6b-T
Lab Code: K2406297-001
File ID: J:\MS14\DATA\100104\1001F013.D
Instrument ID: MS14

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Extraction Lot: KWG0414745
Calibration ID: CAL3859

Sample Amount: 2.04 g
% Solids: NA
Dilution Factor: 1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	99	20-130	10/01/04	Acceptable
Phenol-d6	106	20-130	10/01/04	Acceptable
Nitrobenzene-d5	101	20-130	10/01/04	Acceptable
2-Fluorobiphenyl	99	20-130	10/01/04	Acceptable
2,4,6-Tribromophenol	99	20-130	10/01/04	Acceptable
Terphenyl-d14	114	20-130	10/01/04	Acceptable

† Analyte Comments

4-Methylphenol This analyte cannot be separated from 3-Methylphenol.

Comments: _____

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406297
Date Collected: 08/18/2004
Date Received: 08/21/2004
Date Extracted: 09/28/2004
Date Analyzed: 10/04/2004

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: LDW-B6b-TRE
Lab Code: K2406297-001
File ID: J:\MS14\DATA\100404\1004F007.D
Instrument ID: MS14

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Extraction Lot: KWG0414745
Calibration ID: CAL3859

Sample Amount: 2.04 g
% Solids: NA
Dilution Factor: 1

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
62-75-9	N-Nitrosodimethylamine	50 U	200	50	*
62-53-3	Aniline	1200 U	4000	1200	*
111-44-4	Bis(2-chloroethyl) Ether	43 U	200	43	
108-95-2	Phenol	84 U	500	84	
95-57-8	2-Chlorophenol	54 U	400	54	
541-73-1	1,3-Dichlorobenzene	54 U	200	54	
106-46-7	1,4-Dichlorobenzene	54 U	200	54	
95-50-1	1,2-Dichlorobenzene	59 U	200	59	
100-51-6	Benzyl Alcohol	33 U	200	33	
39638-32-9	Bis(2-chloroisopropyl) Ether	54 U	200	54	
95-48-7	2-Methylphenol	260 U	400	260	
67-72-1	Hexachloroethane	42 U	200	42	
621-64-7	N-Nitrosodi-n-propylamine	41 U	200	41	
106-44-5	4-Methylphenol†	170 J	400	74	
98-95-3	Nitrobenzene	50 U	200	50	
78-59-1	Isophorone	29 U	200	29	
88-75-5	2-Nitrophenol	74 U	200	74	
105-67-9	2,4-Dimethylphenol	64 U	400	64	*
111-91-1	Bis(2-chloroethoxy)methane	25 U	200	25	
120-83-2	2,4-Dichlorophenol	59 U	400	59	
65-85-0	Benzoic Acid	1300 J	4000	940	
120-82-1	1,2,4-Trichlorobenzene	49 U	200	49	
106-47-8	4-Chloroaniline	29 U	990	29	
87-68-3	Hexachlorobutadiene	42 U	200	42	
59-50-7	4-Chloro-3-methylphenol	360 U	990	360	
77-47-4	Hexachlorocyclopentadiene	25000 U	25000	25000	*
88-06-2	2,4,6-Trichlorophenol	44 U	400	44	
95-95-4	2,4,5-Trichlorophenol	54 U	400	54	

Comments:

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406297
Date Collected: 08/18/2004
Date Received: 08/21/2004
Date Extracted: 09/28/2004
Date Analyzed: 10/04/2004

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: LDW-B6b-TRE
Lab Code: K2406297-001
File ID: J:\MS14\DATA\100404\1004F007.D
Instrument ID: MS14

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Extraction Lot: KWG0414745
Calibration ID: CAL3859

Sample Amount: 2.04 g
% Solids: NA
Dilution Factor: 1

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
91-58-7	2-Chloronaphthalene	29 U	200	29	
88-74-4	2-Nitroaniline	130 U	990	130	
131-11-3	Dimethyl Phthalate	25 U	200	25	
606-20-2	2,6-Dinitrotoluene	35 U	200	35	
99-09-2	3-Nitroaniline	44 U	2000	44	
51-28-5	2,4-Dinitrophenol	120 U	4000	120	
100-02-7	4-Nitrophenol	110 J	2000	37	*
121-14-2	2,4-Dinitrotoluene	42 U	400	42	
7005-72-3	4-Chlorophenyl Phenyl Ether	23 U	200	23	
84-66-2	Diethyl Phthalate	47 U	400	47	
100-01-6	4-Nitroaniline	130 U	990	130	
534-52-1	2-Methyl-4,6-dinitrophenol	74 U	2000	74	*
86-30-6	N-Nitrosodiphenylamine	47 U	200	47	
101-55-3	4-Bromophenyl Phenyl Ether	27 U	200	27	
118-74-1	Hexachlorobenzene	29 U	200	29	
87-86-5	Pentachlorophenol	1100 J	2000	160	
86-74-8	Carbazole	170 U	990	170	
84-74-2	Di-n-butyl Phthalate	79 U	200	79	
92-87-5	Benzidine	25000 U	25000	25000	*
85-68-7	Butyl Benzyl Phthalate	69 U	200	69	
91-94-1	3,3'-Dichlorobenzidine	3900 U	9900	3900	
117-81-7	Bis(2-ethylhexyl) Phthalate	260 U	2500	260	
117-84-0	Di-n-octyl Phthalate	64 U	200	64	

* See Case Narrative

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406297
Date Collected: 08/18/2004
Date Received: 08/21/2004
Date Extracted: 09/28/2004
Date Analyzed: 10/04/2004

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: LDW-B6b-TRE
Lab Code: K2406297-001
File ID: J:\MS14\DATA\100404\1004F007.D
Instrument ID: MS14
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Lot: KWG0414745
Calibration ID: CAL3859

Sample Amount: 2.04 g
% Solids: NA
Dilution Factor: 1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	98	20-130	10/04/04	Acceptable
Phenol-d6	112	20-130	10/04/04	Acceptable
Nitrobenzene-d5	111	20-130	10/04/04	Acceptable
2-Fluorobiphenyl	99	20-130	10/04/04	Acceptable
2,4,6-Tribromophenol	93	20-130	10/04/04	Acceptable
Terphenyl-d14	110	20-130	10/04/04	Acceptable

† Analyte Comments

4-Methylphenol This analyte cannot be separated from 3-Methylphenol.

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406297
Date Collected: 08/19/2004
Date Received: 08/21/2004
Date Extracted: 09/28/2004
Date Analyzed: 10/01/2004

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: LDW-B8b-T
Lab Code: K2406297-002
File ID: J:\MS14\DATA\100104\1001F014.D
Instrument ID: MS14
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Lot: KWG0414745
Calibration ID: CAL3859

Sample Amount: 2.01 g
% Solids: NA
Dilution Factor: 1

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
62-75-9	N-Nitrosodimethylamine	50 U	200	50	
62-53-3	Aniline	1200 U	4000	1200	*
111-44-4	Bis(2-chloroethyl) Ether	44 U	200	44	
108-95-2	Phenol	89 J	500	85	
95-57-8	2-Chlorophenol	55 U	400	55	
541-73-1	1,3-Dichlorobenzene	55 U	200	55	
106-46-7	1,4-Dichlorobenzene	55 U	200	55	
95-50-1	1,2-Dichlorobenzene	60 U	200	60	
100-51-6	Benzyl Alcohol	34 U	200	34	
39638-32-9	Bis(2-chloroisopropyl) Ether	55 U	200	55	
95-48-7	2-Methylphenol	270 U	400	270	
67-72-1	Hexachloroethane	43 U	200	43	
621-64-7	N-Nitrosodi-n-propylamine	41 U	200	41	
106-44-5	4-Methylphenol†	75 U	400	75	
98-95-3	Nitrobenzene	50 U	200	50	
78-59-1	Isophorone	29 U	200	29	
88-75-5	2-Nitrophenol	75 U	200	75	
105-67-9	2,4-Dimethylphenol	65 U	400	65	*
111-91-1	Bis(2-chloroethoxy)methane	25 U	200	25	
120-83-2	2,4-Dichlorophenol	60 U	400	60	
65-85-0	Benzoic Acid	1400 J	4000	950	
120-82-1	1,2,4-Trichlorobenzene	50 U	200	50	
106-47-8	4-Chloroaniline	30 U	1000	30	
87-68-3	Hexachlorobutadiene	43 U	200	43	
59-50-7	4-Chloro-3-methylphenol	360 U	1000	360	
77-47-4	Hexachlorocyclopentadiene	25000 U	25000	25000	
88-06-2	2,4,6-Trichlorophenol	44 U	400	44	
95-95-4	2,4,5-Trichlorophenol	55 U	400	55	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406297
Date Collected: 08/19/2004
Date Received: 08/21/2004
Date Extracted: 09/28/2004
Date Analyzed: 10/01/2004

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: LDW-B8b-T
Lab Code: K2406297-002
File ID: J:\MS14\DATA\100104\1001F014.D
Instrument ID: MS14

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Extraction Lot: KWG0414745
Calibration ID: CAL3859

Sample Amount: 2.01 g
% Solids: NA
Dilution Factor: 1

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
91-58-7	2-Chloronaphthalene	30 U	200	30	
88-74-4	2-Nitroaniline	130 U	1000	130	
131-11-3	Dimethyl Phthalate	26 U	200	26	
606-20-2	2,6-Dinitrotoluene	35 U	200	35	
99-09-2	3-Nitroaniline	45 U	2000	45	
51-28-5	2,4-Dinitrophenol	120 U	4000	120	
100-02-7	4-Nitrophenol	38 U	2000	38	
121-14-2	2,4-Dinitrotoluene	43 U	400	43	
7005-72-3	4-Chlorophenyl Phenyl Ether	23 U	200	23	
84-66-2	Diethyl Phthalate	47 U	400	47	
100-01-6	4-Nitroaniline	130 U	1000	130	
534-52-1	2-Methyl-4,6-dinitrophenol	75 U	2000	75	
86-30-6	N-Nitrosodiphenylamine	48 U	200	48	
101-55-3	4-Bromophenyl Phenyl Ether	28 U	200	28	
118-74-1	Hexachlorobenzene	30 U	200	30	
87-86-5	Pentachlorophenol	160 U	2000	160	
86-74-8	Carbazole	170 U	1000	170	
84-74-2	Di-n-butyl Phthalate	80 U	200	80	
92-87-5	Benzidine	25000 U	25000	25000	*
85-68-7	Butyl Benzyl Phthalate	70 U	200	70	
91-94-1	3,3'-Dichlorobenzidine	3900 U	10000	3900	
117-81-7	Bis(2-ethylhexyl) Phthalate	270 U	2500	270	
117-84-0	Di-n-octyl Phthalate	65 U	200	65	

* See Case Narrative

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406297
Date Collected: 08/19/2004
Date Received: 08/21/2004
Date Extracted: 09/28/2004
Date Analyzed: 10/01/2004

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: LDW-B8b-T
Lab Code: K2406297-002
File ID: J:\MS14\DATA\100104\1001F014.D
Instrument ID: MS14
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Lot: KWG0414745
Calibration ID: CAL3859

Sample Amount: 2.01 g
% Solids: NA
Dilution Factor: 1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	92	20-130	10/01/04	Acceptable
Phenol-d6	101	20-130	10/01/04	Acceptable
Nitrobenzene-d5	99	20-130	10/01/04	Acceptable
2-Fluorobiphenyl	89	20-130	10/01/04	Acceptable
2,4,6-Tribromophenol	94	20-130	10/01/04	Acceptable
Terphenyl-d14	99	20-130	10/01/04	Acceptable

† Analyte Comments

4-Methylphenol This analyte cannot be separated from 3-Methylphenol.

Comments: _____

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406297
Date Collected: 08/19/2004
Date Received: 08/21/2004
Date Extracted: 09/28/2004
Date Analyzed: 10/04/2004

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: LDW-B8b-TRE
Lab Code: K2406297-002
File ID: J:\MS14\DATA\100404\1004F008.D
Instrument ID: MS14

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Extraction Lot: KWG0414745
Calibration ID: CAL3859

Sample Amount: 2.01 g
% Solids: NA
Dilution Factor: 1

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
62-75-9	N-Nitrosodimethylamine	50 U	200	50	*
62-53-3	Aniline	1200 U	4000	1200	*
111-44-4	Bis(2-chloroethyl) Ether	44 U	200	44	
108-95-2	Phenol	99 J	500	85	
95-57-8	2-Chlorophenol	55 U	400	55	
541-73-1	1,3-Dichlorobenzene	55 U	200	55	
106-46-7	1,4-Dichlorobenzene	55 U	200	55	
95-50-1	1,2-Dichlorobenzene	60 U	200	60	
100-51-6	Benzyl Alcohol	34 U	200	34	
39638-32-9	Bis(2-chloroisopropyl) Ether	55 U	200	55	
95-48-7	2-Methylphenol	270 U	400	270	
67-72-1	Hexachloroethane	43 U	200	43	
621-64-7	N-Nitrosodi-n-propylamine	41 U	200	41	
106-44-5	4-Methylphenol†	75 U	400	75	
98-95-3	Nitrobenzene	50 U	200	50	
78-59-1	Isophorone	29 U	200	29	
88-75-5	2-Nitrophenol	75 U	200	75	
105-67-9	2,4-Dimethylphenol	65 U	400	65	*
111-91-1	Bis(2-chloroethoxy)methane	25 U	200	25	
120-83-2	2,4-Dichlorophenol	60 U	400	60	
65-85-0	Benzoic Acid	1900 J	4000	950	
120-82-1	1,2,4-Trichlorobenzene	50 U	200	50	
106-47-8	4-Chloroaniline	30 U	1000	30	
87-68-3	Hexachlorobutadiene	43 U	200	43	
59-50-7	4-Chloro-3-methylphenol	360 U	1000	360	
77-47-4	Hexachlorocyclopentadiene	25000 U	25000	25000	*
88-06-2	2,4,6-Trichlorophenol	44 U	400	44	
95-95-4	2,4,5-Trichlorophenol	55 U	400	55	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406297
Date Collected: 08/19/2004
Date Received: 08/21/2004
Date Extracted: 09/28/2004
Date Analyzed: 10/04/2004

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: LDW-B8b-TRE
Lab Code: K2406297-002
File ID: J:\MS14\DATA\100404\1004F008.D
Instrument ID: MS14
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Lot: KWG0414745
Calibration ID: CAL3859

Sample Amount: 2.01 g
% Solids: NA
Dilution Factor: 1

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
91-58-7	2-Chloronaphthalene	30 U	200	30	
88-74-4	2-Nitroaniline	130 U	1000	130	
131-11-3	Dimethyl Phthalate	26 U	200	26	
606-20-2	2,6-Dinitrotoluene	35 U	200	35	
99-09-2	3-Nitroaniline	45 U	2000	45	
51-28-5	2,4-Dinitrophenol	120 U	4000	120	
100-02-7	4-Nitrophenol	38 U	2000	38	*
121-14-2	2,4-Dinitrotoluene	43 U	400	43	
7005-72-3	4-Chlorophenyl Phenyl Ether	23 U	200	23	
84-66-2	Diethyl Phthalate	47 U	400	47	
100-01-6	4-Nitroaniline	130 U	1000	130	
534-52-1	2-Methyl-4,6-dinitrophenol	75 U	2000	75	*
86-30-6	N-Nitrosodiphenylamine	48 U	200	48	
101-55-3	4-Bromophenyl Phenyl Ether	28 U	200	28	
118-74-1	Hexachlorobenzene	30 U	200	30	
87-86-5	Pentachlorophenol	160 U	2000	160	
86-74-8	Carbazole	170 U	1000	170	
84-74-2	Di-n-butyl Phthalate	80 U	200	80	
92-87-5	Benzidine	25000 U	25000	25000	*
85-68-7	Butyl Benzyl Phthalate	70 U	200	70	
91-94-1	3,3'-Dichlorobenzidine	3900 U	10000	3900	
117-81-7	Bis(2-ethylhexyl) Phthalate	270 U	2500	270	
117-84-0	Di-n-octyl Phthalate	65 U	200	65	

* See Case Narrative

Comments: _____

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406297
Date Collected: 08/19/2004
Date Received: 08/21/2004
Date Extracted: 09/28/2004
Date Analyzed: 10/04/2004

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: LDW-B8b-TRE
Lab Code: K2406297-002
File ID: J:\MS14\DATA\100404\1004F008.D
Instrument ID: MS14

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Extraction Lot: KWG0414745
Calibration ID: CAL3859

Sample Amount: 2.01 g
% Solids: NA
Dilution Factor: 1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	91	20-130	10/04/04	Acceptable
Phenol-d6	105	20-130	10/04/04	Acceptable
Nitrobenzene-d5	106	20-130	10/04/04	Acceptable
2-Fluorobiphenyl	87	20-130	10/04/04	Acceptable
2,4,6-Tribromophenol	93	20-130	10/04/04	Acceptable
Terphenyl-d14	96	20-130	10/04/04	Acceptable

† Analyte Comments

4-Methylphenol This analyte cannot be separated from 3-Methylphenol.

Comments: _____

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406297
Date Collected: 08/19/2004
Date Received: 08/21/2004
Date Extracted: 09/28/2004
Date Analyzed: 10/01/2004

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: LDW-B10b-T
Lab Code: K2406297-003
File ID: J:\MS14\DATA\100104\1001F015.D
Instrument ID: MS14

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Extraction Lot: KWG0414745
Calibration ID: CAL3859

Sample Amount: 2.03 g
% Solids: NA
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
62-75-9	N-Nitrosodimethylamine	50	U	200	50	
62-53-3	Aniline	1200	U	4000	1200	*
111-44-4	Bis(2-chloroethyl) Ether	43	U	200	43	
108-95-2	Phenol	84	U	500	84	
95-57-8	2-Chlorophenol	55	U	400	55	
541-73-1	1,3-Dichlorobenzene	55	U	200	55	
106-46-7	1,4-Dichlorobenzene	55	U	200	55	
95-50-1	1,2-Dichlorobenzene	60	U	200	60	
100-51-6	Benzyl Alcohol	34	U	200	34	
39638-32-9	Bis(2-chloroisopropyl) Ether	55	U	200	55	
95-48-7	2-Methylphenol	270	U	400	270	
67-72-1	Hexachloroethane	42	U	200	42	
621-64-7	N-Nitrosodi-n-propylamine	3700		200	41	
106-44-5	4-Methylphenol†	74	U	400	74	
98-95-3	Nitrobenzene	50	U	200	50	
78-59-1	Isophorone	29	U	200	29	
88-75-5	2-Nitrophenol	74	U	200	74	
105-67-9	2,4-Dimethylphenol	65	U	400	65	*
111-91-1	Bis(2-chloroethoxy)methane	25	U	200	25	
120-83-2	2,4-Dichlorophenol	60	U	400	60	
65-85-0	Benzoic Acid	940	U	4000	940	
120-82-1	1,2,4-Trichlorobenzene	49	U	200	49	
106-47-8	4-Chloroaniline	30	U	990	30	
87-68-3	Hexachlorobutadiene	42	U	200	42	
59-50-7	4-Chloro-3-methylphenol	360	U	990	360	
77-47-4	Hexachlorocyclopentadiene	25000	U	25000	25000	
88-06-2	2,4,6-Trichlorophenol	44	U	400	44	
95-95-4	2,4,5-Trichlorophenol	55	U	400	55	

Comments:

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406297
Date Collected: 08/19/2004
Date Received: 08/21/2004
Date Extracted: 09/28/2004
Date Analyzed: 10/01/2004

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: LDW-B10b-T
Lab Code: K2406297-003
File ID: J:\MS14\DATA\I00104\I001F015.D
Instrument ID: MS14

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Extraction Lot: KWG0414745
Calibration ID: CAL3859

Sample Amount: 2.03 g
% Solids: NA
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
91-58-7	2-Chloronaphthalene	30	U	200	30	
88-74-4	2-Nitroaniline	130	U	990	130	
131-11-3	Dimethyl Phthalate	26	U	200	26	
606-20-2	2,6-Dinitrotoluene	35	U	200	35	
99-09-2	3-Nitroaniline	44	U	2000	44	
51-28-5	2,4-Dinitrophenol	120	U	4000	120	
100-02-7	4-Nitrophenol	37	U	2000	37	
121-14-2	2,4-Dinitrotoluene	42	U	400	42	
7005-72-3	4-Chlorophenyl Phenyl Ether	23	U	200	23	
84-66-2	Diethyl Phthalate	47	U	400	47	
100-01-6	4-Nitroaniline	130	U	990	130	
534-52-1	2-Methyl-4,6-dinitrophenol	74	U	2000	74	
86-30-6	N-Nitrosodiphenylamine	47	U	200	47	
101-55-3	4-Bromophenyl Phenyl Ether	28	U	200	28	
118-74-1	Hexachlorobenzene	30	U	200	30	
87-86-5	Pentachlorophenol	160	U	2000	160	
86-74-8	Carbazole	170	U	990	170	
84-74-2	Di-n-butyl Phthalate	79	U	200	79	
92-87-5	Benzidine	25000	U	25000	25000	*
85-68-7	Butyl Benzyl Phthalate	69	U	200	69	
91-94-1	3,3'-Dichlorobenzidine	3900	U	9900	3900	
117-81-7	Bis(2-ethylhexyl) Phthalate	270	U	2500	270	
117-84-0	Di-n-octyl Phthalate	65	U	200	65	

* See Case Narrative

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406297
Date Collected: 08/19/2004
Date Received: 08/21/2004
Date Extracted: 09/28/2004
Date Analyzed: 10/01/2004

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: LDW-B10b-T
Lab Code: K2406297-003
File ID: J:\MS14\DATA\100104\1001F015.D
Instrument ID: MS14

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Extraction Lot: KWG0414745
Calibration ID: CAL3859

Sample Amount: 2.03 g
% Solids: NA
Dilution Factor: 1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	79	20-130	10/01/04	Acceptable
Phenol-d6	87	20-130	10/01/04	Acceptable
Nitrobenzene-d5	85	20-130	10/01/04	Acceptable
2-Fluorobiphenyl	81	20-130	10/01/04	Acceptable
2,4,6-Tribromophenol	89	20-130	10/01/04	Acceptable
Terphenyl-d14	101	20-130	10/01/04	Acceptable

† Analyte Comments

4-Methylphenol This analyte cannot be separated from 3-Methylphenol.

Comments: _____

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406297
Date Collected: 08/19/2004
Date Received: 08/21/2004
Date Extracted: 09/28/2004
Date Analyzed: 10/04/2004

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: LDW-B10b-TRE
Lab Code: K2406297-003
File ID: J:\MS14\DATA\100404\1004F009.D
Instrument ID: MS14
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Lot: KWG0414745
Calibration ID: CAL3859

Sample Amount: 2.03 g
% Solids: NA
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
62-75-9	N-Nitrosodimethylamine	50	U	200	50	*
62-53-3	Aniline	1200	U	4000	1200	*
111-44-4	Bis(2-chloroethyl) Ether	43	U	200	43	
108-95-2	Phenol	84	U	500	84	
95-57-8	2-Chlorophenol	55	U	400	55	
541-73-1	1,3-Dichlorobenzene	55	U	200	55	
106-46-7	1,4-Dichlorobenzene	55	U	200	55	
95-50-1	1,2-Dichlorobenzene	60	U	200	60	
100-51-6	Benzyl Alcohol	34	U	200	34	
39638-32-9	Bis(2-chloroisopropyl) Ether	55	U	200	55	
95-48-7	2-Methylphenol	270	U	400	270	
67-72-1	Hexachloroethane	42	U	200	42	
621-64-7	N-Nitrosodi-n-propylamine	41	U	200	41	
106-44-5	4-Methylphenol†	74	U	400	74	
98-95-3	Nitrobenzene	50	U	200	50	
78-59-1	Isophorone	29	U	200	29	
88-75-5	2-Nitrophenol	74	U	200	74	
105-67-9	2,4-Dimethylphenol	65	U	400	65	*
111-91-1	Bis(2-chloroethoxy)methane	25	U	200	25	
120-83-2	2,4-Dichlorophenol	60	U	400	60	
65-85-0	Benzoic Acid	990	J	4000	940	
120-82-1	1,2,4-Trichlorobenzene	49	U	200	49	
106-47-8	4-Chloroaniline	30	U	990	30	
87-68-3	Hexachlorobutadiene	42	U	200	42	
59-50-7	4-Chloro-3-methylphenol	360	U	990	360	
77-47-4	Hexachlorocyclopentadiene	25000	U	25000	25000	*
88-06-2	2,4,6-Trichlorophenol	44	U	400	44	
95-95-4	2,4,5-Trichlorophenol	55	U	400	55	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406297
Date Collected: 08/19/2004
Date Received: 08/21/2004
Date Extracted: 09/28/2004
Date Analyzed: 10/04/2004

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: LDW-B10b-TRE
Lab Code: K2406297-003
File ID: J:\MS14\DATA\100404\1004F009.D
Instrument ID: MS14

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Extraction Lot: KWG0414745
Calibration ID: CAL3859

Sample Amount: 2.03 g
% Solids: NA
Dilution Factor: 1

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
91-58-7	2-Chloronaphthalene	30 U	200	30	
88-74-4	2-Nitroaniline	130 U	990	130	
131-11-3	Dimethyl Phthalate	26 U	200	26	
606-20-2	2,6-Dinitrotoluene	35 U	200	35	
99-09-2	3-Nitroaniline	44 U	2000	44	
51-28-5	2,4-Dinitrophenol	120 U	4000	120	
100-02-7	4-Nitrophenol	37 U	2000	37	*
121-14-2	2,4-Dinitrotoluene	42 U	400	42	
7005-72-3	4-Chlorophenyl Phenyl Ether	23 U	200	23	
84-66-2	Diethyl Phthalate	47 U	400	47	
100-01-6	4-Nitroaniline	130 U	990	130	
534-52-1	2-Methyl-4,6-dinitrophenol	74 U	2000	74	*
86-30-6	N-Nitrosodiphenylamine	47 U	200	47	
101-55-3	4-Bromophenyl Phenyl Ether	28 U	200	28	
118-74-1	Hexachlorobenzene	30 U	200	30	
87-86-5	Pentachlorophenol	160 U	2000	160	
86-74-8	Carbazole	170 U	990	170	
84-74-2	Di-n-butyl Phthalate	79 U	200	79	
92-87-5	Benzidine	25000 U	25000	25000	*
85-68-7	Butyl Benzyl Phthalate	69 U	200	69	
91-94-1	3,3'-Dichlorobenzidine	3900 U	9900	3900	
117-81-7	Bis(2-ethylhexyl) Phthalate	270 U	2500	270	
117-84-0	Di-n-octyl Phthalate	65 U	200	65	

* See Case Narrative

Comments: _____

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406297
Date Collected: 08/19/2004
Date Received: 08/21/2004
Date Extracted: 09/28/2004
Date Analyzed: 10/04/2004

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: LDW-B10b-TRE
Lab Code: K2406297-003
File ID: J:\MS14\DATA\100404\1004F009.D
Instrument ID: MS14
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Lot: KWG0414745
Calibration ID: CAL3859

Sample Amount: 2.03 g
% Solids: NA
Dilution Factor: 1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	78	20-130	10/04/04	Acceptable
Phenol-d6	92	20-130	10/04/04	Acceptable
Nitrobenzene-d5	90	20-130	10/04/04	Acceptable
2-Fluorobiphenyl	81	20-130	10/04/04	Acceptable
2,4,6-Tribromophenol	86	20-130	10/04/04	Acceptable
Terphenyl-d14	99	20-130	10/04/04	Acceptable

† Analyte Comments

4-Methylphenol This analyte cannot be separated from 3-Methylphenol.

Comments: _____

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406516
Date Collected: 08/27/2004
Date Received: 08/30/2004
Date Extracted: 09/02/2004
Date Analyzed: 09/23/2004

Semi-Volatile Organic Compounds by GC/MS

Sample Name: LDW-C4-S
Lab Code: K2406516-001
File ID: J:\MS10\DATA\092304\0923F013.D
Instrument ID: MS10
Extraction Method: EPA 3541
Analysis Method: 8270C

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Lot: KWG0413228
Calibration ID: CAL3836

Sample Amount: 30.07 g
% Solids: 66.8
Dilution Factor: 10

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
62-75-9	N-Nitrosodimethylamine	92	U	500	92	
62-53-3	Aniline	23	U	200	23	
111-44-4	Bis(2-chloroethyl) Ether	36	U	100	36	
108-95-2	Phenol	99	JD	300	29	
95-57-8	2-Chlorophenol	26	U	100	26	
541-73-1	1,3-Dichlorobenzene	24	U	100	24	
106-46-7	1,4-Dichlorobenzene	29	U	100	29	
95-50-1	1,2-Dichlorobenzene	20	U	100	20	
100-51-6	Benzyl Alcohol	56	U	100	56	
39638-32-9	Bis(2-chloroisopropyl) Ether	18	U	100	18	
95-48-7	2-Methylphenol	51	U	100	51	
67-72-1	Hexachloroethane	33	U	100	33	
621-64-7	N-Nitrosodi-n-propylamine	48	U	100	48	
106-44-5	4-Methylphenol†	44	U	100	44	
98-95-3	Nitrobenzene	30	U	100	30	
78-59-1	Isophorone	24	U	100	24	
88-75-5	2-Nitrophenol	39	U	100	39	
105-67-9	2,4-Dimethylphenol	83	U	500	83	*
111-91-1	Bis(2-chloroethoxy)methane	20	U	100	20	
120-83-2	2,4-Dichlorophenol	27	U	100	27	
65-85-0	Benzoic Acid	1500	U	2000	1500	*
120-82-1	1,2,4-Trichlorobenzene	23	U	100	23	
106-47-8	4-Chloroaniline	32	U	100	32	
87-68-3	Hexachlorobutadiene	21	U	100	21	
59-50-7	4-Chloro-3-methylphenol	32	U	100	32	
77-47-4	Hexachlorocyclopentadiene	230	U	500	230	
88-06-2	2,4,6-Trichlorophenol	27	U	100	27	
95-95-4	2,4,5-Trichlorophenol	45	U	100	45	

Comments:

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406516
Date Collected: 08/27/2004
Date Received: 08/30/2004
Date Extracted: 09/02/2004
Date Analyzed: 09/23/2004

Semi-Volatile Organic Compounds by GC/MS

Sample Name: LDW-C4-S
Lab Code: K2406516-001
File ID: J:\MS10\DATA\092304\0923F013.D
Instrument ID: MS10
Extraction Method: EPA 3541
Analysis Method: 8270C

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Lot: KWG0413228
Calibration ID: CAL3836

Sample Amount: 30.07 g
% Solids: 66.8
Dilution Factor: 10

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
91-58-7	2-Chloronaphthalene	54	U	100	54	
88-74-4	2-Nitroaniline	41	U	200	41	
131-11-3	Dimethyl Phthalate	27	U	100	27	
606-20-2	2,6-Dinitrotoluene	42	U	100	42	
99-09-2	3-Nitroaniline	39	U	200	39	
51-28-5	2,4-Dinitrophenol	540	U	2000	540	
100-02-7	4-Nitrophenol	450	U	1000	450	
121-14-2	2,4-Dinitrotoluene	42	U	100	42	
7005-72-3	4-Chlorophenyl Phenyl Ether	30	U	100	30	
84-66-2	Diethyl Phthalate	53	U	100	53	
100-01-6	4-Nitroaniline	51	U	200	51	
534-52-1	2-Methyl-4,6-dinitrophenol	26	U	1000	26	
86-30-6	N-Nitrosodiphenylamine	33	U	100	33	
101-55-3	4-Bromophenyl Phenyl Ether	21	U	100	21	
118-74-1	Hexachlorobenzene	32	U	100	32	
87-86-5	Pentachlorophenol	130	U	1000	130	
86-74-8	Carbazole	82	JD	100	20	
84-74-2	Di-n-butyl Phthalate	39	U	100	39	
92-87-5	Benzidine	3000	U	3000	3000	*
85-68-7	Butyl Benzyl Phthalate	23	U	100	23	
91-94-1	3,3'-Dichlorobenzidine	56	U	1000	56	
117-81-7	Bis(2-ethylhexyl) Phthalate	90	JD	2000	26	
117-84-0	Di-n-octyl Phthalate	18	U	100	18	

* See Case Narrative

Comments: _____

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406516
Date Collected: 08/27/2004
Date Received: 08/30/2004
Date Extracted: 09/02/2004
Date Analyzed: 09/23/2004

Semi-Volatile Organic Compounds by GC/MS

Sample Name: LDW-C4-S
Lab Code: K2406516-001
File ID: J:\MS10\DATA\092304\0923F013.D
Instrument ID: MS10
Extraction Method: EPA 3541
Analysis Method: 8270C

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Lot: KWG0413228
Calibration ID: CAL3836

Sample Amount: 30.07 g
% Solids: 66.8
Dilution Factor: 10

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	116	40-130	09/23/04	Acceptable
Phenol-d6	136	40-130	09/23/04	Outside Control Limits
Nitrobenzene-d5	110	40-130	09/23/04	Acceptable
2-Fluorobiphenyl	81	40-130	09/23/04	Acceptable
2,4,6-Tribromophenol	98	40-130	09/23/04	Acceptable
Terphenyl-d14	110	40-130	09/23/04	Acceptable

† Analyte Comments

4-Methylphenol This analyte cannot be separated from 3-Methylphenol.

Comments: _____

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406516
Date Collected: 08/25/2004
Date Received: 08/30/2004
Date Extracted: 09/02/2004
Date Analyzed: 09/23/2004

Semi-Volatile Organic Compounds by GC/MS

Sample Name: LDW-C10-S2
Lab Code: K2406516-002
File ID: J:\MS10\DATA\092304\0923F017.D
Instrument ID: MS10

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: EPA 3541
Analysis Method: 8270C

Extraction Lot: KWG0413228
Calibration ID: CAL3836

Sample Amount: 38.90 g
% Solids: 51.5
Dilution Factor: 5

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
62-75-9	N-Nitrosodimethylamine	60 U	250	60	
62-53-3	Aniline	15 U	100	15	
111-44-4	Bis(2-chloroethyl) Ether	24 U	50	24	
108-95-2	Phenol	1400 D	150	19	
95-57-8	2-Chlorophenol	17 U	50	17	
541-73-1	1,3-Dichlorobenzene	16 U	50	16	
106-46-7	1,4-Dichlorobenzene	19 U	50	19	
95-50-1	1,2-Dichlorobenzene	13 U	50	13	
100-51-6	Benzyl Alcohol	36 U	50	36	
39638-32-9	Bis(2-chloroisopropyl) Ether	12 U	50	12	
95-48-7	2-Methylphenol	34 U	50	34	
67-72-1	Hexachloroethane	22 U	50	22	
621-64-7	N-Nitrosodi-n-propylamine	32 U	50	32	
106-44-5	4-Methylphenol†	29 JD	50	29	
98-95-3	Nitrobenzene	20 U	50	20	
78-59-1	Isophorone	16 U	50	16	
88-75-5	2-Nitrophenol	26 U	50	26	
105-67-9	2,4-Dimethylphenol	54 U	250	54	*
111-91-1	Bis(2-chloroethoxy)methane	13 U	50	13	
120-83-2	2,4-Dichlorophenol	18 U	50	18	
65-85-0	Benzoic Acid	940 U	1000	940	*
120-82-1	1,2,4-Trichlorobenzene	15 U	50	15	
106-47-8	4-Chloroaniline	21 U	50	21	
87-68-3	Hexachlorobutadiene	14 U	50	14	
59-50-7	4-Chloro-3-methylphenol	21 U	50	21	
77-47-4	Hexachlorocyclopentadiene	150 U	250	150	
88-06-2	2,4,6-Trichlorophenol	18 U	50	18	
95-95-4	2,4,5-Trichlorophenol	30 U	50	30	

Comments:

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406516
Date Collected: 08/25/2004
Date Received: 08/30/2004
Date Extracted: 09/02/2004
Date Analyzed: 09/23/2004

Semi-Volatile Organic Compounds by GC/MS

Sample Name: LDW-C10-S2
Lab Code: K2406516-002
File ID: J:\MS10\DATA\092304\0923F017.D
Instrument ID: MS10
Extraction Method: EPA 3541
Analysis Method: 8270C

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Lot: KWG0413228
Calibration ID: CAL3836

Sample Amount: 38.90 g
% Solids: 51.5
Dilution Factor: 5

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
91-58-7	2-Chloronaphthalene	35	U	50	35	
88-74-4	2-Nitroaniline	27	U	100	27	
131-11-3	Dimethyl Phthalate	18	U	50	18	
606-20-2	2,6-Dinitrotoluene	28	U	50	28	
99-09-2	3-Nitroaniline	26	U	100	26	
51-28-5	2,4-Dinitrophenol	350	U	1000	350	
100-02-7	4-Nitrophenol	300	U	500	300	
121-14-2	2,4-Dinitrotoluene	28	U	50	28	
7005-72-3	4-Chlorophenyl Phenyl Ether	20	U	50	20	
84-66-2	Diethyl Phthalate	34	U	50	34	
100-01-6	4-Nitroaniline	34	U	100	34	
534-52-1	2-Methyl-4,6-dinitrophenol	17	U	500	17	
86-30-6	N-Nitrosodiphenylamine	22	U	50	22	
101-55-3	4-Bromophenyl Phenyl Ether	14	U	50	14	
118-74-1	Hexachlorobenzene	21	U	50	21	
87-86-5	Pentachlorophenol	83	U	500	83	
86-74-8	Carbazole	59	D	50	13	
84-74-2	Di-n-butyl Phthalate	380	D	50	26	
92-87-5	Benzidine	2000	U	2000	2000	*
85-68-7	Butyl Benzyl Phthalate	15	U	50	15	
91-94-1	3,3'-Dichlorobenzidine	36	U	500	36	
117-81-7	Bis(2-ethylhexyl) Phthalate	100	JD	1000	17	
117-84-0	Di-n-octyl Phthalate	30	JD	50	12	

* See Case Narrative

Comments: _____

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406516
Date Collected: 08/25/2004
Date Received: 08/30/2004
Date Extracted: 09/02/2004
Date Analyzed: 09/23/2004

Semi-Volatile Organic Compounds by GC/MS

Sample Name: LDW-C10-S2
Lab Code: K2406516-002
File ID: J:\MS10\DATA\092304\0923F017.D
Instrument ID: MS10
Extraction Method: EPA 3541
Analysis Method: 8270C

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Lot: KWG0413228
Calibration ID: CAL3836

Sample Amount: 38.90 g
% Solids: 51.5
Dilution Factor: 5

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	68	40-130	09/23/04	Acceptable
Phenol-d6	95	40-130	09/23/04	Acceptable
Nitrobenzene-d5	66	40-130	09/23/04	Acceptable
2-Fluorobiphenyl	28	40-130	09/23/04	Outside Control Limits
2,4,6-Tribromophenol	73	40-130	09/23/04	Acceptable
Terphenyl-d14	72	40-130	09/23/04	Acceptable

† Analyte Comments

4-Methylphenol This analyte cannot be separated from 3-Methylphenol.

Comments: _____

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406516
Date Collected: 08/25/2004
Date Received: 08/30/2004
Date Extracted: 09/02/2004
Date Analyzed: 09/23/2004

Semi-Volatile Organic Compounds by GC/MS

Sample Name: LDW-C10-S1
Lab Code: K2406516-003
File ID: J:\MS10\DATA\092304\0923F014.D
Instrument ID: MS10
Extraction Method: EPA 3541
Analysis Method: 8270C

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Lot: KWG0413228
Calibration ID: CAL3836

Sample Amount: 39.71 g
% Solids: 50.4
Dilution Factor: 10

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
62-75-9	N-Nitrosodimethylamine	130	U	500	130	
62-53-3	Aniline	30	U	200	30	
111-44-4	Bis(2-chloroethyl) Ether	48	U	100	48	
108-95-2	Phenol	1900	D	300	38	
95-57-8	2-Chlorophenol	34	U	100	34	
541-73-1	1,3-Dichlorobenzene	32	U	100	32	
106-46-7	1,4-Dichlorobenzene	38	U	100	38	
95-50-1	1,2-Dichlorobenzene	26	U	100	26	
100-51-6	Benzyl Alcohol	74	U	100	74	
39638-32-9	Bis(2-chloroisopropyl) Ether	24	U	100	24	
95-48-7	2-Methylphenol	68	U	100	68	
67-72-1	Hexachloroethane	44	U	100	44	
621-64-7	N-Nitrosodi-n-propylamine	64	U	100	64	
106-44-5	4-Methylphenol†	150	D	100	58	
98-95-3	Nitrobenzene	40	U	100	40	
78-59-1	Isophorone	32	U	100	32	
88-75-5	2-Nitrophenol	52	U	100	52	
105-67-9	2,4-Dimethylphenol	110	U	500	110	*
111-91-1	Bis(2-chloroethoxy)methane	26	U	100	26	
120-83-2	2,4-Dichlorophenol	36	U	100	36	
65-85-0	Benzoic Acid	2000	U	2000	2000	*
120-82-1	1,2,4-Trichlorobenzene	30	U	100	30	
106-47-8	4-Chloroaniline	42	U	100	42	
87-68-3	Hexachlorobutadiene	28	U	100	28	
59-50-7	4-Chloro-3-methylphenol	42	U	100	42	
77-47-4	Hexachlorocyclopentadiene	300	U	500	300	
88-06-2	2,4,6-Trichlorophenol	36	U	100	36	
95-95-4	2,4,5-Trichlorophenol	60	U	100	60	

Comments:

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406516
Date Collected: 08/25/2004
Date Received: 08/30/2004
Date Extracted: 09/02/2004
Date Analyzed: 09/23/2004

Semi-Volatile Organic Compounds by GC/MS

Sample Name: LDW-C10-S1
Lab Code: K2406516-003
File ID: J:\MS10\DATA\092304\0923F014.D
Instrument ID: MS10

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: EPA 3541
Analysis Method: 8270C

Extraction Lot: KWG0413228
Calibration ID: CAL3836

Sample Amount: 39.71 g
% Solids: 50.4
Dilution Factor: 10

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
91-58-7	2-Chloronaphthalene	72	U	100	72	
88-74-4	2-Nitroaniline	54	U	200	54	
131-11-3	Dimethyl Phthalate	36	U	100	36	
606-20-2	2,6-Dinitrotoluene	56	U	100	56	
99-09-2	3-Nitroaniline	52	U	200	52	
51-28-5	2,4-Dinitrophenol	720	U	2000	720	
100-02-7	4-Nitrophenol	600	U	1000	600	
121-14-2	2,4-Dinitrotoluene	56	U	100	56	
7005-72-3	4-Chlorophenyl Phenyl Ether	40	U	100	40	
84-66-2	Diethyl Phthalate	70	U	100	70	
100-01-6	4-Nitroaniline	68	U	200	68	
534-52-1	2-Methyl-4,6-dinitrophenol	34	U	1000	34	
86-30-6	N-Nitrosodiphenylamine	44	U	100	44	
101-55-3	4-Bromophenyl Phenyl Ether	28	U	100	28	
118-74-1	Hexachlorobenzene	42	U	100	42	
87-86-5	Pentachlorophenol	170	U	1000	170	
86-74-8	Carbazole	2100	D	100	26	
84-74-2	Di-n-butyl Phthalate	52	U	100	52	
92-87-5	Benzidine	4000	U	4000	4000	*
85-68-7	Butyl Benzyl Phthalate	30	U	100	30	
91-94-1	3,3'-Dichlorobenzidine	74	U	1000	74	
117-81-7	Bis(2-ethylhexyl) Phthalate	100	JD	2000	34	
117-84-0	Di-n-octyl Phthalate	24	U	100	24	

* See Case Narrative

Comments: _____

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406516
Date Collected: 08/25/2004
Date Received: 08/30/2004
Date Extracted: 09/02/2004
Date Analyzed: 09/23/2004

Semi-Volatile Organic Compounds by GC/MS

Sample Name: LDW-C10-S1
Lab Code: K2406516-003
File ID: J:\MS10\DATA\092304\0923F014.D
Instrument ID: MS10
Extraction Method: EPA 3541
Analysis Method: 8270C

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Lot: KWG0413228
Calibration ID: CAL3836

Sample Amount: 39.71 g
% Solids: 50.4
Dilution Factor: 10

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	92	40-130	09/23/04	Acceptable
Phenol-d6	132	40-130	09/23/04	Outside Control Limits
Nitrobenzene-d5	84	40-130	09/23/04	Acceptable
2-Fluorobiphenyl	57	40-130	09/23/04	Acceptable
2,4,6-Tribromophenol	95	40-130	09/23/04	Acceptable
Terphenyl-d14	113	40-130	09/23/04	Acceptable

† Analyte Comments

4-Methylphenol This analyte cannot be separated from 3-Methylphenol.

Comments: _____

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406516
Date Collected: 08/25/2004
Date Received: 08/30/2004
Date Extracted: 09/02/2004
Date Analyzed: 09/23/2004

Semi-Volatile Organic Compounds by GC/MS

Sample Name: LDW-C6-S
Lab Code: K2406516-004
File ID: J:\MS10\DATA\092304\0923F004.D
Instrument ID: MS10
Extraction Method: EPA 3541
Analysis Method: 8270C

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Lot: KWG0413228
Calibration ID: CAL3836

Sample Amount: 29.82 g
% Solids: 70.2
Dilution Factor: 2

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
62-75-9	N-Nitrosodimethylamine	18	U	96	18	
62-53-3	Aniline	4.3	U	39	4.3	
111-44-4	Bis(2-chloroethyl) Ether	6.9	U	20	6.9	
108-95-2	Phenol	12	JD	58	5.5	
95-57-8	2-Chlorophenol	4.9	U	20	4.9	
541-73-1	1,3-Dichlorobenzene	4.6	U	20	4.6	
106-46-7	1,4-Dichlorobenzene	5.5	U	20	5.5	
95-50-1	1,2-Dichlorobenzene	3.8	U	20	3.8	
100-51-6	Benzyl Alcohol	23	D	20	11	
39638-32-9	Bis(2-chloroisopropyl) Ether	3.5	U	20	3.5	
95-48-7	2-Methylphenol	9.7	U	20	9.7	
67-72-1	Hexachloroethane	6.3	U	20	6.3	
621-64-7	N-Nitrosodi-n-propylamine	9.2	U	20	9.2	
106-44-5	4-Methylphenol†	8.3	U	20	8.3	
98-95-3	Nitrobenzene	5.7	U	20	5.7	
78-59-1	Isophorone	4.6	U	20	4.6	
88-75-5	2-Nitrophenol	7.5	U	20	7.5	
105-67-9	2,4-Dimethylphenol	16	U	96	16	*
111-91-1	Bis(2-chloroethoxy)methane	3.8	U	20	3.8	
120-83-2	2,4-Dichlorophenol	5.2	U	20	5.2	
65-85-0	Benzoic Acid	280	U	390	280	*
120-82-1	1,2,4-Trichlorobenzene	4.3	U	20	4.3	
106-47-8	4-Chloroaniline	6.0	U	20	6.0	
87-68-3	Hexachlorobutadiene	4.0	U	20	4.0	
59-50-7	4-Chloro-3-methylphenol	6.4	JD	20	6.0	
77-47-4	Hexachlorocyclopentadiene	43	U	96	43	
88-06-2	2,4,6-Trichlorophenol	5.2	U	20	5.2	
95-95-4	2,4,5-Trichlorophenol	8.6	U	20	8.6	

Comments:

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406516
Date Collected: 08/25/2004
Date Received: 08/30/2004
Date Extracted: 09/02/2004
Date Analyzed: 09/23/2004

Semi-Volatile Organic Compounds by GC/MS

Sample Name: LDW-C6-S
Lab Code: K2406516-004
File ID: J:\MS10\DATA\092304\0923F004.D
Instrument ID: MS10
Extraction Method: EPA 3541
Analysis Method: 8270C

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Lot: KWG0413228
Calibration ID: CAL3836

Sample Amount: 29.82 g
% Solids: 70.2
Dilution Factor: 2

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
91-58-7	2-Chloronaphthalene	11	U	20	11	
88-74-4	2-Nitroaniline	7.7	U	39	7.7	
131-11-3	Dimethyl Phthalate	5.2	U	20	5.2	
606-20-2	2,6-Dinitrotoluene	8.0	U	20	8.0	
99-09-2	3-Nitroaniline	7.5	U	39	7.5	
51-28-5	2,4-Dinitrophenol	110	U	390	110	
100-02-7	4-Nitrophenol	86	U	200	86	
121-14-2	2,4-Dinitrotoluene	8.0	U	20	8.0	
7005-72-3	4-Chlorophenyl Phenyl Ether	5.7	U	20	5.7	
84-66-2	Diethyl Phthalate	10	U	20	10	
100-01-6	4-Nitroaniline	9.7	U	39	9.7	
534-52-1	2-Methyl-4,6-dinitrophenol	4.9	U	200	4.9	
86-30-6	N-Nitrosodiphenylamine	6.3	U	20	6.3	
101-55-3	4-Bromophenyl Phenyl Ether	4.0	U	20	4.0	
118-74-1	Hexachlorobenzene	6.0	U	20	6.0	
87-86-5	Pentachlorophenol	25	U	200	25	
86-74-8	Carbazole	5.0	JD	20	3.8	
84-74-2	Di-n-butyl Phthalate	7.5	U	20	7.5	
92-87-5	Benzidine	570	U	570	570	*
85-68-7	Butyl Benzyl Phthalate	7.0	JD	20	4.3	
91-94-1	3,3'-Dichlorobenzidine	11	U	200	11	
117-81-7	Bis(2-ethylhexyl) Phthalate	55	JD	390	4.9	
117-84-0	Di-n-octyl Phthalate	3.5	U	20	3.5	

* See Case Narrative

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406516
Date Collected: 08/25/2004
Date Received: 08/30/2004
Date Extracted: 09/02/2004
Date Analyzed: 09/23/2004

Semi-Volatile Organic Compounds by GC/MS

Sample Name: LDW-C6-S
Lab Code: K2406516-004
File ID: J:\MS10\DATA\092304\0923F004.D
Instrument ID: MS10
Extraction Method: EPA 3541
Analysis Method: 8270C

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Lot: KWG0413228
Calibration ID: CAL3836

Sample Amount: 29.82 g
% Solids: 70.2
Dilution Factor: 2

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	100	40-130	09/23/04	Acceptable
Phenol-d6	123	40-130	09/23/04	Acceptable
Nitrobenzene-d5	89	40-130	09/23/04	Acceptable
2-Fluorobiphenyl	38	40-130	09/23/04	Outside Control Limits
2,4,6-Tribromophenol	87	40-130	09/23/04	Acceptable
Terphenyl-d14	81	40-130	09/23/04	Acceptable

† Analyte Comments

4-Methylphenol This analyte cannot be separated from 3-Methylphenol.

Comments: _____

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406516
Date Collected: 08/25/2004
Date Received: 08/30/2004
Date Extracted: 09/02/2004
Date Analyzed: 09/23/2004

Semi-Volatile Organic Compounds by GC/MS

Sample Name: LDW-C9-S
Lab Code: K2406516-005
File ID: J:\MS10\DATA\092304\0923F005.D
Instrument ID: MS10
Extraction Method: EPA 3541
Analysis Method: 8270C

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Lot: KWG0413228
Calibration ID: CAL3836

Sample Amount: 26.47 g
% Solids: 75.7
Dilution Factor: 2

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
62-75-9	N-Nitrosodimethylamine	17	U	100	17	
62-53-3	Aniline	4.0	U	40	4.0	
111-44-4	Bis(2-chloroethyl) Ether	6.4	U	20	6.4	
108-95-2	Phenol	87	D	60	5.1	
95-57-8	2-Chlorophenol	4.5	U	20	4.5	
541-73-1	1,3-Dichlorobenzene	4.3	U	20	4.3	
106-46-7	1,4-Dichlorobenzene	5.1	U	20	5.1	
95-50-1	1,2-Dichlorobenzene	3.5	U	20	3.5	
100-51-6	Benzyl Alcohol	9.8	U	20	9.8	
39638-32-9	Bis(2-chloroisopropyl) Ether	3.2	U	20	3.2	
95-48-7	2-Methylphenol	9.0	U	20	9.0	
67-72-1	Hexachloroethane	5.9	U	20	5.9	
621-64-7	N-Nitrosodi-n-propylamine	8.5	U	20	8.5	
106-44-5	4-Methylphenol†	24	D	20	7.7	
98-95-3	Nitrobenzene	5.3	U	20	5.3	
78-59-1	Isophorone	4.3	U	20	4.3	
88-75-5	2-Nitrophenol	6.9	U	20	6.9	
105-67-9	2,4-Dimethylphenol	15	U	100	15	*
111-91-1	Bis(2-chloroethoxy)methane	3.5	U	20	3.5	
120-83-2	2,4-Dichlorophenol	4.8	U	20	4.8	
65-85-0	Benzoic Acid	260	U	400	260	*
120-82-1	1,2,4-Trichlorobenzene	4.0	U	20	4.0	
106-47-8	4-Chloroaniline	5.6	U	20	5.6	
87-68-3	Hexachlorobutadiene	3.7	U	20	3.7	
59-50-7	4-Chloro-3-methylphenol	5.6	U	20	5.6	
77-47-4	Hexachlorocyclopentadiene	40	U	100	40	
88-06-2	2,4,6-Trichlorophenol	4.8	U	20	4.8	
95-95-4	2,4,5-Trichlorophenol	8.0	U	20	8.0	

Comments:

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406516
Date Collected: 08/25/2004
Date Received: 08/30/2004
Date Extracted: 09/02/2004
Date Analyzed: 09/23/2004

Semi-Volatile Organic Compounds by GC/MS

Sample Name: LDW-C9-S
Lab Code: K2406516-005
File ID: J:\MS10\DATA\092304\0923F005.D
Instrument ID: MS10
Extraction Method: EPA 3541
Analysis Method: 8270C

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Lot: KWG0413228
Calibration ID: CAL3836

Sample Amount: 26.47 g
% Solids: 75.7
Dilution Factor: 2

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
91-58-7	2-Chloronaphthalene	9.6	U	20	9.6	
88-74-4	2-Nitroaniline	7.2	U	40	7.2	
131-11-3	Dimethyl Phthalate	4.8	U	20	4.8	
606-20-2	2,6-Dinitrotoluene	7.4	U	20	7.4	
99-09-2	3-Nitroaniline	6.9	U	40	6.9	
51-28-5	2,4-Dinitrophenol	96	U	400	96	
100-02-7	4-Nitrophenol	80	U	200	80	
121-14-2	2,4-Dinitrotoluene	7.4	U	20	7.4	
7005-72-3	4-Chlorophenyl Phenyl Ether	5.3	U	20	5.3	
84-66-2	Diethyl Phthalate	9.3	U	20	9.3	
100-01-6	4-Nitroaniline	9.0	U	40	9.0	
534-52-1	2-Methyl-4,6-dinitrophenol	4.5	U	200	4.5	
86-30-6	N-Nitrosodiphenylamine	5.9	U	20	5.9	
101-55-3	4-Bromophenyl Phenyl Ether	3.7	U	20	3.7	
118-74-1	Hexachlorobenzene	5.6	U	20	5.6	
87-86-5	Pentachlorophenol	23	U	200	23	
86-74-8	Carbazole	4.1	JD	20	3.5	
84-74-2	Di-n-butyl Phthalate	9.1	JD	20	6.9	
92-87-5	Benzidine	530	U	530	530	*
85-68-7	Butyl Benzyl Phthalate	4.0	U	20	4.0	
91-94-1	3,3'-Dichlorobenzidine	9.8	U	200	9.8	
117-81-7	Bis(2-ethylhexyl) Phthalate	24	JD	400	4.5	
117-84-0	Di-n-octyl Phthalate	3.2	U	20	3.2	

* See Case Narrative

Comments: _____

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406516
Date Collected: 08/25/2004
Date Received: 08/30/2004
Date Extracted: 09/02/2004
Date Analyzed: 09/23/2004

Semi-Volatile Organic Compounds by GC/MS

Sample Name: LDW-C9-S
Lab Code: K2406516-005
File ID: J:\MS10\DATA\092304\0923F005.D
Instrument ID: MS10
Extraction Method: EPA 3541
Analysis Method: 8270C

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Lot: KWG0413228
Calibration ID: CAL3836

Sample Amount: 26.47 g
% Solids: 75.7
Dilution Factor: 2

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	73	40-130	09/23/04	Acceptable
Phenol-d6	109	40-130	09/23/04	Acceptable
Nitrobenzene-d5	70	40-130	09/23/04	Acceptable
2-Fluorobiphenyl	49	40-130	09/23/04	Acceptable
2,4,6-Tribromophenol	90	40-130	09/23/04	Acceptable
Terphenyl-d14	96	40-130	09/23/04	Acceptable

† Analyte Comments

4-Methylphenol This analyte cannot be separated from 3-Methylphenol.

Comments: _____

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Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406516
Date Collected: 08/26/2004
Date Received: 08/30/2004
Date Extracted: 09/02/2004
Date Analyzed: 09/23/2004

Semi-Volatile Organic Compounds by GC/MS

Sample Name: LDW-C7-S1
Lab Code: K2406516-006
File ID: J:\MS10\DATA\092304\0923F015.D
Instrument ID: MS10
Extraction Method: EPA 3541
Analysis Method: 8270C

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Lot: KWG0413228
Calibration ID: CAL3836

Sample Amount: 25.97 g
% Solids: 78.0
Dilution Factor: 10

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
62-75-9	N-Nitrosodimethylamine	79	U	500	79	
62-53-3	Aniline	20	U	200	20	
111-44-4	Bis(2-chloroethyl) Ether	31	U	99	31	
108-95-2	Phenol	25	U	300	25	
95-57-8	2-Chlorophenol	22	U	99	22	
541-73-1	1,3-Dichlorobenzene	21	U	99	21	
106-46-7	1,4-Dichlorobenzene	25	U	99	25	
95-50-1	1,2-Dichlorobenzene	17	U	99	17	
100-51-6	Benzyl Alcohol	48	U	99	48	
39638-32-9	Bis(2-chloroisopropyl) Ether	16	U	99	16	
95-48-7	2-Methylphenol	44	U	99	44	
67-72-1	Hexachloroethane	29	U	99	29	
621-64-7	N-Nitrosodi-n-propylamine	42	U	99	42	
106-44-5	4-Methylphenol†	38	U	99	38	
98-95-3	Nitrobenzene	26	U	99	26	
78-59-1	Isophorone	21	U	99	21	
88-75-5	2-Nitrophenol	34	U	99	34	
105-67-9	2,4-Dimethylphenol	71	U	500	71	*
111-91-1	Bis(2-chloroethoxy)methane	17	U	99	17	
120-83-2	2,4-Dichlorophenol	24	U	99	24	
65-85-0	Benzoic Acid	1300	U	2000	1300	*
120-82-1	1,2,4-Trichlorobenzene	20	U	99	20	
106-47-8	4-Chloroaniline	27	U	99	27	
87-68-3	Hexachlorobutadiene	18	U	99	18	
59-50-7	4-Chloro-3-methylphenol	27	U	99	27	
77-47-4	Hexachlorocyclopentadiene	200	U	500	200	
88-06-2	2,4,6-Trichlorophenol	24	U	99	24	
95-95-4	2,4,5-Trichlorophenol	39	U	99	39	

Comments: _____

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406516
Date Collected: 08/26/2004
Date Received: 08/30/2004
Date Extracted: 09/02/2004
Date Analyzed: 09/23/2004

Semi-Volatile Organic Compounds by GC/MS

Sample Name: LDW-C7-S1
Lab Code: K2406516-006
File ID: J:\MS10\DATA\092304\0923F015.D
Instrument ID: MS10
Extraction Method: EPA 3541
Analysis Method: 8270C

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Lot: KWG0413228
Calibration ID: CAL3836

Sample Amount: 25.97 g
% Solids: 78.0
Dilution Factor: 10

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
91-58-7	2-Chloronaphthalene	47	U	99	47	
88-74-4	2-Nitroaniline	35	U	200	35	
131-11-3	Dimethyl Phthalate	24	U	99	24	
606-20-2	2,6-Dinitrotoluene	36	U	99	36	
99-09-2	3-Nitroaniline	34	U	200	34	
51-28-5	2,4-Dinitrophenol	470	U	2000	470	
100-02-7	4-Nitrophenol	390	U	990	390	
121-14-2	2,4-Dinitrotoluene	36	U	99	36	
7005-72-3	4-Chlorophenyl Phenyl Ether	26	U	99	26	
84-66-2	Diethyl Phthalate	45	U	99	45	
100-01-6	4-Nitroaniline	44	U	200	44	
534-52-1	2-Methyl-4,6-dinitrophenol	22	U	990	22	
86-30-6	N-Nitrosodiphenylamine	29	U	99	29	
101-55-3	4-Bromophenyl Phenyl Ether	18	U	99	18	
118-74-1	Hexachlorobenzene	27	U	99	27	
87-86-5	Pentachlorophenol	110	U	990	110	
86-74-8	Carbazole	70	JD	99	17	
84-74-2	Di-n-butyl Phthalate	34	U	99	34	
92-87-5	Benzidine	2600	U	2600	2600	*
85-68-7	Butyl Benzyl Phthalate	20	U	99	20	
91-94-1	3,3'-Dichlorobenzidine	48	U	990	48	
117-81-7	Bis(2-ethylhexyl) Phthalate	230	JD	2000	22	
117-84-0	Di-n-octyl Phthalate	32	JD	99	16	

* See Case Narrative

Comments:

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406516
Date Collected: 08/26/2004
Date Received: 08/30/2004
Date Extracted: 09/02/2004
Date Analyzed: 09/23/2004

Semi-Volatile Organic Compounds by GC/MS

Sample Name: LDW-C7-S1
Lab Code: K2406516-006
File ID: J:\MS10\DATA\092304\0923F015.D
Instrument ID: MS10
Extraction Method: EPA 3541
Analysis Method: 8270C

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Lot: KWG0413228
Calibration ID: CAL3836

Sample Amount: 25.97 g
% Solids: 78.0
Dilution Factor: 10

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	81	40-130	09/23/04	Acceptable
Phenol-d6	116	40-130	09/23/04	Acceptable
Nitrobenzene-d5	71	40-130	09/23/04	Acceptable
2-Fluorobiphenyl	51	40-130	09/23/04	Acceptable
2,4,6-Tribromophenol	88	40-130	09/23/04	Acceptable
Terphenyl-d14	94	40-130	09/23/04	Acceptable

† Analyte Comments

4-Methylphenol This analyte cannot be separated from 3-Methylphenol.

Comments: _____

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 Form IA - Organic

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406516
Date Collected: 08/27/2004
Date Received: 08/30/2004
Date Extracted: 09/02/2004
Date Analyzed: 09/23/2004

Semi-Volatile Organic Compounds by GC/MS

Sample Name: LDW-C3-S2
Lab Code: K2406516-007
File ID: J:\MS10\DATA\092304\0923F018.D
Instrument ID: MS10
Extraction Method: EPA 3541
Analysis Method: 8270C

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Lot: KWG0413228
Calibration ID: CAL3836

Sample Amount: 26.66 g
% Solids: 75.2
Dilution Factor: 5

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
62-75-9	N-Nitrosodimethylamine	41	U	250	41	
62-53-3	Aniline	10	U	100	10	
111-44-4	Bis(2-chloroethyl) Ether	16	U	50	16	
108-95-2	Phenol	13	U	150	13	
95-57-8	2-Chlorophenol	12	U	50	12	
541-73-1	1,3-Dichlorobenzene	11	U	50	11	
106-46-7	1,4-Dichlorobenzene	13	U	50	13	
95-50-1	1,2-Dichlorobenzene	8.7	U	50	8.7	
100-51-6	Benzyl Alcohol	25	U	50	25	
39638-32-9	Bis(2-chloroisopropyl) Ether	8.0	U	50	8.0	
95-48-7	2-Methylphenol	23	U	50	23	
67-72-1	Hexachloroethane	15	U	50	15	
621-64-7	N-Nitrosodi-n-propylamine	22	U	50	22	
106-44-5	4-Methylphenol†	20	U	50	20	
98-95-3	Nitrobenzene	14	U	50	14	
78-59-1	Isophorone	11	U	50	11	
88-75-5	2-Nitrophenol	18	U	50	18	
105-67-9	2,4-Dimethylphenol	37	U	250	37	*
111-91-1	Bis(2-chloroethoxy)methane	8.7	U	50	8.7	
120-83-2	2,4-Dichlorophenol	12	U	50	12	
65-85-0	Benzoic Acid	640	U	1000	640	*
120-82-1	1,2,4-Trichlorobenzene	10	U	50	10	
106-47-8	4-Chloroaniline	14	U	50	14	
87-68-3	Hexachlorobutadiene	9.4	U	50	9.4	
59-50-7	4-Chloro-3-methylphenol	14	U	50	14	
77-47-4	Hexachlorocyclopentadiene	100	U	250	100	
88-06-2	2,4,6-Trichlorophenol	12	U	50	12	
95-95-4	2,4,5-Trichlorophenol	20	U	50	20	

Comments: _____

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406516
Date Collected: 08/27/2004
Date Received: 08/30/2004
Date Extracted: 09/02/2004
Date Analyzed: 09/23/2004

Semi-Volatile Organic Compounds by GC/MS

Sample Name: LDW-C3-S2
Lab Code: K2406516-007
File ID: J:\MS10\DATA\092304\0923F018.D
Instrument ID: MS10
Extraction Method: EPA 3541
Analysis Method: 8270C

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Lot: KWG0413228
Calibration ID: CAL3836

Sample Amount: 26.66 g
% Solids: 75.2
Dilution Factor: 5

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
91-58-7	2-Chloronaphthalene	24	U	50	24	
88-74-4	2-Nitroaniline	18	U	100	18	
131-11-3	Dimethyl Phthalate	12	U	50	12	
606-20-2	2,6-Dinitrotoluene	19	U	50	19	
99-09-2	3-Nitroaniline	18	U	100	18	
51-28-5	2,4-Dinitrophenol	240	U	1000	240	
100-02-7	4-Nitrophenol	200	U	500	200	
121-14-2	2,4-Dinitrotoluene	19	U	50	19	
7005-72-3	4-Chlorophenyl Phenyl Ether	14	U	50	14	
84-66-2	Diethyl Phthalate	24	U	50	24	
100-01-6	4-Nitroaniline	23	U	100	23	
534-52-1	2-Methyl-4,6-dinitrophenol	12	U	500	12	
86-30-6	N-Nitrosodiphenylamine	15	U	50	15	
101-55-3	4-Bromophenyl Phenyl Ether	9.4	U	50	9.4	
118-74-1	Hexachlorobenzene	14	U	50	14	
87-86-5	Pentachlorophenol	57	U	500	57	
86-74-8	Carbazole	8.7	U	50	8.7	
84-74-2	Di-n-butyl Phthalate	18	U	50	18	
92-87-5	Benzidine	1400	U	1400	1400	*
85-68-7	Butyl Benzyl Phthalate	10	U	50	10	
91-94-1	3,3'-Dichlorobenzidine	25	U	500	25	
117-81-7	Bis(2-ethylhexyl) Phthalate	58	JD	1000	12	
117-84-0	Di-n-octyl Phthalate	8.0	U	50	8.0	

* See Case Narrative

Comments:

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406516
Date Collected: 08/27/2004
Date Received: 08/30/2004
Date Extracted: 09/02/2004
Date Analyzed: 09/23/2004

Semi-Volatile Organic Compounds by GC/MS

Sample Name: LDW-C3-S2
Lab Code: K2406516-007
File ID: J:\MS10\DATA\092304\0923F018.D
Instrument ID: MS10
Extraction Method: EPA 3541
Analysis Method: 8270C

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Lot: KWG0413228
Calibration ID: CAL3836

Sample Amount: 26.66 g
% Solids: 75.2
Dilution Factor: 5

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	84	40-130	09/23/04	Acceptable
Phenol-d6	103	40-130	09/23/04	Acceptable
Nitrobenzene-d5	82	40-130	09/23/04	Acceptable
2-Fluorobiphenyl	69	40-130	09/23/04	Acceptable
2,4,6-Tribromophenol	85	40-130	09/23/04	Acceptable
Terphenyl-d14	99	40-130	09/23/04	Acceptable

† Analyte Comments

4-Methylphenol This analyte cannot be separated from 3-Methylphenol.

Comments: _____

3654

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406516
Date Collected: 08/26/2004
Date Received: 08/30/2004
Date Extracted: 09/02/2004
Date Analyzed: 09/24/2004

Semi-Volatile Organic Compounds by GC/MS

Sample Name: LDW-C7-S2
Lab Code: K2406516-008
File ID: J:\MS10\DATA\092304\0923F019.D
Instrument ID: MS10
Extraction Method: EPA 3541
Analysis Method: 8270C

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Lot: KWG0413228
Calibration ID: CAL3836

Sample Amount: 26.00 g
% Solids: 78.3
Dilution Factor: 5

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
62-75-9	N-Nitrosodimethylamine	39 U	250	39	
62-53-3	Aniline	9.6 U	99	9.6	
111-44-4	Bis(2-chloroethyl) Ether	16 U	50	16	
108-95-2	Phenol	14 JD	150	13	
95-57-8	2-Chlorophenol	11 U	50	11	
541-73-1	1,3-Dichlorobenzene	11 U	50	11	
106-46-7	1,4-Dichlorobenzene	13 U	50	13	
95-50-1	1,2-Dichlorobenzene	8.4 U	50	8.4	
100-51-6	Benzyl Alcohol	24 U	50	24	
39638-32-9	Bis(2-chloroisopropyl) Ether	7.7 U	50	7.7	
95-48-7	2-Methylphenol	22 U	50	22	
67-72-1	Hexachloroethane	15 U	50	15	
621-64-7	N-Nitrosodi-n-propylamine	21 U	50	21	
106-44-5	4-Methylphenol†	19 U	50	19	
98-95-3	Nitrobenzene	13 U	50	13	
78-59-1	Isophorone	11 U	50	11	
88-75-5	2-Nitrophenol	17 U	50	17	
105-67-9	2,4-Dimethylphenol	36 U	250	36	*
111-91-1	Bis(2-chloroethoxy)methane	8.4 U	50	8.4	
120-83-2	2,4-Dichlorophenol	12 U	50	12	
65-85-0	Benzoic Acid	620 U	990	620	*
120-82-1	1,2,4-Trichlorobenzene	9.6 U	50	9.6	
106-47-8	4-Chloroaniline	14 U	50	14	
87-68-3	Hexachlorobutadiene	9.0 U	50	9.0	
59-50-7	4-Chloro-3-methylphenol	14 U	50	14	
77-47-4	Hexachlorocyclopentadiene	96 U	250	96	
88-06-2	2,4,6-Trichlorophenol	12 U	50	12	
95-95-4	2,4,5-Trichlorophenol	20 U	50	20	

Comments: _____

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406516
Date Collected: 08/26/2004
Date Received: 08/30/2004
Date Extracted: 09/02/2004
Date Analyzed: 09/24/2004

Semi-Volatile Organic Compounds by GC/MS

Sample Name: LDW-C7-S2
Lab Code: K2406516-008
File ID: J:\MS10\DATA\092304\0923F019.D
Instrument ID: MS10
Extraction Method: EPA 3541
Analysis Method: 8270C

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Lot: KWG0413228
Calibration ID: CAL3836

Sample Amount: 26.00 g
% Solids: 78.3
Dilution Factor: 5

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
91-58-7	2-Chloronaphthalene	23	U	50	23	
88-74-4	2-Nitroaniline	18	U	99	18	
131-11-3	Dimethyl Phthalate	12	U	50	12	
606-20-2	2,6-Dinitrotoluene	18	U	50	18	
99-09-2	3-Nitroaniline	17	U	99	17	
51-28-5	2,4-Dinitrophenol	230	U	990	230	
100-02-7	4-Nitrophenol	200	U	500	200	
121-14-2	2,4-Dinitrotoluene	18	U	50	18	
7005-72-3	4-Chlorophenyl Phenyl Ether	13	U	50	13	
84-66-2	Diethyl Phthalate	23	U	50	23	
100-01-6	4-Nitroaniline	22	U	99	22	
534-52-1	2-Methyl-4,6-dinitrophenol	11	U	500	11	
86-30-6	N-Nitrosodiphenylamine	15	U	50	15	
101-55-3	4-Bromophenyl Phenyl Ether	9.0	U	50	9.0	
118-74-1	Hexachlorobenzene	14	U	50	14	
87-86-5	Pentachlorophenol	55	U	500	55	
86-74-8	Carbazole	17	JD	50	8.4	
84-74-2	Di-n-butyl Phthalate	17	U	50	17	
92-87-5	Benzidine	1300	U	1300	1300	*
85-68-7	Butyl Benzyl Phthalate	9.6	U	50	9.6	
91-94-1	3,3'-Dichlorobenzidine	24	U	500	24	
117-81-7	Bis(2-ethylhexyl) Phthalate	160	JD	990	11	
117-84-0	Di-n-octyl Phthalate	34	JD	50	7.7	

* See Case Narrative

Comments:

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406516
Date Collected: 08/26/2004
Date Received: 08/30/2004
Date Extracted: 09/02/2004
Date Analyzed: 09/24/2004

Semi-Volatile Organic Compounds by GC/MS

Sample Name: LDW-C7-S2
Lab Code: K2406516-008
File ID: J:\MS10\DATA\092304\0923F019.D
Instrument ID: MS10
Extraction Method: EPA 3541
Analysis Method: 8270C

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Lot: KWG0413228
Calibration ID: CAL3836

Sample Amount: 26.00 g
% Solids: 78.3
Dilution Factor: 5

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	90	40-130	09/24/04	Acceptable
Phenol-d6	119	40-130	09/24/04	Acceptable
Nitrobenzene-d5	90	40-130	09/24/04	Acceptable
2-Fluorobiphenyl	57	40-130	09/24/04	Acceptable
2,4,6-Tribromophenol	86	40-130	09/24/04	Acceptable
Terphenyl-d14	93	40-130	09/24/04	Acceptable

† Analyte Comments

4-Methylphenol This analyte cannot be separated from 3-Methylphenol.

Comments:

3657

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406516
Date Collected: 08/26/2004
Date Received: 08/30/2004
Date Extracted: 09/02/2004
Date Analyzed: 09/23/2004

Semi-Volatile Organic Compounds by GC/MS

Sample Name: LDW-C8-S
Lab Code: K2406516-009
File ID: J:\MS10\DATA\092304\0923F016.D
Instrument ID: MS10
Extraction Method: EPA 3541
Analysis Method: 8270C

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Lot: KWG0413228
Calibration ID: CAL3836

Sample Amount: 33.28 g
% Solids: 60.3
Dilution Factor: 10

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
62-75-9	N-Nitrosodimethylamine	110 U	500	110	
62-53-3	Aniline	25 U	200	25	
111-44-4	Bis(2-chloroethyl) Ether	40 U	100	40	
108-95-2	Phenol	47 JD	300	32	
95-57-8	2-Chlorophenol	29 U	100	29	
541-73-1	1,3-Dichlorobenzene	27 U	100	27	
106-46-7	1,4-Dichlorobenzene	32 U	100	32	
95-50-1	1,2-Dichlorobenzene	22 U	100	22	
100-51-6	Benzyl Alcohol	62 U	100	62	
39638-32-9	Bis(2-chloroisopropyl) Ether	20 U	100	20	
95-48-7	2-Methylphenol	57 U	100	57	
67-72-1	Hexachloroethane	37 U	100	37	
621-64-7	N-Nitrosodi-n-propylamine	54 U	100	54	
106-44-5	4-Methylphenol†	49 U	100	49	
98-95-3	Nitrobenzene	34 U	100	34	
78-59-1	Isophorone	27 U	100	27	
88-75-5	2-Nitrophenol	44 U	100	44	
105-67-9	2,4-Dimethylphenol	92 U	500	92	*
111-91-1	Bis(2-chloroethoxy)methane	22 U	100	22	
120-83-2	2,4-Dichlorophenol	30 U	100	30	
65-85-0	Benzoic Acid	1600 U	2000	1600	*
120-82-1	1,2,4-Trichlorobenzene	25 U	100	25	
106-47-8	4-Chloroaniline	35 U	100	35	
87-68-3	Hexachlorobutadiene	24 U	100	24	
59-50-7	4-Chloro-3-methylphenol	35 U	100	35	
77-47-4	Hexachlorocyclopentadiene	250 U	500	250	
88-06-2	2,4,6-Trichlorophenol	30 U	100	30	
95-95-4	2,4,5-Trichlorophenol	50 U	100	50	

Comments:

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406516
Date Collected: 08/26/2004
Date Received: 08/30/2004
Date Extracted: 09/02/2004
Date Analyzed: 09/23/2004

Semi-Volatile Organic Compounds by GC/MS

Sample Name: LDW-C8-S
Lab Code: K2406516-009
File ID: J:\MS10\DATA\092304\0923F016.D
Instrument ID: MS10
Extraction Method: EPA 3541
Analysis Method: 8270C

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Lot: KWG0413228
Calibration ID: CAL3836

Sample Amount: 33.28 g
% Solids: 60.3
Dilution Factor: 10

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
91-58-7	2-Chloronaphthalene	60 U	100	60	
88-74-4	2-Nitroaniline	45 U	200	45	
131-11-3	Dimethyl Phthalate	30 U	100	30	
606-20-2	2,6-Dinitrotoluene	47 U	100	47	
99-09-2	3-Nitroaniline	44 U	200	44	
51-28-5	2,4-Dinitrophenol	600 U	2000	600	
100-02-7	4-Nitrophenol	500 U	1000	500	
121-14-2	2,4-Dinitrotoluene	47 U	100	47	
7005-72-3	4-Chlorophenyl Phenyl Ether	34 U	100	34	
84-66-2	Diethyl Phthalate	59 U	100	59	
100-01-6	4-Nitroaniline	57 U	200	57	
534-52-1	2-Methyl-4,6-dinitrophenol	29 U	1000	29	
86-30-6	N-Nitrosodiphenylamine	37 U	100	37	
101-55-3	4-Bromophenyl Phenyl Ether	24 U	100	24	
118-74-1	Hexachlorobenzene	35 U	100	35	
87-86-5	Pentachlorophenol	150 U	1000	150	
86-74-8	Carbazole	140 D	100	22	
84-74-2	Di-n-butyl Phthalate	44 U	100	44	
92-87-5	Benzidine	3400 U	3400	3400	*
85-68-7	Butyl Benzyl Phthalate	220 D	100	25	
91-94-1	3,3'-Dichlorobenzidine	62 U	1000	62	
117-81-7	Bis(2-ethylhexyl) Phthalate	2500 D	2000	29	
117-84-0	Di-n-octyl Phthalate	160 D	100	20	

* See Case Narrative

Comments: _____

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406516
Date Collected: 08/26/2004
Date Received: 08/30/2004
Date Extracted: 09/02/2004
Date Analyzed: 09/23/2004

Semi-Volatile Organic Compounds by GC/MS

Sample Name: LDW-C8-S
Lab Code: K2406516-009
File ID: J:\MS10\DATA\092304\0923F016.D
Instrument ID: MS10
Extraction Method: EPA 3541
Analysis Method: 8270C

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Lot: KWG0413228
Calibration ID: CAL3836

Sample Amount: 33.28 g
% Solids: 60.3
Dilution Factor: 10

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	68	40-130	09/23/04	Acceptable
Phenol-d6	106	40-130	09/23/04	Acceptable
Nitrobenzene-d5	64	40-130	09/23/04	Acceptable
2-Fluorobiphenyl	61	40-130	09/23/04	Acceptable
2,4,6-Tribromophenol	91	40-130	09/23/04	Acceptable
Terphenyl-d14	102	40-130	09/23/04	Acceptable

† Analyte Comments

4-Methylphenol This analyte cannot be separated from 3-Methylphenol.

Comments: _____

3660
 Form IA - Organic

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406516
Date Collected: 08/27/2004
Date Received: 08/30/2004
Date Extracted: 09/02/2004
Date Analyzed: 09/23/2004

Semi-Volatile Organic Compounds by GC/MS

Sample Name: LDW-C5-S
Lab Code: K2406516-010
File ID: J:\MS10\DATA\092304\0923F006.D
Instrument ID: MS10

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: EPA 3541
Analysis Method: 8270C

Extraction Lot: KWG0413228
Calibration ID: CAL3836

Sample Amount: 27.21 g
% Solids: 74.1
Dilution Factor: 2

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
62-75-9	N-Nitrosodimethylamine	17 U	100	17	
62-53-3	Aniline	4.1 U	40	4.1	
111-44-4	Bis(2-chloroethyl) Ether	6.5 U	20	6.5	
108-95-2	Phenol	74 D	60	5.2	
95-57-8	2-Chlorophenol	4.6 U	20	4.6	
541-73-1	1,3-Dichlorobenzene	4.4 U	20	4.4	
106-46-7	1,4-Dichlorobenzene	5.2 U	20	5.2	
95-50-1	1,2-Dichlorobenzene	3.6 U	20	3.6	
100-51-6	Benzyl Alcohol	10 U	20	10	
39638-32-9	Bis(2-chloroisopropyl) Ether	3.3 U	20	3.3	
95-48-7	2-Methylphenol	9.2 U	20	9.2	
67-72-1	Hexachloroethane	6.0 U	20	6.0	
621-64-7	N-Nitrosodi-n-propylamine	8.7 U	20	8.7	
106-44-5	4-Methylphenol†	7.9 U	20	7.9	
98-95-3	Nitrobenzene	5.4 U	20	5.4	
78-59-1	Isophorone	4.4 U	20	4.4	
88-75-5	2-Nitrophenol	7.1 U	20	7.1	
105-67-9	2,4-Dimethylphenol	15 U	100	15	*
111-91-1	Bis(2-chloroethoxy)methane	3.6 U	20	3.6	
120-83-2	2,4-Dichlorophenol	4.9 U	20	4.9	
65-85-0	Benzoic Acid	260 U	400	260	*
120-82-1	1,2,4-Trichlorobenzene	4.1 U	20	4.1	
106-47-8	4-Chloroaniline	5.7 U	20	5.7	
87-68-3	Hexachlorobutadiene	3.8 U	20	3.8	
59-50-7	4-Chloro-3-methylphenol	5.7 U	20	5.7	
77-47-4	Hexachlorocyclopentadiene	41 U	100	41	
88-06-2	2,4,6-Trichlorophenol	4.9 U	20	4.9	
95-95-4	2,4,5-Trichlorophenol	8.1 U	20	8.1	

Comments: _____

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406516
Date Collected: 08/27/2004
Date Received: 08/30/2004
Date Extracted: 09/02/2004
Date Analyzed: 09/23/2004

Semi-Volatile Organic Compounds by GC/MS

Sample Name: LDW-C5-S
Lab Code: K2406516-010
File ID: J:\MS10\DATA\092304\0923F006.D
Instrument ID: MS10

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: EPA 3541
Analysis Method: 8270C

Extraction Lot: KWG0413228
Calibration ID: CAL3836

Sample Amount: 27.21 g
% Solids: 74.1
Dilution Factor: 2

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
91-58-7	2-Chloronaphthalene	9.8 U	20	9.8	
88-74-4	2-Nitroaniline	7.3 U	40	7.3	
131-11-3	Dimethyl Phthalate	4.9 U	20	4.9	
606-20-2	2,6-Dinitrotoluene	7.6 U	20	7.6	
99-09-2	3-Nitroaniline	7.1 U	40	7.1	
51-28-5	2,4-Dinitrophenol	98 U	400	98	
100-02-7	4-Nitrophenol	81 U	200	81	
121-14-2	2,4-Dinitrotoluene	7.6 U	20	7.6	
7005-72-3	4-Chlorophenyl Phenyl Ether	5.4 U	20	5.4	
84-66-2	Diethyl Phthalate	9.5 U	20	9.5	
100-01-6	4-Nitroaniline	9.2 U	40	9.2	
534-52-1	2-Methyl-4,6-dinitrophenol	4.6 U	200	4.6	
86-30-6	N-Nitrosodiphenylamine	6.0 U	20	6.0	
101-55-3	4-Bromophenyl Phenyl Ether	3.8 U	20	3.8	
118-74-1	Hexachlorobenzene	5.7 U	20	5.7	
87-86-5	Pentachlorophenol	23 JD	200	23	
86-74-8	Carbazole	20 JD	20	3.6	
84-74-2	Di-n-butyl Phthalate	7.7 JD	20	7.1	
92-87-5	Benzidine	540 U	540	540	*
85-68-7	Butyl Benzyl Phthalate	9.7 JD	20	4.1	
91-94-1	3,3'-Dichlorobenzidine	10 U	200	10	
117-81-7	Bis(2-ethylhexyl) Phthalate	37 JD	400	4.6	
117-84-0	Di-n-octyl Phthalate	3.3 U	20	3.3	

* See Case Narrative

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406516
Date Collected: 08/27/2004
Date Received: 08/30/2004
Date Extracted: 09/02/2004
Date Analyzed: 09/23/2004

Semi-Volatile Organic Compounds by GC/MS

Sample Name: LDW-C5-S
Lab Code: K2406516-010
File ID: J:\MS10\DATA\092304\0923F006.D
Instrument ID: MS10
Extraction Method: EPA 3541
Analysis Method: 8270C

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Lot: KWG0413228
Calibration ID: CAL3836

Sample Amount: 27.21 g
% Solids: 74.1
Dilution Factor: 2

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	63	40-130	09/23/04	Acceptable
Phenol-d6	100	40-130	09/23/04	Acceptable
Nitrobenzene-d5	52	40-130	09/23/04	Acceptable
2-Fluorobiphenyl	58	40-130	09/23/04	Acceptable
2,4,6-Tribromophenol	92	40-130	09/23/04	Acceptable
Terphenyl-d14	106	40-130	09/23/04	Acceptable

† Analyte Comments

4-Methylphenol This analyte cannot be separated from 3-Methylphenol.

Comments: _____

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406516
Date Collected: 08/27/2004
Date Received: 08/30/2004
Date Extracted: 09/02/2004
Date Analyzed: 09/23/2004

Semi-Volatile Organic Compounds by GC/MS

Sample Name: LDW-C3-S1
Lab Code: K2406516-011
File ID: J:\MS10\DATA\092304\0923F009.D
Instrument ID: MS10
Extraction Method: EPA 3541
Analysis Method: 8270C

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Lot: KWG0413228
Calibration ID: CAL3836

Sample Amount: 27.94 g
% Solids: 72.2
Dilution Factor: 2

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
62-75-9	N-Nitrosodimethylamine	17 U	100	17	
62-53-3	Aniline	4.2 U	40	4.2	
111-44-4	Bis(2-chloroethyl) Ether	6.7 U	20	6.7	
108-95-2	Phenol	40 JD	60	5.3	
95-57-8	2-Chlorophenol	4.8 U	20	4.8	
541-73-1	1,3-Dichlorobenzene	4.5 U	20	4.5	
106-46-7	1,4-Dichlorobenzene	5.3 U	20	5.3	
95-50-1	1,2-Dichlorobenzene	3.7 U	20	3.7	
100-51-6	Benzyl Alcohol	11 U	20	11	
39638-32-9	Bis(2-chloroisopropyl) Ether	3.4 U	20	3.4	
95-48-7	2-Methylphenol	9.5 U	20	9.5	
67-72-1	Hexachloroethane	6.1 U	20	6.1	
621-64-7	N-Nitrosodi-n-propylamine	8.9 U	20	8.9	
106-44-5	4-Methylphenol†	8.1 U	20	8.1	
98-95-3	Nitrobenzene	5.6 U	20	5.6	
78-59-1	Isophorone	4.5 U	20	4.5	
88-75-5	2-Nitrophenol	7.3 U	20	7.3	
105-67-9	2,4-Dimethylphenol	16 U	100	16	*
111-91-1	Bis(2-chloroethoxy)methane	3.7 U	20	3.7	
120-83-2	2,4-Dichlorophenol	5.0 U	20	5.0	
65-85-0	Benzoic Acid	270 U	400	270	*
120-82-1	1,2,4-Trichlorobenzene	4.2 U	20	4.2	
106-47-8	4-Chloroaniline	5.9 U	20	5.9	
87-68-3	Hexachlorobutadiene	3.9 U	20	3.9	
59-50-7	4-Chloro-3-methylphenol	5.9 U	20	5.9	
77-47-4	Hexachlorocyclopentadiene	42 U	100	42	
88-06-2	2,4,6-Trichlorophenol	5.0 U	20	5.0	
95-95-4	2,4,5-Trichlorophenol	8.4 U	20	8.4	

Comments:

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406516
Date Collected: 08/27/2004
Date Received: 08/30/2004
Date Extracted: 09/02/2004
Date Analyzed: 09/23/2004

Semi-Volatile Organic Compounds by GC/MS

Sample Name: LDW-C3-S1
Lab Code: K2406516-011
File ID: J:\MS10\DATA\092304\0923F009.D
Instrument ID: MS10
Extraction Method: EPA 3541
Analysis Method: 8270C

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Lot: KWG0413228
Calibration ID: CAL3836

Sample Amount: 27.94 g
% Solids: 72.2
Dilution Factor: 2

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
91-58-7	2-Chloronaphthalene	10	U	20	10	
88-74-4	2-Nitroaniline	7.5	U	40	7.5	
131-11-3	Dimethyl Phthalate	5.0	U	20	5.0	
606-20-2	2,6-Dinitrotoluene	7.8	U	20	7.8	
99-09-2	3-Nitroaniline	7.3	U	40	7.3	
51-28-5	2,4-Dinitrophenol	100	U	400	100	
100-02-7	4-Nitrophenol	84	U	200	84	
121-14-2	2,4-Dinitrotoluene	7.8	U	20	7.8	
7005-72-3	4-Chlorophenyl Phenyl Ether	5.6	U	20	5.6	
84-66-2	Diethyl Phthalate	9.7	U	20	9.7	
100-01-6	4-Nitroaniline	9.5	U	40	9.5	
534-52-1	2-Methyl-4,6-dinitrophenol	4.8	U	200	4.8	
86-30-6	N-Nitrosodiphenylamine	6.1	U	20	6.1	
101-55-3	4-Bromophenyl Phenyl Ether	3.9	U	20	3.9	
118-74-1	Hexachlorobenzene	5.9	U	20	5.9	
87-86-5	Pentachlorophenol	24	U	200	24	
86-74-8	Carbazole	4.3	JD	20	3.7	
84-74-2	Di-n-butyl Phthalate	7.3	U	20	7.3	
92-87-5	Benzidine	560	U	560	560	*
85-68-7	Butyl Benzyl Phthalate	4.2	U	20	4.2	
91-94-1	3,3'-Dichlorobenzidine	11	U	200	11	
117-81-7	Bis(2-ethylhexyl) Phthalate	12	JD	400	4.8	
117-84-0	Di-n-octyl Phthalate	3.4	U	20	3.4	

* See Case Narrative

Comments: _____

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406516
Date Collected: 08/27/2004
Date Received: 08/30/2004
Date Extracted: 09/02/2004
Date Analyzed: 09/23/2004

Semi-Volatile Organic Compounds by GC/MS

Sample Name: LDW-C3-S1
Lab Code: K2406516-011
File ID: J:\MS10\DATA\092304\0923F009.D
Instrument ID: MS10
Extraction Method: EPA 3541
Analysis Method: 8270C

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Lot: KWG0413228
Calibration ID: CAL3836

Sample Amount: 27.94 g
% Solids: 72.2
Dilution Factor: 2

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	72	40-130	09/23/04	Acceptable
Phenol-d6	90	40-130	09/23/04	Acceptable
Nitrobenzene-d5	70	40-130	09/23/04	Acceptable
2-Fluorobiphenyl	31	40-130	09/23/04	Outside Control Limits
2,4,6-Tribromophenol	73	40-130	09/23/04	Acceptable
Terphenyl-d14	64	40-130	09/23/04	Acceptable

† Analyte Comments

4-Methylphenol This analyte cannot be separated from 3-Methylphenol.

Comments: _____

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406516
Date Collected: 08/26/2004
Date Received: 08/30/2004
Date Extracted: 09/02/2004
Date Analyzed: 09/23/2004

Semi-Volatile Organic Compounds by GC/MS

Sample Name: LDW-C2-S1
Lab Code: K2406516-012
File ID: J:\MS10\DATA\092304\0923F010.D
Instrument ID: MS10
Extraction Method: EPA 3541
Analysis Method: 8270C

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Lot: KWG0413228
Calibration ID: CAL3836

Sample Amount: 36.01 g
% Solids: 55.9
Dilution Factor: 2

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
62-75-9	N-Nitrosodimethylamine	22	U	100	22	
62-53-3	Aniline	5.4	U	40	5.4	
111-44-4	Bis(2-chloroethyl) Ether	8.6	U	20	8.6	
108-95-2	Phenol	450	D	60	6.8	
95-57-8	2-Chlorophenol	6.1	U	20	6.1	
541-73-1	1,3-Dichlorobenzene	5.8	U	20	5.8	
106-46-7	1,4-Dichlorobenzene	6.8	U	20	6.8	
95-50-1	1,2-Dichlorobenzene	4.7	U	20	4.7	
100-51-6	Benzyl Alcohol	14	U	20	14	
39638-32-9	Bis(2-chloroisopropyl) Ether	4.3	U	20	4.3	
95-48-7	2-Methylphenol	13	U	20	13	
67-72-1	Hexachloroethane	7.9	U	20	7.9	
621-64-7	N-Nitrosodi-n-propylamine	12	U	20	12	
106-44-5	4-Methylphenol†	62	D	20	11	
98-95-3	Nitrobenzene	7.2	U	20	7.2	
78-59-1	Isophorone	5.8	U	20	5.8	
88-75-5	2-Nitrophenol	9.4	U	20	9.4	
105-67-9	2,4-Dimethylphenol	20	U	100	20	*
111-91-1	Bis(2-chloroethoxy)methane	4.7	U	20	4.7	
120-83-2	2,4-Dichlorophenol	6.5	U	20	6.5	
65-85-0	Benzoic Acid	350	U	400	350	*
120-82-1	1,2,4-Trichlorobenzene	5.4	U	20	5.4	
106-47-8	4-Chloroaniline	7.6	U	20	7.6	
87-68-3	Hexachlorobutadiene	5.1	U	20	5.1	
59-50-7	4-Chloro-3-methylphenol	7.6	U	20	7.6	
77-47-4	Hexachlorocyclopentadiene	54	U	100	54	
88-06-2	2,4,6-Trichlorophenol	6.5	U	20	6.5	
95-95-4	2,4,5-Trichlorophenol	11	U	20	11	

Comments:

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406516
Date Collected: 08/26/2004
Date Received: 08/30/2004
Date Extracted: 09/02/2004
Date Analyzed: 09/23/2004

Semi-Volatile Organic Compounds by GC/MS

Sample Name: LDW-C2-S1
Lab Code: K2406516-012
File ID: J:\MS10\DATA\092304\0923F010.D
Instrument ID: MS10
Extraction Method: EPA 3541
Analysis Method: 8270C

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Lot: KWG0413228
Calibration ID: CAL3836

Sample Amount: 36.01 g
% Solids: 55.9
Dilution Factor: 2

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
91-58-7	2-Chloronaphthalene	13	U	20	13	
88-74-4	2-Nitroaniline	9.7	U	40	9.7	
131-11-3	Dimethyl Phthalate	6.5	U	20	6.5	
606-20-2	2,6-Dinitrotoluene	11	U	20	11	
99-09-2	3-Nitroaniline	9.4	U	40	9.4	
51-28-5	2,4-Dinitrophenol	130	U	400	130	
100-02-7	4-Nitrophenol	110	U	200	110	
121-14-2	2,4-Dinitrotoluene	11	U	20	11	
7005-72-3	4-Chlorophenyl Phenyl Ether	7.2	U	20	7.2	
84-66-2	Diethyl Phthalate	13	U	20	13	
100-01-6	4-Nitroaniline	13	U	40	13	
534-52-1	2-Methyl-4,6-dinitrophenol	6.1	U	200	6.1	
86-30-6	N-Nitrosodiphenylamine	7.9	U	20	7.9	
101-55-3	4-Bromophenyl Phenyl Ether	5.1	U	20	5.1	
118-74-1	Hexachlorobenzene	7.6	U	20	7.6	
87-86-5	Pentachlorophenol	31	U	200	31	
86-74-8	Carbazole	66	D	20	4.7	
84-74-2	Di-n-butyl Phthalate	9.4	U	20	9.4	
92-87-5	Benzidine	720	U	720	720	*
85-68-7	Butyl Benzyl Phthalate	5.4	U	20	5.4	
91-94-1	3,3'-Dichlorobenzidine	14	U	200	14	
117-81-7	Bis(2-ethylhexyl) Phthalate	12	JD	400	6.1	
117-84-0	Di-n-octyl Phthalate	4.3	U	20	4.3	

* See Case Narrative

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406516
Date Collected: 08/26/2004
Date Received: 08/30/2004
Date Extracted: 09/02/2004
Date Analyzed: 09/23/2004

Semi-Volatile Organic Compounds by GC/MS

Sample Name: LDW-C2-S1
Lab Code: K2406516-012
File ID: J:\MS10\DATA\092304\0923F010.D
Instrument ID: MS10
Extraction Method: EPA 3541
Analysis Method: 8270C

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Lot: KWG0413228
Calibration ID: CAL3836

Sample Amount: 36.01 g
% Solids: 55.9
Dilution Factor: 2

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	77	40-130	09/23/04	Acceptable
Phenol-d6	122	40-130	09/23/04	Acceptable
Nitrobenzene-d5	83	40-130	09/23/04	Acceptable
2-Fluorobiphenyl	52	40-130	09/23/04	Acceptable
2,4,6-Tribromophenol	77	40-130	09/23/04	Acceptable
Terphenyl-d14	79	40-130	09/23/04	Acceptable

+ Analyte Comments

4-Methylphenol This analyte cannot be separated from 3-Methylphenol.

Comments: _____

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Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406516
Date Collected: 08/26/2004
Date Received: 08/30/2004
Date Extracted: 09/02/2004
Date Analyzed: 09/23/2004

Semi-Volatile Organic Compounds by GC/MS

Sample Name: LDW-C2-S2
Lab Code: K2406516-013
File ID: J:\MS10\DATA\092304\0923F011.D
Instrument ID: MS10
Extraction Method: EPA 3541
Analysis Method: 8270C

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Lot: KWG0413228
Calibration ID: CAL3836

Sample Amount: 28.53 g
% Solids: 70.4
Dilution Factor: 2

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
62-75-9	N-Nitrosodimethylamine	18	U	100	18	
62-53-3	Aniline	4.3	U	40	4.3	
111-44-4	Bis(2-chloroethyl) Ether	6.9	U	20	6.9	
108-95-2	Phenol	290	D	60	5.4	
95-57-8	2-Chlorophenol	4.9	U	20	4.9	
541-73-1	1,3-Dichlorobenzene	4.6	U	20	4.6	
106-46-7	1,4-Dichlorobenzene	5.4	U	20	5.4	
95-50-1	1,2-Dichlorobenzene	3.7	U	20	3.7	
100-51-6	Benzyl Alcohol	11	U	20	11	
39638-32-9	Bis(2-chloroisopropyl) Ether	3.5	U	20	3.5	
95-48-7	2-Methylphenol	9.7	U	20	9.7	
67-72-1	Hexachloroethane	6.3	U	20	6.3	
621-64-7	N-Nitrosodi-n-propylamine	9.1	U	20	9.1	
106-44-5	4-Methylphenol†	160	D	20	8.3	
98-95-3	Nitrobenzene	5.7	U	20	5.7	
78-59-1	Isophorone	4.6	U	20	4.6	
88-75-5	2-Nitrophenol	7.4	U	20	7.4	
105-67-9	2,4-Dimethylphenol	16	U	100	16	*
111-91-1	Bis(2-chloroethoxy)methane	3.7	U	20	3.7	
120-83-2	2,4-Dichlorophenol	5.2	U	20	5.2	
65-85-0	Benzoic Acid	280	U	400	280	*
120-82-1	1,2,4-Trichlorobenzene	4.3	U	20	4.3	
106-47-8	4-Chloroaniline	6.0	U	20	6.0	
87-68-3	Hexachlorobutadiene	4.0	U	20	4.0	
59-50-7	4-Chloro-3-methylphenol	6.0	U	20	6.0	
77-47-4	Hexachlorocyclopentadiene	43	U	100	43	
88-06-2	2,4,6-Trichlorophenol	5.2	U	20	5.2	
95-95-4	2,4,5-Trichlorophenol	8.6	U	20	8.6	

Comments: _____

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406516
Date Collected: 08/26/2004
Date Received: 08/30/2004
Date Extracted: 09/02/2004
Date Analyzed: 09/23/2004

Semi-Volatile Organic Compounds by GC/MS

Sample Name: LDW-C2-S2
Lab Code: K2406516-013
File ID: J:\MS10\DATA\092304\0923F011.D
Instrument ID: MS10
Extraction Method: EPA 3541
Analysis Method: 8270C

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Lot: KWG0413228
Calibration ID: CAL3836

Sample Amount: 28.53 g
% Solids: 70.4
Dilution Factor: 2

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
91-58-7	2-Chloronaphthalene	11	U	20	11	
88-74-4	2-Nitroaniline	7.7	U	40	7.7	
131-11-3	Dimethyl Phthalate	5.2	U	20	5.2	
606-20-2	2,6-Dinitrotoluene	8.0	U	20	8.0	
99-09-2	3-Nitroaniline	7.4	U	40	7.4	
51-28-5	2,4-Dinitrophenol	110	U	400	110	
100-02-7	4-Nitrophenol	86	U	200	86	
121-14-2	2,4-Dinitrotoluene	8.0	U	20	8.0	
7005-72-3	4-Chlorophenyl Phenyl Ether	5.7	U	20	5.7	
84-66-2	Diethyl Phthalate	10	U	20	10	
100-01-6	4-Nitroaniline	9.7	U	40	9.7	
534-52-1	2-Methyl-4,6-dinitrophenol	4.9	U	200	4.9	
86-30-6	N-Nitrosodiphenylamine	6.3	U	20	6.3	
101-55-3	4-Bromophenyl Phenyl Ether	4.0	U	20	4.0	
118-74-1	Hexachlorobenzene	6.0	U	20	6.0	
87-86-5	Pentachlorophenol	25	U	200	25	
86-74-8	Carbazole	3.7	U	20	3.7	
84-74-2	Di-n-butyl Phthalate	7.4	U	20	7.4	
92-87-5	Benzidine	570	U	570	570	*
85-68-7	Butyl Benzyl Phthalate	4.3	U	20	4.3	
91-94-1	3,3'-Dichlorobenzidine	11	U	200	11	
117-81-7	Bis(2-ethylhexyl) Phthalate	20	JD	400	4.9	
117-84-0	Di-n-octyl Phthalate	3.5	U	20	3.5	

* See Case Narrative

Comments:

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406516
Date Collected: 08/26/2004
Date Received: 08/30/2004
Date Extracted: 09/02/2004
Date Analyzed: 09/23/2004

Semi-Volatile Organic Compounds by GC/MS

Sample Name: LDW-C2-S2
Lab Code: K2406516-013
File ID: J:\MS10\DATA\092304\0923F011.D
Instrument ID: MS10
Extraction Method: EPA 3541
Analysis Method: 8270C

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Lot: KWG0413228
Calibration ID: CAL3836

Sample Amount: 28.53 g
% Solids: 70.4
Dilution Factor: 2

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	56	40-130	09/23/04	Acceptable
Phenol-d6	97	40-130	09/23/04	Acceptable
Nitrobenzene-d5	59	40-130	09/23/04	Acceptable
2-Fluorobiphenyl	30	40-130	09/23/04	Outside Control Limits
2,4,6-Tribromophenol	76	40-130	09/23/04	Acceptable
Terphenyl-d14	75	40-130	09/23/04	Acceptable

† Analyte Comments

4-Methylphenol This analyte cannot be separated from 3-Methylphenol.

Comments:

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406516
Date Collected: 08/26/2004
Date Received: 08/30/2004
Date Extracted: 09/02/2004
Date Analyzed: 09/23/2004

Semi-Volatile Organic Compounds by GC/MS

Sample Name: LDW-C1-S
Lab Code: K2406516-014
File ID: J:\MS10\DATA\092304\0923F012.D
Instrument ID: MS10
Extraction Method: EPA 3541
Analysis Method: 8270C

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Lot: KWG0413228
Calibration ID: CAL3836

Sample Amount: 27.01 g
% Solids: 74.2
Dilution Factor: 2

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
62-75-9	N-Nitrosodimethylamine	17	U	100	17	
62-53-3	Aniline	4.1	U	40	4.1	
111-44-4	Bis(2-chloroethyl) Ether	6.5	U	20	6.5	
108-95-2	Phenol	600	D	60	5.2	
95-57-8	2-Chlorophenol	4.6	U	20	4.6	
541-73-1	1,3-Dichlorobenzene	4.4	U	20	4.4	
106-46-7	1,4-Dichlorobenzene	5.2	U	20	5.2	
95-50-1	1,2-Dichlorobenzene	3.6	U	20	3.6	
100-51-6	Benzyl Alcohol	10	U	20	10	
39638-32-9	Bis(2-chloroisopropyl) Ether	3.3	U	20	3.3	
95-48-7	2-Methylphenol	9.2	U	20	9.2	
67-72-1	Hexachloroethane	6.0	U	20	6.0	
621-64-7	N-Nitrosodi-n-propylamine	8.7	U	20	8.7	
106-44-5	4-Methylphenol†	8.7	JD	20	7.9	
98-95-3	Nitrobenzene	5.4	U	20	5.4	
78-59-1	Isophorone	4.4	U	20	4.4	
88-75-5	2-Nitrophenol	7.1	U	20	7.1	
105-67-9	2,4-Dimethylphenol	15	U	100	15	*
111-91-1	Bis(2-chloroethoxy)methane	3.6	U	20	3.6	
120-83-2	2,4-Dichlorophenol	4.9	U	20	4.9	
65-85-0	Benzoic Acid	260	U	400	260	*
120-82-1	1,2,4-Trichlorobenzene	4.1	U	20	4.1	
106-47-8	4-Chloroaniline	5.7	U	20	5.7	
87-68-3	Hexachlorobutadiene	3.8	U	20	3.8	
59-50-7	4-Chloro-3-methylphenol	5.7	U	20	5.7	
77-47-4	Hexachlorocyclopentadiene	41	U	100	41	
88-06-2	2,4,6-Trichlorophenol	4.9	U	20	4.9	
95-95-4	2,4,5-Trichlorophenol	8.1	U	20	8.1	

Comments:

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406516
Date Collected: 08/26/2004
Date Received: 08/30/2004
Date Extracted: 09/02/2004
Date Analyzed: 09/23/2004

Semi-Volatile Organic Compounds by GC/MS

Sample Name: LDW-C1-S
Lab Code: K2406516-014
File ID: J:\MS10\DATA\092304\0923F012.D
Instrument ID: MS10

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: EPA 3541
Analysis Method: 8270C

Extraction Lot: KWG0413228
Calibration ID: CAL3836

Sample Amount: 27.01 g
% Solids: 74.2
Dilution Factor: 2

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
91-58-7	2-Chloronaphthalene	9.8	U	20	9.8	
88-74-4	2-Nitroaniline	7.3	U	40	7.3	
131-11-3	Dimethyl Phthalate	4.9	U	20	4.9	
606-20-2	2,6-Dinitrotoluene	7.6	U	20	7.6	
99-09-2	3-Nitroaniline	7.1	U	40	7.1	
51-28-5	2,4-Dinitrophenol	98	U	400	98	
100-02-7	4-Nitrophenol	81	U	200	81	
121-14-2	2,4-Dinitrotoluene	7.6	U	20	7.6	
7005-72-3	4-Chlorophenyl Phenyl Ether	5.4	U	20	5.4	
84-66-2	Diethyl Phthalate	9.5	U	20	9.5	
100-01-6	4-Nitroaniline	9.2	U	40	9.2	
534-52-1	2-Methyl-4,6-dinitrophenol	4.6	U	200	4.6	
86-30-6	N-Nitrosodiphenylamine	6.0	U	20	6.0	
101-55-3	4-Bromophenyl Phenyl Ether	3.8	U	20	3.8	
118-74-1	Hexachlorobenzene	5.7	U	20	5.7	
87-86-5	Pentachlorophenol	23	U	200	23	
86-74-8	Carbazole	3.6	U	20	3.6	
84-74-2	Di-n-butyl Phthalate	7.2	JD	20	7.1	
92-87-5	Benzidine	540	U	540	540	*
85-68-7	Butyl Benzyl Phthalate	4.1	U	20	4.1	
91-94-1	3,3'-Dichlorobenzidine	10	U	200	10	
117-81-7	Bis(2-ethylhexyl) Phthalate	30	JD	400	4.6	
117-84-0	Di-n-octyl Phthalate	3.3	U	20	3.3	

* See Case Narrative

Comments: _____

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406516
Date Collected: 08/26/2004
Date Received: 08/30/2004
Date Extracted: 09/02/2004
Date Analyzed: 09/23/2004

Semi-Volatile Organic Compounds by GC/MS

Sample Name: LDW-C1-S
Lab Code: K2406516-014
File ID: J:\MS10\DATA\092304\0923F012.D
Instrument ID: MS10
Extraction Method: EPA 3541
Analysis Method: 8270C

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Lot: KWG0413228
Calibration ID: CAL3836

Sample Amount: 27.01 g
% Solids: 74.2
Dilution Factor: 2

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	74	40-130	09/23/04	Acceptable
Phenol-d6	99	40-130	09/23/04	Acceptable
Nitrobenzene-d5	87	40-130	09/23/04	Acceptable
2-Fluorobiphenyl	60	40-130	09/23/04	Acceptable
2,4,6-Tribromophenol	86	40-130	09/23/04	Acceptable
Terphenyl-d14	90	40-130	09/23/04	Acceptable

† Analyte Comments

4-Methylphenol This analyte cannot be separated from 3-Methylphenol.

Comments: _____

3675

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406516
Date Extracted: 09/02/2004
Date Analyzed: 09/22/2004

Duplicate Sample Summary
Semi-Volatile Organic Compounds by GC/MS

Sample Name: LDW-C5-S
Lab Code: K2406516-010
Extraction Method: EPA 3541
Analysis Method: 8270C

Units: ug/Kg
Basis: Dry
Level: Low
Extraction Lot: KWG0413228

Analyte Name	MRL	MDL	Sample Result	LDW-C5-SDUP KWG0413228-6 Duplicate Sample		Relative Percent Difference	RPD Limit
				Result	Average		
N-Nitrosodimethylamine	250	42	ND	ND	ND	-	50
Aniline	100	11	ND	ND	ND	-	50
Bis(2-chloroethyl) Ether	50	17	ND	ND	ND	-	50
Phenol	150	13	74	43	58	53 #	50
2-Chlorophenol	50	12	ND	ND	ND	-	50
1,3-Dichlorobenzene	50	11	ND	ND	ND	-	50
1,4-Dichlorobenzene	50	13	ND	ND	ND	-	50
1,2-Dichlorobenzene	50	8.8	ND	ND	ND	-	50
Benzyl Alcohol	50	25	ND	ND	ND	-	50
Bis(2-chloroisopropyl) Ether	50	8.1	ND	ND	ND	-	50
2-Methylphenol	50	23	ND	ND	ND	-	50
Hexachloroethane	50	15	ND	ND	ND	-	50
N-Nitrosodi-n-propylamine	50	22	ND	ND	ND	-	50
4-Methylphenol	50	20	ND	ND	ND	-	50
Nitrobenzene	50	14	ND	ND	ND	-	50
Isophorone	50	11	ND	ND	ND	-	50
2-Nitrophenol	50	18	ND	ND	ND	-	50
2,4-Dimethylphenol	250	38	ND	ND	ND	-	50
Bis(2-chloroethoxy)methane	50	8.8	ND	ND	ND	-	50
2,4-Dichlorophenol	50	13	ND	ND	ND	-	50
Benzoic Acid	1000	650	ND	ND	ND	-	50
1,2,4-Trichlorobenzene	50	11	ND	ND	ND	-	50
4-Chloroaniline	50	15	ND	ND	ND	-	50
Hexachlorobutadiene	50	9.5	ND	ND	ND	-	50
4-Chloro-3-methylphenol	50	15	ND	ND	ND	-	50
Hexachlorocyclopentadiene	250	110	ND	ND	ND	-	50
2,4,6-Trichlorophenol	50	13	ND	ND	ND	-	50
2,4,5-Trichlorophenol	50	21	ND	ND	ND	-	50
2-Chloronaphthalene	50	25	ND	ND	ND	-	50
2-Nitroaniline	100	19	ND	ND	ND	-	50
Dimethyl Phthalate	50	13	ND	ND	ND	-	50
2,6-Dinitrotoluene	50	19	ND	ND	ND	-	50
3-Nitroaniline	100	18	ND	ND	ND	-	50
2,4-Dinitrophenol	1000	250	ND	ND	ND	-	50
4-Nitrophenol	500	210	ND	ND	ND	-	50

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406516
Date Extracted: 09/02/2004
Date Analyzed: 09/22/2004

Duplicate Sample Summary
Semi-Volatile Organic Compounds by GC/MS

Sample Name: LDW-C5-S
Lab Code: K2406516-010
Extraction Method: EPA 3541
Analysis Method: 8270C

Units: ug/Kg
Basis: Dry
Level: Low
Extraction Lot: KWG0413228

Analyte Name	MRL	MDL	Sample Result	LDW-C5-SDUP KWG0413228-6 Duplicate Sample		Relative Percent Difference	RPD Limit
				Result	Average		
2,4-Dinitrotoluene	50	19	ND	ND	ND	-	50
4-Chlorophenyl Phenyl Ether	50	14	ND	ND	ND	-	50
Diethyl Phthalate	50	24	ND	ND	ND	-	50
4-Nitroaniline	100	23	ND	ND	ND	-	50
2-Methyl-4,6-dinitrophenol	500	12	ND	ND	ND	-	50
N-Nitrosodiphenylamine	50	15	ND	ND	ND	-	50
4-Bromophenyl Phenyl Ether	50	9.5	ND	ND	ND	-	50
Hexachlorobenzene	50	15	ND	ND	ND	-	50
Pentachlorophenol	500	58	23	ND	NC	NC	50
Carbazole	50	8.8	20	21	20	6 #	50
Di-n-butyl Phthalate	50	18	7.7	ND	NC	NC #	50
Benzidine	1400	1400	ND	ND	ND	-	50
Butyl Benzyl Phthalate	50	11	9.7	ND	NC	NC	50
3,3'-Dichlorobenzidine	500	25	ND	ND	ND	-	50
Bis(2-ethylhexyl) Phthalate	1000	12	37	44	41	19 #	50
Di-n-octyl Phthalate	50	8.1	ND	ND	ND	-	50

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406517
Date Collected: 08/26/2004
Date Received: 08/28/2004
Date Extracted: 09/11/2004
Date Analyzed: 09/30/2004

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: LDW-C8-T
Lab Code: K2406517-001
File ID: J:\MS14\DATA\093004\0930F008.D
Instrument ID: MS14
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Lot: KWG0413784
Calibration ID: CAL3859

Sample Amount: 10.43 g
% Solids: NA
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
62-75-9	N-Nitrosodimethylamine	10	U	39	10	
62-53-3	Aniline	230	U	770	230	
111-44-4	Bis(2-chloroethyl) Ether	8.7	U	39	8.7	
108-95-2	Phenol	36	J	96	17	
95-57-8	2-Chlorophenol	11	U	77	11	
541-73-1	1,3-Dichlorobenzene	11	U	39	11	
106-46-7	1,4-Dichlorobenzene	11	U	39	11	
95-50-1	1,2-Dichlorobenzene	12	U	39	12	
100-51-6	Benzyl Alcohol	6.7	U	39	6.7	
39638-32-9	Bis(2-chloroisopropyl) Ether	11	U	39	11	
95-48-7	2-Methylphenol	53	U	77	53	
67-72-1	Hexachloroethane	8.5	U	39	8.5	
621-64-7	N-Nitrosodi-n-propylamine	8.2	U	39	8.2	
106-44-5	4-Methylphenol†	32	J	77	15	
98-95-3	Nitrobenzene	10	U	39	10	
78-59-1	Isophorone	5.8	U	39	5.8	
88-75-5	2-Nitrophenol	15	U	39	15	
105-67-9	2,4-Dimethylphenol	13	U	77	13	*
111-91-1	Bis(2-chloroethoxy)methane	5.0	U	39	5.0	
120-83-2	2,4-Dichlorophenol	12	U	77	12	
65-85-0	Benzoic Acid	340	J	770	190	*
120-82-1	1,2,4-Trichlorobenzene	9.9	U	39	9.9	
106-47-8	4-Chloroaniline	5.9	U	200	5.9	
87-68-3	Hexachlorobutadiene	8.5	U	39	8.5	
59-50-7	4-Chloro-3-methylphenol	200	Ui	200	200	
77-47-4	Hexachlorocyclopentadiene	5000	U	5000	5000	
88-06-2	2,4,6-Trichlorophenol	8.8	U	77	8.8	
95-95-4	2,4,5-Trichlorophenol	11	U	77	11	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406517
Date Collected: 08/26/2004
Date Received: 08/28/2004
Date Extracted: 09/11/2004
Date Analyzed: 09/30/2004

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: LDW-C8-T
Lab Code: K2406517-001
File ID: J:\MS14\DATA\093004\0930F008.D
Instrument ID: MS14
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Lot: KWG0413784
Calibration ID: CAL3859

Sample Amount: 10.43 g
% Solids: NA
Dilution Factor: 1

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
91-58-7	2-Chloronaphthalene	5.9 U	39	5.9	
88-74-4	2-Nitroaniline	26 U	200	26	
131-11-3	Dimethyl Phthalate	5.1 U	39	5.1	
606-20-2	2,6-Dinitrotoluene	7.0 U	39	7.0	
99-09-2	3-Nitroaniline	8.9 U	390	8.9	
51-28-5	2,4-Dinitrophenol	23 U	770	23	
100-02-7	4-Nitrophenol	7.5 U	390	7.5	
121-14-2	2,4-Dinitrotoluene	8.5 U	77	8.5	
7005-72-3	4-Chlorophenyl Phenyl Ether	4.5 U	39	4.5	
84-66-2	Diethyl Phthalate	9.4 U	77	9.4	
100-01-6	4-Nitroaniline	26 U	200	26	
534-52-1	2-Methyl-4,6-dinitrophenol	15 U	390	15	
86-30-6	N-Nitrosodiphenylamine	9.5 U	39	9.5	
101-55-3	4-Bromophenyl Phenyl Ether	5.5 U	39	5.5	
118-74-1	Hexachlorobenzene	5.9 U	39	5.9	
87-86-5	Pentachlorophenol	31 U	390	31	
86-74-8	Carbazole	33 U	200	33	
84-74-2	Di-n-butyl Phthalate	33 J	39	16	
92-87-5	Benzidine	5000 U	5000	5000	
85-68-7	Butyl Benzyl Phthalate	14 U	39	14	
91-94-1	3,3'-Dichlorobenzidine	780 U	2000	780	
117-81-7	Bis(2-ethylhexyl) Phthalate	220 J	480	53	
117-84-0	Di-n-octyl Phthalate	13 U	39	13	

* See Case Narrative

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406517
Date Collected: 08/26/2004
Date Received: 08/28/2004
Date Extracted: 09/11/2004
Date Analyzed: 09/30/2004

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: LDW-C8-T
Lab Code: K2406517-001
File ID: J:\MS14\DATA\093004\0930F008.D
Instrument ID: MS14
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Lot: KWG0413784
Calibration ID: CAL3859

Sample Amount: 10.43 g
% Solids: NA
Dilution Factor: 1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	66	20-130	09/30/04	Acceptable
Phenol-d6	93	20-130	09/30/04	Acceptable
Nitrobenzene-d5	52	20-130	09/30/04	Acceptable
2-Fluorobiphenyl	70	20-130	09/30/04	Acceptable
2,4,6-Tribromophenol	91	20-130	09/30/04	Acceptable
Terphenyl-d14	106	20-130	09/30/04	Acceptable

† Analyte Comments

4-Methylphenol This analyte cannot be separated from 3-Methylphenol.

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406517
Date Collected: 08/26/2004
Date Received: 08/28/2004
Date Extracted: 09/11/2004
Date Analyzed: 09/30/2004

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: LDW-C7-T2
Lab Code: K2406517-002
File ID: J:\MS14\DATA\093004\0930F009.D
Instrument ID: MS14
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Lot: KWG0413784
Calibration ID: CAL3859

Sample Amount: 10.08 g
% Solids: NA
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
62-75-9	N-Nitrosodimethylamine	10	U	40	10	
62-53-3	Aniline	230	U	800	230	
111-44-4	Bis(2-chloroethyl) Ether	8.7	U	40	8.7	
108-95-2	Phenol	30	J	100	17	
95-57-8	2-Chlorophenol	11	U	80	11	
541-73-1	1,3-Dichlorobenzene	11	U	40	11	
106-46-7	1,4-Dichlorobenzene	11	U	40	11	
95-50-1	1,2-Dichlorobenzene	12	U	40	12	
100-51-6	Benzyl Alcohol	6.7	U	40	6.7	
39638-32-9	Bis(2-chloroisopropyl) Ether	11	U	40	11	
95-48-7	2-Methylphenol	53	U	80	53	
67-72-1	Hexachloroethane	8.5	U	40	8.5	
621-64-7	N-Nitrosodi-n-propylamine	8.2	U	40	8.2	
106-44-5	4-Methylphenol†	41	J	80	15	
98-95-3	Nitrobenzene	10	U	40	10	
78-59-1	Isophorone	5.8	U	40	5.8	
88-75-5	2-Nitrophenol	15	U	40	15	
105-67-9	2,4-Dimethylphenol	13	U	80	13	*
111-91-1	Bis(2-chloroethoxy)methane	5.0	U	40	5.0	
120-83-2	2,4-Dichlorophenol	12	U	80	12	
65-85-0	Benzoic Acid	420	J	800	190	*
120-82-1	1,2,4-Trichlorobenzene	9.9	U	40	9.9	
106-47-8	4-Chloroaniline	5.9	U	200	5.9	
87-68-3	Hexachlorobutadiene	8.5	U	40	8.5	
59-50-7	4-Chloro-3-methylphenol	200	Ui	200	200	
77-47-4	Hexachlorocyclopentadiene	5000	U	5000	5000	
88-06-2	2,4,6-Trichlorophenol	8.8	U	80	8.8	
95-95-4	2,4,5-Trichlorophenol	11	U	80	11	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406517
Date Collected: 08/26/2004
Date Received: 08/28/2004
Date Extracted: 09/11/2004
Date Analyzed: 09/30/2004

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: LDW-C7-T2
Lab Code: K2406517-002
File ID: J:\MS14\DATA\093004\0930F009.D
Instrument ID: MS14
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Lot: KWG0413784
Calibration ID: CAL3859

Sample Amount: 10.08 g
% Solids: NA
Dilution Factor: 1

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
91-58-7	2-Chloronaphthalene	5.9 U	40	5.9	
88-74-4	2-Nitroaniline	26 U	200	26	
131-11-3	Dimethyl Phthalate	5.1 U	40	5.1	
606-20-2	2,6-Dinitrotoluene	7.0 U	40	7.0	
99-09-2	3-Nitroaniline	8.9 U	400	8.9	
51-28-5	2,4-Dinitrophenol	23 U	800	23	
100-02-7	4-Nitrophenol	7.5 U	400	7.5	
121-14-2	2,4-Dinitrotoluene	8.5 U	80	8.5	
7005-72-3	4-Chlorophenyl Phenyl Ether	4.5 U	40	4.5	
84-66-2	Diethyl Phthalate	9.4 U	80	9.4	
100-01-6	4-Nitroaniline	26 U	200	26	
534-52-1	2-Methyl-4,6-dinitrophenol	15 U	400	15	
86-30-6	N-Nitrosodiphenylamine	9.5 U	40	9.5	
101-55-3	4-Bromophenyl Phenyl Ether	5.5 U	40	5.5	
118-74-1	Hexachlorobenzene	5.9 U	40	5.9	
87-86-5	Pentachlorophenol	31 U	400	31	
86-74-8	Carbazole	33 U	200	33	
84-74-2	Di-n-butyl Phthalate	19 J	40	16	
92-87-5	Benzidine	5000 U	5000	5000	
85-68-7	Butyl Benzyl Phthalate	14 U	40	14	
91-94-1	3,3'-Dichlorobenzidine	780 U	2000	780	
117-81-7	Bis(2-ethylhexyl) Phthalate	100 J	500	53	
117-84-0	Di-n-octyl Phthalate	13 U	40	13	

* See Case Narrative

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406517
Date Collected: 08/26/2004
Date Received: 08/28/2004
Date Extracted: 09/11/2004
Date Analyzed: 09/30/2004

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: LDW-C7-T2
Lab Code: K2406517-002
File ID: J:\MS14\DATA\093004\0930F009.D
Instrument ID: MS14
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Lot: KWG0413784
Calibration ID: CAL3859

Sample Amount: 10.08 g
% Solids: NA
Dilution Factor: 1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	63	20-130	09/30/04	Acceptable
Phenol-d6	97	20-130	09/30/04	Acceptable
Nitrobenzene-d5	46	20-130	09/30/04	Acceptable
2-Fluorobiphenyl	67	20-130	09/30/04	Acceptable
2,4,6-Tribromophenol	104	20-130	09/30/04	Acceptable
Terphenyl-d14	121	20-130	09/30/04	Acceptable

† Analyte Comments

4-Methylphenol This analyte cannot be separated from 3-Methylphenol.

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406517
Date Collected: 08/26/2004
Date Received: 08/28/2004
Date Extracted: 09/11/2004
Date Analyzed: 09/30/2004

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: LDW-C7-T1
Lab Code: K2406517-003
File ID: J:\MS14\DATA\093004\0930F010.D
Instrument ID: MS14
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Lot: KWG0413784
Calibration ID: CAL3859

Sample Amount: 10.10 g
% Solids: NA
Dilution Factor: 1

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
62-75-9	N-Nitrosodimethylamine	10 U	40	10	
62-53-3	Aniline	230 U	800	230	
111-44-4	Bis(2-chloroethyl) Ether	8.7 U	40	8.7	
108-95-2	Phenol	29 J	100	17	
95-57-8	2-Chlorophenol	11 U	80	11	
541-73-1	1,3-Dichlorobenzene	11 U	40	11	
106-46-7	1,4-Dichlorobenzene	11 U	40	11	
95-50-1	1,2-Dichlorobenzene	12 U	40	12	
100-51-6	Benzyl Alcohol	6.7 U	40	6.7	
39638-32-9	Bis(2-chloroisopropyl) Ether	11 U	40	11	
95-48-7	2-Methylphenol	53 U	80	53	
67-72-1	Hexachloroethane	8.5 U	40	8.5	
621-64-7	N-Nitrosodi-n-propylamine	8.2 U	40	8.2	
106-44-5	4-Methylphenol†	20 J	80	15	
98-95-3	Nitrobenzene	10 U	40	10	
78-59-1	Isophorone	5.8 U	40	5.8	
88-75-5	2-Nitrophenol	15 U	40	15	
105-67-9	2,4-Dimethylphenol	13 U	80	13	*
111-91-1	Bis(2-chloroethoxy)methane	5.0 U	40	5.0	
120-83-2	2,4-Dichlorophenol	12 U	80	12	
65-85-0	Benzoic Acid	640 J	800	190	*
120-82-1	1,2,4-Trichlorobenzene	9.9 U	40	9.9	
106-47-8	4-Chloroaniline	5.9 U	200	5.9	
87-68-3	Hexachlorobutadiene	8.5 U	40	8.5	
59-50-7	4-Chloro-3-methylphenol	200 U	200	200	
77-47-4	Hexachlorocyclopentadiene	5000 U	5000	5000	
88-06-2	2,4,6-Trichlorophenol	8.8 U	80	8.8	
95-95-4	2,4,5-Trichlorophenol	11 U	80	11	

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406517
Date Collected: 08/26/2004
Date Received: 08/28/2004
Date Extracted: 09/11/2004
Date Analyzed: 09/30/2004

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: LDW-C7-T1
Lab Code: K2406517-003
File ID: J:\MS14\DATA\093004\0930F010.D
Instrument ID: MS14
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Lot: KWG0413784
Calibration ID: CAL3859

Sample Amount: 10.10 g
% Solids: NA
Dilution Factor: 1

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
91-58-7	2-Chloronaphthalene	5.9 U	40	5.9	
88-74-4	2-Nitroaniline	26 U	200	26	
131-11-3	Dimethyl Phthalate	5.1 U	40	5.1	
606-20-2	2,6-Dinitrotoluene	7.0 U	40	7.0	
99-09-2	3-Nitroaniline	8.9 U	400	8.9	
51-28-5	2,4-Dinitrophenol	23 U	800	23	
100-02-7	4-Nitrophenol	7.5 U	400	7.5	
121-14-2	2,4-Dinitrotoluene	8.5 U	80	8.5	
7005-72-3	4-Chlorophenyl Phenyl Ether	4.5 U	40	4.5	
84-66-2	Diethyl Phthalate	9.4 U	80	9.4	
100-01-6	4-Nitroaniline	26 U	200	26	
534-52-1	2-Methyl-4,6-dinitrophenol	15 U	400	15	
86-30-6	N-Nitrosodiphenylamine	9.5 U	40	9.5	
101-55-3	4-Bromophenyl Phenyl Ether	5.5 U	40	5.5	
118-74-1	Hexachlorobenzene	5.9 U	40	5.9	
87-86-5	Pentachlorophenol	31 U	400	31	
86-74-8	Carbazole	33 U	200	33	
84-74-2	Di-n-butyl Phthalate	16 U	40	16	
92-87-5	Benzidine	5000 U	5000	5000	
85-68-7	Butyl Benzyl Phthalate	14 U	40	14	
91-94-1	3,3'-Dichlorobenzidine	780 U	2000	780	
117-81-7	Bis(2-ethylhexyl) Phthalate	84 J	500	53	
117-84-0	Di-n-octyl Phthalate	13 U	40	13	

* See Case Narrative

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406517
Date Collected: 08/26/2004
Date Received: 08/28/2004
Date Extracted: 09/11/2004
Date Analyzed: 09/30/2004

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: LDW-C7-T1
Lab Code: K2406517-003
File ID: J:\MS14\DATA\093004\0930F010.D
Instrument ID: MS14
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Lot: KWG0413784
Calibration ID: CAL3859

Sample Amount: 10.10 g
% Solids: NA
Dilution Factor: 1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	80	20-130	09/30/04	Acceptable
Phenol-d6	100	20-130	09/30/04	Acceptable
Nitrobenzene-d5	72	20-130	09/30/04	Acceptable
2-Fluorobiphenyl	83	20-130	09/30/04	Acceptable
2,4,6-Tribromophenol	95	20-130	09/30/04	Acceptable
Terphenyl-d14	108	20-130	09/30/04	Acceptable

† Analyte Comments

4-Methylphenol This analyte cannot be separated from 3-Methylphenol.

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406517
Date Collected: 08/26/2004
Date Received: 08/28/2004
Date Extracted: 09/11/2004
Date Analyzed: 09/30/2004

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: LDW-C1-T
Lab Code: K2406517-004
File ID: J:\MS14\DATA\093004\0930F011.D
Instrument ID: MS14
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Lot: KWG0413784
Calibration ID: CAL3859

Sample Amount: 10.37 g
% Solids: NA
Dilution Factor: 1

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
62-75-9	N-Nitrosodimethylamine	10 U	39	10	
62-53-3	Aniline	230 U	780	230	
111-44-4	Bis(2-chloroethyl) Ether	8.7 U	39	8.7	
108-95-2	Phenol	19 J	97	17	
95-57-8	2-Chlorophenol	11 U	78	11	
541-73-1	1,3-Dichlorobenzene	11 U	39	11	
106-46-7	1,4-Dichlorobenzene	11 U	39	11	
95-50-1	1,2-Dichlorobenzene	12 U	39	12	
100-51-6	Benzyl Alcohol	6.7 U	39	6.7	
39638-32-9	Bis(2-chloroisopropyl) Ether	11 U	39	11	
95-48-7	2-Methylphenol	53 U	78	53	
67-72-1	Hexachloroethane	8.5 U	39	8.5	
621-64-7	N-Nitrosodi-n-propylamine	8.2 U	39	8.2	
106-44-5	4-Methylphenol†	15 U	78	15	
98-95-3	Nitrobenzene	10 U	39	10	
78-59-1	Isophorone	5.8 U	39	5.8	
88-75-5	2-Nitrophenol	15 U	39	15	
105-67-9	2,4-Dimethylphenol	13 U	78	13	*
111-91-1	Bis(2-chloroethoxy)methane	5.0 U	39	5.0	
120-83-2	2,4-Dichlorophenol	12 U	78	12	
65-85-0	Benzoic Acid	600 J	780	190	*
120-82-1	1,2,4-Trichlorobenzene	9.9 U	39	9.9	
106-47-8	4-Chloroaniline	5.9 U	200	5.9	
87-68-3	Hexachlorobutadiene	8.5 U	39	8.5	
59-50-7	4-Chloro-3-methylphenol	200 Ui	200	200	
77-47-4	Hexachlorocyclopentadiene	5000 U	5000	5000	
88-06-2	2,4,6-Trichlorophenol	8.8 U	78	8.8	
95-95-4	2,4,5-Trichlorophenol	11 U	78	11	

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406517
Date Collected: 08/26/2004
Date Received: 08/28/2004
Date Extracted: 09/11/2004
Date Analyzed: 09/30/2004

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: LDW-C1-T
Lab Code: K2406517-004
File ID: J:\MS14\DATA\093004\0930F011.D
Instrument ID: MS14

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Extraction Lot: KWG0413784
Calibration ID: CAL3859

Sample Amount: 10.37 g
% Solids: NA
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
91-58-7	2-Chloronaphthalene	5.9	U	39	5.9	
88-74-4	2-Nitroaniline	26	U	200	26	
131-11-3	Dimethyl Phthalate	5.1	U	39	5.1	
606-20-2	2,6-Dinitrotoluene	7.0	U	39	7.0	
99-09-2	3-Nitroaniline	8.9	U	390	8.9	
51-28-5	2,4-Dinitrophenol	23	U	780	23	
100-02-7	4-Nitrophenol	7.5	U	390	7.5	
121-14-2	2,4-Dinitrotoluene	8.5	U	78	8.5	
7005-72-3	4-Chlorophenyl Phenyl Ether	4.5	U	39	4.5	
84-66-2	Diethyl Phthalate	9.4	U	78	9.4	
100-01-6	4-Nitroaniline	26	U	200	26	
534-52-1	2-Methyl-4,6-dinitrophenol	15	U	390	15	
86-30-6	N-Nitrosodiphenylamine	9.5	U	39	9.5	
101-55-3	4-Bromophenyl Phenyl Ether	5.5	U	39	5.5	
118-74-1	Hexachlorobenzene	5.9	U	39	5.9	
87-86-5	Pentachlorophenol	31	U	390	31	
86-74-8	Carbazole	33	U	200	33	
84-74-2	Di-n-butyl Phthalate	32	J	39	16	
92-87-5	Benzidine	5000	U	5000	5000	
85-68-7	Butyl Benzyl Phthalate	14	U	39	14	
91-94-1	3,3'-Dichlorobenzidine	780	U	2000	780	
117-81-7	Bis(2-ethylhexyl) Phthalate	67	J	490	53	
117-84-0	Di-n-octyl Phthalate	13	U	39	13	

* See Case Narrative

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406517
Date Collected: 08/26/2004
Date Received: 08/28/2004
Date Extracted: 09/11/2004
Date Analyzed: 09/30/2004

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: LDW-C1-T
Lab Code: K2406517-004
File ID: J:\MS14\DATA\093004\0930F011.D
Instrument ID: MS14
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Lot: KWG0413784
Calibration ID: CAL3859

Sample Amount: 10.37 g
% Solids: NA
Dilution Factor: 1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	74	20-130	09/30/04	Acceptable
Phenol-d6	96	20-130	09/30/04	Acceptable
Nitrobenzene-d5	69	20-130	09/30/04	Acceptable
2-Fluorobiphenyl	80	20-130	09/30/04	Acceptable
2,4,6-Tribromophenol	96	20-130	09/30/04	Acceptable
Terphenyl-d14	110	20-130	09/30/04	Acceptable

† Analyte Comments

4-Methylphenol This analyte cannot be separated from 3-Methylphenol.

Comments: _____

Analytical Results

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406517
Date Collected: 08/26/2004
Date Received: 08/28/2004
Date Extracted: 09/11/2004
Date Analyzed: 09/30/2004

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: LDW-C2-T1
Lab Code: K2406517-005
File ID: J:\MS14\DATA\093004\0930F012.D
Instrument ID: MS14

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Extraction Lot: KWG0413784
Calibration ID: CAL3859

Sample Amount: 10.35 g
% Solids: NA
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
62-75-9	N-Nitrosodimethylamine	10	U	39	10	
62-53-3	Aniline	230	U	780	230	
111-44-4	Bis(2-chloroethyl) Ether	8.7	U	39	8.7	
108-95-2	Phenol	20	J	97	17	
95-57-8	2-Chlorophenol	11	U	78	11	
541-73-1	1,3-Dichlorobenzene	11	U	39	11	
106-46-7	1,4-Dichlorobenzene	11	U	39	11	
95-50-1	1,2-Dichlorobenzene	12	U	39	12	
100-51-6	Benzyl Alcohol	6.7	U	39	6.7	
39638-32-9	Bis(2-chloroisopropyl) Ether	11	U	39	11	
95-48-7	2-Methylphenol	53	U	78	53	
67-72-1	Hexachloroethane	8.5	U	39	8.5	
621-64-7	N-Nitrosodi-n-propylamine	8.2	U	39	8.2	
106-44-5	4-Methylphenol†	15	U	78	15	
98-95-3	Nitrobenzene	10	U	39	10	
78-59-1	Isophorone	5.8	U	39	5.8	
88-75-5	2-Nitrophenol	15	U	39	15	
105-67-9	2,4-Dimethylphenol	13	U	78	13	*
111-91-1	Bis(2-chloroethoxy)methane	5.0	U	39	5.0	
120-83-2	2,4-Dichlorophenol	12	U	78	12	
65-85-0	Benzoic Acid	430	J	780	190	*
120-82-1	1,2,4-Trichlorobenzene	9.9	U	39	9.9	
106-47-8	4-Chloroaniline	5.9	U	200	5.9	
87-68-3	Hexachlorobutadiene	8.5	U	39	8.5	
59-50-7	4-Chloro-3-methylphenol	200	Ui	200	200	
77-47-4	Hexachlorocyclopentadiene	5000	U	5000	5000	
88-06-2	2,4,6-Trichlorophenol	8.8	U	78	8.8	
95-95-4	2,4,5-Trichlorophenol	11	U	78	11	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406517
Date Collected: 08/26/2004
Date Received: 08/28/2004
Date Extracted: 09/11/2004
Date Analyzed: 09/30/2004

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: LDW-C2-T1
Lab Code: K2406517-005
File ID: J:\MS14\DATA\093004\0930F012.D
Instrument ID: MS14
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Lot: KWG0413784
Calibration ID: CAL3859

Sample Amount: 10.35 g
% Solids: NA
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
91-58-7	2-Chloronaphthalene	5.9	U	39	5.9	
88-74-4	2-Nitroaniline	26	U	200	26	
131-11-3	Dimethyl Phthalate	5.1	U	39	5.1	
606-20-2	2,6-Dinitrotoluene	7.0	U	39	7.0	
99-09-2	3-Nitroaniline	8.9	U	390	8.9	
51-28-5	2,4-Dinitrophenol	23	U	780	23	
100-02-7	4-Nitrophenol	7.5	U	390	7.5	
121-14-2	2,4-Dinitrotoluene	8.5	U	78	8.5	
7005-72-3	4-Chlorophenyl Phenyl Ether	4.5	U	39	4.5	
84-66-2	Diethyl Phthalate	9.4	U	78	9.4	
100-01-6	4-Nitroaniline	26	U	200	26	
534-52-1	2-Methyl-4,6-dinitrophenol	15	U	390	15	
86-30-6	N-Nitrosodiphenylamine	9.5	U	39	9.5	
101-55-3	4-Bromophenyl Phenyl Ether	5.5	U	39	5.5	
118-74-1	Hexachlorobenzene	5.9	U	39	5.9	
87-86-5	Pentachlorophenol	31	U	390	31	
86-74-8	Carbazole	33	U	200	33	
84-74-2	Di-n-butyl Phthalate	34	J	39	16	
92-87-5	Benzidine	5000	U	5000	5000	
85-68-7	Butyl Benzyl Phthalate	14	U	39	14	
91-94-1	3,3'-Dichlorobenzidine	780	U	2000	780	
117-81-7	Bis(2-ethylhexyl) Phthalate	53	U	490	53	
117-84-0	Di-n-octyl Phthalate	13	U	39	13	

* See Case Narrative

Comments: _____

Analytical Results

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406517
Date Collected: 08/26/2004
Date Received: 08/28/2004
Date Extracted: 09/11/2004
Date Analyzed: 09/30/2004

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: LDW-C2-T1
Lab Code: K2406517-005
File ID: J:\MS14\DATA\093004\0930F012.D
Instrument ID: MS14
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Lot: KWG0413784
Calibration ID: CAL3859

Sample Amount: 10.35 g
% Solids: NA
Dilution Factor: 1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	81	20-130	09/30/04	Acceptable
Phenol-d6	106	20-130	09/30/04	Acceptable
Nitrobenzene-d5	68	20-130	09/30/04	Acceptable
2-Fluorobiphenyl	86	20-130	09/30/04	Acceptable
2,4,6-Tribromophenol	105	20-130	09/30/04	Acceptable
Terphenyl-d14	123	20-130	09/30/04	Acceptable

† Analyte Comments

4-Methylphenol This analyte cannot be separated from 3-Methylphenol.

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406517
Date Collected: 08/26/2004
Date Received: 08/28/2004
Date Extracted: 09/11/2004
Date Analyzed: 09/30/2004

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: LDW-C2-T2
Lab Code: K2406517-006
File ID: J:\MS14\DATA\093004\0930F007.D
Instrument ID: MS14

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Extraction Lot: KWG0413784
Calibration ID: CAL3859

Sample Amount: 10.16 g
% Solids: NA
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
62-75-9	N-Nitrosodimethylamine	10	U	40	10	
62-53-3	Aniline	230	U	790	230	
111-44-4	Bis(2-chloroethyl) Ether	8.7	U	40	8.7	
108-95-2	Phenol	24	J	99	17	
95-57-8	2-Chlorophenol	11	U	79	11	
541-73-1	1,3-Dichlorobenzene	11	U	40	11	
106-46-7	1,4-Dichlorobenzene	11	U	40	11	
95-50-1	1,2-Dichlorobenzene	12	U	40	12	
100-51-6	Benzyl Alcohol	6.7	U	40	6.7	
39638-32-9	Bis(2-chloroisopropyl) Ether	11	U	40	11	
95-48-7	2-Methylphenol	53	U	79	53	
67-72-1	Hexachloroethane	8.5	U	40	8.5	
621-64-7	N-Nitrosodi-n-propylamine	8.2	U	40	8.2	
106-44-5	4-Methylphenol†	16	J	79	15	
98-95-3	Nitrobenzene	10	U	40	10	
78-59-1	Isophorone	5.8	U	40	5.8	
88-75-5	2-Nitrophenol	15	U	40	15	
105-67-9	2,4-Dimethylphenol	13	U	79	13	*
111-91-1	Bis(2-chloroethoxy)methane	5.0	U	40	5.0	
120-83-2	2,4-Dichlorophenol	12	U	79	12	
65-85-0	Benzoic Acid	360	J	790	190	*
120-82-1	1,2,4-Trichlorobenzene	9.9	U	40	9.9	
106-47-8	4-Chloroaniline	5.9	U	200	5.9	
87-68-3	Hexachlorobutadiene	8.5	U	40	8.5	
59-50-7	4-Chloro-3-methylphenol	200	Ui	200	200	
77-47-4	Hexachlorocyclopentadiene	5000	U	5000	5000	
88-06-2	2,4,6-Trichlorophenol	8.8	U	79	8.8	
95-95-4	2,4,5-Trichlorophenol	11	U	79	11	

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406517
Date Collected: 08/26/2004
Date Received: 08/28/2004
Date Extracted: 09/11/2004
Date Analyzed: 09/30/2004

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: LDW-C2-T2
Lab Code: K2406517-006
File ID: J:\MS14\DATA\093004\0930F007.D
Instrument ID: MS14
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Lot: KWG0413784
Calibration ID: CAL3859

Sample Amount: 10.16 g
% Solids: NA
Dilution Factor: 1

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
91-58-7	2-Chloronaphthalene	5.9 U	40	5.9	
88-74-4	2-Nitroaniline	26 U	200	26	
131-11-3	Dimethyl Phthalate	5.1 U	40	5.1	
606-20-2	2,6-Dinitrotoluene	7.0 U	40	7.0	
99-09-2	3-Nitroaniline	8.9 U	400	8.9	
51-28-5	2,4-Dinitrophenol	23 U	790	23	
100-02-7	4-Nitrophenol	7.5 U	400	7.5	
121-14-2	2,4-Dinitrotoluene	8.5 U	79	8.5	
7005-72-3	4-Chlorophenyl Phenyl Ether	4.5 U	40	4.5	
84-66-2	Diethyl Phthalate	9.5 J	79	9.4	
100-01-6	4-Nitroaniline	26 U	200	26	
534-52-1	2-Methyl-4,6-dinitrophenol	15 U	400	15	
86-30-6	N-Nitrosodiphenylamine	9.5 U	40	9.5	
101-55-3	4-Bromophenyl Phenyl Ether	5.5 U	40	5.5	
118-74-1	Hexachlorobenzene	5.9 U	40	5.9	
87-86-5	Pentachlorophenol	31 U	400	31	
86-74-8	Carbazole	33 U	200	33	
84-74-2	Di-n-butyl Phthalate	16 U	40	16	
92-87-5	Benzidine	5000 U	5000	5000	
85-68-7	Butyl Benzyl Phthalate	14 U	40	14	
91-94-1	3,3'-Dichlorobenzidine	780 U	2000	780	
117-81-7	Bis(2-ethylhexyl) Phthalate	53 U	500	53	
117-84-0	Di-n-octyl Phthalate	13 U	40	13	

* See Case Narrative

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406517
Date Collected: 08/26/2004
Date Received: 08/28/2004
Date Extracted: 09/11/2004
Date Analyzed: 09/30/2004

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: LDW-C2-T2
Lab Code: K2406517-006
File ID: J:\MS14\DATA\093004\0930F007.D
Instrument ID: MS14
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Lot: KWG0413784
Calibration ID: CAL3859

Sample Amount: 10.16 g
% Solids: NA
Dilution Factor: 1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	89	20-130	09/30/04	Acceptable
Phenol-d6	112	20-130	09/30/04	Acceptable
Nitrobenzene-d5	83	20-130	09/30/04	Acceptable
2-Fluorobiphenyl	94	20-130	09/30/04	Acceptable
2,4,6-Tribromophenol	111	20-130	09/30/04	Acceptable
Terphenyl-d14	128	20-130	09/30/04	Acceptable

† Analyte Comments

4-Methylphenol This analyte cannot be separated from 3-Methylphenol.

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406517
Date Collected: 08/25/2004
Date Received: 08/28/2004
Date Extracted: 09/11/2004
Date Analyzed: 09/30/2004

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: LDW-C10-T2
Lab Code: K2406517-007
File ID: J:\MS14\DATA\093004\0930F013.D
Instrument ID: MS14
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Lot: KWG0413784
Calibration ID: CAL3859

Sample Amount: 10.00 g
% Solids: NA
Dilution Factor: 1

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
62-75-9	N-Nitrosodimethylamine	10 U	40	10	
62-53-3	Aniline	230 U	800	230	
111-44-4	Bis(2-chloroethyl) Ether	8.7 U	40	8.7	
108-95-2	Phenol	17 U	100	17	
95-57-8	2-Chlorophenol	11 U	80	11	
541-73-1	1,3-Dichlorobenzene	11 U	40	11	
106-46-7	1,4-Dichlorobenzene	11 U	40	11	
95-50-1	1,2-Dichlorobenzene	12 U	40	12	
100-51-6	Benzyl Alcohol	6.7 U	40	6.7	
39638-32-9	Bis(2-chloroisopropyl) Ether	11 U	40	11	
95-48-7	2-Methylphenol	53 U	80	53	
67-72-1	Hexachloroethane	8.5 U	40	8.5	
621-64-7	N-Nitrosodi-n-propylamine	8.2 U	40	8.2	
106-44-5	4-Methylphenol†	15 U	80	15	
98-95-3	Nitrobenzene	10 U	40	10	
78-59-1	Isophorone	5.8 U	40	5.8	
88-75-5	2-Nitrophenol	15 U	40	15	
105-67-9	2,4-Dimethylphenol	13 U	80	13	*
111-91-1	Bis(2-chloroethoxy)methane	5.0 U	40	5.0	
120-83-2	2,4-Dichlorophenol	12 U	80	12	
65-85-0	Benzoic Acid	460 J	800	190	*
120-82-1	1,2,4-Trichlorobenzene	9.9 U	40	9.9	
106-47-8	4-Chloroaniline	5.9 U	200	5.9	
87-68-3	Hexachlorobutadiene	8.5 U	40	8.5	
59-50-7	4-Chloro-3-methylphenol	200 Ui	200	200	
77-47-4	Hexachlorocyclopentadiene	5000 U	5000	5000	
88-06-2	2,4,6-Trichlorophenol	8.8 U	80	8.8	
95-95-4	2,4,5-Trichlorophenol	11 U	80	11	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406517
Date Collected: 08/25/2004
Date Received: 08/28/2004
Date Extracted: 09/11/2004
Date Analyzed: 09/30/2004

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: LDW-C10-T2
Lab Code: K2406517-007
File ID: J:\MS14\DATA\093004\0930F013.D
Instrument ID: MS14

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Extraction Lot: KWG0413784
Calibration ID: CAL3859

Sample Amount: 10.00 g
% Solids: NA
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
91-58-7	2-Chloronaphthalene	5.9	U	40	5.9	
88-74-4	2-Nitroaniline	26	U	200	26	
131-11-3	Dimethyl Phthalate	5.1	U	40	5.1	
606-20-2	2,6-Dinitrotoluene	7.0	U	40	7.0	
99-09-2	3-Nitroaniline	8.9	U	400	8.9	
51-28-5	2,4-Dinitrophenol	23	U	800	23	
100-02-7	4-Nitrophenol	7.5	U	400	7.5	
121-14-2	2,4-Dinitrotoluene	8.5	U	80	8.5	
7005-72-3	4-Chlorophenyl Phenyl Ether	4.5	U	40	4.5	
84-66-2	Diethyl Phthalate	9.4	U	80	9.4	
100-01-6	4-Nitroaniline	26	U	200	26	
534-52-1	2-Methyl-4,6-dinitrophenol	15	U	400	15	
86-30-6	N-Nitrosodiphenylamine	9.5	U	40	9.5	
101-55-3	4-Bromophenyl Phenyl Ether	5.5	U	40	5.5	
118-74-1	Hexachlorobenzene	5.9	U	40	5.9	
87-86-5	Pentachlorophenol	31	U	400	31	
86-74-8	Carbazole	33	U	200	33	
84-74-2	Di-n-butyl Phthalate	16	U	40	16	
92-87-5	Benzidine	5000	U	5000	5000	
85-68-7	Butyl Benzyl Phthalate	14	U	40	14	
91-94-1	3,3'-Dichlorobenzidine	780	U	2000	780	
117-81-7	Bis(2-ethylhexyl) Phthalate	53	U	500	53	
117-84-0	Di-n-octyl Phthalate	13	U	40	13	

* See Case Narrative

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406517
Date Collected: 08/25/2004
Date Received: 08/28/2004
Date Extracted: 09/11/2004
Date Analyzed: 09/30/2004

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: LDW-C10-T2
Lab Code: K2406517-007
File ID: J:\MS14\DATA\093004\0930F013.D
Instrument ID: MS14
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Lot: KWG0413784
Calibration ID: CAL3859

Sample Amount: 10.00 g
% Solids: NA
Dilution Factor: 1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	86	20-130	09/30/04	Acceptable
Phenol-d6	101	20-130	09/30/04	Acceptable
Nitrobenzene-d5	78	20-130	09/30/04	Acceptable
2-Fluorobiphenyl	87	20-130	09/30/04	Acceptable
2,4,6-Tribromophenol	102	20-130	09/30/04	Acceptable
Terphenyl-d14	117	20-130	09/30/04	Acceptable

† Analyte Comments

4-Methylphenol This analyte cannot be separated from 3-Methylphenol.

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406517
Date Collected: 08/25/2004
Date Received: 08/28/2004
Date Extracted: 09/11/2004
Date Analyzed: 09/30/2004

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: LDW-C10-T1
Lab Code: K2406517-008
File ID: J:\MS14\DATA\093004\0930F014.D
Instrument ID: MS14

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Extraction Lot: KWG0413784
Calibration ID: CAL3859

Sample Amount: 10.10 g
% Solids: NA
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
62-75-9	N-Nitrosodimethylamine	10	U	40	10	
62-53-3	Aniline	230	U	800	230	
111-44-4	Bis(2-chloroethyl) Ether	8.7	U	40	8.7	
108-95-2	Phenol	35	J	100	17	
95-57-8	2-Chlorophenol	11	U	80	11	
541-73-1	1,3-Dichlorobenzene	11	U	40	11	
106-46-7	1,4-Dichlorobenzene	11	U	40	11	
95-50-1	1,2-Dichlorobenzene	12	U	40	12	
100-51-6	Benzyl Alcohol	6.7	U	40	6.7	
39638-32-9	Bis(2-chloroisopropyl) Ether	11	U	40	11	
95-48-7	2-Methylphenol	53	U	80	53	
67-72-1	Hexachloroethane	8.5	U	40	8.5	
621-64-7	N-Nitrosodi-n-propylamine	8.2	U	40	8.2	
106-44-5	4-Methylphenol†	15	J	80	15	
98-95-3	Nitrobenzene	10	U	40	10	
78-59-1	Isophorone	5.8	U	40	5.8	
88-75-5	2-Nitrophenol	15	U	40	15	
105-67-9	2,4-Dimethylphenol	13	U	80	13	*
111-91-1	Bis(2-chloroethoxy)methane	5.0	U	40	5.0	
120-83-2	2,4-Dichlorophenol	12	U	80	12	
65-85-0	Benzoic Acid	500	J	800	190	*
120-82-1	1,2,4-Trichlorobenzene	9.9	U	40	9.9	
106-47-8	4-Chloroaniline	5.9	U	200	5.9	
87-68-3	Hexachlorobutadiene	8.5	U	40	8.5	
59-50-7	4-Chloro-3-methylphenol	200	Ui	200	200	
77-47-4	Hexachlorocyclopentadiene	5000	U	5000	5000	
88-06-2	2,4,6-Trichlorophenol	8.8	U	80	8.8	
95-95-4	2,4,5-Trichlorophenol	11	U	80	11	

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406517
Date Collected: 08/25/2004
Date Received: 08/28/2004
Date Extracted: 09/11/2004
Date Analyzed: 09/30/2004

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: LDW-C10-T1
Lab Code: K2406517-008
File ID: J:\MS14\DATA\093004\0930F014.D
Instrument ID: MS14
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Lot: KWGO413784
Calibration ID: CAL3859

Sample Amount: 10.10 g
% Solids: NA
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
91-58-7	2-Chloronaphthalene	5.9	U	40	5.9	
88-74-4	2-Nitroaniline	26	U	200	26	
131-11-3	Dimethyl Phthalate	5.1	U	40	5.1	
606-20-2	2,6-Dinitrotoluene	7.0	U	40	7.0	
99-09-2	3-Nitroaniline	8.9	U	400	8.9	
51-28-5	2,4-Dinitrophenol	23	U	800	23	
100-02-7	4-Nitrophenol	7.5	U	400	7.5	
121-14-2	2,4-Dinitrotoluene	8.5	U	80	8.5	
7005-72-3	4-Chlorophenyl Phenyl Ether	4.5	U	40	4.5	
84-66-2	Diethyl Phthalate	9.4	U	80	9.4	
100-01-6	4-Nitroaniline	26	U	200	26	
534-52-1	2-Methyl-4,6-dinitrophenol	15	U	400	15	
86-30-6	N-Nitrosodiphenylamine	9.5	U	40	9.5	
101-55-3	4-Bromophenyl Phenyl Ether	5.5	U	40	5.5	
118-74-1	Hexachlorobenzene	5.9	U	40	5.9	
87-86-5	Pentachlorophenol	31	U	400	31	
86-74-8	Carbazole	33	U	200	33	
84-74-2	Di-n-butyl Phthalate	16	U	40	16	
92-87-5	Benzidine	5000	U	5000	5000	
85-68-7	Butyl Benzyl Phthalate	14	U	40	14	
91-94-1	3,3'-Dichlorobenzidine	780	U	2000	780	
117-81-7	Bis(2-ethylhexyl) Phthalate	56	J	500	53	
117-84-0	Di-n-octyl Phthalate	13	U	40	13	

* See Case Narrative

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406517
Date Collected: 08/25/2004
Date Received: 08/28/2004
Date Extracted: 09/11/2004
Date Analyzed: 09/30/2004

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: LDW-C10-T1
Lab Code: K2406517-008
File ID: J:\MS14\DATA\093004\0930F014.D
Instrument ID: MS14
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Lot: KWG0413784
Calibration ID: CAL3859

Sample Amount: 10.10 g
% Solids: NA
Dilution Factor: 1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	88	20-130	09/30/04	Acceptable
Phenol-d6	110	20-130	09/30/04	Acceptable
Nitrobenzene-d5	78	20-130	09/30/04	Acceptable
2-Fluorobiphenyl	84	20-130	09/30/04	Acceptable
2,4,6-Tribromophenol	100	20-130	09/30/04	Acceptable
Terphenyl-d14	112	20-130	09/30/04	Acceptable

† Analyte Comments

4-Methylphenol This analyte cannot be separated from 3-Methylphenol.

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406517
Date Collected: 08/27/2004
Date Received: 08/28/2004
Date Extracted: 09/11/2004
Date Analyzed: 09/30/2004

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: LDW-C5-T
Lab Code: K2406517-009
File ID: J:\MS14\DATA\093004\0930F015.D
Instrument ID: MS14
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Lot: KWG0413784
Calibration ID: CAL3859

Sample Amount: 10.18 g
% Solids: NA
Dilution Factor: 1

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
62-75-9	N-Nitrosodimethylamine	10 U	40	10	
62-53-3	Aniline	230 U	790	230	
111-44-4	Bis(2-chloroethyl) Ether	8.7 U	40	8.7	
108-95-2	Phenol	18 J	99	17	
95-57-8	2-Chlorophenol	11 U	79	11	
541-73-1	1,3-Dichlorobenzene	11 U	40	11	
106-46-7	1,4-Dichlorobenzene	11 U	40	11	
95-50-1	1,2-Dichlorobenzene	12 U	40	12	
100-51-6	Benzyl Alcohol	6.7 U	40	6.7	
39638-32-9	Bis(2-chloroisopropyl) Ether	11 U	40	11	
95-48-7	2-Methylphenol	53 U	79	53	
67-72-1	Hexachloroethane	8.5 U	40	8.5	
621-64-7	N-Nitrosodi-n-propylamine	8.2 U	40	8.2	
106-44-5	4-Methylphenol†	15 U	79	15	
98-95-3	Nitrobenzene	10 U	40	10	
78-59-1	Isophorone	5.8 U	40	5.8	
88-75-5	2-Nitrophenol	15 U	40	15	
105-67-9	2,4-Dimethylphenol	13 U	79	13	*
111-91-1	Bis(2-chloroethoxy)methane	5.0 U	40	5.0	
120-83-2	2,4-Dichlorophenol	12 U	79	12	
65-85-0	Benzoic Acid	430 J	790	190	*
120-82-1	1,2,4-Trichlorobenzene	9.9 U	40	9.9	
106-47-8	4-Chloroaniline	5.9 U	200	5.9	
87-68-3	Hexachlorobutadiene	8.5 U	40	8.5	
59-50-7	4-Chloro-3-methylphenol	200 Ui	200	200	
77-47-4	Hexachlorocyclopentadiene	5000 U	5000	5000	
88-06-2	2,4,6-Trichlorophenol	8.8 U	79	8.8	
95-95-4	2,4,5-Trichlorophenol	11 U	79	11	

Comments: _____

Analytical Results

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406517
Date Collected: 08/27/2004
Date Received: 08/28/2004
Date Extracted: 09/11/2004
Date Analyzed: 09/30/2004

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: LDW-C5-T
Lab Code: K2406517-009
File ID: J:\MS14\DATA\093004\0930F015.D
Instrument ID: MS14

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Extraction Lot: KWG0413784
Calibration ID: CAL3859

Sample Amount: 10.18 g
% Solids: NA
Dilution Factor: 1

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
91-58-7	2-Chloronaphthalene	5.9 U	40	5.9	
88-74-4	2-Nitroaniline	26 U	200	26	
131-11-3	Dimethyl Phthalate	5.1 U	40	5.1	
606-20-2	2,6-Dinitrotoluene	7.0 U	40	7.0	
99-09-2	3-Nitroaniline	8.9 U	400	8.9	
51-28-5	2,4-Dinitrophenol	23 U	790	23	
100-02-7	4-Nitrophenol	7.5 U	400	7.5	
121-14-2	2,4-Dinitrotoluene	8.5 U	79	8.5	
7005-72-3	4-Chlorophenyl Phenyl Ether	4.5 U	40	4.5	
84-66-2	Diethyl Phthalate	9.4 U	79	9.4	
100-01-6	4-Nitroaniline	26 U	200	26	
534-52-1	2-Methyl-4,6-dinitrophenol	15 U	400	15	
86-30-6	N-Nitrosodiphenylamine	9.5 U	40	9.5	
101-55-3	4-Bromophenyl Phenyl Ether	5.5 U	40	5.5	
118-74-1	Hexachlorobenzene	5.9 U	40	5.9	
87-86-5	Pentachlorophenol	31 U	400	31	
86-74-8	Carbazole	33 U	200	33	
84-74-2	Di-n-butyl Phthalate	16 U	40	16	
92-87-5	Benzidine	5000 U	5000	5000	
85-68-7	Butyl Benzyl Phthalate	14 U	40	14	
91-94-1	3,3'-Dichlorobenzidine	780 U	2000	780	
117-81-7	Bis(2-ethylhexyl) Phthalate	53 U	500	53	
117-84-0	Di-n-octyl Phthalate	13 U	40	13	

* See Case Narrative

Comments: _____

Analytical Results

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406517
Date Collected: 08/27/2004
Date Received: 08/28/2004
Date Extracted: 09/11/2004
Date Analyzed: 09/30/2004

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: LDW-C5-T
Lab Code: K2406517-009
File ID: J:\MS14\DATA\093004\0930F015.D
Instrument ID: MS14
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Lot: KWG0413784
Calibration ID: CAL3859

Sample Amount: 10.18 g
% Solids: NA
Dilution Factor: 1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	92	20-130	09/30/04	Acceptable
Phenol-d6	104	20-130	09/30/04	Acceptable
Nitrobenzene-d5	88	20-130	09/30/04	Acceptable
2-Fluorobiphenyl	94	20-130	09/30/04	Acceptable
2,4,6-Tribromophenol	103	20-130	09/30/04	Acceptable
Terphenyl-d14	116	20-130	09/30/04	Acceptable

† Analyte Comments

4-Methylphenol This analyte cannot be separated from 3-Methylphenol.

Comments: _____

Analytical Results

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406517
Date Collected: 08/27/2004
Date Received: 08/28/2004
Date Extracted: 09/11/2004
Date Analyzed: 09/30/2004

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: LDW-C3-T2
Lab Code: K2406517-010
File ID: J:\MS14\DATA\093004\0930F016.D
Instrument ID: MS14

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Extraction Lot: KWG0413784
Calibration ID: CAL3859

Sample Amount: 10.28 g
% Solids: NA
Dilution Factor: 1

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
62-75-9	N-Nitrosodimethylamine	10 U	39	10	
62-53-3	Aniline	230 U	780	230	
111-44-4	Bis(2-chloroethyl) Ether	8.7 U	39	8.7	
108-95-2	Phenol	18 J	98	17	
95-57-8	2-Chlorophenol	11 U	78	11	
541-73-1	1,3-Dichlorobenzene	11 U	39	11	
106-46-7	1,4-Dichlorobenzene	11 U	39	11	
95-50-1	1,2-Dichlorobenzene	12 U	39	12	
100-51-6	Benzyl Alcohol	6.7 U	39	6.7	
39638-32-9	Bis(2-chloroisopropyl) Ether	11 U	39	11	
95-48-7	2-Methylphenol	53 U	78	53	
67-72-1	Hexachloroethane	8.5 U	39	8.5	
621-64-7	N-Nitrosodi-n-propylamine	8.2 U	39	8.2	
106-44-5	4-Methylphenol†	15 U	78	15	
98-95-3	Nitrobenzene	10 U	39	10	
78-59-1	Isophorone	5.8 U	39	5.8	
88-75-5	2-Nitrophenol	15 U	39	15	
105-67-9	2,4-Dimethylphenol	13 U	78	13	*
111-91-1	Bis(2-chloroethoxy)methane	5.0 U	39	5.0	
120-83-2	2,4-Dichlorophenol	12 U	78	12	
65-85-0	Benzoic Acid	360 J	780	190	*
120-82-1	1,2,4-Trichlorobenzene	9.9 U	39	9.9	
106-47-8	4-Chloroaniline	5.9 U	200	5.9	
87-68-3	Hexachlorobutadiene	8.5 U	39	8.5	
59-50-7	4-Chloro-3-methylphenol	200 U	200	200	
77-47-4	Hexachlorocyclopentadiene	5000 U	5000	5000	
88-06-2	2,4,6-Trichlorophenol	8.8 U	78	8.8	
95-95-4	2,4,5-Trichlorophenol	11 U	78	11	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406517
Date Collected: 08/27/2004
Date Received: 08/28/2004
Date Extracted: 09/11/2004
Date Analyzed: 09/30/2004

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: LDW-C3-T2
Lab Code: K2406517-010
File ID: J:\MS14\DATA\093004\0930F016.D
Instrument ID: MS14
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Lot: KWG0413784
Calibration ID: CAL3859

Sample Amount: 10.28 g
% Solids: NA
Dilution Factor: 1

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
91-58-7	2-Chloronaphthalene	5.9 U	39	5.9	
88-74-4	2-Nitroaniline	26 U	200	26	
131-11-3	Dimethyl Phthalate	5.1 U	39	5.1	
606-20-2	2,6-Dinitrotoluene	7.0 U	39	7.0	
99-09-2	3-Nitroaniline	8.9 U	390	8.9	
51-28-5	2,4-Dinitrophenol	23 U	780	23	
100-02-7	4-Nitrophenol	7.5 U	390	7.5	
121-14-2	2,4-Dinitrotoluene	8.5 U	78	8.5	
7005-72-3	4-Chlorophenyl Phenyl Ether	4.5 U	39	4.5	
84-66-2	Diethyl Phthalate	9.4 U	78	9.4	
100-01-6	4-Nitroaniline	26 U	200	26	
534-52-1	2-Methyl-4,6-dinitrophenol	15 U	390	15	
86-30-6	N-Nitrosodiphenylamine	9.5 U	39	9.5	
101-55-3	4-Bromophenyl Phenyl Ether	5.5 U	39	5.5	
118-74-1	Hexachlorobenzene	5.9 U	39	5.9	
87-86-5	Pentachlorophenol	31 U	390	31	
86-74-8	Carbazole	33 U	200	33	
84-74-2	Di-n-butyl Phthalate	16 U	39	16	
92-87-5	Benzidine	5000 U	5000	5000	
85-68-7	Butyl Benzyl Phthalate	14 U	39	14	
91-94-1	3,3'-Dichlorobenzidine	780 U	2000	780	
117-81-7	Bis(2-ethylhexyl) Phthalate	56 J	490	53	
117-84-0	Di-n-octyl Phthalate	13 U	39	13	

* See Case Narrative

Comments: _____

Analytical Results

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406517
Date Collected: 08/27/2004
Date Received: 08/28/2004
Date Extracted: 09/11/2004
Date Analyzed: 09/30/2004

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: LDW-C3-T2
Lab Code: K2406517-010
File ID: J:\MS14\DATA\093004\0930F016.D
Instrument ID: MS14
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Lot: KWG0413784
Calibration ID: CAL3859

Sample Amount: 10.28 g
% Solids: NA
Dilution Factor: 1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	80	20-130	09/30/04	Acceptable
Phenol-d6	107	20-130	09/30/04	Acceptable
Nitrobenzene-d5	72	20-130	09/30/04	Acceptable
2-Fluorobiphenyl	83	20-130	09/30/04	Acceptable
2,4,6-Tribromophenol	99	20-130	09/30/04	Acceptable
Terphenyl-d14	114	20-130	09/30/04	Acceptable

† Analyte Comments

4-Methylphenol This analyte cannot be separated from 3-Methylphenol.

Comments:

Analytical Results

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406517
Date Collected: 08/27/2004
Date Received: 08/28/2004
Date Extracted: 09/11/2004
Date Analyzed: 09/30/2004

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: LDW-C3-T1
Lab Code: K2406517-011
File ID: J:\MS14\DATA\093004\0930F017.D
Instrument ID: MS14

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Extraction Lot: KWG0413784
Calibration ID: CAL3859

Sample Amount: 10.41 g
% Solids: NA
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
62-75-9	N-Nitrosodimethylamine	10	U	39	10	
62-53-3	Aniline	230	U	770	230	
111-44-4	Bis(2-chloroethyl) Ether	8.7	U	39	8.7	
108-95-2	Phenol	17	U	97	17	
95-57-8	2-Chlorophenol	11	U	77	11	
541-73-1	1,3-Dichlorobenzene	11	U	39	11	
106-46-7	1,4-Dichlorobenzene	11	U	39	11	
95-50-1	1,2-Dichlorobenzene	12	U	39	12	
100-51-6	Benzyl Alcohol	6.7	U	39	6.7	
39638-32-9	Bis(2-chloroisopropyl) Ether	11	U	39	11	
95-48-7	2-Methylphenol	53	U	77	53	
67-72-1	Hexachloroethane	8.5	U	39	8.5	
621-64-7	N-Nitrosodi-n-propylamine	8.2	U	39	8.2	
106-44-5	4-Methylphenol†	15	U	77	15	
98-95-3	Nitrobenzene	10	U	39	10	
78-59-1	Isophorone	5.8	U	39	5.8	
88-75-5	2-Nitrophenol	15	U	39	15	
105-67-9	2,4-Dimethylphenol	13	U	77	13	*
111-91-1	Bis(2-chloroethoxy)methane	5.0	U	39	5.0	
120-83-2	2,4-Dichlorophenol	12	U	77	12	
65-85-0	Benzoic Acid	340	J	770	190	*
120-82-1	1,2,4-Trichlorobenzene	9.9	U	39	9.9	
106-47-8	4-Chloroaniline	5.9	U	200	5.9	
87-68-3	Hexachlorobutadiene	8.5	U	39	8.5	
59-50-7	4-Chloro-3-methylphenol	200	Ui	200	200	
77-47-4	Hexachlorocyclopentadiene	5000	U	5000	5000	
88-06-2	2,4,6-Trichlorophenol	8.8	U	77	8.8	
95-95-4	2,4,5-Trichlorophenol	11	U	77	11	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406517
Date Collected: 08/27/2004
Date Received: 08/28/2004
Date Extracted: 09/11/2004
Date Analyzed: 09/30/2004

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: LDW-C3-T1
Lab Code: K2406517-011
File ID: J:\MS14\DATA\093004\0930F017.D
Instrument ID: MS14

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Extraction Lot: KWG0413784
Calibration ID: CAL3859

Sample Amount: 10.41 g
% Solids: NA
Dilution Factor: 1

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
91-58-7	2-Chloronaphthalene	5.9 U	39	5.9	
88-74-4	2-Nitroaniline	26 U	200	26	
131-11-3	Dimethyl Phthalate	5.1 U	39	5.1	
606-20-2	2,6-Dinitrotoluene	7.0 U	39	7.0	
99-09-2	3-Nitroaniline	8.9 U	390	8.9	
51-28-5	2,4-Dinitrophenol	23 U	770	23	
100-02-7	4-Nitrophenol	7.5 U	390	7.5	
121-14-2	2,4-Dinitrotoluene	8.5 U	77	8.5	
7005-72-3	4-Chlorophenyl Phenyl Ether	4.5 U	39	4.5	
84-66-2	Diethyl Phthalate	9.4 U	77	9.4	
100-01-6	4-Nitroaniline	26 U	200	26	
534-52-1	2-Methyl-4,6-dinitrophenol	15 U	390	15	
86-30-6	N-Nitrosodiphenylamine	9.5 U	39	9.5	
101-55-3	4-Bromophenyl Phenyl Ether	5.5 U	39	5.5	
118-74-1	Hexachlorobenzene	5.9 U	39	5.9	
87-86-5	Pentachlorophenol	31 U	390	31	
86-74-8	Carbazole	33 U	200	33	
84-74-2	Di-n-butyl Phthalate	16 U	39	16	
92-87-5	Benzidine	5000 U	5000	5000	
85-68-7	Butyl Benzyl Phthalate	14 U	39	14	
91-94-1	3,3'-Dichlorobenzidine	780 U	2000	780	
117-81-7	Bis(2-ethylhexyl) Phthalate	53 U	490	53	
117-84-0	Di-n-octyl Phthalate	13 U	39	13	

* See Case Narrative

Comments: _____

Analytical Results

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406517
Date Collected: 08/27/2004
Date Received: 08/28/2004
Date Extracted: 09/11/2004
Date Analyzed: 09/30/2004

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: LDW-C3-T1
Lab Code: K2406517-011
File ID: J:\MS14\DATA\093004\0930F017.D
Instrument ID: MS14
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Lot: KWG0413784
Calibration ID: CAL3859

Sample Amount: 10.41 g
% Solids: NA
Dilution Factor: 1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	98	20-130	09/30/04	Acceptable
Phenol-d6	117	20-130	09/30/04	Acceptable
Nitrobenzene-d5	94	20-130	09/30/04	Acceptable
2-Fluorobiphenyl	95	20-130	09/30/04	Acceptable
2,4,6-Tribromophenol	100	20-130	09/30/04	Acceptable
Terphenyl-d14	118	20-130	09/30/04	Acceptable

† Analyte Comments

4-Methylphenol This analyte cannot be separated from 3-Methylphenol.

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406517
Date Collected: 08/25/2004
Date Received: 08/28/2004
Date Extracted: 09/11/2004
Date Analyzed: 09/30/2004

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: LDW-C9-T
Lab Code: K2406517-012
File ID: J:\MS14\DATA\093004\0930F018.D
Instrument ID: MS14

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Extraction Lot: KWG0413784
Calibration ID: CAL3859

Sample Amount: 10.34 g
% Solids: NA
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
62-75-9	N-Nitrosodimethylamine	10	U	39	10	
62-53-3	Aniline	230	U	780	230	
111-44-4	Bis(2-chloroethyl) Ether	8.7	U	39	8.7	
108-95-2	Phenol	24	J	97	17	
95-57-8	2-Chlorophenol	11	U	78	11	
541-73-1	1,3-Dichlorobenzene	11	U	39	11	
106-46-7	1,4-Dichlorobenzene	11	U	39	11	
95-50-1	1,2-Dichlorobenzene	12	U	39	12	
100-51-6	Benzyl Alcohol	6.7	U	39	6.7	
39638-32-9	Bis(2-chloroisopropyl) Ether	11	U	39	11	
95-48-7	2-Methylphenol	53	U	78	53	
67-72-1	Hexachloroethane	8.5	U	39	8.5	
621-64-7	N-Nitrosodi-n-propylamine	8.2	U	39	8.2	
106-44-5	4-Methylphenol†	15	U	78	15	
98-95-3	Nitrobenzene	10	U	39	10	
78-59-1	Isophorone	5.8	U	39	5.8	
88-75-5	2-Nitrophenol	15	U	39	15	
105-67-9	2,4-Dimethylphenol	13	U	78	13	*
111-91-1	Bis(2-chloroethoxy)methane	5.0	U	39	5.0	
120-83-2	2,4-Dichlorophenol	12	U	78	12	
65-85-0	Benzoic Acid	450	J	780	190	*
120-82-1	1,2,4-Trichlorobenzene	9.9	U	39	9.9	
106-47-8	4-Chloroaniline	5.9	U	200	5.9	
87-68-3	Hexachlorobutadiene	8.5	U	39	8.5	
59-50-7	4-Chloro-3-methylphenol	200	Ui	200	200	
77-47-4	Hexachlorocyclopentadiene	5000	U	5000	5000	
88-06-2	2,4,6-Trichlorophenol	8.8	U	78	8.8	
95-95-4	2,4,5-Trichlorophenol	11	U	78	11	

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406517
Date Collected: 08/25/2004
Date Received: 08/28/2004
Date Extracted: 09/11/2004
Date Analyzed: 09/30/2004

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: LDW-C9-T
Lab Code: K2406517-012
File ID: J:\MS14\DATA\093004\0930F018.D
Instrument ID: MS14
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Lot: KWG0413784
Calibration ID: CAL3859

Sample Amount: 10.34 g
% Solids: NA
Dilution Factor: 1

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
91-58-7	2-Chloronaphthalene	5.9 U	39	5.9	
88-74-4	2-Nitroaniline	26 U	200	26	
131-11-3	Dimethyl Phthalate	5.1 U	39	5.1	
606-20-2	2,6-Dinitrotoluene	7.0 U	39	7.0	
99-09-2	3-Nitroaniline	8.9 U	390	8.9	
51-28-5	2,4-Dinitrophenol	23 U	780	23	
100-02-7	4-Nitrophenol	7.5 U	390	7.5	
121-14-2	2,4-Dinitrotoluene	8.5 U	78	8.5	
7005-72-3	4-Chlorophenyl Phenyl Ether	4.5 U	39	4.5	
84-66-2	Diethyl Phthalate	9.4 U	78	9.4	
100-01-6	4-Nitroaniline	26 U	200	26	
534-52-1	2-Methyl-4,6-dinitrophenol	15 U	390	15	
86-30-6	N-Nitrosodiphenylamine	9.5 U	39	9.5	
101-55-3	4-Bromophenyl Phenyl Ether	5.5 U	39	5.5	
118-74-1	Hexachlorobenzene	5.9 U	39	5.9	
87-86-5	Pentachlorophenol	31 U	390	31	
86-74-8	Carbazole	33 U	200	33	
84-74-2	Di-n-butyl Phthalate	16 U	39	16	
92-87-5	Benzidine	5000 U	5000	5000	
85-68-7	Butyl Benzyl Phthalate	14 U	39	14	
91-94-1	3,3'-Dichlorobenzidine	780 U	2000	780	
117-81-7	Bis(2-ethylhexyl) Phthalate	120 J	490	53	
117-84-0	Di-n-octyl Phthalate	13 U	39	13	

* See Case Narrative

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406517
Date Collected: 08/25/2004
Date Received: 08/28/2004
Date Extracted: 09/11/2004
Date Analyzed: 09/30/2004

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: LDW-C9-T
Lab Code: K2406517-012
File ID: J:\MS14\DATA\093004\0930F018.D
Instrument ID: MS14
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Lot: KWG0413784
Calibration ID: CAL3859

Sample Amount: 10.34 g
% Solids: NA
Dilution Factor: 1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	94	20-130	09/30/04	Acceptable
Phenol-d6	115	20-130	09/30/04	Acceptable
Nitrobenzene-d5	93	20-130	09/30/04	Acceptable
2-Fluorobiphenyl	94	20-130	09/30/04	Acceptable
2,4,6-Tribromophenol	104	20-130	09/30/04	Acceptable
Terphenyl-d14	116	20-130	09/30/04	Acceptable

† Analyte Comments

4-Methylphenol This analyte cannot be separated from 3-Methylphenol.

Comments: _____

Analytical Results

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406517
Date Collected: 08/25/2004
Date Received: 08/28/2004
Date Extracted: 09/11/2004
Date Analyzed: 09/30/2004

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: LDW-C6-T
Lab Code: K2406517-013
File ID: J:\MS14\DATA\093004\0930F019.D
Instrument ID: MS14

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Extraction Lot: KWG0413784
Calibration ID: CAL3859

Sample Amount: 10.47 g
% Solids: NA
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
62-75-9	N-Nitrosodimethylamine	10	U	39	10	
62-53-3	Aniline	230	U	770	230	
111-44-4	Bis(2-chloroethyl) Ether	8.7	U	39	8.7	
108-95-2	Phenol	23	J	96	17	
95-57-8	2-Chlorophenol	11	U	77	11	
541-73-1	1,3-Dichlorobenzene	11	U	39	11	
106-46-7	1,4-Dichlorobenzene	11	U	39	11	
95-50-1	1,2-Dichlorobenzene	12	U	39	12	
100-51-6	Benzyl Alcohol	6.7	U	39	6.7	
39638-32-9	Bis(2-chloroisopropyl) Ether	11	U	39	11	
95-48-7	2-Methylphenol	53	U	77	53	
67-72-1	Hexachloroethane	8.5	U	39	8.5	
621-64-7	N-Nitrosodi-n-propylamine	8.2	U	39	8.2	
106-44-5	4-Methylphenol†	24	J	77	15	
98-95-3	Nitrobenzene	10	U	39	10	
78-59-1	Isophorone	5.8	U	39	5.8	
88-75-5	2-Nitrophenol	15	U	39	15	
105-67-9	2,4-Dimethylphenol	13	U	77	13	*
111-91-1	Bis(2-chloroethoxy)methane	5.0	U	39	5.0	
120-83-2	2,4-Dichlorophenol	12	U	77	12	
65-85-0	Benzoic Acid	440	J	770	190	*
120-82-1	1,2,4-Trichlorobenzene	9.9	U	39	9.9	
106-47-8	4-Chloroaniline	5.9	U	200	5.9	
87-68-3	Hexachlorobutadiene	8.5	U	39	8.5	
59-50-7	4-Chloro-3-methylphenol	72	U	200	72	
77-47-4	Hexachlorocyclopentadiene	5000	U	5000	5000	
88-06-2	2,4,6-Trichlorophenol	8.8	U	77	8.8	
95-95-4	2,4,5-Trichlorophenol	11	U	77	11	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406517
Date Collected: 08/25/2004
Date Received: 08/28/2004
Date Extracted: 09/11/2004
Date Analyzed: 09/30/2004

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: LDW-C6-T
Lab Code: K2406517-013
File ID: J:\MS14\DATA\093004\0930F019.D
Instrument ID: MS14

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Extraction Lot: KWG0413784
Calibration ID: CAL3859

Sample Amount: 10.47 g
% Solids: NA
Dilution Factor: 1

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
91-58-7	2-Chloronaphthalene	5.9 U	39	5.9	
88-74-4	2-Nitroaniline	26 U	200	26	
131-11-3	Dimethyl Phthalate	5.1 U	39	5.1	
606-20-2	2,6-Dinitrotoluene	7.0 U	39	7.0	
99-09-2	3-Nitroaniline	8.9 U	390	8.9	
51-28-5	2,4-Dinitrophenol	23 U	770	23	
100-02-7	4-Nitrophenol	7.5 U	390	7.5	
121-14-2	2,4-Dinitrotoluene	8.5 U	77	8.5	
7005-72-3	4-Chlorophenyl Phenyl Ether	4.5 U	39	4.5	
84-66-2	Diethyl Phthalate	9.4 U	77	9.4	
100-01-6	4-Nitroaniline	26 U	200	26	
534-52-1	2-Methyl-4,6-dinitrophenol	15 U	390	15	
86-30-6	N-Nitrosodiphenylamine	9.5 U	39	9.5	
101-55-3	4-Bromophenyl Phenyl Ether	5.5 U	39	5.5	
118-74-1	Hexachlorobenzene	5.9 U	39	5.9	
87-86-5	Pentachlorophenol	31 U	390	31	
86-74-8	Carbazole	33 U	200	33	
84-74-2	Di-n-butyl Phthalate	16 U	39	16	
92-87-5	Benzidine	5000 U	5000	5000	
85-68-7	Butyl Benzyl Phthalate	14 U	39	14	
91-94-1	3,3'-Dichlorobenzidine	780 U	2000	780	
117-81-7	Bis(2-ethylhexyl) Phthalate	86 J	480	53	
117-84-0	Di-n-octyl Phthalate	13 U	39	13	

* See Case Narrative

Comments: _____

Analytical Results

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406517
Date Collected: 08/25/2004
Date Received: 08/28/2004
Date Extracted: 09/11/2004
Date Analyzed: 09/30/2004

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: LDW-C6-T
Lab Code: K2406517-013
File ID: J:\MS14\DATA\093004\0930F019.D
Instrument ID: MS14
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Lot: KWG0413784
Calibration ID: CAL3859

Sample Amount: 10.47 g
% Solids: NA
Dilution Factor: 1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	91	20-130	09/30/04	Acceptable
Phenol-d6	111	20-130	09/30/04	Acceptable
Nitrobenzene-d5	87	20-130	09/30/04	Acceptable
2-Fluorobiphenyl	90	20-130	09/30/04	Acceptable
2,4,6-Tribromophenol	96	20-130	09/30/04	Acceptable
Terphenyl-d14	110	20-130	09/30/04	Acceptable

† Analyte Comments

4-Methylphenol This analyte cannot be separated from 3-Methylphenol.

Comments: _____

Analytical Results

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406517
Date Collected: 08/27/2004
Date Received: 08/28/2004
Date Extracted: 09/11/2004
Date Analyzed: 09/30/2004

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: LDW-C4-T
Lab Code: K2406517-014
File ID: J:\MS14\DATA\093004\0930F020.D
Instrument ID: MS14

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Extraction Lot: KWG0413784
Calibration ID: CAL3859

Sample Amount: 10.00 g
% Solids: NA
Dilution Factor: 1

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
62-75-9	N-Nitrosodimethylamine	10 U	40	10	
62-53-3	Aniline	230 U	800	230	
111-44-4	Bis(2-chloroethyl) Ether	8.7 U	40	8.7	
108-95-2	Phenol	50 J	100	17	
95-57-8	2-Chlorophenol	11 U	80	11	
541-73-1	1,3-Dichlorobenzene	11 U	40	11	
106-46-7	1,4-Dichlorobenzene	11 U	40	11	
95-50-1	1,2-Dichlorobenzene	12 U	40	12	
100-51-6	Benzyl Alcohol	6.7 U	40	6.7	
39638-32-9	Bis(2-chloroisopropyl) Ether	11 U	40	11	
95-48-7	2-Methylphenol	53 U	80	53	
67-72-1	Hexachloroethane	8.5 U	40	8.5	
621-64-7	N-Nitrosodi-n-propylamine	8.2 U	40	8.2	
106-44-5	4-Methylphenol†	23 J	80	15	
98-95-3	Nitrobenzene	10 U	40	10	
78-59-1	Isophorone	5.8 U	40	5.8	
88-75-5	2-Nitrophenol	15 U	40	15	
105-67-9	2,4-Dimethylphenol	13 U	80	13	*
111-91-1	Bis(2-chloroethoxy)methane	5.0 U	40	5.0	
120-83-2	2,4-Dichlorophenol	12 U	80	12	
65-85-0	Benzoic Acid	600 J	800	190	*
120-82-1	1,2,4-Trichlorobenzene	9.9 U	40	9.9	
106-47-8	4-Chloroaniline	5.9 U	200	5.9	
87-68-3	Hexachlorobutadiene	8.5 U	40	8.5	
59-50-7	4-Chloro-3-methylphenol	72 U	200	72	
77-47-4	Hexachlorocyclopentadiene	5000 U	5000	5000	
88-06-2	2,4,6-Trichlorophenol	8.8 U	80	8.8	
95-95-4	2,4,5-Trichlorophenol	11 U	80	11	

Comments:

Analytical Results

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406517
Date Collected: 08/27/2004
Date Received: 08/28/2004
Date Extracted: 09/11/2004
Date Analyzed: 09/30/2004

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: LDW-C4-T
Lab Code: K2406517-014
File ID: J:\MS14\DATA\093004\0930F020.D
Instrument ID: MS14

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Extraction Lot: KWG0413784
Calibration ID: CAL3859

Sample Amount: 10.00 g
% Solids: NA
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
91-58-7	2-Chloronaphthalene	5.9	U	40	5.9	
88-74-4	2-Nitroaniline	26	U	200	26	
131-11-3	Dimethyl Phthalate	5.1	U	40	5.1	
606-20-2	2,6-Dinitrotoluene	7.0	U	40	7.0	
99-09-2	3-Nitroaniline	8.9	U	400	8.9	
51-28-5	2,4-Dinitrophenol	23	U	800	23	
100-02-7	4-Nitrophenol	7.5	U	400	7.5	
121-14-2	2,4-Dinitrotoluene	8.5	U	80	8.5	
7005-72-3	4-Chlorophenyl Phenyl Ether	4.5	U	40	4.5	
84-66-2	Diethyl Phthalate	9.5	J	80	9.4	
100-01-6	4-Nitroaniline	26	U	200	26	
534-52-1	2-Methyl-4,6-dinitrophenol	15	U	400	15	
86-30-6	N-Nitrosodiphenylamine	9.5	U	40	9.5	
101-55-3	4-Bromophenyl Phenyl Ether	5.5	U	40	5.5	
118-74-1	Hexachlorobenzene	5.9	U	40	5.9	
87-86-5	Pentachlorophenol	31	U	400	31	
86-74-8	Carbazole	33	U	200	33	
84-74-2	Di-n-butyl Phthalate	16	U	40	16	
92-87-5	Benzidine	5000	U	5000	5000	
85-68-7	Butyl Benzyl Phthalate	14	U	40	14	
91-94-1	3,3'-Dichlorobenzidine	780	U	2000	780	
117-81-7	Bis(2-ethylhexyl) Phthalate	120	J	500	53	
117-84-0	Di-n-octyl Phthalate	13	U	40	13	

* See Case Narrative

Comments: _____

Analytical Results

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406517
Date Collected: 08/27/2004
Date Received: 08/28/2004
Date Extracted: 09/11/2004
Date Analyzed: 09/30/2004

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: LDW-C4-T
Lab Code: K2406517-014
File ID: J:\MS14\DATA\093004\0930F020.D
Instrument ID: MS14
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Lot: KWG0413784
Calibration ID: CAL3859

Sample Amount: 10.00 g
% Solids: NA
Dilution Factor: 1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	66	20-130	09/30/04	Acceptable
Phenol-d6	103	20-130	09/30/04	Acceptable
Nitrobenzene-d5	49	20-130	09/30/04	Acceptable
2-Fluorobiphenyl	74	20-130	09/30/04	Acceptable
2,4,6-Tribromophenol	103	20-130	09/30/04	Acceptable
Terphenyl-d14	115	20-130	09/30/04	Acceptable

† Analyte Comments

4-Methylphenol This analyte cannot be separated from 3-Methylphenol.

Comments:

Analytical Results

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406517
Date Collected: NA
Date Received: NA
Date Extracted: 09/11/2004
Date Analyzed: 09/20/2004

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: Method Blank
Lab Code: KWG0413784-5
File ID: J:\MS14\DATA\092004\0920F015.D
Instrument ID: MS14
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Lot: KWG0413784
Calibration ID: CAL3831

Sample Amount: 10.47 g
% Solids: NA
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
62-75-9	N-Nitrosodimethylamine	10	U	39	10	
62-53-3	Aniline	230	U	770	230	
111-44-4	Bis(2-chloroethyl) Ether	8.7	U	39	8.7	
108-95-2	Phenol	17	U	96	17	
95-57-8	2-Chlorophenol	11	U	77	11	
541-73-1	1,3-Dichlorobenzene	11	U	39	11	
106-46-7	1,4-Dichlorobenzene	11	U	39	11	
95-50-1	1,2-Dichlorobenzene	12	U	39	12	
100-51-6	Benzyl Alcohol	6.7	U	39	6.7	
39638-32-9	Bis(2-chloroisopropyl) Ether	11	U	39	11	
95-48-7	2-Methylphenol	53	U	77	53	
67-72-1	Hexachloroethane	8.5	U	39	8.5	
621-64-7	N-Nitrosodi-n-propylamine	8.2	U	39	8.2	
106-44-5	4-Methylphenol†	15	U	77	15	
98-95-3	Nitrobenzene	10	U	39	10	
78-59-1	Isophorone	5.8	U	39	5.8	
88-75-5	2-Nitrophenol	15	U	39	15	
105-67-9	2,4-Dimethylphenol	13	U	77	13	*
111-91-1	Bis(2-chloroethoxy)methane	5.0	U	39	5.0	
120-83-2	2,4-Dichlorophenol	12	U	77	12	
65-85-0	Benzoic Acid	190	U	770	190	*
120-82-1	1,2,4-Trichlorobenzene	9.9	U	39	9.9	
106-47-8	4-Chloroaniline	5.9	U	200	5.9	
87-68-3	Hexachlorobutadiene	8.5	U	39	8.5	
59-50-7	4-Chloro-3-methylphenol	72	U	200	72	
77-47-4	Hexachlorocyclopentadiene	5000	U	5000	5000	
88-06-2	2,4,6-Trichlorophenol	8.8	U	77	8.8	
95-95-4	2,4,5-Trichlorophenol	11	U	77	11	

Comments:

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406517
Date Extracted: 09/11/2004
Date Analyzed: 09/30/2004

Duplicate Sample Summary
Semivolatile Organic Compounds by GC/MS SIM

Sample Name: LDW-C2-T2
Lab Code: K2406517-006
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Wet
Level: Low
Extraction Lot: KWG0413784

Analyte Name	MRL	MDL	Sample Result	LDW-C2-T2DUP KWG0413784-6 Duplicate Sample		Relative Percent Difference	RPD Limit
				Result	Average		
N-Nitrosodimethylamine	40	10	ND	ND	ND	-	50
Aniline	790	230	ND	ND	ND	-	50
Bis(2-chloroethyl) Ether	40	8.7	ND	ND	ND	-	50
Phenol	99	17	24	21	22	12 #	50
2-Chlorophenol	79	11	ND	ND	ND	-	50
1,3-Dichlorobenzene	40	11	ND	ND	ND	-	50
1,4-Dichlorobenzene	40	11	ND	ND	ND	-	50
1,2-Dichlorobenzene	40	12	ND	ND	ND	-	50
Benzyl Alcohol	40	6.7	ND	ND	ND	-	50
Bis(2-chloroisopropyl) Ether	40	11	ND	ND	ND	-	50
2-Methylphenol	79	53	ND	ND	ND	-	50
Hexachloroethane	40	8.5	ND	ND	ND	-	50
N-Nitrosodi-n-propylamine	40	8.2	ND	ND	ND	-	50
4-Methylphenol	79	15	16	23	20	38 #	50
Nitrobenzene	40	10	ND	ND	ND	-	50
Isophorone	40	5.8	ND	ND	ND	-	50
2-Nitrophenol	40	15	ND	ND	ND	-	50
2,4-Dimethylphenol	79	13	ND	ND	ND	-	50
Bis(2-chloroethoxy)methane	40	5.0	ND	ND	ND	-	50
2,4-Dichlorophenol	79	12	ND	ND	ND	-	50
Benzoic Acid	790	190	360	690	520	63 #	50
1,2,4-Trichlorobenzene	40	9.9	ND	ND	ND	-	50
4-Chloroaniline	200	5.9	ND	ND	ND	-	50
Hexachlorobutadiene	40	8.5	ND	ND	ND	-	50
4-Chloro-3-methylphenol	200	200	ND	ND	ND	-	50
Hexachlorocyclopentadiene	5000	5000	ND	ND	ND	-	50
2,4,6-Trichlorophenol	79	8.8	ND	ND	ND	-	50
2,4,5-Trichlorophenol	79	11	ND	ND	ND	-	50
2-Chloronaphthalene	40	5.9	ND	ND	ND	-	50
2-Nitroaniline	200	26	ND	ND	ND	-	50
Dimethyl Phthalate	40	5.1	ND	ND	ND	-	50
2,6-Dinitrotoluene	40	7.0	ND	ND	ND	-	50
3-Nitroaniline	400	8.9	ND	ND	ND	-	50
2,4-Dinitrophenol	790	23	ND	ND	ND	-	50
4-Nitrophenol	400	7.5	ND	ND	ND	-	50

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406517
Date Extracted: 09/11/2004
Date Analyzed: 09/30/2004

**Duplicate Sample Summary
 Semivolatile Organic Compounds by GC/MS SIM**

Sample Name: LDW-C2-T2
Lab Code: K2406517-006
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Wet
Level: Low
Extraction Lot: KWG0413784

Analyte Name	MRL	MDL	Sample Result	LDW-C2-T2DUP KWG0413784-6 Duplicate Sample		Relative Percent Difference	RPD Limit
				Result	Average		
2,4-Dinitrotoluene	79	8.5	ND	ND	ND	-	50
4-Chlorophenyl Phenyl Ether	40	4.5	ND	ND	ND	-	50
Diethyl Phthalate	79	9.4	9.5	18	14	64 #	50
4-Nitroaniline	200	26	ND	ND	ND	-	50
2-Methyl-4,6-dinitrophenol	400	15	ND	ND	ND	-	50
N-Nitrosodiphenylamine	40	9.5	ND	ND	ND	-	50
4-Bromophenyl Phenyl Ether	40	5.5	ND	ND	ND	-	50
Hexachlorobenzene	40	5.9	ND	ND	ND	-	50
Pentachlorophenol	400	31	ND	ND	ND	-	50
Carbazole	200	33	ND	ND	ND	-	50
Di-n-butyl Phthalate	40	16	ND	ND	ND	-	50
Benzidine	5000	5000	ND	ND	ND	-	50
Butyl Benzyl Phthalate	40	14	ND	ND	ND	-	50
3,3'-Dichlorobenzidine	2000	780	ND	ND	ND	-	50
Bis(2-ethylhexyl) Phthalate	500	53	ND	72	NC	NC	50
Di-n-octyl Phthalate	40	13	ND	ND	ND	-	50

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406519
Date Collected: 08/27/2004
Date Received: 08/30/2004

Semi-Volatile Organic Compounds by GC/MS

Sample Name: LDW-B9a-S
Lab Code: K2406519-001
Extraction Method: EPA 3541
Analysis Method: 8270C

Units: ug/Kg
Basis: Dry
Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
N-Nitrosodimethylamine	ND	U	100	24	2	09/22/04	09/29/04	KWG0414281	
Aniline	ND	U	40	5.8	2	09/22/04	09/29/04	KWG0414281	
Bis(2-chloroethyl) Ether	ND	U	20	9.2	2	09/22/04	09/29/04	KWG0414281	
Phenol	27	JD	60	7.3	2	09/22/04	09/29/04	KWG0414281	
2-Chlorophenol	ND	U	20	6.5	2	09/22/04	09/29/04	KWG0414281	
1,3-Dichlorobenzene	ND	U	20	6.1	2	09/22/04	09/29/04	KWG0414281	
1,4-Dichlorobenzene	ND	U	20	7.3	2	09/22/04	09/29/04	KWG0414281	
1,2-Dichlorobenzene	ND	U	20	5.0	2	09/22/04	09/29/04	KWG0414281	
Benzyl Alcohol	ND	U	20	15	2	09/22/04	09/29/04	KWG0414281	
Bis(2-chloroisopropyl) Ether	ND	U	20	4.6	2	09/22/04	09/29/04	KWG0414281	
2-Methylphenol	ND	U	20	13	2	09/22/04	09/29/04	KWG0414281	
Hexachloroethane	ND	U	20	8.4	2	09/22/04	09/29/04	KWG0414281	
N-Nitrosodi-n-propylamine	ND	U	20	13	2	09/22/04	09/29/04	KWG0414281	
4-Methylphenol†	ND	U	20	12	2	09/22/04	09/29/04	KWG0414281	
Nitrobenzene	ND	U	20	7.7	2	09/22/04	09/29/04	KWG0414281	
Isophorone	ND	U	20	6.1	2	09/22/04	09/29/04	KWG0414281	
2-Nitrophenol	ND	U	20	9.9	2	09/22/04	09/29/04	KWG0414281	
2,4-Dimethylphenol	ND	U	100	21	2	09/22/04	09/29/04	KWG0414281	*
Bis(2-chloroethoxy)methane	ND	U	20	5.0	2	09/22/04	09/29/04	KWG0414281	
2,4-Dichlorophenol	ND	U	20	6.9	2	09/22/04	09/29/04	KWG0414281	
Benzoic Acid	ND	U	400	370	2	09/22/04	09/29/04	KWG0414281	
1,2,4-Trichlorobenzene	ND	U	20	5.8	2	09/22/04	09/29/04	KWG0414281	
4-Chloroaniline	ND	U	20	8.0	2	09/22/04	09/29/04	KWG0414281	
Hexachlorobutadiene	ND	U	20	5.4	2	09/22/04	09/29/04	KWG0414281	
4-Chloro-3-methylphenol	ND	U	20	8.0	2	09/22/04	09/29/04	KWG0414281	
Hexachlorocyclopentadiene	ND	U	100	58	2	09/22/04	09/29/04	KWG0414281	
2,4,6-Trichlorophenol	ND	U	20	6.9	2	09/22/04	09/29/04	KWG0414281	
2,4,5-Trichlorophenol	ND	U	20	12	2	09/22/04	09/29/04	KWG0414281	
2-Chloronaphthalene	ND	U	20	14	2	09/22/04	09/29/04	KWG0414281	
2-Nitroaniline	ND	U	40	11	2	09/22/04	09/29/04	KWG0414281	
Dimethyl Phthalate	ND	U	20	6.9	2	09/22/04	09/29/04	KWG0414281	
2,6-Dinitrotoluene	ND	U	20	11	2	09/22/04	09/29/04	KWG0414281	
3-Nitroaniline	ND	U	40	9.9	2	09/22/04	09/29/04	KWG0414281	
2,4-Dinitrophenol	ND	U	400	140	2	09/22/04	09/29/04	KWG0414281	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406519
Date Collected: 08/27/2004
Date Received: 08/30/2004

Semi-Volatile Organic Compounds by GC/MS

Sample Name: LDW-B9a-S
Lab Code: K2406519-001
Extraction Method: EPA 3541
Analysis Method: 8270C

Units: ug/Kg
Basis: Dry
Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
4-Nitrophenol	ND	U	200	120	2	09/22/04	09/29/04	KWG0414281	
2,4-Dinitrotoluene	ND	U	20	11	2	09/22/04	09/29/04	KWG0414281	
4-Chlorophenyl Phenyl Ether	ND	U	20	7.7	2	09/22/04	09/29/04	KWG0414281	
Diethyl Phthalate	ND	U	20	14	2	09/22/04	09/29/04	KWG0414281	
4-Nitroaniline	ND	U	40	13	2	09/22/04	09/29/04	KWG0414281	
2-Methyl-4,6-dinitrophenol	ND	U	200	6.5	2	09/22/04	09/29/04	KWG0414281	
N-Nitrosodiphenylamine	ND	U	20	8.4	2	09/22/04	09/29/04	KWG0414281	
4-Bromophenyl Phenyl Ether	ND	U	20	5.4	2	09/22/04	09/29/04	KWG0414281	
Hexachlorobenzene	ND	U	20	8.0	2	09/22/04	09/29/04	KWG0414281	
Pentachlorophenol	ND	U	100	33	2	09/22/04	09/29/04	KWG0414281	
Carbazole	19	JD	20	5.0	2	09/22/04	09/29/04	KWG0414281	
Di-n-butyl Phthalate	13	JD	20	9.9	2	09/22/04	09/29/04	KWG0414281	
Benzidine	ND	U	770	770	2	09/22/04	09/29/04	KWG0414281	*
Butyl Benzyl Phthalate	17	JD	20	5.8	2	09/22/04	09/29/04	KWG0414281	
3,3'-Dichlorobenzidine	ND	U	200	15	2	09/22/04	09/29/04	KWG0414281	
Bis(2-ethylhexyl) Phthalate	210	JD	400	6.5	2	09/22/04	09/29/04	KWG0414281	
Di-n-octyl Phthalate	ND	U	40	4.6	2	09/22/04	09/29/04	KWG0414281	

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	44	40-130	09/29/04	Acceptable
Phenol-d6	52	40-130	09/29/04	Acceptable
Nitrobenzene-d5	34	40-130	09/29/04	Outside Control Limits
2-Fluorobiphenyl	40	40-130	09/29/04	Acceptable
2,4,6-Tribromophenol	98	40-130	09/29/04	Acceptable
Terphenyl-d14	92	40-130	09/29/04	Acceptable

† Analyte Comments

4-Methylphenol This analyte cannot be separated from 3-Methylphenol.

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406519
Date Collected: 08/26/2004
Date Received: 08/30/2004

Semi-Volatile Organic Compounds by GC/MS

Sample Name: LDW-B3a-S
Lab Code: K2406519-005
Extraction Method: EPA 3541
Analysis Method: 8270C

Units: ug/Kg
Basis: Dry
Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
N-Nitrosodimethylamine	ND	U	100	20	2	09/22/04	09/29/04	KWG0414281	
Aniline	ND	U	40	4.9	2	09/22/04	09/29/04	KWG0414281	
Bis(2-chloroethyl) Ether	ND	U	20	7.8	2	09/22/04	09/29/04	KWG0414281	
Phenol	220	D	60	6.2	2	09/22/04	09/29/04	KWG0414281	
2-Chlorophenol	ND	U	20	5.6	2	09/22/04	09/29/04	KWG0414281	
1,3-Dichlorobenzene	ND	U	20	5.2	2	09/22/04	09/29/04	KWG0414281	
1,4-Dichlorobenzene	ND	U	20	6.2	2	09/22/04	09/29/04	KWG0414281	
1,2-Dichlorobenzene	ND	U	20	4.3	2	09/22/04	09/29/04	KWG0414281	
Benzyl Alcohol	ND	U	20	13	2	09/22/04	09/29/04	KWG0414281	
Bis(2-chloroisopropyl) Ether	ND	U	20	3.9	2	09/22/04	09/29/04	KWG0414281	
2-Methylphenol	ND	U	20	12	2	09/22/04	09/29/04	KWG0414281	
Hexachloroethane	ND	U	20	7.2	2	09/22/04	09/29/04	KWG0414281	
N-Nitrosodi-n-propylamine	ND	U	20	11	2	09/22/04	09/29/04	KWG0414281	
4-Methylphenol†	22	D	20	9.5	2	09/22/04	09/29/04	KWG0414281	
Nitrobenzene	ND	U	20	6.5	2	09/22/04	09/29/04	KWG0414281	
Isophorone	ND	U	20	5.2	2	09/22/04	09/29/04	KWG0414281	
2-Nitrophenol	ND	U	20	8.5	2	09/22/04	09/29/04	KWG0414281	
2,4-Dimethylphenol	ND	U	100	18	2	09/22/04	09/29/04	KWG0414281	*
Bis(2-chloroethoxy)methane	ND	U	20	4.3	2	09/22/04	09/29/04	KWG0414281	
2,4-Dichlorophenol	ND	U	20	5.9	2	09/22/04	09/29/04	KWG0414281	
Benzoic Acid	ND	U	400	320	2	09/22/04	09/29/04	KWG0414281	
1,2,4-Trichlorobenzene	ND	U	20	4.9	2	09/22/04	09/29/04	KWG0414281	
4-Chloroaniline	ND	U	20	6.9	2	09/22/04	09/29/04	KWG0414281	
Hexachlorobutadiene	ND	U	20	4.6	2	09/22/04	09/29/04	KWG0414281	
4-Chloro-3-methylphenol	ND	U	20	6.9	2	09/22/04	09/29/04	KWG0414281	
Hexachlorocyclopentadiene	ND	U	100	49	2	09/22/04	09/29/04	KWG0414281	
2,4,6-Trichlorophenol	ND	U	20	5.9	2	09/22/04	09/29/04	KWG0414281	
2,4,5-Trichlorophenol	ND	U	20	9.8	2	09/22/04	09/29/04	KWG0414281	
2-Chloronaphthalene	ND	U	20	12	2	09/22/04	09/29/04	KWG0414281	
2-Nitroaniline	ND	U	40	8.8	2	09/22/04	09/29/04	KWG0414281	
Dimethyl Phthalate	ND	U	20	5.9	2	09/22/04	09/29/04	KWG0414281	
2,6-Dinitrotoluene	ND	U	20	9.1	2	09/22/04	09/29/04	KWG0414281	
3-Nitroaniline	ND	U	40	8.5	2	09/22/04	09/29/04	KWG0414281	
2,4-Dinitrophenol	ND	U	400	120	2	09/22/04	09/29/04	KWG0414281	

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406519
Date Collected: 08/26/2004
Date Received: 08/30/2004

Semi-Volatile Organic Compounds by GC/MS

Sample Name: LDW-B3a-S
Lab Code: K2406519-005
Extraction Method: EPA 3541
Analysis Method: 8270C

Units: ug/Kg
Basis: Dry
Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
4-Nitrophenol	ND	U	200	98	2	09/22/04	09/29/04	KWG0414281	
2,4-Dinitrotoluene	ND	U	20	9.1	2	09/22/04	09/29/04	KWG0414281	
4-Chlorophenyl Phenyl Ether	ND	U	20	6.5	2	09/22/04	09/29/04	KWG0414281	
Diethyl Phthalate	ND	U	20	12	2	09/22/04	09/29/04	KWG0414281	
4-Nitroaniline	ND	U	40	12	2	09/22/04	09/29/04	KWG0414281	
2-Methyl-4,6-dinitrophenol	ND	U	200	5.6	2	09/22/04	09/29/04	KWG0414281	
N-Nitrosodiphenylamine	ND	U	20	7.2	2	09/22/04	09/29/04	KWG0414281	
4-Bromophenyl Phenyl Ether	ND	U	20	4.6	2	09/22/04	09/29/04	KWG0414281	
Hexachlorobenzene	ND	U	20	6.9	2	09/22/04	09/29/04	KWG0414281	
Pentachlorophenol	ND	U	100	28	2	09/22/04	09/29/04	KWG0414281	
Carbazole	ND	U	20	4.3	2	09/22/04	09/29/04	KWG0414281	
Di-n-butyl Phthalate	8.6	JD	20	8.5	2	09/22/04	09/29/04	KWG0414281	
Benzidine	ND	U	650	650	2	09/22/04	09/29/04	KWG0414281	*
Butyl Benzyl Phthalate	ND	U	20	4.9	2	09/22/04	09/29/04	KWG0414281	
3,3'-Dichlorobenzidine	ND	U	200	13	2	09/22/04	09/29/04	KWG0414281	
Bis(2-ethylhexyl) Phthalate	67	JD	400	5.6	2	09/22/04	09/29/04	KWG0414281	
Di-n-octyl Phthalate	ND	U	40	3.9	2	09/22/04	09/29/04	KWG0414281	

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	53	40-130	09/29/04	Acceptable
Phenol-d6	58	40-130	09/29/04	Acceptable
Nitrobenzene-d5	42	40-130	09/29/04	Acceptable
2-Fluorobiphenyl	47	40-130	09/29/04	Acceptable
2,4,6-Tribromophenol	85	40-130	09/29/04	Acceptable
Terphenyl-d14	78	40-130	09/29/04	Acceptable

† Analyte Comments

4-Methylphenol This analyte cannot be separated from 3-Methylphenol.

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406580
Date Collected: 08/30/2004
Date Received: 08/31/2004

Semi-Volatile Organic Compounds by GC/MS

Sample Name: LDW-B7a-S
Lab Code: K2406580-001
Extraction Method: EPA 3541
Analysis Method: 8270C

Units: ug/Kg
Basis: Dry
Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
N-Nitrosodimethylamine	ND	U	100	24	2	09/22/04	09/29/04	KWG0414281	
Aniline	ND	U	40	5.9	2	09/22/04	09/29/04	KWG0414281	
Bis(2-chloroethyl) Ether	ND	U	20	9.3	2	09/22/04	09/29/04	KWG0414281	
Phenol	13	JD	60	7.4	2	09/22/04	09/29/04	KWG0414281	
2-Chlorophenol	ND	U	20	6.6	2	09/22/04	09/29/04	KWG0414281	
1,3-Dichlorobenzene	ND	U	20	6.2	2	09/22/04	09/29/04	KWG0414281	
1,4-Dichlorobenzene	ND	U	20	7.4	2	09/22/04	09/29/04	KWG0414281	
1,2-Dichlorobenzene	ND	U	20	5.1	2	09/22/04	09/29/04	KWG0414281	
Benzyl Alcohol	ND	U	20	15	2	09/22/04	09/29/04	KWG0414281	
Bis(2-chloroisopropyl) Ether	ND	U	20	4.7	2	09/22/04	09/29/04	KWG0414281	
2-Methylphenol	ND	U	20	14	2	09/22/04	09/29/04	KWG0414281	
Hexachloroethane	ND	U	20	8.6	2	09/22/04	09/29/04	KWG0414281	
N-Nitrosodi-n-propylamine	ND	U	20	13	2	09/22/04	09/29/04	KWG0414281	
4-Methylphenol†	ND	U	20	12	2	09/22/04	09/29/04	KWG0414281	
Nitrobenzene	ND	U	20	7.8	2	09/22/04	09/29/04	KWG0414281	
Isophorone	ND	U	20	6.2	2	09/22/04	09/29/04	KWG0414281	
2-Nitrophenol	ND	U	20	11	2	09/22/04	09/29/04	KWG0414281	
2,4-Dimethylphenol	ND	U	100	22	2	09/22/04	09/29/04	KWG0414281	*
Bis(2-chloroethoxy)methane	ND	U	20	5.1	2	09/22/04	09/29/04	KWG0414281	
2,4-Dichlorophenol	ND	U	20	7.0	2	09/22/04	09/29/04	KWG0414281	
Benzoic Acid	ND	U	400	380	2	09/22/04	09/29/04	KWG0414281	
1,2,4-Trichlorobenzene	ND	U	20	5.9	2	09/22/04	09/29/04	KWG0414281	
4-Chloroaniline	ND	U	20	8.2	2	09/22/04	09/29/04	KWG0414281	
Hexachlorobutadiene	ND	U	20	5.5	2	09/22/04	09/29/04	KWG0414281	
4-Chloro-3-methylphenol	ND	U	20	8.2	2	09/22/04	09/29/04	KWG0414281	
Hexachlorocyclopentadiene	ND	U	100	59	2	09/22/04	09/29/04	KWG0414281	
2,4,6-Trichlorophenol	ND	U	20	7.0	2	09/22/04	09/29/04	KWG0414281	
2,4,5-Trichlorophenol	ND	U	20	12	2	09/22/04	09/29/04	KWG0414281	
2-Chloronaphthalene	ND	U	20	14	2	09/22/04	09/29/04	KWG0414281	
2-Nitroaniline	ND	U	40	11	2	09/22/04	09/29/04	KWG0414281	
Dimethyl Phthalate	7.1	JD	20	7.0	2	09/22/04	09/29/04	KWG0414281	
2,6-Dinitrotoluene	ND	U	20	11	2	09/22/04	09/29/04	KWG0414281	
3-Nitroaniline	ND	U	40	11	2	09/22/04	09/29/04	KWG0414281	
2,4-Dinitrophenol	ND	U	400	140	2	09/22/04	09/29/04	KWG0414281	

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406580
Date Collected: 08/30/2004
Date Received: 08/31/2004

Semi-Volatile Organic Compounds by GC/MS

Sample Name: LDW-B7a-S
Lab Code: K2406580-001
Extraction Method: EPA 3541
Analysis Method: 8270C

Units: ug/Kg
Basis: Dry
Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
4-Nitrophenol	ND	U	200	120	2	09/22/04	09/29/04	KWG0414281	
2,4-Dinitrotoluene	ND	U	20	11	2	09/22/04	09/29/04	KWG0414281	
4-Chlorophenyl Phenyl Ether	ND	U	20	7.8	2	09/22/04	09/29/04	KWG0414281	
Diethyl Phthalate	ND	U	20	14	2	09/22/04	09/29/04	KWG0414281	
4-Nitroaniline	ND	U	40	14	2	09/22/04	09/29/04	KWG0414281	
2-Methyl-4,6-dinitrophenol	ND	U	200	6.6	2	09/22/04	09/29/04	KWG0414281	
N-Nitrosodiphenylamine	ND	U	20	8.6	2	09/22/04	09/29/04	KWG0414281	
4-Bromophenyl Phenyl Ether	ND	U	20	5.5	2	09/22/04	09/29/04	KWG0414281	
Hexachlorobenzene	ND	U	20	8.2	2	09/22/04	09/29/04	KWG0414281	
Pentachlorophenol	ND	U	100	33	2	09/22/04	09/29/04	KWG0414281	
Carbazole	6.2	JD	20	5.1	2	09/22/04	09/29/04	KWG0414281	
Di-n-butyl Phthalate	ND	U	20	11	2	09/22/04	09/29/04	KWG0414281	
Benzidine	ND	U	780	780	2	09/22/04	09/29/04	KWG0414281	*
Butyl Benzyl Phthalate	11	JD	20	5.9	2	09/22/04	09/29/04	KWG0414281	
3,3'-Dichlorobenzidine	ND	U	200	15	2	09/22/04	09/29/04	KWG0414281	
Bis(2-ethylhexyl) Phthalate	63	JD	400	6.6	2	09/22/04	09/29/04	KWG0414281	
Di-n-octyl Phthalate	ND	U	40	4.7	2	09/22/04	09/29/04	KWG0414281	

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	57	40-130	09/29/04	Acceptable
Phenol-d6	64	40-130	09/29/04	Acceptable
Nitrobenzene-d5	46	40-130	09/29/04	Acceptable
2-Fluorobiphenyl	50	40-130	09/29/04	Acceptable
2,4,6-Tribromophenol	88	40-130	09/29/04	Acceptable
Terphenyl-d14	83	40-130	09/29/04	Acceptable

† Analyte Comments

4-Methylphenol This analyte cannot be separated from 3-Methylphenol.

Comments: _____

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406581
Date Collected: 08/30/2004
Date Received: 08/31/2004
Date Extracted: 09/28/2004
Date Analyzed: 10/01/2004

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: LDW-B7a-T
Lab Code: K2406581-001
File ID: J:\MS14\DATA\100104\1001F016.D
Instrument ID: MS14

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Extraction Lot: KWG0414745
Calibration ID: CAL3859

Sample Amount: 2.03 g
% Solids: NA
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
62-75-9	N-Nitrosodimethylamine	50	U	200	50	
62-53-3	Aniline	1200	U	4000	1200	*
111-44-4	Bis(2-chloroethyl) Ether	43	U	200	43	
108-95-2	Phenol	120	J	500	84	
95-57-8	2-Chlorophenol	55	U	400	55	
541-73-1	1,3-Dichlorobenzene	55	U	200	55	
106-46-7	1,4-Dichlorobenzene	55	U	200	55	
95-50-1	1,2-Dichlorobenzene	60	U	200	60	
100-51-6	Benzyl Alcohol	34	U	200	34	
39638-32-9	Bis(2-chloroisopropyl) Ether	55	U	200	55	
95-48-7	2-Methylphenol	270	U	400	270	
67-72-1	Hexachloroethane	42	U	200	42	
621-64-7	N-Nitrosodi-n-propylamine	41	U	200	41	
106-44-5	4-Methylphenol†	74	U	400	74	
98-95-3	Nitrobenzene	50	U	200	50	
78-59-1	Isophorone	29	U	200	29	
88-75-5	2-Nitrophenol	74	U	200	74	
105-67-9	2,4-Dimethylphenol	65	U	400	65	*
111-91-1	Bis(2-chloroethoxy)methane	25	U	200	25	
120-83-2	2,4-Dichlorophenol	60	U	400	60	
65-85-0	Benzoic Acid	1300	J	4000	940	
120-82-1	1,2,4-Trichlorobenzene	49	U	200	49	
106-47-8	4-Chloroaniline	30	U	990	30	
87-68-3	Hexachlorobutadiene	42	U	200	42	
59-50-7	4-Chloro-3-methylphenol	990	Ui	990	990	
77-47-4	Hexachlorocyclopentadiene	25000	U	25000	25000	
88-06-2	2,4,6-Trichlorophenol	44	U	400	44	
95-95-4	2,4,5-Trichlorophenol	55	U	400	55	

Comments: _____

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406581
Date Collected: 08/30/2004
Date Received: 08/31/2004
Date Extracted: 09/28/2004
Date Analyzed: 10/01/2004

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: LDW-B7a-T
Lab Code: K2406581-001
File ID: J:\MS14\DATA\100104\1001F016.D
Instrument ID: MS14

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Extraction Lot: KWG0414745
Calibration ID: CAL3859

Sample Amount: 2.03 g
% Solids: NA
Dilution Factor: 1

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
91-58-7	2-Chloronaphthalene	30 U	200	30	
88-74-4	2-Nitroaniline	130 U	990	130	
131-11-3	Dimethyl Phthalate	26 U	200	26	
606-20-2	2,6-Dinitrotoluene	35 U	200	35	
99-09-2	3-Nitroaniline	44 U	2000	44	
51-28-5	2,4-Dinitrophenol	120 U	4000	120	
100-02-7	4-Nitrophenol	37 U	2000	37	
121-14-2	2,4-Dinitrotoluene	42 U	400	42	
7005-72-3	4-Chlorophenyl Phenyl Ether	23 U	200	23	
84-66-2	Diethyl Phthalate	47 U	400	47	
100-01-6	4-Nitroaniline	130 U	990	130	
534-52-1	2-Methyl-4,6-dinitrophenol	74 U	2000	74	
86-30-6	N-Nitrosodiphenylamine	47 U	200	47	
101-55-3	4-Bromophenyl Phenyl Ether	28 U	200	28	
118-74-1	Hexachlorobenzene	30 U	200	30	
87-86-5	Pentachlorophenol	160 U	2000	160	
86-74-8	Carbazole	170 U	990	170	
84-74-2	Di-n-butyl Phthalate	79 U	200	79	
92-87-5	Benzidine	25000 U	25000	25000	*
85-68-7	Butyl Benzyl Phthalate	69 U	200	69	
91-94-1	3,3'-Dichlorobenzidine	3900 U	9900	3900	
117-81-7	Bis(2-ethylhexyl) Phthalate	270 U	2500	270	
117-84-0	Di-n-octyl Phthalate	65 U	200	65	

* See Case Narrative

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406581
Date Collected: 08/30/2004
Date Received: 08/31/2004
Date Extracted: 09/28/2004
Date Analyzed: 10/01/2004

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: LDW-B7a-T
Lab Code: K2406581-001
File ID: J:\MS14\DATA\100104\1001F016.D
Instrument ID: MS14
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Lot: KWG0414745
Calibration ID: CAL3859

Sample Amount: 2.03 g
% Solids: NA
Dilution Factor: 1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	83	20-130	10/01/04	Acceptable
Phenol-d6	91	20-130	10/01/04	Acceptable
Nitrobenzene-d5	87	20-130	10/01/04	Acceptable
2-Fluorobiphenyl	82	20-130	10/01/04	Acceptable
2,4,6-Tribromophenol	85	20-130	10/01/04	Acceptable
Terphenyl-d14	100	20-130	10/01/04	Acceptable

† Analyte Comments

4-Methylphenol This analyte cannot be separated from 3-Methylphenol.

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406581
Date Collected: 08/30/2004
Date Received: 08/31/2004
Date Extracted: 09/28/2004
Date Analyzed: 10/04/2004

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: LDW-B7a-TRE
Lab Code: K2406581-001
File ID: J:\MS14\DATA\100404\1004F010.D
Instrument ID: MS14

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Extraction Lot: KWG0414745
Calibration ID: CAL3859

Sample Amount: 2.03 g
% Solids: NA
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
62-75-9	N-Nitrosodimethylamine	50	U	200	50	*
62-53-3	Aniline	1200	U	4000	1200	*
111-44-4	Bis(2-chloroethyl) Ether	43	U	200	43	
108-95-2	Phenol	84	U	500	84	
95-57-8	2-Chlorophenol	55	U	400	55	
541-73-1	1,3-Dichlorobenzene	55	U	200	55	
106-46-7	1,4-Dichlorobenzene	55	U	200	55	
95-50-1	1,2-Dichlorobenzene	60	U	200	60	
100-51-6	Benzyl Alcohol	34	U	200	34	
39638-32-9	Bis(2-chloroisopropyl) Ether	55	U	200	55	
95-48-7	2-Methylphenol	270	U	400	270	
67-72-1	Hexachloroethane	42	U	200	42	
621-64-7	N-Nitrosodi-n-propylamine	41	U	200	41	
106-44-5	4-Methylphenol†	74	U	400	74	
98-95-3	Nitrobenzene	50	U	200	50	
78-59-1	Isophorone	29	U	200	29	
88-75-5	2-Nitrophenol	74	U	200	74	
105-67-9	2,4-Dimethylphenol	65	U	400	65	*
111-91-1	Bis(2-chloroethoxy)methane	25	U	200	25	
120-83-2	2,4-Dichlorophenol	60	U	400	60	
65-85-0	Benzoic Acid	1500	J	4000	940	
120-82-1	1,2,4-Trichlorobenzene	49	U	200	49	
106-47-8	4-Chloroaniline	30	U	990	30	
87-68-3	Hexachlorobutadiene	42	U	200	42	
59-50-7	4-Chloro-3-methylphenol	360	U	990	360	
77-47-4	Hexachlorocyclopentadiene	25000	U	25000	25000	*
88-06-2	2,4,6-Trichlorophenol	44	U	400	44	
95-95-4	2,4,5-Trichlorophenol	55	U	400	55	

Comments: _____

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406581
Date Collected: 08/30/2004
Date Received: 08/31/2004
Date Extracted: 09/28/2004
Date Analyzed: 10/04/2004

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: LDW-B7a-TRE
Lab Code: K2406581-001
File ID: J:\MS14\DATA\100404\1004F010.D
Instrument ID: MS14
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Lot: KWG0414745
Calibration ID: CAL3859

Sample Amount: 2.03 g
% Solids: NA
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
91-58-7	2-Chloronaphthalene	30	U	200	30	
88-74-4	2-Nitroaniline	130	U	990	130	
131-11-3	Dimethyl Phthalate	26	U	200	26	
606-20-2	2,6-Dinitrotoluene	35	U	200	35	
99-09-2	3-Nitroaniline	44	U	2000	44	
51-28-5	2,4-Dinitrophenol	120	U	4000	120	
100-02-7	4-Nitrophenol	37	U	2000	37	*
121-14-2	2,4-Dinitrotoluene	42	U	400	42	
7005-72-3	4-Chlorophenyl Phenyl Ether	23	U	200	23	
84-66-2	Diethyl Phthalate	47	U	400	47	
100-01-6	4-Nitroaniline	130	U	990	130	
534-52-1	2-Methyl-4,6-dinitrophenol	74	U	2000	74	*
86-30-6	N-Nitrosodiphenylamine	47	U	200	47	
101-55-3	4-Bromophenyl Phenyl Ether	28	U	200	28	
118-74-1	Hexachlorobenzene	30	U	200	30	
87-86-5	Pentachlorophenol	160	U	2000	160	
86-74-8	Carbazole	170	U	990	170	
84-74-2	Di-n-butyl Phthalate	79	U	200	79	
92-87-5	Benzidine	25000	U	25000	25000	*
85-68-7	Butyl Benzyl Phthalate	69	U	200	69	
91-94-1	3,3'-Dichlorobenzidine	3900	U	9900	3900	
117-81-7	Bis(2-ethylhexyl) Phthalate	270	U	2500	270	
117-84-0	Di-n-octyl Phthalate	65	U	200	65	

* See Case Narrative

Comments: _____

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406581
Date Collected: 08/30/2004
Date Received: 08/31/2004
Date Extracted: 09/28/2004
Date Analyzed: 10/04/2004

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: LDW-B7a-TRE
Lab Code: K2406581-001
File ID: J:\MS14\DATA\100404\1004F010.D
Instrument ID: MS14

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Extraction Lot: KWG0414745
Calibration ID: CAL3859

Sample Amount: 2.03 g
% Solids: NA
Dilution Factor: 1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	74	20-130	10/04/04	Acceptable
Phenol-d6	92	20-130	10/04/04	Acceptable
Nitrobenzene-d5	96	20-130	10/04/04	Acceptable
2-Fluorobiphenyl	80	20-130	10/04/04	Acceptable
2,4,6-Tribromophenol	78	20-130	10/04/04	Acceptable
Terphenyl-d14	95	20-130	10/04/04	Acceptable

† Analyte Comments

4-Methylphenol This analyte cannot be separated from 3-Methylphenol.

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
 Project: LDW Benthic Invertebrate Survey/04-08-06-21
 Sample Matrix: Tissue

Service Request: K2406932
 Date Collected: 08/17/2004
 Date Received: 08/20/2004
 Date Extracted: 09/28/2004
 Date Analyzed: 10/01/2004

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: LDW-B8a-T
 Lab Code: K2406932-006
 File ID: J:\MS14\DATA\100104\1001F017.D
 Instrument ID: MS14
 Extraction Method: EPA 3541
 Analysis Method: 8270C SIM

Units: ug/Kg
 Basis: Wet
 Level: Low

Extraction Lot: KWG0414745
 Calibration ID: CAL3859

Sample Amount: 2.05 g
 % Solids: NA
 Dilution Factor: 1

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
62-75-9	N-Nitrosodimethylamine	49 U	200	49	
62-53-3	Aniline	1200 U	4000	1200	*
111-44-4	Bis(2-chloroethyl) Ether	43 U	200	43	
108-95-2	Phenol	83 U	490	83	
95-57-8	2-Chlorophenol	54 U	400	54	
541-73-1	1,3-Dichlorobenzene	54 U	200	54	
106-46-7	1,4-Dichlorobenzene	54 U	200	54	
95-50-1	1,2-Dichlorobenzene	59 U	200	59	
100-51-6	Benzyl Alcohol	33 U	200	33	
39638-32-9	Bis(2-chloroisopropyl) Ether	54 U	200	54	
95-48-7	2-Methylphenol	260 U	400	260	
67-72-1	Hexachloroethane	42 U	200	42	
621-64-7	N-Nitrosodi-n-propylamine	40 U	200	40	
106-44-5	4-Methylphenol†	74 U	400	74	
98-95-3	Nitrobenzene	49 U	200	49	
78-59-1	Isophorone	29 U	200	29	
88-75-5	2-Nitrophenol	74 U	200	74	
105-67-9	2,4-Dimethylphenol	64 U	400	64	*
111-91-1	Bis(2-chloroethoxy)methane	25 U	200	25	
120-83-2	2,4-Dichlorophenol	59 U	400	59	
65-85-0	Benzoic Acid	1100 J	4000	930	
120-82-1	1,2,4-Trichlorobenzene	49 U	200	49	
106-47-8	4-Chloroaniline	29 U	980	29	
87-68-3	Hexachlorobutadiene	42 U	200	42	
59-50-7	4-Chloro-3-methylphenol	360 U	980	360	
77-47-4	Hexachlorocyclopentadiene	25000 U	25000	25000	
88-06-2	2,4,6-Trichlorophenol	43 U	400	43	
95-95-4	2,4,5-Trichlorophenol	54 U	400	54	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406932
Date Collected: 08/17/2004
Date Received: 08/20/2004
Date Extracted: 09/28/2004
Date Analyzed: 10/01/2004

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: LDW-B8a-T
Lab Code: K2406932-006
File ID: J:\MS14\DATA\100104\1001F017.D
Instrument ID: MS14
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Lot: KWG0414745
Calibration ID: CAL3859

Sample Amount: 2.05 g
% Solids: NA
Dilution Factor: 1

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
91-58-7	2-Chloronaphthalene	29 U	200	29	
88-74-4	2-Nitroaniline	130 U	980	130	
131-11-3	Dimethyl Phthalate	25 U	200	25	
606-20-2	2,6-Dinitrotoluene	35 U	200	35	
99-09-2	3-Nitroaniline	44 U	2000	44	
51-28-5	2,4-Dinitrophenol	120 U	4000	120	
100-02-7	4-Nitrophenol	37 U	2000	37	
121-14-2	2,4-Dinitrotoluene	42 U	400	42	
7005-72-3	4-Chlorophenyl Phenyl Ether	22 U	200	22	
84-66-2	Diethyl Phthalate	46 U	400	46	
100-01-6	4-Nitroaniline	130 U	980	130	
534-52-1	2-Methyl-4,6-dinitrophenol	74 U	2000	74	
86-30-6	N-Nitrosodiphenylamine	47 U	200	47	
101-55-3	4-Bromophenyl Phenyl Ether	27 U	200	27	
118-74-1	Hexachlorobenzene	29 U	200	29	
87-86-5	Pentachlorophenol	160 U	2000	160	
86-74-8	Carbazole	170 U	980	170	
84-74-2	Di-n-butyl Phthalate	79 U	200	79	
92-87-5	Benzidine	25000 U	25000	25000	*
85-68-7	Butyl Benzyl Phthalate	69 U	200	69	
91-94-1	3,3'-Dichlorobenzidine	3900 U	9800	3900	
117-81-7	Bis(2-ethylhexyl) Phthalate	260 U	2500	260	
117-84-0	Di-n-octyl Phthalate	64 U	200	64	

* See Case Narrative

Comments: _____

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406932
Date Collected: 08/17/2004
Date Received: 08/20/2004
Date Extracted: 09/28/2004
Date Analyzed: 10/01/2004

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: LDW-B8a-T
Lab Code: K2406932-006
File ID: J:\MS14\DATA\100104\1001F017.D
Instrument ID: MS14
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Lot: KWG0414745
Calibration ID: CAL3859

Sample Amount: 2.05 g
% Solids: NA
Dilution Factor: 1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	85	20-130	10/01/04	Acceptable
Phenol-d6	91	20-130	10/01/04	Acceptable
Nitrobenzene-d5	86	20-130	10/01/04	Acceptable
2-Fluorobiphenyl	82	20-130	10/01/04	Acceptable
2,4,6-Tribromophenol	85	20-130	10/01/04	Acceptable
Terphenyl-d14	95	20-130	10/01/04	Acceptable

† Analyte Comments

4-Methylphenol This analyte cannot be separated from 3-Methylphenol.

Comments:

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406932
Date Collected: 08/17/2004
Date Received: 08/20/2004
Date Extracted: 09/28/2004
Date Analyzed: 10/04/2004

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: LDW-B8a-TRE
Lab Code: K2406932-006
File ID: J:\MS14\DATA\100404\1004F011.D
Instrument ID: MS14
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Lot: KWG0414745
Calibration ID: CAL3859

Sample Amount: 2.05 g
% Solids: NA
Dilution Factor: 1

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
62-75-9	N-Nitrosodimethylamine	49 U	200	49	*
62-53-3	Aniline	1200 U	4000	1200	*
111-44-4	Bis(2-chloroethyl) Ether	43 U	200	43	
108-95-2	Phenol	83 U	490	83	
95-57-8	2-Chlorophenol	54 U	400	54	
541-73-1	1,3-Dichlorobenzene	54 U	200	54	
106-46-7	1,4-Dichlorobenzene	54 U	200	54	
95-50-1	1,2-Dichlorobenzene	59 U	200	59	
100-51-6	Benzyl Alcohol	33 U	200	33	
39638-32-9	Bis(2-chloroisopropyl) Ether	54 U	200	54	
95-48-7	2-Methylphenol	260 U	400	260	
67-72-1	Hexachloroethane	42 U	200	42	
621-64-7	N-Nitrosodi-n-propylamine	40 U	200	40	
106-44-5	4-Methylphenol†	74 U	400	74	
98-95-3	Nitrobenzene	49 U	200	49	
78-59-1	Isophorone	29 U	200	29	
88-75-5	2-Nitrophenol	74 U	200	74	
105-67-9	2,4-Dimethylphenol	64 U	400	64	*
111-91-1	Bis(2-chloroethoxy)methane	25 U	200	25	
120-83-2	2,4-Dichlorophenol	59 U	400	59	
65-85-0	Benzoic Acid	1300 J	4000	930	
120-82-1	1,2,4-Trichlorobenzene	49 U	200	49	
106-47-8	4-Chloroaniline	29 U	980	29	
87-68-3	Hexachlorobutadiene	42 U	200	42	
59-50-7	4-Chloro-3-methylphenol	360 U	980	360	
77-47-4	Hexachlorocyclopentadiene	25000 U	25000	25000	*
88-06-2	2,4,6-Trichlorophenol	43 U	400	43	
95-95-4	2,4,5-Trichlorophenol	54 U	400	54	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406932
Date Collected: 08/17/2004
Date Received: 08/20/2004
Date Extracted: 09/28/2004
Date Analyzed: 10/04/2004

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: LDW-B8a-TRE
Lab Code: K2406932-006
File ID: J:\MS14\DATA\100404\1004F011.D
Instrument ID: MS14
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Lot: KWG0414745
Calibration ID: CAL3859

Sample Amount: 2.05 g
% Solids: NA
Dilution Factor: 1

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
91-58-7	2-Chloronaphthalene	29 U	200	29	
88-74-4	2-Nitroaniline	130 U	980	130	
131-11-3	Dimethyl Phthalate	25 U	200	25	
606-20-2	2,6-Dinitrotoluene	35 U	200	35	
99-09-2	3-Nitroaniline	44 U	2000	44	
51-28-5	2,4-Dinitrophenol	120 U	4000	120	
100-02-7	4-Nitrophenol	37 U	2000	37	*
121-14-2	2,4-Dinitrotoluene	42 U	400	42	
7005-72-3	4-Chlorophenyl Phenyl Ether	22 U	200	22	
84-66-2	Diethyl Phthalate	46 U	400	46	
100-01-6	4-Nitroaniline	130 U	980	130	
534-52-1	2-Methyl-4,6-dinitrophenol	74 U	2000	74	*
86-30-6	N-Nitrosodiphenylamine	47 U	200	47	
101-55-3	4-Bromophenyl Phenyl Ether	27 U	200	27	
118-74-1	Hexachlorobenzene	29 U	200	29	
87-86-5	Pentachlorophenol	160 U	2000	160	
86-74-8	Carbazole	170 U	980	170	
84-74-2	Di-n-butyl Phthalate	79 U	200	79	
92-87-5	Benzidine	25000 U	25000	25000	*
85-68-7	Butyl Benzyl Phthalate	69 U	200	69	
91-94-1	3,3'-Dichlorobenzidine	3900 U	9800	3900	
117-81-7	Bis(2-ethylhexyl) Phthalate	260 U	2500	260	
117-84-0	Di-n-octyl Phthalate	64 U	200	64	

* See Case Narrative

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406932
Date Collected: 08/17/2004
Date Received: 08/20/2004
Date Extracted: 09/28/2004
Date Analyzed: 10/04/2004

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: LDW-B8a-TRE
Lab Code: K2406932-006
File ID: J:\MS14\DATA\100404\1004F011.D
Instrument ID: MS14
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Lot: KWG0414745
Calibration ID: CAL3859

Sample Amount: 2.05 g
% Solids: NA
Dilution Factor: 1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	84	20-130	10/04/04	Acceptable
Phenol-d6	96	20-130	10/04/04	Acceptable
Nitrobenzene-d5	92	20-130	10/04/04	Acceptable
2-Fluorobiphenyl	79	20-130	10/04/04	Acceptable
2,4,6-Tribromophenol	86	20-130	10/04/04	Acceptable
Terphenyl-d14	90	20-130	10/04/04	Acceptable

† Analyte Comments

4-Methylphenol This analyte cannot be separated from 3-Methylphenol.

Comments:

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406932
Date Collected: 08/25/2004
Date Received: 08/31/2004
Date Extracted: 09/28/2004
Date Analyzed: 10/01/2004

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: LDW-B10a-T
Lab Code: K2406932-009
File ID: J:\MS14\DATA\100104\1001F018.D
Instrument ID: MS14

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Extraction Lot: KWG0414745
Calibration ID: CAL3859

Sample Amount: 2.05 g
% Solids: NA
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
62-75-9	N-Nitrosodimethylamine	49	U	200	49	
62-53-3	Aniline	1200	U	4000	1200	*
111-44-4	Bis(2-chloroethyl) Ether	43	U	200	43	
108-95-2	Phenol	83	U	490	83	
95-57-8	2-Chlorophenol	54	U	400	54	
541-73-1	1,3-Dichlorobenzene	54	U	200	54	
106-46-7	1,4-Dichlorobenzene	54	U	200	54	
95-50-1	1,2-Dichlorobenzene	59	U	200	59	
100-51-6	Benzyl Alcohol	33	U	200	33	
39638-32-9	Bis(2-chloroisopropyl) Ether	54	U	200	54	
95-48-7	2-Methylphenol	260	U	400	260	
67-72-1	Hexachloroethane	42	U	200	42	
621-64-7	N-Nitrosodi-n-propylamine	2300	Ui	2300	2300	
106-44-5	4-Methylphenol†	74	U	400	74	
98-95-3	Nitrobenzene	49	U	200	49	
78-59-1	Isophorone	29	U	200	29	
88-75-5	2-Nitrophenol	74	U	200	74	
105-67-9	2,4-Dimethylphenol	64	U	400	64	*
111-91-1	Bis(2-chloroethoxy)methane	25	U	200	25	
120-83-2	2,4-Dichlorophenol	59	U	400	59	
65-85-0	Benzoic Acid	930	U	4000	930	
120-82-1	1,2,4-Trichlorobenzene	49	U	200	49	
106-47-8	4-Chloroaniline	29	U	980	29	
87-68-3	Hexachlorobutadiene	42	U	200	42	
59-50-7	4-Chloro-3-methylphenol	360	U	980	360	
77-47-4	Hexachlorocyclopentadiene	25000	U	25000	25000	
88-06-2	2,4,6-Trichlorophenol	43	U	400	43	
95-95-4	2,4,5-Trichlorophenol	54	U	400	54	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406932
Date Collected: 08/25/2004
Date Received: 08/31/2004
Date Extracted: 09/28/2004
Date Analyzed: 10/01/2004

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: LDW-B10a-T
Lab Code: K2406932-009
File ID: J:\MS14\DATA\100104\1001F018.D
Instrument ID: MS14

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Extraction Lot: KWG0414745
Calibration ID: CAL3859

Sample Amount: 2.05 g
% Solids: NA
Dilution Factor: 1

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
91-58-7	2-Chloronaphthalene	29 U	200	29	
88-74-4	2-Nitroaniline	130 U	980	130	
131-11-3	Dimethyl Phthalate	25 U	200	25	
606-20-2	2,6-Dinitrotoluene	35 U	200	35	
99-09-2	3-Nitroaniline	44 U	2000	44	
51-28-5	2,4-Dinitrophenol	120 U	4000	120	
100-02-7	4-Nitrophenol	37 U	2000	37	
121-14-2	2,4-Dinitrotoluene	42 U	400	42	
7005-72-3	4-Chlorophenyl Phenyl Ether	22 U	200	22	
84-66-2	Diethyl Phthalate	46 U	400	46	
100-01-6	4-Nitroaniline	130 U	980	130	
534-52-1	2-Methyl-4,6-dinitrophenol	74 U	2000	74	
86-30-6	N-Nitrosodiphenylamine	47 U	200	47	
101-55-3	4-Bromophenyl Phenyl Ether	27 U	200	27	
118-74-1	Hexachlorobenzene	29 U	200	29	
87-86-5	Pentachlorophenol	160 U	2000	160	
86-74-8	Carbazole	170 U	980	170	
84-74-2	Di-n-butyl Phthalate	79 U	200	79	
92-87-5	Benzidine	25000 U	25000	25000	*
85-68-7	Butyl Benzyl Phthalate	69 U	200	69	
91-94-1	3,3'-Dichlorobenzidine	3900 U	9800	3900	
117-81-7	Bis(2-ethylhexyl) Phthalate	260 U	2500	260	
117-84-0	Di-n-octyl Phthalate	64 U	200	64	

* See Case Narrative

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406932
Date Collected: 08/25/2004
Date Received: 08/31/2004
Date Extracted: 09/28/2004
Date Analyzed: 10/01/2004

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: LDW-B10a-T
Lab Code: K2406932-009
File ID: J:\MS14\DATA\100104\1001F018.D
Instrument ID: MS14
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Lot: KWG0414745
Calibration ID: CAL3859

Sample Amount: 2.05 g
% Solids: NA
Dilution Factor: 1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	84	20-130	10/01/04	Acceptable
Phenol-d6	96	20-130	10/01/04	Acceptable
Nitrobenzene-d5	88	20-130	10/01/04	Acceptable
2-Fluorobiphenyl	86	20-130	10/01/04	Acceptable
2,4,6-Tribromophenol	91	20-130	10/01/04	Acceptable
Terphenyl-d14	106	20-130	10/01/04	Acceptable

† Analyte Comments

4-Methylphenol This analyte cannot be separated from 3-Methylphenol.

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406932
Date Collected: 08/25/2004
Date Received: 08/31/2004
Date Extracted: 09/28/2004
Date Analyzed: 10/04/2004

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: LDW-B10a-TRE
Lab Code: K2406932-009
File ID: J:\MS14\DATA\100404\1004F012.D
Instrument ID: MS14

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Extraction Lot: KWG0414745
Calibration ID: CAL3859

Sample Amount: 2.05 g
% Solids: NA
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
62-75-9	N-Nitrosodimethylamine	49	U	200	49	*
62-53-3	Aniline	1200	U	4000	1200	*
111-44-4	Bis(2-chloroethyl) Ether	43	U	200	43	
108-95-2	Phenol	83	U	490	83	
95-57-8	2-Chlorophenol	54	U	400	54	
541-73-1	1,3-Dichlorobenzene	54	U	200	54	
106-46-7	1,4-Dichlorobenzene	54	U	200	54	
95-50-1	1,2-Dichlorobenzene	59	U	200	59	
100-51-6	Benzyl Alcohol	33	U	200	33	
39638-32-9	Bis(2-chloroisopropyl) Ether	54	U	200	54	
95-48-7	2-Methylphenol	260	U	400	260	
67-72-1	Hexachloroethane	42	U	200	42	
621-64-7	N-Nitrosodi-n-propylamine	40	U	200	40	
106-44-5	4-Methylphenol†	74	U	400	74	
98-95-3	Nitrobenzene	49	U	200	49	
78-59-1	Isophorone	29	U	200	29	
88-75-5	2-Nitrophenol	74	U	200	74	
105-67-9	2,4-Dimethylphenol	64	U	400	64	*
111-91-1	Bis(2-chloroethoxy)methane	25	U	200	25	
120-83-2	2,4-Dichlorophenol	59	U	400	59	
65-85-0	Benzoic Acid	1000	J	4000	930	
120-82-1	1,2,4-Trichlorobenzene	49	U	200	49	
106-47-8	4-Chloroaniline	29	U	980	29	
87-68-3	Hexachlorobutadiene	42	U	200	42	
59-50-7	4-Chloro-3-methylphenol	360	U	980	360	
77-47-4	Hexachlorocyclopentadiene	25000	U	25000	25000	*
88-06-2	2,4,6-Trichlorophenol	43	U	400	43	
95-95-4	2,4,5-Trichlorophenol	54	U	400	54	

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
 Project: LDW Benthic Invertebrate Survey/04-08-06-21
 Sample Matrix: Tissue

Service Request: K2406932
 Date Collected: 08/25/2004
 Date Received: 08/31/2004
 Date Extracted: 09/28/2004
 Date Analyzed: 10/04/2004

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: LDW-B10a-TRE
 Lab Code: K2406932-009
 File ID: J:\MS14\DATA\100404\1004F012.D
 Instrument ID: MS14
 Extraction Method: EPA 3541
 Analysis Method: 8270C SIM

Units: ug/Kg
 Basis: Wet
 Level: Low

Extraction Lot: KWG0414745
 Calibration ID: CAL3859

Sample Amount: 2.05 g
 % Solids: NA
 Dilution Factor: 1

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
91-58-7	2-Chloronaphthalene	29 U	200	29	
88-74-4	2-Nitroaniline	130 U	980	130	
131-11-3	Dimethyl Phthalate	25 U	200	25	
606-20-2	2,6-Dinitrotoluene	35 U	200	35	
99-09-2	3-Nitroaniline	44 U	2000	44	
51-28-5	2,4-Dinitrophenol	120 U	4000	120	
100-02-7	4-Nitrophenol	37 U	2000	37	*
121-14-2	2,4-Dinitrotoluene	42 U	400	42	
7005-72-3	4-Chlorophenyl Phenyl Ether	22 U	200	22	
84-66-2	Diethyl Phthalate	46 U	400	46	
100-01-6	4-Nitroaniline	130 U	980	130	
534-52-1	2-Methyl-4,6-dinitrophenol	74 U	2000	74	*
86-30-6	N-Nitrosodiphenylamine	47 U	200	47	
101-55-3	4-Bromophenyl Phenyl Ether	27 U	200	27	
118-74-1	Hexachlorobenzene	29 U	200	29	
87-86-5	Pentachlorophenol	160 U	2000	160	
86-74-8	Carbazole	170 U	980	170	
84-74-2	Di-n-butyl Phthalate	79 U	200	79	
92-87-5	Benzidine	25000 U	25000	25000	*
85-68-7	Butyl Benzyl Phthalate	69 U	200	69	
91-94-1	3,3'-Dichlorobenzidine	3900 U	9800	3900	
117-81-7	Bis(2-ethylhexyl) Phthalate	260 U	2500	260	
117-84-0	Di-n-octyl Phthalate	64 U	200	64	

* See Case Narrative

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406932
Date Collected: 08/25/2004
Date Received: 08/31/2004
Date Extracted: 09/28/2004
Date Analyzed: 10/04/2004

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: LDW-B10a-TRE
Lab Code: K2406932-009
File ID: J:\MS14\DATA\100404\1004F012.D
Instrument ID: MS14
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Lot: KWG0414745
Calibration ID: CAL3859

Sample Amount: 2.05 g
% Solids: NA
Dilution Factor: 1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	84	20-130	10/04/04	Acceptable
Phenol-d6	100	20-130	10/04/04	Acceptable
Nitrobenzene-d5	94	20-130	10/04/04	Acceptable
2-Fluorobiphenyl	84	20-130	10/04/04	Acceptable
2,4,6-Tribromophenol	90	20-130	10/04/04	Acceptable
Terphenyl-d14	100	20-130	10/04/04	Acceptable

† Analyte Comments

4-Methylphenol This analyte cannot be separated from 3-Methylphenol.

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2407012
Date Collected: 08/17/2004
Date Received: 09/20/2004

Semi-Volatile Organic Compounds by GC/MS

Sample Name: LDW-B8a-S
Lab Code: K2407012-006
Extraction Method: EPA 3541
Analysis Method: 8270C

Units: ug/Kg
Basis: Dry
Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
N-Nitrosodimethylamine	ND	U	250	57	5	09/22/04	09/29/04	KWG0414281	
Aniline	ND	U	99	14	5	09/22/04	09/29/04	KWG0414281	
Bis(2-chloroethyl) Ether	ND	U	50	23	5	09/22/04	09/29/04	KWG0414281	
Phenol	2800	D	150	18	5	09/22/04	09/29/04	KWG0414281	
2-Chlorophenol	ND	U	50	16	5	09/22/04	09/29/04	KWG0414281	
1,3-Dichlorobenzene	ND	U	50	15	5	09/22/04	09/29/04	KWG0414281	
1,4-Dichlorobenzene	ND	U	50	18	5	09/22/04	09/29/04	KWG0414281	
1,2-Dichlorobenzene	ND	U	50	13	5	09/22/04	09/29/04	KWG0414281	
Benzyl Alcohol	ND	U	50	35	5	09/22/04	09/29/04	KWG0414281	
Bis(2-chloroisopropyl) Ether	ND	U	50	12	5	09/22/04	09/29/04	KWG0414281	
2-Methylphenol	ND	U	50	32	5	09/22/04	09/29/04	KWG0414281	
Hexachloroethane	ND	U	50	21	5	09/22/04	09/29/04	KWG0414281	
N-Nitrosodi-n-propylamine	ND	U	50	30	5	09/22/04	09/29/04	KWG0414281	
4-Methylphenol†	ND	U	50	28	5	09/22/04	09/29/04	KWG0414281	
Nitrobenzene	ND	U	50	19	5	09/22/04	09/29/04	KWG0414281	
Isophorone	ND	U	50	15	5	09/22/04	09/29/04	KWG0414281	
2-Nitrophenol	ND	U	50	25	5	09/22/04	09/29/04	KWG0414281	
2,4-Dimethylphenol	ND	U	250	52	5	09/22/04	09/29/04	KWG0414281	*
Bis(2-chloroethoxy)methane	ND	U	50	13	5	09/22/04	09/29/04	KWG0414281	
2,4-Dichlorophenol	ND	U	50	17	5	09/22/04	09/29/04	KWG0414281	
Benzoic Acid	ND	U	990	900	5	09/22/04	09/29/04	KWG0414281	
1,2,4-Trichlorobenzene	ND	U	50	14	5	09/22/04	09/29/04	KWG0414281	
4-Chloroaniline	ND	U	50	20	5	09/22/04	09/29/04	KWG0414281	
Hexachlorobutadiene	ND	U	50	14	5	09/22/04	09/29/04	KWG0414281	
4-Chloro-3-methylphenol	ND	U	50	20	5	09/22/04	09/29/04	KWG0414281	
Hexachlorocyclopentadiene	ND	U	250	140	5	09/22/04	09/29/04	KWG0414281	
2,4,6-Trichlorophenol	ND	U	50	17	5	09/22/04	09/29/04	KWG0414281	
2,4,5-Trichlorophenol	ND	U	50	28	5	09/22/04	09/29/04	KWG0414281	
2-Chloronaphthalene	ND	U	50	34	5	09/22/04	09/29/04	KWG0414281	
2-Nitroaniline	ND	U	99	26	5	09/22/04	09/29/04	KWG0414281	
Dimethyl Phthalate	ND	U	50	17	5	09/22/04	09/29/04	KWG0414281	
2,6-Dinitrotoluene	ND	U	50	27	5	09/22/04	09/29/04	KWG0414281	
3-Nitroaniline	ND	U	99	25	5	09/22/04	09/29/04	KWG0414281	
2,4-Dinitrophenol	ND	U	990	340	5	09/22/04	09/29/04	KWG0414281	

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2407012
Date Collected: 08/17/2004
Date Received: 09/20/2004

Semi-Volatile Organic Compounds by GC/MS

Sample Name: LDW-B8a-S
Lab Code: K2407012-006
Extraction Method: EPA 3541
Analysis Method: 8270C

Units: ug/Kg
Basis: Dry
Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
4-Nitrophenol	ND	U	500	280	5	09/22/04	09/29/04	KWG0414281	
2,4-Dinitrotoluene	ND	U	50	27	5	09/22/04	09/29/04	KWG0414281	
4-Chlorophenyl Phenyl Ether	ND	U	50	19	5	09/22/04	09/29/04	KWG0414281	
Diethyl Phthalate	ND	U	50	33	5	09/22/04	09/29/04	KWG0414281	
4-Nitroaniline	ND	U	99	32	5	09/22/04	09/29/04	KWG0414281	
2-Methyl-4,6-dinitrophenol	ND	U	500	16	5	09/22/04	09/29/04	KWG0414281	
N-Nitrosodiphenylamine	ND	U	50	21	5	09/22/04	09/29/04	KWG0414281	
4-Bromophenyl Phenyl Ether	ND	U	50	14	5	09/22/04	09/29/04	KWG0414281	
Hexachlorobenzene	ND	U	50	20	5	09/22/04	09/29/04	KWG0414281	
Pentachlorophenol	ND	U	250	80	5	09/22/04	09/29/04	KWG0414281	
Carbazole	26	JD	50	13	5	09/22/04	09/29/04	KWG0414281	
Di-n-butyl Phthalate	280	D	50	25	5	09/22/04	09/29/04	KWG0414281	
Benzidine	ND	U	1900	1900	5	09/22/04	09/29/04	KWG0414281	*
Butyl Benzyl Phthalate	51	D	50	14	5	09/22/04	09/29/04	KWG0414281	
3,3'-Dichlorobenzidine	ND	U	500	35	5	09/22/04	09/29/04	KWG0414281	
Bis(2-ethylhexyl) Phthalate	190	JD	990	16	5	09/22/04	09/29/04	KWG0414281	
Di-n-octyl Phthalate	ND	U	99	12	5	09/22/04	09/29/04	KWG0414281	

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	61	40-130	09/29/04	Acceptable
Phenol-d6	66	40-130	09/29/04	Acceptable
Nitrobenzene-d5	51	40-130	09/29/04	Acceptable
2-Fluorobiphenyl	52	40-130	09/29/04	Acceptable
2,4,6-Tribromophenol	108	40-130	09/29/04	Acceptable
Terphenyl-d14	97	40-130	09/29/04	Acceptable

† Analyte Comments

4-Methylphenol This analyte cannot be separated from 3-Methylphenol.

Comments:

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2407012
Date Collected: 08/25/2004
Date Received: 08/30/2004

Semi-Volatile Organic Compounds by GC/MS

Sample Name: LDW-B10a-S
Lab Code: K2407012-009
Extraction Method: EPA 3541
Analysis Method: 8270C

Units: ug/Kg
Basis: Dry
Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
N-Nitrosodimethylamine	ND	U	100	20	2	09/22/04	09/29/04	KWG0414281	
Aniline	ND	U	40	4.8	2	09/22/04	09/29/04	KWG0414281	
Bis(2-chloroethyl) Ether	ND	U	20	7.7	2	09/22/04	09/29/04	KWG0414281	
Phenol	1100	D	60	6.1	2	09/22/04	09/29/04	KWG0414281	
2-Chlorophenol	ND	U	20	5.4	2	09/22/04	09/29/04	KWG0414281	
1,3-Dichlorobenzene	ND	U	20	5.1	2	09/22/04	09/29/04	KWG0414281	
1,4-Dichlorobenzene	ND	U	20	6.1	2	09/22/04	09/29/04	KWG0414281	
1,2-Dichlorobenzene	ND	U	20	4.2	2	09/22/04	09/29/04	KWG0414281	
Benzyl Alcohol	ND	U	20	12	2	09/22/04	09/29/04	KWG0414281	
Bis(2-chloroisopropyl) Ether	ND	U	20	3.9	2	09/22/04	09/29/04	KWG0414281	
2-Methylphenol	ND	U	20	11	2	09/22/04	09/29/04	KWG0414281	
Hexachloroethane	ND	U	20	7.0	2	09/22/04	09/29/04	KWG0414281	
N-Nitrosodi-n-propylamine	ND	U	20	11	2	09/22/04	09/29/04	KWG0414281	
4-Methylphenol†	ND	U	20	9.3	2	09/22/04	09/29/04	KWG0414281	
Nitrobenzene	ND	U	20	6.4	2	09/22/04	09/29/04	KWG0414281	
Isophorone	ND	U	20	5.1	2	09/22/04	09/29/04	KWG0414281	
2-Nitrophenol	ND	U	20	8.3	2	09/22/04	09/29/04	KWG0414281	
2,4-Dimethylphenol	ND	U	100	18	2	09/22/04	09/29/04	KWG0414281	*
Bis(2-chloroethoxy)methane	ND	U	20	4.2	2	09/22/04	09/29/04	KWG0414281	
2,4-Dichlorophenol	ND	U	20	5.8	2	09/22/04	09/29/04	KWG0414281	
Benzoic Acid	ND	U	400	310	2	09/22/04	09/29/04	KWG0414281	
1,2,4-Trichlorobenzene	ND	U	20	4.8	2	09/22/04	09/29/04	KWG0414281	
4-Chloroaniline	ND	U	20	6.7	2	09/22/04	09/29/04	KWG0414281	
Hexachlorobutadiene	ND	U	20	4.5	2	09/22/04	09/29/04	KWG0414281	
4-Chloro-3-methylphenol	ND	U	20	6.7	2	09/22/04	09/29/04	KWG0414281	
Hexachlorocyclopentadiene	ND	U	100	48	2	09/22/04	09/29/04	KWG0414281	
2,4,6-Trichlorophenol	ND	U	20	5.8	2	09/22/04	09/29/04	KWG0414281	
2,4,5-Trichlorophenol	ND	U	20	9.6	2	09/22/04	09/29/04	KWG0414281	
2-Chloronaphthalene	ND	U	20	12	2	09/22/04	09/29/04	KWG0414281	
2-Nitroaniline	ND	U	40	8.6	2	09/22/04	09/29/04	KWG0414281	
Dimethyl Phthalate	ND	U	20	5.8	2	09/22/04	09/29/04	KWG0414281	
2,6-Dinitrotoluene	ND	U	20	8.9	2	09/22/04	09/29/04	KWG0414281	
3-Nitroaniline	ND	U	40	8.3	2	09/22/04	09/29/04	KWG0414281	
2,4-Dinitrophenol	ND	U	400	120	2	09/22/04	09/29/04	KWG0414281	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2407012
Date Collected: 08/25/2004
Date Received: 08/30/2004

Semi-Volatile Organic Compounds by GC/MS

Sample Name: LDW-B10a-S
Lab Code: K2407012-009
Extraction Method: EPA 3541
Analysis Method: 8270C

Units: ug/Kg
Basis: Dry
Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
4-Nitrophenol	ND	U	200	96	2	09/22/04	09/29/04	KWG0414281	
2,4-Dinitrotoluene	ND	U	20	8.9	2	09/22/04	09/29/04	KWG0414281	
4-Chlorophenyl Phenyl Ether	ND	U	20	6.4	2	09/22/04	09/29/04	KWG0414281	
Diethyl Phthalate	ND	U	20	12	2	09/22/04	09/29/04	KWG0414281	
4-Nitroaniline	ND	U	40	11	2	09/22/04	09/29/04	KWG0414281	
2-Methyl-4,6-dinitrophenol	ND	U	200	5.4	2	09/22/04	09/29/04	KWG0414281	
N-Nitrosodiphenylamine	ND	U	20	7.0	2	09/22/04	09/29/04	KWG0414281	
4-Bromophenyl Phenyl Ether	ND	U	20	4.5	2	09/22/04	09/29/04	KWG0414281	
Hexachlorobenzene	ND	U	20	6.7	2	09/22/04	09/29/04	KWG0414281	
Pentachlorophenol	ND	U	100	27	2	09/22/04	09/29/04	KWG0414281	
Carbazole	6.9	JD	20	4.2	2	09/22/04	09/29/04	KWG0414281	
Di-n-butyl Phthalate	11	JD	20	8.3	2	09/22/04	09/29/04	KWG0414281	
Benzidine	ND	U	640	640	2	09/22/04	09/29/04	KWG0414281	*
Butyl Benzyl Phthalate	7.3	JD	20	4.8	2	09/22/04	09/29/04	KWG0414281	
3,3'-Dichlorobenzidine	ND	U	200	12	2	09/22/04	09/29/04	KWG0414281	
Bis(2-ethylhexyl) Phthalate	39	JD	400	5.4	2	09/22/04	09/29/04	KWG0414281	
Di-n-octyl Phthalate	ND	U	40	3.9	2	09/22/04	09/29/04	KWG0414281	

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	50	40-130	09/29/04	Acceptable
Phenol-d6	55	40-130	09/29/04	Acceptable
Nitrobenzene-d5	40	40-130	09/29/04	Acceptable
2-Fluorobiphenyl	40	40-130	09/29/04	Acceptable
2,4,6-Tribromophenol	85	40-130	09/29/04	Acceptable
Terphenyl-d14	80	40-130	09/29/04	Acceptable

† Analyte Comments

4-Methylphenol This analyte cannot be separated from 3-Methylphenol.

Comments: _____

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2407216
Date Collected: 08/26/2004
Date Received: 08/30/2004
Date Extracted: 09/28/2004
Date Analyzed: 10/01/2004

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: LDW-B3a-T
Lab Code: K2407216-001
File ID: J:\MS14\DATA\100104\1001F019.D
Instrument ID: MS14

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Extraction Lot: KWG0414745
Calibration ID: CAL3859

Sample Amount: 2.03 g
% Solids: NA
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
62-75-9	N-Nitrosodimethylamine	50	U	200	50	
62-53-3	Aniline	1200	U	4000	1200	*
111-44-4	Bis(2-chloroethyl) Ether	43	U	200	43	
108-95-2	Phenol	150	J	500	84	
95-57-8	2-Chlorophenol	55	U	400	55	
541-73-1	1,3-Dichlorobenzene	55	U	200	55	
106-46-7	1,4-Dichlorobenzene	55	U	200	55	
95-50-1	1,2-Dichlorobenzene	60	U	200	60	
100-51-6	Benzyl Alcohol	57	J	200	34	
39638-32-9	Bis(2-chloroisopropyl) Ether	55	U	200	55	
95-48-7	2-Methylphenol	270	U	400	270	
67-72-1	Hexachloroethane	42	U	200	42	
621-64-7	N-Nitrosodi-n-propylamine	41	U	200	41	
106-44-5	4-Methylphenol†	210	J	400	74	
98-95-3	Nitrobenzene	50	U	200	50	
78-59-1	Isophorone	29	U	200	29	
88-75-5	2-Nitrophenol	74	U	200	74	
105-67-9	2,4-Dimethylphenol	65	U	400	65	*
111-91-1	Bis(2-chloroethoxy)methane	25	U	200	25	
120-83-2	2,4-Dichlorophenol	60	U	400	60	
65-85-0	Benzoic Acid	1400	J	4000	940	
120-82-1	1,2,4-Trichlorobenzene	49	U	200	49	
106-47-8	4-Chloroaniline	30	U	990	30	
87-68-3	Hexachlorobutadiene	42	U	200	42	
59-50-7	4-Chloro-3-methylphenol	360	U	990	360	
77-47-4	Hexachlorocyclopentadiene	25000	U	25000	25000	
88-06-2	2,4,6-Trichlorophenol	44	U	400	44	
95-95-4	2,4,5-Trichlorophenol	55	U	400	55	

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2407216
Date Collected: 08/26/2004
Date Received: 08/30/2004
Date Extracted: 09/28/2004
Date Analyzed: 10/01/2004

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: LDW-B3a-T
Lab Code: K2407216-001
File ID: J:\MS14\DATA\I00104\I001F019.D
Instrument ID: MS14

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Extraction Lot: KWG0414745
Calibration ID: CAL3859

Sample Amount: 2.03 g
% Solids: NA
Dilution Factor: 1

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
91-58-7	2-Chloronaphthalene	30 U	200	30	
88-74-4	2-Nitroaniline	130 U	990	130	
131-11-3	Dimethyl Phthalate	26 U	200	26	
606-20-2	2,6-Dinitrotoluene	35 U	200	35	
99-09-2	3-Nitroaniline	44 U	2000	44	
51-28-5	2,4-Dinitrophenol	120 U	4000	120	
100-02-7	4-Nitrophenol	37 U	2000	37	
121-14-2	2,4-Dinitrotoluene	42 U	400	42	
7005-72-3	4-Chlorophenyl Phenyl Ether	23 U	200	23	
84-66-2	Diethyl Phthalate	47 U	400	47	
100-01-6	4-Nitroaniline	130 U	990	130	
534-52-1	2-Methyl-4,6-dinitrophenol	74 U	2000	74	
86-30-6	N-Nitrosodiphenylamine	47 U	200	47	
101-55-3	4-Bromophenyl Phenyl Ether	28 U	200	28	
118-74-1	Hexachlorobenzene	30 U	200	30	
87-86-5	Pentachlorophenol	160 U	2000	160	
86-74-8	Carbazole	170 U	990	170	
84-74-2	Di-n-butyl Phthalate	79 U	200	79	
92-87-5	Benzidine	25000 U	25000	25000	*
85-68-7	Butyl Benzyl Phthalate	69 U	200	69	
91-94-1	3,3'-Dichlorobenzidine	3900 U	9900	3900	
117-81-7	Bis(2-ethylhexyl) Phthalate	270 U	2500	270	
117-84-0	Di-n-octyl Phthalate	65 U	200	65	

* See Case Narrative

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2407216
Date Collected: 08/26/2004
Date Received: 08/30/2004
Date Extracted: 09/28/2004
Date Analyzed: 10/01/2004

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: LDW-B3a-T
Lab Code: K2407216-001
File ID: J:\MS14\DATA\100104\1001F019.D
Instrument ID: MS14
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Lot: KWG0414745
Calibration ID: CAL3859

Sample Amount: 2.03 g
% Solids: NA
Dilution Factor: 1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	91	20-130	10/01/04	Acceptable
Phenol-d6	100	20-130	10/01/04	Acceptable
Nitrobenzene-d5	96	20-130	10/01/04	Acceptable
2-Fluorobiphenyl	87	20-130	10/01/04	Acceptable
2,4,6-Tribromophenol	97	20-130	10/01/04	Acceptable
Terphenyl-d14	102	20-130	10/01/04	Acceptable

† Analyte Comments

4-Methylphenol This analyte cannot be separated from 3-Methylphenol.

Comments: _____

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2407216
Date Collected: 08/26/2004
Date Received: 08/30/2004
Date Extracted: 09/28/2004
Date Analyzed: 10/04/2004

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: LDW-B3a-TRE
Lab Code: K2407216-001
File ID: J:\MS14\DATA\100404\1004F013.D
Instrument ID: MS14

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Extraction Lot: KWG0414745
Calibration ID: CAL3859

Sample Amount: 2.03 g
% Solids: NA
Dilution Factor: 1

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
62-75-9	N-Nitrosodimethylamine	50 U	200	50	*
62-53-3	Aniline	1200 U	4000	1200	*
111-44-4	Bis(2-chloroethyl) Ether	43 U	200	43	
108-95-2	Phenol	120 J	500	84	
95-57-8	2-Chlorophenol	55 U	400	55	
541-73-1	1,3-Dichlorobenzene	55 U	200	55	
106-46-7	1,4-Dichlorobenzene	55 U	200	55	
95-50-1	1,2-Dichlorobenzene	60 U	200	60	
100-51-6	Benzyl Alcohol	34 U	200	34	
39638-32-9	Bis(2-chloroisopropyl) Ether	55 U	200	55	
95-48-7	2-Methylphenol	270 U	400	270	
67-72-1	Hexachloroethane	42 U	200	42	
621-64-7	N-Nitrosodi-n-propylamine	41 U	200	41	
106-44-5	4-Methylphenol†	230 J	400	74	
98-95-3	Nitrobenzene	50 U	200	50	
78-59-1	Isophorone	29 U	200	29	
88-75-5	2-Nitrophenol	74 U	200	74	
105-67-9	2,4-Dimethylphenol	65 U	400	65	*
111-91-1	Bis(2-chloroethoxy)methane	25 U	200	25	
120-83-2	2,4-Dichlorophenol	60 U	400	60	
65-85-0	Benzoic Acid	1700 J	4000	940	
120-82-1	1,2,4-Trichlorobenzene	49 U	200	49	
106-47-8	4-Chloroaniline	30 U	990	30	
87-68-3	Hexachlorobutadiene	42 U	200	42	
59-50-7	4-Chloro-3-methylphenol	360 U	990	360	
77-47-4	Hexachlorocyclopentadiene	25000 U	25000	25000	*
88-06-2	2,4,6-Trichlorophenol	44 U	400	44	
95-95-4	2,4,5-Trichlorophenol	55 U	400	55	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2407216
Date Collected: 08/26/2004
Date Received: 08/30/2004
Date Extracted: 09/28/2004
Date Analyzed: 10/04/2004

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: LDW-B3a-TRE
Lab Code: K2407216-001
File ID: J:\MS14\DATA\100404\1004F013.D
Instrument ID: MS14

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Extraction Lot: KWG0414745
Calibration ID: CAL3859

Sample Amount: 2.03 g
% Solids: NA
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
91-58-7	2-Chloronaphthalene	30	U	200	30	
88-74-4	2-Nitroaniline	130	U	990	130	
131-11-3	Dimethyl Phthalate	26	U	200	26	
606-20-2	2,6-Dinitrotoluene	35	U	200	35	
99-09-2	3-Nitroaniline	44	U	2000	44	
51-28-5	2,4-Dinitrophenol	120	U	4000	120	
100-02-7	4-Nitrophenol	37	U	2000	37	*
121-14-2	2,4-Dinitrotoluene	42	U	400	42	
7005-72-3	4-Chlorophenyl Phenyl Ether	23	U	200	23	
84-66-2	Diethyl Phthalate	47	U	400	47	
100-01-6	4-Nitroaniline	130	U	990	130	
534-52-1	2-Methyl-4,6-dinitrophenol	74	U	2000	74	*
86-30-6	N-Nitrosodiphenylamine	47	U	200	47	
101-55-3	4-Bromophenyl Phenyl Ether	28	U	200	28	
118-74-1	Hexachlorobenzene	30	U	200	30	
87-86-5	Pentachlorophenol	160	U	2000	160	
86-74-8	Carbazole	170	U	990	170	
84-74-2	Di-n-butyl Phthalate	79	U	200	79	
92-87-5	Benzidine	25000	U	25000	25000	*
85-68-7	Butyl Benzyl Phthalate	69	U	200	69	
91-94-1	3,3'-Dichlorobenzidine	3900	U	9900	3900	
117-81-7	Bis(2-ethylhexyl) Phthalate	270	U	2500	270	
117-84-0	Di-n-octyl Phthalate	65	U	200	65	

* See Case Narrative

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2407216
Date Collected: 08/26/2004
Date Received: 08/30/2004
Date Extracted: 09/28/2004
Date Analyzed: 10/04/2004

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: LDW-B3a-TRE
Lab Code: K2407216-001
File ID: J:\MS14\DATA\100404\1004F013.D
Instrument ID: MS14
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Lot: KWG0414745
Calibration ID: CAL3859

Sample Amount: 2.03 g
% Solids: NA
Dilution Factor: 1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	88	20-130	10/04/04	Acceptable
Phenol-d6	101	20-130	10/04/04	Acceptable
Nitrobenzene-d5	98	20-130	10/04/04	Acceptable
2-Fluorobiphenyl	86	20-130	10/04/04	Acceptable
2,4,6-Tribromophenol	98	20-130	10/04/04	Acceptable
Terphenyl-d14	96	20-130	10/04/04	Acceptable

† Analyte Comments

4-Methylphenol This analyte cannot be separated from 3-Methylphenol.

Comments: _____

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2407216
Date Collected: 08/27/2004
Date Received: 08/30/2004
Date Extracted: 09/28/2004
Date Analyzed: 10/01/2004

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: LDW-B9a-T
Lab Code: K2407216-002
File ID: J:\MS14\DATA\100104\1001F020.D
Instrument ID: MS14

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Extraction Lot: KWG0414745
Calibration ID: CAL3859

Sample Amount: 2.03 g
% Solids: NA
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
62-75-9	N-Nitrosodimethylamine	50	U	200	50	
62-53-3	Aniline	1200	U	4000	1200	*
111-44-4	Bis(2-chloroethyl) Ether	43	U	200	43	
108-95-2	Phenol	190	J	500	84	
95-57-8	2-Chlorophenol	55	U	400	55	
541-73-1	1,3-Dichlorobenzene	55	U	200	55	
106-46-7	1,4-Dichlorobenzene	55	U	200	55	
95-50-1	1,2-Dichlorobenzene	60	U	200	60	
100-51-6	Benzyl Alcohol	34	U	200	34	
39638-32-9	Bis(2-chloroisopropyl) Ether	55	U	200	55	
95-48-7	2-Methylphenol	270	U	400	270	
67-72-1	Hexachloroethane	42	U	200	42	
621-64-7	N-Nitrosodi-n-propylamine	41	U	200	41	
106-44-5	4-Methylphenol†	26000	E	400	74	
98-95-3	Nitrobenzene	50	U	200	50	
78-59-1	Isophorone	29	U	200	29	
88-75-5	2-Nitrophenol	74	U	200	74	
105-67-9	2,4-Dimethylphenol	65	U	400	65	*
111-91-1	Bis(2-chloroethoxy)methane	25	U	200	25	
120-83-2	2,4-Dichlorophenol	60	U	400	60	
65-85-0	Benzoic Acid	1400	J	4000	940	
120-82-1	1,2,4-Trichlorobenzene	49	U	200	49	
106-47-8	4-Chloroaniline	30	U	990	30	
87-68-3	Hexachlorobutadiene	42	U	200	42	
59-50-7	4-Chloro-3-methylphenol	360	U	990	360	
77-47-4	Hexachlorocyclopentadiene	25000	U	25000	25000	
88-06-2	2,4,6-Trichlorophenol	44	U	400	44	
95-95-4	2,4,5-Trichlorophenol	55	U	400	55	

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2407216
Date Collected: 08/27/2004
Date Received: 08/30/2004
Date Extracted: 09/28/2004
Date Analyzed: 10/01/2004

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: LDW-B9a-T
Lab Code: K2407216-002
File ID: J:\MS14\DATA\100104\1001F020.D
Instrument ID: MS14

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Extraction Lot: KWG0414745
Calibration ID: CAL3859

Sample Amount: 2.03 g
% Solids: NA
Dilution Factor: 1

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
91-58-7	2-Chloronaphthalene	30 U	200	30	
88-74-4	2-Nitroaniline	130 U	990	130	
131-11-3	Dimethyl Phthalate	26 U	200	26	
606-20-2	2,6-Dinitrotoluene	35 U	200	35	
99-09-2	3-Nitroaniline	44 U	2000	44	
51-28-5	2,4-Dinitrophenol	120 U	4000	120	
100-02-7	4-Nitrophenol	37 U	2000	37	
121-14-2	2,4-Dinitrotoluene	42 U	400	42	
7005-72-3	4-Chlorophenyl Phenyl Ether	23 U	200	23	
84-66-2	Diethyl Phthalate	47 U	400	47	
100-01-6	4-Nitroaniline	130 U	990	130	
534-52-1	2-Methyl-4,6-dinitrophenol	74 U	2000	74	
86-30-6	N-Nitrosodiphenylamine	47 U	200	47	
101-55-3	4-Bromophenyl Phenyl Ether	28 U	200	28	
118-74-1	Hexachlorobenzene	30 U	200	30	
87-86-5	Pentachlorophenol	160 U	2000	160	
86-74-8	Carbazole	170 U	990	170	
84-74-2	Di-n-butyl Phthalate	79 U	200	79	
92-87-5	Benzidine	25000 U	25000	25000	*
85-68-7	Butyl Benzyl Phthalate	69 U	200	69	
91-94-1	3,3'-Dichlorobenzidine	3900 U	9900	3900	
117-81-7	Bis(2-ethylhexyl) Phthalate	270 U	2500	270	
117-84-0	Di-n-octyl Phthalate	65 U	200	65	

* See Case Narrative

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2407216
Date Collected: 08/27/2004
Date Received: 08/30/2004
Date Extracted: 09/28/2004
Date Analyzed: 10/01/2004

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: LDW-B9a-T
Lab Code: K2407216-002
File ID: J:\MS14\DATA\100104\1001F020.D
Instrument ID: MS14
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Lot: KWG0414745
Calibration ID: CAL3859

Sample Amount: 2.03 g
% Solids: NA
Dilution Factor: 1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	94	20-130	10/01/04	Acceptable
Phenol-d6	102	20-130	10/01/04	Acceptable
Nitrobenzene-d5	99	20-130	10/01/04	Acceptable
2-Fluorobiphenyl	89	20-130	10/01/04	Acceptable
2,4,6-Tribromophenol	97	20-130	10/01/04	Acceptable
Terphenyl-d14	105	20-130	10/01/04	Acceptable

† Analyte Comments

4-Methylphenol This analyte cannot be separated from 3-Methylphenol.

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2407216
Date Collected: 08/27/2004
Date Received: 08/30/2004
Date Extracted: 09/28/2004
Date Analyzed: 10/04/2004

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: LDW-B9a-TRE
Lab Code: K2407216-002
File ID: J:\MS14\DATA\100404\1004F014.D
Instrument ID: MS14

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Extraction Lot: KWG0414745
Calibration ID: CAL3859

Sample Amount: 2.03 g
% Solids: NA
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
62-75-9	N-Nitrosodimethylamine	50	U	200	50	*
62-53-3	Aniline	1200	U	4000	1200	*
111-44-4	Bis(2-chloroethyl) Ether	43	U	200	43	
108-95-2	Phenol	200	J	500	84	
95-57-8	2-Chlorophenol	55	U	400	55	
541-73-1	1,3-Dichlorobenzene	55	U	200	55	
106-46-7	1,4-Dichlorobenzene	55	U	200	55	
95-50-1	1,2-Dichlorobenzene	60	U	200	60	
100-51-6	Benzyl Alcohol	90	J	200	34	
39638-32-9	Bis(2-chloroisopropyl) Ether	55	U	200	55	
95-48-7	2-Methylphenol	270	U	400	270	
67-72-1	Hexachloroethane	42	U	200	42	
621-64-7	N-Nitrosodi-n-propylamine	41	U	200	41	
106-44-5	4-Methylphenol†	25000	E	400	74	
98-95-3	Nitrobenzene	50	U	200	50	
78-59-1	Isophorone	29	U	200	29	
88-75-5	2-Nitrophenol	74	U	200	74	
105-67-9	2,4-Dimethylphenol	65	U	400	65	*
111-91-1	Bis(2-chloroethoxy)methane	25	U	200	25	
120-83-2	2,4-Dichlorophenol	60	U	400	60	
65-85-0	Benzoic Acid	1900	J	4000	940	
120-82-1	1,2,4-Trichlorobenzene	49	U	200	49	
106-47-8	4-Chloroaniline	30	U	990	30	
87-68-3	Hexachlorobutadiene	42	U	200	42	
59-50-7	4-Chloro-3-methylphenol	360	U	990	360	
77-47-4	Hexachlorocyclopentadiene	25000	U	25000	25000	*
88-06-2	2,4,6-Trichlorophenol	44	U	400	44	
95-95-4	2,4,5-Trichlorophenol	55	U	400	55	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2407216
Date Collected: 08/27/2004
Date Received: 08/30/2004
Date Extracted: 09/28/2004
Date Analyzed: 10/04/2004

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: LDW-B9a-TRE
Lab Code: K2407216-002
File ID: J:\MS14\DATA\100404\1004F014.D
Instrument ID: MS14

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Extraction Lot: KWG0414745
Calibration ID: CAL3859

Sample Amount: 2.03 g
% Solids: NA
Dilution Factor: 1

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
91-58-7	2-Chloronaphthalene	30 U	200	30	
88-74-4	2-Nitroaniline	130 U	990	130	
131-11-3	Dimethyl Phthalate	26 U	200	26	
606-20-2	2,6-Dinitrotoluene	35 U	200	35	
99-09-2	3-Nitroaniline	44 U	2000	44	
51-28-5	2,4-Dinitrophenol	120 U	4000	120	
100-02-7	4-Nitrophenol	37 U	2000	37	*
121-14-2	2,4-Dinitrotoluene	42 U	400	42	
7005-72-3	4-Chlorophenyl Phenyl Ether	23 U	200	23	
84-66-2	Diethyl Phthalate	47 U	400	47	
100-01-6	4-Nitroaniline	130 U	990	130	
534-52-1	2-Methyl-4,6-dinitrophenol	74 U	2000	74	*
86-30-6	N-Nitrosodiphenylamine	47 U	200	47	
101-55-3	4-Bromophenyl Phenyl Ether	28 U	200	28	
118-74-1	Hexachlorobenzene	30 U	200	30	
87-86-5	Pentachlorophenol	160 U	2000	160	
86-74-8	Carbazole	170 U	990	170	
84-74-2	Di-n-butyl Phthalate	79 U	200	79	
92-87-5	Benzidine	25000 U	25000	25000	*
85-68-7	Butyl Benzyl Phthalate	69 U	200	69	
91-94-1	3,3'-Dichlorobenzidine	3900 U	9900	3900	
117-81-7	Bis(2-ethylhexyl) Phthalate	270 U	2500	270	
117-84-0	Di-n-octyl Phthalate	65 U	200	65	

* See Case Narrative

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2407216
Date Collected: 08/27/2004
Date Received: 08/30/2004
Date Extracted: 09/28/2004
Date Analyzed: 10/04/2004

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: LDW-B9a-TRE
Lab Code: K2407216-002
File ID: J:\MS14\DATA\100404\1004F014.D
Instrument ID: MS14

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Extraction Lot: KWG0414745
Calibration ID: CAL3859

Sample Amount: 2.03 g
% Solids: NA
Dilution Factor: 1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	92	20-130	10/04/04	Acceptable
Phenol-d6	104	20-130	10/04/04	Acceptable
Nitrobenzene-d5	101	20-130	10/04/04	Acceptable
2-Fluorobiphenyl	86	20-130	10/04/04	Acceptable
2,4,6-Tribromophenol	101	20-130	10/04/04	Acceptable
Terphenyl-d14	99	20-130	10/04/04	Acceptable

† Analyte Comments

4-Methylphenol This analyte cannot be separated from 3-Methylphenol.

Comments: _____

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2407216
Date Collected: 08/27/2004
Date Received: 08/30/2004
Date Extracted: 09/28/2004
Date Analyzed: 10/04/2004

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: LDW-B9a-TDL
Lab Code: K2407216-002
File ID: J:\MS14\DATA\100404\1004F022.D
Instrument ID: MS14

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Extraction Lot: KWG0414745
Calibration ID: CAL3859

Sample Amount: 2.03 g
% Solids: NA
Dilution Factor: 10

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
62-75-9	N-Nitrosodimethylamine	500	U	2000	500	*
62-53-3	Aniline	12000	U	40000	12000	*
111-44-4	Bis(2-chloroethyl) Ether	430	U	2000	430	
108-95-2	Phenol	840	U	5000	840	
95-57-8	2-Chlorophenol	550	U	4000	550	
541-73-1	1,3-Dichlorobenzene	550	U	2000	550	
106-46-7	1,4-Dichlorobenzene	550	U	2000	550	
95-50-1	1,2-Dichlorobenzene	600	U	2000	600	
100-51-6	Benzyl Alcohol	340	U	2000	340	
39638-32-9	Bis(2-chloroisopropyl) Ether	550	U	2000	550	
95-48-7	2-Methylphenol	2700	U	4000	2700	
67-72-1	Hexachloroethane	420	U	2000	420	
621-64-7	N-Nitrosodi-n-propylamine	410	U	2000	410	
106-44-5	4-Methylphenol†	44000	D	4000	740	
98-95-3	Nitrobenzene	500	U	2000	500	
78-59-1	Isophorone	290	U	2000	290	
88-75-5	2-Nitrophenol	740	U	2000	740	
105-67-9	2,4-Dimethylphenol	650	U	4000	650	*
111-91-1	Bis(2-chloroethoxy)methane	250	U	2000	250	
120-83-2	2,4-Dichlorophenol	600	U	4000	600	
65-85-0	Benzoic Acid	9400	U	40000	9400	
120-82-1	1,2,4-Trichlorobenzene	490	U	2000	490	
106-47-8	4-Chloroaniline	300	U	9900	300	
87-68-3	Hexachlorobutadiene	420	U	2000	420	
59-50-7	4-Chloro-3-methylphenol	3600	U	9900	3600	
77-47-4	Hexachlorocyclopentadiene	250000	U	250000	250000	*
88-06-2	2,4,6-Trichlorophenol	440	U	4000	440	
95-95-4	2,4,5-Trichlorophenol	550	U	4000	550	

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2407216
Date Collected: 08/27/2004
Date Received: 08/30/2004
Date Extracted: 09/28/2004
Date Analyzed: 10/04/2004

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: LDW-B9a-TDL
Lab Code: K2407216-002
File ID: J:\MS14\DATA\100404\1004F022.D
Instrument ID: MS14

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Extraction Lot: KWG0414745
Calibration ID: CAL3859

Sample Amount: 2.03 g
% Solids: NA
Dilution Factor: 10

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
91-58-7	2-Chloronaphthalene	300	U	2000	300	
88-74-4	2-Nitroaniline	1300	U	9900	1300	
131-11-3	Dimethyl Phthalate	260	U	2000	260	
606-20-2	2,6-Dinitrotoluene	350	U	2000	350	
99-09-2	3-Nitroaniline	440	U	20000	440	
51-28-5	2,4-Dinitrophenol	1200	U	40000	1200	
100-02-7	4-Nitrophenol	370	U	20000	370	*
121-14-2	2,4-Dinitrotoluene	420	U	4000	420	
7005-72-3	4-Chlorophenyl Phenyl Ether	230	U	2000	230	
84-66-2	Diethyl Phthalate	470	U	4000	470	
100-01-6	4-Nitroaniline	1300	U	9900	1300	
534-52-1	2-Methyl-4,6-dinitrophenol	740	U	20000	740	*
86-30-6	N-Nitrosodiphenylamine	470	U	2000	470	
101-55-3	4-Bromophenyl Phenyl Ether	280	U	2000	280	
118-74-1	Hexachlorobenzene	300	U	2000	300	
87-86-5	Pentachlorophenol	1600	U	20000	1600	
86-74-8	Carbazole	1700	U	9900	1700	
84-74-2	Di-n-butyl Phthalate	790	U	2000	790	
92-87-5	Benzidine	250000	U	250000	250000	*
85-68-7	Butyl Benzyl Phthalate	690	U	2000	690	
91-94-1	3,3'-Dichlorobenzidine	39000	U	99000	39000	
117-81-7	Bis(2-ethylhexyl) Phthalate	2700	U	25000	2700	
117-84-0	Di-n-octyl Phthalate	650	U	2000	650	

* See Case Narrative

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2407216
Date Collected: 08/27/2004
Date Received: 08/30/2004
Date Extracted: 09/28/2004
Date Analyzed: 10/04/2004

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: LDW-B9a-TDL
Lab Code: K2407216-002
File ID: J:\MS14\DATA\100404\1004F022.D
Instrument ID: MS14
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Lot: KWG0414745
Calibration ID: CAL3859

Sample Amount: 2.03 g
% Solids: NA
Dilution Factor: 10

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	104	20-130	10/04/04	Acceptable
Phenol-d6	117	20-130	10/04/04	Acceptable
Nitrobenzene-d5	114	20-130	10/04/04	Acceptable
2-Fluorobiphenyl	114	20-130	10/04/04	Acceptable
2,4,6-Tribromophenol	101	20-130	10/04/04	Acceptable
Terphenyl-d14	127	20-130	10/04/04	Acceptable

† Analyte Comments

4-Methylphenol This analyte cannot be separated from 3-Methylphenol.

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Sediment

Service Request: K2407473
Date Collected: 09/24/2004
Date Received: 09/27/2004

Semi-Volatile Organic Compounds by GC/MS

Sample Name: LDW-B5a-S
Lab Code: K2407473-001
Extraction Method: EPA 3541
Analysis Method: 8270C

Units: ug/Kg
Basis: Dry
Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
N-Nitrosodimethylamine	ND	U	43	8.2	1	10/08/04	10/12/04	KWG0415420	
Aniline	ND	U	18	2.0	1	10/08/04	10/12/04	KWG0415420	*
Bis(2-chloroethyl) Ether	ND	U	8.6	3.2	1	10/08/04	10/12/04	KWG0415420	
Phenol	24	J	26	2.6	1	10/08/04	10/12/04	KWG0415420	
2-Chlorophenol	ND	U	8.6	2.3	1	10/08/04	10/12/04	KWG0415420	
1,3-Dichlorobenzene	ND	U	8.6	2.2	1	10/08/04	10/12/04	KWG0415420	
1,4-Dichlorobenzene	ND	U	8.6	2.6	1	10/08/04	10/12/04	KWG0415420	
1,2-Dichlorobenzene	ND	U	8.6	1.8	1	10/08/04	10/12/04	KWG0415420	
Benzyl Alcohol	8.2	J	8.6	5.0	1	10/08/04	10/12/04	KWG0415420	
Bis(2-chloroisopropyl) Ether	ND	U	8.6	1.6	1	10/08/04	10/12/04	KWG0415420	
2-Methylphenol	ND	U	8.6	4.6	1	10/08/04	10/12/04	KWG0415420	
Hexachloroethane	ND	U	8.6	3.0	1	10/08/04	10/12/04	KWG0415420	
N-Nitrosodi-n-propylamine	ND	U	8.6	4.3	1	10/08/04	10/12/04	KWG0415420	
4-Methylphenol†	ND	U	8.6	3.9	1	10/08/04	10/12/04	KWG0415420	
Nitrobenzene	ND	U	8.6	2.7	1	10/08/04	10/12/04	KWG0415420	
Isophorone	ND	U	8.6	2.2	1	10/08/04	10/12/04	KWG0415420	
2-Nitrophenol	ND	U	8.6	3.5	1	10/08/04	10/12/04	KWG0415420	
2,4-Dimethylphenol	ND	U	43	7.4	1	10/08/04	10/12/04	KWG0415420	*
Bis(2-chloroethoxy)methane	ND	U	8.6	1.8	1	10/08/04	10/12/04	KWG0415420	
2,4-Dichlorophenol	ND	U	8.6	2.4	1	10/08/04	10/12/04	KWG0415420	
Benzoic Acid	ND	U	180	130	1	10/08/04	10/12/04	KWG0415420	
1,2,4-Trichlorobenzene	ND	U	8.6	2.0	1	10/08/04	10/12/04	KWG0415420	
4-Chloroaniline	ND	U	8.6	2.8	1	10/08/04	10/12/04	KWG0415420	*
Hexachlorobutadiene	ND	U	8.6	1.9	1	10/08/04	10/12/04	KWG0415420	
4-Chloro-3-methylphenol	ND	U	8.6	2.8	1	10/08/04	10/12/04	KWG0415420	
Hexachlorocyclopentadiene	ND	U	43	20	1	10/08/04	10/12/04	KWG0415420	*
2,4,6-Trichlorophenol	ND	U	8.6	2.4	1	10/08/04	10/12/04	KWG0415420	
2,4,5-Trichlorophenol	ND	U	8.6	4.0	1	10/08/04	10/12/04	KWG0415420	
2-Chloronaphthalene	ND	U	8.6	4.8	1	10/08/04	10/12/04	KWG0415420	
2-Nitroaniline	ND	U	18	3.6	1	10/08/04	10/12/04	KWG0415420	
Dimethyl Phthalate	3.4	J	8.6	2.4	1	10/08/04	10/12/04	KWG0415420	
2,6-Dinitrotoluene	ND	U	8.6	3.8	1	10/08/04	10/12/04	KWG0415420	
3-Nitroaniline	ND	U	18	3.5	1	10/08/04	10/12/04	KWG0415420	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Sediment

Service Request: K2407473
Date Collected: 09/24/2004
Date Received: 09/27/2004

Semi-Volatile Organic Compounds by GC/MS

Sample Name: LDW-B5a-S
Lab Code: K2407473-001
Extraction Method: EPA 3541
Analysis Method: 8270C

Units: ug/Kg
Basis: Dry
Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
2,4-Dinitrophenol	ND	U	180	48	1	10/08/04	10/12/04	KWG0415420	
4-Nitrophenol	ND	U	86	40	1	10/08/04	10/12/04	KWG0415420	
2,4-Dinitrotoluene	ND	U	8.6	3.8	1	10/08/04	10/12/04	KWG0415420	
4-Chlorophenyl Phenyl Ether	ND	U	8.6	2.7	1	10/08/04	10/12/04	KWG0415420	
Diethyl Phthalate	ND	U	8.6	4.7	1	10/08/04	10/12/04	KWG0415420	
4-Nitroaniline	ND	U	18	4.6	1	10/08/04	10/12/04	KWG0415420	
2-Methyl-4,6-dinitrophenol	ND	U	86	2.3	1	10/08/04	10/12/04	KWG0415420	
N-Nitrosodiphenylamine	ND	U	8.6	3.0	1	10/08/04	10/12/04	KWG0415420	
4-Bromophenyl Phenyl Ether	ND	U	8.6	1.9	1	10/08/04	10/12/04	KWG0415420	
Hexachlorobenzene	ND	U	8.6	2.8	1	10/08/04	10/12/04	KWG0415420	
Pentachlorophenol	14	J	43	12	1	10/08/04	10/12/04	KWG0415420	
Carbazole	7.6	J	8.6	1.8	1	10/08/04	10/12/04	KWG0415420	
Di-n-butyl Phthalate	7.2	J	8.6	3.5	1	10/08/04	10/12/04	KWG0415420	
Benzidine	ND	U	270	270	1	10/08/04	10/12/04	KWG0415420	*
Butyl Benzyl Phthalate	7.4	J	8.6	2.0	1	10/08/04	10/12/04	KWG0415420	
3,3'-Dichlorobenzidine	ND	U	86	5.0	1	10/08/04	10/12/04	KWG0415420	
Bis(2-ethylhexyl) Phthalate	52	J	180	2.3	1	10/08/04	10/12/04	KWG0415420	
Di-n-octyl Phthalate	ND	U	18	1.6	1	10/08/04	10/12/04	KWG0415420	

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	37	40-130	10/12/04	Outside Control Limits
Phenol-d6	44	40-130	10/12/04	Acceptable
Nitrobenzene-d5	31	40-130	10/12/04	Outside Control Limits
2-Fluorobiphenyl	24	40-130	10/12/04	Outside Control Limits
2,4,6-Tribromophenol	59	40-130	10/12/04	Acceptable
Terphenyl-d14	60	40-130	10/12/04	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Sediment

Service Request: K2407473
Date Collected: 09/24/2004
Date Received: 09/27/2004

Semi-Volatile Organic Compounds by GC/MS

Sample Name: LDW-B5a-S
Lab Code: K2407473-001

Units: ug/Kg
Basis: Dry

† **Analyte Comments**

4-Methylphenol This analyte cannot be separated from 3-Methylphenol.

Comments: _____

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2407595
Date Collected: 09/27/2004
Date Received: 09/30/2004
Date Extracted: 10/08/2004
Date Analyzed: 10/12/2004

Semi-Volatile Organic Compounds by GC/MS

Sample Name: LDW-B1b-S
Lab Code: K2407595-001
File ID: J:\MS06\DATA\101204\1012F009.D
Instrument ID: MS06
Extraction Method: EPA 3541
Analysis Method: 8270C

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Lot: KWG0415420
Calibration ID: CAL3884

Sample Amount: 26.62 g
% Solids: 75.2
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
62-75-9	N-Nitrosodimethylamine	8.2	U	50	8.2	
62-53-3	Aniline	2.0	U	20	2.0	*
111-44-4	Bis(2-chloroethyl) Ether	3.2	U	10	3.2	
108-95-2	Phenol	19	J	30	2.6	
95-57-8	2-Chlorophenol	2.3	U	10	2.3	
541-73-1	1,3-Dichlorobenzene	2.2	U	10	2.2	
106-46-7	1,4-Dichlorobenzene	2.6	U	10	2.6	
95-50-1	1,2-Dichlorobenzene	1.8	U	10	1.8	
100-51-6	Benzyl Alcohol	5.0	U	10	5.0	
39638-32-9	Bis(2-chloroisopropyl) Ether	1.6	U	10	1.6	
95-48-7	2-Methylphenol	4.6	U	10	4.6	
67-72-1	Hexachloroethane	3.0	U	10	3.0	
621-64-7	N-Nitrosodi-n-propylamine	4.3	U	10	4.3	
106-44-5	4-Methylphenol†	4.8	J	10	3.9	
98-95-3	Nitrobenzene	2.7	U	10	2.7	
78-59-1	Isophorone	2.2	U	10	2.2	
88-75-5	2-Nitrophenol	3.5	U	10	3.5	
105-67-9	2,4-Dimethylphenol	7.4	U	50	7.4	*
111-91-1	Bis(2-chloroethoxy)methane	1.8	U	10	1.8	
120-83-2	2,4-Dichlorophenol	2.4	U	10	2.4	
65-85-0	Benzoic Acid	130	U	200	130	
120-82-1	1,2,4-Trichlorobenzene	2.0	U	10	2.0	
106-47-8	4-Chloroaniline	2.8	U	10	2.8	*
87-68-3	Hexachlorobutadiene	1.9	U	10	1.9	
59-50-7	4-Chloro-3-methylphenol	2.8	U	10	2.8	
77-47-4	Hexachlorocyclopentadiene	20	U	50	20	*
88-06-2	2,4,6-Trichlorophenol	2.4	U	10	2.4	
95-95-4	2,4,5-Trichlorophenol	4.0	U	10	4.0	

Comments:

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2407595
Date Collected: 09/27/2004
Date Received: 09/30/2004
Date Extracted: 10/08/2004
Date Analyzed: 10/12/2004

Semi-Volatile Organic Compounds by GC/MS

Sample Name: LDW-B1b-S
Lab Code: K2407595-001
File ID: J:\MS06\DATA\101204\1012F009.D
Instrument ID: MS06
Extraction Method: EPA 3541
Analysis Method: 8270C

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Lot: KWG0415420
Calibration ID: CAL3884

Sample Amount: 26.62 g
% Solids: 75.2
Dilution Factor: 1

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
91-58-7	2-Chloronaphthalene	4.8 U	10	4.8	
88-74-4	2-Nitroaniline	3.6 U	20	3.6	
131-11-3	Dimethyl Phthalate	2.4 U	10	2.4	
606-20-2	2,6-Dinitrotoluene	3.8 U	10	3.8	
99-09-2	3-Nitroaniline	3.5 U	20	3.5	
51-28-5	2,4-Dinitrophenol	48 U	200	48	
100-02-7	4-Nitrophenol	40 U	100	40	
121-14-2	2,4-Dinitrotoluene	3.8 U	10	3.8	
7005-72-3	4-Chlorophenyl Phenyl Ether	2.7 U	10	2.7	
84-66-2	Diethyl Phthalate	4.7 U	10	4.7	
100-01-6	4-Nitroaniline	4.6 U	20	4.6	
534-52-1	2-Methyl-4,6-dinitrophenol	2.3 U	100	2.3	
86-30-6	N-Nitrosodiphenylamine	3.0 U	10	3.0	
101-55-3	4-Bromophenyl Phenyl Ether	1.9 U	10	1.9	
118-74-1	Hexachlorobenzene	2.8 U	10	2.8	
87-86-5	Pentachlorophenol	12 U	50	12	
86-74-8	Carbazole	12	10	1.8	
84-74-2	Di-n-butyl Phthalate	4.8 J	10	3.5	
92-87-5	Benzidine	270 U	270	270	*
85-68-7	Butyl Benzyl Phthalate	2.0 U	10	2.0	
91-94-1	3,3'-Dichlorobenzidine	5.0 U	100	5.0	
117-81-7	Bis(2-ethylhexyl) Phthalate	28 J	200	2.3	
117-84-0	Di-n-octyl Phthalate	1.6 U	20	1.6	

* See Case Narrative

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2407595
Date Collected: 09/27/2004
Date Received: 09/30/2004
Date Extracted: 10/08/2004
Date Analyzed: 10/12/2004

Semi-Volatile Organic Compounds by GC/MS

Sample Name: LDW-B1b-S
Lab Code: K2407595-001
File ID: J:\MS06\DATA\101204\1012F009.D
Instrument ID: MS06

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: EPA 3541
Analysis Method: 8270C

Extraction Lot: KWG0415420
Calibration ID: CAL3884

Sample Amount: 26.62 g
% Solids: 75.2
Dilution Factor: 1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	47	40-130	10/12/04	Acceptable
Phenol-d6	53	40-130	10/12/04	Acceptable
Nitrobenzene-d5	46	40-130	10/12/04	Acceptable
2-Fluorobiphenyl	47	40-130	10/12/04	Acceptable
2,4,6-Tribromophenol	68	40-130	10/12/04	Acceptable
Terphenyl-d14	74	40-130	10/12/04	Acceptable

† Analyte Comments

4-Methylphenol This analyte cannot be separated from 3-Methylphenol.

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2407595
Date Collected: 09/27/2004
Date Received: 09/30/2004
Date Extracted: 10/08/2004
Date Analyzed: 10/12/2004

Semi-Volatile Organic Compounds by GC/MS

Sample Name: LDW-B2b-S
Lab Code: K2407595-002
File ID: J:\MS06\DATA\101204\1012F010.D
Instrument ID: MS06

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: EPA 3541
Analysis Method: 8270C

Extraction Lot: KWG0415420
Calibration ID: CAL3884

Sample Amount: 30.15 g
% Solids: 66.4
Dilution Factor: 1

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
62-75-9	N-Nitrosodimethylamine	9.2 U	50	9.2	
62-53-3	Aniline	2.3 U	20	2.3	*
111-44-4	Bis(2-chloroethyl) Ether	3.7 U	10	3.7	
108-95-2	Phenol	48	30	2.9	
95-57-8	2-Chlorophenol	2.6 U	10	2.6	
541-73-1	1,3-Dichlorobenzene	2.5 U	10	2.5	
106-46-7	1,4-Dichlorobenzene	2.9 U	10	2.9	
95-50-1	1,2-Dichlorobenzene	2.0 U	10	2.0	
100-51-6	Benzyl Alcohol	5.6 U	10	5.6	
39638-32-9	Bis(2-chloroisopropyl) Ether	1.9 U	10	1.9	
95-48-7	2-Methylphenol	5.2 U	10	5.2	
67-72-1	Hexachloroethane	3.4 U	10	3.4	
621-64-7	N-Nitrosodi-n-propylamine	4.9 U	10	4.9	
106-44-5	4-Methylphenol†	9.6 J	10	4.4	
98-95-3	Nitrobenzene	3.1 U	10	3.1	
78-59-1	Isophorone	2.5 U	10	2.5	
88-75-5	2-Nitrophenol	4.0 U	10	4.0	
105-67-9	2,4-Dimethylphenol	8.3 U	50	8.3	*
111-91-1	Bis(2-chloroethoxy)methane	2.0 U	10	2.0	
120-83-2	2,4-Dichlorophenol	2.8 U	10	2.8	
65-85-0	Benzoic Acid	150 U	200	150	
120-82-1	1,2,4-Trichlorobenzene	2.3 U	10	2.3	
106-47-8	4-Chloroaniline	3.2 U	10	3.2	*
87-68-3	Hexachlorobutadiene	2.2 U	10	2.2	
59-50-7	4-Chloro-3-methylphenol	3.2 U	10	3.2	
77-47-4	Hexachlorocyclopentadiene	23 U	50	23	*
88-06-2	2,4,6-Trichlorophenol	2.8 U	10	2.8	
95-95-4	2,4,5-Trichlorophenol	4.6 U	10	4.6	

Comments: _____

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2407595
Date Collected: 09/27/2004
Date Received: 09/30/2004
Date Extracted: 10/08/2004
Date Analyzed: 10/12/2004

Semi-Volatile Organic Compounds by GC/MS

Sample Name: LDW-B2b-S
Lab Code: K2407595-002
File ID: J:\MS06\DATA\101204\1012F010.D
Instrument ID: MS06

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: EPA 3541
Analysis Method: 8270C

Extraction Lot: KWG0415420
Calibration ID: CAL3884

Sample Amount: 30.15 g
% Solids: 66.4
Dilution Factor: 1

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
91-58-7	2-Chloronaphthalene	5.5 U	10	5.5	
88-74-4	2-Nitroaniline	4.1 U	20	4.1	
131-11-3	Dimethyl Phthalate	2.8 U	10	2.8	
606-20-2	2,6-Dinitrotoluene	4.3 U	10	4.3	
99-09-2	3-Nitroaniline	4.0 U	20	4.0	
51-28-5	2,4-Dinitrophenol	55 U	200	55	
100-02-7	4-Nitrophenol	46 U	100	46	
121-14-2	2,4-Dinitrotoluene	4.3 U	10	4.3	
7005-72-3	4-Chlorophenyl Phenyl Ether	3.1 U	10	3.1	
84-66-2	Diethyl Phthalate	5.3 U	10	5.3	
100-01-6	4-Nitroaniline	5.2 U	20	5.2	
534-52-1	2-Methyl-4,6-dinitrophenol	2.6 U	100	2.6	
86-30-6	N-Nitrosodiphenylamine	3.4 U	10	3.4	
101-55-3	4-Bromophenyl Phenyl Ether	2.2 U	10	2.2	
118-74-1	Hexachlorobenzene	3.2 U	10	3.2	
87-86-5	Pentachlorophenol	13 U	50	13	
86-74-8	Carbazole	16	10	2.0	
84-74-2	Di-n-butyl Phthalate	11	10	4.0	
92-87-5	Benzidine	310 U	310	310	*
85-68-7	Butyl Benzyl Phthalate	9.7 J	10	2.3	
91-94-1	3,3'-Dichlorobenzidine	5.6 U	100	5.6	
117-81-7	Bis(2-ethylhexyl) Phthalate	150 J	200	2.6	
117-84-0	Di-n-octyl Phthalate	1.9 U	20	1.9	

* See Case Narrative

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2407595
Date Collected: 09/27/2004
Date Received: 09/30/2004
Date Extracted: 10/08/2004
Date Analyzed: 10/12/2004

Semi-Volatile Organic Compounds by GC/MS

Sample Name: LDW-B2b-S
Lab Code: K2407595-002
File ID: J:\MS06\DATA\101204\1012F010.D
Instrument ID: MS06
Extraction Method: EPA 3541
Analysis Method: 8270C

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Lot: KWG0415420
Calibration ID: CAL3884

Sample Amount: 30.15 g
% Solids: 66.4
Dilution Factor: 1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	46	40-130	10/12/04	Acceptable
Phenol-d6	52	40-130	10/12/04	Acceptable
Nitrobenzene-d5	43	40-130	10/12/04	Acceptable
2-Fluorobiphenyl	35	40-130	10/12/04	Outside Control Limits
2,4,6-Tribromophenol	65	40-130	10/12/04	Acceptable
Terphenyl-d14	71	40-130	10/12/04	Acceptable

† Analyte Comments

4-Methylphenol This analyte cannot be separated from 3-Methylphenol.

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2407595
Date Collected: 09/28/2004
Date Received: 09/30/2004
Date Extracted: 10/08/2004
Date Analyzed: 10/15/2004

Semi-Volatile Organic Compounds by GC/MS

Sample Name: LDW-B4b-S
Lab Code: K2407595-003
File ID: J:\MS10\DATA\101504\1015F006.D
Instrument ID: MS10

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: EPA 3541
Analysis Method: 8270C

Extraction Lot: KWG0415420
Calibration ID: CAL3888

Sample Amount: 40.30 g
% Solids: 45.9
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
62-75-9	N-Nitrosodimethylamine	14	U	55	14	
62-53-3	Aniline	3.3	U	22	3.3	*
111-44-4	Bis(2-chloroethyl) Ether	5.3	U	11	5.3	
108-95-2	Phenol	4.2	U	33	4.2	
95-57-8	2-Chlorophenol	3.8	U	11	3.8	
541-73-1	1,3-Dichlorobenzene	3.5	U	11	3.5	
106-46-7	1,4-Dichlorobenzene	4.2	U	11	4.2	
95-50-1	1,2-Dichlorobenzene	2.9	U	11	2.9	
100-51-6	Benzyl Alcohol	70		11	8.1	
39638-32-9	Bis(2-chloroisopropyl) Ether	2.7	U	11	2.7	
95-48-7	2-Methylphenol	7.5	U	11	7.5	
67-72-1	Hexachloroethane	4.8	U	11	4.8	
621-64-7	N-Nitrosodi-n-propylamine	7.0	U	11	7.0	
106-44-5	4-Methylphenol†	21		11	6.4	
98-95-3	Nitrobenzene	4.4	U	11	4.4	
78-59-1	Isophorone	3.5	U	11	3.5	
88-75-5	2-Nitrophenol	5.7	U	11	5.7	
105-67-9	2,4-Dimethylphenol	12	U	55	12	*
111-91-1	Bis(2-chloroethoxy)methane	2.9	U	11	2.9	
120-83-2	2,4-Dichlorophenol	4.0	U	11	4.0	
65-85-0	Benzoic Acid	250		220	210	
120-82-1	1,2,4-Trichlorobenzene	3.3	U	11	3.3	
106-47-8	4-Chloroaniline	4.6	U	11	4.6	*
87-68-3	Hexachlorobutadiene	3.1	U	11	3.1	
59-50-7	4-Chloro-3-methylphenol	4.6	U	11	4.6	
77-47-4	Hexachlorocyclopentadiene	33	U	55	33	*
88-06-2	2,4,6-Trichlorophenol	4.0	U	11	4.0	
95-95-4	2,4,5-Trichlorophenol	6.6	U	11	6.6	

Comments: _____

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2407595
Date Collected: 09/28/2004
Date Received: 09/30/2004
Date Extracted: 10/08/2004
Date Analyzed: 10/15/2004

Semi-Volatile Organic Compounds by GC/MS

Sample Name: LDW-B4b-S
Lab Code: K2407595-003
File ID: J:\MS10\DATA\101504\1015F006.D
Instrument ID: MS10

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: EPA 3541
Analysis Method: 8270C

Extraction Lot: KWG0415420
Calibration ID: CAL3888

Sample Amount: 40.30 g
% Solids: 45.9
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
91-58-7	2-Chloronaphthalene	7.9	U	11	7.9	
88-74-4	2-Nitroaniline	5.9	U	22	5.9	
131-11-3	Dimethyl Phthalate	4.0	U	11	4.0	
606-20-2	2,6-Dinitrotoluene	6.2	U	11	6.2	
99-09-2	3-Nitroaniline	5.7	U	22	5.7	
51-28-5	2,4-Dinitrophenol	79	U	220	79	
100-02-7	4-Nitrophenol	66	U	110	66	
121-14-2	2,4-Dinitrotoluene	6.2	U	11	6.2	
7005-72-3	4-Chlorophenyl Phenyl Ether	4.4	U	11	4.4	
84-66-2	Diethyl Phthalate	7.7	U	11	7.7	
100-01-6	4-Nitroaniline	7.5	U	22	7.5	
534-52-1	2-Methyl-4,6-dinitrophenol	3.8	U	110	3.8	
86-30-6	N-Nitrosodiphenylamine	4.8	U	11	4.8	
101-55-3	4-Bromophenyl Phenyl Ether	3.1	U	11	3.1	
118-74-1	Hexachlorobenzene	4.6	U	11	4.6	
87-86-5	Pentachlorophenol	19	U	55	19	
86-74-8	Carbazole	180		11	2.9	
84-74-2	Di-n-butyl Phthalate	9.3	J	11	5.7	
92-87-5	Benzidine					
85-68-7	Butyl Benzyl Phthalate	3.3	U	11	3.3	
91-94-1	3,3'-Dichlorobenzidine	8.1	U	110	8.1	
117-81-7	Bis(2-ethylhexyl) Phthalate	140	J	220	3.8	
117-84-0	Di-n-octyl Phthalate	2.7	U	11	2.7	

* See Case Narrative

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2407595
Date Collected: 09/28/2004
Date Received: 09/30/2004
Date Extracted: 10/08/2004
Date Analyzed: 10/15/2004

Semi-Volatile Organic Compounds by GC/MS

Sample Name: LDW-B4b-S
Lab Code: K2407595-003
File ID: J:\MS10\DATA\101504\1015F006.D
Instrument ID: MS10
Extraction Method: EPA 3541
Analysis Method: 8270C

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Lot: KWG0415420
Calibration ID: CAL3888

Sample Amount: 40.30 g
% Solids: 45.9
Dilution Factor: 1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	40	40-130	10/15/04	Acceptable
Phenol-d6	53	40-130	10/15/04	Acceptable
Nitrobenzene-d5	39	40-130	10/15/04	Outside Control Limits
2-Fluorobiphenyl	28	40-130	10/15/04	Outside Control Limits
2,4,6-Tribromophenol	80	40-130	10/15/04	Acceptable
Terphenyl-d14	63	40-130	10/15/04	Acceptable

† Analyte Comments

4-Methylphenol This analyte cannot be separated from 3-Methylphenol.

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2407595
Date Collected: 09/28/2004
Date Received: 09/30/2004
Date Extracted: 10/08/2004
Date Analyzed: 10/12/2004

Semi-Volatile Organic Compounds by GC/MS

Sample Name: LDW-B5b-S
Lab Code: K2407595-004
File ID: J:\MS06\DATA\101204\1012F015.D
Instrument ID: MS06
Extraction Method: EPA 3541
Analysis Method: 8270C

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Lot: KWG0415420
Calibration ID: CAL3884

Sample Amount: 34.75 g
% Solids: 57.8
Dilution Factor: 1

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
62-75-9	N-Nitrosodimethylamine	11 U	50	11	
62-53-3	Aniline	2.6 U	20	2.6	*
111-44-4	Bis(2-chloroethyl) Ether	4.2 U	10	4.2	
108-95-2	Phenol	11 J	30	3.3	
95-57-8	2-Chlorophenol	3.0 U	10	3.0	
541-73-1	1,3-Dichlorobenzene	2.8 U	10	2.8	
106-46-7	1,4-Dichlorobenzene	3.3 U	10	3.3	
95-50-1	1,2-Dichlorobenzene	2.3 U	10	2.3	
100-51-6	Benzyl Alcohol	6.5 U	10	6.5	
39638-32-9	Bis(2-chloroisopropyl) Ether	2.1 U	10	2.1	
95-48-7	2-Methylphenol	5.9 U	10	5.9	
67-72-1	Hexachloroethane	3.9 U	10	3.9	
621-64-7	N-Nitrosodi-n-propylamine	5.6 U	10	5.6	
106-44-5	4-Methylphenol†	5.1 U	10	5.1	
98-95-3	Nitrobenzene	3.5 U	10	3.5	
78-59-1	Isophorone	2.8 U	10	2.8	
88-75-5	2-Nitrophenol	4.5 U	10	4.5	
105-67-9	2,4-Dimethylphenol	9.6 U	50	9.6	*
111-91-1	Bis(2-chloroethoxy)methane	2.3 U	10	2.3	
120-83-2	2,4-Dichlorophenol	3.2 U	10	3.2	
65-85-0	Benzoic Acid	170 U	200	170	
120-82-1	1,2,4-Trichlorobenzene	2.6 U	10	2.6	
106-47-8	4-Chloroaniline	3.7 U	10	3.7	*
87-68-3	Hexachlorobutadiene	2.5 U	10	2.5	
59-50-7	4-Chloro-3-methylphenol	3.7 U	10	3.7	
77-47-4	Hexachlorocyclopentadiene	26 U	50	26	*
88-06-2	2,4,6-Trichlorophenol	3.2 U	10	3.2	
95-95-4	2,4,5-Trichlorophenol	5.2 U	10	5.2	

Comments: _____

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2407595
Date Collected: 09/28/2004
Date Received: 09/30/2004
Date Extracted: 10/08/2004
Date Analyzed: 10/12/2004

Semi-Volatile Organic Compounds by GC/MS

Sample Name: LDW-B5b-S
Lab Code: K2407595-004
File ID: J:\MS06\DATA\101204\1012F015.D
Instrument ID: MS06

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: EPA 3541
Analysis Method: 8270C

Extraction Lot: KWG0415420
Calibration ID: CAL3884

Sample Amount: 34.75 g
% Solids: 57.8
Dilution Factor: 1

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
91-58-7	2-Chloronaphthalene	6.3 U	10	6.3	
88-74-4	2-Nitroaniline	4.7 U	20	4.7	
131-11-3	Dimethyl Phthalate	3.6 J	10	3.2	
606-20-2	2,6-Dinitrotoluene	4.9 U	10	4.9	
99-09-2	3-Nitroaniline	4.5 U	20	4.5	
51-28-5	2,4-Dinitrophenol	63 U	200	63	
100-02-7	4-Nitrophenol	52 U	100	52	
121-14-2	2,4-Dinitrotoluene	4.9 U	10	4.9	
7005-72-3	4-Chlorophenyl Phenyl Ether	3.5 U	10	3.5	
84-66-2	Diethyl Phthalate	6.1 U	10	6.1	
100-01-6	4-Nitroaniline	5.9 U	20	5.9	
534-52-1	2-Methyl-4,6-dinitrophenol	3.0 U	100	3.0	
86-30-6	N-Nitrosodiphenylamine	3.9 U	10	3.9	
101-55-3	4-Bromophenyl Phenyl Ether	2.5 U	10	2.5	
118-74-1	Hexachlorobenzene	3.7 U	10	3.7	
87-86-5	Pentachlorophenol	15 U	50	15	
86-74-8	Carbazole	20	10	2.3	
84-74-2	Di-n-butyl Phthalate	8.6 J	10	4.5	
92-87-5	Benzidine	350 U	350	350	*
85-68-7	Butyl Benzyl Phthalate	8.5 J	10	2.6	
91-94-1	3,3'-Dichlorobenzidine	6.5 U	100	6.5	
117-81-7	Bis(2-ethylhexyl) Phthalate	110 J	200	3.0	
117-84-0	Di-n-octyl Phthalate	2.1 U	20	2.1	

* See Case Narrative

Comments:

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2407595
Date Collected: 09/28/2004
Date Received: 09/30/2004
Date Extracted: 10/08/2004
Date Analyzed: 10/12/2004

Semi-Volatile Organic Compounds by GC/MS

Sample Name: LDW-B5b-S
Lab Code: K2407595-004
File ID: J:\MS06\DATA\101204\1012F015.D
Instrument ID: MS06
Extraction Method: EPA 3541
Analysis Method: 8270C

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Lot: KWG0415420
Calibration ID: CAL3884

Sample Amount: 34.75 g
% Solids: 57.8
Dilution Factor: 1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	44	40-130	10/12/04	Acceptable
Phenol-d6	55	40-130	10/12/04	Acceptable
Nitrobenzene-d5	43	40-130	10/12/04	Acceptable
2-Fluorobiphenyl	38	40-130	10/12/04	Outside Control Limits
2,4,6-Tribromophenol	73	40-130	10/12/04	Acceptable
Terphenyl-d14	73	40-130	10/12/04	Acceptable

† Analyte Comments

4-Methylphenol This analyte cannot be separated from 3-Methylphenol.

Comments: _____

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2407595
Date Extracted: 10/08/2004
Date Analyzed: 10/12/2004

Duplicate Sample Summary
Semi-Volatile Organic Compounds by GC/MS

Sample Name: LDW-B2b-S
Lab Code: K2407595-002
Extraction Method: EPA 3541
Analysis Method: 8270C

Units: ug/Kg
Basis: Dry
Level: Low
Extraction Lot: KWG0415420

Analyte Name	MRL	MDL	Sample Result	LDW-B2b-SDUP KWG0415420-6 Duplicate Sample		Relative Percent Difference	RPD Limit
				Result	Average		
N-Nitrosodimethylamine	50	9.2	ND	ND	ND	-	50
Aniline	20	2.3	ND	ND	ND	-	50
Bis(2-chloroethyl) Ether	10	3.7	ND	ND	ND	-	50
Phenol	30	2.9	48	47	47	2 #	50
2-Chlorophenol	10	2.6	ND	ND	ND	-	50
1,3-Dichlorobenzene	10	2.5	ND	ND	ND	-	50
1,4-Dichlorobenzene	10	2.9	ND	ND	ND	-	50
1,2-Dichlorobenzene	10	2.0	ND	ND	ND	-	50
Benzyl Alcohol	10	5.6	ND	ND	ND	-	50
Bis(2-chloroisopropyl) Ether	10	1.9	ND	ND	ND	-	50
2-Methylphenol	10	5.2	ND	ND	ND	-	50
Hexachloroethane	10	3.4	ND	ND	ND	-	50
N-Nitrosodi-n-propylamine	10	4.9	ND	ND	ND	-	50
4-Methylphenol	10	4.4	9.6	13	11	27 #	50
Nitrobenzene	10	3.1	ND	ND	ND	-	50
Isophorone	10	2.5	ND	ND	ND	-	50
2-Nitrophenol	10	4.0	ND	ND	ND	-	50
2,4-Dimethylphenol	50	8.3	ND	ND	ND	-	50
Bis(2-chloroethoxy)methane	10	2.0	ND	ND	ND	-	50
2,4-Dichlorophenol	10	2.8	ND	ND	ND	-	50
Benzoic Acid	200	150	ND	ND	ND	-	50
1,2,4-Trichlorobenzene	10	2.3	ND	ND	ND	-	50
4-Chloroaniline	10	3.2	ND	ND	ND	-	50
Hexachlorobutadiene	10	2.2	ND	ND	ND	-	50
4-Chloro-3-methylphenol	10	3.2	ND	ND	ND	-	50
Hexachlorocyclopentadiene	50	23	ND	ND	ND	-	50
2,4,6-Trichlorophenol	10	2.8	ND	ND	ND	-	50
2,4,5-Trichlorophenol	10	4.6	ND	ND	ND	-	50
2-Chloronaphthalene	10	5.5	ND	ND	ND	-	50
2-Nitroaniline	20	4.1	ND	ND	ND	-	50
Dimethyl Phthalate	10	2.8	ND	3.8	NC	NC	50
2,6-Dinitrotoluene	10	4.3	ND	ND	ND	-	50
3-Nitroaniline	20	4.0	ND	ND	ND	-	50
2,4-Dinitrophenol	200	55	ND	ND	ND	-	50
4-Nitrophenol	100	46	ND	ND	ND	-	50

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2407595
Date Extracted: 10/08/2004
Date Analyzed: 10/12/2004

Duplicate Sample Summary
Semi-Volatile Organic Compounds by GC/MS

Sample Name: LDW-B2b-S
Lab Code: K2407595-002
Extraction Method: EPA 3541
Analysis Method: 8270C

Units: ug/Kg
Basis: Dry
Level: Low
Extraction Lot: KWG0415420

Analyte Name	MRL	MDL	Sample Result	LDW-B2b-SDUP KWG0415420-6 Duplicate Sample		Relative Percent Difference	RPD Limit
				Result	Average		
2,4-Dinitrotoluene	10	4.3	ND	ND	ND	-	50
4-Chlorophenyl Phenyl Ether	10	3.1	ND	ND	ND	-	50
Diethyl Phthalate	10	5.3	ND	ND	ND	-	50
4-Nitroaniline	20	5.2	ND	ND	ND	-	50
2-Methyl-4,6-dinitrophenol	100	2.6	ND	ND	ND	-	50
N-Nitrosodiphenylamine	10	3.4	ND	ND	ND	-	50
4-Bromophenyl Phenyl Ether	10	2.2	ND	ND	ND	-	50
Hexachlorobenzene	10	3.2	ND	ND	ND	-	50
Pentachlorophenol	50	13	ND	ND	ND	-	50
Carbazole	10	2.0	16	31	24	67 #	50
Di-n-butyl Phthalate	10	4.0	11	9.7	10	9 #	50
Benzidine	310	310	ND	ND	ND	-	50
Butyl Benzyl Phthalate	10	2.3	9.7	32	21	106 #	50
3,3'-Dichlorobenzidine	100	5.6	ND	ND	ND	-	50
Bis(2-ethylhexyl) Phthalate	200	2.6	150	180	160	18 #	50
Di-n-octyl Phthalate	20	1.9	ND	ND	ND	-	50

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2407596
Date Collected: 09/28/2004
Date Received: 09/30/2004
Date Extracted: 10/21/2004
Date Analyzed: 11/08/2004

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: LDW-B4b-T
Lab Code: K2407596-001
File ID: J:\MS14\DATA\110804\1108F009.D
Instrument ID: MS14

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Extraction Lot: KWG0416318
Calibration ID: CAL3961

Sample Amount: 2.00 g
% Solids: NA
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
62-75-9	N-Nitrosodimethylamine	50	U	200	50	
62-53-3	Aniline	1200	U	4000	1200	
111-44-4	Bis(2-chloroethyl) Ether	44	U	200	44	
108-95-2	Phenol	85	U	500	85	
95-57-8	2-Chlorophenol	55	U	400	55	
541-73-1	1,3-Dichlorobenzene	55	U	200	55	
106-46-7	1,4-Dichlorobenzene	55	U	200	55	
95-50-1	1,2-Dichlorobenzene	60	U	200	60	
100-51-6	Benzyl Alcohol	83	J	200	34	
39638-32-9	Bis(2-chloroisopropyl) Ether	55	U	200	55	
95-48-7	2-Methylphenol	270	U	400	270	
67-72-1	Hexachloroethane	43	U	200	43	
621-64-7	N-Nitrosodi-n-propylamine	41	U	200	41	
106-44-5	4-Methylphenol†	75	U	400	75	
98-95-3	Nitrobenzene	50	U	200	50	
78-59-1	Isophorone	29	U	200	29	
88-75-5	2-Nitrophenol	75	U	200	75	
105-67-9	2,4-Dimethylphenol	65	U	400	65	*
111-91-1	Bis(2-chloroethoxy)methane	25	U	200	25	
120-83-2	2,4-Dichlorophenol	60	U	400	60	
65-85-0	Benzoic Acid	3700	J	4000	950	
120-82-1	1,2,4-Trichlorobenzene	50	U	200	50	
106-47-8	4-Chloroaniline	30	U	1000	30	
87-68-3	Hexachlorobutadiene	43	U	200	43	
59-50-7	4-Chloro-3-methylphenol	360	U	1000	360	
77-47-4	Hexachlorocyclopentadiene	25000	U	25000	25000	
88-06-2	2,4,6-Trichlorophenol	44	U	400	44	
95-95-4	2,4,5-Trichlorophenol	55	U	400	55	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2407596
Date Collected: 09/28/2004
Date Received: 09/30/2004
Date Extracted: 10/21/2004
Date Analyzed: 11/08/2004

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: LDW-B4b-T
Lab Code: K2407596-001
File ID: J:\MS14\DATA\110804\1108F009.D
Instrument ID: MS14
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Lot: KWG0416318
Calibration ID: CAL3961

Sample Amount: 2.00 g
% Solids: NA
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
91-58-7	2-Chloronaphthalene	30	U	200	30	
88-74-4	2-Nitroaniline	130	U	1000	130	
131-11-3	Dimethyl Phthalate	26	U	200	26	
606-20-2	2,6-Dinitrotoluene	35	U	200	35	*
99-09-2	3-Nitroaniline	45	U	2000	45	
51-28-5	2,4-Dinitrophenol	120	U	4000	120	
100-02-7	4-Nitrophenol	38	U	2000	38	
121-14-2	2,4-Dinitrotoluene	43	U	400	43	
7005-72-3	4-Chlorophenyl Phenyl Ether	23	U	200	23	
84-66-2	Diethyl Phthalate	47	U	400	47	
100-01-6	4-Nitroaniline	130	U	1000	130	
534-52-1	2-Methyl-4,6-dinitrophenol	75	U	2000	75	
86-30-6	N-Nitrosodiphenylamine	48	U	200	48	
101-55-3	4-Bromophenyl Phenyl Ether	28	U	200	28	
118-74-1	Hexachlorobenzene	30	U	200	30	
87-86-5	Pentachlorophenol	1100	J	2000	160	
86-74-8	Carbazole	170	U	1000	170	*
84-74-2	Di-n-butyl Phthalate	80	U	200	80	
92-87-5	Benzidine	25000	U	25000	25000	*
85-68-7	Butyl Benzyl Phthalate	70	U	200	70	*
91-94-1	3,3'-Dichlorobenzidine	3900	U	10000	3900	
117-81-7	Bis(2-ethylhexyl) Phthalate	1100	J	2500	270	*
117-84-0	Di-n-octyl Phthalate	65	U	200	65	

* See Case Narrative

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2407596
Date Collected: 09/28/2004
Date Received: 09/30/2004
Date Extracted: 10/21/2004
Date Analyzed: 11/08/2004

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: LDW-B4b-T
Lab Code: K2407596-001
File ID: J:\MS14\DATA\110804\1108F009.D
Instrument ID: MS14
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Lot: KWG0416318
Calibration ID: CAL3961

Sample Amount: 2.00 g
% Solids: NA
Dilution Factor: 1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	88	20-130	11/08/04	Acceptable
Phenol-d6	93	20-130	11/08/04	Acceptable
Nitrobenzene-d5	90	20-130	11/08/04	Acceptable
2-Fluorobiphenyl	85	20-130	11/08/04	Acceptable
2,4,6-Tribromophenol	100	20-130	11/08/04	Acceptable
Terphenyl-d14	106	20-130	11/08/04	Acceptable

† Analyte Comments

4-Methylphenol This analyte cannot be separated from 3-Methylphenol.

Comments: _____

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2407596
Date Collected: 09/28/2004
Date Received: 09/30/2004
Date Extracted: 10/21/2004
Date Analyzed: 11/08/2004

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: LDW-B5b-T
Lab Code: K2407596-002
File ID: J:\MS14\DATA\110804\1108F010.D
Instrument ID: MS14

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Extraction Lot: KWG0416318
Calibration ID: CAL3961

Sample Amount: 2.00 g
% Solids: NA
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
62-75-9	N-Nitrosodimethylamine	50	U	200	50	
62-53-3	Aniline	1200	U	4000	1200	
111-44-4	Bis(2-chloroethyl) Ether	44	U	200	44	
108-95-2	Phenol	91	J	500	85	
95-57-8	2-Chlorophenol	55	U	400	55	
541-73-1	1,3-Dichlorobenzene	55	U	200	55	
106-46-7	1,4-Dichlorobenzene	55	U	200	55	
95-50-1	1,2-Dichlorobenzene	60	U	200	60	
100-51-6	Benzyl Alcohol	61	J	200	34	
39638-32-9	Bis(2-chloroisopropyl) Ether	55	U	200	55	
95-48-7	2-Methylphenol	270	U	400	270	
67-72-1	Hexachloroethane	43	U	200	43	
621-64-7	N-Nitrosodi-n-propylamine	41	U	200	41	
106-44-5	4-Methylphenol†	75	U	400	75	
98-95-3	Nitrobenzene	50	U	200	50	
78-59-1	Isophorone	29	U	200	29	
88-75-5	2-Nitrophenol	75	U	200	75	
105-67-9	2,4-Dimethylphenol	65	U	400	65	*
111-91-1	Bis(2-chloroethoxy)methane	25	U	200	25	
120-83-2	2,4-Dichlorophenol	60	U	400	60	
65-85-0	Benzoic Acid	14000		4000	950	
120-82-1	1,2,4-Trichlorobenzene	50	U	200	50	
106-47-8	4-Chloroaniline	30	U	1000	30	
87-68-3	Hexachlorobutadiene	43	U	200	43	
59-50-7	4-Chloro-3-methylphenol	360	U	1000	360	
77-47-4	Hexachlorocyclopentadiene	25000	U	25000	25000	
88-06-2	2,4,6-Trichlorophenol	44	U	400	44	
95-95-4	2,4,5-Trichlorophenol	55	U	400	55	

Comments:

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2407596
Date Collected: 09/28/2004
Date Received: 09/30/2004
Date Extracted: 10/21/2004
Date Analyzed: 11/08/2004

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: LDW-B5b-T
Lab Code: K2407596-002
File ID: J:\MS14\DATA\110804\1108F010.D
Instrument ID: MS14

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Extraction Lot: KWG0416318
Calibration ID: CAL3961

Sample Amount: 2.00 g
% Solids: NA
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
91-58-7	2-Chloronaphthalene	30	U	200	30	
88-74-4	2-Nitroaniline	130	U	1000	130	
131-11-3	Dimethyl Phthalate	26	U	200	26	
606-20-2	2,6-Dinitrotoluene	35	U	200	35	*
99-09-2	3-Nitroaniline	45	U	2000	45	
51-28-5	2,4-Dinitrophenol	120	U	4000	120	
100-02-7	4-Nitrophenol	38	U	2000	38	
121-14-2	2,4-Dinitrotoluene	43	U	400	43	
7005-72-3	4-Chlorophenyl Phenyl Ether	23	U	200	23	
84-66-2	Diethyl Phthalate	47	U	400	47	
100-01-6	4-Nitroaniline	130	U	1000	130	
534-52-1	2-Methyl-4,6-dinitrophenol	75	U	2000	75	
86-30-6	N-Nitrosodiphenylamine	170	J	200	48	
101-55-3	4-Bromophenyl Phenyl Ether	28	U	200	28	
118-74-1	Hexachlorobenzene	30	U	200	30	
87-86-5	Pentachlorophenol	1100	J	2000	160	
86-74-8	Carbazole	170	U	1000	170	*
84-74-2	Di-n-butyl Phthalate	80	U	200	80	
92-87-5	Benzidine	25000	U	25000	25000	*
85-68-7	Butyl Benzyl Phthalate	190	J	200	70	*
91-94-1	3,3'-Dichlorobenzidine	3900	U	10000	3900	
117-81-7	Bis(2-ethylhexyl) Phthalate	1100	J	2500	270	*
117-84-0	Di-n-octyl Phthalate	65	U	200	65	

* See Case Narrative

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2407596
Date Collected: 09/28/2004
Date Received: 09/30/2004
Date Extracted: 10/21/2004
Date Analyzed: 11/08/2004

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: LDW-B5b-T
Lab Code: K2407596-002
File ID: J:\MS14\DATA\110804\1108F010.D
Instrument ID: MS14
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Lot: KWG0416318
Calibration ID: CAL3961

Sample Amount: 2.00 g
% Solids: NA
Dilution Factor: 1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	97	20-130	11/08/04	Acceptable
Phenol-d6	103	20-130	11/08/04	Acceptable
Nitrobenzene-d5	102	20-130	11/08/04	Acceptable
2-Fluorobiphenyl	91	20-130	11/08/04	Acceptable
2,4,6-Tribromophenol	103	20-130	11/08/04	Acceptable
Terphenyl-d14	104	20-130	11/08/04	Acceptable

† Analyte Comments

4-Methylphenol This analyte cannot be separated from 3-Methylphenol.

Comments: _____

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2407596
Date Collected: 09/27/2004
Date Received: 09/30/2004
Date Extracted: 10/21/2004
Date Analyzed: 11/08/2004

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: LDW-B1b-T
Lab Code: K2407596-003
File ID: J:\MS14\DATA\110804\1108F011.D
Instrument ID: MS14

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Extraction Lot: KWG0416318
Calibration ID: CAL3961

Sample Amount: 1.03 g
% Solids: NA
Dilution Factor: 1

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
62-75-9	N-Nitrosodimethylamine	98 U	390	98	
62-53-3	Aniline	2300 U	7800	2300	
111-44-4	Bis(2-chloroethyl) Ether	85 U	390	85	
108-95-2	Phenol	170 U	980	170	
95-57-8	2-Chlorophenol	110 U	780	110	
541-73-1	1,3-Dichlorobenzene	110 U	390	110	
106-46-7	1,4-Dichlorobenzene	110 U	390	110	
95-50-1	1,2-Dichlorobenzene	120 U	390	120	
100-51-6	Benzyl Alcohol	69 J	390	66	
39638-32-9	Bis(2-chloroisopropyl) Ether	110 U	390	110	
95-48-7	2-Methylphenol	520 U	780	520	
67-72-1	Hexachloroethane	83 U	390	83	
621-64-7	N-Nitrosodi-n-propylamine	80 U	390	80	
106-44-5	4-Methylphenol†	150 U	780	150	
98-95-3	Nitrobenzene	98 U	390	98	
78-59-1	Isophorone	57 U	390	57	
88-75-5	2-Nitrophenol	150 U	390	150	
105-67-9	2,4-Dimethylphenol	130 U	780	130	*
111-91-1	Bis(2-chloroethoxy)methane	49 U	390	49	
120-83-2	2,4-Dichlorophenol	120 U	780	120	
65-85-0	Benzoic Acid	3800 J	7800	1900	
120-82-1	1,2,4-Trichlorobenzene	97 U	390	97	
106-47-8	4-Chloroaniline	58 U	2000	58	
87-68-3	Hexachlorobutadiene	83 U	390	83	
59-50-7	4-Chloro-3-methylphenol	700 U	2000	700	
77-47-4	Hexachlorocyclopentadiene	49000 U	49000	49000	
88-06-2	2,4,6-Trichlorophenol	86 U	780	86	
95-95-4	2,4,5-Trichlorophenol	110 U	780	110	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2407596
Date Collected: 09/27/2004
Date Received: 09/30/2004
Date Extracted: 10/21/2004
Date Analyzed: 11/08/2004

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: LDW-B1b-T
Lab Code: K2407596-003
File ID: J:\MS14\DATA\110804\1108F011.D
Instrument ID: MS14

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Extraction Lot: KWG0416318
Calibration ID: CAL3961

Sample Amount: 1.03 g
% Solids: NA
Dilution Factor: 1

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
91-58-7	2-Chloronaphthalene	58 U	390	58	
88-74-4	2-Nitroaniline	260 U	2000	260	
131-11-3	Dimethyl Phthalate	50 U	390	50	
606-20-2	2,6-Dinitrotoluene	68 U	390	68	*
99-09-2	3-Nitroaniline	87 U	3900	87	
51-28-5	2,4-Dinitrophenol	230 U	7800	230	
100-02-7	4-Nitrophenol	73 U	3900	73	
121-14-2	2,4-Dinitrotoluene	83 U	780	83	
7005-72-3	4-Chlorophenyl Phenyl Ether	44 U	390	44	
84-66-2	Diethyl Phthalate	92 U	780	92	
100-01-6	4-Nitroaniline	260 U	2000	260	
534-52-1	2-Methyl-4,6-dinitrophenol	150 U	3900	150	
86-30-6	N-Nitrosodiphenylamine	93 U	390	93	
101-55-3	4-Bromophenyl Phenyl Ether	54 U	390	54	
118-74-1	Hexachlorobenzene	58 U	390	58	
87-86-5	Pentachlorophenol	2100 J	3900	310	
86-74-8	Carbazole	330 U	2000	330	*
84-74-2	Di-n-butyl Phthalate	160 U	390	160	
92-87-5	Benzidine	49000 U	49000	49000	*
85-68-7	Butyl Benzyl Phthalate	140 U	390	140	*
91-94-1	3,3'-Dichlorobenzidine	7600 U	20000	7600	
117-81-7	Bis(2-ethylhexyl) Phthalate	2200 J	4900	520	*
117-84-0	Di-n-octyl Phthalate	130 U	390	130	

* See Case Narrative

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2407596
Date Collected: 09/27/2004
Date Received: 09/30/2004
Date Extracted: 10/21/2004
Date Analyzed: 11/08/2004

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: LDW-B1b-T
Lab Code: K2407596-003
File ID: J:\MS14\DATA\110804\1108F011.D
Instrument ID: MS14
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Lot: KWG0416318
Calibration ID: CAL3961

Sample Amount: 1.03 g
% Solids: NA
Dilution Factor: 1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	82	20-130	11/08/04	Acceptable
Phenol-d6	90	20-130	11/08/04	Acceptable
Nitrobenzene-d5	91	20-130	11/08/04	Acceptable
2-Fluorobiphenyl	83	20-130	11/08/04	Acceptable
2,4,6-Tribromophenol	104	20-130	11/08/04	Acceptable
Terphenyl-d14	105	20-130	11/08/04	Acceptable

† Analyte Comments

4-Methylphenol This analyte cannot be separated from 3-Methylphenol.

Comments: _____

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2407596
Date Collected: 09/27/2004
Date Received: 09/30/2004
Date Extracted: 10/21/2004
Date Analyzed: 11/08/2004

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: LDW-B2b-T
Lab Code: K2407596-004
File ID: J:\MS14\DATA\110804\1108F012.D
Instrument ID: MS14

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Extraction Lot: KWG0416318
Calibration ID: CAL3961

Sample Amount: 1.02 g
% Solids: NA
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
62-75-9	N-Nitrosodimethylamine	99	U	400	99	
62-53-3	Aniline	2300	U	7900	2300	
111-44-4	Bis(2-chloroethyl) Ether	86	U	400	86	
108-95-2	Phenol	170	U	990	170	
95-57-8	2-Chlorophenol	110	U	790	110	
541-73-1	1,3-Dichlorobenzene	110	U	400	110	
106-46-7	1,4-Dichlorobenzene	110	U	400	110	
95-50-1	1,2-Dichlorobenzene	120	U	400	120	
100-51-6	Benzyl Alcohol	66	U	400	66	
39638-32-9	Bis(2-chloroisopropyl) Ether	110	U	400	110	
95-48-7	2-Methylphenol	520	U	790	520	
67-72-1	Hexachloroethane	84	U	400	84	
621-64-7	N-Nitrosodi-n-propylamine	81	U	400	81	
106-44-5	4-Methylphenol†	150	U	790	150	
98-95-3	Nitrobenzene	99	U	400	99	
78-59-1	Isophorone	57	U	400	57	
88-75-5	2-Nitrophenol	150	U	400	150	
105-67-9	2,4-Dimethylphenol	130	U	790	130	*
111-91-1	Bis(2-chloroethoxy)methane	50	U	400	50	
120-83-2	2,4-Dichlorophenol	120	U	790	120	
65-85-0	Benzoic Acid	4500	J	7900	1900	
120-82-1	1,2,4-Trichlorobenzene	98	U	400	98	
106-47-8	4-Chloroaniline	58	U	2000	58	
87-68-3	Hexachlorobutadiene	84	U	400	84	
59-50-7	4-Chloro-3-methylphenol	710	U	2000	710	
77-47-4	Hexachlorocyclopentadiene	50000	U	50000	50000	
88-06-2	2,4,6-Trichlorophenol	87	U	790	87	
95-95-4	2,4,5-Trichlorophenol	110	U	790	110	

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2407596
Date Collected: 09/27/2004
Date Received: 09/30/2004
Date Extracted: 10/21/2004
Date Analyzed: 11/08/2004

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: LDW-B2b-T
Lab Code: K2407596-004
File ID: J:\MS14\DATA\110804\1108F012.D
Instrument ID: MS14

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Extraction Lot: KWG0416318
Calibration ID: CAL3961

Sample Amount: 1.02 g
% Solids: NA
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
91-58-7	2-Chloronaphthalene	58	U	400	58	
88-74-4	2-Nitroaniline	260	U	2000	260	
131-11-3	Dimethyl Phthalate	50	U	400	50	
606-20-2	2,6-Dinitrotoluene	69	U	400	69	*
99-09-2	3-Nitroaniline	88	U	4000	88	
51-28-5	2,4-Dinitrophenol	230	U	7900	230	
100-02-7	4-Nitrophenol	74	U	4000	74	
121-14-2	2,4-Dinitrotoluene	84	U	790	84	
7005-72-3	4-Chlorophenyl Phenyl Ether	45	U	400	45	
84-66-2	Diethyl Phthalate	93	U	790	93	
100-01-6	4-Nitroaniline	260	U	2000	260	
534-52-1	2-Methyl-4,6-dinitrophenol	150	U	4000	150	
86-30-6	N-Nitrosodiphenylamine	94	U	400	94	
101-55-3	4-Bromophenyl Phenyl Ether	54	U	400	54	
118-74-1	Hexachlorobenzene	58	U	400	58	
87-86-5	Pentachlorophenol	310	U	4000	310	
86-74-8	Carbazole	330	U	2000	330	*
84-74-2	Di-n-butyl Phthalate	160	U	400	160	
92-87-5	Benzidine	50000	U	50000	50000	*
85-68-7	Butyl Benzyl Phthalate	140	U	400	140	*
91-94-1	3,3'-Dichlorobenzidine	7700	U	20000	7700	
117-81-7	Bis(2-ethylhexyl) Phthalate	2100	J	5000	520	*
117-84-0	Di-n-octyl Phthalate	130	U	400	130	

* See Case Narrative

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2407596
Date Collected: 09/27/2004
Date Received: 09/30/2004
Date Extracted: 10/21/2004
Date Analyzed: 11/08/2004

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: LDW-B2b-T
Lab Code: K2407596-004
File ID: J:\MS14\DATA\110804\1108F012.D
Instrument ID: MS14
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Lot: KWG0416318
Calibration ID: CAL3961

Sample Amount: 1.02 g
% Solids: NA
Dilution Factor: 1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	90	20-130	11/08/04	Acceptable
Phenol-d6	97	20-130	11/08/04	Acceptable
Nitrobenzene-d5	97	20-130	11/08/04	Acceptable
2-Fluorobiphenyl	86	20-130	11/08/04	Acceptable
2,4,6-Tribromophenol	108	20-130	11/08/04	Acceptable
Terphenyl-d14	112	20-130	11/08/04	Acceptable

† Analyte Comments

4-Methylphenol This analyte cannot be separated from 3-Methylphenol.

Comments: _____

**Polynuclear Aromatic Hydrocarbons
EPA Method 8270C**

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406170
Date Collected: 08/13/2004
Date Received: 08/18/2004
Date Extracted: 09/22/2004
Date Analyzed: 09/28/2004

Polynuclear Aromatic Hydrocarbons

Sample Name: LDW-B2a-S
Lab Code: K2406170-001
File ID: J:\MS11\DATA\092704\0927F044.D
Instrument ID: MS11
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Lot: KWG0414432
Calibration ID: CAL3848

Sample Amount: 20.03 g
% Solids: 50.0
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
91-20-3	Naphthalene	13		5.0	0.68	
91-57-6	2-Methylnaphthalene	7.4		5.0	0.68	
90-12-0	1-Methylnaphthalene	6.2		5.0	0.50	
CASID30061	C2-Naphthalenes	14		5.0	5.0	
CASID30071	C3-Naphthalenes	26		5.0	5.0	
CASID30077	C4-Naphthalenes	14		5.0	5.0	
92-52-4	Biphenyl	2.9	J	5.0	0.86	
208-96-8	Acenaphthylene	23		5.0	0.44	
132-64-9	Dibenzofuran	8.3		5.0	0.34	
83-32-9	Acenaphthene	13		5.0	0.32	
86-73-7	Fluorene	14		5.0	0.38	
CASID30040	C1-Fluorenes	6.3		5.0	5.0	
CASID30060	C2-Fluorenes	11		5.0	5.0	
CASID30070	C3-Fluorenes	15		5.0	5.0	
132-65-0	Dibenzothiophene	6.8		5.0	0.46	
CASID30038	C1-Dibenzothiophenes	8.1		5.0	5.0	
CASID30059	C2-Dibenzothiophenes	12		5.0	5.0	
CASID30069	C3-Dibenzothiophenes	20		5.0	5.0	
85-01-8	Phenanthrene	140		5.0	0.66	
120-12-7	Anthracene	74		5.0	0.44	
CASID30042	C1-Phenanthrenes/Anthracenes	77		5.0	5.0	
CASID30062	C2-Phenanthrenes/Anthracenes	47		5.0	5.0	
CASID30072	C3-Phenanthrenes/Anthracenes	32		5.0	5.0	
CASID30078	C4-Phenanthrenes/Anthracenes	29		5.0	5.0	
206-44-0	Fluoranthene	370		5.0	0.68	
129-00-0	Pyrene	320		5.0	0.72	
CASID30039	C1-Fluoranthenes/Pyrenes	200		5.0	5.0	
56-55-3	Benz(a)anthracene	140		5.0	0.32	

Comments: _____

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406170
Date Collected: 08/13/2004
Date Received: 08/18/2004
Date Extracted: 09/22/2004
Date Analyzed: 09/28/2004

Polynuclear Aromatic Hydrocarbons

Sample Name: LDW-B2a-S
Lab Code: K2406170-001
File ID: J:\MS11\DATA\092704\0927F044.D
Instrument ID: MS11
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Lot: KWG0414432
Calibration ID: CAL3848

Sample Amount: 20.03 g
% Solids: 50.0
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
218-01-9	Chrysene	270		5.0	0.82	
CASID30037	C1-Chrysenes	150		5.0	5.0	
CASID30058	C2-Chrysenes	66		5.0	5.0	
CASID30068	C3-Chrysenes	43		5.0	5.0	
CASID30074	C4-Chrysenes	20		5.0	5.0	
205-99-2	Benzo(b)fluoranthene	280		5.0	0.96	
207-08-9	Benzo(k)fluoranthene	210		5.0	0.66	
192-97-2	Benzo(e)pyrene	210		5.0	0.78	
50-32-8	Benzo(a)pyrene	220		5.0	0.44	
198-55-0	Perylene	65		5.0	0.34	
193-39-5	Indeno(1,2,3-cd)pyrene	150		5.0	0.48	
53-70-3	Dibenz(a,h)anthracene	34		5.0	0.52	
191-24-2	Benzo(g,h,i)perylene	140		5.0	0.46	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	60	40-130	09/28/04	Acceptable
Fluoranthene-d10	67	40-130	09/28/04	Acceptable
Terphenyl-d14	86	40-130	09/28/04	Acceptable

Comments:

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406170
Date Collected: 08/15/2004
Date Received: 08/18/2004
Date Extracted: 09/22/2004
Date Analyzed: 09/27/2004

Polynuclear Aromatic Hydrocarbons

Sample Name: LDW-B6a-S
Lab Code: K2406170-002
File ID: J:\MS11\DATA\092704\0927F040.D
Instrument ID: MS11

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Extraction Lot: KWG0414432
Calibration ID: CAL3848

Sample Amount: 14.91 g
% Solids: 71.2
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
91-20-3	Naphthalene	14		4.8	0.48	
91-57-6	2-Methylnaphthalene	15		4.8	0.48	
90-12-0	1-Methylnaphthalene	11		4.8	0.36	
CASID30061	C2-Naphthalenes	22		4.8	3.6	
CASID30071	C3-Naphthalenes	34		4.8	3.6	
CASID30077	C4-Naphthalenes	24		4.8	3.6	
92-52-4	Biphenyl	4.0	J	4.8	0.61	
208-96-8	Acenaphthylene	9.8		4.8	0.31	
132-64-9	Dibenzofuran	7.9		4.8	0.24	
83-32-9	Acenaphthene	10		4.8	0.23	
86-73-7	Fluorene	7.7		4.8	0.27	
CASID30040	C1-Fluorenes	5.3		4.8	3.6	
CASID30060	C2-Fluorenes	11		4.8	3.6	
CASID30070	C3-Fluorenes	17		4.8	3.6	
132-65-0	Dibenzothiophene	4.1	J	4.8	0.33	
CASID30038	C1-Dibenzothiophenes	16		4.8	3.6	
CASID30059	C2-Dibenzothiophenes	14		4.8	3.6	
CASID30069	C3-Dibenzothiophenes	26		4.8	3.6	
85-01-8	Phenanthrene	38		4.8	0.47	
120-12-7	Anthracene	22		4.8	0.31	
CASID30042	C1-Phenanthrenes/Anthracenes	34		4.8	3.6	
CASID30062	C2-Phenanthrenes/Anthracenes	42		4.8	3.6	
CASID30072	C3-Phenanthrenes/Anthracenes	55		4.8	3.6	
CASID30078	C4-Phenanthrenes/Anthracenes	28		4.8	3.6	
206-44-0	Fluoranthene	140		4.8	0.48	
129-00-0	Pyrene	120		4.8	0.51	
CASID30039	C1-Fluoranthenes/Pyrenes	98		4.8	3.6	
56-55-3	Benz(a)anthracene	38		4.8	0.23	

Comments:

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406170
Date Collected: 08/15/2004
Date Received: 08/18/2004
Date Extracted: 09/22/2004
Date Analyzed: 09/27/2004

Polynuclear Aromatic Hydrocarbons

Sample Name: LDW-B6a-S
Lab Code: K2406170-002
File ID: J:\MS11\DATA\092704\0927F040.D
Instrument ID: MS11
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Lot: KWG0414432
Calibration ID: CAL3848

Sample Amount: 14.91 g
% Solids: 71.2
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
218-01-9	Chrysene	83		4.8	0.58	
CASID30037	C1-Chrysenes	58		4.8	3.6	
CASID30058	C2-Chrysenes	82		4.8	3.6	
CASID30068	C3-Chrysenes	83		4.8	3.6	
CASID30074	C4-Chrysenes	51		4.8	3.6	
205-99-2	Benzo(b)fluoranthene	53		4.8	0.68	
207-08-9	Benzo(k)fluoranthene	41		4.8	0.47	
192-97-2	Benzo(e)pyrene	46		4.8	0.55	
50-32-8	Benzo(a)pyrene	35		4.8	0.31	
198-55-0	Perylene	39		4.8	0.24	
193-39-5	Indeno(1,2,3-cd)pyrene	29		4.8	0.34	
53-70-3	Dibenz(a,h)anthracene	6.2		4.8	0.37	
191-24-2	Benzo(g,h,i)perylene	34		4.8	0.33	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	66	40-130	09/27/04	Acceptable
Fluoranthene-d10	80	40-130	09/27/04	Acceptable
Terphenyl-d14	94	40-130	09/27/04	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406170
Date Collected: 08/14/2004
Date Received: 08/18/2004
Date Extracted: 09/22/2004
Date Analyzed: 09/28/2004

Polynuclear Aromatic Hydrocarbons

Sample Name: LDW-B4a-S
Lab Code: K2406170-003
File ID: J:\MS11\DATA\092704\0927F045.D
Instrument ID: MS11
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Lot: KWG0414432
Calibration ID: CAL3848

Sample Amount: 18.77 g
% Solids: 53.7
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
91-20-3	Naphthalene	82		5.0	0.64	
91-57-6	2-Methylnaphthalene	53		5.0	0.64	
90-12-0	1-Methylnaphthalene	32		5.0	0.47	
CASID30061	C2-Naphthalenes	100		5.0	4.7	
CASID30071	C3-Naphthalenes	310		5.0	4.7	
CASID30077	C4-Naphthalenes	250		5.0	4.7	
92-52-4	Biphenyl	33		5.0	0.81	
208-96-8	Acenaphthylene	180		5.0	0.41	
132-64-9	Dibenzofuran	39		5.0	0.32	
83-32-9	Acenaphthene	36		5.0	0.30	
86-73-7	Fluorene	97		5.0	0.36	
CASID30040	C1-Fluorenes	150		5.0	4.7	
CASID30060	C2-Fluorenes	250		5.0	4.7	
CASID30070	C3-Fluorenes	220		5.0	4.7	
132-65-0	Dibenzothiophene	150		5.0	0.43	
CASID30038	C1-Dibenzothiophenes	59		5.0	4.7	
CASID30059	C2-Dibenzothiophenes	190		5.0	4.7	
CASID30069	C3-Dibenzothiophenes	130		5.0	4.7	
85-01-8	Phenanthrene	2200	E	5.0	0.62	
120-12-7	Anthracene	340		5.0	0.41	
CASID30042	C1-Phenanthrenes/Anthracenes	1700		5.0	4.7	
CASID30062	C2-Phenanthrenes/Anthracenes	840		5.0	4.7	
CASID30072	C3-Phenanthrenes/Anthracenes	420		5.0	4.7	
CASID30078	C4-Phenanthrenes/Anthracenes	150		5.0	4.7	
206-44-0	Fluoranthene	5300	E	5.0	0.64	
129-00-0	Pyrene	4200	E	5.0	0.68	
CASID30039	C1-Fluoranthenes/Pyrenes	2600	E	5.0	4.7	
56-55-3	Benz(a)anthracene	1000		5.0	0.30	

Comments: _____

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406170
Date Collected: 08/14/2004
Date Received: 08/18/2004
Date Extracted: 09/22/2004
Date Analyzed: 09/28/2004

Polynuclear Aromatic Hydrocarbons

Sample Name: LDW-B4a-S
Lab Code: K2406170-003
File ID: J:\MS11\DATA\092704\0927F045.D
Instrument ID: MS11
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Lot: KWG0414432
Calibration ID: CAL3848

Sample Amount: 18.77 g
% Solids: 53.7
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
218-01-9	Chrysene	2600	E	5.0	0.77	
CASID30037	C1-Chrysenes	980		5.0	4.7	
CASID30058	C2-Chrysenes	370		5.0	4.7	
CASID30068	C3-Chrysenes	210		5.0	4.7	
CASID30074	C4-Chrysenes	78		5.0	4.7	
205-99-2	Benzo(b)fluoranthene	1900		5.0	0.90	
207-08-9	Benzo(k)fluoranthene	1100		5.0	0.62	
192-97-2	Benzo(e)pyrene	1300		5.0	0.73	
50-32-8	Benzo(a)pyrene	1100		5.0	0.41	
198-55-0	Perylene	230		5.0	0.32	
193-39-5	Indeno(1,2,3-cd)pyrene	890		5.0	0.45	
53-70-3	Dibenz(a,h)anthracene	130		5.0	0.49	
191-24-2	Benzo(g,h,i)perylene	870		5.0	0.43	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	63	40-130	09/28/04	Acceptable
Fluoranthene-d10	87	40-130	09/28/04	Acceptable
Terphenyl-d14	95	40-130	09/28/04	Acceptable

Comments: _____

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406170
Date Collected: 08/14/2004
Date Received: 08/18/2004
Date Extracted: 09/22/2004
Date Analyzed: 09/28/2004

Polynuclear Aromatic Hydrocarbons

Sample Name: LDW-B4a-SDL
Lab Code: K2406170-003
File ID: J:\MS11\DATA\092704\0927F055.D
Instrument ID: MS11
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Lot: KWG0414432
Calibration ID: CAL3848

Sample Amount: 18.77 g
% Solids: 53.7
Dilution Factor: 10

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
91-20-3	Naphthalene	79 D	50	6.4	
91-57-6	2-Methylnaphthalene	39 JD	50	6.4	
90-12-0	1-Methylnaphthalene	24 JD	50	4.7	
CASID30061	C2-Naphthalenes	70 D	50	47	
CASID30071	C3-Naphthalenes	190 D	50	47	
CASID30077	C4-Naphthalenes	160 D	50	47	
92-52-4	Biphenyl	22 JD	50	8.1	
208-96-8	Acenaphthylene	210 D	50	4.1	
132-64-9	Dibenzofuran	35 JD	50	3.2	
83-32-9	Acenaphthene	36 JD	50	3.0	
86-73-7	Fluorene	88 D	50	3.6	
CASID30040	C1-Fluorenes	140 D	50	47	
CASID30060	C2-Fluorenes	240 D	50	47	
CASID30070	C3-Fluorenes	240 D	50	47	
132-65-0	Dibenzothiophene	140 D	50	4.3	
CASID30038	C1-Dibenzothiophenes	62 D	50	47	
CASID30059	C2-Dibenzothiophenes	180 D	50	47	
CASID30069	C3-Dibenzothiophenes	120 D	50	47	
85-01-8	Phenanthrene	2400 D	50	6.2	
120-12-7	Anthracene	410 D	50	4.1	
CASID30042	C1-Phenanthrenes/Anthracenes	1700 D	50	47	
CASID30062	C2-Phenanthrenes/Anthracenes	840 D	50	47	
CASID30072	C3-Phenanthrenes/Anthracenes	390 D	50	47	
CASID30078	C4-Phenanthrenes/Anthracenes	160 D	50	47	
206-44-0	Fluoranthene	9300 D	50	6.4	
129-00-0	Pyrene	7100 D	50	6.8	
CASID30039	C1-Fluoranthenes/Pyrenes	2600 D	50	47	
56-55-3	Benz(a)anthracene	1000 D	50	3.0	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406170
Date Collected: 08/14/2004
Date Received: 08/18/2004
Date Extracted: 09/22/2004
Date Analyzed: 09/28/2004

Polynuclear Aromatic Hydrocarbons

Sample Name: LDW-B4a-SDL
Lab Code: K2406170-003
File ID: J:\MS11\DATA\092704\0927F055.D
Instrument ID: MS11

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Extraction Lot: KWG0414432
Calibration ID: CAL3848

Sample Amount: 18.77 g
% Solids: 53.7
Dilution Factor: 10

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
218-01-9	Chrysene	2600	D	50	7.7	
CASID30037	C1-Chrysenes	940	D	50	47	
CASID30058	C2-Chrysenes	370	D	50	47	
CASID30068	C3-Chrysenes	190	D	50	47	
CASID30074	C4-Chrysenes	47	U	50	47	
205-99-2	Benzo(b)fluoranthene	1600	D	50	9.0	
207-08-9	Benzo(k)fluoranthene	1400	D	50	6.2	
192-97-2	Benzo(e)pyrene	1300	D	50	7.3	
50-32-8	Benzo(a)pyrene	1000	D	50	4.1	
198-55-0	Perylene	220	D	50	3.2	
193-39-5	Indeno(1,2,3-cd)pyrene	810	D	50	4.5	
53-70-3	Dibenz(a,h)anthracene	120	D	50	4.9	
191-24-2	Benzo(g,h,i)perylene	850	D	50	4.3	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	59	40-130	09/28/04	Acceptable
Fluoranthene-d10	86	40-130	09/28/04	Acceptable
Terphenyl-d14	98	40-130	09/28/04	Acceptable

Comments: _____

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406170
Date Collected: 08/12/2004
Date Received: 08/18/2004
Date Extracted: 09/22/2004
Date Analyzed: 09/27/2004

Polynuclear Aromatic Hydrocarbons

Sample Name: LDW-B1a-S
Lab Code: K2406170-004
File ID: J:\MS11\DATA\092704\0927F025.D
Instrument ID: MS11
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Lot: KWG0414432
Calibration ID: CAL3848

Sample Amount: 12.59 g
% Solids: 80.3
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
91-20-3	Naphthalene	9.7		5.0	0.43	
91-57-6	2-Methylnaphthalene	3.8	J	5.0	0.43	
90-12-0	1-Methylnaphthalene	3.1	J	5.0	0.32	
CASID30061	C2-Naphthalenes	8.5		5.0	3.2	
CASID30071	C3-Naphthalenes	5.7		5.0	3.2	
CASID30077	C4-Naphthalenes	6.6		5.0	3.2	
92-52-4	Biphenyl	1.8	J	5.0	0.54	
208-96-8	Acenaphthylene	11		5.0	0.28	
132-64-9	Dibenzofuran	6.2		5.0	0.22	
83-32-9	Acenaphthene	11		5.0	0.20	
86-73-7	Fluorene	7.3		5.0	0.24	
CASID30040	C1-Fluorenes	4.2	J	5.0	3.2	
CASID30060	C2-Fluorenes	4.6	J	5.0	3.2	
CASID30070	C3-Fluorenes	5.5		5.0	3.2	
132-65-0	Dibenzothiophene	3.1	J	5.0	0.29	
CASID30038	C1-Dibenzothiophenes	4.6	J	5.0	3.2	
CASID30059	C2-Dibenzothiophenes	3.5	J	5.0	3.2	
CASID30069	C3-Dibenzothiophenes	3.2	U	5.0	3.2	
85-01-8	Phenanthrene	46		5.0	0.42	
120-12-7	Anthracene	26		5.0	0.28	
CASID30042	C1-Phenanthrenes/Anthracenes	28		5.0	3.2	
CASID30062	C2-Phenanthrenes/Anthracenes	23		5.0	3.2	
CASID30072	C3-Phenanthrenes/Anthracenes	15		5.0	3.2	
CASID30078	C4-Phenanthrenes/Anthracenes	13		5.0	3.2	
206-44-0	Fluoranthene	120		5.0	0.43	
129-00-0	Pyrene	140		5.0	0.45	
CASID30039	C1-Fluoranthenes/Pyrenes	72		5.0	3.2	
56-55-3	Benz(a)anthracene	42		5.0	0.20	

Comments: _____

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406170
Date Collected: 08/12/2004
Date Received: 08/18/2004
Date Extracted: 09/22/2004
Date Analyzed: 09/27/2004

Polynuclear Aromatic Hydrocarbons

Sample Name: LDW-B1a-S
Lab Code: K2406170-004
File ID: J:\MS11\DATA\092704\0927F025.D
Instrument ID: MS11
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Lot: KWG0414432
Calibration ID: CAL3848

Sample Amount: 12.59 g
% Solids: 80.3
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
218-01-9	Chrysene	50		5.0	0.52	
CASID30037	C1-Chrysenes	38		5.0	3.2	
CASID30058	C2-Chrysenes	22		5.0	3.2	
CASID30068	C3-Chrysenes	15		5.0	3.2	
CASID30074	C4-Chrysenes	8.8		5.0	3.2	
205-99-2	Benzo(b)fluoranthene	45		5.0	0.60	
207-08-9	Benzo(k)fluoranthene	46		5.0	0.42	
192-97-2	Benzo(e)pyrene	41		5.0	0.49	
50-32-8	Benzo(a)pyrene	51		5.0	0.28	
198-55-0	Perylene	15		5.0	0.22	
193-39-5	Indeno(1,2,3-cd)pyrene	36		5.0	0.30	
53-70-3	Dibenz(a,h)anthracene	6.2		5.0	0.33	
191-24-2	Benzo(g,h,i)perylene	40		5.0	0.29	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	61	40-130	09/27/04	Acceptable
Fluoranthene-d10	73	40-130	09/27/04	Acceptable
Terphenyl-d14	91	40-130	09/27/04	Acceptable

Comments: _____

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406170
Date Collected: 08/11/2004
Date Received: 08/18/2004
Date Extracted: 09/22/2004
Date Analyzed: 09/28/2004

Polynuclear Aromatic Hydrocarbons

Sample Name: LDW-B9b-S
Lab Code: K2406170-005
File ID: J:\MS11\DATA\092704\0927F046.D
Instrument ID: MS11

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Extraction Lot: KWG0414432
Calibration ID: CAL3848

Sample Amount: 18.52 g
% Solids: 54.2
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
91-20-3	Naphthalene	7.4		5.0	0.63	
91-57-6	2-Methylnaphthalene	7.0		5.0	0.63	
90-12-0	1-Methylnaphthalene	5.8		5.0	0.47	
CASID30061	C2-Naphthalenes	20		5.0	4.7	
CASID30071	C3-Naphthalenes	46		5.0	4.7	
CASID30077	C4-Naphthalenes	36		5.0	4.7	
92-52-4	Biphenyl	3.0	J	5.0	0.80	
208-96-8	Acenaphthylene	6.3		5.0	0.41	
132-64-9	Dibenzofuran	4.7	J	5.0	0.32	
83-32-9	Acenaphthene	3.8	J	5.0	0.30	
86-73-7	Fluorene	5.3		5.0	0.36	
CASID30040	C1-Fluorenes	4.7	U	5.0	4.7	
CASID30060	C2-Fluorenes	6.9		5.0	4.7	
CASID30070	C3-Fluorenes	12		5.0	4.7	
132-65-0	Dibenzothiophene	3.1	J	5.0	0.43	
CASID30038	C1-Dibenzothiophenes	14		5.0	4.7	
CASID30059	C2-Dibenzothiophenes	7.9		5.0	4.7	
CASID30069	C3-Dibenzothiophenes	17		5.0	4.7	
85-01-8	Phenanthrene	47		5.0	0.61	
120-12-7	Anthracene	15		5.0	0.41	
CASID30042	C1-Phenanthrenes/Anthracenes	25		5.0	4.7	
CASID30062	C2-Phenanthrenes/Anthracenes	24		5.0	4.7	
CASID30072	C3-Phenanthrenes/Anthracenes	23		5.0	4.7	
CASID30078	C4-Phenanthrenes/Anthracenes	27		5.0	4.7	
206-44-0	Fluoranthene	130		5.0	0.63	
129-00-0	Pyrene	130		5.0	0.67	
CASID30039	C1-Fluoranthenes/Pyrenes	72		5.0	4.7	
56-55-3	Benz(a)anthracene	49		5.0	0.30	

Comments:

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406170
Date Collected: 08/11/2004
Date Received: 08/18/2004
Date Extracted: 09/22/2004
Date Analyzed: 09/28/2004

Polynuclear Aromatic Hydrocarbons

Sample Name: LDW-B9b-S
Lab Code: K2406170-005
File ID: J:\MS11\DATA\092704\0927F046.D
Instrument ID: MS11

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Extraction Lot: KWG0414432
Calibration ID: CAL3848

Sample Amount: 18.52 g
% Solids: 54.2
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
218-01-9	Chrysene	95		5.0	0.76	
CASID30037	C1-Chrysenes	39		5.0	4.7	
CASID30058	C2-Chrysenes	23		5.0	4.7	
CASID30068	C3-Chrysenes	21		5.0	4.7	
CASID30074	C4-Chrysenes	7.8		5.0	4.7	
205-99-2	Benzo(b)fluoranthene	75		5.0	0.89	
207-08-9	Benzo(k)fluoranthene	72		5.0	0.61	
192-97-2	Benzo(e)pyrene	62		5.0	0.72	
50-32-8	Benzo(a)pyrene	63		5.0	0.41	
198-55-0	Perylene	48		5.0	0.32	
193-39-5	Indeno(1,2,3-cd)pyrene	57		5.0	0.45	
53-70-3	Dibenz(a,h)anthracene	11		5.0	0.48	
191-24-2	Benzo(g,h,i)perylene	56		5.0	0.43	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	63	40-130	09/28/04	Acceptable
Fluoranthene-d10	70	40-130	09/28/04	Acceptable
Terphenyl-d14	100	40-130	09/28/04	Acceptable

Comments:

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406170
Date Extracted: 09/22/2004
Date Analyzed: 09/27/2004

**Duplicate Sample Summary
 Polynuclear Aromatic Hydrocarbons**

Sample Name: LDW-B1a-S
Lab Code: K2406170-004
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Dry
Level: Low
Extraction Lot: KWG0414432

Analyte Name	MRL	MDL	Sample Result	LDW-B1a-SDUP KWG0414432-5 Duplicate Sample		Relative Percent Difference	RPD Limit
				Result	Average		
Naphthalene	5.0	0.43	9.7	10	9.9	4 #	50
2-Methylnaphthalene	5.0	0.43	3.8	4.4	4.1	16 #	50
1-Methylnaphthalene	5.0	0.32	3.1	4.0	3.5	25 #	50
C2-Naphthalenes	5.0	3.2	8.5	14	11	49 #	50
C3-Naphthalenes	5.0	3.2	5.7	33	19	141 #	50
C4-Naphthalenes	5.0	3.2	6.6	19	13	98 #	50
Biphenyl	5.0	0.54	1.8	2.2	2.0	23 #	50
Acenaphthylene	5.0	0.28	11	12	12	11	50
Dibenzofuran	5.0	0.22	6.2	6.5	6.3	5 #	50
Acenaphthene	5.0	0.20	11	11	11	3	50
Fluorene	5.0	0.24	7.3	6.8	7.0	6 #	50
C1-Fluorenes	5.0	3.2	4.2	4.8	4.5	13 #	50
C2-Fluorenes	5.0	3.2	4.6	7.7	6.2	51 #	50
C3-Fluorenes	5.0	3.2	5.5	13	9.4	83 #	50
Dibenzothiophene	5.0	0.29	3.1	2.9	3.0	6 #	50
C1-Dibenzothiophenes	5.0	3.2	4.6	10	7.4	75 #	50
C2-Dibenzothiophenes	5.0	3.2	3.5	5.3	4.4	40 #	50
C3-Dibenzothiophenes	5.0	3.2	ND	13	NC	NC	50
Phenanthrene	5.0	0.42	46	50	48	10	50
Anthracene	5.0	0.28	26	30	28	12	50
C1-Phenanthrenes/Anthracenes	5.0	3.2	28	49	39	57 *	50
C2-Phenanthrenes/Anthracenes	5.0	3.2	23	43	33	61 *	50
C3-Phenanthrenes/Anthracenes	5.0	3.2	15	38	27	88 *	50
C4-Phenanthrenes/Anthracenes	5.0	3.2	13	16	15	19	50
Fluoranthene	5.0	0.43	120	120	120	2	50
Pyrene	5.0	0.45	140	140	140	2	50
C1-Fluoranthenes/Pyrenes	5.0	3.2	72	99	85	31	50
Benz(a)anthracene	5.0	0.20	42	50	46	18	50
Chrysene	5.0	0.52	50	73	62	37	50
C1-Chrysenes	5.0	3.2	38	44	41	14	50
C2-Chrysenes	5.0	3.2	22	31	26	33	50
C3-Chrysenes	5.0	3.2	15	22	18	39	50
C4-Chrysenes	5.0	3.2	8.8	15	12	51 #	50
Benzo(b)fluoranthene	5.0	0.60	45	47	46	4	50
Benzo(k)fluoranthene	5.0	0.42	46	53	50	13	50

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406170
Date Extracted: 09/22/2004
Date Analyzed: 09/27/2004

**Duplicate Sample Summary
 Polynuclear Aromatic Hydrocarbons**

Sample Name: LDW-B1a-S
Lab Code: K2406170-004
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Dry
Level: Low
Extraction Lot: KWG0414432

Analyte Name	MRL	MDL	Sample Result	LDW-B1a-SDUP KWG0414432-5 Duplicate Sample		Relative Percent Difference	RPD Limit
				Result	Average		
Benzo(e)pyrene	5.0	0.49	41	44	43	7	50
Benzo(a)pyrene	5.0	0.28	51	54	52	6	50
Perylene	5.0	0.22	15	17	16	10	50
Indeno(1,2,3-cd)pyrene	5.0	0.30	36	37	36	4	50
Dibenz(a,h)anthracene	5.0	0.33	6.2	7.2	6.7	15 #	50
Benzo(g,h,i)perylene	5.0	0.29	40	39	40	2	50

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Analytical Results

Client: Windward Environmental
 Project: LDW Benthic Invertebrate Survey/04-08-06-21
 Sample Matrix: Sediment

Service Request: K2406226
 Date Collected: 08/13/2004
 Date Received: 08/19/2004
 Date Extracted: 09/22/2004
 Date Analyzed: 09/27/2004

Polynuclear Aromatic Hydrocarbons

Sample Name: LDW-B7b-S
 Lab Code: K2406226-001
 File ID: J:\MS11\DATA\092704\0927F026.D
 Instrument ID: MS11

Units: ug/Kg
 Basis: Dry
 Level: Low

Extraction Method: EPA 3541
 Analysis Method: 8270C SIM

Extraction Lot: KWG0414432
 Calibration ID: CAL3848

Sample Amount: 19.94 g
 % Solids: 50.5
 Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
91-20-3	Naphthalene	8.6		5.0	0.68	
91-57-6	2-Methylnaphthalene	7.7		5.0	0.68	
90-12-0	1-Methylnaphthalene	5.9		5.0	0.50	
CASID30061	C2-Naphthalenes	18		5.0	5.0	
CASID30071	C3-Naphthalenes	20		5.0	5.0	
CASID30077	C4-Naphthalenes	29		5.0	5.0	
92-52-4	Biphenyl	3.4	J	5.0	0.86	
208-96-8	Acenaphthylene	9.5		5.0	0.44	
132-64-9	Dibenzofuran	13		5.0	0.34	
83-32-9	Acenaphthene	11		5.0	0.32	
86-73-7	Fluorene	13		5.0	0.38	
CASID30040	C1-Fluorenes	5.4		5.0	5.0	
CASID30060	C2-Fluorenes	9.4		5.0	5.0	
CASID30070	C3-Fluorenes	15		5.0	5.0	
132-65-0	Dibenzothiophene	5.7		5.0	0.46	
CASID30038	C1-Dibenzothiophenes	16		5.0	5.0	
CASID30059	C2-Dibenzothiophenes	10		5.0	5.0	
CASID30069	C3-Dibenzothiophenes	21		5.0	5.0	
85-01-8	Phenanthrene	85		5.0	0.66	
120-12-7	Anthracene	40		5.0	0.44	
CASID30042	C1-Phenanthrenes/Anthracenes	50		5.0	5.0	
CASID30062	C2-Phenanthrenes/Anthracenes	43		5.0	5.0	
CASID30072	C3-Phenanthrenes/Anthracenes	36		5.0	5.0	
CASID30078	C4-Phenanthrenes/Anthracenes	37		5.0	5.0	
206-44-0	Fluoranthene	250		5.0	0.68	
129-00-0	Pyrene	230		5.0	0.72	
CASID30039	C1-Fluoranthenes/Pyrenes	150		5.0	5.0	
56-55-3	Benz(a)anthracene	96		5.0	0.32	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
 Project: LDW Benthic Invertebrate Survey/04-08-06-21
 Sample Matrix: Sediment

Service Request: K2406226
 Date Collected: 08/13/2004
 Date Received: 08/19/2004
 Date Extracted: 09/22/2004
 Date Analyzed: 09/27/2004

Polynuclear Aromatic Hydrocarbons

Sample Name: LDW-B7b-S
 Lab Code: K2406226-001
 File ID: J:\MS11\DATA\092704\0927F026.D
 Instrument ID: MS11
 Extraction Method: EPA 3541
 Analysis Method: 8270C SIM

Units: ug/Kg
 Basis: Dry
 Level: Low

Extraction Lot: KWG0414432
 Calibration ID: CAL3848

Sample Amount: 19.94 g
 % Solids: 50.5
 Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
218-01-9	Chrysene	160		5.0	0.82	
CASID30037	C1-Chrysenes	83		5.0	5.0	
CASID30058	C2-Chrysenes	51		5.0	5.0	
CASID30068	C3-Chrysenes	35		5.0	5.0	
CASID30074	C4-Chrysenes	17		5.0	5.0	
205-99-2	Benzo(b)fluoranthene	110		5.0	0.96	
207-08-9	Benzo(k)fluoranthene	120		5.0	0.66	
192-97-2	Benzo(e)pyrene	96		5.0	0.78	
50-32-8	Benzo(a)pyrene	97		5.0	0.44	
198-55-0	Perylene	51		5.0	0.34	
193-39-5	Indeno(1,2,3-cd)pyrene	68		5.0	0.48	
53-70-3	Dibenz(a,h)anthracene	13		5.0	0.52	
191-24-2	Benzo(g,h,i)perylene	69		5.0	0.46	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	55	40-130	09/27/04	Acceptable
Fluoranthene-d10	62	40-130	09/27/04	Acceptable
Terphenyl-d14	91	40-130	09/27/04	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
 Project: LDW Benthic Invertebrate Survey/04-08-06-21
 Sample Matrix: Sediment

Service Request: K2406226
 Date Collected: 08/10/2004
 Date Received: 08/19/2004
 Date Extracted: 09/22/2004
 Date Analyzed: 09/28/2004

Polynuclear Aromatic Hydrocarbons

Sample Name: LDW-B3b-S
 Lab Code: K2406226-002
 File ID: J:\MS11\DATA\092704\0927F047.D
 Instrument ID: MS11
 Extraction Method: EPA 3541
 Analysis Method: 8270C SIM

Units: ug/Kg
 Basis: Dry
 Level: Low

Extraction Lot: KWG0414432
 Calibration ID: CAL3848

Sample Amount: 15.27 g
 % Solids: 66.4
 Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
91-20-3	Naphthalene	36		5.0	0.52	
91-57-6	2-Methylnaphthalene	34		5.0	0.52	
90-12-0	1-Methylnaphthalene	14		5.0	0.38	
CASID30061	C2-Naphthalenes	52		5.0	3.8	
CASID30071	C3-Naphthalenes	61		5.0	3.8	
CASID30077	C4-Naphthalenes	57		5.0	3.8	
92-52-4	Biphenyl	8.9		5.0	0.65	
208-96-8	Acenaphthylene	80		5.0	0.34	
132-64-9	Dibenzofuran	36		5.0	0.26	
83-32-9	Acenaphthene	35		5.0	0.25	
86-73-7	Fluorene	150		5.0	0.29	
CASID30040	C1-Fluorenes	55		5.0	3.8	
CASID30060	C2-Fluorenes	140		5.0	3.8	
CASID30070	C3-Fluorenes	170		5.0	3.8	
132-65-0	Dibenzothiophene	35		5.0	0.35	
CASID30038	C1-Dibenzothiophenes	45		5.0	3.8	
CASID30059	C2-Dibenzothiophenes	130		5.0	3.8	
CASID30069	C3-Dibenzothiophenes	150		5.0	3.8	
85-01-8	Phenanthrene	760		5.0	0.50	
120-12-7	Anthracene	1100		5.0	0.34	
CASID30042	C1-Phenanthrenes/Anthracenes	1000		5.0	3.8	
CASID30062	C2-Phenanthrenes/Anthracenes	560		5.0	3.8	
CASID30072	C3-Phenanthrenes/Anthracenes	400		5.0	3.8	
CASID30078	C4-Phenanthrenes/Anthracenes	180		5.0	3.8	
206-44-0	Fluoranthene	2900	E	5.0	0.52	
129-00-0	Pyrene	2100	E	5.0	0.55	
CASID30039	C1-Fluoranthenes/Pyrenes	4600	E	5.0	3.8	
56-55-3	Benz(a)anthracene	2700	E	5.0	0.25	

Comments:

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406226
Date Collected: 08/10/2004
Date Received: 08/19/2004
Date Extracted: 09/22/2004
Date Analyzed: 09/28/2004

Polynuclear Aromatic Hydrocarbons

Sample Name: LDW-B3b-S
Lab Code: K2406226-002
File ID: J:\MS11\DATA\092704\0927F047.D
Instrument ID: MS11
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Lot: KWG0414432
Calibration ID: CAL3848

Sample Amount: 15.27 g
% Solids: 66.4
Dilution Factor: 1

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
218-01-9	Chrysene	4600 E	5.0	0.62	
CASID30037	C1-Chrysenes	2200 E	5.0	3.8	
CASID30058	C2-Chrysenes	680	5.0	3.8	
CASID30068	C3-Chrysenes	370	5.0	3.8	
CASID30074	C4-Chrysenes	130	5.0	3.8	
205-99-2	Benzo(b)fluoranthene	1700	5.0	0.73	
207-08-9	Benzo(k)fluoranthene	1200	5.0	0.50	
192-97-2	Benzo(e)pyrene	1300	5.0	0.59	
50-32-8	Benzo(a)pyrene	1400	5.0	0.34	
198-55-0	Perylene	350	5.0	0.26	
193-39-5	Indeno(1,2,3-cd)pyrene	660	5.0	0.37	
53-70-3	Dibenz(a,h)anthracene	240	5.0	0.40	
191-24-2	Benzo(g,h,i)perylene	600	5.0	0.35	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	66	40-130	09/28/04	Acceptable
Fluoranthene-d10	79	40-130	09/28/04	Acceptable
Terphenyl-d14	92	40-130	09/28/04	Acceptable

Comments: _____

Analytical Results

Client: Windward Environmental
 Project: LDW Benthic Invertebrate Survey/04-08-06-21
 Sample Matrix: Sediment

Service Request: K2406226
 Date Collected: 08/10/2004
 Date Received: 08/19/2004
 Date Extracted: 09/22/2004
 Date Analyzed: 09/28/2004

Polynuclear Aromatic Hydrocarbons

Sample Name: LDW-B3b-SDL
 Lab Code: K2406226-002
 File ID: J:\MS11\DATA\092704\0927F056.D
 Instrument ID: MS11
 Extraction Method: EPA 3541
 Analysis Method: 8270C SIM

Units: ug/Kg
 Basis: Dry
 Level: Low

Extraction Lot: KWG0414432
 Calibration ID: CAL3848

Sample Amount: 15.27 g
 % Solids: 66.4
 Dilution Factor: 10

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
91-20-3	Naphthalene	37	JD	50	5.2	
91-57-6	2-Methylnaphthalene	39	JD	50	5.2	
90-12-0	1-Methylnaphthalene	16	JD	50	3.8	
CASID30061	C2-Naphthalenes	65	D	50	38	
CASID30071	C3-Naphthalenes	81	D	50	38	
CASID30077	C4-Naphthalenes	81	D	50	38	
92-52-4	Biphenyl	12	JD	50	6.5	
208-96-8	Acenaphthylene	82	D	50	3.4	
132-64-9	Dibenzofuran	37	JD	50	2.6	
83-32-9	Acenaphthene	35	JD	50	2.5	
86-73-7	Fluorene	140	D	50	2.9	
CASID30040	C1-Fluorenes	55	D	50	38	
CASID30060	C2-Fluorenes	130	D	50	38	
CASID30070	C3-Fluorenes	170	D	50	38	
132-65-0	Dibenzothiophene	34	JD	50	3.5	
CASID30038	C1-Dibenzothiophenes	43	JD	50	38	
CASID30059	C2-Dibenzothiophenes	150	D	50	38	
CASID30069	C3-Dibenzothiophenes	140	D	50	38	
85-01-8	Phenanthrene	790	D	50	5.0	
120-12-7	Anthracene	1200	D	50	3.4	
CASID30042	C1-Phenanthrenes/Anthracenes	1000	D	50	38	
CASID30062	C2-Phenanthrenes/Anthracenes	600	D	50	38	
CASID30072	C3-Phenanthrenes/Anthracenes	370	D	50	38	
CASID30078	C4-Phenanthrenes/Anthracenes	200	D	50	38	
206-44-0	Fluoranthene	3600	D	50	5.2	
129-00-0	Pyrene	2300	D	50	5.5	
CASID30039	C1-Fluoranthenes/Pyrenes	4900	D	50	38	
56-55-3	Benz(a)anthracene	2800	D	50	2.5	

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406226
Date Collected: 08/10/2004
Date Received: 08/19/2004
Date Extracted: 09/22/2004
Date Analyzed: 09/28/2004

Polynuclear Aromatic Hydrocarbons

Sample Name: LDW-B3b-SDL
Lab Code: K2406226-002
File ID: J:\MS11\DATA\092704\0927F056.D
Instrument ID: MS11
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Lot: KWG0414432
Calibration ID: CAL3848

Sample Amount: 15.27 g
% Solids: 66.4
Dilution Factor: 10

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
218-01-9	Chrysene	5400	D	50	6.2	
CASID30037	C1-Chrysenes	2100	D	50	38	
CASID30058	C2-Chrysenes	640	D	50	38	
CASID30068	C3-Chrysenes	340	D	50	38	
CASID30074	C4-Chrysenes	150	D	50	38	
205-99-2	Benzo(b)fluoranthene	1700	D	50	7.3	
207-08-9	Benzo(k)fluoranthene	1500	D	50	5.0	
192-97-2	Benzo(e)pyrene	1300	D	50	5.9	
50-32-8	Benzo(a)pyrene	1400	D	50	3.4	
198-55-0	Perylene	340	D	50	2.6	
193-39-5	Indeno(1,2,3-cd)pyrene	610	D	50	3.7	
53-70-3	Dibenz(a,h)anthracene	220	D	50	4.0	
191-24-2	Benzo(g,h,i)perylene	590	D	50	3.5	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	64	40-130	09/28/04	Acceptable
Fluoranthene-d10	79	40-130	09/28/04	Acceptable
Terphenyl-d14	94	40-130	09/28/04	Acceptable

Comments:

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406232
Date Collected: 08/15/2004
Date Received: 08/19/2004
Date Extracted: 09/29/2004
Date Analyzed: 10/06/2004

Polynuclear Aromatic Hydrocarbons

Sample Name: LDW-B1a-T
Lab Code: K2406232-001
File ID: J:\MS14\DATA\100604\1006F018.D
Instrument ID: MS14
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Lot: KWG0414844
Calibration ID: CAL3873

Sample Amount: 2.02 g
% Solids: NA
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
91-20-3	Naphthalene	5.0	J	25	1.3	
91-57-6	2-Methylnaphthalene	2.3	J	25	0.75	
90-12-0	1-Methylnaphthalene	1.9	J	25	0.65	
92-52-4	Biphenyl	1.5	J	25	0.34	
208-96-8	Acenaphthylene	0.81	J	25	0.25	
132-64-9	Dibenzofuran	1.7	J	25	0.26	
83-32-9	Acenaphthene	2.3	J	25	0.37	
86-73-7	Fluorene	3.1	J	25	0.27	
132-65-0	Dibenzothiophene	1.5	J	25	0.70	
85-01-8	Phenanthrene	14	J	25	0.33	
120-12-7	Anthracene	2.6	J	25	0.28	
206-44-0	Fluoranthene	26		25	0.27	
129-00-0	Pyrene	36		25	0.35	
56-55-3	Benz(a)anthracene	2.1	J	25	0.27	
218-01-9	Chrysene	26		25	0.40	
205-99-2	Benzo(b)fluoranthene	3.3	J	25	0.23	
207-08-9	Benzo(k)fluoranthene	3.7	J	25	0.41	
192-97-2	Benzo(e)pyrene	12	J	25	0.060	
50-32-8	Benzo(a)pyrene	2.3	J	25	0.38	
198-55-0	Perylene	0.50	U	25	0.50	
193-39-5	Indeno(1,2,3-cd)pyrene	1.5	J	25	0.37	
53-70-3	Dibenz(a,h)anthracene	1.4	J	25	0.40	
191-24-2	Benzo(g,h,i)perylene	2.9	J	25	0.49	

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406232
Date Collected: 08/15/2004
Date Received: 08/19/2004
Date Extracted: 09/29/2004
Date Analyzed: 10/06/2004

Polynuclear Aromatic Hydrocarbons

Sample Name: LDW-B1a-T
Lab Code: K2406232-001
File ID: J:\MS14\DATA\100604\1006F018.D
Instrument ID: MS14
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Lot: KWG0414844
Calibration ID: CAL3873

Sample Amount: 2.02 g
% Solids: NA
Dilution Factor: 1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	73	20-130	10/06/04	Acceptable
Fluoranthene-d10	81	20-130	10/06/04	Acceptable
Terphenyl-d14	91	20-130	10/06/04	Acceptable

Comments: _____

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406232
Date Collected: 08/15/2004
Date Received: 08/19/2004
Date Extracted: 09/29/2004
Date Analyzed: 10/12/2004

Polynuclear Aromatic Hydrocarbons

Sample Name: LDW-B1a-TRE
Lab Code: K2406232-001
File ID: J:\MS14\DATA\101204\1012F005.D
Instrument ID: MS14

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Extraction Lot: KWG0414844
Calibration ID: CAL3891

Sample Amount: 2.02 g
% Solids: NA
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
CASID30061	C2-Naphthalenes	25	U	25	25	
CASID30071	C3-Naphthalenes	25	U	25	25	
CASID30077	C4-Naphthalenes	25	U	25	25	
CASID30040	C1-Fluorenes	25	U	25	25	
CASID30060	C2-Fluorenes	25	U	25	25	
CASID30070	C3-Fluorenes	25	U	25	25	
CASID30038	C1-Dibenzothiophenes	25	U	25	25	
CASID30059	C2-Dibenzothiophenes	25	U	25	25	
CASID30069	C3-Dibenzothiophenes	25	U	25	25	
CASID30042	C1-Phenanthrenes/Anthracenes	25	U	25	25	
CASID30062	C2-Phenanthrenes/Anthracenes	25	U	25	25	
CASID30072	C3-Phenanthrenes/Anthracenes	25	U	25	25	
CASID30078	C4-Phenanthrenes/Anthracenes	25	U	25	25	
CASID30039	C1-Fluoranthenes/Pyrenes	25	U	25	25	
CASID30037	C1-Chrysenes	25	U	25	25	
CASID30058	C2-Chrysenes	25	U	25	25	
CASID30068	C3-Chrysenes	25	U	25	25	
CASID30074	C4-Chrysenes	25	U	25	25	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	79	20-130	10/12/04	Acceptable
Fluoranthene-d10	86	20-130	10/12/04	Acceptable
Terphenyl-d14	97	20-130	10/12/04	Acceptable

Comments: _____

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406232
Date Collected: 08/14/2004
Date Received: 08/19/2004
Date Extracted: 09/29/2004
Date Analyzed: 10/06/2004

Polynuclear Aromatic Hydrocarbons

Sample Name: LDW-B4a-T
Lab Code: K2406232-002
File ID: J:\MS14\DATA\100604\1006F019.D
Instrument ID: MS14

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Extraction Lot: KWG0414844
Calibration ID: CAL3873

Sample Amount: 2.03 g
% Solids: NA
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
91-20-3	Naphthalene	5.3	J	25	1.3	
91-57-6	2-Methylnaphthalene	1.7	J	25	0.74	
90-12-0	1-Methylnaphthalene	1.5	J	25	0.65	
92-52-4	Biphenyl	1.7	J	25	0.34	
208-96-8	Acenaphthylene	2.3	J	25	0.25	
132-64-9	Dibenzofuran	1.9	J	25	0.26	
83-32-9	Acenaphthene	2.5	J	25	0.37	
86-73-7	Fluorene	3.1	J	25	0.27	
132-65-0	Dibenzothiophene	1.5	J	25	0.69	
85-01-8	Phenanthrene	14	J	25	0.33	
120-12-7	Anthracene	5.8	J	25	0.28	
206-44-0	Fluoranthene	52		25	0.27	
129-00-0	Pyrene	54		25	0.35	
56-55-3	Benz(a)anthracene	16	J	25	0.27	
218-01-9	Chrysene	42		25	0.40	
205-99-2	Benzo(b)fluoranthene	18	J	25	0.23	
207-08-9	Benzo(k)fluoranthene	12	J	25	0.40	
192-97-2	Benzo(e)pyrene	19	J	25	0.060	
50-32-8	Benzo(a)pyrene	12	J	25	0.38	
198-55-0	Perylene	0.50	U	25	0.50	
193-39-5	Indeno(1,2,3-cd)pyrene	9.5	J	25	0.36	
53-70-3	Dibenz(a,h)anthracene	4.4	J	25	0.39	
191-24-2	Benzo(g,h,i)perylene	9.8	J	25	0.48	

Comments:

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406232
Date Collected: 08/14/2004
Date Received: 08/19/2004
Date Extracted: 09/29/2004
Date Analyzed: 10/06/2004

Polynuclear Aromatic Hydrocarbons

Sample Name: LDW-B4a-T
Lab Code: K2406232-002
File ID: J:\MS14\DATA\100604\1006F019.D
Instrument ID: MS14
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Lot: KWG0414844
Calibration ID: CAL3873

Sample Amount: 2.03 g
% Solids: NA
Dilution Factor: 1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	71	20-130	10/06/04	Acceptable
Fluoranthene-d10	80	20-130	10/06/04	Acceptable
Terphenyl-d14	91	20-130	10/06/04	Acceptable

Comments: _____

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406232
Date Collected: 08/14/2004
Date Received: 08/19/2004
Date Extracted: 09/29/2004
Date Analyzed: 10/12/2004

Polynuclear Aromatic Hydrocarbons

Sample Name: LDW-B4a-TRE
Lab Code: K2406232-002
File ID: J:\MS14\DATA\101204\1012F006.D
Instrument ID: MS14
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Lot: KWG0414844
Calibration ID: CAL3891

Sample Amount: 2.03 g
% Solids: NA
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
CASID30061	C2-Naphthalenes	25	U	25	25	
CASID30071	C3-Naphthalenes	25	U	25	25	
CASID30077	C4-Naphthalenes	25	U	25	25	
CASID30040	C1-Fluorenes	25	U	25	25	
CASID30060	C2-Fluorenes	25	U	25	25	
CASID30070	C3-Fluorenes	25	U	25	25	
CASID30038	C1-Dibenzothiophenes	25	U	25	25	
CASID30059	C2-Dibenzothiophenes	25	U	25	25	
CASID30069	C3-Dibenzothiophenes	25	U	25	25	
CASID30042	C1-Phenanthrenes/Anthracenes	25	U	25	25	
CASID30062	C2-Phenanthrenes/Anthracenes	25	U	25	25	
CASID30072	C3-Phenanthrenes/Anthracenes	25	U	25	25	
CASID30078	C4-Phenanthrenes/Anthracenes	25	U	25	25	
CASID30039	C1-Fluoranthenes/Pyrenes	39		25	25	
CASID30037	C1-Chrysenes	25	U	25	25	
CASID30058	C2-Chrysenes	25	U	25	25	
CASID30068	C3-Chrysenes	25	U	25	25	
CASID30074	C4-Chrysenes	25	U	25	25	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	77	20-130	10/12/04	Acceptable
Fluoranthene-d10	85	20-130	10/12/04	Acceptable
Terphenyl-d14	96	20-130	10/12/04	Acceptable

Comments:

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406232
Date Collected: 08/14/2004
Date Received: 08/19/2004
Date Extracted: 09/29/2004
Date Analyzed: 10/06/2004

Polynuclear Aromatic Hydrocarbons

Sample Name: LDW-B2a-T
Lab Code: K2406232-003
File ID: J:\MS14\DATA\100604\1006F020.D
Instrument ID: MS14

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Extraction Lot: KWG0414844
Calibration ID: CAL3873

Sample Amount: 2.03 g
% Solids: NA
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
91-20-3	Naphthalene	5.5	J	25	1.3	
91-57-6	2-Methylnaphthalene	2.1	J	25	0.74	
90-12-0	1-Methylnaphthalene	1.6	J	25	0.65	
92-52-4	Biphenyl	1.6	J	25	0.34	
208-96-8	Acenaphthylene	2.1	J	25	0.25	
132-64-9	Dibenzofuran	2.5	J	25	0.26	
83-32-9	Acenaphthene	2.6	J	25	0.37	
86-73-7	Fluorene	4.3	J	25	0.27	
132-65-0	Dibenzothiophene	1.8	J	25	0.69	
85-01-8	Phenanthrene	19	J	25	0.33	
120-12-7	Anthracene	6.4	J	25	0.28	
206-44-0	Fluoranthene	73		25	0.27	
129-00-0	Pyrene	78		25	0.35	
56-55-3	Benz(a)anthracene	21	J	25	0.27	
218-01-9	Chrysene	42		25	0.40	
205-99-2	Benzo(b)fluoranthene	23	J	25	0.23	
207-08-9	Benzo(k)fluoranthene	15	J	25	0.40	
192-97-2	Benzo(e)pyrene	23	J	25	0.060	
50-32-8	Benzo(a)pyrene	12	J	25	0.38	
198-55-0	Perylene	14	J	25	0.50	
193-39-5	Indeno(1,2,3-cd)pyrene	6.4	J	25	0.36	
53-70-3	Dibenz(a,h)anthracene	1.7	J	25	0.39	
191-24-2	Benzo(g,h,i)perylene	7.5	J	25	0.48	

Comments: _____

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406232
Date Collected: 08/14/2004
Date Received: 08/19/2004
Date Extracted: 09/29/2004
Date Analyzed: 10/06/2004

Polynuclear Aromatic Hydrocarbons

Sample Name: LDW-B2a-T
Lab Code: K2406232-003
File ID: J:\MS14\DATA\100604\1006F020.D
Instrument ID: MS14
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Lot: KWG0414844
Calibration ID: CAL3873

Sample Amount: 2.03 g
% Solids: NA
Dilution Factor: 1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	71	20-130	10/06/04	Acceptable
Fluoranthene-d10	79	20-130	10/06/04	Acceptable
Terphenyl-d14	89	20-130	10/06/04	Acceptable

Comments: _____

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406232
Date Collected: 08/14/2004
Date Received: 08/19/2004
Date Extracted: 09/29/2004
Date Analyzed: 10/12/2004

Polynuclear Aromatic Hydrocarbons

Sample Name: LDW-B2a-TRE
Lab Code: K2406232-003
File ID: J:\MS14\DATA\101204\1012F007.D
Instrument ID: MS14

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Extraction Lot: KWG0414844
Calibration ID: CAL3891

Sample Amount: 2.03 g
% Solids: NA
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
CASID30061	C2-Naphthalenes	25	U	25	25	
CASID30071	C3-Naphthalenes	25	U	25	25	
CASID30077	C4-Naphthalenes	25	U	25	25	
CASID30040	C1-Fluorenes	25	U	25	25	
CASID30060	C2-Fluorenes	25	U	25	25	
CASID30070	C3-Fluorenes	25	U	25	25	
CASID30038	C1-Dibenzothiophenes	25	U	25	25	
CASID30059	C2-Dibenzothiophenes	25	U	25	25	
CASID30069	C3-Dibenzothiophenes	25	U	25	25	
CASID30042	C1-Phenanthrenes/Anthracenes	25	U	25	25	
CASID30062	C2-Phenanthrenes/Anthracenes	25	U	25	25	
CASID30072	C3-Phenanthrenes/Anthracenes	25	U	25	25	
CASID30078	C4-Phenanthrenes/Anthracenes	25	U	25	25	
CASID30039	C1-Fluoranthenes/Pyrenes	50		25	25	
CASID30037	C1-Chrysenes	25	U	25	25	
CASID30058	C2-Chrysenes	25	U	25	25	
CASID30068	C3-Chrysenes	25	U	25	25	
CASID30074	C4-Chrysenes	25	U	25	25	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	77	20-130	10/12/04	Acceptable
Fluoranthene-d10	85	20-130	10/12/04	Acceptable
Terphenyl-d14	95	20-130	10/12/04	Acceptable

Comments: _____

Analytical Results

Client: Windward Environmental
 Project: LDW Benthic Invertebrate Survey/04-08-06-21
 Sample Matrix: Tissue

Service Request: K2406232
 Date Collected: 08/11/2004
 Date Received: 08/19/2004
 Date Extracted: 09/29/2004
 Date Analyzed: 10/06/2004

Polynuclear Aromatic Hydrocarbons

Sample Name: LDW-B9b-T
 Lab Code: K2406232-004
 File ID: J:\MS14\DATA\100604\1006F021.D
 Instrument ID: MS14

Units: ug/Kg
 Basis: Wet
 Level: Low

Extraction Method: EPA 3541
 Analysis Method: 8270C SIM

Extraction Lot: KWG0414844
 Calibration ID: CAL3873

Sample Amount: 2.03 g
 % Solids: NA
 Dilution Factor: 1

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
91-20-3	Naphthalene	5.4 J	25	1.3	
91-57-6	2-Methylnaphthalene	1.9 J	25	0.74	
90-12-0	1-Methylnaphthalene	1.6 J	25	0.65	
92-52-4	Biphenyl	1.4 J	25	0.34	
208-96-8	Acenaphthylene	0.67 J	25	0.25	
132-64-9	Dibenzofuran	0.98 J	25	0.26	
83-32-9	Acenaphthene	1.3 J	25	0.37	
86-73-7	Fluorene	1.7 J	25	0.27	
132-65-0	Dibenzothiophene	0.69 J	25	0.69	
85-01-8	Phenanthrene	6.3 J	25	0.33	
120-12-7	Anthracene	1.7 J	25	0.28	
206-44-0	Fluoranthene	19 J	25	0.27	
129-00-0	Pyrene	20 J	25	0.35	
56-55-3	Benz(a)anthracene	6.1 J	25	0.27	
218-01-9	Chrysene	11 J	25	0.40	
205-99-2	Benzo(b)fluoranthene	6.4 J	25	0.23	
207-08-9	Benzo(k)fluoranthene	3.9 J	25	0.40	
192-97-2	Benzo(e)pyrene	7.0 J	25	0.060	
50-32-8	Benzo(a)pyrene	3.2 J	25	0.38	
198-55-0	Perylene	4.5 J	25	0.50	
193-39-5	Indeno(1,2,3-cd)pyrene	2.3 J	25	0.36	
53-70-3	Dibenz(a,h)anthracene	0.61 J	25	0.39	
191-24-2	Benzo(g,h,i)perylene	3.2 J	25	0.48	

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406232
Date Collected: 08/11/2004
Date Received: 08/19/2004
Date Extracted: 09/29/2004
Date Analyzed: 10/06/2004

Polynuclear Aromatic Hydrocarbons

Sample Name: LDW-B9b-T
Lab Code: K2406232-004
File ID: J:\MS14\DATA\100604\1006F021.D
Instrument ID: MS14
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Lot: KWG0414844
Calibration ID: CAL3873

Sample Amount: 2.03 g
% Solids: NA
Dilution Factor: 1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	71	20-130	10/06/04	Acceptable
Fluoranthene-d10	79	20-130	10/06/04	Acceptable
Terphenyl-d14	93	20-130	10/06/04	Acceptable

Comments: _____

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406232
Date Collected: 08/11/2004
Date Received: 08/19/2004
Date Extracted: 09/29/2004
Date Analyzed: 10/12/2004

Polynuclear Aromatic Hydrocarbons

Sample Name: LDW-B9b-TRE
Lab Code: K2406232-004
File ID: J:\MS14\DATA\101204\1012F008.D
Instrument ID: MS14

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Extraction Lot: KWG0414844
Calibration ID: CAL3891

Sample Amount: 2.03 g
% Solids: NA
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
CASID30061	C2-Naphthalenes	25	U	25	25	
CASID30071	C3-Naphthalenes	25	U	25	25	
CASID30077	C4-Naphthalenes	25	U	25	25	
CASID30040	C1-Fluorenes	25	U	25	25	
CASID30060	C2-Fluorenes	25	U	25	25	
CASID30070	C3-Fluorenes	25	U	25	25	
CASID30038	C1-Dibenzothiophenes	25	U	25	25	
CASID30059	C2-Dibenzothiophenes	25	U	25	25	
CASID30069	C3-Dibenzothiophenes	25	U	25	25	
CASID30042	C1-Phenanthrenes/Anthracenes	25	U	25	25	
CASID30062	C2-Phenanthrenes/Anthracenes	25	U	25	25	
CASID30072	C3-Phenanthrenes/Anthracenes	25	U	25	25	
CASID30078	C4-Phenanthrenes/Anthracenes	25	U	25	25	
CASID30039	C1-Fluoranthenes/Pyrenes	25	U	25	25	
CASID30037	C1-Chrysenes	25	U	25	25	
CASID30058	C2-Chrysenes	25	U	25	25	
CASID30068	C3-Chrysenes	25	U	25	25	
CASID30074	C4-Chrysenes	25	U	25	25	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	77	20-130	10/12/04	Acceptable
Fluoranthene-d10	85	20-130	10/12/04	Acceptable
Terphenyl-d14	99	20-130	10/12/04	Acceptable

Comments: _____

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406232
Date Collected: 08/15/2004
Date Received: 08/19/2004
Date Extracted: 09/29/2004
Date Analyzed: 10/06/2004

Polynuclear Aromatic Hydrocarbons

Sample Name: LDW-B6a-T
Lab Code: K2406232-005
File ID: J:\MS14\DATA\100604\1006F022.D
Instrument ID: MS14

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Extraction Lot: KWG0414844
Calibration ID: CAL3873

Sample Amount: 2.03 g
% Solids: NA
Dilution Factor: 1

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
91-20-3	Naphthalene	6.4 J	25	1.3	
91-57-6	2-Methylnaphthalene	2.7 J	25	0.74	
90-12-0	1-Methylnaphthalene	2.4 J	25	0.65	
92-52-4	Biphenyl	1.7 J	25	0.34	
208-96-8	Acenaphthylene	2.6 J	25	0.25	
132-64-9	Dibenzofuran	6.0 J	25	0.26	
83-32-9	Acenaphthene	22 J	25	0.37	
86-73-7	Fluorene	14 J	25	0.27	
132-65-0	Dibenzothiophene	26	25	0.69	
85-01-8	Phenanthrene	57	25	0.33	
120-12-7	Anthracene	30	25	0.28	
206-44-0	Fluoranthene	430	25	0.27	
129-00-0	Pyrene	290	25	0.35	
56-55-3	Benz(a)anthracene	59	25	0.27	
218-01-9	Chrysene	76	25	0.40	
205-99-2	Benzo(b)fluoranthene	18 J	25	0.23	
207-08-9	Benzo(k)fluoranthene	11 J	25	0.40	
192-97-2	Benzo(e)pyrene	17 J	25	0.060	
50-32-8	Benzo(a)pyrene	10 J	25	0.38	
198-55-0	Perylene	4.4 J	25	0.50	
193-39-5	Indeno(1,2,3-cd)pyrene	3.5 J	25	0.36	
53-70-3	Dibenz(a,h)anthracene	1.3 J	25	0.39	
191-24-2	Benzo(g,h,i)perylene	4.1 J	25	0.48	

Comments: _____

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406232
Date Collected: 08/15/2004
Date Received: 08/19/2004
Date Extracted: 09/29/2004
Date Analyzed: 10/06/2004

Polynuclear Aromatic Hydrocarbons

Sample Name: LDW-B6a-T
Lab Code: K2406232-005
File ID: J:\MS14\DATA\100604\1006F022.D
Instrument ID: MS14
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Lot: KWG0414844
Calibration ID: CAL3873

Sample Amount: 2.03 g
% Solids: NA
Dilution Factor: 1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	76	20-130	10/06/04	Acceptable
Fluoranthene-d10	84	20-130	10/06/04	Acceptable
Terphenyl-d14	95	20-130	10/06/04	Acceptable

Comments: _____

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406232
Date Collected: 08/15/2004
Date Received: 08/19/2004
Date Extracted: 09/29/2004
Date Analyzed: 10/12/2004

Polynuclear Aromatic Hydrocarbons

Sample Name: LDW-B6a-TRE
Lab Code: K2406232-005
File ID: J:\MS14\DATA\101204\1012F009.D
Instrument ID: MS14

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Extraction Lot: KWG0414844
Calibration ID: CAL3891

Sample Amount: 2.03 g
% Solids: NA
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
CASID30061	C2-Naphthalenes	25	U	25	25	
CASID30071	C3-Naphthalenes	25	U	25	25	
CASID30077	C4-Naphthalenes	25	U	25	25	
CASID30040	C1-Fluorenes	34		25	25	
CASID30060	C2-Fluorenes	58		25	25	
CASID30070	C3-Fluorenes	44		25	25	
CASID30038	C1-Dibenzothiophenes	25	U	25	25	
CASID30059	C2-Dibenzothiophenes	25	U	25	25	
CASID30069	C3-Dibenzothiophenes	25	U	25	25	
CASID30042	C1-Phenanthrenes/Anthracenes	140		25	25	
CASID30062	C2-Phenanthrenes/Anthracenes	100		25	25	
CASID30072	C3-Phenanthrenes/Anthracenes	43		25	25	
CASID30078	C4-Phenanthrenes/Anthracenes	25	U	25	25	
CASID30039	C1-Fluoranthenes/Pyrenes	160		25	25	
CASID30037	C1-Chrysenes	25	U	25	25	
CASID30058	C2-Chrysenes	25	U	25	25	
CASID30068	C3-Chrysenes	25	U	25	25	
CASID30074	C4-Chrysenes	25	U	25	25	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	82	20-130	10/12/04	Acceptable
Fluoranthene-d10	91	20-130	10/12/04	Acceptable
Terphenyl-d14	100	20-130	10/12/04	Acceptable

Comments: _____

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406232
Date Collected: 08/10/2004
Date Received: 08/19/2004
Date Extracted: 09/29/2004
Date Analyzed: 10/06/2004

Polynuclear Aromatic Hydrocarbons

Sample Name: LDW-B3b-T
Lab Code: K2406232-008
File ID: J:\MS14\DATA\100604\1006F023.D
Instrument ID: MS14

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Extraction Lot: KWG0414844
Calibration ID: CAL3873

Sample Amount: 2.04 g
% Solids: NA
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
91-20-3	Naphthalene	6.2	J	25	1.3	
91-57-6	2-Methylnaphthalene	4.6	J	25	0.74	
90-12-0	1-Methylnaphthalene	3.1	J	25	0.64	
92-52-4	Biphenyl	5.3	J	25	0.34	
208-96-8	Acenaphthylene	12	J	25	0.25	
132-64-9	Dibenzofuran	26		25	0.26	
83-32-9	Acenaphthene	28		25	0.37	
86-73-7	Fluorene	45		25	0.27	
132-65-0	Dibenzothiophene	18	J	25	0.69	
85-01-8	Phenanthrene	230		25	0.33	
120-12-7	Anthracene	110		25	0.27	
206-44-0	Fluoranthene	680		25	0.26	
129-00-0	Pyrene	570		25	0.35	
56-55-3	Benz(a)anthracene	270		25	0.27	
218-01-9	Chrysene	780		25	0.40	
205-99-2	Benzo(b)fluoranthene	290		25	0.23	
207-08-9	Benzo(k)fluoranthene	220		25	0.40	
192-97-2	Benzo(e)pyrene	250		25	0.059	
50-32-8	Benzo(a)pyrene	190		25	0.38	
198-55-0	Perylene	69		25	0.50	
193-39-5	Indeno(1,2,3-cd)pyrene	87		25	0.36	
53-70-3	Dibenz(a,h)anthracene	25	J	25	0.39	
191-24-2	Benzo(g,h,i)perylene	88		25	0.48	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406232
Date Collected: 08/10/2004
Date Received: 08/19/2004
Date Extracted: 09/29/2004
Date Analyzed: 10/06/2004

Polynuclear Aromatic Hydrocarbons

Sample Name: LDW-B3b-T
Lab Code: K2406232-008
File ID: J:\MS14\DATA\100604\1006F023.D
Instrument ID: MS14
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Lot: KWG0414844
Calibration ID: CAL3873

Sample Amount: 2.04 g
% Solids: NA
Dilution Factor: 1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	73	20-130	10/06/04	Acceptable
Fluoranthene-d10	83	20-130	10/06/04	Acceptable
Terphenyl-d14	86	20-130	10/06/04	Acceptable

Comments: _____

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406232
Date Collected: 08/10/2004
Date Received: 08/19/2004
Date Extracted: 09/29/2004
Date Analyzed: 10/12/2004

Polynuclear Aromatic Hydrocarbons

Sample Name: LDW-B3b-TRE
Lab Code: K2406232-008
File ID: J:\MS14\DATA\101204\1012F010.D
Instrument ID: MS14

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Extraction Lot: KWG0414844
Calibration ID: CAL3891

Sample Amount: 2.04 g
% Solids: NA
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
CASID30061	C2-Naphthalenes	25	U	25	25	
CASID30071	C3-Naphthalenes	25	U	25	25	
CASID30077	C4-Naphthalenes	25	U	25	25	
CASID30040	C1-Fluorenes	25	U	25	25	
CASID30060	C2-Fluorenes	72		25	25	
CASID30070	C3-Fluorenes	37		25	25	
CASID30038	C1-Dibenzothiophenes	25	U	25	25	
CASID30059	C2-Dibenzothiophenes	25	U	25	25	
CASID30069	C3-Dibenzothiophenes	25	U	25	25	
CASID30042	C1-Phenanthrenes/Anthracenes	140		25	25	
CASID30062	C2-Phenanthrenes/Anthracenes	110		25	25	
CASID30072	C3-Phenanthrenes/Anthracenes	71		25	25	
CASID30078	C4-Phenanthrenes/Anthracenes	35		25	25	
CASID30039	C1-Fluoranthenes/Pyrenes	560		25	25	
CASID30037	C1-Chrysenes	240		25	25	
CASID30058	C2-Chrysenes	140		25	25	
CASID30068	C3-Chrysenes	25	U	25	25	
CASID30074	C4-Chrysenes	25	U	25	25	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	81	20-130	10/12/04	Acceptable
Fluoranthene-d10	92	20-130	10/12/04	Acceptable
Terphenyl-d14	92	20-130	10/12/04	Acceptable

Comments:

Analytical Results

Client: Windward Environmental
 Project: LDW Benthic Invertebrate Survey/04-08-06-21
 Sample Matrix: Tissue

Service Request: K2406232
 Date Collected: 08/13/2004
 Date Received: 08/19/2004
 Date Extracted: 09/29/2004
 Date Analyzed: 10/06/2004

Polynuclear Aromatic Hydrocarbons

Sample Name: LDW-B7b-T
 Lab Code: K2406232-009
 File ID: J:\MS14\DATA\100604\1006F024.D
 Instrument ID: MS14
 Extraction Method: EPA 3541
 Analysis Method: 8270C SIM

Units: ug/Kg
 Basis: Wet
 Level: Low

Extraction Lot: KWG0414844
 Calibration ID: CAL3873

Sample Amount: 2.03 g
 % Solids: NA
 Dilution Factor: 1

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
91-20-3	Naphthalene	4.8 J	25	1.3	
91-57-6	2-Methylnaphthalene	1.7 J	25	0.74	
90-12-0	1-Methylnaphthalene	1.4 J	25	0.65	
92-52-4	Biphenyl	1.8 J	25	0.34	
208-96-8	Acenaphthylene	1.8 J	25	0.25	
132-64-9	Dibenzofuran	4.8 J	25	0.26	
83-32-9	Acenaphthene	5.2 J	25	0.37	
86-73-7	Fluorene	7.8 J	25	0.27	
132-65-0	Dibenzothiophene	3.8 J	25	0.69	
85-01-8	Phenanthrene	32	25	0.33	
120-12-7	Anthracene	16 J	25	0.28	
206-44-0	Fluoranthene	120	25	0.27	
129-00-0	Pyrene	170	25	0.35	
56-55-3	Benz(a)anthracene	39	25	0.27	
218-01-9	Chrysene	58	25	0.40	
205-99-2	Benzo(b)fluoranthene	38	25	0.23	
207-08-9	Benzo(k)fluoranthene	28	25	0.40	
192-97-2	Benzo(e)pyrene	37	25	0.060	
50-32-8	Benzo(a)pyrene	22 J	25	0.38	
198-55-0	Perylene	39	25	0.50	
193-39-5	Indeno(1,2,3-cd)pyrene	13 J	25	0.36	
53-70-3	Dibenz(a,h)anthracene	3.0 J	25	0.39	
191-24-2	Benzo(g,h,i)perylene	17 J	25	0.48	

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406232
Date Collected: 08/13/2004
Date Received: 08/19/2004
Date Extracted: 09/29/2004
Date Analyzed: 10/06/2004

Polynuclear Aromatic Hydrocarbons

Sample Name: LDW-B7b-T
Lab Code: K2406232-009
File ID: J:\MS14\DATA\100604\1006F024.D
Instrument ID: MS14

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Extraction Lot: KWG0414844
Calibration ID: CAL3873

Sample Amount: 2.03 g
% Solids: NA
Dilution Factor: 1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	74	20-130	10/06/04	Acceptable
Fluoranthene-d10	83	20-130	10/06/04	Acceptable
Terphenyl-d14	92	20-130	10/06/04	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406232
Date Collected: 08/13/2004
Date Received: 08/19/2004
Date Extracted: 09/29/2004
Date Analyzed: 10/12/2004

Polynuclear Aromatic Hydrocarbons

Sample Name: LDW-B7b-TRE
Lab Code: K2406232-009
File ID: J:\MS14\DATA\101204\1012F011.D
Instrument ID: MS14
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Lot: KWG0414844
Calibration ID: CAL3891

Sample Amount: 2.03 g
% Solids: NA
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
CASID30061	C2-Naphthalenes	25	U	25	25	
CASID30071	C3-Naphthalenes	25	U	25	25	
CASID30077	C4-Naphthalenes	25	U	25	25	
CASID30040	C1-Fluorenes	25	U	25	25	
CASID30060	C2-Fluorenes	25	U	25	25	
CASID30070	C3-Fluorenes	25	U	25	25	
CASID30038	C1-Dibenzothiophenes	25	U	25	25	
CASID30059	C2-Dibenzothiophenes	25	U	25	25	
CASID30069	C3-Dibenzothiophenes	25	U	25	25	
CASID30042	C1-Phenanthrenes/Anthracenes	26		25	25	
CASID30062	C2-Phenanthrenes/Anthracenes	25	U	25	25	
CASID30072	C3-Phenanthrenes/Anthracenes	44		25	25	
CASID30078	C4-Phenanthrenes/Anthracenes	55		25	25	
CASID30039	C1-Fluoranthenes/Pyrenes	100		25	25	
CASID30037	C1-Chrysenes	38		25	25	
CASID30058	C2-Chrysenes	25	U	25	25	
CASID30068	C3-Chrysenes	25	U	25	25	
CASID30074	C4-Chrysenes	25	U	25	25	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	80	20-130	10/12/04	Acceptable
Fluoranthene-d10	89	20-130	10/12/04	Acceptable
Terphenyl-d14	97	20-130	10/12/04	Acceptable

Comments: _____

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406296
Date Collected: 08/18/2004
Date Received: 08/21/2004
Date Extracted: 09/22/2004
Date Analyzed: 09/27/2004

Polynuclear Aromatic Hydrocarbons

Sample Name: LDW-B6b-S
Lab Code: K2406296-001
File ID: J:\MS11\DATA\092704\0927F027.D
Instrument ID: MS11

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Extraction Lot: KWG0414432
Calibration ID: CAL3848

Sample Amount: 21.09 g
% Solids: 47.8
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
91-20-3	Naphthalene	11		5.0	0.72	
91-57-6	2-Methylnaphthalene	8.1		5.0	0.72	
90-12-0	1-Methylnaphthalene	5.7		5.0	0.53	
CASID30061	C2-Naphthalenes	18		5.3	5.3	
CASID30071	C3-Naphthalenes	34		5.3	5.3	
CASID30077	C4-Naphthalenes	27		5.3	5.3	
92-52-4	Biphenyl	3.8	J	5.0	0.90	
208-96-8	Acenaphthylene	19		5.0	0.47	
132-64-9	Dibenzofuran	13		5.0	0.36	
83-32-9	Acenaphthene	12		5.0	0.34	
86-73-7	Fluorene	18		5.0	0.40	
CASID30040	C1-Fluorenes	8.7		5.3	5.3	
CASID30060	C2-Fluorenes	17		5.3	5.3	
CASID30070	C3-Fluorenes	26		5.3	5.3	
132-65-0	Dibenzothiophene	7.6		5.0	0.49	
CASID30038	C1-Dibenzothiophenes	12		5.3	5.3	
CASID30059	C2-Dibenzothiophenes	14		5.3	5.3	
CASID30069	C3-Dibenzothiophenes	22		5.3	5.3	
85-01-8	Phenanthrene	130		5.0	0.70	
120-12-7	Anthracene	73		5.0	0.47	
CASID30042	C1-Phenanthrenes/Anthracenes	90		5.3	5.3	
CASID30062	C2-Phenanthrenes/Anthracenes	61		5.3	5.3	
CASID30072	C3-Phenanthrenes/Anthracenes	48		5.3	5.3	
CASID30078	C4-Phenanthrenes/Anthracenes	39		5.3	5.3	
206-44-0	Fluoranthene	400		5.0	0.72	
129-00-0	Pyrene	310		5.0	0.76	
CASID30039	C1-Fluoranthenes/Pyrenes	240		5.3	5.3	
56-55-3	Benz(a)anthracene	170		5.0	0.34	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406296
Date Collected: 08/18/2004
Date Received: 08/21/2004
Date Extracted: 09/22/2004
Date Analyzed: 09/27/2004

Polynuclear Aromatic Hydrocarbons

Sample Name: LDW-B6b-S
Lab Code: K2406296-001
File ID: J:\MS11\DATA\092704\0927F027.D
Instrument ID: MS11
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Lot: KWG0414432
Calibration ID: CAL3848

Sample Amount: 21.09 g
% Solids: 47.8
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
218-01-9	Chrysene	260		5.0	0.86	
CASID30037	C1-Chrysenes	130		5.3	5.3	
CASID30058	C2-Chrysenes	66		5.3	5.3	
CASID30068	C3-Chrysenes	44		5.3	5.3	
CASID30074	C4-Chrysenes	21		5.3	5.3	
205-99-2	Benzo(b)fluoranthene	190		5.0	1.1	
207-08-9	Benzo(k)fluoranthene	180		5.0	0.70	
192-97-2	Benzo(e)pyrene	150		5.0	0.82	
50-32-8	Benzo(a)pyrene	160		5.0	0.47	
198-55-0	Perylene	66		5.0	0.36	
193-39-5	Indeno(1,2,3-cd)pyrene	110		5.0	0.51	
53-70-3	Dibenz(a,h)anthracene	24		5.0	0.55	
191-24-2	Benzo(g,h,i)perylene	100		5.0	0.49	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	37	40-130	09/27/04	Outside Control Limits
Fluoranthene-d10	42	40-130	09/27/04	Acceptable
Terphenyl-d14	68	40-130	09/27/04	Acceptable

Comments: _____

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406296
Date Collected: 08/19/2004
Date Received: 08/21/2004
Date Extracted: 09/22/2004
Date Analyzed: 09/28/2004

Polynuclear Aromatic Hydrocarbons

Sample Name: LDW-B8b-S
Lab Code: K2406296-002
File ID: J:\MS11\DATA\092704\0927F050.D
Instrument ID: MS11
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Lot: KWG0414432
Calibration ID: CAL3848

Sample Amount: 21.49 g
% Solids: 47.0
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
91-20-3	Naphthalene	4.8	J	5.0	0.73	
91-57-6	2-Methylnaphthalene	5.9		5.0	0.73	
90-12-0	1-Methylnaphthalene	4.9	J	5.0	0.54	
CASID30061	C2-Naphthalenes	15		5.4	5.4	
CASID30071	C3-Naphthalenes	35		5.4	5.4	
CASID30077	C4-Naphthalenes	20		5.4	5.4	
92-52-4	Biphenyl	2.4	J	5.0	0.92	
208-96-8	Acenaphthylene	4.0	J	5.0	0.47	
132-64-9	Dibenzofuran	4.0	J	5.0	0.37	
83-32-9	Acenaphthene	2.4	J	5.0	0.35	
86-73-7	Fluorene	3.6	J	5.0	0.41	
CASID30040	C1-Fluorenes	5.4	U	5.4	5.4	
CASID30060	C2-Fluorenes	5.4	U	5.4	5.4	
CASID30070	C3-Fluorenes	9.3		5.4	5.4	
132-65-0	Dibenzothiophene	2.5	J	5.0	0.49	
CASID30038	C1-Dibenzothiophenes	9.3		5.4	5.4	
CASID30059	C2-Dibenzothiophenes	5.4	U	5.4	5.4	
CASID30069	C3-Dibenzothiophenes	14		5.4	5.4	
85-01-8	Phenanthrene	42		5.0	0.71	
120-12-7	Anthracene	12		5.0	0.47	
CASID30042	C1-Phenanthrenes/Anthracenes	21		5.4	5.4	
CASID30062	C2-Phenanthrenes/Anthracenes	23		5.4	5.4	
CASID30072	C3-Phenanthrenes/Anthracenes	19		5.4	5.4	
CASID30078	C4-Phenanthrenes/Anthracenes	26		5.4	5.4	
206-44-0	Fluoranthene	120		5.0	0.73	
129-00-0	Pyrene	100		5.0	0.77	
CASID30039	C1-Fluoranthenes/Pyrenes	70		5.4	5.4	
56-55-3	Benz(a)anthracene	42		5.0	0.35	

Comments:

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406296
Date Collected: 08/19/2004
Date Received: 08/21/2004
Date Extracted: 09/22/2004
Date Analyzed: 09/28/2004

Polynuclear Aromatic Hydrocarbons

Sample Name: LDW-B8b-S
Lab Code: K2406296-002
File ID: J:\MS11\DATA\092704\0927F050.D
Instrument ID: MS11
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Lot: KWG0414432
Calibration ID: CAL3848

Sample Amount: 21.49 g
% Solids: 47.0
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
218-01-9	Chrysene	79		5.0	0.88	
CASID30037	C1-Chrysenes	36		5.4	5.4	
CASID30058	C2-Chrysenes	23		5.4	5.4	
CASID30068	C3-Chrysenes	21		5.4	5.4	
CASID30074	C4-Chrysenes	12		5.4	5.4	
205-99-2	Benzo(b)fluoranthene	71		5.0	1.1	
207-08-9	Benzo(k)fluoranthene	67		5.0	0.71	
192-97-2	Benzo(e)pyrene	61		5.0	0.83	
50-32-8	Benzo(a)pyrene	58		5.0	0.47	
198-55-0	Perylene	50		5.0	0.37	
193-39-5	Indeno(1,2,3-cd)pyrene	55		5.0	0.52	
53-70-3	Dibenz(a,h)anthracene	9.2		5.0	0.56	
191-24-2	Benzo(g,h,i)perylene	56		5.0	0.49	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	68	40-130	09/28/04	Acceptable
Fluoranthene-d10	80	40-130	09/28/04	Acceptable
Terphenyl-d14	96	40-130	09/28/04	Acceptable

Comments: _____

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406296
Date Collected: 08/19/2004
Date Received: 08/21/2004
Date Extracted: 09/22/2004
Date Analyzed: 09/28/2004

Polynuclear Aromatic Hydrocarbons

Sample Name: LDW-B10b-S
Lab Code: K2406296-003
File ID: J:\MS11\DATA\092804\0928F008.D
Instrument ID: MS11
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Lot: KWG0414432
Calibration ID: CAL3848

Sample Amount: 17.10 g
% Solids: 59.1
Dilution Factor: 1

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
91-20-3	Naphthalene	2.5 J	5.0	0.58	
91-57-6	2-Methylnaphthalene	2.3 J	5.0	0.58	
90-12-0	1-Methylnaphthalene	1.9 J	5.0	0.43	
CASID30061	C2-Naphthalenes	6.2	5.0	4.3	
CASID30071	C3-Naphthalenes	17	5.0	4.3	
CASID30077	C4-Naphthalenes	9.2	5.0	4.3	
92-52-4	Biphenyl	0.86 J	5.0	0.73	
208-96-8	Acenaphthylene	1.5 J	5.0	0.38	
132-64-9	Dibenzofuran	1.5 J	5.0	0.29	
83-32-9	Acenaphthene	1.0 J	5.0	0.28	
86-73-7	Fluorene	1.4 J	5.0	0.33	
CASID30040	C1-Fluorenes	4.3 U	5.0	4.3	
CASID30060	C2-Fluorenes	4.3 U	5.0	4.3	
CASID30070	C3-Fluorenes	4.3 U	5.0	4.3	
132-65-0	Dibenzothiophene	0.81 J	5.0	0.39	
CASID30038	C1-Dibenzothiophenes	4.6 J	5.0	4.3	
CASID30059	C2-Dibenzothiophenes	4.3 U	5.0	4.3	
CASID30069	C3-Dibenzothiophenes	7.6	5.0	4.3	
85-01-8	Phenanthrene	15	5.0	0.56	
120-12-7	Anthracene	4.2 J	5.0	0.38	
CASID30042	C1-Phenanthrenes/Anthracenes	8.0	5.0	4.3	
CASID30062	C2-Phenanthrenes/Anthracenes	8.5	5.0	4.3	
CASID30072	C3-Phenanthrenes/Anthracenes	7.6	5.0	4.3	
CASID30078	C4-Phenanthrenes/Anthracenes	12	5.0	4.3	
206-44-0	Fluoranthene	35	5.0	0.58	
129-00-0	Pyrene	32	5.0	0.61	
CASID30039	C1-Fluoranthenes/Pyrenes	18	5.0	4.3	
56-55-3	Benz(a)anthracene	12	5.0	0.28	

Comments:

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406296
Date Collected: 08/19/2004
Date Received: 08/21/2004
Date Extracted: 09/22/2004
Date Analyzed: 09/28/2004

Polynuclear Aromatic Hydrocarbons

Sample Name: LDW-B10b-S
Lab Code: K2406296-003
File ID: J:\MS11\DATA\092804\0928F008.D
Instrument ID: MS11
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Lot: KWG0414432
Calibration ID: CAL3848

Sample Amount: 17.10 g
% Solids: 59.1
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
218-01-9	Chrysene	23		5.0	0.70	
CASID30037	C1-Chrysenes	12		5.0	4.3	
CASID30058	C2-Chrysenes	8.1		5.0	4.3	
CASID30068	C3-Chrysenes	9.7		5.0	4.3	
CASID30074	C4-Chrysenes	4.3	U	5.0	4.3	
205-99-2	Benzo(b)fluoranthene	21		5.0	0.82	
207-08-9	Benzo(k)fluoranthene	18		5.0	0.56	
192-97-2	Benzo(e)pyrene	17		5.0	0.66	
50-32-8	Benzo(a)pyrene	16		5.0	0.38	
198-55-0	Perylene	15		5.0	0.29	
193-39-5	Indeno(1,2,3-cd)pyrene	15		5.0	0.41	
53-70-3	Dibenz(a,h)anthracene	2.4	J	5.0	0.44	
191-24-2	Benzo(g,h,i)perylene	17		5.0	0.39	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	48	40-130	09/28/04	Acceptable
Fluoranthene-d10	56	40-130	09/28/04	Acceptable
Terphenyl-d14	86	40-130	09/28/04	Acceptable

Comments: _____

Analytical Results

Client: Windward Environmental
 Project: LDW Benthic Invertebrate Survey/04-08-06-21
 Sample Matrix: Tissue

Service Request: K2406297
 Date Collected: 08/18/2004
 Date Received: 08/21/2004
 Date Extracted: 09/29/2004
 Date Analyzed: 10/07/2004

Polynuclear Aromatic Hydrocarbons

Sample Name: LDW-B6b-T
 Lab Code: K2406297-001
 File ID: J:\MS14\DATA\100704\1007F004.D
 Instrument ID: MS14
 Extraction Method: EPA 3541
 Analysis Method: 8270C SIM

Units: ug/Kg
 Basis: Wet
 Level: Low

Extraction Lot: KWG0414844
 Calibration ID: CAL3873

Sample Amount: 2.03 g
 % Solids: NA
 Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
91-20-3	Naphthalene	7.3	J	25	1.3	
91-57-6	2-Methylnaphthalene	2.2	J	25	0.74	
90-12-0	1-Methylnaphthalene	1.8	J	25	0.65	
92-52-4	Biphenyl	3.0	J	25	0.34	
208-96-8	Acenaphthylene	3.8	J	25	0.25	
132-64-9	Dibenzofuran	9.4	J	25	0.26	
83-32-9	Acenaphthene	12	J	25	0.37	
86-73-7	Fluorene	16	J	25	0.27	
132-65-0	Dibenzothiophene	6.8	J	25	0.69	
85-01-8	Phenanthrene	48		25	0.33	
120-12-7	Anthracene	25	J	25	0.28	
206-44-0	Fluoranthene	270		25	0.27	
129-00-0	Pyrene	260		25	0.35	
56-55-3	Benz(a)anthracene	89		25	0.27	
218-01-9	Chrysene	120		25	0.40	
205-99-2	Benzo(b)fluoranthene	85		25	0.23	
207-08-9	Benzo(k)fluoranthene	65		25	0.40	
192-97-2	Benzo(e)pyrene	72		25	0.060	
50-32-8	Benzo(a)pyrene	56		25	0.38	
198-55-0	Perylene	35		25	0.50	
193-39-5	Indeno(1,2,3-cd)pyrene	33		25	0.36	
53-70-3	Dibenz(a,h)anthracene	5.9	J	25	0.39	
191-24-2	Benzo(g,h,i)perylene	33		25	0.48	

Comments:

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406297
Date Collected: 08/18/2004
Date Received: 08/21/2004
Date Extracted: 09/29/2004
Date Analyzed: 10/07/2004

Polynuclear Aromatic Hydrocarbons

Sample Name: LDW-B6b-T
Lab Code: K2406297-001
File ID: J:\MS14\DATA\100704\1007F004.D
Instrument ID: MS14
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Lot: KWG0414844
Calibration ID: CAL3873

Sample Amount: 2.03 g
% Solids: NA
Dilution Factor: 1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	69	20-130	10/07/04	Acceptable
Fluoranthene-d10	77	20-130	10/07/04	Acceptable
Terphenyl-d14	87	20-130	10/07/04	Acceptable

Comments: _____

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406297
Date Collected: 08/18/2004
Date Received: 08/21/2004
Date Extracted: 09/29/2004
Date Analyzed: 10/12/2004

Polynuclear Aromatic Hydrocarbons

Sample Name: LDW-B6b-TRE
Lab Code: K2406297-001
File ID: J:\MS14\DATA\101204\1012F014.D
Instrument ID: MS14

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Extraction Lot: KWG0414844
Calibration ID: CAL3891

Sample Amount: 2.03 g
% Solids: NA
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
CASID30061	C2-Naphthalenes	25	U	25	25	
CASID30071	C3-Naphthalenes	25	U	25	25	
CASID30077	C4-Naphthalenes	25	U	25	25	
CASID30040	C1-Fluorenes	25	U	25	25	
CASID30060	C2-Fluorenes	36		25	25	
CASID30070	C3-Fluorenes	25	U	25	25	
CASID30038	C1-Dibenzothiophenes	25	U	25	25	
CASID30059	C2-Dibenzothiophenes	25	U	25	25	
CASID30069	C3-Dibenzothiophenes	25	U	25	25	
CASID30042	C1-Phenanthrenes/Anthracenes	28		25	25	
CASID30062	C2-Phenanthrenes/Anthracenes	28		25	25	
CASID30072	C3-Phenanthrenes/Anthracenes	35		25	25	
CASID30078	C4-Phenanthrenes/Anthracenes	25	U	25	25	
CASID30039	C1-Fluoranthenes/Pyrenes	140		25	25	
CASID30037	C1-Chrysenes	72		25	25	
CASID30058	C2-Chrysenes	25	U	25	25	
CASID30068	C3-Chrysenes	25	U	25	25	
CASID30074	C4-Chrysenes	25	U	25	25	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	75	20-130	10/12/04	Acceptable
Fluoranthene-d10	82	20-130	10/12/04	Acceptable
Terphenyl-d14	91	20-130	10/12/04	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406297
Date Collected: 08/19/2004
Date Received: 08/21/2004
Date Extracted: 09/29/2004
Date Analyzed: 10/07/2004

Polynuclear Aromatic Hydrocarbons

Sample Name: LDW-B8b-T
Lab Code: K2406297-002
File ID: J:\MS14\DATA\100704\1007F005.D
Instrument ID: MS14

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Extraction Lot: KWG0414844
Calibration ID: CAL3873

Sample Amount: 2.02 g
% Solids: NA
Dilution Factor: 1

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
91-20-3	Naphthalene	4.6 J	25	1.3	
91-57-6	2-Methylnaphthalene	1.0 J	25	0.75	
90-12-0	1-Methylnaphthalene	0.75 J	25	0.65	
92-52-4	Biphenyl	1.5 J	25	0.34	
208-96-8	Acenaphthylene	0.57 J	25	0.25	
132-64-9	Dibenzofuran	0.72 J	25	0.26	
83-32-9	Acenaphthene	0.61 J	25	0.37	
86-73-7	Fluorene	0.93 J	25	0.27	
132-65-0	Dibenzothiophene	0.70 U	25	0.70	
85-01-8	Phenanthrene	5.0 J	25	0.33	
120-12-7	Anthracene	1.6 J	25	0.28	
206-44-0	Fluoranthene	23 J	25	0.27	
129-00-0	Pyrene	20 J	25	0.35	
56-55-3	Benz(a)anthracene	7.4 J	25	0.27	
218-01-9	Chrysene	12 J	25	0.40	
205-99-2	Benzo(b)fluoranthene	6.0 J	25	0.23	
207-08-9	Benzo(k)fluoranthene	4.5 J	25	0.41	
192-97-2	Benzo(e)pyrene	7.3 J	25	0.060	
50-32-8	Benzo(a)pyrene	3.5 J	25	0.38	
198-55-0	Perylene	16 J	25	0.50	
193-39-5	Indeno(1,2,3-cd)pyrene	2.2 J	25	0.37	
53-70-3	Dibenz(a,h)anthracene	0.40 U	25	0.40	
191-24-2	Benzo(g,h,i)perylene	3.1 J	25	0.49	

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406297
Date Collected: 08/19/2004
Date Received: 08/21/2004
Date Extracted: 09/29/2004
Date Analyzed: 10/07/2004

Polynuclear Aromatic Hydrocarbons

Sample Name: LDW-B8b-T
Lab Code: K2406297-002
File ID: J:\MS14\DATA\100704\1007F005.D
Instrument ID: MS14

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Extraction Lot: KWG0414844
Calibration ID: CAL3873

Sample Amount: 2.02 g
% Solids: NA
Dilution Factor: 1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	72	20-130	10/07/04	Acceptable
Fluoranthene-d10	77	20-130	10/07/04	Acceptable
Terphenyl-d14	92	20-130	10/07/04	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406297
Date Collected: 08/19/2004
Date Received: 08/21/2004
Date Extracted: 09/29/2004
Date Analyzed: 10/12/2004

Polynuclear Aromatic Hydrocarbons

Sample Name: LDW-B8b-TRE
Lab Code: K2406297-002
File ID: J:\MS14\DATA\101204\1012F015.D
Instrument ID: MS14
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Lot: KWG0414844
Calibration ID: CAL3891

Sample Amount: 2.02 g
% Solids: NA
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
CASID30061	C2-Naphthalenes	25	U	25	25	
CASID30071	C3-Naphthalenes	25	U	25	25	
CASID30077	C4-Naphthalenes	25	U	25	25	
CASID30040	C1-Fluorenes	25	U	25	25	
CASID30060	C2-Fluorenes	25	U	25	25	
CASID30070	C3-Fluorenes	25	U	25	25	
CASID30038	C1-Dibenzothiophenes	25	U	25	25	
CASID30059	C2-Dibenzothiophenes	25	U	25	25	
CASID30069	C3-Dibenzothiophenes	25	U	25	25	
CASID30042	C1-Phenanthrenes/Anthracenes	25	U	25	25	
CASID30062	C2-Phenanthrenes/Anthracenes	25	U	25	25	
CASID30072	C3-Phenanthrenes/Anthracenes	25	U	25	25	
CASID30078	C4-Phenanthrenes/Anthracenes	25	U	25	25	
CASID30039	C1-Fluoranthenes/Pyrenes	25	U	25	25	
CASID30037	C1-Chrysenes	25	U	25	25	
CASID30058	C2-Chrysenes	25	U	25	25	
CASID30068	C3-Chrysenes	25	U	25	25	
CASID30074	C4-Chrysenes	25	U	25	25	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	77	20-130	10/12/04	Acceptable
Fluoranthene-d10	83	20-130	10/12/04	Acceptable
Terphenyl-d14	96	20-130	10/12/04	Acceptable

Comments: _____

Analytical Results

Client: Windward Environmental
 Project: LDW Benthic Invertebrate Survey/04-08-06-21
 Sample Matrix: Tissue

Service Request: K2406297
 Date Collected: 08/19/2004
 Date Received: 08/21/2004
 Date Extracted: 09/29/2004
 Date Analyzed: 10/07/2004

Polynuclear Aromatic Hydrocarbons

Sample Name: LDW-B10b-T
 Lab Code: K2406297-003
 File ID: J:\MS14\DATA\100704\1007F006.D
 Instrument ID: MS14

Units: ug/Kg
 Basis: Wet
 Level: Low

Extraction Method: EPA 3541
 Analysis Method: 8270C SIM

Extraction Lot: KWG0414844
 Calibration ID: CAL3873

Sample Amount: 2.03 g
 % Solids: NA
 Dilution Factor: 1

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
91-20-3	Naphthalene	5.7 J	25	1.3	
91-57-6	2-Methylnaphthalene	2.0 J	25	0.74	
90-12-0	1-Methylnaphthalene	1.5 J	25	0.65	
92-52-4	Biphenyl	2.2 J	25	0.34	
208-96-8	Acenaphthylene	0.55 J	25	0.25	
132-64-9	Dibenzofuran	0.97 J	25	0.26	
83-32-9	Acenaphthene	1.6 J	25	0.37	
86-73-7	Fluorene	1.2 J	25	0.27	
132-65-0	Dibenzothiophene	0.69 U	25	0.69	
85-01-8	Phenanthrene	5.0 J	25	0.33	
120-12-7	Anthracene	1.1 J	25	0.28	
206-44-0	Fluoranthene	13 J	25	0.27	
129-00-0	Pyrene	13 J	25	0.35	
56-55-3	Benzo(a)anthracene	1.7 J	25	0.27	
218-01-9	Chrysene	8.3 J	25	0.40	
205-99-2	Benzo(b)fluoranthene	1.9 J	25	0.23	
207-08-9	Benzo(k)fluoranthene	2.0 J	25	0.40	
192-97-2	Benzo(e)pyrene	4.2 J	25	0.060	
50-32-8	Benzo(a)pyrene	0.38 U	25	0.38	
198-55-0	Perylene	0.50 U	25	0.50	
193-39-5	Indeno(1,2,3-cd)pyrene	0.80 J	25	0.36	
53-70-3	Dibenz(a,h)anthracene	0.39 U	25	0.39	
191-24-2	Benzo(g,h,i)perylene	1.4 J	25	0.48	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406297
Date Collected: 08/19/2004
Date Received: 08/21/2004
Date Extracted: 09/29/2004
Date Analyzed: 10/07/2004

Polynuclear Aromatic Hydrocarbons

Sample Name: LDW-B10b-T
Lab Code: K2406297-003
File ID: J:\MS14\DATA\100704\1007F006.D
Instrument ID: MS14
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Lot: KWG0414844
Calibration ID: CAL3873

Sample Amount: 2.03 g
% Solids: NA
Dilution Factor: 1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	72	20-130	10/07/04	Acceptable
Fluoranthene-d10	79	20-130	10/07/04	Acceptable
Terphenyl-d14	95	20-130	10/07/04	Acceptable

Comments: _____

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406297
Date Collected: 08/19/2004
Date Received: 08/21/2004
Date Extracted: 09/29/2004
Date Analyzed: 10/12/2004

Polynuclear Aromatic Hydrocarbons

Sample Name: LDW-B10b-TRE
Lab Code: K2406297-003
File ID: J:\MS14\DATA\101204\1012F016.D
Instrument ID: MS14
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Lot: KWG0414844
Calibration ID: CAL3891

Sample Amount: 2.03 g
% Solids: NA
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
CASID30061	C2-Naphthalenes	25	U	25	25	
CASID30071	C3-Naphthalenes	25	U	25	25	
CASID30077	C4-Naphthalenes	25	U	25	25	
CASID30040	C1-Fluorenes	25	U	25	25	
CASID30060	C2-Fluorenes	25	U	25	25	
CASID30070	C3-Fluorenes	25	U	25	25	
CASID30038	C1-Dibenzothiophenes	25	U	25	25	
CASID30059	C2-Dibenzothiophenes	25	U	25	25	
CASID30069	C3-Dibenzothiophenes	25	U	25	25	
CASID30042	C1-Phenanthrenes/Anthracenes	25	U	25	25	
CASID30062	C2-Phenanthrenes/Anthracenes	25	U	25	25	
CASID30072	C3-Phenanthrenes/Anthracenes	25	U	25	25	
CASID30078	C4-Phenanthrenes/Anthracenes	25	U	25	25	
CASID30039	C1-Fluoranthenes/Pyrenes	25	U	25	25	
CASID30037	C1-Chrysenes	25	U	25	25	
CASID30058	C2-Chrysenes	25	U	25	25	
CASID30068	C3-Chrysenes	25	U	25	25	
CASID30074	C4-Chrysenes	25	U	25	25	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	78	20-130	10/12/04	Acceptable
Fluoranthene-d10	85	20-130	10/12/04	Acceptable
Terphenyl-d14	100	20-130	10/12/04	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406516
Date Collected: 08/27/2004
Date Received: 08/30/2004
Date Extracted: 09/01/2004
Date Analyzed: 09/10/2004

Polynuclear Aromatic Hydrocarbons

Sample Name: LDW-C4-S
Lab Code: K2406516-001
File ID: J:\MS11\DATA\091004\0910F036.D
Instrument ID: MS11
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Lot: KWG0413012
Calibration ID: CAL3798

Sample Amount: 15.43 g
% Solids: 66.8
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
91-20-3	Naphthalene	27		4.9	0.51	
91-57-6	2-Methylnaphthalene	17		4.9	0.51	
208-96-8	Acenaphthylene	47		4.9	0.33	
83-32-9	Acenaphthene	2.7	J	4.9	0.24	
86-73-7	Fluorene	5.2		4.9	0.29	
132-64-9	Dibenzofuran	4.5	J	4.9	0.26	
85-01-8	Phenanthrene	43		4.9	0.50	
120-12-7	Anthracene	33		4.9	0.33	
206-44-0	Fluoranthene	190		4.9	0.51	
129-00-0	Pyrene	260		4.9	0.54	
205-99-2	Benzo(b)fluoranthene	140		4.9	0.72	
207-08-9	Benzo(k)fluoranthene	140		4.9	0.50	
56-55-3	Benz(a)anthracene	140		4.9	0.24	
218-01-9	Chrysene	220		4.9	0.62	
50-32-8	Benzo(a)pyrene	190		4.9	0.33	
193-39-5	Indeno(1,2,3-cd)pyrene	140		4.9	0.36	
53-70-3	Dibenz(a,h)anthracene	27		4.9	0.39	
191-24-2	Benzo(g,h,i)perylene	140		4.9	0.35	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	54	40-130	09/10/04	Acceptable
Fluoranthene-d10	58	40-130	09/10/04	Acceptable
Terphenyl-d14	69	40-130	09/10/04	Acceptable

Comments: _____

4126

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406516
Date Collected: 08/25/2004
Date Received: 08/30/2004
Date Extracted: 09/01/2004
Date Analyzed: 09/10/2004

Polynuclear Aromatic Hydrocarbons

Sample Name: LDW-C10-S2
Lab Code: K2406516-002
File ID: J:\MS11\DATA\091004\0910F037.D
Instrument ID: MS11
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Lot: KWG0413012
Calibration ID: CAL3798

Sample Amount: 20.67 g
% Solids: 51.5
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
91-20-3	Naphthalene	5.8		4.7	0.67	
91-57-6	2-Methylnaphthalene	9.4		4.7	0.67	
208-96-8	Acenaphthylene	9.8		4.7	0.43	
83-32-9	Acenaphthene	8.1		4.7	0.32	
86-73-7	Fluorene	19		4.7	0.37	
132-64-9	Dibenzofuran	7.7		4.7	0.34	
85-01-8	Phenanthrene	170		4.7	0.65	
120-12-7	Anthracene	56		4.7	0.43	
206-44-0	Fluoranthene	340		4.7	0.67	
129-00-0	Pyrene	270		4.7	0.70	
205-99-2	Benzo(b)fluoranthene	180		4.7	0.94	
207-08-9	Benzo(k)fluoranthene	140		4.7	0.65	
56-55-3	Benz(a)anthracene	160		4.7	0.32	
218-01-9	Chrysene	310		4.7	0.80	
50-32-8	Benzo(a)pyrene	120		4.7	0.43	
193-39-5	Indeno(1,2,3-cd)pyrene	83		4.7	0.47	
53-70-3	Dibenz(a,h)anthracene	20		4.7	0.51	
191-24-2	Benzo(g,h,i)perylene	81		4.7	0.45	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	52	40-130	09/10/04	Acceptable
Fluoranthene-d10	64	40-130	09/10/04	Acceptable
Terphenyl-d14	85	40-130	09/10/04	Acceptable

Comments: _____

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COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406516
Date Collected: 08/25/2004
Date Received: 08/30/2004
Date Extracted: 09/01/2004
Date Analyzed: 09/11/2004

Polynuclear Aromatic Hydrocarbons

Sample Name: LDW-C10-S1
Lab Code: K2406516-003
File ID: J:\MS11\DATA\091004\0910F047.D
Instrument ID: MS11
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Lot: KWG0413012
Calibration ID: CAL3798

Sample Amount: 19.98 g
% Solids: 50.4
Dilution Factor: 1

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
91-20-3	Naphthalene	6.3	5.0	0.68	
91-57-6	2-Methylnaphthalene	8.2	5.0	0.68	
208-96-8	Acenaphthylene	7.1	5.0	0.44	
83-32-9	Acenaphthene	7.5	5.0	0.32	
86-73-7	Fluorene	14	5.0	0.38	
132-64-9	Dibenzofuran	6.7	5.0	0.34	
85-01-8	Phenanthrene	200	5.0	0.66	
120-12-7	Anthracene	77	5.0	0.44	
206-44-0	Fluoranthene	450	5.0	0.68	
129-00-0	Pyrene	440	5.0	0.72	
205-99-2	Benzo(b)fluoranthene	220	5.0	0.96	
207-08-9	Benzo(k)fluoranthene	150	5.0	0.66	
56-55-3	Benz(a)anthracene	200	5.0	0.32	
218-01-9	Chrysene	330	5.0	0.82	
50-32-8	Benzo(a)pyrene	200	5.0	0.44	
193-39-5	Indeno(1,2,3-cd)pyrene	130	5.0	0.48	
53-70-3	Dibenz(a,h)anthracene	37	5.0	0.52	
191-24-2	Benzo(g,h,i)perylene	140	5.0	0.46	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	56	40-130	09/11/04	Acceptable
Fluoranthene-d10	64	40-130	09/11/04	Acceptable
Terphenyl-d14	79	40-130	09/11/04	Acceptable

Comments: _____

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Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406516
Date Collected: 08/25/2004
Date Received: 08/30/2004
Date Extracted: 09/01/2004
Date Analyzed: 09/10/2004

Polynuclear Aromatic Hydrocarbons

Sample Name: LDW-C6-S
Lab Code: K2406516-004
File ID: J:\MS11\DATA\091004\0910F038.D
Instrument ID: MS11
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Lot: KWG0413012
Calibration ID: CAL3798

Sample Amount: 14.54 g
% Solids: 70.2
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
91-20-3	Naphthalene	6.7		4.9	0.49	
91-57-6	2-Methylnaphthalene	3.7	J	4.9	0.49	
208-96-8	Acenaphthylene	5.3		4.9	0.32	
83-32-9	Acenaphthene	4.6	J	4.9	0.23	
86-73-7	Fluorene	5.5		4.9	0.28	
132-64-9	Dibenzofuran	4.8	J	4.9	0.25	
85-01-8	Phenanthrene	36		4.9	0.48	
120-12-7	Anthracene	17		4.9	0.32	
206-44-0	Fluoranthene	97		4.9	0.49	
129-00-0	Pyrene	87		4.9	0.52	
205-99-2	Benzo(b)fluoranthene	58		4.9	0.69	
207-08-9	Benzo(k)fluoranthene	47		4.9	0.48	
56-55-3	Benz(a)anthracene	41		4.9	0.23	
218-01-9	Chrysene	71		4.9	0.59	
50-32-8	Benzo(a)pyrene	42		4.9	0.32	
193-39-5	Indeno(1,2,3-cd)pyrene	38		4.9	0.35	
53-70-3	Dibenz(a,h)anthracene	7.5		4.9	0.38	
191-24-2	Benzo(g,h,i)perylene	37		4.9	0.33	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	61	40-130	09/10/04	Acceptable
Fluoranthene-d10	61	40-130	09/10/04	Acceptable
Terphenyl-d14	81	40-130	09/10/04	Acceptable

Comments: _____

4129

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406516
Date Collected: 08/25/2004
Date Received: 08/30/2004
Date Extracted: 09/01/2004
Date Analyzed: 09/10/2004

Polynuclear Aromatic Hydrocarbons

Sample Name: LDW-C9-S
Lab Code: K2406516-005
File ID: J:\MS11\DATA\091004\0910F039.D
Instrument ID: MS11
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Lot: KWG0413012
Calibration ID: CAL3798

Sample Amount: 14.37 g
% Solids: 75.7
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
91-20-3	Naphthalene	4.1	J	4.6	0.45	
91-57-6	2-Methylnaphthalene	2.8	J	4.6	0.45	
208-96-8	Acenaphthylene	4.3	J	4.6	0.30	
83-32-9	Acenaphthene	2.7	J	4.6	0.22	
86-73-7	Fluorene	3.9	J	4.6	0.26	
132-64-9	Dibenzofuran	2.8	J	4.6	0.23	
85-01-8	Phenanthrene	48		4.6	0.44	
120-12-7	Anthracene	12		4.6	0.30	
206-44-0	Fluoranthene	100		4.6	0.45	
129-00-0	Pyrene	85		4.6	0.48	
205-99-2	Benzo(b)fluoranthene	67		4.6	0.64	
207-08-9	Benzo(k)fluoranthene	45		4.6	0.44	
56-55-3	Benz(a)anthracene	42		4.6	0.22	
218-01-9	Chrysene	74		4.6	0.55	
50-32-8	Benzo(a)pyrene	41		4.6	0.30	
193-39-5	Indeno(1,2,3-cd)pyrene	31		4.6	0.32	
53-70-3	Dibenz(a,h)anthracene	7.7		4.6	0.35	
191-24-2	Benzo(g,h,i)perylene	31		4.6	0.31	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	65	40-130	09/10/04	Acceptable
Fluoranthene-d10	66	40-130	09/10/04	Acceptable
Terphenyl-d14	82	40-130	09/10/04	Acceptable

Comments: _____

4130

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406516
Date Collected: 08/26/2004
Date Received: 08/30/2004
Date Extracted: 09/01/2004
Date Analyzed: 09/11/2004

Polynuclear Aromatic Hydrocarbons

Sample Name: LDW-C7-S1
Lab Code: K2406516-006
File ID: J:\MS11\DATA\091004\0910F048.D
Instrument ID: MS11
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Lot: KWG0413012
Calibration ID: CAL3798

Sample Amount: 13.56 g
% Solids: 78.0
Dilution Factor: 1

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
91-20-3	Naphthalene	7.1	4.8	0.44	
91-57-6	2-Methylnaphthalene	4.2 J	4.8	0.44	
208-96-8	Acenaphthylene	16	4.8	0.29	
83-32-9	Acenaphthene	6.0	4.8	0.21	
86-73-7	Fluorene	7.9	4.8	0.25	
132-64-9	Dibenzofuran	5.3	4.8	0.22	
85-01-8	Phenanthrene	69	4.8	0.43	
120-12-7	Anthracene	47	4.8	0.29	
206-44-0	Fluoranthene	270	4.8	0.44	
129-00-0	Pyrene	310	4.8	0.47	
205-99-2	Benzo(b)fluoranthene	220	4.8	0.62	
207-08-9	Benzo(k)fluoranthene	150	4.8	0.43	
56-55-3	Benz(a)anthracene	130	4.8	0.21	
218-01-9	Chrysene	220	4.8	0.53	
50-32-8	Benzo(a)pyrene	150	4.8	0.29	
193-39-5	Indeno(1,2,3-cd)pyrene	120	4.8	0.31	
53-70-3	Dibenz(a,h)anthracene	26	4.8	0.34	
191-24-2	Benzo(g,h,i)perylene	130	4.8	0.30	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	69	40-130	09/11/04	Acceptable
Fluoranthene-d10	73	40-130	09/11/04	Acceptable
Terphenyl-d14	80	40-130	09/11/04	Acceptable

Comments:

4131

Analytical Results

Client: Windward Environmental
 Project: LDW Benthic Invertebrate Survey/04-08-06-21
 Sample Matrix: Sediment

Service Request: K2406516
 Date Collected: 08/27/2004
 Date Received: 08/30/2004
 Date Extracted: 09/01/2004
 Date Analyzed: 09/10/2004

Polynuclear Aromatic Hydrocarbons

Sample Name: LDW-C3-S2
 Lab Code: K2406516-007
 File ID: J:\MS11\DATA\091004\0910F040.D
 Instrument ID: MS11

Units: ug/Kg
 Basis: Dry
 Level: Low

Extraction Method: EPA 3541
 Analysis Method: 8270C SIM

Extraction Lot: KWG0413012
 Calibration ID: CAL3798

Sample Amount: 13.75 g
 % Solids: 75.2
 Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
91-20-3	Naphthalene	5.2		4.9	0.46	
91-57-6	2-Methylnaphthalene	3.0	J	4.9	0.46	
208-96-8	Acenaphthylene	8.9		4.9	0.30	
83-32-9	Acenaphthene	3.7	J	4.9	0.22	
86-73-7	Fluorene	6.2		4.9	0.26	
132-64-9	Dibenzofuran	3.3	J	4.9	0.23	
85-01-8	Phenanthrene	63		4.9	0.44	
120-12-7	Anthracene	19		4.9	0.30	
206-44-0	Fluoranthene	130		4.9	0.46	
129-00-0	Pyrene	130		4.9	0.48	
205-99-2	Benzo(b)fluoranthene	79		4.9	0.64	
207-08-9	Benzo(k)fluoranthene	61		4.9	0.44	
56-55-3	Benz(a)anthracene	53		4.9	0.22	
218-01-9	Chrysene	120		4.9	0.55	
50-32-8	Benzo(a)pyrene	76		4.9	0.30	
193-39-5	Indeno(1,2,3-cd)pyrene	64		4.9	0.32	
53-70-3	Dibenz(a,h)anthracene	18		4.9	0.35	
191-24-2	Benzo(g,h,i)perylene	79		4.9	0.31	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	57	40-130	09/10/04	Acceptable
Fluoranthene-d10	72	40-130	09/10/04	Acceptable
Terphenyl-d14	85	40-130	09/10/04	Acceptable

Comments:

4132

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406516
Date Collected: 08/26/2004
Date Received: 08/30/2004
Date Extracted: 09/01/2004
Date Analyzed: 09/10/2004

Polynuclear Aromatic Hydrocarbons

Sample Name: LDW-C7-S2
Lab Code: K2406516-008
File ID: J:\MS11\DATA\091004\0910F041.D
Instrument ID: MS11
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Lot: KWG0413012
Calibration ID: CAL3798

Sample Amount: 13.60 g
% Solids: 78.3
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
91-20-3	Naphthalene	4.2	J	4.7	0.44	
91-57-6	2-Methylnaphthalene	3.1	J	4.7	0.44	
208-96-8	Acenaphthylene	6.2		4.7	0.29	
83-32-9	Acenaphthene	4.6	J	4.7	0.21	
86-73-7	Fluorene	6.0		4.7	0.25	
132-64-9	Dibenzofuran	4.7	J	4.7	0.22	
85-01-8	Phenanthrene	78		4.7	0.43	
120-12-7	Anthracene	25		4.7	0.29	
206-44-0	Fluoranthene	200		4.7	0.44	
129-00-0	Pyrene	180		4.7	0.46	
205-99-2	Benzo(b)fluoranthene	160		4.7	0.62	
207-08-9	Benzo(k)fluoranthene	110		4.7	0.43	
56-55-3	Benz(a)anthracene	98		4.7	0.21	
218-01-9	Chrysene	170		4.7	0.53	
50-32-8	Benzo(a)pyrene	110		4.7	0.29	
193-39-5	Indeno(1,2,3-cd)pyrene	100		4.7	0.31	
53-70-3	Dibenz(a,h)anthracene	20		4.7	0.34	
191-24-2	Benzo(g,h,i)perylene	98		4.7	0.30	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	66	40-130	09/10/04	Acceptable
Fluoranthene-d10	73	40-130	09/10/04	Acceptable
Terphenyl-d14	82	40-130	09/10/04	Acceptable

Comments: _____

4133

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406516
Date Collected: 08/26/2004
Date Received: 08/30/2004
Date Extracted: 09/01/2004
Date Analyzed: 09/11/2004

Polynuclear Aromatic Hydrocarbons

Sample Name: LDW-C8-S
Lab Code: K2406516-009
File ID: J:\MS11\DATA\091004\0910F049.D
Instrument ID: MS11

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Extraction Lot: KWG0413012
Calibration ID: CAL3798

Sample Amount: 17.14 g
% Solids: 60.3
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
91-20-3	Naphthalene	44		4.9	0.57	
91-57-6	2-Methylnaphthalene	43		4.9	0.57	
208-96-8	Acenaphthylene	77		4.9	0.37	
83-32-9	Acenaphthene	530		4.9	0.27	
86-73-7	Fluorene	190		4.9	0.32	
132-64-9	Dibenzofuran	87		4.9	0.29	
85-01-8	Phenanthrene	2000	E	4.9	0.55	
120-12-7	Anthracene	650		4.9	0.37	
206-44-0	Fluoranthene	3800	E	4.9	0.57	
129-00-0	Pyrene	4300	E	4.9	0.60	
205-99-2	Benzo(b)fluoranthene	6000	E	4.9	0.80	
207-08-9	Benzo(k)fluoranthene	2200	E	4.9	0.55	
56-55-3	Benzo(a)anthracene	3100	E	4.9	0.27	
218-01-9	Chrysene	3400	E	4.9	0.68	
50-32-8	Benzo(a)pyrene	5000	E	4.9	0.37	
193-39-5	Indeno(1,2,3-cd)pyrene	4700	E	4.9	0.40	
53-70-3	Dibenz(a,h)anthracene	1500		4.9	0.44	
191-24-2	Benzo(g,h,i)perylene	3800	E	4.9	0.39	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	72	40-130	09/11/04	Acceptable
Fluoranthene-d10	71	40-130	09/11/04	Acceptable
Terphenyl-d14	88	40-130	09/11/04	Acceptable

Comments: _____

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406516
Date Collected: 08/26/2004
Date Received: 08/30/2004
Date Extracted: 09/01/2004
Date Analyzed: 09/11/2004

Polynuclear Aromatic Hydrocarbons

Sample Name: LDW-C8-SDL
Lab Code: K2406516-009
File ID: J:\MS11\DATA\091004\0910F052.D
Instrument ID: MS11
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Lot: KWG0413012
Calibration ID: CAL3798

Sample Amount: 17.14 g
% Solids: 60.3
Dilution Factor: 5

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
91-20-3	Naphthalene	42	D	25	2.9	
91-57-6	2-Methylnaphthalene	42	D	25	2.9	
208-96-8	Acenaphthylene	69	D	25	1.9	
83-32-9	Acenaphthene	520	D	25	1.4	
86-73-7	Fluorene	190	D	25	1.6	
132-64-9	Dibenzofuran	89	D	25	1.5	
85-01-8	Phenanthrene	2200	D	25	2.8	
120-12-7	Anthracene	670	D	25	1.9	
206-44-0	Fluoranthene	5500	D	25	2.9	
129-00-0	Pyrene	5300	D	25	3.0	
205-99-2	Benzo(b)fluoranthene	4600	D	25	4.0	
207-08-9	Benzo(k)fluoranthene	3500	D	25	2.8	
56-55-3	Benz(a)anthracene	3100	D	25	1.4	
218-01-9	Chrysene	3600	D	25	3.4	
50-32-8	Benzo(a)pyrene	4900	D	25	1.9	
193-39-5	Indeno(1,2,3-cd)pyrene	4300	D	25	2.0	
53-70-3	Dibenz(a,h)anthracene	880	D	25	2.2	
191-24-2	Benzo(g,h,i)perylene	3800	D	25	2.0	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	69	40-130	09/11/04	Acceptable
Fluoranthene-d10	76	40-130	09/11/04	Acceptable
Terphenyl-d14	102	40-130	09/11/04	Acceptable

Comments: _____

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Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406516
Date Collected: 08/27/2004
Date Received: 08/30/2004
Date Extracted: 09/01/2004
Date Analyzed: 09/11/2004

Polynuclear Aromatic Hydrocarbons

Sample Name: LDW-C5-S
Lab Code: K2406516-010
File ID: J:\MS11\DATA\091004\0910F042.D
Instrument ID: MS11
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Lot: KWG0413012
Calibration ID: CAL3798

Sample Amount: 13.57 g
% Solids: 74.1
Dilution Factor: 1

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
91-20-3	Naphthalene	13	5.0	0.46	
91-57-6	2-Methylnaphthalene	6.2	5.0	0.46	
208-96-8	Acenaphthylene	12	5.0	0.30	
83-32-9	Acenaphthene	41	5.0	0.22	
86-73-7	Fluorene	33	5.0	0.26	
132-64-9	Dibenzofuran	21	5.0	0.23	
85-01-8	Phenanthrene	230	5.0	0.45	
120-12-7	Anthracene	59	5.0	0.30	
206-44-0	Fluoranthene	440	5.0	0.46	
129-00-0	Pyrene	390	5.0	0.49	
205-99-2	Benzo(b)fluoranthene	210	5.0	0.65	
207-08-9	Benzo(k)fluoranthene	180	5.0	0.45	
56-55-3	Benz(a)anthracene	160	5.0	0.22	
218-01-9	Chrysene	290	5.0	0.56	
50-32-8	Benzo(a)pyrene	170	5.0	0.30	
193-39-5	Indeno(1,2,3-cd)pyrene	130	5.0	0.33	
53-70-3	Dibenz(a,h)anthracene	28	5.0	0.36	
191-24-2	Benzo(g,h,i)perylene	110	5.0	0.32	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	65	40-130	09/11/04	Acceptable
Fluoranthene-d10	71	40-130	09/11/04	Acceptable
Terphenyl-d14	86	40-130	09/11/04	Acceptable

Comments: _____

4136

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406516
Date Collected: 08/27/2004
Date Received: 08/30/2004
Date Extracted: 09/01/2004
Date Analyzed: 09/11/2004

Polynuclear Aromatic Hydrocarbons

Sample Name: LDW-C3-S1
Lab Code: K2406516-011
File ID: J:\MS11\DATA\091004\0910F043.D
Instrument ID: MS11
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Lot: KWG0413012
Calibration ID: CAL3798

Sample Amount: 14.34 g
% Solids: 72.2
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
91-20-3	Naphthalene	5.2		4.9	0.48	
91-57-6	2-Methylnaphthalene	3.6	J	4.9	0.48	
208-96-8	Acenaphthylene	9.9		4.9	0.31	
83-32-9	Acenaphthene	1.4	J	4.9	0.23	
86-73-7	Fluorene	2.3	J	4.9	0.27	
132-64-9	Dibenzofuran	1.7	J	4.9	0.24	
85-01-8	Phenanthrene	25		4.9	0.46	
120-12-7	Anthracene	15		4.9	0.31	
206-44-0	Fluoranthene	95		4.9	0.48	
129-00-0	Pyrene	110		4.9	0.50	
205-99-2	Benzo(b)fluoranthene	45		4.9	0.67	
207-08-9	Benzo(k)fluoranthene	40		4.9	0.46	
56-55-3	Benz(a)anthracene	44		4.9	0.23	
218-01-9	Chrysene	65		4.9	0.57	
50-32-8	Benzo(a)pyrene	47		4.9	0.31	
193-39-5	Indeno(1,2,3-cd)pyrene	35		4.9	0.34	
53-70-3	Dibenz(a,h)anthracene	7.0		4.9	0.37	
191-24-2	Benzo(g,h,i)perylene	36		4.9	0.32	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	64	40-130	09/11/04	Acceptable
Fluoranthene-d10	69	40-130	09/11/04	Acceptable
Terphenyl-d14	88	40-130	09/11/04	Acceptable

Comments:

4137

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406516
Date Collected: 08/26/2004
Date Received: 08/30/2004
Date Extracted: 09/01/2004
Date Analyzed: 09/11/2004

Polynuclear Aromatic Hydrocarbons

Sample Name: LDW-C2-S1
Lab Code: K2406516-012
File ID: J:\MS11\DATA\091004\0910F044.D
Instrument ID: MS11

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Extraction Lot: KWG0413012
Calibration ID: CAL3798

Sample Amount: 18.20 g
% Solids: 55.9
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
91-20-3	Naphthalene	8.7		5.0	0.61	
91-57-6	2-Methylnaphthalene	6.2		5.0	0.61	
208-96-8	Acenaphthylene	31		5.0	0.40	
83-32-9	Acenaphthene	15		5.0	0.29	
86-73-7	Fluorene	54		5.0	0.34	
132-64-9	Dibenzofuran	17		5.0	0.31	
85-01-8	Phenanthrene	460		5.0	0.60	
120-12-7	Anthracene	78		5.0	0.40	
206-44-0	Fluoranthene	460		5.0	0.61	
129-00-0	Pyrene	420		5.0	0.65	
205-99-2	Benzo(b)fluoranthene	120		5.0	0.86	
207-08-9	Benzo(k)fluoranthene	130		5.0	0.60	
56-55-3	Benz(a)anthracene	180		5.0	0.29	
218-01-9	Chrysene	190		5.0	0.74	
50-32-8	Benzo(a)pyrene	160		5.0	0.40	
193-39-5	Indeno(1,2,3-cd)pyrene	99		5.0	0.43	
53-70-3	Dibenz(a,h)anthracene	21		5.0	0.47	
191-24-2	Benzo(g,h,i)perylene	80		5.0	0.42	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	59	40-130	09/11/04	Acceptable
Fluoranthene-d10	56	40-130	09/11/04	Acceptable
Terphenyl-d14	84	40-130	09/11/04	Acceptable

Comments: _____

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COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
 Project: LDW Benthic Invertebrate Survey/04-08-06-21
 Sample Matrix: Sediment

Service Request: K2406516
 Date Collected: 08/26/2004
 Date Received: 08/30/2004
 Date Extracted: 09/01/2004
 Date Analyzed: 09/11/2004

Polynuclear Aromatic Hydrocarbons

Sample Name: LDW-C2-S2
 Lab Code: K2406516-013
 File ID: J:\MS11\DATA\091004\0910F045.D
 Instrument ID: MS11

Units: ug/Kg
 Basis: Dry
 Level: Low

Extraction Method: EPA 3541
 Analysis Method: 8270C SIM

Extraction Lot: KWG0413012
 Calibration ID: CAL3798

Sample Amount: 15.68 g
 % Solids: 70.4
 Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
91-20-3	Naphthalene	4.6		4.6	0.49	
91-57-6	2-Methylnaphthalene	1.8	J	4.6	0.49	
208-96-8	Acenaphthylene	1.3	J	4.6	0.32	
83-32-9	Acenaphthene	1.1	J	4.6	0.23	
86-73-7	Fluorene	1.4	J	4.6	0.27	
132-64-9	Dibenzofuran	1.6	J	4.6	0.25	
85-01-8	Phenanthrene	7.9		4.6	0.47	
120-12-7	Anthracene	3.6	J	4.6	0.32	
206-44-0	Fluoranthene	18		4.6	0.49	
129-00-0	Pyrene	23		4.6	0.52	
205-99-2	Benzo(b)fluoranthene	12		4.6	0.69	
207-08-9	Benzo(k)fluoranthene	8.4		4.6	0.47	
56-55-3	Benz(a)anthracene	7.6		4.6	0.23	
218-01-9	Chrysene	12		4.6	0.59	
50-32-8	Benzo(a)pyrene	8.4		4.6	0.32	
193-39-5	Indeno(1,2,3-cd)pyrene	7.6		4.6	0.35	
53-70-3	Dibenz(a,h)anthracene	1.6	J	4.6	0.37	
191-24-2	Benzo(g,h,i)perylene	7.8		4.6	0.33	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	67	40-130	09/11/04	Acceptable
Fluoranthene-d10	73	40-130	09/11/04	Acceptable
Terphenyl-d14	90	40-130	09/11/04	Acceptable

Comments: _____

4139

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
 Project: LDW Benthic Invertebrate Survey/04-08-06-21
 Sample Matrix: Sediment

Service Request: K2406516
 Date Collected: 08/26/2004
 Date Received: 08/30/2004
 Date Extracted: 09/01/2004
 Date Analyzed: 09/10/2004

Polynuclear Aromatic Hydrocarbons

Sample Name: LDW-C1-S
 Lab Code: K2406516-014
 File ID: J:\MS11\DATA\091004\0910F034.D
 Instrument ID: MS11
 Extraction Method: EPA 3541
 Analysis Method: 8270C SIM

Units: ug/Kg
 Basis: Dry
 Level: Low

Extraction Lot: KWG0413012
 Calibration ID: CAL3798

Sample Amount: 13.91 g
 % Solids: 74.2
 Dilution Factor: 1

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
91-20-3	Naphthalene	2.7 J	4.9	0.46	
91-57-6	2-Methylnaphthalene	1.6 J	4.9	0.46	
208-96-8	Acenaphthylene	3.4 J	4.9	0.30	
83-32-9	Acenaphthene	1.1 J	4.9	0.22	
86-73-7	Fluorene	2.0 J	4.9	0.26	
132-64-9	Dibenzofuran	1.2 J	4.9	0.23	
85-01-8	Phenanthrene	16	4.9	0.45	
120-12-7	Anthracene	7.3	4.9	0.30	
206-44-0	Fluoranthene	33	4.9	0.46	
129-00-0	Pyrene	33	4.9	0.49	
205-99-2	Benzo(b)fluoranthene	16	4.9	0.65	
207-08-9	Benzo(k)fluoranthene	14	4.9	0.45	
56-55-3	Benz(a)anthracene	14	4.9	0.22	
218-01-9	Chrysene	30	4.9	0.56	
50-32-8	Benzo(a)pyrene	14	4.9	0.30	
193-39-5	Indeno(1,2,3-cd)pyrene	11	4.9	0.33	
53-70-3	Dibenz(a,h)anthracene	2.2 J	4.9	0.36	
191-24-2	Benzo(g,h,i)perylene	11	4.9	0.31	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	44	40-130	09/10/04	Acceptable
Fluoranthene-d10	53	40-130	09/10/04	Acceptable
Terphenyl-d14	70	40-130	09/10/04	Acceptable

Comments: _____

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Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406516
Date Extracted: 09/01/2004
Date Analyzed: 09/11/2004

**Duplicate Sample Summary
 Polynuclear Aromatic Hydrocarbons**

Sample Name: LDW-C1-S
Lab Code: K2406516-014
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Dry
Level: Low
Extraction Lot: KWG0413012

Analyte Name	MRL	MDL	Sample Result	LDW-C1-SDUP KWG0413012-7 Duplicate Sample		Relative Percent Difference	RPD Limit
				Result	Average		
Naphthalene	4.9	0.46	2.7	4.9	3.8	58 #	50
2-Methylnaphthalene	4.9	0.46	1.6	1.7	1.6	7 #	50
Acenaphthylene	4.9	0.30	3.4	4.6	4.0	30 #	50
Acenaphthene	4.9	0.22	1.1	1.6	1.4	41 #	50
Fluorene	4.9	0.26	2.0	2.5	2.3	21 #	50
Dibenzofuran	4.9	0.23	1.2	1.3	1.3	7 #	50
Phenanthrene	4.9	0.45	16	19	17	16	50
Anthracene	4.9	0.30	7.3	9.0	8.2	21 #	50
Fluoranthene	4.9	0.46	33	45	39	30	50
Pyrene	4.9	0.49	33	42	38	24	50
Benzo(b)fluoranthene	4.9	0.65	16	18	17	16	50
Benzo(k)fluoranthene	4.9	0.45	14	17	15	15	50
Benz(a)anthracene	4.9	0.22	14	18	16	25	50
Chrysene	4.9	0.56	30	41	36	33	50
Benzo(a)pyrene	4.9	0.30	14	18	16	20	50
Indeno(1,2,3-cd)pyrene	4.9	0.33	11	13	12	16	50
Dibenz(a,h)anthracene	4.9	0.36	2.2	2.6	2.4	20 #	50
Benzo(g,h,i)perylene	4.9	0.31	11	12	12	7	50

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

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Analytical Results

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406517
Date Collected: 08/26/2004
Date Received: 08/28/2004
Date Extracted: 09/13/2004
Date Analyzed: 10/05/2004

Polynuclear Aromatic Hydrocarbons

Sample Name: LDW-C8-T
Lab Code: K2406517-001
File ID: J:\MS14\DATA\100504\1005F022.D
Instrument ID: MS14

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Extraction Lot: KWG0413793
Calibration ID: CAL3873

Sample Amount: 10.05 g
% Solids: NA
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
91-20-3	Naphthalene	1.6		1.0	0.26	
91-57-6	2-Methylnaphthalene	1.9		1.0	0.15	
208-96-8	Acenaphthylene	1.5		0.50	0.050	
83-32-9	Acenaphthene	7.6		0.50	0.074	
132-64-9	Dibenzofuran	2.8		0.50	0.052	
86-73-7	Fluorene	4.6		0.50	0.054	
85-01-8	Phenanthrene	26		0.50	0.066	
120-12-7	Anthracene	8.0		0.50	0.055	
206-44-0	Fluoranthene	120		0.50	0.053	
129-00-0	Pyrene	130		0.50	0.070	
56-55-3	Benz(a)anthracene	42		0.50	0.054	
218-01-9	Chrysene	85		0.50	0.080	
205-99-2	Benzo(b)fluoranthene	44		0.50	0.045	
207-08-9	Benzo(k)fluoranthene	38		0.50	0.081	
50-32-8	Benzo(a)pyrene	26		0.50	0.076	
193-39-5	Indeno(1,2,3-cd)pyrene	28		0.50	0.073	
53-70-3	Dibenz(a,h)anthracene	5.1		0.50	0.079	
191-24-2	Benzo(g,h,i)perylene	32		0.50	0.097	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	63	20-130	10/05/04	Acceptable
Fluoranthene-d10	75	20-130	10/05/04	Acceptable
Terphenyl-d14	77	20-130	10/05/04	Acceptable

Comments: _____

Analytical Results

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406517
Date Collected: 08/26/2004
Date Received: 08/28/2004
Date Extracted: 09/13/2004
Date Analyzed: 10/05/2004

Polynuclear Aromatic Hydrocarbons

Sample Name: LDW-C7-T2
Lab Code: K2406517-002
File ID: J:\MS14\DATA\100504\1005F023.D
Instrument ID: MS14

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Extraction Lot: KWG0413793
Calibration ID: CAL3873

Sample Amount: 10.14 g
% Solids: NA
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
91-20-3	Naphthalene	0.80	J	0.99	0.26	
91-57-6	2-Methylnaphthalene	0.79	J	0.99	0.15	
208-96-8	Acenaphthylene	1.1		0.50	0.050	
83-32-9	Acenaphthene	2.2		0.50	0.074	
132-64-9	Dibenzofuran	1.5		0.50	0.052	
86-73-7	Fluorene	2.3		0.50	0.054	
85-01-8	Phenanthrene	11		0.50	0.066	
120-12-7	Anthracene	4.3		0.50	0.055	
206-44-0	Fluoranthene	84		0.50	0.053	
129-00-0	Pyrene	81		0.50	0.070	
56-55-3	Benz(a)anthracene	23		0.50	0.054	
218-01-9	Chrysene	52		0.50	0.080	
205-99-2	Benzo(b)fluoranthene	21		0.50	0.045	
207-08-9	Benzo(k)fluoranthene	18		0.50	0.081	
50-32-8	Benzo(a)pyrene	9.8		0.50	0.076	
193-39-5	Indeno(1,2,3-cd)pyrene	10		0.50	0.073	
53-70-3	Dibenz(a,h)anthracene	1.9		0.50	0.079	
191-24-2	Benzo(g,h,i)perylene	15		0.50	0.097	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	68	20-130	10/05/04	Acceptable
Fluoranthene-d10	82	20-130	10/05/04	Acceptable
Terphenyl-d14	87	20-130	10/05/04	Acceptable

Comments: _____

Analytical Results

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406517
Date Collected: 08/26/2004
Date Received: 08/28/2004
Date Extracted: 09/13/2004
Date Analyzed: 10/05/2004

Polynuclear Aromatic Hydrocarbons

Sample Name: LDW-C7-T1
Lab Code: K2406517-003
File ID: J:\MS14\DATA\100504\1005F024.D
Instrument ID: MS14

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Extraction Lot: KWG0413793
Calibration ID: CAL3873

Sample Amount: 10.12 g
% Solids: NA
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
91-20-3	Naphthalene	0.90	J	0.99	0.26	
91-57-6	2-Methylnaphthalene	0.77	J	0.99	0.15	
208-96-8	Acenaphthylene	1.6		0.50	0.050	
83-32-9	Acenaphthene	2.6		0.50	0.074	
132-64-9	Dibenzofuran	1.6		0.50	0.052	
86-73-7	Fluorene	2.6		0.50	0.054	
85-01-8	Phenanthrene	13		0.50	0.066	
120-12-7	Anthracene	5.6		0.50	0.055	
206-44-0	Fluoranthene	88		0.50	0.053	
129-00-0	Pyrene	81		0.50	0.070	
56-55-3	Benz(a)anthracene	31		0.50	0.054	
218-01-9	Chrysene	58		0.50	0.080	
205-99-2	Benzo(b)fluoranthene	24		0.50	0.045	
207-08-9	Benzo(k)fluoranthene	22		0.50	0.081	
50-32-8	Benzo(a)pyrene	14		0.50	0.076	
193-39-5	Indeno(1,2,3-cd)pyrene	8.6		0.50	0.073	
53-70-3	Dibenz(a,h)anthracene	1.7		0.50	0.079	
191-24-2	Benzo(g,h,i)perylene	16		0.50	0.097	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	67	20-130	10/05/04	Acceptable
Fluoranthene-d10	86	20-130	10/05/04	Acceptable
Terphenyl-d14	88	20-130	10/05/04	Acceptable

Comments: _____

Analytical Results

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406517
Date Collected: 08/26/2004
Date Received: 08/28/2004
Date Extracted: 09/13/2004
Date Analyzed: 10/05/2004

Polynuclear Aromatic Hydrocarbons

Sample Name: LDW-C1-T
Lab Code: K2406517-004
File ID: J:\MS14\DATA\100504\1005F025.D
Instrument ID: MS14

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Extraction Lot: KWG0413793
Calibration ID: CAL3873

Sample Amount: 10.05 g
% Solids: NA
Dilution Factor: 1

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
91-20-3	Naphthalene	0.79 J	1.0	0.26	
91-57-6	2-Methylnaphthalene	0.87 J	1.0	0.15	
208-96-8	Acenaphthylene	0.68	0.50	0.050	
83-32-9	Acenaphthene	1.1	0.50	0.074	
132-64-9	Dibenzofuran	1.0	0.50	0.052	
86-73-7	Fluorene	1.5	0.50	0.054	
85-01-8	Phenanthrene	9.0	0.50	0.066	
120-12-7	Anthracene	2.7	0.50	0.055	
206-44-0	Fluoranthene	57	0.50	0.053	
129-00-0	Pyrene	48	0.50	0.070	
56-55-3	Benz(a)anthracene	21	0.50	0.054	
218-01-9	Chrysene	37	0.50	0.080	
205-99-2	Benzo(b)fluoranthene	14	0.50	0.045	
207-08-9	Benzo(k)fluoranthene	12	0.50	0.081	
50-32-8	Benzo(a)pyrene	6.2	0.50	0.076	
193-39-5	Indeno(1,2,3-cd)pyrene	3.9	0.50	0.073	
53-70-3	Dibenz(a,h)anthracene	1.4	0.50	0.079	
191-24-2	Benzo(g,h,i)perylene	6.1	0.50	0.097	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	63	20-130	10/05/04	Acceptable
Fluoranthene-d10	76	20-130	10/05/04	Acceptable
Terphenyl-d14	83	20-130	10/05/04	Acceptable

Comments: _____

Analytical Results

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406517
Date Collected: 08/26/2004
Date Received: 08/28/2004
Date Extracted: 09/13/2004
Date Analyzed: 10/05/2004

Polynuclear Aromatic Hydrocarbons

Sample Name: LDW-C2-T1
Lab Code: K2406517-005
File ID: J:\MS14\DATA\100504\1005F026.D
Instrument ID: MS14
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Lot: KWG0413793
Calibration ID: CAL3873

Sample Amount: 10.04 g
% Solids: NA
Dilution Factor: 1

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
91-20-3	Naphthalene	0.71 J	1.0	0.26	
91-57-6	2-Methylnaphthalene	0.73 J	1.0	0.15	
208-96-8	Acenaphthylene	0.60	0.50	0.050	
83-32-9	Acenaphthene	0.97	0.50	0.074	
132-64-9	Dibenzofuran	0.84	0.50	0.052	
86-73-7	Fluorene	1.2	0.50	0.054	
85-01-8	Phenanthrene	6.7	0.50	0.066	
120-12-7	Anthracene	2.0	0.50	0.055	
206-44-0	Fluoranthene	48	0.50	0.053	
129-00-0	Pyrene	39	0.50	0.070	
56-55-3	Benz(a)anthracene	15	0.50	0.054	
218-01-9	Chrysene	27	0.50	0.080	
205-99-2	Benzo(b)fluoranthene	7.8	0.50	0.045	
207-08-9	Benzo(k)fluoranthene	6.8	0.50	0.081	
50-32-8	Benzo(a)pyrene	3.0	0.50	0.076	
193-39-5	Indeno(1,2,3-cd)pyrene	2.1	0.50	0.073	
53-70-3	Dibenz(a,h)anthracene	0.81	0.50	0.079	
191-24-2	Benzo(g,h,i)perylene	3.3	0.50	0.097	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	70	20-130	10/05/04	Acceptable
Fluoranthene-d10	83	20-130	10/05/04	Acceptable
Terphenyl-d14	86	20-130	10/05/04	Acceptable

Comments: _____

Analytical Results

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406517
Date Collected: 08/26/2004
Date Received: 08/28/2004
Date Extracted: 09/13/2004
Date Analyzed: 10/05/2004

Polynuclear Aromatic Hydrocarbons

Sample Name: LDW-C2-T2
Lab Code: K2406517-006
File ID: J:\MS14\DATA\100504\1005F021.D
Instrument ID: MS14

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Extraction Lot: KWG0413793
Calibration ID: CAL3873

Sample Amount: 10.10 g
% Solids: NA
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
91-20-3	Naphthalene	0.83	J	1.0	0.26	
91-57-6	2-Methylnaphthalene	0.77	J	1.0	0.15	
208-96-8	Acenaphthylene	0.79		0.50	0.050	
83-32-9	Acenaphthene	1.1		0.50	0.074	
132-64-9	Dibenzofuran	1.0		0.50	0.052	
86-73-7	Fluorene	1.5		0.50	0.054	
85-01-8	Phenanthrene	7.0		0.50	0.066	
120-12-7	Anthracene	2.8		0.50	0.055	
206-44-0	Fluoranthene	58		0.50	0.053	
129-00-0	Pyrene	47		0.50	0.070	
56-55-3	Benz(a)anthracene	18		0.50	0.054	
218-01-9	Chrysene	30		0.50	0.080	
205-99-2	Benzo(b)fluoranthene	9.0		0.50	0.045	
207-08-9	Benzo(k)fluoranthene	9.0		0.50	0.081	
50-32-8	Benzo(a)pyrene	4.4		0.50	0.076	
193-39-5	Indeno(1,2,3-cd)pyrene	2.2		0.50	0.073	
53-70-3	Dibenz(a,h)anthracene	0.89		0.50	0.079	
191-24-2	Benzo(g,h,i)perylene	4.3		0.50	0.097	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	68	20-130	10/05/04	Acceptable
Fluoranthene-d10	82	20-130	10/05/04	Acceptable
Terphenyl-d14	95	20-130	10/05/04	Acceptable

Comments:

Analytical Results

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406517
Date Collected: 08/25/2004
Date Received: 08/28/2004
Date Extracted: 09/13/2004
Date Analyzed: 10/05/2004

Polynuclear Aromatic Hydrocarbons

Sample Name: LDW-C10-T2
Lab Code: K2406517-007
File ID: J:\MS14\DATA\100504\1005F027.D
Instrument ID: MS14

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Extraction Lot: KWG0413793
Calibration ID: CAL3873

Sample Amount: 10.05 g
% Solids: NA
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
91-20-3	Naphthalene	0.59	J	1.0	0.26	
91-57-6	2-Methylnaphthalene	0.44	J	1.0	0.15	
208-96-8	Acenaphthylene	0.56		0.50	0.050	
83-32-9	Acenaphthene	1.2		0.50	0.074	
132-64-9	Dibenzofuran	0.62		0.50	0.052	
86-73-7	Fluorene	0.81		0.50	0.054	
85-01-8	Phenanthrene	4.4		0.50	0.066	
120-12-7	Anthracene	1.8		0.50	0.055	
206-44-0	Fluoranthene	37		0.50	0.053	
129-00-0	Pyrene	36		0.50	0.070	
56-55-3	Benz(a)anthracene	12		0.50	0.054	
218-01-9	Chrysene	20		0.50	0.080	
205-99-2	Benzo(b)fluoranthene	7.3		0.50	0.045	
207-08-9	Benzo(k)fluoranthene	6.2		0.50	0.081	
50-32-8	Benzo(a)pyrene	4.3		0.50	0.076	
193-39-5	Indeno(1,2,3-cd)pyrene	2.8		0.50	0.073	
53-70-3	Dibenz(a,h)anthracene	0.65		0.50	0.079	
191-24-2	Benzo(g,h,i)perylene	7.1		0.50	0.097	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	72	20-130	10/05/04	Acceptable
Fluoranthene-d10	87	20-130	10/05/04	Acceptable
Terphenyl-d14	92	20-130	10/05/04	Acceptable

Comments: _____

Analytical Results

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406517
Date Collected: 08/25/2004
Date Received: 08/28/2004
Date Extracted: 09/13/2004
Date Analyzed: 10/05/2004

Polynuclear Aromatic Hydrocarbons

Sample Name: LDW-C10-T1
Lab Code: K2406517-008
File ID: J:\MS14\DATA\100504\1005F028.D
Instrument ID: MS14

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Extraction Lot: KWG0413793
Calibration ID: CAL3873

Sample Amount: 10.11 g
% Solids: NA
Dilution Factor: 1

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
91-20-3	Naphthalene	0.57 J	0.99	0.26	
91-57-6	2-Methylnaphthalene	0.41 J	0.99	0.15	
208-96-8	Acenaphthylene	0.61	0.50	0.050	
83-32-9	Acenaphthene	0.82	0.50	0.074	
132-64-9	Dibenzofuran	0.61	0.50	0.052	
86-73-7	Fluorene	0.93	0.50	0.054	
85-01-8	Phenanthrene	4.0	0.50	0.066	
120-12-7	Anthracene	1.8	0.50	0.055	
206-44-0	Fluoranthene	34	0.50	0.053	
129-00-0	Pyrene	34	0.50	0.070	
56-55-3	Benz(a)anthracene	12	0.50	0.054	
218-01-9	Chrysene	20	0.50	0.080	
205-99-2	Benzo(b)fluoranthene	8.2	0.50	0.045	
207-08-9	Benzo(k)fluoranthene	6.5	0.50	0.081	
50-32-8	Benzo(a)pyrene	4.6	0.50	0.076	
193-39-5	Indeno(1,2,3-cd)pyrene	3.1	0.50	0.073	
53-70-3	Dibenz(a,h)anthracene	1.3	0.50	0.079	
191-24-2	Benzo(g,h,i)perylene	8.0	0.50	0.097	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	66	20-130	10/05/04	Acceptable
Fluoranthene-d10	80	20-130	10/05/04	Acceptable
Terphenyl-d14	85	20-130	10/05/04	Acceptable

Comments: _____

Analytical Results

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406517
Date Collected: 08/27/2004
Date Received: 08/28/2004
Date Extracted: 09/13/2004
Date Analyzed: 10/06/2004

Polynuclear Aromatic Hydrocarbons

Sample Name: LDW-C5-T
Lab Code: K2406517-009
File ID: J:\MS14\DATA\100604\1006F009.D
Instrument ID: MS14

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Extraction Lot: KWG0413793
Calibration ID: CAL3873

Sample Amount: 10.01 g
% Solids: NA
Dilution Factor: 1

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
91-20-3	Naphthalene	0.96 J	1.0	0.26	
91-57-6	2-Methylnaphthalene	0.88 J	1.0	0.15	
208-96-8	Acenaphthylene	1.9	0.50	0.050	
83-32-9	Acenaphthene	3.0	0.50	0.074	
132-64-9	Dibenzofuran	2.3	0.50	0.052	
86-73-7	Fluorene	3.7	0.50	0.054	
85-01-8	Phenanthrene	19	0.50	0.066	
120-12-7	Anthracene	7.2	0.50	0.055	
206-44-0	Fluoranthene	110	0.50	0.053	
129-00-0	Pyrene	97	0.50	0.070	
56-55-3	Benz(a)anthracene	39	0.50	0.054	
218-01-9	Chrysene	63	0.50	0.080	
205-99-2	Benzo(b)fluoranthene	23	0.50	0.045	
207-08-9	Benzo(k)fluoranthene	18	0.50	0.081	
50-32-8	Benzo(a)pyrene	13	0.50	0.076	
193-39-5	Indeno(1,2,3-cd)pyrene	5.4	0.50	0.073	
53-70-3	Dibenz(a,h)anthracene	1.4	0.50	0.079	
191-24-2	Benzo(g,h,i)perylene	12	0.50	0.097	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	76	20-130	10/06/04	Acceptable
Fluoranthene-d10	85	20-130	10/06/04	Acceptable
Terphenyl-d14	92	20-130	10/06/04	Acceptable

Comments: _____

Analytical Results

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406517
Date Collected: 08/27/2004
Date Received: 08/28/2004
Date Extracted: 09/13/2004
Date Analyzed: 10/06/2004

Polynuclear Aromatic Hydrocarbons

Sample Name: LDW-C3-T2
Lab Code: K2406517-010
File ID: J:\MS14\DATA\100604\1006F010.D
Instrument ID: MS14

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Extraction Lot: KWG0413793
Calibration ID: CAL3873

Sample Amount: 10.06 g
% Solids: NA
Dilution Factor: 1

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
91-20-3	Naphthalene	0.91 J	1.0	0.26	
91-57-6	2-Methylnaphthalene	1.1	1.0	0.15	
208-96-8	Acenaphthylene	1.1	0.50	0.050	
83-32-9	Acenaphthene	1.5	0.50	0.074	
132-64-9	Dibenzofuran	1.4	0.50	0.052	
86-73-7	Fluorene	2.1	0.50	0.054	
85-01-8	Phenanthrene	11	0.50	0.066	
120-12-7	Anthracene	3.4	0.50	0.055	
206-44-0	Fluoranthene	74	0.50	0.053	
129-00-0	Pyrene	62	0.50	0.070	
56-55-3	Benz(a)anthracene	19	0.50	0.054	
218-01-9	Chrysene	36	0.50	0.080	
205-99-2	Benzo(b)fluoranthene	11	0.50	0.045	
207-08-9	Benzo(k)fluoranthene	9.8	0.50	0.081	
50-32-8	Benzo(a)pyrene	4.8	0.50	0.076	
193-39-5	Indeno(1,2,3-cd)pyrene	2.7	0.50	0.073	
53-70-3	Dibenz(a,h)anthracene	0.63	0.50	0.079	
191-24-2	Benzo(g,h,i)perylene	5.5	0.50	0.097	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	72	20-130	10/06/04	Acceptable
Fluoranthene-d10	81	20-130	10/06/04	Acceptable
Terphenyl-d14	87	20-130	10/06/04	Acceptable

Comments: _____

Analytical Results

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406517
Date Collected: 08/27/2004
Date Received: 08/28/2004
Date Extracted: 09/13/2004
Date Analyzed: 10/06/2004

Polynuclear Aromatic Hydrocarbons

Sample Name: LDW-C3-T1
Lab Code: K2406517-011
File ID: J:\MS14\DATA\100604\1006F011.D
Instrument ID: MS14

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Extraction Lot: KWG0413793
Calibration ID: CAL3873

Sample Amount: 10.01 g
% Solids: NA
Dilution Factor: 1

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
91-20-3	Naphthalene	0.83 J	1.0	0.26	
91-57-6	2-Methylnaphthalene	1.1	1.0	0.15	
208-96-8	Acenaphthylene	1.2	0.50	0.050	
83-32-9	Acenaphthene	1.8	0.50	0.074	
132-64-9	Dibenzofuran	1.3	0.50	0.052	
86-73-7	Fluorene	2.1	0.50	0.054	
85-01-8	Phenanthrene	11	0.50	0.066	
120-12-7	Anthracene	3.7	0.50	0.055	
206-44-0	Fluoranthene	74	0.50	0.053	
129-00-0	Pyrene	61	0.50	0.070	
56-55-3	Benz(a)anthracene	21	0.50	0.054	
218-01-9	Chrysene	39	0.50	0.080	
205-99-2	Benzo(b)fluoranthene	11	0.50	0.045	
207-08-9	Benzo(k)fluoranthene	9.8	0.50	0.081	
50-32-8	Benzo(a)pyrene	5.4	0.50	0.076	
193-39-5	Indeno(1,2,3-cd)pyrene	3.3	0.50	0.073	
53-70-3	Dibenz(a,h)anthracene	1.2	0.50	0.079	
191-24-2	Benzo(g,h,i)perylene	6.0	0.50	0.097	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	77	20-130	10/06/04	Acceptable
Fluoranthene-d10	87	20-130	10/06/04	Acceptable
Terphenyl-d14	97	20-130	10/06/04	Acceptable

Comments: _____

Analytical Results

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406517
Date Collected: 08/25/2004
Date Received: 08/28/2004
Date Extracted: 09/13/2004
Date Analyzed: 10/06/2004

Polynuclear Aromatic Hydrocarbons

Sample Name: LDW-C9-T
Lab Code: K2406517-012
File ID: J:\MS14\DATA\100604\1006F012.D
Instrument ID: MS14
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Wet
Level: Low
Extraction Lot: KWG0413793
Calibration ID: CAL3873

Sample Amount: 10.05 g
% Solids: NA
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
91-20-3	Naphthalene	0.78	J	1.0	0.26	
91-57-6	2-Methylnaphthalene	0.69	J	1.0	0.15	
208-96-8	Acenaphthylene	1.3		0.50	0.050	
83-32-9	Acenaphthene	1.6		0.50	0.074	
132-64-9	Dibenzofuran	1.3		0.50	0.052	
86-73-7	Fluorene	1.8		0.50	0.054	
85-01-8	Phenanthrene	10		0.50	0.066	
120-12-7	Anthracene	4.8		0.50	0.055	
206-44-0	Fluoranthene	74		0.50	0.053	
129-00-0	Pyrene	66		0.50	0.070	
56-55-3	Benz(a)anthracene	26		0.50	0.054	
218-01-9	Chrysene	44		0.50	0.080	
205-99-2	Benzo(b)fluoranthene	14		0.50	0.045	
207-08-9	Benzo(k)fluoranthene	12		0.50	0.081	
50-32-8	Benzo(a)pyrene	7.2		0.50	0.076	
193-39-5	Indeno(1,2,3-cd)pyrene	4.0		0.50	0.073	
53-70-3	Dibenz(a,h)anthracene	0.85		0.50	0.079	
191-24-2	Benzo(g,h,i)perylene	8.0		0.50	0.097	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	67	20-130	10/06/04	Acceptable
Fluoranthene-d10	78	20-130	10/06/04	Acceptable
Terphenyl-d14	84	20-130	10/06/04	Acceptable

Comments: _____

Analytical Results

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406517
Date Collected: 08/25/2004
Date Received: 08/28/2004
Date Extracted: 09/13/2004
Date Analyzed: 10/06/2004

Polynuclear Aromatic Hydrocarbons

Sample Name: LDW-C6-T
Lab Code: K2406517-013
File ID: J:\MS14\DATA\100604\1006F013.D
Instrument ID: MS14

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Extraction Lot: KWG0413793
Calibration ID: CAL3873

Sample Amount: 10.08 g
% Solids: NA
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
91-20-3	Naphthalene	0.80	J	1.0	0.26	
91-57-6	2-Methylnaphthalene	0.66	J	1.0	0.15	
208-96-8	Acenaphthylene	0.96		0.50	0.050	
83-32-9	Acenaphthene	1.8		0.50	0.074	
132-64-9	Dibenzofuran	1.6		0.50	0.052	
86-73-7	Fluorene	2.0		0.50	0.054	
85-01-8	Phenanthrene	10		0.50	0.066	
120-12-7	Anthracene	3.4		0.50	0.055	
206-44-0	Fluoranthene	62		0.50	0.053	
129-00-0	Pyrene	54		0.50	0.070	
56-55-3	Benz(a)anthracene	21		0.50	0.054	
218-01-9	Chrysene	34		0.50	0.080	
205-99-2	Benzo(b)fluoranthene	11		0.50	0.045	
207-08-9	Benzo(k)fluoranthene	8.4		0.50	0.081	
50-32-8	Benzo(a)pyrene	5.2		0.50	0.076	
193-39-5	Indeno(1,2,3-cd)pyrene	3.0		0.50	0.073	
53-70-3	Dibenz(a,h)anthracene	0.74		0.50	0.079	
191-24-2	Benzo(g,h,i)perylene	5.3		0.50	0.097	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	69	20-130	10/06/04	Acceptable
Fluoranthene-d10	79	20-130	10/06/04	Acceptable
Terphenyl-d14	84	20-130	10/06/04	Acceptable

Comments: _____

Analytical Results

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406517
Date Collected: 08/27/2004
Date Received: 08/28/2004
Date Extracted: 09/13/2004
Date Analyzed: 10/06/2004

Polynuclear Aromatic Hydrocarbons

Sample Name: LDW-C4-T
Lab Code: K2406517-014
File ID: J:\MS14\DATA\100604\1006F014.D
Instrument ID: MS14

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Extraction Lot: KWG0413793
Calibration ID: CAL3873

Sample Amount: 10.11 g
% Solids: NA
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
91-20-3	Naphthalene	1.0		0.99	0.26	
91-57-6	2-Methylnaphthalene	0.90	J	0.99	0.15	
208-96-8	Acenaphthylene	1.5		0.50	0.050	
83-32-9	Acenaphthene	1.5		0.50	0.074	
132-64-9	Dibenzofuran	1.2		0.50	0.052	
86-73-7	Fluorene	1.9		0.50	0.054	
85-01-8	Phenanthrene	9.2		0.50	0.066	
120-12-7	Anthracene	3.7		0.50	0.055	
206-44-0	Fluoranthene	65		0.50	0.053	
129-00-0	Pyrene	57		0.50	0.070	
56-55-3	Benz(a)anthracene	23		0.50	0.054	
218-01-9	Chrysene	42		0.50	0.080	
205-99-2	Benzo(b)fluoranthene	13		0.50	0.045	
207-08-9	Benzo(k)fluoranthene	11		0.50	0.081	
50-32-8	Benzo(a)pyrene	7.3		0.50	0.076	
193-39-5	Indeno(1,2,3-cd)pyrene	4.7		0.50	0.073	
53-70-3	Dibenz(a,h)anthracene	1.2		0.50	0.079	
191-24-2	Benzo(g,h,i)perylene	8.6		0.50	0.097	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	66	20-130	10/06/04	Acceptable
Fluoranthene-d10	81	20-130	10/06/04	Acceptable
Terphenyl-d14	82	20-130	10/06/04	Acceptable

Comments:

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406517
Date Extracted: 09/13/2004
Date Analyzed: 10/05/2004

**Duplicate Sample Summary
 Polynuclear Aromatic Hydrocarbons**

Sample Name: LDW-C2-T2
Lab Code: K2406517-006
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Wet
Level: Low
Extraction Lot: KWG0413793

Analyte Name	MRL	MDL	Sample Result	LDW-C2-T2DUP KWG0413793-6 Duplicate Sample		Relative Percent Difference	RPD Limit
				Result	Average		
Naphthalene	1.0	0.26	0.83	0.80	0.82	4 #	50
2-Methylnaphthalene	1.0	0.15	0.77	0.76	0.76	1 #	50
Acenaphthylene	0.50	0.050	0.79	0.86	0.83	8 #	50
Acenaphthene	0.50	0.074	1.1	1.2	1.2	9	50
Dibenzofuran	0.50	0.052	1.0	1.1	1.1	8	50
Fluorene	0.50	0.054	1.5	1.4	1.4	5	50
Phenanthrene	0.50	0.066	7.0	7.5	7.3	7	50
Anthracene	0.50	0.055	2.8	2.9	2.8	4	50
Fluoranthene	0.50	0.053	58	60	59	3	50
Pyrene	0.50	0.070	47	49	48	4	50
Benz(a)anthracene	0.50	0.054	18	19	18	3	50
Chrysene	0.50	0.080	30	31	30	4	50
Benzo(b)fluoranthene	0.50	0.045	9.0	9.9	9.5	9	50
Benzo(k)fluoranthene	0.50	0.081	9.0	8.8	8.9	2	50
Benzo(a)pyrene	0.50	0.076	4.4	4.8	4.6	9	50
Indeno(1,2,3-cd)pyrene	0.50	0.073	2.2	2.4	2.3	10	50
Dibenz(a,h)anthracene	0.50	0.079	0.89	1.1	0.98	20 #	50
Benzo(g,h,i)perylene	0.50	0.097	4.3	4.6	4.4	7	50

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406519
Date Collected: 08/27/2004
Date Received: 08/30/2004
Date Extracted: 09/22/2004
Date Analyzed: 09/28/2004

Polynuclear Aromatic Hydrocarbons

Sample Name: LDW-B9a-S
Lab Code: K2406519-001
File ID: J:\MS11\DATA\092704\0927F051.D
Instrument ID: MS11
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Lot: KWG0414432
Calibration ID: CAL3848

Sample Amount: 19.18 g
% Solids: 52.6
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
91-20-3	Naphthalene	3.6	J	5.0	0.65	
91-57-6	2-Methylnaphthalene	4.2	J	5.0	0.65	
90-12-0	1-Methylnaphthalene	3.7	J	5.0	0.48	
CASID30061	C2-Naphthalenes	11		5.0	4.8	
CASID30071	C3-Naphthalenes	24		5.0	4.8	
CASID30077	C4-Naphthalenes	16		5.0	4.8	
92-52-4	Biphenyl	1.5	J	5.0	0.82	
208-96-8	Acenaphthylene	2.8	J	5.0	0.42	
132-64-9	Dibenzofuran	4.4	J	5.0	0.33	
83-32-9	Acenaphthene	7.9		5.0	0.31	
86-73-7	Fluorene	8.4		5.0	0.37	
CASID30040	C1-Fluorenes	4.8	U	5.0	4.8	
CASID30060	C2-Fluorenes	5.1		5.0	4.8	
CASID30070	C3-Fluorenes	8.9		5.0	4.8	
132-65-0	Dibenzothiophene	4.6	J	5.0	0.44	
CASID30038	C1-Dibenzothiophenes	11		5.0	4.8	
CASID30059	C2-Dibenzothiophenes	5.3		5.0	4.8	
CASID30069	C3-Dibenzothiophenes	13		5.0	4.8	
85-01-8	Phenanthrene	94		5.0	0.63	
120-12-7	Anthracene	27		5.0	0.42	
CASID30042	C1-Phenanthrenes/Anthracenes	42		5.0	4.8	
CASID30062	C2-Phenanthrenes/Anthracenes	27		5.0	4.8	
CASID30072	C3-Phenanthrenes/Anthracenes	21		5.0	4.8	
CASID30078	C4-Phenanthrenes/Anthracenes	23		5.0	4.8	
206-44-0	Fluoranthene	200		5.0	0.65	
129-00-0	Pyrene	180		5.0	0.69	
CASID30039	C1-Fluoranthenes/Pyrenes	100		5.0	4.8	
56-55-3	Benz(a)anthracene	76		5.0	0.31	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406519
Date Collected: 08/27/2004
Date Received: 08/30/2004
Date Extracted: 09/22/2004
Date Analyzed: 09/28/2004

Polynuclear Aromatic Hydrocarbons

Sample Name: LDW-B9a-S
Lab Code: K2406519-001
File ID: J:\MS11\DATA\092704\0927F051.D
Instrument ID: MS11

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Extraction Lot: KWG0414432
Calibration ID: CAL3848

Sample Amount: 19.18 g
% Solids: 52.6
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
218-01-9	Chrysene	100		5.0	0.78	
CASID30037	C1-Chrysenes	52		5.0	4.8	
CASID30058	C2-Chrysenes	30		5.0	4.8	
CASID30068	C3-Chrysenes	20		5.0	4.8	
CASID30074	C4-Chrysenes	12		5.0	4.8	
205-99-2	Benzo(b)fluoranthene	74		5.0	0.92	
207-08-9	Benzo(k)fluoranthene	84		5.0	0.63	
192-97-2	Benzo(e)pyrene	65		5.0	0.75	
50-32-8	Benzo(a)pyrene	80		5.0	0.42	
198-55-0	Perylene	43		5.0	0.33	
193-39-5	Indeno(1,2,3-cd)pyrene	63		5.0	0.46	
53-70-3	Dibenz(a,h)anthracene	13		5.0	0.50	
191-24-2	Benzo(g,h,i)perylene	61		5.0	0.44	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	43	40-130	09/28/04	Acceptable
Fluoranthene-d10	49	40-130	09/28/04	Acceptable
Terphenyl-d14	81	40-130	09/28/04	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406519
Date Collected: 08/26/2004
Date Received: 08/30/2004
Date Extracted: 09/22/2004
Date Analyzed: 09/28/2004

Polynuclear Aromatic Hydrocarbons

Sample Name: LDW-B3a-S
Lab Code: K2406519-005
File ID: J:\MS11\DATA\092704\0927F049.D
Instrument ID: MS11
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Lot: KWG0414432
Calibration ID: CAL3848

Sample Amount: 16.44 g
% Solids: 61.6
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
91-20-3	Naphthalene	3.7	J	5.0	0.56	
91-57-6	2-Methylnaphthalene	2.7	J	5.0	0.56	
90-12-0	1-Methylnaphthalene	2.3	J	5.0	0.41	
CASID30061	C2-Naphthalenes	6.7		5.0	4.1	
CASID30071	C3-Naphthalenes	4.4	J	5.0	4.1	
CASID30077	C4-Naphthalenes	6.0		5.0	4.1	
92-52-4	Biphenyl	1.4	J	5.0	0.70	
208-96-8	Acenaphthylene	4.2	J	5.0	0.36	
132-64-9	Dibenzofuran	2.4	J	5.0	0.28	
83-32-9	Acenaphthene	1.5	J	5.0	0.26	
86-73-7	Fluorene	2.7	J	5.0	0.31	
CASID30040	C1-Fluorenes	4.1	U	5.0	4.1	
CASID30060	C2-Fluorenes	4.1	U	5.0	4.1	
CASID30070	C3-Fluorenes	5.2		5.0	4.1	
132-65-0	Dibenzothiophene	1.1	J	5.0	0.38	
CASID30038	C1-Dibenzothiophenes	4.1	U	5.0	4.1	
CASID30059	C2-Dibenzothiophenes	4.1	U	5.0	4.1	
CASID30069	C3-Dibenzothiophenes	4.1	U	5.0	4.1	
85-01-8	Phenanthrene	29		5.0	0.54	
120-12-7	Anthracene	9.2		5.0	0.36	
CASID30042	C1-Phenanthrenes/Anthracenes	15		5.0	4.1	
CASID30062	C2-Phenanthrenes/Anthracenes	11		5.0	4.1	
CASID30072	C3-Phenanthrenes/Anthracenes	6.8		5.0	4.1	
CASID30078	C4-Phenanthrenes/Anthracenes	5.6		5.0	4.1	
206-44-0	Fluoranthene	55		5.0	0.56	
129-00-0	Pyrene	48		5.0	0.59	
CASID30039	C1-Fluoranthenes/Pyrenes	28		5.0	4.1	
56-55-3	Benz(a)anthracene	17		5.0	0.26	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406519
Date Collected: 08/26/2004
Date Received: 08/30/2004
Date Extracted: 09/22/2004
Date Analyzed: 09/28/2004

Polynuclear Aromatic Hydrocarbons

Sample Name: LDW-B3a-S
Lab Code: K2406519-005
File ID: J:\MS11\DATA\092704\0927F049.D
Instrument ID: MS11
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Lot: KWG0414432
Calibration ID: CAL3848

Sample Amount: 16.44 g
% Solids: 61.6
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
218-01-9	Chrysene	47		5.0	0.67	
CASID30037	C1-Chrysenes	17		5.0	4.1	
CASID30058	C2-Chrysenes	8.7		5.0	4.1	
CASID30068	C3-Chrysenes	7.3		5.0	4.1	
CASID30074	C4-Chrysenes	4.1	U	5.0	4.1	
205-99-2	Benzo(b)fluoranthene	21		5.0	0.78	
207-08-9	Benzo(k)fluoranthene	18		5.0	0.54	
192-97-2	Benzo(e)pyrene	16		5.0	0.64	
50-32-8	Benzo(a)pyrene	17		5.0	0.36	
198-55-0	Perylene	9.0		5.0	0.28	
193-39-5	Indeno(1,2,3-cd)pyrene	13		5.0	0.39	
53-70-3	Dibenz(a,h)anthracene	2.4	J	5.0	0.43	
191-24-2	Benzo(g,h,i)perylene	13		5.0	0.38	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	49	40-130	09/28/04	Acceptable
Fluoranthene-d10	53	40-130	09/28/04	Acceptable
Terphenyl-d14	88	40-130	09/28/04	Acceptable

Comments: _____

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406580
Date Collected: 08/30/2004
Date Received: 08/31/2004
Date Extracted: 09/03/2004
Date Analyzed: 09/25/2004

Polynuclear Aromatic Hydrocarbons

Sample Name: LDW-B7a-S
Lab Code: K2406580-001
File ID: J:\MS11\DATA\092504\0925F021.D
Instrument ID: MS11
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Lot: KWG0413278
Calibration ID: CAL3848

Sample Amount: 20.79 g
% Solids: 51.7
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
91-20-3	Naphthalene	3.5	J	4.7	0.66	
91-57-6	2-Methylnaphthalene	3.8	J	4.7	0.66	
90-12-0	1-Methylnaphthalene	2.8	J	4.7	0.49	
CASID30061	C2-Naphthalenes	16		4.9	4.9	
CASID30071	C3-Naphthalenes	32		4.9	4.9	
CASID30077	C4-Naphthalenes	23		4.9	4.9	
92-52-4	Biphenyl	1.8	J	4.7	0.84	
208-96-8	Acenaphthylene	4.3	J	4.7	0.43	
132-64-9	Dibenzofuran	2.1	J	4.7	0.33	
83-32-9	Acenaphthene	1.6	J	4.7	0.31	
86-73-7	Fluorene	2.9	J	4.7	0.37	
CASID30040	C1-Fluorenes	4.9	U	4.9	4.9	
CASID30060	C2-Fluorenes	6.9		4.9	4.9	
CASID30070	C3-Fluorenes	8.9		4.9	4.9	
132-65-0	Dibenzothiophene	2.0	J	4.7	0.45	
CASID30038	C1-Dibenzothiophenes	6.3		4.9	4.9	
CASID30059	C2-Dibenzothiophenes	5.1		4.9	4.9	
CASID30069	C3-Dibenzothiophenes	4.9	U	4.9	4.9	
85-01-8	Phenanthrene	29		4.7	0.64	
120-12-7	Anthracene	11		4.7	0.43	
CASID30042	C1-Phenanthrenes/Anthracenes	20		4.9	4.9	
CASID30062	C2-Phenanthrenes/Anthracenes	17		4.9	4.9	
CASID30072	C3-Phenanthrenes/Anthracenes	12		4.9	4.9	
CASID30078	C4-Phenanthrenes/Anthracenes	12		4.9	4.9	
206-44-0	Fluoranthene	83		4.7	0.66	
129-00-0	Pyrene	71		4.7	0.70	
CASID30039	C1-Fluoranthenes/Pyrenes	4.9	U	4.9	4.9	
56-55-3	Benz(a)anthracene	30		4.7	0.31	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406580
Date Collected: 08/30/2004
Date Received: 08/31/2004
Date Extracted: 09/03/2004
Date Analyzed: 09/25/2004

Polynuclear Aromatic Hydrocarbons

Sample Name: LDW-B7a-S
Lab Code: K2406580-001
File ID: J:\MS11\DATA\092504\0925F021.D
Instrument ID: MS11
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Lot: KWG0413278
Calibration ID: CAL3848

Sample Amount: 20.79 g
% Solids: 51.7
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
218-01-9	Chrysene	51		4.7	0.80	
CASID30037	C1-Chrysenes	23		4.9	4.9	
CASID30058	C2-Chrysenes	14		4.9	4.9	
CASID30068	C3-Chrysenes	9.4		4.9	4.9	
CASID30074	C4-Chrysenes	4.9	U	4.9	4.9	
205-99-2	Benzo(b)fluoranthene	40		4.7	0.93	
207-08-9	Benzo(k)fluoranthene	39		4.7	0.64	
192-97-2	Benzo(e)pyrene	34		4.7	0.76	
50-32-8	Benzo(a)pyrene	35		4.7	0.43	
198-55-0	Perylene	15		4.7	0.33	
193-39-5	Indeno(1,2,3-cd)pyrene	27		4.7	0.47	
53-70-3	Dibenz(a,h)anthracene	5.5		4.7	0.51	
191-24-2	Benzo(g,h,i)perylene	27		4.7	0.45	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	40	40-130	09/25/04	Acceptable
Fluoranthene-d10	48	40-130	09/25/04	Acceptable
Terphenyl-d14	83	40-130	09/25/04	Acceptable

Comments: _____

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406580
Date Extracted: 09/03/2004
Date Analyzed: 09/25/2004

**Duplicate Sample Summary
 Polynuclear Aromatic Hydrocarbons**

Sample Name: LDW-B7a-S
Lab Code: K2406580-001
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Dry
Level: Low
Extraction Lot: KWG0413278

Analyte Name	MRL	MDL	Sample Result	LDW-B7a-SDUP KWG0413278-5 Duplicate Sample		Relative Percent Difference	RPD Limit
				Result	Average		
Naphthalene	4.7	0.66	3.5	5.5	4.5	46 #	50
2-Methylnaphthalene	4.7	0.66	3.8	5.4	4.6	34 #	50
1-Methylnaphthalene	4.7	0.49	2.8	3.9	3.4	33 #	50
C2-Naphthalenes	4.9	4.9	16	22	19	34	50
C3-Naphthalenes	4.9	4.9	32	35	34	11	50
C4-Naphthalenes	4.9	4.9	23	29	26	21	50
Biphenyl	4.7	0.84	1.8	2.4	2.1	29 #	50
Acenaphthylene	4.7	0.43	4.3	7.1	5.7	48 #	50
Dibenzofuran	4.7	0.33	2.1	4.6	3.3	75 #	50
Acenaphthene	4.7	0.31	1.6	3.5	2.6	72 #	50
Fluorene	4.7	0.37	2.9	6.4	4.7	76 #	50
C1-Fluorenes	4.9	4.9	ND	5.3	NC	NC	50
C2-Fluorenes	4.9	4.9	6.9	10	8.7	42 #	50
C3-Fluorenes	4.9	4.9	8.9	15	12	51 #	50
Dibenzothiophene	4.7	0.45	2.0	3.9	3.0	66 #	50
C1-Dibenzothiophenes	4.9	4.9	6.3	11	8.7	55 #	50
C2-Dibenzothiophenes	4.9	4.9	5.1	9.2	7.1	56 #	50
C3-Dibenzothiophenes	4.9	4.9	ND	ND	ND	-	50
Phenanthrene	4.7	0.64	29	52	40	57 *	50
Anthracene	4.7	0.43	11	20	15	58 *	50
C1-Phenanthrenes/Anthracenes	4.9	4.9	20	30	25	42	50
C2-Phenanthrenes/Anthracenes	4.9	4.9	17	26	21	41	50
C3-Phenanthrenes/Anthracenes	4.9	4.9	12	18	15	40	50
C4-Phenanthrenes/Anthracenes	4.9	4.9	12	16	14	31	50
Fluoranthene	4.7	0.66	83	130	110	44	50
Pyrene	4.7	0.70	71	110	89	42	50
C1-Fluoranthenes/Pyrenes	4.9	4.9	ND	ND	ND	-	50
Benz(a)anthracene	4.7	0.31	30	38	34	23	50
Chrysene	4.7	0.80	51	78	64	42	50
C1-Chrysenes	4.9	4.9	23	32	27	32	50
C2-Chrysenes	4.9	4.9	14	19	17	30	50
C3-Chrysenes	4.9	4.9	9.4	15	12	47 #	50
C4-Chrysenes	4.9	4.9	ND	ND	ND	-	50
Benzo(b)fluoranthene	4.7	0.93	40	64	52	46	50
Benzo(k)fluoranthene	4.7	0.64	39	54	46	32	50

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2406580
Date Extracted: 09/03/2004
Date Analyzed: 09/25/2004

**Duplicate Sample Summary
 Polynuclear Aromatic Hydrocarbons**

Sample Name: LDW-B7a-S
Lab Code: K2406580-001
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Dry
Level: Low
Extraction Lot: KWG0413278

Analyte Name	MRL	MDL	Sample Result	LDW-B7a-SDUP KWG0413278-5 Duplicate Sample		Relative Percent Difference	RPD Limit
				Result	Average		
Benzo(e)pyrene	4.7	0.76	34	51	43	39	50
Benzo(a)pyrene	4.7	0.43	35	46	40	29	50
Perylene	4.7	0.33	15	27	21	56 *	50
Indeno(1,2,3-cd)pyrene	4.7	0.47	27	40	33	40	50
Dibenz(a,h)anthracene	4.7	0.51	5.5	6.9	6.2	23 #	50
Benzo(g,h,i)perylene	4.7	0.45	27	41	34	41	50

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406581
Date Collected: 08/30/2004
Date Received: 08/31/2004
Date Extracted: 09/29/2004
Date Analyzed: 10/07/2004

Polynuclear Aromatic Hydrocarbons

Sample Name: LDW-B7a-T
Lab Code: K2406581-001
File ID: J:\MS14\DATA\100704\1007F007.D
Instrument ID: MS14

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Extraction Lot: KWG0414844
Calibration ID: CAL3873

Sample Amount: 2.01 g
% Solids: NA
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
91-20-3	Naphthalene	6.4	J	25	1.3	
91-57-6	2-Methylnaphthalene	5.6	J	25	0.75	
90-12-0	1-Methylnaphthalene	5.0	J	25	0.65	
92-52-4	Biphenyl	4.9	J	25	0.34	
208-96-8	Acenaphthylene	3.8	J	25	0.25	
132-64-9	Dibenzofuran	3.7	J	25	0.26	
83-32-9	Acenaphthene	4.0	J	25	0.37	
86-73-7	Fluorene	12	J	25	0.27	
132-65-0	Dibenzothiophene	12	J	25	0.70	
85-01-8	Phenanthrene	48		25	0.33	
120-12-7	Anthracene	6.5	J	25	0.28	
206-44-0	Fluoranthene	58		25	0.27	
129-00-0	Pyrene	61		25	0.35	
56-55-3	Benz(a)anthracene	16	J	25	0.27	
218-01-9	Chrysene	33		25	0.40	
205-99-2	Benzo(b)fluoranthene	13	J	25	0.23	
207-08-9	Benzo(k)fluoranthene	8.7	J	25	0.41	
192-97-2	Benzo(e)pyrene	15	J	25	0.060	
50-32-8	Benzo(a)pyrene	6.8	J	25	0.38	
198-55-0	Perylene	0.50	U	25	0.50	
193-39-5	Indeno(1,2,3-cd)pyrene	4.5	J	25	0.37	
53-70-3	Dibenz(a,h)anthracene	1.3	J	25	0.40	
191-24-2	Benzo(g,h,i)perylene	6.0	J	25	0.49	

Comments: _____

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406581
Date Collected: 08/30/2004
Date Received: 08/31/2004
Date Extracted: 09/29/2004
Date Analyzed: 10/07/2004

Polynuclear Aromatic Hydrocarbons

Sample Name: LDW-B7a-T
Lab Code: K2406581-001
File ID: J:\MS14\DATA\100704\1007F007.D
Instrument ID: MS14

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Extraction Lot: KWG0414844
Calibration ID: CAL3873

Sample Amount: 2.01 g
% Solids: NA
Dilution Factor: 1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	71	20-130	10/07/04	Acceptable
Fluoranthene-d10	81	20-130	10/07/04	Acceptable
Terphenyl-d14	89	20-130	10/07/04	Acceptable

Comments: _____

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406581
Date Collected: 08/30/2004
Date Received: 08/31/2004
Date Extracted: 09/29/2004
Date Analyzed: 10/12/2004

Polynuclear Aromatic Hydrocarbons

Sample Name: LDW-B7a-TRE
Lab Code: K2406581-001
File ID: J:\MS14\DATA\101204\1012F017.D
Instrument ID: MS14
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Lot: KWG0414844
Calibration ID: CAL3891

Sample Amount: 2.01 g
% Solids: NA
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
CASID30061	C2-Naphthalenes	68		25	25	
CASID30071	C3-Naphthalenes	120		25	25	
CASID30077	C4-Naphthalenes	110		25	25	
CASID30040	C1-Fluorenes	39		25	25	
CASID30060	C2-Fluorenes	84		25	25	
CASID30070	C3-Fluorenes	92		25	25	
CASID30038	C1-Dibenzothiophenes	46		25	25	
CASID30059	C2-Dibenzothiophenes	36		25	25	
CASID30069	C3-Dibenzothiophenes	25	U	25	25	
CASID30042	C1-Phenanthrenes/Anthracenes	98		25	25	
CASID30062	C2-Phenanthrenes/Anthracenes	94		25	25	
CASID30072	C3-Phenanthrenes/Anthracenes	60		25	25	
CASID30078	C4-Phenanthrenes/Anthracenes	29		25	25	
CASID30039	C1-Fluoranthenes/Pyrenes	43		25	25	
CASID30037	C1-Chrysenes	25	U	25	25	
CASID30058	C2-Chrysenes	25	U	25	25	
CASID30068	C3-Chrysenes	25	U	25	25	
CASID30074	C4-Chrysenes	25	U	25	25	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	76	20-130	10/12/04	Acceptable
Fluoranthene-d10	86	20-130	10/12/04	Acceptable
Terphenyl-d14	93	20-130	10/12/04	Acceptable

Comments: _____

Analytical Results

Client: Windward Environmental
 Project: LDW Benthic Invertebrate Survey/04-08-06-21
 Sample Matrix: Tissue

Service Request: K2406932
 Date Collected: 08/17/2004
 Date Received: 08/20/2004
 Date Extracted: 09/29/2004
 Date Analyzed: 10/07/2004

Polynuclear Aromatic Hydrocarbons

Sample Name: LDW-B8a-T
 Lab Code: K2406932-006
 File ID: J:\MS14\DATA\100704\1007F008.D
 Instrument ID: MS14
 Extraction Method: EPA 3541
 Analysis Method: 8270C SIM

Units: ug/Kg
 Basis: Wet
 Level: Low

Extraction Lot: KWG0414844
 Calibration ID: CAL3873

Sample Amount: 2.02 g
 % Solids: NA
 Dilution Factor: 1

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
91-20-3	Naphthalene	6.5 J	25	1.3	
91-57-6	2-Methylnaphthalene	2.9 J	25	0.75	
90-12-0	1-Methylnaphthalene	3.3 J	25	0.65	
92-52-4	Biphenyl	5.0 J	25	0.34	
208-96-8	Acenaphthylene	1.6 J	25	0.25	
132-64-9	Dibenzofuran	32	25	0.26	
83-32-9	Acenaphthene	35	25	0.37	
86-73-7	Fluorene	57	25	0.27	
132-65-0	Dibenzothiophene	18 J	25	0.70	
85-01-8	Phenanthrene	320	25	0.33	
120-12-7	Anthracene	32	25	0.28	
206-44-0	Fluoranthene	270	25	0.27	
129-00-0	Pyrene	230	25	0.35	
56-55-3	Benz(a)anthracene	41	25	0.27	
218-01-9	Chrysene	42	25	0.40	
205-99-2	Benzo(b)fluoranthene	13 J	25	0.23	
207-08-9	Benzo(k)fluoranthene	12 J	25	0.41	
192-97-2	Benzo(e)pyrene	13 J	25	0.060	
50-32-8	Benzo(a)pyrene	9.3 J	25	0.38	
198-55-0	Perylene	3.2 J	25	0.50	
193-39-5	Indeno(1,2,3-cd)pyrene	3.1 J	25	0.37	
53-70-3	Dibenz(a,h)anthracene	0.81 J	25	0.40	
191-24-2	Benzo(g,h,i)perylene	3.6 J	25	0.49	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406932
Date Collected: 08/17/2004
Date Received: 08/20/2004
Date Extracted: 09/29/2004
Date Analyzed: 10/07/2004

Polynuclear Aromatic Hydrocarbons

Sample Name: LDW-B8a-T
Lab Code: K2406932-006
File ID: J:\MS14\DATA\100704\1007F008.D
Instrument ID: MS14
Extraction Method: EPA 3541
Analysis Method: 8270C.SIM

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Lot: KWG0414844
Calibration ID: CAL3873

Sample Amount: 2.02 g
% Solids: NA
Dilution Factor: 1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	73	20-130	10/07/04	Acceptable
Fluoranthene-d10	79	20-130	10/07/04	Acceptable
Terphenyl-d14	95	20-130	10/07/04	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
 Project: LDW Benthic Invertebrate Survey/04-08-06-21
 Sample Matrix: Tissue

Service Request: K2406932
 Date Collected: 08/17/2004
 Date Received: 08/20/2004
 Date Extracted: 09/29/2004
 Date Analyzed: 10/12/2004

Polynuclear Aromatic Hydrocarbons

Sample Name: LDW-B8a-TRE
 Lab Code: K2406932-006
 File ID: J:\MS14\DATA\101204\1012F018.D
 Instrument ID: MS14
 Extraction Method: EPA 3541
 Analysis Method: 8270C SIM

Units: ug/Kg
 Basis: Wet
 Level: Low

Extraction Lot: KWG0414844
 Calibration ID: CAL3891

Sample Amount: 2.02 g
 % Solids: NA
 Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
CASID30061	C2-Naphthalenes	25	U	25	25	
CASID30071	C3-Naphthalenes	25	U	25	25	
CASID30077	C4-Naphthalenes	25	U	25	25	
CASID30040	C1-Fluorenes	25	U	25	25	
CASID30060	C2-Fluorenes	25	U	25	25	
CASID30070	C3-Fluorenes	25	U	25	25	
CASID30038	C1-Dibenzothiophenes	25	U	25	25	
CASID30059	C2-Dibenzothiophenes	25	U	25	25	
CASID30069	C3-Dibenzothiophenes	25	U	25	25	
CASID30042	C1-Phenanthrenes/Anthracenes	120		25	25	
CASID30062	C2-Phenanthrenes/Anthracenes	62		25	25	
CASID30072	C3-Phenanthrenes/Anthracenes	25	U	25	25	
CASID30078	C4-Phenanthrenes/Anthracenes	25	U	25	25	
CASID30039	C1-Fluoranthenes/Pyrenes	84		25	25	
CASID30037	C1-Chrysenes	25	U	25	25	
CASID30058	C2-Chrysenes	25	U	25	25	
CASID30068	C3-Chrysenes	25	U	25	25	
CASID30074	C4-Chrysenes	25	U	25	25	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	78	20-130	10/12/04	Acceptable
Fluoranthene-d10	83	20-130	10/12/04	Acceptable
Terphenyl-d14	100	20-130	10/12/04	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406932
Date Collected: 08/25/2004
Date Received: 08/31/2004
Date Extracted: 09/29/2004
Date Analyzed: 10/07/2004

Polynuclear Aromatic Hydrocarbons

Sample Name: LDW-B10a-T
Lab Code: K2406932-009
File ID: J:\MS14\DATA\100704\1007F009.D
Instrument ID: MS14
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Lot: KWG0414844
Calibration ID: CAL3873

Sample Amount: 2.05 g
% Solids: NA
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
91-20-3	Naphthalene	5.4	J	25	1.3	
91-57-6	2-Methylnaphthalene	1.3	J	25	0.74	
90-12-0	1-Methylnaphthalene	1.2	J	25	0.64	
92-52-4	Biphenyl	1.5	J	25	0.34	
208-96-8	Acenaphthylene	0.40	J	25	0.25	
132-64-9	Dibenzofuran	0.26	U	25	0.26	
83-32-9	Acenaphthene	0.95	J	25	0.37	
86-73-7	Fluorene	0.83	J	25	0.27	
132-65-0	Dibenzothiophene	0.69	U	25	0.69	
85-01-8	Phenanthrene	3.8	J	25	0.33	
120-12-7	Anthracene	1.0	J	25	0.27	
206-44-0	Fluoranthene	10	J	25	0.26	
129-00-0	Pyrene	11	J	25	0.35	
56-55-3	Benz(a)anthracene	0.93	J	25	0.27	
218-01-9	Chrysene	8.2	J	25	0.40	
205-99-2	Benzo(b)fluoranthene	1.5	J	25	0.22	
207-08-9	Benzo(k)fluoranthene	1.9	J	25	0.40	
192-97-2	Benzo(e)pyrene	3.8	J	25	0.059	
50-32-8	Benzo(a)pyrene	0.38	U	25	0.38	
198-55-0	Perylene	0.49	U	25	0.49	
193-39-5	Indeno(1,2,3-cd)pyrene	0.84	J	25	0.36	
53-70-3	Dibenz(a,h)anthracene	0.39	U	25	0.39	
191-24-2	Benzo(g,h,i)perylene	1.2	J	25	0.48	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2406932
Date Collected: 08/25/2004
Date Received: 08/31/2004
Date Extracted: 09/29/2004
Date Analyzed: 10/07/2004

Polynuclear Aromatic Hydrocarbons

Sample Name: LDW-B10a-T
Lab Code: K2406932-009
File ID: J:\MS14\DATA\100704\1007F009.D
Instrument ID: MS14
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Lot: KWG0414844
Calibration ID: CAL3873

Sample Amount: 2.05 g
% Solids: NA
Dilution Factor: 1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	73	20-130	10/07/04	Acceptable
Fluoranthene-d10	79	20-130	10/07/04	Acceptable
Terphenyl-d14	96	20-130	10/07/04	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
 Project: LDW Benthic Invertebrate Survey/04-08-06-21
 Sample Matrix: Tissue

Service Request: K2406932
 Date Collected: 08/25/2004
 Date Received: 08/31/2004
 Date Extracted: 09/29/2004
 Date Analyzed: 10/12/2004

Polynuclear Aromatic Hydrocarbons

Sample Name: LDW-B10a-TRE
 Lab Code: K2406932-009
 File ID: J:\MS14\DATA\101204\1012F019.D
 Instrument ID: MS14
 Extraction Method: EPA 3541
 Analysis Method: 8270C SIM

Units: ug/Kg
 Basis: Wet
 Level: Low

Extraction Lot: KWG0414844
 Calibration ID: CAL3891

Sample Amount: 2.05 g
 % Solids: NA
 Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
CASID30061	C2-Naphthalenes	25	U	25	25	
CASID30071	C3-Naphthalenes	25	U	25	25	
CASID30077	C4-Naphthalenes	25	U	25	25	
CASID30040	C1-Fluorenes	25	U	25	25	
CASID30060	C2-Fluorenes	25	U	25	25	
CASID30070	C3-Fluorenes	25	U	25	25	
CASID30038	C1-Dibenzothiophenes	25	U	25	25	
CASID30059	C2-Dibenzothiophenes	25	U	25	25	
CASID30069	C3-Dibenzothiophenes	25	U	25	25	
CASID30042	C1-Phenanthrenes/Anthracenes	25	U	25	25	
CASID30062	C2-Phenanthrenes/Anthracenes	25	U	25	25	
CASID30072	C3-Phenanthrenes/Anthracenes	25	U	25	25	
CASID30078	C4-Phenanthrenes/Anthracenes	25	U	25	25	
CASID30039	C1-Fluoranthenes/Pyrenes	25	U	25	25	
CASID30037	C1-Chrysenes	25	U	25	25	
CASID30058	C2-Chrysenes	25	U	25	25	
CASID30068	C3-Chrysenes	25	U	25	25	
CASID30074	C4-Chrysenes	25	U	25	25	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	79	20-130	10/12/04	Acceptable
Fluoranthene-d10	84	20-130	10/12/04	Acceptable
Terphenyl-d14	102	20-130	10/12/04	Acceptable

Comments:

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2407012
Date Collected: 08/17/2004
Date Received: 09/20/2004
Date Extracted: 09/22/2004
Date Analyzed: 09/28/2004

Polynuclear Aromatic Hydrocarbons

Sample Name: LDW-B8a-S
Lab Code: K2407012-006
File ID: J:\MS11\DATA\092704\0927F053.D
Instrument ID: MS11

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Extraction Lot: KWG0414432
Calibration ID: CAL3848

Sample Amount: 18.89 g
% Solids: 53.6
Dilution Factor: 1

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
91-20-3	Naphthalene	4.3 J	5.0	0.64	
91-57-6	2-Methylnaphthalene	3.4 J	5.0	0.64	
90-12-0	1-Methylnaphthalene	2.5 J	5.0	0.47	
CASID30061	C2-Naphthalenes	7.8	5.0	4.7	
CASID30071	C3-Naphthalenes	17	5.0	4.7	
CASID30077	C4-Naphthalenes	9.3	5.0	4.7	
92-52-4	Biphenyl	1.5 J	5.0	0.81	
208-96-8	Acenaphthylene	10	5.0	0.42	
132-64-9	Dibenzofuran	4.3 J	5.0	0.32	
83-32-9	Acenaphthene	5.1	5.0	0.30	
86-73-7	Fluorene	6.9	5.0	0.36	
CASID30040	C1-Fluorenes	4.7 U	5.0	4.7	
CASID30060	C2-Fluorenes	6.1	5.0	4.7	
CASID30070	C3-Fluorenes	13	5.0	4.7	
132-65-0	Dibenzothiophene	3.1 J	5.0	0.43	
CASID30038	C1-Dibenzothiophenes	4.7 U	5.0	4.7	
CASID30059	C2-Dibenzothiophenes	8.7	5.0	4.7	
CASID30069	C3-Dibenzothiophenes	20	5.0	4.7	
85-01-8	Phenanthrene	53	5.0	0.62	
120-12-7	Anthracene	28	5.0	0.42	
CASID30042	C1-Phenanthrenes/Anthracenes	37	5.0	4.7	
CASID30062	C2-Phenanthrenes/Anthracenes	32	5.0	4.7	
CASID30072	C3-Phenanthrenes/Anthracenes	47	5.0	4.7	
CASID30078	C4-Phenanthrenes/Anthracenes	32	5.0	4.7	
206-44-0	Fluoranthene	120	5.0	0.64	
129-00-0	Pyrene	120	5.0	0.68	
CASID30039	C1-Fluoranthenes/Pyrenes	130	5.0	4.7	
56-55-3	Benz(a)anthracene	64	5.0	0.30	

Comments: _____

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2407012
Date Collected: 08/17/2004
Date Received: 09/20/2004
Date Extracted: 09/22/2004
Date Analyzed: 09/28/2004

Polynuclear Aromatic Hydrocarbons

Sample Name: LDW-B8a-S
Lab Code: K2407012-006
File ID: J:\MS11\DATA\092704\0927F053.D
Instrument ID: MS11
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Lot: KWG0414432
Calibration ID: CAL3848

Sample Amount: 18.89 g
% Solids: 53.6
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
218-01-9	Chrysene	170		5.0	0.77	
CASID30037	C1-Chrysenes	74		5.0	4.7	
CASID30058	C2-Chrysenes	67		5.0	4.7	
CASID30068	C3-Chrysenes	72		5.0	4.7	
CASID30074	C4-Chrysenes	56		5.0	4.7	
205-99-2	Benzo(b)fluoranthene	110		5.0	0.90	
207-08-9	Benzo(k)fluoranthene	75		5.0	0.62	
192-97-2	Benzo(e)pyrene	87		5.0	0.73	
50-32-8	Benzo(a)pyrene	65		5.0	0.42	
198-55-0	Perylene	31		5.0	0.32	
193-39-5	Indeno(1,2,3-cd)pyrene	55		5.0	0.45	
53-70-3	Dibenz(a,h)anthracene	12		5.0	0.49	
191-24-2	Benzo(g,h,i)perylene	58		5.0	0.43	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	53	40-130	09/28/04	Acceptable
Fluoranthene-d10	63	40-130	09/28/04	Acceptable
Terphenyl-d14	84	40-130	09/28/04	Acceptable

Comments: _____

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2407012
Date Collected: 08/25/2004
Date Received: 08/30/2004
Date Extracted: 09/22/2004
Date Analyzed: 09/27/2004

Polynuclear Aromatic Hydrocarbons

Sample Name: LDW-B10a-S
Lab Code: K2407012-009
File ID: J:\MS11\DATA\092704\0927F043.D
Instrument ID: MS11

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Extraction Lot: KWG0414432
Calibration ID: CAL3848

Sample Amount: 16.06 g
% Solids: 63.0
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
91-20-3	Naphthalene	2.8	J	5.0	0.54	
91-57-6	2-Methylnaphthalene	3.2	J	5.0	0.54	
90-12-0	1-Methylnaphthalene	2.8	J	5.0	0.40	
CASID30061	C2-Naphthalenes	10		5.0	4.0	
CASID30071	C3-Naphthalenes	25		5.0	4.0	
CASID30077	C4-Naphthalenes	14		5.0	4.0	
92-52-4	Biphenyl	1.4	J	5.0	0.69	
208-96-8	Acenaphthylene	7.0		5.0	0.35	
132-64-9	Dibenzofuran	2.2	J	5.0	0.27	
83-32-9	Acenaphthene	1.1	J	5.0	0.26	
86-73-7	Fluorene	2.1	J	5.0	0.31	
CASID30040	C1-Fluorenes	4.0	U	5.0	4.0	
CASID30060	C2-Fluorenes	4.0	U	5.0	4.0	
CASID30070	C3-Fluorenes	4.0	U	5.0	4.0	
132-65-0	Dibenzothiophene	1.5	J	5.0	0.37	
CASID30038	C1-Dibenzothiophenes	6.9		5.0	4.0	
CASID30059	C2-Dibenzothiophenes	4.3	J	5.0	4.0	
CASID30069	C3-Dibenzothiophenes	14		5.0	4.0	
85-01-8	Phenanthrene	28		5.0	0.53	
120-12-7	Anthracene	14		5.0	0.35	
CASID30042	C1-Phenanthrenes/Anthracenes	19		5.0	4.0	
CASID30062	C2-Phenanthrenes/Anthracenes	21		5.0	4.0	
CASID30072	C3-Phenanthrenes/Anthracenes	24		5.0	4.0	
CASID30078	C4-Phenanthrenes/Anthracenes	15		5.0	4.0	
206-44-0	Fluoranthene	95		5.0	0.54	
129-00-0	Pyrene	79		5.0	0.58	
CASID30039	C1-Fluoranthenes/Pyrenes	58		5.0	4.0	
56-55-3	Benz(a)anthracene	48		5.0	0.26	

Comments:

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2407012
Date Collected: 08/25/2004
Date Received: 08/30/2004
Date Extracted: 09/22/2004
Date Analyzed: 09/27/2004

Polynuclear Aromatic Hydrocarbons

Sample Name: LDW-B10a-S
Lab Code: K2407012-009
File ID: J:\MS11\DATA\092704\0927F043.D
Instrument ID: MS11
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Lot: KWG0414432
Calibration ID: CAL3848

Sample Amount: 16.06 g
% Solids: 63.0
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
218-01-9	Chrysene	70		5.0	0.66	
CASID30037	C1-Chrysenes	55		5.0	4.0	
CASID30058	C2-Chrysenes	57		5.0	4.0	
CASID30068	C3-Chrysenes	55		5.0	4.0	
CASID30074	C4-Chrysenes	43		5.0	4.0	
205-99-2	Benzo(b)fluoranthene	77		5.0	0.77	
207-08-9	Benzo(k)fluoranthene	78		5.0	0.53	
192-97-2	Benzo(e)pyrene	73		5.0	0.62	
50-32-8	Benzo(a)pyrene	74		5.0	0.35	
198-55-0	Perylene	52		5.0	0.27	
193-39-5	Indeno(1,2,3-cd)pyrene	75		5.0	0.39	
53-70-3	Dibenz(a,h)anthracene	17		5.0	0.42	
191-24-2	Benzo(g,h,i)perylene	76		5.0	0.37	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	60	40-130	09/27/04	Acceptable
Fluoranthene-d10	70	40-130	09/27/04	Acceptable
Terphenyl-d14	89	40-130	09/27/04	Acceptable

Comments: _____

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2407216
Date Collected: 08/26/2004
Date Received: 08/30/2004
Date Extracted: 09/29/2004
Date Analyzed: 10/07/2004

Polynuclear Aromatic Hydrocarbons

Sample Name: LDW-B3a-T
Lab Code: K2407216-001
File ID: J:\MS14\DATA\100704\1007F010.D
Instrument ID: MS14

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Extraction Lot: KWG0414844
Calibration ID: CAL3873

Sample Amount: 2.04 g
% Solids: NA
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
91-20-3	Naphthalene	5.1	J	25	1.3	
91-57-6	2-Methylnaphthalene	1.3	J	25	0.74	
90-12-0	1-Methylnaphthalene	1.2	J	25	0.64	
92-52-4	Biphenyl	1.6	J	25	0.34	
208-96-8	Acenaphthylene	0.54	J	25	0.25	
132-64-9	Dibenzofuran	0.82	J	25	0.26	
83-32-9	Acenaphthene	1.4	J	25	0.37	
86-73-7	Fluorene	1.5	J	25	0.27	
132-65-0	Dibenzothiophene	0.82	J	25	0.69	
85-01-8	Phenanthrene	5.8	J	25	0.33	
120-12-7	Anthracene	1.7	J	25	0.27	
206-44-0	Fluoranthene	23	J	25	0.26	
129-00-0	Pyrene	23	J	25	0.35	
56-55-3	Benzo(a)anthracene	3.3	J	25	0.27	
218-01-9	Chrysene	16	J	25	0.40	
205-99-2	Benzo(b)fluoranthene	2.1	J	25	0.23	
207-08-9	Benzo(k)fluoranthene	1.6	J	25	0.40	
192-97-2	Benzo(e)pyrene	6.8	J	25	0.059	
50-32-8	Benzo(a)pyrene	0.38	U	25	0.38	
198-55-0	Perylene	0.50	U	25	0.50	
193-39-5	Indeno(1,2,3-cd)pyrene	0.36	U	25	0.36	
53-70-3	Dibenz(a,h)anthracene	0.39	U	25	0.39	
191-24-2	Benzo(g,h,i)perylene	1.1	J	25	0.48	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2407216
Date Collected: 08/26/2004
Date Received: 08/30/2004
Date Extracted: 09/29/2004
Date Analyzed: 10/07/2004

Polynuclear Aromatic Hydrocarbons

Sample Name: LDW-B3a-T
Lab Code: K2407216-001
File ID: J:\MS14\DATA\100704\1007F010.D
Instrument ID: MS14

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Extraction Lot: KWG0414844
Calibration ID: CAL3873

Sample Amount: 2.04 g
% Solids: NA
Dilution Factor: 1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	70	20-130	10/07/04	Acceptable
Fluoranthene-d10	79	20-130	10/07/04	Acceptable
Terphenyl-d14	93	20-130	10/07/04	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2407216
Date Collected: 08/26/2004
Date Received: 08/30/2004
Date Extracted: 09/29/2004
Date Analyzed: 10/12/2004

Polynuclear Aromatic Hydrocarbons

Sample Name: LDW-B3a-TRE
Lab Code: K2407216-001
File ID: J:\MS14\DATA\101204\1012F020.D
Instrument ID: MS14
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Lot: KWG0414844
Calibration ID: CAL3891

Sample Amount: 2.04 g
% Solids: NA
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
CASID30061	C2-Naphthalenes	25	U	25	25	
CASID30071	C3-Naphthalenes	25	U	25	25	
CASID30077	C4-Naphthalenes	25	U	25	25	
CASID30040	C1-Fluorenes	25	U	25	25	
CASID30060	C2-Fluorenes	25	U	25	25	
CASID30070	C3-Fluorenes	25	U	25	25	
CASID30038	C1-Dibenzothiophenes	25	U	25	25	
CASID30059	C2-Dibenzothiophenes	25	U	25	25	
CASID30069	C3-Dibenzothiophenes	25	U	25	25	
CASID30042	C1-Phenanthrenes/Anthracenes	25	U	25	25	
CASID30062	C2-Phenanthrenes/Anthracenes	25	U	25	25	
CASID30072	C3-Phenanthrenes/Anthracenes	25	U	25	25	
CASID30078	C4-Phenanthrenes/Anthracenes	25	U	25	25	
CASID30039	C1-Fluoranthenes/Pyrenes	25	U	25	25	
CASID30037	C1-Chrysenes	25	U	25	25	
CASID30058	C2-Chrysenes	25	U	25	25	
CASID30068	C3-Chrysenes	25	U	25	25	
CASID30074	C4-Chrysenes	25	U	25	25	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	75	20-130	10/12/04	Acceptable
Fluoranthene-d10	85	20-130	10/12/04	Acceptable
Terphenyl-d14	100	20-130	10/12/04	Acceptable

Comments: _____

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2407216
Date Collected: 08/27/2004
Date Received: 08/30/2004
Date Extracted: 09/29/2004
Date Analyzed: 10/07/2004

Polynuclear Aromatic Hydrocarbons

Sample Name: LDW-B9a-T
Lab Code: K2407216-002
File ID: J:\MS14\DATA\100704\1007F011.D
Instrument ID: MS14

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Extraction Lot: KWG0414844
Calibration ID: CAL3873

Sample Amount: 2.04 g
% Solids: NA
Dilution Factor: 1

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
91-20-3	Naphthalene	6.5 J	25	1.3	
91-57-6	2-Methylnaphthalene	1.5 J	25	0.74	
90-12-0	1-Methylnaphthalene	1.4 J	25	0.64	
92-52-4	Biphenyl	1.8 J	25	0.34	
208-96-8	Acenaphthylene	0.25 U	25	0.25	
132-64-9	Dibenzofuran	0.73 J	25	0.26	
83-32-9	Acenaphthene	2.0 J	25	0.37	
86-73-7	Fluorene	1.1 J	25	0.27	
132-65-0	Dibenzothiophene	0.69 U	25	0.69	
85-01-8	Phenanthrene	3.7 J	25	0.33	
120-12-7	Anthracene	1.4 J	25	0.27	
206-44-0	Fluoranthene	19 J	25	0.26	
129-00-0	Pyrene	20 J	25	0.35	
56-55-3	Benz(a)anthracene	3.9 J	25	0.27	
218-01-9	Chrysene	12 J	25	0.40	
205-99-2	Benzo(b)fluoranthene	2.4 J	25	0.23	
207-08-9	Benzo(k)fluoranthene	2.6 J	25	0.40	
192-97-2	Benzo(e)pyrene	5.7 J	25	0.059	
50-32-8	Benzo(a)pyrene	2.0 J	25	0.38	
198-55-0	Perylene	0.50 U	25	0.50	
193-39-5	Indeno(1,2,3-cd)pyrene	1.2 J	25	0.36	
53-70-3	Dibenz(a,h)anthracene	0.39 U	25	0.39	
191-24-2	Benzo(g,h,i)perylene	1.4 J	25	0.48	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2407216
Date Collected: 08/27/2004
Date Received: 08/30/2004
Date Extracted: 09/29/2004
Date Analyzed: 10/07/2004

Polynuclear Aromatic Hydrocarbons

Sample Name: LDW-B9a-T
Lab Code: K2407216-002
File ID: J:\MS14\DATA\100704\1007F011.D
Instrument ID: MS14
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Lot: KWG0414844
Calibration ID: CAL3873

Sample Amount: 2.04 g
% Solids: NA
Dilution Factor: 1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	72	20-130	10/07/04	Acceptable
Fluoranthene-d10	80	20-130	10/07/04	Acceptable
Terphenyl-d14	93	20-130	10/07/04	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2407216
Date Collected: 08/27/2004
Date Received: 08/30/2004
Date Extracted: 09/29/2004
Date Analyzed: 10/12/2004

Polynuclear Aromatic Hydrocarbons

Sample Name: LDW-B9a-TRE
Lab Code: K2407216-002
File ID: J:\MS14\DATA\101204\1012F021.D
Instrument ID: MS14

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Extraction Lot: KWG0414844
Calibration ID: CAL3891

Sample Amount: 2.04 g
% Solids: NA
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
CASID30061	C2-Naphthalenes	25	U	25	25	
CASID30071	C3-Naphthalenes	25	U	25	25	
CASID30077	C4-Naphthalenes	25	U	25	25	
CASID30040	C1-Fluorenes	25	U	25	25	
CASID30060	C2-Fluorenes	25	U	25	25	
CASID30070	C3-Fluorenes	25	U	25	25	
CASID30038	C1-Dibenzothiophenes	25	U	25	25	
CASID30059	C2-Dibenzothiophenes	25	U	25	25	
CASID30069	C3-Dibenzothiophenes	25	U	25	25	
CASID30042	C1-Phenanthrenes/Anthracenes	25	U	25	25	
CASID30062	C2-Phenanthrenes/Anthracenes	25	U	25	25	
CASID30072	C3-Phenanthrenes/Anthracenes	25	U	25	25	
CASID30078	C4-Phenanthrenes/Anthracenes	25	U	25	25	
CASID30039	C1-Fluoranthenes/Pyrenes	25	U	25	25	
CASID30037	C1-Chrysenes	25	U	25	25	
CASID30058	C2-Chrysenes	25	U	25	25	
CASID30068	C3-Chrysenes	25	U	25	25	
CASID30074	C4-Chrysenes	25	U	25	25	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	77	20-130	10/12/04	Acceptable
Fluoranthene-d10	85	20-130	10/12/04	Acceptable
Terphenyl-d14	99	20-130	10/12/04	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Sediment

Service Request: K2407473
Date Collected: 09/24/2004
Date Received: 09/27/2004
Date Extracted: 10/25/2004
Date Analyzed: 11/03/2004

Polynuclear Aromatic Hydrocarbons

Sample Name: LDW-B5a-S
Lab Code: K2407473-001
File ID: J:\MS11\DATA\110304\1103F006.D
Instrument ID: MS11
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Lot: KWG0416619
Calibration ID: CAL3933

Sample Amount: 20.15 g
% Solids: 64.9
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
91-20-3	Naphthalene	10		3.9	0.53	
91-57-6	2-Methylnaphthalene	14		3.9	0.53	
90-12-0	1-Methylnaphthalene	10		3.9	0.39	
CASID30061	C2-Naphthalenes	30		7.8	7.8	
CASID30071	C3-Naphthalenes	46		7.8	7.8	
CASID30077	C4-Naphthalenes	68		7.8	7.8	
92-52-4	Biphenyl	4.1		3.9	0.67	
208-96-8	Acenaphthylene	4.6		3.9	0.34	
132-64-9	Dibenzofuran	5.8		3.9	0.27	
83-32-9	Acenaphthene	4.1		3.9	0.25	
86-73-7	Fluorene	6.5		3.9	0.30	
CASID30040	C1-Fluorenes	7.8	U	7.8	7.8	
CASID30060	C2-Fluorenes	17		7.8	7.8	
CASID30070	C3-Fluorenes	36		7.8	7.8	
132-65-0	Dibenzothiophene	5.0		3.9	0.36	
CASID30038	C1-Dibenzothiophenes	32		7.8	7.8	
CASID30059	C2-Dibenzothiophenes	18		7.8	7.8	
CASID30069	C3-Dibenzothiophenes	32		7.8	7.8	
85-01-8	Phenanthrene	31		3.9	0.51	
120-12-7	Anthracene	15		3.9	0.34	
CASID30042	C1-Phenanthrenes/Anthracenes	34		7.8	7.8	
CASID30062	C2-Phenanthrenes/Anthracenes	40		7.8	7.8	
CASID30072	C3-Phenanthrenes/Anthracenes	62		7.8	7.8	
CASID30078	C4-Phenanthrenes/Anthracenes	90		7.8	7.8	
206-44-0	Fluoranthene	160		3.9	0.53	
129-00-0	Pyrene	130		3.9	0.56	
CASID30039	C1-Fluoranthenes/Pyrenes	84		7.8	7.8	
56-55-3	Benz(a)anthracene	41		3.9	0.25	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW/04-08-06-21
Sample Matrix: Sediment

Service Request: K2407473
Date Collected: 09/24/2004
Date Received: 09/27/2004
Date Extracted: 10/25/2004
Date Analyzed: 11/03/2004

Polynuclear Aromatic Hydrocarbons

Sample Name: LDW-B5a-S
Lab Code: K2407473-001
File ID: J:\MS11\DATA\110304\1103F006.D
Instrument ID: MS11

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Extraction Lot: KWG0416619
Calibration ID: CAL3933

Sample Amount: 20.15 g
% Solids: 64.9
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
218-01-9	Chrysene	81		3.9	0.64	
CASID30037	C1-Chrysenes	42		7.8	7.8	
CASID30058	C2-Chrysenes	36		7.8	7.8	
CASID30068	C3-Chrysenes	43		7.8	7.8	
CASID30074	C4-Chrysenes	40		7.8	7.8	
205-99-2	Benzo(b)fluoranthene	54		3.9	0.74	
207-08-9	Benzo(k)fluoranthene	46		3.9	0.51	
192-97-2	Benzo(e)pyrene	44		3.9	0.61	
50-32-8	Benzo(a)pyrene	37		3.9	0.34	
198-55-0	Perylene	45		3.9	0.27	
193-39-5	Indeno(1,2,3-cd)pyrene	36		3.9	0.37	
53-70-3	Dibenz(a,h)anthracene	8.6		3.9	0.41	
191-24-2	Benzo(g,h,i)perylene	41		3.9	0.36	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	62	40-130	11/03/04	Acceptable
Fluoranthene-d10	67	40-130	11/03/04	Acceptable
Terphenyl-d14	82	40-130	11/03/04	Acceptable

Comments: _____

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2407595
Date Collected: 09/27/2004
Date Received: 09/30/2004
Date Extracted: 10/08/2004
Date Analyzed: 10/20/2004

Polynuclear Aromatic Hydrocarbons

Sample Name: LDW-B1b-S
Lab Code: K2407595-001
File ID: J:\MS11\DATA\102004\1020F013.D
Instrument ID: MS11

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Extraction Lot: KWG0415421
Calibration ID: CAL3848

Sample Amount: 13.40 g
% Solids: 75.2
Dilution Factor: 1

CAS No.	Analyte Name	Result Q	MRL	MDL	Note
91-20-3	Naphthalene	4.4 J	5.0	0.46	
91-57-6	2-Methylnaphthalene	2.7 J	5.0	0.46	
90-12-0	1-Methylnaphthalene	2.4 J	5.0	0.34	
CASID30061	C2-Naphthalenes	6.2	5.0	3.4	
CASID30071	C3-Naphthalenes	16	5.0	3.4	
CASID30077	C4-Naphthalenes	9.6	5.0	3.4	
92-52-4	Biphenyl	1.8 J	5.0	0.58	
208-96-8	Acenaphthylene	3.9 J	5.0	0.30	
132-64-9	Dibenzofuran	5.2	5.0	0.23	
83-32-9	Acenaphthene	4.4 J	5.0	0.22	
86-73-7	Fluorene	6.6	5.0	0.26	
CASID30040	C1-Fluorenes	3.4 U	5.0	3.4	
CASID30060	C2-Fluorenes	3.4 J	5.0	3.4	
CASID30070	C3-Fluorenes	3.9 J	5.0	3.4	
132-65-0	Dibenzothiophene	2.1 J	5.0	0.31	
CASID30038	C1-Dibenzothiophenes	3.4 U	5.0	3.4	
CASID30059	C2-Dibenzothiophenes	3.4 U	5.0	3.4	
CASID30069	C3-Dibenzothiophenes	3.4 U	5.0	3.4	
85-01-8	Phenanthrene	38	5.0	0.44	
120-12-7	Anthracene	16	5.0	0.30	
CASID30042	C1-Phenanthrenes/Anthracenes	20	5.0	3.4	
CASID30062	C2-Phenanthrenes/Anthracenes	15	5.0	3.4	
CASID30072	C3-Phenanthrenes/Anthracenes	11	5.0	3.4	
CASID30078	C4-Phenanthrenes/Anthracenes	15	5.0	3.4	
206-44-0	Fluoranthene	190	5.0	0.46	
129-00-0	Pyrene	140	5.0	0.48	
CASID30039	C1-Fluoranthenes/Pyrenes	64	5.0	3.4	
56-55-3	Benz(a)anthracene	35	5.0	0.22	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2407595
Date Collected: 09/27/2004
Date Received: 09/30/2004
Date Extracted: 10/08/2004
Date Analyzed: 10/20/2004

Polynuclear Aromatic Hydrocarbons

Sample Name: LDW-B1b-S
Lab Code: K2407595-001
File ID: J:\MS11\DATA\102004\1020F013.D
Instrument ID: MS11
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Lot: KWG0415421
Calibration ID: CAL3848

Sample Amount: 13.40 g
% Solids: 75.2
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
218-01-9	Chrysene	57		5.0	0.55	
CASID30037	C1-Chrysenes	24		5.0	3.4	
CASID30058	C2-Chrysenes	14		5.0	3.4	
CASID30068	C3-Chrysenes	13		5.0	3.4	
CASID30074	C4-Chrysenes	8.3		5.0	3.4	
205-99-2	Benzo(b)fluoranthene	28		5.0	0.64	
207-08-9	Benzo(k)fluoranthene	25		5.0	0.44	
192-97-2	Benzo(e)pyrene	24		5.0	0.52	
50-32-8	Benzo(a)pyrene	23		5.0	0.30	
198-55-0	Perylene	11		5.0	0.23	
193-39-5	Indeno(1,2,3-cd)pyrene	14		5.0	0.32	
53-70-3	Dibenz(a,h)anthracene	2.6	J	5.0	0.35	
191-24-2	Benzo(g,h,i)perylene	16		5.0	0.31	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	46	40-130	10/20/04	Acceptable
Fluoranthene-d10	58	40-130	10/20/04	Acceptable
Terphenyl-d14	68	40-130	10/20/04	Acceptable

Comments: _____

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2407595
Date Collected: 09/27/2004
Date Received: 09/30/2004
Date Extracted: 10/08/2004
Date Analyzed: 10/20/2004

Polynuclear Aromatic Hydrocarbons

Sample Name: LDW-B2b-S
Lab Code: K2407595-002
File ID: J:\MS11\DATA\102004\1020F015.D
Instrument ID: MS11

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Extraction Lot: KWG0415421
Calibration ID: CAL3848

Sample Amount: 15.08 g
% Solids: 66.4
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
91-20-3	Naphthalene	12		5.0	0.52	
91-57-6	2-Methylnaphthalene	8.5		5.0	0.52	
90-12-0	1-Methylnaphthalene	6.2		5.0	0.38	
CASID30061	C2-Naphthalenes	15		5.0	3.8	
CASID30071	C3-Naphthalenes	24		5.0	3.8	
CASID30077	C4-Naphthalenes	18		5.0	3.8	
92-52-4	Biphenyl	3.1	J	5.0	0.65	
208-96-8	Acenaphthylene	11		5.0	0.34	
132-64-9	Dibenzofuran	8.1		5.0	0.26	
83-32-9	Acenaphthene	7.6		5.0	0.25	
86-73-7	Fluorene	12		5.0	0.29	
CASID30040	C1-Fluorenes	3.8	U	5.0	3.8	
CASID30060	C2-Fluorenes	11		5.0	3.8	
CASID30070	C3-Fluorenes	19		5.0	3.8	
132-65-0	Dibenzothiophene	4.0	J	5.0	0.35	
CASID30038	C1-Dibenzothiophenes	3.8	U	5.0	3.8	
CASID30059	C2-Dibenzothiophenes	3.8	U	5.0	3.8	
CASID30069	C3-Dibenzothiophenes	3.8	U	5.0	3.8	
85-01-8	Phenanthrene	82		5.0	0.50	
120-12-7	Anthracene	42		5.0	0.34	
CASID30042	C1-Phenanthrenes/Anthracenes	50		5.0	3.8	
CASID30062	C2-Phenanthrenes/Anthracenes	36		5.0	3.8	
CASID30072	C3-Phenanthrenes/Anthracenes	31		5.0	3.8	
CASID30078	C4-Phenanthrenes/Anthracenes	30		5.0	3.8	
206-44-0	Fluoranthene	200		5.0	0.52	
129-00-0	Pyrene	200		5.0	0.55	
CASID30039	C1-Fluoranthenes/Pyrenes	140		5.0	3.8	
56-55-3	Benz(a)anthracene	89		5.0	0.25	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2407595
Date Collected: 09/27/2004
Date Received: 09/30/2004
Date Extracted: 10/08/2004
Date Analyzed: 10/20/2004

Polynuclear Aromatic Hydrocarbons

Sample Name: LDW-B2b-S
Lab Code: K2407595-002
File ID: J:\MS11\DATA\102004\1020F015.D
Instrument ID: MS11
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Lot: KWG0415421
Calibration ID: CAL3848

Sample Amount: 15.08 g
% Solids: 66.4
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
218-01-9	Chrysene	140		5.0	0.62	
CASID30037	C1-Chrysenes	73		5.0	3.8	
CASID30058	C2-Chrysenes	51		5.0	3.8	
CASID30068	C3-Chrysenes	38		5.0	3.8	
CASID30074	C4-Chrysenes	18		5.0	3.8	
205-99-2	Benzo(b)fluoranthene	120		5.0	0.73	
207-08-9	Benzo(k)fluoranthene	91		5.0	0.50	
192-97-2	Benzo(e)pyrene	99		5.0	0.59	
50-32-8	Benzo(a)pyrene	95		5.0	0.34	
198-55-0	Perylene	38		5.0	0.26	
193-39-5	Indeno(1,2,3-cd)pyrene	69		5.0	0.37	
53-70-3	Dibenz(a,h)anthracene	12		5.0	0.40	
191-24-2	Benzo(g,h,i)perylene	72		5.0	0.35	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	43	40-130	10/20/04	Acceptable
Fluoranthene-d10	53	40-130	10/20/04	Acceptable
Terphenyl-d14	61	40-130	10/20/04	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
 Project: LDW Benthic Invertebrate Survey/04-08-06-21
 Sample Matrix: Sediment

Service Request: K2407595
 Date Collected: 09/28/2004
 Date Received: 09/30/2004
 Date Extracted: 10/08/2004
 Date Analyzed: 10/20/2004

Polynuclear Aromatic Hydrocarbons

Sample Name: LDW-B4b-S
 Lab Code: K2407595-003
 File ID: J:\MS11\DATA\102004\1020F016.D
 Instrument ID: MS11
 Extraction Method: EPA 3541
 Analysis Method: 8270C SIM

Units: ug/Kg
 Basis: Dry
 Level: Low

Extraction Lot: KWG0415421
 Calibration ID: CAL3848

Sample Amount: 21.87 g
 % Solids: 45.9
 Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
91-20-3	Naphthalene	23		5.0	0.75	
91-57-6	2-Methylnaphthalene	14		5.0	0.75	
90-12-0	1-Methylnaphthalene	11		5.0	0.55	
CASID30061	C2-Naphthalenes	21		5.5	5.5	
CASID30071	C3-Naphthalenes	30		5.5	5.5	
CASID30077	C4-Naphthalenes	24		5.5	5.5	
92-52-4	Biphenyl	4.8	J	5.0	0.94	
208-96-8	Acenaphthylene	28		5.0	0.48	
132-64-9	Dibenzofuran	13		5.0	0.38	
83-32-9	Acenaphthene	13		5.0	0.35	
86-73-7	Fluorene	19		5.0	0.42	
CASID30040	C1-Fluorenes	7.4		5.5	5.5	
CASID30060	C2-Fluorenes	16		5.5	5.5	
CASID30070	C3-Fluorenes	29		5.5	5.5	
132-65-0	Dibenzothiophene	9.0		5.0	0.51	
CASID30038	C1-Dibenzothiophenes	5.5	U	5.5	5.5	
CASID30059	C2-Dibenzothiophenes	30		5.5	5.5	
CASID30069	C3-Dibenzothiophenes	51		5.5	5.5	
85-01-8	Phenanthrene	160		5.0	0.72	
120-12-7	Anthracene	82		5.0	0.48	
CASID30042	C1-Phenanthrenes/Anthracenes	120		5.5	5.5	
CASID30062	C2-Phenanthrenes/Anthracenes	77		5.5	5.5	
CASID30072	C3-Phenanthrenes/Anthracenes	66		5.5	5.5	
CASID30078	C4-Phenanthrenes/Anthracenes	53		5.5	5.5	
206-44-0	Fluoranthene	620		5.0	0.75	
129-00-0	Pyrene	500		5.0	0.79	
CASID30039	C1-Fluoranthenes/Pyrenes	340		5.5	5.5	
56-55-3	Benz(a)anthracene	210		5.0	0.35	

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2407595
Date Collected: 09/28/2004
Date Received: 09/30/2004
Date Extracted: 10/08/2004
Date Analyzed: 10/20/2004

Polynuclear Aromatic Hydrocarbons

Sample Name: LDW-B4b-S
Lab Code: K2407595-003
File ID: J:\MS11\DATA\102004\1020F016.D
Instrument ID: MS11
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Dry
Level: Low
Extraction Lot: KWG0415421
Calibration ID: CAL3848

Sample Amount: 21.87 g
% Solids: 45.9
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
218-01-9	Chrysene	430		5.0	0.90	
CASID30037	C1-Chrysenes	200		5.5	5.5	
CASID30058	C2-Chrysenes	100		5.5	5.5	
CASID30068	C3-Chrysenes	72		5.5	5.5	
CASID30074	C4-Chrysenes	27		5.5	5.5	
205-99-2	Benzo(b)fluoranthene	310		5.0	1.1	
207-08-9	Benzo(k)fluoranthene	200		5.0	0.72	
192-97-2	Benzo(e)pyrene	220		5.0	0.85	
50-32-8	Benzo(a)pyrene	200		5.0	0.48	
198-55-0	Perylene	78		5.0	0.38	
193-39-5	Indeno(1,2,3-cd)pyrene	140		5.0	0.53	
53-70-3	Dibenz(a,h)anthracene	26		5.0	0.57	
191-24-2	Benzo(g,h,i)perylene	140		5.0	0.51	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	36	40-130	10/20/04	Outside Control Limits
Fluoranthene-d10	46	40-130	10/20/04	Acceptable
Terphenyl-d14	55	40-130	10/20/04	Acceptable

Comments: _____

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2407595
Date Collected: 09/28/2004
Date Received: 09/30/2004
Date Extracted: 10/08/2004
Date Analyzed: 10/20/2004

Polynuclear Aromatic Hydrocarbons

Sample Name: LDW-B5b-S
Lab Code: K2407595-004
File ID: J:\MS11\DATA\102004\1020F017.D
Instrument ID: MS11
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Lot: KWG0415421
Calibration ID: CAL3848

Sample Amount: 17.32 g
% Solids: 57.8
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
91-20-3	Naphthalene	10		5.0	0.59	
91-57-6	2-Methylnaphthalene	9.3		5.0	0.59	
90-12-0	1-Methylnaphthalene	7.0		5.0	0.44	
CASID30061	C2-Naphthalenes	21		5.0	4.4	
CASID30071	C3-Naphthalenes	25		5.0	4.4	
CASID30077	C4-Naphthalenes	18		5.0	4.4	
92-52-4	Biphenyl	4.3	J	5.0	0.75	
208-96-8	Acenaphthylene	31		5.0	0.39	
132-64-9	Dibenzofuran	11		5.0	0.30	
83-32-9	Acenaphthene	11		5.0	0.28	
86-73-7	Fluorene	18		5.0	0.33	
CASID30040	C1-Fluorenes	5.8		5.0	4.4	
CASID30060	C2-Fluorenes	17		5.0	4.4	
CASID30070	C3-Fluorenes	30		5.0	4.4	
132-65-0	Dibenzothiophene	6.8		5.0	0.40	
CASID30038	C1-Dibenzothiophenes	4.4	U	5.0	4.4	
CASID30059	C2-Dibenzothiophenes	20		5.0	4.4	
CASID30069	C3-Dibenzothiophenes	27		5.0	4.4	
85-01-8	Phenanthrene	110		5.0	0.58	
120-12-7	Anthracene	100		5.0	0.39	
CASID30042	C1-Phenanthrenes/Anthracenes	94		5.0	4.4	
CASID30062	C2-Phenanthrenes/Anthracenes	71		5.0	4.4	
CASID30072	C3-Phenanthrenes/Anthracenes	60		5.0	4.4	
CASID30078	C4-Phenanthrenes/Anthracenes	47		5.0	4.4	
206-44-0	Fluoranthene	890		5.0	0.59	
129-00-0	Pyrene	660		5.0	0.63	
CASID30039	C1-Fluoranthenes/Pyrenes	470		5.0	4.4	
56-55-3	Benz(a)anthracene	320		5.0	0.28	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2407595
Date Collected: 09/28/2004
Date Received: 09/30/2004
Date Extracted: 10/08/2004
Date Analyzed: 10/20/2004

Polynuclear Aromatic Hydrocarbons

Sample Name: LDW-B5b-S
Lab Code: K2407595-004
File ID: J:\MS11\DATA\102004\1020F017.D
Instrument ID: MS11
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Lot: KWG0415421
Calibration ID: CAL3848

Sample Amount: 17.32 g
% Solids: 57.8
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
218-01-9	Chrysene	510		5.0	0.71	
CASID30037	C1-Chrysenes	200		5.0	4.4	
CASID30058	C2-Chrysenes	100		5.0	4.4	
CASID30068	C3-Chrysenes	70		5.0	4.4	
CASID30074	C4-Chrysenes	31		5.0	4.4	
205-99-2	Benzo(b)fluoranthene	340		5.0	0.84	
207-08-9	Benzo(k)fluoranthene	230		5.0	0.58	
192-97-2	Benzo(e)pyrene	230		5.0	0.68	
50-32-8	Benzo(a)pyrene	220		5.0	0.39	
198-55-0	Perylene	74		5.0	0.30	
193-39-5	Indeno(1,2,3-cd)pyrene	130		5.0	0.42	
53-70-3	Dibenz(a,h)anthracene	24		5.0	0.45	
191-24-2	Benzo(g,h,i)perylene	120		5.0	0.40	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	46	40-130	10/20/04	Acceptable
Fluoranthene-d10	60	40-130	10/20/04	Acceptable
Terphenyl-d14	64	40-130	10/20/04	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2407595
Date Extracted: 10/08/2004
Date Analyzed: 10/20/2004

Duplicate Sample Summary
Polynuclear Aromatic Hydrocarbons

Sample Name: LDW-B1b-S
Lab Code: K2407595-001
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Dry
Level: Low
Extraction Lot: KWG0415421

Analyte Name	MRL	MDL	Sample Result	LDW-B1b-SDUP KWG0415421-3 Duplicate Sample		Relative Percent Difference	RPD Limit
				Result	Average		
Naphthalene	5.0	0.46	4.4	7.5	5.9	53 #	50
2-Methylnaphthalene	5.0	0.46	2.7	3.5	3.1	27 #	50
1-Methylnaphthalene	5.0	0.34	2.4	3.8	3.1	44 #	50
C2-Naphthalenes	5.0	3.4	6.2	7.5	6.8	18 #	50
C3-Naphthalenes	5.0	3.4	16	15	15	11	50
C4-Naphthalenes	5.0	3.4	9.6	6.9	8.3	32 #	50
Biphenyl	5.0	0.58	1.8	2.6	2.2	39 #	50
Acenaphthylene	5.0	0.30	3.9	5.3	4.6	31 #	50
Dibenzofuran	5.0	0.23	5.2	8.7	6.9	50 #	50
Acenaphthene	5.0	0.22	4.4	8.5	6.5	63 #	50
Fluorene	5.0	0.26	6.6	7.8	7.2	16 #	50
C1-Fluorenes	5.0	3.4	ND	ND	ND	-	50
C2-Fluorenes	5.0	3.4	3.4	ND	NC	NC	50
C3-Fluorenes	5.0	3.4	3.9	3.9	3.9	1 #	50
Dibenzothiophene	5.0	0.31	2.1	2.5	2.3	18 #	50
C1-Dibenzothiophenes	5.0	3.4	ND	ND	ND	-	50
C2-Dibenzothiophenes	5.0	3.4	ND	ND	ND	-	50
C3-Dibenzothiophenes	5.0	3.4	ND	ND	ND	-	50
Phenanthrene	5.0	0.44	38	39	38	3	50
Anthracene	5.0	0.30	16	20	18	20	50
C1-Phenanthrenes/Anthracenes	5.0	3.4	20	21	20	4	50
C2-Phenanthrenes/Anthracenes	5.0	3.4	15	14	15	4	50
C3-Phenanthrenes/Anthracenes	5.0	3.4	11	9.6	10	12 #	50
C4-Phenanthrenes/Anthracenes	5.0	3.4	15	9.5	12	45 #	50
Fluoranthene	5.0	0.46	190	110	150	51 *	50
Pyrene	5.0	0.48	140	150	140	5	50
C1-Fluoranthenes/Pyrenes	5.0	3.4	64	60	62	7	50
Benz(a)anthracene	5.0	0.22	35	44	40	21	50
Chrysene	5.0	0.55	57	70	63	21	50
C1-Chrysenes	5.0	3.4	24	29	26	20	50
C2-Chrysenes	5.0	3.4	14	15	15	11	50
C3-Chrysenes	5.0	3.4	13	13	13	2	50
C4-Chrysenes	5.0	3.4	8.3	7.1	7.7	15 #	50
Benzo(b)fluoranthene	5.0	0.64	28	57	43	66 *	50
Benzo(k)fluoranthene	5.0	0.44	25	47	36	60 *	50

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Sediment

Service Request: K2407595
Date Extracted: 10/08/2004
Date Analyzed: 10/20/2004

**Duplicate Sample Summary
 Polynuclear Aromatic Hydrocarbons**

Sample Name: LDW-B1b-S
Lab Code: K2407595-001
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Dry
Level: Low
Extraction Lot: KWG0415421

Analyte Name	MRL	MDL	Sample Result	LDW-B1b-SDUP KWG0415421-3 Duplicate Sample		Relative Percent Difference	RPD Limit
				Result	Average		
Benzo(e)pyrene	5.0	0.52	24	54	39	76 *	50
Benzo(a)pyrene	5.0	0.30	23	55	39	81 *	50
Perylene	5.0	0.23	11	21	16	60 *	50
Indeno(1,2,3-cd)pyrene	5.0	0.32	14	42	28	98 *	50
Dibenz(a,h)anthracene	5.0	0.35	2.6	6.4	4.5	85 #	50
Benzo(g,h,i)perylene	5.0	0.31	16	48	32	102 *	50

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2407596
Date Collected: 09/28/2004
Date Received: 09/30/2004
Date Extracted: 10/21/2004
Date Analyzed: 11/04/2004

Polynuclear Aromatic Hydrocarbons

Sample Name: LDW-B4b-T
Lab Code: K2407596-001
File ID: J:\MS14\DATA\110404\1104F020.D
Instrument ID: MS14
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Lot: KWG0416322
Calibration ID: CAL3954

Sample Amount: 2.01 g
% Solids: NA
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
91-20-3	Naphthalene	5.7	J	25	1.3	
91-57-6	2-Methylnaphthalene	3.3	J	25	0.75	
90-12-0	1-Methylnaphthalene	2.6	J	25	0.65	
CASID30061	C2-Naphthalenes	25	U	25	25	
CASID30071	C3-Naphthalenes	25	U	25	25	
CASID30077	C4-Naphthalenes	25	U	25	25	
92-52-4	Biphenyl	3.6	J	25	0.34	
208-96-8	Acenaphthylene	5.0	J	25	0.25	
132-64-9	Dibenzofuran	4.3	J	25	0.26	
83-32-9	Acenaphthene	6.9	J	25	0.37	
86-73-7	Fluorene	12	J	25	0.27	
CASID30040	C1-Fluorenes	25	U	25	25	
CASID30060	C2-Fluorenes	25	U	25	25	
CASID30070	C3-Fluorenes	47		25	25	
132-65-0	Dibenzothiophene	8.8	J	25	0.70	
CASID30038	C1-Dibenzothiophenes	25	U	25	25	
CASID30059	C2-Dibenzothiophenes	25	U	25	25	
CASID30069	C3-Dibenzothiophenes	25	U	25	25	
85-01-8	Phenanthrene	150		25	0.33	
120-12-7	Anthracene	53		25	0.28	
CASID30042	C1-Phenanthrenes/Anthracenes	99		25	25	
CASID30062	C2-Phenanthrenes/Anthracenes	74		25	25	
CASID30072	C3-Phenanthrenes/Anthracenes	62		25	25	
CASID30078	C4-Phenanthrenes/Anthracenes	43		25	25	
206-44-0	Fluoranthene	400		25	0.27	
129-00-0	Pyrene	500		25	0.35	
CASID30039	C1-Fluoranthenes/Pyrenes	250		25	25	
56-55-3	Benz(a)anthracene	190		25	0.27	

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2407596
Date Collected: 09/28/2004
Date Received: 09/30/2004
Date Extracted: 10/21/2004
Date Analyzed: 11/04/2004

Polynuclear Aromatic Hydrocarbons

Sample Name: LDW-B4b-T
Lab Code: K2407596-001
File ID: J:\MS14\DATA\110404\1104F020.D
Instrument ID: MS14
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Lot: KWG0416322
Calibration ID: CAL3954

Sample Amount: 2.01 g
% Solids: NA
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
218-01-9	Chrysene	260		25	0.40	
CASID30037	C1-Chrysenes	140		25	25	
CASID30058	C2-Chrysenes	25	U	25	25	
CASID30068	C3-Chrysenes	25	U	25	25	
CASID30074	C4-Chrysenes	25	U	25	25	
205-99-2	Benzo(b)fluoranthene	160		25	0.23	
207-08-9	Benzo(k)fluoranthene	130		25	0.41	
192-97-2	Benzo(e)pyrene	130		25	0.060	
50-32-8	Benzo(a)pyrene	130		25	0.38	
198-55-0	Perylene	45		25	0.50	
193-39-5	Indeno(1,2,3-cd)pyrene	83		25	0.37	
53-70-3	Dibenz(a,h)anthracene	20	J	25	0.40	
191-24-2	Benzo(g,h,i)perylene	74		25	0.49	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	72	20-130	11/04/04	Acceptable
Fluoranthene-d10	83	20-130	11/04/04	Acceptable
Terphenyl-d14	92	20-130	11/04/04	Acceptable

Comments: _____

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2407596
Date Collected: 09/28/2004
Date Received: 09/30/2004
Date Extracted: 10/21/2004
Date Analyzed: 11/04/2004

Polynuclear Aromatic Hydrocarbons

Sample Name: LDW-B5b-T
Lab Code: K2407596-002
File ID: J:\MS14\DATA\110404\1104F021.D
Instrument ID: MS14

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Extraction Lot: KWG0416322
Calibration ID: CAL3954

Sample Amount: 2.02 g
% Solids: NA
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
91-20-3	Naphthalene	3.4	J	25	1.3	
91-57-6	2-Methylnaphthalene	1.3	J	25	0.75	
90-12-0	1-Methylnaphthalene	0.98	J	25	0.65	
CASID30061	C2-Naphthalenes	25	U	25	25	
CASID30071	C3-Naphthalenes	25	U	25	25	
CASID30077	C4-Naphthalenes	25	U	25	25	
92-52-4	Biphenyl	2.3	J	25	0.34	
208-96-8	Acenaphthylene	3.0	J	25	0.25	
132-64-9	Dibenzofuran	1.5	J	25	0.26	
83-32-9	Acenaphthene	2.1	J	25	0.37	
86-73-7	Fluorene	2.3	J	25	0.27	
CASID30040	C1-Fluorenes	25	U	25	25	
CASID30060	C2-Fluorenes	25	U	25	25	
CASID30070	C3-Fluorenes	25	U	25	25	
132-65-0	Dibenzothiophene	1.6	J	25	0.70	
CASID30038	C1-Dibenzothiophenes	25	U	25	25	
CASID30059	C2-Dibenzothiophenes	25	U	25	25	
CASID30069	C3-Dibenzothiophenes	25	U	25	25	
85-01-8	Phenanthrene	12	J	25	0.33	
120-12-7	Anthracene	9.8	J	25	0.28	
CASID30042	C1-Phenanthrenes/Anthracenes	25	U	25	25	
CASID30062	C2-Phenanthrenes/Anthracenes	25	U	25	25	
CASID30072	C3-Phenanthrenes/Anthracenes	25	U	25	25	
CASID30078	C4-Phenanthrenes/Anthracenes	25	U	25	25	
206-44-0	Fluoranthene	120		25	0.27	
129-00-0	Pyrene	270		25	0.35	
CASID30039	C1-Fluoranthenes/Pyrenes	100		25	25	
56-55-3	Benz(a)anthracene	42		25	0.27	

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2407596
Date Collected: 09/28/2004
Date Received: 09/30/2004
Date Extracted: 10/21/2004
Date Analyzed: 11/04/2004

Polynuclear Aromatic Hydrocarbons

Sample Name: LDW-B5b-T
Lab Code: K2407596-002
File ID: J:\MS14\DATA\110404\1104F021.D
Instrument ID: MS14
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Lot: KWG0416322
Calibration ID: CAL3954

Sample Amount: 2.02 g
% Solids: NA
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
218-01-9	Chrysene	72		25	0.40	
CASID30037	C1-Chrysenes	36		25	25	
CASID30058	C2-Chrysenes	25	U	25	25	
CASID30068	C3-Chrysenes	25	U	25	25	
CASID30074	C4-Chrysenes	25	U	25	25	
205-99-2	Benzo(b)fluoranthene	46		25	0.23	
207-08-9	Benzo(k)fluoranthene	29		25	0.41	
192-97-2	Benzo(e)pyrene	41		25	0.060	
50-32-8	Benzo(a)pyrene	20	J	25	0.38	
198-55-0	Perylene	11	J	25	0.50	
193-39-5	Indeno(1,2,3-cd)pyrene	9.4	J	25	0.37	
53-70-3	Dibenz(a,h)anthracene	1.8	J	25	0.40	
191-24-2	Benzo(g,h,i)perylene	12	J	25	0.49	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	76	20-130	11/04/04	Acceptable
Fluoranthene-d10	82	20-130	11/04/04	Acceptable
Terphenyl-d14	101	20-130	11/04/04	Acceptable

Comments: _____

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2407596
Date Collected: 09/27/2004
Date Received: 09/30/2004
Date Extracted: 10/21/2004
Date Analyzed: 11/04/2004

Polynuclear Aromatic Hydrocarbons

Sample Name: LDW-B1b-T
Lab Code: K2407596-003
File ID: J:\MS14\DATA\110404\1104F022.D
Instrument ID: MS14

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Extraction Lot: KWG0416322
Calibration ID: CAL3954

Sample Amount: 1.04 g
% Solids: NA
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
91-20-3	Naphthalene	6.7	J	49	2.5	
91-57-6	2-Methylnaphthalene	2.3	J	49	1.5	
90-12-0	1-Methylnaphthalene	1.9	J	49	1.3	
CASID30061	C2-Naphthalenes	49	U	49	49	
CASID30071	C3-Naphthalenes	49	U	49	49	
CASID30077	C4-Naphthalenes	49	U	49	49	
92-52-4	Biphenyl	3.3	J	49	0.66	
208-96-8	Acenaphthylene	3.5	J	49	0.49	
132-64-9	Dibenzofuran	3.7	J	49	0.50	
83-32-9	Acenaphthene	5.1	J	49	0.72	
86-73-7	Fluorene	5.3	J	49	0.52	
CASID30040	C1-Fluorenes	49	U	49	49	
CASID30060	C2-Fluorenes	49	U	49	49	
CASID30070	C3-Fluorenes	49	U	49	49	
132-65-0	Dibenzothiophene	2.2	J	49	1.4	
CASID30038	C1-Dibenzothiophenes	49	U	49	49	
CASID30059	C2-Dibenzothiophenes	49	U	49	49	
CASID30069	C3-Dibenzothiophenes	49	U	49	49	
85-01-8	Phenanthrene	27	J	49	0.64	
120-12-7	Anthracene	18	J	49	0.53	
CASID30042	C1-Phenanthrenes/Anthracenes	49	U	49	49	
CASID30062	C2-Phenanthrenes/Anthracenes	49	U	49	49	
CASID30072	C3-Phenanthrenes/Anthracenes	49	U	49	49	
CASID30078	C4-Phenanthrenes/Anthracenes	49	U	49	49	
206-44-0	Fluoranthene	71		49	0.51	
129-00-0	Pyrene	120		49	0.68	
CASID30039	C1-Fluoranthenes/Pyrenes	64		49	49	
56-55-3	Benz(a)anthracene	35	J	49	0.52	

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2407596
Date Collected: 09/27/2004
Date Received: 09/30/2004
Date Extracted: 10/21/2004
Date Analyzed: 11/04/2004

Polynuclear Aromatic Hydrocarbons

Sample Name: LDW-B1b-T
Lab Code: K2407596-003
File ID: J:\MS14\DATA\110404\1104F022.D
Instrument ID: MS14
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Lot: KWG0416322
Calibration ID: CAL3954

Sample Amount: 1.04 g
% Solids: NA
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
218-01-9	Chrysene	61		49	0.77	
CASID30037	C1-Chrysenes	49	U	49	49	
CASID30058	C2-Chrysenes	49	U	49	49	
CASID30068	C3-Chrysenes	49	U	49	49	
CASID30074	C4-Chrysenes	49	U	49	49	
205-99-2	Benzo(b)fluoranthene	34	J	49	0.44	
207-08-9	Benzo(k)fluoranthene	25	J	49	0.78	
192-97-2	Benzo(e)pyrene	33	J	49	0.12	
50-32-8	Benzo(a)pyrene	21	J	49	0.74	
198-55-0	Perylene	11	J	49	0.97	
193-39-5	Indeno(1,2,3-cd)pyrene	10	J	49	0.71	
53-70-3	Dibenz(a,h)anthracene	2.2	J	49	0.76	
191-24-2	Benzo(g,h,i)perylene	12	J	49	0.94	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	77	20-130	11/04/04	Acceptable
Fluoranthene-d10	85	20-130	11/04/04	Acceptable
Terphenyl-d14	103	20-130	11/04/04	Acceptable

Comments: _____

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2407596
Date Collected: 09/27/2004
Date Received: 09/30/2004
Date Extracted: 10/21/2004
Date Analyzed: 11/04/2004

Polynuclear Aromatic Hydrocarbons

Sample Name: LDW-B2b-T
Lab Code: K2407596-004
File ID: J:\MS14\DATA\110404\1104F023.D
Instrument ID: MS14
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Lot: KWG0416322
Calibration ID: CAL3954

Sample Amount: 1.01 g
% Solids: NA
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
91-20-3	Naphthalene	6.2	J	50	2.6	
91-57-6	2-Methylnaphthalene	1.9	J	50	1.5	
90-12-0	1-Methylnaphthalene	1.3	U	50	1.3	
CASID30061	C2-Naphthalenes	50	U	50	50	
CASID30071	C3-Naphthalenes	50	U	50	50	
CASID30077	C4-Naphthalenes	50	U	50	50	
92-52-4	Biphenyl	3.7	J	50	0.68	
208-96-8	Acenaphthylene	2.6	J	50	0.50	
132-64-9	Dibenzofuran	1.3	J	50	0.52	
83-32-9	Acenaphthene	1.0	J	50	0.74	
86-73-7	Fluorene	1.8	J	50	0.54	
CASID30040	C1-Fluorenes	50	U	50	50	
CASID30060	C2-Fluorenes	50	U	50	50	
CASID30070	C3-Fluorenes	50	U	50	50	
132-65-0	Dibenzothiophene	1.4	U	50	1.4	
CASID30038	C1-Dibenzothiophenes	50	U	50	50	
CASID30059	C2-Dibenzothiophenes	50	U	50	50	
CASID30069	C3-Dibenzothiophenes	50	U	50	50	
85-01-8	Phenanthrene	13	J	50	0.66	
120-12-7	Anthracene	10	J	50	0.55	
CASID30042	C1-Phenanthrenes/Anthracenes	50	U	50	50	
CASID30062	C2-Phenanthrenes/Anthracenes	50	U	50	50	
CASID30072	C3-Phenanthrenes/Anthracenes	50	U	50	50	
CASID30078	C4-Phenanthrenes/Anthracenes	50	U	50	50	
206-44-0	Fluoranthene	64		50	0.53	
129-00-0	Pyrene	94		50	0.70	
CASID30039	C1-Fluoranthenes/Pyrenes	61		50	50	
56-55-3	Benz(a)anthracene	31	J	50	0.54	

Comments: _____

Analytical Results

Client: Windward Environmental
Project: LDW Benthic Invertebrate Survey/04-08-06-21
Sample Matrix: Tissue

Service Request: K2407596
Date Collected: 09/27/2004
Date Received: 09/30/2004
Date Extracted: 10/21/2004
Date Analyzed: 11/04/2004

Polynuclear Aromatic Hydrocarbons

Sample Name: LDW-B2b-T
Lab Code: K2407596-004
File ID: J:\MS14\DATA\110404\1104F023.D
Instrument ID: MS14
Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Wet
Level: Low

Extraction Lot: KWG0416322
Calibration ID: CAL3954

Sample Amount: 1.01 g
% Solids: NA
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
218-01-9	Chrysene	46	J	50	0.80	
CASID30037	C1-Chrysenes	50	U	50	50	
CASID30058	C2-Chrysenes	50	U	50	50	
CASID30068	C3-Chrysenes	50	U	50	50	
CASID30074	C4-Chrysenes	50	U	50	50	
205-99-2	Benzo(b)fluoranthene	32	J	50	0.45	
207-08-9	Benzo(k)fluoranthene	19	J	50	0.81	
192-97-2	Benzo(e)pyrene	28	J	50	0.12	
50-32-8	Benzo(a)pyrene	16	J	50	0.76	
198-55-0	Perylene	13	J	50	1.0	
193-39-5	Indeno(1,2,3-cd)pyrene	6.9	J	50	0.73	
53-70-3	Dibenz(a,h)anthracene	1.6	J	50	0.79	
191-24-2	Benzo(g,h,i)perylene	9.0	J	50	0.97	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	75	20-130	11/04/04	Acceptable
Fluoranthene-d10	81	20-130	11/04/04	Acceptable
Terphenyl-d14	104	20-130	11/04/04	Acceptable

Comments: _____

Background Arsenic

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client: Windward Environmental

Service Request: K2407455

Project No.: 04-08-06-22

Date Collected: 09/23/04

Project Name: LDW

Date Received: 09/25/04

Matrix: TISSUE

Units: MG/KG

Basis: Wet

Sample Name: BI-C-T1

Lab Code: K2407455-001

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Arsenic	6020	0.096	0.006	5	10/13/04	10/19/04	2.550		

% Solids: NA

Comments:

00019

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client: Windward Environmental

Service Request: K2407455

Project No.: 04-08-06-22

Date Collected: 09/23/04

Project Name: LDW

Date Received: 09/25/04

Matrix: TISSUE

Units: MG/KG

Basis: Wet

Sample Name: BI-C-T2

Lab Code: K2407455-002

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Arsenic	6020	0.093	0.006	5	10/13/04	10/19/04	2.830		

% Solids: NA

Comments:

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client: Windward Environmental

Service Request: K2407455

Project No.: 04-08-06-22

Date Collected: 09/23/04

Project Name: LDW

Date Received: 09/25/04

Matrix: TISSUE

Units: MG/KG

Basis: Wet

Sample Name: BI-C-T3

Lab Code: K2407455-003

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Arsenic	6020	0.086	0.005	5	10/13/04	10/19/04	1.680		

% Solids: NA

Comments:

00021

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client: Windward Environmental

Service Request: K2407455

Project No.: 04-08-06-22

Date Collected: 09/23/04

Project Name: LDW

Date Received: 09/25/04

Matrix: TISSUE

Units: MG/KG

Basis: Wet

Sample Name: BI-C-T4

Lab Code: K2407455-004

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Arsenic	6020	0.105	0.006	5	10/13/04	10/19/04	2.310		

% Solids: NA

Comments:

00022

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client: Windward Environmental

Service Request: K2407455

Project No.: 04-08-06-22

Date Collected: 09/23/04

Project Name: LDW

Date Received: 09/25/04

Matrix: TISSUE

Units: MG/KG

Basis: Wet

Sample Name: BI-C-T5

Lab Code: K2407455-005

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Arsenic	6020	0.098	0.006	5	10/13/04	10/19/04	2.350		

% Solids: NA

Comments:

00023

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client: Windward Environmental

Service Request: K2407455

Project No.: 04-08-06-22

Date Collected: 09/23/04

Project Name: LDW

Date Received: 09/25/04

Matrix: TISSUE

Units: MG/KG

Basis: Wet

Sample Name: BI-C-T6

Lab Code: K2407455-006

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Arsenic	6020	0.094	0.006	5	10/13/04	10/19/04	1.890		

% Solids: NA

Comments:

00024

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client: Windward Environmental

Service Request: K2407455

Project No.: 04-08-06-22

Date Collected: 09/23/04

Project Name: LDW

Date Received: 09/25/04

Matrix: TISSUE

Units: MG/KG

Basis: Wet

Sample Name: SP-C-T1

Lab Code: K2407455-007

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Arsenic	6020	0.076	0.005	5	10/13/04	10/19/04	1.090		

% Solids: NA

Comments:

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client: Windward Environmental

Service Request: K2407455

Project No.: 04-08-06-22

Date Collected: 09/23/04

Project Name: LDW

Date Received: 09/25/04

Matrix: TISSUE

Units: MG/KG

Basis: Wet

Sample Name: SP-C-T2

Lab Code: K2407455-008

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Arsenic	6020	0.104	0.006	5	10/13/04	10/19/04	2.250		

% Solids: NA

Comments:

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client: Windward Environmental

Service Request: K2407455

Project No.: 04-08-06-22

Date Collected: 09/23/04

Project Name: LDW

Date Received: 09/25/04

Matrix: TISSUE

Units: MG/KG

Basis: Wet

Sample Name: SP-C-T3

Lab Code: K2407455-009

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Arsenic	6020	0.112	0.007	5	10/13/04	10/19/04	2.110		

% Solids: NA

Comments:

00027

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client: Windward Environmental

Service Request: K2407455

Project No.: 04-08-06-22

Date Collected: 09/23/04

Project Name: LDW

Date Received: 09/25/04

Matrix: TISSUE

Units: MG/KG

Basis: Wet

Sample Name: SP-C-T4

Lab Code: K2407455-010

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Arsenic	6020	0.111	0.007	5	10/13/04	10/19/04	2.040		

% Solids: NA

Comments:

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client: Windward Environmental

Service Request: K2407455

Project No.: 04-08-06-22

Date Collected: 09/23/04

Project Name: LDW

Date Received: 09/25/04

Matrix: TISSUE

Units: MG/KG

Basis: Wet

Sample Name: SP-C-T5

Lab Code: K2407455-011

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Arsenic	6020	0.110	0.007	5	10/13/04	10/19/04	2.130		

% Solids: NA

Comments:

00029

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client: Windward Environmental

Service Request: K2407455

Project No.: 04-08-06-22

Date Collected: 09/23/04

Project Name: LDW

Date Received: 09/25/04

Matrix: TISSUE

Units: MG/KG

Basis: Wet

Sample Name: SP-C-T6

Lab Code: K2407455-012

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Arsenic	6020	0.109	0.007	5	10/13/04	10/19/04	1.980		

% Solids: NA

Comments:

00030

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client: Windward Environmental

Service Request: K2407469

Project No.: 04-08-06-22

Date Collected: 09/23/04

Project Name: LDW

Date Received: 09/27/04

Matrix: SEDIMENT

Units: mg/kg

Basis: Dry

Sample Name: SP-C-S1

Lab Code: K2407469-001

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Arsenic	6020	0.58	0.08	5	10/05/04	10/19/04	1.76		

% Solids: 85.1

Comments:

00017

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client: Woodward Environmental

Service Request: K2407469

Project No.: 04-08-06-22

Date Collected: 09/23/04

Project Name: LDW

Date Received: 09/27/04

Matrix: SEDIMENT

Units: mg/kg

Basis: Dry

Sample Name: SP-C-S2

Lab Code: K2407469-002

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Arsenic	6020	0.53	0.07	5	10/05/04	10/19/04	1.38		

% Solids: 77.2

Comments:

00018

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client: Windward Environmental

Service Request: K2407469

Project No.: 04-08-06-22

Date Collected: 09/23/04

Project Name: LDW

Date Received: 09/27/04

Matrix: SEDIMENT

Units: mg/kg

Basis: Dry

Sample Name: SP-C-S3

Lab Code: K2407469-003

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Arsenic	6020	0.52	0.07	5	10/05/04	10/19/04	1.42		

% Solids: 79.5

Comments:

00019

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client: Windward Environmental

Service Request: K2407469

Project No.: 04-08-06-22

Date Collected: 09/23/04

Project Name: LDW

Date Received: 09/27/04

Matrix: SEDIMENT

Units: mg/kg

Basis: Dry

Sample Name: SP-C-S4

Lab Code: K2407469-004

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Arsenic	6020	0.55	0.08	5	10/05/04	10/19/04	1.64		

% Solids: 75.9

Comments:

00020

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client: Windward Environmental

Service Request: K2407469

Project No.: 04-08-06-22

Date Collected: 09/23/04

Project Name: LDW

Date Received: 09/27/04

Matrix: SEDIMENT

Units: mg/kg

Basis: Dry

Sample Name: SP-C-S5

Lab Code: K2407469-005

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Arsenic	6020	0.54	0.07	5	10/05/04	10/19/04	1.69		

% Solids: 76.0

Comments:

00021

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client: Windward Environmental

Service Request: K2407469

Project No.: 04-08-06-22

Date Collected: 09/23/04

Project Name: LDW

Date Received: 09/27/04

Matrix: SEDIMENT

Units: mg/kg

Basis: Dry

Sample Name: SP-C-S6

Lab Code: K2407469-006

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Arsenic	6020	0.61	0.08	5	10/05/04	10/19/04	1.45		

% Solids: 80.1

Comments:

00022

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client: Windward Environmental

Service Request: K2407469

Project No.: 04-08-06-22

Date Collected: 09/23/04

Project Name: LDW

Date Received: 09/27/04

Matrix: SEDIMENT

Units: mg/kg

Basis: Dry

Sample Name: B1-C-S1

Lab Code: K2407469-007

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Arsenic	6020	0.56	0.08	5	10/05/04	10/19/04	1.39		

% Solids: 74.6

Comments:

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client: Windward Environmental

Service Request: K2407469

Project No.: 04-08-06-22

Date Collected: 09/24/04

Project Name: LDW

Date Received: 09/27/04

Matrix: SEDIMENT

Units: mg/kg

Basis: Dry

Sample Name: B1-C-S2

Lab Code: K2407469-008

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Arsenic	6020	0.58	0.08	5	10/05/04	10/19/04	1.58		

% Solids: 72.4

Comments:

00024

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client: Windward Environmental

Service Request: K2407469

Project No.: 04-08-06-22

Date Collected: 09/24/04

Project Name: LDW

Date Received: 09/27/04

Matrix: SEDIMENT

Units: mg/kg

Basis: Dry

Sample Name: B1-C-S3

Lab Code: K2407469-009

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Arsenic	6020	0.55	0.08	5	10/05/04	10/19/04	1.61		

% Solids: 74.1

Comments:

00025

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client: Windward Environmental

Service Request: K2407469

Project No.: 04-08-06-22

Date Collected: 09/24/04

Project Name: LDW

Date Received: 09/27/04

Matrix: SEDIMENT

Units: mg/kg

Basis: Dry

Sample Name: B1-C-S4

Lab Code: K2407469-010

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Arsenic	6020	0.56	0.08	5	10/05/04	10/19/04	1.63		

% Solids: 73.3

Comments:

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client: Windward Environmental

Service Request: K2407469

Project No.: 04-08-06-22

Date Collected: 09/24/04

Project Name: LDW

Date Received: 09/27/04

Matrix: SEDIMENT

Units: mg/kg

Basis: Dry

Sample Name: B1-C-S5

Lab Code: K2407469-011

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Arsenic	6020	0.56	0.08	5	10/05/04	10/19/04	1.60		

% Solids: 73.8

Comments:

00027

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client: Windward Environmental

Service Request: K2407469

Project No.: 04-08-06-22

Date Collected: 09/23/04

Project Name: LDW

Date Received: 09/27/04

Matrix: SEDIMENT

Units: mg/kg

Basis: Dry

Sample Name: B1-C-S6

Lab Code: K2407469-012

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Arsenic	6020	0.55	0.08	5	10/05/04	10/19/04	1.53		

% Solids: 75.0

Comments:

00028

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client: Windward Environmental

Service Request: K2407471

Project No.: 04-08-06-22

Date Collected: 09/16/04

Project Name: LDWG

Date Received: 09/27/04

Matrix: SEDIMENT

Units: mg/kg

Basis: Dry

Sample Name: LDW-BL-S-1

Lab Code: K2407471-001

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Arsenic	6020	0.55	0.08	5	10/05/04	10/19/04	4.38		

% Solids: 64.5

Comments:

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client: Windward Environmental

Service Request: K2407471

Project No.: 04-08-06-22

Date Collected: 09/17/04

Project Name: LDWG

Date Received: 09/27/04

Matrix: SEDIMENT

Units: mg/kg

Basis: Dry

Sample Name: LDW-EP-S1

Lab Code: K2407471-003

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Arsenic	6020	0.53	0.07	5	10/05/04	10/19/04	2.51		

% Solids: 77.1

Comments: