APPENDIX G: RAW ANALYTICAL LABORATORY DATA



Seep Sampling Data Report DRAFT FINAL November 12, 2004

Port of Seattle / City of Seattle / King County / The Boeing Company

Data Summary Package

Prepared for

Windward Environmental

04-08-06-20 LDW-SEEP SAMPLING

ARI Job Nos. GX14

Prepared By

Analytical Resources, Inc.

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ORGANICS ANALYSIS DATA SHEET Volatiles by Purge & Trap GC/MS-Method 8260B Page 1 of 2

Sample ID: LDW-SP-10-C-U SAMPLE

Lab Sample ID: GX14A LIMS ID: 04-12015 Matrix: Water Data Release Authorized Reported: 08/11/04 QC Report No: GX14-Windward Environmental Project: LDW-Seep Sampling

Date Sampled: 07/30/04 Date Received: 07/30/04

Instrument/Analyst: FINN5/PAB Date Analyzed: 08/05/04 19:00 Sample Amount: 5.00 mL Purge Volume: 5.0 mL

CAS Number	Analyte	RL	Result
74-87-3	Chloromethane	1.0	< 1.0 U
74-83-9	Bromomethane	1.0	< 1.0 U
75-01-4	Vinyl Chloride	1.0	< 1.0 U
75-00-3	Chloroethane	1.0	< 1.0 U
75-09-2	Methylene Chloride	2.0	< 2.0 U
67-64-1	Acetone	5.0	< 5.0 U
75-15-0	Carbon Disulfide	1.0	< 1.0 U
75-35-4	1,1-Dichloroethene	1.0	< 1.0 U
75-34-3	1,1-Dichloroethane	1.0	< 1.0 U
156-60-5	trans-1,2-Dichloroethene	1.0	< 1.0 U
156-59-2	cis-1,2-Dichloroethene	1.0	< 1.0 U
67-66-3	Chloroform	1.0	< 1.0 U
107-06-2	1,2-Dichloroethane	1.0	< 1.0 U
78-93-3	2-Butanone	5.0	< 5.0 U
71-55-6	1,1,1-Trichloroethane	1.0	< 1.0 U
56-23-5	Carbon Tetrachloride	1.0	< 1.0 U
108-05-4	Vinyl Acetate	5.0	< 5.0 U
75-27-4	Bromodichloromethane	1.0	< 1.0 U
78-87-5	1,2-Dichloropropane	1.0	< 1.0 U
10061-01-5	cis-1,3-Dichloropropene	1.0	< 1.0 U
79-01-6	Trichloroethene	1.0	< 1.0 U
124-48-1	Dibromochloromethane	1.0	< 1.0 U
79-00-5	1,1,2-Trichloroethane	1.0	< 1.0 U
71-43-2	Benzene	1.0	< 1.0 U
10061-02-6	trans-1,3-Dichloropropene	1.0	< 1.0 U
110-75-8	2-Chloroethylvinylether	5.0	< 5.0 U
75-25-2	Bromoform	1.0	< 1.0 U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0 U
591-78-6	2-Hexanone	5.0	< 5.0 U
127-18-4	Tetrachloroethene	1.0	< 1.0 U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	< 1.0 U
108-88-3	Toluene	1.0	< 1.0 U
108-90-7	Chlorobenzene	1.0	< 1.0 U
100-41-4	Ethylbenzene	1.0	< 1.0 U
100-42-5	Styrene	1.0	< 1.0 U
75-69-4	Trichlorofluoromethane	1.0	< 1.0 U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroe	2.0	< 2.0 U
1330-20-7	m,p-Xvlene	1.0	< 1.0 U
95-47-6	o-Xylene	1.0	< 1.0 U
95-50-1	1,2-Dichlorobenzene	1.0	< 1.0 U
541-73-1	1,3-Dichlorobenzene	1.0	< 1.0 U
106-46-7	1,4-Dichlorobenzene	1.0	< 1.0 U
107-02-8	Acrolein	50	< 50 U
74-88-4	Methvl Iodide	1.0	< 1.0 U
74-96-4	Bromoethane	2.0	< 2.0 T
107-13-1	Acrylonitrile	1.0	< 1 0 11
563-58-6	1,1-Dichloropropene	1.0	< 1.0 II
74-95-3	Dibromomethane	1.0	< 1.0 U
630-20-6	1,1,1,2-Tetrachloroethane	1.0	< 1.0 U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	< 5 0 11
	-, of onioropropule	5.0	× 5.0 0



ORGANICS ANALYSIS DATA SHEET Volatiles by Purge & Trap GC/MS-Method 8260B

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Sample ID: LDW-SP-10-C-U SAMPLE

Lab Sample ID: GX14A LIMS ID: 04-12015 Matrix: Water Date Analyzed: 08/05/04 19:00

QC Report No: GX14-Windward Environmental Project: LDW-Seep Sampling

CAS Number	Analyte	RL	Result	
96-18-4	1,2,3-Trichloropropane	3.0	< 3.0 U	
110-57-6	trans-1,4-Dichloro-2-butene	5.0	< 5.0 U	
108-67-8	1,3,5-Trimethylbenzene	1.0	< 1.0 U	
95-63-6	1,2,4-Trimethylbenzene	1.0	< 1.0 U	
87-68-3	Hexachlorobutadiene	5.0	< 5.0 U	
106-93-4	Ethylene Dibromide	1.0	< 1.0 U	
74-97-5	Bromochloromethane	1.0	< 1.0 U	
594-20-7	2,2-Dichloropropane	1.0	< 1.0 U	
142-28-9	1,3-Dichloropropane	1.0	< 1.0 U	
98-82-8	Isopropylbenzene	1.0	< 1.0 U	
103-65-1	n-Propylbenzene	1.0	< 1.0 U	
108-86-1	Bromobenzene	1.0	< 1.0 U	
95-49-8	2-Chlorotoluene	1.0	< 1.0 U	
106-43-4	4-Chlorotoluene	1.0	< 1.0 U	
98-06-6	tert-Butylbenzene	1.0	< 1.0 U	
135-98-8	sec-Butylbenzene	1.0	< 1.0 U	
99-87-6	4-Isopropyltoluene	1.0	< 1.0 U	
104-51-8	n-Butylbenzene	1.0	< 1.0 U	
120-82-1	1,2,4-Trichlorobenzene	5.0	< 5.0 Ŭ	
91-20-3	Naphthalene	5.0	< 5.0 U	
87-61-6	1,2,3-Trichlorobenzene	5.0	< 5.0 U	

Reported in $\mu g/L$ (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	94.8%
d8-Toluene	96.2%
Bromofluorobenzene	95.0%
d4-1,2-Dichlorobenzene	98.3%

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× 8.4



ORGANICS ANALYSIS DATA SHEET Volatiles by Purge & Trap GC/MS-Method 8260B Page 1 of 2

Lab Sample ID: GX14B LIMS ID: 04-12016 Matrix: Water Data Release Authorized:

Data Release Authorized:

Instrument/Analyst: FINN5/PAB Date Analyzed: 08/05/04 19:28 **SAMPLE** QC Report No: GX14-Windward Environmental

Project: LDW-Seep Sampling

Date Sampled: 07/30/04 Date Received: 07/30/04

Sample Amount: 5.00 mL Purge Volume: 5.0 mL

74-87-3Chloromethane1.0< 1.0	CAS Number	Analyte	RL	Result
$\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	74-87-3	Chloromethane	1.0	< 1.0 U
$\begin{array}{llllllllllllllllllllllllllllllllllll$	74-83-9	Bromomethane	1.0	< 1.0 U
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	75-01-4	Vinyl Chloride	1.0	< 1.0 U
$\begin{array}{llllllllllllllllllllllllllllllllllll$	75-00-3	Chloroethane	1.0	< 1.0 U
$\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	75-09-2	Methylene Chloride	2.0	< 2.0 U
$\begin{array}{llllllllllllllllllllllllllllllllllll$	67-64-1	Acetone	5.0	< 5.0 U
$\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	75-15-0	Carbon Disulfide	1.0	< 1.0 U
$\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	75-35-4	1,1-Dichloroethene	1.0	< 1.0 U
$\begin{array}{llllllllllllllllllllllllllllllllllll$	75-34-3	1,1-Dichloroethane	1.0	< 1.0 U
$\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	156-60-5	trans-1,2-Dichloroethene	1.0	< 1.0 U
$\begin{array}{llllllllllllllllllllllllllllllllllll$	156-59-2	cis-1,2-Dichloroethene	1.0	< 1.0 U
$\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	67-66-3	Chloroform	1.0	< 1.0 U
$\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	107-06-2	1,2-Dichloroethane	1.0	< 1.0 U
$\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	78-93-3	2-Butanone	5.0	< 5.0 Ŭ
$\begin{array}{llllllllllllllllllllllllllllllllllll$	71-55-6	1,1,1-Trichloroethane	1.0	< 1.0 U
108-05-4Vinyl Acetate5.0< 5.0 U $75-27-4$ Bromodichloromethane 1.0 < 1.0 U $78-87-5$ $1, 2$ -Dichloropropane 1.0 < 1.0 U $78-87-5$ $1, 2$ -Dichloropropane 1.0 < 1.0 U $78-87-5$ $1, 2$ -Dichloropropene 1.0 < 1.0 U $79-01-6$ Trichloroethene 1.0 < 1.0 U $79-01-6$ Trichloroethane 1.0 < 1.0 U $79-00-5$ $1, 1, 2$ -Trichloroethane 1.0 < 1.0 U $10061-02-6$ trans- $1, 3$ -Dichloropropene 1.0 < 1.0 U $10061-02-6$ trans- $1, 3$ -Dichloropropene 1.0 < 1.0 U $100-75-8$ 2 -Chloroethylvinylether 5.0 < 5.0 U $75-25-2$ Bromoform 1.0 < 1.0 U $108-10-1$ 4 -Methyl- 2 -Pentanone (MIBK) 5.0 < 5.0 U $591-78-6$ 2 -Hexanone 5.0 < 5.0 U $127-18-4$ Tetrachloroethene 1.0 < 1.0 U $108-80-7$ Chlorobenzene 1.0 < 1.0 U $108-80-7$ Chlorobenzene 1.0 < 1.0 U $100-41-4$ Ethylbenzene 1.0 < 1.0 U $100-42-5$ Styrene 1.0 < 1.0 U $75-69-4$ Trichlorofluoromethane 1.0 < 1.0 U $76-13-1$ $1, 1, 2$ -Trichloro- $1, 2, 2$ -trifluoroe 2.0 2.0 U $130-20-7$ m, p -Xylene 1.0 < 1.0 U $95-50-1$ $1, 2$ -Dichlorobenzene 1.0 < 1.0 U $107-68-4$	56-23-5	Carbon Tetrachloride	1.0	< 1.0 U
75-27-4Bromodichloromethane1.0< 1.0U $78-87-5$ $1,2-Dichloropropane$ 1.0 < 1.0	108-05-4	Vinyl Acetate	5.0	< 5.0 U
78-87-51,2-Dichloropropane1.0< 1.0V $10061-01-5$ cis-1,3-Dichloropropene1.0< 1.0	75-27-4	Bromodichloromethane	1.0	< 1.0 U
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	78-87-5	1,2-Dichloropropane	1.0	< 1.0 U
79-01-6Trichloroethene1.0< 1.0 U $124+48-1$ Dibromochloromethane1.0< 1.0 U	10061-01-5	cis-1,3-Dichloropropene	1.0	< 1.0 U
124-48-1Dibromochloromethane1.0< 1.0U $79-00-5$ 1,1,2-Trichloroethane1.0< 1.0	79-01-6	Trichloroethene	1.0	< 1.0 U
79-00-51,1,2-Trichloroethane1.0< 1.0U $71-43-2$ Benzene1.0< 1.0	124-48-1	Dibromochloromethane	1.0	< 1.0 II
71-43-2 Benzene 1.0 < 1.0	79-00-5	1,1,2-Trichloroethane	1.0	< 1 0 U
10061-02-6trans-1,3-Dichloropropene1.0< 1.0<110-75-82-Chloroethylvinylether5.0< 5.0	71-43-2	Benzene	1.0	< 1.0 U
110-75-8 2-Chloroethylvinylether 5.0 < 5.0	10061-02-6	trans-1,3-Dichloropropene	1.0	< 1.0 U
75-25-2 Bromoform 1.0 < 1.0	110-75-8	2-Chloroethylvinylether	5.0	< 5.0 U
108-10-14-Methyl-2-Pentanone (MIBK)5.0< 5.0U591-78-62-Hexanone5.0< 5.0	75-25-2	Bromoform	1.0	< 1.0 U
591-78-62-Hexanone5.0 $<$ 5.0U127-18-4Tetrachloroethene1.0 $<$ 1.0U79-34-51,1,2,2-Tetrachloroethane1.0 $<$ 1.0U108-88-3Toluene1.0 $<$ 1.0U108-90-7Chlorobenzene1.0 $<$ 1.0U100-41-4Ethylbenzene1.0 $<$ 1.0U100-42-5Styrene1.0 $<$ 1.0U75-69-4Trichlorofluoromethane1.0 $<$ 1.0U76-13-11,1,2-Trichloro-1,2,2-trifluoroe2.0 $<$ 2.0U1330-20-7m,p-Xylene1.0 $<$ 1.0U95-47-6 $-Xylene$ 1.0 $<$ 1.0U95-50-11,2-Dichlorobenzene1.0 $<$ 1.0U106-46-71,4-Dichlorobenzene1.0 $<$ 1.0U107-02-8Acrolein50 $<$ 50U74-88-4Methyl Iodide1.0 $<$ 1.0U107-13-1Acrylonitrile1.0 $<$ 1.0U108-28-61,1-Dichlorop	108-10-1	4-Methvl-2-Pentanone (MIBK)	5 0	< 5 0 U
127-18-4Tetrachloroethene1.0< 1.0U79-34-51,1,2,2-Tetrachloroethane1.0< 1.0	591-78-6	2-Hexanone	5.0	< 5.0 U
79-34-5 $1,1,2,2-Tetrachloroethane$ 1.0 < 1.0 0 $108-88-3$ Toluene 1.0 < 1.0 0 $108-90-7$ Chlorobenzene 1.0 < 1.0 0 $100-41-4$ Ethylbenzene 1.0 < 1.0 0 $100-42-5$ Styrene 1.0 < 1.0 0 $100-42-5$ Styrene 1.0 < 1.0 0 $75-69-4$ Trichlorofluoromethane 1.0 < 1.0 0 $76-13-1$ $1,1,2-Trichloro-1,2,2-trifluoroe2.0< 2.001330-20-7m,p-Xylene1.0< 1.0095-47-60-Xylene1.0< 1.0095-50-11,2-Dichlorobenzene1.0< 1.00106-46-71,4-Dichlorobenzene1.0< 1.00107-02-8Acrolein50< 50074-98-4Methyl Iodide1.0< 1.00107-13-1Acrylonitrile1.0< 1.00107-13-1Acrylonitrile1.0< 1.00107-13-1Acrylonitrile1.0< 1.00107-13-1Acrylonitrile1.0< 1.00107-13-1Acrylonitrile1.0< 1.00107-13-1Acrylonitrile1.0< 1.00107-13-1Acrylonitrile1.0< 1.00107-13-1Acrylonitrile0.00.00.0$	127-18-4	Tetrachloroethene	1.0	
108-88-3Toluene1.0< 1.0< 1.0U108-88-3Toluene1.0< 1.0	79-34-5	1,1,2,2-Tetrachloroethane	1 0	
108-90-7 Chlorobenzene 1.0 < 1.0	108-88-3	Toluene	1 0	
100-41-4 Ethylbenzene 1.0 < 1.0	108-90-7	Chlorobenzene	1 0	
100-42-5 Styrene 1.0 < 1.0	100-41-4	Ethylbenzene	1 0	
75-69-4 Trichlorofluoromethane 1.0 < 1.0	100-42-5	Styrene	1 0	
76-13-1 1,1,2-Trichloro-1,2,2-trifluoroe 2.0 1330-20-7 m,p-Xylene 1.0 95-47-6 o-Xylene 1.0 1.0 U 95-50-1 1,2-Dichlorobenzene 1.0 1.0 U 541-73-1 1,3-Dichlorobenzene 1.0 1.0 U 541-73-1 1,3-Dichlorobenzene 1.0 1.0 U 106-46-7 1,4-Dichlorobenzene 1.0 1.0 U 107-02-8 Acrolein 50 < 50	75-69-4	Trichlorofluoromethane	1 0	
1330-20-7 m,p-Xylene 1.0 < 1.0	76-13-1	1.1.2-Trichloro-1.2.2-trifluoroe	$2^{1.0}$	
95-47-6 o-Xylene 1.0 < 1.0	1330-20-7	m n-Xvlene	1 0	
95-50-1 1,2-Dichlorobenzene 1.0 < 1.0	95-47-6	0-Xylene	1.0	
53 0 1 1,2 Dichlorobenzene 1.0 < 1.0 U	95-50-1	1.2-Dichlorobenzene	1.0	
11,3-Dichlorobenzene 1.0 < 1.0	541-73-1	1,2 Dichlorobenzene	1.0	< 1.0 U
100 10 7 1,4 Dichiofobenzene 1.0 1.0 1.0 0 107-02-8 Acrolein 50 50 U 74-88-4 Methyl Iodide 1.0 1.0 U 74-96-4 Bromoethane 2.0 2.0 U 107-13-1 Acrylonitrile 1.0 1.0 U 563-58-6 1,1-Dichloropropene 1.0 1.0 U 74-95-3 Dibromomethane 1.0 1.0 U 530-20-6 1,1,1,2-Tetrachloroethane 1.0 1.0 U 96-12-8 1,2-Dibromo-3-chloropropane 5.0 U 0000008	106-46-7	1 4-Dichlorobenzene	1.0	< 1.0 U
74-88-4 Methyl Iodide 1.0 < 1.0 U	107-02-8	Acrolein	±.0	< 1.0 U
74-96-4 Bromoethane 2.0 < 2.0 U	74-88-4	Methyl Iodide	1 0	< 50 0
107-13-1 Acrylonitrile 1.0 < 1.0 U	74-96-4	Bromoethane	2.0	< 1.0 U
563-58-6 1,1-Dichloropropene 1.0 < 1.0	107-13-1	Acrylonitrile	2.0	
74-95-3 Dibromomethane 1.0 < 1.0	563-58-6	1 1-Dichloropropopo	1.0	< 1.0 U
530-20-6 1,1,1,2-Tetrachloroethane 1.0 < 1.0	74-95-2	r, r-bromomethane	1.0	< 1.0 U
96-12-8 1,2-Dibromo-3-chloropropane 5.0 < 5.0	(30-20-4 (30-20-4	1 1 1 2-Totrachlareathara	1.0	< 1.0 0
0 12 0 1,2-DIDIOMO-3-CHIOTOPIOPANE 5.0 < 5.0 0	96-12-8	1 2-Dibromo-3-chloropropano	T.0	< I.U U
	12 0	2,2 Distono 5 chiloropiopane	5.0	000008



ORGANICS ANALYSIS DATA SHEET Volatiles by Purge & Trap GC/MS-Method 8260B Page 2 of 2

Sample ID: LDW-SP-62-C-U SAMPLE

Lab Sample ID: GX14B LIMS ID: 04-12016 Matrix: Water Date Analyzed: 08/05/04 19:28 QC Report No: GX14-Windward Environmental Project: LDW-Seep Sampling

CAS Number	Analyte	RL	Result
96-18-4	1,2,3-Trichloropropane	3.0	< 3.0 U
110-57-6	trans-1,4-Dichloro-2-butene	5.0	< 5.0 U
108-67-8	1,3,5-Trimethylbenzene	1.0	< 1.0 U
95-63-6	1,2,4-Trimethylbenzene	1.0	< 1.0 U
87-68-3	Hexachlorobutadiene	5.0	< 5.0 U
106-93-4	Ethylene Dibromide	1.0	< 1.0 U
74-97-5	Bromochloromethane	1.0	< 1.0 U
594-20-7	2,2-Dichloropropane	1.0	< 1.0 U
142-28-9	1,3-Dichloropropane	1.0	< 1.0 U
98-82-8	Isopropylbenzene	1.0	< 1.0 U
103-65-1	n-Propylbenzene	1.0	< 1.0 U
108-86-1	Bromobenzene	1.0	< 1.0 U
95-49-8	2-Chlorotoluene	1.0	< 1.0 U
106-43-4	4-Chlorotoluene	1.0	< 1.0 U
98-06-6	tert-Butylbenzene	1.0	< 1.0 U
135-98-8	sec-Butylbenzene	1.0	< 1.0 U
99-87-6	4-Isopropyltoluene	1.0	< 1.0 U
104-51-8	n-Butylbenzene	1.0	< 1.0 U
120-82-1	1,2,4-Trichlorobenzene	5.0	< 5.0 Ŭ
91-20-3	Naphthalene	5.0	< 5.0 U
87~61-6	1,2,3-Trichlorobenzene	5.0	< 5.0 U

Reported in $\mu g/L$ (ppb)

Volatile Surrogate Recovery

95.5%
95.8%
93.0%
97.6%

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ORGANICS ANALYSIS DATA SHEET Volatiles by Purge & Trap GC/MS-Method 8260B Page 1 of 2

Lab Sample ID: GX14C LIMS ID: 04-12017 Matrix: Water Data Release Authorized: Reported: 08/11/04 IN

Instrument/Analyst: FINN5/PAB Date Analyzed: 08/05/04 19:57

SAMPLE QC Report No: GX14-Windward Environmental

Sample ID: TRIP BLANK

Project: LDW-Seep Sampling

Date Sampled: Date Received: 07/30/04

Sample Amount: 5.00 mL Purge Volume: 5.0 mL

CAS Number	Analyte	RL	Result
74-87-3	Chloromethane	1.0	< 1.0 U
74-83-9	Bromomethane	1.0	< 1.0 U
75-01-4	Vinyl Chloride	1.0	< 1.0 U
75-00-3	Chloroethane	1.0	< 1.0 U
75-09-2	Methylene Chloride	2.0	< 2.0 U
67-64-1	Acetone	5.0	< 5.0 U
75-15-0	Carbon Disulfide	1.0	< 1.0 U
75-35-4	1,1-Dichloroethene	1.0	< 1.0 U
75-34-3	1,1-Dichloroethane	1.0	< 1.0 U
156-60-5	trans-1,2-Dichloroethene	1.0	< 1.0 U
156-59-2	cis-1,2-Dichloroethene	1.0	< 1.0 U
67-66-3	Chloroform	1.0	< 1.0 U
107-06-2	1,2-Dichloroethane	1.0	< 1.0 U
78-93-3	2-Butanone	5.0	< 5.0 U
71-55-6	1,1,1-Trichloroethane	1.0	< 1.0 U
56-23-5	Carbon Tetrachloride	1.0	< 1.0 U
108-05-4	Vinyl Acetate	5.0	< 5.0 U
75-27-4	Bromodichloromethane	1.0	< 1.0 U
78-87-5	1,2-Dichloropropane	1.0	< 1.0 U
10061-01-5	cis-1,3-Dichloropropene	1.0	< 1.0 U
79-01-6	Trichloroethene	1.0	< 1.0 U
124-48-1	Dibromochloromethane	1.0	< 1.0 U
79-00-5	1,1,2-Trichloroethane	1.0	< 1.0 U
71-43-2	Benzene	1.0	< 1.0 U
10061-02-6	trans-1,3-Dichloropropene	1.0	< 1.0 U
110-75-8	2-Chloroethylvinylether	5.0	< 5.0 Ŭ
75-25-2	Bromoform	1.0	< 1.0 U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0 U
591-78-6	2-Hexanone	5.0	< 5.0 U
127-18-4	Tetrachloroethene	1.0	< 1.0 U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	< 1.0 U
108-88-3	Toluene	1.0	< 1.0 U
108-90-7	Chlorobenzene	1.0	< 1.0 U
100-41-4	Ethylbenzene	1.0	< 1.0 U
100-42-5	Stvrene	1.0	< 1.0 U
75-69-4	Trichlorofluoromethane	1.0	< 1.0 U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroe	2.0	< 2.0 U
1330-20-7	m,p-Xvlene	1.0	< 1.0 U
95-47-6	o-Xvlene	1.0	< 1.0 U
95-50-1	1,2-Dichlorobenzene	1.0	< 1.0 U
541-73-1	1,3-Dichlorobenzene	1.0	< 1.0 U
106-46-7	1,4-Dichlorobenzene	1.0	< 1.0 U
107-02-8	Acrolein	50	< 50 U
74-88-4	Methyl Todide	1.0	< 1.0 U
74-96-4	Bromoethane	2.0	< 2.0 U
107-13-1	Acrylonitrile	1.0	< 1.0 U
563-58-6	1,1-Dichloropropene	1.0	< 1.0 U
74-95-3	Dibromomethane	1.0	< 1.0 U
630-20-6	1,1,1,2-Tetrachloroethane	1.0	< 1.0 U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	< 5.0 dbaara
	-, - Sisteme s enteropropune	0.0	



ORGANICS ANALYSIS DATA SHEET Volatiles by Purge & Trap GC/MS-Method 8260B Page 2 of 2

Sample ID: TRIP BLANK SAMPLE

Lab Sample ID: GX14C LIMS ID: 04-12017 Matrix: Water Date Analyzed: 08/05/04 19:57 QC Report No: GX14-Windward Environmental Project: LDW-Seep Sampling

CAS Number	Analyte	RL	Result
96-18-4	1,2,3-Trichloropropane	3.0	< 3.0 U
110-57-6	trans-1,4-Dichloro-2-butene	5.0	< 5.0 U
108-67-8	1,3,5-Trimethylbenzene	1.0	< 1.0 U
95-63-6	1,2,4-Trimethylbenzene	1.0	< 1.0 U
87-68-3	Hexachlorobutadiene	5.0	< 5.0 U
106-93-4	Ethylene Dibromide	1.0	< 1.0 U
74-97-5	Bromochloromethane	1.0	< 1.0 U
594-20-7	2,2-Dichloropropane	1.0	< 1.0 U
142-28-9	1,3-Dichloropropane	1.0	< 1.0 U
98-82-8	Isopropylbenzene	1.0	< 1.0 U
103-65-1	n-Propylbenzene	1.0	< 1.0 U
108-86-1	Bromobenzene	1.0	< 1.0 U
95-49-8	2-Chlorotoluene	1.0	< 1.0 U
106-43-4	4-Chlorotoluene	1.0	< 1.0 U
98-06-6	tert-Butylbenzene	1.0	< 1.0 U
135-98-8	sec-Butylbenzene	1.0	< 1.0 U
99-87-6	4-Isopropyltoluene	1.0	< 1.0 U
104-51-8	n-Butylbenzene	1.0	< 1.0 U
120-82-1	1,2,4-Trichlorobenzene	5.0	< 5.0 U
91-20-3	Naphthalene	5.0	< 5.0 U
87-61-6	1,2,3-Trichlorobenzene	5.0	< 5.0 U

Reported in $\mu g/L$ (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	92.6%
d8-Toluene	95.6%
Bromofluorobenzene	93.0%
d4-1,2-Dichlorobenzene	99.5%

(24)



WATER VOLATILE SYSTEM MONITORING COMPOUND SUMMARY

Matrix: Water 5 mL

QC Report No: GX14

Lab ID	Client ID	DCE	TOL	BFB	DCB	TOT OUT
080504MB	Method Blank	86.3%	94.0%	92.1%	97.4%	0
GX14LCS	Lab Cntrl Sample	86.7%	94.2%	93.5%	101%	0
GX14LCSD	Lab Cntrl Sample Dp	88.1%	96.1%	94.78	101%	0
GX14A	LDW-SP-10-C-U	94.8%	96.2%	95.0%	98.3%	0
GX14B	LDW-SP-62-C-U	95.5%	95.8%	93.0%	97.6%	0
GX14C	TRIP BLANK	92.6%	95.6%	93.0%	99.5%	0 ·

SW8260B	LCS/MB LIMITS	QC LIMITS
(DCE) = 1,2-Dichloroethane-d4	(74-133)	(74-142)
(TOL) = Toluene-d8	(77-131)	(84-129)
(BFB) = Bromofluorobenzene	(79-127)	(77-122)
(DCB) = 1,2-Dichlorobenzene-d4	(84-132)	(85-135)

Column to be used to flag recovery values

* Values outside of required QC limits

D System Monitoring Compound diluted out

9

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ORGANICS ANALYSIS DATA SHEET

Volatiles by Purge & Trap GC/MS-Method 8260B Sample ID: LCS-080504 Page 1 of 2

LCS/LCSD

Lab Sample ID: LCS-080504 LIMS ID: 04-12015 Matrix: Water Data Release Authorized: Reported: 08/11/04

QC Report No: GX14-Windward Environmental Project: LDW-Seep Sampling

Date Sampled: NA Date Received: NA

Instrument/Analyst LCS: FINN5/PAB LCSD: FINN5/PAB Date Analyzed LCS: 08/05/04 11:49 LCSD: 08/05/04 12:31

Sample Amount LCS: 5.00 mL LCSD: 5.00 mL Purge Volume LCS: 5.0 mL LCSD: 5.0 mL

		Spike	LCS		Spike	LCSD	
Analyte	LCS	Added-LCS	Recovery	LCSD	Added-LCSD	Recovery	RPD
Chloromethane	48.5	50.0	97.0%	47.0	50.0	94.0%	3.1%
Bromomethane	41.8	50.0	83.6%	41.9	50.0	83.8%	0.2%
Vinyl Chloride	40.9	50.0	81.8%	40.1	50.0	80.2%	2.0%
Chloroethane	44.9	50.0	89.8%	44.5	50.0	89.0%	0.9%
Methylene Chloride	49.7	50.0	99.4%	51.5	50.0	103%	3.6%
Acetone	188	250	75.2%	189	250	75.6%	0.5%
Carbon Disulfide	48.7	50.0	97.4%	49.8	50.0	99.6%	2.2%
1,1-Dichloroethene	44.7	50.0	89.4%	45.7	50.0	91.4%	2.2%
1,1-Dichloroethane	49.6	50.0	99.2%	51.0	50.0	102%	2.8%
trans-1,2-Dichloroethene	50.4	50.0	101%	51.5	50.0	103%	2.2%
cis-1,2-Dichloroethene	49.0	50.0	98.0%	52.6	50.0	105%	7.1%
Chloroform	46.9	50.0	93.8%	48.4	50.0	96.8%	3.1%
1,2-Dichloroethane	48.2	50.0	96.4%	49.5	50.0	99.0%	2.78
2-Butanone	247	250	98.8%	261	250	104%	5.5%
1,1,1-Trichloroethane	48.3	50.0	96.6%	49.5	50.0	99.08	2.5%
Carbon Tetrachloride	50.1	50.0	100%	50.5	50.0	101%	0.8%
Vinyl Acetate	49.4	50.0	98.8%	51.5	50.0	103%	4.2%
Bromodichloromethane	52.0	50.0	104%	53.3	50.0	107%	2.5%
1,2-Dichloropropane	51.8	50.0	104%	53.7	50.0	107%	3.6%
cis-1,3-Dichloropropene	51.6	50.0	103%	53.3	50.0	107%	3.28
Trichloroethene	51.8	50.0	104%	52.8	50.0	106%	1 9%
Dibromochloromethane	52.1	50.0	104%	53 8	50.0	108%	3 2%
1,1,2-Trichloroethane	48.5	50.0	97.0%	50.9	50.0	1028	4.8%
Benzene	49.9	50.0	99.8%	51.2	50.0	102%	2.6%
trans-1,3-Dichloropropene	51.9	50.0	104%	53.1	50.0	106%	2 38
2-Chloroethylvinvlether	42.6	50.0	85.28	44.5	50.0	89.0%	4.4%
Bromoform	56.9	50.0	114%	56.9	50.0	114%	0.0%
4-Methyl-2-Pentanone (MIBK	266	250	106%	278	250	111%	4 4%
2-Hexanone	262	250	105%	268	250	107%	2 38
Tetrachloroethene	56.0	50.0	1128	54.2	50.0	108%	3,3%
1,1,2,2-Tetrachloroethane	54.2	50.0	108%	54.3	50.0	109%	0.2%
Toluene	51.7	50.0	103%	52 1	50.0	104%	0.8%
Chlorobenzene	52.0	50.0	104%	52 0	50.0	104%	0.0%
Ethvlbenzene	51.5	50.0	103%	51 2	50.0	102%	0.6%
Styrene	54.6	50.0	109%	54 4	50.0	109%	0.00
Trichlorofluoromethane	46.0	50 0	92 08	44 8	50.0	89 68	2 68
1,1,2-Trichloro-1,2,2-trif	146.1	50.0	92.2%	45 5	50.0	91 0%	1 3%
m,p-Xvlene	102	100	102%	103	100	103%	1 0%
o-Xvlene	52.8	50 0	106%	55 1	50 0	110%	4 3%
1,2-Dichlorobenzene	55.3	50.0	1118	55 7	50.0	111%	1,58 0 7%
1.3-Dichlorobenzene	57 1	50.0	114%	56 6	50.0	1138	0.98
1,4-Dichlorobenzene	56 5	50.0	1128	56 3	50.0	1138	0.28
Acrolein	216	250	86 4%	218	250	87 28	0.48
Methyl Iodide	58 1	50 0	116%	60 4	50 0	1218	3 98
Bromoethane	50.7	50.0	1018	53 K	50.0	1079	5.50
Acrylonitrile	49 R	50.0	707.0	53.0 52.4	50.0	1070	5.00
1.1-Dichloropropene	54 5	50.0	1098	52.0	50.0	1119	ン・ン ¹⁰ つ つら
Dibromomethane	50.0	50.0	100%	52.7	50.0	105%	5 38
·····			1000		50.0	T000	2.20

ORGANICS ANALYSIS DATA SHEET

Volatiles by Purge & Trap GC/MS-Method 8260B Sample ID: LCS-080504 Page 2 of 2



LCS/LCSD

Lab Sample ID: LCS-080504 LIMS ID: 04-12015 Matrix: Water Date Analyzed: 08/05/04 11:49 LCSD: 08/05/04 12:31 QC Report No: GX14-Windward Environmental Project: LDW-Seep Sampling

Purge Volume: 5.0 mL LCSD: 5.0 mL

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD	
1,1,1,2-Tetrachloroethane	50.6	50.0	101%	49.9	50.0	99.8%	1.4%	-
1,2-Dibromo-3-chloropropa	ne51.5	50.0	103%	51.4	50.0	103%	0.2%	
1,2,3-Trichloropropane	53.7	50.0	107%	54.6	50.0	109%	1.7%	
trans-1,4-Dichloro-2-buter	ne52.0	50.0	104%	51.0	50.0	102%	1.9%	
1,3,5-Trimethylbenzene	57.9	50.0	116%	58.0	50.0	116%	0.2%	
1,2,4-Trimethylbenzene	58.5	50.0	117%	57.5	50.0	115%	1.7%	
Hexachlorobutadiene	59.2	50.0	118%	58.1	50.0	116%	1.9%	
Ethylene Dibromide	51.1	50.0	102%	53.0	50.0	106%	3.7%	
Bromochloromethane	48.7	50.0	97.4%	50.6	50.0	101%	3.8%	
2,2-Dichloropropane	51.0	50.0	102%	51.8	50.0	104%	1.6%	
1,3-Dichloropropane	50.7	50.0	101%	51.9	50.0	104%	2.3%	
Isopropylbenzene	59.6	50.0	119%	60.9	50.0	122%	2.2%	
n-Propylbenzene	57.1	50.0	114%	57.7	50.0	115%	1.0%	
Bromobenzene	56.3	50.0	113%	56.8	50.0	1148	0.9%	
2-Chlorotoluene	57.8	50.0	116%	61.8	50.0	124%	6.7%	
4-Chlorotoluene	52.4	50.0	105%	52.1	50.0	104%	0.6%	
tert-Butylbenzene	57.5	50.0	115%	57.6	50.0	115%	0.2%	
sec-Butylbenzene	57.4	50.0	115%	57.6	50.0	115%	0.3%	
4-Isopropyltoluene	59.4	50.0	119%	60.3	50.0	121%	1.5%	
n-Butylbenzene	62.7	50.0	125%	62.7	50.0	125%	0.0%	
1,2,4-Trichlorobenzene	65.0	50.0	130%	62.8	50.0	126%	3.4%	
Naphthalene	56.1	50.0	112%	59.4	50.0	119%	5.7%	
1,2,3-Trichlorobenzene	59.6	50.0	119%	59.2	50.0	118%	0.7%	

Results reported in $\mu g/L$

RPD calculated using sample concentrations per SW846.

LCS spike recovery is evaluated using only the nine regulated compounds noted in the ARI LQAP. The other LCS spike compound recoveries are advisory and used for analytical troubleshooting should any of the nine regulated compounds be out of control.

Volatile Surrogate Recovery

	LCS	LCSD
d4-1,2-Dichloroethane	86.7%	88.1%
d8-Toluene	94.2%	96.1%
Bromofluorobenzene	93.5%	94.7%
d4-1,2-Dichlorobenzene	101%	101%

EPA SAMPLE NO.

4A VOLATILE METHOD BLANK SUMMARY

MB0805

Lab Name: ANALYTICAL RESOURCES, INC Contract: WINDWARD ENVIRONMENTAL

Lab Name: Number Number NameLab Code: ARICase No.: LDW-SEEP SAMPLINGSDG No.: GX14Lab File ID: MB0805Lab Sample ID: MB0805Date Analyzed: 08/05/04Time Analyzed: 1259GC Column: RTX502.2ID: 0.18 (mm)Heated Purge: (Y/N) YInstrument ID: FINN5

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	EPA	LAB		
	SAMPLE NO.	SAMPLE ID	FILE ID	ANALIZED
			===============	
		TCCOROF	1.090805	1149
01	LCS0805	LC30605	LCD0005	1031
02	LCS0805	LCS0805	LCS0805A	1231
03	SP-10	GX14A	GX14A	1900
0.1		CX14B	GX14B	1928
04	SP-62	GX14D	CV14C	1957
05	TRIP BLANK	GX14C	GA14C	1937
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COMMENTS:

page 1 of 1

FORM IV VOA

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ORGANICS ANALYSIS DATA SHEET Volatiles by Purge & Trap GC/MS-Method 8260B Page 1 of 2

Sample ID: MB-080504 METHOD BLANK

Lab Sample ID: MB-080504 LIMS ID: 04-12015 Matrix: Water Data Release Authorized: Reported: 08/11/04 QC Report No: GX14-Windward Environmental Project: LDW-Seep Sampling

Date Sampled: NA Date Received: NA

Instrument/Analyst: FINN5/PAB Date Analyzed: 08/05/04 12:59

Sample Amount: 5.00 mL Purge Volume: 5.0 mL

CAS Number	Analyte	RL	Result
74-87-3	Chloromethane	1.0	< 1.0 U
74-83-9	Bromomethane	1.0	< 1.0 U
75-01-4	Vinyl Chloride	1.0	< 1.0 U
75-00-3	Chloroethane	1.0	< 1.0 U
75-09-2	Methylene Chloride	2.0	< 2.0 U
67-64-1	Acetone	5.0	< 5.0 U
75-15-0	Carbon Disulfide	1.0	< 1.0 U
75-35-4	1,1-Dichloroethene	1.0	< 1.0 U
75-34-3	1,1-Dichloroethane	1.0	< 1.0 U
156-60-5	trans-1,2-Dichloroethene	1.0	< 1.0 U
156-59-2	cis-1,2-Dichloroethene	1.0	< 1.0 U
67-66-3	Chloroform	1.0	< 1.0 U
107-06-2	1,2-Dichloroethane	1.0	< 1.0 U
78-93-3	2-Butanone	5.0	< 5.0 U
71-55-6	1,1,1-Trichloroethane	1.0	< 1.0 U
56-23-5	Carbon Tetrachloride	1.0	< 1.0 U
108-05-4	Vinyl Acetate	5.0	< 5.0 U
75-27-4	Bromodichloromethane	1.0	< 1.0 U
78-87-5	1,2-Dichloropropane	1.0	< 1.0 U
10061-01-5	cis-1,3-Dichloropropene	1.0	< 1.0 U
79-01-6	Trichloroethene	1.0	< 1.0 U
124-48-1	Dibromochloromethane	1.0	
79-00-5	1.1.2-Trichloroethane	1.0	< 1 0 U
71-43-2	Benzene	1.0	
10061-02-6	trans-1.3-Dichloropropene	1 0	
110-75-8	2-Chloroethylyinylether	5 0	
75-25-2	Bromoform	1 0	
108-10-1	4-Methyl-2-Pentanone (MTBK)	5 0	
591-78-6	2-Hexanone	5.0	
127-18-4	Tetrachloroethene	1 0	
79-34-5	1 1 2 2-Tetrachloroethane	1.0	
108-88-3	Toluene	1.0	
108-90-7	Chlorobenzene	1.0	
100-41-4	Fthylbenzene	1.0	
100-42-5	Styrepe	1.0	
75-69-1	Trichlorofluoromothano	1.0	< 1.0 0
75-13-1	1 1 2 Trichloro 1 2 2 trifluoroa	2.0	
1220 20 7		2.0	< 2.0 0
	m, p-Ayrene	1.0	< 1.0 0
95-47-6 DE EO 1	0-Xylene	1.0	< 1.0 U
95-50-1 - 41 72 1	1,2-Dichlorobenzene	1.0	< 1.0 0
541 - 73 - 1	1,3-Dichiorobenzene	1.0	< 1.0 0
105-46-7	1,4-Dichlorobenzene	1.0	< 1.0 U
107-02-8	Acrolein	50	< 50 U
74-00-4		1.0	< 1.0 U
/4-96-4	Bromoethane	2.0	< 2.0 U
10/-13-1	Acrylonitrile	1.0	< 1.0 U
553-58-6	1,1-Dichloropropene	1.0	< 1.0 U
/4-95-3	Dibromomethane	1.0	< 1.0 U
>30-20-6	1,1,1,2-Tetrachloroethane	1.0	< 1.0 U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	< 5.00001

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ORGANICS ANALYSIS DATA SHEET

Volatiles by Purge & Trap GC/MS-Method 8260B Page 2 of 2

Sample ID: MB-080504 METHOD BLANK

Lab Sample ID: MB-080504 LIMS ID: 04-12015 Matrix: Water Date Analyzed: 08/05/04 12:59

QC Report No: GX14-Windward Environmental Project: LDW-Seep Sampling

CAS Number	Analyte	RL	Result
96-18-4	1,2,3-Trichloropropane	3.0	< 3.0 U
110-57-6	trans-1,4-Dichloro-2-butene	5.0	< 5.0 U
108-67-8	1,3,5-Trimethylbenzene	1.0	< 1.0 U
95-63-6	1,2,4-Trimethylbenzene	1.0	< 1.0 U
87-68-3	Hexachlorobutadiene	5.0	< 5.0 U
106-93-4	Ethylene Dibromide	1.0	< 1.0 U
74-97-5	Bromochloromethane	1.0	< 1.0 U
594-20-7	2,2-Dichloropropane	1.0	< 1.0 U
142-28-9	1,3-Dichloropropane	1.0	< 1.0 U
98-82-8	Isopropylbenzene	1.0	< 1.0 U
103-65-1	n-Propylbenzene	1.0	< 1.0 U
108-86-1	Bromobenzene	1.0	< 1.0 U
95-49-8	2-Chlorotoluene	1.0	< 1.0 U
106-43-4	4-Chlorotoluene	1.0	< 1.0 U
98-06-6	tert-Butylbenzene	1.0	< 1.0 U
135-98-8	sec-Butylbenzene	1.0	< 1.0 U
99-87-6	4-Isopropyltoluene	1.0	< 1.0 U
104-51-8	n-Butylbenzene	1.0	< 1.0 U
120-82-1	1,2,4-Trichlorobenzene	5.0	< 5.0 U
91-20-3	Naphthalene	5.0	< 5.0 U
87-61-6	1,2,3-Trichlorobenzene	5.0	< 5.0 U

Reported in $\mu g/L$ (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	86.38
d8-Toluene	94.0%
Bromofluorobenzene	92.1%
d4-1,2-Dichlorobenzene	97.4%

8A VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: ANALYTICAL RESOURCES, INC Contract: WINDWARD ENVIRONMENTAL Lab Code: ARI Case No.: LDW-SEEP SAMPLING SDG No.: GX14 Lab File ID (Standard): 0500805A Date Analyzed: 08/05/04 Instrument ID: FINN5 Time Analyzed: 1101 GC Column: RTX502.2 ID: 0.18 (mm) Heated Purge: (Y/N) Y

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		AREA #	RT #	AREA #	K.L. #	АКВА #	KT #
		===========	=======	=========	======	===========	=======
	12 HOUR STD	98673	6.30	147136	7.31	144104	10.46
	UPPER LIMIT	197346	6.80	294272	7.81	288208	10.96
	LOWER LIMIT	49336	5.80	73568	6.81	72052	9.96
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01	LCS0805	102097	0.27	150000	7.50	151762	10 46
02	LCS0805	102639	0.30		7.51	1/5000	
03	MB0805	109510	6.3L	120.071	1.54	154000	10.46
04	SP-10	106626	6.30	156004	1.31	104602	10.40
05	SP-62	105906	6.31	157879	1.32	100911	10.47
06	TRIP BLANK	101281	6.31	149167	7.34	145470	10.47
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IS1 = Pentafluorobenzene IS2 (DFB) = 1,4-Difluorobenzene IS3 = d5-Chlorobenzene

AREA UPPER LIMIT = +100% of internal standard area AREA LOWER LIMIT = - 50% of internal standard area RT UPPER LIMIT = + 0.50 minutes of internal standard RT RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

age 1 of 2

FORM VIII VOA

OLM3.2M

8A VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: ANALYTICAL RESOURCES, INC Contract: WINDWARD ENVIRONMENTAL Lab Code: ARI Case No.: LDW-SEEP SAMPLING SDG No.: GX14 Lab File ID (Standard): 0500805A Date Analyzed: 08/05/04 Instrument ID: FINN5 Time Analyzed: 1101 GC Column: RTX502.2 ID: 0.18 (mm) Heated Purge: (Y/N) Y

		IS4 AREA #	RT #	AREA #	RT #	AREA #	RT #
		================	======	===========	======		======
	12 HOUR STD	69030	13.14				
		138060	13 64				
	TOWER LIMIT	24515	12 61				
	TOMER PIWLI	34515	12.04				
		==========	======				
	EPA SAMPLE						
	NO.						
			=======		======	=========	======
01	LCG0805	68275	13,14				
UT 0		700273	12 15				
02	LCS0805	70955	12.12			·	
03	MB0805	68524	13.10				·
04	SP-10	73230	13.15				
05	SP-62	74170	13.16				
06	TRTP BLANK	68349	13.16				
07	INII DEMAR						
07							
08				I			
09						<u></u>	
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22		1				l	I

IS4

= d4-1,4-Dichlorobenzene

AREA UPPER LIMIT = +100% of internal standard area AREA LOWER LIMIT = - 50% of internal standard area RT UPPER LIMIT = + 0.50 minutes of internal standard RT RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk. * Values outside of QC limits.

page 2 of 2

FORM VIII VOA

OLM3.2M

Data Summary Package

Prepared for

Windward Environmental

Project: LDW-SEEP SAMPLING

ARI Job No. GU26

Prepared By

Analytical Resources, Inc.

000007

Volatiles

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800000



WATER VOLATILE SYSTEM MONITORING COMPOUND SUMMARY

Matrix: Water 5 mL

QC Report No: GU26

Lab ID	Client ID	DCE	TOL	BFB	DCB	TOT OUT
attoca				1000		
GU26G	TRIP BLANK	1118	115%	109%	113%	0
GU26B	LDW-SP-71-C-U	107%	109%	102%	110%	0
071004MB	Method Blank	109%	114%	107%	112%	0
GU26LCS	Lab Cntrl Sample	102%	115%	109%	108%	0
GU26LCSD	Lab Cntrl Sample Dp	90.3%	105%	99.0%	99.7%	0
GU26D	LDW-SP-76-C-U	112%	115%	107%	112%	0
GU26F	LDW-SP-69-C-U	114%	112%	106%	112%	0

* *	PROJECT SPECIFIED LIMITS **	LCS/MB LIMITS	QC LIMITS
	(DCE) = 1,2-Dichloroethane-d4	(–)	(-)
	(TOL) = Toluene-d8	(–)	(–)
	(BFB) = Bromofluorobenzene	(-)	(-)
	(DCB) = 1,2-Dichlorobenzene-d4	(–)	(-)

Column to be used to flag recovery values

- * Values outside of required QC limits
- D System Monitoring Compound diluted out

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET Volatiles by Purge & Trap GC/MS-Method 8260B Page 1 of 2

Sample ID: LDW-SP-71-C-U SAMPLE

Lab Sample ID: GU26B LIMS ID: 04-10121 Matrix: Water Data Release Authorized: Reported: 07/15/04

Instrument/Analyst: FINN3/LJR Date Analyzed: 07/10/04 15:28 QC Report No: GU26-Windward Environmental Project: LDW-SEEP SAMPLING

Date Sampled: 06/29/04 Date Received: 06/29/04

Sample Amount: 5.00 mL Purge Volume: 5.0 mL

CAS Number	Analyte	RL	Result
74-87-3	Chloromethane	1.0	< 1.0 U
74-83-9	Bromomethane	1.0	< 1.0 U
75-01-4	Vinyl Chloride	1.0	< 1.0 U
75-00-3	Chloroethane	1.0	< 1.0 U
75-09-2	Methylene Chloride	2.0	< 2.0 U
67-64-1	Acetone	5.0	< 5.0 U
75-15-0	Carbon Disulfide	1.0	< 1.0 U
75-35-4	1,1-Dichloroethene	1.0	< 1.0 U
75-34-3	1,1-Dichloroethane	1.0	< 1.0 U
156-60-5	trans-1,2-Dichloroethene	1.0	< 1.0 U
156-59-2	cis-1,2-Dichloroethene	1.0	< 1.0 U
67-66-3	Chloroform	1.0	< 1.0 U
107-06-2	1,2-Dichloroethane	1.0	< 1.0 U
78-93-3	2-Butanone	5.0	< 5.0 U
71-55-6	1,1,1-Trichloroethane	1.0	< 1.0 U
56-23-5	Carbon Tetrachloride	1.0	< 1.0 U
108-05-4	Vinyl Acetate	5.0	< 5.0 U
75-27-4	Bromodichloromethane	1.0	< 1.0 U
78-87-5	1,2-Dichloropropane	1.0	< 1.0 U
10061-01-5	cis-1,3-Dichloropropene	1.0	< 1.0 U
79-01-6	Trichloroethene	1.0	< 1.0 U
124-48-1	Dibromochloromethane	1.0	< 1.0 U
79-00-5	1.1.2-Trichloroethane	1 0	
71-43-2	Benzene	1 0	< 1.0 U
10061-02-6	trans-1.3-Dichloropropene	1.0	< 1 0 H
110-75-8	2-Chloroethylvinylether	5.0	
75-25-2	Bromoform	1 0	
108-10-1	4-Methvl-2-Pentanone (MIBK)	5 0	
591-78-6	2-Hexanone	5 0	
127-18-4	Tetrachloroethene	1 0	
79-34-5	1.1.2.2-Tetrachloroethane	1 0	
108-88-3	Toluene	1 0	
108-90-7	Chlorobenzene	1 0	
100 - 41 - 4	Ethylhenzene	1.0	
100-42-5	Styrene	1.0	
75-69-4	Trichlorofluoromethane	1.0	
76-13-1	1 1 2-Trichloro-1 2 2-trifluoroo	2.0	
1330-20-7	m p - Yylepe	2.0	
95-47-6	a, p-Ayrene	1.0	< 1.0 U
95-50-1	1.2-Dichlorobongono	1.0	
541_73_1	1,2-Dichlorobengene	1.0	< 1.0 U
106-46-7	1, 3-Dichlorobenzene	1.0	< 1.0 U
107-02-8	Agroloin	1.0	< 1.0 U
74-99-4	ACIOIEIN Mothul Iodido	50	< 50 0
74-00-4	Bromosthene	1.0	< 1.0 0
/4-20-4 107_12 1		2.0	< 2.0 U
TO1-TO-T		1.U	< 1.0 U
ンロゴーンダー6 74 OF つ	1, 1-Dichioropropene	1.0	< 1.0 U
14-95-3	Dibromometnane	1.0	< 1.0 U
630-20-6	1,1,1,2-Tetrachloroethane	1.0	< 1.0 U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	< 5.0 U

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ORGANICS ANALYSIS DATA SHEET Volatiles by Purge & Trap GC/MS-Method 8260B Page 2 of 2

Sample ID: LDW-SP-71-C-U SAMPLE

Result

Lab Sample ID: GU26B LIMS ID: 04-10121 Matrix: Water Date Analyzed: 07/10/04 15:28

QC Report No: GU26-Windward Environmental Project: LDW-SEEP SAMPLING

RL

CAS	Number	Analyte
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96-18-4	1,2,3-Trichloropropane	3.0	< 3.0 U
110-57-6	trans-1,4-Dichloro-2-butene	5.0	< 5.0 U
108-67-8	1,3,5-Trimethylbenzene	1.0	< 1.0 U
95-63-6	1,2,4-Trimethylbenzene	1.0	< 1.0 U
87-68-3	Hexachlorobutadiene	5.0	< 5.0 U
106-93-4	Ethylene Dibromide	1.0	< 1.0 U
74-97-5	Bromochloromethane	1.0	< 1.0 U
594-20-7	2,2-Dichloropropane	1.0	< 1.0 U
142-28-9	1,3-Dichloropropane	1.0	< 1.0 U
98-82-8	Isopropylbenzene	1.0	< 1.0 U
103-65-1	n-Propylbenzene	1.0	< 1.0 U
108-86-1	Bromobenzene	1.0	< 1.0 U
95-49-8	2-Chlorotoluene	1.0	< 1.0 U
106-43-4	4-Chlorotoluene	1.0	< 1.0 U
98-06-6	tert-Butylbenzene	1.0	< 1.0 U
135-98-8	sec-Butylbenzene	1.0	< 1.0 U
99-87-6	4-Isopropyltoluene	1.0	< 1.0 U
104-51-8	n-Butylbenzene	1.0	< 1.0 U
120-82-1	1,2,4-Trichlorobenzene	5.0	< 5.0 U
91-20-3	Naphthalene	5.0	< 5.0 Ŭ
87-61-6	1,2,3-Trichlorobenzene	5.0	< 5.0 U

Reported in $\mu g/L$ (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	1078
d8-Toluene	109%
Bromofluorobenzene	102%
d4-1,2-Dichlorobenzene	110%

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ORGANICS ANALYSIS DATA SHEET Volatiles by Purge & Trap GC/MS-Method 8260B Page 1 of 2

Lab Sample ID: GU26D LIMS ID: 04-10123 Matrix: Water Data Release Authorized: Reported: 07/15/04 QC Report No: GU26-Windward Environmental Project: LDW-SEEP SAMPLING

SAMPLE

Date Sampled: 06/29/04 Date Received: 06/29/04

Instrument/Analyst: FINN3/LJR Date Analyzed: 07/10/04 15:56 Sample Amount: 5.00 mL Purge Volume: 5.0 mL

CAS Number	Analyte	RL	Result
74-87-3	Chloromethane	1.0	< 1.0 Ư
74-83-9	Bromomethane	1.0	< 1.0 U
75-01-4	Vinyl Chloride	1.0	< 1.0 U
75-00-3	Chloroethane	1.0	< 1.0 U
75-09-2	Methylene Chloride	2.0	< 2.0 U
57-64-1	Acetone	5.0	< 5.0 U
75-15-0	Carbon Disulfide	1.0	< 1.0 U
75-35-4	1,1-Dichloroethene	1.0	< 1.0 U
75-34-3	1,1-Dichloroethane	1.0	< 1.0 U
L56-60-5	trans-1,2-Dichloroethene	1.0	< 1.0 U
56-59-2	cis-1,2-Dichloroethene	1.0	< 1.0 U
57-66-3	Chloroform	1.0	< 1.0 U
L07-06-2	1,2-Dichloroethane	1.0	< 1.0 U
/8-93-3	2-Butanone	5.0	< 5.0 U
1-55-6	1,1,1-Trichloroethane	1.0	< 1.0 U
6-23-5	Carbon Tetrachloride	1.0	< 1.0 U
.08-05-4	Vinyl Acetate	5.0	< 5.0 U
75-27-4	Bromodichloromethane	1.0	< 1.0 U
8-87-5	1,2-Dichloropropane	1.0	< 1.0 U
0061-01-5	cis-1,3-Dichloropropene	1.0	< 1.0 U
9-01-6	Trichloroethene	1.0	< 1.0 U
24-48-1	Dibromochloromethane	1.0	< 1.0 U
9-00-5	1,1,2-Trichloroethane	1.0	< 1.0 U
1-43-2	Benzene	1.0	< 1.0 U
0061-02-6	trans-1,3-Dichloropropene	1.0	< 1.0 U
10-75-8	2-Chloroethylvinylether	5.0	
5-25-2	Bromoform	1 0	
08-10-1	4-Methyl-2-Pentanone (MIBK)	5 0	< 5.0 U
91-78-6	2-Hexanone	5.0	
27-18-4	Tetrachloroethene	1 0	
9-34-5	1.1.2.2-Tetrachloroethane	1 0	
08-88-3	Toluene	1 0	
08-90-7	Chlorobenzene	1 0	
00 - 41 - 4	Ethylbenzene	1 0	
00-42-5	Styrene	1.0	
5-69-4	Trichlorofluoromethane	1.0	
6-13-1	1 1 2-Trichloro-1 2 2-trifluoroo	2.0	
330-20-7	m_{p-Yy}	2.0	< 2.0 0
5-47-6	(, p kyrene	1.0	< 1.0 0
5-50-1	1 2-Dighlorobongono	1.0	< 1.0 0
J-JU-I 41-73-1	1,2-Dichlorobenzene	1.0	< 1.0 U
41-73-1	1, 3-Dichlorobenzene	1.0	< 1.0 0
00-40-7	l,4-Dichiorobenzene	1.0	< 1.0 U
4 90 4		50	< 50 0
4-00-4	Rechyl louide	1.0	< 1.0 Ŭ
4-90-4		2.0	< 2.0 U
1-13-1	ACTYIONITTILE	1.0	< 1.0 Ŭ
23-58-6	1,1-UlChloropropene	1.0	< 1.0 U
+-95-3	Dibromomethane	1.0	< 1.0 U
50-20-6	1,1,1,2-Tetrachloroethane	1.0	< 1.0 U
s-12-8	1,2-Dibromo-3-chloropropane	5.0	< 5.0 U
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ORGANICS ANALYSIS DATA SHEET Volatiles by Purge & Trap GC/MS-Method 8260B Page 2 of 2

Sample ID: LDW-SP-76-C-U SAMPLE

Result

Lab Sample ID: GU26D LIMS ID: 04-10123 Matrix: Water Date Analyzed: 07/10/04 15:56

CAS Number Analyte

RL

Project: LDW-SEEP SAMPLING

QC Report No: GU26-Windward Environmental

96-18-4	1,2,3-Trichloropropane	3.0	< 3.0 U
110-57-6	trans-1,4-Dichloro-2-butene	5.0	< 5.0 U
108-67-8	1,3,5-Trimethylbenzene	1.0	< 1.0 U
95-63-6	1,2,4-Trimethylbenzene	1.0	< 1.0 U
87-68-3	Hexachlorobutadiene	5.0	< 5.0 U
106-93-4	Ethylene Dibromide	1.0	< 1.0 U
74-97-5	Bromochloromethane	1.0	< 1.0 U
594-20-7	2,2-Dichloropropane	1.0	< 1.0 U
142-28-9	1,3-Dichloropropane	1.0	< 1.0 U
98-82-8	Isopropylbenzene	1.0	< 1.0 U
103-65-1	n-Propylbenzene	1.0	< 1.0 U
108-86-1	Bromobenzene	1.0	< 1.0 U
95-49-8	2-Chlorotoluene	1.0	< 1.0 U
106-43-4	4-Chlorotoluene	1.0	< 1.0 U
98-06-6	tert-Butylbenzene	1.0	< 1.0 U
135-98-8	sec-Butylbenzene	1.0	< 1.0 U
99-87-6	4-Isopropyltoluene	1.0	< 1.0 U
104-51-8	n-Butylbenzene	1.0	< 1.0 U
120-82-1	1,2,4-Trichlorobenzene	5.0	< 5.0 U
91-20-3	Naphthalene	5.0	< 5.0 U
87-61-6	1,2,3-Trichlorobenzene	5.0	< 5.0 Ŭ

Reported in $\mu g/L$ (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	112%
d8-Toluene	115%
Bromofluorobenzene	107%
d4-1,2-Dichlorobenzene	112%



ORGANICS ANALYSIS DATA SHEET Volatiles by Purge & Trap GC/MS-Method 8260B

Page 1 of 2

d 8260B Sample ID: LDW-SP-69-C-U SAMPLE

Lab Sample ID: GU26F LIMS ID: 04-10125 Matrix: Water Data Release Authorized: Reported: 07/15/04 QC Report No: GU26-Windward Environmental Project: LDW-SEEP SAMPLING

Date Sampled: 06/29/04 Date Received: 06/29/04

Instrument/Analyst: FINN3/LJR Date Analyzed: 07/10/04 16:25 Sample Amount: 5.00 mL Purge Volume: 5.0 mL

CAS Number	Analyte	RL	Result
74-87-3	Chloromethane	1.0	< 1.0 U
74-83-9	Bromomethane	1.0	< 1.0 U
75-01-4	Vinyl Chloride	1.0	< 1.0 U
75-00-3	Chloroethane	1.0	< 1.0 U
75-09-2	Methylene Chloride	2.0	< 2.0 U
67-64-1	Acetone	5.0	< 5.0 U
75-15-0	Carbon Disulfide	1.0	< 1.0 U
75-35-4	1,1-Dichloroethene	1.0	< 1.0 U
75-34-3	1,1-Dichloroethane	1.0	< 1.0 U
156-60-5	trans-1,2-Dichloroethene	1.0	< 1.0 U
156-59-2	cis-1,2-Dichloroethene	1.0	< 1.0 U
67-66-3	Chloroform	1.0	< 1.0 U
107-06-2	1,2-Dichloroethane	1.0	< 1.0 U
78-93-3	2-Butanone	5.0	< 5.0 U
71-55-6	1,1,1-Trichloroethane	1.0	< 1.0 U
56-23-5	Carbon Tetrachloride	1.0	< 1.0 Ŭ
108-05-4	Vinyl Acetate	5.0	< 5.0 U
75-27-4	Bromodichloromethane	1.0	< 1.0 U
78-87-5	1,2-Dichloropropane	1.0	< 1.0 U
10061-01-5	cis-1,3-Dichloropropene	1.0	< 1.0 U
79-01-6	Trichloroethene	1.0	< 1.0 U
124-48-1	Dibromochloromethane	1.0	< 1.0 U
79-00-5	1,1,2-Trichloroethane	1.0	< 1.0 U
71-43-2	Benzene	1.0	< 1.0 U
10061-02-6	trans-1,3-Dichloropropene	1.0	< 1.0 U
110-75-8	2-Chloroethylvinylether	5.0	< 5.0 U
75-25-2	Bromoform	1.0	< 1.0 U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0 U
591-78-6	2-Hexanone	5.0	< 5.0 U
127-18-4	Tetrachloroethene	1.0	< 1.0 U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	< 1.0 U
108-88-3	Toluene	1.0	< 1.0 U
108-90-7	Chlorobenzene	1.0	< 1.0 U
100-41-4	Ethylbenzene	1.0	< 1.0 U
100-42-5	Styrene	1.0	< 1.0 U
75-69-4	Trichlorofluoromethane	1.0	< 1.0 U
76-13-1	1.1.2-Trichloro-1.2.2-trifluoroe	2.0	< 2.0 U
330-20-7	m.p-Xvlene	1.0	< 1.0 U
95-47-6	o-Xvlene	1.0	< 1.0 U
95-50-1	1.2-Dichlorobenzene	1 0	
541-73-1	1 3-Dichlorobenzene	1 0	
06-46-7	1 4-Dichlorobenzene	1 0	
07-02-8	Acrolein	50	
74-88-4	Methyl Iodide	1 0	
74-96-4	Bromoethane	2 0	
	Acrylonitrile	2.0	
563-58-6	1 1-Dichloropropeno	1.0	
74_95_3	Dibromomethane	1.0	
-+	1 1 1 2 Tatrachlereethane	1.0	
) - U - ZU - O	1, 1, 1, 2-ietrachioroethane	T.0	< I.U U
70-12-0	r, z-miniono-s-chioropropane	5.0	< 5.0 0



ORGANICS ANALYSIS DATA SHEET Volatiles by Purge & Trap GC/MS-Method 8260B Page 2 of 2

Sample ID: LDW-SP-69-C-U SAMPLE

Lab Sample ID: GU26F LIMS ID: 04-10125 Matrix: Water Date Analyzed: 07/10/04 16:25 QC Report No: GU26-Windward Environmental Project: LDW-SEEP SAMPLING

< 3.0 U
< 5.0 U
< 1.0 U
< 1.0 U
< 5.0 U
< 1.0 U
< 5.0 U
< 5.0 Ū
< 5.0 U

Reported in $\mu g/L$ (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	114%
d8-Toluene	1128
Bromofluorobenzene	106%
d4-1,2-Dichlorobenzene	112%

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ORGANICS ANALYSIS DATA SHEET Volatiles by Purge & Trap GC/MS-Method 8260B Page 1 of 2

Sample ID: TRIP BLANK SAMPLE

Lab Sample ID: GU26G LIMS ID: 04-10071 Matrix: Water Data Release Authorized: Reported: 07/15/04 QC Report No: GU26-Windward Environmental Project: LDW-SEEP SAMPLING

Date Sampled: Date Received: 06/29/04

Instrument/Analyst: FINN3/LJR Date Analyzed: 07/10/04 16:53

Sample Amount: 5.00 mL Purge Volume: 5.0 mL

CAS Number	Analyte	RL	Result
74-87-3	Chloromethane	1.0	< 1.0 U
74-83-9	Bromomethane	1.0	< 1.0 U
75-01-4	Vinyl Chloride	1.0	< 1.0 U
75-00-3	Chloroethane	1.0	< 1.0 U
75-09-2	Methylene Chloride	2.0	< 2.0 U
67-64-1	Acetone	5.0	< 5.0 U
75-15-0	Carbon Disulfide	1.0	< 1.0 U
75-35-4	1,1-Dichloroethene	1.0	< 1.0 U
75-34-3	1,1-Dichloroethane	1.0	< 1.0 U
156-60-5	trans-1,2-Dichloroethene	1.0	< 1.0 U
156-59-2	cis-1,2-Dichloroethene	1.0	< 1.0 U
67-66-3	Chloroform	1.0	< 1.0 U
107-06-2	1,2-Dichloroethane	1.0	< 1.0 U
78-93-3	2-Butanone	5.0	< 5.0 II
71-55-6	1,1,1-Trichloroethane	1.0	< 1.0 U
56-23-5	Carbon Tetrachloride	1.0	< 1 0 U
108-05-4	Vinvl Acetate	5.0	< 5.0 II
75-27-4	Bromodichloromethane	1.0	
78-87-5	1,2-Dichloropropane	1.0	
10061-01-5	cis-1.3-Dichloropropene	1 0	
79-01-6	Trichloroethene	1 0	< 1.0 U
124-48-1	Dibromochloromethane	1 0	
79-00-5	1.1.2-Trichloroethane	1 0	
71-43-2	Benzene	1 0	
10061-02-6	trans-1.3-Dichloropropene	1 0	
110-75-8	2-Chloroethylyinylether	5.0	
75-25-2	Bromoform	1.0	
108-10-1	4 - Methyl - 2 - Dentanone (MIDK)	1.0	< I.U U
591-78-6	2-Hexanone	5.0	< 5.0 0
127-18-4	Tetrachloroethene	1 0	
79-34-5	1 1 2 2-Tetrachloroethano	1.0	< 1.0 0
108-88-3	Toluene	1.0	< 1.0 U
	Chlorobongono	1.0	< 1.0 0
	Fthulbongono	1.0	< 1.0 U
	Sturana	1.0	< 1.0 U
75-69-1	Trichlerofluoremethene	1.0	< 1.0 U
75-09-4		1.0	< 1.0 U
220 20 7	1,1,2-Irichioro-1,2,2-trifiuoroe	2.0	< 2.0 U
-350-20-7	m, p-Xylene	1.0	< 1.0 U
95-47-6	o-Xylene	1.0	< 1.0 U
75-50-1	1,2-Dichlorobenzene	1.0	< 1.0 U
941-73-1	1, 3-Dichlorobenzene	1.0	< 1.0 U
.06-46-7	1,4-Dichlorobenzene	1.0	< 1.0 Ŭ
.07-02-8	Acrolein	50	< 50 U
4-88-4	Metnyl Iodide	1.0	< 1.0 U
4-96-4	Bromoethane	2.0	< 2.0 U
.07-13-1	Acrylonitrile	1.0	< 1.0 U
63-58-6	1,1-Dichloropropene	1.0	< 1.0 U
4-95-3	Dibromomethane	1.0	< 1.0 U
30-20-6	1,1,1,2-Tetrachloroethane	1.0	< 1.0 U
6-12-8	1,2-Dibromo-3-chloropropane	5.0	< 5.0 U
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ORGANICS ANALYSIS DATA SHEET Volatiles by Purge & Trap GC/MS-Method 8260B Page 2 of 2

Sample ID: TRIP BLANK SAMPLE

Lab Sample ID: GU26G LIMS ID: 04-10071 Matrix: Water Date Analyzed: 07/10/04 16:53 QC Report No: GU26-Windward Environmental Project: LDW-SEEP SAMPLING

CAS Number	Analyte	RL	Result
96-18-4	1,2,3-Trichloropropane	3.0	< 3.0 U
110-57-6	trans-1,4-Dichloro-2-butene	5.0	< 5.0 U
108-67-8	1,3,5-Trimethylbenzene	1.0	< 1.0 U
95-63-6	1,2,4-Trimethylbenzene	1.0	< 1.0 U
87-68-3	Hexachlorobutadiene	5.0	< 5.0 U
106-93-4	Ethylene Dibromide	1.0	< 1.0 U
74-97-5	Bromochloromethane	1.0	< 1.0 U
594-20-7	2,2-Dichloropropane	1.0	< 1.0 U
142-28-9	1,3-Dichloropropane	1.0	< 1.0 U
98-82-8	Isopropylbenzene	1.0	< 1.0 U
103-65-1	n-Propylbenzene	1.0	< 1.0 U
108-86-1	Bromobenzene	1.0	< 1.0 U
95-49-8	2-Chlorotoluene	1.0	< 1.0 U
106-43-4	4-Chlorotoluene	1.0	< 1.0 U
98-06-6	tert-Butylbenzene	1.0	< 1.0 U
135-98-8	sec-Butylbenzene	1.0	< 1.0 U
99-87-6	4-Isopropyltoluene	1.0	< 1.0 U
104-51-8	n-Butylbenzene	1.0	< 1.0 U
120-82-1	1,2,4-Trichlorobenzene	5.0	< 5.0 U
91-20-3	Naphthalene	5.0	< 5.0 U
B7-61-6	1,2,3-Trichlorobenzene	5.0	< 5.0 U

Reported in $\mu g/L$ (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	1118
d8-Toluene	115%
Bromofluorobenzene	109%
d4-1,2-Dichlorobenzene	113%

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ORGANICS ANALYSIS DATA SHEET

Volatiles by Purge & Trap GC/MS-Method 8260B Page 1 of 2

Lab Sample ID: LCS-071004 LIMS ID: 04-10123 Matrix: Water Data Release Authorized Reported: 07/15/04 QC Report No: GU26-Windward Environmental Project: LDW-SEEP SAMPLING

Sample ID: LCS-071004

LCS/LCSD

Date Sampled: NA Date Received: NA

Instrument/Analyst LCS: FINN3/LJR LCSD: FINN3/LJR Date Analyzed LCS: 07/10/04 13:59 LCSD: 07/10/04 14:31 Sample Amount LCS: 5.00 mL LCSD: 5.00 mL Purge Volume LCS: 5.0 mL LCSD: 5.0 mL

		Spike	LCS		Spike	LCSD	
Analyte	LCS	Added-LCS	Recovery	LCSD	Added-LCSD	Recovery	RPD
Chloromethane	45.9	50.0	91.8%	44.8	50.0	89.6%	2.4%
Bromomethane	49.0	50.0	98.0%	48.3	50.0	96.6%	1.4%
Vinyl Chloride	46.4	50.0	92.8%	46.2	50.0	92.4%	0.4%
Chloroethane	46.8	50.0	93.6%	46.7	50.0	93.4%	0.2%
Methylene Chloride	45.5	50.0	91.0%	46.2	50.0	92.4%	1.5%
Acetone	202	250	80.8%	240	250	96.0%	17.28
Carbon Disulfide	54.0	50.0	108%	48.6	50.0	97.28	10.5%
1,1-Dichloroethene	47.5	50.0	95.0%	47.6	50.0	95.2%	0.2%
1,1-Dichloroethane	47.5	50.0	95.0%	47.9	50.0	95.8%	0.8%
trans-1,2-Dichloroethene	46.0	50.0	92.0%	46.8	50.0	93.6%	1 7%
cis-1,2-Dichloroethene	50.3	50.0	101%	51.2	50 0	102%	1 8%
Chloroform	49.3	50.0	98 68	49 8	50.0	99 68	1 0%
1,2-Dichloroethane	47.5	50 0	95 08	49 0	50.0	98 08	3 18
2-Butanone	215	250	86 0%	252	250	101%	15 8%
1.1.1-Trichloroethane	52.1	50 0	104%	53 0	50 0	106%	1 78
Carbon Tetrachloride	50 8	50.0	1028	51 8	50.0	1048	1.09
Vinvl Acetate	51 6	50.0	1028	52.0	50.0	1048	1 78
Bromodichloromethane	50 6	50.0	1018	52.2	50.0	1048	1.20
1.2-Dichloropropage	50.0	50.0	1018	51.4	50.0	1038	1.02
cis-1 3-Dichloropropene	44 6	50.0	1012		50.0	1046	2.58
Trichloroethene	44.0	50.0	09.20	45.4	50.0	30.08	1.01
Dibromochloromethane	49.4	50.0	90.00	50.9	50.0	1028	3.08
1 1 2-Trichloroethane	44.4	50.0	04.05	45.0	50.0	90.08	5.98
Benzene	49.1 50 0	50.0	98.28	51.5	50.0	1038	4.88
trang_1_2_Dighloropropone	12.9	50.0	1064	53.5	50.0	10/8	1.18
2-Chloroothylyinylothor	43.0	50.0	86.08	44.9	50.0	89.88	4.38
Promoform	44.9	50.0	89.88	45.5	50.0	91.0%	1.38
4 Mother] 2 Deptember (MIDK)	37.8	50.0	75.6%	42.3	50.0	84.6*	11.2%
4-Methyl-2-Pentanone (MIBK)	243	250	97.28	272	250	109%	11.3%
	168	250	67.28	219	250	87.6%	26.4%
1 1 2 2 Tetrachioroethene	49.8	50.0	99.6%	51.9	50.0	104%	4.1%
1,1,2,2-Tetrachloroethane	46.5	50.0	93.0%	51.8	50.0	104%	10.8%
Toluene	52.8	50.0	106%	54.0	50.0	108%	2.2%
Chlorobenzene	50.2	50.0	100%	50.9	50.0	102%	1.4%
Ethylbenzene	51.3	50.0	103%	53.9	50.0	108%	4.9%
Styrene	44.6	50.0	89.2%	45.2	50.0	90.4%	1.3%
Trichlorofluoromethane	47.1	50.0	94.2%	46.7	50.0	93.4%	0.9%
1,1,2-Trichloro-1,2,2-trifl	52.6	50.0	105%	47.8	50.0	95.6%	9.6%
m,p-Xylene	106	100	106%	110	100	110%	3.7%
o-Xylene	47.2	50.0	94.4%	49.9	50.0	99.8%	5.6%
1,2-Dichlorobenzene	50.5	50.0	101%	53.3	50.0	107%	5.4%
1,3-Dichlorobenzene	51.3	50.0	103%	54.0	50.0	108%	5.1%
1,4-Dichlorobenzene	49.1	50.0	98.2%	51.7	50.0	103%	5.2%
Acrolein	225	250	90.0%	260	250	104%	14.4%
Methyl Iodide	50.9	50.0	102%	48.2	50.0	96.4%	5.4%
Bromoethane	51.4	50.0	103%	48.1	50.0	96.2%	6.6%
Acrylonitrile	42.5	50.0	85.0%	46.5	50.0	93.0%	9.0%
1,1-Dichloropropene	50.7	50.0	101%	51.7	50.0	103%	2.0%
Dibromomethane	47.6	50.0	95.2%	50.7	50.0	101%	6.3%

ORGANICS ANALYSIS DATA SHEET

Volatiles by Purge & Trap GC/MS-Method 8260B Page 2 of 2



Sample ID: LCS-071004 LCS/LCSD

Lab Sample ID: LCS-071004 LIMS ID: 04-10123 Matrix: Water Date Analyzed: 07/10/04 13:59 LCSD: 07/10/04 14:31 QC Report No: GU26-Windward Environmental Project: LDW-SEEP SAMPLING

Purge Volume: 5.0 mL LCSD: 5.0 mL

		Spike	LCS		Spike	LCSD	
Analyte	LCS	Added-LCS	Recovery	LCSD	Added-LCSD	Recovery	RPD
1,1,1,2-Tetrachloroethane	47.7	50.0	95.4%	49.1	50.0	98.2%	2.9%
1,2-Dibromo-3-chloropropane	34.2	50.0	68.4%	41.4	50.0	82.8%	19.0%
1,2,3-Trichloropropane	45.5	50.0	91.0%	53.2	50.0	106%	15.6%
trans-1,4-Dichloro-2-butene	51.3	50.0	103%	54.6	50.0	109%	6.2%
1,3,5-Trimethylbenzene	40.9	50.0	81.8%	43.7	50.0	87.4%	6.6%
1,2,4-Trimethylbenzene	40.7	50.0	81.4%	43.4	50.0	86.8%	6.4%
Hexachlorobutadiene	48.3	50.0	96.6%	52.6	50.0	105%	8.5%
Ethylene Dibromide	43.5	50.0	87.0%	46.4	50.0	92.8%	6.5%
Bromochloromethane	49.3	50.0	98.6%	50.6	50.0	101%	2.6%
2,2-Dichloropropane	52.5	50.0	105%	53.1	50.0	106%	1.1%
1,3-Dichloropropane	48.1	50.0	96.2%	52.1	50.0	104%	8.0%
Isopropylbenzene	57.3	50.0	115%	60.0	50.0	120%	4.6%
n-Propylbenzene	42.6	50.0	85.2%	44.6	50.0	89.2%	4.6%
Bromobenzene	51.3	50.0	103%	52.8	50.0	106%	2.9%
2-Chlorotoluene	53.9	50.0	108%	54.2	50.0	108%	0.6%
4-Chlorotoluene	52.7	50.0	105%	55.1	50.0	110%	4.5%
tert-Butylbenzene	55.2	50.0	110%	58.1	50.0	116%	5.1%
sec-Butylbenzene	56.4	50.0	113%	60.4	50.0	121%	6.8%
4-Isopropyltoluene	41.7	50.0	83.4%	45.3	50.0	90.6%	8.3%
n-Butylbenzene	56.1	50.0	112%	59.4	50.0	119%	5.7%
1,2,4-Trichlorobenzene	43.5	50.0	87.0%	46.1	50.0	92.2%	5.8%
Naphthalene	36.5	50.0	73.0%	43.0	50.0	86.0%	16.4%
1,2,3-Trichlorobenzene	49.7	50.0	99.4%	54.1	50.0	108%	8.5%

Results reported in $\mu g/L$

RPD calculated using sample concentrations per SW846.

LCS spike recovery is evaluated using only the nine regulated compounds noted in the ARI LQAP. The other LCS spike compound recoveries are advisory and used for analytical troubleshooting should any of the nine regulated compounds be out of control.

Volatile Surrogate Recovery

LCS	LCSD
102%	90.3%
115%	105%
109%	99.0%
108%	99.7%
	LCS 102% 115% 109% 108%

4A VOLATILE METHOD BLANK SUMMARY

Lab Name: ANALYTICAL RESOURCES, INC Client: WINDWARD ENVIRONMENTAL Lab Code: GU45 Project: LDW-SEEP SAMPLING SDG No.: GU45 Lab File ID: MB0710 Lab Sample ID: MB 0710 Date Analyzed: 07/10/04 Time Analyzed: 1500 GC Column: RTX502.2 ID: 0.18 (mm) Heated Purge: (Y/N) N Instrument ID: FINN3

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	1			
	CLIENT	LAB	LAB	TIME
	SAMPLE NO.	SAMPLE ID	FILE ID	ANALYZED
	=======================================		===== == ======	=======================================
01	LCS 0710	LCS 0710	LCS0710	1359
02	LCSD 0710	LCSD 0710	LCD0710	1431
03	LDW-SP-71-C-	GU26B	GU26B	1528
04	LDW-SP-76-C-	GU26D	GU26D	1556
05	LDW-SP-69-C-	GU26F	GU26F	1625
06	TRIP BLANK	GU26G	GU26G	1653
07	LDW-SP-48-C-	GU45A	GU45A	1721
80	LDW-SP-54-C-	GU45C	GU45C	1750
09	LDW-SP-54-C-	GU45CMS	GU45CMS	1818
10	LDW-SP-54-C-	GU45CMSD	GU45CMD	1847
11	LDW-SP-82-C-	GU45E	GU45E	1915
12	LDW-SP-82-C-	GU45G	GU45G	1943
13	TRIP BLANK	GU45I	GU45I	2012
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COMMENTS:

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FORM IV VOA

BLANK NO.

MB 0710

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ORGANICS ANALYSIS DATA SHEET Volatiles by Purge & Trap GC/MS-Method 8260B Page 1 of 2

Sample ID: MB-071004 METHOD BLANK

Lab Sample ID: MB-071004 LIMS ID: 04-10123 Matrix: Water Data Release Authorized AB Reported: 07/15/04 QC Report No: GU26-Windward Environmental Project: LDW-SEEP SAMPLING

Date Sampled: NA Date Received: NA

Instrument/Analyst: FINN3/LJR Date Analyzed: 07/10/04 15:00 Sample Amount: 5.00 mL Purge Volume: 5.0 mL

CAS Number	Analyte	RL	Result
74-87-3	Chloromethane	1.0	< 1.0 U
74-83-9	Bromomethane	1.0	< 1.0 U
75-01-4	Vinyl Chloride	1.0	< 1.0 U
75-00-3	Chloroethane	1.0	< 1.0 U
75-09-2	Methylene Chloride	2.0	< 2.0 U
67-64-1	Acetone	5.0	< 5.0 U
75-15-0	Carbon Disulfide	1.0	< 1.0 U
75-35-4	1,1-Dichloroethene	1.0	< 1.0 U
75-34-3	1,1-Dichloroethane	1.0	< 1.0 U
156-60-5	trans-1,2-Dichloroethene	1.0	< 1.0 U
156-59-2	cis-1,2-Dichloroethene	1.0	< 1.0 U
67-66-3	Chloroform	1.0	< 1.0 U
107-06-2	1,2-Dichloroethane	1.0	`< 1.0 U
78-93-3	2-Butanone	5.0	< 5.0 U
71-55-6	1,1,1-Trichloroethane	1.0	< 1.0 U
56-23-5	Carbon Tetrachloride	1.0	< 1.0 U
108-05-4	Vinyl Acetate	5.0	< 5.0 U
75-27-4	Bromodichloromethane	1.0	< 1.0 U
78-87-5	1,2-Dichloropropane	1.0	< 1.0 U
10061-01-5	cis-1,3-Dichloropropene	1.0	< 1.0 U
79-01-6	Trichloroethene	1.0	< 1.0 U
124-48-1	Dibromochloromethane	1.0	< 1.0 U
79-00-5	1,1,2-Trichloroethane	1.0	< 1.0 U
71-43-2	Benzene	1.0	< 1.0 U
10061-02-6	trans-1.3-Dichloropropene	1.0	< 1.0 U
110-75-8	2-Chloroethylvinylether	5.0	< 5.0 U
75-25-2	Bromoform	1.0	< 1.0 U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0 U
591-78-6	2-Hexanone	5.0	< 5.0 U
127-18-4	Tetrachloroethene	1 0	< 1 0 U
79-34-5	1 1 2 2-Tetrachloroethane	1 0	
108-88-3	Toluene	1.0	
108-90-7	Chlorobenzene	1 0	
100-41-4	Fthylbenzene	1.0	
100-42-5	Styrene	1 0	
75-69-4	Trichlorofluoromethane	1 0	
76-13-1	1 1 2-Trichloro-1 2 2-trifluoroe	2.0	
1330-20-7	$r_1, r_2 = r_1 r_1 r_1 r_2, r_2 = c_1 r_1 r_1 r_2 r_2$	2.0	
25-47-6	m, p-xyrene	1.0	
95-47-0 95-50-1	1 2 Dichlorohongono	1.0	
5-50-1 5/1 72 1	1,2-Dichlorobenzene	1.0	< 1.0 U
141 - 73 - 1	1, 3-Dichlorobenzene	1.0	< 1.0 0
	l,4-Dichiorobenzene	1.0	< 1.0 U
107-02-0	ACTOTETH Mothwil Todido	50	< 50 0
74 06 4	Rechyl Ioulue	1.0	< 1.0 U
14-30-4 107 13 1		2.0	< 2.0 U
	Acryionitrile	1.0	< 1.0 U
24 05 2	1, 1-Dichioropropene	1.0	< 1.0 U
14-95-3	Dipromomethane	1.0	< 1.0 U
30-20-6	1,1,1,2-Tetrachloroethane	1.0	< 1.0 U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	< 5.0 Ŭ ())

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ORGANICS ANALYSIS DATA SHEET Volatiles by Purge & Trap GC/MS-Method 8260B Sample ID: MB-071004 Page 2 of 2

METHOD BLANK

Lab Sample ID: MB-071004 LIMS ID: 04-10123 Matrix: Water Date Analyzed: 07/10/04 15:00 QC Report No: GU26-Windward Environmental Project: LDW-SEEP SAMPLING

CAS Number	Analyte .	RL	Result
96-18-4	1,2,3-Trichloropropane	3.0	< 3.0 U
110-57-6	trans-1,4-Dichloro-2-butene	5.0	< 5.0 U
108-67-8	1,3,5-Trimethylbenzene	1.0	< 1.0 U
95-63-6	1,2,4-Trimethylbenzene	1.0	< 1.0 U
87-68-3	Hexachlorobutadiene	5.0	< 5.0 U
106-93-4	Ethylene Dibromide	1.0	< 1.0 U
74-97-5	Bromochloromethane	1.0	< 1.0 U
594-20-7	2,2-Dichloropropane	1.0	< 1.0 U
142-28-9	1,3-Dichloropropane	1.0	< 1.0 U
98-82-8	Isopropylbenzene	1.0	< 1.0 U
103-65-1	n-Propylbenzene	1.0	< 1.0 U
108-86-1	Bromobenzene	1.0	< 1.0 U
95-49-8	2-Chlorotoluene	1.0	< 1.0 U
106-43-4	4-Chlorotoluene	1.0	< 1.0 U
98-06-6	tert-Butylbenzene	1.0	< 1.0 U
135-98-8	sec-Butylbenzene	1.0	< 1.0 U
99-87-6	4-Isopropyltoluene	1.0	< 1.0 U
104-51-8	n-Butylbenzene	1.0	< 1.0 U
120-82-1	1,2,4-Trichlorobenzene	5.0	< 5.0 U
91-20-3	Naphthalene	5.0	< 5.0 U
87-61-6	1,2,3-Trichlorobenzene	5.0	< 5.0 U

Reported in $\mu g/L$ (ppb)

Volatile Surrogate Recovery

d4-1.2-Dichloroethape	109%
d8-Toluene	114%
Bromofluorobenzene	107%
d4-1,2-Dichlorobenzene	112%

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Semivolatiles



SW8270 SEMIVOLATILES WATER SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: GU26-Windward Environmental Project: LDW-SEEP SAMPLING

Client ID	NBZ	FBP	TPH	DCB	PHL	2FP	TBP	2CP	DXN T	OT OUT
MB-070204	80.0%	71.6%	88.0%	58.4%	75 1%	75 5%	79 78	79 18	62 88	0
LCS-070204	73.5%	70.78	88.5%	60.3%	74.6%	71.5%	81.5%	75.98	61.8%	0
LDW-SP-71-C-F	69.6%	65.0%	83.8%	51.2%	62.9%	62.2%	85.4%	67.8%	53.2%	0
LDW-SP-71-C-U	61.6%	58.4%	85.3%	45.5%	56.0%	54.5%	81.3%	59.78	49.0%	0
LDW-SP-76-C-F	69.2%	67.0%	84.5%	50.1%	62.2%	58.7%	91.7%	66.6%	47.7%	0
LDW-SP-76-C-U	74.5%	73.2%	85.6%	56.6%	69.5%	67.3%	92.78	74.0%	60.0%	0
LDW-SP-69-C-F	78.5%	72.3%	82.9%	61.6%	70.3%	69.5%	87.0%	76.1%	59.9%	0
LDW-SP-69-C-U	57.6%	55.8%	81.8%	43.8%	52.6%	49.4%	82.7%	54.9%	42.7%	0

			LCS/MB LIMITS	QC LIMITS
(NBZ)	=	d5-Nitrobenzene	(44-107)	(38-111)
(FBP)	=	2-Fluorobiphenyl	(43-99)	(30-109)
(TPH)	=	d14-p-Terphenyl	(44-123)	(37-113)
(DCB)	=	d4-1,2-Dichlorobenzene	(36-88)	(35-88)
(PHL)	=	d5-Phenol	(47-101)	(42-98)
(2FP)	=	2-Fluorophenol	(44-102)	(40-99)
(TBP)	=	2,4,6-Tribromophenol	(38-116)	(27-136)
(2CP)	=	d4-2-Chlorophenol	(50-102)	(47-101)
(DXN)	=	d8-1,4-Dioxane	(30-160)	(30-160)

Prep Method: SW3520C Log Number Range: 04-10120 to 04-10125



ORGANICS ANALYSIS DATA SHEET Semivolatiles by SW8270C GC/MS Page 1 of 2

Lab Sample ID: GU26A LIMS ID: 04-10120 Matrix: Water Data Release Authorized: Reported: 07/15/04

Date Extracted: 07/02/04 Date Analyzed: 07/14/04 08:03 Instrument/Analyst: NT6/Van SAMPLE

Sample ID: LDW-SP-71-C-F

QC Report No: GU26-Windward Environmental Project: LDW-SEEP SAMPLING

Date Sampled: 06/29/04 Date Received: 06/29/04

Sample Amount: 500 mL Final Extract Volume: 0.50 mL Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
108-95-2	Phenol	2.0	< 2.0 U
111-44-4	Bis-(2-Chloroethyl) Ether	2.0	< 2.0 U
95-57-8	2-Chlorophenol	1.0	< 1.0 U
541-73-1	1,3-Dichlorobenzene	1.0	< 1.0 U
106-46-7	1,4-Dichlorobenzene	1.0	< 1.0 U
100-51-6	Benzyl Alcohol	5.0	< 5.0 U
95-50-1	1,2-Dichlorobenzene	1.0	< 1.0 U
95-48-7	2-Methylphenol	1.0	< 1.0 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	1.0	< 1.0 U
106-44-5	4-Methylphenol	1.0	< 1.0 U
621-64-7	N-Nitroso-Di-N-Propylamine	2.0	< 2.0 U
67-72-1	Hexachloroethane	2.0	< 2.0 U
98-95-3	Nitrobenzene	1.0	< 1.0 U
78-59-1	Isophorone	1.0	< 1.0 U
88-75-5	2-Nitrophenol	5.0	< 5.0 U
105-67-9	2,4-Dimethylphenol	3.0	< 3.0 U
65-85-0	Benzoic Acid	10	< 10 U
111-91-1	bis(2-Chloroethoxy) Methane	1.0	< 1.0 U
120-83-2	2,4-Dichlorophenol	3.0	< 3.0 U
120-82-1	1,2,4-Trichlorobenzene	1.0	< 1.0 U
91-20-3	Naphthalene	1.0	< 1.0 U
106-47-8	4-Chloroaniline	3.0	< 3.0 U
87-68-3	Hexachlorobutadiene	2.0	< 2.0 U
59-50-7	4-Chloro-3-methylphenol	2.0	< 2.0 U
91-57-6	2-Methylnaphthalene	1.0	< 1.0 U
77-47-4	Hexachlorocyclopentadiene	5.0	< 5.0 U
88-06-2	2,4,6-Trichlorophenol	5.0	< 5.0 Ŭ
95-95-4	2,4,5-Trichlorophenol	5.0	< 5.0 U
91-58-7	2-Chloronaphthalene	1.0	< 1.0 U
88-74-4	2-Nitroaniline	5.0	< 5.0 U
131-11-3	Dimethylphthalate	1.0	< 1.0 U
208-96-8	Acenaphthylene	1.0	< 1.0 U
99-09-2	3-Nitroaniline	6.0	< 6.0 U
83-32-9	Acenaphthene	1.0	< 1.0 U
51-28-5	2,4-Dinitrophenol	25	< 25 U
100-02-7	4-Nitrophenol	5.0	< 5.0 U
132-64-9	Dibenzofuran	1.0	< 1.0 U
606-20-2	2,6-Dinitrotoluene	5.0	< 5.0 U
121-14-2	2,4-Dinitrotoluene	5.0	< 5.0 U
84-66-2	Diethylphthalate	1.0	< 1.0 U



ORGANICS ANALYSIS DATA SHEET Semivolatiles by SW8270C GC/MS Page 2 of 2

Sample ID: LDW-SP-71-C-F SAMPLE

Lab Sample ID: GU26A LIMS ID: 04-10120 Matrix: Water Date Analyzed: 07/14/04 08:03 QC Report No: GU26-Windward Environmental Project: LDW-SEEP SAMPLING

CAS Number	Analyte	RL	Result
7005-72-3	4-Chlorophenyl-phenylether	1.0	< 1.0 U
86-73-7	Fluorene	1.0	< 1.0 U
100-01-6	4-Nitroaniline	5.0	< 5.0 U
534-52-1	4,6-Dinitro-2-Methylphenol	15	< 15 U
86-30-6	N-Nitrosodiphenylamine	1.0	< 1.0 U
101-55-3	4-Bromophenyl-phenylether	1.0	< 1.0 U
118-74-1	Hexachlorobenzene	1.0	< 1.0 U
87-86-5	Pentachlorophenol	5.0	< 5.0 U
85-01-8	Phenanthrene	1.0	< 1.0 U
86-74-8	Carbazole	1.0	< 1.0 U
120-12-7	Anthracene	1.0	< 1.0 U
84-74-2	Di-n-Butylphthalate	1.0	< 1.0 U
206-44-0	Fluoranthene	1.0	< 1.0 U
129-00-0	Pyrene	1.0	< 1.0 U
85-68-7	Butylbenzylphthalate	1.0	< 1.0 U
91-94-1	3,3'-Dichlorobenzidine	5.0	< 5.0 U
56-55-3	Benzo(a)anthracene	1.0	< 1.0 U
117-81-7	bis(2-Ethylhexyl)phthalate	1.0	< 1.0 U
218-01-9	Chrysene	1.0	< 1.0 U
117-84-0	Di-n-Octyl phthalate	1.0	< 1.0 U
205-99-2	Benzo(b)fluoranthene	1.0	< 1.0 U
207-08-9	Benzo(k)fluoranthene	1.0	< 1.0 U
50-32-8	Benzo(a)pyrene	1.0	< 1.0 U
193-39-5	Indeno(1,2,3-cd)pyrene	1.0	< 1.0 U
53-70-3	Dibenz(a,h)anthracene	1.0	< 1.0 U
191-24-2	Benzo(g,h,i)perylene	1.0	< 1.0 U
123-91-1	1,4-Dioxane	1.0	< 1.0 U

Reported in $\mu g/L$ (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	69.6%	2-Fluorobiphenyl	65.0%
d14-p-Terphenyl	83.8%	d4-1,2-Dichlorobenzene	51.2%
d5-Phenol	62.9%	2-Fluorophenol	62.2%
2,4,6-Tribromophenol	85.4%	d4-2-Chlorophenol	67.8%
d8-1,4-Dioxane	53.2%	-	

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ORGANICS ANALYSIS DATA SHEET Semivolatiles by SW8270C GC/MS Page 1 of 2

Lab Sample ID: GU26B LIMS ID: 04-10121 Matrix: Water Data Release Authorized: Reported: 07/15/04

Date Extracted: 07/02/04 Date Analyzed: 07/14/04 08:34 Instrument/Analyst: NT6/Van Sample ID: LDW-SP-71-C-U SAMPLE

QC Report No: GU26-Windward Environmental Project: LDW-SEEP SAMPLING

Date Sampled: 06/29/04 Date Received: 06/29/04

Sample Amount: 500 mL Final Extract Volume: 0.50 mL Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
108-95-2	Phenol	2.0	< 2.0 U
111-44-4	Bis-(2-Chloroethyl) Ether	2.0	< 2.0 U
95-57-8	2-Chlorophenol	1.0	< 1.0 U
541-73-1	1,3-Dichlorobenzene	1.0	< 1.0 U
106-46-7	1,4-Dichlorobenzene	1.0	< 1.0 U
100-51-6	Benzyl Alcohol	5.0	< 5.0 U
95-50-1	1,2-Dichlorobenzene	1.0	< 1.0 U
95-48-7	2-Methylphenol	1.0	< 1.0 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	1.0	< 1.0 U
106-44-5	4-Methylphenol	1.0	< 1.0 U
621-64-7	N-Nitroso-Di-N-Propylamine	2.0	< 2.0 U
67-72-1	Hexachloroethane	2.0	< 2.0 U
98-95-3	Nitrobenzene	1.0	< 1.0 U
78-59-1	Isophorone	1.0	< 1.0 U
88-75-5	2-Nitrophenol	5.0	< 5.0 U
105-67-9	2,4-Dimethylphenol	3.0	< 3.0 U
65-85-0	Benzoic Acid	10	< 10 U
111-91-1	bis(2-Chloroethoxy) Methane	1.0	< 1.0 U
120-83-2	2,4-Dichlorophenol	3.0	< 3.0 U
120-82-1	1,2,4-Trichlorobenzene	1.0	< 1.0 U
91-20-3	Naphthalene	1.0	< 1.0 U
106-47-8	4-Chloroaniline	3.0	< 3.0 U
87-68-3	Hexachlorobutadiene	2.0	< 2.0 U
59-50-7	4-Chloro-3-methylphenol	2.0	< 2.0 U
91-57-6	2-Methylnaphthalene	1.0	< 1.0 U
77-47-4	Hexachlorocyclopentadiene	5.0	< 5.0 U
88-06-2	2,4,6-Trichlorophenol	5.0	< 5.0 U
95-95-4	2,4,5-Trichlorophenol	5.0	< 5.0 Ŭ
91-58-7	2-Chloronaphthalene	1.0	< 1.0 U
88-74-4	2-Nitroaniline	5.0	< 5.0 U
131-11-3	Dimethylphthalate	1.0	< 1.0 U
208-96-8	Acenaphthylene	1.0	< 1.0 U
99-09-2	3-Nitroaniline	6.0	< 6.0 U
83-32-9	Acenaphthene	1.0	< 1.0 U
51-28-5	2,4-Dinitrophenol	25	< 25 U
100-02-7	4-Nitrophenol	5.0	< 5.0 Ŭ
132-64-9	Dibenzofuran	1.0	< 1.0 U
606-20-2	2,6-Dinitrotoluene	5.0	< 5.0 Ŭ
121-14-2	2,4-Dinitrotoluene	5.0	< 5.0 U
84-66-2	Diethylphthalate	1.0	< 1.0 U



ORGANICS ANALYSIS DATA SHEET Semivolatiles by SW8270C GC/MS Page 2 of 2

Sample ID: LDW-SP-71-C-U SAMPLE

Lab Sample ID: GU26B LIMS ID: 04-10121 Matrix: Water Date Analyzed: 07/14/04 08:34 QC Report No: GU26-Windward Environmental Project: LDW-SEEP SAMPLING

CAS Number	Analyte	RL	Result
7005-72-3	4-Chlorophenyl-phenylether	1.0	< 1.0 U
86-73-7	Fluorene	1.0	< 1.0 U
100-01-6	4-Nitroaniline	5.0	< 5.0 U
534-52-1	4,6-Dinitro-2-Methylphenol	15	< 15 U
86-30-6	N-Nitrosodiphenylamine	1.0	< 1.0 U
101-55-3	4-Bromophenyl-phenylether	1.0	< 1.0 U
118-74-1	Hexachlorobenzene	1.0	< 1.0 U
87-86-5	Pentachlorophenol	5.0	< 5.0 U
85-01-8	Phenanthrene	1.0	< 1.0 U
86-74-8	Carbazole	1.0	< 1.0 U
120-12-7	Anthracene	1.0	< 1.0 U
84-74-2	Di-n-Butylphthalate	1.0	< 1.0 U
206-44-0	Fluoranthene	1.0	< 1.0 U
129-00-0	Pyrene	1.0	< 1.0 U
85-68-7	Butylbenzylphthalate	1.0	< 1.0 U
91-94-1	3,3'-Dichlorobenzidine	5.0	< 5.0 U
56-55-3	Benzo(a) anthracene	1.0	< 1.0 U
117-81-7	bis(2-Ethylhexyl)phthalate	1.0	1.2
218-01-9	Chrysene	1.0	< 1.0 U
117-84-0	Di-n-Octyl phthalate	1.0	< 1.0 U
205-99-2	Benzo(b)fluoranthene	1.0	< 1.0 U
207-08-9	Benzo(k)fluoranthene	1.0	< 1.0 U
50-32-8	Benzo(a)pyrene	· 1.0	< 1.0 U
193-39-5	Indeno(1,2,3-cd)pyrene	1.0	< 1.0 U
53-70-3	Dibenz(a,h)anthracene	1.0	< 1.0 U
191-24-2	Benzo(g,h,i)perylene	1.0	< 1.0 U
123-91-1	1,4-Dioxane	1.0	< 1.0 U

Reported in μ g/L (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	61.6%	2-Fluorobiphenyl	58.4%
d14-p-Terphenyl	85.3%	d4-1,2-Dichlorobenzene	45.5%
d5-Phenol	56.0%	2-Fluorophenol	54.5%
2,4,6-Tribromophenol	81.3%	d4-2-Chlorophenol	59.7%
d8-1,4-Dioxane	49.0%	-	



ORGANICS ANALYSIS DATA SHEET Semivolatiles by SW8270C GC/MS Page 1 of 2

Lab Sample ID: GU26C LIMS ID: 04-10122 Matrix: Water Data Release Authorized: Reported: 07/15/04

Date Extracted: 07/02/04 Date Analyzed: 07/14/04 09:06 Instrument/Analyst: NT6/Van SAMPLE

Sample ID: LDW-SP-76-C-F

QC Report No: GU26-Windward Environmental Project: LDW-SEEP SAMPLING

Date Sampled: 06/29/04 Date Received: 06/29/04

Sample Amount: 500 mL Final Extract Volume: 0.50 mL Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
108-95-2	Phenol	2 0	< 2 0 11
111-44-4	Bis-(2-Chloroethyl) Ether	2.0	< 2.0 U
95-57-8	2-Chlorophenol	1.0	< 1.0 U
541-73-1	1,3-Dichlorobenzene	1.0	< 1.0 U
106-46-7	1,4-Dichlorobenzene	1.0	< 1.0 U
100-51-6	Benzyl Alcohol	5.0	< 5.0 U
95-50-1	1,2-Dichlorobenzene	1.0	< 1.0 U
95-48-7	2-Methylphenol	1.0	< 1.0 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	1.0	< 1.0 U
106-44-5	4-Methylphenol	1.0	< 1.0 U
621-64-7	N-Nitroso-Di-N-Propylamine	2.0	< 2.0 U
67-72-1	Hexachloroethane	2.0	< 2.0 U
98-95-3	Nitrobenzene	1.0	< 1.0 U
78-59-1	Isophorone	1.0	< 1.0 U
88-75-5	2-Nitrophenol	5.0	< 5.0 II
105-67-9	2,4-Dimethylphenol	3.0	< 3.0 U
65-85-0	Benzoic Acid	10	< 10 U
111-91-1	bis(2-Chloroethoxy) Methane	1.0	< 1.0 U
120-83-2	2,4-Dichlorophenol	3.0	< 3.0 U
120-82-1	1,2,4-Trichlorobenzene	1.0	< 1.0 U
91-20-3	Naphthalene	1.0	< 1.0 U
106-47-8	4-Chloroaniline	3.0	< 3.0 U
87-68-3	Hexachlorobutadiene	2.0	< 2.0 U
59-50-7	4-Chloro-3-methylphenol	2.0	< 2.0 U
91-57-6	2-Methylnaphthalene	1.0	< 1.0 U
77-47-4	Hexachlorocyclopentadiene	5.0	< 5.0 U
88-06-2	2,4,6-Trichlorophenol	5.0	< 5.0 U
95-95-4	2,4,5-Trichlorophenol	5.0	< 5.0 U
91-58-7	2-Chloronaphthalene	1.0	< 1.0 U
88-74-4	2-Nitroaniline	5.0	< 5.0 U
131-11-3	Dimethylphthalate	1.0	< 1.0 U
208-96-8	Acenaphthylene	1.0	< 1.0 U
99-09-2	3-Nitroaniline	6.0	< 6.0 U
83-32-9	Acenaphthene	1.0	< 1.0 U
51-28-5	2,4-Dinitrophenol	25	< 25 U
100-02-7	4-Nitrophenol	5.0	< 5.0 U
132-64-9	Dibenzofuran	1.0	< 1.0 U
606-20-2	2,6-Dinitrotoluene	5.0	< 5.0 U
121-14-2	2,4-Dinitrotoluene	5.0	< 5.0 U
84-66-2	Diethylphthalate	1.0	1.0



ORGANICS ANALYSIS DATA SHEET Semivolatiles by SW8270C GC/MS Page 2 of 2

Sample ID: LDW-SP-76-C-F SAMPLE

Lab Sample ID: GU26C LIMS ID: 04-10122 Matrix: Water Date Analyzed: 07/14/04 09:06 QC Report No: GU26-Windward Environmental Project: LDW-SEEP SAMPLING

CAS Number	Analyte	RL	Result
7005-72-3	4-Chlorophenyl-phenylether	1.0	< 1.0 Ŭ
86-73-7	Fluorene	1.0	< 1.0 U
100-01-6	4-Nitroaniline	5.0	< 5.0 U
534-52-1	4,6-Dinitro-2-Methylphenol	15	< 15 U
86-30-6	N-Nitrosodiphenylamine	1.0	< 1.0 U
101-55-3	4-Bromophenyl-phenylether	1.0	< 1.0 U
118-74-1	Hexachlorobenzene	1.0	< 1.0 U
87-86-5	Pentachlorophenol	5.0	< 5.0 U
85-01-8	Phenanthrene	1.0	< 1.0 U
86~74-8	Carbazole	1.0	< 1.0 U
120-12-7	Anthracene	1.0	< 1.0 U
84-74-2	Di-n-Butylphthalate	1.0	< 1.0 U
206-44-0	Fluoranthene	1.0	< 1.0 U
129-00-0	Pyrene	1.0	< 1.0 U
85-68-7	Butylbenzylphthalate	1.0	< 1.0 U
91-94-1	3,3'-Dichlorobenzidine	5.0	< 5.0 U
56-55-3	Benzo(a) anthracene	1.0	< 1.0 U
117-81-7	bis(2-Ethylhexyl)phthalate	1.0	3.8
218-01-9	Chrysene	1.0	< 1.0 U
117-84-0	Di-n-Octyl phthalate	1.0	< 1.0 U
205-99-2	Benzo(b)fluoranthene	1.0	< 1.0 U
207-08-9	Benzo(k)fluoranthene	1.0	< 1.0 U
50-32-8	Benzo(a)pyrene	1.0	< 1.0 U
193-39-5	Indeno(1,2,3-cd)pyrene	1.0	< 1.0 U
53-70-3	Dibenz(a,h)anthracene	1.0	< 1.0 U
191-24-2	Benzo(g,h,i)perylene	1.0	< 1.0 U
123-91-1	1,4-Dioxane	1.0	< 1.0 U

Reported in μ g/L (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	69.2%	2-Fluorobiphenyl	67.0%
d14-p-Terphenyl	84.5%	d4-1,2-Dichlorobenzene	50.1%
d5-Phenol	62.2%	2-Fluorophenol	58.7%
2,4,6-Tribromophenol	91.7%	d4-2-Chlorophenol	66.6%
d8-1,4-Dioxane	47.7%	_	



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ORGANICS ANALYSIS DATA SHEET Semivolatiles by SW8270C GC/MS Page 1 of 2

Lab Sample ID: GU26D LIMS ID: 04-10123 Matrix: Water Data Release Authorized: Reported: 07/15/04

Date Extracted: 07/02/04 Date Analyzed: 07/14/04 09:37 Instrument/Analyst: NT6/Van Sample ID: LDW-SP-76-C-U SAMPLE

QC Report No: GU26-Windward Environmental Project: LDW-SEEP SAMPLING

Date Sampled: 06/29/04 Date Received: 06/29/04

Sample Amount: 500 mL Final Extract Volume: 0.50 mL Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
108-95-2	Phenol	2.0	< 2.0 U
111-44-4	Bis-(2-Chloroethyl) Ether	2.0	< 2.0 U
95-57-8	2-Chlorophenol	1.0	< 1.0 U
541-73-1	1,3-Dichlorobenzene	1.0	< 1.0 U
106-46-7	1,4-Dichlorobenzene	1.0	< 1.0 U
100-51-6	Benzyl Alcohol	5.0	< 5.0 U
95-50-1	1,2-Dichlorobenzene	1.0	< 1.0 U
95-48-7	2-Methylphenol	1.0	< 1.0 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	1.0	< 1.0 U
106-44-5	4-Methylphenol	1.0	< 1.0 U
621-64-7	N-Nitroso-Di-N-Propylamine	2.0	< 2.0 U
67-72-1	Hexachloroethane	2.0	< 2.0 U
98-95-3	Nitrobenzene	1.0	< 1.0 U
78-59-1	Isophorone	1.0	< 1.0 U
88-75-5	2-Nitrophenol	5.0	< 5.0 U
105-67-9	2,4-Dimethylphenol	3.0	< 3.0 U
65-85-0	Benzoic Acid	10	< 10 U
111-91-1	bis(2-Chloroethoxy) Methane	1.0	< 1.0 U
120-83-2	2,4-Dichlorophenol	3.0	< 3.0 U
120-82-1	1,2,4-Trichlorobenzene	1.0	< 1.0 U
91-20-3	Naphthalene	1.0	< 1.0 U
106-47-8	4-Chloroaniline	3.0	< 3.0 U
87-68-3	Hexachlorobutadiene	2.0	< 2.0 U
59-50-7	4-Chloro-3-methylphenol	2.0	< 2.0 Ŭ
91-57-6	2-Methylnaphthalene	1.0	< 1.0 U
77-47-4	Hexachlorocyclopentadiene	5.0	< 5.0 U
88-06-2	2,4,6-Trichlorophenol	5.0	< 5.0 U
95-95-4	2,4,5-Trichlorophenol	5.0	< 5.0 Ŭ
91-58-7	2-Chloronaphthalene	1.0	< 1.0 U
88-74-4	2-Nitroaniline	5.0	< 5.0 U
131-11-3	Dimethylphthalate	1.0	< 1.0 U
208-96-8	Acenaphthylene	1.0	< 1.0 U
99-09-2	3-Nitroaniline	6.0	< 6.0 U
83-32-9	Acenaphthene	1.0	< 1.0 U
51-28-5	2,4-Dinitrophenol	25	< 25 U
100-02-7	4-Nitrophenol	5.0	< 5.0 U
132-64-9	Dibenzofuran	1.0	< 1.0 U
606-20-2	2,6-Dinitrotoluene	5.0	< 5.0 Ŭ
121-14-2	2,4-Dinitrotoluene	5.0	< 5.0 U
84-66-2	Diethylphthalate	1.0	< 1.0 U

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ORGANICS ANALYSIS DATA SHEET Semivolatiles by SW8270C GC/MS Page 2 of 2

Sample ID: LDW-SP-76-C-U SAMPLE

Lab Sample ID: GU26D LIMS ID: 04-10123 Matrix: Water Date Analyzed: 07/14/04 09:37 QC Report No: GU26-Windward Environmental Project: LDW-SEEP SAMPLING

CAS Number	Analyte	RL	Result
7005-72-3	4-Chlorophenyl-phenylether	1.0	< 1.0 U
86-73-7	Fluorene	1.0	< 1.0 U
100-01-6	4-Nitroaniline	5.0	< 5.0 Ư
534-52-1	4,6-Dinitro-2-Methylphenol	15	< 15 U
86-30 - 6	N-Nitrosodiphenylamine	1.0	< 1.0 U
101-55-3	4-Bromophenyl-phenylether	1.0	< 1.0 U
118-74-1	Hexachlorobenzene	1.0	< 1.0 U
87-86-5	Pentachlorophenol	5.0	< 5.0 U
85-01-8	Phenanthrene	1.0	< 1.0 U
86-74-8	Carbazole	1.0	< 1.0 U
120-12-7	Anthracene	1.0	< 1.0 U
84-74-2	Di-n-Butylphthalate	1.0	< 1.0 U
206-44-0	Fluoranthene	1.0	< 1.0 U
129-00-0	Pyrene	1.0	< 1.0 U
85-68-7	Butylbenzylphthalate	1.0	< 1.0 U
91-94-1	3,3'-Dichlorobenzidine	5.0	< 5.0 U
56-55-3	Benzo(a) anthracene	1.0	< 1.0 U
117-81-7	bis(2-Ethylhexyl)phthalate	1.0	< 1.0 U
218-01-9	Chrysene	1.0	< 1.0 U
117-84-0	Di-n-Octyl phthalate	1.0	< 1.0 U
205-99-2	Benzo(b)fluoranthene	1.0	< 1.0 U
207-08-9	Benzo(k)fluoranthene	1.0	< 1.0 U
50-32-8	Benzo(a)pyrene	1.0	< 1.0 U
193-39-5	Indeno (1,2,3-cd) pyrene	1.0	< 1.0 U
53-70-3	Dibenz(a,h)anthracene	1.0	< 1.0 U
191-24-2	Benzo(g,h,i)perylene	1.0	< 1.0 U
123-91-1	1,4-Dioxane	1.0	< 1.0 U

Reported in $\mu g/L$ (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	74.5%	2-Fluorobiphenyl	73.2%
d14-p-Terphenyl	85.6%	d4-1,2-Dichlorobenzene	56.6%
d5-Phenol	69.5%	2-Fluorophenol	67.3%
2,4,6-Tribromophenol	92.7%	d4-2-Chlorophenol	74.0%
d8-1,4-Dioxane	60.0%	-	



ORGANICS ANALYSIS DATA SHEET Semivolatiles by SW8270C GC/MS Page 1 of 2

Lab Sample ID: GU26E LIMS ID: 04-10124 Matrix: Water Data Release Authorized: Reported: 07/15/04

Date Extracted: 07/02/04 Date Analyzed: 07/14/04 10:09 Instrument/Analyst: NT6/Van Sample ID: LDW-SP-69-C-F SAMPLE

QC Report No: GU26-Windward Environmental Project: LDW-SEEP SAMPLING

Date Sampled: 06/29/04 Date Received: 06/29/04

Sample Amount: 500 mL Final Extract Volume: 0.50 mL Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
108-95-2	Phenol	2.0	< 2.0 U
111-44-4	Bis-(2-Chloroethyl) Ether	2.0	< 2.0 U
95-57-8	2-Chlorophenol	1.0	< 1.0 U
541-73-1	1,3-Dichlorobenzene	1.0	< 1.0 U
106-46-7	1,4-Dichlorobenzene	1.0	< 1.0 U
100-51-6	Benzyl Alcohol	5.0	< 5.0 U
95-50-1	1,2-Dichlorobenzene	1.0	< 1.0 U
95-48-7	2-Methylphenol	1.0	< 1.0 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	1.0	< 1.0 U
106-44-5	4-Methylphenol	1.0	< 1.0 U
621-64-7	N-Nitroso-Di-N-Propylamine	2.0	< 2.0 U
67-72-1	Hexachloroethane	2.0	< 2.0 U
98-95-3	Nitrobenzene	1.0	< 1.0 U
78-59-1	Isophorone	1.0	< 1.0 U
88-75-5	2-Nitrophenol	5.0	< 5.0 Ŭ
105-67-9	2,4-Dimethylphenol	3.0	< 3.0 U
65-85-0	Benzoic Acid	10	< 10 U
111-91-1	bis(2-Chloroethoxy) Methane	1.0	< 1.0 U
120-83-2	2,4-Dichlorophenol	3.0	< 3.0 U
120-82-1	1,2,4-Trichlorobenzene	1.0	< 1.0 U
91-20-3	Naphthalene	1.0	< 1.0 U
106-47-8	4-Chloroaniline	3.0	< 3.0 U
87-68-3	Hexachlorobutadiene	2.0	< 2.0 U
59-50-7	4-Chloro-3-methylphenol	2.0	< 2.0 U
91-57-6	2-Methylnaphthalene	1.0	< 1.0 U
77-47-4	Hexachlorocyclopentadiene	5.0	< 5.0 U
88-06-2	2,4,6-Trichlorophenol	5.0	< 5.0 U
95-95-4	2,4,5-Trichlorophenol	5.0	< 5.0 U
91-58-7	2-Chloronaphthalene	1.0	< 1.0 U
88-74-4	2-Nitroaniline	5.0	< 5.0 U
131-11-3	Dimethylphthalate	1.0	< 1.0 U
208-96-8	Acenaphthylene	1.0	< 1.0 U
99-09-2	3-Nitroaniline	6.0	< 6.0 U
83-32-9	Acenaphthene	1.0	< 1.0 U
51-28-5	2,4-Dinitrophenol	25	< 25 U
100-02-7	4-Nitrophenol	5.0	< 5.0 U
132-64-9	Dibenzofuran	1.0	< 1.0 U
606-20-2	2,6-Dinitrotoluene	5.0	< 5.0 U
121-14-2	2,4-Dinitrotoluene	5.0	< 5.0 U
84-66-2	Diethylphthalate	1.0	5.5



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ORGANICS ANALYSIS DATA SHEET Semivolatiles by SW8270C GC/MS Page 2 of 2

Sample ID: LDW-SP-69-C-F SAMPLE

Lab Sample ID: GU26E LIMS ID: 04-10124 Matrix: Water Date Analyzed: 07/14/04 10:09 QC Report No: GU26-Windward Environmental Project: LDW-SEEP SAMPLING

CAS Number	Analyte	RL	Result
7005-72-3	4-Chlorophenyl-phenylether	1.0	< 1.0 U
86-73-7	Fluorene	1.0	< 1.0 U
100-01-6	4-Nitroaniline	5.0	< 5.0 U
534-52-1	4,6-Dinitro-2-Methylphenol	15	< 15 Ŭ
86-30-6	N-Nitrosodiphenylamine	1.0	< 1.0 U
101-55-3	4-Bromophenyl-phenylether	1.0	< 1.0 U
118-74-1	Hexachlorobenzene	1.0	< 1.0 U
87-86-5	Pentachlorophenol	5.0	< 5.0 U
85-01-8	Phenanthrene	1.0	< 1.0 U
86-74-8	Carbazole	1.0	< 1.0 U
120-12-7	Anthracene	1.0	< 1.0 U
84-74-2	Di-n-Butylphthalate	1.0	< 1.0 U
206-44-0	Fluoranthene	1.0	< 1.0 U
129-00-0	Pyrene	1.0	< 1.0 U
85-68-7	Butylbenzylphthalate	1.0	< 1.0 U
91-94-1	3,3'-Dichlorobenzidine	5.0	< 5.0 U
56-55-3	Benzo(a) anthracene	1.0	< 1.0 U
117-81-7	bis(2-Ethylhexyl)phthalate	1.0	< 1.0 U
218-01-9	Chrysene	1.0	< 1.0 U
117-84-0	Di-n-Octyl phthalate	1.0	< 1.0 U
205-99-2	Benzo(b)fluoranthene	1.0	< 1.0 U
207-08-9	Benzo(k)fluoranthene	1.0	< 1.0 U
50-32-8	Benzo(a)pyrene	1.0	< 1.0 U
193-39-5	Indeno(1,2,3-cd)pyrene	1.0	< 1.0 U
53-70-3	Dibenz(a,h)anthracene	1.0	< 1.0 U
191-24-2	Benzo(g,h,i)perylene	1.0	< 1.0 U
123-91-1	1,4-Dioxane	1.0	< 1.0 U

Reported in $\mu g/L$ (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	78.5%	2-Fluorobiphenyl	72.3%
d14-p-Terphenyl	82.9%	d4-1,2-Dichlorobenzene	61.6%
d5-Phenol	70.3%	2-Fluorophenol	69.5%
2,4,6-Tribromophenol	87.0%	d4-2-Chlorophenol	76.1%
d8-1,4-Dioxane	59.9%	-	



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ORGANICS ANALYSIS DATA SHEET Semivolatiles by SW8270C GC/MS Page 1 of 2

Lab Sample ID: GU26F LIMS ID: 04-10125 Matrix: Water Data Release Authorized: Reported: 07/15/04

Date Extracted: 07/02/04 Date Analyzed: 07/14/04 10:41 Instrument/Analyst: NT6/Van Sample ID: LDW-SP-69-C-U SAMPLE

QC Report No: GU26-Windward Environmental Project: LDW-SEEP SAMPLING

Date Sampled: 06/29/04 Date Received: 06/29/04

Sample Amount: 500 mL Final Extract Volume: 0.50 mL Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
108-95-2	Phenol	2.0	< 2.0 U
111-44-4	Bis-(2-Chloroethyl) Ether	2.0	< 2.0 U
95-57-8	2-Chlorophenol	1.0	< 1.0 U
541-73 - 1	1,3-Dichlorobenzene	1.0	< 1.0 U
106-46-7	1,4-Dichlorobenzene	1.0	< 1.0 U
100-51-6	Benzyl Alcohol	5.0	< 5.0 U
95-50-1	1,2-Dichlorobenzene	1.0	< 1.0 U
95-48-7	2-Methylphenol	1.0	< 1.0 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	1.0	< 1.0 U
106-44-5	4-Methylphenol	1.0	< 1.0 U
621-64-7	N-Nitroso-Di-N-Propylamine	2.0	< 2.0 U
67-72-1	Hexachloroethane	2.0	< 2.0 U
98-95-3	Nitrobenzene	1.0	< 1.0 U
78-59-1	Isophorone	1.0	< 1.0 U
88-75-5	2-Nitrophenol	5.0	< 5.0 U
105-67-9	2,4-Dimethylphenol	3.0	< 3.0 U
65-85-0	Benzoic Acid	10	< 10 U
111-91-1	bis(2-Chloroethoxy) Methane	1.0	< 1.0 U
120-83-2	2,4-Dichlorophenol	3.0	< 3.0 U
120-82-1	1,2,4-Trichlorobenzene	1.0	< 1.0 U
91-20-3	Naphthalene	1.0	< 1.0 U
106-47-8	4-Chloroaniline	3.0	< 3.0 U
87-68-3	Hexachlorobutadiene	2.0	< 2.0 U
59-50-7	4-Chloro-3-methylphenol	2.0	< 2.0 U
91-57-6	2-Methylnaphthalene	1.0	< 1.0 U
77-47-4	Hexachlorocyclopentadiene	5.0	< 5.0 U
88-06-2	2,4,6-Trichlorophenol	5.0	< 5.0 Ŭ
95-95-4	2,4,5-Trichlorophenol	5.0	< 5.0 U
91-58-7	2-Chloronaphthalene	1.0	< 1.0 U
88-74-4	2-Nitroaniline	5.0	< 5.0 U
131-11-3	Dimethylphthalate	1.0	< 1.0 U
208-96-8	Acenaphthylene	1.0	< 1.0 U
99-09-2	3-Nitroaniline	6.0	< 6.0 U
83-32-9	Acenaphthene	1.0	< 1.0 U
51-28-5	2,4-Dinitrophenol	25	< 25 U
100-02-7	4-Nitrophenol	5.0	< 5.0 Ŭ
132-64-9	Dibenzofuran	1.0	< 1.0 U
606-20-2	2,6-Dinitrotoluene	5.0	< 5.0 Ŭ
121-14-2	2,4-Dinitrotoluene	5.0	< 5.0 Ū
84-66-2	Diethylphthalate	1.0	< 1.0 U



ORGANICS ANALYSIS DATA SHEET Semivolatiles by SW8270C GC/MS Page 2 of 2

Sample ID: LDW-SP-69-C-U SAMPLE

Lab Sample ID: GU26F LIMS ID: 04-10125 Matrix: Water Date Analyzed: 07/14/04 10:41 QC Report No: GU26-Windward Environmental Project: LDW-SEEP SAMPLING

CAS Number	Analyte	RL	Result
7005-72-3	4-Chlorophenyl-phenylether	1.0	< 1.0 U
86-73-7	Fluorene	1.0	< 1.0 U
100-01-6	4-Nitroaniline	5.0	< 5.0 U
534-52-1	4,6-Dinitro-2-Methylphenol	15	< 15 U
86-30-6	N-Nitrosodiphenylamine	1.0	< 1.0 U
101-55-3	4-Bromophenyl-phenylether	1.0	< 1.0 U
118-74-1	Hexachlorobenzene	1.0	< 1.0 U
87-86-5	Pentachlorophenol	5.0	< 5.0 U
85-01-8	Phenanthrene	1.0	< 1.0 U
86-74-8	Carbazole	1.0	< 1.0 U
120-12-7	Anthracene	1.0	< 1.0 U
84-74-2	Di-n-Butylphthalate	1.0	< 1.0 U
206-44-0	Fluoranthene	1.0	< 1.0 U
129-00-0	Pyrene	1.0	< 1.0 U
85-68-7	Butylbenzylphthalate	1.0	< 1.0 U
91-94-1	3,3'-Dichlorobenzidine	5.0	< 5.0 Ŭ
56-55-3	Benzo (a) anthracene	1.0	< 1.0 U
117-81-7	bis(2-Ethylhexyl)phthalate	1.0	< 1.0 U
218-01-9	Chrysene	1.0	< 1.0 U
117-84-0	Di-n-Octyl phthalate	1.0	< 1.0 U
205-99-2	Benzo(b)fluoranthene	1.0	< 1.0 U
207-08-9	Benzo(k)fluoranthene	1.0	< 1.0 U
50-32-8	Benzo(a)pyrene	1.0	< 1.0 U
193-39-5	Indeno(1,2,3-cd)pyrene	1.0	< 1.0 U
53-70-3	Dibenz(a,h)anthracene	1.0	< 1.0 U
191-24-2	Benzo(g,h,i)perylene	1.0	< 1.0 U
123-91-1	1,4-Dioxane	1.0	< 1.0 U

Reported in $\mu g/L$ (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	57.6%	2-Fluorobiphenyl	55.8%
d14-p-Terphenyl	81.8%	d4-1,2-Dichlorobenzene	43.8%
d5-Phenol	52.6%	2-Fluorophenol	49.4%
2,4,6-Tribromophenol	82.7%	d4-2-Chlorophenol	54.9%
d8-1,4-Dioxane	42.7%	_	

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ORGANICS ANALYSIS DATA SHEET Semivolatiles by SW8270C GC/MS Page 1 of 1

Lab Sample ID: LCS-070204 LIMS ID: 04-10120 Matrix: Water Data Release Authorized: M Reported: 07/15/04

Date Extracted: 07/02/04 Date Analyzed: 07/13/04 14:28 Instrument/Analyst: NT6/Van GPC Cleanup: NO

Sample ID: LCS-070204 LAB CONTROL

QC Report No: GU26-Windward Environmental Project: LDW-SEEP SAMPLING

Date Sampled: 06/29/04 Date Received: 06/29/04

Sample Amount: 500 mL Final Extract Volume: 0.50 mL Dilution Factor: 1.00

	Lab	Spike	
Analyte	Control	Added	Recovery
Phenol	22.0	37.5	58.7%
2-Chlorophenol	21.3	37.5	56.8%
1,4-Dichlorobenzene	10.5	25.0	42.0%
N-Nitroso-Di-N-Propylamine	15.1	25.0	60.4%
1,2,4-Trichlorobenzene	10.9	25.0	43.6%
4-Chloro-3-methylphenol	23.3	37.5	62.1%
Acenaphthene	14.9	25.0	59.6%
4-Nitrophenol	25.6	37.5	68.3%
2,4-Dinitrotoluene	15.4	25.0	61.6%
Pentachlorophenol	26.7	37.5	71.2%
Pyrene	17.9	25.0	71.6%
1,4-Dioxane	12.1	25.0	48.4%

Semivolatile Surrogate Recovery

d5-Nitrobenzene	73.5%
2-Fluorobiphenyl	70.7%
d14-p-Terphenyl	88.5%
d4-1,2-Dichlorobenzene	60.3%
d5-Phenol	74.6%
2-Fluorophenol	71.5%
2,4,6-Tribromophenol	81.5%
d4-2-Chlorophenol	75.9%
d8-1,4-Dioxane	61.8%

Results reported in μ g/L

4B SEMIVOLATILE METHOD BLANK SUMMARY

GU59MBW1

Lab Name: ANALYTICAL RESOURCES, INC

Client: WINDWARD ENVIRONMENTAL

Lab Code: GU26Project: LDW-SEEP SAMPLINGSDG No.: GU26Lab File ID: GU59MBLab Sample ID: GU59MBW1Instrument ID: NT6Date Extracted: 07/02/04Matrix: (soil/water) WATERDate Analyzed: 07/13/04Level: (low/med) LOWTime Analyzed: 1356

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

			• • • • • • • • • • • • • • • • • • •	
	CLIENT	LAB	LAB	DATE
	SAMPLE NO.	SAMPLE ID	FILE ID	ANALYZED
	=======================================	================	=================	========
01	GU59LCSW1	GU59LCSW1	GU59SB	07/13/04
02	LDW-SP-10-C-F	GU59A	GU59A	07/13/04
03	LDW-SP-12-C-F	GU59B	GU59B	07/13/04
04	LDW-SP-20-C-F	GU59C	GU59C	07/13/04
05	LDW-SP-41-C-F	GU59D	GU59D	07/13/04
06	LDW-SP-41-C-F MS	GU59DMS	GU59DMS	07/13/04
07	LDW-SP-41-C-F MS	GU59DMSD	GU59DMSD	07/13/04
80	LDW-SP-12-C-U	GU59E	GU59E	07/13/04
09	LDW-SP-20-C-U	GU59F	GU59F	07/13/04
10	LDW-SP-41-C-U	GU59G	GU59G	07/13/04
11	LDW-SP-41-C-U MS	GU59GMS	GU59GMS	07/13/04
12	LDW-SP-41-C-U MS	GU59GMSD	GU59GMSD	07/13/04
13	LDW-SP-39-C-F	GU59H	GU59H	07/13/04
14	LDW-SP-80-C-F	GU59I	GU59I	07/13/04
15	LDW-SP-39-C-U	GU59J	GU59J	07/13/04
16	LDW-SP-80-C-U	GU59K	GU59K	07/13/04
17	LDW-SP-71-C-F	GU26A	GU26A	07/14/04
18	LDW-SP-71-C-U	GU26B	GU26B	07/14/04
19	LDW-SP-76-C-F	GU26C	GU26C	07/14/04
20	LDW-SP-76-C-U	GU26D	GU26D	07/14/04
21	LDW-SP-69-C-F	GU26E	GU26E	07/14/04
22	LDW-SP-69-C-U	GU26F	GU26F	07/14/04
23				
24				1
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COMMENTS:

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FORM IV SV



ORGANICS ANALYSIS DATA SHEET Semivolatiles by SW8270C GC/MS Page 1 of 2

Lab Sample ID: MB-070204 LIMS ID: 04-10120 Matrix: Water Data Release Authorized: Reported: 07/15/04

Date Extracted: 07/02/04 Date Analyzed: 07/13/04 13:56 Instrument/Analyst: NT6/Van Sample ID: MB-070204 METHOD BLANK

QC Report No: GU26-Windward Environmental Project: LDW-SEEP SAMPLING

Date Sampled: NA Date Received: NA

Sample Amount: 500 mL Final Extract Volume: 0.50 mL Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
108-95-2	Phenol	2.0	< 2.0 U
111-44-4	Bis-(2-Chloroethyl) Ether	2.0	< 2.0 U
95-57-8	2-Chlorophenol	1.0	< 1.0 U
541-73-1	1,3-Dichlorobenzene	1.0	< 1.0 U
106-46-7	1,4-Dichlorobenzene	1.0	< 1.0 U
100-51-6	Benzyl Alcohol	5.0	< 5.0 U
95-50-1	1,2-Dichlorobenzene	1.0	< 1.0 U
95-48-7	2-Methylphenol	1.0	< 1.0 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	1.0	< 1.0 U
106-44-5	4-Methylphenol	1.0	< 1.0 U
621-64-7	N-Nitroso-Di-N-Propylamine	2.0	< 2.0 U
67-72-1	Hexachloroethane	2.0	< 2.0 U
98-95-3	Nitrobenzene	1.0	< 1.0 U
78-59-1	Isophorone	1.0	< 1.0 U
88-75-5	2-Nitrophenol	5.0	< 5.0 U
105-67-9	2,4-Dimethylphenol	3.0	< 3.0 U
65-85-0	Benzoic Acid	10	< 10 U
111-91-1	bis(2-Chloroethoxy) Methane	1.0	< 1.0 U
120-83-2	2,4-Dichlorophenol	3.0	< 3.0 U
120-82-1	1,2,4-Trichlorobenzene	1.0	< 1.0 U
91-20-3	Naphthalene	1.0	< 1.0 U
106-47-8	4-Chloroaniline	3.0	< 3.0 U
87-68-3	Hexachlorobutadiene	2.0	< 2.0 U
59-50-7	4-Chloro-3-methylphenol	2.0	< 2.0 U
91-57-6	2-Methylnaphthalene	1.0	< 1.0 U
77-47-4	Hexachlorocyclopentadiene	5.0	< 5.0 U
88-06-2	2,4,6-Trichlorophenol	5.0	< 5.0 U
95-95-4	2,4,5-Trichlorophenol	5.0	< 5.0 U
91-58-7	2-Chloronaphthalene	1.0	< 1.0 U
88-74-4	2-Nitroaniline	5.0	< 5.0 U
131-11-3	Dimethylphthalate	1.0	< 1.0 U
208-96-8	Acenaphthylene	1.0	< 1.0 U
99-09-2	3-Nitroaniline	6.0	< 6.0 Ŭ
83-32-9	Acenaphthene	1.0	< 1.0 U
51-28-5	2,4-Dinitrophenol	25	< 25 U
100-02-7	4-Nitrophenol	5.0	< 5.0 U
132-64-9	Dibenzofuran	1.0	< 1.0 U
606-20-2	2,6-Dinitrotoluene	5.0	. < 5.0 U
121-14-2	2,4-Dinitrotoluene	5.0	< 5.0 Ŭ
84-66-2	Diethylphthalate	1.0	< 1.0 U



ORGANICS ANALYSIS DATA SHEET Semivolatiles by SW8270C GC/MS Page 2 of 2

Sample ID: MB-070204 METHOD BLANK

Lab Sample ID: MB-070204 LIMS ID: 04-10120 Matrix: Water Date Analyzed: 07/13/04 13:56 QC Report No: GU26-Windward Environmental Project: LDW-SEEP SAMPLING

CAS Number	Analyte	RL	Result
7005-72-3	4-Chlorophenyl-phenylether	1.0	< 1.0 U
86-73-7	Fluorene	1.0	< 1.0 U
100-01-6	4-Nitroaniline	5.0	< 5.0 U
534-52-1	4,6-Dinitro-2-Methylphenol	15	< 15 U
86-30-6	N-Nitrosodiphenylamine	1.0	< 1.0 U
101-55-3	4-Bromophenyl-phenylether	1.0	< 1.0 U
118-74-1	Hexachlorobenzene	1.0	< 1.0 U
87-86-5	Pentachlorophenol	5.0	< 5.0 U
85-01-8	Phenanthrene	1.0	< 1.0 U
86-74-8	Carbazole	1.0	< 1.0 U
120-12-7	Anthracene	1.0	< 1.0 U
84-74-2	Di-n-Butylphthalate	1.0	< 1.0 U
206-44-0	Fluoranthene	1.0	< 1.0 U
129-00-0	Pyrene	1.0	< 1.0 U
85-68-7	Butylbenzylphthalate	1.0	< 1.0 U
91-94-1	3,3'-Dichlorobenzidine	5.0	< 5.0 U
56-55-3	Benzo(a) anthracene	1.0	< 1.0 U
117-81-7	bis(2-Ethylhexyl)phthalate	1.0	< 1.0 U
218-01-9	Chrysene	1.0	< 1.0 U
117-84-0	Di-n-Octyl phthalate	1.0	< 1.0 U
205-99-2	Benzo(b)fluoranthene	1.0	< 1.0 U
207-08-9	Benzo(k)fluoranthene	1.0	< 1.0 U
50-32-8	Benzo (a) pyrene	1.0	< 1.0 U
193-39-5	Indeno(1,2,3-cd)pyrene	1.0	< 1.0 U
53-70-3	Dibenz (a,h) anthracene	1.0	< 1.0 U
191-24-2	Benzo(g,h,i)perylene	1.0	< 1.0 U
123-91-1	1,4-Dioxane	1.0	< 1.0 U

Reported in μ g/L (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	80.0%	2-Fluorobiphenyl	71.6%
d14-p-Terphenyl	88.0%	d4-1,2-Dichlorobenzene	58.4%
d5-Phenol	75.1%	2-Fluorophenol	75.5%
2,4,6-Tribromophenol	79.7%	d4-2-Chlorophenol	79.1%
d8-1,4-Dioxane	62.8%	-	

Manchester Pesticides



SW8081/PESTICIDE WATER SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: GU26-Windward Environmental Project: LDW-SEEP SAMPLING

Client ID	DCBP	TCMX	TOT OUT
MB-070204	75.8%	32.0%	0
LCS-070204	74.0%	31.8%	0
LDW-SP-71-C-F	56.8%	33.8%	0
LDW-SP-71-C-U	59.0%	38.2%	0
LDW-SP-76-C-F	63.8%	31.8%	0
LDW-SP-76-C-U	74.5%	34.0%	0
LDW-SP-69-C-F	49.8%	38.2%	0
LDW-SP-69-C-U	33.8%	39.5%	0

** PROJECT SPECIFIED LIMITS **	LCS/MB LIMITS	QC LIMITS
(DCBP) = Decachlorobiphenyl	(30-160)	(30-160)
(TCMX) = Tetrachlorometaxylene	(30-160)	(30 - 160)

Prep Method: Manchester Log Number Range: 04-10120 to 04-10125



Lab Sample ID: GU26A LIMS ID: 04-10120 Matrix: Water Data Release Authorized: Reported: 07/14/04

Date Extracted: 07/02/04 Date Analyzed: 07/09/04 15:21 Instrument/Analyst: ECD4/YZ GPC Cleanup: No Sulfur Cleanup: Yes

Sample ID: LDW-SP-71-C-F SAMPLE

QC Report No: GU26-Windward Environmental Project: LDW-SEEP SAMPLING

Date Sampled: 06/29/04 Date Received: 06/29/04

Sample Amount: 3000 mL Final Extract Volume: 0.50 mL Dilution Factor: 1.00 pH: 6.7 Florisil Cleanup: No Silica Gel: Yes

CAS Number	Analyte	RL	Result
319-84-6	alpha-BHC	0.00083	< 0.00083 U
319-85-7	beta-BHC	0.00083	< 0.00083 U
319-86-8	delta-BHC	0.00083	< 0.00083 U
58-89-9	gamma-BHC (Lindane)	0.00083	< 0.00083 U
76-44-8	Heptachlor	0.00083	< 0.00083 U
309-00-2	Aldrin	0.00083	< 0.00083 U
1024-57-3	Heptachlor Epoxide	0.00083	< 0.00083 U
959-98-8	Endosulfan I	0.00083	< 0.00083 U
60-57-1	Dieldrin	0.0017	< 0.0017 U
72-55-9	4,4'-DDE	0.0017	< 0.0017 U
72-20-8	Endrin	0.0017	< 0.0017 U
33213-65-9	Endosulfan II	0.0017	< 0.0017 U
72-54-8	4,4'-DDD	0.0017	< 0.0017 U
1031-07-8	Endosulfan Sulfate	0.0017	< 0.0017 U
50-29-3	4,4'-DDT	0.0017	< 0.0017 U
72-43-5	Methoxychlor	0.0083	< 0.0083 U
53494-70-5	Endrin Ketone	0.0017	< 0.0017 U
7421-93-4	Endrin Aldehyde	0.0017	< 0.0017 U
5103-74-2	gamma Chlordane	0.00083	< 0.00083 U
5103-71-9	alpha Chlordane	0.00083	< 0.00083 U
8001-35-2	Toxaphene	0.083	< 0.083 U

Reported in $\mu g/L$ (ppb)

Decachlorobiphenyl	56.8%
Tetrachlorometaxylene	33.8%



Lab Sample ID: GU26B LIMS ID: 04-10121 Matrix: Water Data Release Authorized: Reported: 07/14/04

Date Extracted: 07/02/04 Date Analyzed: 07/09/04 15:55 Instrument/Analyst: ECD4/YZ GPC Cleanup: No Sulfur Cleanup: Yes

Sample ID: LDW-SP-71-C-U SAMPLE

QC Report No: GU26-Windward Environmental Project: LDW-SEEP SAMPLING

Date Sampled: 06/29/04 Date Received: 06/29/04

Sample Amount: 3000 mL Final Extract Volume: 0.50 mL Dilution Factor: 1.00 pH: 7.3 Florisil Cleanup: No Silica Gel: Yes

CAS Number	Analyte	RL	Result
319-84-6	alpha-BHC	0.00083	< 0.00083 U
319-85-7	beta-BHC	0.00083	< 0.00083 U
319-86-8	delta-BHC	0.00083	< 0.00083 U
58-89-9	gamma-BHC (Lindane)	0.00083	< 0.00083 U
76-44-8	Heptachlor	0.00083	< 0.00083 U
309-00-2	Aldrin	0.00083	< 0.00083 U
1024-57-3	Heptachlor Epoxide	0.00083	< 0.00083 U
959-98-8	Endosulfan I	0.00083	< 0.00083 U
60-57-1	Dieldrin	0.0017	< 0.0017 U
72-55-9	4,4'-DDE	0.0017	< 0.0017 U
72-20-8	Endrin	0.0017	< 0.0017 U
33213-65-9	Endosulfan II	0.0017	< 0.0017 U
72-54-8	4,4'-DDD	0.0017	< 0.0017 U
1031-07-8	Endosulfan Sulfate	0.0017	< 0.0017 U
50-29-3	4,4'-DDT	0.0017	< 0.0017 U
72-43-5	Methoxychlor	0.0083	< 0.0083 U
53494-70-5	Endrin Ketone	0.0017	< 0.0017 U
7421-93-4	Endrin Aldehyde	0.0017	< 0.0017 U
5103-74-2	gamma Chlordane	0.00083	< 0.00083 U
5103-71-9	alpha Chlordane	0.00083	< 0.00083 U
8001-35-2	Toxaphene	0.083	< 0.083 U

Reported in $\mu g/L$ (ppb)

Pest/PCB Surrogate Recovery

Decachlorobiphenyl	59.0%
Tetrachlorometaxylene	38.2%

ANALYTICAL **RESOURCES** INCORPORATED

ORGANICS ANALYSIS DATA SHEET Pesticides/PCB by GC/ECD Page 1 of 1

Lab Sample ID: GU26C LIMS ID: 04-10122 Matrix: Water Data Release Authorized: Reported: 07/14/04

Date Extracted: 07/02/04 Date Analyzed: 07/09/04 16:29 Instrument/Analyst: ECD4/YZ GPC Cleanup: No Sulfur Cleanup: Yes

Sample ID: LDW-SP-76-C-F SAMPLE

QC Report No: GU26-Windward Environmental Project: LDW-SEEP SAMPLING

Date Sampled: 06/29/04 Date Received: 06/29/04

Sample Amount: 3000 mL Final Extract Volume: 0.50 mL Dilution Factor: 1.00 pH: 7.1 Florisil Cleanup: No Silica Gel: Yes

CAS Number	Analyte	RL	Result
319-84-6	alpha-BHC	0.00083	< 0.00083 U
319-85-7	beta-BHC	0.00083	< 0.00083. U
319-86-8	delta-BHC	0.00083	< 0.00083 U
58-89-9	gamma-BHC (Lindane)	0.00083	< 0.00083 U
76-44-8	Heptachlor	0.00083	< 0.00083 U
309-00-2	Aldrin	0.00083	< 0.00083 U
1024-57-3	Heptachlor Epoxide	0.00083	< 0.00083 U
959-98-8	Endosulfan I	0.00083	< 0.00083 U
60-57-1	Dieldrin	0.0017	< 0.0017 U
72-55-9	4,4'-DDE	0.0017	< 0.0017 U
72-20-8	Endrin	0.0017	< 0.0017 U
33213-65-9	Endosulfan II	0.0017	< 0.0017 U
72-54-8	4,4'-DDD	0.0017	< 0.0017 U
1031-07-8	Endosulfan Sulfate	0.0017	< 0.0017 U
50-29-3	4,4'-DDT	0.0017	< 0.0017 U
72-43-5	Methoxychlor	0.0083	< 0.0083 U
53494-70-5	Endrin Ketone	0.0017	< 0.0017 U
7421-93-4	Endrin Aldehyde	0.0017	< 0.0017 U
5103-74-2	gamma Chlordane	0.00083	< 0.00083 U
5103-71-9	alpha Chlordane	0.00083	< 0.00083 U
8001-35-2	Toxaphene	0.083	< 0.083 U

Reported in $\mu g/L$ (ppb)

Decachlorobiphenyl	63.8%
Tetrachlorometaxylene	31.8%



Lab Sample ID: GU26D LIMS ID: 04-10123 Matrix: Water Data Release Authorized: Reported: 07/14/04

Date Extracted: 07/02/04 Date Analyzed: 07/09/04 17:03 Instrument/Analyst: ECD4/YZ GPC Cleanup: No Sulfur Cleanup: Yes

Sample ID: LDW-SP-76-C-U SAMPLE

QC Report No: GU26-Windward Environmental Project: LDW-SEEP SAMPLING

Date Sampled: 06/29/04 Date Received: 06/29/04

Sample Amount: 3000 mL Final Extract Volume: 0.50 mL Dilution Factor: 1.00 pH: 6.9 Florisil Cleanup: No Silica Gel: Yes

CAS Number	Analyte	RL	Result
319-84-6	alpha-BHC	0.00083	< 0.00083 U
319-85-7	beta-BHC	0.00083	< 0.00083 U
319-86-8	delta-BHC	0.00083	< 0.00083 U
58-89-9	gamma-BHC (Lindane)	0.00083	< 0.00083 U
76-44-8	Heptachlor	0.00083	< 0.00083 U
309-00-2	Aldrin	0.00083	< 0.00083 U
1024-57-3	Heptachlor Epoxide	0.00083	< 0.00083 U
959-98-8	Endosulfan I	0.00083	< 0.00083 U
60-57-1	Dieldrin	0.0017	< 0.0017 U
72-55-9	4,4'-DDE	0.0017	< 0.0017 U
72-20-8	Endrin	0.0017	< 0.0017 U
33213-65-9	Endosulfan II	0.0017	< 0.0017 U
72-54-8	4,4'-DDD	0.0017	< 0.0017 U
1031-07-8	Endosulfan Sulfate	0.0017	< 0.0017 U
50-29-3	4,4'-DDT	0.0017	< 0.0017 U
72-43-5	Methoxychlor	0.0083	< 0.0083 U
53494-70-5	Endrin Ketone	0.0017	< 0.0017 U
7421-93-4	Endrin Aldehyde	0.0017	< 0.0017 U
5103-74-2	gamma Chlordane	0.0032	< 0.0032 Y
5103-71-9	alpha Chlordane	0.00083	< 0.00083 U
8001-35-2	Toxaphene	0.083	< 0.083 U

Reported in $\mu g/L$ (ppb)

Decachlorobiphenyl	74.5%
Tetrachlorometaxylene	34.0%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET Pesticides/PCB by GC/ECD Page 1 of 1

Lab Sample ID: GU26E LIMS ID: 04-10124 Matrix: Water Data Release Authorized: Reported: 07/14/04

Date Extracted: 07/02/04 Date Analyzed: 07/09/04 17:37 Instrument/Analyst: ECD4/YZ GPC Cleanup: No Sulfur Cleanup: Yes

Sample ID: LDW-SP-69-C-F SAMPLE

QC Report No: GU26-Windward Environmental Project: LDW-SEEP SAMPLING

Date Sampled: 06/29/04 Date Received: 06/29/04

Sample Amount: 3000 mL Final Extract Volume: 0.50 mL Dilution Factor: 1.00 pH: 7.4 Florisil Cleanup: No Silica Gel: Yes

CAS Number	Analyte	RL	Result
319-84-6	alpha-BHC	0.00083	< 0.00083 U
319-85-7	beta-BHC	0.00083	< 0.00083 U
319-86-8	delta-BHC	0.00083	< 0.00083 U
58-89-9	gamma-BHC (Lindane)	0.00083	< 0.00083 U
76-44-8	Heptachlor	0.00083	< 0.00083 U
309-00-2	Aldrin	0.00083	< 0.00083 U
1024-57-3	Heptachlor Epoxide	0.00083	< 0.00083 U
959-98-8	Endosulfan I	0.00083	< 0.00083 U
60-57-1	Dieldrin	0.0017	< 0.0017 U
72-55-9	4,4'-DDE	0.0017	< 0.0017 U
72-20-8	Endrin	0.0017	< 0.0017 U
33213-65-9	Endosulfan II	0.0017	< 0.0017 U
72-54-8	4,4'-DDD	0.0017	< 0.0017 U
1031-07-8	Endosulfan Sulfate	0.0017	< 0.0017 U
50-29-3	4,4'-DDT	0.0017	< 0.0017 U
72-43-5	Methoxychlor	0.0083	< 0.0083 U
53494-70-5	Endrin Ketone	0.0017	< 0.0017 U
7421-93-4	Endrin Aldehyde	0.0017	< 0.0017 U
5103-74-2	gamma Chlordane	0.00083	< 0.00083 U
5103-71-9	alpha Chlordane	0.00083	< 0.00083 U
8001-35-2	Toxaphene	0.083	< 0.083 U

Reported in $\mu g/L$ (ppb)

Decachlorobiphenyl	49.8%
Tetrachlorometaxylene	38.2%

Lab Sample ID: GU26F LIMS ID: 04-10125 Matrix: Water Data Release Authorized: Reported: 07/14/04

Date Extracted: 07/02/04 Date Analyzed: 07/09/04 18:11 Instrument/Analyst: ECD4/YZ GPC Cleanup: No Sulfur Cleanup: Yes ANALYTICAL RESOURCES INCORPORATED

Sample ID: LDW-SP-69-C-U SAMPLE

QC Report No: GU26-Windward Environmental Project: LDW-SEEP SAMPLING

Date Sampled: 06/29/04 Date Received: 06/29/04

Sample Amount: 3000 mL Final Extract Volume: 0.50 mL Dilution Factor: 1.00 pH: 6.4 Florisil Cleanup: No Silica Gel: Yes

CAS Number	Analyte	RL	Result
319-84-6	alpha-BHC	0.00083	< 0.00083 U
319-85-7	beta-BHC	0.00083	< 0.00083 U
319-86-8	delta-BHC	0.00083	< 0.00083 U
58-89-9	gamma-BHC (Lindane)	0.00083	< 0.00083 U
76-44-8	Heptachlor	0.00083	< 0.00083 U
309-00-2	Aldrin	0.00083	< 0.00083 U
1024-57-3	Heptachlor Epoxide	0.00083	< 0.00083 U
959-98-8	Endosulfan I	0.00083	< 0.00083 U
60-57-1	Dieldrin	0.0017	< 0.0017 U
72-55-9	4,4'-DDE	0.0017	< 0.0017 U
72-20-8	Endrin	0.0017	< 0.0017 U
33213-65-9	Endosulfan II	0.0017	< 0.0017 U
72-54-8	4,4'-DDD	0.0017	< 0.0017 U
1031-07-8	Endosulfan Sulfate	0.0017	< 0.0017 U
50-29-3	4,4'-DDT	0.0017	< 0.0017 U
72-43-5	Methoxychlor	0.0083	< 0.0083 U
53494-70-5	Endrin Ketone	0.0017	< 0.0017 U
7421-93-4	Endrin Aldehyde	0.0017	< 0.0017 U
5103-74-2	gamma Chlordane	0.00083	< 0.00083 U
5103-71-9	alpha Chlordane	0.00083	< 0.00083 U
8001-35-2	Toxaphene	0.083	< 0.083 U

Reported in $\mu g/L$ (ppb)

Decachlorobiphenyl	33.8%
Tetrachlorometaxylene	39.5%



Lab Sample ID: LCS-070204 LIMS ID: 04-10120 Matrix: Water Data Release Authorized: Reported: 07/14/04

Date Extracted: 07/02/04 Date Analyzed: 07/09/04 14:13 Instrument/Analyst: ECD4/YZ GPC Cleanup: No Florisil Cleanup: No

Sample ID: LCS-070204 LAB CONTROL

QC Report No: GU26-Windward Environmental Project: LDW-SEEP SAMPLING

Date Sampled: 06/29/04 Date Received: 06/29/04

Sample Amount: 3000 mL Final Extract Volume: 0.50 mL Dilution Factor: 1.00 Sulfur Cleanup: Yes Silica Gel: Yes

Analyte	Lab Control	Spike Added	Recovery
alpha-BHC	0.00200	0.00333	60.1%
beta-BHC	0.00233	0.00333	70.0%
delta-BHC	0.00267	0.00333	80.2%
gamma-BHC (Lindane)	0.00218	0.00333	65.5%
Heptachlor	0.00198	0.00333	59.5%
Aldrin	0.00177	0.00333	53.2%
Heptachlor Epoxide	0.00287	0.00333	86.2%
Endosulfan I	0.00258	0.00333	77.5%
Dieldrin	0.00543	0.00667	81.4%
4,4'-DDE	0.00575	0.00667	86.2%
Endrin	0.00607	0.00667	91.0%
Endosulfan II	0.00568	0.00667	85.2%
4,4'-DDD	0.00603	0.00667	90.4%
Endosulfan Sulfate	0.00560	0.00667	84.0%
4,4'-DDT	0.00663	0.00667	99.48
Methoxychlor	0.0322	0.0333	96.78
Endrin Ketone	0.00548	0.00667	82.2%
Endrin Aldehyde	0.00080	0.00667	12.0%
gamma Chlordane	0.00243	0.00333	73.0%
alpha Chlordane	0.00242	0.00333	72.7%

Pest/PCB Surrogate Recovery

Decachlorobiphenyl	74.0%
Tetrachlorometaxylene	31.8%

Results reported in $\mu g/L$ (ppb)

000049



Sample ID: MB-070204 METHOD BLANK

Lab Sample ID: MB-070204 LIMS ID: 04-10120 Matrix: Water Data Release Authorized; Reported: 07/14/04

Date Extracted: 07/02/04 Date Analyzed: 07/09/04 13:39 Instrument/Analyst: ECD4/YZ GPC Cleanup: No Sulfur Cleanup: Yes

QC Report No: GU26-Windward Environmental Project: LDW-SEEP SAMPLING

Date Sampled: NA Date Received: NA

> Sample Amount: 3000 mL Final Extract Volume: 0.50 mL Dilution Factor: 1.00 pH: NA Florisil Cleanup: No Silica Gel: Yes

CAS Number	Analyte	RL	Result
319-84-6	alpha-BHC	0.00083	< 0.00083 U
319-85-7	beta-BHC	0.00083	< 0.00083 U
319-86-8	delta-BHC	0.00083	< 0.00083 U
58-89-9	gamma-BHC (Lindane)	0.00083	< 0.00083 U
76-44-8	Heptachlor	0.00083	< 0.00083 U
309-00-2	Aldrin	0.00083	< 0.00083 U
1024-57-3	Heptachlor Epoxide	0.00083	< 0.00083 U
959-98-8	Endosulfan I	0.00083	< 0.00083 U
60-57-1	Dieldrin	0.0017	< 0.0017 U
72-55-9	4,4'-DDE	0.0017	< 0.0017 U
72-20-8	Endrin	0.0017	< 0.0017 U
33213-65-9	Endosulfan II	0.0017	< 0.0017 U
72-54-8	4,4'-DDD	0.0017	< 0.0017 U
1031-07-8	Endosulfan Sulfate	0.0017	< 0.0017 U
50-29-3	4,4'-DDT	0.0017	< 0.0017 U
72-43-5	Methoxychlor	0.0083	< 0.0083 U
53494-70-5	Endrin Ketone	0.0017	< 0.0017 U
7421-93-4	Endrin Aldehyde	0.0017	< 0.0017 U
5103-74-2	gamma Chlordane	0.00083	< 0.00083 U
5103-71-9	alpha Chlordane	0.00083	< 0.00083 U
8001-35-2	Toxaphene	0.083	< 0.083 U

Reported in $\mu g/L$ (ppb)

Pest/PCB Surrogate Recovery

Decachlorobiphenyl	75.8%
Tetrachlorometaxylene	32.0%

FORM I

FORM 4 PCB METHOD BLANK SUMMARY

GUMBW7/2

Lab Name: ANALYTICAL RESOURCES, INC	Client: WINDWARD ENVIRONMENTAL
ARI Job No.: GU26	Project: LDW-SEEP SAMPLING
Lab Sample ID: GU26MBW7/2	Lab File ID: 0709-08R
Matrix (soil/water) WATER	Extraction: (SepF/Cont/Sonc) OTHER
Sulfur Cleanup (Y/N) Y	Date Extracted: 07/02/04
Date Analyzed (1): 07/09/04	Date Analyzed (2): 07/09/04
Time Analyzed (1): 1339	Time Analyzed (2): 1339
Instrument ID (1): ECD4	Instrument ID (2): ECD4
GC Column (1): RTX-CLP1 ID: 0.53(mm)	GC Column (2): RTX-CLP2 ID: 0.53(mm)
THIS METHOD BLANK APPLIES TO T	HE FOLLOWING SAMPLES, MS and MSD:

01 02 03 04 05 06 07	EPA SAMPLE NO. ========= GUSBW7/2 LDW-SP-71-C- LDW-SP-71-C- LDW-SP-76-C- LDW-SP-76-C- LDW-SP-69-C- LDW-SP-69-C-	LAB SAMPLE ID GU26SBW1 GU26A GU26B GU26C GU26C GU26D GU26E GU26F	DATE ANALYZED 1 ======= 07/09/04 07/09/04 07/09/04 07/09/04 07/09/04 07/09/04	DATE ANALYZED 2 ======== 07/09/04 07/09/04 07/09/04 07/09/04 07/09/04 07/09/04	
07	LDW-SP-69-C-	GU26F	07/09/04	07/09/04	

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FORM IV PEST

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РСВ



SW8082/PCB WATER SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: GU26-Windward Environmental Project: LDW-SEEP SAMPLING

DCBP	TCMX	TOT OUT
72.5%	32.0%	0
63.2%	35.8%	0
49.0%	33.8%	0
40.8%	38.2%	0
40.8%	31.8%	0
44.8%	34.0%	0
37.8%	38.2%	0
28.2%	39.5%	0
	DCBP 72.5% 63.2% 49.0% 40.8% 40.8% 44.8% 37.8% 28.2%	DCBP TCMX 72.5% 32.0% 63.2% 35.8% 49.0% 33.8% 40.8% 38.2% 40.8% 31.8% 44.8% 34.0% 37.8% 38.2% 28.2% 39.5%

		LCS/MB LIMITS	QC LIMITS
(DCBP)	= Decachlorobiphenyl	(42-138)	(25-134)
(TCMX)	= Tetrachlorometaxylene	(32-117)	(25-118)

Prep Method: Manchester Log Number Range: 04-10120 to 04-10125



Lab Sample ID: GU26A LIMS ID: 04-10120 Matrix: Water Data Release Authorized: Reported: 07/13/04

Date Extracted: 07/02/04 Date Analyzed: 07/09/04 15:21 Instrument/Analyst: ECD4/YZ GPC Cleanup: No Sulfur Cleanup: Yes

Sample ID: LDW-SP-71-C-F SAMPLE

QC Report No: GU26-Windward Environmental Project: LDW-SEEP SAMPLING

Date Sampled: 06/29/04 Date Received: 06/29/04

Sample Amount: 3000 mL Final Extract Volume: 0.50 mL Dilution Factor: 1.00 Silica Gel: Yes Acid Cleanup: No

CAS Number	Analyte	RL	Result
12674-11-2	Aroclor 1016	0.017	< 0.017 U
53469-21-9	Aroclor 1242	0.017	< 0.017 U
12672-29-6	Aroclor 1248	0.017	< 0.017 U
11097-69-1	Aroclor 1254	0.017	< 0.017 U
11096-82-5	Aroclor 1260	0.017	< 0.017 U
11104-28-2	Aroclor 1221	0.017	< 0.017 U
11141-16-5	Aroclor 1232	0.017	< 0.017 U

Reported in $\mu g/L$ (ppb)

Decachlorobiphenyl	49.0%
Tetrachlorometaxylene	33.8%



Lab Sample ID: GU26B LIMS ID: 04-10121 Matrix: Water Data Release Authorized: Reported: 11/02/04

Date Extracted: 07/02/04 Date Analyzed: 07/09/04 15:55 Instrument/Analyst: ECD4/YZ GPC Cleanup: No Sulfur Cleanup: Yes Sample ID: LDW-SP-71-C-U SAMPLE

QC Report No: GU26-Windward Environmental Project: LDW-SEEP SAMPLING

Date Sampled: 06/29/04 Date Received: 06/29/04

Sample Amount: 3000 mL Final Extract Volume: 0.50 mL Dilution Factor: 1.00 Silica Gel: Yes Acid Cleanup: No

Analyte	RL	Result
Aroclor 1016	0.017	< 0.017 U
Aroclor 1242	0.017	< 0.017 U
Aroclor 1248	0.017	< 0.017 U
Aroclor 1254	0.017	0.020
Aroclor 1260	0.017	< 0.017 U
Aroclor 1221	0.017	< 0.017 U
Aroclor 1232	0.017	< 0.017 U
	Analyte Aroclor 1016 Aroclor 1242 Aroclor 1248 Aroclor 1254 Aroclor 1260 Aroclor 1221 Aroclor 1232	Analyte RL Aroclor 1016 0.017 Aroclor 1242 0.017 Aroclor 1248 0.017 Aroclor 1254 0.017 Aroclor 1260 0.017 Aroclor 1221 0.017 Aroclor 1232 0.017

Reported in $\mu g/L$ (ppb)

Decachlorobiphenyl	40.8%
Tetrachlorometaxylene	38.2%



Lab Sample ID: GU26C LIMS ID: 04-10122 Matrix: Water Data Release Authorized:

Date Extracted: 07/02/04 Date Analyzed: 07/09/04 16:29 Instrument/Analyst: ECD4/YZ GPC Cleanup: No Sulfur Cleanup: Yes

Sample ID: LDW-SP-76-C-F SAMPLE

QC Report No: GU26-Windward Environmental Project: LDW-SEEP SAMPLING

Date Sampled: 06/29/04 Date Received: 06/29/04

Sample Amount: 3000 mL Final Extract Volume: 0.50 mL Dilution Factor: 1.00 Silica Gel: Yes Acid Cleanup: No

CAS Number	Analyte	RL	Result
12674-11-2	Aroclor 1016	0.017	< 0.017 U
53469-21-9	Aroclor 1242	0.017	< 0.017 U
12672-29-6	Aroclor 1248	0.017	< 0.017 U
11097-69-1	Aroclor 1254	0.017	< 0.017 U
11096-82-5	Aroclor 1260	0.017	< 0.017 U
11104-28-2	Aroclor 1221	0.017	< 0.017 U
11141-16-5	Aroclor 1232	0.017	< 0.017 U

Reported in $\mu g/L$ (ppb)

PCB Surrogate Recovery

Decachlorobiphenyl	40.8%
Tetrachlorometaxylene	31.8%

FORM I



Lab Sample ID: GU26D LIMS ID: 04-10123 Matrix: Water Data Release Authorized:

Date Extracted: 07/02/04 Date Analyzed: 07/09/04 17:03 Instrument/Analyst: ECD4/YZ GPC Cleanup: No Sulfur Cleanup: Yes

Sample ID: LDW-SP-76-C-U SAMPLE

QC Report No: GU26-Windward Environmental Project: LDW-SEEP SAMPLING

Date Sampled: 06/29/04 Date Received: 06/29/04

Sample Amount: 3000 mL Final Extract Volume: 0.50 mL Dilution Factor: 1.00 Silica Gel: Yes Acid Cleanup: No

CAS Number	Analyte	RL	Result
12674-11-2	Aroclor 1016	0.017	< 0.017 U
53469-21-9	Aroclor 1242	0.017	< 0.017 U
12672-29-6	Aroclor 1248	0.017	< 0.017 U
11097-69-1	Aroclor 1254	0.017	< 0.017 U
11096-82-5	Aroclor 1260	0.017	< 0.017 U
11104-28-2	Aroclor 1221	0.017	< 0.017 U
11141-16-5	Aroclor 1232	0.017	< 0.017 U

Reported in $\mu g/L$ (ppb)

Decachlorobiphenyl	44.8%
Tetrachlorometaxylene	34.0%



Lab Sample ID: GU26E LIMS ID: 04-10124 Matrix: Water Data Release Authorized:

Date Extracted: 07/02/04 Date Analyzed: 07/09/04 17:37 Instrument/Analyst: ECD4/YZ GPC Cleanup: No Sulfur Cleanup: Yes

Sample ID: LDW-SP-69-C-F SAMPLE

QC Report No: GU26-Windward Environmental Project: LDW-SEEP SAMPLING

Date Sampled: 06/29/04 Date Received: 06/29/04

Sample Amount: 3000 mL Final Extract Volume: 0.50 mL Dilution Factor: 1.00 Silica Gel: Yes Acid Cleanup: No

CAS Number	Analyte	RL	Result
12674-11-2	Aroclor 1016	0.017	< 0.017 U
53469-21-9	Aroclor 1242	0.017	< 0.017 U
12672-29-6	Aroclor 1248	0.017	< 0.017 U
11097-69-1	Aroclor 1254	0.017	< 0.017 U
11096-82-5	Aroclor 1260	0.017	< 0.017 U
11104-28-2	Aroclor 1221	0.017	< 0.017 U
11141-16-5	Aroclor 1232	0.017	< 0.017 U

Reported in $\mu g/L$ (ppb)

Decachlorobiphenyl	37.8%
Tetrachlorometaxylene	38.2%



Lab Sample ID: GU26F LIMS ID: 04-10125 Matrix: Water Data Release Authorized: Reported: 11/02/04

Date Extracted: 07/02/04 Date Analyzed: 07/09/04 18:11 Instrument/Analyst: ECD4/YZ GPC Cleanup: No Sulfur Cleanup: Yes

Sample ID: LDW-SP-69-C-U SAMPLE

QC Report No: GU26-Windward Environmental Project: LDW-SEEP SAMPLING

Date Sampled: 06/29/04 Date Received: 06/29/04

Sample Amount: 3000 mL Final Extract Volume: 0.50 mL Dilution Factor: 1.00 Silica Gel: Yes Acid Cleanup: No

CAS Number	Analyte	RL	Result
12674-11-2	Aroclor 1016	0.017	< 0.017 U
53469-21-9	Aroclor 1242	0.017	< 0.017 U
12672-29-6	Aroclor 1248	0.017	< 0.017 U
11097-69-1	Aroclor 1254	0.017	< 0.017 U
11096-82-5	Aroclor 1260	0.017	< 0.017 U
11104-28-2	Aroclor 1221	0.017	< 0.017 U
11141-16-5	Aroclor 1232	0.017	< 0.017 U

Reported in $\mu g/L$ (ppb)

Decachlorobiphenyl	28.2%
Tetrachlorometaxylene	39.5%



Lab Sample ID: LCS-070204 LIMS ID: 04-10120 Matrix: Water Data Release Authorized: Reported: 07/13/04

Date Extracted: 07/02/04 Date Analyzed: 07/09/04 14:47 Instrument/Analyst: ECD4/YZ GPC Cleanup: No Sulfur Cleanup: Yes

Sample ID: LCS-070204 LAB CONTROL

QC Report No: GU26-Windward Environmental Project: LDW-SEEP SAMPLING

Date Sampled: 06/29/04 Date Received: 06/29/04

Sample Amount: 3000 mL Final Extract Volume: 0.50 mL Dilution Factor: 1.00 Silica Gel: Yes Acid Cleanup: No

Analyte	Lab Control	Spike Added	Recovery
Aroclor 1016	0.104	0.168	61.9%
Aroclor 1260	0.130	0.168	77.4%

PCB Surrogate Recovery

Description of the base of	6 2 08
Decachiorobiphenyi	63.28
Tetrachlorometaxylene	35.8%

Results reported in μ g/L

PCB METHOD BLANK SUMMARY

BLANK NO.

1

	GUMBW7/2
Lab Name: ANALYTICAL RESOURCES, INC	Client: WINDWARD ENVIRONMENTAL
ARI Job No.: GU26	Project: LDW-SEEP SAMPLING
Lab Sample ID: GU26MBW7/2	Lab File ID: 0709-08R
Matrix (soil/water) WATER	Date Extracted: 07/02/04
Date Analyzed (1): 07/09/04	Date Analyzed (2): 07/09/04
Time Analyzed (1): 1339	Time Analyzed (2): 1339
Instrument ID (1): ECD4	Instrument ID (2): ECD4
GC Column (1): RTX-CLP1 ID: 0.53(mm)	GC Column (2): RTX-CLP2 ID: 0.53(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	Client	LAB	DATE	DATE
	SAMPLE NO.	SAMPLE ID	ANALYZED 1	ANALYZED 2
01	GUSBW7/2	GU26SBW2	07/09/04	07/09/04
02	LDW-SP-71-C-F	GU26A	07/09/04	07/09/04
03	LDW-SP-71-C-U	GU26B	07/09/04	07/09/04
04	LDW-SP-76-C-F	GU26C	07/09/04	07/09/04
05	LDW-SP-76-C-U	GU26D	07/09/04	07/09/04
06	LDW-SP-69-C-F	GU26E	07/09/04	07/09/04
07	LDW-SP-69-C-U	GU26F	07/09/04	07/09/04

page 1 of 1

FORM IV PCB



Lab Sample ID: MB-070204 LIMS ID: 04-10120 Matrix: Water Data Release Authorized: Reported: 07/13/04

Date Extracted: 07/02/04 Date Analyzed: 07/09/04 13:39 Instrument/Analyst: ECD4/YZ GPC Cleanup: No Sulfur Cleanup: Yes

Sample ID: MB-070204 METHOD BLANK

QC Report No: GU26-Windward Environmental Project: LDW-SEEP SAMPLING

Date Sampled: NA Date Received: NA

Sample Amount: 3000 mL Final Extract Volume: 0.50 mL Dilution Factor: 1.00 Silica Gel: Yes Acid Cleanup: No

CAS Number	Analyte	RL	Result
12674-11-2	Aroclor 1016	0.017	< 0.017 U
53469-21-9	Aroclor 1242	0.017	< 0.017 U
12672-29-6	Aroclor 1248	0.017	< 0.017 U
11097-69-1	Aroclor 1254	0.017	< 0.017 U
11096-82-5	Aroclor 1260	0.017	< 0.017 U
11104-28-2	Aroclor 1221	0.017	< 0.017 U
11141-16-5	Aroclor 1232	0.017	< 0.017 U

Reported in μ g/L (ppb)

Decachlorobiphenyl	72.5%
Tetrachlorometaxylene	32.0%
General Chemistry



Matrix: Water Data Release Authorized: A Reported: 07/12/04 Project: LDW-SEEP SAMPLING Event: NA Date Sampled: 06/29/04 Date Received: 06/29/04

Client ID: LDW-SP-71-C-F ARI ID: 04-10120 GU26A

Analyte	Date	Method	Units	RL	Sample
Dissolved Organic Carbon	07/09/04 070104#1	EPA 415.1	mg/L	1.50	< 1.50 U

RL Analytical reporting limit
U Undetected at reported detection limit



Matrix: Water Data Release Authorized: Reported: 07/12/04 Project: LDW-SEEP SAMPLING Event: NA Date Sampled: 06/29/04 Date Received: 06/29/04

Client ID: LDW-SP-71-C-U ARI ID: 04-10121 GU26B

Analyte	Date	Method Units	RL	Sample
Total Suspended Solids	06/30/04	EPA 160.2 mg/L	 1.0	11.3
Total Organic Carbon	07/01/04 07/01/04 070104#1	EPA 415.1 mg/L	1.50	2.16

RL Analytical reporting limit
U Undetected at reported detection limit

Water Sample Report-GU26

ANALYTICAL RESOURCES INCORPORATED

Matrix: Water Data Release Authorized: A Reported: 07/12/04

Project: LDW-SEEP SAMPLING Event: NA Date Sampled: 06/29/04 Date Received: 06/29/04

Client ID: LDW-SP-76-C-F ARI ID: 04-10122 GU26C

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Analyte	Date	Method	Units	an at a	RL	Sample
			······································		-	·, ·····
Dissolved Organic Carbon	07/09/04 070104#1	EPA 415.1	mg/L		1.50	6.57

RL Analytical reporting limit
U Undetected at reported detection limit



Matrix: Water Data Release Authorized: 44 Reported: 07/12/04 Project: LDW-SEEP SAMPLING Event: NA Date Sampled: 06/29/04 Date Received: 06/29/04

Client ID: LDW-SP-76-C-U ARI ID: 04-10123 GU26D

Analyte	Date	Method	Units	· · ·	RL	Sample
				· · · · · · ·		
Total Suspended Solids	06/30/04	EPA 160.2	mg/L		1.0	5.2
	003004#1					
Total Organic Carbon	07/01/04 070104#1	EPA 415.1	mg/L		1.50	7.78

RL Analytical reporting limit
U Undetected at reported detection limit



Matrix: Water Data Release Authorized: 04 Reported: 07/12/04

Project: LDW-SEEP SAMPLING Event: NA Date Sampled: 06/29/04 Date Received: 06/29/04

Client ID: LDW-SP-69-C-F ARI ID: 04-10124 GU26E

Analyte		Date	Method	Units		RL	Sample
Dissolved	Organic Carbon	07/09/04	FPA 115 1	ma/L		50	
	organito ourbon	070104#1	BIA 413.1	IIIQ / LJ	· · · ·	.50	2.81

RL Analytical reporting limit

U Undetected at reported detection limit



Matrix: Water Data Release Authorized: AAA Reported: 07/12/04 Project: LDW-SEEP SAMPLING Event: NA Date Sampled: 06/29/04 Date Received: 06/29/04

Client ID: LDW-SP-69-C-U ARI ID: 04-10125 GU26F

Analyte	Date	Method	Units	RL	Sample
Total Suspended Solids	06/30/04 063004#1	EPA 160.2	mg/L	2.5	25.5
Total Organic Carbon	07/01/04 070104#1	EPA 415.1	mg/L	1.50	8.55

RL Analytical reporting limit U Undetected at reported detection limit

METHOD BLANK RESULTS-CONVENTIONALS GU26-Windward Environmental



Matrix: Water Data Release Authorized: AAP Reported: 07/12/04

Project: LDW-SEEP SAMPLING Event: NA Date Sampled: NA Date Received: NA

Analyte	Date	Units	Blank
Total Currended Calida	0.0 (20 (0.1		
Total Suspended Solids	06/30/04	mg/L	< 1.0 0
Iotal Organic Carbon	07/01/04	mg/L	< 1.50 U
Dissolved Organic Carbon	07/09/04	mg/L	< 1.50 U

Water Method Blank Report-GU26

LAB CONTROL RESULTS-CONVENTIONALS GU26-Windward Environmental



Matrix: Water Data Release Authorized: and Reported: 07/12/04

				0	
Analyte	Date	Units	LCS	Added	Recovery
					· · · · · ·
Total Suspended Solids	06/30/04	ma/T	49.2	50.0	98 4%

STANDARD REFERENCE RESULTS-CONVENTIONALS GU26-Windward Environmental



Matrix: Water Data Release Authorized: 07/12/04

Project: LDW-SEEP SAMPLING Event: NA Date Sampled: NA Date Received: NA

Analyte/SRM ID	Date	Units	SRM	True Value	Recovery
Total Organic Carbon SPEX #25-161AS	07/01/04	mg/L	19.6	20.0	98.0%
Dissolved Organic Carbon ERA #0206-02-02	07/09/04	mg/L	21.6	20.0	108.0%

Water Standard Reference Report-GU26

000072



Matrix: Water Data Release Authorized: (Reported: 07/12/04	м	Dat Date	Project: Event: e Sampled: Received:	LDW-SEEP SAM NA 06/29/04 06/29/04	PLING
Analyte	Date	Units	Sample	Replicate(s)	RPD/RSD
ARI ID: GU26B Client ID:	LDW-SP-71-C-U			<u> </u>	
Total Organic Carbon	07/01/04	mg/L	2.16	1.99	8.2%
ARI ID: GU26F Client ID:	LDW-SP-69-C-U				
Total Suspended Solids	06/30/04	mg/L	25.5	24.5	4.0%



Matrix: Water Data Release Authorized: Reported: 07/12/04 Date Sampled: 06/29/04 Date Received: 06/29/04

Analyte		Date	Units	Sample	Spike	Spike Added	Recovery
ARI ID: GU26B	Client ID:	LDW-SP-71-C	:-u				
Total Organic	Carbon	07/01/04	mg/L	2.16	23.7	20.0	107.7%

Data Summary Package

Prepared for

Windward Environmental

Project: LDW-SEEP SAMPLING

ARI Job Nos. GU45, GU59, GU76 and GU83

Prepared By

Analytical Resources, Inc.

000013

Volatiles



WATER VOLATILE SYSTEM MONITORING COMPOUND SUMMARY

Matrix: Water 5 mL

QC Report No: GU45

Lab ID	Client ID	DCE	TOL	BFB	DCB	TOT OUT
GU45A	LDW-SP-48-C-U	106%	104%	97.4%	104%	0
071004MB	Method Blank	109%	1148	107%	112%	0 0
GU45LCS	Lab Cntrl Sample	102%	115%	109%	108%	0
GU45C	LDW-SP-54-C-U	115%	116%	107%	106%	0
GU45C-MS	LDW-SP-54-C-U	99.1%	107%	103%	97.0%	0
GU45C-MSD	LDW-SP-54-C-U	102%	113%	107%	106%	0
GU45E	LDW-SP-82-C-U	103%	107%	98.7%	100%	0
GU45G	LDW-SP-82-C-FD-U	110%	113%	103%	105%	0
GU45I	Trip Blank	112%	115%	109%	112%	0

SW8260B	LCS/MB LIMITS	QC LIMITS
(DCE) = 1, 2-Dichloroethane-d4	(74-133)	(74-142)
(TOL) = Toluene-d8	(77-131)	(84-129)
(BFB) = Bromofluorobenzene	(79-127)	(77 - 122)
(DCB) = 1,2-Dichlorobenzene-d4	(84-132)	(85-135)

Column to be used to flag recovery values

- * Values outside of required QC limits
- D System Monitoring Compound diluted out



ORGANICS ANALYSIS DATA SHEET Volatiles by Purge & Trap GC/MS-Method 8260B Page 1 of 2

Sample ID: LDW-SP-48-C-U SAMPLE

Lab Sample ID: GU45A LIMS ID: 04-10230 Matrix: Water Data Release Authorized Reported: 07/15/04

Instrument/Analyst: FINN3/LJR

Date Analyzed: 07/10/04 17:21

QC Report No: GU45-Windward Environmental Project: LDW Seep Sampling

Date Sampled: 06/30/04 Date Received: 06/30/04

Sample Amount: 5.00 mL Purge Volume: 5.0 mL

CAS Number	Analyte	RL	Result
74-87-3	Chloromethane	1.0	< 1.0 U
74-83-9	Bromomethane	1.0	< 1.0 U
75-01-4	Vinyl Chloride	1.0	< 1.0 U
75-00-3	Chloroethane	1.0	< 1.0 U
75-09-2	Methylene Chloride	2.0	< 2.0 U
67-64-1	Acetone	5.0	< 5.0 U
75-15-0	Carbon Disulfide	1.0	< 1.0 U
75-35-4	1,1-Dichloroethene	1.0	< 1.0 U
75-34-3	1,1-Dichloroethane	1.0	< 1.0 U
156-60-5	trans-1,2-Dichloroethene	1.0	< 1.0 II
156-59-2	cis-1,2-Dichloroethene	1.0	< 1 0 U
67-66-3	Chloroform	1.0	< 1.0 U
107-06-2	1,2-Dichloroethane	1 0	
78-93-3	2-Butanone	5 0	< 5.0 U
71-55-6	1,1.1-Trichloroethane	1 0	
56-23-5	Carbon Tetrachloride	1 0	
108-05-4	Vinvl Acetate	5.0	
75-27-4	Bromodichloromethane	1 0	
78-87-5	1.2-Dichloropropane	1.0	
10061-01-5	cis-1.3-Dichloropropene	1 0	
79-01-6	Trichloroethene	1 0	
124-48-1	Dibromochloromethane	1 0	
79-00-5	1.1.2-Trichloroethane	1 0	
71-43-2	Benzene	1.0	< 1.0 U
10061-02-6	trans-1.3-Dichloropropene	1 0	
110-75-8	2-Chloroethylyinylether	5.0	
75-25-2	Bromoform	1 0	< 3.0 0
108-10-1	4 - Methyl - 2 - Pentanone (MTPK)	1.0	< 1.0 0
591-78-6	2-Hexanone	5.0	< 5.0 0
127-18-4	Tetrachloroethene	1 0	< 5.0 0
79-34-5	1 1 2 2-Tetrachloroethane	1.0	< 1.0 U
108-88-3	Toluene	1.0	< 1.0 U
108-90-7	Chlorobenzene	1.0	< 1.0 0
00-41-4	Ethylbenzene	1.0	< 1.0 0
00-42-5	Styrene	1.0	< 1.0 U
25-69-4	Trichlorofluoromothana	1.0	< 1.0 0
6-13-1	1 1 2-Trichloro 1 2 2 trifluoroa	1.0	< 1.0 U
330-20-7		2.0	< 2.0 0
5-47-6	a, p xylene	1.0	< 1.0 0
5-50-1	1 2-Dighlorobongono	1.0	< 1.0 0
11_73_1	1,2-Dichlorobongono	1.0	< 1.0 0
06-46-7	1, 4 Dighlorobonzono	1.0	< 1.0 U
07-02-9	r, - Dicuitoropenzene	1.0	< 1.0 U
4-88-4	Methyl Todido	50	< 50 Ư
4 - 06 - 4	Promoothane	1.0	< 1.0 U
4-20-4		2.0	< 2.0 U
C) ED C	ACTYTOHICTIE	1.0	< 1.0 Ŭ
4 05 2	r, r-Dichioropropene	1.0	< 1.0 U
4-70-3 20 20 C		1.0	< 1.0 U
3U-2U-0	1,1,1,2-Tetrachloroethane	1.0	< 1.0 U
5-12-8	1,2-Dibromo-3-chloropropane	5 0	< 5 0 II



ORGANICS ANALYSIS DATA SHEET Volatiles by Purge & Trap GC/MS-Method 8260B Page 2 of 2

Sample ID: LDW-SP-48-C-U SAMPLE

Lab Sample ID: GU45A LIMS ID: 04-10230 Matrix: Water Date Analyzed: 07/10/04 17:21

QC Report No: GU45-Windward Environmental Project: LDW Seep Sampling

CAS Number	Analyte	RL	Result
96-18-4	1,2,3-Trichloropropane	3.0	< 3.0 U
110-57-6	trans-1,4-Dichloro-2-butene	5.0	< 5.0 U
108-67-8	1,3,5-Trimethylbenzene	1.0	< 1.0 U
95-63~6	1,2,4-Trimethylbenzene	1.0	< 1.0 U
87-68-3	Hexachlorobutadiene	5.0	< 5.0 U
106-93-4	Ethylene Dibromide	1.0	< 1.0 U
74-97-5	Bromochloromethane	1.0	< 1.0 U
594-20-7	2,2-Dichloropropane	1.0	< 1.0 U
142-28-9	1,3-Dichloropropane	1.0	< 1.0 U
98-82-8	Isopropylbenzene	1.0	< 1.0 U
103-65-1	n-Propylbenzene	1.0	< 1.0 U
108-86-1	Bromobenzene	1.0	< 1.0 U
95-49-8	2-Chlorotoluene	1.0	< 1.0 U
106-43-4	4-Chlorotoluene	1.0	< 1.0 U
98-06-6	tert-Butylbenzene	1.0	< 1.0 U
135-98-8	sec-Butylbenzene	1.0	< 1.0 U
99-87-6	4-Isopropyltoluene	1.0	< 1.0 U
104-51-8	n-Butylbenzene	1.0	< 1.0 U
120-82-1	1,2,4-Trichlorobenzene	5.0	< 5.0 U
91-20-3	Naphthalene	5.0	< 5.0 U
87-61-6	1,2,3-Trichlorobenzene	5.0	< 5.0 U

Reported in $\mu g/L$ (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	106%
d8-Toluene	104%
Bromofluorobenzene	97.4%
d4-1,2-Dichlorobenzene	104%



ORGANICS ANALYSIS DATA SHEET Volatiles by Purge & Trap GC/MS-Method 8260B Page 1 of 2

Sample ID: LDW-SP-54-C-U SAMPLE

Lab Sample ID: GU45C LIMS ID: 04-10232 Matrix: Water Data Release Authorized: Reported: 07/15/04

Instrument/Analyst: FINN3/LJR Date Analyzed: 07/10/04 17:50 QC Report No: GU45-Windward Environmental Project: LDW Seep Sampling

Date Sampled: 06/30/04 Date Received: 06/30/04

Sample Amount: 5.00 mL Purge Volume: 5.0 mL

CAS Number	Analyte	RL	Result
74-87-3	Chloromethane	1.0	< 1.0 U
74-83-9	Bromomethane	1.0	< 1.0 U
75-01-4	Vinyl Chloride	1.0	< 1.0 U
75-00-3	Chloroethane	1.0	< 1.0 U
75-09-2	Methylene Chloride	2.0	< 2.0 U
67-64-1	Acetone	5.0	< 5.0 U
75-15-0	Carbon Disulfide	1.0	2.4
75-35-4	1,1-Dichloroethene	1.0	< 1.0 U
75-34-3	1,1-Dichloroethane	1.0	< 1.0 U
156-60-5	trans-1,2-Dichloroethene	1.0	< 1.0 U
156-59-2	cis-1,2-Dichloroethene	1.0	< 1.0 U
67-66-3	Chloroform	1.0	< 1.0 U
107-06-2	1,2-Dichloroethane	1.0	< 1.0 U
78-93-3	2-Butanone	5.0	< 5.0 U
71-55-6	1,1,1-Trichloroethane	1.0	< 1.0 U
56-23-5	Carbon Tetrachloride	1.0	< 1.0 U
108-05-4	Vinyl Acetate	5.0	< 5.0 U
75-27-4	Bromodichloromethane	1.0	< 1.0 U
78-87-5	1,2-Dichloropropane	1.0	< 1.0 U
10061-01-5	cis-1,3-Dichloropropene	1.0	< 1.0 U
79-01-6	Trichloroethene	1.0	< 1.0 U
124-48-1	Dibromochloromethane	1.0	< 1.0 U
79-00-5	1,1,2-Trichloroethane	1.0	< 1.0 U
71-43-2	Benzene	1.0	< 1.0 U
10061-02-6	trans-1,3-Dichloropropene	1.0	< 1.0 U
110-75-8	2-Chloroethylvinylether	5.0	< 5.0 U
75-25-2	Bromoform	1.0	< 1.0 H
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0 II
591-78-6	2-Hexanone	5.0	< 5.0 II
127-18-4	Tetrachloroethene	1.0	< 1 0 11
79-34-5	1,1,2,2-Tetrachloroethane	1.0	< 1.0 U
108-88-3	Toluene	1.0	< 1.0 U
108-90-7	Chlorobenzene	1.0	6 5
100-41-4	Ethylbenzene	1 0	
100-42-5	Styrene	1 0	
75-69-4	Trichlorofluoromethane	1 0	
76-13-1	1.1.2-Trichloro-1.2.2-trifluoroe	2 0	
L330-20-7	m.p-Xvlene	1 0	
95-47-6	0-Xvlene	1.0	
95-50-1	1.2-Dichlorobenzene	1 0	< 1.0 U
541_73_1	1 3-Dichlorobengene	1.0	4.9
06-46-7	1,5 Dichlorobenzene	1.0	58
07-02-9	Agroloin	1.0	40
1 - 99 - 4	Actoreth Mothyl Iodido	50	< 50 0
4-96-1	Bromoethano	1.0	< 1.0 U
		2.0	< 2.0 U
63-59 6	ACTYTOHICTITE	1.0	< 1.0 U
4 - 95 - 2	I, I-DICHIOPOPENE	1.0	< 1.0 U
30-20. C	1 1 1 2 Totrachlane	1.0	< 1.0 U
50-20-0	1, 1, 1, 2-ietrachioroethane	1.0	< 1.0 U
0-12-0	1,2-DIDIONO-3-Chioropropane	5.0	< 5.0 U
			00001



ORGANICS ANALYSIS DATA SHEET Volatiles by Purge & Trap GC/MS-Method 8260B Sample ID: LDW-SP-54-C-U Page 2 of 2

SAMPLE

Lab Sample ID: GU45C LIMS ID: 04-10232 Matrix: Water Date Analyzed: 07/10/04 17:50 QC Report No: GU45-Windward Environmental Project: LDW Seep Sampling

CAS Number	Analyte	RL	Result
96-18-4	1,2,3-Trichloropropane	3.0	< 3.0 U
110-57-6	trans-1,4-Dichloro-2-butene	5.0	< 5.0 U
108-67-8	1,3,5-Trimethylbenzene	1.0	< 1.0 U
95-63-6	1,2,4-Trimethylbenzene	1.0	< 1.0 U
87-68-3	Hexachlorobutadiene	5.0	< 5.0 U
106-93-4	Ethylene Dibromide	1.0	< 1.0 U
74-97-5	Bromochloromethane	1.0	< 1.0 U
594-20-7	2,2-Dichloropropane	1.0	< 1.0 U
142-28-9	1,3-Dichloropropane	1.0	< 1.0 U
98-82-8	Isopropylbenzene	1.0	< 1.0 U
103-65-1	n-Propylbenzene	1.0	< 1.0 U
108-86-1	Bromobenzene	1.0	< 1.0 U
95-49-8	2-Chlorotoluene	1.0	< 1.0 U
106-43-4	4-Chlorotoluene	1.0	< 1.0 U
98-06-6	tert-Butylbenzene	1.0	< 1.0 U
135-98-8	sec-Butylbenzene	1.0	< 1.0 U
99-87-6	4-Isopropyltoluene	1.0	< 1.0 U
104-51-8	n-Butylbenzene	1.0	< 1.0 U
120-82-1	1,2,4-Trichlorobenzene	5.0	< 5.0 U
91-20-3	Naphthalene	5.0	< 5.0 U
87-61-6	1,2,3-Trichlorobenzene	5.0	< 5.0 U

Reported in $\mu g/L$ (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	115%
d8-Toluene	116%
Bromofluorobenzene	107%
d4-1,2-Dichlorobenzene	106%



ORGANICS ANALYSIS DATA SHEET Volatiles by Purge & Trap GC/MS-Method 8260B Page 1 of 2

Sample ID: LDW-SP-54-C-U MATRIX SPIKE

Lab Sample ID: GU45C LIMS ID: 04-10232 Matrix: Water Data Release Authorized: Reported: 07/15/04

Instrument/Analyst: FINN3/LJR Date Analyzed: 07/10/04 18:18 QC Report No: GU45-Windward Environmental Project: LDW Seep Sampling

Date Sampled: 06/30/04 Date Received: 06/30/04

Sample Amount: 5.00 mL Purge Volume: 5.0 mL

CAS Number	Analyte	RL	Result
74-87-3	Chloromethane	1.0	
74-83-9	Bromomethane	1.0	
75-01-4	Vinyl Chloride	1.0	
75-00-3	Chloroethane	1.0	
75-09-2	Methylene Chloride	2.0	
67-64-1	Acetone	5.0	
75-15-0	Carbon Disulfide	1.0	
75-35-4	1,1-Dichloroethene	1.0	
75-34-3	1,1-Dichloroethane	1.0	
156-60-5	trans-1,2-Dichloroethene	1.0	
156-59-2	cis-1,2-Dichloroethene	1.0	
67-66-3	Chloroform	1.0	
107-06-2	1,2-Dichloroethane	1.0	·
78-93-3	2-Butanone	5.0	
71-55-6	1,1,1-Trichloroethane	1.0	
56-23-5	Carbon Tetrachloride	1.0	
108-05-4	Vinyl Acetate	5.0	
75-27-4	Bromodichloromethane	1.0	
78-87-5	1,2-Dichloropropane	1.0	
10061-01-5	cis-1,3-Dichloropropene	1.0	
79-01-6	Trichloroethene	1.0	
124-48-1	Dibromochloromethane	1.0	
79-00-5	1,1,2-Trichloroethane	1.0	
71-43-2	Benzene	1 0	
10061-02-6	trans-1.3-Dichloropropene	1 0	
110-75-8	2-Chloroethylvinylether	5.0	
75-25-2	Bromoform	1 0	
108-10-1	4-Methvl-2-Pentanone (MTBK)	5.0	
591-78-6	2-Hexanone	5.0	
127-18-4	Tetrachloroethene	1 0	
79-34-5	1.1.2.2-Tetrachloroethane	1 0	
108-88-3	Toluene	1 0	
108-90-7	Chlorobenzene	1.0	
100-41-4	Ethylbenzene	1.0	
100-42-5	Styrene	1.0	
75-69-4	Trichlorofluoromethane	1.0	
76-13-1	1 1 2-Trichloro-1 2 2-trifluoroo	1.0	
330-20-7	m n-Yylene	2.0	
95-47-6	o-Xylene	1.0	
95 - 50 - 1	1 2-Dichlorobengono	1.0	
41-73-1	1,2 Dighlorohongono	1.0	
06-46-7	1, 3-Dichlorobenzene	1.0	
	l,4-Dichiolobenzene	1.0	
-07-02-0 17-88-4	ACIUICIII Mothul Iodida	50	
	Promosthane	1.0	
		2.0	
.0/-I3-I	Acryionitrile	1.0	
	I, I-DICNIOropropene	1.0	
4-95-3	Dibromomethane	1.0	
30-20-6	1,1,1,2-Tetrachloroethane	1.0	
0-17-8	1,2-Dibromo-3-chloropropane	5.0	



ORGANICS ANALYSIS DATA SHEET

Volatiles by Purge & Trap GC/MS-Method 8260B Page 2 of 2

Sample ID: LDW-SP-54-C-U MATRIX SPIKE

Lab Sample ID: GU45C LIMS ID: 04-10232 Matrix: Water Date Analyzed: 07/10/04 18:18

QC Report No: GU45-Windward Environmental Project: LDW Seep Sampling

CAS Number	Analyte	RL	Result
96-18-4	1,2,3-Trichloropropane	3.0	
110-57-6	trans-1,4-Dichloro-2-butene	5.0	
108-67-8	1,3,5-Trimethylbenzene	1.0	
95-63-6	1,2,4-Trimethylbenzene	1.0	
87-68-3	Hexachlorobutadiene	5.0	
106-93-4	Ethylene Dibromide	1.0	
74-97-5	Bromochloromethane	1.0	
594-20-7	2,2-Dichloropropane	1.0	
142-28-9	1,3-Dichloropropane	1.0	
98-82-8	Isopropylbenzene	1.0	
103-65-1	n-Propylbenzene	1.0	
108-86-1	Bromobenzene	1.0	
95-49-8	2-Chlorotoluene	1.0	
106-43-4	4-Chlorotoluene	1.0	
98-06-6	tert-Butylbenzene	1.0	
135-98-8	sec-Butylbenzene	1.0	
99-87-6	4-Isopropyltoluene	1.0	
L04-51-8	n-Butylbenzene	1.0	
L20-82-1	1,2,4-Trichlorobenzene	5.0	
€1-20-3	Naphthalene	5.0	
37-61-6	1,2,3-Trichlorobenzene	5.0	

Reported in $\mu g/L$ (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	99.1%
d8-Toluene	107%
Bromofluorobenzene	103%
d4-1,2-Dichlorobenzene	97.0%



ORGANICS ANALYSIS DATA SHEET Volatiles by Purge & Trap GC/MS-Method 8260B Page 1 of 2

Sample ID: LDW-SP-54-C-U MATRIX SPIKE DUPLICATE

Lab Sample ID: GU45C LIMS ID: 04-10232 Matrix: Water Data Release Authorized: Reported: 07/15/04

Instrument/Analyst: FINN3/LJR Date Analyzed: 07/10/04 18:47 QC Report No: GU45-Windward Environmental Project: LDW Seep Sampling

Date Sampled: 06/30/04 Date Received: 06/30/04

Sample Amount: 5.00 mL Purge Volume: 5.0 mL

CAS Number	Analyte	RL	Result
74-87-3	Chloromethane	1.0	
74-83-9	Bromomethane	1.0	
75-01-4	Vinyl Chloride	1.0	
75-00-3	Chloroethane	1.0	
75-09-2	Methylene Chloride	2.0	
67-64-1	Acetone	5.0	
75-15-0	Carbon Disulfide	1.0	
75-35-4	1,1-Dichloroethene	1.0	
75-34-3	1,1-Dichloroethane	1.0	
156-60-5	trans-1,2-Dichloroethene	1.0	
156-59-2	cis-1,2-Dichloroethene	1.0	
67-66-3	Chloroform	1.0	
107-06-2	1,2-Dichloroethane	1.0	
78-93-3	2-Butanone	5.0	
71-55-6	1,1,1-Trichloroethane	1.0	
56-23-5	Carbon Tetrachloride	1.0	
108-05-4	Vinyl Acetate	5.0	
75-27-4	Bromodichloromethane	1 0	
78-87-5	1,2-Dichloropropane	1.0	
10061-01-5	cis-1.3-Dichloropropene	1 0	
79-01-6	Trichloroethene	1 0	
124-48-1	Dibromochloromethane	1.0	
79-00-5	1.1.2-Trichloroethane	1.0	
71-43-2	Benzene	1.0	
10061-02-6	trans-1 3-Dichloropropene	1.0	
110-75-8	2-Chloroethylyinylether	1.0	
75-25-2	Bromoform	1.0	
108-10-1	$4 - Methyl_2 - Pentanone (MTRK)$	1.0 E 0	
591-78-6	2-Hevanone	5.0	
127-18-4	Tetrachloroethene	5.0	~
79-34-5	1 1 2 2-Tetrachloroothano	1.0	
108-88-3	Toluene	1.0	
108-90-7	Chlorobenzono	1.0	
100-41-4	Ethylhongone	1.0	
100-41-4	Sturane	1.0	
75-69 4	Juichle woflware the set	1.0	
75-05-4	1 1 2 Trichloro 1 2 2 triff	1.0	
1220 20 7	1,1,2-Trichioro-1,2,2-trifluoroe	2.0	
1330-20-7	m,p-Xylene	1.0	
95-47-6	o-Xylene	1.0	
95-50-1	1,2-Dichlorobenzene	1.0	
541-73-1	1,3-Dichlorobenzene	1.0	
L06-46-7	1,4-Dichlorobenzene	1.0	
L07-02-8	Acrolein	50	
/4-88-4	Methyl Iodide	1.0	
74-96-4	Bromoethane	2.0	
L07-13-1	Acrylonitrile	1.0	
563-58-6	1,1-Dichloropropene	1.0	
74-95-3	Dibromomethane	1.0	
30-20-6	1,1,1,2-Tetrachloroethane	1.0	
96-12-8	1,2-Dibromo-3-chloropropane	5.0	

FORM I



ORGANICS ANALYSIS DATA SHEET Volatiles by Purge & Trap GC/MS-Method 8260B Sample ID: LDW-SP-54-C-U Page 2 of 2

MATRIX SPIKE DUPLICATE

Lab Sample ID: GU45C LIMS ID: 04-10232 Matrix: Water Date Analyzed: 07/10/04 18:47

QC Report No: GU45-Windward Environmental Project: LDW Seep Sampling

CAS Number	Analyte	RL	Result
96-18-4	1,2,3-Trichloropropane	3.0	
110-57-6	trans-1,4-Dichloro-2-butene	5.0	-
108-67-8	1,3,5-Trimethylbenzene	1.0	
95-63-6	1,2,4-Trimethylbenzene	1.0	
87-68-3	Hexachlorobutadiene	5.0	
106-93-4	Ethylene Dibromide	1.0	
74-97-5	Bromochloromethane	1.0	<i>`</i>
594-20-7	2,2-Dichloropropane	1.0	
142-28-9	1,3-Dichloropropane	1.0	
98-82-8	Isopropylbenzene	1.0	~
103-65-1	n-Propylbenzene	1.0	
108-86-1	Bromobenzene	1.0	
95-49-8	2-Chlorotoluene	1.0	
106-43-4	4-Chlorotoluene	1.0	· _ <u></u>
98-06-6	tert-Butylbenzene	1.0	
135-98-8	sec-Butylbenzene	1.0	
99-87-6	4-Isopropyltoluene	1.0	-
104-51-8	n-Butylbenzene	1.0	
120-82-1	1,2,4-Trichlorobenzene	5.0	
91-20-3	Naphthalene	5.0	
87-61-6	1,2,3-Trichlorobenzene	5.0	

Reported in $\mu g/L$ (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	102%
d8-Toluene	113%
Bromofluorobenzene	1078
d4-1,2-Dichlorobenzene	106%



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ORGANICS ANALYSIS DATA SHEET Volatiles by Purge & Trap GC/MS-Method 8260B Page 1 of 2

Sample ID: LDW-SP-82-C-U SAMPLE

Lab Sample ID: GU45E LIMS ID: 04-10234 Matrix: Water Data Release Authorized Reported: 07/15/04

Instrument/Analyst: FINN3/LJR
Date Analyzed: 07/10/04 19:15

QC Report No: GU45-Windward Environmental Project: LDW Seep Sampling

Date Sampled: 06/30/04 Date Received: 06/30/04

Sample Amount: 5.00 mL Purge Volume: 5.0 mL

CAS Number	Analyte	RL	Result
74-87-3	Chloromethane	1.0	< 1.0 U
74-83-9	Bromomethane	1.0	< 1.0 U
75-01-4	Vinyl Chloride	1.0	< 1.0 U
75-00-3	Chloroethane	1.0	< 1.0 U
75-09-2	Methylene Chloride	2.0	< 2.0 U
67-64-1	Acetone	5.0	< 5.0 U
75-15-0	Carbon Disulfide	1.0	< 1.0 U
75-35-4	1,1-Dichloroethene	1.0	< 1.0 U
75-34-3	1,1-Dichloroethane	1.0	< 1.0 U
156-60-5	trans-1,2-Dichloroethene	1.0	< 1.0 U
156-59-2	cis-1,2-Dichloroethene	1.0	< 1.0 U
67-66-3	Chloroform	1.0	< 1.0 U
107-06-2	1,2-Dichloroethane	1.0	< 1.0 U
78-93-3	2-Butanone	5.0	< 5.0 U
71-55-6	1,1,1-Trichloroethane	1.0	< 1.0 U
56-23-5	Carbon Tetrachloride	1.0	< 1.0 U
108-05-4	Vinyl Acetate	5.0	< 5.0 II
75-27-4	Bromodichloromethane	1.0	< 1 0 U
78-87-5	1,2-Dichloropropane	1.0	
10061-01-5	cis-1,3-Dichloropropene	1.0	
79-01-6	Trichloroethene	1 0	
124-48-1	Dibromochloromethane	1 0	
79-00-5	1,1,2-Trichloroethane	1 0	
71-43-2	Benzene	1 0	
10061-02-6	trans-1.3-Dichloropropene	1 0	
110-75-8	2-Chloroethvlvinvlether	5 0	
75-25-2	Bromoform	1 0	
L08-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0 U
591-78-6	2-Hexanone	5.0	
27-18-4	Tetrachloroethene	1 0	
79-34-5	1.1.2.2-Tetrachloroethane	1.0	
08-88-3	Toluene	1.0	< 1.0 U
08-90-7	Chlorobenzene	1.0	< 1.0 0
00-41-4	Ethylbenzene	1.0	< 1.0 U
00-42-5	Styrene	1.0	< 1.0 U
5-69-4	Trichlorofluoromethane	1.0	< 1.0 U
6-13-1	1 1 2-Trichloro-1 2 2 trifluoroo	1.0	< 1.0 0
330-20-7	m n Y y lene	2.0	< 2.0 U
5-47-6	0-Yylene	1.0	< 1.0 U
5-50-1	1 2-Dichlorobongono	1.0	< 1.0 U
41-73-1	1,2-Dichlorobenzene	1.0	< 1.0 U
11 /J · I 06-46-7	1, J-Dichlorobenzene	1.0	< 1.0 U
00-40-7	l,4-Dichiofobenzene	1.0	< 1.0 U
4_99_A	Mothyl Todida	50	< 50 0
	Promoothana	1.0	< 1.0 U
4-20-4 07 12 1		2.0	< 2.0 Ŭ
C) EO C		1.0	< 1.0 U
03-30-0 4 05 7	r, r-Dichioropropene	1.0	< 1.0 U
4~30-3 20 20 C		1.0	< 1.0 U
50-20-6	1,1,1,2-Tetrachioroethane	1.0	< 1.0 U
0-12-8	1,2-Dipromo-3-chioropropane	5.0	< 5.0 U
			0000



ORGANICS ANALYSIS DATA SHEET Volatiles by Purge & Trap GC/MS-Method 8260B Page 2 of 2

Sample ID: LDW-SP-82-C-U SAMPLE

Lab Sample ID: GU45E LIMS ID: 04-10234 Matrix: Water Date Analyzed: 07/10/04 19:15 QC Report No: GU45-Windward Environmental Project: LDW Seep Sampling

CAS Number	Analyte	RL	Result
96-18-4	1,2,3-Trichloropropane	3.0	< 3.0 U
110-57-6	trans-1,4-Dichloro-2-butene	5.0	< 5.0 U
108-67-8	1,3,5-Trimethylbenzene	1.0	< 1.0 U
95-63-6	1,2,4-Trimethylbenzene	1.0	< 1.0 U
87-68-3	Hexachlorobutadiene	5.0	< 5.0 U
106-93-4	Ethylene Dibromide	1.0	< 1.0 U
74-97-5	Bromochloromethane	1.0	< 1.0 U
594-20-7	2,2-Dichloropropane	1.0	< 1.0 U
142-28-9	1,3-Dichloropropane	1.0	< 1.0 U
98-82-8	Isopropylbenzene	1.0	< 1.0 U
103-65-1	n-Propylbenzene	1.0	< 1.0 U
108-86-1	Bromobenzene	1.0	< 1.0 U
95-49-8	2-Chlorotoluene	1.0	< 1.0 U
106-43-4	4-Chlorotoluene	1.0	< 1.0 U
98-06-6	tert-Butylbenzene	1.0	< 1.0 U
135-98-8	sec-Butylbenzene	1.0	< 1.0 U
99-87-6	4-Isopropyltoluene	1.0	< 1.0 U
104-51-8	n-Butylbenzene	1.0	< 1.0 U
120-82-1	1,2,4-Trichlorobenzene	5.0	< 5.0 U
91-20-3	Naphthalene	5.0	< 5.0 U
87-61-6	1,2,3-Trichlorobenzene	5.0	< 5.0 U

Reported in μ g/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	103%
d8-Toluene	107%
Bromofluorobenzene	98.7%
d4-1,2-Dichlorobenzene	100%

Lab Sample ID: GU45E



ORGANICS ANALYSIS DATA SHEET Volatiles by Purge & Trap GC/MS-Method 8260B Page 1 of 2

Sample ID: LDW-SP-82-C-FD-U SAMPLE

Lab Sample ID: GU45G LIMS ID: 04-10236 Matrix: Water Data Release Authorized: QC Report No: GU45-Windward Environmental Project: LDW Seep Sampling

Date Sampled: 06/30/04 Date Received: 06/30/04

Instrument/Analyst: FINN3/LJR Date Analyzed: 07/10/04 19:43 Sample Amount: 5.00 mL Purge Volume: 5.0 mL

CAS Number	Analyte	RL	Result
74-87-3	Chloromethane	1.0	< 1.0 U
74-83-9	Bromomethane	1.0	< 1.0 U
75-01-4	Vinyl Chloride	1.0	< 1.0 U
75-00-3	Chloroethane	1.0	< 1.0 U
75-09-2	Methylene Chloride	2.0	< 2.0 U
67-64-1	Acetone	5.0	< 5.0 U
75-15-0	Carbon Disulfide	1.0	< 1.0 U
75-35-4	1,1-Dichloroethene	1.0	< 1.0 U
75-34-3	1,1-Dichloroethane	1.0	< 1.0 U
156-60-5	trans-1,2-Dichloroethene	1.0	< 1.0 U
156-59-2	cis-1,2-Dichloroethene	1.0	< 1.0 U
67-66-3	Chloroform	1.0	< 1.0 U
107-06-2	1,2-Dichloroethane	1.0	< 1.0 U
78-93-3	2-Butanone	5.0	< 5.0 U
71-55-6	1,1,1-Trichloroethane	1.0	< 1.0 II
56-23-5	Carbon Tetrachloride	1.0	< 1.0 U
108-05-4	Vinyl Acetate	5.0	< 5.0 U
75-27-4	Bromodichloromethane	1.0	< 1.0 U
78-87-5	1,2-Dichloropropane	1.0	
10061-01-5	cis-1.3-Dichloropropene	1.0	
79-01-6	Trichloroethene	1 0	
124-48-1	Dibromochloromethane	1 0	
79-00-5	1,1,2-Trichloroethane	1 0	
71-43-2	Benzene	1.0	
10061-02-6	trans-1.3-Dichloropropene	1 0	
110-75-8	2-Chloroethylvinylether	5 0	
75-25-2	Bromoform	1 0	
108-10-1	4-Methyl-2-Pentanone (MTBK)	5.0	< 5.0 U
591-78-6	2-Hexanone	5.0	
L27-18-4	Tetrachloroethene	1 0	
79-34-5	1.1.2.2-Tetrachloroethane	1 0	
108-88-3	Toluene	1 0	
08-90-7	Chlorobenzene	1 0	
00-41-4	Ethylbenzene	1 0	
00-42-5	Styrene	1 0	
25-69-4	Trichlorofluoromethane	1 0	
6-13-1	1 1 2-Trichloro-1 2 2-trifluoroe	2.0	
330-20-7	m p_X life in the second se	1 0	
5-47-6	0-Xvlene	1.0	< 1.0 U
5-50-1	1 2-Dichlorobengene	1.0	
41-73-1	1 3-Dichlorobengene	1.0	
06-46-7	1,5 Dichlorobenzene	1.0	< 1.0 U
07-02-8	Agrolein	1.0	< 1.0 0
4-88-4	Methyl Iodido	50	< 50 0
4-96-4	Bromoethane	1.0	< 1.0 0
		2.0	< 2.0 U
63-58. <i>6</i>	1 1 Dichloron	1.0	< 1.0 U
0	r, r-preutoropropene	1.0	< 1.0 U
4-70-3 20 20 C		1.0	< 1.0 U
50-20-6 C 10 0	1, 1, 1, 2-Tetrachloroethane	1.0	< 1.0 U
0-17-9	1,2-Dibromo-3-chloropropane	5.0	< 5.0 U 000(



ORGANICS ANALYSIS DATA SHEET Volatiles by Purge & Trap GC/MS-Method 8260B Sample ID: LDW-SP-82-C-FD-U Page 2 of 2

SAMPLE

Lab Sample ID: GU45G LIMS ID: 04-10236 Matrix: Water Date Analyzed: 07/10/04 19:43

QC Report No: GU45-Windward Environmental Project: LDW Seep Sampling

CAS Number	Analyte	RL	Result
96-18-4	1,2,3-Trichloropropane	3.0	< 3.0 U
110-57-6	trans-1,4-Dichloro-2-butene	5.0	< 5.0 U
108-67-8	1,3,5-Trimethylbenzene	1.0	< 1.0 U
95-63-6	1,2,4-Trimethylbenzene	1.0	< 1.0 U
87-68-3	Hexachlorobutadiene	5.0	< 5.0 U
106-93-4	Ethylene Dibromide	1.0	< 1.0 U
74-97-5	Bromochloromethane	1.0	< 1.0 U
594-20-7	2,2-Dichloropropane	1.0	< 1.0 U
142-28-9	1,3-Dichloropropane	1.0	< 1.0 U
98-82~8	Isopropylbenzene	1.0	< 1.0 U
103-65-1	n-Propylbenzene	1.0	< 1.0 U
108-86-1	Bromobenzene	1.0	< 1.0 U
95-49-8	2-Chlorotoluene	1.0	< 1.0 U
106-43-4	4-Chlorotoluene	1.0	< 1.0 U
98-06-6	tert-Butylbenzene	1.0	< 1.0 U
135-98-8	sec-Butylbenzene	1.0	< 1.0 U
99-87-6	4-Isopropyltoluene	1.0	< 1.0 U
104-51-8	n-Butylbenzene	1.0	< 1.0 U
120-82-1	1,2,4-Trichlorobenzene	5.0	< 5.0 U
91-20-3	Naphthalene	5.0	< 5.0 U
87-61-6	1,2,3-Trichlorobenzene	5.0	< 5.0 U

Reported in $\mu g/L$ (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	110%
d8-Toluene	113%
Bromofluorobenzene	103%
d4-1,2-Dichlorobenzene	105%



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ORGANICS ANALYSIS DATA SHEET Volatiles by Purge & Trap GC/MS-Method 8260B Page 1 of 2

Sample ID: Trip Blank SAMPLE

Lab Sample ID: GU45I LIMS ID: 04-10238 Matrix: Water Data Release Authorized Reported: 07/15/04

Instrument/Analyst: FINN3/LJR Date Analyzed: 07/10/04 20:12 QC Report No: GU45-Windward Environmental Project: LDW Seep Sampling

Date Sampled: Date Received: 06/30/04

Sample Amount: 5.00 mL Purge Volume: 5.0 mL

CAS Number	Analyte	RL	Result
74-87-3	Chloromethane	1.0	< 1.0 U
74-83-9	Bromomethane	1.0	< 1.0 U
75-01-4	Vinyl Chloride	1.0	< 1.0 U
75-00-3	Chloroethane	1.0	< 1.0 U
75-09-2	Methvlene Chloride	2.0	< 2.0 U
67-64-1	Acetone	5.0	< 5.0 U
75-15-0	Carbon Disulfide	1.0	< 1.0 U
75-35-4	1.1-Dichloroethene	1.0	< 1.0 U
75-34-3	1.1-Dichloroethane	1.0	< 1.0 U
156-60-5	trans-1,2-Dichloroethene	1.0	< 1.0 U
156-59-2	cis-1,2-Dichloroethene	1.0	< 1.0 U
67-66-3	Chloroform	1.0	< 1.0 U
107-06-2	1.2-Dichloroethane	1.0	< 1.0 U
78-93-3	2-Butanone	5.0	< 5.0 U
71-55-6	1.1.1-Trichloroethane	1.0	< 1.0 U
56-23-5	Carbon Tetrachloride	1.0	< 1.0 U
108-05-4	Vinvl Acetate	5 0	
75-27-4	Bromodichloromethane	1 0	
78-87-5	1 2-Dichloropropage	1 0	
10061-01-5	cis-1 3-Dichloropropene	1.0	
79-01-6	Trighloroothopo	1.0	
124-49-1	Dibromoghloromothano	1.0	
124-40-1 79-00-5	1 1 2 Trichloroothane	1.0	
79-00-5	I, I, Z-IIICHIOFOELHAHE	1.0	< 1.0 U
11-43-2 10061 02 C	belizelle	1.0	
110 75 9	2 Chloroothylyinylothor	1.0	
110-75-0 75 05 0		5.0	< 5.0 0
100 10 1	A Mathyl 2 Deptembra (MIDK)	I.U	< 1.0 0
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0 0
591-78-6	2-Hexanone	5.0	< 5.0 0
		1.0	< 1.0 0
19-34-5	1,1,2,2-Tetrachioroethane	1.0	< 1.0 0
108-88-3	Toluene	1.0	< 1.0 0
108-90-7	Chlorobenzene	1.0	< 1.0 0
	Ethylbenzene	1.0	< 1.0 0
100-42-5	Styrene	1.0	< 1.0 U
75-69-4	Trichlorofluoromethane	1.0	< 1.0 U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroe	2.0	< 2.0 U
1330-20-7	m,p-Xylene	1.0	< 1.0 U
95-47-6	o-Xylene	1.0	< 1.0 U
95-50-1	1,2-Dichlorobenzene	1.0	< 1.0 U
541-73-1	1,3-Dichlorobenzene	1.0	< 1.0 U
106-46-7	1,4-Dichlorobenzene	1.0	< 1.0 U
107-02-8	Acrolein	50	< 50 U
74-88-4	Methyl Iodide	1.0	< 1.0 U
74-96-4	Bromoethane	2.0	< 2.0 U
107-13-1	Acrylonitrile	1.0	< 1.0 U
563-58-6	1,1-Dichloropropene	1.0	< 1.0 U
74-95-3	Dibromomethane	1.0	< 1.0 U
530-20-6	1,1,1,2-Tetrachloroethane	1.0	< 1.0 U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	< 5.0 U 00002



ORGANICS ANALYSIS DATA SHEET Volatiles by Purge & Trap GC/MS-Method 8260B Page 2 of 2

Sample ID: Trip Blank SAMPLE

Lab Sample ID: GU45I LIMS ID: 04-10238 Matrix: Water Date Analyzed: 07/10/04 20:12 QC Report No: GU45-Windward Environmental Project: LDW Seep Sampling

CAS Number	Analyte	RL	Result	
96-18-4	1,2,3-Trichloropropane	3.0	< 3.0 U	
110-57-6	trans-1,4-Dichloro-2-butene	5.0	< 5.0 U	
108-67-8	1,3,5-Trimethylbenzene	1.0	< 1.0 U	
95-63-6	1,2,4-Trimethylbenzene	1.0	< 1.0 U	
87-68-3	Hexachlorobutadiene	5.0	< 5.0 Ŭ	
106-93-4	Ethylene Dibromide	1.0	< 1.0 U	
74-97-5	Bromochloromethane	1.0	< 1.0 U	
594-20-7	2,2-Dichloropropane	1.0	< 1.0 U	
142-28-9	1,3-Dichloropropane	1.0	< 1.0 U	
98-82-8	Isopropylbenzene	1.0	< 1.0 U	
103-65-1	n-Propylbenzene	1.0	< 1.0 U	
108-86-1	Bromobenzene	1.0	< 1.0 U	
95-49-8	2-Chlorotoluene	1.0	< 1.0 U	
106-43-4	4-Chlorotoluene	1.0	< 1.0 U	
98-06-6	tert-Butylbenzene	1.0	< 1.0 U	
135-98-8	sec-Butylbenzene	1.0	< 1.0 U	
99-87-6	4-Isopropyltoluene	1.0	< 1.0 U	
104-51-8	n-Butylbenzene	1.0	< 1.0 U	
120-82-1	1,2,4-Trichlorobenzene	5.0	< 5.0 U	
91-20-3	Naphthalene	5.0	< 5.0 U	
87-61-6	1,2,3-Trichlorobenzene	5.0	< 5.0 U	

Reported in μ g/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	112%
d8-Toluene	115%
Bromofluorobenzene	109%
d4-1,2-Dichlorobenzene	112%



ORGANICS ANALYSIS DATA SHEET Volatiles by Purge & Trap GC/MS-Method 8260B

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Lab Sample ID: GU45C LIMS ID: 04-10232 Matrix: Water Data Release Authorized: Reported: 07/15/04

QC Report No: GU45-Windward Environmental Project: LDW Seep Sampling

MS/MSD

Date Sampled: 06/30/04 Date Received: 06/30/04

Instrument/Analyst MS: FINN3/LJR MSD: FINN3/LJR Date Analyzed MS: 07/10/04 18:18 MSD: 07/10/04 18:47 Sample Amount MS: 5.00 mL MSD: 5.00 mL Purge Volume MS: 5.0 mL MSD: 5.0 mL

Analyte	Sample	MS	Spike Added-MS	MS Recovery	MSD	Spike Added-MSD	MSD Recovery	RPD
Chloromethane	< 1.0	39.8	50.0	79.6%	38.3	50.0	76.6%	3.8%
Bromomethane	< 1.0	37.0	50.0	74.0%	36.5	50.0	73.0%	1.4%
Vinyl Chloride	< 1.0	44.8	50.0	89.6%	43.1	50.0	86.2%	3.9%
Chloroethane	< 1.0	46.4	50.0	92.8%	45.8	50.0	91.6%	1.3%
Methylene Chloride	< 2.0	47.3	50.0	94.6%	45.7	50.0	91.4%	3.4%
Acetone	< 5.0	275	250	110%	288	250	115%	4.6%
Carbon Disulfide	2.4	58.6	50.0	112%	58.7	50.0	113%	0.2%
1,1-Dichloroethene	< 1.0	45.8	50.0	91.6%	45.9	50.0	91.8%	0.2%
1,1-Dichloroethane	< 1.0	51.2	50.0	102%	49.3	50.0	98.6%	3.8%
trans-1,2-Dichloroethene	< 1.0	48.0	50.0	96.0%	46.6	50.0	93.2%	3.0%
cis-1,2-Dichloroethene	< 1.0	51.8	50.0	104%	50.7	50.0	101%	2.1%
Chloroform	< 1.0	51.3	50.0	103%	51.3	50.0	103%	0.0%
1,2-Dichloroethane	< 1.0	49.7	50.0	99.48	49.9	50.0	99.88	0.4%
2-Butanone	< 5.0	285	250	114%	305	250	122%	6.8%
1,1,1-Trichloroethane	< 1.0	55.9	50.0	112%	56.6	50.0	113%	1.2%
Carbon Tetrachloride	< 1.0	49.2	50.0	98.4%	51.0	50.0	102%	3.6%
Vinyl Acetate	< 5.0	57.6	50.0	115%	60.4	50.0	121%	4.7%
Bromodichloromethane	< 1.0	54.5	50.0	109%	54.8	50.0	110%	0.5%
1,2-Dichloropropane	< 1.0	53.6	50.0	1078	54.9	50.0	110%	2.4%
cis-1,3-Dichloropropene	< 1.0	48.5	50.0	97.0%	49.7	50.0	99.4%	2.48
Trichloroethene	< 1.0	49.7	50.0	99.4%	50.6	50.0	101%	1.8%
Dibromochloromethane	< 1.0	45.7	50.0	91.4%	47.3	50.0	94.6%	3.48
1,1,2-Trichloroethane	< 1.0	53.3	50.0	107%	53.2	50.0	106%	0.2%
Benzene	< 1.0	54.0	50.0	108%	55.0	50.0	110%	1.8%
trans-1,3-Dichloropropene	< 1.0	45.5	50.0	91.0%	48.2	50.0	96.4%	5.8%
2-Chloroethylvinvlether	< 5.0	< 5.0	50.0	NA	< 5.0	50.0	NA	NA
Bromoform	< 1.0	44.5	50.0	89.08	46.8	50.0	93.6%	5.0%
4-Methvl-2-Pentanone (MIBK)	< 5.0	297	250	119%	321	250	128%	7.8%
2-Hexanone	< 5.0	264	250	106%	297	250	119%	11.8%
Tetrachloroethene	< 1.0	46.6	50.0	93.28	49.5	50.0	99.08	6.0%
1,1,2,2-Tetrachloroethane	< 1.0	56.7	50.0	1138	58.5	50.0	117%	3.1%
Toluene	< 1.0	53.5	50.0	107%	53.7	50.0	107%	0.4%
Chlorobenzene	6.5	57.9	.50.0	103%	57.8	50.0	103%	0.2%
Ethylbenzene	< 1.0	50.9	50.0	102%	53.8	50.0	108%	5.5%
Styrene	< 1.0	24.3	50.0	48.6%	30.0	50.0	60.0%	21.0%
Trichlorofluoromethane	< 1.0	44.7	50.0	89.4%	44.4	50.0	88.8%	0.7%
1.1.2-Trichloro-1.2.2-trifl	< 2.0	41.6	50.0	83.2%	45.5	50.0	91.0%	9.0%
m,p-Xvlene	< 1.0	102	100	102%	107	100	107%	4.8%
o-Xvlene	< 1.0	46.6	50.0	93.2%	49.3	50.0	98.6%	5.6%
1.2-Dichlorobenzene	2.9	52.1	50 0	98 4%	55 0	50 0	104%	5.4%
1.3-Dichlorobenzene	58.3	119	50.0	121%	113	50.0	109%	5.2%
1.4-Dichlorobenzene	40.2	94.2	50.0	108%	90 2	50.0	100%	4 3%
Acrolein	< 50.0	166	250	66 4%	196	250	78 4%	16 68
Methyl Iodide	< 1 0	50 7	50 0	101%	51 5	50 0	103%	1 6%
Bromoethane	< 2.0	46 8	50.0	93 6%	48 1	50.0	96.2%	2.7%
Acrylonitrile	< 1 0	45 0	50.0	90 08	47 5	50.0	95 08	5 4 %
1.1-Dichloropropene	< 1.0	50 7	50.0	101%	52 8	50.0	106%	4 1%
Dibromomethane	< 1.0	51.9	50.0	104%	53.4	50.0	107%	2.8%



ORGANICS ANALYSIS DATA SHEET

Volatiles by Purge & Trap GC/MS-Method 8260B Page 2 of 2

Sample ID: LDW-SP-54-C-U MS/MSD

Lab Sample ID: GU45C LIMS ID: 04-10232 Matrix: Water Date Analyzed MS: 07/10/04 18:18 MSD: 07/10/04 18:47 QC Report No: GU45-Windward Environmental Project: LDW Seep Sampling

Purge Volume MS: 5.0 mL MSD: 5.0 mL

Analyte	Sample	MS	Spike Added-MS	MS Recovery	MSD	Spike Added-MSD	MSD Recovery	RPD	
1,1,1,2-Tetrachloroethane	< 1.0	48.5	50.0	97.0%	50.0	50.0	100%	3.0%	
1,2-Dibromo-3-chloropropane	< 5.0	53.1	50.0	106%	58.0	50.0	116%	8.8%	
1,2,3-Trichloropropane	< 3.0	56.3	50.0	113%	59.1	50.0	118%	4.9%	
trans-1,4-Dichloro-2-butene	< 5.0	43.0	50.0	86.0%	45.6	50.0	91.2%	5.9%	
1,3,5-Trimethylbenzene	< 1.0	33.9	50.0	67.8%	39.6	50.0	79.2%	15.5%	
1,2,4-Trimethylbenzene	< 1.0	33.9	50.0	67.8%	39.2	50.0	78.4%	14.5%	
Hexachlorobutadiene	< 5.0	24.8	50.0	49.6%	36.1	50.0	72.2%	37.1%	
Ethylene Dibromide	< 1.0	49.1	50.0	98.2%	50.0	50.0	100%	1.8%	
Bromochloromethane	< 1.0	51.0	50.0	102%	52.4	50.0	105%	2.7%	
2,2-Dichloropropane	< 1.0	57.6	50.0	115%	58.7	50.0	1178	1.9%	
1,3-Dichloropropane	< 1.0	53.1	50.0	106%	53.5	50.0	107%	0.8%	
Isopropylbenzene	< 1.0	52.2	50.0	104%	57.8	50.0	116%	10.2%	
n-Propylbenzene	< 1.0	33.0	50.0	66.0%	40.5	50.0	81.0%	20.4%	
Bromobenzene	< 1.0	51.9	50.0	104%	53.8	50.0	108%	3.6%	
2-Chlorotoluene	< 1.0	48.3	50.0	96.6%	52.3	50.0	105%	8.0%	
4-Chlorotoluene	< 1.0	52.5	50.0	105%	54.8	50.0	110%	4.3%	
tert-Butylbenzene	< 1.0	43.6	50.0	87.2%	51.6	50.0	103%	16.8%	
sec-Butylbenzene	< 1.0	43.2	50.0	86.4%	52.1	50.0	104%	18.7%	
4-Isopropyltoluene	< 1.0	29.6	50.0	59.2%	37.1	50.0	74.28	22.5%	
n-Butylbenzene	< 1.0	39.6	50.0	79.2%	49.2	50.0	98.4%	21.6%	
1,2,4-Trichlorobenzene	< 5.0	35.9	50.0	71.8%	43.2	50.0	86.4%	18.5%	
Naphthalene	< 5.0	43.8	50.0	87.6%	51.7	50.0	103%	16.5%	
1,2,3-Trichlorobenzene	< 5.0	41.0	50.0	82.0%	50.2	50.0	100%	20.2%	

Results reported in $\mu g/L$

NA-No recovery due to high concentration of analyte in original sample, or calculated negative recovery, or undetected spike. RPD calculated using sample concentrations per SW846.



ORGANICS ANALYSIS DATA SHEET Volatiles by Purge & Trap GC/MS-Method 8260B Page 1 of 2

Sample ID: LCS-071004 LAB CONTROL

Lab Sample ID: LCS-071004 LIMS ID: 04-10232 Matrix: Water Data Release Authorized Reported: 07/15/04

Instrument/Analyst: FINN3/LJR

Date Analyzed: 07/10/04 13:59

QC Report No: GU45-Windward Environmental Project: LDW Seep Sampling

Date Sampled: NA Date Received: NA

Sample Amount: 5.00 mL Purge Volume: 5.0 mL

Analyte	Lab Control	Spike	Perovers
		Added	Recovery
Chloromethane	45.9	50.0	91.8%
Bromomethane	49.0	50.0	98.0%
Vinyl Chloride	46.4	50.0	92.8%
Chloroethane	46.8	50.0	93.6%
Methylene Chloride	45.5	50.0	91.0%
Acetone	202	250	80.8%
Carbon Disulfide	54.0	50.0	108%
1,1-Dichloroethene	47.5	50.0	95.0%
1,1-Dichloroethane	47.5	50.0	95.0%
trans-1,2-Dichloroethene	46.0	50.0	92.0%
cis-1,2-Dichloroethene	50.3	50.0	101%
Chloroform	49.3	50.0	98.6%
1,2-Dichloroethane	47.5	50.0	95.0%
2-Butanone	215	250	86.0%
1,1,1-Trichloroethane	52.1	50.0	104%
Carbon Tetrachloride	50.8	50.0	1028
Vinyl Acetate	51.6	50.0	103%
Bromodichloromethane	50.6	50.0	101%
1,2-Dichloropropane	50.7	50.0	101%
cis-1,3-Dichloropropene	44.6	50.0	89.2%
Trichloroethene	49.4	50.0	98.8%
Dibromochloromethane	42.4	50.0	84.8%
1,1,2-Trichloroethane	49.1	50.0	98.2%
Benzene	52.9	50.0	106%
trans-1,3-Dichloropropene	43.0	50.0	86.0%
2-Chloroethylvinylether	44.9	50.0	89.8%
Bromoform	37.8	50.0	75.6%
4-Methyl-2-Pentanone (MIBK)	243	250	97.2%
2-Hexanone	168	250	67.2%
Tetrachloroethene	49.8	50.0	99.6%
1,1,2,2-Tetrachloroethane	46.5	50.0	93.0%
Toluene	52.8	50.0	106%
Chlorobenzene	50.2	50.0	100%
Ethylbenzene	51.3	50.0	103%
Styrene	44.6	50.0	89.2%
Trichlorofluoromethane	47.1	50.0	94.28
1,1,2-Trichloro-1,2,2-trifluoroethane	52.6	50.0	105%



ORGANICS ANALYSIS DATA SHEET Volatiles by Purge & Trap GC/MS-Method 8260B Page 2 of 2

Sample ID: LCS-071004 LAB CONTROL

Lab Sample ID: LCS-071004 LIMS ID: 04-10232 Matrix: Water Date Analyzed: 07/10/04 13:59 QC Report No: GU45-Windward Environmental Project: LDW Seep Sampling

Purge Volume: 5.0 mL

	Lab	Spike	
Analyte	Control	Added	Recovery
m,p-Xylene	106	100	106%
o-Xylene	47.2	50.0	94.4%
1,2-Dichlorobenzene	50.5	50.0	1018
1,3-Dichlorobenzene	51.3	50.0	1038
1,4-Dichlorobenzene	49.1	50.0	98.2%
Acrolein	225	250	90.0%
Methyl Iodide	50.9	50.0	102%
Bromoethane	51.4	50.0	103%
Acrylonitrile	42.5	50.0	85.0%
1,1-Dichloropropene	50.7	50.0	101%
Dibromomethane	47.6	50.0	95.2%
1,1,1,2-Tetrachloroethane	47.7	50.0	95.4%
1,2-Dibromo-3-chloropropane	34.2	50.0	68.4%
1,2,3-Trichloropropane	45.5	50.0	91.0%
trans-1,4-Dichloro-2-butene	51.3	50.0	103%
1,3,5-Trimethylbenzene	40.9	50.0	81.8%
1,2,4-Trimethylbenzene	40.7	50.0	81.4%
Hexachlorobutadiene	48.3	50.0	96.6%
Ethylene Dibromide	43.5	50.0	87.0%
Bromochloromethane	49.3	50.0	98.6%
2,2-Dichloropropane	52.5	50.0	105%
1,3-Dichloropropane	48.1	50.0	96.2%
Isopropylbenzene	57.3	50.0	115%
n-Propylbenzene	42.6	50.0	85.2%
Bromobenzene	51.3	50.0	103%
2-Chlorotoluene	53.9	50.0	108%
4-Chlorotoluene	52.7	50.0	105%
tert-Butylbenzene	55.2	50.0	110%
sec-Butylbenzene	56.4	50.0	113%
4-Isopropyltoluene	41.7	50.0	83.4%
n-Butylbenzene	56.1	50.0	112%
1,2,4-Trichlorobenzene	43.5	50.0	87.0%
Naphthalene	36.5	50.0	73.0%
1,2,3-Trichlorobenzene	49.7	50.0	99.4%

Results reported in μ g/L

LCS spike recovery is evaluated using only the nine regulated compounds noted in the ARI LQAP. The other LCS spike compound recoveries are advisory and used for analytical troubleshooting should any of the nine regulated compounds be out of control.

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	102%
d8-Toluene	115%
Bromofluorobenzene	109%
d4-1,2-Dichlorobenzene	108%

4A VOLATILE METHOD BLANK SUMMARY

000034

MB 0710

BLANK NO.

Lab Name: ANALYTICAL RESOURCES, INCClient: WINDWARD ENVIRONMENTALLab Code: GU45Project: LDW-SEEP SAMPLINGSDG No.: GU45Lab File ID: MB0710Lab Sample ID: MB 0710Date Analyzed: 07/10/04Time Analyzed: 1500GC Column: RTX502.2ID: 0.18 (mm)Heated Purge: (Y/N) NInstrument ID: FINN3Year State State

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	CLIENT	LAB	LAB	TIME
	SAMPLE NO.	SAMPLE ID	FILE ID	ANALYZED
	=======================================			===========
01	LCS 0710	LCS 0710	LCS0710	1359
02	LCSD 0710	LCSD 0710	LCD0710	1431
03	LDW-SP-71-C-	GU26B	GU26B	1528
04	LDW-SP-76-C-	GU26D	GU26D	1556
05	LDW-SP-69-C-	GU26F	GU26F	1625
06	TRIP BLANK	GU26G	GU26G	1653
07	LDW-SP-48-C-	GU45A	GU45A	1721
80	LDW-SP-54-C-	GU45C	GU45C	1750
09	LDW-SP-54-C-	GU45CMS	GU45CMS	1818
10	LDW-SP-54-C-	GU45CMSD	GU45CMD	1847
11	LDW-SP-82-C-	GU45E	GU45E	1915
12	LDW-SP-82-C-	GU45G	GU45G	1943
13	TRIP BLANK	GU45I	GU45T	2012
14			•••-•	
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COMMENTS:

page 1 of 1

FORM IV VOA



ORGANICS ANALYSIS DATA SHEET Volatiles by Purge & Trap GC/MS-Method 8260B Page 1 of 2

Sample ID: MB-071004 METHOD BLANK

Lab Sample ID: MB-071004 LIMS ID: 04-10232 Matrix: Water Data Release Authorized: Reported: 07/15/04 QC Report No: GU45-Windward Environmental Project: LDW Seep Sampling

Date Sampled: NA Date Received: NA

Sample Amount: 5.00 mL Purge Volume: 5.0 mL

Instrument/Analyst: FINN3/LJR Date Analyzed: 07/10/04 15:00

CAS Number	Analyte	RL	Result
74-87-3	Chloromethane	1.0	< 1.0 U
74-83-9	Bromomethane	1.0	< 1.0 U
75-01-4	Vinyl Chloride	1.0	< 1.0 U
75-00-3	Chloroethane	1.0	< 1.0 U
75-09-2	Methylene Chloride	2.0	< 2.0 U
67-64-1	Acetone	5.0	< 5.0 U
75-15-0	Carbon Disulfide	1.0	< 1.0 U
75-35-4	1,1-Dichloroethene	1.0	< 1.0 U
75-34-3	1,1-Dichloroethane	1.0	< 1.0 U
156-60-5	trans-1,2-Dichloroethene	1.0	< 1.0 U
156-59-2	cis-1,2-Dichloroethene	1.0	< 1.0 U
67-66-3	Chloroform	1.0	< 1.0 U
107-06-2	1,2-Dichloroethane	1.0	< 1.0 U
78-93-3	2-Butanone	5.0	< 5.0 U
71-55-6	1,1,1-Trichloroethane	1.0	< 1.0 U
56-23-5	Carbon Tetrachloride	1.0	< 1.0 U
108-05-4	Vinyl Acetate	5.0	< 5.0 U
75-27-4	Bromodichloromethane	1.0	< 1.0 U
78-87-5	1,2-Dichloropropane	1.0	< 1.0 U
10061-01-5	cis-1,3-Dichloropropene	1.0	< 1.0 U
79-01-6	Trichloroethene	1.0	< 1.0 U
124-48-1	Dibromochloromethane	1.0	< 1.0 U
79-00-5	1,1,2-Trichloroethane	1.0	< 1.0 U
71-43-2	Benzene	1.0	< 1.0 U
10061-02-6	trans-1,3-Dichloropropene	1.0	< 1.0 U -
110-75-8	2-Chloroethylvinylether	5.0	< 5.0 Ŭ
75-25-2	Bromoform	1.0	< 1.0 U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0 U
591-78-6	2-Hexanone	5.0	< 5.0 U
127-18-4	Tetrachloroethene	1.0	< 1.0 U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	< 1.0 U
108-88-3	Toluene	1.0	< 1.0 U
108-90-7	Chlorobenzene	1.0	< 1.0 U
100-41-4	Ethylbenzene	1.0	< 1.0 U
100-42-5	Styrene	1.0	< 1.0 U
75-69-4	Trichlorofluoromethane	1.0	< 1.0 U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroe	2.0	< 2.0 U
1330-20-7	m,p-Xvlene	1.0	< 1.0 U
95-47-6	o-Xylene	1.0	< 1.0 U
95-50-1	1,2-Dichlorobenzene	1.0	< 1.0 U
541-73-1	1,3-Dichlorobenzene	1.0	< 1.0 U
106-46-7	1,4-Dichlorobenzene	1.0	< 1.0 U
107-02-8	Acrolein	50	< 50 Ŭ
74-88-4	Methyl Iodide	1.0	< 1.0 U
74-96-4	Bromoethane	2.0	< 2.0 U
107-13-1	Acrylonitrile	1.0	< 1.0 U
563-58-6	1,1-Dichloropropene	1.0	< 1.0 U
74-95-3	Dibromomethane	1.0	< 1.0 U
630-20-6	1,1,1,2-Tetrachloroethane	1.0	< 1.0 U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	< 5.0 00003



ORGANICS ANALYSIS DATA SHEET Volatiles by Purge & Trap GC/MS-Method 8260B Sample ID: MB-071004 Page 2 of 2

METHOD BLANK

Lab Sample ID: MB-071004 LIMS ID: 04-10232 Matrix: Water Date Analyzed: 07/10/04 15:00 QC Report No: GU45-Windward Environmental Project: LDW Seep Sampling

CAS Number	Analyte	RL	Result
96-18-4	1,2,3-Trichloropropane	3.0	< 3.0 U
110-57-6	trans-1,4-Dichloro-2-butene	5.0	< 5.0 U
108-67-8	1,3,5-Trimethylbenzene	1.0	< 1.0 U
95-63-6	1,2,4-Trimethylbenzene	1.0	< 1.0 U
87-68-3	Hexachlorobutadiene	5.0	< 5.0 Ŭ
106-93-4	Ethylene Dibromide	1.0	< 1.0 U
74-97-5	Bromochloromethane	1.0	< 1.0 U
594-20-7	2,2-Dichloropropane	1.0	< 1.0 U
142-28-9	1,3-Dichloropropane	1.0	< 1.0 U
98-82-8	Isopropylbenzene	1.0	< 1.0 U
103-65-1	n-Propylbenzene	1.0	< 1.0 U
108-86-1	Bromobenzene	1.0	< 1.0 U
95-49-8	2-Chlorotoluene	1.0	< 1.0 U
106-43-4	4-Chlorotoluene	1.0	< 1.0 U
98-06-6	tert-Butylbenzene	1.0	< 1.0 U
135-98-8	sec-Butylbenzene	1.0	< 1.0 U
99-87-6	4-Isopropyltoluene	1.0	< 1.0 U
104-51-8	n-Butylbenzene	1.0	< 1.0 U
120-82-1	1,2,4-Trichlorobenzene	5.0	< 5.0 U
91-20-3	Naphthalene	5.0	< 5.0 U
87-61-6	1,2,3-Trichlorobenzene	5.0	< 5.0 Ŭ

Reported in $\mu g/L$ (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	109%
d8-Toluene	114%
Bromofluorobenzene	107%
d4-1,2-Dichlorobenzene	1128

FORM I


WATER VOLATILE SYSTEM MONITORING COMPOUND SUMMARY

Matrix: Water 5 mL

QC Report No: GU59

Lab ID	Client ID	DCE	TOL	BFB	DCB	TOT OUT
GU59E	LDW-SP-12-C-U	119%	1228	1128	117%	0
GU59F	LDW-SP-20-C-U	120%	123%	113%	116%	0
071404MB	Method Blank	111%	119%	111%	1138	0
GU59LCS	Lab Cntrl Sample	110%	122%	1218	114%	0
GU59LCSD	Lab Cntrl Sample Dp	109%	121%	120%	114%	0
GU59G	LDW-SP-41-C-U	120%	1228	114%	116%	0
GU59G-MS	LDW-SP-41-C-U	114%	1238	122%	113%	0
GU59G-MSD	LDW-SP-41-C-U	109%	121%	120%	114%	0
GU59J	LDW-SP-39-C-U	110%	119%	112%	115%	0
GU59K	LDW-SP-80-C-U	115%	121%	113%	115%	0
GU59L	TRIP BLANK	118%	119%	113%	114%	0

SW8260B	LCS/MB LIMITS	OC LIMITS
(DCE) = 1,2-Dichloroethane-d4	(74-133)	(74-142)
(TOL) = Toluene-d8	(77 - 131)	(84 - 129)
(BFB) = Bromofluorobenzene	(79-127)	(77 - 122)
(DCB) = 1,2-Dichlorobenzene-d4	(84-132)	(85-135)

Column to be used to flag recovery values

- * Values outside of required QC limits
- D System Monitoring Compound diluted out



WATER VOLATILE SYSTEM MONITORING COMPOUND SUMMARY

Matrix: Water 5 mL

QC Report No: GU76

Lab ID	Client ID	DCE	TOL	BFB	DCB	TOT OUT
071404MB	Method Blank	111%	119%	111%	113%	0
GU76LCS	Lab Cntrl Sample	110%	122%	121%	114%	0
GU76LCSD	Lab Cntrl Sample Dp	1098	121%	120%	114%	0
GU76B	LDW-SP-61-C-U	116%	121%	112%	116%	0

SW8260B	LCS/MB LIMITS	QC LIMITS
(DCE) = 1,2-Dichloroethane-d4	(74-133)	(74-142)
(TOL) = Toluene-d8	(77-131)	(84-129)
(BFB) = Bromofluorobenzene	(79-127)	(77-122)
(DCB) = 1,2-Dichlorobenzene-d4	(84-132)	(85-135)

Column to be used to flag recovery values

- * Values outside of required QC limits
- D System Monitoring Compound diluted out



9

WATER VOLATILE SYSTEM MONITORING COMPOUND SUMMARY

Matrix: Water 5 mL

QC Report No: GU83

Client ID	DCE	TOL	BFB	DCB	TOT OUT
Method Blank	111%	119%	111%	113%	0
Lab Cntrl Sample	110%	122%	121%	114%	0
Lab Cntrl Sample Dp	109%	121%	120%	114%	0
LDW-SP-75-C-U	118%	121%	1148	117%	0
LDW-SP-64-C-U	116%	122%	113%	116%	0
	Client ID Method Blank Lab Cntrl Sample Lab Cntrl Sample Dp LDW-SP-75-C-U LDW-SP-64-C-U	Client ID DCE Method Blank 111% Lab Cntrl Sample 110% Lab Cntrl Sample Dp 109% LDW-SP-75-C-U 118% LDW-SP-64-C-U 116%	Client ID DCE TOL Method Blank 111% 119% Lab Cntrl Sample 110% 122% Lab Cntrl Sample Dp 109% 121% LDW-SP-75-C-U 118% 121% LDW-SP-64-C-U 116% 122%	Client IDDCETOLBFBMethod Blank111%119%111%Lab Cntrl Sample110%122%121%Lab Cntrl Sample Dp109%121%120%LDW-SP-75-C-U118%121%114%LDW-SP-64-C-U116%122%113%	Client IDDCETOLBFBDCBMethod Blank111%119%111%113%Lab Cntrl Sample110%122%121%114%Lab Cntrl Sample Dp109%121%120%114%LDW-SP-75-C-U118%121%114%117%LDW-SP-64-C-U116%122%113%116%

SW8260B	LCS/MB LIMITS	QC LIMITS
(DCE) = 1,2-Dichloroethane-d4	(74-133)	(74 - 142)
(TOL) = Toluene-d8	(77-131)	(84-129)
(BFB) = Bromofluorobenzene	(79-127)	(77-122)
(DCB) = 1,2-Dichlorobenzene-d4	(84-132)	(85-135)

- # Column to be used to flag recovery values
- * Values outside of required QC limits
- D System Monitoring Compound diluted out



Lab Sample ID: GU59E LIMS ID: 04-10341 Matrix: Water Data Release Authorized: Reported: 07/19/04 SAMPLE

Sample ID: LDW-SP-12-C-U

QC Report No: GU59-Windward Environmental Project: LDW-SEEP SAMPLING

Date Sampled: 07/01/04 Date Received: 07/01/04

Instrument/Analyst: FINN3/LJR Date Analyzed: 07/14/04 15:35

Sample Amount: 5.00 mL Purge Volume: 5.0 mL

CAS Number	Analyte	RL	Result
74-87-3	Chloromethane	1.0	< 1.0 U
74-83-9	Bromomethane	1.0	< 1.0 U
75-01-4	Vinyl Chloride	1.0	< 1.0 U
75-00-3	Chloroethane	1.0	< 1.0 U
75-09-2	Methylene Chloride	2.0	< 2.0 U
67-64-1	Acetone	5.0	< 5.0 U
75-15-0	Carbon Disulfide	1.0	< 1.0 U
75-35-4	1,1-Dichloroethene	1.0	< 1.0 U
75-34-3	1,1-Dichloroethane	1.0	< 1.0 U
156-60-5	trans-1,2-Dichloroethene	1.0	< 1.0 U
156-59-2	cis-1,2-Dichloroethene	1.0	< 1.0 U
67-66-3	Chloroform	1.0	< 1.0 U
107-06-2	1,2-Dichloroethane	1.0	< 1.0 U
78-93-3	2-Butanone	5.0	< 5.0 U
71-55-6	1,1,1-Trichloroethane	1.0	< 1.0 U
56-23-5	Carbon Tetrachloride	1.0	< 1.0 U
108-05-4	Vinyl Acetate	5.0	< 5.0 U
75-27-4	Bromodichloromethane	1.0	< 1.0 U
78-87-5	1,2-Dichloropropane	1.0	< 1 0 II
10061-01-5	cis-1.3-Dichloropropene	1 0	
79-01-6	Trichloroethene	1.0	< 1 0 U
124-48-1	Dibromochloromethane	1.0	
79-00-5	1.1.2-Trichloroethane	1 0	
71-43-2	Benzene	1 0	
10061-02-6	trans-1.3-Dichloropropene	1 0	
110-75-8	2-Chloroethylyinylether	5.0	
75-25-2	Bromoform	1 0	
108-10-1	4-Methyl-2-Pentanone (MTBK)	5.0	
591-78-6	2-Hexanone	5.0	
127-18-4	Tetrachloroethene	1 0	
79-34-5	1 1 2 2-Tetrachloroethane	1.0	
08-88-3	Toluene	1.0	
08-90-7	Chlorobenzene	1.0	
00-41-4	Fthylbenzene	1.0	< 1.0 U
00-42-5	Styrene	1.0	
75-69-4	Trichlorofluoromethano	1.0	< 1.0 U
26-13-1	1 1 2-Trichloro-1 2 2 trifluoroo	2.0	< 1.0 U
330-20-7		2.0	< 2.0 0
5-47-6	m, p-Aytene	1.0	< 1.0 0
5-50-1	1.2-Dighlorohongono	1.0	< 1.0 0
$3^{-} 3^{-} 3^{-} 1$	1,2-Dichlorobenzene	1.0	< 1.0 0
06.46.7	1, 3-Dichlorobenzene	1.0	< 1.0 U
00-40-7	l,4-Dichiorobenzene	1.0	< 1.0 U
107-02-0	ACIOIEIN Mothal Indida	50	< 50 0
4-00-4	Promosthene	1.0	< 1.0 U
4-30-4		2.0	< 2.0 U
	ACTYTONICTILE	1.0	< 1.0 U
63-58-6	1,1-Dichioropropene	1.0	< 1.0 U
4-95-3	Dipromomethane	1.0	< 1.0 U
30-20-6	1,1,1,2-Tetrachloroethane	1.0	< 1.0 U
6-12-8	1,2-Dibromo-3-chloropropane	5.0	< 5.0 U ₀₀₀



Sample ID: LDW-SP-12-C-U SAMPLE

Lab Sample ID: GU59E LIMS ID: 04-10341 Matrix: Water Date Analyzed: 07/14/04 15:35 QC Report No: GU59-Windward Environmental Project: LDW-SEEP SAMPLING

CAS Number	Analyte	RL	Result
96-18-4	1,2,3-Trichloropropane	3.0	< 3.0 U
110-57-6	trans-1,4-Dichloro-2-butene	5.0	< 5.0 Ư
108-67-8	1,3,5-Trimethylbenzene	1.0	< 1.0 U
95-63-6	1,2,4-Trimethylbenzene	1.0	< 1.0 U
87-68-3	Hexachlorobutadiene	5.0	< 5.0 U
106-93-4	Ethylene Dibromide	1.0	< 1.0 U
7 4-97-5	Bromochloromethane	1.0	< 1.0 U
594-20-7	2,2-Dichloropropane	1.0	< 1.0 U
142-28-9	1,3-Dichloropropane	1.0	< 1.0 U
98-82-8	Isopropylbenzene	1.0	< 1.0 Ŭ
103-65-1	n-Propylbenzene	1.0	< 1.0 U
108-86-1	Bromobenzene	1.0	< 1.0 U
95-49-8	2-Chlorotoluene	1.0	< 1.0 U
106-43-4	4-Chlorotoluene	1.0	< 1.0 U
98-06-6	tert-Butylbenzene	1.0	< 1.0 U
135-98-8	sec-Butylbenzene	1.0	< 1.0 U
99-87-6	4-Isopropyltoluene	1.0	< 1.0 U
104-51-8	n-Butylbenzene	1.0	< 1.0 U
120-82-1	1,2,4-Trichlorobenzene	5.0	< 5.0 Ŭ
91-20-3	Naphthalene	5.0	< 5.0 Ŭ
87-61-6	1,2,3-Trichlorobenzene	5.0	< 5.0 U

Reported in $\mu g/L$ (ppb)

d4-1,2-Dichloroethane	119%
d8-Toluene	122%
Bromofluorobenzene	112%
d4-1,2-Dichlorobenzene	1178



Sample ID: LDW-SP-20-C-U SAMPLE

Lab Sample ID: GU59F LIMS ID: 04-10342 Matrix: Water Data Release Authorized: Reported: 07/19/04

Instrument/Analyst: FINN3/LJR Date Analyzed: 07/14/04 16:03 QC Report No: GU59-Windward Environmental Project: LDW-SEEP SAMPLING

Date Sampled: 07/01/04 Date Received: 07/01/04

Sample Amount: 5.00 mL Purge Volume: 5.0 mL

CAS Number	Analyte	RL	Result
74-87-3	Chloromethane	1.0	< 1.0 U
74-83-9	Bromomethane	1.0	< 1.0 U
75-01-4	Vinyl Chloride	1.0	< 1.0 U
75-00-3	Chloroethane	1.0	< 1.0 U
75-09-2	Methylene Chloride	2.0	< 2.0 U
67-64-1	Acetone	5.0	< 5.0 U
75-15-0	Carbon Disulfide	1.0	< 1.0 U
75-35-4	1,1-Dichloroethene	1.0	< 1.0 U
75-34-3	1,1-Dichloroethane	1.0	< 1.0 U
156-60-5	trans-1,2-Dichloroethene	1.0	< 1.0 U
156-59-2	cis-1,2-Dichloroethene	1.0	< 1.0 U
67-66-3	Chloroform	1.0	< 1.0 U
107-06-2	1,2-Dichloroethane	1.0	< 1.0 U
78-93-3	2-Butanone	5.0	< 5.0 U
71-55-6	1,1,1-Trichloroethane	1.0	< 1.0 U
56-23-5	Carbon Tetrachloride	1.0	< 1.0 U
108-05-4	Vinyl Acetate	5.0	< 5.0 U
75-27-4	Bromodichloromethane	1.0	< 1.0 U
78-87-5	1,2-Dichloropropane	1.0	< 1.0 U
10061-01-5	cis-1,3-Dichloropropene	1.0	< 1.0 U
79-01-6	Trichloroethene	1.0	< 1.0 U
124-48-1	Dibromochloromethane	1.0	< 1.0 U
79-00-5	1,1,2-Trichloroethane	1.0	< 1.0 U
71-43-2	Benzene	1.0	< 1.0 U
10061-02-6	trans-1,3-Dichloropropene	1.0	< 1.0 U
110-75-8	2-Chloroethylvinylether	5.0	< 5.0 U
75-25-2	Bromoform	1.0	< 1.0 U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0 U
591-78-6	2-Hexanone	5.0	< 5.0 II
127-18-4	Tetrachloroethene	1.0	< 1 0 U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	
108-88-3	Toluene	1.0	< 1 0 U
108-90-7	Chlorobenzene	1.0	< 1 0 U
100-41-4	Ethylbenzene	1.0	< 1.0 U
100-42-5	Styrene	1 0	
75-69-4	Trichlorofluoromethane	1.0	< 1.0 U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroe	2.0	< 2 0 U
1330-20-7	m,p-Xvlene	1 0	
95-47-6	o-Xvlene	1 0	
95-50-1	1,2-Dichlorobenzene	1 0	
541-73-1	1,3-Dichlorobenzene	1 0	
106-46-7	1,4-Dichlorobenzene	1 0	
107-02-8	Acrolein	50	< 1.0 U
74-88-4	Methyl Todide	1 0	
74-96-4	Bromoethane	2 0	
107-13-1	Acrylonitrile	1 0	
563-58-6	1.1-Dichloropropene	1 0	
74-95-3	Dibromomethane	1 0	
630-20-6	1.1.1.2-Tetrachloroethane	1.0	
96-12-8	1,2-Dibromo-3-chloropropane	5.0	< 5.0 U

000042



Sample ID: LDW-SP-20-C-U SAMPLE

Lab Sample ID: GU59F LIMS ID: 04-10342 Matrix: Water Date Analyzed: 07/14/04 16:03 QC Report No: GU59-Windward Environmental Project: LDW-SEEP SAMPLING

CAS Number	Analyte	RL	Result
96-18-4	1,2,3-Trichloropropane	3.0	< 3.0 U
110-57-6	trans-1,4-Dichloro-2-butene	5.0	< 5.0 U
108-67-8	1,3,5-Trimethylbenzene	1.0	< 1.0 U
95-63-6	1,2,4-Trimethylbenzene	1.0	< 1.0 U
87-68-3	Hexachlorobutadiene	5.0	< 5.0 U
106-93-4	Ethylene Dibromide	1.0	< 1.0 U
74-97-5	Bromochloromethane	1.0	< 1.0 U
594-20-7	2,2-Dichloropropane	1.0	< 1.0 U
142-28-9	1,3-Dichloropropane	1.0	< 1.0 U
98-82-8	Isopropylbenzene	1.0	< 1.0 U
103-65-1	n-Propylbenzene	1.0	< 1.0 U
108-86-1	Bromobenzene	1.0	< 1.0 U
95-49-8	2-Chlorotoluene	1.0	< 1.0 U
106-43-4	4-Chlorotoluene	1.0	< 1.0 U
98-06-6	tert-Butylbenzene	1.0	< 1.0 U
135-98-8	sec-Butylbenzene	1.0	< 1.0 U
99-87-6	4-Isopropyltoluene	1.0	< 1.0 U
104-51-8	n-Butylbenzene	1.0	< 1.0 U
120-82-1	1,2,4-Trichlorobenzene	5.0	< 5.0 U
91-20-3	Naphthalene	5.0	< 5.0 U
87-61-6	1,2,3-Trichlorobenzene	5.0	< 5.0 U

Reported in $\mu g/L$ (ppb)

120%
123%
113%
116%



Lab Sample ID: GU59G LIMS ID: 04-10343 Matrix: Water Data Release Authorized: Reported: 07/19/04

QC Report No: GU59-Windward Environmental

SAMPLE

Date Sampled: 07/01/04

Instrument/Analyst: FINN3/LJR Date Analyzed: 07/14/04 16:32

Project: LDW-SEEP SAMPLING

Date Received: 07/01/04

Sample Amount: 5.00 mL Purge Volume: 5.0 mL

CAS Number	Analyte	RL	Result
74-87-3	Chloromethane	1.0	< 1.0 U
74-83-9	Bromomethane	1.0	< 1.0 U
75-01-4	Vinyl Chloride	1.0	< 1.0 Ŭ
75-00-3	Chloroethane	1.0	< 1.0 U
75-09-2	Methylene Chloride	2.0	< 2.0 U
67-64-1	Acetone	5.0	< 5.0 U
75-15-0	Carbon Disulfide	1.0	< 1.0 U
75-35-4	1,1-Dichloroethene	1.0	< 1.0 U
75-34-3	1,1-Dichloroethane	1.0	< 1.0 U
156-60-5	trans-1,2-Dichloroethene	1.0	< 1.0 U
156-59-2	cis-1,2-Dichloroethene	1.0	< 1.0 U
67-66-3	Chloroform	1.0	< 1.0 U
107-06-2	1,2-Dichloroethane	1.0	< 1.0 U
78-93-3	2-Butanone	5.0	< 5.0 U
71-55-6	1,1,1-Trichloroethane	1.0	< 1.0 U
56-23-5	Carbon Tetrachloride	1.0	< 1.0 U
108-05-4	Vinyl Acetate	5.0	< 5.0 II
75-27-4	Bromodichloromethane	1.0	
78-87-5	1,2-Dichloropropane	1.0	
L0061-01-5	cis-1,3-Dichloropropene	1 0	
79-01-6	Trichloroethene	1.0	
L24-48-1	Dibromochloromethane	1 0	
79-00-5	1,1,2-Trichloroethane	1 0	
71-43-2	Benzene	1.0	
L0061-02-6	trans-1.3-Dichloropropene	1 0	
L10-75-8	2-Chloroethylvinylether	5.0	
75-25-2	Bromoform	1 0	
L08-10-1	4-Methyl-2-Pentanone (MTBK)	5.0	
591-78-6	2-Hexanone	5.0	
27-18-4	Tetrachloroethene	1 0	
9-34-5	1.1.2.2-Tetrachloroethane	1 0	
08-88-3	Toluene	1 0	
08-90-7	Chlorobenzene	1.0	
00-41-4	Ethylbenzene	1.0	< 1.0 0
00-42-5	Styrene	1.0	< 1.0 U
5-69-4	Trichlorofluoromethane	1.0	
6-13-1	1 1 2-Trichloro-1 2 2-trifluoroo	2.0	< 1.0 0
330-20-7	m p = Xy lene	2.0	< 2.0 0
5-47-6	0-Xvlene	1.0	< 1.0 0
5-50-1	1 2-Dichlorobenzene	1.0	< 1.0 U
41-73-1	1 3-Dichlorobenzene	1.0	< 1.0 0
06-46-7	1 4-Dichlorobengene	1.0	< 1.0 0
07-02-8	Agrolein	1.0	< 1.0 0
4-88-4	Methyl Iodide	50	< 50 0
4-96-4	Bromoethane	T.0	< 1.0 0
- 20-4 07-12-1		2.0	< 2.0 U
63-59-6	ACTYTOHIUTTIE	1.0	< 1.0 Ŭ
4-95-3	L, L-DICHIOTOPROPENE	1.0	< 1.0 U
		1.0	< 1.0 U
50-20-0 6-10-0	1, 1, 1, 2-Tetrachioroethane	1.0	< 1.0 U
0-12-8	1,2-Dibromo-3-chloropropane	5.0	< 5.0 U

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Sample ID: LDW-SP-41-C-U SAMPLE

Lab Sample ID: GU59G LIMS ID: 04-10343 Matrix: Water Date Analyzed: 07/14/04 16:32 QC Report No: GU59-Windward Environmental Project: LDW-SEEP SAMPLING

CAS Number	Analyte	RL	Result
96-18-4	1,2,3-Trichloropropane	3.0	< 3.0 U
110-57-6	trans-1,4-Dichloro-2-butene	5.0	< 5.0 U
108-67-8	1,3,5-Trimethylbenzene	1.0	< 1.0 U
95-63-6	1,2,4-Trimethylbenzene	1.0	< 1.0 U
87-68-3	Hexachlorobutadiene	5.0	< 5.0 Ŭ
106-93-4	Ethylene Dibromide	1.0	< 1.0 U
74-97-5	Bromochloromethane	1.0	< 1.0 U
594-20-7	2,2-Dichloropropane	1.0	< 1.0 U
142-28-9	1,3-Dichloropropane	1.0	< 1.0 U
98-82-8	Isopropylbenzene	1.0	< 1.0 U
103-65-1	n-Propylbenzene	1.0	< 1.0 U
108-86-1	Bromobenzene	1.0	< 1.0 U
95-49-8	2-Chlorotoluene	1.0	< 1.0 U
106-43-4	4-Chlorotoluene	1.0	< 1.0 U
98-06-6	tert-Butylbenzene	1.0	< 1.0 U
135-98-8	sec-Butylbenzene	1.0	< 1.0 U
99-87-6	4-Isopropyltoluene	1.0	< 1.0 U
104-51-8	n-Butylbenzene	1.0	< 1.0 U
120-82-1	1,2,4-Trichlorobenzene	5.0	< 5.0 U
91-20-3	Naphthalene	5.0	< 5.0 U
87-61-6	1,2,3-Trichlorobenzene	5.0	< 5.0 U

Reported in $\mu g/L$ (ppb)

d4-1,2-Dichloroethane	120%
d8-Toluene	122%
Bromofluorobenzene	114%
d4-1,2-Dichlorobenzene	116%



Lab Sample ID: GU59G LIMS ID: 04-10343 Matrix: Water Data Release Authorized: Reported: 07/19/04 MATRIX SPIKE QC Report No: GU59-Windward Environmental Project: LDW-SEEP SAMPLING

Date Sampled: 07/01/04 Date Received: 07/01/04

Instrument/Analyst: FINN3/LJR Date Analyzed: 07/14/04 17:00 Sample Amount: 5.00 mL

Purge Volume: 5.0 mL

		Rebuit
74-87-3 Chloromethane	1.0	
74-83-9 Bromomethane	1.0	
75-01-4 Vinyl Chloride	1.0	
75-00-3 Chloroethane	1.0	;
75-09-2 Methylene Chloride	2.0	
67-64-1 Acetone	5.0	
75-15-0 Carbon Disulfide	1.0	
75-35-4 1,1-Dichloroethene	1.0	
75-34-3 1,1-Dichloroethane	1.0	
156-60-5 trans-1,2-Dichloroethe	ene 1.0	
156-59-2 cis-1,2-Dichloroethene	1.0	
67-66-3 Chloroform	1.0	
107-06-2 1.2-Dichloroethane	1.0	
78-93-3 2-Butanone	5.0	
71-55-6 1.1.1-Trichloroethane	1.0	
56-23-5 Carbon Tetrachloride	1 0	
108-05-4 Vinvl Acetate	5 0	
75-27-4 Bromodichloromethane	1.0	
78-87-5 1.2-Dichloropropane	1.0	
10061-01-5 cis-1.3-Dichloropropen	e 10	
79-01-6 Trichloroethene	1.0	
124-48-1 Dibromochloromethane	1.0	
79-00-5 1 1 2-Trichloroethane	1.0	
71-43-2 Benzene	1.0	
10061-02-6 trans-1 3-Dichloroprop	ene 1.0	
110-75-8 2-Chloroethylyinylethe	r = 50	
75-25-2 Bromoform	1 5.0	
108-10-1 $4-Methyl-2-Deptypone ($		
591-78-6 $2-Heyprone$	MIDR/ 5.0	
127-18-4 Tetrachloroethere	1.0	
79-34-5 1 1 2 2-Tetrachlorooth	200 1.0	
108-88-3 Toluene		
108-90-7 Chlorobengono	1.0	
100-41 4 Ethylborgono	1.0	
100 42 E Churche	1.0	
75-69-4 Trighlorofluoromothono	1.0	
75-13-1 1-1-2 Trichloro 1-2-2		
1220 20 7 m m Yulana	crifiuoroe 2.0	
n p-xytene	1.0	
95-47-6 O-XyTene	1.0	
541 72 1 1,2-Dichlorobenzene	1.0	
541-73-1 1,3-Dichiorobenzene	1.0	
106-46-7 1,4-Dichlorobenzene	1.0	
107-02-8 Acrolein	50	
/4-88-4 Methyl Iodide	1.0	
/4-96-4 Bromoethane	2.0	
10/-13-1 Acrylonitrile	1.0	
563-58-6 1,1-Dichloropropene	1.0	
74-95-3 Dibromomethane	1.0	
630-20-6 1,1,1,2-Tetrachloroetha	ane 1.0	
96-12-8 1,2-Dibromo-3-chloropro	opane 5.0	00



ORGANICS ANALYSIS DATA SHEET Volatiles by Purge & Trap GC/MS-Method 8260B Sample ID: LDW-SP-41-C-U

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MATRIX SPIKE

Lab Sample ID: GU59G LIMS ID: 04-10343 Matrix: Water Date Analyzed: 07/14/04 17:00 QC Report No: GU59-Windward Environmental Project: LDW-SEEP SAMPLING

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CAS Number	Analyte	RL	Result
96-18-4	1,2,3-Trichloropropane	3.0	
110-57-6	trans-1,4-Dichloro-2-butene	5.0	
108-67-8	1,3,5-Trimethylbenzene	1.0	
95~63-6	1,2,4-Trimethylbenzene	1.0	
87-68-3	Hexachlorobutadiene	5.0	
106-93-4	Ethylene Dibromide	1.0	
74-97-5	Bromochloromethane	1.0	
594-20-7	2,2-Dichloropropane	1.0	
142-28-9	1,3-Dichloropropane	1.0	
98-82-8	Isopropylbenzene	1.0	
103-65-1	n-Propylbenzene	1.0	
108-86-1	Bromobenzene	1.0	
95-49-8	2-Chlorotoluene	1.0	
106-43-4	4-Chlorotoluene	1.0	
98-06-6	tert-Butylbenzene	1.0	
135-98-8	sec-Butylbenzene	1.0	
99-87-6	4-Isopropyltoluene	1.0	
104-51-8	n-Butylbenzene	1.0	
120-82-1	1,2,4-Trichlorobenzene	5.0	
91-20-3	Naphthalene	5.0	
87-61-6	1,2,3-Trichlorobenzene	5.0	

Reported in $\mu g/L$ (ppb)

114%
123%
122%
113%



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ORGANICS ANALYSIS DATA SHEET Volatiles by Purge & Trap GC/MS-Method 8260B Page 1 of 2

Sample ID: LDW-SP-41-C-U MATRIX SPIKE DUPLICATE

Lab Sample ID: GU59G LIMS ID: 04-10343 Matrix: Water Data Release Authorized: Reported: 07/19/04 QC Report No: GU59-Windward Environmental Project: LDW-SEEP SAMPLING

Date Sampled: 07/01/04 Date Received: 07/01/04

Sample Amount: 5.00 mL Purge Volume: 5.0 mL

Instrument/Analyst: FINN3/LJR Date Analyzed: 07/14/04 17:29

CAS Number	Analyte	RL	Result
74-87-3	Chloromethane	1.0	
74-83-9	Bromomethane	1.0	
75-01-4	Vinyl Chloride	1.0	
75-00-3	Chloroethane	1.0	
75-09-2	Methylene Chloride	2.0	
67-64-1	Acetone	5.0	
75-15-0	Carbon Disulfide	1.0	
75-35-4	1,1-Dichloroethene	1.0	
75-34-3	1,1-Dichloroethane	1.0	
156-60-5	trans-1,2-Dichloroethene	1.0	
156-59-2	cis-1,2-Dichloroethene	1.0	
67-66-3	Chloroform	1.0	
107-06-2	1,2-Dichloroethane	1.0	
78-93-3	2-Butanone	5.0	
71-55-6	1,1,1-Trichloroethane	1.0	
56-23-5	Carbon Tetrachloride	1.0	
108-05-4	Vinvl Acetate	5.0	
75-27-4	Bromodichloromethane	1.0	
78-87-5	1.2-Dichloropropane	1.0	
10061-01-5	cis-1.3-Dichloropropene	1.0	
79-01-6	Trichloroethene	1.0	
124-48-1	Dibromochloromethane	1.0	
79-00-5	1.1.2-Trichloroethane	1.0	
71-43-2	Benzene	1 0	
10061-02-6	trans-1.3-Dichloropropene	1.0	
110-75-8	2-Chloroethylyinylether	5.0	
75-25-2	Bromoform	1 0	
108-10-1	4-Methyl-2-Pentanone (MTBK)	5.0	
591-78-6	2-Hexanone	5.0	
127-18-4	Tetrachloroethene	1 0	
79-34-5	1 1 2 2-Tetrachloroethane	1.0	
108-88-3	Toluene	1.0	
108-90-7	Chlorobenzene	1.0	
100-41-4	Ethylbenzene	1.0	
100-42-5	Styrepe	1.0	
75-69-4	Trichlorofluoromethano	1.0	
76-12-1	1 1 2-Trichloro 1 2 2 trifluoroo	1.0	
		2.0	
	m, p-Ayrene	1.0	
95-47-0	1.2 Dichlorobongono	1.0	
50-50-1	1,2-Dichlorobenzene	1.0	
	1,3-Dichiorobenzene	1.0	
	l,4-Dichiorobenzene	1.0	
107-02-0	Acrorein Methul Tedide	50	
74 06 4	Methyi Ioalae	1.0	
/4-90-4 ·		2.0	
	Acrylonitrile	1.0	
05-58-6 74 05 0	1,1-Dichioropropene	1.0	
4-95-3	Dibromomethane	1.0	
30-20-6	1,1,1,2-Tetrachloroethane	1.0	
1 6-12 - 8	1,2-Dibromo-3-chloropropane	5.0	

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET Volatiles by Purge & Trap GC/MS-Method 8260B Sample ID: LDW-SP-41-C-U

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Sample ID: LDW-SP-41-C-U MATRIX SPIKE DUPLICATE

Lab Sample ID: GU59G LIMS ID: 04-10343 Matrix: Water Date Analyzed: 07/14/04 17:29

QC Report No: GU59-Windward Environmental Project: LDW-SEEP SAMPLING

CAS Number	Analyte	RL	Result
96-18-4	1,2,3-Trichloropropane	3.0	
110-57-6	trans-1,4-Dichloro-2-butene	5.0	
108-67-8	1,3,5-Trimethylbenzene	1.0	
95-63-6	1,2,4-Trimethylbenzene	1.0	
87-68-3	Hexachlorobutadiene	5.0	
106-93-4	Ethylene Dibromide	1.0	
74-97-5	Bromochloromethane	1.0	
594-20-7	2,2-Dichloropropane	1.0	
142-28-9	1,3-Dichloropropane	1.0	
98-82-8	Isopropylbenzene	1.0	
103-65-1	n-Propylbenzene	1.0	
108-86-1	Bromobenzene	1.0	
95-49-8	2-Chlorotoluene	1.0	
106-43-4	4-Chlorotoluene	1.0	
98-06-6	tert-Butylbenzene	1.0	
135-98-8	sec-Butylbenzene	1.0	
99-87-6	4-Isopropyltoluene	1.0	
104-51-8	n-Butylbenzene	1.0	
120-82-1	1,2,4-Trichlorobenzene	5.0	
91-20-3	Naphthalene	5.0	
37-61-6	1,2,3-Trichlorobenzene	5.0	

Reported in $\mu g/L$ (ppb)

d4-1,2-Dichloroethane	109%
d8-Toluene	121%
Bromofluorobenzene	120%
d4-1,2-Dichlorobenzene	114%



Sample ID: LDW-SP-39-C-U SAMPLE

Lab Sample ID: GU59J LIMS ID: 04-10346 Matrix: Water Data Release Authorized: Reported: 07/19/04

Instrument/Analyst: FINN3/LJR Date Analyzed: 07/14/04 17:57 QC Report No: GU59-Windward Environmental Project: LDW-SEEP SAMPLING

Date Sampled: 07/01/04 Date Received: 07/01/04

Sample Amount: 5.00 mL Purge Volume: 5.0 mL

74-87-3Chloromethane1.0< 1.0	CAS Number	Analyte	RL	Result
74-83-9Bromomethane1.0< 1.0U $75-01-4$ Vinyl Chloride1.0< 1.0	74-87-3	Chloromethane	1.0	< 1.0 U
$\begin{array}{llllllllllllllllllllllllllllllllllll$	74-83-9	Bromomethane	1.0	< 1.0 U
$\begin{array}{llllllllllllllllllllllllllllllllllll$	75-01-4	Vinyl Chloride	1.0	< 1.0 U
$\begin{array}{llllllllllllllllllllllllllllllllllll$	75-00-3	Chloroethane	1.0	< 1.0 U
$\begin{array}{llllllllllllllllllllllllllllllllllll$	75-09-2	Methylene Chloride	2.0	< 2.0 U
$\begin{array}{llllllllllllllllllllllllllllllllllll$	67-64-1	Acetone	5.0	< 5.0 U
	75-15-0	Carbon Disulfide	1.0	< 1.0 U
	75-35-4	1,1-Dichloroethene	1.0	< 1.0 U
$\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	75-34-3	1,1-Dichloroethane	1.0	< 1.0 U
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	156-60-5	trans-1,2-Dichloroethene	1.0	
i7-66-3Chloroform1.0< 1.0U $0.7-06-2$ 1,2-Dichloroethane1.0< 1.0	156-59-2	cis-1,2-Dichloroethene	1 0	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	57-66-3	Chloroform	1 0	
8-93-3 2 -Butanone 1.0 5.0 < 5.0 U $1-55-6$ $1, 1, 1$ -Trichloroethane 1.0 < 1.0 U $6-23-5$ Carbon Tetrachloride 1.0 < 1.0 U $08-05-4$ Vinyl Acetate 5.0 < 5.0 U $5-27-4$ Bromodichloromethane 1.0 < 1.0 U $9-61-6$ Trichloropropane 1.0 < 1.0 U $9-01-6$ Trichloroethane 1.0 < 1.0 U $24-48-1$ Dibromochloromethane 1.0 < 1.0 U $9-00-5$ $1, 1, 2$ -Trichloropropene 1.0 < 1.0 U $1-43-2$ Benzene 1.0 < 1.0 U $0061-02-6$ trans- $1, 3$ -Dichloropropene 1.0 < 1.0 U $10-75-8$ 2 -Chloroethylvinylether 5.0 < 5.0 U $5-25-2$ Bromoform 1.0 < 1.0 U $08-10-1$ 4 -Methyl- 2 -Pentanone 1.0 < 1.0 U $27-18-4$ Tetrachloroethene 1.0 < 1.0 U $9-34-5$ $1, 1, 2, 2$ -Tetrachloroethane 1.0 < 1.0 U $08-80-7$ Chlorobenzene 1.0 < 1.0 U $00-42-5$ Styrene 1.0 < 1.0 U $5-69-4$ Trichlorofluoromethane 1.0 < 1.0 U $0-42-5$ Styrene 1.0 < 1.0 U $5-76-1$ $1, 2$ -Dichlorobenzene 1.0 < 1.0 U $0-76-6$ </td <td>07-06-2</td> <td>1.2-Dichloroethane</td> <td>1 0</td> <td></td>	07-06-2	1.2-Dichloroethane	1 0	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	78-93-3	2-Butanone	5.0	< 5.0 U
6-23-5Carbon Tetrachloride1.0< 1.0U $08-05-4$ Vinyl Acetate 5.0 < 5.0 U $5-27-4$ Bromodichloromethane 1.0 < 1.0 U $0061-01-5$ cis $-1, 3$ -Dichloropropane 1.0 < 1.0 U $0061-01-5$ cis $-1, 3$ -Dichloropropane 1.0 < 1.0 U $9-01-6$ Trichloroethene 1.0 < 1.0 U $24-48-1$ Dibromochloromethane 1.0 < 1.0 U $9-00-5$ $1, 1, 2$ -Trichloroethane 1.0 < 1.0 U $0061-02-6$ trans $-1, 3$ -Dichloropropene 1.0 < 1.0 U $005-102-6$ trans $-1, 3$ -Dichloropropene 1.0 < 1.0 U $005-25-2$ Bromoform 1.0 < 1.0 U $0061-02-6$ trans $-1, 3$ -Dichloropropene 1.0 < 1.0 U $005-102-6$ trans $-1, 3$ -Dichloropropene 1.0 < 1.0 U $0061-02-6$ trans $-1, 3$ -Dichloropropene 1.0 < 1.0 U $00-75-8$ 2-Chloroethylvinylether 5.0 < 5.0 U $07-78-6$ 2-Hexanone 5.0 < 5.0 U $07-78-6$ 2-Hexanone 1.0 < 1.0 U $08-80-7$ Chlorobenzene 1.0 < 1.0 U $08-80-7$ Chlorobenzene 1.0 < 1.0 U $08-90-7$ Chlorobenzene 1.0 < 1.0 U $07-42-5$ Styrene 1.0 < 1.0 U $56-9-4$ <td< td=""><td>71-55-6</td><td>1.1.1-Trichloroethane</td><td>1 0</td><td></td></td<>	71-55-6	1.1.1-Trichloroethane	1 0	
08-05-4Vinyl Acetate5.0C5.0U5-27-4Bromodichloromethane1.0< 1.0	6-23-5	Carbon Tetrachloride	1.0	< 1.0 U
5-27-4Bromodichloromethane1.0< 1.0U8-87-51,2-Dichloropropane1.0< 1.0	08-05-4	Vinvl Acetate	1.0 5 0	
3 - 3 - 1Description of the entropy of	5-27-4	Bromodichloromethane	3.0	< 5.0 0
0.061-01-5 $1,2$ Dichloropropene 1.0 < 1.0 0 $9-01-6$ Trichloroethene 1.0 < 1.0 0 $24-48-1$ Dibromochloromethane 1.0 < 1.0 0 $9-00-5$ $1,1,2$ -Trichloroethane 1.0 < 1.0 0 $1-43-2$ Benzene 1.0 < 1.0 0 $0061-02-6$ trans- $1,3$ -Dichloropropene 1.0 < 1.0 0 $10-75-8$ 2 -Chloroethylvinylether 5.0 < 5.0 0 $5-25-2$ Bromoform 1.0 < 1.0 0 $08-10-1$ 4 -Methyl- 2 -Pentanone 5.0 < 5.0 0 $91-78-6$ 2 -Hexanone 5.0 < 5.0 0 $27-18-4$ Tetrachloroethene 1.0 < 1.0 0 $9-34-5$ $1,1,2,2$ -Tetrachloroethane 1.0 < 1.0 0 $08-88-3$ Toluene 1.0 < 1.0 0 $08-88-3$ Toluene 1.0 < 1.0 0 $00-41-4$ Ethylbenzene 1.0 < 1.0 0 $00-42-5$ Styrene 1.0 < 1.0 0 $5-69-4$ Trichlorofluoromethane 1.0 < 1.0 0 $5-13-1$ $1,1,2$ -Trichloro $-1,2,2$ -trifluoroe 1.0 < 1.0 0 $5-69-4$ Trichlorobenzene 1.0 < 1.0 0 $5-70-1$ $1,2$ -Dichlorobenzene 1.0 < 1.0 0 $0-70-2-8$ Acrolein 50 < 50 0 $1-88-4$ Methyl Iodide <td>8-87-5</td> <td>1 2-Dichloropropano</td> <td>1.0</td> <td>< 1.0 0</td>	8-87-5	1 2-Dichloropropano	1.0	< 1.0 0
0.00000000000000000000000000000000000	0061-01-5	cig-1 3-Dichloropropono	1.0	< 1.0 U
3 - 3 + 3 + 3 + 3 + 3 + 3 + 3 + 3 + 3 +	9-01-6	Trichloroothono	1.0	< 1.0 0
24 $30-1$ Display=000000000000000000000000000000000000	24 - 48 - 1	Dibromochloremethane	1.0	< 1.0 U
3 - 33 - 3 $1, 1, 2 - 11 + 1 - 1 + 1 + 1 + 1 + 1 + 1 + 1 +$	9_00_5	1 1 2 Trichlemeethere	1.0	< 1.0 U
1-4-3-2Benzene 1.0 < 1.0 < 1.0 << $0061-02-6$ trans-1, 3 -Dichloropropene 1.0 <	3-00-5	1,1,2-IIIChioroethane	1.0	< 1.0 U
0000102-0Clais-1,3-Dichloropropene1.0< 1.0<10-75-82-Chloroethylvinylether5.0< 5.0	1 - 43 - 2		1.0	< 1.0 U
10-75-8 $2-Chloroethylvinylether$ 5.0 < 5.0 0 $5-25-2$ Bromoform 1.0 < 1.0 0 $08-10-1$ $4-Methyl-2-Pentanone$ (MIBK) 5.0 < 5.0 0 $91-78-6$ $2-Hexanone$ 5.0 < 5.0 0 $27-18-4$ Tetrachloroethene 1.0 < 1.0 0 $9-34-5$ $1, 1, 2, 2$ -Tetrachloroethane 1.0 < 1.0 0 $9-34-5$ $1, 1, 2, 2$ -Tetrachloroethane 1.0 < 1.0 0 $08-88-3$ Toluene 1.0 < 1.0 0 $08-90-7$ Chlorobenzene 1.0 < 1.0 0 $00-41-4$ Ethylbenzene 1.0 < 1.0 0 $00-42-5$ Styrene 1.0 < 1.0 0 $5-69-4$ Trichlorofluoromethane 1.0 < 1.0 0 $5-69-4$ Trichlorofluoromethane 1.0 < 1.0 0 $5-69-4$ Trichlorobenzene 1.0 < 1.0 0 $5-69-4$ $1, 2-Dichlorobenzene1.0< 1.005-69-41, 2-Dichlorobenzene1.0< 1.005-69-11, 2-Dichlorobenzene1.0< 1.0007-02-8Acrolein50< 5004-88-4Methyl Iodide$	10 75 0	Crans-1, 3-Dichloropropene	1.0	< 1.0 Ŭ
3-2-2Bromoform1.0< 1.0U $08-10-1$ $4-Methyl-2-Pentanone$ (MIBK) 5.0 < 5.0 U $91-78-6$ $2-Hexanone$ 5.0 < 5.0 U $27-18-4$ Tetrachloroethene 1.0 < 1.0 U $9-34-5$ $1,1,2,2$ -Tetrachloroethane 1.0 < 1.0 U $08-88-3$ Toluene 1.0 < 1.0 U $08-90-7$ Chlorobenzene 1.0 < 1.0 U $00-41-4$ Ethylbenzene 1.0 < 1.0 U $00-42-5$ Styrene 1.0 < 1.0 U $5-69-4$ Trichlorofluoromethane 1.0 < 1.0 U $5-69-4$ Trichlorofluoromethane 1.0 < 1.0 U $5-69-4$ $1,1,2$ -Trichloro- $1,2,2$ -trifluoroe 2.0 < 2.0 U $30-20-7$ $m,p-Xylene$ 1.0 < 1.0 U $5-47-6$ $0-Xylene$ 1.0 < 1.0 U $5-50-1$ $1,2$ -Dichlorobenzene 1.0 < 1.0 U $1-73-1$ $1,3$ -Dichlorobenzene 1.0 < 1.0 U $07-02-8$ Acrolein 50 < 50 U $4-88-4$ Methyl Iodide 1.0 < 1.0 U $1-96-4$ Bromoethane 2.0 < 2.0 U $07-13-1$ Acrylonitrile 1.0 < 1.0 U $07-26$ $1,1-1$ -Dichloropropene 1.0 < 1.0 U $0-553-6$ $1,1-1$ -Dichloropropene 1.0 < 1.0 U $0-20-6$	10-75-8	2-Chioroethylvinylether	5.0	< 5.0 Ŭ
03-10-1 $4-Metnyl-2-Pentanone$ (MIBK) 5.0 < 5.0 U $91-78-6$ $2-Hexanone$ 5.0 < 5.0 U $27-18-4$ Tetrachloroethene 1.0 < 1.0 U $9-34-5$ $1,1,2,2-Tetrachloroethane$ 1.0 < 1.0 U $9-34-5$ $1,1,2,2-Tetrachloroethane$ 1.0 < 1.0 U $08-88-3$ Toluene 1.0 < 1.0 U $08-90-7$ Chlorobenzene 1.0 < 1.0 U $00-41-4$ Ethylbenzene 1.0 < 1.0 U $00-42-5$ Styrene 1.0 < 1.0 U $5-69-4$ Trichlorofluoromethane 1.0 < 1.0 U $5-69-4$ Trichlorofluoromethane 1.0 < 1.0 U $5-69-4$ Trichlorofluorobenzene 1.0 < 1.0 U $5-69-4$ Trichlorofluorobenzene 1.0 < 1.0 U $5-69-4$ Trichlorobenzene 1.0 < 1.0 U $5-69-4$ $1,2-Dichlorobenzene$ 1.0 < 1.0 U $5-67-1$ $1,2-Dichlorobenzene$ 1.0 < 1.0 U $41-73-1$ $1,3-Dichlorobenzene$ 1.0 < 1.0 U $07-02-8$ Acrolein 50 < 50 U $4-88-4$ Methyl Iodide 1.0 < 1.0 U $4-96-4$ Bromoethane 2.0 < 2.0 U $07-13-1$ Acrylonitrile 1.0 < 1.0 U $07-20-6$ $1,1-Dichloropropene$ </td <td></td> <td>Bromororm</td> <td>1.0</td> <td>< 1.0 U</td>		Bromororm	1.0	< 1.0 U
91-78-62-Hexanone5.0< 5.0U $27-18-4$ Tetrachloroethene 1.0 < 1.0 U $9-34-5$ $1,1,2,2$ -Tetrachloroethane 1.0 < 1.0 U $08-88-3$ Toluene 1.0 < 1.0 U $08-88-3$ Toluene 1.0 < 1.0 U $08-90-7$ Chlorobenzene 1.0 < 1.0 U $00-41-4$ Ethylbenzene 1.0 < 1.0 U $00-42-5$ Styrene 1.0 < 1.0 U $5-69-4$ Trichlorofluoromethane 1.0 < 1.0 U $5-13-1$ $1,1,2$ -Trichloro- $1,2,2$ -trifluoroe 2.0 < 2.0 U $30-20-7$ m,p-Xylene 1.0 < 1.0 U $5-47-6$ o-Xylene 1.0 < 1.0 U $5-50-1$ $1,2$ -Dichlorobenzene 1.0 < 1.0 U $41-73-1$ $1,3$ -Dichlorobenzene 1.0 < 1.0 U $07-02-8$ Acrolein 50 < 50 U $4-88-4$ Methyl Iodide 1.0 < 1.0 U $07-02-8$ Acrolein 50 < 2.0 U $07-13-1$ Acrylonitrile 1.0 < 1.0 U $07-64$ Bromoethane 1.0 < 1.0 U $07-64$ Dibromoethane 1.0 < 1.0 U $07-64$ $1,1-Dichloropropene1.0< 1.0U07-13-1Acrylonitrile1.0< 1.0U07-261,1-Dichloropropene1.0< $	01 70 6	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0 U
27-18-4Tetrachloroethene 1.0 < 1.0 U $9-34-5$ $1,1,2,2$ -Tetrachloroethane 1.0 < 1.0 U $08-88-3$ Toluene 1.0 < 1.0 U $08-88-3$ Toluene 1.0 < 1.0 U $08-90-7$ Chlorobenzene 1.0 < 1.0 U $00-41-4$ Ethylbenzene 1.0 < 1.0 U $00-42-5$ Styrene 1.0 < 1.0 U $5-69-4$ Trichlorofluoromethane 1.0 < 1.0 U $5-13-1$ $1,1,2$ -Trichloro- $1,2,2$ -trifluoroe 2.0 < 2.0 U $330-20-7$ m,p -Xylene 1.0 < 1.0 U $5-47-6$ 0 -Xylene 1.0 < 1.0 U $5-50-1$ $1,2$ -Dichlorobenzene 1.0 < 1.0 U $41-73-1$ $1,3$ -Dichlorobenzene 1.0 < 1.0 U $06-46-7$ $1,4$ -Dichlorobenzene 1.0 < 1.0 U $07-02-8$ Acrolein 50 < 50 U $4-88-4$ Methyl Iodide 1.0 < 1.0 U $4-96-4$ Bromoethane 2.0 < 2.0 U $07-13-1$ Acrylonitrile 1.0 < 1.0 U $03-58-6$ $1,1$ -Dichloropropene 1.0 < 1.0 U $0-20-6$ $1,1,1,2$ -Tetrachloroethane 1.0 < 1.0 U $0-20-6$ $1,2$ Dibromomethane 1.0 < 1.0 U	91-78-6	2-Hexanone	5.0	< 5.0 Ŭ
9-34-51,1,2,2-Tetrachloroethane1.0< 1.0U $08-88-3$ Toluene1.0< 1.0	2/-18-4	Tetrachloroethene	1.0	< 1.0 U
08-88-3Toluene 1.0 < 1.0 U $08-90-7$ Chlorobenzene 1.0 < 1.0 U $00-41-4$ Ethylbenzene 1.0 < 1.0 U $00-42-5$ Styrene 1.0 < 1.0 U $5-69-4$ Trichlorofluoromethane 1.0 < 1.0 U $5-13-1$ $1,1,2$ -Trichloro- $1,2,2$ -trifluoroe 2.0 < 2.0 U $330-20-7$ m,p -Xylene 1.0 < 1.0 U $5-47-6$ 0 -Xylene 1.0 < 1.0 U $5-50-1$ $1,2$ -Dichlorobenzene 1.0 < 1.0 U $41-73-1$ $1,3$ -Dichlorobenzene 1.0 < 1.0 U $06-46-7$ $1,4$ -Dichlorobenzene 1.0 < 1.0 U $07-02-8$ Acrolein 50 < 50 U $4-88-4$ Methyl Iodide 1.0 < 1.0 U $07-13-1$ Acrylonitrile 1.0 < 1.0 U $07-53-8-6$ $1,1$ -Dichloropropene 1.0 < 1.0 U $0-55-3$ Dibromomethane 1.0 < 1.0 U $0-20-6$ $1,2$ -Zetrachloroethane 1.0 < 1.0 U	9-34-5	1,1,2,2-Tetrachloroethane	1.0	< 1.0 U
08-90-7Chlorobenzene1.0< 1.0U $00-41-4$ Ethylbenzene1.0< 1.0	08-88-3	Toluene	1.0	< 1.0 U
00-41-4Ethylbenzene 1.0 < 1.0 U $00-42-5$ Styrene 1.0 < 1.0 U $5-69-4$ Trichlorofluoromethane 1.0 < 1.0 U $5-13-1$ $1,1,2$ -Trichloro- $1,2,2$ -trifluoroe 2.0 < 2.0 U $330-20-7$ m,p -Xylene 1.0 < 1.0 U $5-47-6$ o -Xylene 1.0 < 1.0 U $5-50-1$ $1,2$ -Dichlorobenzene 1.0 < 1.0 U $41-73-1$ $1,3$ -Dichlorobenzene 1.0 < 1.0 U $06-46-7$ $1,4$ -Dichlorobenzene 1.0 < 1.0 U $07-02-8$ Acrolein 50 < 50 U $4-88-4$ Methyl Iodide 1.0 < 1.0 U $07-13-1$ Acrylonitrile 1.0 < 1.0 U $07-13-1$ Acrylonitrile 1.0 < 1.0 U $0-58-6$ $1,1$ -Dichloropropene 1.0 < 1.0 U $0-57-3$ Dibromomethane 1.0 < 1.0 U $0-20-6$ $1,2$ Dibromomethane 1.0 < 1.0 U	08-90-7	Chlorobenzene	1.0	< 1.0 U
00-42-5Styrene1.0< 1.0 U $5-69-4$ Trichlorofluoromethane1.0< 1.0 U	00-41-4	Ethylbenzene	1.0	< 1.0 U
5-69-4Trichlorofluoromethane 1.0 < 1.0 U $5-13-1$ $1,1,2$ -Trichloro- $1,2,2$ -trifluoroe 2.0 < 2.0 U $330-20-7$ m,p -Xylene 1.0 < 1.0 U $5-47-6$ o -Xylene 1.0 < 1.0 U $5-50-1$ $1,2$ -Dichlorobenzene 1.0 < 1.0 U $41-73-1$ $1,3$ -Dichlorobenzene 1.0 < 1.0 U $06-46-7$ $1,4$ -Dichlorobenzene 1.0 < 1.0 U $07-02-8$ Acrolein 50 < 50 U $4-88-4$ Methyl Iodide 1.0 < 1.0 U $07-02-8$ Acrolein 50 < 1.0 U $07-02-8$ Acrolein 1.0 < 1.0 U $07-02-8$ Dibromoethane 1.0 < 1.0 U $07-02-8$ 1.1 -Dichloropropene 1.0 < 1.0 U $07-02-8$ 1.1 -Dichloropropene 1.0 < 1.0 U $07-02-8$ $1.$	00-42-5	Styrene	1.0	< 1.0 U
5-13-1 $1,1,2$ -Trichloro- $1,2,2$ -trifluoroe 2.0 < 2.0 U $330-20-7$ m,p -Xylene 1.0 < 1.0 U $5-47-6$ o -Xylene 1.0 < 1.0 U $5-50-1$ $1,2$ -Dichlorobenzene 1.0 < 1.0 U $41-73-1$ $1,3$ -Dichlorobenzene 1.0 < 1.0 U $06-46-7$ $1,4$ -Dichlorobenzene 1.0 < 1.0 U $07-02-8$ Acrolein 50 < 50 U $4-88-4$ Methyl Iodide 1.0 < 1.0 U $07-13-1$ Acrylonitrile 1.0 < 1.0 U $07-53$ Dibromomethane 1.0 < 1.0 U $0-20-6$ $1,1,1,2$ -Tetrachloroethane 1.0 < 1.0 U	5-69-4	Trichlorofluoromethane	1.0	< 1.0 U
330-20-7m,p-Xylene1.0< 1.0U $5-47-6$ o-Xylene1.0< 1.0	6-13-1	1,1,2-Trichloro-1,2,2-trifluoroe	2.0	< 2.0 U
5-47-6 o -Xylene 1.0 < 1.0 U $5-50-1$ $1,2$ -Dichlorobenzene 1.0 < 1.0 U $41-73-1$ $1,3$ -Dichlorobenzene 1.0 < 1.0 U $06-46-7$ $1,4$ -Dichlorobenzene 1.0 < 1.0 U $07-02-8$ Acrolein 50 < 50 U $4-88-4$ Methyl Iodide 1.0 < 1.0 U $1-96-4$ Bromoethane 2.0 < 2.0 U $07-13-1$ Acrylonitrile 1.0 < 1.0 U $5-58-6$ $1,1$ -Dichloropropene 1.0 < 1.0 U $4-95-3$ Dibromomethane 1.0 < 1.0 U $0-20-6$ $1,1,1,2$ -Tetrachloroethane 1.0 < 1.0 U	330-20-7	m,p-Xylene	1.0	< 1.0 U
5-50-1 $1,2-Dichlorobenzene$ 1.0 < 1.0 U $41-73-1$ $1,3-Dichlorobenzene$ 1.0 < 1.0 U $06-46-7$ $1,4-Dichlorobenzene$ 1.0 < 1.0 U $07-02-8$ Acrolein 50 < 50 U $4-88-4$ Methyl Iodide 1.0 < 1.0 U $4-96-4$ Bromoethane 2.0 < 2.0 U $07-13-1$ Acrylonitrile 1.0 < 1.0 U $63-58-6$ $1,1-Dichloropropene$ 1.0 < 1.0 U $4-95-3$ Dibromomethane 1.0 < 1.0 U $0-20-6$ $1,1,1,2-Tetrachloroethane$ 1.0 < 1.0 U	5-47-6	o-Xylene	1.0	< 1.0 U
41-73-1 $1,3$ -Dichlorobenzene 1.0 < 1.0 U $06-46-7$ $1,4$ -Dichlorobenzene 1.0 < 1.0 U $07-02-8$ Acrolein 50 < 50 U $4-88-4$ Methyl Iodide 1.0 < 1.0 U $4-96-4$ Bromoethane 2.0 < 2.0 U $07-13-1$ Acrylonitrile 1.0 < 1.0 U $53-58-6$ $1,1$ -Dichloropropene 1.0 < 1.0 U $4-95-3$ Dibromomethane 1.0 < 1.0 U $0-20-6$ $1,1,1,2$ -Tetrachloroethane 1.0 < 1.0 U	5-50-1	1,2-Dichlorobenzene	1.0	< 1.0 U
06-46-7 1,4-Dichlorobenzene 1.0 < 1.0	41-73-1	1,3-Dichlorobenzene	1.0	< 1.0 U
07-02-8 Acrolein 50 < 50	06-46-7	1,4-Dichlorobenzene	1.0	< 1.0 U
4-88-4 Methyl Iodide 1.0 < 1.0	07-02-8	Acrolein	50	< 50 U
4-96-4Bromoethane 2.0 < 2.0 U $07-13-1$ Acrylonitrile 1.0 < 1.0 U $53-58-6$ $1,1$ -Dichloropropene 1.0 < 1.0 U $4-95-3$ Dibromomethane 1.0 < 1.0 U $0-20-6$ $1,1,1,2$ -Tetrachloroethane 1.0 < 1.0 U	4-88-4	Methyl Iodide	1.0	< 1.0 U
07-13-1Acrylonitrile 1.0 < 1.0 0 $53-58-6$ $1,1$ -Dichloropropene 1.0 < 1.0 0 $1-95-3$ Dibromomethane 1.0 < 1.0 0 $0-20-6$ $1,1,1,2$ -Tetrachloroethane 1.0 < 1.0 0	4-96-4	Bromoethane	2.0	< 2.0 IT
53-58-61,1-Dichloropropene1.0< 1.0U $1-95-3$ Dibromomethane1.0< 1.0	07-13-1	Acrvlonitrile	1 0	
1-95-3Dibromomethane 1.0 < 1.0 U $10-20-6$ $1,1,1,2$ -Tetrachloroethane 1.0 < 1.0 U	63-58-6	1,1-Dichloropropene	1 0	
1.0 < 1.0 U	4-95-3	Dibromomethane	1 0	
$120 \qquad 120 $	30-20-6	1.1.1.2-Tetrachloroethane	1 0	
-12-3 $1.2-01000-3-000000000000000000000000000000$	6-12-8	1.2-Dibromo-3-chloropropage	5.0	

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ORGANICS ANALYSIS DATA SHEET Volatiles by Purge & Trap GC/MS-Method 8260B Sample ID: LDW-SP-39-C-U Page 2 of 2

SAMPLE

Lab Sample ID: GU59J LIMS ID: 04-10346 Matrix: Water Date Analyzed: 07/14/04 17:57 QC Report No: GU59-Windward Environmental Project: LDW-SEEP SAMPLING

CAS Number	Analyte	RL	Result
96-18-4	1,2,3-Trichloropropane	3.0	< 3.0 U
110-57-6	trans-1,4-Dichloro-2-butene	5.0	< 5.0 U
108-67-8	1,3,5-Trimethylbenzene	1.0	< 1.0 U
95-63-6	1,2,4-Trimethylbenzene	1.0	< 1.0 U
87-68-3	Hexachlorobutadiene	5.0	< 5.0 U
106-93-4	Ethylene Dibromide	1.0	< 1.0 U
74-97-5	Bromochloromethane	1.0	< 1.0 U
594-20-7	2,2-Dichloropropane	1.0	< 1.0 U
142-28-9	1,3-Dichloropropane	1.0	< 1.0 U
98-82-8	Isopropylbenzene	1.0	< 1.0 U
103-65-1	n-Propylbenzene	1.0	< 1.0 U
108-86-1	Bromobenzene	1.0	< 1.0 U
95-49-8	2-Chlorotoluene	1.0	< 1.0 U
106-43-4	4-Chlorotoluene	1.0	< 1.0 U
98-06-6	tert-Butylbenzene	1.0	< 1.0 U
135-98-8	sec-Butylbenzene	1.0	< 1.0 U
99-87-6	4-Isopropyltoluene	1.0	< 1.0 U
104-51-8	n-Butylbenzene	1.0	< 1.0 U
120-82-1	1,2,4-Trichlorobenzene	5.0	< 5.0 U
91-20-3	Naphthalene	5.0	< 5.0 Ŭ
87-61-6	1,2,3-Trichlorobenzene	5.0	< 5.0 U

Reported in $\mu g/L$ (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	110%
d8-Toluene	119%
Bromofluorobenzene	112%
d4-1,2-Dichlorobenzene	115%

FORM I



Sample ID: LDW-SP-80-C-U SAMPLE

QC Report No: GU59-Windward Environmental

Lab Sample ID: GU59K LIMS ID: 04-10347 Matrix: Water Data Release Authorized: Reported: 07/19/04

Project: LDW-SEEP SAMPLING

Date Sampled: 07/01/04 Date Received: 07/01/04

Sample Amount: 5.00 mL

Purge Volume: 5.0 mL

Instrument/Analyst: FINN3/LJR Date Analyzed: 07/14/04 18:25

CAS Number	Analyte	RL	Result
74-87-3	Chloromethane	1.0	< 1.0 U
74-83-9	Bromomethane	1.0	< 1.0 U
75-01-4	Vinyl Chloride	1.0	< 1.0 U
75-00-3	Chloroethane	1.0	< 1.0 U
75-09-2	Methylene Chloride	2.0	< 2.0 U
67-64-1	Acetone	5.0	< 5.0 U
75-15-0	Carbon Disulfide	1.0	1.1
75-35-4	1,1-Dichloroethene	1.0	< 1.0 U
75-34-3	1,1-Dichloroethane	1.0	< 1.0 U
156-60-5	trans-1,2-Dichloroethene	1.0	< 1.0 U
156-59-2	cis-1,2-Dichloroethene	1.0	< 1.0 U
67-66-3	Chloroform	1.0	< 1.0 U
107-06-2	1,2-Dichloroethane	1.0	< 1.0 U
78-93-3	2-Butanone	5.0	< 5.0 Ŭ
71-55-6	1,1,1-Trichloroethane	1.0	< 1.0 U
56-23-5	Carbon Tetrachloride	1.0	< 1.0 U
108-05-4	Vinyl Acetate	5.0	< 5.0 Ŭ
75-27-4	Bromodichloromethane	1.0	< 1.0 U
78-87-5	1,2-Dichloropropane	1.0	< 1.0 U
10061-01-5	cis-1,3-Dichloropropene	1.0	< 1.0 U
79-01-6	Trichloroethene	1.0	< 1.0 U
124-48-1	Dibromochloromethane	1.0	< 1.0 U
79-00-5	1,1,2-Trichloroethane	1.0	< 1.0 U
71-43-2	Benzene	1.0	< 1.0 U
10061-02-6	trans-1.3-Dichloropropene	1.0	< 1.0 U
110-75-8	2-Chloroethylvinylether	5.0	< 5.0 U
75-25-2	Bromoform	1.0	< 1.0 U
108-10-1	4-Methyl-2-Pentanone (MTBK)	5.0	< 5.0 U
591-78-6	2-Hexanone	5 0	
127-18-4	Tetrachloroethene	1.0	< 1.0 U
79-34-5	1.1.2.2-Tetrachloroethane	1 0	< 1 0 U
108-88-3	Toluene	1 0	
108-90-7	Chlorobenzene	1 0	
100-41-4	Ethylhenzene	1 0	
100-42-5	Styrene	1 0	
75-69-4	Trichlorofluoromethane	1.0	
75-13-1	1 1 2-Trichloro-1 2 2-trifluoroe	2 0	
1330-20-7	m n-Xylene	1 0	
95-47-6	m,p xyrene	1.0	
95-50-1	1.2-Dichlorobongono	1.0	
53-50-1 541-72-1	1,2-Dichlorobenzene	1.0	
106 46 7	1,3-Dichlorobenzene	1.0	
	1,4-Dichiofobenzene	1.0	< 1.0 U
74-98-4	Methyl Iodide	1 0	
74-00-4	Promoethane	2.0	
107_12 1	Dromoethane	∠.U 1 ∩	
TO 1-T2-T	ACTYTOHILITE	1.0	< 1.0 U
203-20-6 74 0F 2	L, I-DICHIOFOPTOPENE	1.0	< 1.0 U
14-95-3		1.0	< 1.0 U
030-20-6	1, 1, 1, 2-Tetrachioroethane	1.0	< 1.0 0
90-12-8	1,2-Dibromo-3-Chioropropane	5.0	< 5.000052



Sample ID: LDW-SP-80-C-U SAMPLE

Lab Sample ID: GU59K LIMS ID: 04-10347 Matrix: Water Date Analyzed: 07/14/04 18:25 QC Report No: GU59-Windward Environmental Project: LDW-SEEP SAMPLING

CAS Number	Analyte	RL	Result
96-18-4	1,2,3-Trichloropropane	3.0	< 3.0 U
110-57-6	trans-1,4-Dichloro-2-butene	5.0	< 5.0 Ŭ
108-67-8	1,3,5-Trimethylbenzene	1.0	< 1.0 U
95-63-6	1,2,4-Trimethylbenzene	1.0	< 1.0 U
87-68-3	Hexachlorobutadiene	5.0	< 5.0 U
106-93-4	Ethylene Dibromide	1.0	< 1.0 U
74-97-5	Bromochloromethane	1.0	< 1.0 U
594-20-7	2,2-Dichloropropane	1.0	< 1.0 U
142-28-9	1,3-Dichloropropane	1.0	< 1.0 U
98-82-8	Isopropylbenzene	1.0	< 1.0 U
103-65-1	n-Propylbenzene	1.0	< 1.0 U
108-86-1	Bromobenzene	1.0	< 1.0 U
95-49-8	2-Chlorotoluene	1.0	< 1.0 U
106-43-4	4-Chlorotoluene	1.0	< 1.0 U
98-06-6	tert-Butylbenzene	1.0	< 1.0 U
135-98-8	sec-Butylbenzene	1.0	< 1.0 U
99-87-6	4-Isopropyltoluene	1.0	< 1.0 U
104-51-8	n-Butylbenzene	1.0	< 1.0 U
120-82-1	1,2,4-Trichlorobenzene	5.0	< 5.0 U
91-20-3	Naphthalene	5.0	< 5.0 U
87-61-6	1,2,3-Trichlorobenzene	5.0	< 5.0 U

Reported in μ g/L (ppb)

d4-1,2-Dichloroethane	115%
d8-Toluene	121%
Bromofluorobenzene	113%
d4-1,2-Dichlorobenzene	115%



Sample ID: TRIP BLANK SAMPLE

Lab Sample ID: GU59L LIMS ID: 04-10348 Matrix: Water Data Release Authorized: Reported: 07/19/04

Instrument/Analyst: FINN3/LJR Date Analyzed: 07/14/04 18:53 QC Report No: GU59-Windward Environmental Project: LDW-SEEP SAMPLING

Date Sampled: Date Received: 07/01/04

Sample Amount: 5.00 mL Purge Volume: 5.0 mL

CAS Number	Analyte	RL	Result
74-87-3	Chloromethane	1.0	< 1.0 U
74-83-9	Bromomethane	1.0	< 1.0 U
75-01-4	Vinyl Chloride	1.0	< 1.0 U
75-00-3	Chloroethane	1.0	< 1.0 U
75-09-2	Methylene Chloride	2.0	< 2.0 U
67-64-1	Acetone	5.0	< 5.0 U
75-15-0	Carbon Disulfide	1.0	< 1.0 U
75-35-4	1,1-Dichloroethene	1.0	< 1.0 U
75-34-3	1,1-Dichloroethane	1.0	< 1.0 U
156-60-5	trans-1,2-Dichloroethene	1.0	< 1.0 U
156-59-2	cis-1,2-Dichloroethene	1.0	< 1.0 U
57-66-3	Chloroform	1.0	< 1.0 U
107-06-2	1,2-Dichloroethane	1.0	< 1.0 U
78-93-3	2-Butanone	5.0	< 5.0 U
71-55-6	1,1,1-Trichloroethane	1.0	< 1.0 U
56-23-5	Carbon Tetrachloride	1.0	< 1.0 U
108-05-4	Vinyl Acetate	5.0	< 5.0 U
75-27-4	Bromodichloromethane	1.0	< 1.0 U
78-87-5	1,2-Dichloropropane	1.0	< 1.0 U
10061-01-5	cis-1,3-Dichloropropene	1.0	< 1.0 U
79-01-6	Trichloroethene	1.0	< 1.0 U
L24-48-1	Dibromochloromethane	1.0	< 1.0 U
79-00-5	1,1,2-Trichloroethane	1.0	< 1.0 U
71-43-2	Benzene	1.0	
0061-02-6	trans-1.3-Dichloropropene	1.0	
10-75-8	2-Chloroethylyinylether	5.0	
2-25-2	Bromoform	1 0	
08-10-1	4-Methyl-2-Pentanone (MTBK)	5.0	
591-78-6	2-Hexanone	5.0	
27-18-4	Tetrachloroethene	1 0	
9-34-5	1 1 2 2-Tetrachloroethane	1.0	
08-88-3	Toluene	1 0	
08-90-7	Chlorobenzene	1.0	
00-41-4	Fthylbenzene	1.0	
00-42-5	Styrepe	1.0	
5-69-4	Trichlorofluoromethane	1.0	
5-05-4	1 1 2 Trichloro 1 2 2 trifluoroo	1.0	< 1.0 0
330-20-7	1, 1, 2-IIICHIOIO- $1, 2, 2$ -CIIIIUOIOE	2.0	< 2.0 0
530-20-7	m, p-xyrene	1.0	< 1.0 0
	1 2 Dichlerchengene	1.0	< 1.0 U
41 72 1	1,2-Dichlorobenzene	1.0	< 1.0 0
41-73-1	1,3-Dichiorobenzene	1.0	< 1.0 U
06-46-7	l,4-Dichlorobenzene	1.0	< 1.0 U
07-02-8	Acrolein	50	< 50 U
4-00-4		1.0	< 1.0 U
4~96-4	Bromoethane	2.0	< 2.0 Ŭ
07-13-1	Acrylonitrile	1.0	< 1.0 U
63-58-6	1,1-Dichloropropene	1.0	< 1.0 U
4-95-3	Dibromomethane	1.0	< 1.0 U
30-20-6	1,1,1,2-Tetrachloroethane	1.0	< 1.0 U
6-12-8	1,2-Dibromo-3-chloropropane	5.0	< 5.0 U
			000



Sample ID: TRIP BLANK SAMPLE

Lab Sample ID: GU59L LIMS ID: 04-10348 Matrix: Water Date Analyzed: 07/14/04 18:53 QC Report No: GU59-Windward Environmental Project: LDW-SEEP SAMPLING

CAS Number	Analyte	RL	Result
96-18-4	1,2,3-Trichloropropane	3.0	< 3.0 U
110-57-6	trans-1,4-Dichloro-2-butene	5.0	< 5.0 U
108-67-8	1,3,5-Trimethylbenzene	1.0	< 1.0 U
95-63-6	1,2,4-Trimethylbenzene	1.0	< 1.0 U
87-68-3	Hexachlorobutadiene	5.0	< 5.0 U
106-93-4	Ethylene Dibromide	1.0	< 1.0 U
74-97-5	Bromochloromethane	1.0	< 1.0 U
594-20-7	2,2-Dichloropropane	1.0	< 1.0 U
142-28-9	1,3-Dichloropropane	1.0	< 1.0 U
98-82-8	Isopropylbenzene	1.0	< 1.0 U
103-65-1	n-Propylbenzene	1.0	< 1.0 U
108-86-1	Bromobenzene	1.0	< 1.0 U
95-49~8	2-Chlorotoluene	1.0	< 1.0 U
106-43-4	4-Chlorotoluene	1.0	< 1.0 U
98-06-6	tert-Butylbenzene	1.0	< 1.0 U
135-98-8	sec-Butylbenzene	1.0	< 1.0 U
99-87-6	4-Isopropyltoluene	1.0	< 1.0 U
104-51-8	n-Butylbenzene	1.0	< 1.0 U
120-82-1	1,2,4-Trichlorobenzene	5.0	< 5.0 U
91-20-3	Naphthalene	5.0	< 5.0 U
87-61-6	1,2,3-Trichlorobenzene	5.0	< 5.0 U

Reported in $\mu g/L$ (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	118%
d8-Toluene	119%
Bromofluorobenzene	113%
d4-1,2-Dichlorobenzene	114%

FORM I



Sample ID: LDW-SP-61-C-U SAMPLE

Lab Sample ID: GU76B LIMS ID: 04-10431 Matrix: Water Data Release Authorized: Reported: 07/19/04

Instrument/Analyst: FINN3/LJR Date Analyzed: 07/14/04 19:22 QC Report No: GU76-Windward Environmental Project: LDW-SEEP SAMPLING

Date Sampled: 07/02/04 Date Received: 07/02/04

Sample Amount: 5.00 mL Purge Volume: 5.0 mL

CAS Number	Analyte	RL	Result
74-87-3	Chloromethane	1.0	< 1.0 U
74-83-9	Bromomethane	1.0	< 1.0 U
75-01-4	Vinyl Chloride	1.0	< 1.0 U
75-00-3	Chloroethane	1.0	< 1.0 U
75-09-2	Methylene Chloride	2.0	< 2.0 U
67-64-1	Acetone	5.0	< 5.0 U
75-15-0	Carbon Disulfide	1.0	< 1.0 U
75-35-4	1,1-Dichloroethene	1.0	< 1.0 U
75-34-3	1,1-Dichloroethane	1.0	< 1.0 U
156-60-5	trans-1,2-Dichloroethene	1.0	< 1.0 U
156-59-2	cis-1,2-Dichloroethene	1.0	< 1.0 U
67-66-3	Chloroform	1.0	< 1.0 U
107-06-2	1,2-Dichloroethane	1.0	< 1.0 U
78-93-3	2-Butanone	5.0	< 5.0 U
71-55-6	1,1,1-Trichloroethane	1.0	< 1.0 U
56-23-5	Carbon Tetrachloride	1.0	< 1.0 U
108-05-4	Vinvl Acetate	5.0	< 5.0 II
75-27-4	Bromodichloromethane	1.0	
78-87-5	1,2-Dichloropropane	1.0	< 1.0 U
10061-01-5	cis-1.3-Dichloropropene	1.0	
79-01-6	Trichloroethene	1 0	
124-48-1	Dibromochloromethane	1 0	< 1.0 U
79-00-5	1.1.2-Trichloroethane	1 0	
71-43-2	Benzene	1 0	
10061-02-6	trans-1 3-Dichloropropene	1 0	
110-75-8	2-Chloroethylyinylether	5.0	
75-25-2	Bromoform	1.0	
108-10-1	$4 - Methyl_2 - Pentanone (MTRK)$	5.0	
591-78-6	2-Hevanone	5.0	
127-18-4	Tetrachloroethene	1.0	
79-34-5	1 1 2 2 Totrachloroothana	1.0	
108-88-3	Tolueno	1.0	< 1.0 U
108-88-3	Chlorobongono	1.0	< 1.0 0
L08-90-7	Ethylborgone	1.0	< 1.0 0
100-41-4	Churrene	1.0	< 1.0 U
LUU-42~5	Styrene Wrighlenefluorenethere	1.0	< 1.0 U
75-09-4	1 1 2 Trickless 1 2 2 trifflueron	1.0	< 1.0 0
220 20 7	1,1,2-Trichioro-1,2,2-trifiuoroe	2.0	< 2.0 U
1330-20-7	m,p-Xylene	1.0	< 1.0 U
95-4/-6	o-Xylene	1.0	< 1.0 U
95-50-1	1,2-Dichlorobenzene	1.0	< 1.0 U
41-73-1	1, 3-Dichlorobenzene	1.0	< 1.0 U
.06-46-7	1,4-Dichlorobenzene	1.0	< 1.0 U
.07-02-8	Acrolein	50	< 50 U
4-88-4	Methyl Iodide	1.0	< 1.0 U
4-96-4	Bromoethane	2.0	< 2.0 U
.07-13-1	Acrylonitrile	1.0	< 1.0 U
63-58-6	1,1-Dichloropropene	1.0	< 1.0 U
4-95-3	Dibromomethane	1.0	< 1.0 U
30-20-6	1,1,1,2-Tetrachloroethane	1.0	< 1.0 U
6-12-8	1,2-Dibromo-3-chloropropane	5.0	< 5.0 U 000



ORGANICS ANALYSIS DATA SHEET Volatiles by Purge & Trap GC/MS-Method 8260B Sample ID: LDW-SP-61-C-U Page 2 of 2

SAMPLE

Lab Sample ID: GU76B LIMS ID: 04-10431 Matrix: Water Date Analyzed: 07/14/04 19:22 QC Report No: GU76-Windward Environmental Project: LDW-SEEP SAMPLING

CAS Number	Analyte	RL	Result
96-18-4	1,2,3-Trichloropropane	3.0	< 3.0 U
110-57-6	trans-1,4-Dichloro-2-butene	5.0	< 5.0 U
108-67-8	1,3,5-Trimethylbenzene	1.0	< 1.0 U
95-63-6	1,2,4-Trimethylbenzene	1.0	< 1.0 U
87-68-3	Hexachlorobutadiene	5.0	< 5.0 U
106-93-4	Ethylene Dibromide	1.0	< 1.0 U
74-97-5	Bromochloromethane	1.0	< 1.0 U
594-20-7	2,2-Dichloropropane	1.0	< 1.0 U
142-28-9	1,3-Dichloropropane	1.0	< 1.0 U
98-82-8	Isopropylbenzene	1.0	< 1.0 U
103-65-1	n-Propylbenzene	1.0	< 1.0 U
108-86-1	Bromobenzene	1.0	< 1.0 U
95-49-8	2-Chlorotoluene	1.0	< 1.0 U
106-43-4	4-Chlorotoluene	1.0	< 1.0 U
98-06-6	tert-Butylbenzene	1.0	< 1.0 U
135-98-8	sec-Butylbenzene	1.0	< 1.0 U
99-87-6	4-Isopropyltoluene	1.0	< 1.0 U
104-51-8	n-Butylbenzene	1.0	< 1.0 U
120-82-1	1,2,4-Trichlorobenzene	5.0	< 5.0 U
91-20-3	Naphthalene	5.0	< 5.0 U
87-61-6	1,2,3-Trichlorobenzene	5.0	< 5.0 U

Reported in $\mu g/L$ (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	116%
d8-Toluene	121%
Bromofluorobenzene	112%
d4-1,2-Dichlorobenzene	116%

FORM I



Sample ID: LDW-SP-75-C-U SAMPLE

Lab Sample ID: GU83A LIMS ID: 04-10461 Matrix: Water Data Release Authorized: Reported: 07/19/04

Instrument/Analyst: FINN3/LJR Date Analyzed: 07/14/04 19:50 QC Report No: GU83-Windward Environmental Project: LDW-SEEP SAMPLING

Date Sampled: 07/03/04 Date Received: 07/03/04

Sample Amount: 5.00 mL Purge Volume: 5.0 mL

CAS Number	Analyte	RL	Result
74-87-3	Chloromethane	1.0	< 1.0 U
74-83-9	Bromomethane	1.0	< 1.0 U
75-01-4	Vinyl Chloride	1.0	< 1.0 U
75-00-3	Chloroethane	1.0	< 1.0 U
75-09-2	Methylene Chloride	2.0	< 2.0 U
67-64-1	Acetone	5.0	< 5.0 U
75-15-0	Carbon Disulfide	1.0	< 1.0 U
75-35-4	1,1-Dichloroethene	1.0	< 1.0 U
75-34-3	1,1-Dichloroethane	1.0	< 1.0 U
156-60-5	trans-1,2-Dichloroethene	1.0	< 1.0 U
156-59-2	cis-1,2-Dichloroethene	1.0	< 1.0 U
67-66-3	Chloroform	1.0	< 1.0 U
107-06-2	1,2-Dichloroethane	1.0	< 1.0 U
78-93-3	2-Butanone	5.0	< 5.0 U
71-55-6	1,1,1-Trichloroethane	1.0	< 1.0 U
56-23-5	Carbon Tetrachloride	1.0	< 1.0 U
108-05-4	Vinyl Acetate	5.0	< 5.0 U
75-27-4	Bromodichloromethane	1.0	< 1.0 U
78-87-5	1,2-Dichloropropane	1.0	< 1.0 U
10061-01-5	cis-1,3-Dichloropropene	1.0	< 1.0 U
79-01-6	Trichloroethene	1.0	< 1.0 U
124-48-1	Dibromochloromethane	1.0	< 1.0 U
79-00-5	1,1,2-Trichloroethane	1.0	< 1.0 U
71-43-2	Benzene	1.0	< 1.0 U
10061-02-6	trans-1,3-Dichloropropene	1.0	< 1.0 U
110-75-8	2-Chloroethylvinylether	5.0	< 5.0 U
75-25-2	Bromoform	1.0	< 1.0 U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0 U
591-78-6	2-Hexanone	5.0	< 5.0 U
127-18-4	Tetrachloroethene	1.0	< 1.0 U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	< 1.0 U
108-88-3	Toluene	1.0	< 1.0 U
108-90-7	Chlorobenzene	1.0	< 1.0 U
100-41-4	Ethylbenzene	1.0	< 1.0 U
100-42-5	Styrene	1 0	
75-69-4	Trichlorofluoromethane	1 0	
76-13-1	1.1.2-Trichloro-1.2.2-trifluoroe	2 0	
1330-20-7	m.p-Xvlene	1.0	< 1.0 U
95-47-6	o-Xvlene	1 0	
95-50-1	1.2-Dichlorobenzene	1 0	
541-73-1	1.3-Dichlorobenzene	1 0	
106-46-7	1 4-Dichlorobenzene	1.0	
107-02-8	Acrolein	50	< 50 II
74-88-4	Methyl Iodide	1 0	
74-96-4	Bromoethane	2 0	
107-13-1	Acrylonitrile	1 0	
63-58-6	1 1-Dichloropropere	1.0	
14-95-3	Dibromomethane	1 0	
30-20-6	1 1 1 2-Tetrachloroethane	1 0	
96-12-8	1,2-Dibromo-3-chloropropane	5.0	< 5.0 U 0000



Sample ID: LDW-SP-75-C-U SAMPLE

Lab Sample ID: GU83A LIMS ID: 04-10461 Matrix: Water Date Analyzed: 07/14/04 19:50

QC Report No: GU83-Windward Environmental Project: LDW-SEEP SAMPLING

CAS Number	Analyte	RL	Result
96-18-4	1,2,3-Trichloropropane	3.0	< 3.0 U
110-57-6	trans-1,4-Dichloro-2-butene	5.0	< 5.0 U
108-67-8	1,3,5-Trimethylbenzene	1.0	< 1.0 U
95-63-6	1,2,4-Trimethylbenzene	1.0	< 1.0 U
87-68~3	Hexachlorobutadiene	5.0	< 5.0 U
106-93-4	Ethylene Dibromide	1.0	< 1.0 U
74-97-5	Bromochloromethane	1.0	< 1.0 U
594-20-7	2,2-Dichloropropane	1.0	< 1.0 U
142-28-9	1,3-Dichloropropane	1.0	< 1.0 U
98-82-8	Isopropylbenzene	1.0	< 1.0 U
103-65-1	n-Propylbenzene	1.0	< 1.0 U
108-86-1	Bromobenzene	1.0	< 1.0 U
95-49-8	2-Chlorotoluene	1.0	< 1.0 U
106-43-4	4-Chlorotoluene	1.0	< 1.0 U
98-06-6	tert-Butylbenzene	1.0	< 1.0 U
135-98-8	sec-Butylbenzene	1.0	< 1.0 U
99-87-6	4-Isopropyltoluene	1.0	< 1.0 U
104-51-8	n-Butylbenzene	1.0	< 1.0 U
120-82-1	1,2,4-Trichlorobenzene	5.0	< 5.0 U
91-20-3	Naphthalene	5.0	< 5.0 U
87-61-6	1,2,3-Trichlorobenzene	5.0	< 5.0 U

Reported in $\mu g/L$ (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	118%
d8-Toluene	121%
Bromofluorobenzene	114%
d4-1,2-Dichlorobenzene	117%

FORM I



Sample ID: LDW-SP-64-C-U SAMPLE

Lab Sample ID: GU83E LIMS ID: 04-10465 Matrix: Water Data Release Authorized: Reported: 07/19/04

Instrument/Analyst: FINN3/LJR Date Analyzed: 07/14/04 20:19 QC Report No: GU83-Windward Environmental Project: LDW-SEEP SAMPLING

Date Sampled: 07/02/04 Date Received: 07/03/04

Sample Amount: 5.00 mL Purge Volume: 5.0 mL

CAS Number	Analyte	RL	Result
74-87-3	Chloromethane	1.0	< 1.0 U
74-83-9	Bromomethane	1.0	< 1.0 U
75-01-4	Vinyl Chloride	1.0	< 1.0 U
75-00-3	Chloroethane	1.0	< 1.0 U
75-09-2	Methylene Chloride	2.0	< 2.0 U
67-64-1	Acetone	5.0	< 5.0 U
75-15-0	Carbon Disulfide	1.0	< 1.0 U
75-35-4	1,1-Dichloroethene	1.0	< 1.0 U
75-34-3	1,1-Dichloroethane	1.0	< 1.0 U
156-60-5	trans-1,2-Dichloroethene	1.0	< 1.0 U
156-59-2	cis-1,2-Dichloroethene	1.0	< 1.0 U
67-66-3	Chloroform	1.0	< 1.0 U
107-06-2	1,2-Dichloroethane	1.0	< 1.0 U
78-93-3	2-Butanone	5.0	< 5.0 U
71-55-6	1,1,1-Trichloroethane	1.0	< 1.0 U
56-23-5	Carbon Tetrachloride	1.0	< 1.0 U
108-05-4	Vinvl Acetate	5.0	< 5.0 U
75-27-4	Bromodichloromethane	1.0	< 1.0 U
78-87-5	1,2-Dichloropropane	1.0	< 1.0 U
10061-01-5	cis-1,3-Dichloropropene	1.0	< 1.0 U
79-01-6	Trichloroethene	1.0	< 1.0 U
124-48-1	Dibromochloromethane	1.0	< 1.0 U
79-00-5	1.1.2-Trichloroethane	1.0	< 1.0 U
71-43-2	Benzene	1.0	< 1.0 U
10061-02-6	trans-1.3-Dichloropropene	1 0	< 1.0 U
110-75-8	2-Chloroethylvinylether	5 0	< 5.0 U
75-25-2	Bromoform	1 0	
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	
591-78-6	2-Hexanone	5.0	
27-18-4	Tetrachloroethene	1 0	
79-34-5	1 1 2 2-Tetrachloroethane	1.0	
108-88-3	Toluene	1.0	
108-90-7	Chlorobenzene	1 0	
100 - 41 - 4	Fthylbenzene	1.0	
	Styrene	1.0	
75-69-4	Trichlorofluoromethano	1.0	< 1.0 U
75-09-4 76-12-1	1 1 2-Trichloro 1 2 2 trifluoroo	1.0	< 1.0 0
330-20-7	1, 1, 2-IIICHIOIO- $1, 2, 2$ -CIIIIIUOIOE	2.0	< 2.0 0
1330-20-7		1.0	< 1.0 0
0-4/-0 E EO 1	0-Aylene	1.0	< 1.0 U
10-50-1	1,2-Dichlerchenzene	1.0	< 1.0 U
941 - 73 - 1	1, 3-Dichlorobenzene	1.0	< 1.0 0
07 00 0	1,4-Dichiorobenzene	1.0	< 1.0 U
.07-02-8	Acrolein	50	< 50 U
4-88-4	metnyi ioalae	1.0	< 1.0 U
4-96-4	Bromoetnane	2.0	< 2.0 U
	Acryionitrile	1.0	< 1.0 U
63-58-6	1,1-Dichloropropene	1.0	< 1.0 U
4-95-3	UI bromomethane	1.0	< 1.0 U
30-20-6		1.0	
	1,1,1,2-Tetrachloroethane	1.0	< 1.0 U

e 14



Sample ID: LDW-SP-64-C-U SAMPLE

Lab Sample ID: GU83E LIMS ID: 04-10465 Matrix: Water Date Analyzed: 07/14/04 20:19 QC Report No: GU83-Windward Environmental Project: LDW-SEEP SAMPLING

CAS Number	Analyte	RL	Result
96-18-4	1,2,3-Trichloropropane	3.0	< 3.0 U
110-57-6	trans-1,4-Dichloro-2-butene	5.0	< 5.0 U
108-67-8	1,3,5-Trimethylbenzene	1.0	< 1.0 U
95-63-6	1,2,4-Trimethylbenzene	1.0	< 1.0 U
87-68-3	Hexachlorobutadiene	5.0	< 5.0 U
106-93-4	Ethylene Dibromide	1.0	< 1.0 U
74-97-5	Bromochloromethane	1.0	< 1.0 U
594-20-7	2,2-Dichloropropane	1.0	< 1.0 U
142-28-9	1,3-Dichloropropane	1.0	< 1.0 U
98-82-8	Isopropylbenzene	1.0	< 1.0 U
103-65-1	n-Propylbenzene	1.0	< 1.0 U
108-86-1	Bromobenzene	1.0	< 1.0 U
95-49-8	2-Chlorotoluene	1.0	< 1.0 U
106-43-4	4-Chlorotoluene	1.0	< 1.0 U
98-06-6	tert-Butylbenzene	1.0	< 1.0 U
135-98-8	sec-Butylbenzene	1.0	< 1.0 U
99-87-6	4-Isopropyltoluene	1.0	< 1.0 U
104-51-8	n-Butylbenzene	1.0	< 1.0 U
120-82-1	1,2,4-Trichlorobenzene	5.0	< 5.0 U
91-20-3	Naphthalene	5.0	< 5.0 U
87-61-6	1,2,3-Trichlorobenzene	5.0	< 5.0 U

Reported in $\mu g/L$ (ppb)

d4-1,2-Dichloroethane	116%
d8-Toluene	122%
Bromofluorobenzene	113%
d4-1,2-Dichlorobenzene	116%



MSD

ORGANICS ANALYSIS DATA SHEET Volatiles by Purge & Trap GC/MS-Method 8260B

Page 1 of 2

Lab Sample ID: GU59G LIMS ID: 04-10343 Matrix: Water Data Release Authorized; Reported: 07/19/04

Sample ID: LDW-SP-41-C-U MS/MSD

QC Report No: GU59-Windward Environmental Project: LDW-SEEP SAMPLING

Date Sampled: 07/01/04 Date Received: 07/01/04

Instrument/Analyst MS: FINN3/LJR MSD: FINN3/LJR Date Analyzed MS: 07/14/04 17:00 MSD: 07/14/04 17:29

Sample Amount MS: 5.00 mL MSD: 5.00 mL Purge Volume MS: 5.0 mL MSD: 5.0 mL Spike MS Spike Added-MS Recovery MC MOD Adad MCD

Analyte	Sample	MS	Added-MS	Recovery	MSD	Added-MSD	Recovery	RPD
Chloromethane	< 1.0	44.4	50.0	88.8%	43.7	50.0	87.4%	1.6%
Bromomethane	< 1.0	29.8	50.0	59.6%	35.3	50.0	70.6%	16.9%
Vinyl Chloride	< 1.0	48.9	50.0	97.8%	47.3	50.0	94.6%	3.3%
Chloroethane	< 1.0	50.2	50.0	100%	49.1	50.0	98.2%	2.2%
Methylene Chloride	< 2.0	50.9	50.0	102%	49.9	50.0	99.8%	2.0%
Acetone	< 5.0	313	250	125%	287	250	115%	8.7%
Carbon Disulfide	< 1.0	41.4	50.0	82.8%	43.7	50.0	87.4%	5.4%
1,1-Dichloroethene	< 1.0	50.1	50.0	100%	48.6	50.0	97.2%	3.0%
1,1-Dichloroethane	< 1.0	52.3	50.0	105%	50.2	50.0	100%	4.1%
trans-1,2-Dichloroethene	< 1.0	50.9	50.0	102%	49.6	50.0	99.28	2.6%
cis-1,2-Dichloroethene	< 1.0	51.7	50.0	103%	51.4	50.0	103%	0.6%
Chloroform	< 1.0	52.3	50.0	105%	51.3	50.0	103%	1.9%
1,2-Dichloroethane	< 1.0	52.3	50.0	105%	51.8	50.0	104%	1.0%
2-Butanone	< 5.0	302	250	121%	278	250	1118	8.3%
1,1,1-Trichloroethane	< 1.0	52.3	50.0	105%	52.6	50.0	105%	0.6%
Carbon Tetrachloride	< 1.0	52.9	50.0	106%	52.9	50.0	106%	0.0%
Vinyl Acetate	< 5.0	49.6	50.0	99.2%	52.0	50.0	104%	4.7%
Bromodichloromethane	< 1.0	55.1	50.0	110%	54.6	50.0	109%	0.9%
1,2-Dichloropropane	< 1.0	52.2	50.0	104%	53.0	50.0	106%	1.5%
cis-1,3-Dichloropropene	< 1.0	47.1	50.0	94.2%	47.1	50.0	94.28	0.0%
Trichloroethene	< 1.0	51.6	50.0	103%	52.1	50.0	104%	1.0%
Dibromochloromethane	< 1.0	48.4	50.0	96.8%	48.0	50.0	96.0%	0.8%
1,1,2-Trichloroethane	< 1.0	55.0	50.0	110%	55.0	50.0	110%	0.0%
Benzene	< 1.0	54.4	50.0	109%	54.8	50.0	110%	0.7%
trans-1,3-Dichloropropene	< 1.0	45.2	50.0	90.4%	44.0	50.0	88.0%	2.7%
2-Chloroethylvinylether	< 5.0	< 5.0	50.0	NA	< 5.0	50.0	NA	NA
Bromoform	< 1.0	45.6	50.0	91.2%	46.3	50.0	92.6%	1.5%
4-Methyl-2-Pentanone (MIBK)	< 5.0	297	250	1198	280	250	112%	5.9%
2-Hexanone	< 5.0	285	250	114%	268	250	107%	6.18
Tetrachloroethene	< 1.0	51.4	50.0	103%	53.3	50 0	107%	3 6%
1,1,2,2-Tetrachloroethane	< 1.0	53.7	50.0	107%	56.9	50.0	114%	5.8%
Toluene	< 1.0	55.0	50.0	110%	55 4	50.0	1118	0.7%
Chlorobenzene	< 1.0	53.5	50.0	107%	53 1	50.0	106%	0.98
Ethylbenzene	< 1.0	56.4	50.0	1138	57 2	50.0	114%	1 4%
Styrene	< 1.0	45.8	50.0	91.6%	32 7	50.0	65 4%	22 48
Trichlorofluoromethane	< 1.0	51.2	50.0	102%	49.3	50.0	98 68	3 88
1,1,2-Trichloro-1,2,2-trifl	< 2.0	40.0	50.0	80 0%	46 1	50.0	92.28	14 28
m,p-Xylene	< 1.0	109	100	109%	110	100	110%	0 98
o-Xvlene	< 1.0	55 3	50 0	111%	55 8	50 0	1128	0.98
1.2-Dichlorobenzene	< 1.0	50.2	50.0	100%	51 9	50.0	1048	2 32
1.3-Dichlorobenzene	< 1.0	49 8	50.0	99 68	51 2	50.0	1028	J.J% J 08
1,4-Dichlorobenzene	< 1.0	47 9	50.0	95 88	49 0	50.0	00 02 0	2.00
Acrolein	< 50.0	278	250	1119	49.0	250	30.00	2.20
Methyl Iodide	< 1.0	35 /	50 0	70 08	44 1	250	1030	7.90
Bromoethane	< 2.0	41 2	50.0	10.00	44.1	50.0		21.95
Acrylonitrile	< 1.0	+1.4 52 2	50.0	02.43 1078	40.0	50.0	23.05	1 79
1.1-Dichloropropene	< 1.0	55.5	50.0	1078 1028	54.Z	50.0	1038 1038	1./8
Dibromomethane	< 1.0	51.4 55 A	50.0	1109	51./	50.0	1038	U-68
DIDIONOMELIIANE	< 1.0	55.U	50.0	TTOS	54.2	50.0	T08#	1.5%



ORGANICS ANALYSIS DATA SHEET

Volatiles by Purge & Trap GC/MS-Method 8260B Page 2 of 2

Sample ID: LDW-SP-41-C-U MS/MSD

Lab Sample ID: GU59G LIMS ID: 04-10343 Matrix: Water Date Analyzed MS: 07/14/04 17:00 MSD: 07/14/04 17:29

QC Report No: GU59-Windward Environmental Project: LDW-SEEP SAMPLING

Purge Volume MS: 5.0 mL MSD: 5.0 mL

			Spike	MS		Spike	MSD	
Analyte	Sample	MS	Added-MS	Recovery	MSD	Added-MSD	Recovery	RPD
1,1,1,2-Tetrachloroethane	< 1.0	56.3	50.0	113%	56.5	50.0	113%	0.4%
1,2-Dibromo-3-chloropropane	< 5.0	45.7	50.0	91.4%	48.6	50.0	97.28	6.2%
1,2,3-Trichloropropane	< 3.0	55.6	50.0	111%	56.9	50.0	1148	2.3%
trans-1,4-Dichloro-2-butene	< 5.0	46.3	50.0	92.6%	49.9	50.0	99.88	7.5%
1,3,5-Trimethylbenzene	< 1.0	54.5	50.0	109%	56.1	50.0	112%	2.9%
1,2,4-Trimethylbenzene	< 1.0	50.8	50.0	102%	48.1	50.0	96.2%	5.5%
Hexachlorobutadiene	< 5.0	48.7	50.0	97.4%	51.0	50.0	102%	4.6%
Ethylene Dibromide	< 1.0	49.3	50.0	98.6%	49.8	50.0	99.6%	1.0%
Bromochloromethane	< 1.0	50.8	50.0	102%	52.0	50.0	104%	2.3%
2,2-Dichloropropane	< 1.0	50.0	50.0	100%	49.2	50.0	98.4%	1.6%
1,3-Dichloropropane	< 1.0	55.1	50.0	110%	55.3	50.0	111%	0.4%
Isopropylbenzene	< 1.0	55.5	50.0	111%	58.3	50.0	117%	4.9%
n-Propylbenzene	< 1.0	52.8	50.0	106%	55.4	50.0	111%	4.8%
Bromobenzene	< 1.0	51.0	50.0	102%	54.1	50.0	108%	5.9%
2-Chlorotoluene	< 1.0	53.7	50.0	1078	53.1	50.0	106%	1.18
4-Chlorotoluene	< 1.0	52.4	50.0	105%	55.3	50.0	1118	5.4%
tert-Butylbenzene	< 1.0	53.7	50.0	107%	54.6	50.0	109%	1.7%
sec-Butylbenzene	< 1.0	54.2	50.0	108%	56.4	50.0	113%	4.0%
4-Isopropyltoluene	< 1.0	53.1	50.0	106%	55.4	50.0	111%	4.2%
n-Butylbenzene	< 1.0	50.4	50.0	101%	54.0	50.0	108%	6.9%
1,2,4-Trichlorobenzene	< 5.0	48.1	50.0	96.2%	51.2	50.0	102%	6.2%
Naphthalene	< 5.0	44.9	50.0	89.8%	47.6	50.0	95.2%	5.8%
1,2,3-Trichlorobenzene	< 5.0	49.3	50.0	98.6%	52.3	50.0	105%	5.9%

Results reported in $\mu g/L$

NA-No recovery due to high concentration of analyte in original sample, or calculated negative recovery, or undetected spike.

RPD calculated using sample concentrations per SW846.



Sample ID: LCS-071404 LCS/LCSD

Lab Sample ID: LCS-071404 LIMS ID: 04-10343 Matrix: Water Data Release Authorized: Reported: 07/19/04 QC Report No: GU59-Windward Environmental Project: LDW-SEEP SAMPLING

Date Sampled: NA Date Received: NA

Instrument/Analyst LCS: FINN3/LJR LCSD: FINN3/LJR Date Analyzed LCS: 07/14/04 10:46 LCSD: 07/14/04 11:14 Sample Amount LCS: 5.00 mL LCSD: 5.00 mL Purge Volume LCS: 5.0 mL LCSD: 5.0 mL

		Spike	LCS		Spike	LCSD	
Analyte	LCS	Added-LCS	Recovery	LCSD	Added-LCSD	Recovery	RPD
Chloromethane	43.9	50.0	87.8%	43.2	50.0	86.4%	1.6%
Bromomethane	32.6	50.0	65.2%	34.2	50.0	68.4%	4.8%
Vinyl Chloride	46.4	50.0	92.8%	46.2	50.0	92.4%	0.4%
Chloroethane	48.0	50.0	96.0%	48.5	50.0	97.0%	1.0%
Methylene Chloride	47.1	50.0	94.2%	48.2	50.0	96.4%	2.3%
Acetone	284	250	114%	274	250	110%	3.6%
Carbon Disulfide	49.7	50.0	99.4%	47.2	50.0	94.4%	5.2%
1,1-Dichloroethene	47.9	50.0	95.8%	48.1	50.0	96.2%	0.4%
1,1-Dichloroethane	48.6	50.0	97.2%	50.0	50.0	100%	2.8%
trans-1,2-Dichloroethene	48.2	50.0	96.4%	48.5	50.0	97.0%	0.6%
cis-1,2-Dichloroethene	50.1	50.0	100%	52.7	50.0	105%	5.1%
Chloroform	50.5	50.0	101%	52.4	50.0	105%	3.78
1,2-Dichloroethane	50.3	50.0	101%	52.0	50.0	104%	3.38
2-Butanone	282	250	113%	275	250	110%	2.5%
1,1,1-Trichloroethane	53.3	50.0	107%	55.7	50.0	1118	4 4%
Carbon Tetrachloride	52.2	50.0	104%	53 5	50.0	107%	2 5%
Vinvl Acetate	58.9	50.0	118%	53.8	50.0	108%	9 1%
Bromodichloromethane	53.4	50.0	107%	55.3	50.0	111%	3 5%
1.2-Dichloropropane	51.8	50 0	104%	54 1	50.0	108%	4 3%
cis-1.3-Dichloropropene	46 6	50.0	93 28	48 3	50.0	96 68	3 68
Trichloroethene	50 4	50.0	101%	51 5	50.0	103%	2.2%
Dibromochloromethane	46 7	50.0	93 48	48 3	50.0	96 68	2.20
1.1.2-Trichloroethane	51 4	50.0	1038	53 0	50.0	106%	3 1 %
Benzene	52 5	50.0	105%	55 1	50.0	1108	1 98
trans-1 3-Dichloropropene	45 8	50.0	91 68	173	50.0	01 68 1108	2.08
2-Chloroethylyinylether	43.0	50.0	94 08	44 0	50.0	00 09	5.20
Bromoform	44 4	50.0	99 99	44.0	50.0	00.08	2 58
4-Methyl-2-Deptanone (MIBK)	292	250	1179	275	250	1109	2.20
2-Hexanone	200	250	1018	275	250	1028	2.90
Tetrachloroethene	50 2	50 0	1046	ED 4	200	1028	1.20
1 1 2 2-Tetrachloroethane	52 0	50.0	1068	52.4	50.0	1038	4.50
Toluene	53.0	50.0	106%	53.0	50.0	100%	1.10
Chlorobenzene	51 2	50.0	1028	54.5	50.0	105%	3.20 2.68
Ethylbenzene	51.2	50.0	1028	53.1	50.0	1148	J.07 4 7%
Styrone	56.2	50.0	1126	57.1	50.0	1178	4.50
Trichlorofluoromethane	10.3	50.0	1122	10.4	50.0	11/8	5.78
1 1 2-Trichloro-1 2 2-trifl	40.1	50.0	90.20	40.5	50.0	90.00 01 0%	0.40
r, r, z $rrcnroro-r, z, z-crrr$	106	100	39.00	45.9	100	91.00	0.20
[a, p-xy] ene	E1 0	E0 0	110%	57.2	100	1149	4.05
1 2-Dichlorobongono	54.9	50.0	1019	5/.2	50.0	1059	4.18
1,2-Dichlorobongono	50.3	50.0	1016	52.5	50.0	1058	4.38
1, 3-Dichlorobenzene	20.0	50.0	1023	52.9	50.0	1005	4.18
1,4-DICHIOLODEHZEHE	40.1	50.0	96.28	50.7	50.0	1018	5.38
Actolelli Mothril Todido	283	250	1138	266	250	1068	6.28
Promoothano	43.6	50.0	81.28	42.3	50.0	84.68	3.08
DrumOetHalle	49.1	50.0	98.28	45.6	50.0	91.28	1.48
ACTYTOHIUITTE	52.7	50.0	1058	49.5	50.0	99.08	6.38 2 20
1,1-DICHIOropropene	50.8	50.0	1028	52.5	50.0	105%	3.38
DIDIOMOMETHANE	51.4	50.0	7072	53.5	50.0	1078	4.0*



ORGANICS ANALYSIS DATA SHEET

Volatiles by Purge & Trap GC/MS-Method 8260B Page 2 of 2

Sample ID: LCS-071404 LCS/LCSD

Lab Sample ID: LCS-071404 LIMS ID: 04-10343 Matrix: Water Date Analyzed: 07/14/04 10:46 LCSD: 07/14/04 11:14 QC Report No: GU59-Windward Environmental Project: LDW-SEEP SAMPLING

Purge Volume: 5.0 mL LCSD: 5.0 mL

		Spike	LCS		Spike	LCSD	
Analyte	LCS	Added-LCS	Recovery	LCSD	Added-LCSD	Recovery	RPD
1,1,1,2-Tetrachloroethane	54.7	50.0	109%	57.2	50.0	1148	4.5%
1,2-Dibromo-3-chloropropane	47.0	50.0	94.0%	46.9	50.0	93.8%	0.2%
1,2,3-Trichloropropane	54.0	50.0	108%	55.9	50.0	112%	3.5%
trans-1,4-Dichloro-2-butene	51.1	50.0	102%	48.2	50.0	96.4%	5.8%
1,3,5-Trimethylbenzene	56.6	50.0	113%	59.1	50.0	118%	4.3%
1,2,4-Trimethylbenzene	56.3	50.0	113%	58.5	50.0	1178	3.8%
Hexachlorobutadiene	50.0	50.0	100%	52.2	50.0	104%	4.3%
Ethylene Dibromide	46.6	50.0	93.2%	48.5	50.0	97.0%	4.0%
Bromochloromethane	50.3	50.0	101%	51.4	50.0	103%	2.2%
2,2-Dichloropropane	55.1	50.0	110%	56.4	50.0	113%	2.3%
1,3-Dichloropropane	52.4	50.0	105%	53.9	50.0	108%	2.8%
Isopropylbenzene	58.0	50.0	116%	60.5	50.0	121%	4.2%
n-Propylbenzene	55.3	50.0	1118	57.0	50.0	114%	3.0%
Bromobenzene	52.1	50.0	104%	53.8	50.0	108%	3.2%
2-Chlorotoluene	51.9	50.0	104%	54.6	50.0	109%	5.1%
4-Chlorotoluene	57.7	50.0	115%	56.8	50.0	114%	1.6%
tert-Butylbenzene	55.9	50.0	112%	57.5	50.0	115%	2.8%
sec-Butylbenzene	57.1	50.0	114%	59.3	50.0	119%	3.8%
4-Isopropyltoluene	56.9	50.0	114%	59.3	50.0	119%	4.1%
n-Butylbenzene	54.8	50.0	110%	58.0	50.0	116%	5.7%
1,2,4-Trichlorobenzene	51.6	50.0	103%	53.9	50.0	108%	4.4%
Naphthalene	45.7	50.0	91.4%	47.9	50.0	95.8%	4.78
1,2,3-Trichlorobenzene	51.4	50.0	103%	53.6	50.0	107%	4.2%

Results reported in μ g/L

RPD calculated using sample concentrations per SW846.

LCS spike recovery is evaluated using only the nine regulated compounds noted in the ARI LQAP. The other LCS spike compound recoveries are advisory and used for analytical troubleshooting should any of the nine regulated compounds be out of control.

	LCS	LCSD
d4-1,2-Dichloroethane	110%	109%
d8-Toluene	1228	121%
Bromofluorobenzene	121%	120%
d4-1,2-Dichlorobenzene	114%	114%

BLANK NO.

4A VOLATILE METHOD BLANK SUMMARY

MB0714

Lab Name: ANALYTICAL RESOURCES, INC Client: WINDWARD ENVIRONMENTAL

Lab Code: GU59 Project: LDW-SEEP SAMPLING SDG No.: GU59 Lab File ID: MB0714 Lab Sample ID: MB0714 Date Analyzed: 07/14/04 Time Analyzed: 1143 GC Column: RTX502.2 ID: 0.18 (mm) Heated Purge: (Y/N) N Instrument ID: FINN3

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	CLIENT	LAB	LAB	TIME
	SAMPLE NO.	SAMPLE ID	FILE ID	ANALYZED
	========= ====	======== =:	=================	=============
01	LCS0714	LCS0714	LCS0714	1046
02	LCSD0714	LCSD0714	LCD0714	1114
03	LDW-SP-12-C-	GU59E	GU59E	1535
04	LDW-SP-20-C-	GU59F	GU59F	1603
05	LDW-SP-41-C-	GU59G	GUS9G	1632
06	LDW-SP-41-C-	GUS9G	GII59GMS	1700
07	LDW-SP-41-C-	GUS9G	GII59GMD	1729
08	LDW-SP-39-C-	GI15 9.T	GII59.T	1757
<u>09</u>	LDW-SP-80-C-	GUS 9K	GII59K	1825
10	TETE BLANK		CIIS 91.	1853
11	LDW-SP-61-C-	GU76B	GU76B	1922
12	LDW - SP - 75 - C -	CU83A	CI1837	1950
12	LDW - SP - 7J - C -			2010
1/	DDW-32-04-C-	GOOSE	G002E	2019
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COMMENTS:

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FORM IV VOA



Sample ID: MB-071404 METHOD BLANK

Lab Sample ID: MB-071404 LIMS ID: 04-10343 Matrix: Water Data Release Authorized: Reported: 07/19/04

Instrument/Analyst: FINN3/LJR

Date Analyzed: 07/14/04 11:43

QC Report No: GU59-Windward Environmental Project: LDW-SEEP SAMPLING

.

Date Sampled: NA Date Received: NA

Sample Amount: 5.00 mL Purge Volume: 5.0 mL

CAS Number Analyte		RL	Result
74-87-3	Chloromethane	1.0	< 1.0 U
74-83-9	Bromomethane	1.0	< 1.0 U
75-01-4	Vinyl Chloride	1.0	< 1.0 U
75-00-3	Chloroethane	1.0	< 1.0 U
75-09-2	Methylene Chloride	2.0	< 2.0 U
67-64-1	Acetone	5.0	< 5.0 U
75-15-0	Carbon Disulfide	1.0	< 1.0 U
75-35-4	1,1-Dichloroethene	1.0	< 1.0 U
75-34-3	1,1-Dichloroethane	1.0	< 1.0 U
156-60-5	trans-1,2-Dichloroethene	1.0	< 1.0 U
156-59-2	cis-1,2-Dichloroethene	1.0	< 1.0 U
57-66-3	Chloroform	1.0	< 1.0 U
L07-06-2	1,2-Dichloroethane	1.0	< 1.0 U
78-93-3	2-Butanone	5.0	< 5.0 Ŭ
71-55-6	1,1,1-Trichloroethane	1.0	< 1.0 U
56-23-5	Carbon Tetrachloride	1.0	< 1.0 U
L08-05-4	Vinyl Acetate	5.0	< 5.0 U
75-27-4	Bromodichloromethane	1.0	< 1.0 U
78-87-5	1,2-Dichloropropane	1.0	< 1.0 U
10061-01-5	cis-1,3-Dichloropropene	1.0	< 1.0 U
9-01-6	Trichloroethene	1.0	< 1.0 U
24-48-1	Dibromochloromethane	1.0	< 1.0 U
9-00-5	1,1,2-Trichloroethane	1.0	< 1.0 U
1-43-2	Benzene	1.0	< 1.0 U
.0061-02-6	trans-1,3-Dichloropropene	1.0	< 1.0 U
10-75-8	2-Chloroethylvinylether	5.0	< 5.0 U
5-25-2	Bromoform	1.0	< 1.0 U
.08-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0 U
91-78-6	2-Hexanone	5.0	< 5.0 U
27-18-4	Tetrachloroethene	1.0	< 1.0 U
9-34-5	1,1,2,2-Tetrachloroethane	1.0	< 1.0 U
08-88-3	Toluene	1.0	< 1.0 U
08-90-7	Chlorobenzene	1.0	< 1.0 U
00-41-4	Ethylbenzene	1.0	< 1.0 U
00-42-5	Styrene	1.0	< 1.0 U
5-69-4	Trichlorofluoromethane	1.0	< 1.0 U
6-13-1	1,1,2-Trichloro-1,2,2-trifluoroe	2.0	< 2.0 U
330-20-7	m,p-Xylene	1.0	< 1.0 U
5-47-6	o-Xylene	1.0	< 1.0 U
5-50-1	1,2-Dichlorobenzene	1.0	< 1.0 U
41-73-1	1,3-Dichlorobenzene	1.0	< 1.0 U
06-46-7	1,4-Dichlorobenzene	1.0	< 1.0 U
07-02-8	Acrolein	50	< 50 U
4-88-4	Methyl Iodide	1.0	< 1.0 U
4-96-4	Bromoethane	2.0	< 2.0 U
07-13-1	Acrylonitrile	1.0	< 1.0 U
63-58-6	1,1-Dichloropropene	1.0	< 1.0 U
4-95-3	Dibromomethane	1.0	< 1.0 U
30-20-6	1,1,1,2-Tetrachloroethane	1.0	< 1.0 U
6-12-8	1.2-Dibromo-3-chloropropane	5 0	< 5 0 II

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ORGANICS ANALYSIS DATA SHEET Volatiles by Purge & Trap GC/MS-Method 8260B Sample ID: MB-071404 Page 2 of 2

METHOD BLANK

Lab Sample ID: MB-071404 LIMS ID: 04-10343 Matrix: Water Date Analyzed: 07/14/04 11:43 QC Report No: GU59-Windward Environmental Project: LDW-SEEP SAMPLING

CAS MULDEI	Analyte	RL	Result
96-18-4	1,2,3-Trichloropropane	3.0	< 3.0 U
110-57-6	trans-1,4-Dichloro-2-butene	5.0	< 5.0 U
108-67-8	1,3,5-Trimethylbenzene	1.0	< 1.0 U
95-63-6	1,2,4-Trimethylbenzene	1.0	< 1.0 U
87-68-3	Hexachlorobutadiene	5.0	< 5.0 U
106-93-4	Ethylene Dibromide	1.0	< 1.0 U
74-97-5	Bromochloromethane	1.0	< 1.0 U
594-20-7	2,2-Dichloropropane	1.0	< 1.0 U
142-28-9	1,3-Dichloropropane	1.0	< 1.0 U
98-82-8	Isopropylbenzene	1.0	< 1.0 U
103-65-1	n-Propylbenzene	1.0	< 1.0 U
108-86-1	Bromobenzene	1.0	< 1.0 U
95-49-8	2-Chlorotoluene	1.0	< 1.0 U
106-43-4	4-Chlorotoluene	1.0	< 1.0 U
98-06-6	tert-Butylbenzene	1.0	< 1.0 U
135-98-8	sec-Butylbenzene	1.0	< 1.0 U
99-87-6	4-Isopropyltoluene	1.0	< 1.0 U
104-51-8	n-Butylbenzene	1.0	< 1.0 U
120-82-1	1,2,4-Trichlorobenzene	5.0	< 5.0 U
91-20-3	Naphthalene	5.0	< 5.0 U
87-61-6	1,2,3-Trichlorobenzene	5.0	< 5.0 U

Reported in $\mu g/L$ (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	111%
d8-Toluene	119%
Bromofluorobenzene	111%
d4-1,2-Dichlorobenzene	113%

Semivolatiles



SW8270 SEMIVOLATILES WATER SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: GU45-Windward Environmental Project: LDW Seep Sampling

Client ID	NBZ	FBP	TPH	DCB	PHL	2FP	TBP	2CP	DXN 1	TUO TO
MB-070704	74.1%	71.1%	96.9%	52.7%	66.1%	66.7%	90.9%	71.6%	56.1%	0
LCS-070704	74.6%	74.9%	96.1%	59.1%	73.9%	67.9%	91.1%	74.3%	63.6%	0
LDW-SP-48-C-U	68.3%	69.8%	92.8%	54.4%	62.0%	62.5%	87.7%	65.3%	55.2%	0
LDW-SP-48-C-F	72.2%	74.2%	98.3%	61.5%	66.4%	67.3%	94.3%	71.1%	60.0%	0
LDW-SP-54-C-U	68.8%	76.2%	93.5%	54.8%	63.6%	59.8%	103%	67.5%	47.5%	0
LDW-SP-54-C-F	75.6%	76.5%	94.1%	58.1%	67.2%	65.7%	104%	72.78	52.0%	0
LDW-SP-82-C-U	68.4%	67.6%	95.3%	52.8%	59.8%	60.5%	94.9%	64.3%	51.4%	0
LDW-SP-82-C-F	74.4%	72.4%	95.0%	56.0%	67.2%	66.9%	95.1%	72.1%	60.9%	0
LDW-SP-82-C-FD-U	71.1%	68.8%	93.0%	54.0%	63.0%	64.3%	89.5%	67.5%	55.6%	0
LDW-SP-82-C-FD-F	81.2%	77.6%	93.1%	58.6%	74.4%	73.5%	99.0%	78.7%	64.8%	0

			LCS/MB LIMITS	QC LIMITS
(NBZ)	=	d5-Nitrobenzene	(44-107)	(38-111)
(FBP)	=	2-Fluorobiphenyl	(43-99)	(30-109)
(TPH)	=	d14-p-Terphenyl	(44-123)	(37-113)
(DCB)	=	d4-1,2-Dichlorobenzene	(36-88)	(35-88)
(PHL)	=	d5-Phenol	(47-101)	(42-98)
(2FP)	=	2-Fluorophenol	(44-102)	(40-99)
(TBP)	=	2,4,6-Tribromophenol	(38-116)	(27-136)
(2CP)	=	d4-2-Chlorophenol	(50-102)	(47-101)
(DXN)	=	d8-1,4-Dioxane	(30-160)	(30-160)

Prep Method: SW3520C Log Number Range: 04-10230 to 04-10237



SW8270 SEMIVOLATILES WATER SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: GU76-Windward Environmental Project: LDW-SEEP SAMPLING

Client ID	NBZ	FBP	TPH	DCB	PHL	2FP	TBP	2CP	DXN T	TUO TO
MB-070704	74.1%	71.1%	96.9%	52.7%	66.1%	66.7%	90.9%	71.6%	56.1%	0
LCS-070704	74.6%	74.9%	96.1%	59.1%	73.9%	67.9%	91.1%	74.3%	63.6%	0
LDW-SP-62-C-F	81.0%	78.4%	98.0%	62.1%	73.5%	74.2%	99.8%	78.9%	65.2%	0
LDW-SP-61-C-U	75.0%	67.2%	91.8%	48.6%	61.7%	64.6%	92.4%	72.5%	55.8%	0
LDW-SP-61-C-F	72.0%	71.0%	89.6%	50.1%	61.8%	62.8%	94.9%	68.3%	54.0%	0
LDW-SP-61-C-F DL	D	D	D	D	D	D	D	D	D	0

			LCS/MB LIMITS	QC LIMITS
(NBZ)	=	d5-Nitrobenzene	(44-107)	(38-111)
(FBP)	=	2-Fluorobiphenyl	(43-99)	(30-109)
(TPH)	=	d14-p-Terphenyl	(44-123)	(37-113)
(DCB)	=	d4-1,2-Dichlorobenzene	(36-88)	(35-88)
(PHL)	=	d5-Phenol	(47-101)	(42-98)
(2FP)	=	2-Fluorophenol	(44-102)	(40-99)
(TBP)	=	2,4,6-Tribromophenol	(38-116)	(27-136)
(2CP)	=	d4-2-Chlorophenol	(50-102)	(47-101)
(DXN)	=	d8-1,4-Dioxane	(30-160)	(30-160)

Prep Method: SW3520C Log Number Range: 04-10430 to 04-10432



SW8270 SEMIVOLATILES WATER SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: GU83-Windward Environmental Project: LDW-SEEP SAMPLING

Client ID	NBZ	FBP	TPH	DCB	PHL	2FP	TBP	2CP	DXN 1	TUO TOT
MB-070704	74.1%	71.1%	96.9%	52.7%	66.1%	66.7%	90.9%	71.6%	56.1%	0
LCS-070704	74.6%	74.9%	96.1%	59.1%	73.9%	67.9%	91.1%	74.3%	63.6%	0
LDW-SP-75-C-U	64.8%	58.0%	88.7%	42.0%	57.3%	58.8%	86.5%	63.6%	51.6%	0
LDW-SP-75-C-U MS	79.0%	72.3%	97.3%	57.4%	76.6%	70.9%	91.6%	78.7%	62.3%	0
LDW-SP-75-C-U MSD	68.4%	63.2%	90.5%	46.4%	66.7%	61.8%	84.6%	66.3%	54.6%	0
LDW-SP-75-C-F	72.5%	69.6%	88.5%	52.0%	67.7%	66.7%	88.8%	71.7%	61.3%	0
LDW-SP-75-C-F MS	76.1%	72.2%	95.3%	55.4%	72.2%	68.6%	95.1%	72.8%	55.4%	0
LDW-SP-75-C-F MSD	79.0%	73.3%	88.9%	55.8%	77.0%	73.7%	90.1%	77.8%	63.9%	0
LDW-SP-64-RB-S-U	76.7%	69.9%	94.0%	56.4%	66.5%	68.2%	88.2%	72.0%	58.5%	0
LDW-SP-64-RB-MP-U	79.48	73.9%	97.9%	60.1%	62.6%	69.4%	93.8%	78.2%	52.8%	0
LDW-SP-64-C-U	73.7%	68.9%	90.0%	50.5%	67.9%	68.9%	92.0%	72.2%	61.7%	0

			LCS/MB LIMITS	QC LIMITS
(NBZ)	=	d5-Nitrobenzene	(44-107)	(38-111)
(FBP)	=	2-Fluorobiphenyl	(43-99)	(30-109)
(TPH)	=	d14-p-Terphenyl	(44-123)	(37-113)
(DCB)	=	d4-1,2-Dichlorobenzene	(36-88)	(35-88)
(PHL)	=	d5-Phenol	(47-101)	(42-98)
(2FP)	=	2-Fluorophenol	(44-102)	(40-99)
(TBP)	=	2,4,6-Tribromophenol	(38-116)	(27-136)
(2CP)	=	d4-2-Chlorophenol	(50-102)	(47-101)
(DXN)	=	d8-1,4-Dioxane	(30-160)	(30-160)

Prep Method: SW3520C Log Number Range: 04-10461 to 04-10465
Lab Sample ID: GU45A LIMS ID: 04-10230 Matrix: Water Data Release Authorized: Reported: 07/15/04

Date Extracted: 07/07/04 Date Analyzed: 07/14/04 12:16 Instrument/Analyst: NT6/Van

Sample ID: LDW-SP-48-C-U SAMPLE

QC Report No: GU45-Windward Environmental Project: LDW Seep Sampling

Date Sampled: 06/30/04 Date Received: 06/30/04

Sample Amount: 500 mL Final Extract Volume: 0.50 mL Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
108-95-2	Phenol	2.0	< 2.0 Ŭ
111-44-4	Bis-(2-Chloroethyl) Ether	2.0	< 2.0 U
95-57-8	2-Chlorophenol	1.0	< 1.0 Ŭ
541-73-1	1,3-Dichlorobenzene	1.0	< 1.0 U
106-46-7	1,4-Dichlorobenzene	1.0	< 1.0 U
100-51-6	Benzyl Alcohol	5.0	< 5.0 U
95-50-1	1,2-Dichlorobenzene	1.0	< 1.0 U
95-48-7	2-Methylphenol	1.0	< 1.0 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	1.0	< 1.0 U
106-44-5	4-Methylphenol	1.0	< 1.0 U
621-64-7	N-Nitroso-Di-N-Propylamine	2.0	< 2.0 U
67-72-1	Hexachloroethane	2.0	< 2.0 U
98-95-3	Nitrobenzene	1.0	< 1.0 U
78-59-1	Isophorone	1.0	< 1.0 U
88-75-5	2-Nitrophenol	5.0	< 5.0 U
105-67-9	2,4-Dimethylphenol	3.0	< 3.0 U
65-85-0	Benzoic Acid	10	< 10 U
111-91-1	bis(2-Chloroethoxy) Methane	1.0	< 1.0 U
120-83-2	2,4-Dichlorophenol	3.0	< 3.0 U
120-82-1	1,2,4-Trichlorobenzene	1.0	< 1.0 U
91-20-3	Naphthalene	1.0	< 1.0 U
106-47-8	4-Chloroaniline	3.0	< 3.0 U
87-68-3	Hexachlorobutadiene	2.0	< 2.0 U
59-50-7	4-Chloro-3-methylphenol	2.0	< 2.0 U
91-57-6	2-Methylnaphthalene	1.0	< 1.0 U
77-47-4	Hexachlorocyclopentadiene	5.0	< 5.0 U
88-06-2	2,4,6-Trichlorophenol	5.0	< 5.0 U
95-95-4	2,4,5-Trichlorophenol	5.0	< 5.0 U
91-58-7	2-Chloronaphthalene	1.0	< 1.0 U
88-74-4	2-Nitroaniline	5.0	< 5.0 U
131-11-3	Dimethylphthalate	1.0	< 1.0 U
208-96-8	Acenaphthylene	1.0	< 1.0 U
99-09-2	3-Nitroaniline	6.0	< 6.0 U
83-32-9	Acenaphthene	1.0	< 1.0 U
51-28-5	2,4-Dinitrophenol	25	< 25 U
100-02-7	4-Nitrophenol	5.0	< 5.0 Ŭ
132-64-9	Dibenzofuran	1.0	< 1.0 U
606-20-2	2,6-Dinitrotoluene	5.0	< 5.0 Ŭ
121-14-2	2,4-Dinitrotoluene	5.0	< 5.0 U
84-66-2	Diethylphthalate	1.0	< 1.0 U

ANALYTICAL RESOURCES INCORPORATED

ANALYTICAL RESOURCES

Lab Sample ID: GU45A LIMS ID: 04-10230 Matrix: Water Date Analyzed: 07/14/04 12:16 QC Report No: GU45-Windward Environmental Project: LDW Seep Sampling

CAS Number	Analyte	RL	Result
7005-72-3	4-Chlorophenyl-phenylether	1.0	< 1.0 U
86-73-7	Fluorene	1.0	< 1.0 U
100-01-6	4-Nitroaniline	5.0	< 5.0 U
534-52-1	4,6-Dinitro-2-Methylphenol	15	< 15 U
86-30-6	N-Nitrosodiphenylamine	1.0	< 1.0 U
101-55-3	4-Bromophenyl-phenylether	1.0	< 1.0 U
118-74-1	Hexachlorobenzene	1.0	< 1.0 U
87-86-5	Pentachlorophenol	5.0	< 5.0 U
85-01-8	Phenanthrene	1.0	< 1.0 U
86-74-8	Carbazole	1.0	< 1.0 U
120-12-7	Anthracene	1.0	< 1.0 U
84-74-2	Di-n-Butylphthalate	1.0	< 1.0 U
206-44-0	Fluoranthene	1.0	< 1.0 U
129-00-0	Pyrene	1.0	< 1.0 U
85-68-7	Butylbenzylphthalate	1.0	< 1.0 U
91-94-1	3,3'-Dichlorobenzidine	5.0	< 5.0 U
56-55-3	Benzo (a) anthracene	1.0	< 1.0 U
117-81-7	bis(2-Ethylhexyl)phthalate	1.0	3.0 B
218-01-9	Chrysene	1.0	< 1.0 U
117-84-0	Di-n-Octyl phthalate	1.0	< 1.0 U
205-99-2	Benzo(b)fluoranthene	1.0	< 1.0 U
207-08-9	Benzo(k)fluoranthene	1.0	< 1.0 U
50-32-8	Benzo (a) pyrene	1.0	< 1.0 U
193-39-5	Indeno(1,2,3-cd)pyrene	1.0	< 1.0 U
53-70-3	Dibenz(a,h)anthracene	1.0	< 1.0 U
191-24-2	Benzo(g,h,i)perylene	1.0	< 1.0 U
123-91-1	1,4-Dioxane	1.0	< 1.0 U

Reported in $\mu g/L$ (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	68.3%	2-Fluorobiphenyl	69.8%
d14-p-Terphenyl	92.8%	d4-1,2-Dichlorobenzene	54.4%
d5-Phenol	62.0%	2-Fluorophenol	62.5%
2,4,6-Tribromophenol	87.7%	d4-2-Chlorophenol	65.3%
d8-1,4-Dioxane	55.2%	-	

Lab Sample ID: GU45B LIMS ID: 04-10231 Matrix: Water Data Release Authorized: Reported: 07/15/04

Date Extracted: 07/07/04 Date Analyzed: 07/14/04 12:48 Instrument/Analyst: NT6/Van ANALYTICAL RESOURCES INCORPORATED

Sample ID: LDW-SP-48-C-F SAMPLE

QC Report No: GU45-Windward Environmental Project: LDW Seep Sampling

Date Sampled: 06/30/04 Date Received: 06/30/04

CAS Number	Analyte	RL	Result
108-95-2	Phenol	2.0	< 2.0 U
111-44-4	Bis-(2-Chloroethyl) Ether	2.0	< 2.0 U
95-57-8	2-Chlorophenol	1.0	< 1.0 U
541-73-1	1,3-Dichlorobenzene	1.0	< 1.0 U
106-46-7	1,4-Dichlorobenzene	1.0	< 1.0 U
100-51-6	Benzyl Alcohol	5.0	< 5.0 U
95-50-1	1,2-Dichlorobenzene	1.0	< 1.0 U
95-48-7	2-Methylphenol	1.0	< 1.0 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	1.0	< 1.0 U
106-44-5	4-Methylphenol	1.0	< 1.0 U
621-64-7	N-Nitroso-Di-N-Propylamine	2.0	< 2.0 U
67-72-1	Hexachloroethane	2.0	< 2.0 U
98-95-3	Nitrobenzene	1.0	< 1.0 U
78-59-1	Isophorone	1.0	< 1.0 U
88-75-5	2-Nitrophenol	5.0	< 5.0 U
105-67-9	2,4-Dimethylphenol	3.0	< 3.0 U
65-85-0	Benzoic Acid	10	< 10 U
111-91-1	bis(2-Chloroethoxy) Methane	1.0	< 1.0 U
120-83-2	2,4-Dichlorophenol	3.0	< 3.0 U
120-82-1	1,2,4-Trichlorobenzene	1.0	< 1.0 U
91-20-3	Naphthalene	1.0	< 1.0 U
106-47-8	4-Chloroaniline	3.0	< 3.0 U
87-68-3	Hexachlorobutadiene	2.0	< 2.0 U
59-50-7	4-Chloro-3-methylphenol	2.0	< 2.0 U
91-57-6	2-Methylnaphthalene	1.0	< 1.0 U
77-47-4	Hexachlorocyclopentadiene	5.0	< 5.0 U
88-06-2	2,4,6-Trichlorophenol	5.0	< 5.0 U
95-95-4	2,4,5-Trichlorophenol	5.0	< 5.0 U
91-58-7	2-Chloronaphthalene	1.0	< 1.0 U
88-74-4	2-Nitroaniline	5.0	< 5.0 U
131-11-3	Dimethylphthalate	1.0	< 1.0 U
208-96-8	Acenaphthylene	1.0	< 1.0 U
99-09-2	3-Nitroaniline	6.0	< 6.0 U
83-32-9	Acenaphthene	1.0	< 1.0 U
51-28-5	2,4-Dinitrophenol	25	< 25 U
100-02-7	4-Nitrophenol	5.0	< 5.0 U
132-64-9	Dibenzofuran	1.0	< 1.0 U
606-20-2	2,6-Dinitrotoluene	5.0	< 5.0 U
121-14-2	2,4-Dinitrotoluene	5.0	< 5.0 U
84-66-2	Diethylphthalate	1.0	< 1.0 U

Lab Sample ID: GU45B LIMS ID: 04-10231 Matrix: Water Date Analyzed: 07/14/04 12:48 QC Report No: GU45-Windward Environmental Project: LDW Seep Sampling

CAS Number	Analyte	RL	Result
7005-72-3	4-Chlorophenyl-phenylether	1.0	< 1.0 U
86-73-7	Fluorene	1.0	< 1.0 U
100-01-6	4-Nitroaniline	5.0	< 5.0 U
534-52-1	4,6-Dinitro-2-Methylphenol	15	< 15 U
86-30-6	N-Nitrosodiphenylamine	1.0	< 1.0 U
101-55-3	4-Bromophenyl-phenylether	1.0	< 1.0 U
118-74-1	Hexachlorobenzene	1.0	< 1.0 U
87-86-5	Pentachlorophenol	5.0	< 5.0 U
85-01-8	Phenanthrene	1.0	< 1.0 U
86-74-8	Carbazole	1.0	< 1.0 U
120-12-7	Anthracene	1.0	< 1.0 U
84-74-2	Di-n-Butylphthalate	1.0	< 1.0 U
206-44-0	Fluoranthene	1.0	< 1.0 U
129-00-0	Pyrene	1.0	< 1.0 U
85-68-7	Butylbenzylphthalate	1.0	< 1.0 U
91-94-1	3,3'-Dichlorobenzidine	5.0	< 5.0 U
56-55-3	Benzo(a) anthracene	1.0	< 1.0 U
117-81-7	bis(2-Ethylhexyl)phthalate	1.0	2.2 B
218-01-9	Chrysene	1.0	< 1.0 U
117-84-0	Di-n-Octyl phthalate	1.0	< 1.0 U
205-99-2	Benzo(b)fluoranthene	1.0	< 1.0 U
207-08-9	Benzo(k)fluoranthene	1.0	< 1.0 U
50-32-8	Benzo(a)pyrene	1.0	< 1.0 U
193-39-5	Indeno(1,2,3-cd)pyrene	1.0	< 1.0 U
53-70-3	Dibenz(a,h)anthracene	1.0	< 1.0 U
191-24-2	Benzo(g,h,i)perylene	1.0	< 1.0 U
123-91-1	1,4-Dioxane	1.0	< 1.0 U

Reported in $\mu g/L$ (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	72.2%	2-Fluorobiphenyl	74.2%
d14-p-Terphenyl	98.3%	d4-1,2-Dichlorobenzene	61.5%
d5-Phenol	66.4%	2-Fluorophenol	67.3%
2,4,6-Tribromophenol	94.3%	d4-2-Chlorophenol	71.1%
d8-1,4-Dioxane	60.0%	-	

CAS Number Analyt

Lab Sample ID: GU45C LIMS ID: 04-10232 Matrix: Water Data Release Authorized: Reported: 07/15/04

Date Extracted: 07/07/04 Date Analyzed: 07/14/04 13:19 Instrument/Analyst: NT6/Van INCORPORATED Sample ID: LDW-SP-54-C-U SAMPLE

QC Report No: GU45-Windward Environmental Project: LDW Seep Sampling

Date Sampled: 06/30/04 Date Received: 06/30/04

CAS Number	Analyte	RL	Result
108-95-2	Phenol	2.0	< 2.0 U
111-44-4	Bis-(2-Chloroethyl) Ether	2.0	< 2.0 U
95-57-8	2-Chlorophenol	1.0	< 1.0 U
541-73-1	1,3-Dichlorobenzene	1.0	3.7
106-46-7	1,4-Dichlorobenzene	1.0	4.0
100-51-6	Benzyl Alcohol	5.0	< 5.0 U
95-50-1	1,2-Dichlorobenzene	1.0	< 1.0 U
95-48-7	2-Methylphenol	1.0	< 1.0 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	1.0	< 1.0 U
106-44-5	4-Methylphenol	1.0	< 1.0 U
621-64-7	N-Nitroso-Di-N-Propylamine	2.0	< 2.0 U
67-72-1	Hexachloroethane	2.0	< 2.0 U
98-95-3	Nitrobenzene	1.0	< 1.0 Ŭ
78-59-1	Isophorone	1.0	< 1.0 U
88-75-5	2-Nitrophenol	5.0	< 5.0 Ŭ
105-67-9	2,4-Dimethylphenol	3.0	< 3.0 U
65-85-0	Benzoic Acid	10	< 10 U
111-91-1	bis(2-Chloroethoxy) Methane	1.0	< 1.0 U
120-83-2	2,4-Dichlorophenol	3.0	< 3.0 U
120-82-1	1,2,4-Trichlorobenzene	1.0	< 1.0 U
91-20-3	Naphthalene	1.0	< 1.0 U
106-47-8	4-Chloroaniline	3.0	< 3.0 U
87-68-3	Hexachlorobutadiene	2.0	< 2.0 U
59-50-7	4-Chloro-3-methylphenol	2.0	< 2.0 U
91-57-6	2-Methylnaphthalene	1.0	< 1.0 U
77-47-4	Hexachlorocyclopentadiene	5.0	< 5.0 Ŭ
88-06-2	2,4,6-Trichlorophenol	5.0	< 5.0 U
95-95-4	2,4,5-Trichlorophenol	5.0	< 5.0 U
91-58-7	2-Chloronaphthalene	1.0	< 1.0 U
88-74-4	2-Nitroaniline	5.0	< 5.0 U
131-11-3	Dimethylphthalate	1.0	< 1.0 U
208-96-8	Acenaphthylene	1.0	< 1.0 U
99-09-2	3-Nitroaniline	6.0	< 6.0 U
83-32-9	Acenaphthene	1.0	< 1.0 U
51-28-5	2,4-Dinitrophenol	25	< 25 U
100-02-7	4-Nitrophenol	5.0	< 5.0 U
132-64-9	Dibenzofuran	1.0	< 1.0 U
606-20-2	2,6-Dinitrotoluene	5.0	< 5.0 U
121-14-2	2,4-Dinitrotoluene	5.0	< 5.0 U
84-66-2	Diethylphthalate	1.0	< 1.0 U



Sample ID: LDW-SP-54-C-U SAMPLE

Lab Sample ID: GU45C LIMS ID: 04-10232 Matrix: Water Date Analyzed: 07/14/04 13:19 QC Report No: GU45-Windward Environmental Project: LDW Seep Sampling

CAS Number	Analyte	RL	Result
7005-72-3	4-Chlorophenyl-phenylether	1.0	< 1.0 U
86-73-7	Fluorene	1.0	< 1.0 U
100-01-6	4-Nitroaniline	5.0	< 5.0 U
534-52-1	4,6-Dinitro-2-Methylphenol	15	< 15 U
86-30-6	N-Nitrosodiphenylamine	1.0	< 1.0 U
101-55-3	4-Bromophenyl-phenylether	1.0	< 1.0 U
118-74-1	Hexachlorobenzene	1.0	< 1.0 U
87-86-5	Pentachlorophenol	5.0	< 5.0 Ŭ
85-01-8	Phenanthrene	1.0	< 1.0 U
86-74-8	Carbazole	1.0	< 1.0 U
120-12-7	Anthracene	1.0	< 1.0 U
84-74-2	Di-n-Butylphthalate	1.0	< 1.0 U
206-44-0	Fluoranthene	1.0	< 1.0 U
129-00-0	Pyrene	1.0	< 1.0 U
85-68-7	Butylbenzylphthalate	1.0	< 1.0 U
91-94-1	3,3'-Dichlorobenzidine	5.0	< 5.0 U
56-55-3	Benzo (a) anthracene	1.0	< 1.0 U
117-81-7	bis(2-Ethylhexyl)phthalate	1.0	1.0 B
218-01-9	Chrysene	1.0	< 1.0 U
117-84-0	Di-n-Octyl phthalate	1.0	< 1.0 U
205-99-2	Benzo(b)fluoranthene	1.0	< 1.0 U
207-08-9	Benzo(k)fluoranthene	1.0	< 1.0 U
50-32~8	Benzo(a)pyrene	1.0	< 1.0 U
193-39-5	Indeno(1,2,3-cd)pyrene	1.0	< 1.0 U
53-70-3	Dibenz(a,h)anthracene	1.0	< 1.0 U
191-24-2	Benzo(g,h,i)perylene	1.0	< 1.0 U
123-91-1	1,4-Dioxane	1.0	< 1.0 U

Reported in μ g/L (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	68.8%	2-Fluorobiphenyl	76.2%
d14-p-Terphenyl	93.5%	d4-1,2-Dichlorobenzene	54.8%
d5-Phenol	63.6%	2-Fluorophenol	59.8%
2,4,6-Tribromophenol	103%	d4-2-Chlorophenol	67.5%
d8-1,4-Dioxane	47.5%	L	

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Lab Sample ID: GU45D LIMS ID: 04-10233 Matrix: Water Data Release Authorized: Reported: 07/15/04

Date Extracted: 07/07/04 Date Analyzed: 07/14/04 13:51 Instrument/Analyst: NT6/Van INCORPORATED Sample ID: LDW-SP-54-C-F SAMPLE

ANALYTICAL RESOURCES

QC Report No: GU45-Windward Environmental Project: LDW Seep Sampling

Date Sampled: 06/30/04 Date Received: 06/30/04

CAS Number	Analyte	RL	Result
108-95-2	Phenol	2.0	< 2.0 U
111-44-4	Bis-(2-Chloroethyl) Ether	2.0	< 2.0 U
95-57-8	2-Chlorophenol	1.0	< 1.0 U
541-73-1	1,3-Dichlorobenzene	1.0	3.6
106-46-7	1,4-Dichlorobenzene	1.0	3.9
100-51-6	Benzyl Alcohol	5.0	< 5.0 U
95-50-1	1,2-Dichlorobenzene	1.0	< 1.0 U
95-48-7	2-Methylphenol	1.0	< 1.0 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	1.0	< 1.0 U
106-44-5	4-Methylphenol	1.0	< 1.0 U
621-64-7	N-Nitroso-Di-N-Propylamine	2.0	< 2.0 U
67-72-1	Hexachloroethane	2.0	< 2.0 U
98-95-3	Nitrobenzene	1.0	< 1.0 U
78-59-1	Isophorone	1.0	< 1.0 U
88-75-5	2-Nitrophenol	5.0	< 5.0 U
105-67-9	2,4-Dimethylphenol	3.0	< 3.0 U
65-85-0	Benzoic Acid	10	< 10 U
111-91-1	bis(2-Chloroethoxy) Methane	1.0	< 1.0 U
120-83-2	2,4-Dichlorophenol	3.0	< 3.0 U
120-82-1	1,2,4-Trichlorobenzene	1.0	< 1.0 U
91-20-3	Naphthalene	1.0	< 1.0 U
106-47-8	4-Chloroaniline	3.0	< 3.0 U
87-68-3	Hexachlorobutadiene	2.0	< 2.0 U
59-50-7	4-Chloro-3-methylphenol	2.0	< 2.0 U
91-57-6	2-Methylnaphthalene	1.0	< 1.0 U
77-47-4	Hexachlorocyclopentadiene	5.0	< 5.0 U
88-06-2	2,4,6-Trichlorophenol	5.0	< 5.0 U
95-95-4	2,4,5-Trichlorophenol	5.0	< 5.0 U
91-58-7	2-Chloronaphthalene	1.0	< 1.0 U
88-74-4	2-Nitroaniline	5.0	< 5.0 U
131-11-3	Dimethylphthalate	1.0	< 1.0 U
208-96-8	Acenaphthylene	1.0	< 1.0 U
99-09-2	3-Nitroaniline	6.0	< 6.0 U
83-32-9	Acenaphthene	1.0	< 1.0 U
51-28-5	2,4-Dinitrophenol	25	< 25 Ŭ
100-02-7	4-Nitrophenol	5.0	< 5.0 U
132-64-9	Dibenzofuran	1.0	< 1.0 U
606-20-2	2,6-Dinitrotoluene	5.0	< 5.0 U
121-14-2	2,4-Dinitrotoluene	5.0	< 5.0 Ŭ
84-66-2	Diethylphthalate	1.0	< 1.0 U



Sample ID: LDW-SP-54-C-F SAMPLE

Lab Sample ID: GU45D LIMS ID: 04-10233 Matrix: Water Date Analyzed: 07/14/04 13:51 QC Report No: GU45-Windward Environmental Project: LDW Seep Sampling

Analyte	RL	Result
4-Chlorophenyl-phenylether	1.0	< 1.0 U
Fluorene	1.0	< 1.0 U
4-Nitroaniline	5.0	< 5.0 U
4,6-Dinitro-2-Methylphenol	15	< 15 U
N-Nitrosodiphenylamine	1.0	< 1.0 U
4-Bromophenyl-phenylether	1.0	< 1.0 U
Hexachlorobenzene	1.0	< 1.0 U
Pentachlorophenol	5.0	< 5.0 U
Phenanthrene	1.0	< 1.0 U
Carbazole	1.0	< 1.0 U
Anthracene	1.0	< 1.0 U
Di-n-Butylphthalate	1.0	< 1.0 U
Fluoranthene	1.0	< 1.0 U
Pyrene	1.0	< 1.0 U
Butylbenzylphthalate	1.0	< 1.0 U
3,3'-Dichlorobenzidine	5.0	< 5.0 U
Benzo (a) anthracene	1.0	< 1.0 U
bis(2-Ethylhexyl)phthalate	1.0	< 1.0 U
Chrysene	1.0	< 1.0 U
Di-n-Octyl phthalate	1.0	< 1.0 U
Benzo(b)fluoranthene	1.0	< 1.0 U
Benzo(k)fluoranthene	1.0	< 1.0 U
Benzo(a)pyrene	1.0	< 1.0 U
Indeno(1,2,3-cd)pyrene	1.0	< 1.0 U
Dibenz(a,h)anthracene	1.0	< 1.0 U
Benzo(g,h,i)perylene	1.0	< 1.0 U
1,4-Dioxane	1.0	< 1.0 U
	Analyte 4-Chlorophenyl-phenylether Fluorene 4-Nitroaniline 4,6-Dinitro-2-Methylphenol N-Nitrosodiphenylamine 4-Bromophenyl-phenylether Hexachlorobenzene Pentachlorophenol Phenanthrene Carbazole Anthracene Di-n-Butylphthalate Fluoranthene Pyrene Butylbenzylphthalate 3,3'-Dichlorobenzidine Benzo(a) anthracene bis(2-Ethylhexyl)phthalate Chrysene Di-n-Octyl phthalate Benzo(b)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenz(a,h) anthracene Benzo(g,h,i)perylene 1,4-Dioxane	AnalyteRL4-Chlorophenyl-phenylether1.0Fluorene1.04-Nitroaniline5.04,6-Dinitro-2-Methylphenol15N-Nitrosodiphenylamine1.04-Bromophenyl-phenylether1.0Hexachlorobenzene1.0Pentachlorophenol5.0Phenanthrene1.0Carbazole1.0Anthracene1.0Di-n-Butylphthalate1.0Fluoranthene1.0Pyrene1.0Butylbenzylphthalate1.0Di -n-Cctyl phthalate1.0Di-n-Octyl phthalate1.0Benzo (a) pyrene1.0Benzo (b) fluoranthene1.0Benzo (a) pyrene1.0Benzo (a) hanthracene1.0Benzo (b) fluoranthene1.0Benzo (c) pyrene1.0Benzo (c) pyrene1.0Benzo (c) pyrene1.0Benzo (c) pyrene1.0Indeno (1, 2, 3-cd) pyrene1.0Benzo (g, h, i) perylene1.01, 4-Dioxane1.0

Reported in $\mu g/L$ (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	75.6%	2-Fluorobiphenvl	76.5%
d14-p-Terphenyl	94.1%	d4-1,2-Dichlorobenzene	58.1%
d5-Phenol	67.2%	2-Fluorophenol	65.7%
2,4,6-Tribromophenol	104%	d4-2-Chlorophenol	72.7%
d8-1,4-Dioxane	52.0%	1	

Lab Sample ID: GU45E LIMS ID: 04-10234 Matrix: Water Data Release Authorized: Reported: 07/15/04

Date Extracted: 07/07/04 Date Analyzed: 07/14/04 14:23 Instrument/Analyst: NT6/Van



Sample ID: LDW-SP-82-C-U SAMPLE

QC Report No: GU45-Windward Environmental Project: LDW Seep Sampling

Date Sampled: 06/30/04 Date Received: 06/30/04

CAS Number	Analyte	RL	Result
108-95-2	Phenol	2.0	< 2.0 U
111-44-4	Bis-(2-Chloroethyl) Ether	2.0	< 2.0 U
95-57-8	2-Chlorophenol	1.0	< 1.0 U
541-73-1	1,3-Dichlorobenzene	1.0	< 1.0 U
106-46-7	1,4-Dichlorobenzene	1.0	< 1.0 U
100-51-6	Benzyl Alcohol	5.0	< 5.0 U
95-50-1	1,2-Dichlorobenzene	1.0	< 1.0 U
95-48-7	2-Methylphenol	1.0	< 1.0 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	1.0	< 1.0 U
106-44-5	4-Methylphenol	1.0	< 1.0 U
621-64-7	N-Nitroso-Di-N-Propylamine	2.0	< 2.0 U
67-72-1	Hexachloroethane	2.0	< 2.0 U
98-95-3	Nitrobenzene	1.0	< 1.0 U
78-59-1	Isophorone	1.0	< 1.0 U
88-75-5	2-Nitrophenol	5.0	< 5.0 Ŭ
105-67-9	2,4-Dimethylphenol	3.0	< 3.0 U
65-85-0	Benzoic Acid	10	< 10 U
111-91-1	bis(2-Chloroethoxy) Methane	1.0	< 1.0 U
120-83-2	2,4-Dichlorophenol	3.0	< 3.0 U
120-82-1	1,2,4-Trichlorobenzene	1.0	< 1.0 U
91-20-3	Naphthalene	1.0	< 1.0 U
106-47-8	4-Chloroaniline	3.0	< 3.0 U
87-68-3	Hexachlorobutadiene	2.0	< 2.0 U
59-50-7	4-Chloro-3-methylphenol	2.0	< 2.0 U
91-57-6	2-Methylnaphthalene	1.0	< 1.0 U
77-47-4	Hexachlorocyclopentadiene	5.0	< 5.0 U
88-06-2	2,4,6-Trichlorophenol	5.0	< 5.0 U
95-95-4	2,4,5-Trichlorophenol	5.0	< 5.0 Ŭ
91-58-7	2-Chloronaphthalene	1.0	< 1.0 U
88-74-4	2-Nitroaniline	5.0	< 5.0 U
131-11-3	Dimethylphthalate	1.0	< 1.0 U
208-96-8	Acenaphthylene	1.0	< 1.0 U
99-09-2	3-Nitroaniline	6.0	< 6.0 U
83-32-9	Acenaphthene	1.0	< 1.0 U
51-28-5	2,4-Dinitrophenol	25	< 25 U
100-02-7	4-Nitrophenol	5.0	< 5.0 U
132-64-9	Dibenzofuran	1.0	< 1.0 U
606-20-2	2,6-Dinitrotoluene	5.0	< 5.0 U
121-14-2	2,4-Dinitrotoluene	5.0	< 5.0 U
84-66-2	Diethylphthalate	1.0	< 1.0 U



Sample ID: LDW-SP-82-C-U SAMPLE

Lab Sample ID: GU45E LIMS ID: 04-10234 Matrix: Water Date Analyzed: 07/14/04 14:23 QC Report No: GU45-Windward Environmental Project: LDW Seep Sampling

CAS Number	Analyte	RL	Result
7005-72-3	4-Chlorophenyl-phenylether	1.0	< 1.0 U
86-73-7	Fluorene	1.0	< 1.0 U
100-01-6	4-Nitroaniline	5.0	< 5.0 Ŭ
534-52-1	4,6-Dinitro-2-Methylphenol	15	< 15 U
86-30-6	N-Nitrosodiphenylamine	1.0	< 1.0 U
101-55-3	4-Bromophenyl-phenylether	1.0	< 1.0 U
118-74-1	Hexachlorobenzene	1.0	< 1.0 U
87-86-5	Pentachlorophenol	5.0	< 5.0 U
85-01-8	Phenanthrene	1.0	< 1.0 U
86-74-8	Carbazole	1.0	< 1.0 U
120-12-7	Anthracene	1.0	< 1.0 U
84-74-2	Di-n-Butylphthalate	1.0	< 1.0 U
206-44-0	Fluoranthene	1.0	< 1.0 U
129-00-0	Pyrene	1.0	< 1.0 U
85-68-7	Butylbenzylphthalate	1.0	< 1.0 U
91-94-1	3,3'-Dichlorobenzidine	5.0	< 5.0 U
56-55-3	Benzo (a) anthracene	1.0	< 1.0 U
117-81-7	bis(2-Ethylhexyl)phthalate	1.0	< 1.0 U
218-01-9	Chrysene	1.0	< 1.0 U
117-84-0	Di-n-Octyl phthalate	1.0	< 1.0 U
205-99-2	Benzo(b)fluoranthene	1.0	< 1.0 U
207-08-9	Benzo(k)fluoranthene	1.0	< 1.0 U
50-32-8	Benzo(a)pyrene	1.0	< 1.0 U
193-39-5	Indeno(1,2,3-cd)pyrene	1.0	< 1.0 U
53-70-3	Dibenz(a,h)anthracene	1.0	< 1.0 U
191-24-2	Benzo(g,h,i)perylene	1.0	< 1.0 U
123-91-1	1,4-Dioxane	1.0	< 1.0 U

Reported in $\mu g/L$ (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	68.4%	2-Fluorobiphenyl	67.6%
d14-p-Terphenyl	95.3%	d4-1,2-Dichlorobenzene	52.8%
d5-Phenol	59.8%	2-Fluorophenol	60.5%
2,4,6-Tribromophenol	94.9%	d4-2-Chlorophenol	64.3%
d8-1,4-Dioxane	51.4%	L	

ORGANICS ANALYSIS DATA SHEET Semivolatiles by SW8270C GC/MS Page 1 of 2

Lab Sample ID: GU45F LIMS ID: 04-10235 Matrix: Water Data Release Authorized: Reported: 07/15/04

Date Extracted: 07/07/04 Date Analyzed: 07/14/04 15:27 Instrument/Analyst: NT6/Van

Sample ID: LDW-SP-82-C-F SAMPLE

QC Report No: GU45-Windward Environmental Project: LDW Seep Sampling

Date Sampled: 06/30/04 Date Received: 06/30/04

CAS Number	Analyte	RL	Result
108-95-2	Phenol	2.0	< 2.0 U
111-44-4	Bis-(2-Chloroethyl) Ether	2.0	< 2.0 U
95-57-8	2-Chlorophenol	1.0	< 1.0 U
541-73-1	1,3-Dichlorobenzene	1.0	< 1.0 U
106-46-7	1,4-Dichlorobenzene	1.0	< 1.0 U
100-51-6	Benzyl Alcohol	5.0	< 5.0 U
95-50-1	1,2-Dichlorobenzene	1.0	< 1.0 U
95-48-7	2-Methylphenol	1.0	< 1.0 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	1.0	< 1.0 U
106-44-5	4-Methylphenol	1.0	< 1.0 U
621-64-7	N-Nitroso-Di-N-Propylamine	2.0	< 2.0 U
67-72-1	Hexachloroethane	2.0	< 2.0 U
98-95-3	Nitrobenzene	1.0	< 1.0 U
78-59-1	Isophorone	1.0	< 1.0 U
88-75-5	2-Nitrophenol	5.0	< 5.0 U
105-67-9	2,4-Dimethylphenol	3.0	< 3.0 Ŭ
65-85-0	Benzoic Acid	10	< 10 U
111-91-1	bis(2-Chloroethoxy) Methane	1.0	< 1.0 U
120-83-2	2,4-Dichlorophenol	3.0	< 3.0 U
120-82-1	1,2,4-Trichlorobenzene	1.0	< 1.0 U
91-20-3	Naphthalene	1.0	< 1.0 U
106-47-8	4-Chloroaniline	3.0	< 3.0 U
87-68-3	Hexachlorobutadiene	2.0	< 2.0 U
59-50-7	4-Chloro-3-methylphenol	2.0	< 2.0 U
91-57-6	2-Methylnaphthalene	1.0	< 1.0 U
77-47-4	Hexachlorocyclopentadiene	5.0	< 5.0 U
88-06-2	2,4,6-Trichlorophenol	5.0	< 5.0 U
95-95-4	2,4,5-Trichlorophenol	5.0	< 5.0 U
91-58-7	2-Chloronaphthalene	1.0	< 1.0 U
88-74-4	2-Nitroaniline	5.0	< 5.0 U
131-11-3	Dimethylphthalate	1.0	< 1.0 U
208-96-8	Acenaphthylene	1.0	< 1.0 U
99-09-2	3-Nitroaniline	6.0	< 6.0 U
83-32-9	Acenaphthene	1.0	< 1.0 U
51-28-5	2,4-Dinitrophenol	25	< 25 U
100-02-7	4-Nitrophenol	5.0	< 5.0 U
132-64-9	Dibenzofuran	1.0	< 1.0 U
606-20-2	2,6-Dinitrotoluene	5.0	< 5.0 U
121-14-2	2,4-Dinitrotoluene	5.0	< 5.0 U
84-66-2	Diethylphthalate	1.0	< 1.0 U



Sample ID: LDW-SP-82-C-F SAMPLE

Lab Sample ID: GU45F LIMS ID: 04-10235 Matrix: Water Date Analyzed: 07/14/04 15:27 QC Report No: GU45-Windward Environmental Project: LDW Seep Sampling

CAS Number	Analyte	RL	Result
7005-72-3	4-Chlorophenyl-phenylether	1.0	< 1.0 U
86-73-7	Fluorene	1.0	< 1.0 U
100-01-6	4-Nitroaniline	5.0	< 5.0 U
534-52-1	4,6-Dinitro-2-Methylphenol	15	< 15 U
86-30-6	N-Nitrosodiphenylamine	1.0	< 1.0 U
101-55-3	4-Bromophenyl-phenylether	1.0	< 1.0 U
118-74-1	Hexachlorobenzene	1.0	< 1.0 Ŭ
87-86-5	Pentachlorophenol	5.0	< 5.0 Ŭ
85-01-8	Phenanthrene	1.0	< 1.0 U
86-74-8	Carbazole	1.0	< 1.0 U
120-12-7	Anthracene	1.0	< 1.0 U
84-74-2	Di-n-Butylphthalate	1.0	< 1.0 U
206-44-0	Fluoranthene	1.0	< 1.0 U
129-00-0	Pyrene	1.0	< 1.0 U
85-68-7	Butylbenzylphthalate	1.0	< 1.0 U
91-94-1	3,3'-Dichlorobenzidine	5.0	< 5.0 U
56-55-3	Benzo (a) anthracene	1.0	< 1.0 U
117-81-7	bis(2-Ethylhexyl)phthalate	1.0	< 1.0 U
218-01-9	Chrysene	1.0	< 1.0 U
117-84-0	Di-n-Octyl phthalate	1.0	< 1.0 U
205-99-2	Benzo(b)fluoranthene	1.0	< 1.0 U
207-08-9	Benzo(k)fluoranthene	1.0	< 1.0 U
50-32-8	Benzo(a)pyrene	1.0	< 1.0 U
193-39-5	Indeno(1,2,3-cd)pyrene	1.0	< 1.0 U
53-70-3	Dibenz(a,h)anthracene	1.0	< 1.0 U
191-24-2	Benzo(g,h,i)perylene	1.0	< 1.0 U
123-91-1	1,4-Dioxane	1.0	< 1.0 U

Reported in $\mu g/L$ (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	74.4%	2-Fluorobiphenyl	72.4%
d14-p-Terphenyl	95.0%	d4-1,2-Dichlorobenzene	56.0%
d5-Phenol	67.2%	2-Fluorophenol	66.9%
2,4,6-Tribromophenol	95.1%	d4-2-Chlorophenol	72.1%
d8-1,4-Dioxane	60.9%	L	

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срет Срет

Lab Sample ID: GU45G LIMS ID: 04-10236 Matrix: Water Data Release Authorized Reported: 07/15/04

Date Extracted: 07/07/04 Date Analyzed: 07/14/04 15:58 Instrument/Analyst: NT6/Van Sample ID: LDW-SP-82-C-FD-U SAMPLE

ANALYTICAL RESOURCES

INCORPORATED

QC Report No: GU45-Windward Environmental Project: LDW Seep Sampling

Date Sampled: 06/30/04 Date Received: 06/30/04

CAS Number	Analyte	RL	Result
108-95-2	Phenol	2.0	< 2.0 U
111 - 44 - 4	Bis-(2-Chloroethyl) Ether	2.0	< 2.0 U
95-57-8	2-Chlorophenol	1.0	< 1.0 U
541-73-1	1,3-Dichlorobenzene	1.0	< 1.0 U
106-46-7	1,4-Dichlorobenzene	1.0	< 1.0 U
100-51-6	Benzyl Alcohol	5.0	< 5.0 U
95-50-1	1,2-Dichlorobenzene	1.0	< 1.0 U
95-48-7	2-Methylphenol	1.0	< 1.0 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	1.0	< 1.0 U
106-44-5	4-Methylphenol	1.0	< 1.0 U
621-64-7	N-Nitroso-Di-N-Propylamine	2.0	< 2.0 U
67-72-1	Hexachloroethane	2.0	< 2.0 U
98-95-3	Nitrobenzene	1.0	< 1.0 U
78-59-1	Isophorone	1.0	< 1.0 U
88-75-5	2-Nitrophenol	5.0	< 5.0 U
105-67-9	2,4-Dimethylphenol	3.0	< 3.0 U
65-85-0	Benzoic Acid	10	< 10 U
111-91-1	bis(2-Chloroethoxy) Methane	1.0	< 1.0 U
120-83-2	2,4-Dichlorophenol	3.0	< 3.0 U
120-82-1	1,2,4-Trichlorobenzene	1.0	< 1.0 U
91-20-3	Naphthalene	1.0	< 1.0 U
106-47-8	4-Chloroaniline	3.0	< 3.0 U
87-68-3	Hexachlorobutadiene	2.0	< 2.0 U
59-50-7	4-Chloro-3-methylphenol	2.0	< 2.0 U
91-57-6	2-Methylnaphthalene	1.0	< 1.0 U
77-47-4	Hexachlorocyclopentadiene	5.0	< 5.0 U
88-06-2	2,4,6-Trichlorophenol	5.0	< 5.0 U
95-95-4	2,4,5-Trichlorophenol	5.0	< 5.0 U
91-58-7	2-Chloronaphthalene	1.0	< 1.0 U
88-74-4	2-Nitroaniline	5.0	< 5.0 U
131-11-3	Dimethylphthalate	1.0	< 1.0 U
208-96-8	Acenaphthylene	1.0	< 1.0 U
99-09-2	3-Nitroaniline	6.0	< 6.0 U
83-32-9	Acenaphthene	1.0	< 1.0 U
51-28-5	2,4-Dinitrophenol	25	< 25 Ŭ
100-02-7	4-Nitrophenol	5.0	< 5.0 U
132-64-9	Dibenzofuran	1.0	< 1.0 U
606-20-2	2,6-Dinitrotoluene	5.0	< 5.0 U
121-14-2	2,4-Dinitrotoluene	5.0	< 5.0 Ū
84-66-2	Diethylphthalate	1.0	< 1.0 U

ANALYTICAL

Lab Sample ID: GU45G LIMS ID: 04-10236 Matrix: Water Date Analyzed: 07/14/04 15:58 QC Report No: GU45-Windward Environmental Project: LDW Seep Sampling

CAS Number	Analyte	RL	Result
7005-72-3	4-Chlorophenyl-phenylether	1.0	< 1.0 U
86-73-7	Fluorene	1.0	< 1.0 U
100-01-6	4-Nitroaniline	5.0	< 5.0 U
534-52-1	4,6-Dinitro-2-Methylphenol	15	< 15 U
86-30-6	N-Nitrosodiphenylamine	1.0	< 1.0 U
101-55-3	4-Bromophenyl-phenylether	1.0	< 1.0 U
118-74-1	Hexachlorobenzene	1.0	< 1.0 U
87-86-5	Pentachlorophenol	5.0	< 5.0 U
85-01-8	Phenanthrene	1.0	< 1.0 U
86-74-8	Carbazole	1.0	< 1.0 U
120-12-7	Anthracene	1.0	< 1.0 U
84-74-2	Di-n-Butylphthalate	1.0	< 1.0 U
206-44-0	Fluoranthene	1.0	< 1.0 U
129-00-0	Pyrene	1.0	< 1.0 U
85-68-7	Butylbenzylphthalate	1.0	< 1.0 U
91-94-1	3,3'-Dichlorobenzidine	5.0	< 5.0 U
56-55-3	Benzo(a)anthracene	1.0	< 1.0 U
117-81-7	bis(2-Ethylhexyl)phthalate	1.0	< 1.0 U
218-01-9	Chrysene	1.0	< 1.0 U
117-84-0	Di-n-Octyl phthalate	1.0	< 1.0 U
205-99-2	Benzo(b)fluoranthene	1.0	< 1.0 U
207-08-9	Benzo(k)fluoranthene	1.0	< 1.0 U
50-32-8	Benzo(a)pyrene	1.0	< 1.0 U
193-39-5	Indeno(1,2,3-cd)pyrene	1.0	< 1.0 U
53-70-3	Dibenz (a,h) anthracene	1.0	< 1.0 U
191-24-2	Benzo(g,h,i)perylene	1.0	< 1.0 U
123-91-1	1,4-Dioxane	1.0	< 1.0 U

Reported in $\mu g/L$ (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	71.1%	2-Fluorobiphenyl	68.8%
d14-p-Terphenyl	93.0%	d4-1,2-Dichlorobenzene	54.0%
d5-Phenol	63.0%	2-Fluorophenol	64.3%
2,4,6-Tribromophenol	89.5%	d4-2-Chlorophenol	67.5%
d8-1,4-Dioxane	55.6%	-	

Lab Sample ID: GU45H LIMS ID: 04-10237 Matrix: Water Data Release Authorized: Reported: 07/15/04

Date Extracted: 07/07/04 Date Analyzed: 07/14/04 16:30 Instrument/Analyst: NT6/Van RESOURCES INCORPORATED Sample ID: LDW-SP-82-C-FD-F SAMPLE

ANALYTICAL

QC Report No: GU45-Windward Environmental Project: LDW Seep Sampling

Date Sampled: 06/30/04 Date Received: 06/30/04

Sample Amount: 500 mL Final Extract Volume: 0.50 mL Dilution Factor: 1.00

108-95-2Phenol 2.0 < 2.0 U $111-44-4$ $Bis-(2-Chloroethyl)$ $Ether$ 2.0 < 2.0 U $95-57-8$ $2-Chlorophenol$ 1.0 < 1.0 U $541-73-1$ $1, 3$ -Dichlorobenzene 1.0 < 1.0 U $106-46-7$ $1, 4$ -Dichlorobenzene 1.0 < 1.0 U $106-46-7$ $1, 4$ -Dichlorobenzene 1.0 < 1.0 U $106-46-7$ $1, 4$ -Dichlorobenzene 1.0 < 1.0 U $100-51-6$ $Benzyl$ $Alcohol$ 5.0 < 5.0 U $95-50-1$ $1, 2$ -Dichlorobenzene 1.0 < 1.0 U $95-48-7$ 2 -Methylphenol 1.0 < 1.0 U $108-60-1$ $2, 2'-Oxybis (1-Chloropropane)$ 1.0 < 1.0 U $106-44-5$ 4 -Methylphenol 1.0 < 1.0 U $106-44-5$ 4 -Methylphenol 1.0 < 1.0 U 2.0 < 2.0 U 4 -Methylphenol 1.0 < 1.0 $106-44-5$ 4 -Methylphenol 1.0 < 1.0 U $98-95-3$ Nitrobenzene 1.0 < 1.0 U $98-95-3$ Nitrobenzene 1.0 < 1.0 U $88-75-5$ 2 -Nitrophenol 5.0 < 5.0 U $105-67-9$ $2, 4$ -Dimethylphenol 3.0 < 3.0 U $11-91-1$ $bis (2-Chloroethoxy)$ $Methane$ 1.0 < 1.0 U $1120-83-2$ $2, 4$ -Dichlorophe	CAS Number	Analyte	RL	Result
111-44-4Bis-(2-Chloroethyl) Ether 2.0 < 2.0 U $95-57-8$ 2 -Chlorophenol 1.0 < 1.0 U $541-73-1$ $1,3$ -Dichlorobenzene 1.0 < 1.0 U $106-46-7$ $1,4$ -Dichlorobenzene 1.0 < 1.0 U $100-51-6$ Benzyl Alcohol 5.0 < 5.0 U $95-50-1$ $1,2$ -Dichlorobenzene 1.0 < 1.0 U $95-48-7$ 2 -Methylphenol 1.0 < 1.0 U $106-44-5$ 4 -Methylphenol 1.0 < 1.0 U $106-44-5$ 4 -Methylphenol 1.0 < 1.0 U $621-64-7$ N-Nitroso-Di-N-Propylamine 2.0 < 2.0 U $67-72-1$ Hexachloroethane 2.0 < 2.0 U $98-95-3$ Nitrobenzene 1.0 < 1.0 U $88-75-5$ 2 -Nitrophenol 5.0 < 5.0 U $105-67-9$ $2,4$ -Dimethylphenol 3.0 < 3.0 U $11-91-1$ bis (2-Chloroethoxy) Methane 1.0 < 1.0 U $120-83-2$ $2,4$ -Dichlorophenol 3.0 < 3.0 U	108-95-2	Phenol	2.0	< 2.0 U
95-57-82-Chlorophenol 1.0 < 1.0 U $541-73-1$ $1,3$ -Dichlorobenzene 1.0 < 1.0 U $106-46-7$ $1,4$ -Dichlorobenzene 1.0 < 1.0 U $100-51-6$ Benzyl Alcohol 5.0 < 5.0 U $95-50-1$ $1,2$ -Dichlorobenzene 1.0 < 1.0 U $95-48-7$ 2 -Methylphenol 1.0 < 1.0 U $108-60-1$ $2,2'-Oxybis(1-Chloropropane)$ 1.0 < 1.0 U $106-44-5$ 4 -Methylphenol 1.0 < 1.0 U $621-64-7$ N -Nitroso-Di-N-Propylamine 2.0 < 2.0 U $67-72-1$ Hexachloroethane 2.0 < 2.0 U $98-95-3$ Nitrobenzene 1.0 < 1.0 U $78-59-1$ Isophorone 5.0 < 5.0 U $88-75-5$ 2 -Nitrophenol 5.0 < 3.0 U $105-67-9$ $2,4$ -Dimethylphenol 3.0 < 3.0 U $11-91-1$ $bis(2$ -Chloroethoxy) $Methane$ 1.0 < 1.0 U $120-83-2$ $2,4$ -Dichlorophenol 3.0 < 3.0 < 3.0 < 3.0 < 3.0	111-44-4	Bis-(2-Chloroethyl) Ether	2.0	< 2.0 U
541-73-11,3-Dichlorobenzene1.0< 1.0U $106-46-7$ 1,4-Dichlorobenzene1.0< 1.0	95-57-8	2-Chlorophenol	1.0	< 1.0 U
106-46-7 $1,4-Dichlorobenzene$ 1.0 < 1.0 U $100-51-6$ Benzyl Alcohol 5.0 < 5.0 U $95-50-1$ $1,2-Dichlorobenzene$ 1.0 < 1.0 U $95-48-7$ $2-Methylphenol$ 1.0 < 1.0 U $108-60-1$ $2,2'-Oxybis(1-Chloropropane)$ 1.0 < 1.0 U $106-44-5$ $4-Methylphenol$ 1.0 < 1.0 U $621-64-7$ $N-Nitroso-Di-N-Propylamine$ 2.0 < 2.0 U $67-72-1$ Hexachloroethane 2.0 < 2.0 U $98-95-3$ Nitrobenzene 1.0 < 1.0 U $78-59-1$ Isophorone 1.0 < 1.0 U $88-75-5$ $2-Nitrophenol$ 5.0 < 5.0 U $105-67-9$ $2,4-Dimethylphenol$ 3.0 < 3.0 U $111-91-1$ $bis(2-Chloroethoxy)$ $Methane$ 1.0 < 1.0 U $120-83-2$ $2,4-Dichlorophenol$ 3.0 < 3.0 < 3.0 < 3.0 < 3.0	541-73-1	1,3-Dichlorobenzene	1.0	< 1.0 U
100-51-6Benzyl Alcohol 5.0 < 5.0 U $95-50-1$ $1,2$ -Dichlorobenzene 1.0 < 1.0 U $95-48-7$ 2 -Methylphenol 1.0 < 1.0 U $108-60-1$ $2,2'-Oxybis(1-Chloropropane)$ 1.0 < 1.0 U $106-44-5$ 4 -Methylphenol 1.0 < 1.0 U $621-64-7$ N -Nitroso-Di-N-Propylamine 2.0 < 2.0 U $67-72-1$ Hexachloroethane 2.0 < 2.0 U $98-95-3$ Nitrobenzene 1.0 < 1.0 U $78-59-1$ Isophorone 1.0 < 1.0 U $88-75-5$ 2 -Nitrophenol 5.0 < 5.0 U $105-67-9$ $2,4$ -Dimethylphenol 3.0 < 3.0 U $111-91-1$ $bis(2$ -Chloroethoxy)Methane 1.0 < 1.0 U $120-83-2$ $2,4$ -Dichlorophenol 3.0 < 3.0 < 3.0 < 3.0	106-46-7	1,4-Dichlorobenzene	1.0	< 1.0 U
95-50-1 $1,2-Dichlorobenzene$ 1.0 < 1.0 U $95-48-7$ $2-Methylphenol$ 1.0 < 1.0 U $108-60-1$ $2,2'-Oxybis(1-Chloropropane)$ 1.0 < 1.0 U $106-44-5$ $4-Methylphenol$ 1.0 < 1.0 U $621-64-7$ $N-Nitroso-Di-N-Propylamine$ 2.0 < 2.0 U $67-72-1$ Hexachloroethane 2.0 < 2.0 U $98-95-3$ Nitrobenzene 1.0 < 1.0 U $78-59-1$ Isophorone 1.0 < 1.0 U $88-75-5$ $2-Nitrophenol$ 5.0 < 5.0 U $105-67-9$ $2,4-Dimethylphenol$ 3.0 < 3.0 U $111-91-1$ $bis(2-Chloroethoxy)$ $Methane$ 1.0 < 1.0 U $120-83-2$ $2,4-Dichlorophenol$ 3.0 < 3.0 < 3.0 < 3.0 < 3.0	100-51-6	Benzyl Alcohol	5.0	< 5.0 Ŭ
95-48-72-Methylphenol1.0< 1.0U $108-60-1$ $2,2'-Oxybis(1-Chloropropane)$ 1.0 < 1.0	95-50-1	1,2-Dichlorobenzene	1.0	< 1.0 U
$\begin{array}{cccccccc} 108-60-1 & 2,2'-Oxybis(1-Chloropropane) & 1.0 & < 1.0 & U \\ 106-44-5 & 4-Methylphenol & 1.0 & < 1.0 & U \\ 621-64-7 & N-Nitroso-Di-N-Propylamine & 2.0 & < 2.0 & U \\ 67-72-1 & Hexachloroethane & 2.0 & < 2.0 & U \\ 98-95-3 & Nitrobenzene & 1.0 & < 1.0 & U \\ 78-59-1 & Isophorone & 1.0 & < 1.0 & U \\ 88-75-5 & 2-Nitrophenol & 5.0 & < 5.0 & U \\ 105-67-9 & 2,4-Dimethylphenol & 3.0 & < 3.0 & U \\ 65-85-0 & Benzoic Acid & 10 & < 10 & U \\ 111-91-1 & bis(2-Chloroethoxy) & Methane & 1.0 & < 1.0 & U \\ 120-83-2 & 2,4-Dichlorophenol & 3.0 & < 3.0 & U \\ \end{array}$	95-48-7	2-Methylphenol	1.0	< 1.0 U
106-44-54-Methylphenol1.0< 1.0U621-64-7N-Nitroso-Di-N-Propylamine2.0< 2.0	108-60-1	2,2'-Oxybis(1-Chloropropane)	1.0	< 1.0 U
621-64-7N-Nitroso-Di-N-Propylamine2.0< 2.0U67-72-1Hexachloroethane2.0< 2.0	106-44-5	4-Methylphenol	1.0	< 1.0 U
67-72-1Hexachloroethane2.0< 2.0U98-95-3Nitrobenzene1.0< 1.0	621-64-7	N-Nitroso-Di-N-Propylamine	2.0	< 2.0 U
98-95-3Nitrobenzene1.0< 1.0U78-59-1Isophorone1.0< 1.0	67-72-1	Hexachloroethane	2.0	< 2.0 U
78-59-1Isophorone1.0< 1.0U88-75-52-Nitrophenol5.0< 5.0	98-95-3	Nitrobenzene	1.0	< 1.0 U
88-75-52-Nitrophenol5.0< 5.0U105-67-92,4-Dimethylphenol3.0< 3.0	78-59-1	Isophorone	1.0	< 1.0 U
105-67-92,4-Dimethylphenol3.0< 3.0U65-85-0Benzoic Acid10< 10	88-75-5	2-Nitrophenol	5.0	< 5.0 U
65-85-0Benzoic Acid10< 10 U111-91-1bis(2-Chloroethoxy) Methane1.0< 1.0 U	105-67-9	2,4-Dimethylphenol	3.0	< 3.0 U
111-91-1bis(2-Chloroethoxy) Methane1.0< 1.0 U120-83-22,4-Dichlorophenol3.0< 3.0 U	65-85-0	Benzoic Acid	10	< 10 U
120-83-2 2,4-Dichlorophenol 3.0 < 3.0 U	111-91-1	bis(2-Chloroethoxy) Methane	1.0	< 1.0 U
	120-83-2	2,4-Dichlorophenol	3.0	< 3.0 U
120-82-1 1,2,4-Trichlorobenzene 1.0 < 1.0 U	120-82-1	1,2,4-Trichlorobenzene	1.0	< 1.0 U
91-20-3 Naphthalene 1.0 < 1.0 U	91-20-3	Naphthalene	1.0	< 1.0 U
106-47-8 4-Chloroaniline 3.0 < 3.0 U	106-47-8	4-Chloroaniline	3.0	< 3.0 U
87-68-3 Hexachlorobutadiene 2.0 < 2.0 U	87-68-3	Hexachlorobutadiene	2.0	< 2.0 U
59-50-7 4-Chloro-3-methylphenol 2.0 < 2.0 U	59-50-7	4-Chloro-3-methylphenol	2.0	< 2.0 U
91-57-6 2-Methylnaphthalene 1.0 < 1.0 U	91-57-6	2-Methylnaphthalene	1.0	< 1.0 U
77-47-4 Hexachlorocyclopentadiene 5.0 < 5.0 U	77-47-4	Hexachlorocyclopentadiene	5.0	< 5.0 U
88-06-2 2,4,6-Trichlorophenol 5.0 < 5.0 U	88-06-2	2,4,6-Trichlorophenol	5.0	< 5.0 U
95-95-4 2,4,5-Trichlorophenol 5.0 < 5.0 U	95-95-4	2,4,5-Trichlorophenol	5.0	< 5.0 U
91-58-7 2-Chloronaphthalene 1.0 < 1.0 U	91-58-7	2-Chloronaphthalene	1.0	< 1.0 U
88-74-4 2-Nitroaniline 5.0 < 5.0 U	88-74-4	2-Nitroaniline	5.0	< 5.0 U
131-11-3 Dimethylphthalate 1.0 < 1.0 U	131-11-3	Dimethylphthalate	1.0	< 1.0 U
208-96-8 Acenaphthylene 1.0 < 1.0 U	208-96-8	Acenaphthylene	1.0	< 1.0 U
99-09-2 3-Nitroaniline 6.0 < 6.0 U	99-09-2	3-Nitroaniline	6.0	< 6.0 U
83-32-9 Acenaphthene 1.0 < 1.0 U	83-32-9	Acenaphthene	1.0	< 1.0 U
51-28-5 2,4-Dinitrophenol 25 < 25 U	51-28-5	2,4-Dinitrophenol	25	< 25 U
100-02-7 4-Nitrophenol 5.0 < 5.0 U	100-02-7	4-Nitrophenol	5.0	< 5.0 U
132-64-9 Dibenzofuran 1.0 < 1.0 U	132-64-9	Dibenzofuran	1.0	< 1.0 U
606-20-2 2,6-Dinitrotoluene 5.0 < 5.0 U	606-20-2	2,6-Dinitrotoluene	5.0	< 5.0 U
121-14-2 2,4-Dinitrotoluene 5.0 < 5.0 U	121-14-2	2,4-Dinitrotoluene	5.0	< 5.0 U
84-66-2 Diethylphthalate 1.0 < 1.0 U	84-66-2	Diethylphthalate	1.0	< 1.0 U



ANALYTICAL

Lab Sample ID: GU45H LIMS ID: 04-10237 Matrix: Water Date Analyzed: 07/14/04 16:30 QC Report No: GU45-Windward Environmental Project: LDW Seep Sampling

CAS Number	Analyte	RL	Result
7005-72-3	4-Chlorophenyl-phenylether	1.0	< 1.0 U
86-73-7	Fluorene	1.0	< 1.0 U
100-01-6	4-Nitroaniline	5.0	< 5.0 U
534-52-1	4,6-Dinitro-2-Methylphenol	15	< 15 U
86-30-6	N-Nitrosodiphenylamine	1.0	< 1.0 U
101-55-3	4-Bromophenyl-phenylether	1.0	< 1.0 U
118-74-1	Hexachlorobenzene	1.0	< 1.0 U
87-86-5	Pentachlorophenol	5.0	< 5.0 U
85-01-8	Phenanthrene	1.0	< 1.0 U
86-74-8	Carbazole	1.0	< 1.0 U
120-12-7	Anthracene	1.0	< 1.0 U
84-74-2	Di-n-Butylphthalate	1.0	3.0
206-44-0	Fluoranthene	1.0	< 1.0 U
129-00-0	Pyrene	1.0	< 1.0 U
85-68-7	Butylbenzylphthalate	1.0	< 1.0 U
91-94-1	3,3'-Dichlorobenzidine	5.0	< 5.0 U
56-55-3	Benzo(a)anthracene	1.0	< 1.0 U
117-81-7	bis(2-Ethylhexyl)phthalate	1.0	4.4 B
218-01-9	Chrysene	1.0	< 1.0 U
117-84-0	Di-n-Octyl phthalate	1.0	< 1.0 U
205-99-2	Benzo(b)fluoranthene	1.0	< 1.0 U
207-08-9	Benzo(k)fluoranthene	1.0	< 1.0 U
50-32-8	Benzo(a)pyrene	1.0	< 1.0 U
193-39-5	Indeno(1,2,3-cd)pyrene	1.0	< 1.0 U
53-70-3	Dibenz(a,h)anthracene	1.0	< 1.0 U
191-24-2	Benzo(g,h,i)perylene	1.0	< 1.0 U
123-91-1	1,4-Dioxane	1.0	< 1.0 U

Reported in $\mu g/L$ (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	81.2%	2-Fluorobiphenvl	77.6%
d14-p-Terphenyl	93.1%	d4-1,2-Dichlorobenzene	58.6%
d5-Phenol	74.4%	2-Fluorophenol	73.5%
2,4,6-Tribromophenol	99.08	d4-2-Chlorophenol	78.7%
d8-1,4-Dioxane	64.8%	-	



Lab Sample ID: GU76A LIMS ID: 04-10430 Matrix: Water Data Release Authorized: Reported: 07/15/04

Date Extracted: 07/07/04 Date Analyzed: 07/14/04 17:02 Instrument/Analyst: NT6/Van

Sample ID: LDW-SP-62-C-F SAMPLE

QC Report No: GU76-Windward Environmental Project: LDW-SEEP SAMPLING

Date Sampled: 07/02/04 Date Received: 07/02/04

CAS Number	Analyte	RL	Result
108-95-2	Phenol	2.0	< 2.0 U
111-44-4	Bis-(2-Chloroethyl) Ether	2.0	< 2.0 U
95-57-8	2-Chlorophenol	1.0	< 1.0 U
541-73-1	1,3-Dichlorobenzene	1.0	< 1.0 U
106-46-7	1,4-Dichlorobenzene	1.0	< 1.0 U
100-51-6	Benzyl Alcohol	5.0	< 5.0 U
95-50-1	1,2-Dichlorobenzene	1.0	< 1.0 U
95-48-7	2-Methylphenol	1.0	< 1.0 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	1.0	< 1.0 U
106-44-5	4-Methylphenol	1.0	< 1.0 U
621-64-7	N-Nitroso-Di-N-Propylamine	2.0	< 2.0 U
67-72-1	Hexachloroethane	2.0	< 2.0 U
98-95-3	Nitrobenzene	1.0	< 1.0 U
78-59-1	Isophorone	1.0	< 1.0 Ư
88-75-5	2-Nitrophenol	5.0	< 5.0 U
105-67-9	2,4-Dimethylphenol	3.0	< 3.0 U
65-85-0	Benzoic Acid	10	< 10 U
111-91-1	bis(2-Chloroethoxy) Methane	1.0	< 1.0 U
120-83-2	2,4-Dichlorophenol	3.0	< 3.0 U
120-82-1	1,2,4-Trichlorobenzene	1.0	< 1.0 U
91-20-3	Naphthalene	1.0	< 1.0 U
106-47-8	4-Chloroaniline	3.0	< 3.0 U
87-68-3	Hexachlorobutadiene	2.0	< 2.0 U
59-50-7	4-Chloro-3-methylphenol	2.0	< 2.0 U
91-57-6	2-Methylnaphthalene	1.0	< 1.0 U
77-47-4	Hexachlorocyclopentadiene	5.0	< 5.0 U
88-06-2	2,4,6-Trichlorophenol	5.0	< 5.0 U
95-95-4	2,4,5-Trichlorophenol	5.0	< 5.0 U
91-58-7	2-Chloronaphthalene	1.0	< 1.0 U
88-74-4	2-Nitroaniline	5.0	< 5.0 U
131-11-3	Dimethylphthalate	1.0	< 1.0 U
208-96-8	Acenaphthylene	1.0	< 1.0 U
99-09-2	3-Nitroaniline	6.0	< 6.0 U
83-32-9	Acenaphthene	1.0	< 1.0 U
51-28-5	2,4-Dinitrophenol	25	< 25 U
100-02-7	4-Nitrophenol	5.0	< 5.0 U
132-64-9	Dibenzofuran	1.0	< 1.0 U
606-20-2	2,6-Dinitrotoluene	5.0	< 5.0 U
121-14-2	2,4-Dinitrotoluene	5.0	< 5.0 U
84-66-2	Diethylphthalate	1.0	< 1.0 U

ORGANICS ANALYSIS DATA SHEET Semivolatiles by SW8270C GC/MS Page 2 of 2

Sample ID: LDW-SP-62-C-F SAMPLE

Lab Sample ID: GU76A LIMS ID: 04-10430 Matrix: Water Date Analyzed: 07/14/04 17:02 QC Report No: GU76-Windward Environmental Project: LDW-SEEP SAMPLING

CAS Number	Analyte	RL	Result
7005-72-3	4-Chlorophenyl-phenylether	1.0	< 1.0 U
86-73-7	Fluorene	1.0	< 1.0 U
100-01-6	4-Nitroaniline	5.0	< 5.0 U
534-52-1	4,6-Dinitro-2-Methylphenol	15	< 15 U
86-30-6	N-Nitrosodiphenylamine	1.0	< 1.0 U
101-55-3	4-Bromophenyl-phenylether	1.0	< 1.0 U
118-74-1	Hexachlorobenzene	1.0	< 1.0 U
87-86-5	Pentachlorophenol	5.0	< 5.0 U
85-01-8	Phenanthrene	1.0	< 1.0 U
86-74-8	Carbazole	1.0	< 1.0 U
120-12-7	Anthracene	1.0	< 1.0 U
84-74-2	Di-n-Butylphthalate	1.0	< 1.0 U
206-44-0	Fluoranthene	1.0	< 1.0 U
129-00-0	Pyrene	1.0	< 1.0 U
85-68-7	Butylbenzylphthalate	1.0	< 1.0 U
91-94-1	3,3'-Dichlorobenzidine	5.0	< 5.0 U
56-55-3	Benzo(a) anthracene	1.0	< 1.0 U
117-81-7	bis(2-Ethylhexyl)phthalate	1.0	1.0 B
218-01-9	Chrysene	1.0	< 1.0 U
117-84-0	Di-n-Octyl phthalate	1.0	< 1.0 U
205-99-2	Benzo(b)fluoranthene	1.0	< 1.0 U
207-08-9	Benzo(k)fluoranthene	1.0	< 1.0 U
50-32-8	Benzo(a)pyrene	1.0	< 1.0 U
193-39-5	Indeno(1,2,3-cd)pyrene	1.0	< 1.0 U
53-70-3	Dibenz(a,h)anthracene	1.0	< 1.0 U
191-24-2	Benzo(g,h,i)perylene	1.0	< 1.0 U
123-91-1	1,4-Dioxane	1.0	< 1.0 U

Reported in $\mu g/L$ (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	81.0%	2-Fluorobiphenyl	78.4%
d14-p-Terphenyl	98.0%	d4-1,2-Dichlorobenzene	62.1%
d5-Phenol	73.5%	2-Fluorophenol	74.2%
2,4,6-Tribromophenol	99.88	d4-2-Chlorophenol	78.9%
d8-1,4-Dioxane	65.2%	-	

Lab Sample ID: GU76B LIMS ID: 04-10431 Matrix: Water Data Release Authorized: Reported: 07/15/04

Date Extracted: 07/07/04 Date Analyzed: 07/14/04 17:34 Instrument/Analyst: NT6/Van



Sample ID: LDW-SP-61-C-U SAMPLE

QC Report No: GU76-Windward Environmental Project: LDW-SEEP SAMPLING

Date Sampled: 07/02/04 Date Received: 07/02/04

CAS Number	Analyte	RL	Result
108-95-2	Phenol	2.0	< 2.0 U
111-44-4	Bis-(2-Chloroethyl) Ether	2.0	< 2.0 U
95-57-8	2-Chlorophenol	1.0	< 1.0 U
541-73-1	1,3-Dichlorobenzene	1.0	< 1.0 U
106-46-7	1,4-Dichlorobenzene	1.0	< 1.0 U
100-51-6	Benzyl Alcohol	5.0	< 5.0 U
95-50-1	1,2-Dichlorobenzene	1.0	< 1.0 U
95-48-7	2-Methylphenol	1.0	< 1.0 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	1.0	< 1.0 U
106-44-5	4-Methylphenol	1.0	< 1.0 U
621-64-7	N-Nitroso-Di-N-Propylamine	2.0	< 2.0 U
67-72-1	Hexachloroethane	2.0	< 2.0 U
98-95-3	Nitrobenzene	1.0	< 1.0 U
78-59-1	Isophorone	1.0	< 1.0 U
88-75-5	2-Nitrophenol	5.0	< 5.0 U
105-67-9	2,4-Dimethylphenol	3.0	< 3.0 U
65-85-0	Benzoic Acid	10	< 10 U
111-91-1	bis(2-Chloroethoxy) Methane	1.0	< 1.0 U
120-83-2	2,4-Dichlorophenol	3.0	< 3.0 U
120-82-1	1,2,4-Trichlorobenzene	1.0	< 1.0 U
91-20-3	Naphthalene	1.0	< 1.0 U
106-47-8	4-Chloroaniline	3.0	< 3.0 U
87-68-3	Hexachlorobutadiene	2.0	< 2.0 U
59~50-7	4-Chloro-3-methylphenol	2.0	< 2.0 U
91-57-6	2-Methylnaphthalene	1.0	< 1.0 U
77-47-4	Hexachlorocyclopentadiene	5.0	< 5.0 U
88-06-2	2,4,6-Trichlorophenol	5.0	< 5.0 U
95-95-4	2,4,5-Trichlorophenol	5.0	< 5.0 U
91-58-7	2-Chloronaphthalene	1.0	< 1.0 U
88-74-4	2-Nitroaniline	5.0	< 5.0 U
131-11-3	Dimethylphthalate	1.0	< 1.0 U
208-96-8	Acenaphthylene	1.0	< 1.0 U
99-09-2	3-Nitroaniline	6.0	< 6.0 Ŭ
83-32-9	Acenaphthene	1.0	< 1.0 U
51-28-5	2,4-Dinitrophenol	25	< 25 U
100-02-7	4-Nitrophenol	5.0	< 5.0 U
132-64-9	Dibenzofuran	1.0	< 1.0 U
606-20-2	2,6-Dinitrotoluene	5.0	< 5.0 U
121-14-2	2,4-Dinitrotoluene	5.0	< 5.0 Ư
84-66-2	Diethylphthalate	1.0	< 1.0 U



Sample ID: LDW-SP-61-C-U SAMPLE

Lab Sample ID: GU76B LIMS ID: 04-10431 Matrix: Water Date Analyzed: 07/14/04 17:34 QC Report No: GU76-Windward Environmental Project: LDW-SEEP SAMPLING

CAS Number	Analyte	RL	Result
7005-72-3	4-Chlorophenyl-phenylether	1.0	< 1.0 U
86-73-7	Fluorene	1.0	< 1.0 U
100-01-6	4-Nitroaniline	5.0	< 5.0 U
534-52-1	4,6-Dinitro-2-Methylphenol	15	< 15 U
86-30-6	N-Nitrosodiphenylamine	1.0	< 1.0 U
101-55-3	4-Bromophenyl-phenylether	1.0	< 1.0 U
118-74-1	Hexachlorobenzene	1.0	< 1.0 U
87-86-5	Pentachlorophenol	5.0	< 5.0 U
85-01-8	Phenanthrene	1.0	< 1.0 U
86-74-8	Carbazole	1.0	< 1.0 U
120-12-7	Anthracene	1.0	< 1.0 U
84-74-2	Di-n-Butylphthalate	1.0	< 1.0 U
206-44-0	Fluoranthene	1.0	< 1.0 U
129-00-0	Pyrene	1.0	< 1.0 U
85-68-7	Butylbenzylphthalate	1.0	< 1.0 U
91-94-1	3,3'-Dichlorobenzidine	5.0	< 5.0 U
56-55-3	Benzo(a) anthracene	1.0	< 1.0 U
117-81-7	bis(2-Ethylhexyl)phthalate	1.0	3.1 B
218-01-9	Chrysene	1.0	< 1.0 U
117-84-0	Di-n-Octyl phthalate	1.0	< 1.0 U
205-99-2	Benzo(b)fluoranthene	1.0	< 1.0 U
207-08-9	Benzo(k)fluoranthene	1.0	< 1.0 U
50-32-8	Benzo (a) pyrene	1.0	< 1.0 U
193-39-5	Indeno(1,2,3-cd)pyrene	1.0	< 1.0 U
53-70-3	Dibenz(a,h)anthracene	1.0	< 1.0 U
191-24-2	Benzo(g,h,i)perylene	1.0	< 1.0 U
123-91-1	1,4-Dioxane	1.0	< 1.0 U

Reported in $\mu g/L$ (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	75.0%	2-Fluorobiphenvl	67.2%
d14-p-Terphenyl	91.8%	d4-1,2-Dichlorobenzene	48.6%
d5-Phenol	61.7%	2-Fluorophenol	64.6%
2,4,6-Tribromophenol	92.4%	d4-2-Chlorophenol	72.5%
d8-1,4-Dioxane	55.8%	E • • • • • • = =	

Lab Sample ID: GU76C LIMS ID: 04-10432 Matrix: Water Data Release Authorized Reported: 07/15/04

Date Extracted: 07/07/04 Date Analyzed: 07/14/04 14:55 Instrument/Analyst: NT6/Van



Sample ID: LDW-SP-61-C-F SAMPLE

QC Report No: GU76-Windward Environmental Project: LDW-SEEP SAMPLING

Date Sampled: 07/02/04 Date Received: 07/02/04

CAS Number	Analyte	RL	Result
108-95-2	Phenol	2.0	< 2.0 U
111-44-4	Bis-(2-Chloroethyl) Ether	2.0	< 2.0 U
95-57-8	2-Chlorophenol	1.0	< 1.0 U
541-73-1	1,3-Dichlorobenzene	1.0	< 1.0 U
106-46-7	1,4-Dichlorobenzene	1.0	< 1.0 U
100-51-6	Benzyl Alcohol	5.0	< 5.0 U
95-50-1	1,2-Dichlorobenzene	1.0	< 1.0 U
95-48-7	2-Methylphenol	1.0	< 1.0 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	1.0	< 1.0 U
106-44-5	4-Methylphenol	1.0	< 1.0 U
621-64-7	N-Nitroso-Di-N-Propylamine	2.0	< 2.0 U
67-72-1	Hexachloroethane	2.0	< 2.0 U
98-95-3	Nitrobenzene	1.0	< 1.0 U
78-59-1	Isophorone	1.0	< 1.0 U
88-75-5	2-Nitrophenol	5.0	< 5.0 U
105-67-9	2,4-Dimethylphenol	3.0	< 3.0 U
65-85-0	Benzoic Acid	10	< 10 U
111-91-1	bis(2-Chloroethoxy) Methane	1.0	< 1.0 U
120-83-2	2,4-Dichlorophenol	3.0	< 3.0 U
120-82-1	1,2,4-Trichlorobenzene	1.0	< 1.0 U
91-20-3	Naphthalene	1.0	< 1.0 U
106-47-8	4-Chloroaniline	3.0	< 3.0 U
87-68-3	Hexachlorobutadiene	2.0	< 2.0 U
59-50-7	4-Chloro-3-methylphenol	2.0	< 2.0 U
91-57-6	2-Methylnaphthalene	1.0	< 1.0 U
77-47-4	Hexachlorocyclopentadiene	5.0	< 5.0 U
88-06-2	2,4,6-Trichlorophenol	5.0	< 5.0 U
95-95-4	2,4,5-Trichlorophenol	5.0	< 5.0 U
91-58-7	2-Chloronaphthalene	1.0	< 1.0 U
88-74-4	2-Nitroaniline	5.0	< 5.0 U
131-11-3	Dimethylphthalate	1.0	< 1.0 U
208-96-8	Acenaphthylene	1.0	< 1.0 U
99-09-2	3-Nitroaniline	6.0	< 6.0 U
83-32-9	Acenaphthene	1.0	< 1.0 U
51-28-5	2,4-Dinitrophenol	25	< 25 Ŭ
100-02-7	4-Nitrophenol	5.0	< 5.0 U
132-64-9	Dibenzofuran	1.0	< 1.0 U
606-20-2	2,6-Dinitrotoluene	5.0	< 5.0 U
121-14-2	2,4-Dinitrotoluene	5.0	< 5.0 U
84-66-2	Diethylphthalate	1.0	< 1.0 U



Sample ID: LDW-SP-61-C-F SAMPLE

Lab Sample ID: GU76C LIMS ID: 04-10432 Matrix: Water Date Analyzed: 07/14/04 14:55 QC Report No: GU76-Windward Environmental Project: LDW-SEEP SAMPLING

CAS Number	Analyte	RL	Result
7005-72-3	4-Chlorophenyl-phenylether	1.0	< 1.0 U
86-73-7	Fluorene	1.0	< 1.0 U
100-01-6	4-Nitroaniline	5.0	< 5.0 U
534-52-1	4,6-Dinitro-2-Methylphenol	15	< 15 U
86-30-6	N-Nitrosodiphenylamine	1.0	< 1.0 U
101-55-3	4-Bromophenyl-phenylether	1.0	< 1.0 U
118-74-1	Hexachlorobenzene	1.0	< 1.0 U
87-86-5	Pentachlorophenol	5.0	< 5.0 U
85-01-8	Phenanthrene	1.0	< 1.0 U
86-74-8	Carbazole	1.0	< 1.0 U
120-12-7	Anthracene	1.0	< 1.0 U
84-74-2	Di-n-Butylphthalate	1.0	3.8
206-44-0	Fluoranthene	1.0	< 1.0 U
129-00-0	Pyrene	1.0	< 1.0 U
85-68-7	Butylbenzylphthalate	1.0	< 1.0 U
91-94-1	3,3'-Dichlorobenzidine	5.0	< 5.0 Ŭ
56-55-3	Benzo(a)anthracene	1.0	< 1.0 U
117-81-7	bis(2-Ethylhexyl)phthalate	1.0	2,300 E
218-01-9	Chrysene	1.0	< 1.0 U
117-84-0	Di-n-Octyl phthalate	1.0	< 1.0 U
205-99-2	Benzo(b)fluoranthene	1.0	< 1.0 U
207-08-9	Benzo(k)fluoranthene	1.0	< 1.0 U
50-32-8	Benzo(a)pyrene	1.0	< 1.0 U
193-39-5	Indeno(1,2,3-cd)pyrene	1.0	< 1.0 U
53-70-3	Dibenz(a,h)anthracene	1.0	< 1.0 U
191-24-2	Benzo(g,h,i)perylene	1.0	< 1.0 U
123-91-1	1,4-Dioxane	1.0	< 1.0 U

Reported in $\mu g/L$ (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	72.0%	2-Fluorobiphenyl	71.0%
d14-p-Terphenyl	89.6%	d4-1,2-Dichlorobenzene	50.1%
d5-Phenol	61.8%	2-Fluorophenol	62.8%
2,4,6-Tribromophenol	94.9%	d4-2-Chlorophenol	68.3%
d8-1,4-Dioxane	54.0%	-	



Lab Sample ID: GU76C LIMS ID: 04-10432 Matrix: Water Data Release Authorized Reported: 07/15/04

Date Extracted: 07/07/04 Date Analyzed: 07/15/04 13:19 Instrument/Analyst: NT6/Van

Sample ID: LDW-SP-61-C-F DILUTION

QC Report No: GU76-Windward Environmental Project: LDW-SEEP SAMPLING

Date Sampled: 07/02/04 Date Received: 07/02/04

CAS Number	Analyte	RL	Result
108-95-2	Phenol	200	< 200 U
111-44-4	Bis-(2-Chloroethyl) Ether	200	< 200 U
95-57-8	2-Chlorophenol	100	< 100 U
541-73-1	1,3-Dichlorobenzene	100	< 100 U
106-46-7	1,4-Dichlorobenzene	100	< 100 U
100-51-6	Benzyl Alcohol	500	< 500 U
95-50-1	1,2-Dichlorobenzene	100	< 100 U
95-48-7	2-Methylphenol	100	< 100 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	100	< 100 U
106-44-5	4-Methylphenol	100	< 100 U
621-64-7	N-Nitroso-Di-N-Propylamine	200	< 200 U
67-72-1	Hexachloroethane	200	< 200 U
98-95-3	Nitrobenzene	100	< 100 U
78-59-1	Isophorone	100	< 100 U
88-75-5	2-Nitrophenol	500	< 500 U
105-67-9	2,4-Dimethylphenol	300	< 300 U
65-85-0	Benzoic Acid	1000	< 1,000 U
111-91-1	bis(2-Chloroethoxy) Methane	100	< 100 U
120-83-2	2,4-Dichlorophenol	300	< 300 U
120-82-1	1,2,4-Trichlorobenzene	100	< 100 U
91-20-3	Naphthalene	100	< 100 U
106-47-8	4-Chloroaniline	300	< 300 U
87-68-3	Hexachlorobutadiene	200	< 200 U
59-50-7	4-Chloro-3-methylphenol	200	< 200 U
91-57-6	2-Methylnaphthalene	100	< 100 U
77-47-4	Hexachlorocyclopentadiene	500	< 500 U
88-06-2	2,4,6-Trichlorophenol	500	< 500 U
95-95-4	2,4,5-Trichlorophenol	500	< 500 U
91-58-7	2-Chloronaphthalene	100	< 100 U
88-74-4	2-Nitroaniline	500	< 500 U
131-11-3	Dimethylphthalate	100	< 100 U
208-96~8	Acenaphthylene	100	< 100 U
99-09-2	3-Nitroaniline	600	< 600 U
83-32-9	Acenaphthene	100	< 100 U
51-28-5	2,4-Dinitrophenol	2500	< 2,500 U
100-02-7	4-Nitrophenol	500	< 500 U
132-64-9	Dibenzofuran	100	< 100 U
606-20-2	2,6-Dinitrotoluene	500	< 500 U
121-14-2	2,4-Dinitrotoluene	500	< 500 U
84-66-2	Diethylphthalate	100	< 100 U



Sample ID: LDW-SP-61-C-F DILUTION

Lab Sample ID: GU76C LIMS ID: 04-10432 Matrix: Water Date Analyzed: 07/15/04 13:19

QC Report No: GU76-Windward Environmental Project: LDW-SEEP SAMPLING

7005-72-3 4-Chlorophenyl-phenylether 100 < 100 86-73-7 Fluorene 100 < 100 100-01-6 4-Nitroaniline 500 < 500 534-52-1 4,6-Dinitro-2-Methylphenol 1500 < 1,500 86-30-6 N-Nitrosodiphenylamine 100 < 100 101-55-3 4-Bromophenyl-phenylether 100 < 100 118-74-1 Hexachlorobenzene 100 < 100 87-86-5 Pentachlorophenol 500 < 500) U) U
86-73-7 Fluorene 100 < 100) U
100-01-6 4-Nitroaniline 500 < 500	
534-52-1 4,6-Dinitro-2-Methylphenol 1500 < 1,500	ប
86-30-6 N-Nitrosodiphenylamine 100 < 100 101-55-3 4-Bromophenyl-phenylether 100 < 100) U
101-55-3 4-Bromophenyl-phenylether 100 < 100) U
118-74-1 Hexachlorobenzene 100 < 100 87-86-5 Pentachlorophenol 500 < 500	U
87-86-5 Pentachlorophenol 500 < 500	U
_	U
85-01-8 Phenanthrene 100 < 100	U
86-74-8 Carbazole 100 < 100	U
120-12-7 Anthracene 100 < 100	U
84-74-2 Di-n-Butylphthalate 100 < 100	U
206-44-0 Fluoranthene 100 < 100	U
129-00-0 Pyrene 100 < 100	U
85-68-7 Butylbenzylphthalate 100 < 100	U
91-94-1 3,3'-Dichlorobenzidine 500 < 500	U
56-55-3 Benzo(a) anthracene 100 < 100	U
117-81-7 bis(2-Ethylhexyl)phthalate 100 2,600	в
218-01-9 Chrysene 100 < 100	U
117-84-0 Di-n-Octyl phthalate 100 < 100	U
205-99-2 Benzo(b)fluoranthene 100 < 100	U
207-08-9 Benzo(k)fluoranthene 100 < 100	U
50-32-8 Benzo(a) pyrene 100 < 100	U
193-39-5 Indeno(1,2,3-cd)pyrene 100 < 100	U
53-70-3 Dibenz(a,h)anthracene 100 < 100	U
191-24-2 Benzo(g,h,i)perylene 100 < 100	U
123-91-1 1,4-Dioxane 100 < 100	U

Reported in μ g/L (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	D	2-Fluorobiphenyl	D
d14-p-Terphenyl	D	d4-1,2-Dichlorobenzene	D
d5-Phenol	D	2-Fluorophenol	D
2,4,6-Tribromophenol	D	d4-2-Chlorophenol	D
d8-1,4-Dioxane	D	1	_

Lab Sample ID: GU83A LIMS ID: 04-10461 Matrix: Water Data Release Authorized: Reported: 07/16/04

Date Extracted: 07/07/04 Date Analyzed: 07/14/04 18:06 Instrument/Analyst: NT6/Van Sample ID: LDW-SP-75-C-U SAMPLE

QC Report No: GU83-Windward Environmental Project: LDW-SEEP SAMPLING

Date Sampled: 07/03/04 Date Received: 07/03/04

Sample Amount: 500 mL Final Extract Volume: 0.50 mL Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
108-95-2	Phenol	2.0	< 2.0 II
111-44-4	Bis-(2-Chloroethyl) Ether	2.0	< 2.0 U
95-57-8	2-Chlorophenol	1.0	< 1.0 U
541-73-1	1,3-Dichlorobenzene	1.0	< 1.0 U
106-46-7	1,4-Dichlorobenzene	1.0	< 1.0 U
100-51-6	Benzyl Alcohol	5.0	< 5.0 U
95-50-1	1,2-Dichlorobenzene	1.0	< 1.0 U
95-48-7	2-Methylphenol	1.0	< 1.0 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	1.0	< 1.0 U
106-44-5	4-Methylphenol	1.0	< 1.0 U
621-64-7	N-Nitroso-Di-N-Propylamine	2.0	< 2.0 U
67-72-1	Hexachloroethane	2.0	< 2.0 U
98-95-3	Nitrobenzene	1.0	< 1.0 U
78-59-1	Isophorone	1.0	< 1.0 U
88-75-5	2-Nitrophenol	5.0	< 5.0 U
105-67-9	2,4-Dimethylphenol	3.0	< 3.0 U
65-85-0	Benzoic Acid	10	< 10 U
111-91-1	bis(2-Chloroethoxy) Methane	1.0	< 1.0 U
120-83-2	2,4-Dichlorophenol	3.0	< 3.0 U
120-82-1	1,2,4-Trichlorobenzene	1.0	< 1.0 U
91-20-3	Naphthalene	1.0	< 1.0 U
106-47-8	4-Chloroaniline	3.0	< 3.0 U
87-68-3	Hexachlorobutadiene	2.0	< 2.0 Ŭ
59-50-7	4-Chloro-3-methylphenol	2.0	< 2.0 U
91-57-6	2-Methylnaphthalene	1.0	< 1.0 U
77-47-4	Hexachlorocyclopentadiene	5.0	< 5.0 U
88-06-2	2,4,6-Trichlorophenol	5.0	< 5.0 U
95-95-4	2,4,5-Trichlorophenol	5.0	< 5.0 U
91-58-7	2-Chloronaphthalene	1.0	< 1.0 U
88-74-4	2-Nitroaniline	5.0	< 5.0 U
131-11-3	Dimethylphthalate	1.0	< 1.0 U
208-96-8	Acenaphthylene	1.0	< 1.0 U
99-09-2	3-Nitroaniline	6.0	< 6.0 U
83-32-9	Acenaphthene	1.0	< 1.0 U
51-28-5	2,4-Dinitrophenol	25	< 25 U
100-02-7	4-Nitrophenol	5.0	< 5.0 U
132-64-9	Dibenzofuran	1.0	< 1.0 U
606-20-2	2,6-Dinitrotoluene	5.0	< 5.0 Ū
121-14-2	2,4-Dinitrotoluene	5.0	< 5.0 Ŭ
84-66-2	Diethylphthalate	1.0	< 1.0 U

FORM I



tracted: 07/07/04

Sample ID: LDW-SP-75-C-U SAMPLE

Lab Sample ID: GU83A LIMS ID: 04-10461 Matrix: Water Date Analyzed: 07/14/04 18:06 QC Report No: GU83-Windward Environmental Project: LDW-SEEP SAMPLING

CAS Number	Analyte	RL	Result
7005-72-3	4-Chlorophenyl-phenylether	1.0	< 1.0 U
86-73-7	Fluorene	1.0	< 1.0 U
100-01-6	4-Nitroaniline	5.0	< 5.0 Ŭ
534-52-1	4,6-Dinitro-2-Methylphenol	15	< 15 U
86-30-6	N-Nitrosodiphenylamine	1.0	< 1.0 U
101-55-3	4-Bromophenyl-phenylether	1.0	< 1.0 U
118-74-1	Hexachlorobenzene	1.0	< 1.0 U
87-86-5	Pentachlorophenol	5.0	< 5.0 U
85-01-8	Phenanthrene	1.0	< 1.0 U
86-74-8	Carbazole	1.0	< 1.0 U
120-12-7	Anthracene	1.0	< 1.0 U
84-74-2	Di-n-Butylphthalate	1.0	< 1.0 U
206-44-0	Fluoranthene	1.0	< 1.0 U
129-00-0	Pyrene	1.0	< 1.0 U
85-68-7	Butylbenzylphthalate	1.0	< 1.0 U
91-94-1	3,3'~Dichlorobenzidine	5.0	< 5.0 U
56-55-3	Benzo(a) anthracene	1.0	< 1.0 U
117-81-7	bis(2-Ethylhexyl)phthalate	1.0	1.8 B
218-01-9	Chrysene	1.0	< 1.0 U
117-84-0	Di-n-Octyl phthalate	1.0	< 1.0 U
205-99-2	Benzo(b)fluoranthene	1.0	< 1.0 U
207-08-9	Benzo(k)fluoranthene	1.0	< 1.0 U
50-32-8	Benzo(a)pyrene	1.0	< 1.0 U
193-39-5	Indeno(1,2,3-cd)pyrene	1.0	< 1.0 U
53-70-3	Dibenz(a,h)anthracene	1.0	< 1.0 U
191-24-2	Benzo(g,h,i)perylene	1.0	< 1.0 U
123-91-1	1,4-Dioxane	1.0	< 1.0 U

Reported in $\mu g/L$ (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	64.8%	2-Fluorobiphenyl	58.0%
d14-p-Terphenyl	88.7%	d4-1,2-Dichlorobenzene	42.0%
d5-Phenol	57.3%	2-Fluorophenol	58.8%
2,4,6-Tribromophenol	86.5%	d4-2-Chlorophenol	63.6%
d8-1,4-Dioxane	51.6%	-	

Lab Sample ID: GU83A LIMS ID: 04-10461 Matrix: Water Data Release Authorized: Reported: 07/16/04

Date Extracted: 07/07/04 Date Analyzed: 07/15/04 12:16 Instrument/Analyst: NT6/Van Sample ID: LDW-SP-75-C-U MATRIX SPIKE

QC Report No: GU83-Windward Environmental Project: LDW-SEEP SAMPLING

Date Sampled: 07/03/04 Date Received: 07/03/04

Sample Amount: 250 mL Final Extract Volume: 0.50 mL Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
108-95-2	Phenol	4.0	
111-44-4	Bis-(2-Chloroethyl) Ether	4.0	< 4.0 U
95-57-8	2-Chlorophenol	2.0	
541-73-1	1,3-Dichlorobenzene	2.0	< 2.0 U
106-46-7	1,4-Dichlorobenzene	2.0	
100-51-6	Benzyl Alcohol	10	< 10 U
95-50-1	1,2-Dichlorobenzene	2.0	< 2.0 U
95-48-7	2-Methylphenol	2.0	< 2.0 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	2.0	< 2.0 U
106-44-5	4-Methylphenol	2.0	< 2.0 U
621-64-7	N-Nitroso-Di-N-Propylamine	4.0	
67-72-1	Hexachloroethane	4.0	< 4.0 U
98-95-3	Nitrobenzene	2.0	< 2.0 U
78-59-1	Isophorone	2.0	< 2.0 U
88-75-5	2-Nitrophenol	10	< 10 U
105-67-9	2,4-Dimethylphenol	6.0	< 6.0 U
65-85-0	Benzoic Acid	20	< 20 U
111-91-1	bis(2-Chloroethoxy) Methane	2.0	< 2.0 U
120-83-2	2,4-Dichlorophenol	6.0	< 6.0 U
120-82-1	1,2,4-Trichlorobenzene	2.0	
91-20-3	Naphthalene	2.0	< 2.0 U
106-47-8	4-Chloroaniline	6.0	< 6.0 U
87-68-3	Hexachlorobutadiene	4.0	< 4.0 U
59-50-7	4-Chloro-3-methylphenol	4.0	
91-57-6	2-Methylnaphthalene	2.0	< 2.0 U
77-47-4	Hexachlorocyclopentadiene	10	< 10 U
88-06-2	2,4,6-Trichlorophenol	10	< 10 U
95-95-4	2,4,5-Trichlorophenol	10	< 10 U
91-58-7	2-Chloronaphthalene	2.0	< 2.0 U
88-74-4	2-Nitroaniline	10	< 10 U
131-11-3	Dimethylphthalate	2.0	< 2.0 U
208-96-8	Acenaphthylene	2.0	< 2.0 U
99-09-2	3-Nitroaniline	12	< 12 U
83-32-9	Acenaphthene	2.0	
51-28-5	2,4-Dinitrophenol	50	< 50 U
100-02-7	4-Nitrophenol	10	
132-64-9	Dibenzofuran	2.0	< 2.0 U
606-20-2	2,6-Dinitrotoluene	10	< 10 U
121-14-2	2,4-Dinitrotoluene	10	
84-66-2	Diethylphthalate	2.0	< 2.0 U

FORM I

RESOURCES

ANALYTICAL RESOURCES INCORPORATED

Sample ID: LDW-SP-75-C-U MATRIX SPIKE

Lab Sample ID: GU83A LIMS ID: 04-10461 Matrix: Water Date Analyzed: 07/15/04 12:16 QC Report No: GU83-Windward Environmental Project: LDW-SEEP SAMPLING

CAS Number	Analyte	RL	Result
7005-72-3	4-Chlorophenyl-phenylether	2.0	< 2.0 U
86-73-7	Fluorene	2.0	< 2.0 U
100-01-6	4-Nitroaniline	10	< 10 U
534-52-1	4,6-Dinitro-2-Methylphenol	30	< 30 U
86-30-6	N-Nitrosodiphenylamine	2.0	< 2.0 U
101-55-3	4-Bromophenyl-phenylether	2.0	< 2.0 U
118-74-1	Hexachlorobenzene	2.0	< 2.0 U
87-86-5	Pentachlorophenol	10	
85-01-8	Phenanthrene	2.0	< 2.0 U
86-74-8	Carbazole	2.0	< 2.0 U
120-12-7	Anthracene	2.0	< 2.0 U
84-74-2	Di-n-Butylphthalate	2.0	< 2.0 U
206-44-0	Fluoranthene	2.0	< 2.0 U
129-00-0	Pyrene	2.0	
85-68-7	Butylbenzylphthalate	2.0	< 2.0 U
91-94-1	3,3'-Dichlorobenzidine	10	< 10 U
56-55-3	Benzo(a) anthracene	2.0	< 2.0 U
117-81-7	bis(2-Ethylhexyl)phthalate	2.0	4.6 B
218-01-9	Chrysene	2.0	< 2.0 U
117-84-0	Di-n-Octyl phthalate	2.0	< 2.0 U
205-99-2	Benzo(b)fluoranthene	2.0	< 2.0 U
207-08-9	Benzo(k)fluoranthene	2.0	< 2.0 U
50-32-8	Benzo(a)pyrene	2.0	< 2.0 U
193-39-5	Indeno(1,2,3-cd)pyrene	2.0	< 2.0 U
53-70-3	Dibenz (a,h) anthracene	2.0	< 2.0 U
191-24-2	Benzo(g,h,i)perylene	2.0	< 2.0 U
123-91-1	1,4-Dioxane	2.0	

Reported in $\mu g/L$ (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	79.0%	2-Fluorobiphenyl	72.3%
d14-p-Terphenyl	97.3%	d4-1,2-Dichlorobenzene	57.4%
d5-Phenol	76.6%	2-Fluorophenol	70.9%
2,4,6-Tribromophenol	91.6%	d4-2-Chlorophenol	78.7%
d8-1,4-Dioxane	62.3%	-	

FORM I

ORGANICS ANALYSIS DATA SHEET Semivolatiles by SW8270C GC/MS Page 1 of 2

Lab Sample ID: GU83A LIMS ID: 04-10461 Matrix: Water Data Release Authorized: Reported: 07/16/04

Date Extracted: 07/07/04 Date Analyzed: 07/15/04 12:47 Instrument/Analyst: NT6/Van Sample ID: LDW-SP-75-C-U MATRIX SPIKE DUP

QC Report No: GU83-Windward Environmental Project: LDW-SEEP SAMPLING

Date Sampled: 07/03/04 Date Received: 07/03/04

CAS Number	Analyte	RL	Result
108-95-2	Phenol	4.0	
111-44-4	Bis-(2-Chloroethyl) Ether	4.0	< 4.0 U
95-57-8	2-Chlorophenol	2.0	
541-73-1	1,3-Dichlorobenzene	2.0	< 2.0 U
106-46-7	1,4-Dichlorobenzene	2.0	
100-51-6	Benzyl Alcohol	10	< 10 U
95-50-1	1,2-Dichlorobenzene	2.0	< 2.0 U
95-48-7	2-Methylphenol	2.0	< 2.0 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	2.0	< 2.0 U
106-44-5	4-Methylphenol	2.0	< 2.0 U
621-64-7	N-Nitroso-Di-N-Propylamine	4.0	
67-72-1	Hexachloroethane	4.0	< 4.0 U
98-95-3	Nitrobenzene	2.0	< 2.0 U
78-59-1	Isophorone	2.0	< 2.0 U
88-75-5	2-Nitrophenol	10	< 10 U
105-67-9	2,4-Dimethylphenol	6.0	< 6.0 U
65-85-0	Benzoic Acid	20	< 20 U
111-91-1	bis(2-Chloroethoxy) Methane	2.0	< 2.0 U
120-83-2	2,4-Dichlorophenol	6.0	< 6.0 U
120-82-1	1,2,4-Trichlorobenzene	2.0	
91-20-3	Naphthalene	2.0	< 2.0 U
106-47-8	4-Chloroaniline	6.0	< 6.0 U
87-68-3	Hexachlorobutadiene	4.0	< 4.0 U
59-50-7	4-Chloro-3-methylphenol	4.0	
91-57-6	2-Methylnaphthalene	2.0	< 2.0 U
77-47~4	Hexachlorocyclopentadiene	10	< 10 U
88-06-2	2,4,6-Trichlorophenol	10	< 10 U
95-95-4	2,4,5-Trichlorophenol	10	< 10 U
91-58-7	2-Chloronaphthalene	2.0	< 2.0 U
88-74-4	2-Nitroaniline	10	< 10 U
131-11-3	Dimethylphthalate	2.0	< 2.0 U
208-96-8	Acenaphthylene	2.0	< 2.0 U
99-09-2	3-Nitroaniline	12	< 12 U
83-32-9	Acenaphthene	2.0	
51-28-5	2,4-Dinitrophenol	50	< 50 U
100-02-7	4-Nitrophenol	10	
132-64-9	Dibenzofuran	2.0	< 2.0 U
606-20-2	2,6-Dinitrotoluene	10	< 10 U
121-14-2	2,4-Dinitrotoluene	10	
84-66-2	Diethylphthalate	2.0	< 2.0 U

ANALYTICAL RESOURCES

Lab Sample ID: GU83A LIMS ID: 04-10461 Matrix: Water Date Analyzed: 07/15/04 12:47 QC Report No: GU83-Windward Environmental Project: LDW-SEEP SAMPLING

CAS Number	Analyte	RL	Result
7005-72-3	4-Chlorophenyl-phenylether	2.0	< 2.0 U
86-73-7	Fluorene	2.0	< 2.0 U
100-01-6	4-Nitroaniline	10	< 10 U
534-52-1	4,6-Dinitro-2-Methylphenol	30	< 30 U
86-30-6	N-Nitrosodiphenylamine	2.0	< 2.0 U
101-55-3	4-Bromophenyl-phenylether	2.0	< 2.0 U
118-74-1	Hexachlorobenzene	2.0	< 2.0 U
87-86-5	Pentachlorophenol	10	
85-01-8	Phenanthrene	2.0	< 2.0 U
86-74-8	Carbazole	2.0	< 2.0 U
120-12-7	Anthracene	2.0	< 2.0 U
84-74-2	Di-n-Butylphthalate	2.0	< 2.0 U
206-44-0	Fluoranthene	2.0	< 2.0 U
129-00-0	Pyrene	2.0	
85-68-7	Butylbenzylphthalate	2.0	< 2.0 U
91-94-1	3,3'-Dichlorobenzidine	10	< 10 U
56-55-3	Benzo(a) anthracene	2.0	< 2.0 U
117-81-7	bis(2-Ethylhexyl)phthalate	2.0	8.0 B
218-01-9	Chrysene	2.0	< 2.0 U
117-84-0	Di-n-Octyl phthalate	2.0	< 2.0 U
205-99-2	Benzo(b)fluoranthene	2.0	< 2.0 U
207-08-9	Benzo(k)fluoranthene	2.0	< 2.0 U
50-32-8	Benzo(a)pyrene	2.0	< 2.0 U
193-39-5	Indeno(1,2,3-cd)pyrene	2.0	< 2.0 U
53-70-3	Dibenz(a,h)anthracene	2.0	< 2.0 U
191-24-2	Benzo(g,h,i)perylene	2.0	< 2.0 U
123-91-1	1,4-Dioxane	2.0	

Reported in $\mu g/L$ (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	68.4%	2-Fluorobiphenyl	63.2%
d14-p-Terphenyl	90.5%	d4-1,2-Dichlorobenzene	46.4%
d5-Phenol	66.7%	2-Fluorophenol	61.8%
2,4,6-Tribromophenol	84.6%	d4-2-Chlorophenol	66.3%
d8-1,4-Dioxane	54.6%	-	

ORGANICS ANALYSIS DATA SHEET Semivolatiles by SW8270C GC/MS Page 1 of 2

Lab Sample ID: GU83B LIMS ID: 04-10462 Matrix: Water Data Release Authorized: Reported: 07/16/04

Date Extracted: 07/07/04 Date Analyzed: 07/15/04 09:04 Instrument/Analyst: NT6/Van Sample ID: LDW-SP-75-C-F SAMPLE

QC Report No: GU83-Windward Environmental Project: LDW-SEEP SAMPLING

Date Sampled: 07/03/04 Date Received: 07/03/04

CAS Number	Analyte	RL	Result
108-95-2	Phenol	2.0	< 2.0 U
111-44-4	Bis-(2-Chloroethyl) Ether	2.0	< 2.0 U
95-57-8	2-Chlorophenol	1.0	< 1.0 U
541-73-1	1,3-Dichlorobenzene	1.0	< 1.0 U
106-46-7	1,4-Dichlorobenzene	1.0	< 1.0 U
100-51-6	Benzyl Alcohol	5.0	< 5.0 U
95-50-1	1,2-Dichlorobenzene	1.0	< 1.0 U
95-48-7	2-Methylphenol	1.0	< 1.0 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	1.0	< 1.0 U
106-44-5	4-Methylphenol	1.0	< 1.0 U
621-64-7	N-Nitroso-Di-N-Propylamine	2.0	< 2.0 U
67-72-1	Hexachloroethane	2.0	< 2.0 U
98-95-3	Nitrobenzene	1.0	< 1.0 U
78-59-1	Isophorone	1.0	< 1.0 U
88-75-5	2-Nitrophenol	5.0	< 5.0 U
105-67-9	2,4-Dimethylphenol	3.0	< 3.0 U
65-85-0	Benzoic Acid	10	< 10 U
111-91-1	bis(2-Chloroethoxy) Methane	1.0	< 1.0 U
120-83-2	2,4-Dichlorophenol	3.0	< 3.0 U
120-82-1	1,2,4-Trichlorobenzene	1.0	< 1.0 U
91-20-3	Naphthalene	1.0	< 1.0 U
106-47-8	4-Chloroaniline	3.0	< 3.0 U
87-68-3	Hexachlorobutadiene	2.0	< 2.0 Ŭ
59-50-7	4-Chloro-3-methylphenol	2.0	< 2.0 U
91-57-6	2-Methylnaphthalene	1.0	< 1.0 U
77-47-4	Hexachlorocyclopentadiene	5.0	< 5.0 U
88-06-2	2,4,6-Trichlorophenol	5.0	< 5.0 Ũ
95-95-4	2,4,5-Trichlorophenol	5.0	< 5.0 Ŭ
91-58-7	2-Chloronaphthalene	1.0	< 1.0 U
88-74-4	2-Nitroaniline	5.0	< 5.0 U
131-11-3	Dimethylphthalate	1.0	< 1.0 U
208-96-8	Acenaphthylene	1.0	< 1.0 U
99-09-2	3-Nitroaniline	6.0	< 6.0 U
83-32-9	Acenaphthene	1.0	< 1.0 U
51-28-5	2,4-Dinitrophenol	25	< 25 U
100-02-7	4-Nitrophenol	5.0	< 5.0 U
132-64-9	Dibenzofuran	1.0	< 1.0 U
606-20-2	2,6-Dinitrotoluene	5.0	< 5.0 U
121-14-2	2,4-Dinitrotoluene	5.0	< 5.0 U
84-66-2	Diethylphthalate	1.0	< 1.0 U

ORGANICS ANALYSIS DATA SHEET Semivolatiles by SW8270C GC/MS Page 2 of 2

Sample ID: LDW-SP-75-C-F SAMPLE

Lab Sample ID: GU83B LIMS ID: 04-10462 Matrix: Water Date Analyzed: 07/15/04 09:04

QC Report No: GU83-Windward Environmental Project: LDW-SEEP SAMPLING

Analyte	RL	Result
4-Chlorophenyl-phenylether	1.0	< 1.0 U
Fluorene	1.0	< 1.0 U
4-Nitroaniline	5.0	< 5.0 U
4,6-Dinitro-2-Methylphenol	15	< 15 U
N-Nitrosodiphenylamine	1.0	< 1.0 U
4-Bromophenyl-phenylether	1.0	< 1.0 U
Hexachlorobenzene	1.0	< 1.0 U
Pentachlorophenol	5.0	< 5.0 U
Phenanthrene	1.0	< 1.0 U
Carbazole	1.0	< 1.0 U
Anthracene	1.0	< 1.0 U
Di-n-Butylphthalate	1.0	< 1.0 U
Fluoranthene	1.0	< 1.0 U
Pyrene	1.0	< 1.0 U
Butylbenzylphthalate	1.0	< 1.0 U
3,3'-Dichlorobenzidine	5.0	< 5.0 U
Benzo(a)anthracene	1.0	< 1.0 U
bis(2-Ethylhexyl)phthalate	1.0	1.7 B
Chrysene	1.0	< 1.0 U
Di-n-Octyl phthalate	1.0	< 1.0 U
Benzo(b)fluoranthene	1.0	< 1.0 U
Benzo(k)fluoranthene	1.0	< 1.0 U
Benzo (a) pyrene	1.0	< 1.0 U
Indeno(1,2,3-cd)pyrene	1.0	< 1.0 U
Dibenz(a,h)anthracene	1.0	< 1.0 U
Benzo(g,h,i)perylene	1.0	< 1.0 U
1,4-Dioxane	1.0	< 1.0 U
	Analyte 4-Chlorophenyl-phenylether Fluorene 4-Nitroaniline 4,6-Dinitro-2-Methylphenol N-Nitrosodiphenylamine 4-Bromophenyl-phenylether Hexachlorobenzene Pentachlorophenol Phenanthrene Carbazole Anthracene Di-n-Butylphthalate Fluoranthene Pyrene Butylbenzylphthalate 3,3'-Dichlorobenzidine Benzo(a) anthracene bis(2-Ethylhexyl)phthalate Chrysene Di-n-Octyl phthalate Benzo(b) fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenz(a,h) anthracene Benzo(g,h,i)perylene 1,4-Dioxane	AnalyteRL4-Chlorophenyl-phenylether1.0Fluorene1.04-Nitroaniline5.04,6-Dinitro-2-Methylphenol15N-Nitrosodiphenylamine1.04-Bromophenyl-phenylether1.0Hexachlorobenzene1.0Pentachlorophenol5.0Phenanthrene1.0Carbazole1.0Anthracene1.0Di-n-Butylphthalate1.0Fluoranthene1.0Pyrene1.0Butylbenzylphthalate1.0Di-n-Octyl phthalate1.0Di-n-Octyl phthalate1.0Benzo (a) pyrene1.0Benzo (a) pyrene1.0Benzo (a) pyrene1.0Benzo (a) pyrene1.0Benzo (a) pyrene1.0Benzo (b) fluoranthene1.0Benzo (c) pyrene1.0Indeno (1,2,3-cd) pyrene1.0Benzo (g,h,i) perylene1.01,4-Dioxane1.0

Reported in $\mu g/L$ (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	72.5%	2-Fluorobiphenyl	69.6%
d14-p-Terphenyl	88.5%	d4-1,2-Dichlorobenzene	52.0%
d5-Phenol	67.7%	2-Fluorophenol	66.7%
2,4,6-Tribromophenol	88.8%	d4-2-Chlorophenol	71.7%
d8-1,4-Dioxane	61.3%	-	

ORGANICS ANALYSIS DATA SHEET Semivolatiles by SW8270C GC/MS Page 1 of 2

Lab Sample ID: GU83B LIMS ID: 04-10462 Matrix: Water Data Release Authorized: Reported: 07/16/04

Date Extracted: 07/07/04 Date Analyzed: 07/15/04 09:37 Instrument/Analyst: NT6/Van

Sample ID: LDW-SP-75-C-F MATRIX SPIKE

QC Report No: GU83-Windward Environmental Project: LDW-SEEP SAMPLING

Date Sampled: 07/03/04 Date Received: 07/03/04

Sample Amount: 250 mL Final Extract Volume: 0.50 mL Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
108-95-2	Phenol	4.0	
111-44-4	Bis-(2-Chloroethyl) Ether	4.0	< 4.0 U
95-57-8	2-Chlorophenol	2.0	
541-73-1	1,3-Dichlorobenzene	2.0	< 2.0 U
106-46-7	1,4-Dichlorobenzene	2.0	
100-51-6	Benzyl Alcohol	10	< 10 U
95-50-1	1,2-Dichlorobenzene	2.0	< 2.0 U
95-48-7	2-Methylphenol	2.0	< 2.0 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	2.0	< 2.0 U
106-44-5	4-Methylphenol	2.0	< 2.0 U
621-64-7	N-Nitroso-Di-N-Propylamine	4.0	
67-72-1	Hexachloroethane	4.0	< 4.0 U
98-95-3	Nitrobenzene	2.0	< 2.0 U
78-59-1	Isophorone	2.0	< 2.0 U
88-75-5	2-Nitrophenol	10	< 10 U
105-67-9	2,4-Dimethylphenol	6.0	< 6.0 U
65-85-0	Benzoic Acid	20	< 20 U
111-91-1	bis(2-Chloroethoxy) Methane	2.0	< 2.0 U
120-83-2	2,4-Dichlorophenol	6.0	< 6.0 U
120-82-1	1,2,4-Trichlorobenzene	2.0	
91-20-3	Naphthalene	2.0	< 2.0 U
106-47-8	4-Chloroaniline	6.0	< 6.0 U
87-68-3	Hexachlorobutadiene	4.0	< 4.0 U
59-50-7	4-Chloro-3-methylphenol	4.0	
91-57-6	2-Methylnaphthalene	2.0	< 2.0 U
77-47-4	Hexachlorocyclopentadiene	10	< 10 U
88-06-2	2,4,6-Trichlorophenol	10	< 10 U
95-95-4	2,4,5-Trichlorophenol	10	< 10 U
91-58-7	2-Chloronaphthalene	2.0	< 2.0 U
88-74-4	2-Nitroaniline	10	< 10 U
131-11-3	Dimethylphthalate	2.0	< 2.0 U
208-96-8	Acenaphthylene	2.0	< 2.0 U
99-09-2	3-Nitroaniline	12	< 12 U
83-32-9	Acenaphthene	2.0	~
51-28-5	2,4-Dinitrophenol	50	< 50 U
100-02-7	4-Nitrophenol	10	
132-64-9	Dibenzofuran	2.0	< 2.0 U
606-20-2	2,6-Dinitrotoluene	10	< 10 U
121-14-2	2,4-Dinitrotoluene	10	
84-66-2	Diethylphthalate	2.0	< 2.0 U

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ORGANICS ANALYSIS DATA SHEET Semivolatiles by SW8270C GC/MS Page 2 of 2

Sample ID: LDW-SP-75-C-F MATRIX SPIKE

Lab Sample ID: GU83B LIMS ID: 04-10462 Matrix: Water Date Analyzed: 07/15/04 09:37

QC Report No: GU83-Windward Environmental Project: LDW-SEEP SAMPLING

CAS Number	Analyte	RL	Result
7005-72-3	4-Chlorophenyl-phenylether	2.0	< 2.0 U
86-73-7	Fluorene	2.0	< 2.0 U
100-01-6	4-Nitroaniline	10	< 10 U
534-52-1	4,6-Dinitro-2-Methylphenol	30	< 30 U
86-30-6	N-Nitrosodiphenylamine	2.0	< 2.0 U
101-55-3	4-Bromophenyl-phenylether	2.0	< 2.0 U
118-74-1	Hexachlorobenzene	2.0	< 2.0 U
87-86-5	Pentachlorophenol	10	
85-01-8	Phenanthrene	2.0	< 2.0 U
86-74-8	Carbazole	2.0	< 2.0 U
120-12-7	Anthracene	2.0	< 2.0 U
84-74-2	Di-n-Butylphthalate	2.0	< 2.0 U
206-44-0	Fluoranthene	2.0	< 2.0 U
129-00-0	Pyrene	2.0	
85-68-7	Butylbenzylphthalate	2.0	< 2.0 U
91-94-1	3,3'-Dichlorobenzidine	10	< 10 U
56-55-3	Benzo (a) anthracene	2.0	< 2.0 U
117-81-7	bis(2-Ethylhexyl)phthalate	2.0	4.4 B
218-01-9	Chrysene	2.0	< 2.0 U
117-84-0	Di-n-Octyl phthalate	2.0	< 2.0 U
205-99-2	Benzo(b)fluoranthene	2.0	< 2.0 U
207-08-9	Benzo(k)fluoranthene	2.0	< 2.0 U
50-32-8	Benzo(a)pyrene	2.0	< 2.0 U
193-39-5	Indeno(1,2,3-cd)pyrene	2.0	< 2.0 U
53-70-3	Dibenz(a,h)anthracene	2.0	< 2.0 U
191-24-2	Benzo(g,h,i)perylene	2.0	< 2.0 U
123-91-1	1,4-Dioxane	2.0	

Reported in $\mu g/L$ (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	76.1%	2-Fluorobiphenyl	72.2%
d14-p-Terphenyl	95.3%	d4-1,2-Dichlorobenzene	55.4%
d5-Phenol	72.2%	2-Fluorophenol	68.6%
2,4,6-Tribromophenol	95.1%	d4-2-Chlorophenol	72.8%
d8-1,4-Dioxane	55.4%	±	

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ANALYTICAL RESOURCES

ORGANICS ANALYSIS DATA SHEET Semivolatiles by SW8270C GC/MS Page 1 of 2

Lab Sample ID: GU83B LIMS ID: 04-10462 Matrix: Water Data Release Authorized: Reported: 07/16/04

Date Extracted: 07/07/04 Date Analyzed: 07/15/04 10:09 Instrument/Analyst: NT6/Van Sample ID: LDW-SP-75-C-F MATRIX SPIKE DUP

QC Report No: GU83-Windward Environmental Project: LDW-SEEP SAMPLING

Date Sampled: 07/03/04 Date Received: 07/03/04

CAS Number	Analyte	RL	Result
108-95-2	Phenol	4.4	
111-44-4	Bis-(2-Chloroethyl) Ether	4.4	< 4.4 Ü
95-57-8	2-Chlorophenol	2.2	
541-73-1	1,3-Dichlorobenzene	2.2	< 2.2 U
106-46-7	1,4-Dichlorobenzene	2.2	
100-51-6	Benzyl Alcohol	11	< 11 U
95-50-1	1,2-Dichlorobenzene	2.2	< 2.2 U
95-48-7	2-Methylphenol	2.2	< 2.2 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	2.2	< 2.2 U
106-44-5	4-Methylphenol	2.2	< 2.2 U
621-64-7	N-Nitroso-Di-N-Propylamine	4.4	
67-72-1	Hexachloroethane	4.4	< 4.4 U
98-95-3	Nitrobenzene	2.2	< 2.2 U
78-59-1	Isophorone	2.2	< 2.2 U
88-75-5	2-Nitrophenol	11	< 11 U
105-67-9	2,4-Dimethylphenol	6.7	< 6.7 U
65-85-0	Benzoic Acid	22	< 22 U
111-91-1	bis(2-Chloroethoxy) Methane	2.2	< 2.2 U
120-83-2	2,4-Dichlorophenol	6.7	< 6.7 U
120-82-1	1,2,4-Trichlorobenzene	2.2	
91-20-3	Naphthalene	2.2	< 2.2 U
106-47-8	4-Chloroaniline	6.7	< 6.7 Ŭ
87-68-3	Hexachlorobutadiene	4.4	< 4.4 U
59-50-7	4-Chloro-3-methylphenol	4.4	
91-57-6	2-Methylnaphthalene	2.2	< 2.2 U
77-47-4	Hexachlorocyclopentadiene	11	< 11 U
88-06-2	2,4,6-Trichlorophenol	11	< 11 U
95-95-4	2,4,5-Trichlorophenol	11	< 11 U
91-58-7	2-Chloronaphthalene	2.2	< 2.2 U
88-74-4	2-Nitroaniline	11	< 11 U
131-11-3	Dimethylphthalate	2.2	< 2.2 U
208-96-8	Acenaphthylene	2.2	< 2.2 U
99-09-2	3-Nitroaniline	13	< 13 U
83-32-9	Acenaphthene	2.2	
51-28-5	2,4-Dinitrophenol	56	< 56 U
100-02-7	4-Nitrophenol	11	
132-64-9	Dibenzofuran	2.2	< 2.2 U
606-20-2	2,6-Dinitrotoluene	11	< 11 U
121-14-2	2,4-Dinitrotoluene	11	
84-66-2	Diethylphthalate	2.2	< 2.2 U

ORGANICS ANALYSIS DATA SHEET Semivolatiles by SW8270C GC/MS Page 2 of 2

Sample ID: LDW-SP-75-C-F MATRIX SPIKE DUP

Lab Sample ID: GU83B LIMS ID: 04-10462 Matrix: Water Date Analyzed: 07/15/04 10:09 QC Report No: GU83-Windward Environmental Project: LDW-SEEP SAMPLING

CAS Number	Analyte	RL	Result
7005-72-3	4-Chlorophenyl-phenylether	2.2	< 2.2 U
86-73-7	Fluorene	2.2	< 2.2 U
100-01-6	4-Nitroaniline	11	< 11 U
534-52-1	4,6-Dinitro-2-Methylphenol	33	< 33 U
86-30-6	N-Nitrosodiphenylamine	2.2	< 2.2 U
101-55-3	4-Bromophenyl-phenylether	2.2	< 2.2 U
118-74-1	Hexachlorobenzene	2.2	< 2.2 U
87-86-5	Pentachlorophenol	11	
85-01-8	Phenanthrene	2.2	< 2.2 U
86-74-8	Carbazole	2.2	< 2.2 U
120-12-7	Anthracene	2.2	< 2.2 U
84-74-2	Di-n-Butylphthalate	2.2	< 2.2 U
206-44-0	Fluoranthene	2.2	< 2.2 U
129-00-0	Pyrene	2.2	
85-68-7	Butylbenzylphthalate	2.2	< 2.2 U
91-94-1	3,3'-Dichlorobenzidine	11	< 11 U
56-55-3	Benzo(a) anthracene	2.2	< 2.2 U
117-81-7	bis(2-Ethylhexyl)phthalate	2.2	6.3 B
218-01-9	Chrysene	2.2	< 2.2 U
117-84-0	Di-n-Octyl phthalate	2.2	< 2.2 U
205-99-2	Benzo(b)fluoranthene	2.2	< 2.2 U
207-08-9	Benzo (k) fluoranthene	2.2	< 2.2 U
50-32-8	Benzo (a) pyrene	2.2	< 2.2 U
193-39-5	Indeno (1,2,3-cd) pyrene	2.2	< 2.2 U
53-70-3	Dibenz(a,h)anthracene	2.2	< 2.2 U
191-24-2	Benzo(g,h,i)perylene	2.2	< 2.2 U
123-91-1	1,4-Dioxane	2.2	

Reported in μ g/L (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	79.0%	2-Fluorobiphenyl	73.3%
d14-p-Terphenyl	88.9%	d4-1,2-Dichlorobenzene	55.8%
d5-Phenol	77.0%	2-Fluorophenol	73.7%
2,4,6-Tribromophenol	90.1%	d4-2-Chlorophenol	77.8%
d8-1,4-Dioxane	63.9%	-	

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ANALYTICAL RESOURCES

ORGANICS ANALYSIS DATA SHEET Semivolatiles by SW8270C GC/MS Page 1 of 2

Lab Sample ID: GU83C LIMS ID: 04-10463 Matrix: Water Data Release Authorized: Reported: 07/16/04

Date Extracted: 07/07/04 Date Analyzed: 07/15/04 10:40 Instrument/Analyst: NT6/Van Sample ID: LDW-SP-64-RB-S-U SAMPLE

QC Report No: GU83-Windward Environmental Project: LDW-SEEP SAMPLING

Date Sampled: 07/03/04 Date Received: 07/03/04

CAS Number	Analyte	RL	Result
108-95-2	Phenol	2.0	< 2.0 U
111-44-4	Bis-(2-Chloroethyl) Ether	2.0	< 2.0 U
95-57-8	2-Chlorophenol	1.0	< 1.0 U
541-73-1	1,3-Dichlorobenzene	1.0	< 1.0 U
106-46-7	1,4-Dichlorobenzene	1.0	< 1.0 U
100-51-6	Benzyl Alcohol	5.0	< 5.0 U
95-50-1	1,2-Dichlorobenzene	1.0	< 1.0 U
95-48-7	2-Methylphenol	1.0	< 1.0 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	1.0	< 1.0 U
106-44-5	4-Methylphenol	1.0	< 1.0 U
621-64-7	N-Nitroso-Di-N-Propylamine	2.0	< 2.0 U
67-72-1	Hexachloroethane	2.0	< 2.0 U
98-95-3	Nitrobenzene	1.0	< 1.0 U
78-59-1	Isophorone	1.0	< 1.0 U
88-75-5	2-Nitrophenol	5.0	< 5.0 U
105-67-9	2,4-Dimethylphenol	3.0	< 3.0 U
65-85-0	Benzoic Acid	10	< 10 U
111-91-1	bis(2-Chloroethoxy) Methane	1.0	< 1.0 U
120-83-2	2,4-Dichlorophenol	3.0	< 3.0 U
120-82-1	1,2,4-Trichlorobenzene	1.0	< 1.0 U
91-20-3	Naphthalene	1.0	< 1.0 U
106-47-8	4-Chloroaniline	3.0	< 3.0 U
87-68-3	Hexachlorobutadiene	2.0	< 2.0 U
59-50-7	4-Chloro-3-methylphenol	2.0	< 2.0 U
91-57-6	2-Methylnaphthalene	1.0	< 1.0 U
77-47-4	Hexachlorocyclopentadiene	5.0	< 5.0 Ŭ
88-06-2	2,4,6-Trichlorophenol	5.0	< 5.0 U
95-95-4	2,4,5-Trichlorophenol	5.0	< 5.0 U
91-58-7	2-Chloronaphthalene	1.0	< 1.0 U
88-74-4	2-Nitroaniline	5.0	< 5.0 U
131-11-3	Dimethylphthalate	1.0	< 1.0 U
208-96-8	Acenaphthylene	1.0	< 1.0 U
99-09-2	3-Nitroaniline	6.0	< 6.0 U
83-32-9	Acenaphthene	1.0	< 1.0 U
51-28-5	2,4-Dinitrophenol	25	< 25 U
100-02-7	4-Nitrophenol	5.0	< 5.0 U
132-64-9	Dibenzofuran	1.0	< 1.0 U
606-20-2	2,6-Dinitrotoluene	5.0	< 5.0 U
121-14-2	2,4-Dinitrotoluene	5.0	< 5.0 U
84-66-2	Diethylphthalate	1.0	< 1.0 U

ANALYTICAL RESOURCES

ORGANICS ANALYSIS DATA SHEET Semivolatiles by SW8270C GC/MS Page 2 of 2

Sample ID: LDW-SP-64-RB-S-U SAMPLE

Lab Sample ID: GU83C LIMS ID: 04-10463 Matrix: Water Date Analyzed: 07/15/04 10:40

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QC Report No: GU83-Windward Environmental Project: LDW-SEEP SAMPLING

CAS Number	Analyte	RL	Result
7005-72-3	4-Chlorophenyl-phenylether	1.0	< 1.0 U
86-73-7	Fluorene	1.0	< 1.0 U
100-01-6	4-Nitroaniline	5.0	< 5.0 U
534-52-1	4,6-Dinitro-2-Methylphenol	15	< 15 U
86-30-6	N-Nitrosodiphenylamine	1.0	< 1.0 U
101-55-3	4-Bromophenyl-phenylether	1.0	< 1.0 U
118-74-1	Hexachlorobenzene	1.0	< 1.0 U
87-86-5	Pentachlorophenol	5.0	< 5.0 Ŭ
85-01-8	Phenanthrene	1.0	< 1.0 U
86-74-8	Carbazole	1.0	< 1.0 U
120-12-7	Anthracene	1.0	< 1.0 U
84-74-2	Di-n-Butylphthalate	1.0	< 1.0 U
206-44-0	Fluoranthene	1.0	< 1.0 U
129-00-0	Pyrene	1.0	< 1.0 U
85-68 - 7	Butylbenzylphthalate	1.0	< 1.0 U
91-94-1	3,3'-Dichlorobenzidine	5.0	< 5.0 U
56-55-3	Benzo (a) anthracene	1.0	< 1.0 U
117-81-7	bis(2-Ethylhexyl)phthalate	1.0	1.2 B
218-01-9	Chrysene	1.0	< 1.0 U
117-84-0	Di-n-Octyl phthalate	1.0	< 1.0 U
205-99-2	Benzo(b)fluoranthene	1.0	< 1.0 U
207-08-9	Benzo(k)fluoranthene	1.0	< 1.0 U
50-32-8	Benzo (a) pyrene	1.0	< 1.0 U
193-39-5	Indeno(1,2,3-cd)pyrene	1.0	< 1.0 U
53-70-3	Dibenz(a,h)anthracene	1.0	< 1.0 U
191-24-2	Benzo(g,h,i)perylene	1.0	< 1.0 U
123-91-1	1,4-Dioxane	1.0	< 1.0 U

Reported in $\mu g/L$ (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	76.7%	2-Fluorobiphenyl	69.9%
d14-p-Terphenyl	94.0%	d4-1,2-Dichlorobenzene	56.4%
d5-Phenol	66.5%	2-Fluorophenol	68.2%
2,4,6-Tribromophenol	88.2%	d4-2-Chlorophenol	72.0%
d8-1,4-Dioxane	58.5%	-	

Lab Sample ID: GU83D LIMS ID: 04-10464 Matrix: Water Data Release Authorized: Reported: 07/16/04

Date Extracted: 07/07/04 Date Analyzed: 07/15/04 11:12 Instrument/Analyst: NT6/Van Sample ID: LDW-SP-64-RB-MP-U SAMPLE

QC Report No: GU83-Windward Environmental Project: LDW-SEEP SAMPLING

Date Sampled: 07/03/04 Date Received: 07/03/04

CAS Number	Analyte	RL	Result
108-95-2	Phenol	2.0	< 2.0 U
111-44-4	Bis-(2-Chloroethyl) Ether	2.0	< 2.0 U
95-57-8	2-Chlorophenol	1.0	< 1.0 U
541-73-1	1,3-Dichlorobenzene	1.0	< 1.0 U
106-46-7	1,4-Dichlorobenzene	1.0	< 1.0 U
100-51-6	Benzyl Alcohol	5.0	< 5.0 U
95-50-1	1,2-Dichlorobenzene	1.0	< 1.0 U
95-48-7	2-Methylphenol	1.0	< 1.0 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	1.0	< 1.0 U
106-44-5	4-Methylphenol	1.0	< 1.0 U
621-64-7	N-Nitroso-Di-N-Propylamine	2.0	< 2.0 U
67-72-1	Hexachloroethane	2.0	< 2.0 U
98-95-3	Nitrobenzene	1.0	< 1.0 U
78-59-1	Isophorone	1.0	< 1.0 U
88-75-5	2-Nitrophenol	5.0	< 5.0 Ŭ
105-67-9	2,4-Dimethylphenol	3.0	< 3.0 U
65-85-0	Benzoic Acid	10	< 10 U
111-91-1	bis(2-Chloroethoxy) Methane	1.0	< 1.0 U
120-83-2	2,4-Dichlorophenol	3.0	< 3.0 U
120-82-1	1,2,4-Trichlorobenzene	1.0	< 1.0 U
91-20-3	Naphthalene	1.0	< 1.0 U
106-47-8	4-Chloroaniline	3.0	< 3.0 U
87-68-3	Hexachlorobutadiene	2.0	< 2.0 U
59-50-7	4-Chloro-3-methylphenol	2.0	< 2.0 U
91-57-6	2-Methylnaphthalene	1.0	< 1.0 U
77-47-4	Hexachlorocyclopentadiene	5.0	< 5.0 U
88-06-2	2,4,6-Trichlorophenol	5.0	< 5.0 U
95-95-4	2,4,5-Trichlorophenol	5.0	< 5.0 Ŭ
91-58-7	2-Chloronaphthalene	1.0	< 1.0 U
88-74-4	2-Nitroaniline	5.0	< 5.0 U
131-11-3	Dimethylphthalate	1.0	< 1.0 U
208-96-8	Acenaphthylene	1.0	< 1.0 U
99-09-2	3-Nitroaniline	6.0	< 6.0 U
83-32-9	Acenaphthene	1.0	< 1.0 U
51-28-5	2,4-Dinitrophenol	25	< 25 U
100-02-7	4-Nitrophenol	5.0	< 5.0 Ŭ
132-64-9	Dibenzofuran	1.0	< 1.0 U
606-20-2	2,6-Dinitrotoluene	5.0	< 5.0 U
121-14-2	2,4-Dinitrotoluene	5.0	< 5.0 U
84-66-2	Diethylphthalate	1.0	< 1.0 U



Sample ID: LDW-SP-64-RB-MP-U SAMPLE

Lab Sample ID: GU83D LIMS ID: 04-10464 Matrix: Water Date Analyzed: 07/15/04 11:12 QC Report No: GU83-Windward Environmental Project: LDW-SEEP SAMPLING

CAS Number	Analyte	RL	Result
7005-72-3	4-Chlorophenyl-phenylether	1.0	< 1.0 U
86-73-7	Fluorene	1.0	< 1.0 U
100-01-6	4-Nitroaniline	5.0	< 5.0 U
534-52-1	4,6-Dinitro-2-Methylphenol	15	< 15 U
86-30-6	N-Nitrosodiphenylamine	1.0	< 1.0 U
101-55-3	4-Bromophenyl-phenylether	1.0	< 1.0 U
118-74-1	Hexachlorobenzene	1.0	< 1.0 U
87-86-5	Pentachlorophenol	5.0	< 5.0 U
85-01-8	Phenanthrene	1.0	< 1.0 U
86-74-8	Carbazole	1.0	< 1.0 U
120-12-7	Anthracene	1.0	< 1.0 U
84-74-2	Di-n-Butylphthalate	1.0	< 1.0 U
206-44-0	Fluoranthene	1.0	< 1.0 U
129-00-0	Pyrene	1.0	< 1.0 U
85-68-7	Butylbenzylphthalate	1.0	< 1.0 U
91-94-1	3,3'-Dichlorobenzidine	5.0	< 5.0 U
56-55-3	Benzo (a) anthracene	1.0	< 1.0 U
117-81-7	bis(2-Ethylhexyl)phthalate	1.0	2.4 B
218-01-9	Chrysene	1.0	< 1.0 U
117-84-0	Di-n-Octyl phthalate	1.0	< 1.0 U
205-99-2	Benzo(b)fluoranthene	1.0	< 1.0 U
207-08-9	Benzo(k)fluoranthene	1.0	< 1.0 U
50-32-8	Benzo(a)pyrene	1.0	< 1.0 U
193-39-5	Indeno(1,2,3-cd)pyrene	1.0	< 1.0 U
53-70-3	Dibenz(a,h)anthracene	1.0	< 1.0 U
191-24-2	Benzo(g,h,i)perylene	1.0	< 1.0 U
123-91-1	1,4-Dioxane	1.0	< 1.0 U

Reported in μ g/L (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	79.4%	2-Fluorobiphenyl	73.9%
d14-p-Terphenyl	97.9%	d4-1,2-Dichlorobenzene	60.1%
d5-Phenol	62.6%	2-Fluorophenol	69.4%
2,4,6-Tribromophenol	93.8%	d4-2-Chlorophenol	78.2%
d8-1,4-Dioxane	52.8%	-	

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ANALYTICAL RESOURCES

ORGANICS ANALYSIS DATA SHEET Semivolatiles by SW8270C GC/MS Page 1 of 2

Lab Sample ID: GU83E LIMS ID: 04-10465 Matrix: Water Data Release Authorized: Reported: 07/16/04

Date Extracted: 07/07/04 Date Analyzed: 07/15/04 11:44 Instrument/Analyst: NT6/Van

Sample ID: LDW-SP-64-C-U SAMPLE

QC Report No: GU83-Windward Environmental Project: LDW-SEEP SAMPLING

Date Sampled: 07/02/04 Date Received: 07/03/04

CAS Number	Analyte	RL	Result
108-95-2	Phenol	2.0	< 2.0 U
111-44-4	Bis-(2-Chloroethyl) Ether	2.0	< 2.0 U
95-57-8	2-Chlorophenol	1.0	< 1.0 U
541-73-1	1,3-Dichlorobenzene	1.0	< 1.0 U
106-46-7	1,4-Dichlorobenzene	1.0	< 1.0 U
100-51-6	Benzyl Alcohol	5.0	< 5.0 U
95-50-1	1,2-Dichlorobenzene	1.0	< 1.0 U
95-48-7	2-Methylphenol	1.0	< 1.0 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	1.0	< 1.0 U
106-44-5	4-Methylphenol	1.0	< 1.0 U
621-64-7	N-Nitroso-Di-N-Propylamine	2.0	< 2.0 U
67-72-1	Hexachloroethane	2.0	< 2.0 U
98-95-3	Nitrobenzene	1.0	< 1.0 U
78-59-1	Isophorone	1.0	< 1.0 U
88-75-5	2-Nitrophenol	5.0	< 5.0 U
105-67-9	2,4-Dimethylphenol	3.0	< 3.0 U
65-85-0	Benzoic Acid	10	< 10 U
111-91-1	bis(2-Chloroethoxy) Methane	1.0	< 1.0 U
120-83-2	2,4-Dichlorophenol	3.0	< 3.0 U
120-82-1	1,2,4-Trichlorobenzene	1.0	< 1.0 U
91-20-3	Naphthalene	1.0	< 1.0 U
106-47-8	4-Chloroaniline	3.0	< 3.0 U
87-68-3	Hexachlorobutadiene	2.0	< 2.0 U
59-50-7	4-Chloro-3-methylphenol	2.0	< 2.0 U
91-57-6	2-Methylnaphthalene	1.0	< 1.0 U
77-47-4	Hexachlorocyclopentadiene	5.0	< 5.0 U
88-06-2	2,4,6-Trichlorophenol	5.0	< 5.0 U
95-95-4	2,4,5-Trichlorophenol	5.0	< 5.0 U
91-58-7	2-Chloronaphthalene	1.0	< 1.0 U
88-74-4	2-Nitroaniline	5.0	< 5.0 U
131-11-3	Dimethylphthalate	1.0	< 1.0 U
208-96-8	Acenaphthylene	1.0	< 1.0 U
99-09-2	3-Nitroaniline	6.0	< 6.0 U
83-32-9	Acenaphthene	1.0	< 1.0 U
51-28-5	2,4-Dinitrophenol	25	< 25 U
100-02-7	4-Nitrophenol	5.0	< 5.0 Ŭ
132-64-9	Dibenzofuran	1.0	< 1.0 U
606-20-2	2,6-Dinitrotoluene	5.0	< 5.0 U
121-14-2	2,4-Dinitrotoluene	5.0	< 5.0 U
84-66-2	Diethylphthalate	1.0	< 1.0 U



Sample ID: LDW-SP-64-C-U SAMPLE

Lab Sample ID: GU83E LIMS ID: 04-10465 Matrix: Water Date Analyzed: 07/15/04 11:44

QC Report No: GU83-Windward Environmental Project: LDW-SEEP SAMPLING

CAS Number	Analyte	RL	Result
7005-72-3	4-Chlorophenyl-phenylether	1.0	< 1.0 U
86-73-7	Fluorene	1.0	< 1.0 U
100-01-6	4-Nitroaniline	5.0	< 5.0 U
534-52-1	4,6-Dinitro-2-Methylphenol	15	< 15 U
86-30-6	N-Nitrosodiphenylamine	1.0	< 1.0 U
101-55-3	4-Bromophenyl-phenylether	1.0	< 1.0 U
118-74-1	Hexachlorobenzene	1.0	< 1.0 U
87-86-5	Pentachlorophenol	5.0	< 5.0 Ŭ
85-01-8	Phenanthrene	1.0	< 1.0 U
86-74-8	Carbazole	1.0	< 1.0 U
120-12-7	Anthracene	1.0	< 1.0 U
84-74-2	Di-n-Butylphthalate	1.0	< 1.0 U
206-44-0	Fluoranthene	1.0	< 1.0 U
129-00-0	Pyrene	1.0	< 1.0 U
85-68-7	Butylbenzylphthalate	1.0	< 1.0 U
91-94-1	3,3'-Dichlorobenzidine	5.0	< 5.0 U
56-55-3	Benzo(a) anthracene	1.0	< 1.0 U
117-81-7	bis(2-Ethylhexyl)phthalate	1.0	1.7 B
218-01-9	Chrysene	1.0	< 1.0 U
117-84-0	Di-n-Octyl phthalate	1.0	< 1.0 U
205-99-2	Benzo(b)fluoranthene	1.0	< 1.0 U
207-08-9	Benzo(k)fluoranthene	1.0	< 1.0 U
50-32-8	Benzo(a)pyrene	1.0	< 1.0 U
193-39-5	Indeno(1,2,3-cd)pyrene	1.0	< 1.0 U
53-70-3	Dibenz(a,h)anthracene	1.0	< 1.0 U
191-24-2	Benzo(g,h,i)perylene	1.0	< 1.0 U
123-91-1	1,4-Dioxane	1.0	< 1.0 U

Reported in $\mu g/L$ (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	73.7%	2-Fluorobiphenyl	68.9%
d14-p-Terphenyl	90.0%	d4-1,2-Dichlorobenzene	50.5%
d5-Phenol	67.9%	2-Fluorophenol	68.9%
2,4,6-Tribromophenol	92.0%	d4-2-Chlorophenol	72.2%
d8-1,4-Dioxane	61.7%	~	



Lab Sample ID: GU83B LIMS ID: 04-10462 Matrix: Water Data Release Authorized: Reported: 07/16/04

Date Extracted MS/MSD: 07/07/04

Date Analyzed MS: 07/15/04 09:37 MSD: 07/15/04 10:09 Instrument/Analyst MS: NT6/Van MSD: NT6/Van GPC Cleanup: NO Sample ID: LDW-SP-75-C-F MS/MSD

QC Report No: GU83-Windward Environmental Project: LDW-SEEP SAMPLING

Date Sampled: 07/03/04 Date Received: 07/03/04

Sample Amount MS: 250 mL MSD: 225 mL Final Extract Volume MS: 0.5 mL MSD: 0.5 mL Dilution Factor MS: 1.00 MSD: 1.00

Analyte	Sample	MS	Spike Added-MS	MS Recovery	MSD	Spike Added-MSD	MSD Recovery	RPD
					1100			
Phenol	< 2.0	50.2	75.0	66.9%	60.4	83.3	72.5%	18.4%
2-Chlorophenol	< 1.0	49.2	75.0	65.6%	59.0	83.3	70.8%	18.1%
1,4-Dichlorobenzene	< 1.0	25.6	50.0	51.2%	25.1	55.6	45.1%	2.0%
N-Nitroso-Di-N-Propylamine	< 2.0	33.6	50.0	67.2%	38.1	55.6	68.5%	12.6%
1,2,4-Trichlorobenzene	< 1.0	27.8	50.0	55.6%	27.5	55.6	49.5%	1.1%
4-Chloro-3-methylphenol	< 2.0	59.9	75.0	79.9%	67.7	83.3	81.3%	12.2%
Acenaphthene	< 1.0	37.6	50.0	75.2%	41.2	55.6	74.1%	9.1%
4-Nitrophenol	< 5.0	66.5	75.0	88.7%	69.6	83.3	83.6%	4.6%
2,4-Dinitrotoluene	< 5.0	36.3	50.0	72.6%	39.7	55.6	71.4%	8.9%
Pentachlorophenol	< 5.0	77.0	75.0	1038	82.6	83.3	99.2%	7.08
Pyrene	< 1.0	44.8	50.0	89.6%	48.0	55.6	86.3%	6.9%
1,4-Dioxane	< 1.0	30.9	50.0	61.8%	36.7	55.6	66.0%	17.2%

Results reported in $\mu g/L$

RPD calculated using sample concentrations per SW846.



Lab Sample ID: GU83A LIMS ID: 04-10461 Matrix: Water Data Release Authorized: Reported: 07/16/04

Date Extracted MS/MSD: 07/07/04

Date Analyzed MS: 07/15/04 12:16 MSD: 07/15/04 12:47 Instrument/Analyst MS: NT6/Van MSD: NT6/Van GPC Cleanup: NO

Sample ID: LDW-SP-75-C-U MS/MSD

QC Report No: GU83-Windward Environmental Project: LDW-SEEP SAMPLING

Date Sampled: 07/03/04 Date Received: 07/03/04

Sample Amount MS: 250 mL MSD: 250 mL Final Extract Volume MS: 0.5 mL MSD: 0.5 mL Dilution Factor MS: 1.00 MSD: 1.00

			Spike	MS		Spike	MSD	
Analyte	Sample	MS	Added-MS	Recovery	MSD	Added-MSD	Recovery	RPD
Phenol	< 2.0	51.7	75.0	68.9%	44.9	75.0	59.9%	14.1%
2-Chlorophenol	< 1.0	50.2	75.0	66.9%	42.8	75.0	57.1%	15.9%
1,4-Dichlorobenzene	< 1.0	26.3	50.0	52.6%	21.3	50.0	42.6%	21.0%
N-Nitroso-Di-N-Propylamine	< 2.0	33.1	50.0	66.2%	30.3	50.0	60.6%	8.8%
1,2,4-Trichlorobenzene	< 1.0	27.8	50.0	55.6%	23.2	50.0	46.4%	18.0%
4-Chloro-3-methylphenol	< 2.0	57.9	75.0	77.2%	55.0	75.0	73.3%	5.1%
Acenaphthene	< 1.0	36.3	50.0	72.6%	33.6	50.0	67.2%	7.7%
4-Nitrophenol	< 5.0	57.7	75.0	76.9%	58.6	75.0	78.1%	1.5%
2,4-Dinitrotoluene	< 5.0	33.3	50.0	66.6%	33.2	50.0	66.4%	0.3%
Pentachlorophenol	< 5.0	73.5	75.0	98.0%	72.3	75.0	96.4%	1.6%
Pyrene	< 1.0	44.3	50.0	88.6%	42.8	50.0	85.6%	3.4%
1,4-Dioxane	< 1.0	29.4	50.0	58.8%	31.6	50.0	63.2%	7.2%

Results reported in $\mu g/L$

RPD calculated using sample concentrations per SW846.



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ORGANICS ANALYSIS DATA SHEET Semivolatiles by SW8270C GC/MS Page 1 of 1

Lab Sample ID: LCS-070704 LIMS ID: 04-10230 Matrix: Water Data Release Authorized: Reported: 07/15/04

Date Extracted: 07/07/04 Date Analyzed: 07/14/04 11:44 Instrument/Analyst: NT6/Van GPC Cleanup: NO

Sample ID: LCS-070704 LAB CONTROL

QC Report No: GU45-Windward Environmental Project: LDW Seep Sampling

Date Sampled: 06/30/04 Date Received: 06/30/04

Sample Amount: 500 mL Final Extract Volume: 0.50 mL Dilution Factor: 1.00

	Lab	Spike	
Analyte	Control	Added	Recovery
Phenol	24.5	37.5	65.3%
2-Chlorophenol	24.2	37.5	64.5%
1,4-Dichlorobenzene	11.0	25.0	44.0%
N-Nitroso-Di-N-Propylamine	15.8	25.0	63.2%
1,2,4-Trichlorobenzene	11.9	25.0	47.6%
4-Chloro-3-methylphenol	28.3	37.5	75.5%
Acenaphthene	18.2	25.0	72.8%
4-Nitrophenol	29.8	37.5	79.5%
2,4-Dinitrotoluene	17.2	25.0	68.8%
Pentachlorophenol	39.2	37.5	105%
Pyrene	22.6	25.0	90.4%
1,4-Dioxane	16.7	25.0	66.8%

Semivolatile Surrogate Recovery

d5-Nitrobenzene	74.6%
2-Fluorobiphenyl	74.9%
d14-p-Terphenyl	96.1%
d4-1,2-Dichlorobenzene	59.1%
d5-Phenol	73.9%
2-Fluorophenol	67.9%
2,4,6-Tribromophenol	91.1%
d4-2-Chlorophenol	74.3%
d8-1,4-Dioxane	63.6%

Results reported in μ g/L

4B SEMIVOLATILE METHOD BLANK SUMMARY

GU45MBW1

Client: WINDWARD ENVIRONMENTAL

Lab Name: ANALYTICAL RESOURCES, INC Lab Code: GU83 Project: LDW-SEEP SAMPLING SDG No.: GU83 Lab File ID: GU45MB Lab Sample ID: GU45MBW1 Date Extracted: 07/07/04 Instrument ID: NT6 Date Analyzed: 07/14/04 Matrix: (soil/water) WATER Time Analyzed: 1113 Level:(low/med) LOW

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	CLIENT	LAB	LAB	DATE
	SAMPLE NO.	SAMPLE ID	FILE ID	ANALYZED
	==================	===========	===============	===========
01	GU45LCSW1	GU45LCSW1	GU45SB	07/14/04
02	LDW-SP-48-C-U	GU45A	GU45A	07/14/04
03	LDW-SP-48-C-F	GU45B	GU45B	07/14/04
04	LDW-SP-54-C-U	GU45C	GU45C	07/14/04
05	LDW-SP-54-C-F	GU45D	GU45D	07/14/04
06	LDW-SP-82-C-U	GU45E	GU45E	07/14/04
07	LDW-SP-61-C-F	GU76C	GU76C	07/14/04
08	LDW-SP-82-C-F	GU45F	GU45F	07/14/04
09	LDW-SP-82-C-FD-U	GU45G	GU45G	07/14/04
10	LDW-SP-82-C-FD-F	GU45H	GU45H	07/14/04
11	LDW-SP-62-C-F	GU76A	GU76A	07/14/04
12	LDW-SP-61-C-U	GU76B	GU76B	07/14/04
13	LDW-SP-75-C-U	GU83A	GU83A	07/14/04
14	LDW-SP-75-C-F	GU83B	GU83B	07/15/04
15	LDW-SP-75-C-F MS	GU83BMS	GU83BMS	07/15/04
16	LDW-SP-75-C-F MS	GU83BMSD	GU83BMSD	07/15/04
17	LDW-SP-64-RB-S-U	GU83C	GU83C	07/15/04
18	LDW-SP-64-RB-MP-	GU83D	GU83D	07/15/04
19	LDW-SP-64-C-U	GU83E	GU83E	07/15/04
20	LDW-SP-75-C-U MS	GU83AMS	GU83AMS	07/15/04
21	LDW-SP-75-C-U MS	GU83AMSD	GU83AMSD	07/15/04
22	LDW-SP-61-C-F	GU76C	GU76CDL	07/15/04
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COMMENTS:

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FORM IV SV

ANALYTICAL RESOURCES INCORPORATED

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ORGANICS ANALYSIS DATA SHEET Semivolatiles by SW8270C GC/MS Page 1 of 2

Lab Sample ID: MB-070704 LIMS ID: 04-10230 Matrix: Water Data Release Authorized: Reported: 07/15/04

Date Extracted: 07/07/04 Date Analyzed: 07/14/04 11:13 Instrument/Analyst: NT6/Van Sample ID: MB-070704 METHOD BLANK

QC Report No: GU45-Windward Environmental Project: LDW Seep Sampling

Date Sampled: NA Date Received: NA

CAS Number	Analyte	RL	Result
108-95-2	Phenol	2.0	< 2.0 U
111-44-4	Bis-(2-Chloroethyl) Ether	2.0	< 2.0 U
95-57-8	2-Chlorophenol	1.0	< 1.0 U
541-73-1	1,3-Dichlorobenzene	1.0	< 1.0 U
106-46-7	1,4-Dichlorobenzene	1.0	< 1.0 U
100-51-6	Benzyl Alcohol	5.0	< 5.0 Ŭ
95-50-1	1,2-Dichlorobenzene	1.0	< 1.0 U
95-48-7	2-Methylphenol	1.0	< 1.0 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	1.0	< 1.0 U
106-44-5	4-Methylphenol	1.0	< 1.0 U
621-64-7	N-Nitroso-Di-N-Propylamine	2.0	< 2.0 U
67-72-1	Hexachloroethane	2.0	< 2.0 U
98-95-3	Nitrobenzene	1.0	< 1.0 U
78-59-1	Isophorone	1.0	< 1.0 U
88-75-5	2-Nitrophenol	5.0	< 5.0 U
105-67-9	2,4-Dimethylphenol	3.0	< 3.0 U
65-85-0	Benzoic Acid	10	< 10 U
111-91-1	bis(2-Chloroethoxy) Methane	1.0	< 1.0 U
120-83-2	2,4-Dichlorophenol	3.0	< 3.0 U
120-82-1	1,2,4-Trichlorobenzene	1.0	< 1.0 U
91-20-3	Naphthalene	1.0	< 1.0 U
106-47-8	4-Chloroaniline	3.0	< 3.0 Ŭ
87-68-3	Hexachlorobutadiene	2.0	< 2.0 U
59-50-7	4-Chloro-3-methylphenol	2.0	< 2.0 U
91-57-6	2-Methylnaphthalene	1.0	< 1.0 U
77-47-4	Hexachlorocyclopentadiene	5.0	< 5.0 U
88-06-2	2,4,6-Trichlorophenol	5.0	< 5.0 U
95-95-4	2,4,5-Trichlorophenol	5.0	< 5.0 U
91-58-7	2-Chloronaphthalene	1.0	< 1.0 U
88-74-4	2-Nitroaniline	5.0	< 5.0 U
131-11-3	Dimethylphthalate	1.0	< 1.0 U
208-96-8	Acenaphthylene	1.0	< 1.0 U
99-09-2	3-Nitroaniline	6.0	< 6.0 U
83-32-9	Acenaphthene	1.0	< 1.0 U
51-28-5	2,4-Dinitrophenol	25	< 25 U
100-02-7	4-Nitrophenol	5.0	< 5.0 U
132-64-9	Dibenzofuran	1.0	< 1.0 U
606-20-2	2,6-Dinitrotoluene	5.0	< 5.0 Ŭ
121-14-2	2,4-Dinitrotoluene	5.0	< 5.0 U
84-66-2	Diethylphthalate	1.0	< 1.0 U



Sample ID: MB-070704 METHOD BLANK

Lab Sample ID: MB-070704 LIMS ID: 04-10230 Matrix: Water Date Analyzed: 07/14/04 11:13

QC Report No: GU45-Windward Environmental Project: LDW Seep Sampling

CAS Number	Analyte	RL	Result
7005-72-3	4-Chlorophenyl-phenylether	1.0	< 1.0 U
86-73-7	Fluorene	1.0	< 1.0 U
100-01-6	4-Nitroaniline	5.0	< 5.0 U
534-52-1	4,6-Dinitro-2-Methylphenol	15	< 15 U
86-30-6	N-Nitrosodiphenylamine	1.0	< 1.0 U
101-55-3	4-Bromophenyl-phenylether	1.0	< 1.0 U
118-74-1	Hexachlorobenzene	1.0	< 1.0 U
87-86-5	Pentachlorophenol	5.0	< 5.0 U
85-01-8	Phenanthrene	1.0	< 1.0 U
86-74-8	Carbazole	1.0	< 1.0 U
120-12-7	Anthracene	1.0	< 1.0 U
84-74-2	Di-n-Butylphthalate	1.0	< 1.0 U
206-44-0	Fluoranthene	1.0	< 1.0 U
129-00-0	Pyrene	1.0	< 1.0 U
85-68-7	Butylbenzylphthalate	1.0	< 1.0 U
91-94-1	3,3'-Dichlorobenzidine	5.0	< 5.0 U
56-55-3	Benzo(a)anthracene	1.0	< 1.0 U
117-81-7	bis(2-Ethylhexyl)phthalate	1.0	1.2
218-01-9	Chrysene	1.0	< 1.0 U
117-84-0	Di-n-Octyl phthalate	1.0	< 1.0 U
205-99-2	Benzo(b)fluoranthene	1.0	< 1.0 U
207-08-9	Benzo(k)fluoranthene	1.0	< 1.0 U
50-32-8	Benzo(a)pyrene	1.0	< 1.0 U
193-39-5	Indeno(1,2,3-cd)pyrene	1.0	< 1.0 U
53-70-3	Dibenz(a,h)anthracene	1.0	< 1.0 U
191-24-2	Benzo(g,h,i)perylene	1.0	< 1.0 U
123-91-1	1,4-Dioxane	1.0	< 1.0 U

Reported in $\mu g/L$ (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	74.1%	2-Fluorobiphenyl	71.1%
d14-p-Terphenyl	96.9%	d4-1,2-Dichlorobenzene	52.7%
d5-Phenol	66.1%	2-Fluorophenol	66.7%
2,4,6-Tribromophenol	90.9%	d4-2-Chlorophenol	71.6%
d8-1,4-Dioxane	56.1%	-	



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SW8270 SEMIVOLATILES WATER SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: GU59-Windward Environmental Project: LDW-SEEP SAMPLING

Client ID	NBZ	FBP	TPH	DCB	PHL	2FP	TBP	2CP	DXN 1	TOT OUT
MB-070204	90 0%	71 69	00 00	FO 48		~ ~ ~ ~				
MB-070204	00.08	/1.68	88.08	58.48	75.18	75.5%	79.7%	79.1%	62.8%	0
LCS-070204	73.5%	70.7%	88.5%	60.3%	74.6%	71.5%	81.5%	75.9%	61.8%	0
LDW-SP-10-C-F	74.48	71.4%	83.0%	59.2%	68.0%	69.8%	80.9%	74.6%	62.5%	0
LDW-SP-12-C-F	65.4%	64.1%	88.2%	53.1%	60.7%	60.3%	74.28	65.3%	52.8%	0
LDW-SP-20-C-F	64.9%	65.0%	86.0%	47.1%	60.3%	59.2%	80.1%	64.0%	47.7%	õ
LDW-SP-41-C-F	68.9%	62.5%	83.8%	53.9%	62.9%	62.6%	74.3%	67.7%	55.9%	õ
LDW-SP-41-C-F MS	68.3%	66.8%	90.4%	50.8%	66.2%	61.6%	82.8%	67.7%	51 8%	õ
LDW-SP-41-C-F MSD	76.6%	75.5%	100%	59.6%	70.3%	65.2%	90.6%	74.6%	50 9%	0
LDW-SP-12-C-U	54.5%	51.4%	86.1%	40.5%	50.4%	48.2%	66.6%	53.6%	42 2%	Õ
LDW-SP-20-C-U	59.2%	58.1%	80.6%	48.8%	54.0%	54.0%	71.2%	57.9%	44 9%	ñ
LDW-SP-41-C-U	61.4%	56.2%	81.4%	45.0%	57.0%	55.7%	73.1%	61.6%	49.28	ñ .
LDW-SP-41-C-U MS	69.5%	69.8%	90.1%	51.1%	66.7%	60.8%	83.5%	67.9%	49.08	õ
LDW-SP-41-C-U MSD	78.1%	76.3%	103%	59.9%	77.5%	69.1%	90.3%	77.2%	58.3%	0
LDW-SP-39-C-F	65.3%	64.6%	85.6%	50.3%	60.5%	59.7%	78.9%	64.1%	49.5%	0 0
LDW-SP-80-C-F	62.6%	63.6%	75.4%	47.6%	61.2%	55.7%	82.6%	63 38	41 0%	0
LDW-SP-39-C-U	72.5%	67.8%	87.1%	54.8%	65.0%	63.1%	84.9%	69.5%	54.9%	õ
LDW-SP-80-C-U	68.2%	66.7%	80.3%	50.0%	64.7%	61.7%	89.4%	67.5%	47.98	õ

		·	LCS/MB LIMITS	QC LIMITS
(NBZ)	Ξ	d5-Nitrobenzene	(44-107)	(38-111)
(FBP)	=	2-Fluorobiphenyl	(43-99)	(30-109)
(TPH)	=	d14-p-Terphenyl	(44-123)	(37-113)
(DCB)	=	d4-1,2-Dichlorobenzene	(36-88)	(35-88)
(PHL)	=	d5-Phenol	(47 - 101)	(42 - 98)
(2FP)	≕	2-Fluorophenol	(44 - 102)	(40-99)
(TBP)	=	2,4,6-Tribromophenol	(38-116)	(27 - 136)
(2CP)	=	d4-2-Chlorophenol	(50-102)	(47 - 101)
(DXN)	=	d8-1,4-Dioxane	(30-160)	(30-160)

Prep Method: SW3520C Log Number Range: 04-10337 to 04-10347

Lab Sample ID: GU59A LIMS ID: 04-10337 Matrix: Water Data Release Authorized: Reported: 07/15/04

Date Extracted: 07/02/04 Date Analyzed: 07/13/04 15:00 Instrument/Analyst: NT6/Van INCORPORATED Sample ID: LDW-SP-10-C-F SAMPLE

ANALYTICAL RESOURCES

QC Report No: GU59-Windward Environmental Project: LDW-SEEP SAMPLING

Date Sampled: 07/01/04 Date Received: 07/01/04

CAS Number	Analyte	RL	Result
108-95-2	Phenol	2.0	< 2.0 U
111-44-4	Bis-(2-Chloroethyl) Ether	2.0	< 2.0 U
95-57-8	2-Chlorophenol	1.0	< 1.0 U
541-73-1	1,3-Dichlorobenzene	1.0	< 1.0 U
106-46-7	1,4-Dichlorobenzene	1.0	< 1.0 U
100-51-6	Benzyl Alcohol	5.0	< 5.0 Ŭ
95-50-1	1,2-Dichlorobenzene	1.0	< 1.0 U
95-48-7	2-Methylphenol	1.0	< 1.0 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	1.0	< 1.0 U
106-44-5	4-Methylphenol	1.0	< 1.0 U
621-64-7	N-Nitroso-Di-N-Propylamine	2.0	< 2.0 U
67-72-1	Hexachloroethane	2.0	< 2.0 U
98-95-3	Nitrobenzene	1.0	< 1.0 U
78-59-1	Isophorone	1.0	< 1.0 U
88-75-5	2-Nitrophenol	5.0	< 5.0 U
105-67-9	2,4-Dimethylphenol	3.0	< 3.0 U
65-85-0	Benzoic Acid	10	< 10 U
111-91-1	bis(2-Chloroethoxy) Methane	1.0	< 1.0 U
120-83-2	2,4-Dichlorophenol	3.0	< 3.0 U
120-82-1	1,2,4-Trichlorobenzene	1.0	< 1.0 U
91-20-3	Naphthalene	1.0	< 1.0 U
106-47-8	4-Chloroaniline	3.0	< 3.0 U
87-68-3	Hexachlorobutadiene	2.0	< 2.0 U
59-50-7	4-Chloro-3-methylphenol	2.0	< 2.0 U
91-57-6	2-Methylnaphthalene	1.0	< 1.0 U
77-47-4	Hexachlorocyclopentadiene	5.0	< 5.0 U
88-06~2	2,4,6-Trichlorophenol	5.0	< 5.0 U
95-95-4	2,4,5-Trichlorophenol	5.0	< 5.0 U
91-58-7	2-Chloronaphthalene	1.0	< 1.0 U
88-74-4	2-Nitroaniline	5.0	< 5.0 U
131-11-3	Dimethylphthalate	1.0	< 1.0 U
208-96-8	Acenaphthylene	1.0	< 1.0 U
99-09-2	3-Nitroaniline	6.0	< 6.0 U
83-32-9	Acenaphthene	1.0	< 1.0 U
51-28-5	2,4-Dinitrophenol	25	< 25 U
100-02-7	4-Nitrophenol	5.0	< 5.0 Ŭ
132-64-9	Dibenzofuran	1.0	< 1.0 U
606-20-2	2,6-Dinitrotoluene	5.0	< 5.0 U
121-14-2	2,4-Dinitrotoluene	5.0	< 5.0 U
84-66-2	Diethylphthalate	1.0	< 1.0 U



Sample ID: LDW-SP-10-C-F SAMPLE

Lab Sample ID: GU59A LIMS ID: 04-10337 Matrix: Water Date Analyzed: 07/13/04 15:00 QC Report No: GU59-Windward Environmental Project: LDW-SEEP SAMPLING

CAS Number	Analyte	RL	Result
7005-72-3	4-Chlorophenyl-phenylether	1.0	< 1.0 U
86-73-7	Fluorene	1.0	< 1.0 U
100-01-6	4-Nitroaniline	5.0	< 5.0 U
534-52-1	4,6-Dinitro-2-Methylphenol	15	< 15 U
86-30-6	N-Nitrosodiphenylamine	1.0	< 1.0 U
101-55-3	4-Bromophenyl-phenylether	1.0	< 1.0 U
118-74-1	Hexachlorobenzene	1.0	< 1.0 U
87-86-5	Pentachlorophenol	5.0	< 5.0 U
85-01-8	Phenanthrene	1.0	< 1.0 U
86-74-8	Carbazole	1.0	< 1.0 U
120-12-7	Anthracene	1.0	< 1.0 U
84-74-2	Di-n-Butylphthalate	1.0	< 1.0 U
206-44-0	Fluoranthene	1.0	< 1.0 U
129-00-0	Pyrene	1.0	< 1.0 U
85-68-7	Butylbenzylphthalate	1.0	< 1.0 U
91-94-1	3,3'-Dichlorobenzidine	5.0	< 5.0 U
56-55-3	Benzo(a) anthracene	1.0	< 1.0 U
117-81-7	bis(2-Ethylhexyl)phthalate	1.0	< 1.0 U
218-01-9	Chrysene	1.0	< 1.0 U
117-84-0	Di-n-Octyl phthalate	1.0	< 1.0 U
205-99-2	Benzo(b)fluoranthene	1.0	< 1.0 U
207-08-9	Benzo(k)fluoranthene	1.0	< 1.0 U
50-32-8	Benzo (a) pyrene	1.0	< 1.0 U
193-39-5	Indeno(1,2,3-cd)pyrene	1.0	< 1.0 U
53-70-3	Dibenz(a,h)anthracene	1.0	< 1.0 U
191-24-2	Benzo(g,h,i)perylene	1.0	< 1.0 U
123-91-1	1,4-Dioxane	1.0	< 1.0 U

Reported in $\mu g/L$ (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	74.4%	2-Fluorobiphenyl	71.4%
d14-p-Terphenyl	83.0%	d4-1,2-Dichlorobenzene	59.2%
d5-Phenol	68.0%	2-Fluorophenol	69.8%
2,4,6-Tribromophenol	80.9%	d4-2-Chlorophenol	74.6%
d8-1,4-Dioxane	62.5%	-	

ANALYTICAL RESOURCES

ORGANICS ANALYSIS DATA SHEET Semivolatiles by SW8270C GC/MS Page 1 of 2

Lab Sample ID: GU59B LIMS ID: 04-10338 Matrix: Water Data Release Authorized: Reported: 07/15/04

Date Extracted: 07/02/04 Date Analyzed: 07/13/04 15:32 Instrument/Analyst: NT6/Van Sample ID: LDW-SP-12-C-F SAMPLE

QC Report No: GU59-Windward Environmental Project: LDW-SEEP SAMPLING

Date Sampled: 07/01/04 Date Received: 07/01/04

CAS Number	Analyte	RL	Result
108-95-2	Phenol	2.0	< 2.0 U
111-44-4	Bis-(2-Chloroethyl) Ether	2.0	< 2.0 U
95-57-8	2-Chlorophenol	1.0	< 1.0 U
541-73-1	1,3-Dichlorobenzene	1.0	< 1.0 U
106-46-7	1,4-Dichlorobenzene	1.0	< 1.0 U
100-51-6	Benzyl Alcohol	5.0	< 5.0 U
95-50-1	1,2-Dichlorobenzene	1.0	< 1.0 U
95-48-7	2-Methylphenol	1.0	< 1.0 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	1.0	< 1.0 U
106-44-5	4-Methylphenol	1.0	< 1.0 U
621-64-7	N-Nitroso-Di-N-Propylamine	2.0	< 2.0 U
67-72-1	Hexachloroethane	2.0	< 2.0 U
98-95-3	Nitrobenzene	1.0	< 1.0 U
78-59-1	Isophorone	1.0	< 1.0 U
88-75-5	2-Nitrophenol	5.0	< 5.0 U
105-67-9	2,4-Dimethylphenol	3.0	< 3.0 U
65-85-0	Benzoic Acid	10	< 10 U
111-91-1	bis(2-Chloroethoxy) Methane	1.0	< 1.0 U
120-83-2	2,4-Dichlorophenol	3.0	< 3.0 U
120-82-1	1,2,4-Trichlorobenzene	1.0	< 1.0 U
91-20-3	Naphthalene	1.0	< 1.0 U
106-47-8	4-Chloroaniline	3.0	< 3.0 Ŭ
87-68-3	Hexachlorobutadiene	2.0	< 2.0 U
59-50-7	4-Chloro-3-methylphenol	2.0	< 2.0 U
91-57-6	2-Methylnaphthalene	1.0	< 1.0 U
77-47-4	Hexachlorocyclopentadiene	5.0	< 5.0 U
88-06-2	2,4,6-Trichlorophenol	5.0	< 5.0 U
95-95-4	2,4,5-Trichlorophenol	5.0	< 5.0 U
91-58-7	2-Chloronaphthalene	1.0	< 1.0 U
88-74-4	2-Nitroaniline	5.0	< 5.0 U
131-11-3	Dimethylphthalate	1.0	< 1.0 U
208-96-8	Acenaphthylene	1.0	< 1.0 U
99-09-2	3-Nitroaniline	6.0	< 6.0 U
83-32-9	Acenaphthene	1.0	< 1.0 U
51-28-5	2,4-Dinitrophenol	25	< 25 U
100-02-7	4-Nitrophenol	5.0	< 5.0 U
132-64-9	Dibenzofuran	1.0	< 1.0 U
606-20-2	2,6-Dinitrotoluene	5.0	< 5.0 U
121-14-2	2,4-Dinitrotoluene	5.0	< 5.0 U
84-66-2	Diethylphthalate	1.0	< 1.0 U



Sample ID: LDW-SP-12-C-F SAMPLE

Lab Sample ID: GU59B LIMS ID: 04-10338 Matrix: Water Date Analyzed: 07/13/04 15:32 QC Report No: GU59-Windward Environmental Project: LDW-SEEP SAMPLING

CAS Number	Analyte	RL	Result
7005-72-3	4-Chlorophenyl-phenylether	1.0	< 1.0 U
86-73-7	Fluorene	1.0	< 1.0 U
100-01-6	4-Nitroaniline	5.0	< 5.0 U
534-52-1	4,6-Dinitro-2-Methylphenol	15	< 15 U
86-30-6	N-Nitrosodiphenylamine	1.0	< 1.0 U
101-55-3	4-Bromophenyl-phenylether	1.0	< 1.0 U
118-74-1	Hexachlorobenzene	1.0	< 1.0 U
87-86-5	Pentachlorophenol	5.0	< 5.0 Ŭ
85-01-8	Phenanthrene	1.0	< 1.0 U
86-74-8	Carbazole	1.0	< 1.0 U
120-12-7	Anthracene	1.0	< 1.0 U
84-74-2	Di-n-Butylphthalate	1.0	< 1.0 U
206-44-0	Fluoranthene	1.0	< 1.0 U
129-00-0	Pyrene	1.0	< 1.0 U
85-68-7	Butylbenzylphthalate	1.0	< 1.0 U
91-94-1	3,3'-Dichlorobenzidine	5.0	< 5.0 U
56-55-3	Benzo(a)anthracene	1.0	< 1.0 U
117-81-7	bis(2-Ethylhexyl)phthalate	1.0	< 1.0 U
218-01-9	Chrysene	1.0	< 1.0 U
117-84-0	Di-n-Octyl phthalate	1.0	< 1.0 U
205-99-2	Benzo(b)fluoranthene	1.0	< 1.0 U
207-08-9	Benzo(k)fluoranthene	1.0	< 1.0 U
50-32-8	Benzo(a)pyrene	1.0	< 1.0 U
193-39-5	Indeno(1,2,3-cd)pyrene	1.0	< 1.0 U
53-70-3	Dibenz(a,h)anthracene	1.0	< 1.0 U
191-24-2	Benzo(g,h,i)perylene	1.0	< 1.0 U
123-91-1	1,4-Dioxane	1.0	< 1.0 U

Reported in $\mu g/L$ (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	65.4%	2-Fluorobiphenyl	64.1%
d14-p-Terphenyl	88.2%	d4-1,2-Dichlorobenzene	53.1%
d5-Phenol	60.7%	2-Fluorophenol	60.3%
2,4,6-Tribromophenol	74.2%	d4-2-Chlorophenol	65.3%
d8-1,4-Dioxane	52.8%	-	



Lab Sample ID: GU59C LIMS ID: 04-10339 Matrix: Water Data Release Authorized: Reported: 07/15/04

Date Extracted: 07/02/04 Date Analyzed: 07/13/04 16:04 Instrument/Analyst: NT6/Van

Sample ID: LDW-SP-20-C-F SAMPLE

QC Report No: GU59-Windward Environmental Project: LDW-SEEP SAMPLING

Date Sampled: 07/01/04 Date Received: 07/01/04

CAS Number	Analyte	RL	Result
108-95-2	Phenol	2.0	< 2.0 U
111-44-4	Bis-(2-Chloroethyl) Ether	2.0	< 2.0 U
95-57-8	2-Chlorophenol	1.0	< 1.0 U
541-73-1	1,3-Dichlorobenzene	1.0	< 1.0 U
106-46-7	1,4-Dichlorobenzene	1.0	< 1.0 U
100-51-6	Benzyl Alcohol	5.0	< 5.0 U
95-50-1	1,2-Dichlorobenzene	1.0	< 1.0 U
95-48-7	2-Methylphenol	1.0	< 1.0 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	1.0	< 1.0 U
106-44-5	4-Methylphenol	1.0	< 1.0 U
621-64-7	N-Nitroso-Di-N-Propylamine	2.0	< 2.0 U
67-72-1	Hexachloroethane	2.0	< 2.0 U
98-95-3	Nitrobenzene	1.0	< 1.0 U
78-59-1	Isophorone	1.0	< 1.0 U
88-75-5	2-Nitrophenol	5.0	< 5.0 Ŭ
105-67-9	2,4-Dimethylphenol	3.0	< 3.0 Ŭ
65-85-0	Benzoic Acid	10	< 10 U
111-91-1	bis(2-Chloroethoxy) Methane	1.0	< 1.0 U
120-83-2	2,4-Dichlorophenol	3.0	< 3.0 U
120-82-1	1,2,4-Trichlorobenzene	1.0	< 1.0 U
91-20-3	Naphthalene	1.0	< 1.0 U
106-47-8	4-Chloroaniline	3.0	< 3.0 U
87-68-3	Hexachlorobutadiene	2.0	< 2.0 U
59-50-7	4-Chloro-3-methylphenol	2.0	< 2.0 U
91-57-6	2-Methylnaphthalene	1.0	< 1.0 U
77-47-4	Hexachlorocyclopentadiene	5.0	< 5.0 U
88-06-2	2,4,6-Trichlorophenol	5.0	< 5.0 U
95-95-4	2,4,5-Trichlorophenol	5.0	< 5.0 U
91-58-7	2-Chloronaphthalene	1.0	< 1.0 U
88-74-4	2-Nitroaniline	5.0	< 5.0 U
131-11-3	Dimethylphthalate	1.0	< 1.0 U
208-96-8	Acenaphthylene	1.0	< 1.0 U
99-09-2	3-Nitroaniline	6.0	< 6.0 U
83-32-9	Acenaphthene	1.0	< 1.0 U
51-28-5	2,4-Dinitrophenol	25	< 25 U
100-02-7	4-Nitrophenol	5.0	< 5.0 U
132-64-9	Dibenzofuran	1.0	< 1.0 U
606-20-2	2,6-Dinitrotoluene	5.0	< 5.0 U
121-14-2	2,4-Dinitrotoluene	5.0	< 5.0 U
84-66-2	Diethylphthalate	1.0	< 1.0 U



Sample ID: LDW-SP-20-C-F SAMPLE

Lab Sample ID: GU59C LIMS ID: 04-10339 Matrix: Water Date Analyzed: 07/13/04 16:04

QC Report No: GU59-Windward Environmental Project: LDW-SEEP SAMPLING

CAS Number	Analyte	RL	Result
7005-72-3	4-Chlorophenyl-phenylether	1.0	< 1.0 U
86-73-7	Fluorene	1.0	< 1.0 U
100-01-6	4-Nitroaniline	5.0	< 5.0 U
534-52-1	4,6-Dinitro-2-Methylphenol	15	< 15 U
86-30-6	N-Nitrosodiphenylamine	1.0	< 1.0 U
101-55-3	4-Bromophenyl-phenylether	1.0	< 1.0 U
118-74-1	Hexachlorobenzene	1.0	< 1.0 U
87-86-5	Pentachlorophenol	5.0	< 5.0 U
85-01-8	Phenanthrene	1.0	< 1.0 U
86-74-8	Carbazole	1.0	< 1.0 U
120-12-7	Anthracene	1.0	< 1.0 U
84-74-2	Di-n-Butylphthalate	1.0	< 1.0 U
206-44-0	Fluoranthene	1.0	< 1.0 U
129-00-0	Pyrene	1.0	< 1.0 U
85-68-7	Butylbenzylphthalate	1.0	< 1.0 U
91-94-1	3,3'-Dichlorobenzidine	5.0	< 5.0 U
56-55-3	Benzo(a)anthracene	1.0	< 1.0 U
117-81-7	bis(2-Ethylhexyl)phthalate	1.0	< 1.0 U
218-01-9	Chrysene	1.0	< 1.0 U
117-84-0	Di-n-Octyl phthalate	1.0	< 1.0 U
205-99-2	Benzo(b)fluoranthene	1.0	< 1.0 U
207-08-9	Benzo(k)fluoranthene	1.0	< 1.0 U
50-32-8	Benzo(a)pyrene	1.0	< 1.0 U
193-39-5	Indeno(1,2,3-cd)pyrene	1.0	< 1.0 U
53-70-3	Dibenz(a,h)anthracene	1.0	< 1.0 U
191-24-2	Benzo(g,h,i)perylene	1.0	< 1.0 U
123-91-1	1,4-Dioxane	1.0	< 1.0 Ū

Reported in $\mu g/L$ (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	64.9%	2-Fluorobiphenyl	65.0%
d14-p-Terphenyl	86.0%	d4-1,2-Dichlorobenzene	47.1%
d5-Phenol	60.3%	2-Fluorophenol	59.2%
2,4,6-Tribromophenol	80.1%	d4-2-Chlorophenol	64.0%
d8-1,4-Dioxane	47.7%	-	

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET Semivolatiles by SW8270C GC/MS Page 1 of 2

Lab Sample ID: GU59D LIMS ID: 04-10340 Matrix: Water Data Release Authorized: Reported: 07/15/04

Date Extracted: 07/02/04 Date Analyzed: 07/13/04 16:35 Instrument/Analyst: NT6/Van Sample ID: LDW-SP-41-C-F SAMPLE

QC Report No: GU59-Windward Environmental Project: LDW-SEEP SAMPLING

Date Sampled: 07/01/04 Date Received: 07/01/04

CAS Number	Analyte	RL	Result
108-95-2	Phenol	2.0	< 2.0 U
111-44-4	Bis-(2-Chloroethyl) Ether	2.0	< 2.0 U
95-57-8	2-Chlorophenol	1.0	< 1.0 U
541-73-1	1,3-Dichlorobenzene	1.0	< 1.0 U
106-46-7	1,4-Dichlorobenzene	1.0	< 1.0 U
100-51-6	Benzyl Alcohol	5.0	< 5.0 U
95-50-1	1,2-Dichlorobenzene	1.0	< 1.0 U
95-48-7	2-Methylphenol	1.0	< 1.0 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	1.0	< 1.0 U
106-44-5	4-Methylphenol	1.0	< 1.0 U
621-64-7	N-Nitroso-Di-N-Propylamine	2.0	< 2.0 U
67-72-1	Hexachloroethane	2.0	< 2.0 U
98-95-3	Nitrobenzene	1.0	< 1.0 U
78-59-1	Isophorone	1.0	< 1.0 U
88-75-5	2-Nitrophenol	5.0	< 5.0 U
105-67-9	2,4-Dimethylphenol	3.0	< 3.0 U
65-85-0	Benzoic Acid	10	< 10 U
111-91-1	bis(2-Chloroethoxy) Methane	1.0	< 1.0 U
120-83-2	2,4-Dichlorophenol	3.0	< 3.0 U
120-82-1	1,2,4-Trichlorobenzene	1.0	< 1.0 U
91-20-3	Naphthalene	1.0	< 1.0 U
106-47-8	4-Chloroaniline	3.0	< 3.0 U
87-68-3	Hexachlorobutadiene	2.0	< 2.0 U
59-50-7	4-Chloro-3-methylphenol	2.0	< 2.0 U
91-57-6	2-Methylnaphthalene	1.0	< 1.0 U
77-47-4	Hexachlorocyclopentadiene	5.0	< 5.0 U
88-06-2	2,4,6-Trichlorophenol	5.0	< 5.0 Ŭ
95-95-4	2,4,5-Trichlorophenol	5.0	< 5.0 Ŭ
91-58-7	2-Chloronaphthalene	1.0	< 1.0 U
88-74-4	2-Nitroaniline	5.0	< 5.0 U
131-11-3	Dimethylphthalate	1.0	< 1.0 U
208-96-8	Acenaphthylene	1.0	< 1.0 U
99-09-2	3-Nitroaniline	6.0	< 6.0 U
83-32-9	Acenaphthene	1.0	< 1.0 U
51-28-5	2,4-Dinitrophenol	25	< 25 U
100-02-7	4-Nitrophenol	5.0	< 5.0 U
132-64-9	Dibenzofuran	1.0	< 1.0 U
606-20-2	2,6-Dinitrotoluene	5.0	< 5.0 U
121-14-2	2,4-Dinitrotoluene	5.0	< 5.0 U
84-66-2	Diethylphthalate	1.0	1.6



Sample ID: LDW-SP-41-C-F SAMPLE

Lab Sample ID: GU59D LIMS ID: 04-10340 Matrix: Water Date Analyzed: 07/13/04 16:35

QC Report No: GU59-Windward Environmental Project: LDW-SEEP SAMPLING

CAS Number	Analyte	RL	Result
7005-72-3	4-Chlorophenyl-phenylether	1.0	< 1.0 U
86-73-7	Fluorene	1.0	< 1.0 U
100-01-6	4-Nitroaniline	5.0	< 5.0 U
534-52-1	4,6-Dinitro-2-Methylphenol	15	< 15 U
86-30-6	N-Nitrosodiphenylamine	1.0	< 1.0 U
101-55-3	4-Bromophenyl-phenylether	1.0	< 1.0 U
118-74-1	Hexachlorobenzene	1.0	< 1.0 U
87-86-5	Pentachlorophenol	5.0	< 5.0 U
85-01-8	Phenanthrene	1.0	< 1.0 U
86-74-8	Carbazole	1.0	< 1.0 U
120-12-7	Anthracene	1.0	< 1.0 U
84-74-2	Di-n-Butylphthalate	1.0	< 1.0 U
206-44-0	Fluoranthene	1.0	< 1.0 U
129-00-0	Pyrene	1.0	< 1.0 U
85-68~7	Butylbenzylphthalate	1.0	< 1.0 U
91-94-1	3,3'-Dichlorobenzidine	5.0	< 5.0 U
56-55-3	Benzo(a)anthracene	1.0	< 1.0 U
117-81-7	bis(2-Ethylhexyl)phthalate	1.0	< 1.0 U
218-01-9	Chrysene	1.0	< 1.0 U
117-84-0	Di-n-Octyl phthalate	1.0	< 1.0 U
205-99-2	Benzo(b)fluoranthene	1.0	< 1.0 U
207-08-9	Benzo(k)fluoranthene	1.0	< 1.0 U
50-32-8	Benzo (a) pyrene	1.0	< 1.0 U
193-39-5	Indeno(1,2,3-cd)pyrene	1.0	< 1.0 U
53-70-3	Dibenz (a, h) anthracene	1.0	< 1.0 U
191-24-2	Benzo(g,h,i)perylene	1.0	< 1.0 U
123-91-1	1,4-Dioxane	1.0	< 1.0 U

Reported in $\mu g/L$ (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	68.9%	2-Fluorobiphenyl	62.5%
d14-p-Terphenyl	83.8%	d4-1,2-Dichlorobenzene	53.9%
d5-Phenol	62.9%	2-Fluorophenol	62.6%
2,4,6-Tribromophenol	74.3%	d4-2-Chlorophenol	67.7%
d8-1,4-Dioxane	55.9%	-	

ANALYTICAL RESOURCES

ORGANICS ANALYSIS DATA SHEET Semivolatiles by SW8270C GC/MS Page 1 of 2

Lab Sample ID: GU59D LIMS ID: 04-10340 Matrix: Water Data Release Authorized: Reported: 07/15/04

Date Extracted: 07/02/04 Date Analyzed: 07/13/04 17:07 Instrument/Analyst: NT6/Van

Sample ID: LDW-SP-41-C-F MATRIX SPIKE

QC Report No: GU59-Windward Environmental Project: LDW-SEEP SAMPLING

Date Sampled: 07/01/04 Date Received: 07/01/04

Sample Amount: 500 mL Final Extract Volume: 0.50 mL Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
108-95-2	Phenol	2.0	
111-44-4	Bis-(2-Chloroethyl) Ether	2.0	< 2.0 U
95-57-8	2-Chlorophenol	1.0	
541-73-1	1,3-Dichlorobenzene	1.0	< 1.0 U
106-46-7	1,4-Dichlorobenzene	1.0	
100-51-6	Benzyl Alcohol	5.0	< 5.0 U
95-50-1	1,2-Dichlorobenzene	1.0	< 1.0 U
95-48-7	2-Methylphenol	1.0	< 1.0 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	1.0	< 1.0 U
106-44-5	4-Methylphenol	1.0	< 1.0 U
621-64-7	N-Nitroso-Di-N-Propylamine	2.0	
67-72-1	Hexachloroethane	2.0	< 2.0 U
98-95-3	Nitrobenzene	1.0	< 1.0 U
78-59-1	Isophorone	1.0	< 1.0 U
88-75-5	2-Nitrophenol	5.0	< 5.0 U
105-67-9	2,4-Dimethylphenol	3.0	< 3.0 U
65-85-0	Benzoic Acid	10	< 10 U
111-91-1	bis(2-Chloroethoxy) Methane	1.0	< 1.0 U
120-83-2	2,4-Dichlorophenol	3.0	< 3.0 U
120-82-1	1,2,4-Trichlorobenzene	1.0	
91-20-3	Naphthalene	1.0	< 1.0 U
106-47-8	4-Chloroaniline	3.0	< 3.0 U
87-68-3	Hexachlorobutadiene	2.0	< 2.0 U
59-50-7	4-Chloro-3-methylphenol	2.0	
91-57-6	2-Methylnaphthalene	1.0	< 1.0 U
77-47-4	Hexachlorocyclopentadiene	5.0	< 5.0 U
88-06-2	2,4,6-Trichlorophenol	5.0	< 5.0 U
95-95-4	2,4,5-Trichlorophenol	5.0	< 5.0 U
91-58-7	2-Chloronaphthalene	1.0	< 1.0 U
88-74-4	2-Nitroaniline	5.0	< 5.0 U
131-11-3	Dimethylphthalate	1.0	< 1.0 U
208-96-8	Acenaphthylene	1.0	< 1.0 U
99-09-2	3-Nitroaniline	6.0	< 6.0 U
83-32-9	Acenaphthene	1.0	
51-28-5	2,4-Dinitrophenol	25	< 25 U
100-02-7	4-Nitrophenol	5.0	
132-64-9	Dibenzofuran	1.0	< 1.0 U
606-20-2	2,6-Dinitrotoluene	5.0	< 5.0 U
121-14-2	2,4-Dinitrotoluene	5.0	
84-66-2	Diethylphthalate	1.0	< 1.0 U

Sample ID: LDW-SP-41-C-F MATRIX SPIKE

Lab Sample ID: GU59D LIMS ID: 04-10340 Matrix: Water Date Analyzed: 07/13/04 17:07 QC Report No: GU59-Windward Environmental Project: LDW-SEEP SAMPLING

CAS Number	Analyte	RL	Result
7005-72-3	4-Chlorophenyl-phenylether	1.0	< 1.0 U
86-73-7	Fluorene	1.0	< 1.0 U
100-01-6	4-Nitroaniline	5.0	< 5.0 Ŭ
534-52-1	4,6-Dinitro-2-Methylphenol	15	< 15 U
86-30-6	N-Nitrosodiphenylamine	1.0	< 1.0 U
101-55-3	4-Bromophenyl-phenylether	1.0	< 1.0 U
118-74-1	Hexachlorobenzene	1.0	< 1.0 U
87-86-5	Pentachlorophenol	5.0	
85-01-8	Phenanthrene	1.0	< 1.0 U
86-74-8	Carbazole	1.0	< 1.0 U
120-12-7	Anthracene	1.0	< 1.0 U
84-74-2	Di-n-Butylphthalate	1.0	< 1.0 U
206-44-0	Fluoranthene	1.0	< 1.0 U
129-00-0	Pyrene	1.0	
85-68-7	Butylbenzylphthalate	1.0	< 1.0 U
91-94-1	3,3'-Dichlorobenzidine	5.0	< 5.0 U
56-55-3	Benzo (a) anthracene	1.0	< 1.0 U
117-81-7	bis(2-Ethylhexyl)phthalate	1.0	< 1.0 U
218-01-9	Chrysene	1.0	< 1.0 U
117-84-0	Di-n-Octyl phthalate	1.0	< 1.0 U
205-99-2	Benzo(b)fluoranthene	1.0	< 1.0 U
207-08-9	Benzo(k)fluoranthene	1.0	< 1.0 U
50-32-8	Benzo (a) pyrene	1.0	< 1.0 U
193-39-5	Indeno(1,2,3-cd)pyrene	1.0	< 1.0 U
53-70-3	Dibenz(a,h)anthracene	1.0	< 1.0 U
191-24-2	Benzo(g,h,i)perylene	1.0	< 1.0 U
123-91-1	1,4-Dioxane	1.0	

Reported in $\mu g/L$ (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	68.3%	2-Fluorobiphenvl	66.8%
d14-p-Terphenyl	90.4%	d4-1,2-Dichlorobenzene	50.8%
d5-Phenol	66.2%	2-Fluorophenol	61.6%
2,4,6-Tribromophenol	82.8%	d4-2-Chlorophenol	67.7%
d8-1,4-Dioxane	51.8%	*	

Lab Sample ID: GU59D LIMS ID: 04-10340 Matrix: Water Data Release Authorized: Reported: 07/15/04

Date Extracted: 07/02/04 Date Analyzed: 07/13/04 17:39 Instrument/Analyst: NT6/Van INCORPORATED Sample ID: LDW-SP-41-C-F MATRIX SPIKE DUP

ANALYTICAL RESOURCES

QC Report No: GU59-Windward Environmental Project: LDW-SEEP SAMPLING

Date Sampled: 07/01/04 Date Received: 07/01/04

CAS Number	Analyte	RL	Result
108-95-2	Phenol	2.0	
111-44-4	Bis-(2-Chloroethyl) Ether	2.0	< 2.0 U
95-57-8	2-Chlorophenol	1.0	
541-73-1	1,3-Dichlorobenzene	1.0	< 1.0 U
106-46-7	1,4-Dichlorobenzene	1.0	
100-51-6	Benzyl Alcohol	5.0	< 5.0 U
95-50-1	1,2-Dichlorobenzene	1.0	< 1.0 U
95-48-7	2-Methylphenol	1.0	< 1.0 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	1.0	< 1.0 U
106-44-5	4-Methylphenol	1.0	< 1.0 U
621-64-7	N-Nitroso-Di-N-Propylamine	2.0	
67-72-1	Hexachloroethane	2.0	< 2.0 U
98-95-3	Nitrobenzene	1.0	< 1.0 U
78-59-1	Isophorone	1.0	< 1.0 U
88-75-5	2-Nitrophenol	5.0	< 5.0 U
105-67-9	2,4-Dimethylphenol	3.0	< 3.0 U
65-85-0	Benzoic Acid	10	< 10 U
111-91-1	bis(2-Chloroethoxy) Methane	1.0	< 1.0 U
120-83-2	2,4-Dichlorophenol	3.0	< 3.0 U
120-82-1	1,2,4-Trichlorobenzene	1.0	
91-20-3	Naphthalene	1.0	< 1.0 U
106-47-8	4-Chloroaniline	3.0	< 3.0 U
87-68-3	Hexachlorobutadiene	2.0	< 2.0 U
59-50-7	4-Chloro-3-methylphenol	2.0	
91-57-6	2-Methylnaphthalene	1.0	< 1.0 U
77-47-4	Hexachlorocyclopentadiene	5.0	< 5.0 U
88-06-2	2,4,6-Trichlorophenol	5.0	< 5.0 U
95-95-4	2,4,5-Trichlorophenol	5.0	< 5.0 U
91-58-7	2-Chloronaphthalene	1.0	< 1.0 U
88-74-4	2-Nitroaniline	5.0	< 5.0 U
131-11-3	Dimethylphthalate	1.0	< 1.0 U
208-96-8	Acenaphthylene	1.0	< 1.0 U
99-09-2	3-Nitroaniline	6.0	< 6.0 U
83-32-9	Acenaphthene	1.0	
51-28-5	2,4-Dinitrophenol	25	< 25 Ŭ
100-02-7	4-Nitrophenol	5.0	
132-64-9	Dibenzofuran	1.0	< 1.0 U
606-20-2	2,6-Dinitrotoluene	5.0	< 5.0 U
121-14-2	2,4-Dinitrotoluene	5.0	
84-66-2	Diethylphthalate	1.0	< 1.0 Ŭ

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET Semivolatiles by SW8270C GC/MS Page 2 of 2

Sample ID: LDW-SP-41-C-F MATRIX SPIKE DUP

Lab Sample ID: GU59D LIMS ID: 04-10340 Matrix: Water Date Analyzed: 07/13/04 17:39

QC Report No: GU59-Windward Environmental Project: LDW-SEEP SAMPLING

CAS Number	Analyte	RL	Result
7005-72-3	4-Chlorophenyl-phenylether	1.0	< 1.0 U
86-73-7	Fluorene	1.0	< 1.0 U
100-01-6	4-Nitroaniline	5.0	< 5.0 U
534-52-1	4,6-Dinitro-2-Methylphenol	15	< 15 U
86-30-6	N-Nitrosodiphenylamine	1.0	< 1.0 U
101-55-3	4-Bromophenyl-phenylether	1.0	< 1.0 U
118-74-1	Hexachlorobenzene	1.0	< 1.0 U
87-86-5	Pentachlorophenol	5.0	
85-01-8	Phenanthrene	1.0	< 1.0 U
86-74-8	Carbazole	1.0	< 1.0 U
120-12-7	Anthracene	1.0	< 1.0 U
84-74-2	Di-n-Butylphthalate	1.0	< 1.0 U
206-44-0	Fluoranthene	1.0	< 1.0 U
129-00-0	Pyrene	1.0	
85-68-7	Butylbenzylphthalate	1.0	< 1.0 U
91-94-1	3,3'-Dichlorobenzidine	5.0	< 5.0 U
56-55-3	Benzo(a) anthracene	1.0	< 1.0 U
117-81-7	bis(2-Ethylhexyl)phthalate	1.0	< 1.0 U
218-01-9	Chrysene	1.0	< 1.0 U
117-84-0	Di-n-Octyl phthalate	1.0	< 1.0 U
205-99-2	Benzo(b)fluoranthene	1.0	< 1.0 U
207-08-9	Benzo(k)fluoranthene	1.0	< 1.0 U
50-32-8	Benzo(a)pyrene	1.0	< 1.0 U
193-39-5	Indeno(1,2,3-cd)pyrene	1.0	< 1.0 U
53-70-3	Dibenz(a,h)anthracene	1.0	< 1.0 U
191-24-2	Benzo(g,h,i)perylene	1.0	< 1.0 U
123-91-1	1,4-Dioxane	1.0	

Reported in μ g/L (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	76.6%	2-Fluorobiphenyl	75.5%
d14-p-Terphenyl	100%	d4-1,2-Dichlorobenzene	59.6%
d5-Phenol	70.3%	2-Fluorophenol	65.2%
2,4,6-Tribromophenol	90.6%	d4-2-Chlorophenol	74.6%
d8-1,4-Dioxane	50.9%	L	

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET Semivolatiles by SW8270C GC/MS Page 1 of 2

Lab Sample ID: GU59E LIMS ID: 04-10341 Matrix: Water Data Release Authorized: Reported: 07/15/04

Date Extracted: 07/02/04 Date Analyzed: 07/13/04 18:11 Instrument/Analyst: NT6/Van Sample ID: LDW-SP-12-C-U SAMPLE

QC Report No: GU59-Windward Environmental Project: LDW-SEEP SAMPLING

Date Sampled: 07/01/04 Date Received: 07/01/04

Sample Amount: 500 mL Final Extract Volume: 0.50 mL Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
108-95-2	Phenol	2.0	< 2.0 U
111-44-4	Bis-(2-Chloroethyl) Ether	2.0	< 2.0 U
95-57-8	2-Chlorophenol	1.0	< 1.0 U
541-73-1	1,3-Dichlorobenzene	1.0	< 1.0 U
106-46-7	1,4-Dichlorobenzene	1.0	< 1.0 U
100-51-6	Benzyl Alcohol	5.0	< 5.0 U
95-50-1	1,2-Dichlorobenzene	1.0	< 1.0 U
95-48-7	2-Methylphenol	1.0	< 1.0 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	1.0	< 1.0 U
106-44-5	4-Methylphenol	1.0	< 1.0 U
621-64-7	N-Nitroso-Di-N-Propylamine	2.0	< 2.0 U
67-72-1	Hexachloroethane	2.0	< 2.0 U
98-95-3	Nitrobenzene	1.0	< 1.0 U
78-59-1	Isophorone	1.0	< 1.0 U
88-75-5	2-Nitrophenol	5.0	< 5.0 U
105-67-9	2,4-Dimethylphenol	3.0	< 3.0 U
65-85-0	Benzoic Acid	10	< 10 U
111-91-1	bis(2-Chloroethoxy) Methane	1.0	< 1.0 U
120-83-2	2,4-Dichlorophenol	3.0	< 3.0 U
120-82-1	1,2,4-Trichlorobenzene	1.0	< 1.0 U
91-20-3	Naphthalene	1.0	< 1.0 U
106-47-8	4-Chloroaniline	3.0	< 3.0 Ŭ
87-68-3	Hexachlorobutadiene	2.0	< 2.0 U
59-50-7	4-Chloro-3-methylphenol	2.0	< 2.0 U
91-57-6	2-Methylnaphthalene	1.0	< 1.0 U
77-47-4	Hexachlorocyclopentadiene	5.0	< 5.0 U
88-06-2	2,4,6-Trichlorophenol	5.0	< 5.0 U
95-95-4	2,4,5-Trichlorophenol	5.0	< 5.0 U
91-58-7	2-Chloronaphthalene	1.0	< 1.0 U
88-74-4	2-Nitroaniline	5.0	< 5.0 U
131-11-3	Dimethylphthalate	1.0	< 1.0 U
208-96-8	Acenaphthylene	1.0	< 1.0 U
99-09-2	3-Nitroaniline	6.0	< 6.0 U
83-32-9	Acenaphthene	1.0	< 1.0 U
51-28-5	2,4-Dinitrophenol	25	< 25 U
100-02-7	4-Nitrophenol	5.0	< 5.0 U
132-64-9	Dibenzofuran	1.0	< 1.0 U
606-20-2	2,6-Dinitrotoluene	5.0	< 5.0 U
121-14-2	2,4-Dinitrotoluene	5.0	< 5.0 U
84-66-2	Diethylphthalate	1.0	< 1.0 U



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ORGANICS ANALYSIS DATA SHEET Semivolatiles by SW8270C GC/MS Page 2 of 2

Sample ID: LDW-SP-12-C-U SAMPLE

Lab Sample ID: GU59E LIMS ID: 04-10341 Matrix: Water Date Analyzed: 07/13/04 18:11

QC Report No: GU59-Windward Environmental Project: LDW-SEEP SAMPLING

CAS Number	Analyte	RL	Result
7005-72-3	4-Chlorophenyl-phenylether	1.0	< 1.0 U
86-73-7	Fluorene	1.0	< 1.0 U
100-01-6	4-Nitroaniline	5.0	< 5.0 Ŭ
534-52-1	4,6-Dinitro-2-Methylphenol	15	< 15 U
86-30-6	N-Nitrosodiphenylamine	1.0	< 1.0 U
101-55-3	4-Bromophenyl-phenylether	1.0	< 1.0 U
118-74-1	Hexachlorobenzene	1.0	< 1.0 U
87-86-5	Pentachlorophenol	5.0	< 5.0 U
85-01-8	Phenanthrene	1.0	< 1.0 U
86-74-8	Carbazole	1.0	< 1.0 U
120-12-7	Anthracene	1.0	< 1.0 U
84-74-2	Di-n-Butylphthalate	1.0	< 1.0 U
206-44-0	Fluoranthene	1.0	< 1.0 U
129-00-0	Pyrene	1.0	< 1.0 U
85-68-7	Butylbenzylphthalate	1.0	< 1.0 U
91-94-1	3,3'-Dichlorobenzidine	5.0	< 5.0 U
56-55-3	Benzo(a)anthracene	1.0	< 1.0 U
117-81-7	bis(2-Ethylhexyl)phthalate	1.0	< 1.0 U
218-01-9	Chrysene	1.0	< 1.0 U
117-84-0	Di-n-Octyl phthalate	1.0	< 1.0 U
205-99-2	Benzo(b)fluoranthene	1.0	< 1.0 U
207-08-9	Benzo(k)fluoranthene	1.0	< 1.0 U
50-32-8	Benzo(a)pyrene	1.0	< 1.0 U
193-39-5	Indeno(1,2,3-cd)pyrene	1.0	< 1.0 U
53-70-3	Dibenz(a,h)anthracene	1.0	< 1.0 U
191-24-2	Benzo(g,h,i)perylene	1.0	< 1.0 U
123-91-1	1,4-Dioxane	1.0	< 1.0 U

Reported in $\mu g/L$ (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	54.5%	2-Fluorobiphenyl	51.4%
d14-p-Terphenyl	86.1%	d4-1,2-Dichlorobenzene	40.5%
d5-Phenol	50.4%	2-Fluorophenol	48.2%
2,4,6-Tribromophenol	66.6%	d4-2-Chlorophenol	53.6%
d8-1,4-Dioxane	42.2%	-	

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET Semivolatiles by SW8270C GC/MS Page 1 of 2

Lab Sample ID: GU59F LIMS ID: 04-10342 Matrix: Water Data Release Authorized: Reported: 07/15/04

Date Extracted: 07/02/04 Date Analyzed: 07/13/04 18:42 Instrument/Analyst: NT6/Van Sample ID: LDW-SP-20-C-U SAMPLE

QC Report No: GU59-Windward Environmental Project: LDW-SEEP SAMPLING

Date Sampled: 07/01/04 Date Received: 07/01/04

Sample Amount: 500 mL Final Extract Volume: 0.50 mL Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
108-95-2	Phenol	2.0	< 2.0 U
111-44-4	Bis-(2-Chloroethyl) Ether	2.0	< 2.0 U
95-57-8	2-Chlorophenol	1.0	< 1.0 U
541-73-1	1,3-Dichlorobenzene	1.0	< 1.0 U
106-46-7	1,4-Dichlorobenzene	1.0	< 1.0 U
100-51-6	Benzyl Alcohol	5.0	< 5.0 U
95-50-1	1,2-Dichlorobenzene	1.0	< 1.0 U
95-48-7	2-Methylphenol	1.0	< 1.0 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	1.0	< 1.0 U
106-44-5	4-Methylphenol	1.0	< 1.0 U
621-64-7	N-Nitroso-Di-N-Propylamine	2.0	< 2.0 U
67-72-1	Hexachloroethane	2.0	< 2.0 U
98-95-3	Nitrobenzene	1.0	< 1.0 U
78-59-1	Isophorone	1.0	< 1.0 U
88-75-5	2-Nitrophenol	5.0	< 5.0 U
105-67-9	2,4-Dimethylphenol	3.0	< 3.0 Ŭ
65-85-0	Benzoic Acid	10	< 10 Ŭ
111-91-1	bis(2-Chloroethoxy) Methane	1.0	< 1.0 U
120-83-2	2,4-Dichlorophenol	3.0	< 3.0 U
120-82-1	1,2,4-Trichlorobenzene	1.0	< 1.0 U
91-20-3	Naphthalene	1.0	< 1.0 U
106-47-8	4-Chloroaniline	3.0	< 3.0 U
87-68-3	Hexachlorobutadiene	2.0	< 2.0 U
59-50-7	4-Chloro-3-methylphenol	2.0	< 2.0 U
91-57-6	2-Methylnaphthalene	1.0	< 1.0 U
77-47-4	Hexachlorocyclopentadiene	5.0	< 5.0 U
88-06-2	2,4,6-Trichlorophenol	5.0	< 5.0 U
95-95-4	2,4,5-Trichlorophenol	5.0	< 5.0 U
91-58-7	2-Chloronaphthalene	1.0	< 1.0 U
88-74-4	2-Nitroaniline	5.0	< 5.0 U
131-11-3	Dimethylphthalate	1.0	< 1.0 U
208-96-8	Acenaphthylene	1.0	< 1.0 U
99-09-2	3-Nitroaniline	6.0	< 6.0 U
83-32-9	Acenaphthene	1.0	< 1.0 U
51-28-5	2,4-Dinitrophenol	25	< 25 U
100-02-7	4-Nitrophenol	5.0	< 5.0 U
132-64-9	Dibenzofuran	1.0	< 1.0 U
606-20-2	2,6-Dinitrotoluene	5.0	< 5.0 U
121-14-2	2,4-Dinitrotoluene	5.0	< 5.0 U
84-66-2	Diethylphthalate	1.0	< 1.0 U



Sample ID: LDW-SP-20-C-U SAMPLE

Lab Sample ID: GU59F LIMS ID: 04-10342 Matrix: Water Date Analyzed: 07/13/04 18:42

QC Report No: GU59-Windward Environmental Project: LDW-SEEP SAMPLING

CAS Number	Analyte	RL	Result
7005-72-3	4-Chlorophenyl-phenylether	1.0	< 1.0 U
86-73-7	Fluorene	1.0	< 1.0 U
100-01-6	4-Nitroaniline	5.0	< 5.0 U
534-52-1	4,6-Dinitro-2-Methylphenol	15	< 15 U
86-30-6	N-Nitrosodiphenylamine	1.0	< 1.0 U
101-55-3	4-Bromophenyl-phenylether	1.0	< 1.0 U
118-74-1	Hexachlorobenzene	1.0	< 1.0 U
87-86-5	Pentachlorophenol	5.0	< 5.0 U
85-01-8	Phenanthrene	1.0	< 1.0 U
86-74-8	Carbazole	1.0	< 1.0 U
120-12-7	Anthracene	1.0	< 1.0 U
84-74-2	Di-n-Butylphthalate	1.0	< 1.0 U
206-44-0	Fluoranthene	1.0	< 1.0 U
129-00-0	Pyrene	1.0	< 1.0 U
85-68-7	Butylbenzylphthalate	1.0	< 1.0 U
91-94-1	3,3'-Dichlorobenzidine	5.0	< 5.0 U
56-55-3	Benzo(a) anthracene	1.0	< 1.0 U
117-81-7	bis(2-Ethylhexyl)phthalate	1.0	< 1.0 U
218-01-9	Chrysene	1.0	< 1.0 U
117-84-0	Di-n-Octyl phthalate	1.0	< 1.0 U
205-99-2	Benzo(b)fluoranthene	1.0	< 1.0 U
207-08-9	Benzo(k)fluoranthene	1.0	< 1.0 U
50-32-8	Benzo(a)pyrene	1.0	< 1.0 U
193-39-5	Indeno(1,2,3-cd)pyrene	1.0	< 1.0 U
53-70-3	Dibenz(a,h)anthracene	1.0	< 1.0 U
191-24-2	Benzo(g,h,i)perylene	1.0	< 1.0 U
123-91-1	1,4-Dioxane	1.0	< 1.0 U

Reported in $\mu g/L$ (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	59.2%	2-Fluorobiphenyl	58.1%
d14-p-Terphenyl	80.6%	d4-1,2-Dichlorobenzene	48.8%
d5-Phenol	54.0%	2-Fluorophenol	54.0%
2,4,6-Tribromophenol	71.2%	d4-2-Chlorophenol	57.9%
d8-1,4-Dioxane	44.9%	*	

Lab Sample ID: GU59G LIMS ID: 04-10343 Matrix: Water Data Release Authorized: Reported: 07/15/04

Date Extracted: 07/02/04 Date Analyzed: 07/13/04 19:14 Instrument/Analyst: NT6/Van



ANALYTICAL

QC Report No: GU59-Windward Environmental Project: LDW-SEEP SAMPLING

Date Sampled: 07/01/04 Date Received: 07/01/04

CAS Number	Analyte	RL	Result
108-95-2	Phenol	2.0	< 2.0 U
111-44-4	Bis-(2-Chloroethyl) Ether	2.0	< 2.0 U
95-57 - 8	2-Chlorophenol	1.0	< 1.0 U
541-73-1	1,3-Dichlorobenzene	1.0	< 1.0 U
106-46-7	1,4-Dichlorobenzene	1.0	< 1.0 U
100-51-6	Benzyl Alcohol	5.0	< 5.0 U
95-50-1	1,2-Dichlorobenzene	1.0	< 1.0 U
95-48-7	2-Methylphenol	1.0	< 1.0 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	1.0	< 1.0 U
106-44-5	4-Methylphenol	1.0	< 1.0 U
621-64-7	N-Nitroso-Di-N-Propylamine	2.0	< 2.0 U
67-72-1	Hexachloroethane	2.0	< 2.0 U
98-95-3	Nitrobenzene	1.0	< 1.0 U
78-59-1	Isophorone	1.0	< 1.0 U
88-75-5	2-Nitrophenol	5.0	< 5.0 U
105-67-9	2,4-Dimethylphenol	3.0	< 3.0 U
65-85-0	Benzoic Acid	10	< 10 U
111-91-1	bis(2-Chloroethoxy) Methane	1.0	< 1.0 U
120-83-2	2,4-Dichlorophenol	3.0	< 3.0 U
120-82-1	1,2,4-Trichlorobenzene	1.0	< 1.0 U
91-20-3	Naphthalene	1.0	< 1.0 U
106-47-8	4-Chloroaniline	3.0	< 3.0 U
87-68-3	Hexachlorobutadiene	2.0	< 2.0 U
59-50-7	4-Chloro-3-methylphenol	2.0	< 2.0 U
91-57-6	2-Methylnaphthalene	1.0	< 1.0 U
77-47-4	Hexachlorocyclopentadiene	5.0	< 5.0 U
88-06-2	2,4,6-Trichlorophenol	5.0	< 5.0 U
95-95-4	2,4,5-Trichlorophenol	5.0	< 5.0 U
91-58-7	2-Chloronaphthalene	1.0	< 1.0 U
88-74-4	2-Nitroaniline	5.0	< 5.0 U
131-11-3	Dimethylphthalate	1.0	< 1.0 U
208-96-8	Acenaphthylene	1.0	< 1.0 U
99-09-2	3-Nitroaniline	6.0	< 6.0 U
83-32-9	Acenaphthene	1.0	< 1.0 U
51-28-5	2,4-Dinitrophenol	25	< 25 U
100-02-7	4-Nitrophenol	5.0	< 5.0 U
132-64-9	Dibenzofuran	1.0	< 1.0 U
606-20-2	2,6-Dinitrotoluene	5.0	< 5.0 U
121-14-2	2,4-Dinitrotoluene	5.0	< 5.0 U
84-66-2	Diethylphthalate	1.0	< 1.0 U



Sample ID: LDW-SP-41-C-U SAMPLE

Lab Sample ID: GU59G LIMS ID: 04-10343 Matrix: Water Date Analyzed: 07/13/04 19:14

QC Report No: GU59-Windward Environmental Project: LDW-SEEP SAMPLING

CAS Number	Analyte	RL	Result
7005-72-3	4-Chlorophenyl-phenylether	1.0	< 1.0 U
86-73-7	Fluorene	1.0	< 1.0 U
100-01-6	4-Nitroaniline	5.0	< 5.0 U
534-52-1	4,6-Dinitro-2-Methylphenol	15	< 15 U
86-30-6	N-Nitrosodiphenylamine	1.0	< 1.0 U
101-55-3	4-Bromophenyl-phenylether	1.0	< 1.0 U
118-74-1	Hexachlorobenzene	1.0	< 1.0 U
87-86-5	Pentachlorophenol	5.0	< 5.0 U
85-01-8	Phenanthrene	1.0	< 1.0 U
86-74-8	Carbazole	1.0	< 1.0 U
120-12-7	Anthracene	1.0	< 1.0 U
84-74-2	Di-n-Butylphthalate	1.0	< 1.0 U
206-44-0	Fluoranthene	1.0	< 1.0 U
129-00-0	Pyrene	1.0	< 1.0 U
85-68-7	Butylbenzylphthalate	1.0	< 1.0 U
91-94-1	3,3'-Dichlorobenzidine	5.0	< 5.0 U
56-55-3	Benzo(a) anthracene	1.0	< 1.0 U
117-81-7	bis(2-Ethylhexyl)phthalate	1.0	3.9
218-01-9	Chrysene	1.0	< 1.0 U
117-84-0	Di-n-Octyl phthalate	1.0	< 1.0 U
205-99-2	Benzo(b)fluoranthene	1.0	< 1.0 U
207-08-9	Benzo(k)fluoranthene	1.0	< 1.0 U
50-32-8	Benzo(a)pyrene	1.0	< 1.0 U
193-39-5	Indeno(1,2,3-cd)pyrene	1.0	< 1.0 U
53-70-3	Dibenz(a,h)anthracene	1.0	< 1.0 U
191-24-2	Benzo(g,h,i)perylene	1.0	< 1.0 U
123-91-1	1,4-Dioxane	1.0	< 1.0 U

Reported in $\mu g/L$ (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	61.4%	2-Fluorobiphenvl	56.28
d14-p-Terphenyl	81.4%	d4-1,2-Dichlorobenzene	45.0%
d5-Phenol	57.0%	2-Fluorophenol	55.7%
2,4,6-Tribromophenol	73.1%	d4-2-Chlorophenol	61.6%
d8-1,4-Dioxane	49.2%		51.00

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Lab Sample ID: GU59G LIMS ID: 04-10343 Matrix: Water Data Release Authorized: Reported: 07/15/04

Date Extracted: 07/02/04 Date Analyzed: 07/13/04 19:45 Instrument/Analyst: NT6/Van RESOURCES INCORPORATED Sample ID: LDW-SP-41-C-U

ANALYTICAL

MATRIX SPIKE

QC Report No: GU59-Windward Environmental Project: LDW-SEEP SAMPLING

Date Sampled: 07/01/04 Date Received: 07/01/04

CAS Number	Analyte	RL	Result
108-95-2	Phenol	2.0	
111-44-4	Bis-(2-Chloroethyl) Ether	2.0	< 2.0 U
95-57-8	2-Chlorophenol	1.0	~ ~ ~
541-73-1	1,3-Dichlorobenzene	1.0	< 1.0 U
106-46-7	1,4-Dichlorobenzene	1.0	
100-51-6	Benzyl Alcohol	5.0	< 5.0 U
95-50-1	1,2-Dichlorobenzene	1.0	< 1.0 U
95-48-7	2-Methylphenol	1.0	< 1.0 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	1.0	< 1.0 U
106-44-5	4-Methylphenol	1.0	< 1.0 U
621-64-7	N-Nitroso-Di-N-Propylamine	2.0	
67-72-1	Hexachloroethane	2.0	< 2.0 U
98-95-3	Nitrobenzene	1.0	< 1.0 U
78-59-1	Isophorone	1.0	< 1.0 U
88-75-5	2-Nitrophenol	5.0	< 5.0 U
105-67-9	2,4-Dimethylphenol	3.0	< 3.0 U
65-85-0	Benzoic Acid	10	< 10 U
111-91-1	bis(2-Chloroethoxy) Methane	1.0	< 1.0 U
120-83-2	2,4-Dichlorophenol	3.0	< 3.0 U
120-82-1	1,2,4-Trichlorobenzene	1.0	
91-20-3	Naphthalene	1.0	< 1.0 U
106-47-8	4-Chloroaniline	3.0	< 3.0 U
87-68-3	Hexachlorobutadiene	2.0	< 2.0 U
59-50-7	4-Chloro-3-methylphenol	2.0	
91-57-6	2-Methylnaphthalene	1.0	< 1.0 U
77-47-4	Hexachlorocyclopentadiene	5.0	< 5.0 U
88-06-2	2,4,6-Trichlorophenol	5.0	< 5.0 U
95-95-4	2,4,5-Trichlorophenol	5.0	< 5.0 U
91-58-7	2-Chloronaphthalene	1.0	< 1.0 U
88-74-4	2-Nitroaniline	5.0	< 5.0 U
131-11-3	Dimethylphthalate	1.0	< 1.0 U
208-96-8	Acenaphthylene	1.0	< 1.0 U
99-09-2	3-Nitroaniline	6.0	< 6.0 Ŭ
83-32-9	Acenaphthene	1.0	
51-28-5	2,4-Dinitrophenol	25	< 25 U
100-02-7	4-Nitrophenol	5.0	
132-64-9	Dibenzofuran	1.0	< 1.0 U
606-20-2	2,6-Dinitrotoluene	5.0	< 5.0 U
121-14-2	2,4-Dinitrotoluene	5.0	
84-66-2	Diethylphthalate	1.0	< 1.0 U



Sample ID: LDW-SP-41-C-U MATRIX SPIKE

Lab Sample ID: GU59G LIMS ID: 04-10343 Matrix: Water Date Analyzed: 07/13/04 19:45 QC Report No: GU59-Windward Environmental Project: LDW-SEEP SAMPLING

CAS Number	Analyte	RL	Result
7005-72-3	4-Chlorophenyl-phenylether	1.0	< 1.0 U
86-73-7	Fluorene	1.0	< 1.0 U
100-01-6	4-Nitroaniline	5.0	< 5.0 Ŭ
534-52-1	4,6-Dinitro-2-Methylphenol	15	< 15 U
86-30-6	N-Nitrosodiphenylamine	1.0	< 1.0 U
101-55-3	4-Bromophenyl-phenylether	1.0	< 1.0 U
118-74-1	Hexachlorobenzene	1.0	< 1.0 U
87-86-5	Pentachlorophenol	5.0	
85-01-8	Phenanthrene	1.0	< 1.0 U
86-74-8	Carbazole	1.0	< 1.0 U
120-12-7	Anthracene	1.0	< 1.0 U
84-74-2	Di-n-Butylphthalate	1.0	< 1.0 U
206-44-0	Fluoranthene	1.0	< 1.0 U
129-00-0	Pyrene	1.0	
85-68-7	Butylbenzylphthalate	1.0	< 1.0 U
91-94-1	3,3'-Dichlorobenzidine	5.0	< 5.0 U
56-55-3	Benzo(a)anthracene	1.0	< 1.0 U
117-81-7	bis(2-Ethylhexyl)phthalate	1.0	1.3
218-01-9	Chrysene	1.0	< 1.0 U
117-84-0	Di-n-Octyl phthalate	1.0	< 1.0 U
205-99-2	Benzo(b)fluoranthene	1.0	< 1.0 U
207-08-9	Benzo(k)fluoranthene	1.0	< 1.0 U
50-32-8	Benzo(a)pyrene	1.0	< 1.0 U
193-39-5	Indeno(1,2,3-cd)pyrene	1.0	< 1.0 U
53-70-3	Dibenz(a,h)anthracene	1.0	< 1.0 U
191-24-2	Benzo(g,h,i)perylene	1.0	< 1.0 U
123-91-1	1,4-Dioxane	1.0	

Reported in $\mu g/L$ (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	69.5%	2-Fluorobiphenyl	69.8%
d14-p-Terphenyl	90.1%	d4-1,2-Dichlorobenzene	51.1%
d5-Phenol	66.7%	2-Fluorophenol	60.8%
2,4,6-Tribromophenol	83.5%	d4-2-Chlorophenol	67.9%
d8-1,4-Dioxane	49.0%	-	

ANALYTICAL RESOURCES

ORGANICS ANALYSIS DATA SHEET Semivolatiles by SW8270C GC/MS Page 1 of 2

Lab Sample ID: GU59G LIMS ID: 04-10343 Matrix: Water Data Release Authorized: Reported: 07/15/04

Date Extracted: 07/02/04 Date Analyzed: 07/13/04 20:17 Instrument/Analyst: NT6/Van Sample ID: LDW-SP-41-C-U MATRIX SPIKE DUP

QC Report No: GU59-Windward Environmental Project: LDW-SEEP SAMPLING

Date Sampled: 07/01/04 Date Received: 07/01/04

CAS Number	Analyte	RL	Result
108-95-2	Phenol	2.0	
111-44-4	Bis-(2-Chloroethyl) Ether	2.0	< 2.0 U
95-57-8	2-Chlorophenol	1.0	
541-73-1	1,3-Dichlorobenzene	1.0	< 1.0 U
106-46-7	1,4-Dichlorobenzene	1.0	
100-51-6	Benzyl Alcohol	5.0	< 5.0 U
95-50-1	1,2-Dichlorobenzene	1.0	< 1.0 U
95-48-7	2-Methylphenol	1.0	< 1.0 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	1.0	< 1.0 U
106-44-5	4-Methylphenol	1.0	< 1.0 U
621-64-7	N-Nitroso-Di-N-Propylamine	2.0	
67-72-1	Hexachloroethane	2.0	< 2.0 U
98-95-3	Nitrobenzene	1.0	< 1.0 U
78-59-1	Isophorone	1.0	< 1.0 U
88-75-5	2-Nitrophenol	5.0	< 5.0 U
105-67-9	2,4-Dimethylphenol	3.0	< 3.0 U
65-85-0	Benzoic Acid	10	< 10 U
111-91-1	bis(2-Chloroethoxy) Methane	1.0	< 1.0 U
120-83-2	2,4-Dichlorophenol	3.0	< 3.0 U
120-82-1	1,2,4-Trichlorobenzene	1.0	
91-20-3	Naphthalene	1.0	< 1.0 U
106-47-8	4-Chloroaniline	3.0	< 3.0 U
87-68-3	Hexachlorobutadiene	2.0	< 2.0 U
59-50-7	4-Chloro-3-methylphenol	2.0	
91-57~6	2-Methylnaphthalene	1.0	< 1.0 U
77-47-4	Hexachlorocyclopentadiene	5.0	< 5.0 U
88-06-2	2,4,6-Trichlorophenol	5.0	< 5.0 U
95-95-4	2,4,5-Trichlorophenol	5.0	< 5.0 Ŭ
91-58-7	2-Chloronaphthalene	1.0	< 1.0 U
88-74-4	2-Nitroaniline	5.0	< 5.0 U
131-11-3	Dimethylphthalate	1.0	< 1.0 U
208-96-8	Acenaphthylene	1.0	< 1.0 U
99-09-2	3-Nitroaniline	6.0	< 6.0 U
83-32-9	Acenaphthene	1.0	
51-28-5	2,4-Dinitrophenol	25	< 25 U
100-02-7	4-Nitrophenol	5.0	
132-64-9	Dibenzofuran	1.0	< 1.0 U
606-20-2	2,6-Dinitrotoluene	5.0	< 5.0 U
121-14-2	2,4-Dinitrotoluene	5.0	
84-66-2	Diethylphthalate	1.0	< 1.0 U

ANALYTICAL RESOURCES

ORGANICS ANALYSIS DATA SHEET Semivolatiles by SW8270C GC/MS Page 2 of 2

Sample ID: LDW-SP-41-C-U MATRIX SPIKE DUP

Lab Sample ID: GU59G LIMS ID: 04-10343 Matrix: Water Date Analyzed: 07/13/04 20:17 QC Report No: GU59-Windward Environmental Project: LDW-SEEP SAMPLING

CAS Number	Analyte	RL	Result
7005-72-3	4-Chlorophenyl-phenylether	1.0	< 1.0 U
86-73-7	Fluorene	1.0	< 1.0 U
100-01-6	4-Nitroaniline	5.0	< 5.0 U
534-52-1	4,6-Dinitro-2-Methylphenol	15	< 15 U
86-30-6	N-Nitrosodiphenylamine	1.0	< 1.0 U
101-55-3	4-Bromophenyl-phenylether	1.0	< 1.0 U
118-74-1	Hexachlorobenzene	1.0	< 1.0 U
87-86-5	Pentachlorophenol	5.0	
85-01-8	Phenanthrene	1.0	< 1.0 U
86-74-8	Carbazole	1.0	< 1.0 U
120-12-7	Anthracene	1.0	< 1.0 U
84-74-2	Di-n-Butylphthalate	1.0	< 1.0 U
206-44-0	Fluoranthene	1.0	< 1.0 U
129-00-0	Pyrene	1.0	
85-68-7	Butylbenzylphthalate	1.0	< 1.0 U
91-94-1	3,3'-Dichlorobenzidine	5.0	< 5.0 U
56-55-3	Benzo (a) anthracene	1.0	< 1.0 U
117-81-7	bis(2-Ethylhexyl)phthalate	1.0	1.0
218-01-9	Chrysene	1.0	< 1.0 U
117-84-0	Di-n-Octyl phthalate	1.0	< 1.0 U
205-99-2	Benzo(b)fluoranthene	1.0	< 1.0 U
207-08-9	Benzo(k)fluoranthene	1.0	< 1.0 U
50-32-8	Benzo(a)pyrene	1.0	< 1.0 U
193-39-5	Indeno(1,2,3-cd)pyrene	1.0	< 1.0 U
53-70-3	Dibenz(a,h)anthracene	1.0	< 1.0 U
191-24-2	Benzo(g,h,i)perylene	1.0	< 1.0 U
123-91-1	1,4-Dioxane	1.0	

Reported in $\mu g/L$ (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	78.1%	2-Fluorobiphenyl	76.3%
d14-p-Terphenyl	103%	d4-1,2-Dichlorobenzene	59.9%
d5-Phenol	77.5%	2-Fluorophenol	69.1%
2,4,6-Tribromophenol	90.3%	d4-2-Chlorophenol	77.2%
d8-1,4-Dioxane	58.3%	-	

Lab Sample ID: GU59H LIMS ID: 04-10344 Matrix: Water Data Release Authorized: Reported: 07/15/04

Date Extracted: 07/02/04 Date Analyzed: 07/13/04 20:49 Instrument/Analyst: NT6/Van

Sample ID: LDW-SP-39-C-F SAMPLE

QC Report No: GU59-Windward Environmental Project: LDW-SEEP SAMPLING

Date Sampled: 07/01/04 Date Received: 07/01/04

Sample Amount: 500 mL Final Extract Volume: 0.50 mL Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
108-95-2	Phenol	2.0	< 2.0 U
111-44-4	Bis-(2-Chloroethyl) Ether	2.0	< 2.0 U
95-57-8	2-Chlorophenol	1.0	< 1.0 U
541-73-1	1,3-Dichlorobenzene	1.0	< 1.0 U
106-46-7	1,4-Dichlorobenzene	1.0	< 1.0 U
100-51-6	Benzyl Alcohol	5.0	< 5.0 U
95-50-1	1,2-Dichlorobenzene	1.0	< 1.0 U
95-48-7	2-Methylphenol	1.0	< 1.0 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	1.0	< 1.0 U
106-44-5	4-Methylphenol	1.0	< 1.0 U
621-64-7	N-Nitroso-Di-N-Propylamine	2.0	< 2.0 U
67-72-1	Hexachloroethane	2.0	< 2.0 U
98-95-3	Nitrobenzene	1.0	< 1.0 U
78-59-1	Isophorone	1.0	< 1.0 U
88-75-5	2-Nitrophenol	5.0	< 5.0 Ŭ
105-67-9	2,4-Dimethylphenol	3.0	< 3.0 U
65-85-0	Benzoic Acid	10	< 10 U
111-91-1	bis(2-Chloroethoxy) Methane	1.0	< 1.0 U
120-83-2	2,4-Dichlorophenol	3.0	< 3.0 U
120-82-1	1,2,4-Trichlorobenzene	1.0	< 1.0 U
91-20-3	Naphthalene	1.0	< 1.0 U
106-47-8	4-Chloroaniline	3.0	< 3.0 U
87-68-3	Hexachlorobutadiene	2.0	< 2.0 U
59-50-7	4-Chloro-3-methylphenol	2.0	< 2.0 U
91-57-6	2-Methylnaphthalene	1.0	< 1.0 U
77-47-4	Hexachlorocyclopentadiene	5.0	< 5.0 U
88-06-2	2,4,6-Trichlorophenol	5.0	< 5.0 U
95-95-4	2,4,5-Trichlorophenol	5.0	< 5.0 U
91-58-7	2-Chloronaphthalene	1.0	< 1.0 U
88-74-4	2-Nitroaniline	5.0	< 5.0 U
131-11-3	Dimethylphthalate	1.0	< 1.0 U
208-96-8	Acenaphthylene	1.0	< 1.0 U
99-09-2	3-Nitroaniline	6.0	< 6.0 U
83-32-9	Acenaphthene	1.0	< 1.0 U
51-28-5	2,4-Dinitrophenol	25	< 25 U
100-02-7	4-Nitrophenol	5.0	< 5.0 U
132-64-9	Dibenzofuran	1.0	< 1.0 U
606-20-2	2,6-Dinitrotoluene	5.0	< 5.0 U
121-14-2	2,4-Dinitrotoluene	5.0	< 5.0 U
84-66-2	Diethylphthalate	1.0	< 1.0 U

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Sample ID: LDW-SP-39-C-F SAMPLE

Lab Sample ID: GU59H LIMS ID: 04-10344 Matrix: Water Date Analyzed: 07/13/04 20:49 QC Report No: GU59-Windward Environmental Project: LDW-SEEP SAMPLING

CAS Number	Analyte	RL	Result
7005-72-3	4-Chlorophenyl-phenylether	1.0	< 1.0 U
86-73-7	Fluorene	1.0	< 1.0 U
100-01-6	4-Nitroaniline	5.0	< 5.0 U
534-52-1	4,6-Dinitro-2-Methylphenol	15	< 15 U
86-30-6	N-Nitrosodiphenylamine	1.0	< 1.0 U
101-55-3	4-Bromophenyl-phenylether	1.0	< 1.0 U
118-74-1	Hexachlorobenzene	1.0	< 1.0 U
87-86-5	Pentachlorophenol	5.0	< 5.0 Ŭ
85-01-8	Phenanthrene	1.0	< 1.0 U
86-74-8	Carbazole	1.0	< 1.0 U
120-12-7	Anthracene	1.0	< 1.0 U
84-74-2	Di-n-Butylphthalate	1.0	< 1.0 U
206-44-0	Fluoranthene	1.0	< 1.0 U
129-00-0	Pyrene	1.0	< 1.0 U
85-68-7	Butylbenzylphthalate	1.0	< 1.0 U
91-94-1	3,3'-Dichlorobenzidine	5.0	< 5.0 U
56-55-3	Benzo(a)anthracene	1.0	< 1.0 U
117-81-7	bis(2-Ethylhexyl)phthalate	1.0	< 1.0 U
218-01-9	Chrysene	1.0	< 1.0 U
117-84-0	Di-n-Octyl phthalate	1.0	< 1.0 U
205-99-2	Benzo(b)fluoranthene	1.0	< 1.0 U
207-08-9	Benzo(k)fluoranthene	1.0	< 1.0 U
50-32-8	Benzo(a)pyrene	1.0	< 1.0 U
193-39-5	Indeno(1,2,3-cd)pyrene	1.0	< 1.0 U
53-70-3	Dibenz(a,h)anthracene	1.0	< 1.0 U
191-24-2	Benzo(g,h,i)perylene	1.0	< 1.0 U
123-91-1	1,4-Dioxane	1.0	< 1.0 U

Reported in $\mu g/L$ (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	65.3%	2-Fluorobiphenyl	64.6%
d14-p-Terphenyl	85.6%	d4-1,2-Dichlorobenzene	50.3%
d5-Phenol	60.5%	2-Fluorophenol	59.7%
2,4,6-Tribromophenol	78.9%	d4-2-Chlorophenol	64.1%
d8-1,4-Dioxane	49.5%	_	

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Lab Sample ID: GU59I LIMS ID: 04-10345 Matrix: Water Data Release Authorized: Reported: 07/15/04

Date Extracted: 07/02/04 Date Analyzed: 07/13/04 21:20 Instrument/Analyst: NT6/Van

Sample ID: LDW-SP-80-C-F SAMPLE

QC Report No: GU59-Windward Environmental Project: LDW-SEEP SAMPLING

Date Sampled: 07/01/04 Date Received: 07/01/04

Sample Amount: 500 mL Final Extract Volume: 0.50 mL Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
108-95-2	Phenol	2.0	< 2.0 Ŭ
111-44-4	Bis-(2-Chloroethyl) Ether	2.0	< 2.0 U
95-57-8	2-Chlorophenol	1.0	< 1.0 U
541-73-1	1,3-Dichlorobenzene	1.0	< 1.0 U
106-46-7	1,4-Dichlorobenzene	1.0	< 1.0 U
100-51-6	Benzyl Alcohol	5.0	< 5.0 U
95-50-1	1,2-Dichlorobenzene	1.0	< 1.0 U
95-48-7	2-Methylphenol	1.0	< 1.0 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	1.0	< 1.0 U
106-44-5	4-Methylphenol	1.0	< 1.0 U
621-64-7	N-Nitroso-Di-N-Propylamine	2.0	< 2.0 U
67-72-1	Hexachloroethane	2.0	< 2.0 U
98-95-3	Nitrobenzene	1.0	< 1.0 U
78-59-1	Isophorone	1.0	< 1.0 U
88-75-5	2-Nitrophenol	5.0	< 5.0 U
105-67-9	2,4-Dimethylphenol	3.0	< 3.0 U
65-85-0	Benzoic Acid	10	< 10 U
111-91-1	bis(2-Chloroethoxy) Methane	1.0	< 1.0 U
120-83-2	2,4-Dichlorophenol	3.0	< 3.0 U
120-82-1	1,2,4-Trichlorobenzene	1.0	< 1.0 U
91-20-3	Naphthalene	1.0	< 1.0 U
106-47-8	4-Chloroaniline	3.0	< 3.0 U
87-68-3	Hexachlorobutadiene	2.0	< 2.0 U
59-50-7	4-Chloro-3-methylphenol	2.0	< 2.0 U
91-57-6	2-Methylnaphthalene	1.0	< 1.0 U
77-47-4	Hexachlorocyclopentadiene	5.0	< 5.0 U
88-06-2	2,4,6-Trichlorophenol	5.0	< 5.0 U
95-95-4	2,4,5-Trichlorophenol	5.0	< 5.0 U
91-58-7	2-Chloronaphthalene	1.0	< 1.0 U
88-74-4	2-Nitroaniline	5.0	< 5.0 U
131-11-3	Dimethylphthalate	1.0	< 1.0 U
208-96-8	Acenaphthylene	1.0	< 1.0 U
99-09-2	3-Nitroaniline	6.0	< 6.0 U
83-32-9	Acenaphthene	1.0	< 1.0 U
51-28-5	2,4-Dinitrophenol	25	< 25 U
100-02-7	4-Nitrophenol	5.0	< 5.0 U
132-64-9	Dibenzofuran	1.0	< 1.0 U
606-20-2	2,6-Dinitrotoluene	5.0	< 5.0 U
121-14-2	2,4-Dinitrotoluene	5.0	< 5.0 U
84-66-2	Diethylphthalate	1.0	< 1.0 U



ORGANICS ANALYSIS DATA SHEET Semivolatiles by SW8270C GC/MS Page 2 of 2

Sample ID: LDW-SP-80-C-F SAMPLE

Lab Sample ID: GU59I LIMS ID: 04-10345 Matrix: Water Date Analyzed: 07/13/04 21:20 QC Report No: GU59-Windward Environmental Project: LDW-SEEP SAMPLING

CAS Number	Analyte	RL	Result
7005-72-3	4-Chlorophenyl-phenylether	1.0	< 1.0 U
86-73-7	Fluorene	1.0	< 1.0 U
100-01-6	4-Nitroaniline	5.0	< 5.0 Ŭ
534-52-1	4,6-Dinitro-2-Methylphenol	15	< 15 U
86-30-6	N-Nitrosodiphenylamine	1.0	< 1.0 U
101-55-3	4-Bromophenyl-phenylether	1.0	< 1.0 U
118-74-1	Hexachlorobenzene	1.0	< 1.0 U
87-86-5	Pentachlorophenol	5.0	< 5.0 U
85-01-8	Phenanthrene	1.0	< 1.0 U
86-74-8	Carbazole	1.0	< 1.0 U
120-12-7	Anthracene	1.0	< 1.0 U
84-74-2	Di-n-Butylphthalate	1.0	< 1.0 U
206-44-0	Fluoranthene	1.0	< 1.0 U
129-00-0	Pyrene	1.0	< 1.0 U
85-68-7	Butylbenzylphthalate	1.0	< 1.0 U
91-94-1	3,3'-Dichlorobenzidine	5.0	< 5.0 Ŭ
56-55-3	Benzo(a) anthracene	1.0	< 1.0 U
117-81-7	bis(2-Ethylhexyl)phthalate	1.0	< 1.0 U
218-01-9	Chrysene	1.0	< 1.0 U
117-84-0	Di-n-Octyl phthalate	1.0	< 1.0 U
205-99-2	Benzo(b)fluoranthene	1.0	< 1.0 U
207-08-9	Benzo(k)fluoranthene	1.0	< 1.0 U
50-32-8	Benzo(a)pyrene	1.0	< 1.0 Ŭ
193-39-5	Indeno $(1, 2, 3 - cd)$ pyrene	1.0	< 1.0 U
53-70-3	Dibenz (a, h) anthracene	1.0	< 1.0 U
191-24-2	Benzo(g,h,i)perylene	1.0	< 1.0 U
123-91-1	1,4-Dioxane	1.0	< 1.0 U

Reported in $\mu g/L$ (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	62.6%	2-Fluorobiphenyl	63.6%
d14-p-Terphenyl	75.4%	d4-1,2-Dichlorobenzene	47.6%
d5-Phenol	61.2%	2-Fluorophenol	55.7%
2,4,6-Tribromophenol	82.6%	d4-2-Chlorophenol	63.3%
d8-1,4-Dioxane	41.0%		



ORGANICS ANALYSIS DATA SHEET Semivolatiles by SW8270C GC/MS Page 1 of 2

Lab Sample ID: GU59J LIMS ID: 04-10346 Matrix: Water Data Release Authorized: Reported: 07/15/04

Date Extracted: 07/02/04 Date Analyzed: 07/13/04 21:52 Instrument/Analyst: NT6/Van

Sample ID: LDW-SP-39-C-U SAMPLE

QC Report No: GU59-Windward Environmental Project: LDW-SEEP SAMPLING

Date Sampled: 07/01/04 Date Received: 07/01/04

Sample Amount: 500 mL Final Extract Volume: 0.50 mL Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
108-95-2	Phenol	2.0	< 2.0 U
111-44-4	Bis-(2-Chloroethyl) Ether	2.0	< 2.0 U
95-57-8	2-Chlorophenol	1.0	< 1.0 U
541-73-1	1,3-Dichlorobenzene	1.0	< 1.0 U
106-46-7	1,4-Dichlorobenzene	1.0	< 1.0 U
100-51-6	Benzyl Alcohol	5.0	< 5.0 U
95-50-1	1,2-Dichlorobenzene	1.0	< 1.0 U
95-48-7	2-Methylphenol	1.0	< 1.0 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	1.0	< 1.0 U
106-44-5	4-Methylphenol	1.0	< 1.0 U
621-64-7	N-Nitroso-Di-N-Propylamine	2.0	< 2.0 U
67-72-1	Hexachloroethane	2.0	< 2.0 U
98-95-3	Nitrobenzene	1.0	< 1.0 U
78-59-1	Isophorone	1.0	< 1.0 U
88-75-5	2-Nitrophenol	5.0	< 5.0 U
105-67-9	2,4-Dimethylphenol	3.0	< 3.0 U
65-85-0	Benzoic Acid	10	< 10 U
111-91-1	bis(2-Chloroethoxy) Methane	1.0	< 1.0 U
120-83-2	2,4-Dichlorophenol	3.0	< 3.0 U
120-82-1	1,2,4-Trichlorobenzene	1.0	< 1.0 U
91-20-3	Naphthalene	1.0	< 1.0 U
106-47-8	4-Chloroaniline	3.0	< 3.0 U
87-68-3	Hexachlorobutadiene	2.0	< 2.0 U
59-50-7	4-Chloro-3-methylphenol	2.0	< 2.0 U
91-57-6	2-Methylnaphthalene	1.0	< 1.0 U
77-47-4	Hexachlorocyclopentadiene	5.0	< 5.0 U
88-06-2	2,4,6-Trichlorophenol	5.0	< 5.0 U
95-95-4	2,4,5-Trichlorophenol	5.0	< 5.0 U
91-58-7	2-Chloronaphthalene	1.0	< 1.0 U
88-74-4	2-Nitroaniline	5.0	< 5.0 U
131-11-3	Dimethylphthalate	1.0	< 1.0 U
208-96-8	Acenaphthylene	1.0	< 1.0 U
99-09-2	3-Nitroaniline	6.0	< 6.0 U
83-32-9	Acenaphthene	1.0	< 1.0 U
51-28-5	2,4-Dinitrophenol	25	< 25 U
100-02-7	4-Nitrophenol	5.0	< 5.0 U
132-64-9	Dibenzofuran	1.0	< 1.0 U
606-20-2	2,6-Dinitrotoluene	5.0	< 5.0 U
121-14-2	2;4-Dinitrotoluene	5.0	< 5.0 Ŭ
84-66-2	Diethylphthalate	1.0	< 1.0 U

ORGANICS ANALYSIS DATA SHEET Semivolatiles by SW8270C GC/MS Page 2 of 2

Sample ID: LDW-SP-39-C-U SAMPLE

Lab Sample ID: GU59J LIMS ID: 04-10346 Matrix: Water Date Analyzed: 07/13/04 21:52 QC Report No: GU59-Windward Environmental Project: LDW-SEEP SAMPLING

CAS Number	Analyte	RL	Result
7005-72-3	4-Chlorophenyl-phenylether	1.0	< 1.0 U
86-73-7	Fluorene	1.0	< 1.0 U
100-01-6	4-Nitroaniline	5.0	< 5.0 U
534-52-1	4,6-Dinitro-2-Methylphenol	15	< 15 U
86-30-6	N-Nitrosodiphenylamine	1.0	< 1.0 U
101-55-3	4-Bromophenyl-phenylether	1.0	< 1.0 U
118-74-1	Hexachlorobenzene	1.0	< 1.0 U
87-86-5	Pentachlorophenol	5.0	< 5.0 U
85-01-8	Phenanthrene	1.0	< 1.0 Ŭ
86-74-8	Carbazole	1.0	< 1.0 U
120-12-7	Anthracene	1.0	< 1.0 U
84-74-2	Di-n-Butylphthalate	1.0	< 1.0 U
206-44-0	Fluoranthene	1.0	< 1.0 U
129-00-0	Pyrene	1.0	< 1.0 U
85-68-7	Butylbenzylphthalate	1.0	< 1.0 U
91-94-1	3,3'-Dichlorobenzidine	5.0	< 5.0 U
56-55-3	Benzo(a)anthracene	1.0	< 1.0 U
117-81-7	bis(2-Ethylhexyl)phthalate	1.0	1.1
218-01-9	Chrysene	1.0	< 1.0 U
117-84-0	Di-n-Octyl phthalate	1.0	< 1.0 U
205-99-2	Benzo(b)fluoranthene	1.0	< 1.0 U
207-08-9	Benzo(k)fluoranthene	1.0	< 1.0 U
50-32-8	Benzo(a)pyrene	1.0	< 1.0 U
193-39-5	Indeno(1,2,3-cd)pyrene	1.0	< 1.0 U
53-70-3	Dibenz(a,h)anthracene	1.0	< 1.0 U
191-24-2	Benzo(g,h,i)perylene	1.0	< 1.0 U
123-91-1	1,4-Dioxane	1.0	< 1.0 U

Reported in $\mu g/L$ (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	72.5%	2-Fluorobiphenyl	67.8%
d14-p-Terphenyl	87.1%	d4-1,2-Dichlorobenzene	54.8%
d5-Phenol	65.0%	2-Fluorophenol	63.1%
2,4,6-Tribromophenol	84.9%	d4-2-Chlorophenol	69.5%
d8-1,4-Dioxane	54.9%	-	



ORGANICS ANALYSIS DATA SHEET Semivolatiles by SW8270C GC/MS Page 1 of 2

Lab Sample ID: GU59K LIMS ID: 04-10347 Matrix: Water Data Release Authorized: Reported: 07/15/04

Date Extracted: 07/02/04 Date Analyzed: 07/13/04 22:23 Instrument/Analyst: NT6/Van

Sample ID: LDW-SP-80-C-U SAMPLE

QC Report No: GU59-Windward Environmental Project: LDW-SEEP SAMPLING

Date Sampled: 07/01/04 Date Received: 07/01/04

Sample Amount: 500 mL Final Extract Volume: 0.50 mL Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
108-95-2	Phenol	2.0	< 2.0 U
111-44-4	Bis-(2-Chloroethyl) Ether	2.0	< 2.0 U
95-57-8	2-Chlorophenol	1.0	< 1.0 U
541-73-1	1,3-Dichlorobenzene	1.0	< 1.0 U
106-46-7	1,4-Dichlorobenzene	1.0	< 1.0 U
100-51-6	Benzyl Alcohol	5.0	< 5.0 U
95-50-1	1,2-Dichlorobenzene	1.0	< 1.0 U
95-48-7	2-Methylphenol	1.0	< 1.0 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	1.0	< 1.0 U
106-44-5	4-Methylphenol	1.0	< 1.0 U
621-64-7	N-Nitroso-Di-N-Propylamine	2.0	< 2.0 U
67-72-1	Hexachloroethane	2.0	< 2.0 U
98-95-3	Nitrobenzene	1.0	< 1.0 U
78-59-1	Isophorone	1.0	< 1.0 U
88-75-5	2-Nitrophenol	5.0	< 5.0 U
105-67-9	2,4-Dimethylphenol	3.0	< 3.0 U
65-85-0	Benzoic Acid	10	< 10 U
111-91-1	bis(2-Chloroethoxy) Methane	1.0	< 1.0 U
120-83-2	2,4-Dichlorophenol	3.0	< 3.0 U
120-82-1	1,2,4-Trichlorobenzene	1.0	< 1.0 U
91-20-3	Naphthalene	1.0	< 1.0 U
106-47-8	4-Chloroaniline	3.0	< 3.0 U
87-68-3	Hexachlorobutadiene	2.0	< 2.0 U
59-50-7	4-Chloro-3-methylphenol	2.0	< 2.0 U
91-57-6	2-Methylnaphthalene	1.0	< 1.0 U
77-47-4	Hexachlorocyclopentadiene	5.0	< 5.0 U
88-06-2	2,4,6-Trichlorophenol	5.0	< 5.0 U
95-95-4	2,4,5-Trichlorophenol	5.0	< 5.0 U
91-58-7	2-Chloronaphthalene	1.0	< 1.0 U
88-74-4	2-Nitroaniline	5.0	< 5.0 U
131-11-3	Dimethylphthalate	1.0	< 1.0 U
208-96-8	Acenaphthylene	1.0	< 1.0 U
99-09-2	3-Nitroaniline	6.0	< 6.0 U
83-32-9	Acenaphthene	1.0	< 1.0 U
51-28-5	2,4-Dinitrophenol	25	< 25 U
100-02-7	4-Nitrophenol	5.0	< 5.0 U
132-64-9	Dibenzofuran	1.0	< 1.0 U
606-20-2	2,6-Dinitrotoluene	5.0	< 5.0 U
121-14-2	2,4-Dinitrotoluene	5.0	< 5.0 U
84-66-2	Diethylphthalate	1.0	< 1.0 U

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ORGANICS ANALYSIS DATA SHEET Semivolatiles by SW8270C GC/MS Page 2 of 2

Sample ID: LDW-SP-80-C-U SAMPLE

Lab Sample ID: GU59K LIMS ID: 04-10347 Matrix: Water Date Analyzed: 07/13/04 22:23 QC Report No: GU59-Windward Environmental Project: LDW-SEEP SAMPLING

CAS Number	Analyte	RL	Result
7005-72-3	4-Chlorophenyl-phenylether	1.0	< 1.0 U
86-73-7	Fluorene	1.0	< 1.0 U
100-01-6	4-Nitroaniline	5.0	< 5.0 Ŭ
534-52-1	4,6-Dinitro-2-Methylphenol	15	< 15 U
86-30-6	N-Nitrosodiphenylamine	1.0	< 1.0 U
101-55-3	4-Bromophenyl-phenylether	1.0	< 1.0 U
118-74-1	Hexachlorobenzene	1.0	< 1.0 U
87-86-5	Pentachlorophenol	5.0	< 5.0 U
85-01-8	Phenanthrene	1.0	< 1.0 U
86-74-8	Carbazole	1.0	< 1.0 U
120-12-7	Anthracene	1.0	< 1.0 U
84-74-2	Di-n-Butylphthalate	1.0	< 1.0 U
206-44-0	Fluoranthene	1.0	< 1.0 U
129-00-0	Pyrene	1.0	< 1.0 U
85-68-7	Butylbenzylphthalate	1.0	< 1.0 U
91-94-1	3,3'-Dichlorobenzidine	5.0	< 5.0 U
56-55-3	Benzo(a)anthracene	1.0	< 1.0 U
117-81-7	bis(2-Ethylhexyl)phthalate	1.0	< 1.0 U
218-01-9	Chrysene	1.0	< 1.0 U
117-84-0	Di-n-Octyl phthalate	1.0	< 1.0 U
205-99-2	Benzo(b)fluoranthene	1.0	< 1.0 U
207-08-9	Benzo(k)fluoranthene	1.0	< 1.0 U
50-32-8	Benzo(a)pyrene	1.0	< 1.0 U
193-39-5	Indeno(1,2,3-cd)pyrene	1.0	< 1.0 U
53-70-3	Dibenz(a,h)anthracene	1.0	< 1.0 U
191-24-2	Benzo(g,h,i)perylene	1.0	< 1.0 U
123-91-1	1,4-Dioxane	1.0	< 1.0 U

Reported in $\mu g/L$ (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	68.2%	2-Fluorobiphenyl	66.7%
d14-p-Terphenyl	80.3%	d4-1,2-Dichlorobenzene	50.0%
d5-Phenol	64.7%	2-Fluorophenol	61.7%
2,4,6-Tribromophenol	89.4%	d4-2-Chlorophenol	67.5%
d8-1,4-Dioxane	47.9%	1	

FORM I



ORGANICS ANALYSIS DATA SHEET Semivolatiles by SW8270C GC/MS Page 1 of 1

Lab Sample ID: GU59D LIMS ID: 04-10340 Matrix: Water Data Release Authorized: Reported: 07/14/04

Date Extracted MS/MSD: 07/02/04

Date Analyzed MS: 07/13/04 17:07 MSD: 07/13/04 17:39 Instrument/Analyst MS: NT6/Van MSD: NT6/Van GPC Cleanup: NO

Sample ID: LDW-SP-41-C-F MS/MSD

QC Report No: GU59-Windward Environmental Project: LDW-SEEP SAMPLING

Date Sampled: 07/01/04 Date Received: 07/01/04

Sample Amount MS: 500 mL MSD: 500 mL Final Extract Volume MS: 0.5 mL MSD: 0.5 mL Dilution Factor MS: 1.00 MSD: 1.00

			Spike	MS		Spike	MSD	
Analyte	Sample	MS	Added-MS	Recovery	MSD	Added-MSD	Recovery	RPD
Phenol	< 2.0	20.0	37.5	53.3%	23.0	37.5	61.3%	14.0%
2-Chlorophenol	< 1.0	19.2	37.5	51.2%	23.2	37.5	61.9%	18.9%
1,4-Dichlorobenzene	< 1.0	10.5	25.0	42.0%	11.9	25.0	47.6%	12.5%
N-Nitroso-Di-N-Propylamine	< 2.0	13.7	25.0	54.8%	17.8	25.0	71.2%	26.0%
1,2,4-Trichlorobenzene	< 1.0	11.1	25.0	44.4%	13.1	25.0	52.4%	16.5%
4-Chloro-3-methylphenol	< 2.0	24.0	37.5	64.0%	29.2	37.5	77.9%	19.5%
Acenaphthene	< 1.0	15.0	25.0	60.0%	18.2	25.0	72.8%	19.3%
4-Nitrophenol	< 5.0	27.6	37.5	73.6%	32.7	37.5	87.2%	16.9%
2,4-Dinitrotoluene	< 5.0	15.9	25.0	63.6%	19.6	25.0	78.4%	20.8%
Pentachlorophenol	< 5.0	30.0	37.5	80.0%	37.2	37.5	99.2%	21.4%
Pyrene	< 1.0	18.8	25.0	75.2%	22.7	25.0	90.8%	18.8%
1,4-Dioxane	< 5.0	11.9	25.0	47.6%	13.9	25.0	55.6%	15.5%

Results reported in μ g/L

RPD calculated using sample concentrations per SW846.

ANALYTICAL RESOURCES

ORGANICS ANALYSIS DATA SHEET Semivolatiles by SW8270C GC/MS Page 1 of 1

Lab Sample ID: GU59G LIMS ID: 04-10343 Matrix: Water Data Release Authorized: Reported: 07/14/04

Date Extracted MS/MSD: 07/02/04

Date Analyzed MS: 07/13/04 19:45 MSD: 07/13/04 20:17 Instrument/Analyst MS: NT6/Van MSD: NT6/Van GPC Cleanup: NO

Sample ID: LDW-SP-41-C-U MS/MSD

QC Report No: GU59-Windward Environmental Project: LDW-SEEP SAMPLING

Date Sampled: 07/01/04 Date Received: 07/01/04

Sample Amount MS: 500 mL MSD: 500 mL Final Extract Volume MS: 0.5 mL MSD: 0.5 mL Dilution Factor MS: 1.00 MSD: 1.00

Analyte	Sample	MS	Spike Added-MS	MS Recovery	MSD	Spike Added-MSD	MSD Recovery	RPD
Phonel		20.2	 	ГА <u>1</u> 9-		27 6	70.1%	25.0%
2 Chlorophonol	< 2.0	20.3	37.5	54.18	26.3	37.5	/0.18	25.88
z-cittoropiteitor	< 1.0	19.0	37.5	52.05	25.2	31.5	01.28	24.08
1,4-Dichlorobenzene	< 1.0	10.6	25.0	42.4%	13.2	25.0	52.8%	21.8%
N-Nitroso-Di-N-Propylamine	< 2.0	15.4	25.0	61.6%	19.0	25.0	76.0%	20.9%
1,2,4-Trichlorobenzene	< 1.0	11.3	25.0	45.2%	14.1	25.0	56.4%	22.0%
4-Chloro-3-methylphenol	< 2.0	23.4	37.5	62.4%	29.0	37.5	77.3%	21.4%
Acenaphthene	< 1.0	15.7	25.0	62.8%	19.3	25.0	77.2%	20.6%
4-Nitrophenol	< 5.0	29.8	37.5	79.5%	36.7	37.5	97.9%	20.8%
2,4-Dinitrotoluene	< 5.0	16.7	25.0	66.8%	20.9	25.0	83.6%	22.3%
Pentachlorophenol	< 5.0	30.8	37.5	82.1%	39.4	37.5	105%	24.5%
Pyrene	< 1.0	18.8	25.0	75.2%	24.4	25.0	97.6%	25.9%
1,4-Dioxane	< 5.0	11.4	25.0	45.6%	14.9	25.0	59.6%	26.6%

Results reported in μ g/L

RPD calculated using sample concentrations per SW846.



ORGANICS ANALYSIS DATA SHEET Semivolatiles by SW8270C GC/MS Page 1 of 1

Lab Sample ID: LCS-070204 LIMS ID: 04-10337 Matrix: Water Data Release Authorized: Reported: 07/14/04

Date Extracted: 07/02/04 Date Analyzed: 07/13/04 14:28 Instrument/Analyst: NT6/Van GPC Cleanup: NO

Sample ID: LCS-070204 LAB CONTROL

QC Report No: GU59-Windward Environmental Project: LDW-SEEP SAMPLING

Date Sampled: 07/01/04 Date Received: 07/01/04

Sample Amount: 500 mL Final Extract Volume: 0.50 mL Dilution Factor: 1.00

Analyte	Lab Control	Spike Added	Recovery
Phenol	22.0	37.5	58.7%
2-Chlorophenol	21.3	37.5	56.8%
1,4-Dichlorobenzene	10.5	25.0	42.0%
N-Nitroso-Di-N-Propylamine	15.1	25.0	60.4%
1,2,4-Trichlorobenzene	10.9	25.0	43.6%
4-Chloro-3-methylphenol	23.3	37.5	62.1%
Acenaphthene	14.9	25.0	59.6%
4-Nitrophenol	25.6	37.5	68.3%
2,4-Dinitrotoluene	15.4	25.0	61.6%
Pentachlorophenol	26.7	37.5	71.2%
Pyrene	17.9	25.0	71.6%
1,4-Dioxane	12.1	25.0	48.4%

Semivolatile Surrogate Recovery

d5-Nitrobenzene	73.5%
2-Fluorobiphenyl	70.7%
d14-p-Terphenyl	88.5%
d4-1,2-Dichlorobenzene	60.3%
d5-Phenol	74.6%
2-Fluorophenol	71.5%
2,4,6-Tribromophenol	81.5%
d4-2-Chlorophenol	75.9%
d8-1,4-Dioxane	61.8%

Results reported in $\mu g/L$

4B SEMIVOLATILE METHOD BLANK SUMMARY

BLANK NO.

GU59MBW1

Lab Name: ANALYTICAL RESOURCES, INC

Client: WINDWARD ENVIRONMENTAL

Lab Sample ID: GU59MBW1

Date Analyzed: 07/13/04

Date Extracted: 07/02/04

Lab Code: GU26 Project: LDW-SEEP SAMPLING SDG No.: GU26 Lab File ID: GU59MB Lab Sample ID: GU

Instrument ID: NT6

Matrix: (soil/water) WATER

Level: (low/med) LOW

Time Analyzed: 1356

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

CLIENT	LAB	LAB	DATE
SAMPLE NO.	SAMPLE ID	FILE ID	ANALYZED
=======================================	==================	============	============
GU59LCSW1	GU59LCSW1	GU59SB	07/13/04
LDW-SP-10-C-F	GU59A	GU59A	07/13/04
LDW-SP-12-C-F	GU59B	GU59B	07/13/04
LDW-SP-20-C-F	GU59C	GU59C	07/13/04
LDW-SP-41-C-F	GU59D	GU59D	07/13/04
LDW-SP-41-C-F MS	GU59DMS	GU59DMS	07/13/04
LDW-SP-41-C-F MS	GU59DMSD	GU59DMSD	07/13/04
LDW-SP-12-C-U	GU59E	GU59E	07/13/04
LDW-SP-20-C-U	GU59F	GU59F	07/13/04
LDW-SP-41-C-U	GU59G	GU59G	07/13/04
LDW-SP-41-C-U MS	GU59GMS	GU59GMS	07/13/04
LDW-SP-41-C-U MS	GU59GMSD	GU59GMSD	07/13/04
LDW-SP-39-C-F	GU59H	GU59H	07/13/04
LDW-SP-80-C-F	GU59I	GU59I	07/13/04
LDW-SP-39-C-U	GU59J	GU59J	07/13/04
LDW-SP-80-C-U	GU59K	GU59K	07/13/04
LDW-SP-71-C-F	GU26A	GU26A	07/14/04
LDW-SP-71-C-U	GU26B	GU26B	07/14/04
LDW-SP-76-C-F	GU26C	GU26C	07/14/04
LDW-SP-76-C-U	GU26D	GU26D	07/14/04
LDW-SP-69-C-F	GU26E	GU26E	07/14/04
LDW-SP-69-C-U	GU26F	GU26F	07/14/04
		·	
	·		
	CLIENT SAMPLE NO. ====================================	CLIENT LAB SAMPLE NO. SAMPLE ID ====================================	CLIENT LAB LAB SAMPLE NO. SAMPLE ID FILE ID ====================================

COMMENTS:

page 1 of 1

FORM IV SV

ANALYTICAL RESOURCES

ORGANICS ANALYSIS DATA SHEET Semivolatiles by SW8270C GC/MS Page 1 of 2

Lab Sample ID: MB-070204 LIMS ID: 04-10337 Matrix: Water Data Release Authorized: Reported: 07/15/04

Date Extracted: 07/02/04 Date Analyzed: 07/13/04 13:56 Instrument/Analyst: NT6/Van Sample ID: MB-070204 METHOD BLANK

QC Report No: GU59-Windward Environmental Project: LDW-SEEP SAMPLING

Date Sampled: NA Date Received: NA

Sample Amount: 500 mL Final Extract Volume: 0.50 mL Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
108-95-2	Phenol	2.0	< 2.0 U
111-44-4	Bis-(2-Chloroethyl) Ether	2.0	< 2.0 U
95-57-8	2-Chlorophenol	1.0	< 1.0 U
541-73-1	1,3-Dichlorobenzene	1.0	< 1.0 U
106-46-7	1,4-Dichlorobenzene	1.0	< 1.0 U
100-51-6	Benzyl Alcohol	5.0	< 5.0 U
95-50-1	1,2-Dichlorobenzene	1.0	< 1.0 U
95-48-7	2-Methylphenol	1.0	< 1.0 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	1.0	< 1.0 U
106-44-5	4-Methylphenol	1.0	< 1.0 U
621-64-7	N-Nitroso-Di-N-Propylamine	2.0	< 2.0 U
67-72-1	Hexachloroethane	2.0	< 2.0 U
98-95-3	Nitrobenzene	1.0	< 1.0 U
78-59-1	Isophorone	1.0	< 1.0 U
88-75-5	2-Nitrophenol	5.0	< 5.0 U
105-67-9	2,4-Dimethylphenol	3.0	< 3.0 U
65-85-0	Benzoic Acid	10	< 10 U
111-91-1	bis(2-Chloroethoxy) Methane	1.0	< 1.0 U
120-83-2	2,4-Dichlorophenol	3.0	< 3.0 U
120-82-1	1,2,4-Trichlorobenzene	1.0	< 1.0 U
91-20-3	Naphthalene	1.0	< 1.0 U
106-47-8	4-Chloroaniline	3.0	< 3.0 Ŭ
87-68-3	Hexachlorobutadiene	2.0	< 2.0 U
59-50-7	4-Chloro-3-methylphenol	2.0	< 2.0 U
91-57-6	2-Methylnaphthalene	1.0	< 1.0 U
77-47-4	Hexachlorocyclopentadiene	5.0	< 5.0 U
88-06-2	2,4,6-Trichlorophenol	5.0	< 5.0 U
95-95-4	2,4,5-Trichlorophenol	5.0	< 5.0 U
91-58-7	2-Chloronaphthalene	1.0	< 1.0 U
88-74-4	2-Nitroaniline	5.0	< 5.0 U
131-11-3	Dimethylphthalate	1.0	< 1.0 U
208-96-8	Acenaphthylene	1.0	< 1.0 U
99-09-2	3-Nitroaniline	6.0	< 6.0 U
83-32-9	Acenaphthene	1.0	< 1.0 U
51-28-5	2,4-Dinitrophenol	25	< 25 U
100-02-7	4-Nitrophenol	5.0	< 5.0 U
132-64-9	Dibenzofuran	1.0	< 1.0 U
606-20-2	2,6-Dinitrotoluene	5.0	< 5.0 U
121-14-2	2,4-Dinitrotoluene	5.0	< 5.0 U
84-66-2	Diethylphthalate	1.0	< 1.0 U

ORGANICS ANALYSIS DATA SHEET Semivolatiles by SW8270C GC/MS Page 2 of 2



Sample ID: MB-070204 METHOD BLANK

Lab Sample ID: MB-070204 LIMS ID: 04-10337 Matrix: Water Date Analyzed: 07/13/04 13:56 QC Report No: GU59-Windward Environmental Project: LDW-SEEP SAMPLING

CAS Number	Analyte	RL	Result
7005-72-3	4-Chlorophenyl-phenylether	1.0	< 1.0 U
86-73-7	Fluorene	1.0	< 1.0 U
100-01-6	4-Nitroaniline	5.0	< 5.0 U
534-52-1	4,6-Dinitro-2-Methylphenol	15	< 15 U
86-30-6	N-Nitrosodiphenylamine	1.0	< 1.0 U
101-55-3	4-Bromophenyl-phenylether	1.0	< 1.0 U
118-74-1	Hexachlorobenzene	1.0	< 1.0 U
87-86-5	Pentachlorophenol	5.0	< 5.0 U
85-01-8	Phenanthrene	1.0	< 1.0 U
86-74-8	Carbazole	1.0	< 1.0 U
120-12-7	Anthracene	1.0	< 1.0 U
84-74-2	Di-n-Butylphthalate	1.0	< 1.0 U
206-44-0	Fluoranthene	1.0	< 1.0 U
129-00-0	Pyrene	1.0	< 1.0 U
85-68-7	Butylbenzylphthalate	1.0	< 1.0 U
91-94-1	3,3'-Dichlorobenzidine	5.0	< 5.0 U
56-55-3	Benzo (a) anthracene	1.0	< 1.0 Ŭ
117-81-7	bis(2-Ethylhexyl)phthalate	1.0	< 1.0 U
218-01-9	Chrysene	1.0	< 1.0 U
117-84-0	Di-n-Octyl phthalate	1.0	< 1.0 U
205-99-2	Benzo(b)fluoranthene	1.0	< 1.0 U
207-08-9	Benzo(k)fluoranthene	1.0	< 1.0 U
50-32-8	Benzo(a)pyrene	1.0	< 1.0 U
193-39-5	Indeno(1,2,3-cd)pyrene	1.0	< 1.0 U
53-70-3	Dibenz(a,h)anthracene	1.0	< 1.0 U
191-24-2	Benzo(g,h,i)perylene	1.0	< 1.0 U
123-91-1	1,4-Dioxane	1.0	< 1.0 U

Reported in $\mu g/L$ (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	80.0%	2-Fluorobiphenyl	71.6%
d14-p-Terphenyl	88.0%	d4-1,2-Dichlorobenzene	58.4%
d5-Phenol	75.1%	2-Fluorophenol	75.5%
2,4,6-Tribromophenol	79.7%	d4-2-Chlorophenol	79.1%
d8-1,4-Dioxane	62.8%	~	

Manchester Pesticides



SW8081/PESTICIDE WATER SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: GU45-Windward Environmental Project: LDW Seep Sampling

Client ID	DCBP	TCMX	TOT OUT
MB-070704	80.8%	40.8%	0
LCS-070704	71.5%	42.2%	0
LDW-SP-48-C-U	67.8%	68.0%	0
LDW-SP-48-C-F	86.2%	71.8%	0
LDW-SP-54-C-U	95.0%	85.0%	0
LDW-SP-54-C-F	74.8%	53.0%	0
LDW-SP-82-C-U	58.8%	59.5%	0
LDW-SP-82-C-F	52.0%	57.8%	0
LDW-SP-82-C-FD-U	44.2%	34.5%	0
LDW-SP-82-C-FD-F	57.8%	53.2%	0

** PROJECT SPECIFIED LIMITS **	LCS/MB LIMITS	QC LIMITS
(DCBP) = Decachlorobiphenyl	(30-160)	(30-160)
(TCMX) = Tetrachlorometaxylene	(30-160)	(30 - 160)

Prep Method: Manchester Log Number Range: 04-10230 to 04-10237



SW8081/PESTICIDE WATER SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: GU76-Windward Environmental Project: LDW-SEEP SAMPLING

DCBP	TCMX	TOT OUT
	10.00	2
80.8%	40.8%	0
71.5%	42.2%	0
52.0%	39.0%	0
79.0%	44.5%	0
57.2%	62.8%	0
	DCBP 80.8% 71.5% 52.0% 79.0% 57.2%	DCBP TCMX 80.8% 40.8% 71.5% 42.2% 52.0% 39.0% 79.0% 44.5% 57.2% 62.8%

** PROJECT SPECIFIED LIMITS **	LCS/MB LIMITS	QC LIMITS
(DCBP) = Decachlorobiphenyl	(30-160)	(30-160)
(TCMX) = Tetrachlorometaxylene	(30-160)	(30 - 160)

Prep Method: Manchester Log Number Range: 04-10430 to 04-10432



SW8081/PESTICIDE WATER SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: GU83-Windward Environmental Project: LDW-SEEP SAMPLING

Client ID	DCBP	TCMX	TOT OUT
MB-070704	80.8%	40.8%	0
LCS-070704	71.5%	42.2%	0
LDW-SP-75-C-U	48.2%	41.0%	0
LDW-SP-75-C-U MS	55.2%	54.5%	- 0
LDW-SP-75-C-U MSD	45.5%	44.8%	0
LDW-SP-75-C-F	50.0%	45.2%	0
LDW-SP-64-RB-S-U	62.8%	78.5%	0
LDW-SP-64-RB-MP-U	38.5%	51.5%	0
LDW-SP-64-C-F	49.2%	49.2%	0

** PROJECT SPECIFIED LIMITS **	LCS/MB LIMITS	QC LIMITS
(DCBP) = Decachlorobiphenyl	(30-160)	(30-160)
(TCMX) = Tetrachlorometaxylene	(30-160)	(30 - 160)

Prep Method: Manchester Log Number Range: 04-10461 to 04-10466

ANALYTICAL RESOURCES

ORGANICS ANALYSIS DATA SHEET Pesticides/PCB by GC/ECD Page 1 of 1

Lab Sample ID: GU45A LIMS ID: 04-10230 Matrix: Water Data Release Authorized Reported: 08/04/04

Date Extracted: 07/07/04 Date Analyzed: 07/13/04 17:24 Instrument/Analyst: ECD4/YZ GPC Cleanup: No Sulfur Cleanup: No Sample ID: LDW-SP-48-C-U SAMPLE

QC Report No: GU45-Windward Environmental Project: LDW Seep Sampling

Date Sampled: 06/30/04 Date Received: 06/30/04

Sample Amount: 3000 mL Final Extract Volume: 0.50 mL Dilution Factor: 1.00 pH: 6.5 Florisil Cleanup: No Silica Gel: No

CAS Number	Analyte	RL	Result
319-84-6	alpha-BHC	0.00083	< 0.00083 U
319-85-7	beta-BHC	0.00083	< 0.00083 U
319-86-8	delta-BHC	0.0021	< 0.0021 Y
58-89-9	gamma-BHC (Lindane)	0.00083	< 0.00083 U
76-44-8	Heptachlor	0.00083	< 0.00083 U
309-00-2	Aldrin	0.00083	< 0.00083 U
1024-57-3	Heptachlor Epoxide	0.00083	< 0.00083 U
959-98-8	Endosulfan I	0.00083	< 0.00083 U
60-57-1	Dieldrin	0.0017	< 0.0017 U
72-55-9	4,4'-DDE	0.0017	< 0.0017 U
72-20-8	Endrin	0.0017	< 0.0017 U
33213-65-9	Endosulfan II	0.0017	< 0.0017 U
72-54-8	4,4'-DDD	0.0017	< 0.0017 U
1031-07-8	Endosulfan Sulfate	0.0017	< 0.0017 U
50-29-3	4,4'-DDT	0.0017	< 0.0017 U
72-43-5	Methoxychlor	0.0083	< 0.0083 U
53494-70-5	Endrin Ketone	0.0017	< 0.0017 U
7421-93-4	Endrin Aldehyde	0.0017	< 0.0017 U
5103-74-2	gamma Chlordane	0.00083	< 0.00083 U
5103-71-9	alpha Chlordane	0.00083	< 0.00083 U
8001-35-2	Toxaphene	0.083	< 0.083 U

Reported in $\mu g/L$ (ppb)

Pest/PCB Surrogate Recovery

Decachlorobiphenyl	67.8%
Tetrachlorometaxylene	68.0%

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Lab Sample ID: GU45B LIMS ID: 04-10231 Matrix: Water Data Release Authorized; Reported: 08/04/04

Date Extracted: 07/07/04 Date Analyzed: 07/13/04 17:58 Instrument/Analyst: ECD4/YZ GPC Cleanup: No Sulfur Cleanup: No

Sample ID: LDW-SP-48-C-F SAMPLE

QC Report No: GU45-Windward Environmental Project: LDW Seep Sampling

Date Sampled: 06/30/04 Date Received: 06/30/04

Sample Amount: 3000 mL Final Extract Volume: 0.50 mL Dilution Factor: 1.00 pH: 6.8 Florisil Cleanup: No Silica Gel: No

CAS Number	Analyte	RL	Result
319-84-6	alpha-BHC	0.00083	< 0.00083 U
319-85-7	beta-BHC	0.0090	< 0.0090 Y
319-86-8	delta-BHC	0.0029	< 0.0029 Y
58-89-9	gamma-BHC (Lindane)	0.00083	< 0.00083 U
76-44-8	Heptachlor	0.00083	< 0.00083 U
309-00-2	Aldrin	0.00083	< 0.00083 U
1024-57-3	Heptachlor Epoxide	0.00083	< 0.00083 U
959-98-8	Endosulfan I	0.00083	< 0.00083 U
60-57-1	Dieldrin	0.0017	< 0.0017 U
72-55-9	4,4'-DDE	0.0017	< 0.0017 U
72-20-8	Endrin	0.0017	< 0.0017 U
33213-65-9	Endosulfan II	0.0017	< 0.0017 U
72-54-8	4,4'-DDD	0.0017	< 0.0017 U
1031-07-8	Endosulfan Sulfate	0.0017	< 0.0017 U
50-29-3	4,4'-DDT	0.0017	< 0.0017 U
72-43-5	Methoxychlor	0.0083	< 0.0083 U
53494-70-5	Endrin Ketone	0.0017	< 0.0017 U
7421-93-4	Endrin Aldehyde	0.0017	< 0.0017 U
5103-74-2	gamma Chlordane	0.00083	< 0.00083 U
5103-71-9	alpha Chlordane	0.00083	< 0.00083 U
8001-35-2	Toxaphene	0.083	< 0.083 U

Reported in $\mu g/L$ (ppb)

Decachlorobiphenyl	86.2%
Tetrachlorometaxylene	71.8%

ORGANICS ANALYSIS DATA SHEET Pesticides/PCB by GC/ECD Page 1 of 1

Lab Sample ID: GU45C LIMS ID: 04-10232 Matrix: Water Data Release Authorized: Reported: 07/20/04

Date Extracted: 07/07/04 Date Analyzed: 07/14/04 10:26 Instrument/Analyst: ECD4/YZ GPC Cleanup: No Sulfur Cleanup: Yes

Sample ID: LDW-SP-54-C-U SAMPLE

QC Report No: GU45-Windward Environmental Project: LDW Seep Sampling

Date Sampled: 06/30/04 Date Received: 06/30/04

Sample Amount: 3000 mL Final Extract Volume: 0.50 mL Dilution Factor: 10.0 pH: 7.8 Florisil Cleanup: No Silica Gel: Yes

CAS Number	Analyte	RL	Result
319-84-6	alpha-BHC	0.0083	< 0.0083 U
319-85-7	beta-BHC	0.0083	< 0.0083 U
319-86-8	delta-BHC	0.0083	< 0.0083 U
58-89-9	gamma-BHC (Lindane)	0.0083	< 0.0083 U
76-44-8	Heptachlor	0.0083	< 0.0083 U
309-00-2	Aldrin	0.0083	< 0.0083 U
1024-57-3	Heptachlor Epoxide	0.0083	< 0.0083 U
959-98-8	Endosulfan I	0.0083	< 0.0083 U
60-57-1	Dieldrin	0.11	< 0.11 Y
72-55-9	4,4'-DDE	0.17	< 0.17 Y
72-20-8	Endrin	0.057	< 0.057 Y
33213-65-9	Endosulfan II	0.26	< 0.26 Y
72-54-8	4,4'-DDD	0.18	< 0.18 Y
1031-07-8	Endosulfan Sulfate	0.017	< 0.017 U
50-29-3	4,4'-DDT	0.017	< 0.017 U
72-43-5	Methoxychlor	0.083	< 0.083 U
53494-70-5	Endrin Ketone	0.017	< 0.017 U
7421-93-4	Endrin Aldehyde	0.061	< 0.061 Y
5103-74-2	gamma Chlordane	0.0083	< 0.0083 U
5103-71-9	alpha Chlordane	0.0083	< 0.0083 U
8001-35-2	Toxaphene	0.83	< 0.83 U

Reported in $\mu g/L$ (ppb)

Decachlorobiphenyl	95.0%
Tetrachlorometaxylene	85.0%

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Lab Sample ID: GU45D LIMS ID: 04-10233 Matrix: Water Data Release Authorized: Reported: 07/20/04

Date Extracted: 07/07/04 Date Analyzed: 07/14/04 12:06 Instrument/Analyst: ECD4/YZ GPC Cleanup: No Sulfur Cleanup: Yes Sample ID: LDW-SP-54-C-F SAMPLE

QC Report No: GU45-Windward Environmental Project: LDW Seep Sampling

Date Sampled: 06/30/04 Date Received: 06/30/04

Sample Amount: 3000 mL Final Extract Volume: 0.50 mL Dilution Factor: 1.00 pH: 8.5 Florisil Cleanup: No Silica Gel: Yes

CAS Number	Analyte	RL	Result
319-84-6	alpha-BHC	0.00083	< 0.00083 U
319-85-7	beta-BHC	0.00083	< 0.00083 U
319-86-8	delta-BHC	0.00083	< 0.00083 U
58-89-9	gamma-BHC (Lindane)	0.00083	< 0.00083 U
76-44-8	Heptachlor	0.00083	< 0.00083 U
309-00-2	Aldrin	0.00083	< 0.00083 U
1024-57-3	Heptachlor Epoxide	0.016	< 0.016 Y
959-98-8	Endosulfan I	0.00083	< 0.00083 U
60-57-1	Dieldrin	0.0095	< 0.0095 Y
72-55-9	4,4'-DDE	0.0017	< 0.0017 Ŭ
72-20-8	Endrin	0.0017	< 0.0017 U
33213-65-9	Endosulfan II	0.011	< 0.011 Y
72-54-8	4,4'-DDD	0.021	< 0.021 Y
1031-07-8	Endosulfan Sulfate	0.0017	< 0.0017 U
50-29-3	4,4'-DDT	0.0017	< 0.0017 U
72-43-5	Methoxychlor	0.0083	< 0.0083 U
53494-70-5	Endrin Ketone	0.0017	< 0.0017 U
7421-93-4	Endrin Aldehyde	0.0017	< 0.0017 U
5103-74-2	gamma Chlordane	0.00083	< 0.00083 U
5103-71-9	alpha Chlordane	0.0018	< 0.0018 Y
8001-35-2	Toxaphene	0.083	< 0.083 U

Reported in $\mu g/L$ (ppb)

Decachlorobiphenyl	74.8%
Tetrachlorometaxylene	53.0%

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Lab Sample ID: GU45E LIMS ID: 04-10234 Matrix: Water Data Release Authorized: Reported: 07/20/04

Date Extracted: 07/07/04 Date Analyzed: 07/13/04 19:40 Instrument/Analyst: ECD4/YZ GPC Cleanup: No Sulfur Cleanup: Yes Sample ID: LDW-SP-82-C-U SAMPLE

QC Report No: GU45-Windward Environmental Project: LDW Seep Sampling

Date Sampled: 06/30/04 Date Received: 06/30/04

Sample Amount: 3000 mL Final Extract Volume: 0.50 mL Dilution Factor: 1.00 pH: 7.4 Florisil Cleanup: No Silica Gel: Yes

CAS Number	Analyte	RL	Result
319-84-6	alpha-BHC	0.00083	< 0.00083 U
319-85-7	beta-BHC	0.00083	< 0.00083 U
319-86-8	delta-BHC	0.00083	< 0.00083 U
58-89-9	gamma-BHC (Lindane)	0.00083	< 0.00083 U
76-44-8	Heptachlor	0.00083	< 0.00083 U
309-00-2	Aldrin	0.00083	< 0.00083 U
1024-57-3	Heptachlor Epoxide	0.00083	< 0.00083 U
959-98-8	Endosulfan I	0.00083	< 0.00083 U
60-57-1	Dieldrin	0.0017	< 0.0017 U
72-55-9	4,4'-DDE	0.0017	< 0.0017 U
72-20-8	Endrin	0.0017	< 0.0017 U
33213-65-9	Endosulfan II	0.0017	< 0.0017 U
72-54-8	4,4'-DDD	0.0017	< 0.0017 U
1031-07-8	Endosulfan Sulfate	0.0017	< 0.0017 U
50-29-3	4,4'-DDT	0.0017	< 0.0017 U
72-43-5	Methoxychlor	0.0083	< 0.0083 U
53494-70-5	Endrin Ketone	0.0017	< 0.0017 U
7421-93-4	Endrin Aldehyde	0.0017	< 0.0017 U
5103-74-2	gamma Chlordane	0.00083	< 0.00083 U
5103-71-9	alpha Chlordane	0.00083	< 0.00083 U
8001-35-2	Toxaphene	0.083	< 0.083 U

Reported in $\mu g/L$ (ppb)

Decachlorobiphenyl	58.8%
Tetrachlorometaxylene	59.5%

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Lab Sample ID: GU45F LIMS ID: 04-10235 Matrix: Water Data Release Authorized; Reported: 08/04/04

Date Extracted: 07/07/04 Date Analyzed: 07/13/04 20:14 Instrument/Analyst: ECD4/YZ GPC Cleanup: No Sulfur Cleanup: No

Sample ID: LDW-SP-82-C-F SAMPLE

QC Report No: GU45-Windward Environmental Project: LDW Seep Sampling

Date Sampled: 06/30/04 Date Received: 06/30/04

Sample Amount: 3000 mL Final Extract Volume: 0.50 mL Dilution Factor: 1.00 pH: 7.3 Florisil Cleanup: No Silica Gel: No

CAS Number	Analyte	RL	Result
319-84-6	alpha-BHC	0.00083	< 0.00083 U
319-85-7	beta-BHC	0.00083	< 0.00083 U
319-86-8	delta-BHC	0.0039	< 0.0039 Y
58-89-9	gamma-BHC (Lindane)	0.00083	< 0.00083 U
76-44-8	Heptachlor	0.00083	< 0.00083 U
309-00-2	Aldrin	0.00083	< 0.00083 U
1024-57-3	Heptachlor Epoxide	0.00083	< 0.00083 U
959-98-8	Endosulfan I	0.00083	< 0.00083 U
60-57-1	Dieldrin	0.0017	< 0.0017 U
72-55-9	4,4'-DDE	0.0017	< 0.0017 U
72-20-8	Endrin	0.0017	< 0.0017 U
33213-65-9	Endosulfan II	0.0017	< 0.0017 U
72-54-8	4,4'-DDD	0.0017	< 0.0017 U
1031-07-8	Endosulfan Sulfate	0.0017	< 0.0017 U
50-29-3	4,4'-DDT	0.0017	< 0.0017 U
72-43-5	Methoxychlor	0.0083	< 0.0083 U
53494-70-5	Endrin Ketone	0.0017	< 0.0017 U
7421-93-4	Endrin Aldehyde	0.0017	< 0.0017 U
5103-74-2	gamma Chlordane	0.00083	< 0.00083 U
5103-71-9	alpha Chlordane	0.00083	< 0.00083 U
8001-35-2	Toxaphene	0.083	< 0.083 U

Reported in $\mu g/L$ (ppb)

Decachlorobiphenyl	52.	0응
Tetrachlorometaxylene	57.	88

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Lab Sample ID: GU45G LIMS ID: 04-10236 Matrix: Water Data Release Authorized: Reported: 07/20/04

Date Extracted: 07/07/04 Date Analyzed: 07/13/04 20:48 Instrument/Analyst: ECD4/YZ GPC Cleanup: No Sulfur Cleanup: Yes

CAS Number

Sample ID: LDW-SP-82-C-FD-U SAMPLE

Result

QC Report No: GU45-Windward Environmental Project: LDW Seep Sampling

Date Sampled: 06/30/04 Date Received: 06/30/04

Sample Amount: 3000 mL Final Extract Volume: 0.50 mL Dilution Factor: 1.00 pH: 7.0 Florisil Cleanup: No Silica Gel: Yes

RL

319-84-6	alpha-BHC	0.00083	< 0.00083 U
319-85-7	beta-BHC	0.00083	< 0.00083 U
319-86-8	delta-BHC	0.00083	< 0.00083 U
58-89-9	gamma-BHC (Lindane)	0.00083	< 0.00083 U
76-44-8	Heptachlor	0.00083	< 0.00083 U
309-00-2	Aldrin	0.00083	< 0.00083 U
1024-57-3	Heptachlor Epoxide	0.00083	< 0.00083 U
959-98-8	Endosulfan I	0.00083	< 0.00083 U
60-57-1	Dieldrin	0.0017	< 0.0017 U
72-55-9	4,4'-DDE	0.0017	< 0.0017 U
72-20-8	Endrin	0.0017	< 0.0017 U
33213-65-9	Endosulfan II	0.0017	< 0.0017 U
72-54-8	4,4'-DDD	0.0017	< 0.0017 U
1031-07-8	Endosulfan Sulfate	0.0017	< 0.0017 U
50-29-3	4,4'-DDT	0.0017	< 0.0017 U
72-43-5	Methoxychlor	0.0083	< 0.0083 U
53494-70-5	Endrin Ketone	0.0017	< 0.0017 U
7421-93-4	Endrin Aldehyde	0.0017	< 0.0017 U
5103-74-2	gamma Chlordane	0.00083	< 0.00083 U
5103-71-9	alpha Chlordane	0.00083	< 0.00083 U
8001-35-2	Toxaphene	0.083	< 0.083 U

Analyte

Reported in $\mu g/L$ (ppb)

Decachlorobipheny	71	44.	28
Tetrachlorometaxy	ylene	34.	5%

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Lab Sample ID: GU45H LIMS ID: 04-10237 Matrix: Water Data Release Authorized: Reported: 07/20/04

Date Extracted: 07/07/04 Date Analyzed: 07/13/04 21:22 Instrument/Analyst: ECD4/YZ GPC Cleanup: No Sulfur Cleanup: No Sample ID: LDW-SP-82-C-FD-F SAMPLE

QC Report No: GU45-Windward Environmental Project: LDW Seep Sampling

Date Sampled: 06/30/04 Date Received: 06/30/04

Sample Amount: 3000 mL Final Extract Volume: 0.50 mL Dilution Factor: 1.00 pH: 7.1 Florisil Cleanup: No Silica Gel: No

CAS Number	Analyte	RL	Result
319-84-6	alpha-BHC	0.00083	< 0.00083 U
319-85-7	beta-BHC	0.00083	< 0.00083 U
319-86-8	delta-BHC	0.00083	< 0.00083 U
58-89-9	gamma-BHC (Lindane)	0.00083	< 0.00083 U
76-44-8	Heptachlor	0.00083	< 0.00083 U
309-00-2	Aldrin	0.00083	< 0.00083 U
1024-57-3	Heptachlor Epoxide	0.00083	< 0.00083 U
959-98-8	Endosulfan I	0.00083	< 0.00083 U
60-57-1	Dieldrin	0.0017	< 0.0017 U
72-55-9	4,4'-DDE	0.0017	< 0.0017 U
72-20-8	Endrin	0.0017	< 0.0017 U
33213-65-9	Endosulfan II	0.0017	< 0.0017 U
72-54-8	4,4'-DDD	0.0017	< 0.0017 U
1031-07-8	Endosulfan Sulfate	0.0017	< 0.0017 U
50-29-3	4,4'-DDT	0.0017	< 0.0017 U
72-43-5	Methoxychlor	0.0083	< 0.0083 U
53494-70-5	Endrin Ketone	0.0017	< 0.0017 U
7421-93-4	Endrin Aldehyde	0.0017	< 0.0017 U
5103-74-2	gamma Chlordane	0.00083	< 0.00083 U
5103-71-9	alpha Chlordane	0.00083	< 0.00083 U
8001-35-2	Toxaphene	0.083	< 0.083 U

Reported in $\mu g/L$ (ppb)

Decachlorobiphenyl	57.8%
Tetrachlorometaxylene	53.2%

Lab Sample ID: GU76A LIMS ID: 04-10430 Matrix: Water Data Release Authorized: Reported: 08/04/04

Date Extracted: 07/07/04 Date Analyzed: 07/14/04 00:47 Instrument/Analyst: ECD4/YZ GPC Cleanup: No Sulfur Cleanup: No

CAS Number

ANALYTICAL RESOURCES INCORPORATED

Sample ID: LDW-SP-62-C-F SAMPLE

Result

QC Report No: GU76-Windward Environmental Project: LDW-SEEP SAMPLING

Date Sampled: 07/02/04 Date Received: 07/02/04

Sample Amount: 3000 mL Final Extract Volume: 0.50 mL Dilution Factor: 1.00 pH: 7.4 Florisil Cleanup: No Silica Gel: No

RL

319-84-6	alpha-BHC	0.00083	< 0.00083 U
319-85-7	beta-BHC	0.00083	< 0.00083 U
319-86-8	delta-BHC	0.012	< 0.012 Y
58-89-9	gamma-BHC (Lindane)	0.00083	< 0.00083 U
76-44-8	Heptachlor	0.00083	< 0.00083 U
309-00-2	Aldrin	0.00083	< 0.00083 U
1024-57-3	Heptachlor Epoxide	0.00083	< 0.00083 U
959-98-8	Endosulfan I	0.00083	< 0.00083 U
60-57-1	Dieldrin	0.0017	< 0.0017 U
72-55-9	4,4'-DDE	0.0017	< 0.0017 U
72-20-8	Endrin	0.0017	< 0.0017 U
33213-65-9	Endosulfan II	0.0017	< 0.0017 U
72-54-8	4,4'-DDD	0.0017	< 0.0017 U
1031-07-8	Endosulfan Sulfate	0.0017	< 0.0017 U
50-29-3	4,4'-DDT	0.0017	< 0.0017 U
72-43-5	Methoxychlor	0.0083	< 0.0083 U
53494-70-5	Endrin Ketone	0.0017	< 0.0017 U
7421-93-4	Endrin Aldehyde	0.0017	< 0.0017 U
5103-74-2	gamma Chlordane	0.0017	< 0.0017 Y
5103-71-9	alpha Chlordane	0.00083	< 0.00083 U
8001-35-2	Toxaphene	0.083	< 0 083 U

Analyte

Reported in $\mu g/L$ (ppb)

Pest/PCB Surrogate Recovery

Decachlorobiphenyl	52.0%
Tetrachlorometaxylene	39.0%

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Lab Sample ID: GU76B LIMS ID: 04-10431 Matrix: Water Data Release Authorized Reported: 07/20/04

Date Extracted: 07/07/04 Date Analyzed: 07/14/04 01:21 Instrument/Analyst: ECD4/YZ GPC Cleanup: No Sulfur Cleanup: Yes Sample ID: LDW-SP-61-C-U SAMPLE

QC Report No: GU76-Windward Environmental Project: LDW-SEEP SAMPLING

Date Sampled: 07/02/04 Date Received: 07/02/04

Sample Amount: 2500 mL Final Extract Volume: 0.50 mL Dilution Factor: 1.00 pH: 7.3 Florisil Cleanup: No Silica Gel: Yes

CAS Number	Analyte	RL	Result
319-84-6	alpha-BHC	0.0010	< 0.0010 U
319-85-7	beta-BHC	0.0010	< 0.0010 U
319-86-8	delta-BHC	0.0010	< 0.0010 U
58-89-9	gamma-BHC (Lindane)	0.0010	< 0.0010 U
76-44-8	Heptachlor	0.0010	< 0.0010 U
309-00-2	Aldrin	0.0010	< 0.0010 U
1024-57-3	Heptachlor Epoxide	0.0010	< 0.0010 U
959-98-8	Endosulfan I	0.0010	< 0.0010 U
60-57-1	Dieldrin	0.027	< 0.027 Y
72-55-9	4,4'-DDE	0.038	< 0.038 Y
72-20-8	Endrin	0.0020	< 0.0020 Ŭ
33213-65-9	Endosulfan II	0.0020	< 0.0020 U
72-54-8	4,4'-DDD	0.0020	< 0.0020 U
1031-07-8	Endosulfan Sulfate	0.0020	< 0.0020 U
50-29-3	4,4'-DDT	0.0020	< 0.0020 U
72-43-5	Methoxychlor	0.010	< 0.010 U
53494-70-5	Endrin Ketone	0.0020	< 0.0020 U
7421-93-4	Endrin Aldehyde	0.0020	< 0.0020 U
5103-74-2	gamma Chlordane	0.0010	< 0.0010 U
5103-71-9	alpha Chlordane	0.0010	< 0.0010 U
8001-35-2	Toxaphene	0.10	< 0.10 U

Reported in $\mu g/L$ (ppb)

Decachlorobiphenyl	79.0%
Tetrachlorometaxylene	44.5%

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Lab Sample ID: GU76C LIMS ID: 04-10432 Matrix: Water Data Release Authorized Reported: 08/04/04

Date Extracted: 07/07/04 Date Analyzed: 07/14/04 13:48 Instrument/Analyst: ECD4/YZ GPC Cleanup: No Sulfur Cleanup: No

Sample ID: LDW-SP-61-C-F SAMPLE

QC Report No: GU76-Windward Environmental Project: LDW-SEEP SAMPLING

Date Sampled: 07/02/04 Date Received: 07/02/04

Sample Amount: 3000 mL Final Extract Volume: 0.50 mL Dilution Factor: 1.00 pH: 7.5 Florisil Cleanup: No Silica Gel: No

CAS Number	Analyte	RL	Result
319-84-6	alpha-BHC	0.00083	< 0.00083 U
319-85-7	beta-BHC	0.00083	< 0.00083 U
319-86-8	delta-BHC	0.0083	< 0.0083 Y
58-89-9	gamma-BHC (Lindane)	0.00083	< 0.00083 U
76-44-8	Heptachlor	0.00083	< 0.00083 U
309-00-2	Aldrin	0.00083	< 0.00083 U
1024-57-3	Heptachlor Epoxide	0.00083	< 0.00083 U
959-98-8	Endosulfan I	0.00083	< 0.00083 U
60-57-1	Dieldrin	0.0017	< 0.0017 U
72-55-9	4,4'-DDE	0.058	< 0.058 Y
72-20-8	Endrin	0.0017	< 0.0017 U
33213-65-9	Endosulfan II	0.0017	< 0.0017 U
72-54-8	4,4'-DDD	0.0049	< 0.0049 Y
1031-07-8	Endosulfan Sulfate	0.0017	< 0.0017 U
50-29-3	4,4'-DDT	0.0017	< 0.0017 U
72-43-5	Methoxychlor	0.0083	< 0.0083 U
53494-70-5	Endrin Ketone	0.0017	< 0.0017 U
7421-93-4	Endrin Aldehyde	0.0017	< 0.0017 U
5103-74-2	gamma Chlordane	0.00083	< 0.00083 U
5103-71-9	alpha Chlordane	0.038	< 0.038 Y
8001-35-2	Toxaphene	0.083	< 0.083 Ū

Reported in $\mu g/L$ (ppb)

Pest/PCB Surrogate Recovery

Decachlorobiphenyl	57.	28
Tetrachlorometaxylene	62.	8%

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Lab Sample ID: GU83A LIMS ID: 04-10461 Matrix: Water Data Release Authorized Reported: 08/04/04

Date Extracted: 07/07/04 Date Analyzed: 07/14/04 14:22 Instrument/Analyst: ECD4/YZ GPC Cleanup: No Sulfur Cleanup: No

Sample ID: LDW-SP-75-C-U SAMPLE

QC Report No: GU83-Windward Environmental Project: LDW-SEEP SAMPLING

Date Sampled: 07/03/04 Date Received: 07/03/04

Sample Amount: 3000 mL Final Extract Volume: 0.50 mL Dilution Factor: 1.00 pH: 7.2 Florisil Cleanup: No Silica Gel: No

CAS Number	Analyte	RL	Result
319-84-6	alpha-BHC	0.00083	< 0.00083 U
319-85-7	beta-BHC	0.0019	< 0.0019 Y
319-86-8	delta-BHC	0.0049	< 0.0049 Y
58-89-9	gamma-BHC (Lindane)	0.00083	< 0.00083 U
76-44-8	Heptachlor	0.00083	< 0.00083 U
309-00-2	Aldrin	0.00083	< 0.00083 U
1024-57-3	Heptachlor Epoxide	0.00083	< 0.00083 U
959-98-8	Endosulfan I	0.00083	< 0.00083 U
60-57-1	Dieldrin	0.0017	< 0.0017 U
72-55-9	4,4'-DDE	0.0017	< 0.0017 U
72-20-8	Endrin	0.0017	< 0.0017 U
33213-65-9	Endosulfan II	0.0017	< 0.0017 U
72-54-8	4,4'-DDD	0.0017	< 0.0017 U
1031-07-8	Endosulfan Sulfate	0.0017	< 0.0017 U
50-29-3	4,4'-DDT	0.0017	< 0.0017 U
72-43-5	Methoxychlor	0.0083	< 0.0083 U
53494-70-5	Endrin Ketone	0.0017	< 0.0017 U
7421-93-4	Endrin Aldehyde	0.0017	< 0.0017 U
5103-74-2	gamma Chlordane	0.00083	< 0.00083 U
5103-71-9	alpha Chlordane	0.00083	< 0.00083 U
8001-35-2	Toxaphene	0.083	< 0.083 U

Reported in $\mu g/L$ (ppb)

Decachlorobiphenyl	48.2%
Tetrachlorometaxylene	41.0%

Lab Sample ID: GU83A LIMS ID: 04-10461 Matrix: Water Data Release Authorized: Reported: 11/02/04

Date Extracted: 07/07/04 Date Analyzed: 07/14/04 03:03 Instrument/Analyst: ECD4/YZ GPC Cleanup: No Sulfur Cleanup: No INCORPORATED Sample ID: LDW-SP-75-C-U MATRIX SPIKE

ANALYTICAL RESOURCES

QC Report No: GU83-Windward Environmental Project: LDW-SEEP SAMPLING

Date Sampled: 07/03/04 Date Received: 07/03/04

Sample Amount: 1560 mL Final Extract Volume: 0.50 mL Dilution Factor: 1.00 pH: 7.2 Florisil Cleanup: No Silica Gel: No

CAS Number	Analyte	RL	Result
319-84-6	alpha-BHC	0.0016	< 0.0016 U
319-85-7	beta-BHC	0.0039	< 0.0039 Y
319-86-8	delta-BHC	0.0068	< 0.0068 Y
58-89-9	gamma-BHC (Lindane)	0.0016	
76-44-8	Heptachlor	0.0016	
309-00-2	Aldrin	0.0016	
1024-57-3	Heptachlor Epoxide	0.0016	< 0.0016 U
959-98-8	Endosulfan I	0.0016	< 0.0016 U
60-57-1	Dieldrin	0.0032	
72-55-9	4,4'-DDE	0.0032	< 0.0032 U
72-20-8	Endrin	0.0032	
33213-65-9	Endosulfan II	0.0032	< 0.0032 U
72-54-8	4,4'-DDD	0.0032	< 0.0032 U
1031-07-8	Endosulfan Sulfate	0.0032	< 0.0032 U
50-29-3	4,4'-DDT	0.0032	
72-43-5	Methoxychlor	0.016	< 0.016 U
53494-70-5	Endrin Ketone	0.0032	< 0.0032 U
7421-93-4	Endrin Aldehyde	0.058	< 0.058 Y
5103-74-2	gamma Chlordane	0.0045	< 0.0045 Y
5103-71-9	alpha Chlordane	0.0016	< 0.0016 U
8001-35-2	Toxaphene	0.16	< 0.16 U

Reported in $\mu g/L$ (ppb)

Decachlorobiphenyl	55.2%
Tetrachlorometaxylene	54.5%

Lab Sample ID: GU83A LIMS ID: 04-10461 Matrix: Water Data Release Authorized: Reported: 11/02/04

Date Extracted: 07/07/04 Date Analyzed: 07/14/04 03:37 Instrument/Analyst: ECD4/YZ GPC Cleanup: No Sulfur Cleanup: No

Sample ID: LDW-SP-75-C-U MATRIX SPIKE DUP

QC Report No: GU83-Windward Environmental Project: LDW-SEEP SAMPLING

Date Sampled: 07/03/04 Date Received: 07/03/04

Sample Amount: 1560 mL Final Extract Volume: 0.50 mL Dilution Factor: 1.00 pH: 7.2 Florisil Cleanup: No Silica Gel: No

CAS Number	Analyte	RL	Result
319-84-6	alpha-BHC	0.0016	< 0.0016 II
319-85-7	beta-BHC	0.0089	< 0 0089 V
319-86-8	delta-BHC	0.0016	
58-89-9	gamma-BHC (Lindane)	0.0016	
76-44-8	Heptachlor	0.0016	
309-00-2	Aldrin	0.0016	
1024-57-3	Heptachlor Epoxide	0.0016	< 0.0016 II
959-98-8	Endosulfan I	0.0016	< 0.0016 U
60-57-1	Dieldrin	0.0032	
72-55-9	4,4'-DDE	0.0032	< 0.0032 II
72-20-8	Endrin	0.0032	
33213-65-9	Endosulfan II	0.0032	< 0.0032 II
72-54-8	4,4'-DDD	0.0032	< 0.0032 U
1031-07-8	Endosulfan Sulfate	0.0032	< 0.0032 U
50-29-3	4,4'-DDT	0.0032	
72-43-5	Methoxychlor	0.016	< 0.016 U
53494-70-5	Endrin Ketone	0.0032	< 0.0032 U
7421-93-4	Endrin Aldehyde	0.0032	< 0.0032 U
5103-74-2	gamma Chlordane	0.0043	< 0.0043 Y
5103-71-9	alpha Chlordane	0.0016	< 0.0016 U
8001-35-2	Toxaphene	0.16	< 0.16 U

Reported in $\mu g/L$ (ppb)

Pest/PCB Surrogate Recovery

Decachlorobiphenyl	45.5%
Tetrachlorometaxylene	44.8%

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ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET Pesticides/PCB by GC/ECD Page 1 of 1

Lab Sample ID: GU83B LIMS ID: 04-10462 Matrix: Water Data Release Authorized: Reported: 08/04/04

Date Extracted: 07/07/04 Date Analyzed: 07/14/04 14:56 Instrument/Analyst: ECD4/YZ GPC Cleanup: No Sulfur Cleanup: No

CAS Number

Sample ID: LDW-SP-75-C-F SAMPLE

QC Report No: GU83-Windward Environmental Project: LDW-SEEP SAMPLING

Date Sampled: 07/03/04 Date Received: 07/03/04

Sample Amount: 3000 mL Final Extract Volume: 0.50 mL Dilution Factor: 1.00 pH: 7.3 Florisil Cleanup: No Silica Gel: No

CAS Number	Analyte	RL	Result
319-84-6	alpha-BHC	0.00083	< 0.00083 U
319-85-7	beta-BHC	0.00083	< 0.00083 U
319-86-8	delta-BHC	0.013	< 0.013 Y
58-89-9	gamma-BHC (Lindane)	0.00083	< 0.00083 U
76-44-8	Heptachlor	0.00083	< 0.00083 U
309-00-2	Aldrin	0.00083	< 0.00083 U
1024-57-3	Heptachlor Epoxide	0.0018	< 0.0018 Y
959-98-8	Endosulfan I	0.00083	< 0.00083 U
60-57-1	Dieldrin	0.0017	< 0.0017 U
72-55-9	4,4'-DDE	0.0017	< 0.0017 U
72-20-8	Endrin	0.0017	< 0.0017 U
33213-65-9	Endosulfan II	0.0017	< 0.0017 U
72-54-8	4,4'-DDD	0.0017	< 0.0017 U
1031-07-8	Endosulfan Sulfate	0.0017	< 0.0017 U
50-29-3	4,4'-DDT	0.0017	< 0.0017 U
72-43-5	Methoxychlor	0.0083	< 0.0083 U
53494-70-5	Endrin Ketone	0.0017	< 0.0017 U
7421-93-4	Endrin Aldehyde	0.0017	< 0.0017 U
5103-74-2	gamma Chlordane	0.00083	< 0.00083 U
5103-71-9	alpha Chlordane	0.00083	< 0.00083 U
8001-35-2	Toxaphene	0.083	< 0.083 U

Reported in $\mu g/L$ (ppb)

Decachlorobiphenyl	50.0%
Tetrachlorometaxylene	45.2%

ORGANICS ANALYSIS DATA SHEET Pesticides/PCB by GC/ECD Page 1 of 1

Lab Sample ID: GU83C LIMS ID: 04-10463 Matrix: Water Data Release Authorized Reported: 07/20/04

Date Extracted: 07/07/04 Date Analyzed: 07/14/04 04:45 Instrument/Analyst: ECD4/YZ GPC Cleanup: No Sulfur Cleanup: No

CAS Number

Sample ID: LDW-SP-64-RB-S-U SAMPLE

QC Report No: GU83-Windward Environmental Project: LDW-SEEP SAMPLING

Date Sampled: 07/03/04 Date Received: 07/03/04

Sample Amount: 3000 mL Final Extract Volume: 0.50 mL Dilution Factor: 1.00 pH: 7.9 Florisil Cleanup: No Silica Gel: No

RL Result

319-84-6	alpha-BHC	0.00083	< 0.00083 U
319-05-7	delte DUC	0.0020	< 0.0020 Y
319-00-0		0.00083	< 0.00083 0
58-89-9	gamma-BHC (Lindane)	0.00083	< 0.00083 U
76-44-8	Heptachlor	0.00083	< 0.00083 Ŭ
309-00-2	Aldrin	0.00083	< 0.00083 U
1024-57-3	Heptachlor Epoxide	0.00083	< 0.00083 U
959-98-8	Endosulfan I	0.00083	< 0.00083 U
60-57-1	Dieldrin	0.0017	< 0.0017 U
72-55-9	4,4'-DDE	0.0017	< 0.0017 U
72-20-8	Endrin	0.0017	< 0.0017 U
33213-65-9	Endosulfan II	0.0017	< 0.0017 U
72-54-8	4,4'-DDD	0.0017	< 0.0017 U
1031-07-8	Endosulfan Sulfate	0.0017	< 0.0017 U
50-29-3	4,4'-DDT	0.0017	< 0.0017 U
72-43-5	Methoxychlor	0.0083	< 0.0083 U
53494-70-5	Endrin Ketone	0.0017	< 0.0017 U
7421-93-4	Endrin Aldehyde	0.0017	< 0.0017 U
5103-74-2	gamma Chlordane	0.00083	< 0.00083 U
5103-71-9	alpha Chlordane	0.00083	< 0.00083 U
8001-35-2	Toxaphene	0.083	< 0.083 U

Analyte

Reported in $\mu g/L$ (ppb)

Decachlorobiphenyl	62.8%
Tetrachlorometaxylene	78.5%

Lab Sample ID: GU83D LIMS ID: 04-10464 Matrix: Water Data Release Authorized: Reported: 07/20/04

Date Extracted: 07/07/04 Date Analyzed: 07/14/04 05:19 Instrument/Analyst: ECD4/YZ GPC Cleanup: No Sulfur Cleanup: No

CAS Number

ANALYTICAL RESOURCES INCORPORATED Sample ID: LDW-SP-64-RB-MP-U

SAMPLE

QC Report No: GU83-Windward Environmental Project: LDW-SEEP SAMPLING

Date Sampled: 07/03/04 Date Received: 07/03/04

Sample Amount: 3000 mL Final Extract Volume: 0.50 mL Dilution Factor: 1.00 pH: 7.1 Florisil Cleanup: No Silica Gel: No

CAS Number	Analyte	RL	Result
319-84-6	alpha-BHC	0.00083	< 0.00083 U
319-85-7	beta-BHC	0.00083	< 0.00083 U
319-86-8	delta-BHC	0.00083	0.0035
58-89-9	gamma-BHC (Lindane)	0.00083	< 0.00083 U
76-44-8	Heptachlor	0.00083	< 0.00083 U
309-00-2	Aldrin	0.00083	< 0.00083 U
1024-57-3	Heptachlor Epoxide	0.00083	< 0.00083 U
959-98-8	Endosulfan I	0.00083	< 0.00083 U
60-57-1	Dieldrin	0.0017	< 0.0017 U
72-55-9	4,4'-DDE	0.0017	< 0.0017 U
72-20-8	Endrin	0.0017	< 0.0017 U
33213-65-9	Endosulfan II	0.0017	< 0.0017 U
72-54-8	4,4'-DDD	0.0017	< 0.0017 U
1031-07-8	Endosulfan Sulfate	0.0017	< 0.0017 U
50-29-3	4,4'-DDT	0.0017	< 0.0017 U
72-43-5	Methoxychlor	0.0083	< 0.0083 U
53494-70-5	Endrin Ketone	0.0017	< 0.0017 U
7421-93-4	Endrin Aldehyde	0.0017	< 0.0017 U
5103-74-2	gamma Chlordane	0.0026	< 0.0026 Y
5103-71-9	alpha Chlordane	0.00083	< 0.00083 U
8001-35-2	Toxaphene	0.083	< 0.083 U

Reported in $\mu g/L$ (ppb)

Decachlorobiphenyl	38.5%
Tetrachlorometaxylene	51.5%



Lab Sample ID: GU83F LIMS ID: 04-10466 Matrix: Water Data Release Authorized: Reported: 07/20/04

Date Extracted: 07/07/04 Date Analyzed: 07/14/04 05:53 Instrument/Analyst: ECD4/YZ GPC Cleanup: No Sulfur Cleanup: Yes

CAS Number

Sample ID: LDW-SP-64-C-F SAMPLE

Result

QC Report No: GU83-Windward Environmental Project: LDW-SEEP SAMPLING

Date Sampled: 07/02/04 Date Received: 07/03/04

Sample Amount: 3000 mL Final Extract Volume: 0.50 mL Dilution Factor: 1.00 pH: 6.3 Florisil Cleanup: No Silica Gel: Yes

RL

319-84-6	alpha-BHC	0.00083	< 0.00083 U
319-85-7	beta-BHC	0.00083	< 0.00083 U
319-86-8	delta-BHC	0.00083	< 0.00083 U
58-89-9	gamma-BHC (Lindane)	0.00083	< 0.00083 U
76-44-8	Heptachlor	0.00083	< 0.00083 U
309-00-2	Aldrin	0.00083	< 0.00083 U
1024-57-3	Heptachlor Epoxide	0.00083	< 0.00083 U
959-98-8	Endosulfan I	0.00083	< 0.00083 U
60-57-1	Dieldrin	0.0017	< 0.0017 U
72-55-9	4,4'-DDE	0.0017	< 0.0017 U
72-20-8	Endrin	0.0017	< 0.0017 U
33213-65-9	Endosulfan II	0.0017	< 0.0017 U
72-54-8	4,4'-DDD	0.0017	< 0.0017 U
1031-07-8	Endosulfan Sulfate	0.0017	< 0.0017 U
50-29-3	4,4'-DDT	0.0017	< 0.0017 U
72-43-5	Methoxychlor	0.0083	< 0.0083 U
53494-70-5	Endrin Ketone	0.0017	< 0.0017 U
7421-93-4	Endrin Aldehyde	0.0017	< 0.0017 U
5103-74-2	gamma Chlordane	0.00083	< 0.00083 U
5103-71-9	alpha Chlordane	0.00083	< 0.00083 U
8001-35-2	Toxaphene	0.083	< 0.083 U

Analyte

Reported in $\mu g/L$ (ppb)

Decachlorobiphenyl	49.2%
Tetrachlorometaxylene	49.2%



Lab Sample ID: GU83A LIMS ID: 04-10461 Matrix: Water Data Release Authorized: Reported: 07/20/04

Date Extracted MS/MSD: 07/07/04

Date Analyzed MS: 07/14/04 03:03 MSD: 07/14/04 03:37 Instrument/Analyst MS: ECD4/YZ MSD: ECD4/YZ GPC Cleanup: No Florisil Cleanup: No

Sample ID: LDW-SP-75-C-U MS/MSD

QC Report No: GU83-Windward Environmental Project: LDW-SEEP SAMPLING

Date Sampled: 07/03/04 Date Received: 07/03/04

Sample Amount MS: 1560 mL MSD: 1560 mL Final Extract Volume MS: 0.5 mL MSD: 0.5 mL Dilution Factor MS: 1.00 MSD: 1.00 Sulfur Cleanup: Yes Silica Gel: Yes

Analyte	Sample	MS	Spike Added-MS	MS Recover	y MSD	Spike Added-MSD	MSD Recovery	RPD
gamma-BHC (Lindane)	< 0.0008	0.00862	0.0160	53.9%	0.00795	0.0160	49.7%	8.1%
Heptachlor	< 0.0008	0.0118	0.0160	73.8%	0.0113	0.0160	70.6%	4.3%
Aldrin	< 0.0008	0.0127	0.0160	79.4%	0.00878	0.0160	54.9%	36.5%
Dieldrin	< 0.0016	0.0254	0.0321	79.1%	0.0233	0.0321	72.6%	8.6%
Endrin	< 0.0016	0.0349	0.0321	109%	0.0285	0.0321	88.8%	20.2%
4,4'-DDT	< 0.0016	0.0286	0.0321	89.1%	0.0217	0.0321	67.6%	27.48

Results reported in $\mu g/L$ (ppb)

RPD calculated using sample concentrations per SW846.
ORGANICS ANALYSIS DATA SHEET Pesticides/PCB by GC/ECD Page 1 of 1

Lab Sample ID: LCS-070704 LIMS ID: 04-10230 Matrix: Water Data Release Authorized:

Date Extracted: 07/07/04 Date Analyzed: 07/13/04 16:16 Instrument/Analyst: ECD4/YZ GPC Cleanup: No Florisil Cleanup: No

Sample ID: LCS-070704 LAB CONTROL

QC Report No: GU45-Windward Environmental Project: LDW Seep Sampling

Date Sampled: 06/30/04 Date Received: 06/30/04

Sample Amount: 3000 mL Final Extract Volume: 0.50 mL Dilution Factor: 1.00 Sulfur Cleanup: Yes Silica Gel: Yes

	Lab	Spike	
Analyte	Control	Added	Recovery
alpha-BHC	0.00258	0.00333	77.5%
beta-BHC	0.00497	0.00333	149%
delta-BHC	0.00283	0.00333	85.0%
gamma-BHC (Lindane)	0.00253	0.00333	76.0%
Heptachlor	0.00250	0.00333	75.1%
Aldrin	0.00200	0.00333	60.1%
Heptachlor Epoxide	0.00317	0.00333	95.2%
Endosulfan I	0.00292	0.00333	87.7%
Dieldrin	0.00585	0.00667	87.7%
4,4'-DDE	0.00687	0.00667	103%
Endrin	0.00665	0.00667	99.7%
Endosulfan II	0.00598	0.00667	89.7%
4,4'-DDD	0.00670	0.00667	100%
Endosulfan Sulfate	0.00572	0.00667	85.8%
4,4'-DDT	0.00705	0.00667	106%
Methoxychlor	0.0345	0.0333	104%
Endrin Ketone	0.00507	0.00667	76.0%
Endrin Aldehyde	0.00285	0.00667	42.7%
gamma Chlordane	0.00302	0.00333	90.78
alpha Chlordane	0.00285	0.00333	85.6%

Pest/PCB Surrogate Recovery

Decachlorobiphenyl	71.5%
Tetrachlorometaxylene	42.28

Results reported in μ g/L (ppb)

SAMPLE NO.

FORM 4 PCB METHOD BLANK SUMMARY

GU45MBW7/7

Lab Name: ANALYTICAL RESOURCES, INC	Client: WINDWARD ENVIRONMENTAL
ARI Job No.: GU45/GU76/GU83	Project: LDW-SEEP SAMPLING
Lab Sample ID: GU45MBW7/7	Lab File ID: 0713-06R
Matrix (soil/water) WATER	Extraction: (SepF/Cont/Sonc) OTHER
Sulfur Cleanup (Y/N) Y	Date Extracted: 07/09/04
Date Analyzed (1): 07/13/04	Date Analyzed (2): 07/13/04
Time Analyzed (1): 1542	Time Analyzed (2): 1542
Instrument ID (1): ECD4	Instrument ID (2): ECD4
GC Column (1): RTX-CLP1 ID: 0.53(mm)	GC Column (2): RTX-CLP2 ID: 0.53(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	1			•
	EPA	LAB	DATE	DATE
	SAMPLE NO.	SAMPLE ID	ANALYZED 1	ANALYZED 2
	=================		==========	=========
01	GU45SBW7/7	GU45SBW1	07/13/04	07/13/04
02	LDW-SP-48-CU	GU45A	07/13/04	07/13/04
03	LDW-SP-48-CF	GU45B	07/13/04	07/13/04
04	LDW-SP-82-CU	GU45E	07/13/04	07/13/04
05	LDW-SP-82-CF	GU45F	07/13/04	07/13/04
06	LDW-SP82CFDU	GU45G	07/13/04	07/13/04
07	LDW-SP82CFDF	GU45H	07/13/04	07/13/04
80	LDW-SP-62-CF	GU76A	07/14/04	07/14/04
09	LDW-SP-61-CU	GU76B	07/14/04	07/14/04
10	LDW-SP-75-CU	GU83AMS	07/14/04	07/14/04
11	LDW-SP-75-CU	GU83AMSD	07/14/04	07/14/04
12	LDW-SP64RBSU	GU83C	07/14/04	07/14/04
13	LDW-SP64RBMP	GU83D	07/14/04	07/14/04
14	LDW-SP-64-CF	GU83F	07/14/04	07/14/04
15	LDW-SP-54-CU	GU45C10X	07/14/04	07/14/04
16	LDW-SP-54-CF	GU45D	07/14/04	07/14/04
17	LDW-SP-61-CF	GU76C	07/14/04	07/14/04
18	LDW-SP-75-CU	GU83A	07/14/04	07/14/04
19	LDW-SP-75-CF	GU83B	07/14/04	07/14/04
			- •	

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FORM IV PEST

ORGANICS ANALYSIS DATA SHEET Pesticides/PCB by GC/ECD Page 1 of 1

Lab Sample ID: MB-070704 LIMS ID: 04-10230 Matrix: Water Data Release Authorized: Reported: 07/20/04

Date Extracted: 07/07/04 Date Analyzed: 07/13/04 15:42 Instrument/Analyst: ECD4/YZ GPC Cleanup: No Sulfur Cleanup: Yes

Sample ID: MB-070704 METHOD BLANK

QC Report No: GU45-Windward Environmental Project: LDW Seep Sampling

Date Sampled: NA Date Received: NA

Sample Amount: 3000 mL Final Extract Volume: 0.50 mL Dilution Factor: 1.00 pH: NA Florisil Cleanup: No Silica Gel: Yes

CAS Number	er Analyte RL		Result
319-84-6	alpha-BHC	0.00083	< 0.00083 U
319-85-7	beta-BHC	0.00083	< 0.00083 U
319-86-8	delta-BHC	0.00083	< 0.00083 U
58-89-9	gamma-BHC (Lindane)	0.00083	< 0.00083 U
76-44-8	Heptachlor	0.00083	< 0.00083 U
309-00-2	Aldrin	0.00083	< 0.00083 U
1024-57-3	Heptachlor Epoxide	0.00083	< 0.00083 U
959-98-8	Endosulfan I	0.00083	< 0.00083 U
60-57-1	Dieldrin	0.0017	< 0.0017 U
72-55-9	4,4'-DDE	0.0017	< 0.0017 U
72-20-8	Endrin	0.0017	< 0.0017 U
33213-65-9	Endosulfan II	0.0017	< 0.0017 U
72-54-8	4,4'-DDD	0.0017	< 0.0017 U
1031-07-8	Endosulfan Sulfate	0.0017	< 0.0017 U
50-29-3	4,4'-DDT	0.0017	< 0.0017 U
72-43-5	Methoxychlor	0.0083	< 0.0083 U
53494-70-5	Endrin Ketone	0.0017	< 0.0017 U
7421-93-4	Endrin Aldehyde	0.0017	< 0.0017 U
5103-74-2	gamma Chlordane	0.00083	< 0.00083 U
5103-71-9	alpha Chlordane	0.00083	< 0.00083 U
8001-35-2	Toxaphene	0.083	< 0.083 U

Reported in $\mu g/L$ (ppb)

Decachlorobiphenyl	80.8%
Tetrachlorometaxylene	40.8%



SW8081/PESTICIDE WATER SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: GU59-Windward Environmental Project: LDW-SEEP SAMPLING

Client ID	DCBP	TCMX	TOT OUT
MB-070204	75.8%	32.0%	0
LCS-070204	74.0%	31.8%	0
LDW-SP-10-C-F	63.8%	32.5%	0
LDW-SP-12-C-F	63.8%	48.8%	0
LDW-SP-20-C-F	66.0%	44.5%	0
LDW-SP-41-C-F	85.0%	59.5%	0
LDW-SP-41-C-F MS	71.5%	86.2%	0
LDW-SP-41-C-F MSD	68.8%	81.5%	0
LDW-SP-12-C-U	58.0%	42.8%	0
LDW-SP-20-C-U	66.2%	48.5%	0
LDW-SP-41-C-U	72.2%	76.2%	0
LDW-SP-39-C-F	69.2%	75.5%	0
LDW-SP-80-C-F	66.2%	67.5%	0
LDW-SP-39-C-U	59.2%	62.8%	0
LDW-SP-80-C-U	59.5%	35.0%	0

** PRO	JECT	SPECIFIED	LIMITS **	LCS/MB	LIMITS	QC LIMITS
(DCBP)	= De	ecachlorobi	iphenyl	(30-3	L60)	(30-160)
(TCMX)	= Te	etrachlorom	metaxylene	(30-3	L60)	(30-160)

Prep Method: Manchester Log Number Range: 04-10337 to 04-10347

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Lab Sample ID: GU59A LIMS ID: 04-10337 Matrix: Water Data Release Authorized: Ð Reported: 07/16/04

Date Extracted: 07/02/04 Date Analyzed: 07/09/04 18:45 Instrument/Analyst: ECD4/YZ GPC Cleanup: No Sulfur Cleanup: Yes

Sample ID: LDW-SP-10-C-F SAMPLE

QC Report No: GU59-Windward Environmental Project: LDW-SEEP SAMPLING

Date Sampled: 07/01/04 Date Received: 07/01/04

Sample Amount: 3000 mL Final Extract Volume: 0.50 mL Dilution Factor: 1.00 pH: 7.1 Florisil Cleanup: No Silica Gel: Yes

CAS Number	Analyte	RL	Result
319-84-6	alpha-BHC	0.00083	< 0.00083 U
319-85-7	beta-BHC	0.00083	< 0.00083 U
319-86-8	delta-BHC	0.00083	< 0.00083 U
58-89-9	gamma-BHC (Lindane)	0.00083	< 0.00083 U
76-44-8	Heptachlor	0.00083	< 0.00083 U
309-00-2	Aldrin	0.00083	< 0.00083 U
1024-57-3	Heptachlor Epoxide	0.00083	< 0.00083 U
959-98-8	Endosulfan I	0.00083	< 0.00083 U
60-57-1	Dieldrin	0.0017	< 0.0017 U
72-55-9	4,4'-DDE	0.0017	< 0.0017 U
72-20-8	Endrin	0.0017	< 0.0017 U
33213-65-9	Endosulfan II	0.0017	< 0.0017 U
72-54-8	4,4'-DDD	0.0017	< 0.0017 U
1031-07-8	Endosulfan Sulfate	0.0017	< 0.0017 U
50-29-3	4,4'-DDT	0.0017	< 0.0017 U
72-43-5	Methoxychlor	0.0083	< 0.0083 U
53494-70-5	Endrin Ketone	0.0017	< 0.0017 U
7421-93-4	Endrin Aldehyde	0.0017	< 0.0017 U
5103-74-2	gamma Chlordane	0.00083	< 0.00083 U
5103-71-9	alpha Chlordane	0.00083	< 0.00083 U
8001-35-2	Toxaphene	0.083	< 0.083 U

Reported in $\mu g/L$ (ppb)

Decachlorobiphenyl	63.8	38
Tetrachlorometaxylene	32.5	58

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Lab Sample ID: GU59B LIMS ID: 04-10338 Matrix: Water Data Release Authorized: Reported: 07/16/04

Date Extracted: 07/02/04 Date Analyzed: 07/09/04 19:19 Instrument/Analyst: ECD4/YZ GPC Cleanup: No Sulfur Cleanup: Yes

Sample ID: LDW-SP-12-C-F SAMPLE

QC Report No: GU59-Windward Environmental Project: LDW-SEEP SAMPLING

Date Sampled: 07/01/04 Date Received: 07/01/04

Sample Amount: 3000 mL Final Extract Volume: 0.50 mL Dilution Factor: 1.00 pH: 6.5 Florisil Cleanup: No Silica Gel: Yes

CAS Number Analyte		RL	Result
319-84-6	alpha-BHC	0.00083	< 0.00083 U
319-85-7	beta-BHC	0.00083	< 0.00083 U
319-86-8	delta-BHC	0.00083	< 0.00083 U
58-89-9	gamma-BHC (Lindane)	0.00083	< 0.00083 U
76-44-8	Heptachlor	0.00083	< 0.00083 U
309-00-2	Aldrin	0.00083	< 0.00083 U
1024-57-3	Heptachlor Epoxide	0.00083	< 0.00083 U
959-98-8	Endosulfan I	0.00083	< 0.00083 U
60-57-1	Dieldrin	0.0017	< 0.0017 U
72-55-9	4,4'-DDE	0.0017	< 0.0017 U
72-20-8	Endrin	0.0017	< 0.0017 U
33213-65-9	Endosulfan II	0.0017	< 0.0017 U
72-54-8	4,4'-DDD	0.0017	< 0.0017 U
1031-07-8	Endosulfan Sulfate	0.0017	< 0.0017 U
50-29-3	4,4'-DDT	0.0017	< 0.0017 U
72-43-5	Methoxychlor	0.0083	< 0.0083 U
53494-70-5	Endrin Ketone	0.0017	< 0.0017 U
7421-93-4	Endrin Aldehyde	0.0017	< 0.0017 U
5103-74-2	gamma Chlordane	0.00083	< 0.00083 U
5103-71-9	alpha Chlordane	0.00083	< 0.00083 U
8001-35-2	Toxaphene	0.083	< 0.083 U

Reported in $\mu g/L$ (ppb)

Pest/PCB Surrogate Recovery

Decachlorobiphenyl	63.8%
Tetrachlorometaxylene	48.8%

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Lab Sample ID: GU59C LIMS ID: 04-10339 Matrix: Water Data Release Authorized; Reported: 08/04/04

Date Extracted: 07/02/04 Date Analyzed: 07/09/04 19:53 Instrument/Analyst: ECD4/YZ GPC Cleanup: No Sulfur Cleanup: No

Sample ID: LDW-SP-20-C-F SAMPLE

QC Report No: GU59-Windward Environmental Project: LDW-SEEP SAMPLING

Date Sampled: 07/01/04 Date Received: 07/01/04

Sample Amount: 3000 mL Final Extract Volume: 0.50 mL Dilution Factor: 1.00 pH: 8.4 Florisil Cleanup: No Silica Gel: No

CAS Number	Analyte	RL	Result
319-84-6	alpha-BHC	0.00083	< 0.00083 U
319-85-7	beta-BHC	0.00083	< 0.00083 U
319-86-8	delta-BHC	0.0092	< 0.0092 Y
58-89-9	gamma-BHC (Lindane)	0.00083	< 0.00083 U
76-44-8	Heptachlor	0.00083	< 0.00083 U
309-00-2	Aldrin	0.00083	< 0.00083 U
1024-57-3	Heptachlor Epoxide	0.00083	< 0.00083 U
959-98-8	Endosulfan I	0.00083	< 0.00083 U
60-57-1	Dieldrin	0.0017	< 0.0017 U
72-55-9	4,4'-DDE	0.0017	< 0.0017 U
72-20-8	Endrin	0.0017	< 0.0017 U
33213-65-9	Endosulfan II	0.0017	< 0.0017 U
72-54-8	4,4'-DDD	0.0017	< 0.0017 U
1031-07-8	Endosulfan Sulfate	0.0017	< 0.0017 U
50-29-3	4,4'-DDT	0.0017	< 0.0017 Ŭ
72-43-5	Methoxychlor	0.0083	< 0.0083 Ŭ
53494-70-5	Endrin Ketone	0.0017	< 0.0017 U
7421-93-4	Endrin Aldehyde	0.0017	< 0.0017 U
5103-74-2	gamma Chlordane	0.0040	< 0.0040 Y
5103-71-9	alpha Chlordane	0.00083	< 0.00083 U
8001-35-2	Toxaphene	0.083	< 0.083 U

Reported in $\mu g/L$ (ppb)

Decachlorobiphenyl	66.0%
Tetrachlorometaxylene	44.5%



Lab Sample ID: GU59D LIMS ID: 04-10340 Matrix: Water Data Release Authorized: Reported: 07/16/04

Date Extracted: 07/02/04 Date Analyzed: 07/09/04 23:18 Instrument/Analyst: ECD4/YZ GPC Cleanup: No Sulfur Cleanup: No

Sample ID: LDW-SP-41-C-F SAMPLE

QC Report No: GU59-Windward Environmental Project: LDW-SEEP SAMPLING

Date Sampled: 07/01/04 Date Received: 07/01/04

Sample Amount: 3000 mL Final Extract Volume: 0.50 mL Dilution Factor: 1.00 pH: 6.5 Florisil Cleanup: No Silica Gel: No

CAS Number	Analyte	RL	Result
319-84-6	alpha-BHC	0.0070	< 0.0070 Y
319-85-7	beta-BHC	0.00083	< 0.00083 U
319-86-8	delta-BHC	0.00083	< 0.00083 U
58-89-9	gamma-BHC (Lindane)	0.00083	< 0.00083 U
76-44-8	Heptachlor	0.00083	< 0.00083 U
309-00-2	Aldrin	0.00083	< 0.00083 U
1024-57-3	Heptachlor Epoxide	0.00083	< 0.00083 U
959-98-8	Endosulfan I	0.00083	< 0.00083 U
60-57-1	Dieldrin	0.0017	< 0.0017 U
72-55-9	4,4'-DDE	0.0017	< 0.0017 U
72-20-8	Endrin	0.0017	< 0.0017 U
33213-65-9	Endosulfan II	0.0017	< 0.0017 U
72-54-8	4,4'-DDD	0.0017	< 0.0017 U
1031-07-8	Endosulfan Sulfate	0.0017	< 0.0017 U
50-29-3	4,4'-DDT	0.0017	< 0.0017 U
72-43-5	Methoxychlor	0.0083	< 0.0083 U
53494-70-5	Endrin Ketone	0.0017	< 0.0017 U
7421-93-4	Endrin Aldehyde	0.0017	< 0.0017 U
5103-74-2	gamma Chlordane	0.0054	< 0.0054 Y
5103-71-9	alpha Chlordane	0.00083	< 0.00083 U
8001-35-2	Toxaphene	0.083	< 0.083 U

Reported in $\mu g/L$ (ppb)

Pest/PCB Surrogate Recovery

Decachlorobiphenyl	85.0%
Tetrachlorometaxylene	59.5%

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Lab Sample ID: GU59D LIMS ID: 04-10340 Matrix: Water Data Release Authorized Reported: 08/04/04

Date Extracted: 07/02/04 Date Analyzed: 07/09/04 23:52 Instrument/Analyst: ECD4/YZ GPC Cleanup: No Sulfur Cleanup: No

Sample ID: LDW-SP-41-C-F MATRIX SPIKE

QC Report No: GU59-Windward Environmental Project: LDW-SEEP SAMPLING

Date Sampled: 07/01/04 Date Received: 07/01/04

Sample Amount: 3000 mL Final Extract Volume: 0.50 mL Dilution Factor: 1.00 pH: 6.5 Florisil Cleanup: No Silica Gel: No

CAS Number	Analyte	RL	Result
319-84-6	alpha-BHC	0.00083	< 0.00083 U
319-85-7	beta-BHC	0.00083	< 0.00083 U
319-86-8	delta-BHC	0.0036	< 0.0036 Y
58-89-9	gamma-BHC (Lindane)	0.00083	
76-44-8	Heptachlor	0.00083	
309-00-2	Aldrin	0.00083	
1024-57-3	Heptachlor Epoxide	0.00083	< 0.00083 U
959-98-8	Endosulfan I	0.00083	< 0.00083 U
60-57-1	Dieldrin	0.0017	
72-55-9	4,4'-DDE	0.0036	< 0.0036 Y
72-20-8	Endrin	0.0017	
33213-65-9	Endosulfan II	0.0017	< 0.0017 U
72-54-8	4,4'-DDD	0.0017	< 0.0017 U
1031-07-8	Endosulfan Sulfate	0.0017	< 0.0017 U
50-29-3	4, 4' - DDT	0.0017	
72-43-5	Methoxychlor	0.0083	< 0.0083 U
53494-70-5	Endrin Ketone	0.0017	< 0.0017 U
7421-93-4	Endrin Aldehyde	0.0017	< 0.0017 U
5103-74-2	gamma Chlordane	0.00083	< 0.00083 U
5103-71-9	alpha Chlordane	0.00083	< 0.00083 U
8001-35-2	Toxaphene	0.083	< 0.083 U

Reported in $\mu g/L$ (ppb)

Decachlorobiphenyl	71.5%
Tetrachlorometaxylene	86.2%

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Lab Sample ID: GU59D LIMS ID: 04-10340 Matrix: Water Data Release Authorized: Reported: 07/16/04

Date Extracted: 07/02/04 Date Analyzed: 07/10/04 00:26 Instrument/Analyst: ECD4/YZ GPC Cleanup: No Sulfur Cleanup: No

Sample ID: LDW-SP-41-C-F MATRIX SPIKE DUP

QC Report No: GU59-Windward Environmental Project: LDW-SEEP SAMPLING

Date Sampled: 07/01/04 Date Received: 07/01/04

Sample Amount: 3000 mL Final Extract Volume: 0.50 mL Dilution Factor: 1.00 pH: 6.5 Florisil Cleanup: No Silica Gel: No

CAS Number	Analyte	RL	Result
319-84-6	alpha-BHC	0.00083	< 0.00083 U
319-85-7	beta-BHC	0.0032	< 0.0032 Y
319-86-8	delta-BHC	0.00083	< 0.00083 U
58-89-9	gamma-BHC (Lindane)	0.00083	
76-44-8	Heptachlor	0.00083	
309-00-2	Aldrin	0.00083	
1024-57-3	Heptachlor Epoxide	0.00083	< 0.00083 U
959-98-8	Endosulfan I	0.00083	< 0.00083 U
60-57-1	Dieldrin	0.0017	
72-55-9	4,4'-DDE	0.0040	< 0.0040 Y
72-20-8	Endrin	0.0017	
33213-65-9	Endosulfan II	0.0017	< 0.0017 U
72-54-8	4,4'-DDD	0.0017	< 0.0017 U
1031-07-8	Endosulfan Sulfate	0.0017	< 0.0017 U
50-29-3	4,4'-DDT	0.0017	-
72-43-5	Methoxychlor	0.0083	< 0.0083 U
53494-70-5	Endrin Ketone	0.0017	< 0.0017 U
7421-93-4	Endrin Aldehyde	0.0017	< 0.0017 U
5103-74-2	gamma Chlordane	0.00083	< 0.00083 U
5103-71-9	alpha Chlordane	0.00083	< 0.00083 U
8001-35-2	Toxaphene	0.083	< 0.083 U

Reported in $\mu g/L$ (ppb)

Pest/PCB Surrogate Recovery

Decachlorobiphenyl	68.8%
Tetrachlorometaxylene	81.5%

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Lab Sample ID: GU59E LIMS ID: 04-10341 Matrix: Water Data Release Authorized: Reported: 07/16/04

Date Extracted: 07/02/04 Date Analyzed: 07/10/04 01:00 Instrument/Analyst: ECD4/YZ GPC Cleanup: No Sulfur Cleanup: Yes

Sample ID: LDW-SP-12-C-U SAMPLE

QC Report No: GU59-Windward Environmental Project: LDW-SEEP SAMPLING

Date Sampled: 07/01/04 Date Received: 07/01/04

Sample Amount: 3000 mL Final Extract Volume: 0.50 mL Dilution Factor: 1.00 pH: 7.2 Florisil Cleanup: No Silica Gel: Yes

CAS Number	Analyte	RL	Result
319-84-6	alpha-BHC	0.00083	< 0.00083 U
319-85-7	beta-BHC	0.00083	< 0.00083 U
319-86-8	delta-BHC	0.00083	< 0.00083 U
58-89-9	gamma-BHC (Lindane)	0.00083	< 0.00083 U
76-44-8	Heptachlor	0.00083	< 0.00083 U
309-00-2	Aldrin	0.00083	< 0.00083 U
1024-57-3	Heptachlor Epoxide	0.00083	< 0.00083 U
959-98-8	Endosulfan I	0.00083	< 0.00083 U
60-57-1	Dieldrin	0.0017	< 0.0017 U
72-55-9	4,4'-DDE	0.0017	< 0.0017 U
72-20-8	Endrin	0.0017	< 0.0017 U
33213-65-9	Endosulfan II	0.0017	< 0.0017 U
72-54-8	4,4'-DDD	0.0017	< 0.0017 U
1031-07-8	Endosulfan Sulfate	0.0017	< 0.0017 U
50-29-3	4,4'-DDT	0.0017	< 0.0017 U
72-43-5	Methoxychlor	0.0083	< 0.0083 U
53494-70-5	Endrin Ketone	0.0017	< 0.0017 U
7421-93-4	Endrin Aldehyde	0.0017	< 0.0017 U
5103-74-2	gamma Chlordane	0.00083	< 0.00083 U
5103-71-9	alpha Chlordane	0.00083	< 0.00083 U
8001-35-2	Toxaphene	0.083	< 0.083 U

Reported in $\mu g/L$ (ppb)

Pest/PCB Surrogate Recovery

Decachlorobiphenyl	58.0%
Tetrachlorometaxylene	42.8%



Lab Sample ID: GU59F LIMS ID: 04-10342 Matrix: Water Data Release Authorized: Reported: 07/16/04

Date Extracted: 07/02/04 Date Analyzed: 07/10/04 01:34 Instrument/Analyst: ECD4/YZ GPC Cleanup: No Sulfur Cleanup: Yes

CAS Number

Sample ID: LDW-SP-20-C-U SAMPLE

QC Report No: GU59-Windward Environmental Project: LDW-SEEP SAMPLING

Date Sampled: 07/01/04 Date Received: 07/01/04

Sample Amount: 3000 mL Final Extract Volume: 0.50 mL Dilution Factor: 1.00 pH: 7.8 Florisil Cleanup: No Silica Gel: Yes

CAS Number	Analyte	RL	Result
319-84-6	alpha-BHC	0.00083	< 0.00083 U
319-85-7	beta-BHC	0.00083	< 0.00083 U
319-86-8	delta-BHC	0.00083	< 0.00083 U
58-89-9	gamma-BHC (Lindane)	0.00083	< 0.00083 U
76-44-8	Heptachlor	0.00083	< 0.00083 U
309-00-2	Aldrin	0.00083	< 0.00083 U
1024-57-3	Heptachlor Epoxide	0.00083	< 0.00083 U
959-98-8	Endosulfan I	0.00083	< 0.00083 U
60-57-1	Dieldrin	0.0017	< 0.0017 U
72-55-9	4,4'-DDE	0.0017	< 0.0017 U
72-20-8	Endrin	0.0017	< 0.0017 U
33213-65-9	Endosulfan II	0.0017	< 0.0017 U
72-54-8	4,4'-DDD	0.0017	< 0.0017 U
1031-07-8	Endosulfan Sulfate	0.0017	< 0.0017 U
50-29-3	4,4'-DDT	0.0017	< 0.0017 U
72-43-5	Methoxychlor	0.0083	< 0.0083 U
53494-70-5	Endrin Ketone	0.0017	< 0.0017 U
7421-93-4	Endrin Aldehyde	0.0017	< 0.0017 U
5103-74-2	gamma Chlordane	0.00083	< 0.00083 U
5103-71-9	alpha Chlordane	0.00083	< 0.00083 U
8001-35-2	Toxaphene	0.083	< 0.083 U

Reported in $\mu g/L$ (ppb)

Pest/PCB Surrogate Recovery

Decachlorobiphenyl	66.2%
Tetrachlorometaxylene	48.5%



Lab Sample ID: GU59G LIMS ID: 04-10343 Matrix: Water Data Release Authorized, Reported: 08/04/04

Date Extracted: 07/02/04 Date Analyzed: 07/10/04 02:08 Instrument/Analyst: ECD4/YZ GPC Cleanup: No Sulfur Cleanup: No

Sample ID: LDW-SP-41-C-U SAMPLE

QC Report No: GU59-Windward Environmental Project: LDW-SEEP SAMPLING

Date Sampled: 07/01/04 Date Received: 07/01/04

Sample Amount: 3000 mL Final Extract Volume: 0.50 mL Dilution Factor: 1.00 pH: 6.2 Florisil Cleanup: No Silica Gel: No

CAS Number	Analyte	RL	
319-84-6	alpha-BHC	0.0039	< 0.0039 Y
319-85-7	beta-BHC	0.0026	< 0.0026 Y
319-86-8	delta-BHC	0.0066	< 0.0066 Y
58-89-9	gamma-BHC (Lindane)	0.00083	< 0.00083 U
76-44-8	Heptachlor	0.00083	< 0.00083 U
309-00-2	Aldrin	0.00083	< 0.00083 U
1024-57-3	Heptachlor Epoxide	0.00083	< 0.00083 U
959-98-8	Endosulfan I	0.00083	< 0.00083 U
60-57-1	Dieldrin	0.0017	< 0.0017 U
72-55-9	4,4'-DDE	0.0017	< 0.0017 U
72-20-8	Endrin	0.0017	< 0.0017 U
33213-65-9	Endosulfan II	0.0017	< 0.0017 U
72-54-8	4,4'-DDD	0.0017	< 0.0017 U
1031-07-8	Endosulfan Sulfate	0.0017	< 0.0017 U
50-29-3	4,4'-DDT	0.0017	< 0.0017 U
72-43-5	Methoxychlor	0.0083	< 0.0083 U
53494-70-5	Endrin Ketone	0.0017	< 0.0017 U
7421-93-4	Endrin Aldehyde	0.0017	< 0.0017 U
5103-74-2	gamma Chlordane	0.00083	< 0.00083 U
5103-71-9	alpha Chlordane	0.00083	< 0.00083 U
8001-35-2	Toxaphene	0.083	< 0.083 U

Reported in $\mu q/L$ (ppb)

Decachlorobiphenyl	72.2%
Tetrachlorometaxylene	76.2%



Lab Sample ID: GU59H LIMS ID: 04-10344 Matrix: Water Data Release Authorized: Reported: 08/04/04

Date Extracted: 07/02/04 Date Analyzed: 07/10/04 03:50 Instrument/Analyst: ECD4/YZ GPC Cleanup: No Sulfur Cleanup: No

Sample ID: LDW-SP-39-C-F SAMPLE

QC Report No: GU59-Windward Environmental Project: LDW-SEEP SAMPLING

Date Sampled: 07/01/04 Date Received: 07/01/04

Sample Amount: 3000 mL Final Extract Volume: 0.50 mL Dilution Factor: 1.00 pH: 6.8 Florisil Cleanup: No Silica Gel: No

CAS Number	Analyte	RL	Result
319-84-6	alpha-BHC	0.00083	< 0.00083 U
319-85-7	beta-BHC	0.00083	< 0.00083 U
319-86-8	delta-BHC	0.0051	< 0.0051 Y
58-89-9	gamma-BHC (Lindane)	0.00083	< 0.00083 U
76-44-8	Heptachlor	0.00083	< 0.00083 U
309-00-2	Aldrin	0.00083	< 0.00083 U
1024-57-3	Heptachlor Epoxide	0.00083	0.0090
959-98-8	Endosulfan I	0.00083	< 0.00083 U
60-57-1	Dieldrin	0.0017	< 0.0017 U
72-55-9	4,4'-DDE	0.0017	< 0.0017 U
72-20-8	Endrin	0.0017	< 0.0017 U
33213-65-9	Endosulfan II	0.0017	< 0.0017 U
72-54-8	4,4'-DDD	0.0017	< 0.0017 U
1031-07-8	Endosulfan Sulfate	0.0017	< 0.0017 U
50-29-3	4,4'-DDT	0.0017	< 0.0017 U
72-43-5	Methoxychlor	0.0083	< 0.0083 U
53494-70-5	Endrin Ketone	0.0017	< 0.0017 U
7421-93-4	Endrin Aldehyde	0.0017	< 0.0017 U
5103-74-2	gamma Chlordane	0.00083	< 0.00083 U
5103-71-9	alpha Chlordane	0.00083	< 0.00083 U
8001-35-2	Toxaphene	0.083	< 0.083 U

Reported in $\mu g/L$ (ppb)

Decachlorobiphenyl	69.2%
Tetrachlorometaxylene	75.5%

Lab Sample ID: GU59I LIMS ID: 04-10345 Matrix: Water Data Release Authorized:

Date Extracted: 07/02/04 Date Analyzed: 07/12/04 18:09 Instrument/Analyst: ECD4/YZ GPC Cleanup: No Sulfur Cleanup: Yes

CAS Number

7



Sample ID: LDW-SP-80-C-F SAMPLE

Result

QC Report No: GU59-Windward Environmental Project: LDW-SEEP SAMPLING

Date Sampled: 07/01/04 Date Received: 07/01/04

Sample Amount: 3000 mL Final Extract Volume: 0.50 mL Dilution Factor: 1.00 pH: 6.9 Florisil Cleanup: No Silica Gel: Yes

RL

	-		
319-84-6	alpha-BHC	0.00083	< 0.00083 U
319-85-7	beta-BHC	0.00083	< 0.00083 U
319-86-8	delta-BHC	0.00083	< 0.00083 U
58-89-9	gamma-BHC (Lindane)	0.00083	< 0.00083 U
76-44-8	Heptachlor	0.00083	< 0.00083 U
309-00-2	Aldrin	0.00083	< 0.00083 U
1024-57-3	Heptachlor Epoxide	0.00083	< 0.00083 U
959-98-8	Endosulfan I	0.00083	< 0.00083 U
60-57-1	Dieldrin	0.0017	< 0.0017 U
72-55-9	4,4'-DDE	0.0017	< 0.0017 U
72-20-8	Endrin	0.0017	< 0.0017 U
33213-65-9	Endosulfan II	0.0017	< 0.0017 U
72-54-8	4,4'-DDD	0.0017	< 0.0017 U
1031-07-8	Endosulfan Sulfate	0.0017	< 0.0017 U
50-29-3	4,4'-DDT	0.0017	< 0.0017 U
72-43-5	Methoxychlor	0.0083	< 0.0083 U
53494-70-5	Endrin Ketone	0.0017	< 0.0017 U
7421-93-4	Endrin Aldehyde	0.0017	< 0.0017 U
5103-74-2	gamma Chlordane	0.00083	< 0.00083 U
5103-71-9	alpha Chlordane	0.00083	< 0.00083 U
8001-35-2	Toxaphene	0.083	< 0.083 U

Analyte

Reported in $\mu g/L$ (ppb)

Decachlorobiphenyl	66.2%
Tetrachlorometaxylene	67.5%

ORGANICS ANALYSIS DATA SHEET Pesticides/PCB by GC/ECD Page 1 of 1

Lab Sample ID: GU59J LIMS ID: 04-10346 Matrix: Water Data Release Authorized; Reported: 08/04/04

Date Extracted: 07/02/04 Date Analyzed: 07/10/04 04:58 Instrument/Analyst: ECD4/YZ GPC Cleanup: No Sulfur Cleanup: No

Sample ID: LDW-SP-39-C-U SAMPLE

QC Report No: GU59-Windward Environmental Project: LDW-SEEP SAMPLING

Date Sampled: 07/01/04 Date Received: 07/01/04

Sample Amount: 3000 mL Final Extract Volume: 0.50 mL Dilution Factor: 1.00 pH: 7.3 Florisil Cleanup: No Silica Gel: No

CAS Number	Analyte	RL	Result	
319-84-6	alpha-BHC	0.00083	< 0.00083 U	
319-85-7	beta-BHC	0.00083	< 0.00083 U	
319-86-8	delta-BHC	0.0031	< 0.0031 Y	
58-89-9	gamma-BHC (Lindane)	0.00083	< 0.00083 U	
76-44-8	Heptachlor	0.00083	< 0.00083 U	
309-00-2	Aldrin	0.00083	< 0.00083 U	
1024-57-3	Heptachlor Epoxide	0.00083	0.0076	
959-98-8	Endosulfan I	0.00083	< 0.00083 U	
60-57-1	Dieldrin	0.0017	< 0.0017 U	
72-55-9	4,4'-DDE	0.0017	< 0.0017 U	
72-20-8	Endrin	0.0017	< 0.0017 U	
33213-65-9	Endosulfan II	0.0017	< 0.0017 U	
72-54-8	4,4'-DDD	0.0017	< 0.0017 U	
1031-07-8	Endosulfan Sulfate	0.0017	< 0.0017 U	
50-29-3	4,4'-DDT	0.0017	< 0.0017 U	
72-43-5	Methoxychlor	0.0083	< 0.0083 U	
53494-70-5	Endrin Ketone	0.0017	< 0.0017 U	
7421-93-4	Endrin Aldehyde	0.0017	< 0.0017 U	
5103-74-2	gamma Chlordane	0.00083	< 0.00083 U	
5103-71-9	alpha Chlordane	0.00083	< 0.00083 U	
8001-35-2	Toxaphene	0.083	< 0.083 U	

Reported in $\mu g/L$ (ppb)

Decachlorobiphenyl	59.2%
Tetrachlorometaxylene	62.8%

ANALYTICAL RESOURCES

ORGANICS ANALYSIS DATA SHEET Pesticides/PCB by GC/ECD Page 1 of 1

Lab Sample ID: GU59K LIMS ID: 04-10347 Matrix: Water Data Release Authorized: Reported: 07/16/04

Date Extracted: 07/02/04 Date Analyzed: 07/12/04 18:43 Instrument/Analyst: ECD4/YZ GPC Cleanup: No Sulfur Cleanup: Yes Sample ID: LDW-SP-80-C-U SAMPLE

QC Report No: GU59-Windward Environmental Project: LDW-SEEP SAMPLING

Date Sampled: 07/01/04 Date Received: 07/01/04

Sample Amount: 3000 mL Final Extract Volume: 0.50 mL Dilution Factor: 1.00 pH: 8.1 Florisil Cleanup: No Silica Gel: Yes

CAS Number	Analyte	RL	Result
319-84-6	alpha-BHC	0.00083	< 0.00083 U
319-85-7	beta-BHC	0.00083	< 0.00083 U
319-86-8	delta-BHC	0.00083	< 0.00083 U
58-89-9	gamma-BHC (Lindane)	0.00083	< 0.00083 U
76-44-8	Heptachlor	0.00083	< 0.00083 U
309-00-2	Aldrin	0.00083	< 0.00083 U
1024-57-3	Heptachlor Epoxide	0.00083	< 0.00083 U
959-98-8	Endosulfan I	0.00083	< 0.00083 U
60-57-1	Dieldrin	0.0017	< 0.0017 U
72-55-9	4,4'-DDE	0.0017	< 0.0017 U
72-20-8	Endrin	0.0017	< 0.0017 U
33213-65-9	Endosulfan II	0.0017	< 0.0017 U
72-54-8	4,4'-DDD	0.0017	< 0.0017 U
1031-07-8	Endosulfan Sulfate	0.0017	< 0.0017 U
50-29-3	4,4'-DDT	0.0017	< 0.0017 U
72-43-5	Methoxychlor	0.0083	< 0.0083 U
53494-70-5	Endrin Ketone	0.0017	< 0.0017 U
7421-93-4	Endrin Aldehyde	0.0017	< 0.0017 U
5103-74-2	gamma Chlordane	0.00083	< 0.00083 U
5103-71-9	alpha Chlordane	0.00083	< 0.00083 U
8001-35-2	Toxaphene	0.083	< 0.083 U

Reported in $\mu g/L$ (ppb)

Decachlorobiphenyl	59.5%
Tetrachlorometaxylene	35.0%

ORGANICS ANALYSIS DATA SHEET Pesticides/PCB by GC/ECD Page 1 of 1

Lab Sample ID: GU59D LIMS ID: 04-10340 Matrix: Water Data Release Authorized: Reported: 07/16/04

Date Extracted MS/MSD: 07/02/04

Date Analyzed MS: 07/09/04 23:52 MSD: 07/10/04 00:26 Instrument/Analyst MS: ECD4/YZ MSD: ECD4/YZ GPC Cleanup: No Florisil Cleanup: No

Sample ID: LDW-SP-41-C-F MS/MSD

QC Report No: GU59-Windward Environmental Project: LDW-SEEP SAMPLING

Date Sampled: 07/01/04 Date Received: 07/01/04

Sample Amount MS: 3000 mL MSD: 3000 mL Final Extract Volume MS: 0.5 mL MSD: 0.5 mL Dilution Factor MS: 1.00 MSD: 1.00 Sulfur Cleanup: No Silica Gel: No

Analyte	Sample	MS	Spike Added-MS	MS Recover	y MSD	Spike Added-MSD	MSD Recovery	RPD
gamma-BHC (Lindane)	< 0.0008	0.00527	0.0083	63.3%	0.00428	0.0083	51.4%	20.7%
Heptachlor	< 0.0008	0.00762	0.0083	91.5%	0.00690	0.0083	82.8%	9.9%
Aldrin	< 0.0008	0.00832	0.0083	99.9%	0.00693	0.0083	83.2%	18.2%
Dieldrin	< 0.0016	0.0131	0.0167	78.4%	0.0120	0.0167	71.9%	8.8%
Endrin	< 0.0016	0.0168	0.0167	101%	0.0149	0.0167	89.2%	12.0%
4,4'-DDT	< 0.0016	0.0140	0.0167	83.8%	0.0132	0.0167	79.0%	5.9%

Results reported in μ g/L (ppb)

RPD calculated using sample concentrations per SW846.



Lab Sample ID: LCS-070204 LIMS ID: 04-10337 Matrix: Water Data Release Authorized Reported: 07/16/04

Date Extracted: 07/02/04 Date Analyzed: 07/09/04 14:13 Instrument/Analyst: ECD4/YZ GPC Cleanup: No Florisil Cleanup: No

Sample ID: LCS-070204 LAB CONTROL

QC Report No: GU59-Windward Environmental Project: LDW-SEEP SAMPLING

Date Sampled: 07/01/04 Date Received: 07/01/04

Sample Amount: 3000 mL Final Extract Volume: 0.50 mL Dilution Factor: 1.00 Sulfur Cleanup: Yes Silica Gel: Yes

Analyte	Lab Control	Spike Added	Recovery
alpha-BHC	0.00200	0.00333	60.1%
beta-BHC	0.00233	0.00333	70.0%
delta-BHC	0.00267	0.00333	80.2%
gamma-BHC (Lindane)	0.00218	0.00333	65.5%
Heptachlor	0.00198	0.00333	59.5%
Aldrin	0.00177	0.00333	53.2%
Heptachlor Epoxide	0.00287	0.00333	86.2%
Endosulfan I	0.00258	0.00333	77.5%
Dieldrin	0.00543	0.00667	81.4%
4,4'-DDE	0.00575	0.00667	86.2%
Endrin	0.00607	0.00667	91.0%
Endosulfan II	0.00568	0.00667	85.2%
4,4'-DDD	0.00603	0.00667	90.4%
Endosulfan Sulfate	0.00560	0.00667	84.0%
4,4'-DDT	0.00663	0.00667	99.4%
Methoxychlor	0.0322	0.0333	96.7%
Endrin Ketone	0.00548	0.00667	82.2%
Endrin Aldehyde	0.00080	0.00667	12.0%
gamma Chlordane	0.00243	0.00333	73.0%
alpha Chlordane	0.00242	0.00333	72.7%

Pest/PCB Surrogate Recovery

Decachlorobiphenyl	74.0%
Tetrachlorometaxylene	31.8%

Results reported in μ g/L (ppb)



Lab Sample ID: MB-070204 LIMS ID: 04-10337 Matrix: Water Data Release Authorized: Reported: 07/16/04

Date Extracted: 07/02/04 Date Analyzed: 07/09/04 13:39 Instrument/Analyst: ECD4/YZ GPC Cleanup: No Sulfur Cleanup: Yes Sample ID: MB-070204 METHOD BLANK

QC Report No: GU59-Windward Environmental Project: LDW-SEEP SAMPLING

Date Sampled: NA Date Received: NA

Sample Amount: 3000 mL Final Extract Volume: 0.50 mL Dilution Factor: 1.00 pH: NA Florisil Cleanup: No Silica Gel: Yes

CAS Number	Analyte	RL	Result
319-84-6	alpha-BHC	0.00083	< 0.00083 U
319-85-7	beta-BHC	0.00083	< 0.00083 U
319-86-8	delta-BHC	0.00083	< 0.00083 U
58-89-9	gamma-BHC (Lindane)	0.00083	< 0.00083 U
76-44-8	Heptachlor	0.00083	< 0.00083 U
309-00-2	Aldrin	0.00083	< 0.00083 U
1024-57-3	Heptachlor Epoxide	0.00083	< 0.00083 U
959-98-8	Endosulfan I	0.00083	< 0.00083 U
60-57-1	Dieldrin	0.0017	< 0.0017 U
72-55-9	4,4'-DDE	0.0017	< 0.0017 U
72-20-8	Endrin	0.0017	< 0.0017 U
33213-65-9	Endosulfan II	0.0017	< 0.0017 U
72-54-8	4,4'-DDD	0.0017	< 0.0017 U
1031-07-8	Endosulfan Sulfate	0.0017	< 0.0017 U
50-29-3	4,4'-DDT	0.0017	< 0.0017 U
72-43-5	Methoxychlor	0.0083	< 0.0083 U
53494-70-5	Endrin Ketone	0.0017	< 0.0017 U
7421-93-4	Endrin Aldehyde	0.0017	< 0.0017 U
5103-74-2	gamma Chlordane	0.00083	< 0.00083 U
5103-71-9	alpha Chlordane	0.00083	< 0.00083 U
8001-35-2	Toxaphene	0.083	< 0.083 U

Reported in $\mu g/L$ (ppb)

Pest/PCB Surrogate Recovery

Decachlorobiphenyl	75.8%
Tetrachlorometaxylene	32.0%

FORM I

SAMPLE NO.

FORM 4 PCB METHOD BLANK SUMMARY

GUMBW7/2

Lab Name: ANALYTICAL RESOURCES, INC	Client: WINDWARD ENVIRONMENTAL
ARI Job No.: GU59	Project: LDW-SEEP SAMPLING
Lab Sample ID: GU26MBW7/2	Lab File ID: 0709-08R
Matrix (soil/water) WATER	Extraction: (SepF/Cont/Sonc) OTHER
Sulfur Cleanup (Y/N) Y	Date Extracted: 07/02/04
Date Analyzed (1): 07/09/04	Date Analyzed (2): 07/09/04
Time Analyzed (1): 1339	Time Analyzed (2): 1339
Instrument ID (1): ECD4	Instrument ID (2): ECD4
GC Column (1): RTX-CLP1 ID: 0.53(mm)	GC Column (2): RTX-CLP2 ID: 0.53(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

		1				
		EPA	LAB	DATE	DATE	
		SAMPLE NO.	SAMPLE ID	ANALYZED 1	ANALYZED 2	
				=========	=======	
	01	GUSBW7/2	GU26SBW1	07/09/04	07/09/04	
	02	LDW-SP-10-CF	GU59A	07/09/04	07/09/04	
	03	LDW-SP-12-CF	GU59B	07/09/04	07/09/04	: · ·
	04	LDW-SP-20-CF	GU59C	07/09/04	07/09/04	
	05	LDW-SP-41-CF	GU59D	07/09/04	07/09/04	
	0,6	LDW-SP-41-CF	GU59DMS	07/09/04	07/10/04	
· .	07	LDW-SP-41-CF	GU59DMSD	07/10/04	07/09/04	
,	08	LDW-SP-12-CU	GU59E	07/10/04	07/10/04	
	09	LDW-SP-20-CU	GU59F	07/10/04	07/10/04	
	10	LDW-SP-41-CU	GU59G	07/10/04	07/10/04	
	12	LDW-SP-39-CF	GU59H	07/10/04	07/10/04	
	13	LDW-SP-39-CU	GU59J	07/10/04	07/10/04	
	14	LDW-SP-80-CF	GU59I	07/12/04	07/12/04	
	15	LDW-SP-80-CU	GU59K	07/12/04	07/12/04	

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FORM IV PEST

PCB



Matrix: Water

QC Report No: GU45-Windward Environmental Project: LDW Seep Sampling

Client ID	DCBP	TCMX	TOT OUT
MB-070704	74.5%	40.8%	0
LCS-070704	46.5%	40.0%	0
LDW-SP-48-C-U	67.8%	68.0%	0
LDW-SP-48-C-F	63.8%	71.8%	0
LDW-SP-54-C-U	95.0%	85.0%	0
LDW-SP-54-C-U DL	D	D	0
LDW-SP-54-C-F	43.2%	52.2%	0
LDW-SP-82-C-U	45.5%	59.5%	0
LDW-SP-82-C-F	52.0%	57.8%	0
LDW-SP-82-C-FD-U	43.0%	34.5%	0
LDW-SP-82-C-FD-F	57.8%	53.2%	0

LCS/N	IB LIMITS	QC	LIMITS

(DCBP)	=	Decachlorobiphenyl	(42-138)	(25-134)
(TCMX)	=	Tetrachlorometaxylene	(32-117)	(25-118)

Prep Method: Manchester Log Number Range: 04-10230 to 04-10237



Matrix: Water

QC Report No: GU76-Windward Environmental Project: LDW-SEEP SAMPLING

Client ID	DCBP	TCMX	TOT OUT
MB-070704	74.5%	40.8%	0
LCS-070704	46.5%	40.0%	0
LDW-SP-62-C-F	45.8%	39.0%	0
LDW-SP-61-C-U	79.0%	44.5%	0
LDW-SP-61-C-F	57.2%	62.8%	0

		LCS/MB LIMITS	QC LIMITS
(DCBP)	= Decachlorobiphenyl	(42-138)	(25-134)
(TCMX)	= Tetrachlorometaxvlene	(32-117)	(25 - 118)

Prep Method: Manchester Log Number Range: 04-10430 to 04-10432



Matrix: Water

QC Report No: GU83-Windward Environmental Project: LDW-SEEP SAMPLING

<u>Client</u> ID	DCBP	TCMX	TOT OUT
MB-070704	74.5%	40.8%	0
LCS-070704	46.5%	40.0%	0
LDW-SP-75-C-U	36.2%	41.0%	.0
LDW-SP-75-C-F	50.0%	45.2%	0
LDW-SP-75-C-F MS	49.2%	36.5%	0
LDW-SP-75-C-F MSD	33.8%	36.5%	0
LDW-SP-64-RB-S-U	38.8%	48.8%	0
LDW-SP-64-RB-MP-U	25.5%	51.5%	0
LDW-SP-64-C-F	46.8%	49.2%	0

	LCS/MB LIMITS	QC LIMITS
(DCBP) = Decachlorobiphenyl	(42-138)	(25-134)
(TCMX) = Tetrachlorometaxylene	(32-117)	(25-118)

Prep Method: Manchester Log Number Range: 04-10461 to 04-10466



Matrix: Water

QC Report No: GU83-Windward Environmental Project: LDW-SEEP SAMPLING

Client ID	DCBP	TCMX	TOT OUT
MB-070904	78.8%	70.8%	0
LCS-070904	80.2%	71.8%	0
LDW-SP-64-C-U	61.2%	62.0%	0

		LCS/MB LIMITS	QC LIMITS
(DCBP)	= Decachlorobiphenyl	(42-138)	(25-134)
(TCMX)	= Tetrachlorometaxylene	(32-117)	(25-118)

Prep Method: SW3510C Log Number Range: 04-10465 to 04-10465

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Lab Sample ID: GU45A LIMS ID: 04-10230 Matrix: Water Data Release Authorized: Reported: 11/02/04

Date Extracted: 07/07/04 Date Analyzed: 07/13/04 17:24 Instrument/Analyst: ECD4/YZ GPC Cleanup: No Sulfur Cleanup: No



Sample ID: LDW-SP-48-C-U SAMPLE

QC Report No: GU45-Windward Environmental Project: LDW Seep Sampling

Date Sampled: 06/30/04 Date Received: 06/30/04

Sample Amount: 3000 mL Final Extract Volume: 0.50 mL Dilution Factor: 1.00 Silica Gel: No Acid Cleanup: No

.017	
.017 .017 .017 .017 .017 .017	< 0.017 U < 0.017 U < 0.017 U < 0.017 U < 0.017 U < 0.017 U < 0.017 U
	.017 .017 .017 .017 .017 .017

Reported in μ g/L (ppb)

PCB Surrogate Recovery

Decachlorobiphenyl	67.8%
Tetrachlorometaxylene	68.0%

FORM I

ORGANICS ANALYSIS DATA SHEET PCB by GC/ECD Method SW8082 Page 1 of 1

Lab Sample ID: GU45B LIMS ID: 04-10231 Matrix: Water Data Release Authorized: Reported: 07/21/04

Date Extracted: 07/07/04 Date Analyzed: 07/13/04 17:58 Instrument/Analyst: ECD4/YZ GPC Cleanup: No Sulfur Cleanup: No

Sample ID: LDW-SP-48-C-F SAMPLE

QC Report No: GU45-Windward Environmental Project: LDW Seep Sampling

Date Sampled: 06/30/04 Date Received: 06/30/04

Sample Amount: 3000 mL Final Extract Volume: 0.50 mL Dilution Factor: 1.00 Silica Gel: No Acid Cleanup: No

CAS Number	Analyte	RL	Result
12674-11-2	Aroclor 1016	0.017	< 0.017 U
53469-21-9	Aroclor 1242	0.017	< 0.017 U
12672-29-6	Aroclor 1248	0.017	< 0.017 U
11097-69-1	Aroclor 1254	0.017	< 0.017 U
11096-82-5	Aroclor 1260	0.017	< 0.017 U
11104-28-2	Aroclor 1221	0.017	< 0.017 U
11141-16-5	Aroclor 1232	0.017	< 0.017 U

Reported in $\mu g/L$ (ppb)

Decachlorobiphenyl	63.8%
Tetrachlorometaxylene	71.8%



Date Extracted: 07/07/04 Date Analyzed: 07/14/04 10:26 Instrument/Analyst: ECD4/YZ GPC Cleanup: No Sulfur Cleanup: Yes

INCORPORATED Sample ID: LDW-SP-54-C-U SAMPLE

ANALYTICAL RESOURCES

QC Report No: GU45-Windward Environmental Project: LDW Seep Sampling

Date Sampled: 06/30/04 Date Received: 06/30/04

Sample Amount: 3000 mL Final Extract Volume: 0.50 mL Dilution Factor: 10.0 Silica Gel: Yes Acid Cleanup: No

CAS NUMber	Analyte	RL	Result
12674-11-2	Aroclor 1016	0.17	< 0.17 U
53469-21-9	Aroclor 1242	0.17	< 0.17 U
12672-29-6	Aroclor 1248	0.17	4.0 E
11097-69-1	Aroclor 1254	0.17	2.3
11096-82-5	Aroclor 1260	0.17	1.9 P
11104-28-2	Aroclor 1221	0.17	< 0.17 U
11141-16-5	Aroclor 1232	0.17	< 0.17 U

Reported in $\mu g/L$ (ppb)

PCB Surrogate Recovery

Decachlorobiphenyl	95.0%
Tetrachlorometaxylene	85.0%

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Lab Sample ID: GU45C LIMS ID: 04-10232 Matrix: Water Data Release Authorized: Reported: 07/21/04

Date Extracted: 07/07/04 Date Analyzed: 07/19/04 15:33 Instrument/Analyst: ECD4/YZ GPC Cleanup: No Sulfur Cleanup: Yes

Sample ID: LDW-SP-54-C-U DILUTION

QC Report No: GU45-Windward Environmental Project: LDW Seep Sampling

Date Sampled: 06/30/04 Date Received: 06/30/04

Sample Amount: 3000 mL Final Extract Volume: 0.50 mL Dilution Factor: 20.0 Silica Gel: Yes Acid Cleanup: No

CAS Number	Analyte	RL	Result
12674-11-2	Aroclor 1016	0.33	< 0.33 U
53469-21-9	Aroclor 1242	0.33	< 0.33 U
12672-29-6	Aroclor 1248	0.33	4.7
11097-69-1	Aroclor 1254	0.33	3.0
11096-82-5	Aroclor 1260	0.33	1.9
11104-28-2	Aroclor 1221	0.33	< 0.33 U
11141-16-5	Aroclor 1232	0.33	< 0.33 Ŭ
53469-21-9 12672-29-6 11097-69-1 11096-82-5 11104-28-2 11141-16-5	Aroclor 1242 Aroclor 1248 Aroclor 1254 Aroclor 1260 Aroclor 1221 Aroclor 1232	0.33 0.33 0.33 0.33 0.33 0.33	< 0.33 U 4.7 3.0 1.9 < 0.33 U < 0.33 U

Reported in $\mu g/L$ (ppb)

Decachlorobiphenyl	D
Tetrachlorometaxylene	D



Date Extracted: 07/07/04 Date Analyzed: 07/14/04 12:06 Instrument/Analyst: ECD4/YZ GPC Cleanup: No Sulfur Cleanup: Yes



Sample ID: LDW-SP-54-C-F SAMPLE

QC Report No: GU45-Windward Environmental Project: LDW Seep Sampling

Date Sampled: 06/30/04 Date Received: 06/30/04

Sample Amount: 3000 mL Final Extract Volume: 0.50 mL Dilution Factor: 1.00 Silica Gel: Yes Acid Cleanup: No

CAS Number	Analyte	RL	Result
12674-11-2 53469-21-9 12672-29-6 11097-69-1 11096-82-5 11104-28-2	Aroclor 1016 Aroclor 1242 Aroclor 1248 Aroclor 1254 Aroclor 1254 Aroclor 1221 Aroclor 1221	0.017 0.017 0.017 0.017 0.017 0.017	< 0.017 U < 0.017 U 0.21 < 0.15 Y 0.047 < 0.017 U
11111 IO D	AIOCIOI 1232	0.017	< 0.017 U

Reported in $\mu g/L$ (ppb)

Decachlorobiphenyl	43.2%
Tetrachlorometaxylene	52.2%



Date Extracted: 07/07/04 Date Analyzed: 07/13/04 19:40 Instrument/Analyst: ECD4/YZ GPC Cleanup: No Sulfur Cleanup: Yes



Sample ID: LDW-SP-82-C-U SAMPLE

QC Report No: GU45-Windward Environmental Project: LDW Seep Sampling

Date Sampled: 06/30/04 Date Received: 06/30/04

Sample Amount: 3000 mL Final Extract Volume: 0.50 mL Dilution Factor: 1.00 Silica Gel: Yes Acid Cleanup: No

RL	Result
0.017 0.017 0.017 0.017 0.017 0.017 0.017 0.017	<pre>< 0.017 U < 0.017 U </pre>
	0.017 < 0.017 < 0.017 < 0.017 <

Reported in $\mu g/L$ (ppb)

Decachlorobiphenyl	45.5%
Tetrachlorometaxylene	59.5%

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Lab Sample ID: GU45F LIMS ID: 04-10235 Matrix: Water Data Release Authorized: Reported: 07/21/04

Date Extracted: 07/07/04 Date Analyzed: 07/13/04 20:14 Instrument/Analyst: ECD4/YZ GPC Cleanup: No Sulfur Cleanup: No

Sample ID: LDW-SP-82-C-F SAMPLE

QC Report No: GU45-Windward Environmental Project: LDW Seep Sampling

Date Sampled: 06/30/04 Date Received: 06/30/04

Sample Amount: 3000 mL Final Extract Volume: 0.50 mL Dilution Factor: 1.00 Silica Gel: No Acid Cleanup: No

CAS Number	Analyte	RL	Result
12674-11-2	Aroclor 1016	0.017	< 0.017 U
53469-21-9	Aroclor 1242	0.017	< 0.017 U
12672-29-6	Aroclor 1248	0.017	< 0.017 U
11097-69-1	Aroclor 1254	0.017	< 0.017 U
11096-82-5	Aroclor 1260	0.017	< 0.017 U
11104-28-2	Aroclor 1221	0.017	< 0.017 U
11141-16-5	Aroclor 1232	0.017	< 0.017 U

Reported in $\mu g/L$ (ppb)

PCB Surrogate Recovery

Decachlorobiphenyl	52.0%
Tetrachlorometaxylene	57.8%

Lab Sample ID: GU45G LIMS ID: 04-10236 Matrix: Water Data Release Authorized: Reported: 11/02/04

Date Extracted: 07/07/04 Date Analyzed: 07/13/04 20:48 Instrument/Analyst: ECD4/YZ GPC Cleanup: No Sulfur Cleanup: Yes

Sample ID: LDW-SP-82-C-FD-U SAMPLE

QC Report No: GU45-Windward Environmental Project: LDW Seep Sampling

Date Sampled: 06/30/04 Date Received: 06/30/04

Sample Amount: 3000 mL Final Extract Volume: 0.50 mL Dilution Factor: 1.00 Silica Gel: Yes Acid Cleanup: No

CAS Number	Analyte	RL	Result
12674-11-2	Aroclor 1016	0.017	< 0.017 U
53469-21-9	Aroclor 1242	0.017	< 0.017 U
12672-29-6	Aroclor 1248	0.017	< 0.017 U
11097-69-1	Aroclor 1254	0.017	< 0.017 U
11096-82-5	Aroclor 1260	0.017	< 0.017 U
11104-28-2	Aroclor 1221	0.017	< 0.017 U
11141-16-5	Aroclor 1232	0.017	< 0.017 U

Reported in $\mu g/L$ (ppb)

PCB Surrogate Recovery

Decachlorobiphenyl	43.0%
Tetrachlorometaxylene	34.5%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET PCB by GC/ECD Method SW8082 Page 1 of 1

Lab Sample ID: GU45H LIMS ID: 04-10237 Matrix: Water Data Release Authorized: Reported: 07/21/04

Date Extracted: 07/07/04 Date Analyzed: 07/13/04 21:22 Instrument/Analyst: ECD4/YZ GPC Cleanup: No Sulfur Cleanup: No Sample ID: LDW-SP-82-C-FD-F SAMPLE

QC Report No: GU45-Windward Environmental Project: LDW Seep Sampling

Date Sampled: 06/30/04 Date Received: 06/30/04

Sample Amount: 3000 mL Final Extract Volume: 0.50 mL Dilution Factor: 1.00 Silica Gel: No Acid Cleanup: No

CAS Number	Analyte	RL	Result
12674-11-2	Aroclor 1016	0.017	< 0.017 U
53469-21-9	Aroclor 1242	0.017	< 0.017 U
12672-29-6	Aroclor 1248	0.017	< 0.017 U
11097-69-1	Aroclor 1254	0.017	< 0.017 U
11096-82-5	Aroclor 1260	0.017	< 0.017 U
11104-28-2	Aroclor 1221	0.017	< 0.017 U
11141-16-5	Aroclor 1232	0.017	< 0.017 U

Reported in $\mu g/L$ (ppb)

PCB Surrogate Recovery

Decachlorobiphenyl	57.8%
Tetrachlorometaxylene	53.2%

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Lab Sample ID: GU76A LIMS ID: 04-10430 Matrix: Water Data Release Authorized:

Date Extracted: 07/07/04 Date Analyzed: 07/14/04 00:47 Instrument/Analyst: ECD4/YZ GPC Cleanup: No Sulfur Cleanup: No

Sample ID: LDW-SP-62-C-F SAMPLE

QC Report No: GU76-Windward Environmental Project: LDW-SEEP SAMPLING

Date Sampled: 07/02/04 Date Received: 07/02/04

Sample Amount: 3000 mL Final Extract Volume: 0.50 mL Dilution Factor: 1.00 Silica Gel: No Acid Cleanup: No

CAS Number	Analyte	RL	Result
12674-11-2	Aroclor 1016	0.017	< 0.017 U
53469-21-9	Aroclor 1242	0.017	< 0.017 U
12672-29-6	Aroclor 1248	0.017	< 0.017 U
11097-69-1	Aroclor 1254	0.017	< 0.017 U
11096-82-5	Aroclor 1260	0.017	< 0.017 U
11104-28-2	Aroclor 1221	0.017	< 0.017 U
11141-16-5	Aroclor 1232	0.017	< 0.017 U

Reported in μ g/L (ppb)

Decachlorobiphenyl	45.8%
Tetrachlorometaxylene	39.0%


Lab Sample ID: GU76B LIMS ID: 04-10431 Matrix: Water Data Release Authorized: Reported: 11/02/04

Date Extracted: 07/07/04 Date Analyzed: 07/14/04 01:21 Instrument/Analyst: ECD4/YZ GPC Cleanup: No Sulfur Cleanup: Yes

Sample ID: LDW-SP-61-C-U SAMPLE

QC Report No: GU76-Windward Environmental Project: LDW-SEEP SAMPLING

Date Sampled: 07/02/04 Date Received: 07/02/04

Sample Amount: 2500 mL Final Extract Volume: 0.50 mL Dilution Factor: 1.00 Silica Gel: Yes Acid Cleanup: No

CAS Number	Analyte	RL	Result
12674-11-2 53469-21-9 12672-29-6 11097-69-1 11096-82-5 11104-28-2 11141-16-5	Aroclor 1016 Aroclor 1242 Aroclor 1248 Aroclor 1254 Aroclor 1260 Aroclor 1221 Aroclor 1232	0.020 0.020 0.020 0.020 0.020 0.020 0.020	< 0.020 U < 0.020 U < 0.020 U < 0.020 U < 0.020 U < 0.020 U < 0.020 U
		0.020	< 0.020 0

Reported in μ g/L (ppb)

Decachlorobiphenyl	79.0%
Tetrachlorometaxylene	44.5%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET PCB by GC/ECD Method SW8082 Page 1 of 1

Lab Sample ID: GU76C LIMS ID: 04-10432 Matrix: Water Data Release Authorized: Reported: 07/21/04

Date Extracted: 07/07/04 Date Analyzed: 07/14/04 13:48 Instrument/Analyst: ECD4/YZ GPC Cleanup: No Sulfur Cleanup: No

Sample ID: LDW-SP-61-C-F SAMPLE

QC Report No: GU76-Windward Environmental Project: LDW-SEEP SAMPLING

Date Sampled: 07/02/04 Date Received: 07/02/04

Sample Amount: 3000 mL Final Extract Volume: 0.50 mL Dilution Factor: 1.00 Silica Gel: No Acid Cleanup: No

CAS Number	Analyte	RL	Result
12674-11-2	Aroclor 1016	0.017	< 0.017 U
53469-21-9	Aroclor 1242	0.017	< 0.017 U
12672-29-6	Aroclor 1248	0.017	< 0.017 U
11097-69-1	Aroclor 1254	0.017	< 0.017 U
11096-82-5	Aroclor 1260	0.017	< 0.017 U
11104-28-2	Aroclor 1221	0.017	< 0.017 U
11141-16-5	Aroclor 1232	0.017	< 0.017 U

Reported in $\mu g/L$ (ppb)

PCB Surrogate Recovery

Decachlorobiphenyl	57.2%
Tetrachlorometaxylene	62.8%



Lab Sample ID: GU83A LIMS ID: 04-10461 Matrix: Water Data Release Authorized: Reported: 11/02/04

Date Extracted: 07/07/04 Date Analyzed: 07/14/04 14:22 Instrument/Analyst: ECD4/YZ GPC Cleanup: No Sulfur Cleanup: No

Sample ID: LDW-SP-75-C-U SAMPLE

QC Report No: GU83-Windward Environmental Project: LDW-SEEP SAMPLING

Date Sampled: 07/03/04 Date Received: 07/03/04

Sample Amount: 3000 mL Final Extract Volume: 0.50 mL Dilution Factor: 1.00 Silica Gel: No Acid Cleanup: No

CAS Number	Analyte	RL	Result
12674-11-2	Aroclor 1016	0.017	< 0.017 U
53469-21-9	Aroclor 1242	0.017	< 0.017 U
12672-29-6	Aroclor 1248	0.017	< 0.017 U
11097-69-1	Aroclor 1254	0.017	< 0.017 U
11096-82-5	Aroclor 1260	0.017	< 0.017 U
11104-28-2	Aroclor 1221	0.017	< 0.017 U
11141-16-5	Aroclor 1232	0.017	< 0.017 U

PCB Surrogate Recovery

Decachlorobiphenyl	36.2%
Tetrachlorometaxylene	41.0%

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Reported in $\mu g/L$ (ppb)

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET PCB by GC/ECD Method SW8082 Page 1 of 1

Lab Sample ID: GU83B LIMS ID: 04-10462 Matrix: Water Data Release Authorized; Reported: 07/21/04

Date Extracted: 07/07/04 Date Analyzed: 07/14/04 14:56 Instrument/Analyst: ECD4/YZ GPC Cleanup: No Sulfur Cleanup: No

Sample ID: LDW-SP-75-C-F SAMPLE

QC Report No: GU83-Windward Environmental Project: LDW-SEEP SAMPLING

Date Sampled: 07/03/04 Date Received: 07/03/04

Sample Amount: 3000 mL Final Extract Volume: 0.50 mL Dilution Factor: 1.00 Silica Gel: No Acid Cleanup: No

CAS Number	Analyte	RL	Result
12674-11-2	Aroclor 1016	0.017	< 0.017 U
53469-21-9	Aroclor 1242	0.017	< 0.017 U
12672-29-6	Aroclor 1248	0.017	< 0.017 U
11097-69-1	Aroclor 1254	0.017	< 0.017 U
11096-82-5	Aroclor 1260	0.017	< 0.017 U
11104-28-2	Aroclor 1221	0.017	< 0.017 U
11141-16-5	Aroclor 1232	0.017	< 0.017 U

Reported in $\mu g/L$ (ppb)

Decachlorobiphenyl	50.0%
Tetrachlorometaxylene	45.2%



Lab Sample ID: GU83B LIMS ID: 04-10462 Matrix: Water Data Release Authorized: Reported: 11/02/04

Date Extracted: 07/07/04 Date Analyzed: 07/14/04 06:27 Instrument/Analyst: ECD4/YZ GPC Cleanup: No Sulfur Cleanup: No

Sample ID: LDW-SP-75-C-F MATRIX SPIKE

QC Report No: GU83-Windward Environmental Project: LDW-SEEP SAMPLING

Date Sampled: 07/03/04 Date Received: 07/03/04

Sample Amount: 1600 mL Final Extract Volume: 0.50 mL Dilution Factor: 1.00 Silica Gel: No Acid Cleanup: No

CAS Number	Analyte	RL	Result
12674-11-2	Aroclor 1016	0.031	
53469-21-9	Aroclor 1242	0.031	< 0.031 U
12672-29-6	Aroclor 1248	0.031	< 0.031 U
11097-69-1	Aroclor 1254	0.031	< 0.031 U
11096-82-5	Aroclor 1260	0.031	
11104-28-2	Aroclor 1221	0.031	< 0.031 U
11141-16-5	Aroclor 1232	0.031	< 0.031 U

Reported in $\mu g/L$ (ppb)

Decachlorobiphenyl	49.2%
Tetrachlorometaxylene	36.5%



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ORGANICS ANALYSIS DATA SHEET PCB by GC/ECD Method SW8082 Page 1 of 1

Lab Sample ID: GU83B LIMS ID: 04-10462 Matrix: Water Data Release Authorized:

Date Extracted: 07/07/04 Date Analyzed: 07/14/04 07:01 Instrument/Analyst: ECD4/YZ GPC Cleanup: No Sulfur Cleanup: No

Sample ID: LDW-SP-75-C-F MATRIX SPIKE DUP

QC Report No: GU83-Windward Environmental Project: LDW-SEEP SAMPLING

Date Sampled: 07/03/04 Date Received: 07/03/04

Sample Amount: 1600 mL Final Extract Volume: 0.50 mL Dilution Factor: 1.00 Silica Gel: No Acid Cleanup: No

CAS Number	Analyte	RL	Result
12674-11-2	Aroclor 1016	0.031	
53469-21-9	Aroclor 1242	0.031	< 0.031 U
12672-29-6	Aroclor 1248	0.031	< 0.031 U
11097-69-1	Aroclor 1254	0.031	< 0.031 U
11096-82-5	Aroclor 1260	0.031	
11104-28-2	Aroclor 1221	0.031	< 0.031 U
11141-16-5	Aroclor 1232	0.031	< 0.031 U

Reported in $\mu g/L$ (ppb)

Decachlorobiphenyl	33.8%
Tetrachlorometaxylene	36.5%

Lab Sample ID: GU83C LIMS ID: 04-10463 Matrix: Water Data Release Authorized: Reported: 07/21/04

Date Extracted: 07/07/04 Date Analyzed: 07/14/04 04:45 Instrument/Analyst: ECD4/YZ GPC Cleanup: No Sulfur Cleanup: No INCORPOR Sample ID: LDW-SP-64-RB-S-U SAMPLE

QC Report No: GU83-Windward Environmental Project: LDW-SEEP SAMPLING

Date Sampled: 07/03/04 Date Received: 07/03/04

Sample Amount: 3000 mL Final Extract Volume: 0.50 mL Dilution Factor: 1.00 Silica Gel: No Acid Cleanup: No

CAS Number	Analyte	RL	Result
12674-11-2	Aroclor 1016	0.017	< 0.017 U
53469-21-9	Aroclor 1242	0.017	< 0.017 U
12672-29-6	Aroclor 1248	0.017	< 0.017 U
11097-69-1	Aroclor 1254	0.017	< 0.017 U
11096-82-5	Aroclor 1260	0.017	< 0.017 U
11104-28-2	Aroclor 1221	0.017	< 0.017 U
11141-16-5	Aroclor 1232	0.017	< 0.017 U

Reported in $\mu g/L$ (ppb)

PCB Surrogate Recovery

Decachlorobiphenyl	38.8%
Tetrachlorometaxylene	48.8%

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ANALYTICAL RESOURCES INCORPORATED

Lab Sample ID: GU83D LIMS ID: 04-10464 Matrix: Water Data Release Authorized: Reported: 07/21/04

Date Extracted: 07/07/04 Date Analyzed: 07/14/04 05:19 Instrument/Analyst: ECD4/YZ GPC Cleanup: No Sulfur Cleanup: No

Sample ID: LDW-SP-64-RB-MP-U SAMPLE

QC Report No: GU83-Windward Environmental Project: LDW-SEEP SAMPLING

Date Sampled: 07/03/04 Date Received: 07/03/04

Sample Amount: 3000 mL Final Extract Volume: 0.50 mL Dilution Factor: 1.00 Silica Gel: No Acid Cleanup: No

CAS Number	Analyte	RL	Result
12674-11-2	Aroclor 1016	0.017	< 0.017 U
53469-21-9	Aroclor 1242	0.017	< 0.017 U
12672-29-6	Aroclor 1248	0.017	< 0.017 U
11097-69-1	Aroclor 1254	0.017	< 0.017 U
11096-82-5	Aroclor 1260	0.017	< 0.017 U
11104-28-2	Aroclor 1221	0.017	< 0.017 U
11141-16-5	Aroclor 1232	0.017	< 0.017 U

Reported in $\mu g/L$ (ppb)

PCB Surrogate Recovery

Decachlorobiphenyl	25.5%
Tetrachlorometaxylene	51.5%



ANALYTICAL RESOURCES INCORPORATED

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET PCB by GC/ECD Method SW8082 Page 1 of 1

Lab Sample ID: GU83E LIMS ID: 04-10465 Matrix: Water Data Release Authorized:

Date Extracted: 07/09/04 Date Analyzed: 07/14/04 14:29 Instrument/Analyst: ECD5/PK GPC Cleanup: No Sulfur Cleanup: Yes

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Sample ID: LDW-SP-64-C-U SAMPLE

QC Report No: GU83-Windward Environmental Project: LDW-SEEP SAMPLING

Date Sampled: 07/02/04 Date Received: 07/03/04

Sample Amount: 500 mL Final Extract Volume: 1.0 mL Dilution Factor: 1.00 Silica Gel: No Acid Cleanup: Yes

CAS Number	Analyte	RL	Result
12674-11-2	Aroclor 1016	0.040	< 0.040 U
53469-21-9	Aroclor 1242	0.040	< 0.040 U
12672-29-6	Aroclor 1248	0.040	0.092
11097-69-1	Aroclor 1254	0.040	0.21
11096-82-5	Aroclor 1260	0.040	0.16
11104-28-2	Aroclor 1221	0.040	< 0.040 U
11141-16-5	Aroclor 1232	0.040	< 0.040 U

Reported in $\mu g/L$ (ppb)

Decachlorobiphenyl	61.2%
Tetrachlorometaxylene	62.0%



Lab Sample ID: GU83F LIMS ID: 04-10466 Matrix: Water Data Release Authorized: Reported: 11/02/04

Date Extracted: 07/07/04 Date Analyzed: 07/14/04 05:53 Instrument/Analyst: ECD4/YZ GPC Cleanup: No Sulfur Cleanup: Yes

Sample ID: LDW-SP-64-C-F SAMPLE

QC Report No: GU83-Windward Environmental Project: LDW-SEEP SAMPLING

Date Sampled: 07/02/04 Date Received: 07/03/04

Sample Amount: 3000 mL Final Extract Volume: 0.50 mL Dilution Factor: 1.00 Silica Gel: Yes Acid Cleanup: No

CAS Number	Analyte	RL	Result
12674-11-2	Aroclor 1016	0.017	< 0.017 U
53469-21-9	Aroclor 1242	0.017	< 0.017 U
12672-29-6	Aroclor 1248	0.017	< 0.017 U
11097-69-1	Aroclor 1254	0.017	< 0.017 U
11096-82-5	Aroclor 1260	0.017	< 0.017 U
11104-28-2	Aroclor 1221	0.017	< 0.017 U
11141-16-5	Aroclor 1232	0.017	< 0.017 U

Reported in $\mu g/L$ (ppb)

Decachlorobiphenyl	46.8%
Tetrachlorometaxylene	49.2%

ANALYTICAL RESOURCES

ORGANICS ANALYSIS DATA SHEET PCB by GC/ECD Method SW8082 Page 1 of 1

Lab Sample ID: GU83B LIMS ID: 04-10462 Matrix: Water Data Release Authorized Reported: 07/21/04

Date Extracted MS/MSD: 07/07/04

Date Analyzed MS: 07/14/04 06:27

Instrument/Analyst MS: ECD4/YZ

MSD: 07/14/04 07:01

MSD: ECD4/YZ

QC Report No: GU83-Windward Environmental Project: LDW-SEEP SAMPLING

Sample ID: LDW-SP-75-C-F

MS/MSD

Date Sampled: 07/03/04 Date Received: 07/03/04

Sample Amount MS: 1600 mL MSD: 1600 mL Final Extract Volume MS: 0.5 mL MSD: 0.5 mL Dilution Factor MS: 1.00 MSD: 1.00 Silica Gel: Yes Acid Cleanup: No

Analyte	Sample	MS	Spike Added-MS	MS Recovery	MSD	Spike Added-MSD	MSD Recovery	RPD
Aroclor 1016	< 0.017	0.165	0.315	52.4%	0.152	0.315	48.3%	8.2%
Aroclor 1260	< 0.017	0.196	0.315	62.2%	0.163	0.315	51.7%	18.4%

Results reported in $\mu g/L$

GPC Cleanup: No

Sulfur Cleanup: Yes

RPD calculated using sample concentrations per SW846.



Lab Sample ID: LCS-070704 LIMS ID: 04-10230 Matrix: Water Data Release Authorized: Reported: 07/21/04

Date Extracted: 07/07/04 Date Analyzed: 07/13/04 16:50 Instrument/Analyst: ECD4/YZ GPC Cleanup: No Sulfur Cleanup: Yes

Sample ID: LCS-070704 LAB CONTROL

QC Report No: GU45-Windward Environmental Project: LDW Seep Sampling

Date Sampled: 06/30/04 Date Received: 06/30/04

Sample Amount: 3000 mL Final Extract Volume: 0.50 mL Dilution Factor: 1.00 Silica Gel: Yes Acid Cleanup: No

N-sluts	Lab Control	Spike Added	Recovery
Aroclor 1016	0.081	0.168	48.2%
Aroclor 1260	0.093	0.168	55.4%

PCB Surrogate Recovery

Decachlorobiphenvl	46.5%
Decacinitoros	10 08
Tetrachlorometaxylene	40.0%

Results reported in μ g/L



Lab Sample ID: LCS-070904 LIMS ID: 04-10465 Matrix: Water Data Release Authorized: Reported: 07/21/04

Date Extracted: 07/09/04 Date Analyzed: 07/14/04 12:40 Instrument/Analyst: ECD5/PK GPC Cleanup: No Sulfur Cleanup: Yes

Sample ID: LCS-070904 LAB CONTROL

QC Report No: GU83-Windward Environmental Project: LDW-SEEP SAMPLING

Date Sampled: 07/02/04 Date Received: 07/03/04

Sample Amount: 500 mL Final Extract Volume: 1.0 mL Dilution Factor: 1.00 Silica Gel: No Acid Cleanup: Yes

Analyte	Lab Control	Spike Added	Recovery
Aroclor 1016	1.39	2.00	69.5%
Aroclor 1260	1.48	2.00	74.0%

PCB Surrogate Recovery

Decachlorobiphenyl	80.2%
Tetrachlorometaxylene	71.8%

Results reported in $\mu g/L$

SAMPLE NO.

GU45MBW7/7

Lab Name: ANALYTICAL RESOURCES, INC	Client: WINDWARD ENVIRONMENTAL
ARI Job No.: GU45/GU76/GU83	Project: LDW-SEEP SAMPLING
Lab Sample ID: GU45MBW7/7	Lab File ID: 0713-06R
Matrix (soil/water) WATER	Extraction: (SepF/Cont/Sonc) OTHER
Sulfur Cleanup (Y/N) Y	Date Extracted: 07/09/04
Date Analyzed (1): 07/13/04	Date Analyzed (2): 07/13/04
Time Analyzed (1): 1542	Time Analyzed (2): 1542
Instrument ID (1): ECD4	Instrument ID (2): ECD4
GC Column (1): RTX-CLP1 ID: 0.53(mm)	GC Column (2): RTX-CLP2 ID: 0.53(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	EPA	LAB	DATE	DATE	٢
	SAMPLE NO.	SAMPLE ID	ANALYZED 1	ANALYZED 2	
		=======================================	===========	=========	
01	GU45SBW7/7	GU45SBW2	07/13/04	07/13/04	1
02	LDW-SP-48-CU	GU45A	07/13/04	07/13/04	
03	LDW-SP-48-CF	GU45B	07/13/04	07/13/04	
04	LDW-SP-82-CU	GU45E	07/13/04	07/13/04	
05	LDW-SP-82-CF	GU45F	07/13/04	07/13/04	
06	LDW-SP82CFDU	GU45G	07/13/04	07/13/04	
07	LDW-SP82CFDF	GU45H	07/13/04	07/13/04	
80	LDW-SP-62-CF	GU76A	07/14/04	07/14/04	
09	LDW-SP-61-CU	GU76B	07/14/04	07/14/04	
10	LDW-SP64RBSU	GU83C	07/14/04	07/14/04	
11	LDW-SP64RBMP	GU83D	07/14/04	07/14/04	
12	LDW-SP-64-CF	GU83F	07/14/04	07/14/04	
13	LDW-SP-75-CF	GU83BMS	07/14/04	07/14/04	
14	LDW-SP-75-CF	GU83BMSD	07/14/04	07/14/04	
15	LDW-SP-54-CU	GU45C10X	07/14/04	07/14/04	
16	LDW-SP-54-CF	GU45D	07/14/04	07/14/04	
17	LDW-SP-61-CF	GU76C	07/14/04	07/14/04	
18	LDW-SP-75-CU	GU83A	07/14/04	07/14/04	
19	LDW-SP-75-CF	GU83B	07/14/04	07/14/04	
20	LDW-SP-54-CU	GU45C20X	07/19/04	07/19/04	
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FORM IV PEST



Lab Sample ID: MB-070704 LIMS ID: 04-10230 Matrix: Water Data Release Authorized: Reported: 07/21/04

Date Extracted: 07/07/04 Date Analyzed: 07/13/04 15:42 Instrument/Analyst: ECD4/YZ GPC Cleanup: No Sulfur Cleanup: Yes

Sample ID: MB-070704 METHOD BLANK

QC Report No: GU45-Windward Environmental Project: LDW Seep Sampling

Date Sampled: NA Date Received: NA

Sample Amount: 3000 mL Final Extract Volume: 0.50 mL Dilution Factor: 1.00 Silica Gel: Yes Acid Cleanup: No

CAS Number	Analyte	RL	Result
12674-11-2 53469-21-9 12672-29-6 11097-69-1 11096-82-5 11104-28-2	Aroclor 1016 Aroclor 1242 Aroclor 1248 Aroclor 1254 Aroclor 1260 Aroclor 1221	0.017 0.017 0.017 0.017 0.017 0.017 0.017	< 0.017 U < 0.017 U < 0.017 U < 0.017 U < 0.017 U < 0.017 U < 0.017 U
11141-16-5	Aroclor 1232	0.017	< 0.017 U

Reported in $\mu g/L$ (ppb)

Decachlorobiphenyl	74.5%
Tetrachlorometaxylene	40.8%

4 PCB METHOD BLANK SUMMARY

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	GU81MBW1
Lab Name: ANALYTICAL RESOURCES, INC	Client: WINDWARD ENV.
ARI Job No.: GU83	Project: LOW-SEEP SAMPLING
Lab Sample ID: GU81MBW1	Lab File ID: 0714B006
Matrix (soil/water) WATER	Date Extracted: 07/09/04
Date Analyzed (1): 07/14/04	Date Analyzed (2): 07/14/04
Time Analyzed (1): 1219	Time Analyzed (2): 1219
Instrument ID (1): ECD5	Instrument ID (2): ECD5
GC Column (1): DB5 ID: 0.53 (mm)	GC Column (2): ZB35 ID: 0.53(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	Client	LAB	DATE	DATE
	SAMPLE NO.	SAMPLE ID	ANALYZED 1	ANALYZED 2
01 02	GU81LCSW1 LDW-SP-64-C-U	GU81LCSW1 GU83E	======================================	========= 07/14/04 07/14/04

page 1 of 1

FORM IV PCB



Lab Sample ID: MB-070904 LIMS ID: 04-10465 Matrix: Water Data Release Authorized: Reported: 07/21/04

Date Extracted: 07/09/04 Date Analyzed: 07/14/04 12:19 Instrument/Analyst: ECD5/PK GPC Cleanup: No Sulfur Cleanup: Yes



Sample ID: MB-070904 METHOD BLANK

QC Report No: GU83-Windward Environmental Project: LDW-SEEP SAMPLING

Date Sampled: NA Date Received: NA

Sample Amount: 500 mL Final Extract Volume: 1.0 mL Dilution Factor: 1.00 Silica Gel: No Acid Cleanup: Yes

CAS Number	Analyte	RL	Result
12674-11-2	Aroclor 1016	0.040	< 0.040 U
53469-21-9	Aroclor 1242	0.040	< 0.040 U
12672-29-6	Aroclor 1248	0.040	< 0.040 U
11097-69-1	Aroclor 1254	0.040	< 0.040 U
11096-82-5	Aroclor 1260	0.040	< 0.040 U
11104-28-2	Aroclor 1221	0.040	< 0.040 U
11141-16-5	Aroclor 1232	0.040	< 0.040 U

Reported in $\mu g/L$ (ppb)

PCB Surrogate Recovery

Decachlorobiphenyl	78.8%
Tetrachlorometaxylene	70.8%



SW8082/PCB WATER SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: GU59-Windward Environmental Project: LDW-SEEP SAMPLING

Client ID	DCBP	TCMX	TOT OUT
MB-070204	72.5%	32.0%	0
LCS-070204	63.2%	35.8%	0
LDW-SP-10-C-F	51.0%	32.5%	0
LDW-SP-12-C-F	55.5%	48.8%	0
LDW-SP-20-C-F	66.0%	44.5%	0
LDW-SP-41-C-F	85.0%	59.5%	0
LDW-SP-12-C-U	55.2%	42.8%	0
LDW-SP-20-C-U	53.2%	48.5%	0
LDW-SP-41-C-U	64.5%	76.2%	0
LDW-SP-41-C-U MS	66.8%	88.2%	0
LDW-SP-41-C-U MSD	66.0%	82.2%	0
LDW-SP-39-C-F	57.0%	75.5%	0
LDW-SP-80-C-F	53.0%	67.5%	0
LDW-SP-39-C-U	55.8%	62.8%	0
LDW-SP-80-C-U	55.2%	35.0%	0

		LCS/MB LIMITS	QC LIMITS
(DCBP)	= Decachlorobiphenyl	(42-138)	(25-134)
(TCMX)	= Tetrachlorometaxylene	(32-117)	(25-118)

Prep Method: Manchester Log Number Range: 04-10337 to 04-10347



Lab Sample ID: GU59A LIMS ID: 04-10337 Matrix: Water Data Release Authorized: Reported: 07/16/04

Date Extracted: 07/02/04 Date Analyzed: 07/09/04 18:45 Instrument/Analyst: ECD4/YZ GPC Cleanup: No Sulfur Cleanup: Yes Sample ID: LDW-SP-10-C-F SAMPLE

QC Report No: GU59-Windward Environmental Project: LDW-SEEP SAMPLING

Date Sampled: 07/01/04 Date Received: 07/01/04

Sample Amount: 3000 mL Final Extract Volume: 0.50 mL Dilution Factor: 1.00 Silica Gel: Yes Acid Cleanup: No

CAS Number	Analyte	RL	Result
12674-11-2 53469-21-9 12672-29-6 11097-69-1 11096-82-5	Aroclor 1016 Aroclor 1242 Aroclor 1248 Aroclor 1254 Aroclor 1260	0.017 0.017 0.017 0.017 0.017 0.017	< 0.017 U < 0.017 U < 0.017 U < 0.017 U < 0.017 U < 0.017 U
11104-28-2	Aroclor 1221 Aroclor 1232	0.017 0.017	< 0.017 U < 0.017 U

Reported in $\mu g/L$ (ppb)

Decachlorobiphenyl	51.0%
Tetrachlorometaxylene	32.5%



Lab Sample ID: GU59B LIMS ID: 04-10338 Matrix: Water Data Release Authorized: Reported: 11/02/04

Date Extracted: 07/02/04 Date Analyzed: 07/09/04 19:19 Instrument/Analyst: ECD4/YZ GPC Cleanup: No Sulfur Cleanup: Yes

Sample ID: LDW-SP-12-C-F SAMPLE

QC Report No: GU59-Windward Environmental Project: LDW-SEEP SAMPLING

Date Sampled: 07/01/04 Date Received: 07/01/04

Sample Amount: 3000 mL Final Extract Volume: 0.50 mL Dilution Factor: 1.00 Silica Gel: Yes Acid Cleanup: No

CAS Number	Analyte	RL	Result
12674-11-2	Aroclor 1016	0.017	< 0.017 U
53469-21-9	Aroclor 1242	0.017	< 0.017 U
126/2-29-6	Aroclor 1248	0.017	< 0.017 U
11097-89-1	Aroclor 1254	0.017	< 0.017 U
11104-28-2	Aroclor 1220	0.017	< 0.017 U
11141-16-5	Aroclor 1232	0.017	< 0.017 U < 0.017 U

Reported in $\mu g/L$ (ppb)

Decachlorobiphenyl	55.5%
Tetrachlorometaxylene	48.8%



Lab Sample ID: GU59C LIMS ID: 04-10339 Matrix: Water Data Release Authorized: Reported: 07/16/04

Date Extracted: 07/02/04 Date Analyzed: 07/09/04 19:53 Instrument/Analyst: ECD4/YZ GPC Cleanup: No Sulfur Cleanup: No

Sample ID: LDW-SP-20-C-F SAMPLE

QC Report No: GU59-Windward Environmental Project: LDW-SEEP SAMPLING

Date Sampled: 07/01/04 Date Received: 07/01/04

Sample Amount: 3000 mL Final Extract Volume: 0.50 mL Dilution Factor: 1.00 Silica Gel: No Acid Cleanup: No

CAS Number	Analyte	RL	Result
12674-11-2	Aroclor 1016	0.017	< 0.017 U
53469-21-9	Aroclor 1242	0.017	< 0.017 U
12672-29-6	Aroclor 1248	0.017	< 0.017 U
11097-69-1	Aroclor 1254	0.017	< 0.017 U
11096-82-5	Aroclor 1260	0.017	< 0.017 U
11104-28-2	Aroclor 1221	0.017	< 0.017 U
11141-16-5	Aroclor 1232	0.017	< 0.017 U

Reported in $\mu g/L$ (ppb)

Decachlorobiphenyl	66.0%
Tetrachlorometaxylene	44.5%



Lab Sample ID: GU59D LIMS ID: 04-10340 Matrix: Water Data Release Authorized: Reported: 07/16/04

Date Extracted: 07/02/04 Date Analyzed: 07/09/04 23:18 Instrument/Analyst: ECD4/YZ GPC Cleanup: No Sulfur Cleanup: No

Sample ID: LDW-SP-41-C-F SAMPLE

QC Report No: GU59-Windward Environmental Project: LDW-SEEP SAMPLING

Date Sampled: 07/01/04 Date Received: 07/01/04

Sample Amount: 3000 mL Final Extract Volume: 0.50 mL Dilution Factor: 1.00 Silica Gel: No Acid Cleanup: No

CAS Number	Analyte	RL	Result
12674-11-2	Aroclor 1016	0.017 <	: 0.017 U
53469-21-9	Aroclor 1242	0.017 <	: 0.017 U
12672-29-6	Aroclor 1248	0.017 <	: 0.017 U
11097-69-1	Aroclor 1254	0.017 <	: 0.017 U
11096-82-5	Aroclor 1260	0.017 <	: 0.017 U
11104-28-2	Aroclor 1221	0.017 <	0.017 U
11141-16-5	Aroclor 1232	0.017 <	0.017 U

Reported in $\mu g/L$ (ppb)

PCB Surrogate Recovery

Decachlorobiphenyl	85.0%
Tetrachlorometaxylene	59.5%

FORM I



Lab Sample ID: GU59E LIMS ID: 04-10341 Matrix: Water Data Release Authorized: Reported: 11/02/04

Date Extracted: 07/02/04 Date Analyzed: 07/10/04 01:00 Instrument/Analyst: ECD4/YZ GPC Cleanup: No Sulfur Cleanup: Yes

Sample ID: LDW-SP-12-C-U SAMPLE

QC Report No: GU59-Windward Environmental Project: LDW-SEEP SAMPLING

Date Sampled: 07/01/04 Date Received: 07/01/04

Sample Amount: 3000 mL Final Extract Volume: 0.50 mL Dilution Factor: 1.00 Silica Gel: Yes Acid Cleanup: No

CAS Number	Analyte	RL	Result
12674-11-2 53469-21-9 12672-29-6 11097-69-1 11096-82-5 11104-28-2 11141-16-5	Aroclor 1016 Aroclor 1242 Aroclor 1248 Aroclor 1254 Aroclor 1260 Aroclor 1221 Aroclor 1232	0.017 0.017 0.017 0.017 0.017 0.017 0.017 0.017	< 0.017 U < 0.017 U

Reported in $\mu g/L$ (ppb)

PCB Surrogate Recovery

Decachlorobiphenyl	55.2%
Tetrachlorometaxylene	42.8%



Lab Sample ID: GU59F LIMS ID: 04-10342 Matrix: Water Data Release Authorized: Reported: 11/02/04

Date Extracted: 07/02/04 Date Analyzed: 07/10/04 01:34 Instrument/Analyst: ECD4/YZ GPC Cleanup: No Sulfur Cleanup: Yes

Sample ID: LDW-SP-20-C-U SAMPLE

QC Report No: GU59-Windward Environmental Project: LDW-SEEP SAMPLING

Date Sampled: 07/01/04 Date Received: 07/01/04

Sample Amount: 3000 mL Final Extract Volume: 0.50 mL Dilution Factor: 1.00 Silica Gel: Yes Acid Cleanup: No

CAS Number	Analyte	RL	Result
12674-11-2 53469-21-9 12672-29-6 11097-69-1 11096-82-5 11104-28-2	Aroclor 1016 Aroclor 1242 Aroclor 1248 Aroclor 1254 Aroclor 1260 Aroclor 1221	0.017 0.017 0.017 0.017 0.017 0.017	< 0.017 U < 0.017 U < 0.017 U < 0.017 U < 0.017 U < 0.017 U < 0.017 U
11141-16-5	Aroclor 1232	0.017	< 0.017 U

Reported in $\mu g/L$ (ppb)

Decachlorobiphenyl	53.2%
Fetrachlorometaxylene	48.5%



Lab Sample ID: GU59G LIMS ID: 04-10343 Matrix: Water Data Release Authorized: Reported: 07/16/04

Date Extracted: 07/02/04 Date Analyzed: 07/10/04 02:08 Instrument/Analyst: ECD4/YZ GPC Cleanup: No Sulfur Cleanup: No

Sample ID: LDW-SP-41-C-U SAMPLE

QC Report No: GU59-Windward Environmental Project: LDW-SEEP SAMPLING

Date Sampled: 07/01/04 Date Received: 07/01/04

Sample Amount: 3000 mL Final Extract Volume: 0.50 mL Dilution Factor: 1.00 Silica Gel: No Acid Cleanup: No

CAS Number	Analyte	RL	Result
12674-11-2	Aroclor 1016	0.017	< 0.017 U
53469-21-9	Aroclor 1242	0.017	< 0.017 U
12672-29-6	Aroclor 1248	0.017	< 0.017 U
11097-69-1	Aroclor 1254	0.017	< 0.017 U
11096-82-5	Aroclor 1260	0.017	< 0.017 U
11104-28-2	Aroclor 1221	0.017	< 0.017 U
11141-16-5	Aroclor 1232	0.017	< 0.017 U

Reported in $\mu g/L$ (ppb)

Decachlorobiphenyl	64.5%
Tetrachlorometaxylene	76.2%

ANALYTICAL RESOURCES

ORGANICS ANALYSIS DATA SHEET PCB by GC/ECD Method SW8082 Page 1 of 1

Lab Sample ID: GU59G LIMS ID: 04-10343 Matrix: Water Data Release Authorized: Reported: 07/16/04

Date Extracted: 07/02/04 Date Analyzed: 07/10/04 02:42 Instrument/Analyst: ECD4/YZ GPC Cleanup: No Sulfur Cleanup: No

Sample ID: LDW-SP-41-C-U MATRIX SPIKE

QC Report No: GU59-Windward Environmental Project: LDW-SEEP SAMPLING

Date Sampled: 07/01/04 Date Received: 07/01/04

Sample Amount: 3000 mL Final Extract Volume: 0.50 mL Dilution Factor: 1.00 Silica Gel: No Acid Cleanup: No

CAS	Number	Anal	lyte	RL		Result
1267	4-11-2	Aroclor	1016	0.017		
5346	9-21-9	Aroclor	1242	0.017	<	0.017 U
1267	2-29-6	Aroclor	1248	0.017	<	0.017 U
1109	7-69-1	Aroclor	1254	0.017	<	0.017 U
1109	6-82-5	Aroclor	1260	0.017		
1110	4-28-2	Aroclor	1221	0.017	<	0.017 U
1114	1-16-5	Aroclor	1232	0.017	<	0.017 U

Reported in μ g/L (ppb)

Decachlorobiphenyl	66.8%
Tetrachlorometaxylene	88.2%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET PCB by GC/ECD Method SW8082 Page 1 of 1

Lab Sample ID: GU59G LIMS ID: 04-10343 Matrix: Water Data Release Authorized: Reported: 07/16/04

Date Extracted: 07/02/04 Date Analyzed: 07/10/04 03:16 Instrument/Analyst: ECD4/YZ GPC Cleanup: No Sulfur Cleanup: No Sample ID: LDW-SP-41-C-U MATRIX SPIKE DUP

QC Report No: GU59-Windward Environmental Project: LDW-SEEP SAMPLING

Date Sampled: 07/01/04 Date Received: 07/01/04

Sample Amount: 3000 mL Final Extract Volume: 0.50 mL Dilution Factor: 1.00 Silica Gel: No Acid Cleanup: No

CAS Number	Analyte	RL	Result
12674-11-2	Aroclor 1016	0.017	
53469-21-9	Aroclor 1242	0.017	< 0.017 U
12672-29-6	Aroclor 1248	0.017	< 0.017 U
11097-69-1	Aroclor 1254	0.017	< 0.017 U
11096-82-5	Aroclor 1260	0.017	
11104-28-2	Aroclor 1221	0.017	< 0.017 U
11141-16-5	Aroclor 1232	0.017	< 0.017 U

Reported in $\mu g/L$ (ppb)

PCB Surrogate Recovery

Decachlorobiphenyl	66.0%
Tetrachlorometaxylene	82.2%



Lab Sample ID: GU59H LIMS ID: 04-10344 Matrix: Water Data Release Authorized: Reported: 07/16/04

Date Extracted: 07/02/04 Date Analyzed: 07/10/04 03:50 Instrument/Analyst: ECD4/YZ GPC Cleanup: No Sulfur Cleanup: No

Sample ID: LDW-SP-39-C-F SAMPLE

QC Report No: GU59-Windward Environmental Project: LDW-SEEP SAMPLING

Date Sampled: 07/01/04 Date Received: 07/01/04

Sample Amount: 3000 mL Final Extract Volume: 0.50 mL Dilution Factor: 1.00 Silica Gel: No Acid Cleanup: No

CAS Number	Analyte	RL	Result
12674-11-2	Aroclor 1016	0.017	< 0.017 U
53469-21-9	Aroclor 1242	0.017	< 0.017 U
12672-29-6	Aroclor 1248	0.017	< 0.017 U
11097-69-1	Aroclor 1254	0.017	< 0.017 U
11096-82-5	Aroclor 1260	0.017	< 0.017 U
11104-28-2	Aroclor 1221	0.017	< 0.017 U
11141-16-5	Aroclor 1232	0.017	< 0.017 U

Reported in $\mu g/L$ (ppb)

Decachlorobiphenyl	57.0%
Tetrachlorometaxylene	75.5%



Lab Sample ID: GU59I LIMS ID: 04-10345 Matrix: Water Data Release Authorized: Reported: 11/02/04

Date Extracted: 07/02/04 Date Analyzed: 07/12/04 18:09 Instrument/Analyst: ECD4/YZ GPC Cleanup: No Sulfur Cleanup: Yes

Sample ID: LDW-SP-80-C-F SAMPLE

QC Report No: GU59-Windward Environmental Project: LDW-SEEP SAMPLING

Date Sampled: 07/01/04 Date Received: 07/01/04

Sample Amount: 3000 mL Final Extract Volume: 0.50 mL Dilution Factor: 1.00 Silica Gel: Yes Acid Cleanup: No

CAS Number	Analyte	RL	Result
12674-11-2	Aroclor 1016	0.017	< 0.017 U
53469-21-9	Aroclor 1242	0.017	< 0.017 U
12672-29-6	Aroclor 1248	0.017	< 0.017 U
11097-69-1	Aroclor 1254	0.017	< 0.017 U
11096-82-5	Aroclor 1260	0.017	< 0.017 U
11104-28-2	Aroclor 1221	0.017	< 0.017 U
11141-16-5	Aroclor 1232	0.017	< 0.017 U

Reported in μ g/L (ppb)

Decachlorobiphenyl	53.0%
Tetrachlorometaxylene	67.5%



Lab Sample ID: GU59J LIMS ID: 04-10346 Matrix: Water Data Release Authorized: Reported: 07/16/04

Date Extracted: 07/02/04 Date Analyzed: 07/10/04 04:58 Instrument/Analyst: ECD4/YZ GPC Cleanup: No Sulfur Cleanup: No

Sample ID: LDW-SP-39-C-U SAMPLE

QC Report No: GU59-Windward Environmental Project: LDW-SEEP SAMPLING

Date Sampled: 07/01/04 Date Received: 07/01/04

Sample Amount: 3000 mL Final Extract Volume: 0.50 mL Dilution Factor: 1.00 Silica Gel: No Acid Cleanup: No

CAS Number	Analyte	RL	Result
12674-11-2	Aroclor 1016	0.017	< 0.017 U
53469-21-9 12672-29-6	Arocior 1242 Arocior 1248	0.017	< 0.017 U
11097-69-1	Aroclor 1254	0.017	< 0.017 U
11096-82-5	Aroclor 1260	0.017	< 0.017 U
11104-28-2	Aroclor 1232	0.017	< 0.017 U < 0.017 U

Reported in $\mu g/L$ (ppb)

PCB Surrogate Recovery

Decachlorobiphenyl	55.8%
Tetrachlorometaxylene	62.8%



Lab Sample ID: GU59K LIMS ID: 04-10347 Matrix: Water Data Release Authorized: Reported: 11/02/04

Date Extracted: 07/02/04 Date Analyzed: 07/12/04 18:43 Instrument/Analyst: ECD4/YZ GPC Cleanup: No Sulfur Cleanup: Yes

Sample ID: LDW-SP-80-C-U SAMPLE

QC Report No: GU59-Windward Environmental Project: LDW-SEEP SAMPLING

Date Sampled: 07/01/04 Date Received: 07/01/04

Sample Amount: 3000 mL Final Extract Volume: 0.50 mL Dilution Factor: 1.00 Silica Gel: Yes Acid Cleanup: No

CAS Number	Analyte	RL	Result
12674-11-2	Aroclor 1016	0.017	< 0.017 U
53469-21-9	Aroclor 1242	0.017	< 0.017 U
12672-29-6	Aroclor 1248	0.017	< 0.017 U
11097-69-1	Aroclor 1254	0.017	< 0.017 U
11096-82-5	Aroclor 1260	0.017	< 0.017 U
11104-28-2	Aroclor 1221	0.017	< 0.017 U
11141-16-5	Aroclor 1232	0.017	< 0.017 U

Reported in $\mu g/L$ (ppb)

Decachlorobiphenyl	55.2%
Tetrachlorometaxylene	35.0%



Lab Sample ID: GU59G LIMS ID: 04-10343 Matrix: Water Data Release Authorized; Reported: 07/16/04

MS/MSD QC Report No: GU59-Windward Environmental Project: LDW-SEEP SAMPLING

MSD: 3000 mL

MSD: 0.5 mL

MSD: 1.00

Silica Gel: No

Acid Cleanup: No

Date Sampled: 07/01/04 Date Received: 07/01/04

Date Extracted MS/MSD: 07/02/04 Sample Amount MS: 3000 mL Date Analyzed MS: 07/10/04 02:42 Final Extract Volume MS: 0.5 mL MSD: 07/10/04 03:16 Instrument/Analyst MS: ECD4/YZ Dilution Factor MS: 1.00 MSD: ECD4/YZ GPC Cleanup: No Sulfur Cleanup: No

Analyte	Sample	MS	Spike Added-MS	MS Recovery	MSD	Spike Added-MSD	MSD Recovery	RPD	
Aroclor 1016 Aroclor 1260	< 0.017 < 0.017	0.132 0.146	0.168	78.6% 86.9%	0.122	0.168	72.6% 75.6%	7.9% 13.9%	

FORM III

Results reported in $\mu g/L$

RPD calculated using sample concentrations per SW846.



Lab Sample ID: LCS-070204 LIMS ID: 04-10337 Matrix: Water Data Release Authorized: Reported: 07/16/04

Date Extracted: 07/02/04 Date Analyzed: 07/09/04 14:47 Instrument/Analyst: ECD4/YZ GPC Cleanup: No Sulfur Cleanup: Yes

Sample ID: LCS-070204 LAB CONTROL

QC Report No: GU59-Windward Environmental Project: LDW-SEEP SAMPLING

Date Sampled: 07/01/04 Date Received: 07/01/04

Sample Amount: 3000 mL Final Extract Volume: 0.50 mL Dilution Factor: 1.00 Silica Gel: Yes Acid Cleanup: No

Analyte	Lab Control	Spike Added	Recovery	
Aroclor 1016	0.104	0.168	61.9%	
Aroclor 1260	0.130	0.168	77.4%	

PCB Surrogate Recovery

Decachlorobiphenyl	63.2%
Tetrachlorometaxylene	35.8%

FORM III

Results reported in $\mu g/L$

FORM 4 PCB METHOD BLANK SUMMARY SAMPLE NO.

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	GUMBW7/2
Lab Name: ANALYTICAL RESOURCES, INC	Client: WINDWARD ENVIRONMENTAL
ARI Job No.: GU59	Project: LDW-SEEP SAMPLING
Lab Sample ID: GU26MBW7/2	Lab File ID: 0709-08R
Matrix (soil/water) WATER	Extraction: (SepF/Cont/Sonc) OTHER
Sulfur Cleanup (Y/N) Y	Date Extracted: 07/02/04
Date Analyzed (1): 07/09/04	Date Analyzed (2): 07/09/04
Time Analyzed (1): 1339	Time Analyzed (2): 1339
Instrument ID (1): ECD4	Instrument ID (2): ECD4
GC Column (1): RTX-CLP1 ID: 0.53(mm)	GC Column (2): RTX-CLP2 ID: 0.53(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

		T 3 D	D 3 m P	
	EPA	ј цав	I DATE	DATE
	SAMPLE NO.	SAMPLE ID	ANALYZED 1	ANALYZED 2
		=======================================	===========	==========
01	GUSBW7/2	GU26SBW2	07/09/04	07/09/04
02	LDW-SP-10-CF	GU59A	07/09/04	07/09/04
03	LDW-SP-12-CF	GU59B	07/09/04	07/09/04
	LDW-SP-20-CF	GU59C	07/09/04	07/09/04
05	LDW-SP-41-CF	GU59D	07/09/04	07/09/04
06	LDW-SP-12-CU	GU59E	07/10/04	07/10/04
07	LDW-SP-20-CU	GU59F	07/10/04	07/10/04
08	LDW-SP-41-CU	GU59G	07/10/04	07/10/04
09	LDW-SP-41-CU	GU59GMSD	07/10/04	07/10/04
10	LDW-SP-41-CU	GU59GMS	07/10/04	07/10/04
11	LDW-SP-39-CF	GU59H	07/10/04	07/10/04
12	LDW-SP-39-CU	GU59J	07/10/04	07/10/04
13	LDW-SP-80-CF	GU59T	07/12/04	07/12/04
14	LDW-SP-80-CU	GU59K	07/12/04	07/12/04
			0,, 22, 01	0,,12,04

page 1 of 2

FORM IV PEST



Lab Sample ID: MB-070204 LIMS ID: 04-10337 Matrix: Water Data Release Authorized: Reported: 07/16/04

Date Extracted: 07/02/04 Date Analyzed: 07/09/04 13:39 Instrument/Analyst: ECD4/YZ GPC Cleanup: No Sulfur Cleanup: Yes

Sample ID: MB-070204 METHOD BLANK

QC Report No: GU59-Windward Environmental Project: LDW-SEEP SAMPLING

Date Sampled: NA Date Received: NA

Sample Amount: 3000 mL Final Extract Volume: 0.50 mL Dilution Factor: 1.00 Silica Gel: Yes Acid Cleanup: No

CAS Number	Analyte	RL	Result
12674-11-2	Aroclor 1016	0.017	< 0.017 U
53469-21-9	Aroclor 1242	0.017	< 0.017 U
12672-29-6	Aroclor 1248	0.017	< 0.017 U
11097-69-1	Aroclor 1254	0.017	< 0.017 U
11096-82-5	Aroclor 1260	0.017	< 0.017 U
11104-28-2	Aroclor 1221	0.017	< 0.017 U
11141-16-5	Aroclor 1232	0.017	< 0.017 U

Reported in $\mu g/L$ (ppb)

PCB Surrogate Recovery

Decachlorobiphenyl	72.5%
Tetrachlorometaxylene	32.0%

NWTPH-g


WATER TPHg SYSTEM MONITORING COMPOUND SUMMARY

Matrix: Water

QC Report No: GU45

LIMS ID	Lab ID	Client ID	TFT	BB	TOT OUT
04-10232MB	070104MB	Method Blank	106%	104%	0
04-10232LC	070104LC	Lab Control	98.5%	95.6%	0
04-10232LCD	070104LCD	Lab Control Dup	100%	95.7%	0
04-10232	GU45C	LDW-SP-54-C-U	101%	105%	0
04-10238	GU45I	Trip Blank	94.6%	97.2%	0

	MB/LCS	SAMPLE
	QC LIMITS	QC LIMITS
(TFT) = Trifluorotoluene	(66-129)	(31-139)
(BB) = Bromobenzene	(72-118)	(38-141)

Limits Updated - 04/26/04

Column to be used to flag recovery values

- * Values outside of required QC limits
- D System Monitoring Compound diluted out

Page 1 for GU45



ORGANICS ANALYSIS DATA SHEET TOTAL GASOLINE RANGE HYDROCARBONS NWTPHg Toluene to Naphthalene Page 1 of 1 Matrix: Water

QC Report No: GU45-Windward Environmental Project: LDW Seep Sampling

Data Release Authorized: Reported: 07/19/04

ARI ID	Client ID	Analysis Date	Range	Result mg/L
MB-070104 04-10232	Method Blank	07/01/04 PID2	Gasoline HC ID Trifluorotoluene Bromobenzene	< 0.25 U 106% 104%
GU45C 04-10232	LDW-SP-54-C-U	07/01/04 PID2	Gasoline HC ID Trifluorotoluene Bromobenzene	0.29 GRO 101% 105%
GU45I 04-10238	Trip Blank	07/01/04 PID2	Gasoline HC ID Trifluorotoluene Bromobenzene	< 0.25 U 94.6% 97.2%

Quantitation on total peaks in the gasoline range from Toluene to Naphthalene.

GAS: Indicates the presence of gasoline or weathered gasoline. GRO: Positive result that does not match an identifiable gasoline pattern.



ORGANICS ANALYSIS DATA SHEET NWTPHg - Toluene to Naphthalene Page 1 of 1

Sample ID: LCS-070104 LCS/LCSD

Lab Sample ID: LCS-070104 LIMS ID: 04-10232 Matrix: Water Data Release Authorized: Reported: 07/19/04 QC Report No: GU45-Windward Environmental Project: LDW Seep Sampling

Date Sampled: NA Date Received: NA

Instrument/Analyst LCS: PID2/AAR LCSD: PID2/AAR Date Analyzed LCS: 07/01/04 15:05 LCSD: 07/01/04 15:32 Sample Amount LCS: 5.0 mL

LCSD: 5.0 mL

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD	
Gasoline Range Hydrocarbons	2.55	2.50	102%	2.53	2.50	101%	0.8%	

Results reported in mg/L (ppm).

RPD calculated using sample concentrations per SW846.

Gasoline Surrogate Recovery

	LCS	LCSD
Trifluorotoluene	98.5%	100%
Bromobenzene	95.6%	95.7%

BLANK NO.

BETX/GAS METHOD BLANK SUMMARY

4

GU45MB0701W1

Lab Name: ANALYTICAL RESOURCES, INC Client: WINDWARD ENVIRONMENTAL

Project No.: LDW-SEEP SAMPLING

SDG No.: GU45

Date Analyzed : 07/01/04

Time Analyzed : 1437

Instrument ID : PID2

Matrix: WATER

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS, and MSD:

	CLIENT		LAB		DATE
	SAMPLE NO		SAMPLE TD		ANALYZED
				==	
01			GUA SLCS0701W1		07/01/04
UL		L. .7-1		71	07/01/04
02	G045LCSD0701	VТ		4 T	07/01/04
03	TRIP BLANK	_	GU451		
04	LDW-SP-54-C-U	J	GU45C		07/01/04
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FORM IV BETX/GAS

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WATER TPHg SYSTEM MONITORING COMPOUND SUMMARY

Matrix: Water

QC Report No: GU59

LIMS ID	Lab ID	Client ID	TFT	BB	TOT OUT
04-10342MB	070604MB	Method Blank	90.5%	90.4%	0
04-10342LC	070604LC	Lab Control	106%	97.0%	、 0
04-10342LCD	070604LCD	Lab Control Dup	102%	94.8%	0
04-10342	GU59F	LDW-SP-20-C-U	93.6%	92.6%	0
04-10343	GU59G	LDW-SP-41-C-U	95.8%	93.0%	0
04-10343	GU59G-MS	LDW-SP-41-C-U	102%	92.9%	0
04-10343	GU59G-MSD	LDW-SP-41-C-U	101%	95.2%	0
04-10346	GU59J	LDW-SP-39-C-U	95.9%	94.3%	0
04-10347MB	070704MB	Method Blank	95.9%	96.6%	0
04-10347LC	070704LC	Lab Control	106%	96.7%	0
04-10347LCD	070704LCD	Lab Control Dup	103%	92.9%	0
04-10347	GU59K	LDW-SP-80-C-U	96.8%	95.1%	0
04-10348	GU59L	TRIP BLANK	94.3%	95.3%	0



	MB/LCS	SAMPLE
	QC LIMITS	QC LIMITS
(TFT) = Trifluorotoluene	(66-129)	(31-139)
(BB) = Bromobenzene	(72-118)	(38-141)

Limits Updated - 04/26/04

- # Column to be used to flag recovery values
- * Values outside of required QC limits
- D System Monitoring Compound diluted out

ORGANICS ANALYSIS DATA SHEET TOTAL GASOLINE RANGE HYDROCARBONS NWTPHg Toluene to Naphthalene

QC Report No: GU59-Windward Environmental Project: LDW-SEEP SAMPLING

Page 1 of 1 Matrix: Water Data Release Authorized:

Data Release Authorized:

ARI ID	Client ID	Analysis Date	Range	Result mg/L
MB-070604 04-10342	Method Blank	07/06/04 PID1	Gasoline HC ID Trifluoroțoluene Bromobenzene	< 0.25 U 90.5% 90.4%
GU59F 04-10342	LDW-SP-20-C-U	07/06/04 PID1	Gasoline HC ID Trifluorotoluene Bromobenzene	< 0.25 U 93.6% 92.6%
GU59G 04-10343	LDW-SP-41-C-U	07/06/04 PID1	Gasoline HC ID Trifluorotoluene Bromobenzene	< 0.25 U 95.8% 93.0%
GU59J 04-10346	LDW-SP-39-C-U	07/06/04 PID1	Gasoline HC ID Trifluorotoluene Bromobenzene	< 0.25 U 95.9% 94.3%
MB-070704 04-10347	Method Blank	07/07/04 PID1	Gasoline HC ID Trifluorotoluene Bromobenzene	< 0.25 U 95.9% 96.6%
GU59K 04-10347	LDW-SP-80-C-U	07/07/04 PID1	Gasoline HC ID Trifluorotoluene Bromobenzene	< 0.25 U 96.8% 95.1%
GU59L 04-10348	TRIP BLANK	07/06/04 PID1	Gasoline HC ID Trifluorotoluene Bromobenzene	< 0.25 U 94.3% 95.3%

Quantitation on total peaks in the gasoline range from Toluene to Naphthalene.

GAS: Indicates the presence of gasoline or weathered gasoline. GRO: Positive result that does not match an identifiable gasoline pattern.

FORM I

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ORGANICS ANALYSIS DATA SHEET NWTPHg - Toluene to Naphthalene Page 1 of 1

Lab Sample ID: GU59G LIMS ID: 04-10343 Matrix: Water Data Release Authorized: Reported: 07/16/04 Sample ID: LDW-SP-41-C-U MS/MSD

QC Report No: GU59-Windward Environmental Project: LDW-SEEP SAMPLING

Date Sampled: 07/01/04 Date Received: 07/01/04

Instrument/Analyst MS: PID1/AAR Samp MSD: PID1/AAR Date Analyzed MS: 07/06/04 16:29 MSD: 07/06/04 16:57

Sample Amount MS: 5.0 mL MSD: 5.0 mL

Analyte	Sample	MS	Spike Added-MS	MS Recovery	MSD	`Spike Added-MSD	MSD Recovery	RPD
Gasoline Range Hydrocarbons	< 0.25 U	1.97	2.50	78.8%	1.97	2.50	78.8%	0.0%

Results reported in mg/L (ppm).

RPD calculated using sample concentrations per SW846.

Gasoline Surrogate Recovery

	MS	MSD
Trifluorotoluene	102%	101%
Bromobenzene	92.9%	95.2%



ORGANICS ANALYSIS DATA SHEET NWTPHg - Toluene to Naphthalene Page 1 of 1

Lab Sample ID: LCS-070604 LIMS ID: 04-10342 Matrix: Water Data Release Authorized; Reported: 07/16/04 Sample ID: LCS-070604 LCS/LCSD

QC Report No: GU59-Windward Environmental Project: LDW-SEEP SAMPLING

LCSD: 5.0 mL

Date Sampled: NA Date Received: NA

Sample Amount LCS: 5.0 mL

Instrument/Analyst LCS: PID1/AAR LCSD: PID1/AAR Date Analyzed LCS: 07/06/04 14:07 LCSD: 07/06/04 14:36

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	` LCSD Recovery	RPD	
Gasoline Range Hydrocarbons	2.13	2.50	85.2%	2.12	2.50	84.8%	0.5%	

Results reported in mg/L (ppm).

RPD calculated using sample concentrations per SW846.

Gasoline Surrogate Recovery

	LCS	LCSD
Trifluorotoluene	106%	102%
Bromobenzene	97.0%	94.8%

BLANK NO.

4 BETX/GAS METHOD BLANK SUMMARY

GU59MB0706W1

Lab Name: ANALYTICAL RESOURCES, INC Client: WINDWARD ENVIRONMENTAL Project No.: LDW-SEEP SAMPLING

SDG No.: GU59

Date Analyzed : 07/06/04

Time Analyzed : 1339

Matrix: WATER

Instrument ID : PID1

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS, and MSD:

01 02 03 04 05 06 07	CLIENT SAMPLE NO. ====================================	LAB SAMPLE ID ============ GU59LCS0706W1 GU59LCSD0706W GU59L GU59G MS GU59G MSD GU59G GU59G GU59E GU59E	-	DATE ANALYZED ======== 07/06/04 07/06/04 07/06/04 07/06/04 07/06/04 07/06/04 07/06/04
009 112 112 115 117 119 22 22 22 22 22 22 22 22 22 22 23 0	LDW-SP-39-C-Ŭ	GU59J		07/06/04

page 1 of 1

FORM IV BETX/GAS

000261



ORGANICS ANALYSIS DATA SHEET NWTPHg - Toluene to Naphthalene Page 1 of 1

Lab Sample ID: LCS-070704 LIMS ID: 04-10347 Matrix: Water Data Release Authorized: Reported: 07/16/04 Sample ID: LCS-070704 LCS/LCSD

QC Report No: GU59-Windward Environmental Project: LDW-SEEP SAMPLING

LCSD: 5.0 mL

Date Sampled: NA Date Received: NA

Sample Amount LCS: 5.0 mL

Instrument/Analyst LCS: PID1/AAR LCSD: PID1/AAR Date Analyzed LCS: 07/07/04 13:37 LCSD: 07/07/04 14:06

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike ` Added-LCSD	LCSD Recovery	RPD	
Gasoline Range Hydrocarbons	2.21	2.50	88.4%	2.03	2.50	81.2%	8.5%	

Results reported in mg/L (ppm).

RPD calculated using sample concentrations per SW846.

Gasoline Surrogate Recovery

	LCS	LCSD
Trifluorotoluene	106%	103%
Bromobenzene	96.7%	92.9%

BLANK NO.

BETX/GAS METHOD BLANK SUMMARY

GU59MB0707W1

Lab Name: ANALYTICAL RESOURCES, INC Client: WINDWARD ENVIRONMENTAL

SDG No.: GU59

Date Analyzed : 07/07/04

Project No.: LDW-SEEP SAMPLING Matrix: WATER Instrument ID : PID1

Time Analyzed : 1309

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS, and MSD:

1	CLIENT	LAB	DATE
	SAMPLE NO.	SAMPLE ID	ANALYZED
01 02 03	======================================	GU59LCS0707W1 GU59LCSD0707W GU59K	07/07/04 1 07/07/04 07/07/04
004 005 007 009 001 112 114 115 107 100 212 223 225			
26			· · · · · · · · · · · · · · · · · · ·
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page 1 of 1

FORM IV BETX/GAS



WATER TPHg SYSTEM MONITORING COMPOUND SUMMARY

Matrix: Water

QC Report No: GU76

LIMS ID	Lab ID	Client ID	TFT	BB	TOT OUT
04-10433MB	070604MB	Method Blank	90.5%	90.4%	0
04-10433LC	070604LC	Lab Control	106%	97.0%	. 0
04-10433LCD	070604LCD	Lab Control Dup	102%	94.8%	`` 0
04-10433	GU76D	LDW-SP-69-C-U	96.4%	95.0%	0

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	MB/LCS	SAMPLE
	QC LIMITS	QC LIMITS
(TFT) = Trifluorotoluene	(66-129)	(31-139)
(BB) = Bromobenzene	(72-118)	(38-141)

Limits Updated - 04/26/04

Column to be used to flag recovery values

- * Values outside of required QC limits
- D System Monitoring Compound diluted out

Page 1 for GU76



ORGANICS ANALYSIS DATA SHEET TOTAL GASOLINE RANGE HYDROCARBONS NWTPHg Toluene to Naphthalene Page 1 of 1 Matrix: Water

QC Report No: GU76-Windward Environmental Project: LDW-SEEP SAMPLING

Data Release Authorized: AB Reported: 07/19/04

ARI ID	Client ID	Analysis Date	Range	Result mg/L
MB-070604	Method Blank	07/06/04 BID1	Gasoline	< 0.25 U
04-10433			Trifluorotoluene Bromobenzène	90.5% 90.4%
GU76D 04-10433	LDW-SP-69-C-U	07/06/04 PID1	Gasoline HC ID Trifluorotoluene Bromobenzene	< 0.25 U 96.4% 95.0%

Quantitation on total peaks in the gasoline range from Toluene to Naphthalene.

GAS: Indicates the presence of gasoline or weathered gasoline. GRO: Positive result that does not match an identifiable gasoline pattern.



ORGANICS ANALYSIS DATA SHEET NWTPHg - Toluene to Naphthalene Page 1 of 1

Lab Sample ID: LCS-070604 LIMS ID: 04-10433 Matrix: Water Data Release Authorized: Sample ID: LCS-070604 LCS/LCSD

QC Report No: GU76-Windward Environmental Project: LDW-SEEP SAMPLING

LCSD: 5.0 mL

Date Sampled: NA Date Received: NA

Sample Amount LCS: 5.0 mL

Instrument/Analyst LCS: PID1/AAR LCSD: PID1/AAR Date Analyzed LCS: 07/06/04 14:07 LCSD: 07/06/04 14:36

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	`LCSD Recovery	RPD
Gasoline Range Hydrocarbons	2.13	2.50	85.2%	2.09	2.50	83.6%	1.9%

Results reported in mg/L (ppm).

RPD calculated using sample concentrations per SW846.

Gasoline Surrogate Recovery

	LCS	LCSD
Trifluorotoluene	106%	102%
Bromobenzene	97.0%	94.8%

BLANK NO.

4 BETX/GAS METHOD BLANK SUMMARY

GU76MB0706W1

Lab Name: ANALYTICAL RESOURCES, INC Client: WINDWARD ENVIRONMENTAL

SDG No.: GU76

Date Analyzed : 07/06/04

Matrix: WATER Instrument ID : PID1

Project No.: LDW-SEEP SAMPLING

Time Analyzed : 1339

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS, and MSD:

1			TAR	_	DATE
			SAMPLE TD		ANALYZED
	SAMPLE NO.	_		=	
0.1		-	GUZGLCS0706W1		07/06/04
	CUTCI CCD0706W	1	GU76LCSD0706W	11	07/06/04
02	TDW SD-69-C-II	<u>т</u>	GUZED		07/06/04
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FORM IV BETX/GAS



WATER TPHg SYSTEM MONITORING COMPOUND SUMMARY

Matrix: Water

QC Report No: GU83

LIMS ID	Lab ID	Client ID	TFT	BB	TOT OUT
04-10465MB	070604MB	Method Blank	90.5%	90.4%	0
04-10465LC	070604LC	Lab Control	106%	97.0%	0
04-10465LCD	070604LCD	Lab Control Dup	102%	94.8%	́`О
04-10465	GU83E	LDW-SP-64-C-U	93.1%	92.0%	0



	MB/LCS	SAMPLE
	QC LIMITS	QC LIMITS
(TFT) = Trifluorotoluene	(66-129)	(31-139)
(BB) = Bromobenzene	(72-118)	(38-141)

Limits Updated - 04/26/04

Column to be used to flag recovery values

- * Values outside of required QC limits
- D System Monitoring Compound diluted out

Page 1 for GU83



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ORGANICS ANALYSIS DATA SHEET TOTAL GASOLINE RANGE HYDROCARBONS NWTPHg Toluene to Naphthalene Page 1 of 1 Matrix: Water

QC Report No: GU83-Windward Environmental Project: LDW-SEEP SAMPLING

Data Release Authorized: Reported: 07/20/04

ARI ID	Client ID	Analysis Date	Range	Result mg/L
MB-070604	Method Blank	07/06/04	Gasoline	< 0.25 U
04-10465		PID1	HC ID	
			Trifluorotoluene	90.5%
			Bromobenzène	90.4%
GU83E	LDW-SP-64-C-U	07/06/04	Gasoline	< 0.25 U
04-10465		PID1	HC ID	
			Trifluorotoluene	93.1%
			Bromobenzene	92.0%

Quantitation on total peaks in the gasoline range from Toluene to Naphthalene.

GAS: Indicates the presence of gasoline or weathered gasoline. GRO: Positive result that does not match an identifiable gasoline pattern.



ORGANICS ANALYSIS DATA SHEET NWTPHg - Toluene to Naphthalene Page 1 of 1

Lab Sample ID: LCS-070604 LIMS ID: 04-10465

Instrument/Analyst LCS: PID1/AAR

Date Analyzed LCS: 07/06/04 14:07

LIMS ID: 04-10465 Matrix: Water Data Release Authorized: Reported: 07/20/04 Sample ID: LCS-070604 LCS/LCSD

QC Report No: GU83-Windward Environmental Project: LDW-SEEP SAMPLING

Date Sampled: NA Date Received: NA

Sample Amount LCS: 5.0 mL LCSD: 5.0 mL

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Gasoline Range Hydrocarbons	2.13	2.50	85.2%	2.09	2.50	83.6%	1.9%

Results reported in mg/L (ppm).

RPD calculated using sample concentrations per SW846.

LCSD: PID1/AAR

LCSD: 07/06/04 14:36

Gasoline Surrogate Recovery

	LCS	LCSD
Trifluorotoluene	106%	102%
Bromobenzene	97.0%	94.8%

BLANK NO.

4 BETX/GAS METHOD BLANK SUMMARY

GU83MB0706W1

Lab Name: ANALYTICAL RESOURCES, INC

SDG No.: GU83

Date Analyzed : 07/06/04

Time Analyzed : 1339

Client: WINDWARD ENVIRONMENTAL Project No.: LDW-SEEP SAMPLING Matrix: WATER Instrument ID : PID1

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THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS, and MSD:

I		LAB	DATE
		SAMPLE ID	ANALYZED
	SAMPLE NO.		============
			07/06/04
01	GU83LCS0706W1		07/06/04
02	GU83LCSD0706W		
03	LDW-SP-64-C-U	GU83E	07/08/04
04			_1
05			
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FORM IV BETX/GAS

NWTPH-Dx



TPHD SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: GU45-Windward Environmental Project: LDW Seep Sampling

Client ID	O-TER	TOT OUT
MB-070204	77.8%	0
LCS-070204	84.2%	0
LDW-SP-54-C-U	55.1%	0
LDW-SP-54-C-F	53.3%	0

LCS/MB LIMITS QC LIMITS

(O-TER) = o-Terphenyl

(54-131) (46-123)

Prep Method: SW3510C Log Number Range: 04-10232 to 04-10233



TPHD SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: GU59-Windward Environmental Project: LDW-SEEP SAMPLING

Client ID	O-TER	TOT OUT
MB-070204	77.8%	0
LCS-070204	84.2%	0
LDW-SP-10-C-F	58.7%	0
LDW-SP-12-C-F	84.0%	0
LDW-SP-20-C-F	68.4%	0
LDW-SP-41-C-F	83.6%	0
LDW-SP-41-C-F MS	84.9%	0
LDW-SP-41-C-F MSD	86.2%	0
LDW-SP-12-C-U	64.4%	0
LDW-SP-20-C-U	84.9%	0
LDW-SP-41-C-U	84.4%	0
LDW-SP-41-C-U MS	88.0%	0
LDW-SP-41-C-U MSD	84.2%	0
LDW-SP-39-C-F	85.1%	0
LDW-SP-80-C-F	51.6%	0
LDW-SP-39-C-U	82.2%	0
LDW-SP-80-C-U	54.9%	0

LCS/MB LIMITS QC LIMITS

(O-TER) = o-Terphenyl

(54-131) (46-123)

Prep Method: SW3510C Log Number Range: 04-10337 to 04-10347

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ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET TOTAL DIESEL RANGE HYDROCARBONS NWTPHD by GC/FID Page 1 of 1 Matrix: Water

QC Report No: GU45-Windward Environmental Project: LDW Seep Sampling

Data Release Authorized: NW Reported: 07/09/04

ARI ID	Sample ID	Extraction Date	Analysis Date	DL	Range	Result mg/L
MB-070204 04-10232	Method Blank	07/02/04	07/07/04 FID3A	1.0	Diesel Motor Oil HC ID o-Terphenyl	< 0.25 U < 0.50 U 77.8%
GU45C 04-10232	LDW-SP-54-C-U	07/02/04	07/07/04 FID3A	1.0	Diesel Motor Oil HC ID o-Terphenyl	2.2 1.9 DRO/RRO 55.1%
GU45D 04-10233	LDW-SP-54-C-F	07/02/04	07/07/04 FID3A	1.0	Diesel Motor Oil HC ID o-Terphenyl	1.4 < 0.50 U DRO 53.3%

Diesel quantitation on total peaks in the range from C12 to C24. Motor Oil quantitation on total peaks in the range from C24 to C38. HC ID: DRO/RRO indicates results of organics or additional hydrocarbons in ranges are not identifiable. ORGANICS ANALYSIS DATA SHEET TOTAL DIESEL RANGE HYDROCARBONS NWTPHD by GC/FID Page 1 of 2 Matrix: Water

QC Report No: GU59-Windward Environmental Project: LDW-SEEP SAMPLING

ANALYTICAL RESOURCES

INCORPORATED

Data Release Authorized: **M** Reported: 07/09/04

ARI ID	Sample ID	Extraction Date	Analysis Date	DL	Range	Result mg/L
MB-070204 04-10337	Method Blank	07/02/04	07/07/04 FID3A	1.0	Diesel Motor Oil HC ID	< 0.25 U < 0.50 U
					o-Terphenyl	77.8%
GU59A 04-10337	LDW-SP-10-C-F	07/02/04	07/07/04 FID3A	1.0	Diesel Motor Oil HC ID o-Terphenyl	< 0.25 U < 0.50 U 58 7%
GU59B 04-10338	LDW-SP-12-C-F	07/02/04	07/07/04 FID3A	1.0	Diesel Motor Oil HC ID o-Terphenyl	< 0.25 U < 0.50 U 84.0%
GU59C 04-10339	LDW-SP-20-C-F	07/02/04	07/07/04 FID3A	1.0	Diesel Motor Oil HC ID o-Terphenyl	< 0.25 U < 0.50 U 68.4%
GU59D 04-10340	LDW-SP-41-C-F	07/02/04	07/07/04 FID3A	1.0	Diesel Motor Oil HC ID o-Terphenyl	< 0.25 U < 0.50 U 83.6%
GU59E 04-10341	LDW-SP-12-C-U	07/02/04	07/07/04 FID3A	1.0	Diesel Motor Oil HC ID o-Terphenyl	< 0.25 U < 0.50 U 64.4%
GU59F 04-10342	LDW-SP-20-C-U	07/02/04	07/07/04 FID3A	1.0	Diesel Motor Oil HC ID o-Terphenyl	< 0.25 U < 0.50 U 84.9%
GU59G 04-10343	LDW-SP-41-C-U	07/02/04	07/07/04 FID3A	1.0	Diesel Motor Oil HC ID o-Terphenyl	< 0.25 U < 0.50 U 84.4%
GU59H 04-10344	LDW-SP-39-C-F	07/02/04	07/07/04 FID3A	1.0	Diesel Motor Oil HC ID o-Terphenyl	< 0.25 U < 0.50 U 85.1%

348

ORGANICS ANALYSIS DATA SHEET TOTAL DIESEL RANGE HYDROCARBONS NWTPHD by GC/FID Page 2 of 2 Matrix: Water



QC Report No: GU59-Windward Environmental Project: LDW-SEEP SAMPLING

Data Release Authorized: MV Reported: 07/09/04

ARI ID	Sample ID	Extraction Date	Analysis Date	DL	Range	Result mg/L
GU59I 04-10345	LDW-SP-80-C-F	07/02/04	07/07/04 FID3A	1.0	Diesel Motor Oil HC ID o-Terphenyl	0.59 < 0.50 U DRO 51.6%
GU59J 04-10346	LDW-SP-39-C-U	07/02/04	07/07/04 FID3A	1.0	Diesel Motor Oil HC ID o-Terphenyl	< 0.25 U < 0.50 U 82.2%
GU59K 04-10347	LDW-SP-80-C-U	07/02/04	07/08/04 FID3A	1.0	Diesel Motor Oil HC ID o-Terphenyl	0.61 < 0.50 U DRO 54.9%

Diesel quantitation on total peaks in the range from C12 to C24. Motor Oil quantitation on total peaks in the range from C24 to C38. HC ID: DRO/RRO indicates results of organics or additional hydrocarbons in ranges are not identifiable. ORGANICS ANALYSIS DATA SHEET NWTPHD by GC/FID Page 1 of 1



Sample ID: LDW-SP-41-C-F MS/MSD

Lab Sample ID: GU59D LIMS ID: 04-10340 Matrix: Water Data Release Authorized: Reported: 07/09/04

QC Report No: GU59-Windward Environmental Project: LDW-SEEP SAMPLING

Date Sampled: 07/01/04 Date Received: 07/01/04

Date Extracted MS/MSD: 07/02/04 Date Analyzed MS: 07/07/04 19:46 MSD: 07/07/04 20:07 Instrument/Analyst MS: FID/PKC MSD: FID/PKC

	Sample	Amount	MS:	500	mL
		1	MSD:	500	\mathtt{mL}
'inal	Extract	Volume	MS:	1.0	mL
		1	ASD:	1.0	mL
	Dilution	Factor	MS:	1.00)
		1	ASD:	1.00)

Range	Sample	MS	Spike Added-MS	MS Recovery	MSD	Spike Added-MSD	MSD Recovery	RPD	
Diesel	< 0.25 U	2.64	3.00	88.0%	2.63	3.00	87.7%	0.4%	—

Results reported in mg/L

RPD calculated using sample concentrations per SW846.

ORGANICS ANALYSIS DATA SHEET NWTPHD by GC/FID Page 1 of 1



Sample ID: LDW-SP-41-C-U MS/MSD

Lab Sample ID: GU59G LIMS ID: 04-10343 Matrix: Water Data Release Authorized: ~~~~~ Reported: 07/09/04

Date Extracted MS/MSD: 07/02/04

Date Analyzed MS: 07/07/04 21:31

Instrument/Analyst MS: FID/PKC

MSD: 07/07/04 21:52

MSD: FID/PKC

QC Report No: GU59-Windward Environmental Project: LDW-SEEP SAMPLING

Date Sampled: 07/01/04 Date Received: 07/01/04

Sample Amount MS: 500 mL MSD: 500 mL Final Extract Volume MS: 1.0 mL MSD: 1.0 mL Dilution Factor MS: 1.00 MSD: 1.00

Range	Sample	MS	Spike Added-MS	MS Recovery	MSD	Spike Added-MSD	MSD Recovery	RPD	٨
Diesel	< 0.25 U	2.73	3.00	91.0%	2.62	3.00	87.3%	4.1%	

Results reported in mg/L

RPD calculated using sample concentrations per SW846.

ORGANIC	CS ANALYSIS DATA SHEET
NWTPHD	by GC/FID
Page	1 of 1



Sample ID: LCS-070204 LAB CONTROL

Lab Sample ID: LCS-070204QC Report No: GU45-Windward Environmental
Project: LDW Seep SamplingLIMS ID: 04-10232Project: LDW Seep SamplingMatrix: WaterDate Release Authorized:Data Release Authorized:Date Sampled: 06/30/04Date Extracted: 07/09/04Date Received: 06/30/04Date Extracted: 07/02/04Sample Amount: 500 mLDate Analyzed: 07/07/04 16:17Final Extract Volume: 1.0 mLDilution Factor: 1.00Dilution Factor: 1.00

Range	Lab Control	Spike Added	Recovery	
Diesel	2.63	3.00	87.7%	

TPHD Surrogate Recovery

o-Terphenyl

84.2%

Results reported in mg/L

BLANK NO.

4 TPH METHOD BLANK SUMMARY

GU45MBW1

Lab Name: ANALYTICAL RESOURCES, INC

SDG No.: GU45

Date Extracted: 07/02/04

Date Analyzed : 07/07/04

Matrix: LIQUID

Instrument ID : FID3A

Client: WINDWARD ENVIRONMENTAL

Project No.: LDW SEEP SAMPLING

Time Analyzed : 1556

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS, and MSD:

	CLIENT	LAB	DATE
	SAMPLE NO.	SAMPLE ID	ANALYZED
	=================	==============================	=============
01	GU45LCSW1	GU45LCSW1	07/07/04
02	LDW-SP-54-C-	GU45C	07/07/04
03	LDW-SP-54-C-	GU45D	07/07/04
04	LDW-SP-10-C-	GU59A	07/07/04
05	LDW-SP-12-C-	GU59B	07/07/04
06	LDW-SP-20-C-	GU59C	07/07/04
07	LDW-SP-41-C-	GU59D	07/07/04
08	LDW-SP-41-C-	GU59D MS	07/07/04
09	LDW-SP-41-C-	GU59D MSD	07/07/04
10	LDW-SP-12-C-	GU59E	07/07/04
11	LDW-SP-20-C-	GU59F	07/07/04
12	LDW-SP-41-C-	GU59G	07/07/04
13	LDW-SP-41-C-	GU59G MS	07/07/04
14	LDW-SP-41-C-	GU59G MSD	07/07/04
15	LDW-SP-39-C-	GU59H	07/07/04
16	LDW-SP-80-C-	GU59I	07/07/04
17	LDW-SP-39-C-	GU59J	07/07/04
18	LDW-SP-80-C-	GU59K	07/08/04
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page 1 of 1

FORM IV TPH



TPHD SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: GU76-Windward Environmental Project: LDW-SEEP SAMPLING

Client ID	O-TER	TOT OUT
MB-070704	89.3%	0
LCS-070704	96.9%	0
LCSD-070704	100%	0
LDW-SP-69-C-U	96.9%	0
LDW-SP-69-C-F	95.1%	0

LCS/MB LIMITS QC LIMITS

(O-TER) = O-Terphenyl

(54-131) (46-123)

Prep Method: SW3510C Log Number Range: 04-10433 to 04-10434



TPHD SURROGATE RECOVERY SUMMARY

.

Matrix: Water

QC Report No: GU83-Windward Environmental Project: LDW-SEEP SAMPLING

Client ID	O-TER	TOT OUT
· ·		
MB-070704	89.3%	0
LCS-070704	96.9%	0
LCSD-070704	100%	0
LDW-SP-64-RB-S-U	94.9%	0
LDW-SP-64-RB-MP-U	94.9%	0
LDW-SP-64-C-U	94.0%	0

LCS/MB LIMITS QC LIMITS

(46-123)

(O-TER) = o-Terphenyl

Prep Method: SW3510C Log Number Range: 04-10463 to 04-10465

(54-131)



ORGANICS ANALYSIS DATA SHEET TOTAL DIESEL RANGE HYDROCARBONS NWTPHD by GC/FID Page 1 of 1 Matrix: Water

QC Report No: GU76-Windward Environmental Project: LDW-SEEP SAMPLING

Data Release Authorized: WW Reported: 07/12/04

ARI ID	Sample ID	Extraction Date	Analysis Date	DL	Range	Result mg/L
MB-070704 04-10433	Method Blank	07/07/04	07/09/04 FID3A	1.0	Diesel Motor Oil HC ID o-Terphenyl	< 0.25 U < 0.50 U 89.3%
GU76D 04-10433	LDW-SP-69-C-U	07/07/04	07/09/04 FID3A	1.0	Diesel Motor Oil HC ID o-Terphenyl	< 0.25 U < 0.50 U 96.9%
GU76E 04-10434	LDW-SP-69-C-F	07/07/04	07/09/04 FID3A	1.0	Diesel Motor Oil HC ID o-Terphenyl	< 0.25 U < 0.50 U 95.1%

Diesel quantitation on total peaks in the range from C12 to C24. Motor Oil quantitation on total peaks in the range from C24 to C38. HC ID: DRO/RRO indicates results of organics or additional hydrocarbons in ranges are not identifiable.



ORGANICS ANALYSIS DATA SHEET TOTAL DIESEL RANGE HYDROCARBONS NWTPHD by GC/FID Page 1 of 1 Matrix: Water

QC Report No: GU83-Windward Environmental Project: LDW-SEEP SAMPLING

Data Release Authorized: WW Reported: 07/12/04

ARI ID	Sample ID	Extraction Date	Analysis Date	DL	Range	Result mg/L
MB-070704 04-10463	Method Blank	07/07/04	07/09/04 FID3A	1.0	Diesel Motor Oil HC ID o-Terphenyl	< 0.25 U < 0.50 U 89.3%
GU83C 04-10463	LDW-SP-64-RB-S-U	07/07/04	07/09/04 FID3A	1.0	Diesel Motor Oil HC ID o-Terphenyl	< 0.25 U < 0.50 U 94.9%
GU83D 04-10464	LDW-SP-64-RB-MP-U	07/07/04	07/09/04 FID3A	1.0	Diesel Motor Oil HC ID o-Terphenyl	< 0.25 U < 0.50 U 94.9%
GU83E 04-10465	LDW-SP-64-C-U	07/07/04	07/09/04 FID3A	1.0	Diesel Motor Oil HC ID o-Terphenyl	< 0.25 U < 0.50 U 94.0%

Diesel quantitation on total peaks in the range from C12 to C24. Motor Oil quantitation on total peaks in the range from C24 to C38. HC ID: DRO/RRO indicates results of organics or additional hydrocarbons in ranges are not identifiable.



ORGANICS ANALYSIS DATA SHEET NWTPHD by GC/FID Page 1 of 1

Sample ID: LCS-070704 LCS/LCSD

Lab Sample ID: LCS-070704 LIMS ID: 04-10433 Matrix: Water Data Release Authorized: Reported: 07/12/04 QC Report No: GU76-Windward Environmental Project: LDW-SEEP SAMPLING

Sample Amount LCS: 500 mL

Date Sampled: 07/02/04 Date Received: 07/02/04

Date Extracted LCS/LCSD: 07/07/04 Date Analyzed LCS: 07/09/04 19:14 LCSD: 07/09/04 19:35

Instrument/Analyst LCS: FID/PKC LCSD: FID/PKC LCSD: 500 mL Final Extract Volume LCS: 1.0 mL LCSD: 1.0 mL Dilution Factor LCS: 1.00 LCSD: 1.00

Range	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Diesel	2.59	3.00	86.3%	2.67	3.00	89.0%	3.0%

TPHD Surrogate Recovery

•		
	LCS	LCSD
o-Terphenyl	96.98	100%

Results reported in mg/L

RPD calculated using sample concentrations per SW846.

FORM III

4 TPH METHOD BLANK SUMMARY

BLANK NO.

GU76MBW1

Lab Name: ANALYTICAL RESOURCES, INC

SDG No.: GU76/GU83

Date Extracted: 07/07/04

Date Analyzed : 07/09/04

Matrix: LIQUID

Client: WINDWARD ENVIRONMENTAL

Project No.: LDW-SEEP SAMPLING

Instrument ID : FID3A

Time Analyzed : 1853

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS, and MSD:

	CLIENT	LAB	DATE
	SAMPLE NO.	SAMPLE ID	ANALYZED
			===========
01	GU76LCSW1	GU76LCSW1	07/09/04
02	GU76LCSDW1	GU76LCSDW1	07/09/04
03	LDW-SP-69-C-U	GU76D	07/09/04
04	LDW-SP-69-C-F	GU76E	07/09/04
05	LDW-SP-64-RB-S-U	GU83C	07/09/04
06	LDW-SP-64-RB-MP-U	GU83D	07/09/04
07	LDW-SP-64-C-U	GU83E	07/09/04
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page 1 of 1

FORM IV TPH

General Chemistry


Matrix: Water Data Release Authorized: pr Reported: 07/12/04 Project: LDW Seep Sampling Event: NA Date Sampled: 06/30/04 Date Received: 06/30/04

Client ID: LDW-SP-48-C-U ARI ID: 04-10230 GU45A

Analyte	Date	Method	Units	RL	Sample
Total Suspended Solids	07/07/04 070704#2	EPA 160.2	mg/L	2.2	12.4
Total Organic Carbon	07/01/04 070104#1	EPA 415.1	mg/L	1.50	< 1.50 U

RL Analytical reporting limit U Undetected at reported detection limit

Water Sample Report-GU45

361



Matrix: Water Data Release Authorized: A Reported: 07/12/04

Project: LDW Seep Sampling Event: NA Date Sampled: 06/30/04 Date Received: 06/30/04

Client ID: LDW-SP-48-C-F ARI ID: 04-10231 GU45B

Analyte	Date	Method	Units	RL	Sample
Dissolved Organic Carbon	07/09/04 070104#1	EPA 415.1	mg/L	1.50	< 1.50 U

RL U



Matrix: Water Data Release Authorized: A Reported: 07/12/04

Project: LDW Seep Sampling Event: NA Date Sampled: 06/30/04 Date Received: 06/30/04

Client ID: LDW-SP-54-C-U ARI ID: 04-10232 GU45C

Analyte	Date	Method	Units	RL	Sample
Total Suspended Solids	07/07/04 070704#2	EPA 160.2	mg/L	1.0	14.3
Total Organic Carbon	07/01/04 070104#1	EPA 415.1	mg/L	1.50	6.42



Matrix: Water Data Release Authorized: A Reported: 07/12/04

Project: LDW Seep Sampling Event: NA Date Sampled: 06/30/04 Date Received: 06/30/04

Client ID: LDW-SP-54-C-F ARI ID: 04-10233 GU45D

Analyte	Date	Method	Units	RL	Sample
Dissolved Organic Carbon	07/09/04 070604#1	EPA 415.1	mg/L	1.50	5.00

RL Analytical reporting limit
U Undetected at reported detection limit

ondeceded at reported detection limit



Matrix: Water Data Release Authorized: AR Reported: 07/12/04 Project: LDW Seep Sampling Event: NA Date Sampled: 06/30/04 Date Received: 06/30/04

Client ID: LDW-SP-82-C-U ARI ID: 04-10234 GU45E

Analyte	Date	Method	Units	RL	Sample
Total Suspended Solids	07/07/04 070704#2	EPA 160.2	mg/L	1.0	11.2
Total Organic Carbon	07/01/04 070104#1	EPA 415.1	mg/L	1.50	2.50

RL Analytical reporting limit U Undetected at reported detection limit

Water Sample Report-GU45



Matrix: Water Data Release Authorized: 04 Reported: 07/12/04 Project: LDW Seep Sampling Event: NA Date Sampled: 06/30/04 Date Received: 06/30/04

Client ID: LDW-SP-82-C-F ARI ID: 04-10235 GU45F

Analyte		Date	Method	Units	RL	Sample
			·······	· · · · · ·	·····	<u>.</u>
Dissolved Or	ganic Carbon	07/09/04 070104#1	EPA 415.1	mg/L	1.50	< 1.50 U



Matrix: Water Data Release Authorized: A Reported: 07/12/04

	Project:	LDW Seep	Sampling
· .	Event:	NA	
Date	Sampled:	06/30/04	
Date H	Received:	06/30/04	

Client ID: LDW-SP-82-C-FD-U ARI ID: 04-10236 GU45G

Analyte	Date	Method	Units	RL Sample
·····				
Total Suspended Solids	07/07/04 070704#2	EPA 160.2	mg/L	1.1 5.8
Total Organic Carbon	07/01/04 070104#1	EPA 415.1	mg/L	1.50 1.60



Matrix: Water Data Release Authorized: 04 Reported: 07/12/04 Project: LDW Seep Sampling Event: NA Date Sampled: 06/30/04 Date Received: 06/30/04

Client ID: LDW-SP-82-C-FD-F ARI ID: 04-10237 GU45H

Analyte	Date	Method	Units	RL Sample
		· · · · · · · · · · · · · · · · · · ·	·	
Dissolved Organic Carbon	07/09/04 070104#1	EPA 415.1	mg/L	1.50 < 1.50 U

METHOD BLANK RESULTS-CONVENTIONALS GU45-Windward Environmental



Matrix: Water Data Release Authorized: or Reported: 07/12/04

Analyte	Date	Units	Blank
	· · · · · · · · · · · · · · · · · · ·		
Total Suspended Solids	07/07/04	mg/L	< 1.0 U
Total Organic Carbon	07/01/04	mg/L	< 1.50 U
Dissolved Organic Carbon	07/09/04	mg/L	< 1.50 U

Water Method Blank Report-GU45

LAB CONTROL RESULTS-CONVENTIONALS GU45-Windward Environmental



Matrix: Water Data Release Authorized: A Reported: 07/12/04 Project: LDW Seep Sampling Event: NA Date Sampled: NA Date Received: NA

Analyte	Date	Units	LCS	Spike Added	Recovery
Total Suspended Solid	ds 07/07/04	mg/L	49.5	50.0	99.0%

Water Lab Control Report-GU45

STANDARD REFERENCE RESULTS-CONVENTIONALS GU45-Windward Environmental



Matrix: Water Data Release Authorized: Reported: 07/12/04 arp Project: LDW Seep Sampling Event: NA Date Sampled: NA Date Received: NA

Analyte/SRM ID	Date	Units	SRM	Value	Recovery
					- <u> </u>
Total Organic Carbon SPEX #25-161AS	07/01/04	mg/L	19.6	20.0	98.0%
Dissolved Organic Carbon SPEX #25-161AS	07/09/04	mg/L	21.6	20.0	108.0%



Matrix: WaterProjectData Release Authorized:EvenReported:07/12/04Date ReceivedDate Received

Project: LDW Seep Sampling Event: NA Date Sampled: 06/30/04 Date Received: 06/30/04

Analyte		Date	Units	Sample	Replicate(s)	RPD/RSD	
ARI ID: GU45A	Client ID:	LDW-SP-48-C-U	· .		·		
Total Suspended	Solids	07/07/04	mg/L	12.4	13.1	5.5%	;

Water Replicate Report-GU45

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Matrix: Water Data Release Authorized: AA Reported: 07/12/04

	and the second
Project:	LDW-SEEP SAMPLING
Event:	NA
Date Sampled:	07/01/04
Date Received:	07/01/04

Client ID: LDW-SP-10-C-F ARI ID: 04-10337 GU59A

Analyte	Date	Method	Units	RL	Sample
				· · · · · · · · · · · · · · · · · · ·	
Dissolved Organic Carbon	07/09/04 070104#1	EPA 415.1	mg/L	1.50	2.41

RL



Matrix: Water Project: LDW-SEEP SAMPLING Data Release Authorized: pr Reported: 07/12/04 Event: NA Date Sampled: 07/01/04 Date Received: 07/01/04

Client ID: LDW-SP-12-C-F ARI ID: 04-10338 GU59B

Analyte	Date	Method	Units	RL	Sample
Dissolved Organic Carbon	07/09/04 070104#1	EPA 415.1	mg/L	1.50	< 1.50 U

Analytical reporting limit Undetected at reported detection limit \mathbf{RL} Ū.



Matrix: Water Data Release Authorized: 64 Reported: 07/12/04

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Project: LDW-SEEP SAMPLING Event: NA Date Sampled: 07/01/04 Date Received: 07/01/04

Client ID: LDW-SP-20-C-F ARI ID: 04-10339 GU59C

Analyte		Date	Method	Units	RL	Sample
		- <u>-</u> .				
Dissolved Organ	ic Carbon	07/09/04 070104#1	EPA 415.	1 mg/L	1.50	< 1.50 U



Matrix: Water Data Release Authorized: 07 Reported: 07/12/04

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Project: LDW-SEEP SAMPLING Event: NA Date Sampled: 07/01/04 Date Received: 07/01/04

Client ID: LDW-SP-41-C-F ARI ID: 04-10340 GU59D

Analyte	Date	Method	Units	. • *	RL	Sample
					1.5	
Dissolved Organic Carbon	07/09/04 070104#1	EPA 415.1	mg/L		1.50	< 1.50 U



Matrix: Water Data Release Authorized: PA Reported: 07/12/04

Project: LDW-SEEP SAMPLING Event: NA Date Sampled: 07/01/04 Date Received: 07/01/04

Client ID: LDW-SP-12-C-U ARI ID: 04-10341 GU59E

Analyte	Date	Method	Units	RL	Sample
Total Suspended Solids	07/02/04 070204#1	EPA 160.2	mg/L	1.0	15.6
Total Organic Carbon	07/01/04 070104#1	EPA 415.1	mg/L	1.50	< 1.50 U



Matrix: Water Data Release Authorized: A Reported: 07/12/04 Project: LDW-SEEP SAMPLING Event: NA Date Sampled: 07/01/04 Date Received: 07/01/04

Client ID: LDW-SP-20-C-U ARI ID: 04-10342 GU59F

Analyte	Date	Method Units	RL Sample
Total Suspended Solids	07/02/04 070204#1	EPA 160.2 mg/L 1	.0 4.3
Total Organic Carbon	07/01/04 070104#1	EPA 415.1 mg/L 1.	50 < 1.50 U



Matrix: Water Data Release Authorized: Mr Reported: 07/12/04 Project: LDW-SEEP SAMPLING Event: NA Date Sampled: 07/01/04 Date Received: 07/01/04

Client ID: LDW-SP-41-C-U ARI ID: 04-10343 GU59G

			1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	and the second second	
Analyte	Date	Method	Units	RL	Sample
Total Suspended Solids	07/02/04 070204#1	EPA 160.2	mg/L	1.0	4.0
Total Organic Carbon	07/01/04	EPA 415.1	mg/L	1.50	< 1.50 U
	070104#1	and the second second			· · · · · · · · · · · · · · · · · · ·



Matrix: Water Data Release Authorized: PAR Reported: 07/12/04

Project: LDW-SEEP SAMPLING Event: NA Date Sampled: 07/01/04 Date Received: 07/01/04

Client ID: LDW-SP-39-C-F ARI ID: 04-10344 GU59H

Analyte	Date	Method	Units	÷	RL Sample
Dissolved Organic Carbon	07/09/04	EPA 415.1	mg/L		1.50 < 1.50 U
	0/0104#1				



Matrix: Water Data Release Authorized: pr Reported: 07/12/04

	Project: LDW-SEEP	SAMP	LING
1	Event: NA		
	Date Sampled: 07/01/04		
	Date Réceived: 07/01/04		1999 - 1999 1999 - 1999 - 1999 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1

Client ID: LDW-SP-80-C-F ARI ID: 04-10345 GU591

Analyte			Date	Method	Units	RL	Sample
				• • • • •			
Dissolved	Organic	Carbon	07/09/04 070604#1	EPA 415.1	mg/L	1.50	14.8



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Matrix: Water Data Release Authorized: MR Reported: 07/12/04

Project: LDW-SEEP SAMPLING Event: NA Date Sampled: 07/01/04 Date Received: 07/01/04

Client ID: LDW-SP-39-C-U ARI ID: 04-10346 GU59J

Analyte	Date Method Units	RL Sample
Total Suspended Solids	07/02/04 EPA 160.2 mg/L 070204#1	1.0 5.8
Total Organic Carbon	07/01/04 EPA 415.1 mg/L 070104#1	1.50 < 1.50 U



Matrix: Water Data Release Authorized: MR Reported: 07/12/04

Project: LDW-SEEP SAMPLING Event: NA Date Sampled: 07/01/04 Date Received: 07/01/04

Client ID: LDW-SP-80-C-U ARI ID: 04-10347 GU59K

Analyte	Date	Method	Units	RL	Sample
Total Suspended Solids	07/02/04 070204#1	EPA 160.2	mg/L	1.1	33.3
Total Organic Carbon	07/01/04 070104#1	EPA 415.1	mg/L	1.50	13.4

RL Analytical reporting limit U Undetected at reported detection limit

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METHOD BLANK RESULTS-CONVENTIONALS GU59-Windward Environmental



Matrix: Water Data Release Authorized: Reported: 07/12/04

Analyte	Date	Units	Blank
Total Suspended Solids	07/02/04	mg/L	< 1.0 U
Total Organic Carbon	07/01/04	mg/L	< 1.50 U
Dissolved Organic Carbon	07/09/04	mg/L	< 1.50 U

LAB CONTROL RESULTS-CONVENTIONALS GU59-Windward Environmental



Matrix: Water Data Release Authorized: Reported: 07/12/04

Analyte	Date	Units	LCS	Spike Added	Recovery
Total Suspended Sol.	ids 07/02/04	mg/L	49.6	50.0	99.2%

STANDARD REFERENCE RESULTS-CONVENTIONALS GU59-Windward Environmental



Matrix: Water Data Release Authorized: 0

Analyte/SRM ID	Date	Units	SRM	True Value	Recovery
Total Organic Carbon SPEX #25-161AS	07/01/04	mg/L	19.6	20.0	98.0%
Dissolved Organic Carbon ERA #0206-02-02	07/09/04	mg/L	21.6	20.0	108.0%

ANALYTICAL RESOURCES INCORPORATED

Matrix: Water Data Release Authorize Reported: 07/12/04

Matrix: Water Data Release Authorized: Reported: 07/12/04	6 ~*	D	Project Event Date Sampled ate Received	: LDW-SEEP SAMM : NA : 07/01/04 : 07/01/04	PLING
Analyte	Date	Units	Sample	Replicate(s)	RPD/RSD
ARI ID: GU59A Client ID:	LDW-SP-10-0	C-F			
Dissolved Organic Carbon	07/09/04	mg/L	2.41	< 1.50	NA

ARI ID: GU59G Client ID: LDW-SP-41-C-U

Total Suspended Solids	07/02/04	mg/L 4.0	10.2 87.3%
Total Organic Carbon	07/01/04	mg/L < 1.50	< 1.50 NA



Matrix: Water Data Release Authorized: Reported: 07/12/04	are		Proj Ev Date Samp	ect: LDW- rent: NA bled: 07/0	SEEP SAM	IPLING
Analyte	Date	Units	Date Recei Sample	ved: 07/0 Spike	1/04 Spike Added	Recovery
ARI ID: GU59A Client ID	LDW-SP-10-	C-F			· · ·	
Dissolved Organic Carbon	07/09/04	mg/L	2.41	26.4	20.0	120.0%
ARI ID: GU59G Client ID:	LDW-SP-41-	C-U				
Total Organic Carbon	07/01/04	mg/L	< 1.50	21.7	20.0	108.5%



Matrix: Water Data Release Authorized: A Reported: 07/16/04

	Project:	LDW-SEEP	SAMPLING
	Event:	NA	
٠D	ate Sampled:	07/02/04	
Da	te Received:	07/02/04	

Client ID: LDW-SP-62-C-F ARI ID: 04-10430 GU76A

Analyte			Date	Method	Units	RL	Sample
							<u> </u>
Dissolved	Organic	Carbon	07/09/04 070904#1	EPA 415.1	mg/L	1.50	< 1.50 U

RL Analytical reporting limit U Undetected at reported detection limit

000317



Matrix: Water Data Release Authorized: A Reported: 07/16/04

Project: LDW-SEEP SAMPLING Event: NA Date Sampled: 07/02/04 Date Received: 07/02/04

Client ID: LDW-SP-61-C-U ARI ID: 04-10431 GU76B

Analyte	Date	Method	Units	RL	Sample
Total Suspended Solids	07/07/04 070704#1	EPA 160.2	mg/L	2.2	16.2
Total Organic Carbon	07/15/04 071504#1	EPA 415.1	mg/L	1.50	2.57



Matrix: Water Data Release Authorized: Reported: 07/16/04

Project:	LDW-SEEP	SAMPLING
Event:	NA	
Date Sampled:	07/02/04	
Date Received:	07/02/04	

Client ID: LDW-SP-61-C-F ARI ID: 04-10432 GU76C

Analyte	Date	Method	Units	RL	Sample
				· · · · · · · · · · · · · · · · · · ·	
Dissolved Organic Carbon	07/09/04 070604#1	EPA 415.1	mg/L	1.50	< 1.50 U

Analytical reporting limit Undetected at reported detection limit RL.

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METHOD BLANK RESULTS-CONVENTIONALS GU76-Windward Environmental



Matrix: Water Data Release Authorized: OR Reported: 07/16/04

Project: LDW-SEEP SAMPLING Event: NA Date Sampled: NA Date Received: NA

		Date Received: NA			
Analyte	Date	Units	Blank		
Total Suspended Solids	07/07/04	mg/L	< 1.0 U		
Total Organic Carbon	07/15/04	mg/L	< 1.50 U		
Dissolved Organic Carbon	07/09/04	mg/L	< 1.50 U		

Water Method Blank Report-GU76

392

LAB CONTROL RESULTS-CONVENTIONALS GU76-Windward Environmental



Matrix: Water Data Release Authorized: Ast Reported: 07/16/04

Project: LDW-SEEP SAMPLING

Event: NA Date Sampled: NA Date Received: NA

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		· · · ·

Analyte	Date	Units	LCS	Spike Added	Recovery
				· · · · ·	
Total Suspended Solids	07/07/04	mg/L	49.9	50.0	99.8%

STANDARD REFERENCE RESULTS-CONVENTIONALS GU76-Windward Environmental



Matrix: Water

Data Release Authorized: AAR Reported: 07/16/04

Analyte/SRM ID	Date	Units	SRM	True Value	Recovery
Total Organic Carbon SPEX #25-161AS	07/15/04	mg/L	20.3	20.0	101.5%
Dissolved Organic Carbon EBA #0206-02-02	07/09/04	mg/L	21.6	20.0	108.0%

REPLICATE RESULTS-CONVENTIONALS GU76-Windward Environmental



Matrix: Water Data Release Authorized: Arg Reported: 07/16/04			Project: LDW-SEEP SAMPLING Event: NA Date Sampled: 07/02/04 Date Received: 07/02/04				
Analyte		Date		Units	Sample	Replicate(s)	RPD/RSD
ARI ID: GU76B C1	ient ID:	LDW-SP-	61-C-U	- <u></u>	**************************************	<u> </u>	
Total Suspended So.	lids	07/07	/04	mg/L	16.2	15.3	5.7%
	-						
				•	· · ·	×	

Water Replicate Report-GU76.



Matrix: Water Data Release Authorized: Art Reported: 07/16/04 Project: LDW-SEEP SAMPLING Event: NA Date Sampled: 07/03/04 Date Received: 07/03/04

Client ID: LDW-SP-75-C-U ARI ID: 04-10461 GU83A

Analyte	Date	Method	Units	RL	Sample
	······································			 	
Total Suspended Solids	07/07/04 070704#1	EPA 160.2	mg/L	2.3	24.9
Total Organic Carbon	07/15/04 071504#1	EPA 415.1	mg/L	1.50	3.18

RL Analytical reporting limit

U Undetected at reported detection limit
SAMPLE RESULTS-CONVENTIONALS GU83-Windward Environmental



Matrix: Water Data Release Authorized: Reported: 07/16/04

Project: LDW-SEEP	SAMPLING
Event: NA	
Date Sampled: 07/03/04	aran Aran Ar
Date Received: 07/03/04	e di tangéné di

Client ID: LDW-SP-75-C-F ARI ID: 04-10462 GU83B

				· · ·		
Analyte	Date	Method	Units	RL	Sample	
	and a second	· .	· · ·			
Dissolved Organic Carbon	07/09/04	EPA 415.1	mg/L	1.50	< 1.50 U	

RL Analytical reporting limit U Undetected at reported detection limit

SAMPLE RESULTS-CONVENTIONALS GU83-Windward Environmental



Matrix: Water Data Release Authorized: 04 Reported: 07/16/04

Project: LDW-SEEP SAMPLING Event: NA Date Sampled: 07/02/04 Date Received: 07/03/04

Client ID: LDW-SP-64-C-F ARI ID: 04-10466 GU83F

					to the second
Analyte	Date	Method	Units	RL	Sample
	· · · · · · · · · · · · · · · · · · ·				
Dissolved Organic Carbon	07/09/04 070604#1	EPA 415.1	mg/L	1.50	1.75
			· · · · · · ·		

RL Analytical reporting limit U Undetected at reported detection limit

METHOD BLANK RESULTS-CONVENTIONALS GU83-Windward Environmental



Matrix: Water

Data Release Authorized: 044 Reported: 07/16/04

Project: LDW-SEEP SAMPLING Event: NA

Date S Date Re

sampled:	NA	1.14
eceived:	NA	

Analyte	Date	Units	Blank
Total Suspended Solids	07/07/04	mg/L	< 1.0 U
Total Organic Carbon	07/15/04	mg/L	< 1.50 U
Dissolved Organic Carbon	07/09/04	mg/L	< 1.50 U

LAB CONTROL RESULTS-CONVENTIONALS GU83-Windward Environmental



Matrix: Water Data Release Authorized: A Reported: 07/16/04

	Date Red	ceived: NA
		Spike
Analyte Date	Units LCS	Added Recovery
Total Suspended Solids 07/07/04	mg/L 49.9	50.0 99.8%

STANDARD REFERENCE RESULTS-CONVENTIONALS GU83-Windward Environmental



Matrix: Water Data Release Authorized: Reported: 07/16/04	947	Da	Project: Event: ite Sampled:	LDW-SEEP NA NA	SAMPLING
Analyte/SRM ID	Date	Dat Units	e Received: SRM	NA True Value	Recovery
Total Organic Carbon SPEX #25-161AS	07/15/04	mg/L	20.3	20.0	101.5%
Dissolved Organic Carbon ERA #0206-02-02	07/09/04	mg/L	21.6	20.0	108.0%

000329

Water Standard Reference Report-GU83

REPLICATE RESULTS-CONVENTIONALS GU83-Windward Environmental



Matrix: Water Data Release Authorized: A Reported: 07/16/04 Analyte Date	Project: Event: Date Sampled: Date Received: Units Sample	LDW-SEEP SAMPLING NA 07/03/04 07/03/04 Replicate(s) RPD/RS	D
ARI ID: GU83A Client ID: LDW-SP-75-C-U			
Total Suspended Solids 07/07/04	mg/L 24.9	23.7 4.9%	•••
Total Organic Carbon 07/15/04	mg/L 3.18	3.11 2.2%	-

MS/MSD RESULTS-CONVENTIONALS GU83-Windward Environmental



Matrix: Water Data Release Authorized: MAR Reported: 07/16/04

• .	Project:	LDW-SEEP SAMPLING
	Event:	NA
	Date Sampled:	07/03/04
	Date Received:	07/03/04

Analyte	Date	Units	Sample	Spike	Spike Added Recovery
ARI ID: GU83A Client ID:]	LDW-SP-75-C-	Ŭ			
Total Organic Carbon	07/15/04	mg/L	3.18	23.8	20.0 103.1%



Frontier GeoSciences Inc.

414 Pontius Ave N Seattle, WA 98109

206-622-6960 fax 206-622-6870 RE: Lower Duwamish Waterway Seeps Project Project # 04-08-06-20

November 12, 2004

Susan McGroddy Windward Environmental 200 West Mercer St., Suite 401 Seattle, WA 98119 Main Line: (206) 378-1364 Fax: (206) 217-0089

SUBJECT: Report for the Samples Collected from June 29 to July 3, 2004.

Dear Ms. McGroddy,

Enclosed please find the revised results for trace metals and mercury in the water samples collected from June 29 to July 3, 2004. The samples were received in good condition by Frontier Geosciences Inc. from July 29 to July 3, 2004.

There were no significant analytical issues and any QC issues experienced are addressed within the following report. Please feel free to contact me if you have any questions regarding this report.

Sincerely,

Frank Colich

Frank Colich Project Manager <u>Frankc@Frontiergeosciences.com</u>

Windward Environmental Report to Susan McGroddy

RE: Lower Duwamish Waterway Seeps Project Project # 04-08-06-20

November 12, 2004

Frank Colich Frontier Geosciences Inc. 414 Pontius Ave. N Seattle, WA 98109 (206) 622-6960

1. Scope of Work

A total of forty samples were submitted for trace metals analysis and total mercury analysis from June 29 to July 3, 2004. The samples were analyzed using high-level QA/QC documentation.

Please note that this is a revised report. There are three revisions that were made to the report and are as follows:

The sample LDW-SP-80-C-F was had an original nickel concentration reported as a non-detect at ND (< 0.07). The report has been changed to reflect nickel's reporting limit of 0.04. The new result is ND (0.04).

The batch identifiers for Cr and Cd were reported as A3 on the matrix duplicate and matrix spike reports. The correct batch ID is A4 and this report has been changed to reflect that identifier.

Samples results were reported as preparation blank corrected. The report has been changed to reflect all results without preparation blank correction. The ICP-MS datasets have been relabeled with a suffix of –nPBW to reflect the correction. The CV-AFS and HG-HFS datasets have maintained their original labels.

2. Sample Receipt

Due to the fact that Frontier is based within a few miles from the sampling site, the samples were hand delivered on the same day that sampling occurred. Samples typically arrived at Frontier between three to four o'clock PM. Upon arrival, samples were immediately received and sent to the lab for preservation and filtration where necessary.

The samples were received and logged in according to FGS protocols on the day of receipt. Sample processing took place using ultra-clean sample handling techniques in clean areas known to be low in atmospheric mercury (and presumably other trace elements as well). Reagents, gases, and DI water are all reagent or ultra-pure grade, and were previously analyzed for trace metals to ensure very low blanks. Samples designated for dissolved analysis were filtered using a 0.45 um-disposable Nalgene filter unit. Immediately after the samples arrived at Frontier Geosciences, the samples were preserved to 1% (v/v) with HNO₃. This only occurred for the first sampling event. After the first event the trace metals bottles were sent to Windward with preservative in the bottles. When these bottles were received, the pH was check upon receipt to ensure proper preservation of the samples. All samples requiring trace metals analyses were oven-digested at 85°C overnight prior to analysis by inductively coupled plasma-mass spectroscopy (ICP-MS) according to EPA Method 200.8.

Original samples for total mercury analysis were preserved and oxidized to 1% to 5% (v/v) with BrCl and digested overnight at room temperature prior to analysis by cold vapor atomic fluorescence spectroscopy (CVAFS) according to EPA Method 1631. Prior to preservation the samples were filtered using 1.0 um PES filter units that were specifically purchased for this project.

The samples identified as LDW-SP-39-F and LDW-SP-39-C-U that were collected on July 1, 2004, were mistakenly delivered to ARI in Seattle. These samples were delivered to Frontier by ARI's courier on July 2, 2004. Since the samples arrived to Frontier within 48 hours, all samples were received within holding times and no further action was required.

3. ICP-MS Analyses

Metals were determined using inductively coupled plasma – mass spectrometry (ICP-MS) with a Perkin-Elmer ELAN 6000. Prepared samples were introduced

into a radio frequency (RF) plasma where energy-transfer processes cause desolvation, atomization, and ionization. The ions were extracted from the plasma through a differentially pumped vacuum interface and separated based on their mass-to-charge ratio (m/z) by a mass spectrometer. A solid-state detector detects ions transmitted through the mass analyzer and the resulting current is processed by a data handling system. Daily analytical runs were begun with a 6-point standard curve, spanning the entire analytical range of interest, with additional continuing calibration verification (CCV) standards run every 10 samples. The daily standard curves were calculated with the initial standards (calibration blank corrected) of the day, using linear regression, forced through zero (Access Database software). All sample results are reported blank corrected. The ICP-MS software performs most calculations for trace metals determination automatically, and outputs hardcopies with results in $\mu g/L$ units uncorrected for the preparation blanks and instrument blanks. All samples were corrected for the instrument blanks but were **not** preparation blank corrected according to the following equation.

C is the sample concentration calculated by ICP-MS software in μ g/L units **DF** is the dilution factor of the sample **IB** is the mean concentration of the instrument blanks in μ g/L units

[Metal] $(\mu g/L) = C - (DF * IB)$

To assist with identifying analytical batches, each ICP-MS dataset was given a specific label. There were four ICP-MS analytical batches and are determined as follows:

ICPMS1-040706-1-nPBW was analyzed on July 6, 2004 and is labeled as Batch ID of A1. ICPMS1-040713-1-nPBW was analyzed on July 13, 2004 and is labeled as Batch ID of A2. ICPMS3-040714-1A-nPBW was analyzed on July 14, 2004 and is labeled as Batch ID of A3. ICPMS3-040715-1-nPBW was analyzed on July 15, 2004 and is labeled as

Batch ID of A4.

4. Total Mercury Analysis

Samples were analyzed for total mercury in accordance with EPA Method 1631E on March 24, 2004. Aliquots of the samples were weighed out in Teflon containers, NH₂OH · HCl was added to destroy free halogens, and then each sample was poured into pre-purged bubblers. Then $SnCl_2$ was added to reduce Hg (II) to Hg^O, which was then purged onto gold traps as a preconcentration step. The Hg^O contained on the gold traps was then analyzed by thermal desorption into a CVAFS, using the dual amalgamation technique. Peak areas were assessed by integrators. All samples were corrected for the instrument (bubbler) blanks, but the sample concentrations were **not** corrected for the preparation blanks. Net THg concentrations were calculated according to the following formula, where **PA** is the integrator peak area, **b** is the mean bubbler blank, **V** is the digest volume (in liters), **F**_D is the dilution factor associated with preserving the samples, and **S** is the calibration curve slope in units/ng:

$$[THg] (ng/L) = \underline{[(PA-b/S)/(V)]}_{F_D}$$

To assist with identifying analytical batches, each CV-AFS dataset was given a specific label. There were four CV-AFS analytical batches and are determined as follows:

THg11-040709-1 was analyzed on July 9, 2004 and is labeled as Batch ID B1. THg12-040709-1 was analyzed on July 9, 2004 and is labeled as Batch ID B2. Thg12-040714-1 was analyzed on July 14, 2004 and is labeled as Batch ID B3.

5. Arsenic Analysis

Aliquots of the digested samples were analyzed for arsenic content by hydride generation - atomic fluorescence spectroscopy (HG-AFS) according to SM3114-C. Samples were treated with potassium-iodide (KI) to reduce all inorganic arsenic in the sample to As(III). Reaction of the sample with sodium borohydride releases gaseous arsine hydrides that are carried by an argon stream into a hydrogen-fueled flame placed in the path of an atomic fluorescence detector. Blank samples were analyzed undiluted (1.43x) while most samples were analyzed at a 5x dilution. Results were automatically downloaded to an MS Access database, where calculations and blank correction for the mean of the instrument blanks were performed. All samples were corrected for the

instrument blanks but were **not** preparation blank corrected according to the following equation.

$$C_s (ng/L) = [(PH_s - Ph_{ib})/m^*DF_s]_b$$

Where: $C_s = sample \ concentration$ $PH_s = peak \ height \ of \ the \ sample$ $PH_{ib} = mean \ peak \ height \ of \ the \ instrument \ blanks \ (IBWs)$ $m = slope \ of \ the \ calibration \ curve \ corrected \ for \ the \ IBWs$ $DF_s = dilution \ factor \ of \ the \ sample$

To assist with identifying analytical batches, each HV-AFS dataset was given a specific label. There were four HV-AFS analytical batches and are determined as follows:

AFS1-040721-1 was analyzed on July 21, 2004 and is labeled as Batch ID C1. AFS1-040720-1 was analyzed on July 20, 2004 and is labeled as Batch ID C2.

6. Analytical Issues

There were no significant analytical difficulties experienced during the analysis of these samples and all QC parameters were within established control limits with the following exceptions:

As a measure of the accuracy of the methods used, certified reference materials (CRMs) were prepared and analyzed with each analytical batch according to the matrix. Since there is no CRM available for a seep samples, the CRM's analyzed were NIST 1640 and NIST 1641d, which are river water matrices. The control limits for CRM recoveries are 75-125%. All CRM results are within the control limits.

All calibration curves have correlation coefficients of at least 0.995, and all calibration check samples (ICVs and CCVs) were within the control limits of 75-125% recovery, with the following exception. The ICP-MS analysis for silver for batch A1 yielded low CCV recoveries, below the 75% limit. Due to the low recoveries silver is not reported from this analytical run. All samples were reanalyzed for silver and are reported from batch A2.

As a measure of the accuracy of the methods used, and to check for matrix interference, matrix spikes were digested and analyzed. All matrix spikes were

within the control limits of 75-125%, with the following exceptions. The matrix spike recoveries for Ni and Cu in batch A3 yielded recoveries that were below the established control limits. The samples were also analyzed at a 10X dilution. At that dilution there was no suppression of the spike recovery; therefore, all analytes reported from Batch ID A3 are reported from the 10X dilution.

The matrix spikes for chromium and cadmium in batch A3 were mistakenly not spiked by the ICP-MS analyst. These samples were immediately re-analyzed with the proper spiking solution added. These samples are reported from batch ID A4.

A reasonable measure of the precision of the analytical methods is to look at the RPD between matrix duplicates or matrix spike sample concentration and a matrix spike duplicate sample concentration. All RPD's were less than the control limit of 25% with the following exceptions. The recovery for the matrix spike duplicate performed on the samples identified as LDW-SP-61 U for silver and LDW-SP-75-C U for cadmium exceeded the established control limit of 25% at 39.7% and 39.4%, respectively. Since both the native sample and its duplicate were 3 times higher than the reporting limit, variation is expected to increase, therefore, this is not considered significant. Since all other forms of QC are in control for these batches, no further action was taken.

It should be noted that one matrix duplicate RPD for Cr and Ni are reported as not calculated due to native or duplicate concentrations below the reporting limit. At such low concentrations variability is expected to increase; therefore, no corrective action was taken and Frontier maintains confidence in the results reported.

There were a number of samples analyzed for chromium that yielded a dissolved concentration that was significantly higher than the total fraction. All samples were re-analyzed for confirmation purposes. The re-analysis confirmed the fractionation discrepancy, therefore only the original analysis was reported.

Please contact me with any questions or concerns regarding this report.

LDW - Seep Sampling Project

Reported November 12, 2004

Frontier Geosciences Inc., 414 Pontius Ave. N, Seattle WA 98109

Analyte (µg/L)	Batch ID	LDW-SP-69-C-U	LDW-SP-69-C-F	LDW-SP-71-C-U	LDW-SP-71-C-F
Date Collected		6/29/04	6/29/04	6/29/04	6/29/04
Cr	A1	2.91	3.10	4.24	2.03
Ni	A1	4.52	3.22	3.44	1.95
Cu	A1	8.06	4.63	12.1	6.07
Zn	A1	45.6	3.95	26.9	10.2
As	C2	1.64	1.47	1.91	1.02
Ag	A2	0.053	0.053	0.068	0.070
Cd	A1	0.112	0.016	0.078	0.023
Pb	A1	0.356	0.066	15.2	0.175
Hg (ng/L)	B1	12.7	3.49	32.2	2.01

Analyte (µg/L)	Batch ID	LDW-SP-76-C-U	LDW-SP-76-C-F	LDW-SP-69-C-AB
Date Collected		6/29/04	6/29/04	6/29/04
Cr	A1	5.67	7.04	-
Ni	A1	3.79	2.37	-
Cu	A1	50.9	3.28	-
Zn	A1	309	138	-
As	C2	287	253	-
Ag	A2	0.077	0.012	-
Cd	A1	0.204	0.091	-
Pb	A1	56.4	3.00	-
Hg (ng/L)	B1	61.6	15.3	ND (< 0.15)

LDW - Seep Sampling Project

Reported November 12, 2004

Frontier Geosciences Inc., 414 Pontius Ave. N, Seattle WA 98109

Analyte (µg/L)	Batch ID	LDW-SP-48-C-U	LDW-SP-48-C-F	LDW-SP-54-C-U	LDW-SP-54-C-F
Date Collected		6/30/04	6/30/04	6/30/04	6/30/04
Cr	A1	4.72	7.58	74.9	4.02
Ni	A1	2.83	1.56	3.92	0.84
Cu	A1	10.9	10.1	6.47	4.53
Zn	A1	17.7	15.8	322	5.45
As	C2	0.618	0.422	1.30	0.404
Ag	A2	0.051	0.053	ND (< 0.015)	ND (< 0.015)
Cd	A1	0.138	0.101	0.710	0.012
Pb	A1	1.11	0.154	296	0.703
Hg (ng/L)	B1	1.09	1.32	582	13.2

Analyte (µg/L)	Batch ID	LDW-SP-82-C-U	LDW-SP-82-C-F	LDW-SP-82-FD-U	LDW-SP-82-FD-F	LDW-SP-82-C-AB
Date Collected		6/30/04	6/30/04	6/30/04	6/30/04	6/30/04
Cr	A1	5.65	3.25	5.81	3.51	-
Ni	A1	5.83	3.56	6.12	3.36	-
Cu	A1	10.9	8.22	13.4	8.27	-
Zn	A1	186	164	201	158	-
As	C2	1.55	1.20	2.20	1.14	-
Ag	A2	0.088	0.113	0.126	0.084	-
Cd	A1	0.569	0.513	0.606	0.503	-
Pb	A1	2.31	0.206	8.29	0.201	-
Hg (ng/L)	B1	16.8	3.80	11.7	2.95	ND (<0.15)

LDW - Seep Sampling Project

Reported November 12, 2004 Frontier Geosciences Inc., 414 Pontius Ave. N, Seattle WA 98109

Revised on November 12, 2004

Analyte (µg/L)	Batch ID	LDW-SP-12-C-U	LDW-SP-12-C-F	LDW-SP-20-C-U	LDW-SP-20-C-F	
Date Collected		7/1/04	7/1/04	7/1/04	7/1/04	
Cr	A1	6.34	7.06	11.4	8.80	
Ni	A1	8.03	4.24	8.83	5.25	
Cu	A1	15.8	12.5	10.2	8.16	
Zn	A1	16.1	14.1	10.8	8.08	
As	C1	1.13	0.771	1.58	1.35	
Ag	A2	0.033	0.053	0.086	0.112	
Cd	A1	0.133	0.107	0.114	0.111	
Pb	A1	0.823	0.129	1.44	0.096	
Hg (ng/L)	B2	5.18	0.74	0.61	0.62	
Analyte (µg/L)	Batch ID	LDW-SP-41-C-U	LDW-SP-41-C-F	LDW-SP-80-C-U	LDW-SP-80-C-F	

Date Collected		7/1/04	7/1/04	7/1/04	7/1/04
Cr	A1	3.68	6.95	4.61	6.70
Ni	A1	4.71	2.23	2.80	ND (< 0.04)
Cu	A1	5.96	5.24	21.4	22.8
Zn	A1	7.14	6.07	14.1	16.8
As	C1	0.239	0.235	0.855	0.590
Ag	A2	0.026	0.036	ND (< 0.015)	ND (< 0.015)
Cd	A1	0.158	0.133	0.037	0.011
Pb	A1	0.080	0.036	0.277	0.078
Hg (ng/L)	B2	1.12	0.62	6.46	8.69

LDW - Seep Sampling Project

Reported November 12, 2004

Frontier Geosciences Inc., 414 Pontius Ave. N, Seattle WA 98109

Analyte (µg/L) Batch ID		LDW-SP-39-C-U	LDW-SP-39-C-F	LDW-SP-10-C-F
Date Collected		7/1/04	7/1/04	7/1/04
Cr	A1	6.01	4.36	6.31
Ni	A1	6.43	2.78	1.32
Cu	A1	12.2	10.1	8.69
Zn	A1	9.90	8.30	11.97
As	C1	0.058	0.054	0.841
Ag	A2	0.025	0.028	0.021
Cd	A1	0.272	0.206	0.085
Pb	A1	0.161	0.051	0.252
Hg (ng/L)	B2	0.95	0.87	0.92

Analyte (µg/L)	Batch ID	LDW-SP-80-C-AB-U	LDW-SP-20-C-AB-U
Date Collected		7/1/04	7/1/04
Cr	-	-	-
Ni	-	-	-
Cu	-	-	-
Zn	-	-	-
As	-	-	-
Ag	-	-	-
Cd	-	-	-
Pb	-	-	-
Hg (ng/L)	B2	ND (<0.15)	ND (<0.15)

LDW - Seep Sampling Project

Reported November 12, 2004 Frontier Geosciences Inc., 414 Pontius Ave. N, Seattle WA 98109

Analyte (µg/L) Batch ID		LDW-SP-62-C-F	W-SP-62-C-F LDW-SP-61-C-U LDW-			
Date Collected		7/2/04	7/2/04	7/2/04		
Cr	A4	7.73	0.12	1.83		
Ni	A3	ND (< 0.04)	ND (< 0.04)	ND (< 0.04)		
Cu	A3	7.77	4.75	4.72		
Zn	A3	12.2	3.53	3.29		
As	C1	6.84	67.2	72.4		
Ag	A3	0.044	0.039	0.027		
Cd	A4	0.109	0.022	0.009		
Pb	A3	0.101	0.233	0.088		
Hg (ng/L)	B3	2.56	2.16	0.99		

Analyte (µg/L)	Batch ID	LDW-SP-64-C-F	LDW-SP-62-C-AB
Date Collected		7/2/04	7/2/04
Cr	A4	1.51	-
Ni	A3	ND (< 0.04)	-
Cu	A3	6.99	-
Zn	A3	3.86	-
As	C1	1.28	-
Ag	A3	0.049	-
Cd	A4	0.045	-
Pb	A3	0.193	-
Hg (ng/L)	B3	1.26	ND (<0.15)

LDW - Seep Sampling Project

Reported November 12, 2004

Frontier Geosciences Inc., 414 Pontius Ave. N, Seattle WA 98109

Analyte (µg/L)	Batch ID	LDW-SP-75-C-U	LDW-SP-75-C-F	LDW-SP-75-C-RB-U	LDW-SP-75-C-RB-F
Date Collected		7/3/04	7/3/04	7/3/04	7/3/04
Cr	A1	5.37	9.74	-	-
Ni	A1	3.31	1.42	-	-
Cu	A1	8.37	6.79	-	-
Zn	A1	8.39	5.35	-	-
As	C1	2.49	2.20	-	-
Ag	A2	0.074	0.081	-	-
Cd	A1	0.037	0.021	-	-
Pb	A1	0.666	0.056	-	-
Hg (ng/L)	B2	1.71	0.77	0.20	ND (<0.15)

Analyte (µg/L)	Batch ID	LDW-SP-64-S-RB-U	LDW-SP-64-C-RB-MP-U	Funnel Blank	Piezometer Blank
Date Collected		7/3/04	7/3/04	7/8/04	7/8/04
Cr	A1	5.25	4.05	-	-
Ni	A1	0.17	0.18	-	-
Cu	A1	1.61	1.59	-	-
Zn	A1	0.98	0.75	-	-
As	C1	ND (< 0.050)	ND (< 0.050)	-	-
Ag	A2	ND (< 0.015)	ND (< 0.015)	-	-
Cd	A1	ND (< 0.008)	ND (< 0.008)	-	-
Pb	A1	0.087	0.091	-	-
Hg (ng/L)	B2/B1	ND (<0.15)	0.16	0.13	ND (<0.15)

LDW - Seep Sampling Project

Reported November 12, 2004

Frontier Geosciences Inc., 414 Pontius Ave. N, Seattle WA 98109

Revised on August 18, 2004

Quality Control Data - Duplicate Report

Analyte (µg/L)	Batch ID	Sample QC'd	Rep. 1	Rep. 2	Mean	RPD
Cr	A1	LDW-SP-75-C U	5.37	5.38	5.37	0.0
	A1	LDW-SP-48-C U	4.72	4.58	4.65	3.0
	A4	LDW-SP-61-C-U	0.12	ND (< 0.07)	N/C	N/C
Ni	A1	LDW-SP-75-C U	3.31	3.65	3.48	9.6
	A1	LDW-SP-48-C U	2.83	3.63	3.23	24.8
	A3	LDW-SP-61-C-U	ND (< 0.04)	ND (< 0.04)	N/C	N/C
Cu	A1	LDW-SP-75-C U	8.37	8.49	8.43	1.5
	A1	LDW-SP-48-C U	10.95	11.28	11.1	2.9
	A3	LDW-SP-61-C-U	4.75	4.80	4.77	1.1
Zn	A1	LDW-SP-75-C U	8.39	8.32	8.35	0.8
	A1	LDW-SP-48-C U	17.65	17.72	17.69	0.4
	A3	LDW-SP-61-C-U	3.53	3.44	3.48	2.5
As	C1	LDW-SP-41-C U	0.239	0.220	0.230	8.3
	C2	LDW-SP-82-C U	1.545	1.360	1.453	12.8
Ag	A2	LDW-SP-75-C U	0.074	0.062	0.068	17.2
	A2	LDW-SP-48-C U	0.051	0.056	0.053	9.2
	A3	LDW-SP-61-C-U	0.039	0.020	0.030	65.9*
Cd	A1	LDW-SP-75-C U	0.037	0.025	0.031	39.9*
	Al	LDW-SP-48-C U	0.138	0.116	0.127	17.8
	A4	LDW-SP-61-C-U	0.020	0.021	0.021	6.1
Ph	A 1	LDW-SP-75-C U	0.666	0.633	0.650	5 1
10	Al	LDW-SP-48-C U	1 112	1.013	1.063	93
	A3	LDW-SP-61-C-U	0.233	0.246	0.239	5.4
Hσ (nσ/Ι.)	B1	I.DW-SP-69-C-U	12 72	12 70	12 7	0.2
···6 (IIG/L)	B2	LDW-SP-39-C-U	0.95	0.92	0.93	3.6
	B3	LDW-SP-61-C-U	2.16	2.15	2.15	0.7

N/C = Not calculated, please see case narrative.

*RPD is above established control limits. Please see case narrative.

LDW - Seep Sampling Project

Reported November 12, 2004

Frontier Geosciences Inc., 414 Pontius Ave. N, Seattle WA 98109

Revised on August 18, 2004

Quality Control Data - Matrix Spike / Matrix Spike Duplicate Report

Analyte (µg/L)	Batch ID	Sample QC'd	Sample Mean	Spike Level	MS	% Rec.	MSD	% Rec.	RPD
Cr	A1	LDW-SP-75-C U	5.37	200.0	192.8	93.7	191.3	93.0	0.7
	A1	LDW-SP-48-C U	4.65	200.0	196.6	96.0	192.9	94.1	1.9
	A4	LDW-SP-61-C-U	0.00	250.0	244.6	97.8	245.4	98.2	0.3
Ni	A1	LDW-SP-75-C U	3.48	250.0	215.5	84.8	208.8	82.1	3.1
	A1	LDW-SP-48-C U	3.23	250.0	228.1	89.9	223.5	88.1	2.0
	A3	LDW-SP-61-C-U	0.00	312.5	309.8	99.1	315.6	101.0	1.9
Cu	A1	LDW-SP-75-C U	8.43	250.0	238.1	91.9	237.8	91.7	0.1
	A1	LDW-SP-48-C U	11.11	250.0	241.0	91.9	242.4	92.5	0.6
	A3	LDW-SP-61-C-U	4.77	312.5	323.1	101.9	325.8	102.7	0.8
Zn	A1	LDW-SP-75-C U	8.35	500.0	489.8	96.3	485.1	95.3	1.0
	A1	LDW-SP-48-C U	17.69	500.0	488.2	94.1	487.7	94.0	0.1
	A3	LDW-SP-61-C-U	3.48	625.0	613.5	97.6	623.5	99.2	1.6

* Recoveries are below established control limits. Please see case narrative.

LDW - Seep Sampling Project

Reported November 12, 2004

Frontier Geosciences Inc., 414 Pontius Ave. N, Seattle WA 98109

Quality Control Data - Matrix Spike / Matrix Spike Duplicate Report

Analyte (µg/L)	Batch ID	Sample QC'd	Sample Mean	Spike Level	MS	% Rec.	MSD	% Rec.	RPD
As	C1	LDW-SP-41-C U	0.230	0.715	1.020	110.5	1.013	109.6	0.6
	C2	LDW-SP-82-C U	1.453	2.500	4.044	103.6	3.861	96.3	4.6
Ag	A2	LDW-SP-75-C U	0.068	40.00	36.60	91.3	38.17	95.3	4.2
	A2	LDW-SP-48-C U	0.053	40.00	37.32	93.2	38.28	95.6	2.5
	A3	LDW-SP-61-C-U	0.030	50.00	49.45	98.8	50.27	100.5	1.6
Cd	A1	LDW-SP-75-C U	0.031	20.00	19.28	96.2	19.41	96.9	0.7
	A1	LDW-SP-48-C U	0.127	20.00	19.50	96.9	19.01	94.4	2.6
	A4	LDW-SP-61-C-U	2.500	2.08	82.40	3842.2	2.13	-17.7	189.9
Pb	A1	LDW-SP-75-C U	0.650	50.00	51.86	102.4	51.43	101.6	0.8
	A1	LDW-SP-48-C U	1.063	50.00	51.50	100.9	51.14	100.2	0.7
	A3	LDW-SP-61-C-U	0.239	62.50	68.81	109.7	69.57	110.9	1.1
Hg (ng/L)	B1	LDW-SP-69-C-U	12.71	40.40	51.18	95.2	50.70	94.0	1.0
	B2	LDW-SP-39-C-U	5.18	20.20	24.32	94.8	24.04	93.4	1.1
	В3	LDW-SP-61-C-U	2.15	8.08	9.96	96.7	10.20	99.6	2.3

Trace Metals Results for Windward Environmental LDW - Seep Sampling Project

Reported November 12, 2004

Frontier Geosciences Inc., 414 Pontius Ave. N, Seattle WA 98109

Analyte (µg/L)	Batch ID	CRM Identity	Cert. Value	Obs. Value	% Rec.
Cr	A1	NIST 1640	38.6	35.2	91.1
	A4	NIST 1640	38.6	39.2	101.6
Ni	Δ1	NIST 1640	27 4	25.6	93 5
111	A3	NIST 1640	27.4	25.0	101.1
Cu	A1	NIST 1640	85.2	83.9	98.4
	A3	NIST 1640	85.2	91.1	106.9
Zn	A1	NIST 1640	53.2	52.4	98.5
	A3	NIST 1640	53.2	59.2	111.3
As	C1	NIST 1640	26.67	25.56	95.8
	C2	NIST 1640	26.67	28.77	107.9
Ag	A2	NIST 1640	7.62	7.22	94.8
-	A3	NIST 1640	7.62	7.91	103.7
	4.1		00 5 0	00 51	00.0
Cd	AI	NIST 1640	22.79	22.51	98.8
	A4	NIST 1640	22.79	24.37	106.9
Pb	A1	NIST 1640	27.89	27.87	99.9
	A3	NIST 1640	27.89	29.33	105.2
Hg (ng/L)	B1	NIST 1641d	1601	1599	99 9
	B2	NIST 1641d	1601	1587	99.2
	B3	NIST 1641d	1601	1591	99.4

Quality Control Data - Certified Reference Material Report

CRM Identity = Certified reference material identity

Cert. Value = Certified value

Obs. Value = Experimental result

% Rec. = Percent recovery

LDW - Seep Sampling Project

Reported November 12, 2004 Frontier Geosciences Inc., 414 Pontius Ave. N, Seattle WA 98109

Quality	Control	Data -	Prenaration	Rlank	Renart
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Analyte (µg/L)	Batch ID	PBW1	PBW2	PBW3	PBW4	Mean	Std Dev	R.L
Cr	A1	0.01	0.02	0.02	0.01	0.02	0.00	0.07
	A4	-0.03	-0.04	-0.06	-0.09	-0.05	0.03	0.07
Ni	A1	0.00	0.00	0.00	0.00	0.00	0.00	0.04
	A3	0.00	0.00	0.00	0.00	0.00	0.00	0.04
Cu	A1	0.00	0.00	0.00	0.00	0.00	0.00	0.04
	A3	-0.01	0.00	-0.01	0.00	-0.01	0.00	0.04
Zn	A1	0.05	0.00	0.01	-0.01	0.01	0.02	0.10
	A3	0.00	0.00	0.02	0.00	0.00	0.01	0.10
As	C1	-0.005	-0.013	0.003	-0.015	-0.008	0.008	0.050
	C2	0.003	-0.004	-0.005	-0.003	-0.002	0.004	0.050
Ag	A2	-0.001	-0.001	0.000	0.000	-0.001	0.000	0.015
	A3	0.000	0.000	0.000	0.000	0.000	0.000	0.015
Cd	A1	0.000	-0.001	0.000	-0.001	0.000	0.001	0.008
	A4	-0.001	0.000	-0.001	0.000	-0.001	0.000	0.008
Pb	A1	0.000	0.008	0.000	-0.001	0.002	0.005	0.015
	A3	0.000	0.005	0.001	0.003	0.002	0.002	0.015
Hg (ng/L)	B1	0.04	0.04	0.08	-	0.05	0.02	0.15
	B2	0.08	0.05	0.04	-	0.06	0.02	0.15
	B3	0.05	0.02	0.05	-	0.04	0.02	0.15

R.L = Reporting Limit

Std Dev = Standard deviation