

Data for SW8260B Forms

Sample Extraction Data

Prep Method: 5030B-SW8260B

Lab Number [Field ID]	Batch	Nominal Initial/Final	Initial [mL]	Final [mL]	Dilution	% Solids	Notes	Date
1303202-01 [GW0890]	3D02004	5.00/5.00	5.00	5.00	5.00			04/02/13
1303202-03 [GW0905]	3D02004	5.00/5.00	5.00	5.00	1.00			04/02/13
1303202-05 [GW0908]	3D02004	5.00/5.00	5.00	5.00	1.00			04/02/13
1303202-07 [GW0965]	3D02004	5.00/5.00	5.00	5.00	50.00			04/02/13
1303202-09 [GW0982]	3D02004	5.00/5.00	5.00	5.00	1.00			04/02/13
1303202-11 [GW8262-TB]	3D02004	5.00/5.00	5.00	5.00	1.00			04/02/13

ANALYSIS DATA SHEET

GW0890

Laboratory: Empirical Laboratories, LLC SDG: Kirtland_082
 Client: Shaw Environmental, Inc. Project: Kirtland AFB 2011
 Matrix: Water Laboratory ID: 1303202-01 File ID: 0320201D.D
 Sampled: 03/25/13 12:59 Prepared: 04/02/13 16:06 Analyzed: 04/02/13 16:06
 Solids: Preparation: 5030B Dilution: 5
 Batch: 3D02004 Sequence: 3D09303 Calibration: 3091002 Instrument: MS-VOA5

CAS NO.	COMPOUND	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	46.4	12.5	25.0	50.0	JD
71-43-2	Benzene	526	1.25	2.50	5.00	D
108-86-1	Bromobenzene		1.25	2.50	5.00	U
74-97-5	Bromochloromethane		1.25	2.50	5.00	U
75-27-4	Bromodichloromethane		1.25	2.50	5.00	U
75-25-2	Bromoform		1.25	2.50	5.00	U
74-83-9	Bromomethane		2.50	5.00	10.0	U
104-51-8	n-Butylbenzene		1.25	2.50	5.00	U
78-93-3	2-Butanone	43.1	12.5	25.0	50.0	JD
135-98-8	sec-Butylbenzene	4.90	1.25	2.50	5.00	JD
98-06-6	tert-Butylbenzene		1.25	2.50	5.00	U
75-15-0	Carbon disulfide		1.25	2.50	5.00	U
56-23-5	Carbon tetrachloride		1.25	2.50	5.00	U
108-90-7	Chlorobenzene		1.25	2.50	5.00	U
75-00-3	Chloroethane		2.50	5.00	10.0	U
67-66-3	Chloroform		1.25	2.50	5.00	U
74-87-3	Chloromethane		1.25	2.50	5.00	U
95-49-8	2-Chlorotoluene		1.25	2.50	5.00	U
106-43-4	4-Chlorotoluene		1.25	2.50	5.00	U
124-48-1	Dibromochloromethane		1.25	2.50	5.00	U
96-12-8	1,2-Dibromo-3-chloropropane		2.50	5.00	10.0	U
106-93-4	1,2-Dibromoethane (EDB)	1.70	1.25	2.50	5.00	JD
74-95-3	Dibromomethane		1.25	2.50	5.00	U
95-50-1	1,2-Dichlorobenzene		1.25	2.50	5.00	U
541-73-1	1,3-Dichlorobenzene		1.25	2.50	5.00	U
106-46-7	1,4-Dichlorobenzene		1.25	2.50	5.00	U
75-71-8	Dichlorodifluoromethane		2.50	5.00	10.0	U
75-34-3	1,1-Dichloroethane		1.25	2.50	5.00	U
107-06-2	1,2-Dichloroethane	1.65	1.25	2.50	5.00	JD
75-35-4	1,1-Dichloroethene		1.25	2.50	5.00	U
156-59-2	cis-1,2-Dichloroethene		1.25	2.50	5.00	U
156-60-5	trans-1,2-Dichloroethene		1.25	2.50	5.00	U
78-87-5	1,2-Dichloropropane		1.25	2.50	5.00	U
142-28-9	1,3-Dichloropropane		1.25	2.50	5.00	U
594-20-7	2,2-Dichloropropane		1.25	2.50	5.00	U
563-58-6	1,1-Dichloropropene		1.25	2.50	5.00	U
10061-01-5	cis-1,3-Dichloropropene		1.25	2.50	5.00	U
10061-02-6	trans-1,3-Dichloropropene		1.25	2.50	5.00	U
100-41-4	Ethylbenzene	166	1.25	2.50	5.00	D
87-68-3	Hexachlorobutadiene		1.25	2.50	10.0	U

ANALYSIS DATA SHEET

GW0890

Laboratory: Empirical Laboratories, LLC SDG: Kirtland_082
 Client: Shaw Environmental, Inc. Project: Kirtland AFB 2011
 Matrix: Water Laboratory ID: 1303202-01 File ID: 0320201D.D
 Sampled: 03/25/13 12:59 Prepared: 04/02/13 16:06 Analyzed: 04/02/13 16:06
 Solids: Preparation: 5030B Dilution: 5
 Batch: 3D02004 Sequence: 3D09303 Calibration: 3091002 Instrument: MS-VOA5

CAS NO.	COMPOUND	CONC. (ug/L)	DL	LOD	LOQ	Q
591-78-6	2-Hexanone	43.2	6.25	12.5	25.0	D
98-82-8	Isopropylbenzene	15.8	1.25	2.50	5.00	D
99-87-6	p-Isopropyltoluene	3.50	1.25	2.50	5.00	JD
75-09-2	Methylene chloride		2.50	5.00	10.0	U
91-20-3	Naphthalene	58.4	1.25	2.50	10.0	D
108-10-1	4-Methyl-2-pentanone	65.2	6.25	12.5	25.0	D
1634-04-4	Methyl t-Butyl Ether		1.25	2.50	5.00	U
103-65-1	n-Propylbenzene	16.5	1.25	2.50	5.00	D
100-42-5	Styrene		1.25	2.50	5.00	U
79-34-5	1,1,2,2-Tetrachloroethane		1.25	2.50	5.00	U
630-20-6	1,1,1,2-Tetrachloroethane		1.25	2.50	5.00	U
127-18-4	Tetrachloroethene		1.25	2.50	5.00	U
108-88-3	Toluene	826	1.25	2.50	5.00	D
87-61-6	1,2,3-Trichlorobenzene		1.25	2.50	10.0	U
120-82-1	1,2,4-Trichlorobenzene		1.25	2.50	10.0	U
79-00-5	1,1,2-Trichloroethane		1.25	2.50	5.00	U
71-55-6	1,1,1-Trichloroethane		1.25	2.50	5.00	U
79-01-6	Trichloroethene		1.25	2.50	5.00	U
75-69-4	Trichlorofluoromethane		2.50	5.00	10.0	U
96-18-4	1,2,3-Trichloropropane		2.50	5.00	10.0	U
108-67-8	1,3,5-Trimethylbenzene	51.6	1.25	2.50	5.00	D
95-63-6	1,2,4-Trimethylbenzene	123	1.25	2.50	5.00	D
75-01-4	Vinyl chloride		1.25	2.50	5.00	U
1330-20-7	Xylenes (total)	447	3.75	7.50	15.0	D

Total Target Analytes Reported: 64

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
Bromofluorobenzene	30.00	29.41	98.0	75 - 120	
Dibromofluoromethane	30.00	30.12	100	85 - 115	
1,2-Dichloroethane-d4	30.00	31.00	103	70 - 120	
Toluene-d8	30.00	30.06	100	85 - 120	

ANALYSIS DATA SHEET

GW0905

Laboratory: Empirical Laboratories, LLC SDG: Kirtland_082
 Client: Shaw Environmental, Inc. Project: Kirtland AFB 2011
 Matrix: Water Laboratory ID: 1303202-03 File ID: 0320203.D
 Sampled: 03/26/13 14:20 Prepared: 04/02/13 11:26 Analyzed: 04/02/13 11:26
 Solids: Preparation: 5030B Dilution: 1
 Batch: 3D02004 Sequence: 3D09303 Calibration: 3091002 Instrument: MS-VOA5

CAS NO.	COMPOUND	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	3.00	2.50	5.00	10.0	J
71-43-2	Benzene		0.250	0.500	1.00	U
108-86-1	Bromobenzene		0.250	0.500	1.00	U
74-97-5	Bromochloromethane		0.250	0.500	1.00	U
75-27-4	Bromodichloromethane		0.250	0.500	1.00	U
75-25-2	Bromoform		0.250	0.500	1.00	U
74-83-9	Bromomethane		0.500	1.00	2.00	U
104-51-8	n-Butylbenzene		0.250	0.500	1.00	U
78-93-3	2-Butanone		2.50	5.00	10.0	U
135-98-8	sec-Butylbenzene	0.950	0.250	0.500	1.00	J
98-06-6	tert-Butylbenzene		0.250	0.500	1.00	U
75-15-0	Carbon disulfide		0.250	0.500	1.00	U
56-23-5	Carbon tetrachloride		0.250	0.500	1.00	U
108-90-7	Chlorobenzene		0.250	0.500	1.00	U
75-00-3	Chloroethane		0.500	1.00	2.00	U
67-66-3	Chloroform		0.250	0.500	1.00	U
74-87-3	Chloromethane		0.250	0.500	1.00	U
95-49-8	2-Chlorotoluene		0.250	0.500	1.00	U
106-43-4	4-Chlorotoluene		0.250	0.500	1.00	U
124-48-1	Dibromochloromethane		0.250	0.500	1.00	U
96-12-8	1,2-Dibromo-3-chloropropane		0.500	1.00	2.00	U
106-93-4	1,2-Dibromoethane (EDB)		0.250	0.500	1.00	U
74-95-3	Dibromomethane		0.250	0.500	1.00	U
95-50-1	1,2-Dichlorobenzene		0.250	0.500	1.00	U
541-73-1	1,3-Dichlorobenzene		0.250	0.500	1.00	U
106-46-7	1,4-Dichlorobenzene		0.250	0.500	1.00	U
75-71-8	Dichlorodifluoromethane		0.500	1.00	2.00	U
75-34-3	1,1-Dichloroethane		0.250	0.500	1.00	U
107-06-2	1,2-Dichloroethane		0.250	0.500	1.00	U
75-35-4	1,1-Dichloroethene		0.250	0.500	1.00	U
156-59-2	cis-1,2-Dichloroethene		0.250	0.500	1.00	U
156-60-5	trans-1,2-Dichloroethene		0.250	0.500	1.00	U
78-87-5	1,2-Dichloropropane		0.250	0.500	1.00	U
142-28-9	1,3-Dichloropropane		0.250	0.500	1.00	U
594-20-7	2,2-Dichloropropane		0.250	0.500	1.00	U
563-58-6	1,1-Dichloropropene		0.250	0.500	1.00	U
10061-01-5	cis-1,3-Dichloropropene		0.250	0.500	1.00	U
10061-02-6	trans-1,3-Dichloropropene		0.250	0.500	1.00	U
100-41-4	Ethylbenzene		0.250	0.500	1.00	U
87-68-3	Hexachlorobutadiene		0.250	0.500	2.00	U

ANALYSIS DATA SHEET

GW0905

Laboratory: Empirical Laboratories, LLC SDG: Kirtland_082
 Client: Shaw Environmental, Inc. Project: Kirtland AFB 2011
 Matrix: Water Laboratory ID: 1303202-03 File ID: 0320203.D
 Sampled: 03/26/13 14:20 Prepared: 04/02/13 11:26 Analyzed: 04/02/13 11:26
 Solids: Preparation: 5030B Dilution: 1
 Batch: 3D02004 Sequence: 3D09303 Calibration: 3091002 Instrument: MS-VOA5

CAS NO.	COMPOUND	CONC. (ug/L)	DL	LOD	LOQ	Q
591-78-6	2-Hexanone		1.25	2.50	5.00	U
98-82-8	Isopropylbenzene	6.49	0.250	0.500	1.00	
99-87-6	p-Isopropyltoluene	0.360	0.250	0.500	1.00	J
75-09-2	Methylene chloride		0.500	1.00	2.00	U
91-20-3	Naphthalene		0.250	0.500	2.00	U
108-10-1	4-Methyl-2-pentanone		1.25	2.50	5.00	U
1634-04-4	Methyl t-Butyl Ether		0.250	0.500	1.00	U
103-65-1	n-Propylbenzene	0.690	0.250	0.500	1.00	J
100-42-5	Styrene		0.250	0.500	1.00	U
79-34-5	1,1,2,2-Tetrachloroethane		0.250	0.500	1.00	U
630-20-6	1,1,1,2-Tetrachloroethane		0.250	0.500	1.00	U
127-18-4	Tetrachloroethene		0.250	0.500	1.00	U
108-88-3	Toluene		0.250	0.500	1.00	U
87-61-6	1,2,3-Trichlorobenzene		0.250	0.500	2.00	U
120-82-1	1,2,4-Trichlorobenzene		0.250	0.500	2.00	U
79-00-5	1,1,2-Trichloroethane		0.250	0.500	1.00	U
71-55-6	1,1,1-Trichloroethane		0.250	0.500	1.00	U
79-01-6	Trichloroethene		0.250	0.500	1.00	U
75-69-4	Trichlorofluoromethane		0.500	1.00	2.00	U
96-18-4	1,2,3-Trichloropropane		0.500	1.00	2.00	U
108-67-8	1,3,5-Trimethylbenzene		0.250	0.500	1.00	U
95-63-6	1,2,4-Trimethylbenzene		0.250	0.500	1.00	U
75-01-4	Vinyl chloride		0.250	0.500	1.00	U
1330-20-7	Xylenes (total)		0.750	1.50	3.00	U

Total Target Analytes Reported: 64

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
Bromofluorobenzene	30.00	29.18	97.3	75 - 120	
Dibromofluoromethane	30.00	30.56	102	85 - 115	
1,2-Dichloroethane-d4	30.00	29.86	99.5	70 - 120	
Toluene-d8	30.00	29.04	96.8	85 - 120	

ANALYSIS DATA SHEET

GW0908

Laboratory: Empirical Laboratories, LLC SDG: Kirtland_082
 Client: Shaw Environmental, Inc. Project: Kirtland AFB 2011
 Matrix: Water Laboratory ID: 1303202-05 File ID: 0320205.D
 Sampled: 03/26/13 11:20 Prepared: 04/02/13 11:54 Analyzed: 04/02/13 11:54
 Solids: Preparation: 5030B Dilution: 1
 Batch: 3D02004 Sequence: 3D09303 Calibration: 3091002 Instrument: MS-VOA5

CAS NO.	COMPOUND	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone		2.50	5.00	10.0	U
71-43-2	Benzene	0.270	0.250	0.500	1.00	J
108-86-1	Bromobenzene		0.250	0.500	1.00	U
74-97-5	Bromochloromethane		0.250	0.500	1.00	U
75-27-4	Bromodichloromethane		0.250	0.500	1.00	U
75-25-2	Bromoform		0.250	0.500	1.00	U
74-83-9	Bromomethane		0.500	1.00	2.00	U
104-51-8	n-Butylbenzene		0.250	0.500	1.00	U
78-93-3	2-Butanone		2.50	5.00	10.0	U
135-98-8	sec-Butylbenzene	0.480	0.250	0.500	1.00	J
98-06-6	tert-Butylbenzene		0.250	0.500	1.00	U
75-15-0	Carbon disulfide		0.250	0.500	1.00	U
56-23-5	Carbon tetrachloride		0.250	0.500	1.00	U
108-90-7	Chlorobenzene		0.250	0.500	1.00	U
75-00-3	Chloroethane		0.500	1.00	2.00	U
67-66-3	Chloroform		0.250	0.500	1.00	U
74-87-3	Chloromethane		0.250	0.500	1.00	U
95-49-8	2-Chlorotoluene		0.250	0.500	1.00	U
106-43-4	4-Chlorotoluene		0.250	0.500	1.00	U
124-48-1	Dibromochloromethane		0.250	0.500	1.00	U
96-12-8	1,2-Dibromo-3-chloropropane		0.500	1.00	2.00	U
106-93-4	1,2-Dibromoethane (EDB)	0.430	0.250	0.500	1.00	J
74-95-3	Dibromomethane		0.250	0.500	1.00	U
95-50-1	1,2-Dichlorobenzene		0.250	0.500	1.00	U
541-73-1	1,3-Dichlorobenzene		0.250	0.500	1.00	U
106-46-7	1,4-Dichlorobenzene		0.250	0.500	1.00	U
75-71-8	Dichlorodifluoromethane		0.500	1.00	2.00	U
75-34-3	1,1-Dichloroethane		0.250	0.500	1.00	U
107-06-2	1,2-Dichloroethane	0.280	0.250	0.500	1.00	J
75-35-4	1,1-Dichloroethene		0.250	0.500	1.00	U
156-59-2	cis-1,2-Dichloroethene		0.250	0.500	1.00	U
156-60-5	trans-1,2-Dichloroethene		0.250	0.500	1.00	U
78-87-5	1,2-Dichloropropane		0.250	0.500	1.00	U
142-28-9	1,3-Dichloropropane		0.250	0.500	1.00	U
594-20-7	2,2-Dichloropropane		0.250	0.500	1.00	U
563-58-6	1,1-Dichloropropene		0.250	0.500	1.00	U
10061-01-5	cis-1,3-Dichloropropene		0.250	0.500	1.00	U
10061-02-6	trans-1,3-Dichloropropene		0.250	0.500	1.00	U
100-41-4	Ethylbenzene		0.250	0.500	1.00	U
87-68-3	Hexachlorobutadiene		0.250	0.500	2.00	U

ANALYSIS DATA SHEET

GW0908

Laboratory: <u>Empirical Laboratories, LLC</u>	SDG: <u>Kirtland 082</u>	
Client: <u>Shaw Environmental, Inc.</u>	Project: <u>Kirtland AFB 2011</u>	
Matrix: <u>Water</u>	Laboratory ID: <u>1303202-05</u>	File ID: <u>0320205.D</u>
Sampled: <u>03/26/13 11:20</u>	Prepared: <u>04/02/13 11:54</u>	Analyzed: <u>04/02/13 11:54</u>
Solids:	Preparation: <u>5030B</u>	Dilution: <u>1</u>
Batch: <u>3D02004</u>	Sequence: <u>3D09303</u>	Calibration: <u>3091002</u> Instrument: <u>MS-VOA5</u>

CAS NO.	COMPOUND	CONC. (ug/L)	DL	LOD	LOQ	Q
591-78-6	2-Hexanone		1.25	2.50	5.00	U
98-82-8	Isopropylbenzene	4.57	0.250	0.500	1.00	
99-87-6	p-Isopropyltoluene		0.250	0.500	1.00	U
75-09-2	Methylene chloride		0.500	1.00	2.00	U
91-20-3	Naphthalene		0.250	0.500	2.00	U
108-10-1	4-Methyl-2-pentanone		1.25	2.50	5.00	U
1634-04-4	Methyl t-Butyl Ether		0.250	0.500	1.00	U
103-65-1	n-Propylbenzene	0.320	0.250	0.500	1.00	J
100-42-5	Styrene		0.250	0.500	1.00	U
79-34-5	1,1,2,2-Tetrachloroethane		0.250	0.500	1.00	U
630-20-6	1,1,1,2-Tetrachloroethane		0.250	0.500	1.00	U
127-18-4	Tetrachloroethene		0.250	0.500	1.00	U
108-88-3	Toluene		0.250	0.500	1.00	U
87-61-6	1,2,3-Trichlorobenzene		0.250	0.500	2.00	U
120-82-1	1,2,4-Trichlorobenzene		0.250	0.500	2.00	U
79-00-5	1,1,2-Trichloroethane		0.250	0.500	1.00	U
71-55-6	1,1,1-Trichloroethane		0.250	0.500	1.00	U
79-01-6	Trichloroethene		0.250	0.500	1.00	U
75-69-4	Trichlorofluoromethane		0.500	1.00	2.00	U
96-18-4	1,2,3-Trichloropropane		0.500	1.00	2.00	U
108-67-8	1,3,5-Trimethylbenzene	0.300	0.250	0.500	1.00	J
95-63-6	1,2,4-Trimethylbenzene		0.250	0.500	1.00	U
75-01-4	Vinyl chloride		0.250	0.500	1.00	U
1330-20-7	Xylenes (total)		0.750	1.50	3.00	U

Total Target Analytes Reported: 64

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
Bromofluorobenzene	30.00	30.29	101	75 - 120	
Dibromofluoromethane	30.00	30.07	100	85 - 115	
1,2-Dichloroethane-d4	30.00	29.27	97.6	70 - 120	
Toluene-d8	30.00	30.06	100	85 - 120	

ANALYSIS DATA SHEET

GW0965

Laboratory: Empirical Laboratories, LLC SDG: Kirtland_082
 Client: Shaw Environmental, Inc. Project: Kirtland AFB 2011
 Matrix: Water Laboratory ID: 1303202-07 File ID: 0320207D.D
 Sampled: 03/25/13 16:21 Prepared: 04/02/13 16:34 Analyzed: 04/02/13 16:34
 Solids: Preparation: 5030B Dilution: 50
 Batch: 3D02004 Sequence: 3D09303 Calibration: 3091002 Instrument: MS-VOA5

CAS NO.	COMPOUND	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	1990	125	250	500	D
71-43-2	Benzene	4040	12.5	25.0	50.0	D
108-86-1	Bromobenzene		12.5	25.0	50.0	U
74-97-5	Bromochloromethane		12.5	25.0	50.0	U
75-27-4	Bromodichloromethane		12.5	25.0	50.0	U
75-25-2	Bromoform		12.5	25.0	50.0	U
74-83-9	Bromomethane		25.0	50.0	100	U
104-51-8	n-Butylbenzene		12.5	25.0	50.0	U
78-93-3	2-Butanone	482	125	250	500	JD
135-98-8	sec-Butylbenzene		12.5	25.0	50.0	U
98-06-6	tert-Butylbenzene		12.5	25.0	50.0	U
75-15-0	Carbon disulfide		12.5	25.0	50.0	U
56-23-5	Carbon tetrachloride		12.5	25.0	50.0	U
108-90-7	Chlorobenzene		12.5	25.0	50.0	U
75-00-3	Chloroethane		25.0	50.0	100	U
67-66-3	Chloroform		12.5	25.0	50.0	U
74-87-3	Chloromethane		12.5	25.0	50.0	U
95-49-8	2-Chlorotoluene		12.5	25.0	50.0	U
106-43-4	4-Chlorotoluene		12.5	25.0	50.0	U
124-48-1	Dibromochloromethane		12.5	25.0	50.0	U
96-12-8	1,2-Dibromo-3-chloropropane		25.0	50.0	100	U
106-93-4	1,2-Dibromoethane (EDB)	203	12.5	25.0	50.0	D
74-95-3	Dibromomethane		12.5	25.0	50.0	U
95-50-1	1,2-Dichlorobenzene		12.5	25.0	50.0	U
541-73-1	1,3-Dichlorobenzene		12.5	25.0	50.0	U
106-46-7	1,4-Dichlorobenzene		12.5	25.0	50.0	U
75-71-8	Dichlorodifluoromethane		25.0	50.0	100	U
75-34-3	1,1-Dichloroethane		12.5	25.0	50.0	U
107-06-2	1,2-Dichloroethane		12.5	25.0	50.0	U
75-35-4	1,1-Dichloroethene		12.5	25.0	50.0	U
156-59-2	cis-1,2-Dichloroethene		12.5	25.0	50.0	U
156-60-5	trans-1,2-Dichloroethene		12.5	25.0	50.0	U
78-87-5	1,2-Dichloropropane		12.5	25.0	50.0	U
142-28-9	1,3-Dichloropropane		12.5	25.0	50.0	U
594-20-7	2,2-Dichloropropane		12.5	25.0	50.0	U
563-58-6	1,1-Dichloropropene		12.5	25.0	50.0	U
10061-01-5	cis-1,3-Dichloropropene		12.5	25.0	50.0	U
10061-02-6	trans-1,3-Dichloropropene		12.5	25.0	50.0	U
100-41-4	Ethylbenzene	675	12.5	25.0	50.0	D
87-68-3	Hexachlorobutadiene		12.5	25.0	100	U

ANALYSIS DATA SHEET

GW0965

Laboratory: Empirical Laboratories, LLC SDG: Kirtland_082
 Client: Shaw Environmental, Inc. Project: Kirtland AFB 2011
 Matrix: Water Laboratory ID: 1303202-07 File ID: 0320207D.D
 Sampled: 03/25/13 16:21 Prepared: 04/02/13 16:34 Analyzed: 04/02/13 16:34
 Solids: Preparation: 5030B Dilution: 50
 Batch: 3D02004 Sequence: 3D09303 Calibration: 3091002 Instrument: MS-VOA5

CAS NO.	COMPOUND	CONC. (ug/L)	DL	LOD	LOQ	Q
591-78-6	2-Hexanone	561	62.5	125	250	D
98-82-8	Isopropylbenzene	69.0	12.5	25.0	50.0	D
99-87-6	p-Isopropyltoluene	13.0	12.5	25.0	50.0	JD
75-09-2	Methylene chloride		25.0	50.0	100	U
91-20-3	Naphthalene	424	12.5	25.0	100	D
108-10-1	4-Methyl-2-pentanone	406	62.5	125	250	D
1634-04-4	Methyl t-Butyl Ether		12.5	25.0	50.0	U
103-65-1	n-Propylbenzene	79.5	12.5	25.0	50.0	D
100-42-5	Styrene		12.5	25.0	50.0	U
79-34-5	1,1,2,2-Tetrachloroethane		12.5	25.0	50.0	U
630-20-6	1,1,1,2-Tetrachloroethane		12.5	25.0	50.0	U
127-18-4	Tetrachloroethene		12.5	25.0	50.0	U
108-88-3	Toluene	6460	12.5	25.0	50.0	D
87-61-6	1,2,3-Trichlorobenzene		12.5	25.0	100	U
120-82-1	1,2,4-Trichlorobenzene		12.5	25.0	100	U
79-00-5	1,1,2-Trichloroethane		12.5	25.0	50.0	U
71-55-6	1,1,1-Trichloroethane		12.5	25.0	50.0	U
79-01-6	Trichloroethene		12.5	25.0	50.0	U
75-69-4	Trichlorofluoromethane		25.0	50.0	100	U
96-18-4	1,2,3-Trichloropropane		25.0	50.0	100	U
108-67-8	1,3,5-Trimethylbenzene	126	12.5	25.0	50.0	D
95-63-6	1,2,4-Trimethylbenzene	489	12.5	25.0	50.0	D
75-01-4	Vinyl chloride		12.5	25.0	50.0	U
1330-20-7	Xylenes (total)	2960	37.5	75.0	150	D

Total Target Analytes Reported: 64

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
Bromofluorobenzene	30.00	29.30	97.7	75 - 120	
Dibromofluoromethane	30.00	30.28	101	85 - 115	
1,2-Dichloroethane-d4	30.00	30.59	102	70 - 120	
Toluene-d8	30.00	29.49	98.3	85 - 120	

ANALYSIS DATA SHEET

GW0982

Laboratory: Empirical Laboratories, LLC SDG: Kirtland_082
 Client: Shaw Environmental, Inc. Project: Kirtland AFB 2011
 Matrix: Water Laboratory ID: 1303202-09 File ID: 0320209.D
 Sampled: 03/26/13 14:01 Prepared: 04/02/13 12:23 Analyzed: 04/02/13 12:23
 Solids: Preparation: 5030B Dilution: 1
 Batch: 3D02004 Sequence: 3D09303 Calibration: 3091002 Instrument: MS-VOA5

CAS NO.	COMPOUND	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	4.58	2.50	5.00	10.0	J
71-43-2	Benzene		0.250	0.500	1.00	U
108-86-1	Bromobenzene		0.250	0.500	1.00	U
74-97-5	Bromochloromethane		0.250	0.500	1.00	U
75-27-4	Bromodichloromethane		0.250	0.500	1.00	U
75-25-2	Bromoform		0.250	0.500	1.00	U
74-83-9	Bromomethane		0.500	1.00	2.00	U
104-51-8	n-Butylbenzene		0.250	0.500	1.00	U
78-93-3	2-Butanone		2.50	5.00	10.0	U
135-98-8	sec-Butylbenzene		0.250	0.500	1.00	U
98-06-6	tert-Butylbenzene		0.250	0.500	1.00	U
75-15-0	Carbon disulfide		0.250	0.500	1.00	U
56-23-5	Carbon tetrachloride		0.250	0.500	1.00	U
108-90-7	Chlorobenzene		0.250	0.500	1.00	U
75-00-3	Chloroethane		0.500	1.00	2.00	U
67-66-3	Chloroform		0.250	0.500	1.00	U
74-87-3	Chloromethane		0.250	0.500	1.00	U
95-49-8	2-Chlorotoluene		0.250	0.500	1.00	U
106-43-4	4-Chlorotoluene		0.250	0.500	1.00	U
124-48-1	Dibromochloromethane		0.250	0.500	1.00	U
96-12-8	1,2-Dibromo-3-chloropropane		0.500	1.00	2.00	U
106-93-4	1,2-Dibromoethane (EDB)		0.250	0.500	1.00	U
74-95-3	Dibromomethane		0.250	0.500	1.00	U
95-50-1	1,2-Dichlorobenzene		0.250	0.500	1.00	U
541-73-1	1,3-Dichlorobenzene		0.250	0.500	1.00	U
106-46-7	1,4-Dichlorobenzene		0.250	0.500	1.00	U
75-71-8	Dichlorodifluoromethane		0.500	1.00	2.00	U
75-34-3	1,1-Dichloroethane		0.250	0.500	1.00	U
107-06-2	1,2-Dichloroethane	1.35	0.250	0.500	1.00	
75-35-4	1,1-Dichloroethene		0.250	0.500	1.00	U
156-59-2	cis-1,2-Dichloroethene		0.250	0.500	1.00	U
156-60-5	trans-1,2-Dichloroethene		0.250	0.500	1.00	U
78-87-5	1,2-Dichloropropane		0.250	0.500	1.00	U
142-28-9	1,3-Dichloropropane		0.250	0.500	1.00	U
594-20-7	2,2-Dichloropropane		0.250	0.500	1.00	U
563-58-6	1,1-Dichloropropene		0.250	0.500	1.00	U
10061-01-5	cis-1,3-Dichloropropene		0.250	0.500	1.00	U
10061-02-6	trans-1,3-Dichloropropene		0.250	0.500	1.00	U
100-41-4	Ethylbenzene		0.250	0.500	1.00	U
87-68-3	Hexachlorobutadiene		0.250	0.500	2.00	U

ANALYSIS DATA SHEET

GW0982

Laboratory: Empirical Laboratories, LLC SDG: Kirtland_082
 Client: Shaw Environmental, Inc. Project: Kirtland AFB 2011
 Matrix: Water Laboratory ID: 1303202-09 File ID: 0320209.D
 Sampled: 03/26/13 14:01 Prepared: 04/02/13 12:23 Analyzed: 04/02/13 12:23
 Solids: Preparation: 5030B Dilution: 1
 Batch: 3D02004 Sequence: 3D09303 Calibration: 3091002 Instrument: MS-VOA5

CAS NO.	COMPOUND	CONC. (ug/L)	DL	LOD	LOQ	Q
591-78-6	2-Hexanone		1.25	2.50	5.00	U
98-82-8	Isopropylbenzene	3.22	0.250	0.500	1.00	
99-87-6	p-Isopropyltoluene		0.250	0.500	1.00	U
75-09-2	Methylene chloride		0.500	1.00	2.00	U
91-20-3	Naphthalene		0.250	0.500	2.00	U
108-10-1	4-Methyl-2-pentanone		1.25	2.50	5.00	U
1634-04-4	Methyl t-Butyl Ether		0.250	0.500	1.00	U
103-65-1	n-Propylbenzene		0.250	0.500	1.00	U
100-42-5	Styrene		0.250	0.500	1.00	U
79-34-5	1,1,2,2-Tetrachloroethane		0.250	0.500	1.00	U
630-20-6	1,1,1,2-Tetrachloroethane		0.250	0.500	1.00	U
127-18-4	Tetrachloroethene		0.250	0.500	1.00	U
108-88-3	Toluene		0.250	0.500	1.00	U
87-61-6	1,2,3-Trichlorobenzene		0.250	0.500	2.00	U
120-82-1	1,2,4-Trichlorobenzene		0.250	0.500	2.00	U
79-00-5	1,1,2-Trichloroethane		0.250	0.500	1.00	U
71-55-6	1,1,1-Trichloroethane		0.250	0.500	1.00	U
79-01-6	Trichloroethene		0.250	0.500	1.00	U
75-69-4	Trichlorofluoromethane		0.500	1.00	2.00	U
96-18-4	1,2,3-Trichloropropane		0.500	1.00	2.00	U
108-67-8	1,3,5-Trimethylbenzene		0.250	0.500	1.00	U
95-63-6	1,2,4-Trimethylbenzene		0.250	0.500	1.00	U
75-01-4	Vinyl chloride		0.250	0.500	1.00	U
1330-20-7	Xylenes (total)		0.750	1.50	3.00	U

Total Target Analytes Reported: 64

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
Bromofluorobenzene	30.00	30.46	102	75 - 120	
Dibromofluoromethane	30.00	30.70	102	85 - 115	
1,2-Dichloroethane-d4	30.00	31.91	106	70 - 120	
Toluene-d8	30.00	30.46	102	85 - 120	

ANALYSIS DATA SHEET

GW8262-TB

Laboratory: Empirical Laboratories, LLC SDG: Kirtland_082
 Client: Shaw Environmental, Inc. Project: Kirtland AFB 2011
 Matrix: Water Laboratory ID: 1303202-11 File ID: 0320211.D
 Sampled: 03/25/13 08:00 Prepared: 04/02/13 10:03 Analyzed: 04/02/13 10:03
 Solids: Preparation: 5030B Dilution: 1
 Batch: 3D02004 Sequence: 3D09303 Calibration: 3091002 Instrument: MS-VOA5

CAS NO.	COMPOUND	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone		2.50	5.00	10.0	U
71-43-2	Benzene		0.250	0.500	1.00	U
108-86-1	Bromobenzene		0.250	0.500	1.00	U
74-97-5	Bromochloromethane		0.250	0.500	1.00	U
75-27-4	Bromodichloromethane		0.250	0.500	1.00	U
75-25-2	Bromoform		0.250	0.500	1.00	U
74-83-9	Bromomethane		0.500	1.00	2.00	U
104-51-8	n-Butylbenzene		0.250	0.500	1.00	U
78-93-3	2-Butanone		2.50	5.00	10.0	U
135-98-8	sec-Butylbenzene		0.250	0.500	1.00	U
98-06-6	tert-Butylbenzene		0.250	0.500	1.00	U
75-15-0	Carbon disulfide		0.250	0.500	1.00	U
56-23-5	Carbon tetrachloride		0.250	0.500	1.00	U
108-90-7	Chlorobenzene		0.250	0.500	1.00	U
75-00-3	Chloroethane		0.500	1.00	2.00	U
67-66-3	Chloroform		0.250	0.500	1.00	U
74-87-3	Chloromethane		0.250	0.500	1.00	U
95-49-8	2-Chlorotoluene		0.250	0.500	1.00	U
106-43-4	4-Chlorotoluene		0.250	0.500	1.00	U
124-48-1	Dibromochloromethane		0.250	0.500	1.00	U
96-12-8	1,2-Dibromo-3-chloropropane		0.500	1.00	2.00	U
106-93-4	1,2-Dibromoethane (EDB)		0.250	0.500	1.00	U
74-95-3	Dibromomethane		0.250	0.500	1.00	U
95-50-1	1,2-Dichlorobenzene		0.250	0.500	1.00	U
541-73-1	1,3-Dichlorobenzene		0.250	0.500	1.00	U
106-46-7	1,4-Dichlorobenzene		0.250	0.500	1.00	U
75-71-8	Dichlorodifluoromethane		0.500	1.00	2.00	U
75-34-3	1,1-Dichloroethane		0.250	0.500	1.00	U
107-06-2	1,2-Dichloroethane		0.250	0.500	1.00	U
75-35-4	1,1-Dichloroethene		0.250	0.500	1.00	U
156-59-2	cis-1,2-Dichloroethene		0.250	0.500	1.00	U
156-60-5	trans-1,2-Dichloroethene		0.250	0.500	1.00	U
78-87-5	1,2-Dichloropropane		0.250	0.500	1.00	U
142-28-9	1,3-Dichloropropane		0.250	0.500	1.00	U
594-20-7	2,2-Dichloropropane		0.250	0.500	1.00	U
563-58-6	1,1-Dichloropropene		0.250	0.500	1.00	U
10061-01-5	cis-1,3-Dichloropropene		0.250	0.500	1.00	U
10061-02-6	trans-1,3-Dichloropropene		0.250	0.500	1.00	U
100-41-4	Ethylbenzene		0.250	0.500	1.00	U
87-68-3	Hexachlorobutadiene		0.250	0.500	2.00	U

ANALYSIS DATA SHEET

GW8262-TB

Laboratory: <u>Empirical Laboratories, LLC</u>	SDG: <u>Kirtland_082</u>	
Client: <u>Shaw Environmental, Inc.</u>	Project: <u>Kirtland AFB 2011</u>	
Matrix: <u>Water</u>	Laboratory ID: <u>1303202-11</u>	File ID: <u>0320211.D</u>
Sampled: <u>03/25/13 08:00</u>	Prepared: <u>04/02/13 10:03</u>	Analyzed: <u>04/02/13 10:03</u>
Solids:	Preparation: <u>5030B</u>	Dilution: <u>1</u>
Batch: <u>3D02004</u>	Sequence: <u>3D09303</u>	Calibration: <u>3091002</u> Instrument: <u>MS-VOA5</u>

CAS NO.	COMPOUND	CONC. (ug/L)	DL	LOD	LOQ	Q
591-78-6	2-Hexanone		1.25	2.50	5.00	U
98-82-8	Isopropylbenzene		0.250	0.500	1.00	U
99-87-6	p-Isopropyltoluene		0.250	0.500	1.00	U
75-09-2	Methylene chloride		0.500	1.00	2.00	U
91-20-3	Naphthalene		0.250	0.500	2.00	U
108-10-1	4-Methyl-2-pentanone		1.25	2.50	5.00	U
1634-04-4	Methyl t-Butyl Ether		0.250	0.500	1.00	U
103-65-1	n-Propylbenzene		0.250	0.500	1.00	U
100-42-5	Styrene		0.250	0.500	1.00	U
79-34-5	1,1,2,2-Tetrachloroethane		0.250	0.500	1.00	U
630-20-6	1,1,1,2-Tetrachloroethane		0.250	0.500	1.00	U
127-18-4	Tetrachloroethene		0.250	0.500	1.00	U
108-88-3	Toluene		0.250	0.500	1.00	U
87-61-6	1,2,3-Trichlorobenzene		0.250	0.500	2.00	U
120-82-1	1,2,4-Trichlorobenzene		0.250	0.500	2.00	U
79-00-5	1,1,2-Trichloroethane		0.250	0.500	1.00	U
71-55-6	1,1,1-Trichloroethane		0.250	0.500	1.00	U
79-01-6	Trichloroethene		0.250	0.500	1.00	U
75-69-4	Trichlorofluoromethane		0.500	1.00	2.00	U
96-18-4	1,2,3-Trichloropropane		0.500	1.00	2.00	U
108-67-8	1,3,5-Trimethylbenzene		0.250	0.500	1.00	U
95-63-6	1,2,4-Trimethylbenzene		0.250	0.500	1.00	U
75-01-4	Vinyl chloride		0.250	0.500	1.00	U
1330-20-7	Xylenes (total)		0.750	1.50	3.00	U

Total Target Analytes Reported: 64

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
Bromofluorobenzene	30.00	30.04	100	75 - 120	
Dibromofluoromethane	30.00	29.84	99.5	85 - 115	
1,2-Dichloroethane-d4	30.00	29.88	99.6	70 - 120	
Toluene-d8	30.00	29.54	98.5	85 - 120	

SURROGATE STANDARD RECOVERY AND RT SUMMARY

SW8260B

Laboratory: Empirical Laboratories, LLC

SDG: Kirtland 082

Client: Shaw Environmental, Inc.

Project: Kirtland AFB 2011

Sequence: 3D09303

Instrument: MS-VOA5

Calibration: 3091002

Surrogate Compound	Spike Level	% Recovery	Recovery Limits	RT	CCV RT	RT Diff	RT Diff Limit	Q
Calibration Check (3D09303-CCV1) ug/L			Lab File ID: 0402CCV1.D		Analyzed: 04/02/13 07:43			
Bromofluorobenzene	30.00	102	80 - 120	11.93	11.93	0.0000	+/-1.000	
Dibromofluoromethane	30.00	99.3	80 - 120	6.56	6.56	0.0000	+/-1.000	
1,2-Dichloroethane-d4	30.00	98.4	80 - 120	7.06	7.06	0.0000	+/-1.000	
Toluene-d8	30.00	102	80 - 120	9.3	9.3	0.0000	+/-1.000	
LCS (3D02004-BS1) ug/L			Lab File ID: 0402LCS1.D		Analyzed: 04/02/13 08:11			
Bromofluorobenzene	30.00	103	75 - 120	11.93	11.93	0.0000	+/-1.000	
Dibromofluoromethane	30.00	100	85 - 115	6.56	6.56	0.0000	+/-1.000	
1,2-Dichloroethane-d4	30.00	100	70 - 120	7.06	7.06	0.0000	+/-1.000	
Toluene-d8	30.00	101	85 - 120	9.3	9.3	0.0000	+/-1.000	
Blank (3D02004-BLK1) ug/L			Lab File ID: 0402BLK1.D		Analyzed: 04/02/13 09:35			
Bromofluorobenzene	30.00	98.0	75 - 120	11.93	11.93	0.0000	+/-1.000	
Dibromofluoromethane	30.00	101	85 - 115	6.56	6.56	0.0000	+/-1.000	
1,2-Dichloroethane-d4	30.00	103	70 - 120	7.06	7.06	0.0000	+/-1.000	
Toluene-d8	30.00	97.3	85 - 120	9.3	9.3	0.0000	+/-1.000	
GW8262-TB (1303202-11) ug/L			Lab File ID: 0320211.D		Analyzed: 04/02/13 10:03			
Bromofluorobenzene	30.00	100	75 - 120	11.93	11.93	0.0000	+/-1.000	
Dibromofluoromethane	30.00	99.5	85 - 115	6.56	6.56	0.0000	+/-1.000	
1,2-Dichloroethane-d4	30.00	99.6	70 - 120	7.06	7.06	0.0000	+/-1.000	
Toluene-d8	30.00	98.5	85 - 120	9.3	9.3	0.0000	+/-1.000	
GW0905 (1303202-03) ug/L			Lab File ID: 0320203.D		Analyzed: 04/02/13 11:26			
Bromofluorobenzene	30.00	97.3	75 - 120	11.93	11.93	0.0000	+/-1.000	
Dibromofluoromethane	30.00	102	85 - 115	6.56	6.56	0.0000	+/-1.000	
1,2-Dichloroethane-d4	30.00	99.5	70 - 120	7.07	7.06	0.0100	+/-1.000	
Toluene-d8	30.00	96.8	85 - 120	9.3	9.3	0.0000	+/-1.000	
GW0908 (1303202-05) ug/L			Lab File ID: 0320205.D		Analyzed: 04/02/13 11:54			
Bromofluorobenzene	30.00	101	75 - 120	11.93	11.93	0.0000	+/-1.000	
Dibromofluoromethane	30.00	100	85 - 115	6.56	6.56	0.0000	+/-1.000	
1,2-Dichloroethane-d4	30.00	97.6	70 - 120	7.06	7.06	0.0000	+/-1.000	
Toluene-d8	30.00	100	85 - 120	9.3	9.3	0.0000	+/-1.000	
GW0982 (1303202-09) ug/L			Lab File ID: 0320209.D		Analyzed: 04/02/13 12:23			
Bromofluorobenzene	30.00	102	75 - 120	11.93	11.93	0.0000	+/-1.000	
Dibromofluoromethane	30.00	102	85 - 115	6.56	6.56	0.0000	+/-1.000	
1,2-Dichloroethane-d4	30.00	106	70 - 120	7.06	7.06	0.0000	+/-1.000	
Toluene-d8	30.00	102	85 - 120	9.3	9.3	0.0000	+/-1.000	

SURROGATE STANDARD RECOVERY AND RT SUMMARY

SW8260B

Laboratory: Empirical Laboratories, LLC
 Client: Shaw Environmental, Inc.
 Sequence: 3D09303

SDG: Kirtland_082
 Project: Kirtland AFB 2011
 Instrument: MS-VOA5
 Calibration: 3091002

Surrogate Compound	Spike Level	% Recovery	Recovery Limits	RT	CCV RT	RT Diff	RT Diff Limit	Q
GW0890 (1303202-01) ug/L				Lab File ID: 0320201D.D		Analyzed: 04/02/13 16:06		
Bromofluorobenzene	30.00	98.0	75 - 120	11.94	11.93	0.0100	+/-1.000	
Dibromofluoromethane	30.00	100	85 - 115	6.57	6.56	0.0100	+/-1.000	
1,2-Dichloroethane-d4	30.00	103	70 - 120	7.07	7.06	0.0100	+/-1.000	
Toluene-d8	30.00	100	85 - 120	9.31	9.3	0.0100	+/-1.000	
GW0965 (1303202-07) ug/L				Lab File ID: 0320207D.D		Analyzed: 04/02/13 16:34		
Bromofluorobenzene	30.00	97.7	75 - 120	11.93	11.93	0.0000	+/-1.000	
Dibromofluoromethane	30.00	101	85 - 115	6.56	6.56	0.0000	+/-1.000	
1,2-Dichloroethane-d4	30.00	102	70 - 120	7.06	7.06	0.0000	+/-1.000	
Toluene-d8	30.00	98.3	85 - 120	9.31	9.3	0.0100	+/-1.000	

LCS / LCS DUPLICATE RECOVERY

SW8260B

Laboratory: Empirical Laboratories, LLC

SDG: Kirtland_082

Client: Shaw Environmental, Inc.

Project: Kirtland AFB 2011

Matrix: Water

Batch: 3D02004

Laboratory ID: 3D02004-BS1

Preparation: 5030B

Initial/Final: 5 mL / 5 mL

ANALYTE	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC.	QC LIMITS REC.
Acetone	100.0	89.5	89.5	40 - 140
Benzene	50.00	48.4	96.8	80 - 120
Bromobenzene	50.00	48.0	95.9	75 - 125
Bromochloromethane	50.00	50.2	100	65 - 130
Bromodichloromethane	50.00	48.2	96.5	75 - 120
Bromoform	50.00	49.6	99.2	70 - 130
Bromomethane	50.00	44.2	88.3	30 - 145
n-Butylbenzene	50.00	51.0	102	70 - 135
2-Butanone	100.0	106	106	30 - 150
sec-Butylbenzene	50.00	46.6	93.1	70 - 125
tert-Butylbenzene	50.00	46.3	92.6	70 - 130
Carbon disulfide	50.00	45.9	91.8	35 - 160
Carbon tetrachloride	50.00	50.8	102	65 - 140
Chlorobenzene	50.00	45.2	90.4	80 - 120
Chloroethane	50.00	46.4	92.7	60 - 135
Chloroform	50.00	47.2	94.3	65 - 135
Chloromethane	50.00	35.5	71.0	40 - 125
2-Chlorotoluene	50.00	45.2	90.5	75 - 125
4-Chlorotoluene	50.00	45.2	90.3	75 - 130
Dibromochloromethane	50.00	51.5	103	60 - 135
1,2-Dibromo-3-chloropropane	50.00	47.8	95.5	50 - 130
1,2-Dibromoethane (EDB)	50.00	51.0	102	80 - 120
Dibromomethane	50.00	48.8	97.5	75 - 125
1,2-Dichlorobenzene	50.00	44.6	89.3	70 - 120
1,3-Dichlorobenzene	50.00	44.4	88.8	75 - 125
1,4-Dichlorobenzene	50.00	47.9	95.7	75 - 125
Dichlorodifluoromethane	50.00	36.5	72.9	30 - 155
1,1-Dichloroethane	50.00	47.5	95.1	70 - 135
1,2-Dichloroethane	50.00	47.5	94.9	70 - 130
1,1-Dichloroethene	50.00	45.9	91.8	70 - 130

LCS / LCS DUPLICATE RECOVERY

SW8260B

Laboratory: Empirical Laboratories, LLC

SDG: Kirtland_082

Client: Shaw Environmental, Inc.

Project: Kirtland AFB 2011

Matrix: Water

Batch: 3D02004

Laboratory ID: 3D02004-BS1

Preparation: 5030B

Initial/Final: 5 mL / 5 mL

ANALYTE	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC.	QC LIMITS REC.
cis-1,2-Dichloroethene	50.00	48.6	97.1	70 - 125
trans-1,2-Dichloroethene	50.00	49.2	98.4	60 - 140
1,2-Dichloropropane	50.00	47.9	95.8	75 - 125
1,3-Dichloropropane	50.00	50.0	100	75 - 125
2,2-Dichloropropane	50.00	52.9	106	70 - 135
1,1-Dichloropropene	50.00	47.6	95.1	75 - 130
cis-1,3-Dichloropropene	50.00	55.0	110	70 - 130
trans-1,3-Dichloropropene	50.00	50.0	100	55 - 140
Ethylbenzene	50.00	50.9	102	75 - 125
Hexachlorobutadiene	50.00	49.3	98.5	50 - 140
2-Hexanone	100.0	122	122	55 - 130
Isopropylbenzene	50.00	50.8	102	75 - 125
p-Isopropyltoluene	50.00	46.4	92.9	75 - 130
Methylene chloride	50.00	46.8	93.5	55 - 140
Naphthalene	50.00	46.7	93.5	55 - 140
4-Methyl-2-pentanone	100.0	126	126	60 - 135
Methyl t-Butyl Ether	50.00	50.7	101	65 - 125
n-Propylbenzene	50.00	45.2	90.5	70 - 130
Styrene	50.00	52.7	105	65 - 135
1,1,2,2-Tetrachloroethane	50.00	47.2	94.4	65 - 130
1,1,1,2-Tetrachloroethane	50.00	49.4	98.7	80 - 130
Tetrachloroethene	50.00	48.9	97.7	45 - 150
Toluene	50.00	49.4	98.8	75 - 120
1,2,3-Trichlorobenzene	50.00	51.4	103	55 - 140
1,2,4-Trichlorobenzene	50.00	50.9	102	65 - 135
1,1,2-Trichloroethane	50.00	51.6	103	75 - 125
1,1,1-Trichloroethane	50.00	49.3	98.7	65 - 130
Trichloroethene	50.00	47.5	95.1	70 - 125
Trichlorofluoromethane	50.00	47.2	94.3	60 - 145
1,2,3-Trichloropropane	50.00	49.9	99.9	75 - 125

LCS / LCS DUPLICATE RECOVERY

SW8260B

Laboratory: Empirical Laboratories, LLC

SDG: Kirtland_082

Client: Shaw Environmental, Inc.

Project: Kirtland AFB 2011

Matrix: Water

Batch: 3D02004

Laboratory ID: 3D02004-BS1

Preparation: 5030B

Initial/Final: 5 mL / 5 mL

ANALYTE	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC.	QC LIMITS REC.
1,3,5-Trimethylbenzene	50.00	51.9	104	75 - 130
1,2,4-Trimethylbenzene	50.00	51.1	102	75 - 130
Vinyl chloride	50.00	40.8	81.6	50 - 145
Xylenes (total)	150.0	142	94.4	75 - 130

PREPARATION BATCH SUMMARY

SW8260B

Laboratory: Empirical Laboratories, LLC

SDG: Kirtland_082

Client: Shaw Environmental, Inc.

Project: Kirtland AFB 2011

Batch: 3D02004 Batch Matrix: Water

Preparation: 5030B

SAMPLE NAME	LAB SAMPLE ID	DATE PREPARED	INITIAL VOL./WEIGHT	FINAL VOL.
GW0890	1303202-01	04/02/13 16:06	5.00	5.00
GW0905	1303202-03	04/02/13 11:26	5.00	5.00
GW0908	1303202-05	04/02/13 11:54	5.00	5.00
GW0965	1303202-07	04/02/13 16:34	5.00	5.00
GW0982	1303202-09	04/02/13 12:23	5.00	5.00
GW8262-TB	1303202-11	04/02/13 10:03	5.00	5.00
Blank	3D02004-BLK1	04/02/13 09:35	5.00	5.00
LCS	3D02004-BS1	04/02/13 08:11	5.00	5.00

ANALYSIS DATA SHEET

Blank

Laboratory: <u>Empirical Laboratories, LLC</u>	SDG: <u>Kirtland 082</u>	
Client: <u>Shaw Environmental, Inc.</u>	Project: <u>Kirtland AFB 2011</u>	
Matrix: Laboratory ID: <u>3D02004-BLK1</u>	File ID: <u>0402BLK1.D</u>	
Sampled: Prepared: _____	Analyzed: <u>04/02/13 09:35</u>	
Solids: Preparation: <u>5030B</u>	Dilution: _____	
Batch: <u>3D02004</u> Sequence: <u>3D09303</u> Calibration: <u>3091002</u> Instrument: <u>MS-VOA5</u>		

CAS NO.	COMPOUND	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone		2.50	5.00	10.0	U
71-43-2	Benzene		0.250	0.500	1.00	U
108-86-1	Bromobenzene		0.250	0.500	1.00	U
74-97-5	Bromochloromethane		0.250	0.500	1.00	U
75-27-4	Bromodichloromethane		0.250	0.500	1.00	U
75-25-2	Bromoform		0.250	0.500	1.00	U
74-83-9	Bromomethane		0.500	1.00	2.00	U
104-51-8	n-Butylbenzene		0.250	0.500	1.00	U
78-93-3	2-Butanone		2.50	5.00	10.0	U
135-98-8	sec-Butylbenzene		0.250	0.500	1.00	U
98-06-6	tert-Butylbenzene		0.250	0.500	1.00	U
75-15-0	Carbon disulfide		0.250	0.500	1.00	U
56-23-5	Carbon tetrachloride		0.250	0.500	1.00	U
108-90-7	Chlorobenzene		0.250	0.500	1.00	U
75-00-3	Chloroethane		0.500	1.00	2.00	U
67-66-3	Chloroform		0.250	0.500	1.00	U
74-87-3	Chloromethane		0.250	0.500	1.00	U
95-49-8	2-Chlorotoluene		0.250	0.500	1.00	U
106-43-4	4-Chlorotoluene		0.250	0.500	1.00	U
124-48-1	Dibromochloromethane		0.250	0.500	1.00	U
96-12-8	1,2-Dibromo-3-chloropropane		0.500	1.00	2.00	U
106-93-4	1,2-Dibromoethane (EDB)		0.250	0.500	1.00	U
74-95-3	Dibromomethane		0.250	0.500	1.00	U
95-50-1	1,2-Dichlorobenzene		0.250	0.500	1.00	U
541-73-1	1,3-Dichlorobenzene		0.250	0.500	1.00	U
106-46-7	1,4-Dichlorobenzene		0.250	0.500	1.00	U
75-71-8	Dichlorodifluoromethane		0.500	1.00	2.00	U
75-34-3	1,1-Dichloroethane		0.250	0.500	1.00	U
107-06-2	1,2-Dichloroethane		0.250	0.500	1.00	U
75-35-4	1,1-Dichloroethene		0.250	0.500	1.00	U
156-59-2	cis-1,2-Dichloroethene		0.250	0.500	1.00	U
156-60-5	trans-1,2-Dichloroethene		0.250	0.500	1.00	U
78-87-5	1,2-Dichloropropane		0.250	0.500	1.00	U
142-28-9	1,3-Dichloropropane		0.250	0.500	1.00	U
594-20-7	2,2-Dichloropropane		0.250	0.500	1.00	U
563-58-6	1,1-Dichloropropene		0.250	0.500	1.00	U
10061-01-5	cis-1,3-Dichloropropene		0.250	0.500	1.00	U
10061-02-6	trans-1,3-Dichloropropene		0.250	0.500	1.00	U
100-41-4	Ethylbenzene		0.250	0.500	1.00	U
87-68-3	Hexachlorobutadiene		0.250	0.500	2.00	U

ANALYSIS DATA SHEET

Blank

Laboratory: Empirical Laboratories, LLC

SDG: Kirtland 082

Client: Shaw Environmental, Inc.

Project: Kirtland AFB 2011

Matrix: Laboratory ID: 3D02004-BLK1

File ID: 0402BLK1.D

Sampled: Prepared:

Analyzed: 04/02/13 09:35

Solids: Preparation: 5030B

Dilution:

Batch: 3D02004 Sequence: 3D09303 Calibration: 3091002 Instrument: MS-VOA5

CAS NO.	COMPOUND	CONC. (ug/L)	DL	LOD	LOQ	Q
591-78-6	2-Hexanone		1.25	2.50	5.00	U
98-82-8	Isopropylbenzene		0.250	0.500	1.00	U
99-87-6	p-Isopropyltoluene		0.250	0.500	1.00	U
75-09-2	Methylene chloride		0.500	1.00	2.00	U
91-20-3	Naphthalene		0.250	0.500	2.00	U
108-10-1	4-Methyl-2-pentanone		1.25	2.50	5.00	U
1634-04-4	Methyl t-Butyl Ether		0.250	0.500	1.00	U
103-65-1	n-Propylbenzene		0.250	0.500	1.00	U
100-42-5	Styrene		0.250	0.500	1.00	U
79-34-5	1,1,2,2-Tetrachloroethane		0.250	0.500	1.00	U
630-20-6	1,1,1,2-Tetrachloroethane		0.250	0.500	1.00	U
127-18-4	Tetrachloroethene		0.250	0.500	1.00	U
108-88-3	Toluene		0.250	0.500	1.00	U
87-61-6	1,2,3-Trichlorobenzene		0.250	0.500	2.00	U
120-82-1	1,2,4-Trichlorobenzene		0.250	0.500	2.00	U
79-00-5	1,1,2-Trichloroethane		0.250	0.500	1.00	U
71-55-6	1,1,1-Trichloroethane		0.250	0.500	1.00	U
79-01-6	Trichloroethene		0.250	0.500	1.00	U
75-69-4	Trichlorofluoromethane		0.500	1.00	2.00	U
96-18-4	1,2,3-Trichloropropane		0.500	1.00	2.00	U
108-67-8	1,3,5-Trimethylbenzene		0.250	0.500	1.00	U
95-63-6	1,2,4-Trimethylbenzene		0.250	0.500	1.00	U
75-01-4	Vinyl chloride		0.250	0.500	1.00	U
1330-20-7	Xylenes (total)		0.750	1.50	3.00	U
SYSTEM MONITORING COMPOUND		ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
Bromofluorobenzene		30.00	29.40	98.0	75 - 120	
Dibromofluoromethane		30.00	30.24	101	85 - 115	
1,2-Dichloroethane-d4		30.00	30.98	103	70 - 120	
Toluene-d8		30.00	29.20	97.3	85 - 120	

ANALYSIS DATA SHEET

LCS

Laboratory: <u>Empirical Laboratories, LLC</u>	SDG: <u>Kirtland_082</u>	
Client: <u>Shaw Environmental, Inc.</u>	Project: <u>Kirtland AFB 2011</u>	
Matrix:	Laboratory ID: <u>3D02004-BS1</u>	File ID: <u>0402LCS1.D</u>
Sampled:	Prepared:	Analyzed: <u>04/02/13 08:11</u>
Solids:	Preparation: <u>5030B</u>	Dilution:
Batch: <u>3D02004</u>	Sequence: <u>3D09303</u>	Calibration: <u>3091002</u>
		Instrument: <u>MS-VOA5</u>

CAS NO.	COMPOUND	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	89.5	2.50	5.00	10.0	
71-43-2	Benzene	48.4	0.250	0.500	1.00	
108-86-1	Bromobenzene	48.0	0.250	0.500	1.00	
74-97-5	Bromochloromethane	50.2	0.250	0.500	1.00	
75-27-4	Bromodichloromethane	48.2	0.250	0.500	1.00	
75-25-2	Bromoform	49.6	0.250	0.500	1.00	
74-83-9	Bromomethane	44.2	0.500	1.00	2.00	
104-51-8	n-Butylbenzene	51.0	0.250	0.500	1.00	
78-93-3	2-Butanone	106	2.50	5.00	10.0	
135-98-8	sec-Butylbenzene	46.6	0.250	0.500	1.00	
98-06-6	tert-Butylbenzene	46.3	0.250	0.500	1.00	
75-15-0	Carbon disulfide	45.9	0.250	0.500	1.00	
56-23-5	Carbon tetrachloride	50.8	0.250	0.500	1.00	
108-90-7	Chlorobenzene	45.2	0.250	0.500	1.00	
75-00-3	Chloroethane	46.4	0.500	1.00	2.00	
67-66-3	Chloroform	47.2	0.250	0.500	1.00	
74-87-3	Chloromethane	35.5	0.250	0.500	1.00	
95-49-8	2-Chlorotoluene	45.2	0.250	0.500	1.00	
106-43-4	4-Chlorotoluene	45.2	0.250	0.500	1.00	
124-48-1	Dibromochloromethane	51.5	0.250	0.500	1.00	
96-12-8	1,2-Dibromo-3-chloropropane	47.8	0.500	1.00	2.00	
106-93-4	1,2-Dibromoethane (EDB)	51.0	0.250	0.500	1.00	
74-95-3	Dibromomethane	48.8	0.250	0.500	1.00	
95-50-1	1,2-Dichlorobenzene	44.6	0.250	0.500	1.00	
541-73-1	1,3-Dichlorobenzene	44.4	0.250	0.500	1.00	
106-46-7	1,4-Dichlorobenzene	47.9	0.250	0.500	1.00	
75-71-8	Dichlorodifluoromethane	36.5	0.500	1.00	2.00	
75-34-3	1,1-Dichloroethane	47.5	0.250	0.500	1.00	
107-06-2	1,2-Dichloroethane	47.5	0.250	0.500	1.00	
75-35-4	1,1-Dichloroethene	45.9	0.250	0.500	1.00	
156-59-2	cis-1,2-Dichloroethene	48.6	0.250	0.500	1.00	
156-60-5	trans-1,2-Dichloroethene	49.2	0.250	0.500	1.00	
78-87-5	1,2-Dichloropropane	47.9	0.250	0.500	1.00	
142-28-9	1,3-Dichloropropane	50.0	0.250	0.500	1.00	
594-20-7	2,2-Dichloropropane	52.9	0.250	0.500	1.00	
563-58-6	1,1-Dichloropropene	47.6	0.250	0.500	1.00	
10061-01-5	cis-1,3-Dichloropropene	55.0	0.250	0.500	1.00	
10061-02-6	trans-1,3-Dichloropropene	50.0	0.250	0.500	1.00	
100-41-4	Ethylbenzene	50.9	0.250	0.500	1.00	
87-68-3	Hexachlorobutadiene	49.3	0.250	0.500	2.00	

ANALYSIS DATA SHEET

LCS

Laboratory: <u>Empirical Laboratories, LLC</u>	SDG: <u>Kirtland 082</u>	
Client: <u>Shaw Environmental, Inc.</u>	Project: <u>Kirtland AFB 2011</u>	
Matrix:	Laboratory ID: <u>3D02004-BS1</u>	File ID: <u>0402LCS1.D</u>
Sampled:	Prepared:	Analyzed: <u>04/02/13 08:11</u>
Solids:	Preparation: <u>5030B</u>	Dilution:
Batch: <u>3D02004</u>	Sequence: <u>3D09303</u>	Calibration: <u>3091002</u>
		Instrument: <u>MS-VOA5</u>

CAS NO.	COMPOUND	CONC. (ug/L)	DL	LOD	LOQ	Q
591-78-6	2-Hexanone	122	1.25	2.50	5.00	
98-82-8	Isopropylbenzene	50.8	0.250	0.500	1.00	
99-87-6	p-Isopropyltoluene	46.4	0.250	0.500	1.00	
75-09-2	Methylene chloride	46.8	0.500	1.00	2.00	
91-20-3	Naphthalene	46.7	0.250	0.500	2.00	
108-10-1	4-Methyl-2-pentanone	126	1.25	2.50	5.00	
1634-04-4	Methyl t-Butyl Ether	50.7	0.250	0.500	1.00	
103-65-1	n-Propylbenzene	45.2	0.250	0.500	1.00	
100-42-5	Styrene	52.7	0.250	0.500	1.00	
79-34-5	1,1,2,2-Tetrachloroethane	47.2	0.250	0.500	1.00	
630-20-6	1,1,1,2-Tetrachloroethane	49.4	0.250	0.500	1.00	
127-18-4	Tetrachloroethene	48.9	0.250	0.500	1.00	
108-88-3	Toluene	49.4	0.250	0.500	1.00	
87-61-6	1,2,3-Trichlorobenzene	51.4	0.250	0.500	2.00	
120-82-1	1,2,4-Trichlorobenzene	50.9	0.250	0.500	2.00	
79-00-5	1,1,2-Trichloroethane	51.6	0.250	0.500	1.00	
71-55-6	1,1,1-Trichloroethane	49.3	0.250	0.500	1.00	
79-01-6	Trichloroethene	47.5	0.250	0.500	1.00	
75-69-4	Trichlorofluoromethane	47.2	0.500	1.00	2.00	
96-18-4	1,2,3-Trichloropropane	49.9	0.500	1.00	2.00	
108-67-8	1,3,5-Trimethylbenzene	51.9	0.250	0.500	1.00	
95-63-6	1,2,4-Trimethylbenzene	51.1	0.250	0.500	1.00	
75-01-4	Vinyl chloride	40.8	0.250	0.500	1.00	
1330-20-7	Xylenes (total)	142	0.750	1.50	3.00	
SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q	
Bromofluorobenzene	30.00	30.78	103	75 - 120		
Dibromofluoromethane	30.00	30.12	100	85 - 115		
1,2-Dichloroethane-d4	30.00	30.00	100	70 - 120		
Toluene-d8	30.00	30.25	101	85 - 120		

MASS SPECTROMETER INSTRUMENT PERFORMANCE CHECK

SW8260B

Laboratory: Empirical Laboratories, LLC

SDG: Kirtland_082

Client: Shaw Environmental, Inc.

Project: Kirtland AFB 2011

Lab File ID: 0329TUN1.D

Injection Date: 03/29/13

Instrument ID: MS-VOA5

Injection Time: 08:30

Sequence: 3D09103

Lab Sample ID: 3D09103-TUN1

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15 - 40% of 95	18.7	PASS
75	30 - 60% of 95	41	PASS
95	Base peak, 100% relative abundance	100	PASS
96	5 - 9% of 95	6.54	PASS
173	Less than 2% of 174	0	PASS
174	50 - 200% of 95	95.9	PASS
175	5 - 9% of 174	7.86	PASS
176	95 - 101% of 174	100	PASS
177	5 - 9% of 176	6.61	PASS

MASS SPECTROMETER INSTRUMENT PERFORMANCE CHECK

SW8260B

Laboratory: Empirical Laboratories, LLC

SDG: Kirtland_082

Client: Shaw Environmental, Inc.

Project: Kirtland AFB 2011

Lab File ID: 0402TUN1.D

Injection Date: 04/02/13

Instrument ID: MS-VOA5

Injection Time: 07:14

Sequence: 3D09303

Lab Sample ID: 3D09303-TUN1

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15 - 40% of 95	19.1	PASS
75	30 - 60% of 95	41.7	PASS
95	Base peak, 100% relative abundance	100	PASS
96	5 - 9% of 95	6.73	PASS
173	Less than 2% of 174	0	PASS
174	50 - 200% of 95	93.7	PASS
175	5 - 9% of 174	7.81	PASS
176	95 - 101% of 174	98.1	PASS
177	5 - 9% of 176	6.44	PASS

ANALYSIS SEQUENCE SUMMARY

SW8260B

Laboratory: Empirical Laboratories, LLC

SDG: Kirtland_082

Client: Shaw Environmental, Inc.

Project: Kirtland AFB 2011

Sequence: 3D09103

Instrument: MS-VOA5

Calibration: 3091002

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
MS Tune	3D09103-TUN1	0329TUN1.D	03/29/13 08:30
Cal Standard	3D09103-CAL1	0329CAL1.D	03/29/13 10:23
Cal Standard	3D09103-CAL2	0329CAL2.D	03/29/13 10:50
Cal Standard	3D09103-CAL3	0329CAL3.D	03/29/13 11:19
Cal Standard	3D09103-CAL4	0329CAL4.D	03/29/13 11:47
Cal Standard	3D09103-CAL5	0329CAL5.D	03/29/13 12:15
Cal Standard	3D09103-CAL6	0329CAL6.D	03/29/13 12:42
Cal Standard	3D09103-CAL7	0329CAL7.D	03/29/13 13:10
Cal Standard	3D09103-CAL8	0329CAL8.D	03/29/13 13:38
Cal Standard	3D09103-CAL9	0329CAL9.D	03/29/13 14:06
Initial Cal Check	3D09103-ICV1	0329ICV1.D	03/29/13 15:02

ANALYSIS SEQUENCE SUMMARY

SW8260B

Laboratory: Empirical Laboratories, LLC

SDG: Kirtland_082

Client: Shaw Environmental, Inc.

Project: Kirtland AFB 2011

Sequence: 3D09303

Instrument: MS-VOA5

Calibration: 3091002

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
MS Tune	3D09303-TUN1	0402TUN1.D	04/02/13 07:14
Calibration Check	3D09303-CCV1	0402CCV1.D	04/02/13 07:43
LCS	3D02004-BS1	0402LCS1.D	04/02/13 08:11
Blank	3D02004-BLK1	0402BLK1.D	04/02/13 09:35
GW8262-TB	1303202-11	0320211.D	04/02/13 10:03
GW0905	1303202-03	0320203.D	04/02/13 11:26
GW0908	1303202-05	0320205.D	04/02/13 11:54
GW0982	1303202-09	0320209.D	04/02/13 12:23
GW0890	1303202-01	0320201D.D	04/02/13 16:06
GW0965	1303202-07	0320207D.D	04/02/13 16:34

INTERNAL STANDARD AREA AND RT SUMMARY
SW8260B

Laboratory: Empirical Laboratories, LLC

SDG: Kirtland_082

Client: Shaw Environmental, Inc.

Project: Kirtland AFB 2011

Sequence: 3D09303

Instrument: MS-VOA5

Calibration: 3091002

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Calibration Check (3D09303-CCV1)									
Lab File ID: 0402CCV1.D					Analyzed: 04/02/13 07:43				
Fluorobenzene	1331381	7.6	1201716	7.59	111	50 - 200	0.0100	+/-0.50	
Chlorobenzene-d5	469927	10.74	420099	10.73	112	50 - 200	0.0100	+/-0.50	
1,4-Dichlorobenzene-d4	472788	13.13	441436	13.13	107	50 - 200	0.0000	+/-0.50	
LCS (3D02004-BS1)									
Lab File ID: 0402LCS1.D					Analyzed: 04/02/13 08:11				
Fluorobenzene	1287968	7.59	1331381	7.6	107	50 - 200	-0.0100	+/-0.50	
Chlorobenzene-d5	460224	10.74	469927	10.74	110	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4	482412	13.13	472788	13.13	109	50 - 200	0.0000	+/-0.50	
Blank (3D02004-BLK1)									
Lab File ID: 0402BLK1.D					Analyzed: 04/02/13 09:35				
Fluorobenzene	1287546	7.59	1331381	7.6	107	50 - 200	-0.0100	+/-0.50	
Chlorobenzene-d5	481033	10.73	469927	10.74	115	50 - 200	-0.0100	+/-0.50	
1,4-Dichlorobenzene-d4	494962	13.12	472788	13.13	112	50 - 200	-0.0100	+/-0.50	
GW8262-TB (1303202-11)									
Lab File ID: 0320211.D					Analyzed: 04/02/13 10:03				
Fluorobenzene	1291676	7.59	1331381	7.6	107	50 - 200	-0.0100	+/-0.50	
Chlorobenzene-d5	471297	10.73	469927	10.74	112	50 - 200	-0.0100	+/-0.50	
1,4-Dichlorobenzene-d4	491040	13.13	472788	13.13	111	50 - 200	0.0000	+/-0.50	
GW0905 (1303202-03)									
Lab File ID: 0320203.D					Analyzed: 04/02/13 11:26				
Fluorobenzene	1299379	7.6	1331381	7.6	108	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5	489299	10.73	469927	10.74	116	50 - 200	-0.0100	+/-0.50	
1,4-Dichlorobenzene-d4	499954	13.13	472788	13.13	113	50 - 200	0.0000	+/-0.50	
GW0908 (1303202-05)									
Lab File ID: 0320205.D					Analyzed: 04/02/13 11:54				
Fluorobenzene	1268400	7.6	1331381	7.6	106	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5	473525	10.73	469927	10.74	113	50 - 200	-0.0100	+/-0.50	
1,4-Dichlorobenzene-d4	496702	13.13	472788	13.13	113	50 - 200	0.0000	+/-0.50	
GW0982 (1303202-09)									
Lab File ID: 0320209.D					Analyzed: 04/02/13 12:23				
Fluorobenzene	1325725	7.6	1331381	7.6	110	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5	475790	10.73	469927	10.74	113	50 - 200	-0.0100	+/-0.50	
1,4-Dichlorobenzene-d4	497890	13.13	472788	13.13	113	50 - 200	0.0000	+/-0.50	
GW0890 (1303202-01)									
Lab File ID: 0320201D.D					Analyzed: 04/02/13 16:06				
Fluorobenzene	1336846	7.6	1331381	7.6	111	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5	490855	10.73	469927	10.74	117	50 - 200	-0.0100	+/-0.50	
1,4-Dichlorobenzene-d4	493885	13.13	472788	13.13	112	50 - 200	0.0000	+/-0.50	
GW0965 (1303202-07)									
Lab File ID: 0320207D.D					Analyzed: 04/02/13 16:34				
Fluorobenzene	1350789	7.61	1331381	7.6	112	50 - 200	0.0100	+/-0.50	
Chlorobenzene-d5	498752	10.74	469927	10.74	119	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4	501301	13.13	472788	13.13	114	50 - 200	0.0000	+/-0.50	

INITIAL CALIBRATION DATA

SW8260B

Laboratory: Empirical Laboratories, LLC

SDG: Kirtland 082

Client: Shaw Environmental, Inc.

Project: Kirtland AFB 2011

Calibration: 3091002

Instrument: MS-VOA5

Matrix: Water

Calibration Dates: 3/29/13 10:23

3/29/13 14:06

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF
Acetone	1	0.1054151	2	0.1060279	4	0.104138	10	9.493161E-02	20	0.1056978	100	0.1027842
Acetonitrile	5	4.383326E-02	10	4.438527E-02	20	4.476057E-02	50	0.0420668	100	3.958004E-02	500	4.256032E-02
Acrolein	2.508	0.0135758	5.016	1.690575E-02	10.03	1.608999E-02	25.08	1.349449E-02	50.15	0.0161632	250.8	2.205266E-02
Acrylonitrile	2.498	7.818014E-02	4.996	8.528259E-02	9.994	8.561957E-02	24.98	8.743971E-02	49.97	8.977756E-02	249.8	0.0905938
Benzene	0.5	0.9275442	1	0.9646405	2	0.9910127	5	0.9303989	10	0.9214167	50	0.9245758
Allyl chloride	0.5	0.1235635	1	0.1188619	2	0.1282099	5	0.1200287	10	0.1249246	50	0.1273384
Bromobenzene	0.5	0.8498324	1	0.8781514	2	0.8547916	5	0.9027724	10	0.8705142	50	0.9030265
Bromochloromethane	0.5	0.1510019	1	0.1713282	2	0.1685613	5	0.1695823	10	0.1744918	50	0.1759936
Tert-Amyl Methyl Ether	0.5	0.5609875	1	0.6050797	2	0.6068578	5	0.5961397	10	0.60499	50	0.6182343
Bromodichloromethane	0.5	0.3058652	1	0.3071638	2	0.3122634	5	0.3151315	10	0.3182883	50	0.3229553
Bromoform	0.5	0.6428033	1	0.6347802	2	0.5397561	5	0.5214019	10	0.5462592	50	0.5849037
Bromomethane	0.5	0.2640262	1	0.2004786	2	0.2110316	5	0.1973404	10	0.1939804	50	0.2112383
Bromofluorobenzene	30	0.97154	35	0.9473368	40	0.9424287	50	0.9575808	60	0.9416595	70	0.9610979
n-Butylbenzene	0.5	1.238799	1	1.347541	2	1.418377	5	1.542309	10	1.447798	50	1.568721
2-Butanone	1	0.1182485	2	0.1377382	4	0.1346649	10	0.134251	20	0.1332412	100	0.1394094
sec-Butylbenzene	0.5	2.205651	1	2.525112	2	2.413901	5	2.443399	10	2.398037	50	2.401804
tert-Butylbenzene	0.5	1.89531	1	1.97325	2	1.962947	5	1.905051	10	1.920895	50	1.965798
Carbon disulfide	0.5	0.6574307	1	0.7463349	2	0.7794253	5	0.7732541	10	0.7662994	50	0.7933618
Carbon tetrachloride	0.5	0.211966	1	0.294987	2	0.283039	5	0.2879225	10	0.290739	50	0.3075076
Chlorobenzene	0.5	1.799647	1	2.049038	2	2.094975	5	1.923549	10	1.972359	50	1.988615
Chloroethane	0.5	0.127016	1	0.1202687	2	0.1378549	5	0.1371888	10	0.1353379	50	0.1423968
Chloroform	0.5	0.4253402	1	0.4705355	2	0.4285589	5	0.4331285	10	0.4209156	50	0.4255385
2-Chloroethyl vinyl ether	0.9975	6.598981E-02	1.995	6.382241E-02	3.99	7.013906E-02	9.975	7.611774E-02	19.95	8.081019E-02	99.75	8.506915E-02
Chloromethane	0.5	0.2975065	1	0.3484218	2	0.324664	5	0.3060344	10	0.3137623	50	0.3116936
1-Chlorohexane	0.5	1.054289	1	0.9887849	2	0.9025139	5	0.8423352	10	0.8446603	50	0.8342721
2-Chlorotoluene	0.5	1.823532	1	1.940484	2	2.105572	5	1.949894	10	1.877115	50	1.907188
Chloroprene	0.5	0.3315319	1	0.384145	2	0.3529274	5	0.3704829	10	0.3715182	50	0.3860763
4-Chlorotoluene	0.5	2.001936	1	2.114551	2	2.098624	5	2.182607	10	2.125205	50	2.15403
Cyclohexane	0.5	0.3556086	1	0.3740438	2	0.4022523	5	0.3821105	10	0.3722233	50	0.3721999
Dibromochloromethane	0.5	0.6724303	1	0.7189562	2	0.7023629	5	0.7631589	10	0.7921777	50	0.8616989
1,2-Dibromo-3-chloropropane	0.5	9.195309E-02	1	0.1028885	2	0.1301869	5	0.1231116	10	0.1288106	50	0.1507965

INITIAL CALIBRATION DATA
SW8260B

Laboratory: Empirical Laboratories, LLC
 Client: Shaw Environmental, Inc.
 Calibration: 3091002
 Matrix: Water

SDG: Kirtland 082
 Project: Kirtland AFB 2011
 Instrument: MS-VOA5
 Calibration Dates: 3/29/13 10:23 3/29/13 14:06

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF
1,2-Dibromoethane (EDB)	0.5	0.5460726	1	0.6666765	2	0.678799	5	0.6662422	10	0.6882407	50	0.7253337
Dibromomethane	0.5	0.1636763	1	0.1823518	2	0.1765505	5	0.1866326	10	0.1807677	50	0.1840963
1,2-Dichlorobenzene	0.5	1.427596	1	1.500074	2	1.459632	5	1.454855	10	1.461151	50	1.452909
1,3-Dichlorobenzene	0.5	1.496072	1	1.558965	2	1.593944	5	1.584111	10	1.533506	50	1.530388
trans-1,4-Dichloro-2-butene	0.5	0.1362177	1	0.187967	2	0.1731172	5	0.1930426	10	0.1772381	50	0.1974775
cis-1,4-Dichloro-2-butene	0.5	0.1606733	1	0.1820096	2	0.1771497	5	0.1780245	10	0.1832714	50	0.1952481
1,4-Dichlorobenzene	0.5	1.508666	1	1.572618	2	1.54236	5	1.560344	10	1.525857	50	1.532625
Dichlorodifluoromethane	0.5	0.3117254	1	0.3391509	2	0.309334	5	0.3241279	10	0.3363551	50	0.3460143
1,1-Dichloroethane	0.5	0.4454193	1	0.4560756	2	0.4829551	5	0.4812406	10	0.4639743	50	0.4732369
1,2-Dichloroethane	0.5	0.307864	1	0.3353918	2	0.3352932	5	0.3385195	10	0.3278732	50	0.3318142
1,1-Dichloroethene	0.5	0.217281	1	0.2483555	2	0.2750613	5	0.2596931	10	0.2566184	50	0.2658765
cis-1,2-Dichloroethene	0.5	0.2618457	1	0.2808269	2	0.3037068	5	0.2897895	10	0.284505	50	0.2804763
trans-1,2-Dichloroethene	0.5	0.2643442	1	0.2558949	2	0.2757444	5	0.2782992	10	0.2738032	50	0.2820121
1,2-Dichloroethene (total)	1	0.2630949	2	0.2698609	4	0.2897256	10	0.2840444	20	0.2791541	100	0.2812442
1,2-Dichloropropane	0.5	0.2587112	1	0.2624233	2	0.2806538	5	0.2710325	10	0.2678275	50	0.2599181
1,3-Dichloropropane	0.5	0.8538636	1	0.9303398	2	0.9653616	5	0.95186	10	0.963087	50	0.9629779
2,2-Dichloropropane	0.5	0.2819247	1	0.3058954	2	0.3103297	5	0.3065194	10	0.309234	50	0.3058196
1,1-Dichloropropene	0.5	0.3432522	1	0.3199863	2	0.3474971	5	0.3300356	10	0.327808	50	0.3351191
cis-1,3-Dichloropropene	0.5	0.2964162	1	0.3562168	2	0.3570494	5	0.3513003	10	0.3629596	50	0.3611242
trans-1,3-Dichloropropene	0.5	0.7809358	1	0.8225719	2	0.8112947	5	0.8879408	10	0.8941427	50	0.9472321
Diisopropyl Ether	0.5	0.9164144	1	1.002739	2	1.029558	5	1.050606	10	1.029482	50	1.011812
1,4-Dioxane	10	2.141919E-03	20	1.801148E-03	40	2.221934E-03	100	2.221653E-03	200	2.227629E-03	1000	2.369717E-03
Ethylbenzene	0.5	2.52538	1	2.97944	2	2.999703	5	2.985978	10	2.959912	50	2.990547
Ethyl tert-Butyl Ether	0.5	0.6805534	1	0.7634239	2	0.7396644	5	0.7531288	10	0.745168	50	0.7451816
Ethyl Methacrylate	0.5	0.6491339	1	0.6741	2	0.6631108	5	0.7152864	10	0.7064742	50	0.7636649
Hexachlorobutadiene	0.5	0.4383668	1	0.3438511	2	0.3909639	5	0.3692848	10	0.3611868	50	0.3654715
Hexane	0.4982	0.3342798	0.9964	0.3378765	1.993	0.308329	4.982	0.3211198	9.965	0.3171738	49.82	0.3053013
2-Hexanone	1	0.3224146	2	0.4121982	4	0.3953203	10	0.4077826	20	0.4436671	100	0.4553953
Iodomethane	0.5	0.3175401	1	0.3672635	2	0.4272389	5	0.4455523	10	0.4752043	50	0.530018
Isobutyl alcohol	10	4.992512E-03	20	4.607803E-03	40	5.340052E-03	100	4.73045E-03	200	4.950792E-03	1000	5.359932E-03
Isopropylbenzene	0.5	2.264688	1	2.431227	2	2.422719	5	2.552209	10	2.513426	50	2.511939

INITIAL CALIBRATION DATA
SW8260B

Laboratory: Empirical Laboratories, LLC
 Client: Shaw Environmental, Inc.
 Calibration: 3091002
 Matrix: Water

SDG: Kirtland 082
 Project: Kirtland AFB 2011
 Instrument: MS-VOA5
 Calibration Dates: 3/29/13 10:23 3/29/13 14:06

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF
p-Isopropyltoluene	0.5	1.727666	1	1.909456	2	1.982923	5	1.962232	10	1.94614	50	1.957642
Methacrylonitrile	5	0.1528008	10	0.1663075	20	0.1684478	50	0.1657577	100	0.166443	500	0.1511403
Methylene chloride	0.5	0.3651484	1	0.2714867	2	0.3061499	5	0.293638	10	0.2959026	50	0.287851
Methyl Acetate	0.5	0.1905695	1	0.1970424	2	0.2010161	5	0.1874059	10	0.1892403	50	0.1969831
Methylcyclohexane	0.5	0.3233549	1	0.3085244	2	0.3063351	5	0.3124225	10	0.3021622	50	0.3030521
Naphthalene	0.5	0.6673935	1	0.6947766	2	0.6625046	5	0.7574265	10	0.8431316	50	1.068714
Methyl Methacrylate	0.5	0.1965205	1	0.2237482	2	0.2153157	5	0.194247	10	0.2131385	50	0.2229932
4-Methyl-2-pentanone	1	0.1996323	2	0.2332614	4	0.2305242	10	0.2217832	20	0.2213388	100	0.22345
Methyl t-Butyl Ether	0.5	0.5475863	1	0.5623918	2	0.5794975	5	0.5665832	10	0.5837655	50	0.5876283
n-Propylbenzene	0.5	2.692685	1	3.041664	2	2.96359	5	3.078151	10	2.98656	50	2.935582
Propionitrile	5	2.520787E-02	10	2.976391E-02	20	3.101213E-02	50	2.943564E-02	100	3.014129E-02	500	3.079994E-02
Styrene	0.5	1.498946	1	1.745237	2	1.842097	5	1.89492	10	1.902496	50	1.94563
1,1,2,2-Tetrachloroethane	0.5	0.5784974	1	0.6321623	2	0.5642053	5	0.5597351	10	0.5616569	50	0.5642168
1,1,1,2-Tetrachloroethane	0.5	0.6450823	1	0.6550378	2	0.6638699	5	0.6845685	10	0.6717143	50	0.7207006
tert-Butyl alcohol	2.5	1.344662E-02	5	0.0160881	10	1.617299E-02	25	0.0147375	50	1.607533E-02	250	0.0170234
Tetrachloroethene	0.5	0.755487	1	0.839621	2	0.8326445	5	0.8098216	10	0.8314313	50	0.8406089
Toluene	0.5	1.52009	1	1.638412	2	1.644414	5	1.660473	10	1.619613	50	1.624141
1,2,3-Trichlorobenzene	0.5	0.5748291	1	0.4690797	2	0.4952189	5	0.518432	10	0.5069601	50	0.5516122
1,2,4-Trichlorobenzene	0.5	0.5748291	1	0.5785461	2	0.6364796	5	0.6182499	10	0.6056977	50	0.6562325
1,1,2-Trichloroethane	0.5	0.3886953	1	0.473663	2	0.4442985	5	0.4838578	10	0.4804961	50	0.4996691
1,1,1-Trichloroethane	0.5	0.3200386	1	0.3251522	2	0.3108276	5	0.3236429	10	0.3294928	50	0.3402314
Tetrahydrofuran	0.5	2.721123E-02	1	0.0187264	2	0.0221846	5	2.013444E-02	10	0.0239494	50	0.023668
Trichloroethene	0.5	0.3119525	1	0.2919889	2	0.3021552	5	0.2838224	10	0.2875185	50	0.2866129
Trichlorofluoromethane	0.5	0.366693	1	0.3992276	2	0.3857064	5	0.396406	10	0.3774102	50	0.3964491
1,2,3-Trichloropropane	0.5	0.1819398	1	0.1970398	2	0.1803826	5	0.1905732	10	0.197684	50	0.1984696
1,3,5-Trimethylbenzene	0.5	1.585213	1	1.725895	2	1.927771	5	1.950392	10	1.887361	50	1.982355
1,2,4-Trimethylbenzene	0.5	1.48898	1	1.722296	2	1.805122	5	1.815802	10	1.792817	50	1.91726
1,1,2-Trichloro-1,2,2-trifluoroethane	0.5	0.282379	1	0.2674739	2	0.2642469	5	0.2660995	10	0.2561413	50	0.2704149
Vinyl chloride	0.5	0.22832	1	0.1706594	2	0.1787968	5	0.1291808	10	0.1515616	50	0.1350071
m,p-Xylene	1	2.09446	2	2.300056	4	2.321362	10	2.298417	20	2.27409	100	2.19787
o-Xylene	0.5	2.324955	1	2.418393	2	2.414147	5	2.38931	10	2.368238	50	2.322932

INITIAL CALIBRATION DATA

SW8260B

Laboratory: Empirical Laboratories, LLC

SDG: Kirtland 082

Client: Shaw Environmental, Inc.

Project: Kirtland AFB 2011

Calibration: 3091002

Instrument: MS-VOA5

Matrix: Water

Calibration Dates: 3/29/13 10:23 3/29/13 14:06

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF
Vinyl acetate	0.9962	0.5219953	1.992	0.5967659	3.985	0.6065038	9.962	0.6067761	19.92	0.6248967	99.62	0.6274634
Xylenes (total)	1.5	2.171292	3	2.339501	6	2.352291	15	2.328715	30	2.305472	150	2.239557
Dibromofluoromethane	30	0.292916	35	0.2881145	40	0.2917999	50	0.2933954	60	0.2909411	70	0.2848079
1,2-Dichloroethane-d4	30	6.293185E-02	35	6.040221E-02	40	6.178748E-02	50	6.116066E-02	60	6.303356E-02	70	6.059696E-02
Toluene-d8	30	2.498762	35	2.394118	40	2.407015	50	2.371995	60	2.350625	70	2.388157
tert-Amyl alcohol	2.5	1.254715E-02	5	1.534089E-02	10	1.133082E-02	25	1.046533E-02	50	1.225906E-02	250	1.315965E-02
tert-Amyl ethyl ether	0.5	0.5514931	1	0.6116523	2	0.5857268	5	0.5969405	10	0.597425	50	0.6024876
1,3,5-Trichlorobenzene	0.5	0.780623	1	0.7702984	2	0.7532973	5	0.7282875	10	0.7228706	50	0.7635302
Diethyl ether	0.5	0.2043341	1	0.1895011	2	0.208658	5	0.1980406	10	0.2084194	50	0.2158168

INITIAL CALIBRATION DATA (Continued)

SW8260B

Laboratory: Empirical Laboratories, LLC

SDG: Kirtland_082

Client: Shaw Environmental, Inc.

Project: Kirtland AFB 2011

Calibration: 3091002

Instrument: MS-VOA5

Matrix: Water

Calibration Dates: 3/29/13 10:23

3/29/13 14:06

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF
Acetone	200	0.1031941	300	9.605524E-02	400	9.424286E-02						
Acetonitrile	1000	0.0433075	1500	3.914835E-02	2000	3.857741E-02						
Acrolein	501.5	3.322034E-02	752.2	3.888327E-02	1003	4.462008E-02						
Acrylonitrile	499.7	9.207206E-02	749.6	8.482408E-02	999.4	8.306687E-02						
Benzene	100	0.8962344	150	0.8543471	200	0.8156494						
Allyl chloride	100	0.1308419	150	0.1256946	200	0.1168837						
Bromobenzene	100	0.9106052	150	0.9203068	200	0.9342433						
Bromochloromethane	100	0.1801971	150	0.1741222	200	0.1650558						
Tert-Amyl Methyl Ether	100	0.6174231	150	0.5893836	200	0.5698314						
Bromodichloromethane	100	0.3318737	150	0.3227798	200	0.3147004						
Bromoform	100	0.6149315	150	0.616194	200	0.6393513						
Bromomethane	100	0.2057081	150	0.2066446	200	0.2026959						
Bromofluorobenzene	30	1.034682	30	1.02622	30	1.092503						
n-Butylbenzene	100	1.58341	150	1.571477	200	1.560081						
2-Butanone	200	0.1352028	300	0.1376953	400	0.1316045						
sec-Butylbenzene	100	2.357469	150	2.253665	200	2.193388						
tert-Butylbenzene	100	1.958747	150	1.915549	200	1.882056						
Carbon disulfide	100	0.7973837	150	0.7625686	200	0.7337045						
Carbon tetrachloride	100	0.3215959	150	0.3191661	200	0.3118442						
Chlorobenzene	100	1.947974	150	1.833175	200	1.822589						
Chloroethane	100	0.1381529	150	0.133731	200	0.1327954						
Chloroform	100	0.4220048	150	0.4085313	200	0.386608						
2-Chloroethyl vinyl ether	199.5	8.642178E-02	299.2	7.982918E-02	399	7.971751E-02						
Chloromethane	100	0.3063746	150	0.2875292	200	0.2739404						
1-Chlorohexane	100	0.8141995	150	0.7768209	200	0.7843808						
2-Chlorotoluene	100	1.862051	150	1.817696	200	1.816913						
Chloroprene	100	0.4000879	150	0.3840896	200	0.3744948						
4-Chlorotoluene	100	2.092147	150	2.074624	200	2.043914						
Cyclohexane	100	0.3600469	150	0.3465598	200	0.3320392						
Dibromochloromethane	100	0.8827955	150	0.8883096	200	0.9031033						
1,2-Dibromo-3-chloropropane	100	0.1668153	150	0.1645006	200	0.1780095						

INITIAL CALIBRATION DATA (Continued)

SW8260B

Laboratory: Empirical Laboratories, LLC

SDG: Kirtland_082

Client: Shaw Environmental, Inc.

Project: Kirtland AFB 2011

Calibration: 3091002

Instrument: MS-VOA5

Matrix: Water

Calibration Dates: 3/29/13 10:23

3/29/13 14:06

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF
1,2-Dibromoethane (EDB)	100	0.7394193	150	0.7342408	200	0.7618666						
Dibromomethane	100	0.1882828	150	0.1796057	200	0.1752155						
1,2-Dichlorobenzene	100	1.459007	150	1.420415	200	1.425151						
1,3-Dichlorobenzene	100	1.518655	150	1.509392	200	1.493643						
trans-1,4-Dichloro-2-butene	100	0.2108657	150	0.2107784	200	0.2216623						
cis-1,4-Dichloro-2-butene	100	0.2021858	150	0.2076508	200	0.2191931						
1,4-Dichlorobenzene	100	1.539324	150	1.510673	200	1.487127						
Dichlorodifluoromethane	100	0.3659312	150	0.3471264	200	0.3368279						
1,1-Dichloroethane	100	0.4779613	150	0.4548001	200	0.4369173						
1,2-Dichloroethane	100	0.3362342	150	0.3342797	200	0.3200674						
1,1-Dichloroethene	100	0.2757911	150	0.2609866	200	0.2516059						
cis-1,2-Dichloroethene	100	0.2821875	150	0.271768	200	0.2552694						
trans-1,2-Dichloroethene	100	0.2801831	150	0.2654692	200	0.2507429						
1,2-Dichloroethene (total)	200	0.2811853	300	0.2686186	400	0.2530062						
1,2-Dichloropropane	100	0.2561103	150	0.243922	200	0.2331069						
1,3-Dichloropropane	100	0.9481422	150	0.9216702	200	0.9388478						
2,2-Dichloropropane	100	0.3129165	150	0.3086895	200	0.2964815						
1,1-Dichloropropene	100	0.3266207	150	0.3191948	200	0.3025237						
cis-1,3-Dichloropropene	100	0.3656284	150	0.3483283	200	0.3361543						
trans-1,3-Dichloropropene	100	0.9367392	150	0.9080085	200	0.9067128						
Diisopropyl Ether	100	0.9695798	150	0.9130455	200	0.8802786						
1,4-Dioxane	2000	2.436216E-03	3000	2.20176E-03	4000	2.208114E-03						
Ethylbenzene	100	2.922792	150	2.699883	200	2.661955						
Ethyl tert-Butyl Ether	100	0.7420047	150	0.7066408	200	0.6810854						
Ethyl Methacrylate	100	0.7644412	150	0.7541031	200	0.7745133						
Hexachlorobutadiene	100	0.3996029	150	0.4024155	200	0.4190627						
Hexane	99.65	0.3052584	149.5	0.2822419	199.3	0.2779575						
2-Hexanone	200	0.4559272	300	0.4289728	400	0.4543606						
Iodomethane	100	0.5684454	150	0.559878	200	0.5383093						
Isobutyl alcohol	2000	5.596509E-03	3000	5.175632E-03	4000	5.334727E-03						
Isopropylbenzene	100	2.487601	150	2.290406	200	2.282502						

INITIAL CALIBRATION DATA (Continued)

SW8260B

Laboratory: Empirical Laboratories, LLC

SDG: Kirtland_082

Client: Shaw Environmental, Inc.

Project: Kirtland AFB 2011

Calibration: 3091002

Instrument: MS-VOA5

Matrix: Water

Calibration Dates: 3/29/13 10:23

3/29/13 14:06

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF
p-Isopropyltoluene	100	1.978172	150	1.921485	200	1.883645						
Methacrylonitrile	1000	0.1379105	1500	0.1216016	2000	0.114065						
Methylene chloride	100	0.2881634	150	0.2783492	200	0.2650549						
Methyl Acetate	100	0.2019145	150	0.1852166	200	0.1831366						
Methylcyclohexane	100	0.3009309	150	0.2816291	200	0.2751948						
Naphthalene	100	1.216862	150	1.233795	200	1.25822						
Methyl Methacrylate	100	0.2254668	150	0.2145937	200	0.2155444						
4-Methyl-2-pentanone	200	0.2228054	300	0.2101219	400	0.2065418						
Methyl t-Butyl Ether	100	0.6030798	150	0.5647222	200	0.5516784						
n-Propylbenzene	100	2.838873	150	2.690755	200	2.607432						
Propionitrile	1000	3.020813E-02	1500	2.817362E-02	2000	2.856108E-02						
Styrene	100	1.959908	150	1.821934	200	1.815406						
1,1,2,2-Tetrachloroethane	100	0.5722941	150	0.5757706	200	0.5993807						
1,1,1,2-Tetrachloroethane	100	0.7332586	150	0.7253061	200	0.73281						
tert-Butyl alcohol	500	1.883362E-02	750	1.772451E-02	1000	1.813488E-02						
Tetrachloroethene	100	0.8555391	150	0.8464409	200	0.8643103						
Toluene	100	1.601261	150	1.486315	200	1.471444						
1,2,3-Trichlorobenzene	100	0.6141092	150	0.6265152	200	0.7491253						
1,2,4-Trichlorobenzene	100	0.7186738	150	0.7244485	200	0.7491253						
1,1,2-Trichloroethane	100	0.484043	150	0.47305	200	0.4771319						
1,1,1-Trichloroethane	100	0.3496398	150	0.3473721	200	0.3348386						
Tetrahydrofuran	100	2.411377E-02	150	2.292789E-02	200	2.264156E-02						
Trichloroethene	100	0.2842241	150	0.2746066	200	0.2629279						
Trichlorofluoromethane	100	0.4188453	150	0.4016814	200	0.3910868						
1,2,3-Trichloropropane	100	0.2015018	150	0.1940136	200	0.2079895						
1,3,5-Trimethylbenzene	100	1.932947	150	1.911822	200	1.863028						
1,2,4-Trimethylbenzene	100	1.910531	150	1.867906	200	1.819419						
1,1,2-Trichloro-1,2,2-trifluoroethane	100	0.2803374	150	0.2700707	200	0.2609625						
Vinyl chloride	100	0.1511414	150	0.1392687	200	0.1335942						
m,p-Xylene	200	2.075453	300	1.859543	400	1.809251						
o-Xylene	100	2.310377	150	2.115668	200	2.099213						

INITIAL CALIBRATION DATA (Continued)

SW8260B

Laboratory: Empirical Laboratories, LLC

SDG: Kirtland_082

Client: Shaw Environmental, Inc.

Project: Kirtland AFB 2011

Calibration: 3091002

Instrument: MS-VOA5

Matrix: Water

Calibration Dates: 3/29/13 10:23

3/29/13 14:06

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF
Vinyl acetate	199.2	0.623616	298.9	0.5692874	398.5	0.5437849						
Xylenes (total)	300	2.153761	450	1.944917	600	1.905906						
Dibromofluoromethane	30	0.302713	30	0.3015262	30	0.2948106						
1,2-Dichloroethane-d4	30	6.384204E-02	30	6.040182E-02	30	6.364957E-02						
Toluene-d8	30	2.569078	30	2.601561	30	2.723908						
tert-Amyl alcohol	500	1.344812E-02	750	0.0128905	1000	1.327682E-02						
tert-Amyl ethyl ether	100	0.5941264	150	0.5721012	200	0.5553508						
1,3,5-Trichlorobenzene	100	0.8114413	150	0.8292216	200	0.834974						
Diethyl ether	100	0.2183038	150	0.204543	200	0.1911155						

INITIAL CALIBRATION DATA (Continued)

SW8260B

Laboratory: Empirical Laboratories, LLC

SDG: Kirtland_082

Client: Shaw Environmental, Inc.

Project: Kirtland AFB 2011

Calibration: 3091002

Instrument: MS-VOA5

Matrix: Water

Calibration Dates: 3/29/13 10:23

3/29/13 14:06

Compound	Mean RF	RF RSD	Mean RT	RT RSD	Linear r	Quad COD	LIMIT	Q
Acetone	0.1013874	4.810117	3.426667	0.1454974			15	
Acetonitrile	4.202439E-02	5.605638	3.494444	0.2526731			15	
Acrolein	2.388951E-02	49.72151	3.324444	0.159323		0.9994077	0.99	
Acrylonitrile	8.631738E-02	4.935687	4.224444	0.1709767			15	
Benzene	0.91398	5.823213	7.325556	6.966064E-02			15	
Allyl chloride	0.1240386	3.742517	4.304445	0.1223695			15	
Bromobenzene	0.8915827	3.313945	12.08444	4.127347E-02			15	
Bromochloromethane	0.1700371	4.94868	6.41	1.975385E-02			15	
Tert-Amyl Methyl Ether	0.5965475	3.345423	7.524445	7.115343E-02			15	
Bromodichloromethane	0.3167802	2.601378	8.32	1.770462E-02			15	
Bromoform	0.5933757	7.905418	11.49333	4.420676E-02			SPCC (0.1)	
Bromomethane	0.2103493	9.959182	2.588889	0.1277367			15	
Bromofluorobenzene	0.9861165	5.357198	11.93	0.0122097			15	
n-Butylbenzene	1.47539	8.217554	13.52444	3.760056E-02			15	
2-Butanone	0.1335618	4.672289	5.861111	6.117185E-02			15	
sec-Butylbenzene	2.354714	4.817883	12.98333	4.174693E-02			15	
tert-Butylbenzene	1.931067	1.781673	12.74667	3.695518E-02			15	
Carbon disulfide	0.7566403	5.608551	4.401111	0.0751597			15	
Carbon tetrachloride	0.2920853	11.32981	7.296667	6.697017E-02			15	
Chlorobenzene	1.93688	5.304904	10.77	6.678839E-02			SPCC (0.3)	
Chloroethane	0.1338603	4.964107	2.707778	0.246084			15	
Chloroform	0.4245735	5.214893	6.385556	8.508785E-02			CCC (20)	
2-Chloroethyl vinyl ether	0.0764352	10.58469	8.693333	5.464224E-02			15	
Chloromethane	0.3077696	6.943784	2.052222	0.2153438			SPCC (0.1)	
1-Chlorohexane	0.8713618	10.80566	10.74556	4.910683E-02			15	
2-Chlorotoluene	1.900049	4.849724	12.31222	4.160794E-02			15	
Chloroprene	0.3728171	5.435279	5.677778	0.0762613			15	
4-Chlorotoluene	2.098626	2.612241	12.37	0.0204519			15	
Cyclohexane	0.3663427	5.618488	7.226667	0.0675163			15	
Dibromochloromethane	0.7983326	11.1034	9.997778	4.387286E-02			15	
1,2-Dibromo-3-chloropropane	0.1374525	21.54304	14.11556	3.290196E-02		0.9993662	0.99	
1,2-Dibromoethane (EDB)	0.6896546	9.27942	10.21444	0.0511659			15	

INITIAL CALIBRATION DATA (Continued)

SW8260B

Laboratory: Empirical Laboratories, LLC

SDG: Kirtland_082

Client: Shaw Environmental, Inc.

Project: Kirtland AFB 2011

Calibration: 3091002

Instrument: MS-VOA5

Matrix: Water

Calibration Dates: 3/29/13 10:23

3/29/13 14:06

Compound	Mean RF	RF RSD	Mean RT	RT RSD	Linear r	Quad COD	LIMIT	Q
Dibromomethane	0.1796866	4.108604	8.256667	5.711476E-02			15	
1,2-Dichlorobenzene	1.451199	1.691296	13.47444	3.728043E-02			15	
1,3-Dichlorobenzene	1.535408	2.374221	13.06667	3.802045E-02			15	
trans-1,4-Dichloro-2-butene	0.1898185	13.53301	11.89778	2.999372E-02			15	
cis-1,4-Dichloro-2-butene	0.1894896	9.541621	11.58444	5.116309E-02			15	
1,4-Dichlorobenzene	1.531066	1.736879	13.15889	2.039441E-02			15	
Dichlorodifluoromethane	0.335177	5.343172	1.866667	0.2679495			15	
1,1-Dichloroethane	0.4636201	3.545549	5.408889	0.1117717			SPCC (0.1)	
1,2-Dichloroethane	0.3297041	2.999744	7.155556	7.405847E-02			15	
1,1-Dichloroethene	0.2568077	6.831784	3.872222	0.1136387			CCC (20)	
cis-1,2-Dichloroethene	0.2789306	5.199191	6.128889	9.759827E-02			15	
trans-1,2-Dichloroethene	0.2699437	3.953077	5.027778	8.608367E-02			15	
1,2-Dichloroethene (total)	0.2744371	4.239393	6.128889	9.759827E-02			15	
1,2-Dichloropropane	0.2593006	5.470237	8.145555	6.400624E-02			CCC (20)	
1,3-Dichloropropane	0.93735	3.714473	9.744444	5.179837E-02			15	
2,2-Dichloropropane	0.3042011	3.130905	6.235555	0.11598			15	
1,1-Dichloropropene	0.3280042	4.119082	7.176667	7.091866E-02			15	
cis-1,3-Dichloropropene	0.3483531	6.146219	8.905555	5.983577E-02			15	
trans-1,3-Dichloropropene	0.8772865	6.654698	9.381111	0.0401145			15	
Diisopropyl Ether	0.9781684	6.256997	5.79	2.387827E-02			15	
1,4-Dioxane	2.203343E-03	8.002868	8.3	2.483395E-02			15	
Ethylbenzene	2.858399	6.275679	10.92444	4.588162E-02			CCC (20)	
Ethyl tert-Butyl Ether	0.728539	4.26234	6.26	8.021106E-02			15	
Ethyl Methacrylate	0.7183142	6.705679	9.578889	6.161879E-02			15	
Hexachlorobutadiene	0.3878007	7.831198	15.47444	3.396107E-02			15	
Hexane	0.3099487	6.637828	5.624444	9.326706E-02			15	
2-Hexanone	0.4195599	10.21875	9.684444	5.719733E-02			15	
Iodomethane	0.4889887	14.69856	4.06125	8.410759E-02			15	
Isobutyl alcohol	5.120934E-03	6.332305	6.48	2.220419E-02			15	
Isopropylbenzene	2.417413	4.604658	11.82	2.142507E-02			15	
p-Isopropyltoluene	1.918818	4.105289	13.12	0.0125684			15	
Methacrylonitrile	0.149386	13.7486	6.032222	0.2302027			15	

INITIAL CALIBRATION DATA (Continued)

SW8260B

Laboratory: Empirical Laboratories, LLC

SDG: Kirtland_082

Client: Shaw Environmental, Inc.

Project: Kirtland AFB 2011

Calibration: 3091002

Instrument: MS-VOA5

Matrix: Water

Calibration Dates: 3/29/13 10:23

3/29/13 14:06

Compound	Mean RF	RF RSD	Mean RT	RT RSD	Linear r	Quad COD	LIMIT	Q
Methylene chloride	0.2946382	9.946839	4.351111	7.517084E-02			15	
Methyl Acetate	0.1925028	3.593907	4.21	0.117778			15	
Methylcyclohexane	0.3015118	4.918842	8.476666	5.998492E-02			15	
Naphthalene	0.9336471	27.68782	15.34	0.018485		0.9996113	0.99	
Methyl Methacrylate	0.2135076	5.252528	8.286667	5.918969E-02			15	
4-Methyl-2-pentanone	0.2188288	5.09014	8.831111	6.480239E-02			15	
Methyl t-Butyl Ether	0.5718815	3.145284	5.02	1.352399E-02			15	
n-Propylbenzene	2.870588	5.944121	12.23333	4.293679E-02			15	
Propionitrile	2.925596E-02	6.101348	5.577778	0.1494275			15	
Styrene	1.825175	7.668376	11.39667	4.182235E-02			15	
1,1,2,2-Tetrachloroethane	0.5786577	4.0554	11.74333	4.015706E-02			SPCC (0.3)	
1,1,1,2-Tetrachloroethane	0.6924831	5.137184	10.81444	4.986469E-02			15	
tert-Butyl alcohol	1.647077E-02	10.24307	3.994444	0.1818729			15	
Tetrachloroethene	0.8306561	3.870526	10.11444	5.025229E-02			15	
Toluene	1.585129	4.566708	9.376667	5.596866E-02			CCC (20)	
1,2,3-Trichlorobenzene	0.5445946	10.46763	15.57	0.9865946			15	
1,2,4-Trichlorobenzene	0.6513647	10.01095	15.19	1.262227E-02			15	
1,1,2-Trichloroethane	0.4672116	7.039753	9.535555	5.229938E-02			15	
1,1,1-Trichloroethane	0.3312484	3.896224	6.948889	0.0491008			15	
Tetrahydrofuran	0.0228397	10.65351	6.595556	0.1323946			15	
Trichloroethene	0.2873121	4.964505	8.095556	6.795116E-02			15	
Trichlorofluoromethane	0.3926117	3.81654	3.158889	0.1051904			15	
1,2,3-Trichloropropane	0.1943993	4.586442	11.87	8.574804E-03			15	
1,3,5-Trimethylbenzene	1.862976	6.84024	12.41	2.128865E-02			15	
1,2,4-Trimethylbenzene	1.793348	7.207503	12.78	5.782133E-02			15	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.2686807	3.150023	3.946667	0.12602			15	
Vinyl chloride	0.1575033	19.98908	2.188889	0.2742922		0.9988408	CCC (20)	
m,p-Xylene	2.136722	9.049745	11.03667	0.0462225			15	
o-Xylene	2.307026	5.192133	11.42556	4.716898E-02			15	
Vinyl acetate	0.5912322	6.420214	5.486667	0.1277701			15	
Xylenes (total)	2.19349	7.663385	11.42556	4.716898E-02			15	
Dibromofluoromethane	0.2934472	1.96259	6.56	0.0125684			15	

INITIAL CALIBRATION DATA (Continued)

SW8260B

Laboratory: Empirical Laboratories, LLC

SDG: Kirtland_082

Client: Shaw Environmental, Inc.

Project: Kirtland AFB 2011

Calibration: 3091002

Instrument: MS-VOA5

Matrix: Water

Calibration Dates: 3/29/13 10:23 3/29/13 14:06

Compound	Mean RF	RF RSD	Mean RT	RT RSD	Linear r	Quad COD	LIMIT	Q
1,2-Dichloroethane-d4	6.197846E-02	2.272589	7.061111	4.297158E-02			15	
Toluene-d8	2.478358	5.184354	9.305556	5.855457E-02			15	
tert-Amyl alcohol	1.274648E-02	10.80725	6.76	0.1037663			15	
tert-Amyl ethyl ether	0.585256	3.606696	8.42	1.149795E-02			15	
1,3,5-Trichlorobenzene	0.7771716	5.261843	14.64	1.611891E-02			15	
Diethyl ether	0.2043036	4.884841	3.538889	9.508969E-02			15	

INITIAL CALIBRATION CHECK

SW8260B

Laboratory: Empirical Laboratories, LLC

SDG: Kirtland_082

Client: Shaw Environmental, Inc.

Project: Kirtland AFB 2011

Instrument ID: MS-VOA5

Calibration: 3091002

Lab File ID: 0329ICV1.D

Calibration Date: 03/29/13 10:23

Sequence: 3D09103

Injection Date: 03/29/13

Lab Sample ID: 3D09103-ICV1

Injection Time: 15:02

COMPOUND	TYPE	CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	ICV	ICAL	ICV	MIN (#)	ICV	LIMIT (#)
Acetone	A	100.0	106.0	0.1013874	0.1074929		6.0	20
Benzene	A	50.00	49.08	0.91398	0.8971138		-1.8	20
Bromobenzene	A	50.00	49.75	0.8915827	0.8870982		-0.5	20
Bromochloromethane	A	50.00	50.70	0.1700371	0.1724234		1.4	20
Bromodichloromethane	A	50.00	48.66	0.3167802	0.3082877		-2.7	20
Bromoform	A	50.00	51.23	0.5933757	0.6080234	0.1	2.5	20
Bromomethane	A	50.00	48.14	0.2103493	0.2025232		-3.7	20
n-Butylbenzene	A	50.00	51.54	1.47539	1.520932		3.1	20
2-Butanone	A	100.0	101.2	0.1335618	0.1351298		1.2	20
sec-Butylbenzene	A	50.00	47.45	2.354714	2.234796		-5.1	20
tert-Butylbenzene	A	50.00	48.33	1.931067	1.866398		-3.3	20
Carbon disulfide	A	50.00	46.30	0.7566403	0.7007125		-7.4	20
Carbon tetrachloride	A	50.00	52.60	0.2920853	0.3072447		5.2	20
Chlorobenzene	A	50.00	46.77	1.93688	1.811846	0.3	-6.5	20
Chloroethane	A	50.00	48.91	0.1338603	0.1309324		-2.2	20
Chloroform	A	50.00	48.58	0.4245735	0.4124925		-2.8	20
Chloromethane	A	50.00	40.01	0.3077696	0.2462842	0.1	-20.0	20
2-Chlorotoluene	A	50.00	45.04	1.900049	1.711475		-9.9	20
4-Chlorotoluene	A	50.00	46.48	2.098626	1.950892		-7.0	20
Dibromochloromethane	A	50.00	53.17	0.7983326	0.8489653		6.3	20
1,2-Dibromo-3-chloropropane	Q	50.00	47.09	0.1374525	0.1430985		-5.8	20
1,2-Dibromoethane (EDB)	A	50.00	52.45	0.6896546	0.723445		4.9	20
Dibromomethane	A	50.00	50.20	0.1796866	0.1804079		0.4	20
1,2-Dichlorobenzene	A	50.00	45.42	1.451199	1.318242		-9.2	20
1,3-Dichlorobenzene	A	50.00	45.59	1.535408	1.399938		-8.8	20
1,4-Dichlorobenzene	A	50.00	49.35	1.531066	1.511285		-1.3	20
Dichlorodifluoromethane	A	50.00	47.57	0.335177	0.3188694		-4.9	20
1,1-Dichloroethane	A	50.00	49.59	0.4636201	0.4597858	0.1	-0.8	20
1,2-Dichloroethane	A	50.00	48.97	0.3297041	0.3228982		-2.1	20

INITIAL CALIBRATION CHECK

SW8260B

Laboratory: Empirical Laboratories, LLC

SDG: Kirtland_082

Client: Shaw Environmental, Inc.

Project: Kirtland AFB 2011

Instrument ID: MS-VOA5

Calibration: 3091002

Lab File ID: 0329ICV1.D

Calibration Date: 03/29/13 10:23

Sequence: 3D09103

Injection Date: 03/29/13

Lab Sample ID: 3D09103-ICV1

Injection Time: 15:02

COMPOUND	TYPE	CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	ICV	ICAL	ICV	MIN (#)	ICV	LIMIT (#)
1,1-Dichloroethene	A	50.00	47.51	0.2568077	0.2440127		-5.0	20
cis-1,2-Dichloroethene	A	50.00	49.30	0.2789306	0.2750036		-1.4	20
trans-1,2-Dichloroethene	A	50.00	50.88	0.2699437	0.2747154		1.8	20
1,2-Dichloropropane	A	50.00	47.74	0.2593006	0.2476028		-4.5	20
1,3-Dichloropropane	A	50.00	51.26	0.93735	0.9609203		2.5	20
2,2-Dichloropropane	A	50.00	50.76	0.3042011	0.308846		1.5	20
1,1-Dichloropropene	A	50.00	48.53	0.3280042	0.3183548		-2.9	20
cis-1,3-Dichloropropene	A	50.00	54.79	0.3483531	0.3817032		9.6	20
trans-1,3-Dichloropropene	A	50.00	50.72	0.8772865	0.8898631		1.4	20
Ethylbenzene	A	50.00	52.45	2.858399	2.998475		4.9	20
Hexachlorobutadiene	A	50.00	49.34	0.3878007	0.3826654		-1.3	20
2-Hexanone	A	100.0	106.8	0.4195599	0.448203		6.8	20
Isopropylbenzene	A	50.00	53.09	2.417413	2.566627		6.2	20
p-Isopropyltoluene	A	50.00	48.52	1.918818	1.862134		-3.0	20
Methylene chloride	A	50.00	46.86	0.2946382	0.2761631		-6.3	20
Naphthalene	Q	50.00	45.61	0.9336471	1.038748		-8.8	20
4-Methyl-2-pentanone	A	100.0	101.3	0.2188288	0.2216538		1.3	20
Methyl t-Butyl Ether	A	50.00	50.42	0.5718815	0.5766573		0.8	20
n-Propylbenzene	A	50.00	46.06	2.870588	2.644475		-7.9	20
Styrene	A	50.00	55.27	1.825175	2.017695		10.5	20
1,1,2,2-Tetrachloroethane	A	50.00	46.75	0.5786577	0.5410176	0.3	-6.5	20
1,1,1,2-Tetrachloroethane	A	50.00	52.08	0.6924831	0.7212847		4.2	20
Tetrachloroethene	A	50.00	50.86	0.8306561	0.8448967		1.7	20
Toluene	A	50.00	50.20	1.585129	1.591352		0.4	20
1,2,3-Trichlorobenzene	A	50.00	51.76	0.5445946	0.5638175		3.5	20
1,2,4-Trichlorobenzene	A	50.00	51.33	0.6513647	0.6687413		2.7	20
1,1,2-Trichloroethane	A	50.00	51.83	0.4672116	0.4843106		3.7	20
1,1,1-Trichloroethane	A	50.00	52.18	0.3312484	0.3456766		4.4	20
Trichloroethene	A	50.00	48.55	0.2873121	0.279004		-2.9	20

INITIAL CALIBRATION CHECK

SW8260B

Laboratory: Empirical Laboratories, LLC

SDG: Kirtland_082

Client: Shaw Environmental, Inc.

Project: Kirtland AFB 2011

Instrument ID: MS-VOA5

Calibration: 3091002

Lab File ID: 0329ICV1.D

Calibration Date: 03/29/13 10:23

Sequence: 3D09103

Injection Date: 03/29/13

Lab Sample ID: 3D09103-ICV1

Injection Time: 15:02

COMPOUND	TYPE	CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	ICV	ICAL	ICV	MIN (#)	ICV	LIMIT (#)
Trichlorofluoromethane	A	50.00	50.46	0.3926117	0.3962402		0.9	20
1,2,3-Trichloropropane	A	50.00	50.11	0.1943993	0.1948306		0.2	20
1,3,5-Trimethylbenzene	A	50.00	53.96	1.862976	2.010375		7.9	20
1,2,4-Trimethylbenzene	A	50.00	53.12	1.793348	1.905283		6.2	20
Vinyl chloride	Q	50.00	49.87	0.1575033	0.1497686		-0.3	20
Xylenes (total)	A	150.0	147.1	2.19349	2.14916		-2.0	20
Bromofluorobenzene	A	30.00	31.34	0.9861165	1.030302		4.5	20
Dibromofluoromethane	A	30.00	30.72	0.2934472	0.300446		2.4	20
1,2-Dichloroethane-d4	A	30.00	29.63	6.197846E-02	6.121717E-02		-1.2	20
Toluene-d8	A	30.00	30.78	2.478358	2.542451		2.6	20

CONTINUING CALIBRATION CHECK

SW8260B

Laboratory: Empirical Laboratories, LLC

SDG: Kirtland_082

Client: Shaw Environmental, Inc.

Project: Kirtland AFB 2011

Instrument ID: MS-VOA5

Calibration: 3091002

Lab File ID: 0402CCV1.D

Calibration Date: 03/29/13 10:23

Sequence: 3D09303

Injection Date: 04/02/13

Lab Sample ID: 3D09303-CCV1

Injection Time: 07:43

COMPOUND	TYPE	CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Acetone	A	200.0	161.2	0.1013874	8.169945E-02		-19.4	20
Benzene	A	100.0	96.37	0.91398	0.8807679		-3.6	20
Bromobenzene	A	100.0	100.6	0.8915827	0.8971192		0.6	20
Bromochloromethane	A	100.0	99.66	0.1700371	0.1694603		-0.3	20
Bromodichloromethane	A	100.0	101.1	0.3167802	0.3202283		1.1	20
Bromoform	A	100.0	96.83	0.5933757	0.5745822	0.1	-3.2	20
Bromomethane	A	100.0	91.33	0.2103493	0.192103		-8.7	20
n-Butylbenzene	A	100.0	106.4	1.47539	1.570252		6.4	20
2-Butanone	A	200.0	202.4	0.1335618	0.1351372		1.2	20
sec-Butylbenzene	A	100.0	99.29	2.354714	2.338028		-0.7	20
tert-Butylbenzene	A	100.0	99.58	1.931067	1.92293		-0.4	20
Carbon disulfide	A	100.0	104.9	0.7566403	0.7940305		4.9	20
Carbon tetrachloride	A	100.0	105.7	0.2920853	0.308645		5.7	20
Chlorobenzene	A	100.0	96.25	1.93688	1.864255	0.3	-3.7	20
Chloroethane	A	100.0	100.8	0.1338603	0.1349564		0.8	20
Chloroform	A	100.0	95.41	0.4245735	0.4050698		-4.6	20
Chloromethane	A	100.0	84.80	0.3077696	0.2609902	0.1	-15.2	20
2-Chlorotoluene	A	100.0	97.89	1.900049	1.859943		-2.1	20
4-Chlorotoluene	A	100.0	100.7	2.098626	2.114016		0.7	20
Dibromochloromethane	A	100.0	105.4	0.7983326	0.8417475		5.4	20
1,2-Dibromo-3-chloropropane	Q	100.0	94.17	0.1374525	0.150651		-5.8	20
1,2-Dibromoethane (EDB)	A	100.0	102.3	0.6896546	0.7054651		2.3	20
Dibromomethane	A	100.0	100.0	0.1796866	0.1797506		0.04	20
1,2-Dichlorobenzene	A	100.0	96.54	1.451199	1.400986		-3.5	20
1,3-Dichlorobenzene	A	100.0	97.34	1.535408	1.494497		-2.7	20
1,4-Dichlorobenzene	A	100.0	97.13	1.531066	1.487135		-2.9	20
Dichlorodifluoromethane	A	100.0	83.31	0.335177	0.2792237		-16.7	20
1,1-Dichloroethane	A	100.0	99.86	0.4636201	0.4629706	0.1	-0.1	20
1,2-Dichloroethane	A	100.0	97.13	0.3297041	0.3202558		-2.9	20

CONTINUING CALIBRATION CHECK

SW8260B

Laboratory: Empirical Laboratories, LLC

SDG: Kirtland_082

Client: Shaw Environmental, Inc.

Project: Kirtland AFB 2011

Instrument ID: MS-VOA5

Calibration: 3091002

Lab File ID: 0402CCV1.D

Calibration Date: 03/29/13 10:23

Sequence: 3D09303

Injection Date: 04/02/13

Lab Sample ID: 3D09303-CCV1

Injection Time: 07:43

COMPOUND	TYPE	CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
1,1-Dichloroethene	A	100.0	101.5	0.2568077	0.2605736		1.5	20
cis-1,2-Dichloroethene	A	100.0	96.65	0.2789306	0.2695892		-3.3	20
trans-1,2-Dichloroethene	A	100.0	100.4	0.2699437	0.270982		0.4	20
1,2-Dichloropropane	A	100.0	97.80	0.2593006	0.253591		-2.2	20
1,3-Dichloropropane	A	100.0	100.2	0.93735	0.9395915		0.2	20
2,2-Dichloropropane	A	100.0	106.4	0.3042011	0.3235993		6.4	20
1,1-Dichloropropene	A	100.0	97.65	0.3280042	0.3203002		-2.3	20
cis-1,3-Dichloropropene	A	100.0	102.9	0.3483531	0.3586056		2.9	20
trans-1,3-Dichloropropene	A	100.0	103.3	0.8772865	0.9059282		3.3	20
Ethylbenzene	A	100.0	97.14	2.858399	2.776582		-2.9	20
Hexachlorobutadiene	A	100.0	97.46	0.3878007	0.3779544		-2.5	20
2-Hexanone	A	200.0	218.5	0.4195599	0.4582778		9.2	20
Isopropylbenzene	A	100.0	99.14	2.417413	2.396715		-0.9	20
p-Isopropyltoluene	A	100.0	102.0	1.918818	1.958033		2.0	20
Methylene chloride	A	100.0	94.82	0.2946382	0.2793783		-5.2	20
Naphthalene	Q	100.0	94.09	0.9336471	1.117032		-5.9	20
4-Methyl-2-pentanone	A	200.0	219.5	0.2188288	0.240177		9.8	20
Methyl t-Butyl Ether	A	100.0	99.23	0.5718815	0.5674549		-0.8	20
n-Propylbenzene	A	100.0	98.75	2.870588	2.83472		-1.2	20
Styrene	A	100.0	102.5	1.825175	1.870035		2.5	20
1,1,2,2-Tetrachloroethane	A	100.0	98.11	0.5786577	0.5677409	0.3	-1.9	20
1,1,1,2-Tetrachloroethane	A	100.0	102.9	0.6924831	0.7127945		2.9	20
Tetrachloroethene	A	100.0	99.13	0.8306561	0.8233987		-0.9	20
Toluene	A	100.0	96.64	1.585129	1.531887		-3.4	20
1,2,3-Trichlorobenzene	A	100.0	105.3	0.5445946	0.5733394		5.3	20
1,2,4-Trichlorobenzene	A	100.0	103.4	0.6513647	0.673387		3.4	20
1,1,2-Trichloroethane	A	100.0	101.0	0.4672116	0.4721399		1.1	20
1,1,1-Trichloroethane	A	100.0	101.8	0.3312484	0.3372998		1.8	20
Trichloroethene	A	100.0	96.53	0.2873121	0.2773444		-3.5	20

CONTINUING CALIBRATION CHECK

SW8260B

Laboratory: Empirical Laboratories, LLC

SDG: Kirtland_082

Client: Shaw Environmental, Inc.

Project: Kirtland AFB 2011

Instrument ID: MS-VOA5

Calibration: 3091002

Lab File ID: 0402CCV1.D

Calibration Date: 03/29/13 10:23

Sequence: 3D09303

Injection Date: 04/02/13

Lab Sample ID: 3D09303-CCV1

Injection Time: 07:43

COMPOUND	TYPE	CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Trichlorofluoromethane	A	100.0	96.81	0.3926117	0.3800699		-3.2	20
1,2,3-Trichloropropane	A	100.0	99.13	0.1943993	0.1927008		-0.9	20
1,3,5-Trimethylbenzene	A	100.0	102.7	1.862976	1.912608		2.7	20
1,2,4-Trimethylbenzene	A	100.0	103.3	1.793348	1.852909		3.3	20
Vinyl chloride	Q	100.0	89.77	0.1575033	0.1312799		-10.2	20
Xylenes (total)	A	300.0	279.9	2.19349	2.047128		-6.7	20
Bromofluorobenzene	A	30.00	30.66	0.9861165	1.007757		2.2	20
Dibromofluoromethane	A	30.00	29.78	0.2934472	0.2912923		-0.7	20
1,2-Dichloroethane-d4	A	30.00	29.53	6.197846E-02	6.101484E-02		-1.6	20
Toluene-d8	A	30.00	30.63	2.478358	2.530508		2.1	20

HOLDING TIME SUMMARY

SW8260B

Laboratory: Empirical Laboratories, LLC

SDG: Kirtland 082

Client: Shaw Environmental, Inc.

Project: Kirtland AFB 2011

Sample Name	Date Collected	Date Received	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
GW0890	03/25/13 12:59	03/27/13 08:30	04/02/13 16:06	N/A	14.00	04/02/13 16:06	8.09	14.00	
GW0905	03/26/13 14:20	03/27/13 08:30	04/02/13 11:26	N/A	14.00	04/02/13 11:26	6.84	14.00	
GW0908	03/26/13 11:20	03/27/13 08:30	04/02/13 11:54	N/A	14.00	04/02/13 11:54	6.98	14.00	
GW0965	03/25/13 16:21	03/27/13 08:30	04/02/13 16:34	N/A	14.00	04/02/13 16:34	7.97	14.00	
GW0982	03/26/13 14:01	03/27/13 08:30	04/02/13 12:23	N/A	14.00	04/02/13 12:23	6.89	14.00	
GW8262-TB	03/25/13 08:00	03/27/13 08:30	04/02/13 10:03	N/A	14.00	04/02/13 10:03	8.04	14.00	

PREPARATION BENCH SHEET

3D02004

Empirical Laboratories, LLC
Instrument: VOAS

Printed: 4/6/2013 2:21:59PM

Matrix: Water

Prepared using: MS - 5030B

Surrogate used: 12F0423

Lab Number	Cont ID	Analysis	Prepared	Initial (mL)	Final (mL)	Spike ID	Source ID	uI Spike	uI Surrogate	PH	Extraction Comments
1303202-01	B	VOC_8260B_REG	04/02/2013	5	5				1	2	naphthalene must be reported-5XF-NLDHTC
1303202-03	B	VOC_8260B_REG	04/02/2013	5	5				1	2	naphthalene must be reported-1X
1303202-05	B	VOC_8260B_REG	04/02/2013	5	5				1	2	naphthalene must be reported-1X
1303202-07	B	VOC_8260B_REG	04/02/2013	5	5				1	2	naphthalene must be reported-50X-NLDHTC
1303202-09	B	VOC_8260B_REG	04/02/2013	5	5				1	2	naphthalene must be reported-1X
1303202-11	A	VOC_8260B_REG	04/02/2013	5	5				1	2	naphthalene must be reported-TB
1303209-01	B	VOC_8260B_REG	04/02/2013	5	5				1	2	no quadratic calib
1303213-01	A	VOC_8260B_REG	04/02/2013	5	5				1	2	select version-TB
1303213-02	B	VOC_8260B_REG	04/02/2013	5	5				1	2	select version-1X
1303214-01	B	VOC_8260B_REG	04/02/2013	5	5				1	2	select version-1X
1303225-01	B	VOC_8260B_REG	04/02/2013	5	5				1	2	1X
1303225-02	B	VOC_8260B_REG	04/02/2013	5	5				1	2	1X
1303225-03	B	VOC_8260B_REG	04/02/2013	5	5				1	2	1X
1303225-04	B	VOC_8260B_REG	04/02/2013	5	5				1	2	1X
1303225-05	A	VOC_8260B_REG	04/02/2013	5	5				1	2	TB
3D02004-BLK1		QC	04/02/2013	5	5				1	NA	
3D02004-BS1		QC	04/02/2013	5	5	13C0551		2.5	1	NA	

Reagents Used:

Standard	Description
12A0500	Anti-foam-GE_AFF72