



MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY  
ENVIRONMENTAL LABORATORY

P.O. Box 30270  
Lansing, MI 48909  
TEL: (517) 335-9800  
FAX: (517) 335-9600

**Sample Number:** AC08225 SB-01

CAS#	Analyte Name	Result	Unit	RL	Qualifier	Date Tested	Method	Analyst
	% Total Solids	81.6	%	0.1		11/19/2012	2540B SM	JW

CAS# : Chemical Abstract Service Registry Number  
RL : Reporting Limit  
ND : Not Detected

ug / L : microgram / liter (ppb)  
mg / L : milligram / liter (ppm)  
ug / Kg : microgram / kilogram (ppb)  
mg / Kg : milligram / kilogram (ppm)

Laboratory Contacts  
Inorganic Unit Mgr: Kirby Shane  
Organic Unit Mgr: Carol Smith  
Systems Mgmt Unit: George Krisztian



MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY  
ENVIRONMENTAL LABORATORY

P.O. Box 30270  
Lansing, MI 48909  
TEL: (517) 335-9800  
FAX: (517) 335-9600

**Sample Number:** AC08226 SB-02

**Volatile Compounds**

**Analytical Method:** 8260  
**Extraction Method:** 5035

**Date Tested:** 11/16/2012  
**Extraction Date:** 11/15/2012

**Analyst:** SJR  
**Qualifier:**

CAS #	Compound	Result ug/Kg dry	RL	Qualifier	Dilution Factor
	##Weight of sample(grams)	9.41			
SURROGATE	#Bromofluorobenzene#	111			
SURROGATE	#Dibromofluoromethane#	141			
SURROGATE	#Toluene-d8#	126			
630-20-6	1,1,1,2-Tetrachloroethane	Not Detected	61		50
71-55-6	1,1,1-Trichloroethane	Not Detected	61		50
79-34-5	1,1,2,2-Tetrachloroethane	Not Detected	61		50
79-00-5	1,1,2-Trichloroethane	Not Detected	61		50
75-34-3	1,1-Dichloroethane	Not Detected	61		50
75-35-4	1,1-Dichloroethylene	Not Detected	61		50
87-61-6	1,2,3-Trichlorobenzene	Not Detected	300	7	50
96-18-4	1,2,3-Trichloropropane	Not Detected	61		50
526-73-8	1,2,3-Trimethylbenzene	Not Detected	61		50
120-82-1	1,2,4-Trichlorobenzene	Not Detected	300	7	50
95-63-6	1,2,4-Trimethylbenzene	Not Detected	61		50
96-12-8	1,2-Dibromo-3-chloropropane	Not Detected	300		50
106-93-4	1,2-Dibromoethane	Not Detected	61	Z	50
95-50-1	1,2-Dichlorobenzene	Not Detected	61		50
107-06-2	1,2-Dichloroethane	Not Detected	61		50
78-87-5	1,2-Dichloropropane	Not Detected	61		50
108-67-8	1,3,5-Trimethylbenzene	Not Detected	61		50
541-73-1	1,3-Dichlorobenzene	Not Detected	61		50
106-46-7	1,4-Dichlorobenzene	Not Detected	61		50
78-93-3	2-Butanone (MEK)	Not Detected	300		50
591-78-6	2-Hexanone	Not Detected	300		50
91-57-6	2-Methylnaphthalene	Not Detected	300	X 7	50
67-64-1	2-Propanone (acetone)	Not Detected	1200	5	50
108-10-1	4-Methyl-2-pentanone (MIBK)	Not Detected	300		50
107-13-1	Acrylonitrile	Not Detected	300	Z	50
71-43-2	Benzene	Not Detected	61		50
108-86-1	Bromobenzene	Not Detected	61		50
74-97-5	Bromochloromethane	Not Detected	61		50
75-27-4	Bromodichloromethane	Not Detected	61		50
75-25-2	Bromoform	Not Detected	61		50
74-83-9	Bromomethane	Not Detected	240		50
75-15-0	Carbon disulfide	Not Detected	61		50
56-23-5	Carbon tetrachloride	Not Detected	61		50
108-90-7	Chlorobenzene	Not Detected	61		50
75-00-3	Chloroethane	Not Detected	300		50
67-66-3	Chloroform	Not Detected	61		50

CAS# : Chemical Abstract Service Registry Number  
RL : Reporting Limit  
ND : Not Detected

ug / L : microgram / liter (ppb)  
mg / L : milligram / liter (ppm)  
ug / Kg : microgram / kilogram (ppb)  
mg / Kg : milligram / kilogram (ppm)

Laboratory Contacts  
Inorganic Unit Mgr: Kirby Shane  
Organic Unit Mgr: Carol Smith  
Systems Mgmt Unit: George Krisztian



MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY  
ENVIRONMENTAL LABORATORY

P.O. Box 30270  
Lansing, MI 48909  
TEL: (517) 335-9800  
FAX: (517) 335-9600

**Sample Number:** AC08226 SB-02

**Volatile Compounds**

**Analytical Method:** 8260  
**Extraction Method:** 5035

**Date Tested:** 11/16/2012  
**Extraction Date:** 11/15/2012

**Analyst:** SJR  
**Qualifier:**

CAS #	Compound	Result ug/Kg dry	RL	Qualifier	Dilution Factor
74-87-3	Chloromethane	Not Detected	300		50
156-59-2	cis-1,2-Dichloroethylene	Not Detected	61		50
10061-01-5	cis-1,3-Dichloropropylene	Not Detected	61		50
110-82-7	Cyclohexane	Not Detected	300		50
124-48-1	Dibromochloromethane	Not Detected	61		50
74-95-3	Dibromomethane	Not Detected	61		50
75-71-8	Dichlorodifluoromethane	Not Detected	300		50
60-29-7	Diethyl ether	Not Detected	240		50
108-20-3	Diisopropyl Ether	Not Detected	300		50
100-41-4	Ethylbenzene	92	61		50
637-92-3	Ethyltertiarybutylether	Not Detected	300		50
67-72-1	Hexachloroethane	Not Detected	300		50
98-82-8	Isopropylbenzene	Not Detected	61		50
108383,106423	m & p - Xylene	Not Detected	120		50
74-88-4	Methyl iodide	Not Detected	61		50
75-09-2	Methylene chloride	Not Detected	120		50
1634-04-4	Methyltertiarybutylether	Not Detected	61		50
91-20-3	Naphthalene	Not Detected	300	X 5 7	50
104-51-8	n-Butylbenzene	Not Detected	61		50
103-65-1	n-Propylbenzene	Not Detected	61		50
95-47-6	o-Xylene	Not Detected	61		50
99-87-6	p-Isopropyl toluene	69	61		50
135-98-8	sec-Butylbenzene	Not Detected	61		50
100-42-5	Styrene	Not Detected	61		50
98-06-6	tert-Butylbenzene	Not Detected	61		50
75-65-0	tertiary Butyl Alcohol	Not Detected	3000		50
994-05-8	tertiaryAmylmeylether	Not Detected	300		50
127-18-4	Tetrachloroethylene	Not Detected	61		50
109-99-9	Tetrahydrofuran	Not Detected	300		50
108-88-3	Toluene	200	61		50
156-60-5	trans-1,2-Dichloroethylene	Not Detected	61		50
10061-02-6	trans-1,3-Dichloropropylene	Not Detected	61		50
110-57-6	trans-1,4-Dichloro-2-butene	Not Detected	300	Z	50
79-01-6	Trichloroethylene	Not Detected	61		50
75-69-4	Trichlorofluoromethane	Not Detected	61		50
75-01-4	Vinyl chloride	Not Detected	61	Z	50

Methanol leaked out of vial in transit to the lab. Results and reporting limits are estimated.

CAS# : Chemical Abstract Service Registry Number  
RL : Reporting Limit  
ND : Not Detected

ug / L : microgram / liter (ppb)  
mg / L : milligram / liter (ppm)  
ug / Kg : microgram / kilogram (ppb)  
mg / Kg : milligram / kilogram (ppm)

Laboratory Contacts  
Inorganic Unit Mgr: Kirby Shane  
Organic Unit Mgr: Carol Smith  
Systems Mgmt Unit: George Krisztian



MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY  
ENVIRONMENTAL LABORATORY

P.O. Box 30270  
Lansing, MI 48909  
TEL: (517) 335-9800  
FAX: (517) 335-9600

**Sample Number: AC08226 SB-02**

CAS#	Analyte Name	Result	Unit	RL	Qualifier	Date Tested	Method	Analyst
	% Total Solids	93.3	%	0.1		11/19/2012	2540B SM	JW

CAS# : Chemical Abstract Service Registry Number  
RL : Reporting Limit  
ND : Not Detected

ug / L : microgram / liter (ppb)  
mg / L : milligram / liter (ppm)  
ug / Kg : microgram / kilogram (ppb)  
mg / Kg : milligram / kilogram (ppm)

Laboratory Contacts  
Inorganic Unit Mgr: Kirby Shane  
Organic Unit Mgr: Carol Smith  
Systems Mgmt Unit: George Krisztian



MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY  
ENVIRONMENTAL LABORATORY

P.O. Box 30270  
Lansing, MI 48909  
TEL: (517) 335-9800  
FAX: (517) 335-9600

**Sample Number:** AC08227 SB-02 D

**Volatile Compounds**

**Analytical Method:** 8260  
**Extraction Method:** 5035

**Date Tested:** 11/18/2012  
**Extraction Date:** 11/15/2012

**Analyst:** SJR  
**Qualifier:**

CAS #	Compound	Result ug/Kg dry	RL	Qualifier	Dilution Factor
	##Weight of sample(grams)	10.81			
SURROGATE	#Bromofluorobenzene#	105			
SURROGATE	#Dibromofluoromethane#	126			
SURROGATE	#Toluene-d8#	118			
630-20-6	1,1,1,2-Tetrachloroethane	Not Detected	59		50
71-55-6	1,1,1-Trichloroethane	Not Detected	59		50
79-34-5	1,1,2,2-Tetrachloroethane	Not Detected	59		50
79-00-5	1,1,2-Trichloroethane	Not Detected	59		50
75-34-3	1,1-Dichloroethane	Not Detected	59		50
75-35-4	1,1-Dichloroethylene	Not Detected	59		50
87-61-6	1,2,3-Trichlorobenzene	Not Detected	300		50
96-18-4	1,2,3-Trichloropropane	Not Detected	59		50
526-73-8	1,2,3-Trimethylbenzene	Not Detected	59		50
120-82-1	1,2,4-Trichlorobenzene	Not Detected	300		50
95-63-6	1,2,4-Trimethylbenzene	Not Detected	59		50
96-12-8	1,2-Dibromo-3-chloropropane	Not Detected	300		50
106-93-4	1,2-Dibromoethane	Not Detected	59	Z	50
95-50-1	1,2-Dichlorobenzene	Not Detected	59		50
107-06-2	1,2-Dichloroethane	Not Detected	59		50
78-87-5	1,2-Dichloropropane	Not Detected	59		50
108-67-8	1,3,5-Trimethylbenzene	Not Detected	59		50
541-73-1	1,3-Dichlorobenzene	Not Detected	59		50
106-46-7	1,4-Dichlorobenzene	Not Detected	59		50
78-93-3	2-Butanone (MEK)	Not Detected	300		50
591-78-6	2-Hexanone	Not Detected	300		50
91-57-6	2-Methylnaphthalene	Not Detected	300	X 7	50
67-64-1	2-Propanone (acetone)	Not Detected	1200	5	50
108-10-1	4-Methyl-2-pentanone (MIBK)	Not Detected	300		50
107-13-1	Acrylonitrile	Not Detected	300	Z	50
71-43-2	Benzene	Not Detected	59		50
108-86-1	Bromobenzene	Not Detected	59		50
74-97-5	Bromochloromethane	Not Detected	59		50
75-27-4	Bromodichloromethane	Not Detected	59		50
75-25-2	Bromoform	Not Detected	59		50
74-83-9	Bromomethane	Not Detected	240		50
75-15-0	Carbon disulfide	Not Detected	59		50
56-23-5	Carbon tetrachloride	Not Detected	59		50
108-90-7	Chlorobenzene	Not Detected	59		50
75-00-3	Chloroethane	Not Detected	300		50
67-66-3	Chloroform	Not Detected	59		50

CAS# : Chemical Abstract Service Registry Number  
RL : Reporting Limit  
ND : Not Detected

ug / L : microgram / liter (ppb)  
mg / L : milligram / liter (ppm)  
ug / Kg : microgram / kilogram (ppb)  
mg / Kg : milligram / kilogram (ppm)

Laboratory Contacts  
Inorganic Unit Mgr: Kirby Shane  
Organic Unit Mgr: Carol Smith  
Systems Mgmt Unit: George Krisztian



MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY  
ENVIRONMENTAL LABORATORY

P.O. Box 30270  
Lansing, MI 48909  
TEL: (517) 335-9800  
FAX: (517) 335-9600

**Sample Number:** AC08227 SB-02 D

**Volatile Compounds**

**Analytical Method:** 8260  
**Extraction Method:** 5035

**Date Tested:** 11/18/2012  
**Extraction Date:** 11/15/2012

**Analyst:** SJR  
**Qualifier:**

CAS #	Compound	Result ug/Kg dry	RL	Qualifier	Dilution Factor
74-87-3	Chloromethane	Not Detected	300		50
156-59-2	cis-1,2-Dichloroethylene	Not Detected	59		50
10061-01-5	cis-1,3-Dichloropropylene	Not Detected	59		50
110-82-7	Cyclohexane	Not Detected	300		50
124-48-1	Dibromochloromethane	Not Detected	59		50
74-95-3	Dibromomethane	Not Detected	59		50
75-71-8	Dichlorodifluoromethane	Not Detected	300	5	50
60-29-7	Diethyl ether	Not Detected	240		50
108-20-3	Diisopropyl Ether	Not Detected	300		50
100-41-4	Ethylbenzene	72	59		50
637-92-3	Ethyltertiarybutylether	Not Detected	300		50
67-72-1	Hexachloroethane	Not Detected	300		50
98-82-8	Isopropylbenzene	Not Detected	59		50
108383,106423	m & p - Xylene	Not Detected	120		50
74-88-4	Methyl iodide	Not Detected	59		50
75-09-2	Methylene chloride	Not Detected	120		50
1634-04-4	Methyltertiarybutylether	Not Detected	59		50
91-20-3	Naphthalene	Not Detected	300	X 7	50
104-51-8	n-Butylbenzene	Not Detected	59		50
103-65-1	n-Propylbenzene	Not Detected	59		50
95-47-6	o-Xylene	Not Detected	59		50
99-87-6	p-Isopropyl toluene	60	59		50
135-98-8	sec-Butylbenzene	Not Detected	59		50
100-42-5	Styrene	Not Detected	59		50
98-06-6	tert-Butylbenzene	Not Detected	59		50
75-65-0	tertiary Butyl Alcohol	Not Detected	3000	5	50
994-05-8	tertiaryAmylmethylether	Not Detected	300		50
127-18-4	Tetrachloroethylene	Not Detected	59		50
109-99-9	Tetrahydrofuran	Not Detected	300		50
108-88-3	Toluene	200	59		50
156-60-5	trans-1,2-Dichloroethylene	Not Detected	59		50
10061-02-6	trans-1,3-Dichloropropylene	Not Detected	59		50
110-57-6	trans-1,4-Dichloro-2-butene	Not Detected	300	Z	50
79-01-6	Trichloroethylene	Not Detected	59		50
75-69-4	Trichlorofluoromethane	Not Detected	59		50
75-01-4	Vinyl chloride	Not Detected	59	Z	50

Methanol leaked out of the vial in transit to the laboratory, all results are estimated.

CAS# : Chemical Abstract Service Registry Number  
RL : Reporting Limit  
ND : Not Detected

ug / L : microgram / liter (ppb)  
mg / L : milligram / liter (ppm)  
ug / Kg : microgram / kilogram (ppb)  
mg / Kg : milligram / kilogram (ppm)

Laboratory Contacts  
Inorganic Unit Mgr: Kirby Shane  
Organic Unit Mgr: Carol Smith  
Systems Mgmt Unit: George Krisztian



MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY  
 ENVIRONMENTAL LABORATORY

P.O. Box 30270  
 Lansing, MI 48909  
 TEL: (517) 335-9800  
 FAX: (517) 335-9600

**Sample Number: AC08227 SB-02 D**

CAS#	Analyte Name	Result	Unit	RL	Qualifier	Date Tested	Method	Analyst
	% Total Solids	92.5	%	0.1		11/19/2012	2540B SM	JW

CAS# : Chemical Abstract Service Registry Number  
 RL : Reporting Limit  
 ND : Not Detected

ug / L : microgram / liter (ppb)  
 mg / L : milligram / liter (ppm)  
 ug / Kg : microgram / kilogram (ppb)  
 mg / Kg : milligram / kilogram (ppm)

Laboratory Contacts  
 Inorganic Unit Mgr: Kirby Shane  
 Organic Unit Mgr: Carol Smith  
 Systems Mgmt Unit: George Krisztian



MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY  
ENVIRONMENTAL LABORATORY

P.O. Box 30270  
Lansing, MI 48909  
TEL: (517) 335-9800  
FAX: (517) 335-9600

Sample Number: AC08228 SB-03

**Volatile Compounds**

Analytical Method: 8260  
Extraction Method: 5035

Date Tested: 11/18/2012  
Extraction Date: 11/15/2012

Analyst: SJR  
Qualifier:

CAS #	Compound	Result ug/Kg dry	RL	Qualifier	Dilution Factor
	##Weight of sample(grams)	10.24			
SURROGATE	#Bromofluorobenzene#	105			
SURROGATE	#Dibromofluoromethane#	128			
SURROGATE	#Toluene-d8#	121			
630-20-6	1,1,1,2-Tetrachloroethane	Not Detected	58		50
71-55-6	1,1,1-Trichloroethane	Not Detected	58		50
79-34-5	1,1,2,2-Tetrachloroethane	Not Detected	58		50
79-00-5	1,1,2-Trichloroethane	Not Detected	58		50
75-34-3	1,1-Dichloroethane	Not Detected	58		50
75-35-4	1,1-Dichloroethylene	Not Detected	58		50
87-61-6	1,2,3-Trichlorobenzene	Not Detected	290		50
96-18-4	1,2,3-Trichloropropane	Not Detected	58		50
526-73-8	1,2,3-Trimethylbenzene	Not Detected	58		50
120-82-1	1,2,4-Trichlorobenzene	Not Detected	290		50
95-63-6	1,2,4-Trimethylbenzene	Not Detected	58		50
96-12-8	1,2-Dibromo-3-chloropropane	Not Detected	290		50
106-93-4	1,2-Dibromoethane	Not Detected	58	Z	50
95-50-1	1,2-Dichlorobenzene	Not Detected	58		50
107-06-2	1,2-Dichloroethane	Not Detected	58		50
78-87-5	1,2-Dichloropropane	Not Detected	58		50
108-67-8	1,3,5-Trimethylbenzene	Not Detected	58		50
541-73-1	1,3-Dichlorobenzene	Not Detected	58		50
106-46-7	1,4-Dichlorobenzene	Not Detected	58		50
78-93-3	2-Butanone (MEK)	Not Detected	290		50
591-78-6	2-Hexanone	Not Detected	290		50
91-57-6	2-Methylnaphthalene	Not Detected	290	X 7	50
67-64-1	2-Propanone (acetone)	Not Detected	1200	5	50
108-10-1	4-Methyl-2-pentanone (MIBK)	Not Detected	290		50
107-13-1	Acrylonitrile	Not Detected	290	Z	50
71-43-2	Benzene	Not Detected	58		50
108-86-1	Bromobenzene	Not Detected	58		50
74-97-5	Bromochloromethane	Not Detected	58		50
75-27-4	Bromodichloromethane	Not Detected	58		50
75-25-2	Bromoform	Not Detected	58		50
74-83-9	Bromomethane	Not Detected	230		50
75-15-0	Carbon disulfide	Not Detected	58		50
56-23-5	Carbon tetrachloride	Not Detected	58		50
108-90-7	Chlorobenzene	Not Detected	58		50
75-00-3	Chloroethane	Not Detected	290		50
67-66-3	Chloroform	Not Detected	58		50

CAS# : Chemical Abstract Service Registry Number  
RL : Reporting Limit  
ND : Not Detected

ug / L : microgram / liter (ppb)  
mg / L : milligram / liter (ppm)  
ug / Kg : microgram / kilogram (ppb)  
mg / Kg : milligram / kilogram (ppm)

Laboratory Contacts  
Inorganic Unit Mgr: Kirby Shane  
Organic Unit Mgr: Carol Smith  
Systems Mgmt Unit: George Krisztian





MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY  
ENVIRONMENTAL LABORATORY

P.O. Box 30270  
Lansing, MI 48909  
TEL: (517) 335-9800  
FAX: (517) 335-9600

Sample Number: AC08228 SB-03

**Volatile Compounds**

Analytical Method: 8260  
Extraction Method: 5035

Date Tested: 11/18/2012  
Extraction Date: 11/15/2012

Analyst: SJR  
Qualifier:

CAS #	Compound	Result ug/Kg dry	RL	Qualifier	Dilution Factor
74-87-3	Chloromethane	Not Detected	290		50
156-59-2	cis-1,2-Dichloroethylene	Not Detected	58		50
10061-01-5	cis-1,3-Dichloropropylene	Not Detected	58		50
110-82-7	Cyclohexane	Not Detected	290		50
124-48-1	Dibromochloromethane	Not Detected	58		50
74-95-3	Dibromomethane	Not Detected	58		50
75-71-8	Dichlorodifluoromethane	Not Detected	290	5	50
60-29-7	Diethyl ether	Not Detected	230		50
108-20-3	Diisopropyl Ether	Not Detected	290		50
100-41-4	Ethylbenzene	Not Detected	58		50
637-92-3	Ethyltertiarybutylether	Not Detected	290		50
67-72-1	Hexachloroethane	Not Detected	290		50
98-82-8	Isopropylbenzene	Not Detected	58		50
108383,106423	m & p - Xylene	Not Detected	120		50
74-88-4	Methyl iodide	Not Detected	58		50
75-09-2	Methylene chloride	Not Detected	120		50
1634-04-4	Methyltertiarybutylether	Not Detected	58		50
91-20-3	Naphthalene	Not Detected	290	X 3 7	50
104-51-8	n-Butylbenzene	Not Detected	58		50
103-65-1	n-Propylbenzene	Not Detected	58		50
95-47-6	o-Xylene	Not Detected	58		50
99-87-6	p-Isopropyl toluene	Not Detected	58		50
135-98-8	sec-Butylbenzene	Not Detected	58		50
100-42-5	Styrene	Not Detected	58		50
98-06-6	tert-Butylbenzene	Not Detected	58		50
75-65-0	tertiary Butyl Alcohol	Not Detected	2900	5	50
994-05-8	tertiaryAmylmethylether	Not Detected	290		50
127-18-4	Tetrachloroethylene	Not Detected	58		50
109-99-9	Tetrahydrofuran	Not Detected	290		50
108-88-3	Toluene	Not Detected	58		50
156-60-5	trans-1,2-Dichloroethylene	Not Detected	58		50
10061-02-6	trans-1,3-Dichloropropylene	Not Detected	58		50
110-57-6	trans-1,4-Dichloro-2-butene	Not Detected	290	Z	50
79-01-6	Trichloroethylene	Not Detected	58		50
75-69-4	Trichlorofluoromethane	Not Detected	58		50
75-01-4	Vinyl chloride	Not Detected	58	Z	50

CAS# : Chemical Abstract Service Registry Number  
RL : Reporting Limit  
ND : Not Detected

ug / L : microgram / liter (ppb)  
mg / L : milligram / liter (ppm)  
ug / Kg : microgram / kilogram (ppb)  
mg / Kg : milligram / kilogram (ppm)

Laboratory Contacts  
Inorganic Unit Mgr: Kirby Shane  
Organic Unit Mgr: Carol Smith  
Systems Mgmt Unit: George Krisztian



MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY  
 ENVIRONMENTAL LABORATORY

P.O. Box 30270  
 Lansing, MI 48909  
 TEL: (517) 335-9800  
 FAX: (517) 335-9600

**Sample Number: AC08228 SB-03**

CAS#	Analyte Name	Result	Unit	RL	Qualifier	Date Tested	Method	Analyst
	% Total Solids	91.6	%	0.1		11/19/2012	2540B SM	JW

CAS# : Chemical Abstract Service Registry Number  
 RL : Reporting Limit  
 ND : Not Detected

ug / L : microgram / liter (ppb)  
 mg / L : milligram / liter (ppm)  
 ug / Kg : microgram / kilogram (ppb)  
 mg / Kg : milligram / kilogram (ppm)

Laboratory Contacts  
 Inorganic Unit Mgr: Kirby Shane  
 Organic Unit Mgr: Carol Smith  
 Systems Mgmt Unit: George Krisztian



MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY  
ENVIRONMENTAL LABORATORY

P.O. Box 30270  
Lansing, MI 48909  
TEL: (517) 335-9800  
FAX: (517) 335-9600

**Sample Number:** AC08229 SB-03 MS

**Volatile Compounds**

**Analytical Method:** 8260  
**Extraction Method:** 5035

**Date Tested:** 11/18/2012  
**Extraction Date:** 11/15/2012

**Analyst:** SJR  
**Qualifier:**

CAS #	Compound	Result ug/Kg dry	RL	Qualifier	Dilution Factor
	##Weight of sample(grams)	10.24			
SURROGATE	#Bromofluorobenzene#	110			
SURROGATE	#Dibromofluoromethane#	132			
SURROGATE	#Toluene-d8#	130			
630-20-6	1,1,1,2-Tetrachloroethane	3200	58		50
71-55-6	1,1,1-Trichloroethane	2900	58		50
79-34-5	1,1,2,2-Tetrachloroethane	2900	58		50
79-00-5	1,1,2-Trichloroethane	3000	58		50
75-34-3	1,1-Dichloroethane	2900	58		50
75-35-4	1,1-Dichloroethylene	3400	58	4	50
87-61-6	1,2,3-Trichlorobenzene	2700	290		50
96-18-4	1,2,3-Trichloropropane	3200	58		50
526-73-8	1,2,3-Trimethylbenzene	2800	58		50
120-82-1	1,2,4-Trichlorobenzene	2600	290		50
95-63-6	1,2,4-Trimethylbenzene	3000	58		50
96-12-8	1,2-Dibromo-3-chloropropane	2800	290		50
106-93-4	1,2-Dibromoethane	3000	58	Z	50
95-50-1	1,2-Dichlorobenzene	2900	58		50
107-06-2	1,2-Dichloroethane	3100	58		50
78-87-5	1,2-Dichloropropane	2800	58		50
108-67-8	1,3,5-Trimethylbenzene	2900	58		50
541-73-1	1,3-Dichlorobenzene	2800	58		50
106-46-7	1,4-Dichlorobenzene	2900	58		50
78-93-3	2-Butanone (MEK)	2400	290		50
591-78-6	2-Hexanone	2600	290		50
91-57-6	2-Methylnaphthalene	2300	290	X 6 7	50
67-64-1	2-Propanone (acetone)	2500	1200	5	50
108-10-1	4-Methyl-2-pentanone (MIBK)	3000	290		50
107-13-1	Acrylonitrile	3000	290	Z	50
71-43-2	Benzene	2900	58		50
108-86-1	Bromobenzene	2800	58		50
74-97-5	Bromochloromethane	3200	58		50
75-27-4	Bromodichloromethane	3000	58		50
75-25-2	Bromoform	2800	58		50
74-83-9	Bromomethane	2900	230		50
75-15-0	Carbon disulfide	3600	58	6 4	50
56-23-5	Carbon tetrachloride	2800	58		50
108-90-7	Chlorobenzene	3000	58		50
75-00-3	Chloroethane	3200	290		50
67-66-3	Chloroform	3000	58		50

CAS# : Chemical Abstract Service Registry Number  
RL : Reporting Limit  
ND : Not Detected

ug / L : microgram / liter (ppb)  
mg / L : milligram / liter (ppm)  
ug / Kg : microgram / kilogram (ppb)  
mg / Kg : milligram / kilogram (ppm)

Laboratory Contacts  
Inorganic Unit Mgr: Kirby Shane  
Organic Unit Mgr: Carol Smith  
Systems Mgmt Unit: George Krisztian



MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY  
ENVIRONMENTAL LABORATORY

P.O. Box 30270  
Lansing, MI 48909  
TEL: (517) 335-9800  
FAX: (517) 335-9600

**Sample Number:** AC08229 SB-03 MS

**Volatile Compounds**

**Analytical Method:** 8260 **Date Tested:** 11/18/2012 **Analyst:** SJR  
**Extraction Method:** 5035 **Extraction Date:** 11/15/2012 **Qualifier:**

CAS #	Compound	Result ug/Kg dry	RL	Qualifier	Dilution Factor
74-87-3	Chloromethane	2700	290		50
156-59-2	cis-1,2-Dichloroethylene	2900	58		50
10061-01-5	cis-1,3-Dichloropropylene	3000	58		50
110-82-7	Cyclohexane	2700	290		50
124-48-1	Dibromochloromethane	3200	58		50
74-95-3	Dibromomethane	3100	58		50
75-71-8	Dichlorodifluoromethane	2400	290	5	50
60-29-7	Diethyl ether	2900	230		50
108-20-3	Diisopropyl Ether	2900	290		50
100-41-4	Ethylbenzene	3000	58		50
637-92-3	Ethyltertiarybutylether	2900	290		50
67-72-1	Hexachloroethane	2800	290		50
98-82-8	Isopropylbenzene	3000	58		50
108383,106423	m & p - Xylene	5900	120		50
74-88-4	Methyl iodide	3300	58		50
75-09-2	Methylene chloride	2800	120		50
1634-04-4	Methyltertiarybutylether	3000	58		50
91-20-3	Naphthalene	2100	290	X 3 7	50
104-51-8	n-Butylbenzene	2900	58		50
103-65-1	n-Propylbenzene	2900	58		50
95-47-6	o-Xylene	3000	58		50
99-87-6	p-Isopropyl toluene	3000	58		50
135-98-8	sec-Butylbenzene	2900	58		50
100-42-5	Styrene	3100	58		50
98-06-6	tert-Butylbenzene	3000	58		50
75-65-0	tertiary Butyl Alcohol	10000	2900	5	50
994-05-8	tertiaryAmylmethylether	3000	290		50
127-18-4	Tetrachloroethylene	3000	58		50
109-99-9	Tetrahydrofuran	2500	290		50
108-88-3	Toluene	2900	58		50
156-60-5	trans-1,2-Dichloroethylene	2900	58		50
10061-02-6	trans-1,3-Dichloropropylene	2900	58		50
110-57-6	trans-1,4-Dichloro-2-butene	2500	290	Z	50
79-01-6	Trichloroethylene	2900	58		50
75-69-4	Trichlorofluoromethane	3000	58		50
75-01-4	Vinyl chloride	2700	58	Z	50

Sample is a matrix spike.

Compounds spiked at 2890 ug/Kg, except tertiary butyl alcohol spiked at 14400 ug/Kg & m&p-xylene spiked at 5780 ug/Kg.

CAS# : Chemical Abstract Service Registry Number  
RL : Reporting Limit  
ND : Not Detected

ug / L : microgram / liter (ppb)  
mg / L : milligram / liter (ppm)  
ug / Kg : microgram / kilogram (ppb)  
mg / Kg : milligram / kilogram (ppm)

Laboratory Contacts  
Inorganic Unit Mgr: Kirby Shane  
Organic Unit Mgr: Carol Smith  
Systems Mgmt Unit: George Krisztian



MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY  
 ENVIRONMENTAL LABORATORY

P.O. Box 30270  
 Lansing, MI 48909  
 TEL: (517) 335-9800  
 FAX: (517) 335-9600

**Sample Number: AC08229 SB-03 MS**

CAS#	Analyte Name	Result	Unit	RL	Qualifier	Date Tested	Method	Analyst
	% Total Solids	91.6	%	0.1		11/19/2012	2540B SM	JW

CAS# : Chemical Abstract Service Registry Number  
 RL : Reporting Limit  
 ND : Not Detected

ug / L : microgram / liter (ppb)  
 mg / L : milligram / liter (ppm)  
 ug / Kg : microgram / kilogram (ppb)  
 mg / Kg : milligram / kilogram (ppm)

Laboratory Contacts  
 Inorganic Unit Mgr: Kirby Shane  
 Organic Unit Mgr: Carol Smith  
 Systems Mgmt Unit: George Krisztian



MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY  
 ENVIRONMENTAL LABORATORY

P.O. Box 30270  
 Lansing, MI 48909  
 TEL: (517) 335-9800  
 FAX: (517) 335-9600

Sample Number: AC08230 SB-03 MSD

Volatile Compounds

Analytical Method: 8260  
 Extraction Method: 5035

Date Tested: 11/18/2012  
 Extraction Date: 11/15/2012

Analyst: SJR  
 Qualifier:

CAS #	Compound	Result ug/Kg dry	RL	Qualifier	Dilution Factor
	##Weight of sample(grams)	10.24			
SURROGATE	#Bromofluorobenzene#	110			
SURROGATE	#Dibromofluoromethane#	127			
SURROGATE	#Toluene-d8#	127			
630-20-6	1,1,1,2-Tetrachloroethane	3100	58		50
71-55-6	1,1,1-Trichloroethane	2800	58		50
79-34-5	1,1,2,2-Tetrachloroethane	2900	58		50
79-00-5	1,1,2-Trichloroethane	2800	58		50
75-34-3	1,1-Dichloroethane	2800	58		50
75-35-4	1,1-Dichloroethylene	3300	58		50
87-61-6	1,2,3-Trichlorobenzene	3100	290		50
96-18-4	1,2,3-Trichloropropane	3000	58		50
526-73-8	1,2,3-Trimethylbenzene	2900	58		50
120-82-1	1,2,4-Trichlorobenzene	3000	290		50
95-63-6	1,2,4-Trimethylbenzene	3000	58		50
96-12-8	1,2-Dibromo-3-chloropropane	2800	290		50
106-93-4	1,2-Dibromoethane	3000	58	Z	50
95-50-1	1,2-Dichlorobenzene	3000	58		50
107-06-2	1,2-Dichloroethane	2900	58		50
78-87-5	1,2-Dichloropropane	2700	58		50
108-67-8	1,3,5-Trimethylbenzene	3000	58		50
541-73-1	1,3-Dichlorobenzene	2900	58		50
106-46-7	1,4-Dichlorobenzene	3000	58		50
78-93-3	2-Butanone (MEK)	2400	290		50
591-78-6	2-Hexanone	2500	290		50
91-57-6	2-Methylnaphthalene	3100	290	X 6 7	50
67-64-1	2-Propanone (acetone)	2400	1200	5	50
108-10-1	4-Methyl-2-pentanone (MIBK)	2600	290		50
107-13-1	Acrylonitrile	2800	290	Z	50
71-43-2	Benzene	2800	58		50
108-86-1	Bromobenzene	2900	58		50
74-97-5	Bromochloromethane	3000	58		50
75-27-4	Bromodichloromethane	2900	58		50
75-25-2	Bromoform	2800	58		50
74-83-9	Bromomethane	2800	230		50
75-15-0	Carbon disulfide	3400	58	6 4	50
56-23-5	Carbon tetrachloride	2700	58		50
108-90-7	Chlorobenzene	2900	58		50
75-00-3	Chloroethane	3200	290		50
67-66-3	Chloroform	2800	58		50

CAS# : Chemical Abstract Service Registry Number  
 RL : Reporting Limit  
 ND : Not Detected

ug / L : microgram / liter (ppb)  
 mg / L : milligram / liter (ppm)  
 ug / Kg : microgram / kilogram (ppb)  
 mg / Kg : milligram / kilogram (ppm)

Laboratory Contacts  
 Inorganic Unit Mgr: Kirby Shane  
 Organic Unit Mgr: Carol Smith  
 Systems Mgmt Unit: George Krisztian



MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY  
ENVIRONMENTAL LABORATORY

P.O. Box 30270  
Lansing, MI 48909  
TEL: (517) 335-9800  
FAX: (517) 335-9600

**Sample Number:** AC08230 **SB-03 MSD**

**Volatile Compounds**

**Analytical Method:** 8260  
**Extraction Method:** 5035

**Date Tested:** 11/18/2012  
**Extraction Date:** 11/15/2012

**Analyst:** SJR  
**Qualifier:**

CAS #	Compound	Result ug/Kg dry	RL	Qualifier	Dilution Factor
74-87-3	Chloromethane	2500	290		50
156-59-2	cis-1,2-Dichloroethylene	2800	58		50
10061-01-5	cis-1,3-Dichloropropylene	2900	58		50
110-82-7	Cyclohexane	2600	290		50
124-48-1	Dibromochloromethane	3100	58		50
74-95-3	Dibromomethane	2900	58		50
75-71-8	Dichlorodifluoromethane	2100	290	5	50
60-29-7	Diethyl ether	2700	230		50
108-20-3	Diisopropyl Ether	2800	290		50
100-41-4	Ethylbenzene	2900	58		50
637-92-3	Ethyltertiarybutylether	2900	290		50
67-72-1	Hexachloroethane	2900	290		50
98-82-8	Isopropylbenzene	2900	58		50
108383,106423	m & p - Xylene	5700	120		50
74-88-4	Methyl iodide	3500	58		50
75-09-2	Methylene chloride	2700	120		50
1634-04-4	Methyltertiarybutylether	2900	58		50
91-20-3	Naphthalene	2500	290	X 3 7	50
104-51-8	n-Butylbenzene	3100	58		50
103-65-1	n-Propylbenzene	2900	58		50
95-47-6	o-Xylene	3000	58		50
99-87-6	p-Isopropyl toluene	3000	58		50
135-98-8	sec-Butylbenzene	2900	58		50
100-42-5	Styrene	3100	58		50
98-06-6	tert-Butylbenzene	3000	58		50
75-65-0	tertiary Butyl Alcohol	9700	2900	5	50
994-05-8	tertiaryAmylmethylether	2800	290		50
127-18-4	Tetrachloroethylene	3000	58		50
109-99-9	Tetrahydrofuran	2400	290		50
108-88-3	Toluene	2900	58		50
156-60-5	trans-1,2-Dichloroethylene	2700	58		50
10061-02-6	trans-1,3-Dichloropropylene	2900	58		50
110-57-6	trans-1,4-Dichloro-2-butene	2300	290	Z	50
79-01-6	Trichloroethylene	2900	58		50
75-69-4	Trichlorofluoromethane	2900	58		50
75-01-4	Vinyl chloride	2700	58	Z	50

Sample is a matrix spike duplicate.

Compounds spiked at 2890 ug/Kg, except tertiary butyl alcohol spiked at 14400 ug/Kg & m&p-xylene spiked at 5780 ug/Kg.

CAS# : Chemical Abstract Service Registry Number  
RL : Reporting Limit  
ND : Not Detected

ug / L : microgram / liter (ppb)  
mg / L : milligram / liter (ppm)  
ug / Kg : microgram / kilogram (ppb)  
mg / Kg : milligram / kilogram (ppm)

Laboratory Contacts  
Inorganic Unit Mgr: Kirby Shane  
Organic Unit Mgr: Carol Smith  
Systems Mgmt Unit: George Krisztian



MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY  
 ENVIRONMENTAL LABORATORY

P.O. Box 30270  
 Lansing, MI 48909  
 TEL: (517) 335-9800  
 FAX: (517) 335-9600

**Sample Number: AC08230 SB-03 MSD**

CAS#	Analyte Name	Result	Unit	RL	Qualifier	Date Tested	Method	Analyst
	% Total Solids	91.6	%	0.1		11/19/2012	2540B SM	JW

CAS# : Chemical Abstract Service Registry Number  
 RL : Reporting Limit  
 ND : Not Detected

ug / L : microgram / liter (ppb)  
 mg / L : milligram / liter (ppm)  
 ug / Kg : microgram / kilogram (ppb)  
 mg / Kg : milligram / kilogram (ppm)

Laboratory Contacts  
 Inorganic Unit Mgr: Kirby Shane  
 Organic Unit Mgr: Carol Smith  
 Systems Mgmt Unit: George Krisztian





MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY  
 ENVIRONMENTAL LABORATORY

P.O. Box 30270  
 Lansing, MI 48909  
 TEL: (517) 335-9800  
 FAX: (517) 335-9600

Sample Number: AC08231 SB-04

Volatile Compounds

Analytical Method: 8260  
 Extraction Method: 5035

Date Tested: 11/17/2012  
 Extraction Date: 11/15/2012

Analyst: SJR  
 Qualifier:

CAS #	Compound	Result ug/Kg dry	RL	Qualifier	Dilution Factor
	##Weight of sample(grams)	10.75			
SURROGATE	#Bromofluorobenzene#	102			
SURROGATE	#Dibromofluoromethane#	125			
SURROGATE	#Toluene-d8#	114			
630-20-6	1,1,1,2-Tetrachloroethane	Not Detected	58		50
71-55-6	1,1,1-Trichloroethane	Not Detected	58		50
79-34-5	1,1,2,2-Tetrachloroethane	Not Detected	58		50
79-00-5	1,1,2-Trichloroethane	Not Detected	58		50
75-34-3	1,1-Dichloroethane	Not Detected	58		50
75-35-4	1,1-Dichloroethylene	Not Detected	58		50
87-61-6	1,2,3-Trichlorobenzene	Not Detected	290	7	50
96-18-4	1,2,3-Trichloropropane	Not Detected	58		50
526-73-8	1,2,3-Trimethylbenzene	Not Detected	58		50
120-82-1	1,2,4-Trichlorobenzene	Not Detected	290	7	50
95-63-6	1,2,4-Trimethylbenzene	Not Detected	58		50
96-12-8	1,2-Dibromo-3-chloropropane	Not Detected	290		50
106-93-4	1,2-Dibromoethane	Not Detected	58	Z	50
95-50-1	1,2-Dichlorobenzene	Not Detected	58		50
107-06-2	1,2-Dichloroethane	Not Detected	58		50
78-87-5	1,2-Dichloropropane	Not Detected	58		50
108-67-8	1,3,5-Trimethylbenzene	Not Detected	58		50
541-73-1	1,3-Dichlorobenzene	Not Detected	58		50
106-46-7	1,4-Dichlorobenzene	Not Detected	58		50
78-93-3	2-Butanone (MEK)	Not Detected	290		50
591-78-6	2-Hexanone	Not Detected	290		50
91-57-6	2-Methylnaphthalene	Not Detected	290	X	50
67-64-1	2-Propanone (acetone)	Not Detected	1200	5 7	50
108-10-1	4-Methyl-2-pentanone (MIBK)	Not Detected	290		50
107-13-1	Acrylonitrile	Not Detected	290	Z	50
71-43-2	Benzene	Not Detected	58		50
108-86-1	Bromobenzene	Not Detected	58		50
74-97-5	Bromochloromethane	Not Detected	58		50
75-27-4	Bromodichloromethane	Not Detected	58		50
75-25-2	Bromoform	Not Detected	58		50
74-83-9	Bromomethane	Not Detected	230		50
75-15-0	Carbon disulfide	Not Detected	58		50
56-23-5	Carbon tetrachloride	Not Detected	58		50
108-90-7	Chlorobenzene	Not Detected	58		50
75-00-3	Chloroethane	Not Detected	290		50
67-66-3	Chloroform	Not Detected	58		50

CAS# : Chemical Abstract Service Registry Number  
 RL : Reporting Limit  
 ND : Not Detected

ug / L : microgram / liter (ppb)  
 mg / L : milligram / liter (ppm)  
 ug / Kg : microgram / kilogram (ppb)  
 mg / Kg : milligram / kilogram (ppm)

Laboratory Contacts  
 Inorganic Unit Mgr: Kirby Shane  
 Organic Unit Mgr: Carol Smith  
 Systems Mgmt Unit: George Krisztian



MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY  
ENVIRONMENTAL LABORATORY

P.O. Box 30270  
Lansing, MI 48909  
TEL: (517) 335-9800  
FAX: (517) 335-9600

**Sample Number:** AC08231 SB-04

**Volatile Compounds**

**Analytical Method:** 8260  
**Extraction Method:** 5035

**Date Tested:** 11/17/2012  
**Extraction Date:** 11/15/2012

**Analyst:** SJR  
**Qualifier:**

CAS #	Compound	Result ug/Kg dry	RL	Qualifier	Dilution Factor
74-87-3	Chloromethane	Not Detected	290		50
156-59-2	cis-1,2-Dichloroethylene	Not Detected	58		50
10061-01-5	cis-1,3-Dichloropropylene	Not Detected	58		50
110-82-7	Cyclohexane	Not Detected	290		50
124-48-1	Dibromochloromethane	Not Detected	58		50
74-95-3	Dibromomethane	Not Detected	58		50
75-71-8	Dichlorodifluoromethane	Not Detected	290		50
60-29-7	Diethyl ether	Not Detected	230		50
108-20-3	Diisopropyl Ether	Not Detected	290		50
100-41-4	Ethylbenzene	Not Detected	58		50
637-92-3	Ethyltertiarybutylether	Not Detected	290		50
67-72-1	Hexachloroethane	Not Detected	290		50
98-82-8	Isopropylbenzene	Not Detected	58		50
108383,106423	m & p - Xylene	Not Detected	120		50
74-88-4	Methyl iodide	Not Detected	58		50
75-09-2	Methylene chloride	Not Detected	120		50
1634-04-4	Methyltertiarybutylether	Not Detected	58		50
91-20-3	Naphthalene	Not Detected	290	X 7	50
104-51-8	n-Butylbenzene	Not Detected	58		50
103-65-1	n-Propylbenzene	Not Detected	58		50
95-47-6	o-Xylene	Not Detected	58		50
99-87-6	p-Isopropyl toluene	Not Detected	58		50
135-98-8	sec-Butylbenzene	Not Detected	58		50
100-42-5	Styrene	Not Detected	58		50
98-06-6	tert-Butylbenzene	Not Detected	58		50
75-65-0	tertiary Butyl Alcohol	Not Detected	2900		50
994-05-8	tertiaryAmylmethylether	Not Detected	290		50
127-18-4	Tetrachloroethylene	Not Detected	58		50
109-99-9	Tetrahydrofuran	Not Detected	290		50
108-88-3	Toluene	Not Detected	58		50
156-60-5	trans-1,2-Dichloroethylene	Not Detected	58		50
10061-02-6	trans-1,3-Dichloropropylene	Not Detected	58		50
110-57-6	trans-1,4-Dichloro-2-butene	Not Detected	290	Z	50
79-01-6	Trichloroethylene	Not Detected	58		50
75-69-4	Trichlorofluoromethane	Not Detected	58		50
75-01-4	Vinyl chloride	Not Detected	58	Z	50

CAS# : Chemical Abstract Service Registry Number  
RL : Reporting Limit  
ND : Not Detected

ug / L : microgram / liter (ppb)  
mg / L : milligram / liter (ppm)  
ug / Kg : microgram / kilogram (ppb)  
mg / Kg : milligram / kilogram (ppm)

Laboratory Contacts  
Inorganic Unit Mgr: Kirby Shane  
Organic Unit Mgr: Carol Smith  
Systems Mgmt Unit: George Krisztian



MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY  
 ENVIRONMENTAL LABORATORY

P.O. Box 30270  
 Lansing, MI 48909  
 TEL: (517) 335-9800  
 FAX: (517) 335-9600

**Sample Number: AC08231 SB-04**

CAS#	Analyte Name	Result	Unit	RL	Qualifier	Date Tested	Method	Analyst
	% Total Solids	93.8	%	0.1		11/19/2012	2540B SM	JW

CAS# : Chemical Abstract Service Registry Number  
 RL : Reporting Limit  
 ND : Not Detected

ug / L : microgram / liter (ppb)  
 mg / L : milligram / liter (ppm)  
 ug / Kg : microgram / kilogram (ppb)  
 mg / Kg : milligram / kilogram (ppm)

Laboratory Contacts  
 Inorganic Unit Mgr: Kirby Shane  
 Organic Unit Mgr: Carol Smith  
 Systems Mgmt Unit: George Krisztian



MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY  
ENVIRONMENTAL LABORATORY

P.O. Box 30270  
Lansing, MI 48909  
TEL: (517) 335-9800  
FAX: (517) 335-9600

Sample Number: AC08232 SB-05

Volatile Compounds

Analytical Method: 8260  
Extraction Method: 5035

Date Tested: 11/16/2012  
Extraction Date: 11/15/2012

Analyst: SJR  
Qualifier:

CAS #	Compound	Result ug/Kg dry	RL	Qualifier	Dilution Factor
	##Weight of sample(grams)	10.49			
SURROGATE	#Bromofluorobenzene#	116			
SURROGATE	#Dibromofluoromethane#	145			
SURROGATE	#Toluene-d8#	124			
630-20-6	1,1,1,2-Tetrachloroethane	Not Detected	56		50
71-55-6	1,1,1-Trichloroethane	Not Detected	56		50
79-34-5	1,1,2,2-Tetrachloroethane	Not Detected	56		50
79-00-5	1,1,2-Trichloroethane	Not Detected	56		50
75-34-3	1,1-Dichloroethane	Not Detected	56		50
75-35-4	1,1-Dichloroethylene	Not Detected	56		50
87-61-6	1,2,3-Trichlorobenzene	Not Detected	280	7	50
96-18-4	1,2,3-Trichloropropane	Not Detected	56		50
526-73-8	1,2,3-Trimethylbenzene	Not Detected	56		50
120-82-1	1,2,4-Trichlorobenzene	Not Detected	280	7	50
95-63-6	1,2,4-Trimethylbenzene	Not Detected	56		50
96-12-8	1,2-Dibromo-3-chloropropane	Not Detected	280		50
106-93-4	1,2-Dibromoethane	Not Detected	56	Z	50
95-50-1	1,2-Dichlorobenzene	Not Detected	56		50
107-06-2	1,2-Dichloroethane	Not Detected	56		50
78-87-5	1,2-Dichloropropane	Not Detected	56		50
108-67-8	1,3,5-Trimethylbenzene	Not Detected	56		50
541-73-1	1,3-Dichlorobenzene	Not Detected	56		50
106-46-7	1,4-Dichlorobenzene	Not Detected	56		50
78-93-3	2-Butanone (MEK)	Not Detected	280		50
591-78-6	2-Hexanone	Not Detected	280		50
91-57-6	2-Methylnaphthalene	Not Detected	280	X 7	50
67-64-1	2-Propanone (acetone)	Not Detected	1100	5	50
108-10-1	4-Methyl-2-pentanone (MIBK)	Not Detected	280		50
107-13-1	Acrylonitrile	Not Detected	280	Z	50
71-43-2	Benzene	Not Detected	56		50
108-86-1	Bromobenzene	Not Detected	56		50
74-97-5	Bromochloromethane	Not Detected	56		50
75-27-4	Bromodichloromethane	Not Detected	56		50
75-25-2	Bromoform	Not Detected	56		50
74-83-9	Bromomethane	Not Detected	220		50
75-15-0	Carbon disulfide	Not Detected	56		50
56-23-5	Carbon tetrachloride	Not Detected	56		50
108-90-7	Chlorobenzene	Not Detected	56		50
75-00-3	Chloroethane	Not Detected	280		50
67-66-3	Chloroform	Not Detected	56		50

CAS# : Chemical Abstract Service Registry Number  
RL : Reporting Limit  
ND : Not Detected

ug / L : microgram / liter (ppb)  
mg / L : milligram / liter (ppm)  
ug / Kg : microgram / kilogram (ppb)  
mg / Kg : milligram / kilogram (ppm)

Laboratory Contacts  
Inorganic Unit Mgr: Kirby Shane  
Organic Unit Mgr: Carol Smith  
Systems Mgmt Unit: George Krisztian



MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY  
ENVIRONMENTAL LABORATORY

P.O. Box 30270  
Lansing, MI 48909  
TEL: (517) 335-9800  
FAX: (517) 335-9600

**Sample Number: AC08232 SB-05**

**Volatile Compounds**

**Analytical Method:** 8260  
**Extraction Method:** 5035

**Date Tested:** 11/16/2012  
**Extraction Date:** 11/15/2012

**Analyst:** SJR  
**Qualifier:**

CAS #	Compound	Result ug/Kg dry	RL	Qualifier	Dilution Factor
74-87-3	Chloromethane	Not Detected	280		50
156-59-2	cis-1,2-Dichloroethylene	Not Detected	56		50
10061-01-5	cis-1,3-Dichloropropylene	Not Detected	56		50
110-82-7	Cyclohexane	Not Detected	280		50
124-48-1	Dibromochloromethane	Not Detected	56		50
74-95-3	Dibromomethane	Not Detected	56		50
75-71-8	Dichlorodifluoromethane	Not Detected	280		50
60-29-7	Diethyl ether	Not Detected	220		50
108-20-3	Diisopropyl Ether	Not Detected	280		50
100-41-4	Ethylbenzene	Not Detected	56		50
637-92-3	Ethyltertiarybutylether	Not Detected	280		50
67-72-1	Hexachloroethane	Not Detected	280		50
98-82-8	Isopropylbenzene	Not Detected	56		50
108383,106423	m & p - Xylene	Not Detected	110		50
74-88-4	Methyl iodide	Not Detected	56		50
75-09-2	Methylene chloride	Not Detected	110		50
1634-04-4	Methyltertiarybutylether	Not Detected	56		50
91-20-3	Naphthalene	Not Detected	280	X 5 7	50
104-51-8	n-Butylbenzene	Not Detected	56		50
103-65-1	n-Propylbenzene	Not Detected	56		50
95-47-6	o-Xylene	Not Detected	56		50
99-87-6	p-Isopropyl toluene	Not Detected	56		50
135-98-8	sec-Butylbenzene	Not Detected	56		50
100-42-5	Styrene	Not Detected	56		50
98-06-6	tert-Butylbenzene	Not Detected	56		50
75-65-0	tertiary Butyl Alcohol	Not Detected	2800		50
994-05-8	tertiaryAmylmehtylether	Not Detected	280		50
127-18-4	Tetrachloroethylene	Not Detected	56		50
109-99-9	Tetrahydrofuran	Not Detected	280		50
108-88-3	Toluene	Not Detected	56		50
156-60-5	trans-1,2-Dichloroethylene	Not Detected	56		50
10061-02-6	trans-1,3-Dichloropropylene	Not Detected	56		50
110-57-6	trans-1,4-Dichloro-2-butene	Not Detected	280	Z	50
79-01-6	Trichloroethylene	Not Detected	56		50
75-69-4	Trichlorofluoromethane	Not Detected	56		50
75-01-4	Vinyl chloride	Not Detected	56	Z	50

CAS# : Chemical Abstract Service Registry Number  
RL : Reporting Limit  
ND : Not Detected

ug / L : microgram / liter (ppb)  
mg / L : milligram / liter (ppm)  
ug / Kg : microgram / kilogram (ppb)  
mg / Kg : milligram / kilogram (ppm)

Laboratory Contacts  
Inorganic Unit Mgr: Kirby Shane  
Organic Unit Mgr: Carol Smith  
Systems Mgmt Unit: George Krisztian



MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY  
ENVIRONMENTAL LABORATORY

P.O. Box 30270  
Lansing, MI 48909  
TEL: (517) 335-9800  
FAX: (517) 335-9600

**Sample Number: AC08232 SB-05**

CAS#	Analyte Name	Result	Unit	RL	Qualifier	Date Tested	Method	Analyst
	% Total Solids	92.0	%	0.1		11/19/2012	2540B SM	JW

CAS# : Chemical Abstract Service Registry Number  
RL : Reporting Limit  
ND : Not Detected

ug / L : microgram / liter (ppb)  
mg / L : milligram / liter (ppm)  
ug / Kg : microgram / kilogram (ppb)  
mg / Kg : milligram / kilogram (ppm)

Laboratory Contacts  
Inorganic Unit Mgr: Kirby Shane  
Organic Unit Mgr: Carol Smith  
Systems Mgmt Unit: George Krisztian



MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY  
ENVIRONMENTAL LABORATORY

P.O. Box 30270  
Lansing, MI 48909  
TEL: (517) 335-9800  
FAX: (517) 335-9600

Sample Number: AC08233 SB-06

Volatile Compounds

Analytical Method: 8260  
Extraction Method: 5035

Date Tested: 11/16/2012  
Extraction Date: 11/15/2012

Analyst: SJR  
Qualifier:

CAS #	Compound	Result ug/Kg dry	RL	Qualifier	Dilution Factor
	##Weight of sample(grams)	10.79			
SURROGATE	#Bromofluorobenzene#	103			
SURROGATE	#Dibromofluoromethane#	126			
SURROGATE	#Toluene-d8#	117			
630-20-6	1,1,1,2-Tetrachloroethane	Not Detected	57		50
71-55-6	1,1,1-Trichloroethane	Not Detected	57		50
79-34-5	1,1,2,2-Tetrachloroethane	Not Detected	57		50
79-00-5	1,1,2-Trichloroethane	Not Detected	57		50
75-34-3	1,1-Dichloroethane	Not Detected	57		50
75-35-4	1,1-Dichloroethylene	Not Detected	57		50
87-61-6	1,2,3-Trichlorobenzene	Not Detected	290	7	50
96-18-4	1,2,3-Trichloropropane	Not Detected	57		50
526-73-8	1,2,3-Trimethylbenzene	Not Detected	57		50
120-82-1	1,2,4-Trichlorobenzene	Not Detected	290	7	50
95-63-6	1,2,4-Trimethylbenzene	Not Detected	57		50
96-12-8	1,2-Dibromo-3-chloropropane	Not Detected	290		50
106-93-4	1,2-Dibromoethane	Not Detected	57	Z	50
95-50-1	1,2-Dichlorobenzene	Not Detected	57		50
107-06-2	1,2-Dichloroethane	Not Detected	57		50
78-87-5	1,2-Dichloropropane	Not Detected	57		50
108-67-8	1,3,5-Trimethylbenzene	Not Detected	57		50
541-73-1	1,3-Dichlorobenzene	Not Detected	57		50
106-46-7	1,4-Dichlorobenzene	Not Detected	57		50
78-93-3	2-Butanone (MEK)	Not Detected	290		50
591-78-6	2-Hexanone	Not Detected	290		50
91-57-6	2-Methylnaphthalene	Not Detected	290	X 7	50
67-64-1	2-Propanone (acetone)	Not Detected	1100	5	50
108-10-1	4-Methyl-2-pentanone (MIBK)	Not Detected	290		50
107-13-1	Acrylonitrile	Not Detected	290	Z	50
71-43-2	Benzene	Not Detected	57		50
108-86-1	Bromobenzene	Not Detected	57		50
74-97-5	Bromochloromethane	Not Detected	57		50
75-27-4	Bromodichloromethane	Not Detected	57		50
75-25-2	Bromoform	Not Detected	57		50
74-83-9	Bromomethane	Not Detected	230		50
75-15-0	Carbon disulfide	Not Detected	57		50
56-23-5	Carbon tetrachloride	Not Detected	57		50
108-90-7	Chlorobenzene	Not Detected	57		50
75-00-3	Chloroethane	Not Detected	290		50
67-66-3	Chloroform	Not Detected	57		50

CAS# : Chemical Abstract Service Registry Number  
RL : Reporting Limit  
ND : Not Detected

ug / L : microgram / liter (ppb)  
mg / L : milligram / liter (ppm)  
ug / Kg : microgram / kilogram (ppb)  
mg / Kg : milligram / kilogram (ppm)

Laboratory Contacts  
Inorganic Unit Mgr: Kirby Shane  
Organic Unit Mgr: Carol Smith  
Systems Mgmt Unit: George Krisztian



MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY  
ENVIRONMENTAL LABORATORY

P.O. Box 30270  
Lansing, MI 48909  
TEL: (517) 335-9800  
FAX: (517) 335-9600

**Sample Number:** AC08233 SB-06

**Volatile Compounds**

**Analytical Method:** 8260  
**Extraction Method:** 5035

**Date Tested:** 11/16/2012  
**Extraction Date:** 11/15/2012

**Analyst:** SJR  
**Qualifier:**

CAS #	Compound	Result ug/Kg dry	RL	Qualifier	Dilution Factor
74-87-3	Chloromethane	Not Detected	290		50
156-59-2	cis-1,2-Dichloroethylene	Not Detected	57		50
10061-01-5	cis-1,3-Dichloropropylene	Not Detected	57		50
110-82-7	Cyclohexane	Not Detected	290		50
124-48-1	Dibromochloromethane	Not Detected	57		50
74-95-3	Dibromomethane	Not Detected	57		50
75-71-8	Dichlorodifluoromethane	Not Detected	290		50
60-29-7	Diethyl ether	Not Detected	230		50
108-20-3	Diisopropyl Ether	Not Detected	290		50
100-41-4	Ethylbenzene	Not Detected	57		50
637-92-3	Ethyltertiarybutylether	Not Detected	290		50
67-72-1	Hexachloroethane	Not Detected	290		50
98-82-8	Isopropylbenzene	Not Detected	57		50
108383,106423	m & p - Xylene	Not Detected	110		50
74-88-4	Methyl iodide	Not Detected	57		50
75-09-2	Methylene chloride	Not Detected	110		50
1634-04-4	Methyltertiarybutylether	Not Detected	57		50
91-20-3	Naphthalene	Not Detected	290	X 5 7	50
104-51-8	n-Butylbenzene	Not Detected	57		50
103-65-1	n-Propylbenzene	Not Detected	57		50
95-47-6	o-Xylene	Not Detected	57		50
99-87-6	p-Isopropyl toluene	Not Detected	57		50
135-98-8	sec-Butylbenzene	Not Detected	57		50
100-42-5	Styrene	Not Detected	57		50
98-06-6	tert-Butylbenzene	Not Detected	57		50
75-65-0	tertiary Butyl Alcohol	Not Detected	2900		50
994-05-8	tertiaryAmylmethylether	Not Detected	290		50
127-18-4	Tetrachloroethylene	Not Detected	57		50
109-99-9	Tetrahydrofuran	Not Detected	290		50
108-88-3	Toluene	Not Detected	57		50
156-60-5	trans-1,2-Dichloroethylene	Not Detected	57		50
10061-02-6	trans-1,3-Dichloropropylene	Not Detected	57		50
110-57-6	trans-1,4-Dichloro-2-butene	Not Detected	290	Z	50
79-01-6	Trichloroethylene	Not Detected	57		50
75-69-4	Trichlorofluoromethane	Not Detected	57		50
75-01-4	Vinyl chloride	Not Detected	57	Z	50

CAS# : Chemical Abstract Service Registry Number  
RL : Reporting Limit  
ND : Not Detected

ug / L : microgram / liter (ppb)  
mg / L : milligram / liter (ppm)  
ug / Kg : microgram / kilogram (ppb)  
mg / Kg : milligram / kilogram (ppm)

Laboratory Contacts  
Inorganic Unit Mgr: Kirby Shane  
Organic Unit Mgr: Carol Smith  
Systems Mgmt Unit: George Krisztian





MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY  
 ENVIRONMENTAL LABORATORY

P.O. Box 30270  
 Lansing, MI 48909  
 TEL: (517) 335-9800  
 FAX: (517) 335-9600

**Sample Number: AC08233 SB-06**

CAS#	Analyte Name	Result	Unit	RL	Qualifier	Date Tested	Method	Analyst
	% Total Solids	94.1	%	0.1		11/19/2012	2540B SM	JW

CAS# : Chemical Abstract Service Registry Number  
 RL : Reporting Limit  
 ND : Not Detected

ug / L : microgram / liter (ppb)  
 mg / L : milligram / liter (ppm)  
 ug / Kg : microgram / kilogram (ppb)  
 mg / Kg : milligram / kilogram (ppm)

Laboratory Contacts  
 Inorganic Unit Mgr: Kirby Shane  
 Organic Unit Mgr: Carol Smith  
 Systems Mgmt Unit: George Krisztian



MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY  
ENVIRONMENTAL LABORATORY

P.O. Box 30270  
Lansing, MI 48909  
TEL: (517) 335-9800  
FAX: (517) 335-9600

Sample Number: AC08234 SB-08

Volatile Compounds

Analytical Method: 8260  
Extraction Method: 5035

Date Tested: 11/17/2012  
Extraction Date: 11/15/2012

Analyst: SJR  
Qualifier:

CAS #	Compound	Result ug/Kg dry	RL	Qualifier	Dilution Factor
	##Weight of sample(grams)	11.26			
SURROGATE	#Bromofluorobenzene#	105			
SURROGATE	#Dibromofluoromethane#	128			
SURROGATE	#Toluene-d8#	117			
630-20-6	1,1,1,2-Tetrachloroethane	Not Detected	69		50
71-55-6	1,1,1-Trichloroethane	Not Detected	69		50
79-34-5	1,1,2,2-Tetrachloroethane	Not Detected	69		50
79-00-5	1,1,2-Trichloroethane	Not Detected	69		50
75-34-3	1,1-Dichloroethane	Not Detected	69		50
75-35-4	1,1-Dichloroethylene	Not Detected	69		50
87-61-6	1,2,3-Trichlorobenzene	Not Detected	350	7	50
96-18-4	1,2,3-Trichloropropane	Not Detected	69		50
526-73-8	1,2,3-Trimethylbenzene	Not Detected	69		50
120-82-1	1,2,4-Trichlorobenzene	Not Detected	350	7	50
95-63-6	1,2,4-Trimethylbenzene	Not Detected	69		50
96-12-8	1,2-Dibromo-3-chloropropane	Not Detected	350		50
106-93-4	1,2-Dibromoethane	Not Detected	69	Z	50
95-50-1	1,2-Dichlorobenzene	Not Detected	69		50
107-06-2	1,2-Dichloroethane	Not Detected	69		50
78-87-5	1,2-Dichloropropane	Not Detected	69		50
108-67-8	1,3,5-Trimethylbenzene	Not Detected	69		50
541-73-1	1,3-Dichlorobenzene	Not Detected	69		50
106-46-7	1,4-Dichlorobenzene	Not Detected	69		50
78-93-3	2-Butanone (MEK)	Not Detected	350		50
591-78-6	2-Hexanone	Not Detected	350		50
91-57-6	2-Methylnaphthalene	Not Detected	350	X	50
67-64-1	2-Propanone (acetone)	Not Detected	1400	5 7	50
108-10-1	4-Methyl-2-pentanone (MIBK)	Not Detected	350		50
107-13-1	Acrylonitrile	Not Detected	350	Z	50
71-43-2	Benzene	Not Detected	69		50
108-86-1	Bromobenzene	Not Detected	69		50
74-97-5	Bromochloromethane	Not Detected	69		50
75-27-4	Bromodichloromethane	Not Detected	69		50
75-25-2	Bromoform	Not Detected	69		50
74-83-9	Bromomethane	Not Detected	280		50
75-15-0	Carbon disulfide	Not Detected	69		50
56-23-5	Carbon tetrachloride	Not Detected	69		50
108-90-7	Chlorobenzene	Not Detected	69		50
75-00-3	Chloroethane	Not Detected	350		50
67-66-3	Chloroform	Not Detected	69		50

CAS# : Chemical Abstract Service Registry Number  
RL : Reporting Limit  
ND : Not Detected

ug / L : microgram / liter (ppb)  
mg / L : milligram / liter (ppm)  
ug / Kg : microgram / kilogram (ppb)  
mg / Kg : milligram / kilogram (ppm)

Laboratory Contacts  
Inorganic Unit Mgr: Kirby Shane  
Organic Unit Mgr: Carol Smith  
Systems Mgmt Unit: George Krisztian



MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY  
ENVIRONMENTAL LABORATORY

P.O. Box 30270  
Lansing, MI 48909  
TEL: (517) 335-9800  
FAX: (517) 335-9600

**Sample Number:** AC08234 SB-08

**Volatile Compounds**

**Analytical Method:** 8260  
**Extraction Method:** 5035

**Date Tested:** 11/17/2012  
**Extraction Date:** 11/15/2012

**Analyst:** SJR  
**Qualifier:**

CAS #	Compound	Result ug/Kg dry	RL	Qualifier	Dilution Factor
74-87-3	Chloromethane	Not Detected	350		50
156-59-2	cis-1,2-Dichloroethylene	Not Detected	69		50
10061-01-5	cis-1,3-Dichloropropylene	Not Detected	69		50
110-82-7	Cyclohexane	Not Detected	350		50
124-48-1	Dibromochloromethane	Not Detected	69		50
74-95-3	Dibromomethane	Not Detected	69		50
75-71-8	Dichlorodifluoromethane	Not Detected	350		50
60-29-7	Diethyl ether	Not Detected	280		50
108-20-3	Diisopropyl Ether	Not Detected	350		50
100-41-4	Ethylbenzene	Not Detected	69		50
637-92-3	Ethyltertiarybutylether	Not Detected	350		50
67-72-1	Hexachloroethane	Not Detected	350		50
98-82-8	Isopropylbenzene	Not Detected	69		50
108383,106423	m & p - Xylene	Not Detected	140		50
74-88-4	Methyl iodide	Not Detected	69		50
75-09-2	Methylene chloride	Not Detected	140		50
1634-04-4	Methyltertiarybutylether	Not Detected	69		50
91-20-3	Naphthalene	Not Detected	350	X 7	50
104-51-8	n-Butylbenzene	Not Detected	69		50
103-65-1	n-Propylbenzene	Not Detected	69		50
95-47-6	o-Xylene	Not Detected	69		50
99-87-6	p-Isopropyl toluene	Not Detected	69		50
135-98-8	sec-Butylbenzene	Not Detected	69		50
100-42-5	Styrene	Not Detected	69		50
98-06-6	tert-Butylbenzene	Not Detected	69		50
75-65-0	tertiary Butyl Alcohol	Not Detected	3500		50
994-05-8	tertiaryAmylmethylether	Not Detected	350		50
127-18-4	Tetrachloroethylene	Not Detected	69		50
109-99-9	Tetrahydrofuran	Not Detected	350		50
108-88-3	Toluene	Not Detected	69		50
156-60-5	trans-1,2-Dichloroethylene	Not Detected	69		50
10061-02-6	trans-1,3-Dichloropropylene	Not Detected	69		50
110-57-6	trans-1,4-Dichloro-2-butene	Not Detected	350	Z	50
79-01-6	Trichloroethylene	Not Detected	69		50
75-69-4	Trichlorofluoromethane	Not Detected	69		50
75-01-4	Vinyl chloride	Not Detected	69	Z	50

CAS# : Chemical Abstract Service Registry Number  
RL : Reporting Limit  
ND : Not Detected

ug / L : microgram / liter (ppb)  
mg / L : milligram / liter (ppm)  
ug / Kg : microgram / kilogram (ppb)  
mg / Kg : milligram / kilogram (ppm)

Laboratory Contacts  
Inorganic Unit Mgr: Kirby Shane  
Organic Unit Mgr: Carol Smith  
Systems Mgmt Unit: George Krisztian



MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY  
ENVIRONMENTAL LABORATORY

P.O. Box 30270  
Lansing, MI 48909  
TEL: (517) 335-9800  
FAX: (517) 335-9600

**Sample Number: AC08234 SB-08**

CAS#	Analyte Name	Result	Unit	RL	Qualifier	Date Tested	Method	Analyst
	% Total Solids	82.9	%	0.1		11/19/2012	2540B SM	JW

CAS# : Chemical Abstract Service Registry Number  
RL : Reporting Limit  
ND : Not Detected

ug / L : microgram / liter (ppb)  
mg / L : milligram / liter (ppm)  
ug / Kg : microgram / kilogram (ppb)  
mg / Kg : milligram / kilogram (ppm)

Laboratory Contacts  
Inorganic Unit Mgr: Kirby Shane  
Organic Unit Mgr: Carol Smith  
Systems Mgmt Unit: George Krisztian



MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY  
 ENVIRONMENTAL LABORATORY

P.O. Box 30270  
 Lansing, MI 48909  
 TEL: (517) 335-9800  
 FAX: (517) 335-9600

Sample Number: AC08235 SB-09

Volatile Compounds

Analytical Method: 8260  
 Extraction Method: 5035

Date Tested: 11/17/2012  
 Extraction Date: 11/15/2012

Analyst: SJR  
 Qualifier:

CAS #	Compound	Result ug/Kg dry	RL	Qualifier	Dilution Factor
	##Weight of sample(grams)	10.82			
SURROGATE	#Bromofluorobenzene#	101			
SURROGATE	#Dibromofluoromethane#	122			
SURROGATE	#Toluene-d8#	109			
630-20-6	1,1,1,2-Tetrachloroethane	Not Detected	57		50
71-55-6	1,1,1-Trichloroethane	Not Detected	57		50
79-34-5	1,1,2,2-Tetrachloroethane	Not Detected	57		50
79-00-5	1,1,2-Trichloroethane	Not Detected	57		50
75-34-3	1,1-Dichloroethane	Not Detected	57		50
75-35-4	1,1-Dichloroethylene	Not Detected	57		50
87-61-6	1,2,3-Trichlorobenzene	Not Detected	280	7	50
96-18-4	1,2,3-Trichloropropane	Not Detected	57		50
526-73-8	1,2,3-Trimethylbenzene	Not Detected	57		50
120-82-1	1,2,4-Trichlorobenzene	Not Detected	280	7	50
95-63-6	1,2,4-Trimethylbenzene	Not Detected	57		50
96-12-8	1,2-Dibromo-3-chloropropane	Not Detected	280		50
106-93-4	1,2-Dibromoethane	Not Detected	57	Z	50
95-50-1	1,2-Dichlorobenzene	Not Detected	57		50
107-06-2	1,2-Dichloroethane	Not Detected	57		50
78-87-5	1,2-Dichloropropane	Not Detected	57		50
108-67-8	1,3,5-Trimethylbenzene	Not Detected	57		50
541-73-1	1,3-Dichlorobenzene	Not Detected	57		50
106-46-7	1,4-Dichlorobenzene	Not Detected	57		50
78-93-3	2-Butanone (MEK)	Not Detected	280		50
591-78-6	2-Hexanone	Not Detected	280		50
91-57-6	2-Methylnaphthalene	Not Detected	280	X	50
67-64-1	2-Propanone (acetone)	Not Detected	1100	5 7	50
108-10-1	4-Methyl-2-pentanone (MIBK)	Not Detected	280		50
107-13-1	Acrylonitrile	Not Detected	280	Z	50
71-43-2	Benzene	Not Detected	57		50
108-86-1	Bromobenzene	Not Detected	57		50
74-97-5	Bromochloromethane	Not Detected	57		50
75-27-4	Bromodichloromethane	Not Detected	57		50
75-25-2	Bromoform	Not Detected	57		50
74-83-9	Bromomethane	Not Detected	230		50
75-15-0	Carbon disulfide	Not Detected	57		50
56-23-5	Carbon tetrachloride	Not Detected	57		50
108-90-7	Chlorobenzene	Not Detected	57		50
75-00-3	Chloroethane	Not Detected	280		50
67-66-3	Chloroform	Not Detected	57		50

CAS# : Chemical Abstract Service Registry Number  
 RL : Reporting Limit  
 ND : Not Detected

ug / L : microgram / liter (ppb)  
 mg / L : milligram / liter (ppm)  
 ug / Kg : microgram / kilogram (ppb)  
 mg / Kg : milligram / kilogram (ppm)

Laboratory Contacts  
 Inorganic Unit Mgr: Kirby Shane  
 Organic Unit Mgr: Carol Smith  
 Systems Mgmt Unit: George Krisztian



MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY  
 ENVIRONMENTAL LABORATORY

P.O. Box 30270  
 Lansing, MI 48909  
 TEL: (517) 335-9800  
 FAX: (517) 335-9600

**Sample Number: AC08235 SB-09**

**Volatile Compounds**

**Analytical Method:** 8260  
**Extraction Method:** 5035

**Date Tested:** 11/17/2012  
**Extraction Date:** 11/15/2012

**Analyst:** SJR  
**Qualifier:**

CAS #	Compound	Result ug/Kg dry	RL	Qualifier	Dilution Factor
74-87-3	Chloromethane	Not Detected	280		50
156-59-2	cis-1,2-Dichloroethylene	Not Detected	57		50
10061-01-5	cis-1,3-Dichloropropylene	Not Detected	57		50
110-82-7	Cyclohexane	Not Detected	280		50
124-48-1	Dibromochloromethane	Not Detected	57		50
74-95-3	Dibromomethane	Not Detected	57		50
75-71-8	Dichlorodifluoromethane	Not Detected	280		50
60-29-7	Diethyl ether	Not Detected	230		50
108-20-3	Diisopropyl Ether	Not Detected	280		50
100-41-4	Ethylbenzene	Not Detected	57		50
637-92-3	Ethyltertiarybutylether	Not Detected	280		50
67-72-1	Hexachloroethane	Not Detected	280		50
98-82-8	Isopropylbenzene	Not Detected	57		50
108383,106423	m & p - Xylene	Not Detected	110		50
74-88-4	Methyl iodide	Not Detected	57		50
75-09-2	Methylene chloride	Not Detected	110		50
1634-04-4	Methyltertiarybutylether	Not Detected	57		50
91-20-3	Naphthalene	Not Detected	280	X 7	50
104-51-8	n-Butylbenzene	Not Detected	57		50
103-65-1	n-Propylbenzene	Not Detected	57		50
95-47-6	o-Xylene	Not Detected	57		50
99-87-6	p-Isopropyl toluene	Not Detected	57		50
135-98-8	sec-Butylbenzene	Not Detected	57		50
100-42-5	Styrene	Not Detected	57		50
98-06-6	tert-Butylbenzene	Not Detected	57		50
75-65-0	tertiary Butyl Alcohol	Not Detected	2800		50
994-05-8	tertiaryAmylmethylether	Not Detected	280		50
127-18-4	Tetrachloroethylene	Not Detected	57		50
109-99-9	Tetrahydrofuran	Not Detected	280		50
108-88-3	Toluene	Not Detected	57		50
156-60-5	trans-1,2-Dichloroethylene	Not Detected	57		50
10061-02-6	trans-1,3-Dichloropropylene	Not Detected	57		50
110-57-6	trans-1,4-Dichloro-2-butene	Not Detected	280	Z	50
79-01-6	Trichloroethylene	Not Detected	57		50
75-69-4	Trichlorofluoromethane	Not Detected	57		50
75-01-4	Vinyl chloride	Not Detected	57	Z	50

CAS# : Chemical Abstract Service Registry Number  
 RL : Reporting Limit  
 ND : Not Detected

ug / L : microgram / liter (ppb)  
 mg / L : milligram / liter (ppm)  
 ug / Kg : microgram / kilogram (ppb)  
 mg / Kg : milligram / kilogram (ppm)

Laboratory Contacts  
 Inorganic Unit Mgr: Kirby Shane  
 Organic Unit Mgr: Carol Smith  
 Systems Mgmt Unit: George Krisztian



MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY  
 ENVIRONMENTAL LABORATORY

P.O. Box 30270  
 Lansing, MI 48909  
 TEL: (517) 335-9800  
 FAX: (517) 335-9600

**Sample Number: AC08235 SB-09**

CAS#	Analyte Name	Result	Unit	RL	Qualifier	Date Tested	Method	Analyst
	% Total Solids	94.6	%	0.1		11/19/2012	2540B SM	JW

CAS# : Chemical Abstract Service Registry Number  
 RL : Reporting Limit  
 ND : Not Detected

ug / L : microgram / liter (ppb)  
 mg / L : milligram / liter (ppm)  
 ug / Kg : microgram / kilogram (ppb)  
 mg / Kg : milligram / kilogram (ppm)

Laboratory Contacts  
 Inorganic Unit Mgr: Kirby Shane  
 Organic Unit Mgr: Carol Smith  
 Systems Mgmt Unit: George Krisztian



MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY  
ENVIRONMENTAL LABORATORY

P.O. Box 30270  
Lansing, MI 48909  
TEL: (517) 335-9800  
FAX: (517) 335-9600

Sample Number: AC08236 SB-10

**Volatile Compounds**

Analytical Method: 8260  
Extraction Method: 5035

Date Tested: 11/18/2012  
Extraction Date: 11/15/2012

Analyst: SJR  
Qualifier:

CAS #	Compound	Result ug/Kg dry	RL	Qualifier	Dilution Factor
	##Weight of sample(grams)	9.61			
SURROGATE	#Bromofluorobenzene#	111			
SURROGATE	#Dibromofluoromethane#	139			
SURROGATE	#Toluene-d8#	128			
630-20-6	1,1,1,2-Tetrachloroethane	Not Detected	62		50
71-55-6	1,1,1-Trichloroethane	Not Detected	62		50
79-34-5	1,1,2,2-Tetrachloroethane	Not Detected	62		50
79-00-5	1,1,2-Trichloroethane	Not Detected	62		50
75-34-3	1,1-Dichloroethane	Not Detected	62		50
75-35-4	1,1-Dichloroethylene	Not Detected	62		50
87-61-6	1,2,3-Trichlorobenzene	Not Detected	310		50
96-18-4	1,2,3-Trichloropropane	Not Detected	62		50
526-73-8	1,2,3-Trimethylbenzene	Not Detected	62		50
120-82-1	1,2,4-Trichlorobenzene	Not Detected	310		50
95-63-6	1,2,4-Trimethylbenzene	Not Detected	62		50
96-12-8	1,2-Dibromo-3-chloropropane	Not Detected	310		50
106-93-4	1,2-Dibromoethane	Not Detected	62	Z	50
95-50-1	1,2-Dichlorobenzene	Not Detected	62		50
107-06-2	1,2-Dichloroethane	Not Detected	62		50
78-87-5	1,2-Dichloropropane	Not Detected	62		50
108-67-8	1,3,5-Trimethylbenzene	Not Detected	62		50
541-73-1	1,3-Dichlorobenzene	Not Detected	62		50
106-46-7	1,4-Dichlorobenzene	Not Detected	62		50
78-93-3	2-Butanone (MEK)	Not Detected	310		50
591-78-6	2-Hexanone	Not Detected	310		50
91-57-6	2-Methylnaphthalene	Not Detected	310	X 7	50
67-64-1	2-Propanone (acetone)	Not Detected	1200	5	50
108-10-1	4-Methyl-2-pentanone (MIBK)	Not Detected	310		50
107-13-1	Acrylonitrile	Not Detected	310	Z	50
71-43-2	Benzene	Not Detected	62		50
108-86-1	Bromobenzene	Not Detected	62		50
74-97-5	Bromochloromethane	Not Detected	62		50
75-27-4	Bromodichloromethane	Not Detected	62		50
75-25-2	Bromoform	Not Detected	62		50
74-83-9	Bromomethane	Not Detected	250		50
75-15-0	Carbon disulfide	Not Detected	62		50
56-23-5	Carbon tetrachloride	Not Detected	62		50
108-90-7	Chlorobenzene	Not Detected	62		50
75-00-3	Chloroethane	Not Detected	310		50
67-66-3	Chloroform	Not Detected	62		50

CAS# : Chemical Abstract Service Registry Number  
RL : Reporting Limit  
ND : Not Detected

ug / L : microgram / liter (ppb)  
mg / L : milligram / liter (ppm)  
ug / Kg : microgram / kilogram (ppb)  
mg / Kg : milligram / kilogram (ppm)

Laboratory Contacts  
Inorganic Unit Mgr: Kirby Shane  
Organic Unit Mgr: Carol Smith  
Systems Mgmt Unit: George Krisztian





MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY  
ENVIRONMENTAL LABORATORY

P.O. Box 30270  
Lansing, MI 48909  
TEL: (517) 335-9800  
FAX: (517) 335-9600

**Sample Number: AC08236 SB-10**

**Volatile Compounds**

**Analytical Method:** 8260  
**Extraction Method:** 5035

**Date Tested:** 11/18/2012  
**Extraction Date:** 11/15/2012

**Analyst:** SJR  
**Qualifier:**

CAS #	Compound	Result ug/Kg dry	RL	Qualifier	Dilution Factor
74-87-3	Chloromethane	Not Detected	310		50
156-59-2	cis-1,2-Dichloroethylene	Not Detected	62		50
10061-01-5	cis-1,3-Dichloropropylene	Not Detected	62		50
110-82-7	Cyclohexane	Not Detected	310		50
124-48-1	Dibromochloromethane	Not Detected	62		50
74-95-3	Dibromomethane	Not Detected	62		50
75-71-8	Dichlorodifluoromethane	Not Detected	310	5	50
60-29-7	Diethyl ether	Not Detected	250		50
108-20-3	Diisopropyl Ether	Not Detected	310		50
100-41-4	Ethylbenzene	Not Detected	62		50
637-92-3	Ethyltertiarybutylether	Not Detected	310		50
67-72-1	Hexachloroethane	Not Detected	310		50
98-82-8	Isopropylbenzene	Not Detected	62		50
108383,106423	m & p - Xylene	Not Detected	120		50
74-88-4	Methyl iodide	Not Detected	62		50
75-09-2	Methylene chloride	Not Detected	120		50
1634-04-4	Methyltertiarybutylether	Not Detected	62		50
91-20-3	Naphthalene	Not Detected	310	X 7	50
104-51-8	n-Butylbenzene	Not Detected	62		50
103-65-1	n-Propylbenzene	Not Detected	62		50
95-47-6	o-Xylene	Not Detected	62		50
99-87-6	p-Isopropyl toluene	Not Detected	62		50
135-98-8	sec-Butylbenzene	Not Detected	62		50
100-42-5	Styrene	Not Detected	62		50
98-06-6	tert-Butylbenzene	Not Detected	62		50
75-65-0	tertiary Butyl Alcohol	Not Detected	3100	5	50
994-05-8	tertiaryAmylmethylether	Not Detected	310		50
127-18-4	Tetrachloroethylene	Not Detected	62		50
109-99-9	Tetrahydrofuran	Not Detected	310		50
108-88-3	Toluene	Not Detected	62		50
156-60-5	trans-1,2-Dichloroethylene	Not Detected	62		50
10061-02-6	trans-1,3-Dichloropropylene	Not Detected	62		50
110-57-6	trans-1,4-Dichloro-2-butene	Not Detected	310	Z	50
79-01-6	Trichloroethylene	Not Detected	62		50
75-69-4	Trichlorofluoromethane	Not Detected	62		50
75-01-4	Vinyl chloride	Not Detected	62	Z	50

CAS# : Chemical Abstract Service Registry Number  
RL : Reporting Limit  
ND : Not Detected

ug / L : microgram / liter (ppb)  
mg / L : milligram / liter (ppm)  
ug / Kg : microgram / kilogram (ppb)  
mg / Kg : milligram / kilogram (ppm)

Laboratory Contacts  
Inorganic Unit Mgr: Kirby Shane  
Organic Unit Mgr: Carol Smith  
Systems Mgmt Unit: George Krisztian



MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY  
 ENVIRONMENTAL LABORATORY

P.O. Box 30270  
 Lansing, MI 48909  
 TEL: (517) 335-9800  
 FAX: (517) 335-9600

**Sample Number: AC08236 SB-10**

CAS#	Analyte Name	Result	Unit	RL	Qualifier	Date Tested	Method	Analyst
	% Total Solids	91.5	%	0.1		11/19/2012	2540B SM	JW

CAS# : Chemical Abstract Service Registry Number  
 RL : Reporting Limit  
 ND : Not Detected

ug / L : microgram / liter (ppb)  
 mg / L : milligram / liter (ppm)  
 ug / Kg : microgram / kilogram (ppb)  
 mg / Kg : milligram / kilogram (ppm)

Laboratory Contacts  
 Inorganic Unit Mgr: Kirby Shane  
 Organic Unit Mgr: Carol Smith  
 Systems Mgmt Unit: George Krisztian



MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY  
ENVIRONMENTAL LABORATORY

P.O. Box 30270  
Lansing, MI 48909  
TEL: (517) 335-9800  
FAX: (517) 335-9600

**Sample Number:** AC08237 SB-11

**Volatile Compounds**

**Analytical Method:** 8260  
**Extraction Method:** 5035

**Date Tested:** 11/17/2012  
**Extraction Date:** 11/15/2012

**Analyst:** SJR  
**Qualifier:**

CAS #	Compound	Result ug/Kg dry	RL	Qualifier	Dilution Factor
	##Weight of sample(grams)	10.88			
SURROGATE	#Bromofluorobenzene#	106			
SURROGATE	#Dibromofluoromethane#	135			
SURROGATE	#Toluene-d8#	116			
630-20-6	1,1,1,2-Tetrachloroethane	Not Detected	62		50
71-55-6	1,1,1-Trichloroethane	Not Detected	62		50
79-34-5	1,1,2,2-Tetrachloroethane	Not Detected	62		50
79-00-5	1,1,2-Trichloroethane	Not Detected	62		50
75-34-3	1,1-Dichloroethane	Not Detected	62		50
75-35-4	1,1-Dichloroethylene	Not Detected	62		50
87-61-6	1,2,3-Trichlorobenzene	Not Detected	310	7	50
96-18-4	1,2,3-Trichloropropane	Not Detected	62		50
526-73-8	1,2,3-Trimethylbenzene	Not Detected	62		50
120-82-1	1,2,4-Trichlorobenzene	Not Detected	310	7	50
95-63-6	1,2,4-Trimethylbenzene	Not Detected	62		50
96-12-8	1,2-Dibromo-3-chloropropane	Not Detected	310		50
106-93-4	1,2-Dibromoethane	Not Detected	62	Z	50
95-50-1	1,2-Dichlorobenzene	Not Detected	62		50
107-06-2	1,2-Dichloroethane	Not Detected	62		50
78-87-5	1,2-Dichloropropane	Not Detected	62		50
108-67-8	1,3,5-Trimethylbenzene	Not Detected	62		50
541-73-1	1,3-Dichlorobenzene	Not Detected	62		50
106-46-7	1,4-Dichlorobenzene	Not Detected	62		50
78-93-3	2-Butanone (MEK)	Not Detected	310		50
591-78-6	2-Hexanone	Not Detected	310		50
91-57-6	2-Methylnaphthalene	Not Detected	310	X	50
67-64-1	2-Propanone (acetone)	Not Detected	1200	5 7	50
108-10-1	4-Methyl-2-pentanone (MIBK)	Not Detected	310		50
107-13-1	Acrylonitrile	Not Detected	310	Z	50
71-43-2	Benzene	Not Detected	62		50
108-86-1	Bromobenzene	Not Detected	62		50
74-97-5	Bromochloromethane	Not Detected	62		50
75-27-4	Bromodichloromethane	Not Detected	62		50
75-25-2	Bromoform	Not Detected	62		50
74-83-9	Bromomethane	Not Detected	250		50
75-15-0	Carbon disulfide	Not Detected	62		50
56-23-5	Carbon tetrachloride	Not Detected	62		50
108-90-7	Chlorobenzene	Not Detected	62		50
75-00-3	Chloroethane	Not Detected	310		50
67-66-3	Chloroform	Not Detected	62		50

CAS# : Chemical Abstract Service Registry Number  
RL : Reporting Limit  
ND : Not Detected

ug / L : microgram / liter (ppb)  
mg / L : milligram / liter (ppm)  
ug / Kg : microgram / kilogram (ppb)  
mg / Kg : milligram / kilogram (ppm)

Laboratory Contacts  
Inorganic Unit Mgr: Kirby Shane  
Organic Unit Mgr: Carol Smith  
Systems Mgmt Unit: George Krisztian



MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY  
ENVIRONMENTAL LABORATORY

P.O. Box 30270  
Lansing, MI 48909  
TEL: (517) 335-9800  
FAX: (517) 335-9600

Sample Number: AC08237 SB-11

**Volatile Compounds**

Analytical Method: 8260  
Extraction Method: 5035

Date Tested: 11/17/2012  
Extraction Date: 11/15/2012

Analyst: SJR  
Qualifier:

CAS #	Compound	Result ug/Kg dry	RL	Qualifier	Dilution Factor
74-87-3	Chloromethane	Not Detected	310		50
156-59-2	cis-1,2-Dichloroethylene	Not Detected	62		50
10061-01-5	cis-1,3-Dichloropropylene	Not Detected	62		50
110-82-7	Cyclohexane	Not Detected	310		50
124-48-1	Dibromochloromethane	Not Detected	62		50
74-95-3	Dibromomethane	Not Detected	62		50
75-71-8	Dichlorodifluoromethane	Not Detected	310		50
60-29-7	Diethyl ether	Not Detected	250		50
108-20-3	Diisopropyl Ether	Not Detected	310		50
100-41-4	Ethylbenzene	Not Detected	62		50
637-92-3	Ethyltertiarybutylether	Not Detected	310		50
67-72-1	Hexachloroethane	Not Detected	310		50
98-82-8	Isopropylbenzene	Not Detected	62		50
108383,106423	m & p - Xylene	Not Detected	120		50
74-88-4	Methyl iodide	Not Detected	62		50
75-09-2	Methylene chloride	Not Detected	120		50
1634-04-4	Methyltertiarybutylether	Not Detected	62		50
91-20-3	Naphthalene	Not Detected	310	X 7	50
104-51-8	n-Butylbenzene	Not Detected	62		50
103-65-1	n-Propylbenzene	Not Detected	62		50
95-47-6	o-Xylene	Not Detected	62		50
99-87-6	p-Isopropyl toluene	Not Detected	62		50
135-98-8	sec-Butylbenzene	Not Detected	62		50
100-42-5	Styrene	Not Detected	62		50
98-06-6	tert-Butylbenzene	Not Detected	62		50
75-65-0	tertiary Butyl Alcohol	Not Detected	3100		50
994-05-8	tertiaryAmylmethylether	Not Detected	310		50
127-18-4	Tetrachloroethylene	Not Detected	62		50
109-99-9	Tetrahydrofuran	Not Detected	310		50
108-88-3	Toluene	Not Detected	62		50
156-60-5	trans-1,2-Dichloroethylene	Not Detected	62		50
10061-02-6	trans-1,3-Dichloropropylene	Not Detected	62		50
110-57-6	trans-1,4-Dichloro-2-butene	Not Detected	310	Z	50
79-01-6	Trichloroethylene	Not Detected	62		50
75-69-4	Trichlorofluoromethane	Not Detected	62		50
75-01-4	Vinyl chloride	Not Detected	62	Z	50

CAS# : Chemical Abstract Service Registry Number  
RL : Reporting Limit  
ND : Not Detected

ug / L : microgram / liter (ppb)  
mg / L : milligram / liter (ppm)  
ug / Kg : microgram / kilogram (ppb)  
mg / Kg : milligram / kilogram (ppm)

Laboratory Contacts  
Inorganic Unit Mgr: Kirby Shane  
Organic Unit Mgr: Carol Smith  
Systems Mgmt Unit: George Krisztian



MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY  
ENVIRONMENTAL LABORATORY

P.O. Box 30270  
Lansing, MI 48909  
TEL: (517) 335-9800  
FAX: (517) 335-9600

**Sample Number:** AC08237 SB-11

CAS#	Analyte Name	Result	Unit	RL	Qualifier	Date Tested	Method	Analyst
	% Total Solids	90.0	%	0.1		11/19/2012	2540B SM	JW

CAS# : Chemical Abstract Service Registry Number  
RL : Reporting Limit  
ND : Not Detected

ug / L : microgram / liter (ppb)  
mg / L : milligram / liter (ppm)  
ug / Kg : microgram / kilogram (ppb)  
mg / Kg : milligram / kilogram (ppm)

Laboratory Contacts  
Inorganic Unit Mgr: Kirby Shane  
Organic Unit Mgr: Carol Smith  
Systems Mgmt Unit: George Krisztian



MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY  
ENVIRONMENTAL LABORATORY

P.O. Box 30270  
Lansing, MI 48909  
TEL: (517) 335-9800  
FAX: (517) 335-9600

**Sample Number: AC08238 SB-12**

**Volatile Compounds**

**Analytical Method:** 8260  
**Extraction Method:** 5035

**Date Tested:** 11/18/2012  
**Extraction Date:** 11/15/2012

**Analyst:** SJR  
**Qualifier:**

CAS #	Compound	Result ug/Kg dry	RL	Qualifier	Dilution Factor
	##Weight of sample(grams)	8.75			
SURROGATE	#Bromofluorobenzene#	108			
SURROGATE	#Dibromofluoromethane#	139			
SURROGATE	#Toluene-d8#	125			
630-20-6	1,1,1,2-Tetrachloroethane	Not Detected	67		50
71-55-6	1,1,1-Trichloroethane	Not Detected	67		50
79-34-5	1,1,2,2-Tetrachloroethane	Not Detected	67		50
79-00-5	1,1,2-Trichloroethane	Not Detected	67		50
75-34-3	1,1-Dichloroethane	Not Detected	67		50
75-35-4	1,1-Dichloroethylene	Not Detected	67		50
87-61-6	1,2,3-Trichlorobenzene	Not Detected	330		50
96-18-4	1,2,3-Trichloropropane	Not Detected	67		50
526-73-8	1,2,3-Trimethylbenzene	Not Detected	67		50
120-82-1	1,2,4-Trichlorobenzene	Not Detected	330		50
95-63-6	1,2,4-Trimethylbenzene	Not Detected	67		50
96-12-8	1,2-Dibromo-3-chloropropane	Not Detected	330		50
106-93-4	1,2-Dibromoethane	Not Detected	67	Z	50
95-50-1	1,2-Dichlorobenzene	Not Detected	67		50
107-06-2	1,2-Dichloroethane	Not Detected	67		50
78-87-5	1,2-Dichloropropane	Not Detected	67		50
108-67-8	1,3,5-Trimethylbenzene	Not Detected	67		50
541-73-1	1,3-Dichlorobenzene	Not Detected	67		50
106-46-7	1,4-Dichlorobenzene	Not Detected	67		50
78-93-3	2-Butanone (MEK)	Not Detected	330		50
591-78-6	2-Hexanone	Not Detected	330		50
91-57-6	2-Methylnaphthalene	370	330	X 6 7	50
67-64-1	2-Propanone (acetone)	Not Detected	1300	5	50
108-10-1	4-Methyl-2-pentanone (MIBK)	Not Detected	330		50
107-13-1	Acrylonitrile	Not Detected	330	Z	50
71-43-2	Benzene	Not Detected	67		50
108-86-1	Bromobenzene	Not Detected	67		50
74-97-5	Bromochloromethane	Not Detected	67		50
75-27-4	Bromodichloromethane	Not Detected	67		50
75-25-2	Bromoform	Not Detected	67		50
74-83-9	Bromomethane	Not Detected	270		50
75-15-0	Carbon disulfide	Not Detected	67		50
56-23-5	Carbon tetrachloride	Not Detected	67		50
108-90-7	Chlorobenzene	Not Detected	67		50
75-00-3	Chloroethane	Not Detected	330		50
67-66-3	Chloroform	Not Detected	67		50

CAS# : Chemical Abstract Service Registry Number  
RL : Reporting Limit  
ND : Not Detected

ug / L : microgram / liter (ppb)  
mg / L : milligram / liter (ppm)  
ug / Kg : microgram / kilogram (ppb)  
mg / Kg : milligram / kilogram (ppm)

Laboratory Contacts  
Inorganic Unit Mgr: Kirby Shane  
Organic Unit Mgr: Carol Smith  
Systems Mgmt Unit: George Krisztian



MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY  
ENVIRONMENTAL LABORATORY

P.O. Box 30270  
Lansing, MI 48909  
TEL: (517) 335-9800  
FAX: (517) 335-9600

**Sample Number:** AC08238 SB-12

**Volatile Compounds**

**Analytical Method:** 8260  
**Extraction Method:** 5035

**Date Tested:** 11/18/2012  
**Extraction Date:** 11/15/2012

**Analyst:** SJR  
**Qualifier:**

CAS #	Compound	Result ug/Kg dry	RL	Qualifier	Dilution Factor
74-87-3	Chloromethane	Not Detected	330		50
156-59-2	cis-1,2-Dichloroethylene	Not Detected	67		50
10061-01-5	cis-1,3-Dichloropropylene	Not Detected	67		50
110-82-7	Cyclohexane	Not Detected	330		50
124-48-1	Dibromochloromethane	Not Detected	67		50
74-95-3	Dibromomethane	Not Detected	67		50
75-71-8	Dichlorodifluoromethane	Not Detected	330	5	50
60-29-7	Diethyl ether	Not Detected	270		50
108-20-3	Diisopropyl Ether	Not Detected	330		50
100-41-4	Ethylbenzene	Not Detected	67		50
637-92-3	Ethyltertiarybutylether	Not Detected	330		50
67-72-1	Hexachloroethane	Not Detected	330		50
98-82-8	Isopropylbenzene	Not Detected	67		50
108383,106423	m & p - Xylene	Not Detected	130		50
74-88-4	Methyl iodide	Not Detected	67		50
75-09-2	Methylene chloride	Not Detected	130		50
1634-04-4	Methyltertiarybutylether	Not Detected	67		50
91-20-3	Naphthalene	Not Detected	330	X 7	50
104-51-8	n-Butylbenzene	Not Detected	67		50
103-65-1	n-Propylbenzene	Not Detected	67		50
95-47-6	o-Xylene	Not Detected	67		50
99-87-6	p-Isopropyl toluene	5200	67		50
135-98-8	sec-Butylbenzene	Not Detected	67		50
100-42-5	Styrene	Not Detected	67		50
98-06-6	tert-Butylbenzene	Not Detected	67		50
75-65-0	tertiary Butyl Alcohol	Not Detected	3300	5	50
994-05-8	tertiaryAmylmethylether	Not Detected	330		50
127-18-4	Tetrachloroethylene	Not Detected	67		50
109-99-9	Tetrahydrofuran	Not Detected	330		50
108-88-3	Toluene	Not Detected	67		50
156-60-5	trans-1,2-Dichloroethylene	Not Detected	67		50
10061-02-6	trans-1,3-Dichloropropylene	Not Detected	67		50
110-57-6	trans-1,4-Dichloro-2-butene	Not Detected	330	Z	50
79-01-6	Trichloroethylene	Not Detected	67		50
75-69-4	Trichlorofluoromethane	Not Detected	67		50
75-01-4	Vinyl chloride	Not Detected	67	Z	50

Methanol leaked out of the vial in transit to the laboratory, all results are estimated.

CAS# : Chemical Abstract Service Registry Number  
RL : Reporting Limit  
ND : Not Detected

ug / L : microgram / liter (ppb)  
mg / L : milligram / liter (ppm)  
ug / Kg : microgram / kilogram (ppb)  
mg / Kg : milligram / kilogram (ppm)

Laboratory Contacts  
Inorganic Unit Mgr: Kirby Shane  
Organic Unit Mgr: Carol Smith  
Systems Mgmt Unit: George Krisztian



MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY  
ENVIRONMENTAL LABORATORY

P.O. Box 30270  
Lansing, MI 48909  
TEL: (517) 335-9800  
FAX: (517) 335-9600

**Sample Number: AC08238 SB-12**

CAS#	Analyte Name	Result	Unit	RL	Qualifier	Date Tested	Method	Analyst
	% Total Solids	91.6	%	0.1		11/19/2012	2540B SM	JW

CAS# : Chemical Abstract Service Registry Number  
RL : Reporting Limit  
ND : Not Detected

ug / L : microgram / liter (ppb)  
mg / L : milligram / liter (ppm)  
ug / Kg : microgram / kilogram (ppb)  
mg / Kg : milligram / kilogram (ppm)

Laboratory Contacts  
Inorganic Unit Mgr: Kirby Shane  
Organic Unit Mgr: Carol Smith  
Systems Mgmt Unit: George Krisztian





MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY  
ENVIRONMENTAL LABORATORY

P.O. Box 30270  
Lansing, MI 48909  
TEL: (517) 335-9800  
FAX: (517) 335-9600

Sample Number: AC08239 W-1

Base Neutral Acid Compounds

Analytical Method: 8270 Date Tested: 12/05/2012 Analyst: SMH  
Extraction Method: 3545 Extraction Date: 11/15/2012 Qualifier:

CAS #	Compound	Result ug/Kg dry	RL	Qualifier	Dilution Factor
SURROGATE	#2 - Fluorobiphenyl#	62.5			
SURROGATE	#2,4,6-Tribromophenol#	39.2			
SURROGATE	#2-Fluorophenol#	42.8			
SURROGATE	#Nitrobenzene - D5#	40.0			
SURROGATE	#Phenol - D6#	49.6			
SURROGATE	#p-Terphenyl-d14#	70.9			
120-82-1	1,2,4-Trichlorobenzene	Not Detected	410		2.0
95-95-4	2,4,5-Trichlorophenol	Not Detected	680		2.0
88-06-2	2,4,6-Trichlorophenol	Not Detected	680		2.0
120-83-2	2,4-Dichlorophenol	Not Detected	680		2.0
105-67-9	2,4-Dimethylphenol	Not Detected	680		2.0
51-28-5	2,4-Dinitrophenol	Not Detected	3500	Z	2.0
121-14-2	2,4-Dinitrotoluene	Not Detected	520		2.0
606-20-2	2,6-Dinitrotoluene	Not Detected	520		2.0
91-58-7	2-Chloronaphthalene	Not Detected	410		2.0
95-57-8	2-Chlorophenol	Not Detected	680		2.0
534-52-1	2-Methyl-4,6-dinitrophenol	Not Detected	3500	Z	2.0
91-57-6	2-Methylnaphthalene	Not Detected	520		2.0
95-48-7	2-Methylphenol (o-Cresol)	Not Detected	680		2.0
88-74-4	2-Nitroaniline	Not Detected	1000		2.0
88-75-5	2-Nitrophenol	Not Detected	680		2.0
108394,106445	3 & 4-Methylphenol	Not Detected	1400		2.0
99-09-2	3-Nitroaniline	Not Detected	1000	7 8	2.0
101-55-3	4-Bromophenyl phenyl ether	Not Detected	410		2.0
59-50-7	4-Chloro-3-methyl-phenol	Not Detected	410		2.0
7005-72-3	4-Chlorodiphenylether	Not Detected	210		2.0
100-01-6	4-Nitroaniline	Not Detected	1000	5 7 8	2.0
100-02-7	4-Nitrophenol	Not Detected	3500	5Z	2.0
83-32-9	Acenaphthene	Not Detected	210		2.0
208-96-8	Acenaphthylene	Not Detected	210		2.0
120-12-7	Anthracene	Not Detected	210		2.0
103-33-3	Azobenzene	Not Detected	410	5	2.0
56-55-3	Benzo[a]anthracene	Not Detected	210		2.0
50-32-8	Benzo[a]pyrene	Not Detected	410		2.0
205-99-2	Benzo[b]fluoranthene	Not Detected	410		2.0
191-24-2	Benzo[g,h,i]perylene	Not Detected	410		2.0
207-08-9	Benzo[k]fluoranthene	Not Detected	410		2.0
100-51-6	Benzyl Alcohol	Not Detected	5200		2.0
111-91-1	Bis(2-chloroethoxy)methane	Not Detected	410		2.0
111-44-4	Bis(2-chloroethyl)ether	Not Detected	210		2.0

CAS# : Chemical Abstract Service Registry Number

RL : Reporting Limit

ND : Not Detected

ug / L : microgram / liter (ppb)

mg / L : milligram / liter (ppm)

ug / Kg : microgram / kilogram (ppb)

mg / Kg : milligram / kilogram (ppm)

Laboratory Contacts

Inorganic Unit Mgr: Kirby Shane

Organic Unit Mgr: Carol Smith

Systems Mgmt Unit: George Krisztian



MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY  
ENVIRONMENTAL LABORATORY

P.O. Box 30270  
Lansing, MI 48909  
TEL: (517) 335-9800  
FAX: (517) 335-9600

Sample Number: AC08239 W-1

Base Neutral Acid Compounds

Analytical Method: 8270 Date Tested: 12/05/2012 Analyst: SMH  
Extraction Method: 3545 Extraction Date: 11/15/2012 Qualifier:

CAS #	Compound	Result ug/Kg dry	RL	Qualifier	Dilution Factor
108-60-1	Bis(2-chloroisopropyl)ether	Not Detected	210	5	2.0
117-81-7	Bis(2-ethylhexyl)phthalate	Not Detected	520		2.0
85-68-7	Butyl benzyl phthalate	Not Detected	520		2.0
86-74-8	Carbazole	Not Detected	520		2.0
218-01-9	Chrysene	Not Detected	210		2.0
53-70-3	Dibenz[a,h]anthracene	Not Detected	410		2.0
132-64-9	Dibenzofuran	Not Detected	520		2.0
84-66-2	Diethylphthalate	Not Detected	520		2.0
131-11-3	Dimethyl phthalate	Not Detected	520		2.0
84-74-2	Di-n-butyl phthalate	Not Detected	520		2.0
117-84-0	Di-n-octyl phthalate	Not Detected	520		2.0
206-44-0	Fluoranthene	Not Detected	210		2.0
86-73-7	Fluorene	Not Detected	210		2.0
118-74-1	Hexachlorobenzene	Not Detected	410		2.0
87-68-3	Hexachlorobutadiene	Not Detected	210	Z	2.0
77-47-4	Hexachlorocyclopentadiene	Not Detected	2100	Z	2.0
67-72-1	Hexachloroethane	Not Detected	210		2.0
193-39-5	Indeno(1,2,3-c,d)pyrene	Not Detected	410		2.0
78-59-1	Isophorone	260	210	5	2.0
91-20-3	Naphthalene	Not Detected	210		2.0
98-95-3	Nitrobenzene	Not Detected	410		2.0
67-75-9	N-Nitrosodimethylamine	Not Detected	520		2.0
621-64-7	N-Nitrosodi-n-propylamine	Not Detected	410	5	2.0
86-30-6	N-Nitrosodiphenylamine	Not Detected	410		2.0
87-86-5	Pentachlorophenol	Not Detected	3500	Z=800	2.0
85-01-8	Phenanthrene	Not Detected	210		2.0
108-95-2	Phenol	Not Detected	680		2.0
129-00-0	Pyrene	Not Detected	210		2.0

RLs raised due to matrix.

PCBs as Aroclors

Analytical Method: 8082 Date Tested: 11/19/2012 Analyst: MF  
Extraction Method: 3545 Extraction Date: 11/15/2012 Qualifier:

CAS #	Compound	Result ug/Kg dry	RL	Qualifier	Dilution Factor
SURROGATE	#Decachlorobiphenyl#	63.2			
SURROGATE	#Tetrachloro-m-xylene#	79.8			
12674-11-2	Aroclor 1016	Not Detected	100		1.0
11104-28-2	Aroclor 1221	Not Detected	100		1.0

CAS# : Chemical Abstract Service Registry Number  
RL : Reporting Limit  
ND : Not Detected

ug / L : microgram / liter (ppb)  
mg / L : milligram / liter (ppm)  
ug / Kg : microgram / kilogram (ppb)  
mg / Kg : milligram / kilogram (ppm)

Laboratory Contacts  
Inorganic Unit Mgr: Kirby Shane  
Organic Unit Mgr: Carol Smith  
Systems Mgmt Unit: George Krisztian



MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY  
ENVIRONMENTAL LABORATORY

P.O. Box 30270  
Lansing, MI 48909  
TEL: (517) 335-9800  
FAX: (517) 335-9600

**Sample Number: AC08239 W-1**

**PCBs as Aroclors**

**Analytical Method:** 8082                      **Date Tested:** 11/19/2012                      **Analyst:** MF  
**Extraction Method:** 3545                      **Extraction Date:** 11/15/2012                      **Qualifier:**

CAS #	Compound	Result ug/Kg dry	RL	Qualifier	Dilution Factor
11141-16-5	Aroclor 1232	Not Detected	100		1.0
53469-21-9	Aroclor 1242	Not Detected	100		1.0
12672-29-6	Aroclor 1248	Not Detected	100		1.0
11097-69-1	Aroclor 1254	Not Detected	100		1.0
11096-82-5	Aroclor 1260	Not Detected	100		1.0
37324-23-5	Aroclor 1262	Not Detected	100		1.0
11100-14-4	Aroclor 1268	Not Detected	100		1.0

**Sample Number: AC08239 W-1**

CAS#	Analyte Name	Result	Unit	RL	Qualifier	Date Tested	Method	Analyst
	Digest Mercury - Sediment	Completed				11/15/2012	7471	TB
7439-97-6	Mercury - Sediment	.40	mg/Kg dry	0.05	3	11/16/2012	7471	TS
7440-36-0	Antimony - Sediment	10	mg/Kg dry	0.3		11/29/2012	6020	TK
7440-38-2	Arsenic - Sediment	120	mg/Kg dry	0.5		11/28/2012	6020	TK
7440-39-3	Barium - Sediment	51	mg/Kg dry	1		11/27/2012	6020	TK
7440-41-7	Beryllium - Sediment	0.57	mg/Kg dry	0.2		11/27/2012	6020	TK
7440-43-9	Cadmium - Sediment	4.3	mg/Kg dry	0.2		11/27/2012	6020	TK
7440-47-3	Chromium - Sediment	4600	mg/Kg dry	2		11/28/2012	6020	TK
7440-48-4	Cobalt - Sediment	53	mg/Kg dry	.5		11/27/2012	6020	TK
7440-50-8	Copper - Sediment	76000	mg/Kg dry	1		11/28/2012	6020	TK
	Digest Antimony - Sediment	Completed				11/26/2012	3050	TB
	Digest Metals - Sediment	Completed				11/26/2012	3050	TB
7439-89-6	Iron - Sediment	210000	mg/Kg dry	500	D	12/15/2012	6010	WN
7439-92-1	Lead - Sediment	35	mg/Kg dry	1		11/27/2012	6020	TK
7439-96-5	Manganese - Sediment	1900	mg/Kg dry	1		11/27/2012	6020	TK
7439-98-7	Molybdenum - Sediment	74	mg/Kg dry	1		11/27/2012	6020	TK
7440-02-0	Nickel - Sediment	260	mg/Kg dry	1		11/27/2012	6020	TK
7782-49-2	Selenium - Sediment	4.3	mg/Kg dry	0.2		11/27/2012	6020	TK
7440-22-4	Silver - Sediment	49	mg/Kg dry	0.1		11/27/2012	6020	TK
7440-28-0	Thallium - Sediment	ND	mg/Kg dry	0.5		11/27/2012	6020	TK
7440-62-2	Vanadium - Sediment	87	mg/Kg dry	1		12/06/2012	6020	TK
7440-66-6	Zinc - Sediment	170	mg/Kg dry	1		11/27/2012	6020	TK
	% Total Solids	96.5	%	0.1		11/19/2012	2540B SM	JW
	Drying and Grinding - Sediment	COMPLETED				11/19/2012		JW
	Gel Permeation Cleanup-Pesticide/PCB completed					11/16/2012	3640	MK
	Gel Permeation Cleanup-SVOC Analysis completed					11/20/2012	3640	MK

CAS# : Chemical Abstract Service Registry Number  
RL : Reporting Limit  
ND : Not Detected

ug / L : microgram / liter (ppb)  
mg / L : milligram / liter (ppm)  
ug / Kg : microgram / kilogram (ppb)  
mg / Kg : milligram / kilogram (ppm)

Laboratory Contacts  
Inorganic Unit Mgr: Kirby Shane  
Organic Unit Mgr: Carol Smith  
Systems Mgmt Unit: George Krisztian



MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY  
ENVIRONMENTAL LABORATORY

P.O. Box 30270  
Lansing, MI 48909  
TEL: (517) 335-9800  
FAX: (517) 335-9600

Sample Number: AC08240 W-2

Base Neutral Acid Compounds

Analytical Method: 8270  
Extraction Method: 3545

Date Tested: 12/06/2012  
Extraction Date: 11/15/2012

Analyst: SMH  
Qualifier:

CAS #	Compound	Result ug/Kg dry	RL	Qualifier	Dilution Factor
SURROGATE	#2 - Fluorobiphenyl#	Not Applicable		V	
SURROGATE	#2,4,6-Tribromophenol#	Not Applicable		V	
SURROGATE	#2-Fluorophenol#	Not Applicable		V	
SURROGATE	#Nitrobenzene - D5#	Not Applicable		V	
SURROGATE	#Phenol - D6#	Not Applicable		V	
SURROGATE	#p-Terphenyl-d14#	Not Applicable		V	
120-82-1	1,2,4-Trichlorobenzene	Not Detected	28000		100
95-95-4	2,4,5-Trichlorophenol	Not Detected	46000		100
88-06-2	2,4,6-Trichlorophenol	Not Detected	46000		100
120-83-2	2,4-Dichlorophenol	Not Detected	46000		100
105-67-9	2,4-Dimethylphenol	Not Detected	46000		100
51-28-5	2,4-Dinitrophenol	Not Detected	240000	Z	100
121-14-2	2,4-Dinitrotoluene	Not Detected	35000		100
606-20-2	2,6-Dinitrotoluene	Not Detected	35000		100
91-58-7	2-Chloronaphthalene	Not Detected	28000		100
95-57-8	2-Chlorophenol	Not Detected	46000		100
534-52-1	2-Methyl-4,6-dinitrophenol	Not Detected	240000	Z	100
91-57-6	2-Methylnaphthalene	Not Detected	35000		100
95-48-7	2-Methylphenol (o-Cresol)	Not Detected	46000		100
88-74-4	2-Nitroaniline	Not Detected	69000		100
88-75-5	2-Nitrophenol	Not Detected	46000		100
108394,106445	3 & 4-Methylphenol	Not Detected	92000		100
99-09-2	3-Nitroaniline	Not Detected	69000	7 8	100
101-55-3	4-Bromophenyl phenyl ether	Not Detected	28000		100
59-50-7	4-Chloro-3-methyl-phenol	Not Detected	28000		100
7005-72-3	4-Chlorodiphenylether	Not Detected	14000		100
100-01-6	4-Nitroaniline	Not Detected	69000	7 8	100
100-02-7	4-Nitrophenol	Not Detected	240000	5Z	100
83-32-9	Acenaphthene	Not Detected	14000		100
208-96-8	Acenaphthylene	Not Detected	14000		100
120-12-7	Anthracene	Not Detected	14000		100
103-33-3	Azobenzene	Not Detected	28000		100
56-55-3	Benzo[a]anthracene	Not Detected	14000		100
50-32-8	Benzo[a]pyrene	Not Detected	28000		100
205-99-2	Benzo[b]fluoranthene	Not Detected	28000		100
191-24-2	Benzo[g,h,i]perylene	Not Detected	28000		100
207-08-9	Benzo[k]fluoranthene	Not Detected	28000		100
100-51-6	Benzyl Alcohol	Not Detected	350000		100
111-91-1	Bis(2-chloroethoxy)methane	Not Detected	28000		100
111-44-4	Bis(2-chloroethyl)ether	Not Detected	14000		100

CAS# : Chemical Abstract Service Registry Number  
RL : Reporting Limit  
ND : Not Detected

ug / L : microgram / liter (ppb)  
mg / L : milligram / liter (ppm)  
ug / Kg : microgram / kilogram (ppb)  
mg / Kg : milligram / kilogram (ppm)

Laboratory Contacts  
Inorganic Unit Mgr: Kirby Shane  
Organic Unit Mgr: Carol Smith  
Systems Mgmt Unit: George Krisztian



MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY  
ENVIRONMENTAL LABORATORY

P.O. Box 30270  
Lansing, MI 48909  
TEL: (517) 335-9800  
FAX: (517) 335-9600

Sample Number: AC08240 W-2

Base Neutral Acid Compounds

Analytical Method: 8270 Date Tested: 12/06/2012 Analyst: SMH  
Extraction Method: 3545 Extraction Date: 11/15/2012 Qualifier:

CAS #	Compound	Result ug/Kg dry	RL	Qualifier	Dilution Factor
108-60-1	Bis(2-chloroisopropyl)ether	Not Detected	14000	5	100
117-81-7	Bis(2-ethylhexyl)phthalate	Not Detected	35000		100
85-68-7	Butyl benzyl phthalate	Not Detected	35000		100
86-74-8	Carbazole	Not Detected	35000		100
218-01-9	Chrysene	Not Detected	14000		100
53-70-3	Dibenz[a,h]anthracene	Not Detected	28000		100
132-64-9	Dibenzofuran	Not Detected	35000		100
84-66-2	Diethylphthalate	Not Detected	35000		100
131-11-3	Dimethyl phthalate	Not Detected	35000		100
84-74-2	Di-n-butyl phthalate	Not Detected	35000		100
117-84-0	Di-n-octyl phthalate	Not Detected	35000		100
206-44-0	Fluoranthene	Not Detected	14000		100
86-73-7	Fluorene	Not Detected	14000		100
118-74-1	Hexachlorobenzene	Not Detected	28000		100
87-68-3	Hexachlorobutadiene	Not Detected	14000	Z	100
77-47-4	Hexachlorocyclopentadiene	Not Detected	140000	Z	100
67-72-1	Hexachloroethane	Not Detected	14000		100
193-39-5	Indeno(1,2,3-c,d)pyrene	Not Detected	28000		100
78-59-1	Isophorone	Not Detected	14000	5	100
91-20-3	Naphthalene	Not Detected	14000		100
98-95-3	Nitrobenzene	Not Detected	28000		100
67-75-9	N-Nitrosodimethylamine	Not Detected	35000		100
621-64-7	N-Nitrosodi-n-propylamine	Not Detected	28000	5	100
86-30-6	N-Nitrosodiphenylamine	Not Detected	28000		100
87-86-5	Pentachlorophenol	Not Detected	240000	Z=800	100
85-01-8	Phenanthrene	Not Detected	14000		100
108-95-2	Phenol	Not Detected	46000		100
129-00-0	Pyrene	Not Detected	14000		100

Probable petroleum product(s) present.  
RLs raised due to matrix interference.

PCBs as Aroclors

Analytical Method: 8082 Date Tested: 11/20/2012 Analyst: MF  
Extraction Method: 3545 Extraction Date: 11/15/2012 Qualifier:

CAS #	Compound	Result ug/Kg dry	RL	Qualifier	Dilution Factor
SURROGATE	#Decachlorobiphenyl#	78.6			
SURROGATE	#Tetrachloro-m-xylene#	54.0			
12674-11-2	Aroclor 1016	Not Detected	1400		10

CAS# : Chemical Abstract Service Registry Number  
RL : Reporting Limit  
ND : Not Detected

ug / L : microgram / liter (ppb)  
mg / L : milligram / liter (ppm)  
ug / Kg : microgram / kilogram (ppb)  
mg / Kg : milligram / kilogram (ppm)

Laboratory Contacts  
Inorganic Unit Mgr: Kirby Shane  
Organic Unit Mgr: Carol Smith  
Systems Mgmt Unit: George Krisztian



MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY  
 ENVIRONMENTAL LABORATORY

P.O. Box 30270  
 Lansing, MI 48909  
 TEL: (517) 335-9800  
 FAX: (517) 335-9600

**Sample Number:** AC08240 W-2

**PCBs as Aroclors**

**Analytical Method:** 8082  
**Extraction Method:** 3545

**Date Tested:** 11/20/2012  
**Extraction Date:** 11/15/2012

**Analyst:** MF  
**Qualifier:**

CAS #	Compound	Result ug/Kg dry	RL	Qualifier	Dilution Factor
11104-28-2	Aroclor 1221	Not Detected	1400		10
11141-16-5	Aroclor 1232	Not Detected	1400		10
53469-21-9	Aroclor 1242	Not Detected	1400		10
12672-29-6	Aroclor 1248	Not Detected	1400		10
11097-69-1	Aroclor 1254	Not Detected	1400		10
11096-82-5	Aroclor 1260	Not Detected	1400		10
37324-23-5	Aroclor 1262	Not Detected	1400		10
11100-14-4	Aroclor 1268	Not Detected	1400		10

Reporting limits raised due to matrix.

CAS# : Chemical Abstract Service Registry Number  
 RL : Reporting Limit  
 ND : Not Detected

ug / L : microgram / liter (ppb)  
 mg / L : milligram / liter (ppm)  
 ug / Kg : microgram / kilogram (ppb)  
 mg / Kg : milligram / kilogram (ppm)

Laboratory Contacts  
 Inorganic Unit Mgr: Kirby Shane  
 Organic Unit Mgr: Carol Smith  
 Systems Mgmt Unit: George Krisztian



MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY  
 ENVIRONMENTAL LABORATORY

P.O. Box 30270  
 Lansing, MI 48909  
 TEL: (517) 335-9800  
 FAX: (517) 335-9600

**Sample Number: AC08240 W-2**

CAS#	Analyte Name	Result	Unit	RL	Qualifier	Date Tested	Method	Analyst
	Digest Mercury - Sediment	Completed				11/15/2012	7471	TB
7439-97-6	Mercury - Sediment	.38	mg/Kg dry	0.05	3	11/16/2012	7471	TS
7440-36-0	Antimony - Sediment	1.1	mg/Kg dry	0.3		11/29/2012	6020	TK
7440-38-2	Arsenic - Sediment	1300	mg/Kg dry	0.5		11/28/2012	6020	TK
7440-39-3	Barium - Sediment	29	mg/Kg dry	1		11/27/2012	6020	TK
7440-41-7	Beryllium - Sediment	0.48	mg/Kg dry	0.2		11/28/2012	6020	TK
	Result is estimated due to inter-replicate sample analysis RSD >10%.							
7440-43-9	Cadmium - Sediment	0.42	mg/Kg dry	0.2		11/27/2012	6020	TK
7440-47-3	Chromium - Sediment	35	mg/Kg dry	2		11/27/2012	6020	TK
7440-48-4	Cobalt - Sediment	69	mg/Kg dry	.5		11/27/2012	6020	TK
7440-50-8	Copper - Sediment	36000	mg/Kg dry	1		11/28/2012	6020	TK
	Digest Antimony - Sediment	Completed				11/26/2012	3050	TB
	Digest Metals - Sediment	Completed				11/26/2012	3050	TB
7439-89-6	Iron - Sediment	75000	mg/Kg dry	500	D	12/15/2012	6010	WN
7439-92-1	Lead - Sediment	15	mg/Kg dry	1		11/27/2012	6020	TK
7439-96-5	Manganese - Sediment	560	mg/Kg dry	1		11/27/2012	6020	TK
7439-98-7	Molybdenum - Sediment	140	mg/Kg dry	1		11/27/2012	6020	TK
7440-02-0	Nickel - Sediment	500	mg/Kg dry	1		11/27/2012	6020	TK
7782-49-2	Selenium - Sediment	ND	mg/Kg dry	20	I	11/28/2012	6020	TK
7440-22-4	Silver - Sediment	220	mg/Kg dry	0.1		12/06/2012	6020	TK
7440-28-0	Thallium - Sediment	ND	mg/Kg dry	0.5		11/27/2012	6020	TK
7440-62-2	Vanadium - Sediment	65	mg/Kg dry	1		11/27/2012	6020	TK
7440-66-6	Zinc - Sediment	41	mg/Kg dry	1		11/27/2012	6020	TK
	% Total Solids	72.0	%	0.1		11/19/2012	2540B SM	JW
	Drying and Grinding - Sediment	COMPLETED				11/19/2012		JW
	Gel Permeation Cleanup-Pesticide/PCB completed					11/16/2012	3640	MK
	Gel Permeation Cleanup-SVOC Analysis completed					11/20/2012	3640	MK

CAS# : Chemical Abstract Service Registry Number  
 RL : Reporting Limit  
 ND : Not Detected

ug / L : microgram / liter (ppb)  
 mg / L : milligram / liter (ppm)  
 ug / Kg : microgram / kilogram (ppb)  
 mg / Kg : milligram / kilogram (ppm)

Laboratory Contacts  
 Inorganic Unit Mgr: Kirby Shane  
 Organic Unit Mgr: Carol Smith  
 Systems Mgmt Unit: George Krisztian



MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY  
ENVIRONMENTAL LABORATORY

P.O. Box 30270  
Lansing, MI 48909  
TEL: (517) 335-9800  
FAX: (517) 335-9600

<u>Qualifier Code</u>	<u>Qualifier Description</u>
1	Result(s) and RL(s) are estimated due to low surrogate recovery.
2	Result is estimated due to high surrogate recovery.
3	Result(s) and RL(s) are estimated due to low matrix spike recovery.
4	Result is estimated due to high matrix spike recovery.
5	Result and RL are estimated due to low continuing calibration standard criteria failure.
6	Result is estimated due to high continuing calibration standard criteria failure.
7	Result(s) and RL(s) are estimated due to poor precision.
8	Result(s) and RL(s) are estimated due to low recovery of batch QC.
9	Result outside QC acceptance criteria.
A	Value reported is the mean of two or more determinations.
C	Value calculated from other independent parameters.
D	Analyte value quantified from a dilution(s); reporting limit (RL) raised.
E	Result is estimated due to high recovery of batch QC.
F	Amenable cyanide was not analyzed due to low level of total cyanide.
G	Result and RL are estimated due to initial calibration standard criteria failure.
H	Recommended laboratory holding time was exceeded.
I	Dilution required due to matrix interference; reporting limit (RL) raised.
J	Analyte was positively identified. Value is an estimate.
JA	Result is estimated due to multiple Aroclors present.
JC	Result is estimated since confirmation analysis did not meet acceptance criteria
JD	Due to severe degradation, specific Aroclor identification is difficult and quantitation is estimated.
K	RL(s) raised due to matrix interferences.
KR	RL(s) raised due to low sample volume submitted.
KS	RL(s) raised due to low total solids.
KW	RL(s) raised due to light sample weight.
LB	Reported library search compounds are tentative identifications with estimated concentrations.
M	The level of the method preparation blank (MPB) is reported in the qualifier column.
N	Non-homogeneous sample made analysis of sample questionable.
O	Result and RL estimated due to analysis from an open vial.
P	Recommended sample collection/preservation technique not used; reported result(s) is an estimate.
PI	Possible interference may have affected the accuracy of the laboratory result
Q	Quantity of sample insufficient to perform analyses requested.
R	Result confirmed by re-extraction and analysis.
S	Supernatant analyzed.
T	Reported value is less than the reporting limit (RL). Result is estimated.
V	Value not available due to dilution.
W	Reported value is less than the method detection limit (MDL).
X	Methods 8260 & 624 are used to analyze volatile organics that have boiling points below 200°C. 2-Methylnaphthalene & naphthalene have boiling points above 200°C and are better suited to analysis by methods 8270 or 625 as semivolatile organics.
Z	Result reported below the RL to meet the TDL in RRD Op Memo 2 (10/22/04) multiplied by applicable dilution factor.

CAS# : Chemical Abstract Service Registry Number  
RL : Reporting Limit  
ND : Not Detected

ug / L : microgram / liter (ppb)  
mg / L : milligram / liter (ppm)  
ug / Kg : microgram / kilogram (ppb)  
mg / Kg : milligram / kilogram (ppm)

Laboratory Contacts  
Inorganic Unit Mgr: Kirby Shane  
Organic Unit Mgr: Carol Smith  
Systems Mgmt Unit: George Krisztian



**ESAT Controlled Number:** ESAT5.417.00324 - pf 19 Dec 12

**DATE:** December 19, 2012

Michigan Department of Environmental Quality  
MDEQ - RRD Superfund  
**Attn: Mr. Joe Walczak**  
525 W. Allegan  
Constitution Hall, 4<sup>th</sup> Floor, North  
P.O. Box 30242  
Lansing, MI 48909-7742

---

**Site Name: C & H Tamarack Operations (MI) - level 3 data validation**

<u>Case</u>	<u>Lab</u>	<u>Samples</u>	<u>SDG</u>	<u>Matrix</u>
43102	A4 Scientific	20	ME3P89	soils

**Analysis: metals/Hg/CN**

---

Upon receipt of data, please check each package for completeness and note any missing deliverables below.

**PLEASE!!!! Send this form back to Sylvia Griffin, Data Management Coordinator after filling in the blanks below.**

Data Received by: \_\_\_\_\_ Date: \_\_\_\_\_

PROBLEMS:

Please indicate if data is complete, and note if there are any deliverables missing from the cases noted above.

---

Received by Data Management Coordinator, CRL for file.

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

**FROM: U.S. EPA - Region 5**  
Central Regional Laboratory  
536 S. Clark, 10th Floor  
Chicago, IL 60605

Sent By: Pat A. Joyner  
Data Coordinator  
ESAT Region 5 **TechLaw Inc.**

**RECEIVED**

**DEC 21 2012**

**SUPERFUND**

# ESAT5.415.00125

ack  
12-19-12

Regional Transmittal Form

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION V

DATE: 12/12/2012

SUBJECT: Review of Data  
Received for review on 11/29/2012

FROM: Timothy Prendiville, Supervisor, Chief (SR-6J)  
Superfund Contract Management Section

TO: Data User: MDEQ  
Email address: walczaki@michigan.gov

LEVEL 3 DATA VALIDATION

We have reviewed the data for the following case:

SITE NAME: C & H Tamarack Operations (MI)

CASE NUMBER: 43102 SDG NUMBER: ME3P89

Number and Type of Samples: 20 soils (metals/Hg/CN)

Sample Numbers: ME3P89 - 99, A0 - A4, A9, B0 - B1, B3

Laboratory: A4 Scientific Hrs. for Review: 23.0

+ 2.0

Following are our findings:

CC: Howard Pham  
Region 5 TPO  
Mail Code: SA-5J

**Below is a summary of the out-of-control audits and the possible effects on the data for this case:**

Twenty (20) soil samples, numbered ME3P89 – 99, A0 – A4, A9, B0 – B1, and B3, were collected November 5 – 6, 2012. The lab received the samples on November 8, 2012 in good condition. All samples were analyzed for metals and cyanide. All samples were analyzed using the CLP SOW ISM01.3 analysis procedures.

Mercury analysis was performed using a Cold Vapor AA Technique. Cyanide analysis was performed using the MIDI Distillation procedure. The remaining inorganic analyses were performed using an Inductively Coupled Plasma-Atomic Emission Spectroscopy (ICP-AES) procedure.

For samples ME3P97 and ME3P99, the raw thallium values were more negative than the absolute value of the CRQL and would have been rejected. Dilutions were performed for elements with concentrations over the calibration limit. The raw thallium values in the diluted samples were less negative than the absolute value of the CRQL. The reported results were changed to the dilutions by this reviewer. EXES does not allow the reviewer to change the dilution for a sample, so EXES does not have the proper dilution factor reported.

Dates and times for all samples were not present on the Chain of Custody/Traffic Report. Sample dates and times are found on sample tags.

For samples ME3P96 and ME3PA9, the percent solids were reported as 81.9% and 88.7%, respectively, on Form 1. ESAT calculated the percent solids values as 82.2% and 89.1%. Reported ICP-AES results were calculated using 81.9% and 88.7% solids. The reported values in EXES have been changed by the reviewer to reflect 82.2% and 89.1% percent solids.

**1. HOLDING TIME:**

No defects were found.

**2. CALIBRATIONS:**

No defects were found for the calibrations.

**3. BLANKS:**

No defects were found for the preparation blank or ICB/CCBs.

**4. MATRIX SPIKE/MATRIX SPIKE DUPLICATE AND LAB CONTROL SAMPLE:**

The following inorganic samples are associated with a matrix spike recovery which is low (30-74%) indicating that sample results may be biased low. The required post spike was performed and results were greater than or equal to 75%.

Hits are qualified "J" and non-detects are qualified "UJ".

**Antimony**

ME3P89, ME3P90, ME3P91, ME3P92, ME3P93, ME3P94, ME3P95, ME3P96,  
ME3P97, ME3P98, ME3P99, ME3PA0, ME3PA1, ME3PA2, ME3PA3, ME3PA4,  
ME3PA9, ME3PB0, ME3PB1, ME3PB3

**Arsenic**

ME3P89, ME3P90, ME3P91, ME3P92, ME3P93, ME3P94, ME3P95, ME3P96,  
ME3P97, ME3P98, ME3P99, ME3PA0, ME3PA1, ME3PA2, ME3PA3, ME3PA4,  
ME3PA9, ME3PB0, ME3PB1, ME3PB3

**Cadmium**

ME3P89, ME3P90, ME3P91, ME3P92, ME3P93, ME3P94, ME3P95, ME3P96,  
ME3P97, ME3P98, ME3P99, ME3PA0, ME3PA1, ME3PA2, ME3PA3, ME3PA4,  
ME3PA9, ME3PB0, ME3PB1, ME3PB3

**Cobalt**

ME3P89, ME3P90, ME3P91, ME3P92, ME3P93, ME3P94, ME3P95, ME3P96,  
ME3P97, ME3P98, ME3P99, ME3PA0, ME3PA1, ME3PA2, ME3PA3, ME3PA4,  
ME3PA9, ME3PB0, ME3PB1, ME3PB3

**Nickel**

ME3P89, ME3P90, ME3P91, ME3P92, ME3P93, ME3P94, ME3P95, ME3P96,  
ME3P97, ME3P98, ME3P99, ME3PA0, ME3PA1, ME3PA2, ME3PA3, ME3PA4,  
ME3PA9, ME3PB0, ME3PB1, ME3PB3

**Selenium**

ME3P89, ME3P90, ME3P91, ME3P92, ME3P93, ME3P94, ME3P95, ME3P96,  
ME3P97, ME3P98, ME3P99, ME3PA0, ME3PA1, ME3PA2, ME3PA3, ME3PA4,

ME3PA9, ME3PB0, ME3PB1, ME3PB3

#### Zinc

ME3P89, ME3P90, ME3P91, ME3P92, ME3P93, ME3P94, ME3P95, ME3P96,  
ME3P97, ME3P98, ME3P99, ME3PA0, ME3PA1, ME3PA2, ME3PA3, ME3PA4,  
ME3PA9, ME3PB0, ME3PB1, ME3PB3

The following inorganic samples are associated with a matrix spike recovery which is low (30-74%) indicating that sample results may be biased low. The required post spike was performed and results were less than 75%.

Hits are qualified "J-" and non-detects are qualified "UJ".

#### Thallium

ME3P89, ME3P90, ME3P91, ME3P92, ME3P93, ME3P94, ME3P95, ME3P96,  
ME3P97, ME3P98, ME3P99, ME3PA0, ME3PA1, ME3PA2, ME3PA3, ME3PA4,  
ME3PA9, ME3PB0, ME3PB1, ME3PB3

The following inorganic samples are associated with a matrix spike recovery which is extremely low (<30%) indicating that sample results may be biased low. The required post spike was performed and results were greater than or equal to 75%.

Hits are qualified "J" and non-detects are qualified "UJ".

#### Barium

ME3P89, ME3P90, ME3P91, ME3P92, ME3P93, ME3P94, ME3P95, ME3P96,  
ME3P97, ME3P98, ME3P99, ME3PA0, ME3PA1, ME3PA2, ME3PA3, ME3PA4,  
ME3PA9, ME3PB0, ME3PB1, ME3PB3

#### Beryllium

ME3P89, ME3P90, ME3P91, ME3P92, ME3P93, ME3P94, ME3P95, ME3P96,  
ME3P97, ME3P98, ME3P99, ME3PA0, ME3PA1, ME3PA2, ME3PA3, ME3PA4,  
ME3PA9, ME3PB0, ME3PB1, ME3PB3

#### Manganese

ME3P89, ME3P90, ME3P91, ME3P92, ME3P93, ME3P94, ME3P95, ME3P96,  
ME3P97, ME3P98, ME3P99, ME3PA0, ME3PA1, ME3PA2, ME3PA3, ME3PA4,  
ME3PA9, ME3PB0, ME3PB1, ME3PB3

#### Vanadium

ME3P89, ME3P90, ME3P91, ME3P92, ME3P93, ME3P94, ME3P95, ME3P96,  
ME3P97, ME3P98, ME3P99, ME3PA0, ME3PA1, ME3PA2, ME3PA3, ME3PA4,  
ME3PA9, ME3PB0, ME3PB1, ME3PB3

The following inorganic samples are associated with a matrix spike recovery which is extremely low (<30%) indicating that sample results may be biased low. The required post spike was performed and results were less than 75%.

Hits are qualified "J-" and non-detects are qualified "R".

Chromium

ME3P89, ME3P90, ME3P91, ME3P92, ME3P93, ME3P94, ME3P95, ME3P96,  
ME3P97, ME3P98, ME3P99, ME3PA0, ME3PA1, ME3PA2, ME3PA3, ME3PA4,  
ME3PA9, ME3PB0, ME3PB1, ME3PB3

The following inorganic samples are associated with a matrix spike recovery which is extremely low (<30%) indicating that sample results may be biased low. No post spike was required.

Hits are qualified "J-" and non-detects are qualified "R".

Silver

ME3P89, ME3P90, ME3P91, ME3P92, ME3P93, ME3P94, ME3P95, ME3P96,  
ME3P97, ME3P98, ME3P99, ME3PA0, ME3PA1, ME3PA2, ME3PA3, ME3PA4,  
ME3PA9, ME3PB0, ME3PB1, ME3PB3

No defects were found for the laboratory control sample.

**5. LABORATORY AND FIELD DUPLICATE:**

No defects were found for the laboratory duplicate samples.

ME3P90/91 and ME3PB0/B1 are field duplicate pairs. The following inorganic analytes are associated with field duplicate results which did not meet technical data validation criteria; however, no sample results are qualified for field duplicates.

ME3P90/91

Chromium, Manganese

ME3PB0/B1

Lead

**6. ICP ANALYSIS:**

The following inorganic samples are associated with negative sample results whose absolute values are greater than the CRQL, indicating interference. Dilutions performed for other elements were no longer greater than the CRQL. Undiluted results would have been considered rejected "R"; reported results were changed to diluted values by this reviewer. Detection limits for reported results are elevated.

Non-detects are qualified "U".

Thallium

ME3P97, ME3P99

No defects were found for the serial dilution or ICS samples.

## 7. SAMPLE RESULTS:

The following inorganic samples have analyte concentrations reported above the method detection limit (MDL) but below the quantitation limit (CRQL).

Results are qualified "J".

### Antimony

ME3P99, ME3PA4

### Barium

ME3P89

### Beryllium

ME3P90, ME3P97, ME3PA4

### Cadmium

ME3P89, ME3P90, ME3P91, ME3P96, ME3P98, ME3PA1, ME3PA2, ME3PB0,  
ME3PB1

### Cobalt

ME3P96, ME3P98, ME3PA4

### Mercury

ME3P89, ME3P90, ME3P91, ME3P98, ME3PA1, ME3PA2, ME3PB0, ME3PB1

### Potassium

ME3P89, ME3P90, ME3P91, ME3P92, ME3P94, ME3P95, ME3P96, ME3P97,  
ME3P98, ME3PA0, ME3PA1, ME3PA2, ME3PA3, ME3PA4, ME3PA9, ME3PB0,  
ME3PB1, ME3PB3

### Selenium

ME3P93, ME3P94, ME3P97, ME3P99, ME3PA0, ME3PA3, ME3PA4

### Silver

ME3P95, ME3PA0, ME3PA3, ME3PA4

### Sodium

ME3P93, ME3P97, ME3PB0, ME3PB1

All data, except those qualified above, are acceptable.

### **EXES ISM01.3 Data Qualifier Sheet**

<u>Qualifiers</u>	<u>Data Qualifier Definitions</u>
U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
J	The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
J+	The result is an estimated quantity, but the result may be biased high.
J-	The result is an estimated quantity, but the result may be biased low.
R	The data are unusable. The sample results are rejected due to serious deficiencies in meeting Quality Control (QC) criteria. The analyte may or may not be present in the sample.
UJ	The analyte was analyzed for, but not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.



# Sample Summary Report

Case No: 43102	Contract: EPW09035	SDG No: ME3P89	Lab Code: A4
Sample Number: ME3P89	Method: ICP_AES	Matrix: Soil	MA Number: DEFAULT
Sample Location: SS-01	pH:	Sample Date: 11062012	Sample Time: 16:33:00
% Moisture :		% Solids : 87.3	

	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	4940	mg/kg	1			Yes	S2BVE
Antimony	6.7	mg/kg	1	UN	UJ	Yes	S2BVE
Arsenic	1.8	mg/kg	1	N	J	Yes	S2BVE
Barium	20.3	mg/kg	1	JN	J	Yes	S2BVE
Beryllium	0.56	mg/kg	1	UN	UJ	Yes	S2BVE
Cadmium	0.19	mg/kg	1	JN	J	Yes	S2BVE
Calcium	3360	mg/kg	1			Yes	S2BVE
Chromium	11.6	mg/kg	1	N	J-	Yes	S2BVE
Cobalt	7.3	mg/kg	1	N	J	Yes	S2BVE
Copper	448	mg/kg	1			Yes	S2BVE
Iron	7720	mg/kg	1			Yes	S2BVE
Lead	10.1	mg/kg	1			Yes	S2BVE
Magnesium	4600	mg/kg	1			Yes	S2BVE
Manganese	157	mg/kg	1	N	J	Yes	S2BVE
Nickel	11.4	mg/kg	1	N	J	Yes	S2BVE
Potassium	376	mg/kg	1	J	J	Yes	S2BVE
Selenium	3.9	mg/kg	1	UN	UJ	Yes	S2BVE
Silver	1.1	mg/kg	1	UN	R	Yes	S2BVE
Sodium	556	mg/kg	1	U	U	Yes	S2BVE
Thallium	2.8	mg/kg	1	UN	UJ	Yes	S2BVE
Vanadium	17.9	mg/kg	1	N	J	Yes	S2BVE
Zinc	35.8	mg/kg	1	N	J	Yes	S2BVE

Case No:	43102	Contract:	EPW09035	SDG No:	ME3P89	Lab Code:	A4
Sample Number:	ME3P89	Method:	CN	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	SS-01	pH:		Sample Date:	11062012	Sample Time:	16:33:00
% Moisture :		% Solids :			87.3		

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Cyanide	0.56	mg/kg	1	U	U	Yes	S2BVE

Case No:	43102	Contract:	EPW09035	SDG No:	ME3P89	Lab Code:	A4
Sample Number:	ME3P89	Method:	Hg	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	SS-01	pH:		Sample Date:	11062012	Sample Time:	16:33:00
% Moisture :		% Solids :	87.3				

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Mercury	0.030	mg/kg	1	J	J	Yes	S2BVE

Case No:	43102	Contract:	EPW09035	SDG No:	ME3P89	Lab Code:	A4
Sample Number:	ME3P90	Method:	Hg	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	SS-02	pH:		Sample Date:	11052012	Sample Time:	11:23:00
% Moisture :		% Solids :	86.5				

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Mercury	0.082	mg/kg	1	J	J	Yes	S2BVE

Case No:	43102	Contract:	EPW09035	SDG No:	ME3P89	Lab Code:	A4
Sample Number:	ME3P90	Method:	ICP_AES	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	SS-02	pH:		Sample Date:	11052012	Sample Time:	11:23:00
% Moisture :				% Solids :	86.5		

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	5290	mg/kg	1			Yes	S2BVE
Antimony	6.7	mg/kg	1	UN	UJ	Yes	S2BVE
Arsenic	13.1	mg/kg	1	N	J	Yes	S2BVE
Barium	106	mg/kg	1	N	J	Yes	S2BVE
Beryllium	0.41	mg/kg	1	JN	J	Yes	S2BVE
Cadmium	0.45	mg/kg	1	JN	J	Yes	S2BVE
Calcium	3710	mg/kg	1			Yes	S2BVE
Chromium	16.1	mg/kg	1	N	J-	Yes	S2BVE
Cobalt	5.7	mg/kg	1	N	J	Yes	S2BVE
Copper	511	mg/kg	1			Yes	S2BVE
Iron	13800	mg/kg	1			Yes	S2BVE
Lead	32.3	mg/kg	1			Yes	S2BVE
Magnesium	2480	mg/kg	1			Yes	S2BVE
Manganese	202	mg/kg	1	N	J	Yes	S2BVE
Nickel	12.5	mg/kg	1	N	J	Yes	S2BVE
Potassium	436	mg/kg	1	J	J	Yes	S2BVE
Selenium	6.1	mg/kg	1	N	J	Yes	S2BVE
Silver	1.1	mg/kg	1	UN	R	Yes	S2BVE
Sodium	561	mg/kg	1	U	U	Yes	S2BVE
Thallium	2.8	mg/kg	1	UN	UJ	Yes	S2BVE
Vanadium	20.2	mg/kg	1	N	J	Yes	S2BVE
Zinc	39.3	mg/kg	1	N	J	Yes	S2BVE

Case No:	43102	Contract:	EPW09035	SDG No:	ME3P89	Lab Code:	A4
Sample Number:	ME3P90	Method:	CN	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	SS-02	pH:		Sample Date:	11052012	Sample Time:	11:23:00
% Moisture :		% Solids :		86.5			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Cyanide	0.56	mg/kg	1	U	U	Yes	S2BVE

Case No:	43102	Contract:	EPW09035	SDG No:	ME3P89	Lab Code:	A4
Sample Number:	ME3P91	Method:	ICP_AES	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	SS-02D	pH:		Sample Date:	11052012	Sample Time:	11:23:00
% Moisture :		% Solids :	89.5				

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	4900	mg/kg	1			Yes	S2BVE
Antimony	6.5	mg/kg	1	UN	UJ	Yes	S2BVE
Arsenic	15.9	mg/kg	1	N	J	Yes	S2BVE
Barium	139	mg/kg	1	N	J	Yes	S2BVE
Beryllium	0.59	mg/kg	1	N	J	Yes	S2BVE
Cadmium	0.46	mg/kg	1	JN	J	Yes	S2BVE
Calcium	4370	mg/kg	1			Yes	S2BVE
Chromium	8.5	mg/kg	1	N	J-	Yes	S2BVE
Cobalt	5.9	mg/kg	1	N	J	Yes	S2BVE
Copper	528	mg/kg	1			Yes	S2BVE
Iron	11800	mg/kg	1			Yes	S2BVE
Lead	41.1	mg/kg	1			Yes	S2BVE
Magnesium	2440	mg/kg	1			Yes	S2BVE
Manganese	121	mg/kg	1	N	J	Yes	S2BVE
Nickel	11.4	mg/kg	1	N	J	Yes	S2BVE
Potassium	444	mg/kg	1	J	J	Yes	S2BVE
Selenium	8.2	mg/kg	1	N	J	Yes	S2BVE
Silver	1.1	mg/kg	1	UN	R	Yes	S2BVE
Sodium	542	mg/kg	1	U	U	Yes	S2BVE
Thallium	2.7	mg/kg	1	UN	UJ	Yes	S2BVE
Vanadium	15.6	mg/kg	1	N	J	Yes	S2BVE
Zinc	33.0	mg/kg	1	N	J	Yes	S2BVE

Case No:	43102	Contract:	EPW09035	SDG No:	ME3P89	Lab Code:	A4
Sample Number:	ME3P91	Method:	Hg	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	SS-02D	pH:		Sample Date:	11052012	Sample Time:	11:23:00
% Moisture :				% Solids :	89.5		

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Mercury	0.084	mg/kg	1	J	J	Yes	S2BVE



Case No:	43102	Contract:	EPW09035	SDG No:	ME3P89	Lab Code:	A4
Sample Number:	ME3P91	Method:	CN	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	SS-02D	pH:		Sample Date:	11052012	Sample Time:	11:23:00
% Moisture :		% Solids :			89.5		

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Cyanide	0.54	mg/kg	1	U	U	Yes	S2BVE

Case No:	43102	Contract:	EPW09035	SDG No:	ME3P89	Lab Code:	A4
Sample Number:	ME3P92	Method:	ICP_AES	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	SS-03	pH:		Sample Date:	11052012	Sample Time:	12:23:00
% Moisture :				% Solids :	47.3		

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	10400	mg/kg	1			Yes	S2BVE
Antimony	12.7	mg/kg	1	UN	UJ	Yes	S2BVE
Arsenic	8.2	mg/kg	1	N	J	Yes	S2BVE
Barium	67.8	mg/kg	1	N	J	Yes	S2BVE
Beryllium	1.1	mg/kg	1	UN	UJ	Yes	S2BVE
Cadmium	1.3	mg/kg	1	N	J	Yes	S2BVE
Calcium	11400	mg/kg	1			Yes	S2BVE
Chromium	21.9	mg/kg	1	N	J-	Yes	S2BVE
Cobalt	14.5	mg/kg	1	N	J	Yes	S2BVE
Copper	5180	mg/kg	1			Yes	S2BVE
Iron	21000	mg/kg	1			Yes	S2BVE
Lead	504	mg/kg	1			Yes	S2BVE
Magnesium	9130	mg/kg	1			Yes	S2BVE
Manganese	425	mg/kg	1	N	J	Yes	S2BVE
Nickel	31.9	mg/kg	1	N	J	Yes	S2BVE
Potassium	571	mg/kg	1	J	J	Yes	S2BVE
Selenium	7.4	mg/kg	1	UN	UJ	Yes	S2BVE
Silver	3.2	mg/kg	1	N	J-	Yes	S2BVE
Sodium	1060	mg/kg	1	U	U	Yes	S2BVE
Thallium	5.3	mg/kg	1	UN	UJ	Yes	S2BVE
Vanadium	26.0	mg/kg	1	N	J	Yes	S2BVE
Zinc	187	mg/kg	1	N	J	Yes	S2BVE

Case No:	43102	Contract:	EPW09035	SDG No:	ME3P89	Lab Code:	A4
Sample Number:	ME3P92	Method:	CN	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	SS-03	pH:		Sample Date:	11052012	Sample Time:	12:23:00
% Moisture :		% Solids :			47.3		

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Cyanide	1.1	mg/kg	1	U	U	Yes	S2BVE

Case No:	43102	Contract:	EPW09035	SDG No:	ME3P89	Lab Code:	A4
Sample Number:	ME3P92	Method:	Hg	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	SS-03	pH:		Sample Date:	11052012	Sample Time:	12:23:00
% Moisture :		% Solids :	47.3				

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Mercury	0.38	mg/kg	1			Yes	S2BVE

Case No:	43102	Contract:	EPW09035	SDG No:	ME3P89	Lab Code:	A4
Sample Number:	ME3P92D	Method:	Hg	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:		pH:		Sample Date:	11052012	Sample Time:	12:23:00
% Moisture :				% Solids :	47.3		

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Mercury	0.38	mg/kg	1			Yes	S2BVE

Case No:	43102	Contract:	EPW09035	SDG No:	ME3P89	Lab Code:	A4
Sample Number:	ME3P92D	Method:	ICP_AES	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:		pH:		Sample Date:	11052012	Sample Time:	12:23:00
% Moisture :				% Solids :	47.3		

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	11500	mg/kg	1			Yes	S2BVE
Antimony	12.7	mg/kg	1	U	U	Yes	S2BVE
Arsenic	7.5	mg/kg	1			Yes	S2BVE
Barium	77.5	mg/kg	1			Yes	S2BVE
Beryllium	1.1	mg/kg	1	U	U	Yes	S2BVE
Cadmium	1.4	mg/kg	1			Yes	S2BVE
Calcium	11900	mg/kg	1			Yes	S2BVE
Chromium	22.9	mg/kg	1			Yes	S2BVE
Cobalt	14.9	mg/kg	1			Yes	S2BVE
Copper	5490	mg/kg	3	D		Yes	S2BVE
Iron	22200	mg/kg	1			Yes	S2BVE
Lead	463	mg/kg	1			Yes	S2BVE
Magnesium	9590	mg/kg	1			Yes	S2BVE
Manganese	479	mg/kg	1			Yes	S2BVE
Nickel	33.5	mg/kg	1			Yes	S2BVE
Potassium	629	mg/kg	1	J	J	Yes	S2BVE
Selenium	7.4	mg/kg	1	U	U	Yes	S2BVE
Silver	3.7	mg/kg	1			Yes	S2BVE
Sodium	1060	mg/kg	1	U	U	Yes	S2BVE
Thallium	5.3	mg/kg	1	U	U	Yes	S2BVE
Vanadium	25.7	mg/kg	1			Yes	S2BVE
Zinc	202	mg/kg	1			Yes	S2BVE

Case No:	43102	Contract:	EPW09035	SDG No:	ME3P89	Lab Code:	A4
Sample Number:	ME3P92D	Method:	CN	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	SS-03	pH:		Sample Date:	11052012	Sample Time:	12:23:00
% Moisture :		% Solids :	47.3				

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Cyanide	1.1	mg/kg	1	U	U	Yes	S2BVE

Case No:	43102	Contract:	EPW09035	SDG No:	ME3P89	Lab Code:	A4
Sample Number:	ME3P92S	Method:	CN	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	SS-03	pH:		Sample Date:	11052012	Sample Time:	12:23:00
% Moisture :		% Solids :			47.3		

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Cyanide	12.3	mg/kg	1			Yes	S2BVE



Case No:	43102	Contract:	EPW09035	SDG No:	ME3P89	Lab Code:	A4
Sample Number:	ME3P92S	Method:	ICP_AES	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:		pH:		Sample Date:	11052012	Sample Time:	12:23:00
% Moisture :				% Solids :	47.3		

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	
Antimony	21.9	mg/kg	1	N		Yes	S2BVE
Arsenic	17.1	mg/kg	1	N		Yes	S2BVE
Barium	153	mg/kg	1	N		Yes	S2BVE
Beryllium	1.9	mg/kg	1	N		Yes	S2BVE
Cadmium	12.4	mg/kg	1	N		Yes	S2BVE
Chromium	32.8	mg/kg	1	N		Yes	S2BVE
Cobalt	134	mg/kg	1	N		Yes	S2BVE
Copper	5130	mg/kg	1			Yes	S2BVE
Lead	502	mg/kg	1			Yes	S2BVE
Manganese	451	mg/kg	1	N		Yes	S2BVE
Nickel	151	mg/kg	1	N		Yes	S2BVE
Selenium	14.6	mg/kg	1	N		Yes	S2BVE
Silver	6.1	mg/kg	1	N		Yes	S2BVE
Thallium	8.6	mg/kg	1	N		Yes	S2BVE
Vanadium	53.8	mg/kg	1	N		Yes	S2BVE
Zinc	305	mg/kg	1	N		Yes	S2BVE

Case No:	43102	Contract:	EPW09035	SDG No:	ME3P89	Lab Code:	A4
Sample Number:	ME3P92S	Method:	Hg	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:		pH:		Sample Date:	11052012	Sample Time:	12:23:00
% Moisture :				% Solids :	47.3		

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Mercury	1.4	mg/kg	1			Yes	S2BVE

Case No:	43102	Contract:	EPW09035	SDG No:	ME3P89	Lab Code:	A4
Sample Number:	ME3P93	Method:	Hg	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	SS-04	pH:		Sample Date:	11052012	Sample Time:	14:10:00
% Moisture :		% Solids :			85.5		

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Mercury	3.2	mg/kg	2	D		Yes	S2BVE

Case No:	43102	Contract:	EPW09035	SDG No:	ME3P89	Lab Code:	A4
Sample Number:	ME3P93	Method:	ICP_AES	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	SS-04	pH:		Sample Date:	11052012	Sample Time:	14:10:00
% Moisture :		% Solids :	85.5				

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	8140	mg/kg	1			Yes	S2BVE
Antimony	34.3	mg/kg	1	N	J	Yes	S2BVE
Arsenic	8.2	mg/kg	1	N	J	Yes	S2BVE
Barium	687	mg/kg	1	N	J	Yes	S2BVE
Beryllium	0.57	mg/kg	1	UN	UJ	Yes	S2BVE
Cadmium	9.7	mg/kg	1	N	J	Yes	S2BVE
Calcium	6700	mg/kg	1			Yes	S2BVE
Chromium	32.0	mg/kg	1	N	J-	Yes	S2BVE
Cobalt	13.0	mg/kg	1	N	J	Yes	S2BVE
Copper	124000	mg/kg	50	D		Yes	S2BVE
Iron	19100	mg/kg	1			Yes	S2BVE
Lead	5680	mg/kg	50	D		Yes	S2BVE
Magnesium	9230	mg/kg	1			Yes	S2BVE
Manganese	344	mg/kg	1	N	J	Yes	S2BVE
Nickel	86.3	mg/kg	1	N	J	Yes	S2BVE
Potassium	568	mg/kg	1	U	U	Yes	S2BVE
Selenium	3.8	mg/kg	1	JN	J	Yes	S2BVE
Silver	9.0	mg/kg	1	N	J-	Yes	S2BVE
Sodium	230	mg/kg	1	J	J	Yes	S2BVE
Thallium	2.8	mg/kg	1	UN	UJ	Yes	S2BVE
Vanadium	18.6	mg/kg	1	N	J	Yes	S2BVE
Zinc	2500	mg/kg	1	N	J	Yes	S2BVE

Case No:	43102	Contract:	EPW09035	SDG No:	ME3P89	Lab Code:	A4
Sample Number:	ME3P93	Method:	CN	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	SS-04	pH:		Sample Date:	11052012	Sample Time:	14:10:00
% Moisture :		% Solids :		85.5			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Cyanide	0.57	mg/kg	1	U	U	Yes	S2BVE

Case No:	43102	Contract:	EPW09035	SDG No:	ME3P89	Lab Code:	A4
Sample Number:	ME3P94	Method:	ICP_AES	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	SS-05	pH:		Sample Date:	11052012	Sample Time:	15:14:00
% Moisture :				% Solids :	91.8		

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	8730	mg/kg	1			Yes	S2BVE
Antimony	6.4	mg/kg	1	UN	UJ	Yes	S2BVE
Arsenic	434	mg/kg	1	N	J	Yes	S2BVE
Barium	55.2	mg/kg	1	N	J	Yes	S2BVE
Beryllium	0.53	mg/kg	1	UN	UJ	Yes	S2BVE
Cadmium	4.4	mg/kg	1	N	J	Yes	S2BVE
Calcium	7070	mg/kg	1			Yes	S2BVE
Chromium	27.7	mg/kg	1	N	J-	Yes	S2BVE
Cobalt	15.1	mg/kg	1	N	J	Yes	S2BVE
Copper	316000	mg/kg	200	D		Yes	S2BVE
Iron	39000	mg/kg	3	D		Yes	S2BVE
Lead	448	mg/kg	50	D		Yes	S2BVE
Magnesium	9210	mg/kg	1			Yes	S2BVE
Manganese	304	mg/kg	1	N	J	Yes	S2BVE
Nickel	24.9	mg/kg	1	N	J	Yes	S2BVE
Potassium	463	mg/kg	1	J	J	Yes	S2BVE
Selenium	2.2	mg/kg	1	JN	J	Yes	S2BVE
Silver	591	mg/kg	3	D,N	J-	Yes	S2BVE
Sodium	1080	mg/kg	1			Yes	S2BVE
Thallium	2.7	mg/kg	1	UN	UJ	Yes	S2BVE
Vanadium	14.6	mg/kg	1	N	J	Yes	S2BVE
Zinc	161	mg/kg	1	N	J	Yes	S2BVE

Case No:	43102	Contract:	EPW09035	SDG No:	ME3P89	Lab Code:	A4
Sample Number:	ME3P94	Method:	Hg	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	SS-05	pH:		Sample Date:	11052012	Sample Time:	15:14:00
% Moisture :		% Solids :		91.8			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Mercury	0.20	mg/kg	1			Yes	S2BVE

Case No:	43102	Contract:	EPW09035	SDG No:	ME3P89	Lab Code:	A4
Sample Number:	ME3P94	Method:	CN	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	SS-05	pH:		Sample Date:	11052012	Sample Time:	15:14:00
% Moisture :		% Solids :		91.8			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Cyanide	0.53	mg/kg	1	U	U	Yes	S2BVE



Case No:	43102	Contract:	EPW09035	SDG No:	ME3P89	Lab Code:	A4
Sample Number:	ME3P95	Method:	ICP_AES	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	SS-06	pH:		Sample Date:	11062012	Sample Time:	09:06:00
% Moisture :		% Solids :	82.8				

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	4720	mg/kg	1			Yes	S2BVE
Antimony	7.1	mg/kg	1	UN	UJ	Yes	S2BVE
Arsenic	6.6	mg/kg	1	N	J	Yes	S2BVE
Barium	142	mg/kg	1	N	J	Yes	S2BVE
Beryllium	0.59	mg/kg	1	UN	UJ	Yes	S2BVE
Cadmium	1.4	mg/kg	1	N	J	Yes	S2BVE
Calcium	4160	mg/kg	1			Yes	S2BVE
Chromium	12.0	mg/kg	1	N	J-	Yes	S2BVE
Cobalt	7.3	mg/kg	1	N	J	Yes	S2BVE
Copper	946	mg/kg	1			Yes	S2BVE
Iron	10500	mg/kg	1			Yes	S2BVE
Lead	200	mg/kg	1			Yes	S2BVE
Magnesium	4040	mg/kg	1			Yes	S2BVE
Manganese	208	mg/kg	1	N	J	Yes	S2BVE
Nickel	15.8	mg/kg	1	N	J	Yes	S2BVE
Potassium	297	mg/kg	1	J	J	Yes	S2BVE
Selenium	4.1	mg/kg	1	UN	UJ	Yes	S2BVE
Silver	1.0	mg/kg	1	JN	J-	Yes	S2BVE
Sodium	592	mg/kg	1	U	U	Yes	S2BVE
Thallium	3.0	mg/kg	1	UN	UJ	Yes	S2BVE
Vanadium	17.8	mg/kg	1	N	J	Yes	S2BVE
Zinc	325	mg/kg	1	N	J	Yes	S2BVE

Case No:	43102	Contract:	EPW09035	SDG No:	ME3P89	Lab Code:	A4
Sample Number:	ME3P95	Method:	CN	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	SS-06	pH:		Sample Date:	11062012	Sample Time:	09:06:00
% Moisture :		% Solids :			82.8		

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Cyanide	0.59	mg/kg	1	U	U	Yes	S2BVE

Case No:	43102	Contract:	EPW09035	SDG No:	ME3P89	Lab Code:	A4
Sample Number:	ME3P95	Method:	Hg	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	SS-06	pH:		Sample Date:	11062012	Sample Time:	09:06:00
% Moisture :				% Solids :	82.8		

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Mercury	1.9	mg/kg	1			Yes	S2BVE

Case No:	43102	Contract:	EPW09035	SDG No:	ME3P89	Lab Code:	A4
Sample Number:	ME3P96	Method:	ICP_AES	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	SS-07	pH:		Sample Date:	11062012	Sample Time:	08:30:00
% Moisture :				% Solids :	81.9		

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	2350	mg/kg	1			Yes	S2BVE
Antimony	7.1	mg/kg	1	UN	UJ	Yes	S2BVE
Arsenic	4.8	mg/kg	1	N	J	Yes	S2BVE
Barium	29.2	mg/kg	1	N	J	Yes	S2BVE
Beryllium	0.59	mg/kg	1	UN	UJ	Yes	S2BVE
Cadmium	0.31	mg/kg	1	JN	J	Yes	S2BVE
Calcium	1920	mg/kg	1			Yes	S2BVE
Chromium	7.1	mg/kg	1	N	J-	Yes	S2BVE
Cobalt	2.9	mg/kg	1	JN	J	Yes	S2BVE
Copper	4290	mg/kg	5	D		Yes	S2BVE
Iron	9070	mg/kg	1			Yes	S2BVE
Lead	400	mg/kg	1			Yes	S2BVE
Magnesium	1710	mg/kg	1			Yes	S2BVE
Manganese	81.2	mg/kg	1	N	J	Yes	S2BVE
Nickel	8.6	mg/kg	1	N	J	Yes	S2BVE
Potassium	195	mg/kg	1	J	J	Yes	S2BVE
Selenium	4.1	mg/kg	1	UN	UJ	Yes	S2BVE
Silver	7.4	mg/kg	1	N	J-	Yes	S2BVE
Sodium	591	mg/kg	1	U	U	Yes	S2BVE
Thallium	3.0	mg/kg	1	UN	UJ	Yes	S2BVE
Vanadium	8.5	mg/kg	1	N	J	Yes	S2BVE
Zinc	49.3	mg/kg	1	N	J	Yes	S2BVE

Case No:	43102	Contract:	EPW09035	SDG No:	ME3P89	Lab Code:	A4
Sample Number:	ME3P96	Method:	Hg	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	SS-07	pH:		Sample Date:	11062012	Sample Time:	08:30:00
% Moisture :				% Solids :	81.9		

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Mercury	0.24	mg/kg	1			Yes	S2BVE

Case No:	43102	Contract:	EPW09035	SDG No:	ME3P89	Lab Code:	A4
Sample Number:	ME3P96	Method:	CN	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	SS-07	pH:		Sample Date:	11062012	Sample Time:	08:30:00
% Moisture :		% Solids :			81.9		

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Cyanide	0.59	mg/kg	1	U	U	Yes	S2BVE

Case No:	43102	Contract:	EPW09035	SDG No:	ME3P89	Lab Code:	A4
Sample Number:	ME3P97	Method:	Hg	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	SS-08	pH:		Sample Date:	11062012	Sample Time:	11:00:00
% Moisture :				% Solids :	79.7		

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Mercury	2.1	mg/kg	1			Yes	S2BVE

Case No:	43102	Contract:	EPW09035	SDG No:	ME3P89	Lab Code:	A4
Sample Number:	ME3P97	Method:	ICP_AES	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	SS-08	pH:		Sample Date:	11062012	Sample Time:	11:00:00
% Moisture :				% Solids :	79.7		

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	9360	mg/kg	1			Yes	S2BVE
Antimony	7.4	mg/kg	1	UN	UJ	Yes	S2BVE
Arsenic	15.8	mg/kg	1	N	J	Yes	S2BVE
Barium	543	mg/kg	1	N	J	Yes	S2BVE
Beryllium	0.42	mg/kg	1	JN	J	Yes	S2BVE
Cadmium	3.1	mg/kg	1	N	J	Yes	S2BVE
Calcium	54200	mg/kg	1			Yes	S2BVE
Chromium	38.0	mg/kg	1	N	J-	Yes	S2BVE
Cobalt	13.2	mg/kg	1	N	J	Yes	S2BVE
Copper	21500	mg/kg	10	D		Yes	S2BVE
Iron	35400	mg/kg	1			Yes	S2BVE
Lead	2000	mg/kg	1			Yes	S2BVE
Magnesium	8310	mg/kg	1			Yes	S2BVE
Manganese	1010	mg/kg	1	N	J	Yes	S2BVE
Nickel	39.5	mg/kg	1	N	J	Yes	S2BVE
Potassium	404	mg/kg	1	J	J	Yes	S2BVE
Selenium	2.5	mg/kg	1	JN	J	Yes	S2BVE
Silver	10.5	mg/kg	1	N	J-	Yes	S2BVE
Sodium	191	mg/kg	1	J	J	Yes	S2BVE
Thallium	30.8	mg/kg	1	UN	UJ	Yes	S2BVE
Vanadium	21.2	mg/kg	1	N	J	Yes	S2BVE
Zinc	1880	mg/kg	1	N	J	Yes	S2BVE



Case No:	43102	Contract:	EPW09035	SDG No:	ME3P89	Lab Code:	A4
Sample Number:	ME3P97	Method:	CN	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	SS-08	pH:		Sample Date:	11062012	Sample Time:	11:00:00
% Moisture :		% Solids :			79.7		

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Cyanide	0.62	mg/kg	1	U	U	Yes	S2BVE

Case No:	43102	Contract:	EPW09035	SDG No:	ME3P89	Lab Code:	A4
Sample Number:	ME3P98	Method:	Hg	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	SS-09	pH:		Sample Date:	11062012	Sample Time:	10:00:00
% Moisture :		% Solids :			89.7		

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Mercury	0.086	mg/kg	1	J	J	Yes	S2BVE

Case No:	43102	Contract:	EPW09035	SDG No:	ME3P89	Lab Code:	A4
Sample Number:	ME3P98	Method:	CN	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	SS-09	pH:		Sample Date:	11062012	Sample Time:	10:00:00
% Moisture :		% Solids :			89.7		

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Cyanide	0.54	mg/kg	1	U	U	Yes	S2BVE

Case No:	43102	Contract:	EPW09035	SDG No:	ME3P89	Lab Code:	A4
Sample Number:	ME3P98	Method:	ICP_AES	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	SS-09	pH:		Sample Date:	11062012	Sample Time:	10:00:00
% Moisture :				% Solids :	89.7		

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	3600	mg/kg	1			Yes	S2BVE
Antimony	6.5	mg/kg	1	UN	UJ	Yes	S2BVE
Arsenic	2.0	mg/kg	1	N	J	Yes	S2BVE
Barium	61.4	mg/kg	1	N	J	Yes	S2BVE
Beryllium	0.54	mg/kg	1	UN	UJ	Yes	S2BVE
Cadmium	0.35	mg/kg	1	JN	J	Yes	S2BVE
Calcium	2610	mg/kg	1			Yes	S2BVE
Chromium	8.3	mg/kg	1	N	J-	Yes	S2BVE
Cobalt	5.3	mg/kg	1	JN	J	Yes	S2BVE
Copper	419	mg/kg	1			Yes	S2BVE
Iron	6050	mg/kg	1			Yes	S2BVE
Lead	50.1	mg/kg	1			Yes	S2BVE
Magnesium	2910	mg/kg	1			Yes	S2BVE
Manganese	152	mg/kg	1	N	J	Yes	S2BVE
Nickel	9.6	mg/kg	1	N	J	Yes	S2BVE
Potassium	284	mg/kg	1	J	J	Yes	S2BVE
Selenium	3.8	mg/kg	1	UN	UJ	Yes	S2BVE
Silver	1.1	mg/kg	1	UN	R	Yes	S2BVE
Sodium	541	mg/kg	1	U	U	Yes	S2BVE
Thallium	2.7	mg/kg	1	UN	UJ	Yes	S2BVE
Vanadium	12.9	mg/kg	1	N	J	Yes	S2BVE
Zinc	118	mg/kg	1	N	J	Yes	S2BVE

Case No:	43102	Contract:	EPW09035	SDG No:	ME3P89	Lab Code:	A4
Sample Number:	ME3P99	Method:	CN	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	SS-10	pH:		Sample Date:	11062012	Sample Time:	12:23:00
% Moisture :		% Solids :			75.9		

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Cyanide	0.64	mg/kg	1	U	U	Yes	S2BVE

Case No:	43102	Contract:	EPW09035	SDG No:	ME3P89	Lab Code:	A4
Sample Number:	ME3P99	Method:	Hg	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	SS-10	pH:		Sample Date:	11062012	Sample Time:	12:23:00
% Moisture :				% Solids :	75.9		

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Mercury	0.18	mg/kg	1			Yes	S2BVE

Case No:	43102	Contract:	EPW09035	SDG No:	ME3P89	Lab Code:	A4
Sample Number:	ME3P99	Method:	ICP_AES	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	SS-10	pH:		Sample Date:	11062012	Sample Time:	12:23:00
% Moisture :				% Solids :	75.9		

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	12500	mg/kg	1			Yes	S2BVE
Antimony	6.7	mg/kg	1	JN	J	Yes	S2BVE
Arsenic	14.6	mg/kg	1	N	J	Yes	S2BVE
Barium	5710	mg/kg	3	D,N	J	Yes	S2BVE
Beryllium	0.64	mg/kg	1	UN	UJ	Yes	S2BVE
Cadmium	2.6	mg/kg	1	N	J	Yes	S2BVE
Calcium	16600	mg/kg	1			Yes	S2BVE
Chromium	128	mg/kg	1	N	J-	Yes	S2BVE
Cobalt	34.5	mg/kg	1	N	J	Yes	S2BVE
Copper	9080	mg/kg	3	D		Yes	S2BVE
Iron	43300	mg/kg	3	D		Yes	S2BVE
Lead	8260	mg/kg	6	D		Yes	S2BVE
Magnesium	12900	mg/kg	1			Yes	S2BVE
Manganese	747	mg/kg	1	N	J	Yes	S2BVE
Nickel	296	mg/kg	1	N	J	Yes	S2BVE
Potassium	1450	mg/kg	1			Yes	S2BVE
Selenium	2.9	mg/kg	1	JN	J	Yes	S2BVE
Silver	5.6	mg/kg	1	N	J-	Yes	S2BVE
Sodium	783	mg/kg	1			Yes	S2BVE
Thallium	9.6	mg/kg	1	UN	UJ	Yes	S2BVE
Vanadium	40.7	mg/kg	1	N	J	Yes	S2BVE
Zinc	5240	mg/kg	1	N	J	Yes	S2BVE

Case No:	43102	Contract:	EPW09035	SDG No:	ME3P89	Lab Code:	A4
Sample Number:	ME3PA0	Method:	ICP_AES	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	SS-11	pH:		Sample Date:	11062012	Sample Time:	12:51:00
% Moisture :		% Solids :	89.1				

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	3730	mg/kg	1			Yes	S2BVE
Antimony	6.5	mg/kg	1	UN	UJ	Yes	S2BVE
Arsenic	9.8	mg/kg	1	N	J	Yes	S2BVE
Barium	61.6	mg/kg	1	N	J	Yes	S2BVE
Beryllium	0.54	mg/kg	1	UN	UJ	Yes	S2BVE
Cadmium	0.69	mg/kg	1	N	J	Yes	S2BVE
Calcium	1780	mg/kg	1			Yes	S2BVE
Chromium	18.2	mg/kg	1	N	J-	Yes	S2BVE
Cobalt	6.2	mg/kg	1	N	J	Yes	S2BVE
Copper	1380	mg/kg	1			Yes	S2BVE
Iron	28600	mg/kg	1			Yes	S2BVE
Lead	247	mg/kg	1			Yes	S2BVE
Magnesium	2000	mg/kg	1			Yes	S2BVE
Manganese	304	mg/kg	1	N	J	Yes	S2BVE
Nickel	18.6	mg/kg	1	N	J	Yes	S2BVE
Potassium	236	mg/kg	1	J	J	Yes	S2BVE
Selenium	2.7	mg/kg	1	JN	J	Yes	S2BVE
Silver	0.45	mg/kg	1	JN	J-	Yes	S2BVE
Sodium	545	mg/kg	1	U	U	Yes	S2BVE
Thallium	2.7	mg/kg	1	UN	UJ	Yes	S2BVE
Vanadium	12.8	mg/kg	1	N	J	Yes	S2BVE
Zinc	110	mg/kg	1	N	J	Yes	S2BVE



Case No:	43102	Contract:	EPW09035	SDG No:	ME3P89	Lab Code:	A4
Sample Number:	ME3PA0	Method:	CN	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	SS-11	pH:		Sample Date:	11062012	Sample Time:	12:51:00
% Moisture :		% Solids :			89.1		

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Cyanide	0.55	mg/kg	1	U	U	Yes	S2BVE

Case No:	43102	Contract:	EPW09035	SDG No:	ME3P89	Lab Code:	A4
Sample Number:	ME3PA0	Method:	Hg	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	SS-11	pH:		Sample Date:	11062012	Sample Time:	12:51:00
% Moisture :		% Solids :	89.1				

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Mercury	0.14	mg/kg	1			Yes	S2BVE

Case No:	43102	Contract:	EPW09035	SDG No:	ME3P89	Lab Code:	A4
Sample Number:	ME3PA1	Method:	CN	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	SS-12	pH:		Sample Date:	11062012	Sample Time:	10:30:00
% Moisture :		% Solids :			87.9		

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Cyanide	0.56	mg/kg	1	U	U	Yes	S2BVE

Case No:	43102	Contract:	EPW09035	SDG No:	ME3P89	Lab Code:	A4
Sample Number:	ME3PA1	Method:	Hg	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	SS-12	pH:		Sample Date:	11062012	Sample Time:	10:30:00
% Moisture :		% Solids :	87.9				

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Mercury	0.056	mg/kg	1	J	J	Yes	S2BVE

Case No:	43102	Contract:	EPW09035	SDG No:	ME3P89	Lab Code:	A4
Sample Number:	ME3PA1	Method:	ICP_AES	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	SS-12	pH:		Sample Date:	11062012	Sample Time:	10:30:00
% Moisture :				% Solids :	87.9		

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	3420	mg/kg	1			Yes	S2BVE
Antimony	6.7	mg/kg	1	UN	UJ	Yes	S2BVE
Arsenic	3.4	mg/kg	1	N	J	Yes	S2BVE
Barium	54.3	mg/kg	1	N	J	Yes	S2BVE
Beryllium	0.56	mg/kg	1	UN	UJ	Yes	S2BVE
Cadmium	0.34	mg/kg	1	JN	J	Yes	S2BVE
Calcium	2760	mg/kg	1			Yes	S2BVE
Chromium	13.3	mg/kg	1	N	J-	Yes	S2BVE
Cobalt	6.5	mg/kg	1	N	J	Yes	S2BVE
Copper	796	mg/kg	1			Yes	S2BVE
Iron	10600	mg/kg	1			Yes	S2BVE
Lead	384	mg/kg	1			Yes	S2BVE
Magnesium	3470	mg/kg	1			Yes	S2BVE
Manganese	135	mg/kg	1	N	J	Yes	S2BVE
Nickel	17.6	mg/kg	1	N	J	Yes	S2BVE
Potassium	195	mg/kg	1	J	J	Yes	S2BVE
Selenium	3.9	mg/kg	1	UN	UJ	Yes	S2BVE
Silver	1.1	mg/kg	1	UN	R	Yes	S2BVE
Sodium	558	mg/kg	1	U	U	Yes	S2BVE
Thallium	2.8	mg/kg	1	UN	UJ	Yes	S2BVE
Vanadium	14.7	mg/kg	1	N	J	Yes	S2BVE
Zinc	57.7	mg/kg	1	N	J	Yes	S2BVE

Case No:	43102	Contract:	EPW09035	SDG No:	ME3P89	Lab Code:	A4
Sample Number:	ME3PA2	Method:	ICP_AES	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	SS-12D	pH:		Sample Date:	11062012	Sample Time:	10:30:00
% Moisture :		% Solids :	87.4				

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	4340	mg/kg	1			Yes	S2BVE
Antimony	6.7	mg/kg	1	UN	UJ	Yes	S2BVE
Arsenic	2.9	mg/kg	1	N	J	Yes	S2BVE
Barium	55.9	mg/kg	1	N	J	Yes	S2BVE
Beryllium	0.56	mg/kg	1	UN	UJ	Yes	S2BVE
Cadmium	0.34	mg/kg	1	JN	J	Yes	S2BVE
Calcium	2360	mg/kg	1			Yes	S2BVE
Chromium	10.5	mg/kg	1	N	J-	Yes	S2BVE
Cobalt	7.1	mg/kg	1	N	J	Yes	S2BVE
Copper	762	mg/kg	1			Yes	S2BVE
Iron	9370	mg/kg	1			Yes	S2BVE
Lead	121	mg/kg	1			Yes	S2BVE
Magnesium	4940	mg/kg	1			Yes	S2BVE
Manganese	189	mg/kg	1	N	J	Yes	S2BVE
Nickel	18.1	mg/kg	1	N	J	Yes	S2BVE
Potassium	225	mg/kg	1	J	J	Yes	S2BVE
Selenium	3.9	mg/kg	1	UN	UJ	Yes	S2BVE
Silver	1.1	mg/kg	1	UN	R	Yes	S2BVE
Sodium	561	mg/kg	1	U	U	Yes	S2BVE
Thallium	2.8	mg/kg	1	UN	UJ	Yes	S2BVE
Vanadium	22.4	mg/kg	1	N	J	Yes	S2BVE
Zinc	67.2	mg/kg	1	N	J	Yes	S2BVE

Case No:	43102	Contract:	EPW09035	SDG No:	ME3P89	Lab Code:	A4
Sample Number:	ME3PA2	Method:	CN	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	SS-12D	pH:		Sample Date:	11062012	Sample Time:	10:30:00
% Moisture :				% Solids :	87.4		

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Cyanide	0.56	mg/kg	1	U	U	Yes	S2BVE

Case No:	43102	Contract:	EPW09035	SDG No:	ME3P89	Lab Code:	A4
Sample Number:	ME3PA2	Method:	Hg	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	SS-12D	pH:		Sample Date:	11062012	Sample Time:	10:30:00
% Moisture :				% Solids :	87.4		

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Mercury	0.058	mg/kg	1	J	J	Yes	S2BVE



Case No:	43102	Contract:	EPW09035	SDG No:	ME3P89	Lab Code:	A4
Sample Number:	ME3PA3	Method:	Hg	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	SS-13	pH:		Sample Date:	11062012	Sample Time:	17:10:00
% Moisture :		% Solids :			87.6		

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Mercury	0.59	mg/kg	1			Yes	S2BVE

Case No:	43102	Contract:	EPW09035	SDG No:	ME3P89	Lab Code:	A4
Sample Number:	ME3PA3	Method:	ICP_AES	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	SS-13	pH:		Sample Date:	11062012	Sample Time:	17:10:00
% Moisture :		% Solids :	87.6				

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	4190	mg/kg	1			Yes	S2BVE
Antimony	6.8	mg/kg	1	UN	UJ	Yes	S2BVE
Arsenic	6.9	mg/kg	1	N	J	Yes	S2BVE
Barium	535	mg/kg	1	N	J	Yes	S2BVE
Beryllium	0.57	mg/kg	1	UN	UJ	Yes	S2BVE
Cadmium	0.95	mg/kg	1	N	J	Yes	S2BVE
Calcium	4700	mg/kg	1			Yes	S2BVE
Chromium	23.2	mg/kg	1	N	J-	Yes	S2BVE
Cobalt	7.1	mg/kg	1	N	J	Yes	S2BVE
Copper	2170	mg/kg	1			Yes	S2BVE
Iron	24800	mg/kg	1			Yes	S2BVE
Lead	1530	mg/kg	1			Yes	S2BVE
Magnesium	4010	mg/kg	1			Yes	S2BVE
Manganese	225	mg/kg	1	N	J	Yes	S2BVE
Nickel	23.4	mg/kg	1	N	J	Yes	S2BVE
Potassium	237	mg/kg	1	J	J	Yes	S2BVE
Selenium	2.0	mg/kg	1	JN	J	Yes	S2BVE
Silver	0.90	mg/kg	1	JN	J-	Yes	S2BVE
Sodium	565	mg/kg	1	U	U	Yes	S2BVE
Thallium	2.8	mg/kg	1	UN	UJ	Yes	S2BVE
Vanadium	11.9	mg/kg	1	N	J	Yes	S2BVE
Zinc	834	mg/kg	1	N	J	Yes	S2BVE

Case No:	43102	Contract:	EPW09035	SDG No:	ME3P89	Lab Code:	A4
Sample Number:	ME3PA3	Method:	CN	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	SS-13	pH:		Sample Date:	11062012	Sample Time:	17:10:00
% Moisture :				% Solids :	87.6		

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Cyanide	0.56	mg/kg	1	U	U	Yes	S2BVE

Case No:	43102	Contract:	EPW09035	SDG No:	ME3P89	Lab Code:	A4
Sample Number:	ME3PA4	Method:	CN	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	SS-14	pH:		Sample Date:	11062012	Sample Time:	15:56:00
% Moisture :		% Solids :			67.6		

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Cyanide	0.72	mg/kg	1	U	U	Yes	S2BVE

Case No:	43102	Contract:	EPW09035	SDG No:	ME3P89	Lab Code:	A4
Sample Number:	ME3PA4	Method:	Hg	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	SS-14	pH:		Sample Date:	11062012	Sample Time:	15:56:00
% Moisture :				% Solids :	67.6		

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Mercury	1.4	mg/kg	1			Yes	S2BVE

Case No:	43102	Contract:	EPW09035	SDG No:	ME3P89	Lab Code:	A4
Sample Number:	ME3PA4	Method:	ICP_AES	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	SS-14	pH:		Sample Date:	11062012	Sample Time:	15:56:00
% Moisture :		% Solids :	67.6				

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	4510	mg/kg	1			Yes	S2BVE
Antimony	3.2	mg/kg	1	JN	J	Yes	S2BVE
Arsenic	8.1	mg/kg	1	N	J	Yes	S2BVE
Barium	1420	mg/kg	1	N	J	Yes	S2BVE
Beryllium	0.41	mg/kg	1	JN	J	Yes	S2BVE
Cadmium	2.6	mg/kg	1	N	J	Yes	S2BVE
Calcium	2840	mg/kg	1			Yes	S2BVE
Chromium	62.0	mg/kg	1	N	J-	Yes	S2BVE
Cobalt	6.3	mg/kg	1	JN	J	Yes	S2BVE
Copper	935	mg/kg	1			Yes	S2BVE
Iron	12300	mg/kg	1			Yes	S2BVE
Lead	1850	mg/kg	1			Yes	S2BVE
Magnesium	2690	mg/kg	1			Yes	S2BVE
Manganese	228	mg/kg	1	N	J	Yes	S2BVE
Nickel	19.3	mg/kg	1	N	J	Yes	S2BVE
Potassium	306	mg/kg	1	J	J	Yes	S2BVE
Selenium	2.1	mg/kg	1	JN	J	Yes	S2BVE
Silver	1.0	mg/kg	1	JN	J-	Yes	S2BVE
Sodium	725	mg/kg	1	U	U	Yes	S2BVE
Thallium	3.6	mg/kg	1	UN	UJ	Yes	S2BVE
Vanadium	15.9	mg/kg	1	N	J	Yes	S2BVE
Zinc	743	mg/kg	1	N	J	Yes	S2BVE

Case No:	43102	Contract:	EPW09035	SDG No:	ME3P89	Lab Code:	A4
Sample Number:	ME3PA9	Method:	CN	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	SB-01	pH:		Sample Date:	11052012	Sample Time:	10:05:00
% Moisture :		% Solids :		88.7			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Cyanide	0.55	mg/kg	1	U	U	Yes	S2BVE

Case No:	43102	Contract:	EPW09035	SDG No:	ME3P89	Lab Code:	A4
Sample Number:	ME3PA9	Method:	ICP_AES	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	SB-01	pH:		Sample Date:	11052012	Sample Time:	10:05:00
% Moisture :				% Solids :	88.7		

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	6720	mg/kg	1			Yes	S2BVE
Antimony	6.5	mg/kg	1	UN	UJ	Yes	S2BVE
Arsenic	1.4	mg/kg	1	N	J	Yes	S2BVE
Barium	38.5	mg/kg	1	N	J	Yes	S2BVE
Beryllium	0.54	mg/kg	1	UN	UJ	Yes	S2BVE
Cadmium	0.54	mg/kg	1	UN	UJ	Yes	S2BVE
Calcium	2100	mg/kg	1			Yes	S2BVE
Chromium	12.3	mg/kg	1	N	J-	Yes	S2BVE
Cobalt	7.3	mg/kg	1	N	J	Yes	S2BVE
Copper	711	mg/kg	1			Yes	S2BVE
Iron	14800	mg/kg	1			Yes	S2BVE
Lead	4.9	mg/kg	1			Yes	S2BVE
Magnesium	5220	mg/kg	1			Yes	S2BVE
Manganese	225	mg/kg	1	N	J	Yes	S2BVE
Nickel	22.6	mg/kg	1	N	J	Yes	S2BVE
Potassium	316	mg/kg	1	J	J	Yes	S2BVE
Selenium	3.8	mg/kg	1	UN	UJ	Yes	S2BVE
Silver	1.1	mg/kg	1	UN	R	Yes	S2BVE
Sodium	545	mg/kg	1	U	U	Yes	S2BVE
Thallium	2.7	mg/kg	1	UN	UJ	Yes	S2BVE
Vanadium	14.3	mg/kg	1	N	J	Yes	S2BVE
Zinc	38.5	mg/kg	1	N	J	Yes	S2BVE



Case No:	43102	Contract:	EPW09035	SDG No:	ME3P89	Lab Code:	A4
Sample Number:	ME3PA9	Method:	Hg	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	SB-01	pH:		Sample Date:	11052012	Sample Time:	10:05:00
% Moisture :		% Solids :	88.7				

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Mercury	0.11	mg/kg	1	U	U	Yes	S2BVE

Case No:	43102	Contract:	EPW09035	SDG No:	ME3P89	Lab Code:	A4
Sample Number:	ME3PB0	Method:	CN	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	SB-02	pH:		Sample Date:	11052012	Sample Time:	14:35:00
% Moisture :		% Solids :		84.5			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Cyanide	0.58	mg/kg	1	U	U	Yes	S2BVE

Case No:	43102	Contract:	EPW09035	SDG No:	ME3P89	Lab Code:	A4
Sample Number:	ME3PB0	Method:	ICP_AES	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	SB-02	pH:		Sample Date:	11052012	Sample Time:	14:35:00
% Moisture :				% Solids :	84.5		

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	6830	mg/kg	1			Yes	S2BVE
Antimony	6.9	mg/kg	1	UN	UJ	Yes	S2BVE
Arsenic	2.2	mg/kg	1	N	J	Yes	S2BVE
Barium	38.1	mg/kg	1	N	J	Yes	S2BVE
Beryllium	0.57	mg/kg	1	UN	UJ	Yes	S2BVE
Cadmium	0.23	mg/kg	1	JN	J	Yes	S2BVE
Calcium	6940	mg/kg	1			Yes	S2BVE
Chromium	17.5	mg/kg	1	N	J-	Yes	S2BVE
Cobalt	7.1	mg/kg	1	N	J	Yes	S2BVE
Copper	539	mg/kg	1			Yes	S2BVE
Iron	10200	mg/kg	1			Yes	S2BVE
Lead	25.7	mg/kg	1			Yes	S2BVE
Magnesium	5370	mg/kg	1			Yes	S2BVE
Manganese	196	mg/kg	1	N	J	Yes	S2BVE
Nickel	14.3	mg/kg	1	N	J	Yes	S2BVE
Potassium	440	mg/kg	1	J	J	Yes	S2BVE
Selenium	4.0	mg/kg	1	UN	UJ	Yes	S2BVE
Silver	1.1	mg/kg	1	UN	R	Yes	S2BVE
Sodium	347	mg/kg	1	J	J	Yes	S2BVE
Thallium	2.9	mg/kg	1	UN	UJ	Yes	S2BVE
Vanadium	18.9	mg/kg	1	N	J	Yes	S2BVE
Zinc	39.2	mg/kg	1	N	J	Yes	S2BVE

Case No:	43102	Contract:	EPW09035	SDG No:	ME3P89	Lab Code:	A4
Sample Number:	ME3PB0	Method:	Hg	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	SB-02	pH:		Sample Date:	11052012	Sample Time:	14:35:00
% Moisture :		% Solids :			84.5		

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Mercury	0.021	mg/kg	1	J	J	Yes	S2BVE

Case No:	43102	Contract:	EPW09035	SDG No:	ME3P89	Lab Code:	A4
Sample Number:	ME3PB1	Method:	CN	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	SB-02D	pH:		Sample Date:	11052012	Sample Time:	14:35:00
% Moisture :		% Solids :		88.3			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Cyanide	0.55	mg/kg	1	U	U	Yes	S2BVE

Case No:	43102	Contract:	EPW09035	SDG No:	ME3P89	Lab Code:	A4
Sample Number:	ME3PB1	Method:	Hg	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	SB-02D	pH:		Sample Date:	11052012	Sample Time:	14:35:00
% Moisture :		% Solids :	88.3				

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Mercury	0.044	mg/kg	1	J	J	Yes	S2BVE

Case No:	43102	Contract:	EPW09035	SDG No:	ME3P89	Lab Code:	A4
Sample Number:	ME3PB1	Method:	ICP_AES	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	SB-02D	pH:		Sample Date:	11052012	Sample Time:	14:35:00
% Moisture :		% Solids :	88.3				

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	5430	mg/kg	1			Yes	S2BVE
Antimony	6.6	mg/kg	1	UN	UJ	Yes	S2BVE
Arsenic	2.3	mg/kg	1	N	J	Yes	S2BVE
Barium	46.8	mg/kg	1	N	J	Yes	S2BVE
Beryllium	0.55	mg/kg	1	UN	UJ	Yes	S2BVE
Cadmium	0.19	mg/kg	1	JN	J	Yes	S2BVE
Calcium	5820	mg/kg	1			Yes	S2BVE
Chromium	13.7	mg/kg	1	N	J-	Yes	S2BVE
Cobalt	6.4	mg/kg	1	N	J	Yes	S2BVE
Copper	577	mg/kg	1			Yes	S2BVE
Iron	9130	mg/kg	1			Yes	S2BVE
Lead	14.6	mg/kg	1			Yes	S2BVE
Magnesium	3810	mg/kg	1			Yes	S2BVE
Manganese	171	mg/kg	1	N	J	Yes	S2BVE
Nickel	12.3	mg/kg	1	N	J	Yes	S2BVE
Potassium	387	mg/kg	1	J	J	Yes	S2BVE
Selenium	3.8	mg/kg	1	UN	UJ	Yes	S2BVE
Silver	1.1	mg/kg	1	UN	R	Yes	S2BVE
Sodium	253	mg/kg	1	J	J	Yes	S2BVE
Thallium	2.7	mg/kg	1	UN	UJ	Yes	S2BVE
Vanadium	17.5	mg/kg	1	N	J	Yes	S2BVE
Zinc	27.9	mg/kg	1	N	J	Yes	S2BVE

Case No:	43102	Contract:	EPW09035	SDG No:	ME3P89	Lab Code:	A4
Sample Number:	ME3PB3	Method:	CN	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	SB-04	pH:		Sample Date:	11062012	Sample Time:	13:00:00
% Moisture :		% Solids :			92.4		

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Cyanide	0.53	mg/kg	1	U	U	Yes	S2BVE



Case No:	43102	Contract:	EPW09035	SDG No:	ME3P89	Lab Code:	A4
Sample Number:	ME3PB3	Method:	Hg	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	SB-04	pH:		Sample Date:	11062012	Sample Time:	13:00:00
% Moisture :				% Solids :	92.4		

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Mercury	0.11	mg/kg	1	U	U	Yes	S2BVE

Case No:	43102	Contract:	EPW09035	SDG No:	ME3P89	Lab Code:	A4
Sample Number:	ME3PB3	Method:	ICP_AES	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	SB-04	pH:		Sample Date:	11062012	Sample Time:	13:00:00
% Moisture :		% Solids :	92.4				

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	4750	mg/kg	1			Yes	S2BVE
Antimony	6.3	mg/kg	1	UN	UJ	Yes	S2BVE
Arsenic	2.3	mg/kg	1	N	J	Yes	S2BVE
Barium	25.8	mg/kg	1	N	J	Yes	S2BVE
Beryllium	0.53	mg/kg	1	UN	UJ	Yes	S2BVE
Cadmium	0.53	mg/kg	1	UN	UJ	Yes	S2BVE
Calcium	4010	mg/kg	1			Yes	S2BVE
Chromium	11.8	mg/kg	1	N	J-	Yes	S2BVE
Cobalt	7.0	mg/kg	1	N	J	Yes	S2BVE
Copper	880	mg/kg	1			Yes	S2BVE
Iron	8090	mg/kg	1			Yes	S2BVE
Lead	21.5	mg/kg	1			Yes	S2BVE
Magnesium	4120	mg/kg	1			Yes	S2BVE
Manganese	148	mg/kg	1	N	J	Yes	S2BVE
Nickel	18.3	mg/kg	1	N	J	Yes	S2BVE
Potassium	248	mg/kg	1	J	J	Yes	S2BVE
Selenium	3.7	mg/kg	1	UN	UJ	Yes	S2BVE
Silver	1.1	mg/kg	1	UN	R	Yes	S2BVE
Sodium	525	mg/kg	1	U	U	Yes	S2BVE
Thallium	2.6	mg/kg	1	UN	UJ	Yes	S2BVE
Vanadium	16.0	mg/kg	1	N	J	Yes	S2BVE
Zinc	25.5	mg/kg	1	N	J	Yes	S2BVE



**USEPA Contract Laboratory Program**  
**Inorganic Traffic Report & Chain of Custody Record**

*Inorg*

Case No: 43102  
 DAS No:  
 SDG No: ME 3P89 **L**

Date Shipped: 11/7/12 Carrier Name: UPS Airbill: 1Z5490W42210082690 Shipped to: A4 Scientific, Inc. 1544 Sawdust Road Suite 505 The Woodlands TX 77380 (281) 292-5277	<b>Chain of Custody Record</b>		Sampler Signature: <i>John Spielberg</i>	<b>For Lab Use Only</b>	
	Relinquished By (Date / Time)	Received By (Date / Time)		Lab Contract No: EPW09035	
	1. <i>John Spielberg</i> 11/7/12-1030	<i>John Spielberg</i> 11/8/12 9:49		Unit Price:	
	2. _____			Transfer To:	
	3. _____			Lab Contract No: 211812	
4. _____			Unit Price:		

INORGANIC SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/ Bottles	STATION LOCATION	SAMPLE COLLECT DATE/TIME	ORGANIC SAMPLE No.	FOR LAB USE ONLY Sample Condition On Receipt
ME3P96	Surface Soil (0"-12")/ JOHN SPIELBERG	L/G	TM/CN (21)	51302018 (1)	SS-07	11/6/12	E3P96	0016824-01 25x17 SDN
ME3P97	Surface Soil (0"-12")/ JOHN SPIELBERG	L/G	TM/CN (21)	51302020 (1)	SS-08		E3P97	-02
ME3P98	Surface Soil (0"-12")/ JOHN SPIELBERG	L/G	TM/CN (21)	51302022 (1)	SS-09		E3P98	-03
ME3P99	Surface Soil (0"-12")/ JOHN SPIELBERG	L/G	TM/CN (21)	51302024 (1)	SS-10		E3P99	-04
ME3PA0	Surface Soil (0"-12")/ JOHN SPIELBERG	L/G	TM/CN (21)	51302026 (1)	SS-11		E3PA0	-05
ME3PA1	Surface Soil (0"-12")/ JOHN SPIELBERG	L/G	TM/CN (21)	51302028 (1)	SS-12		E3PA1	-06
ME3PA2	Surface Soil (0"-12")/ JOHN SPIELBERG	L/G	TM/CN (21)	51302030 (1)	SS-12D		E3PA2	-07

Shipment for Case Complete? <input checked="" type="checkbox"/>	Sample(s) to be used for laboratory QC: ME3P92	Additional Sampler Signature(s): <i>John Spielberg</i>	Cooler Temperature Upon Receipt: 4°C	Chain of Custody Seal Number: 132733, 132734
Analysis Key:	Concentration: <input checked="" type="checkbox"/> = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G	Custody Seal Intact? <input checked="" type="checkbox"/>	Shipment Iced? <input checked="" type="checkbox"/>

TM/CN = CLP TAL Total Metals and Cyanide - soil

0012

TR Number: 5-094688160-110212-0001

**LABORATORY COPY**



**USEPA Contract Laboratory Program**  
**Inorganic Traffic Report & Chain of Custody Record**

*Insert*

Case No: 43102  
 DAS No:  
 SDG No: ME3P89 **L**

Date Shipped: 11/7/12  
 Carrier Name: UPS  
 Airbill: 1Z5490W42210082690  
 Shipped to: A4 Scientific, Inc.  
 1544 Sawdust Road  
 Suite 505  
 The Woodlands TX 77380  
 (281) 292-5277

Chain of Custody Record		Sampler Signature:
Relinquished By	(Date / Time)	Received By
1. <i>John Spielberg</i>	11/7/12-1630	<i>Patricia</i> 11/8/12 9:49
2. _____	_____	_____
3. _____	11/8/12	_____
4. _____	_____	_____

**For Lab Use Only**

Lab Contract No: EPW09035  
 Unit Price: \_\_\_\_\_  
 Transfer To: \_\_\_\_\_  
 Lab Contract No: \_\_\_\_\_  
 Unit Price: \_\_\_\_\_

INORGANIC SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/ Bottles	STATION LOCATION	SAMPLE COLLECT DATE/TIME	ORGANIC SAMPLE No.	FOR LAB USE ONLY Sample Condition On Receipt
ME3PA3	Surface Soil (0"-12")/ JOHN SPIELBERG	L/G	TM/CN (21)	51302032 (1)	SS-13	11/6/12	E3PA3	0016824-08
ME3PA4	Surface Soil (0"-12")/ JOHN SPIELBERG	L/G	TM/CN (21)	51302034 (1)	SS-14	}	E3PA4	↓ -09
<del>ME3PA5</del>	<del>Surface Soil (0"-12")/ JOHN SPIELBERG</del>	<del>L/G</del>	<del>TM/CN (21)</del>	<del>51302036 (1)</del>	<del>SS-15</del>	} not collected JES 11/7/12	<del>E3PA5</del>	
<del>ME3PA6</del>	<del>Surface Soil (0"-12")/ JOHN SPIELBERG</del>	<del>L/G</del>	<del>TM/CN (21)</del>	<del>51302038 (1)</del>	<del>SS-16</del>		<del>E3PA6</del>	
<del>ME3PA7</del>	<del>Surface Soil (0"-12")/ JOHN SPIELBERG</del>	<del>L/G</del>	<del>TM/CN (21)</del>	<del>51302040 (1)</del>	<del>SS-17</del>		<del>E3PA7</del>	
<del>ME3PA8</del>	<del>Surface Soil (0"-12")/ JOHN SPIELBERG</del>	<del>L/G</del>	<del>TM/CN (21)</del>	<del>51302042 (1)</del>	<del>SS-18</del>		<del>E3PA8</del>	

Shipment for Case Complete? <input checked="" type="checkbox"/>	Sample(s) to be used for laboratory QC: ME3P92	Additional Sampler Signature(s): <i>John Spielberg</i>	Cooler Temperature Upon Receipt: 4°C	Chain of Custody Seal Number: 132733, 132734
Analysis Key:	Concentration: <input checked="" type="checkbox"/> = Low / M = Low/Medium, H = High	Type/Designate: Composite = C, <input checked="" type="checkbox"/> Grab = G	Custody Seal Intact? <input checked="" type="checkbox"/>	Shipment Iced? <input checked="" type="checkbox"/>

TM/CN = CLP TAL Total Metals and Cyanide - soil

000

TR Number: 5-094688160-110212-0001

**LABORATORY COPY**



**USEPA Contract Laboratory Program**  
**Inorganic Traffic Report & Chain of Custody Record**

*Aug 1*

Case No: 43102  
 DAS No:  
 SDG No: ME3P89 L

Date Shipped: 11/7/12 Carrier Name: UPS Airbill: 1Z5490W42210082690 Shipped to: A4 Scientific, Inc. 1544 Sawdust Road Suite 505 The Woodlands TX 77380 (281) 292-5277	<b>Chain of Custody Record</b>		Sampler Signature: <i>John Spielberg</i>		<b>For Lab Use Only</b>	
	Relinquished By (Date / Time)		Received By (Date / Time)		Lab Contract No: EPW09035	
	1. <i>John Spielberg</i> 11/7/12-1030		2. <i>Rose</i> 11/8/12 9:49		Unit Price:	
	3. <i>R</i> 11/8/12				Transfer To: <i>11/8/12</i>	
4.				Lab Contract No:		
				Unit Price:		

INORGANIC SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/ Bottles	STATION LOCATION	SAMPLE COLLECT DATE/TIME	ORGANIC SAMPLE No.	FOR LAB USE ONLY Sample Condition On Receipt
ME3P89	Surface Soil (0"-12")/ JOHN SPIELBERG	L/G	TM/CN (21)	51302002 (1)	SS-01	11/6/12	E3P89	0016824-10
ME3P90	Surface Soil (0"-12")/ JOHN SPIELBERG	L/G	TM/CN (21)	51302004 (1)	SS-02	11/5/12	E3P90	-11
ME3P91	Surface Soil (0"-12")/ JOHN SPIELBERG	L/G	TM/CN (21)	51302006 (1)	SS-02D	~~~~~~	E3P91	-12
ME3P92	Surface Soil (0"-12")/ JOHN SPIELBERG	L/G	TM/CN (21)	51302009, 51302010 (2)	SS-03		E3P92	-13
ME3P93	Surface Soil (0"-12")/ JOHN SPIELBERG	L/G	TM/CN (21)	51302012 (1)	SS-04		E3P93	-14
ME3P94	Surface Soil (0"-12")/ JOHN SPIELBERG	L/G	TM/CN (21)	51302014 (1)	SS-05		E3P94	-15
ME3P95	Surface Soil (0"-12")/ JOHN SPIELBERG	L/G	TM/CN (21)	51302016 (1)	SS-06		11/6/12	E3P95

Shipment for Case Complete: <input checked="" type="checkbox"/>	Sample(s) to be used for laboratory QC: ME3P92	Additional Sampler Signature(s): <i>John Spielberg</i>	Cooler Temperature Upon Receipt: 4°C	Chain of Custody Seal Number: 132733, 132734
Analysis Key:	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G	Custody Seal Intact? <input checked="" type="checkbox"/>	Shipment Iced? <input checked="" type="checkbox"/>

TM/CN = CLP TAL Total Metals and Cyanide - soil

1100

TR Number: 5-094688160-110212-0001

**LABORATORY COPY**



**USEPA Contract Laboratory Program  
Inorganic Traffic Report & Chain of Custody Record**

*Aug 2*

Case No: 43102  
DAS No: ME 3 P89  
SDG No: L

Date Shipped: 11/7/12  
Carrier Name: UPS  
Airbill: 1Z5490W42210093768  
Shipped to: A4 Scientific, Inc.  
1544 Sawdust Road  
Suite 505  
The Woodlands TX 77380  
(281) 292-5277

Chain of Custody Record		Sampler Signature:
Relinquished By	(Date / Time)	Received By
1. John Spielberg	11/7/12 - 10:55	Raven 11/8/12 8:56
2. _____	_____	_____ 9:49
3. _____	_____ 11/8/12	_____
4. _____	_____	_____

**For Lab Use Only**  
Lab Contract No: EPW09035  
Unit Price: \_\_\_\_\_  
Transfer To: \_\_\_\_\_  
Lab Contract No: \_\_\_\_\_  
Unit Price: \_\_\_\_\_

INORGANIC SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/ Bottles	STATION LOCATION	SAMPLE COLLECT DATE/TIME	ORGANIC SAMPLE No.	FOR LAB USE ONLY Sample Condition On Receipt
ME3PA9	Subsurface Soil (>12")/ JOHN SPIELBERG	L/G	TM/CN (21)	51302044 (1)	SB-01	11/5/12 - 1005	E3PA9	0016824-17
ME3PB0	Subsurface Soil (>12")/ JOHN SPIELBERG	L/G	TM/CN (21)	51302046 (1)	SB-02	1435	E3PB0	-18
ME3PB1	Subsurface Soil (>12")/ JOHN SPIELBERG	L/G	TM/CN (21)	51302048 (1)	SB-02D	1435	E3PB1	-19
ME3PB2	Subsurface Soil (>12")/ JOHN SPIELBERG	L/G	TM/CN (21)	51302051, 51302052 (2)	SB-03	11/6/12 - 1450	E3PB2	
ME3PB3	Subsurface Soil (>12")/ JOHN SPIELBERG	L/G	TM/CN (21)	51302054 (1)	SB-04	1300	E3PB3	0016824-20
ME3PB4	Subsurface Soil (>12")/ JOHN SPIELBERG	L/G	TM/CN (21)	51302056 (1)	SB-05	11/5/12 - 1350	E3PB4	
ME3PB5	Subsurface Soil (>12")/ JOHN SPIELBERG	L/G	TM/CN (21)	51302058 (1)	SB-06	1145	E3PB5	

*finals in SD4*

Shipment for Case Complete? <input checked="" type="checkbox"/>	Sample(s) to be used for laboratory QC: ME3PB2	Additional Sampler Signature(s): <i>John Spielberg</i>	Cooler Temperature Upon Receipt: 4°C	Chain of Custody Seal Number: 132735, 132736
Analysis Key:	Concentration: <input checked="" type="checkbox"/> Low / M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G	Custody Seal Intact? <input checked="" type="checkbox"/>	Shipment Iced? <input checked="" type="checkbox"/>

TR Number: 5-094688160-110212-0002

**LABORATORY COPY**

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY ~ REGION V

ESD Central Regional Laboratory  
Data Tracking Form for Contract Samples

Sample Delivery Group: ME3P89 CERCLIS No: TBA  
Case No: 43102 Site Name/Location: C&H Tamarack Operations (MI)  
Contractor or EPA Lab: A4 Scientific Data User: MDEQ  
No. of Samples: 20 Date Sampled or Date Received: 29 NOV 2012

Have Chain-of-Custody records been received? Yes  No   
Have traffic reports or packing lists been received? Yes  No   
If no, are traffic reports or packing list numbers written on the Chain-of-Custody Record?  
Yes  No

If no, which traffic report or packing list numbers are missing?  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
Are basic data forms in? Yes  No

No of samples claimed: 20 No. of samples received: \_\_\_\_\_

Received by: Potajoyner Date: 29 Nov 2012

Received by LSSS: Potajoyner Date: 3 Dec 2012

Review started: 12/10/12 Reviewer Signature: James Edley

Total time spent on review: 23.0 Date review completed: 12/12/12

Copied by: A. C. Harvey <sup>+2.0 ~ 12-18-12</sup> Date: December 18, 2012

Mailed to user by: Potajoyner Date: 19 Dec 2012

**DATA USER:**  
Please fill in the blanks below and return this form to:  
Sylvia Griffin, Data Mgmt. Coordinator, Region V, ML-10C

Data received by: \_\_\_\_\_ Date: \_\_\_\_\_

Data review received by: \_\_\_\_\_ Date: \_\_\_\_\_

- Inorganic Data Complete  Suitable for Intended Purpose  T if OK
- Organic Data Complete  Suitable for Intended Purpose  T if OK
- Dioxin data Complete  Suitable for Intended Purpose  T if OK
- SAS Data Complete  Suitable for Intended Purpose  T if OK

**PROBLEMS:** Please indicate reasons why data are not suitable for your uses.  
\_\_\_\_\_  
\_\_\_\_\_

Received by Data Mgmt. Coordinator for Files. Date: \_\_\_\_\_

**ESAT Controlled Number:** ESAT 5.417.00319 - PJ 18 DEC 2012

**DATE:** December 18, 2012

Michigan Department of Environmental Quality  
MDEQ - RRD Superfund  
**Attn: Mr. Joe Walczak**  
525 W. Allegan  
Constitution Hall, 4<sup>th</sup> Floor, North  
P.O. Box 30242  
Lansing, MI 48909-7742

**Site Name: C & H Tamarack Operations (MI) - level 3 data validation**

<u>Case</u>	<u>Lab</u>	<u>Samples</u>	<u>SDG</u>	<u>Matrix</u>
43102	A4 Scientific	8	ME3PB2	soils

**Analysis:** metals/Hg/CN

Upon receipt of data, please check each package for completeness and note any missing deliverables below.

**PLEASE!!!! Send this form back to Sylvia Griffin, Data Management Coordinator after filling in the blanks below.**

Data Received by: \_\_\_\_\_ Date: \_\_\_\_\_

PROBLEMS:

Please indicate if data is complete, and note if there are any deliverables missing from the cases noted above.

\_\_\_\_\_  
\_\_\_\_\_

Received by Data Management Coordinator, CRL for file.

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

**FROM: U.S. EPA - Region 5**  
Central Regional Laboratory  
536 S. Clark, 10th Floor  
Chicago, IL 60605

Sent By: Pat A. Joyner  
Data Coordinator  
ESAT Region 5 **TechLaw Inc.**

**RECEIVED**

DEC 26 2012

**SUPERFUND**



# ESAT5.415.00123

Regional Transmittal Form

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION V

DATE: 12/12/12

SUBJECT: Review of Data  
Received for review on 11/29/12

FROM: Timothy Prendiville, Supervisor, Chief (SR-6J)  
Superfund Contract Management Section

TO: Data User: MDEO  
Email address: walczakj@michigan.gov

LEVEL 3 DATA VALIDATION

We have reviewed the data for the following case:

SITE NAME: C & H Tamarack Operations (MI)

CASE NUMBER: 43102 SDG NUMBER: ME3PB2

Number and Type of Samples: 8 soils (metals/Hg/CN)

Sample Numbers: ME3PB2, B4, B5, B7-B9, C0, C1

Laboratory: A4 Scientific Hrs. for Review: 9.5 + 1.5 <sup>av</sup> <sub>12/14/12</sub>

Following are our findings:

CC: Howard Pham  
Region 5 TPO  
Mail Code: SA-5J

**Below is a summary of the out-of-control audits and the possible effects on the data for this case:**

Eight (8) soil samples, numbered ME3PB2, B4, B5, B7-B9, C0, C1, were collected on November 6-7, 2012. The lab received the samples on November 8, 2012 in good condition. Although the cooler containing the samples was outside the required temperature range, no sample results are qualified for this deficiency. All samples were analyzed for metals and cyanide. All samples were analyzed using the CLP SOW ISM01.3 analysis procedures.

Mercury analysis was performed using a Cold Vapor AA Technique. Cyanide analysis was performed using the MIDI Distillation procedure. The remaining inorganic analyses were performed using an Inductively Coupled Plasma-Atomic Emission Spectroscopy (ICP-AES) procedure.

Post digestion spikes recoveries were calculated incorrectly for beryllium and thallium. Their recoveries were reported as 75% and 83% respectively. Actual recoveries were 75% and 31% respectively. Qualification of results is based on the recoveries as calculated by ESAT.

### 1. HOLDING TIME:

The inorganic soil samples were reviewed for holding time violations using criteria developed for water samples. No defects were found.

### 2. CALIBRATIONS:

No defects were found for the calibrations.

### 3. BLANKS:

No defects were found for the preparation blank or ICB/CCBs.

### 4. MATRIX SPIKE/MATRIX SPIKE DUPLICATE AND LAB CONTROL SAMPLE:

The following inorganic samples are associated with a matrix spike recovery which is low (30-74%) indicating that sample results may be biased low. The required post spike was performed and results were less than 75%.

Hits are qualified "J-" and non-detects are qualified "UJ".

Thallium

ME3PB2, ME3PB4, ME3PB5, ME3PB7, ME3PB8, ME3PB9, ME3PC0, ME3PC1

The following inorganic samples are associated with a matrix spike recovery which is extremely low (<30%) indicating that sample results may be biased low. The required post spike was performed and results were greater than or equal to 75%.

Hits are qualified "J" and non-detects are qualified "UJ".

Barium

ME3PB2, ME3PB4, ME3PB5, ME3PB7, ME3PB8, ME3PB9, ME3PC0, ME3PC1

Beryllium

ME3PB2, ME3PB4, ME3PB5, ME3PB7, ME3PB8, ME3PB9, ME3PC0, ME3PC1

Chromium

ME3PB2, ME3PB4, ME3PB5, ME3PB7, ME3PB8, ME3PB9, ME3PC0, ME3PC1

Manganese

ME3PB2, ME3PB4, ME3PB5, ME3PB7, ME3PB8, ME3PB9, ME3PC0, ME3PC1

Vanadium

ME3PB2, ME3PB4, ME3PB5, ME3PB7, ME3PB8, ME3PB9, ME3PC0, ME3PC1

The following inorganic samples are associated with a matrix spike recovery which is extremely low (<30%) indicating that sample results may be biased low. No post spike was required.

Hits are qualified "J-" and non-detects are qualified "R".

Silver

ME3PB2, ME3PB4, ME3PB5, ME3PB7, ME3PB8, ME3PB9, ME3PC0, ME3PC1

No defects were found for the laboratory control sample.

## 5. LABORATORY AND FIELD DUPLICATE:

No defects were found for the laboratory duplicate samples. Region 5 uses 35%RPD/2xCRQL difference control criteria for soil samples. No samples were identified as field duplicates.

## 6. ICP ANALYSIS:

The following inorganic samples are associated with an ICP serial dilution percent difference which is not in control.

Hits are qualified "J" and non-detects are qualified "UJ".

Calcium

ME3PB2, ME3PB4, ME3PB5, ME3PB7, ME3PB8, ME3PB9, ME3PC0, ME3PC1

Iron

ME3PB2, ME3PB4, ME3PB5, ME3PB7, ME3PB8, ME3PB9, ME3PC0, ME3PC1

Magnesium

ME3PB2, ME3PB4, ME3PB5, ME3PB7, ME3PB8, ME3PB9, ME3PC0, ME3PC1

Manganese

ME3PB2, ME3PB4, ME3PB5, ME3PB7, ME3PB8, ME3PB9, ME3PC0, ME3PC1

The following inorganic samples are associated with negative sample results whose absolute values are greater than the CRQL, indicating interference.

Non-detects are qualified "R".

Thallium

ME3PB2

No defects were found for the ICS samples.

## 7. SAMPLE RESULTS:

The following inorganic samples have analyte concentrations reported above the method detection limit (MDL) but below the quantitation limit (CRQL).

Results are qualified "J".

Arsenic

ME3PB5, ME3PB8, ME3PC1

Barium

ME3PB2, ME3PB5, ME3PB8

Cadmium

ME3PB2, ME3PB4, ME3PB7, ME3PB9, ME3PC0

Cobalt

ME3PB5, ME3PB8, ME3PC0

Lead

ME3PB8, ME3PC1

Mercury

ME3PB2, ME3PB5, ME3PB7, ME3PB9, ME3PC0

Nickel

ME3PB8

Potassium

ME3PB2, ME3PB4, ME3PB5, ME3PB7, ME3PB8, ME3PB9, ME3PC0, ME3PC1

Selenium

ME3PB7

Silver

ME3PB2

Sodium

ME3PB9, ME3PC1

Zinc

ME3PB8

All data, except those qualified above, are acceptable.

### **EXES ISM01.3 Data Qualifier Sheet**

<u>Qualifiers</u>	<u>Data Qualifier Definitions</u>
U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
J	The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
J+	The result is an estimated quantity, but the result may be biased high.
J-	The result is an estimated quantity, but the result may be biased low.
R	The data are unusable. The sample results are rejected due to serious deficiencies in meeting Quality Control (QC) criteria. The analyte may or may not be present in the sample.
UJ	The analyte was analyzed for, but not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.

# Sample Summary Report

Case No:	43102	Contract:	EPW09035	SDG No:	ME3PB2	Lab Code:	A4
Sample Number:	ME3PB2	Method:	Hg	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	SB-03	pH:		Sample Date:	11062012	Sample Time:	14:50:00
% Moisture :				% Solids :	92.4		

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Mercury	0.031	mg/kg	1	J	J	Yes	S2BVE

Case No:	43102	Contract:	EPW09035	SDG No:	ME3PB2	Lab Code:	A4
Sample Number:	ME3PB2	Method:	ICP_AES	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	SB-03	pH:		Sample Date:	11062012	Sample Time:	14:50:00
% Moisture :				% Solids :	92.4		

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	6140	mg/kg	1			Yes	S2BVE
Antimony	6.5	mg/kg	1	U	U	Yes	S2BVE
Arsenic	2.1	mg/kg	1			Yes	S2BVE
Barium	11.9	mg/kg	1	JN	J	Yes	S2BVE
Beryllium	0.54	mg/kg	1	UN	UJ	Yes	S2BVE
Cadmium	0.19	mg/kg	1	J	J	Yes	S2BVE
Calcium	9570	mg/kg	1	E	J	Yes	S2BVE
Chromium	17.9	mg/kg	1	N	J	Yes	S2BVE
Cobalt	13.4	mg/kg	1			Yes	S2BVE
Copper	1000	mg/kg	1			Yes	S2BVE
Iron	9900	mg/kg	1	E	J	Yes	S2BVE
Lead	13.5	mg/kg	1	*		Yes	S2BVE
Magnesium	8290	mg/kg	1	E	J	Yes	S2BVE
Manganese	221	mg/kg	1	N,E	J	Yes	S2BVE
Nickel	27.8	mg/kg	1			Yes	S2BVE
Potassium	173	mg/kg	1	J	J	Yes	S2BVE
Selenium	3.8	mg/kg	1	U	U	Yes	S2BVE
Silver	0.43	mg/kg	1	JN	J-	Yes	S2BVE
Sodium	541	mg/kg	1	U	U	Yes	S2BVE
Thallium	2.7	mg/kg	1	UN	R	Yes	S2BVE
Vanadium	24.6	mg/kg	1	N	J	Yes	S2BVE
Zinc	58.8	mg/kg	1			Yes	S2BVE



Case No:	43102	Contract:	EPW09035	SDG No:	ME3PB2	Lab Code:	A4
Sample Number:	ME3PB2	Method:	CN	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	SB-03	pH:		Sample Date:	11062012	Sample Time:	14:50:00
% Moisture :		% Solids :			92.4		

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Cyanide	0.54	mg/kg	1	U	U	Yes	S2BVE

Case No:	43102	Contract:	EPW09035	SDG No:	ME3PB2	Lab Code:	A4
Sample Number:	ME3PB2D	Method:	ICP_AES	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:		pH:		Sample Date:	11062012	Sample Time:	14:50:00
% Moisture :				% Solids :	92.4		

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	6290	mg/kg	1			Yes	S2BVE
Antimony	6.5	mg/kg	1	U	U	Yes	S2BVE
Arsenic	2.0	mg/kg	1			Yes	S2BVE
Barium	11.0	mg/kg	1	J	J	Yes	S2BVE
Beryllium	0.54	mg/kg	1	U	U	Yes	S2BVE
Cadmium	0.19	mg/kg	1	J	J	Yes	S2BVE
Calcium	9860	mg/kg	1			Yes	S2BVE
Chromium	18.8	mg/kg	1			Yes	S2BVE
Cobalt	13.7	mg/kg	1			Yes	S2BVE
Copper	950	mg/kg	1			Yes	S2BVE
Iron	9790	mg/kg	1			Yes	S2BVE
Lead	11.0	mg/kg	1	*		Yes	S2BVE
Magnesium	8390	mg/kg	1			Yes	S2BVE
Manganese	224	mg/kg	1			Yes	S2BVE
Nickel	29.1	mg/kg	1			Yes	S2BVE
Potassium	541	mg/kg	1	U	U	Yes	S2BVE
Selenium	3.8	mg/kg	1	U	U	Yes	S2BVE
Silver	0.44	mg/kg	1	J	J	Yes	S2BVE
Sodium	541	mg/kg	1	U	U	Yes	S2BVE
Thallium	2.7	mg/kg	1	U	U	Yes	S2BVE
Vanadium	25.9	mg/kg	1			Yes	S2BVE
Zinc	57.1	mg/kg	1			Yes	S2BVE

Case No:	43102	Contract:	EPW09035	SDG No:	ME3PB2	Lab Code:	A4
Sample Number:	ME3PB2D	Method:	CN	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	SB-03	pH:		Sample Date:	11062012	Sample Time:	14:50:00
% Moisture :				% Solids :	92.4		

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Cyanide	0.54	mg/kg	1	U	U	Yes	S2BVE

Case No:	43102	Contract:	EPW09035	SDG No:	ME3PB2	Lab Code:	A4
Sample Number:	ME3PB2D	Method:	Hg	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:		pH:		Sample Date:	11062012	Sample Time:	14:50:00
% Moisture :				% Solids :	92.4		

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Mercury	0.11	mg/kg	1	J	U	Yes	S2BVE

Case No:	43102	Contract:	EPW09035	SDG No:	ME3PB2	Lab Code:	A4
Sample Number:	ME3PB2S	Method:	Hg	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:		pH:		Sample Date:	11062012	Sample Time:	14:50:00
% Moisture :				% Solids :	92.4		

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Mercury	0.56	mg/kg	1			Yes	S2BVE

Case No:	43102	Contract:	EPW09035	SDG No:	ME3PB2	Lab Code:	A4
Sample Number:	ME3PB2S	Method:	ICP_AES	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:		pH:		Sample Date:	11062012	Sample Time:	14:50:00
% Moisture :				% Solids :	92.4		

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Antimony	17.7	mg/kg	1			Yes	S2BVE
Arsenic	9.3	mg/kg	1			Yes	S2BVE
Barium	67.8	mg/kg	1	N		Yes	S2BVE
Beryllium	1.1	mg/kg	1	N		Yes	S2BVE
Cadmium	9.3	mg/kg	1			Yes	S2BVE
Chromium	27.0	mg/kg	1	N		Yes	S2BVE
Cobalt	114	mg/kg	1			Yes	S2BVE
Copper	1020	mg/kg	1			Yes	S2BVE
Lead	17.4	mg/kg	1			Yes	S2BVE
Manganese	246	mg/kg	1	N		Yes	S2BVE
Nickel	129	mg/kg	1			Yes	S2BVE
Selenium	10.1	mg/kg	1			Yes	S2BVE
Silver	2.7	mg/kg	1	N		Yes	S2BVE
Thallium	7.1	mg/kg	1	N		Yes	S2BVE
Vanadium	47.6	mg/kg	1	N		Yes	S2BVE
Zinc	163	mg/kg	1			Yes	S2BVE

Case No:	43102	Contract:	EPW09035	SDG No:	ME3PB2	Lab Code:	A4
Sample Number:	ME3PB2S	Method:	CN	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	SB-03	pH:		Sample Date:	11062012	Sample Time:	14:50:00
% Moisture :		% Solids :		92.4			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Cyanide	5.1	mg/kg	1			Yes	S2BVE

Case No:	43102	Contract:	EPW09035	SDG No:	ME3PB2	Lab Code:	A4
Sample Number:	ME3PB4	Method:	ICP_AES	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	SB-05	pH:		Sample Date:	11052012	Sample Time:	13:50:00
% Moisture :		% Solids :	90.8				

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	3600	mg/kg	1			Yes	S2BVE
Antimony	6.5	mg/kg	1	U	U	Yes	S2BVE
Arsenic	4.3	mg/kg	1			Yes	S2BVE
Barium	46.2	mg/kg	1	N	J	Yes	S2BVE
Beryllium	0.54	mg/kg	1	UN	UJ	Yes	S2BVE
Cadmium	0.25	mg/kg	1	J	J	Yes	S2BVE
Calcium	3390	mg/kg	1	E	J	Yes	S2BVE
Chromium	10.5	mg/kg	1	N	J	Yes	S2BVE
Cobalt	5.9	mg/kg	1			Yes	S2BVE
Copper	1250	mg/kg	1			Yes	S2BVE
Iron	7680	mg/kg	1	E	J	Yes	S2BVE
Lead	51.7	mg/kg	1	*		Yes	S2BVE
Magnesium	3370	mg/kg	1	E	J	Yes	S2BVE
Manganese	144	mg/kg	1	N,E	J	Yes	S2BVE
Nickel	11.7	mg/kg	1			Yes	S2BVE
Potassium	213	mg/kg	1	J	J	Yes	S2BVE
Selenium	3.8	mg/kg	1	U	U	Yes	S2BVE
Silver	1.1	mg/kg	1	UN	R	Yes	S2BVE
Sodium	540	mg/kg	1	U	U	Yes	S2BVE
Thallium	2.7	mg/kg	1	UN	UJ	Yes	S2BVE
Vanadium	17.9	mg/kg	1	N	J	Yes	S2BVE
Zinc	79.7	mg/kg	1			Yes	S2BVE



Case No:	43102	Contract:	EPW09035	SDG No:	ME3PB2	Lab Code:	A4
Sample Number:	ME3PB4	Method:	CN	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	SB-05	pH:		Sample Date:	11052012	Sample Time:	13:50:00
% Moisture :		% Solids :			90.8		

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Cyanide	0.54	mg/kg	1	U	U	Yes	S2BVE

Case No:	43102	Contract:	EPW09035	SDG No:	ME3PB2	Lab Code:	A4
Sample Number:	ME3PB4	Method:	Hg	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	SB-05	pH:		Sample Date:	11052012	Sample Time:	13:50:00
% Moisture :		% Solids :	90.8				

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Mercury	0.14	mg/kg	1			Yes	S2BVE

Case No:	43102	Contract:	EPW09035	SDG No:	ME3PB2	Lab Code:	A4
Sample Number:	ME3PB5	Method:	Hg	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	SB-06	pH:		Sample Date:	11052012	Sample Time:	11:45:00
% Moisture :		% Solids :			89.2		

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Mercury	0.050	mg/kg	1	J	J	Yes	S2BVE

Case No:	43102	Contract:	EPW09035	SDG No:	ME3PB2	Lab Code:	A4
Sample Number:	ME3PB5	Method:	CN	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	SB-06	pH:		Sample Date:	11052012	Sample Time:	11:45:00
% Moisture :		% Solids :			89.2		

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Cyanide	0.55	mg/kg	1	U	U	Yes	S2BVE

Case No:	43102	Contract:	EPW09035	SDG No:	ME3PB2	Lab Code:	A4
Sample Number:	ME3PB5	Method:	ICP_AES	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	SB-06	pH:		Sample Date:	11052012	Sample Time:	11:45:00
% Moisture :		% Solids :	89.2				

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	2400	mg/kg	1			Yes	S2BVE
Antimony	6.5	mg/kg	1	U	U	Yes	S2BVE
Arsenic	1.1	mg/kg	1	J	J	Yes	S2BVE
Barium	18.4	mg/kg	1	JN	J	Yes	S2BVE
Beryllium	0.54	mg/kg	1	UN	UJ	Yes	S2BVE
Cadmium	0.54	mg/kg	1	U	U	Yes	S2BVE
Calcium	1390	mg/kg	1	E	J	Yes	S2BVE
Chromium	4.7	mg/kg	1	N	J	Yes	S2BVE
Cobalt	2.7	mg/kg	1	J	J	Yes	S2BVE
Copper	392	mg/kg	1			Yes	S2BVE
Iron	4060	mg/kg	1	E	J	Yes	S2BVE
Lead	26.5	mg/kg	1	*		Yes	S2BVE
Magnesium	954	mg/kg	1	E	J	Yes	S2BVE
Manganese	150	mg/kg	1	N,E	J	Yes	S2BVE
Nickel	4.4	mg/kg	1			Yes	S2BVE
Potassium	255	mg/kg	1	J	J	Yes	S2BVE
Selenium	3.8	mg/kg	1	U	U	Yes	S2BVE
Silver	1.1	mg/kg	1	UN	R	Yes	S2BVE
Sodium	544	mg/kg	1	U	U	Yes	S2BVE
Thallium	2.7	mg/kg	1	UN	UJ	Yes	S2BVE
Vanadium	10.3	mg/kg	1	N	J	Yes	S2BVE
Zinc	12.6	mg/kg	1			Yes	S2BVE

Case No:	43102	Contract:	EPW09035	SDG No:	ME3PB2	Lab Code:	A4
Sample Number:	ME3PB7	Method:	CN	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	SB-08	pH:		Sample Date:	11062012	Sample Time:	15:45:00
% Moisture :		% Solids :		88.8			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Cyanide	0.55	mg/kg	1	U	U	Yes	S2BVE

Case No:	43102	Contract:	EPW09035	SDG No:	ME3PB2	Lab Code:	A4
Sample Number:	ME3PB7	Method:	ICP_AES	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	SB-08	pH:		Sample Date:	11062012	Sample Time:	15:45:00
% Moisture :				% Solids :	88.8		

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	4230	mg/kg	1			Yes	S2BVE
Antimony	13.4	mg/kg	1			Yes	S2BVE
Arsenic	4.9	mg/kg	1			Yes	S2BVE
Barium	57.0	mg/kg	1	N	J	Yes	S2BVE
Beryllium	0.55	mg/kg	1	UN	UJ	Yes	S2BVE
Cadmium	0.30	mg/kg	1	J	J	Yes	S2BVE
Calcium	2960	mg/kg	1	E	J	Yes	S2BVE
Chromium	10.7	mg/kg	1	N	J	Yes	S2BVE
Cobalt	6.0	mg/kg	1			Yes	S2BVE
Copper	841	mg/kg	1			Yes	S2BVE
Iron	14600	mg/kg	1	E	J	Yes	S2BVE
Lead	241	mg/kg	1	*		Yes	S2BVE
Magnesium	3180	mg/kg	1	E	J	Yes	S2BVE
Manganese	348	mg/kg	1	N,E	J	Yes	S2BVE
Nickel	15.6	mg/kg	1			Yes	S2BVE
Potassium	264	mg/kg	1	J	J	Yes	S2BVE
Selenium	1.8	mg/kg	1	J	J	Yes	S2BVE
Silver	1.1	mg/kg	1	UN	R	Yes	S2BVE
Sodium	547	mg/kg	1	U	U	Yes	S2BVE
Thallium	2.7	mg/kg	1	UN	UJ	Yes	S2BVE
Vanadium	13.1	mg/kg	1	N	J	Yes	S2BVE
Zinc	50.4	mg/kg	1			Yes	S2BVE

Case No:	43102	Contract:	EPW09035	SDG No:	ME3PB2	Lab Code:	A4
Sample Number:	ME3PB7	Method:	Hg	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	SB-08	pH:		Sample Date:	11062012	Sample Time:	15:45:00
% Moisture :		% Solids :	88.8				

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Mercury	0.072	mg/kg	1	J	J	Yes	S2BVE



Case No:	43102	Contract:	EPW09035	SDG No:	ME3PB2	Lab Code:	A4
Sample Number:	ME3PB8	Method:	ICP_AES	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	SB-09	pH:		Sample Date:	11062012	Sample Time:	12:15:00
% Moisture :		% Solids :	90.2				

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	1780	mg/kg	1			Yes	S2BVE
Antimony	6.5	mg/kg	1	U	U	Yes	S2BVE
Arsenic	0.78	mg/kg	1	J	J	Yes	S2BVE
Barium	13.7	mg/kg	1	JN	J	Yes	S2BVE
Beryllium	0.54	mg/kg	1	UN	UJ	Yes	S2BVE
Cadmium	0.54	mg/kg	1	U	U	Yes	S2BVE
Calcium	4290	mg/kg	1	E	J	Yes	S2BVE
Chromium	3.8	mg/kg	1	N	J	Yes	S2BVE
Cobalt	1.9	mg/kg	1	J	J	Yes	S2BVE
Copper	13.0	mg/kg	1			Yes	S2BVE
Iron	3450	mg/kg	1	E	J	Yes	S2BVE
Lead	1.0	mg/kg	1	J*	J	Yes	S2BVE
Magnesium	1570	mg/kg	1	E	J	Yes	S2BVE
Manganese	64.0	mg/kg	1	N,E	J	Yes	S2BVE
Nickel	3.5	mg/kg	1	J	J	Yes	S2BVE
Potassium	415	mg/kg	1	J	J	Yes	S2BVE
Selenium	3.8	mg/kg	1	U	U	Yes	S2BVE
Silver	1.1	mg/kg	1	UN	R	Yes	S2BVE
Sodium	538	mg/kg	1	U	U	Yes	S2BVE
Thallium	2.7	mg/kg	1	UN	UJ	Yes	S2BVE
Vanadium	8.1	mg/kg	1	N	J	Yes	S2BVE
Zinc	5.4	mg/kg	1	J	J	Yes	S2BVE

Case No:	43102	Contract:	EPW09035	SDG No:	ME3PB2	Lab Code:	A4
Sample Number:	ME3PB8	Method:	Hg	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	SB-09	pH:		Sample Date:	11062012	Sample Time:	12:15:00
% Moisture :		% Solids :	90.2				

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Mercury	0.11	mg/kg	1	U	U	Yes	S2BVE

Case No:	43102	Contract:	EPW09035	SDG No:	ME3PB2	Lab Code:	A4
Sample Number:	ME3PB8	Method:	CN	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	SB-09	pH:		Sample Date:	11062012	Sample Time:	12:15:00
% Moisture :		% Solids :		90.2			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Cyanide	0.54	mg/kg	1	U	U	Yes	S2BVE

Case No:	43102	Contract:	EPW09035	SDG No:	ME3PB2	Lab Code:	A4
Sample Number:	ME3PB9	Method:	ICP_AES	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	SB-10	pH:		Sample Date:	11052012	Sample Time:	15:20:00
% Moisture :		% Solids :	91.5				

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	6370	mg/kg	1			Yes	S2BVE
Antimony	6.5	mg/kg	1	U	U	Yes	S2BVE
Arsenic	2.0	mg/kg	1			Yes	S2BVE
Barium	27.1	mg/kg	1	N	J	Yes	S2BVE
Beryllium	0.54	mg/kg	1	UN	UJ	Yes	S2BVE
Cadmium	0.18	mg/kg	1	J	J	Yes	S2BVE
Calcium	10300	mg/kg	1	E	J	Yes	S2BVE
Chromium	14.6	mg/kg	1	N	J	Yes	S2BVE
Cobalt	8.6	mg/kg	1			Yes	S2BVE
Copper	605	mg/kg	1			Yes	S2BVE
Iron	10000	mg/kg	1	E	J	Yes	S2BVE
Lead	32.4	mg/kg	1	*		Yes	S2BVE
Magnesium	5220	mg/kg	1	E	J	Yes	S2BVE
Manganese	248	mg/kg	1	N,E	J	Yes	S2BVE
Nickel	20.4	mg/kg	1			Yes	S2BVE
Potassium	326	mg/kg	1	J	J	Yes	S2BVE
Selenium	3.8	mg/kg	1	U	U	Yes	S2BVE
Silver	1.1	mg/kg	1	UN	R	Yes	S2BVE
Sodium	208	mg/kg	1	J	J	Yes	S2BVE
Thallium	2.7	mg/kg	1	UN	UJ	Yes	S2BVE
Vanadium	20.2	mg/kg	1	N	J	Yes	S2BVE
Zinc	49.6	mg/kg	1			Yes	S2BVE

Case No:	43102	Contract:	EPW09035	SDG No:	ME3PB2	Lab Code:	A4
Sample Number:	ME3PB9	Method:	CN	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	SB-10	pH:		Sample Date:	11052012	Sample Time:	15:20:00
% Moisture :		% Solids :		91.5			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Cyanide	0.54	mg/kg	1	U	U	Yes	S2BVE

Case No:	43102	Contract:	EPW09035	SDG No:	ME3PB2	Lab Code:	A4
Sample Number:	ME3PB9	Method:	Hg	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	SB-10	pH:		Sample Date:	11052012	Sample Time:	15:20:00
% Moisture :		% Solids :	91.5				

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Mercury	0.043	mg/kg	1	J	J	Yes	S2BVE

Case No:	43102	Contract:	EPW09035	SDG No:	ME3PB2	Lab Code:	A4
Sample Number:	ME3PC0	Method:	ICP_AES	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	SB-11	pH:		Sample Date:	11062012	Sample Time:	08:35:00
% Moisture :				% Solids :	90.8		

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	3590	mg/kg	1			Yes	S2BVE
Antimony	6.5	mg/kg	1	U	U	Yes	S2BVE
Arsenic	1.6	mg/kg	1			Yes	S2BVE
Barium	72.8	mg/kg	1	N	J	Yes	S2BVE
Beryllium	0.54	mg/kg	1	UN	UJ	Yes	S2BVE
Cadmium	0.30	mg/kg	1	J	J	Yes	S2BVE
Calcium	1620	mg/kg	1	E	J	Yes	S2BVE
Chromium	7.4	mg/kg	1	N	J	Yes	S2BVE
Cobalt	2.9	mg/kg	1	J	J	Yes	S2BVE
Copper	569	mg/kg	1			Yes	S2BVE
Iron	6030	mg/kg	1	E	J	Yes	S2BVE
Lead	50.6	mg/kg	1	*		Yes	S2BVE
Magnesium	1420	mg/kg	1	E	J	Yes	S2BVE
Manganese	102	mg/kg	1	N,E	J	Yes	S2BVE
Nickel	6.5	mg/kg	1			Yes	S2BVE
Potassium	213	mg/kg	1	J	J	Yes	S2BVE
Selenium	3.8	mg/kg	1	U	U	Yes	S2BVE
Silver	1.1	mg/kg	1	UN	R	Yes	S2BVE
Sodium	540	mg/kg	1	U	U	Yes	S2BVE
Thallium	2.7	mg/kg	1	UN	UJ	Yes	S2BVE
Vanadium	10.8	mg/kg	1	N	J	Yes	S2BVE
Zinc	76.2	mg/kg	1			Yes	S2BVE

Case No:	43102	Contract:	EPW09035	SDG No:	ME3PB2	Lab Code:	A4
Sample Number:	ME3PC0	Method:	CN	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	SB-11	pH:		Sample Date:	11062012	Sample Time:	08:35:00
% Moisture :		% Solids :			90.8		

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Cyanide	0.54	mg/kg	1	U	U	Yes	S2BVE



Case No:	43102	Contract:	EPW09035	SDG No:	ME3PB2	Lab Code:	A4
Sample Number:	ME3PC0	Method:	Hg	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	SB-11	pH:		Sample Date:	11062012	Sample Time:	08:35:00
% Moisture :				% Solids :	90.8		

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Mercury	0.032	mg/kg	1	J	J	Yes	S2BVE

Case No:	43102	Contract:	EPW09035	SDG No:	ME3PB2	Lab Code:	A4
Sample Number:	ME3PC1	Method:	ICP_AES	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	SB-12	pH:		Sample Date:	11062012	Sample Time:	10:55:00
% Moisture :				% Solids :	93.9		

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	4530	mg/kg	1			Yes	S2BVE
Antimony	6.2	mg/kg	1	U	U	Yes	S2BVE
Arsenic	0.66	mg/kg	1	J	J	Yes	S2BVE
Barium	20.9	mg/kg	1	N	J	Yes	S2BVE
Beryllium	0.52	mg/kg	1	UN	UJ	Yes	S2BVE
Cadmium	0.52	mg/kg	1	U	U	Yes	S2BVE
Calcium	2140	mg/kg	1	E	J	Yes	S2BVE
Chromium	7.9	mg/kg	1	N	J	Yes	S2BVE
Cobalt	5.6	mg/kg	1			Yes	S2BVE
Copper	28.2	mg/kg	1			Yes	S2BVE
Iron	5700	mg/kg	1	E	J	Yes	S2BVE
Lead	0.99	mg/kg	1	J*	J	Yes	S2BVE
Magnesium	3690	mg/kg	1	E	J	Yes	S2BVE
Manganese	125	mg/kg	1	N,E	J	Yes	S2BVE
Nickel	14.9	mg/kg	1			Yes	S2BVE
Potassium	241	mg/kg	1	J	J	Yes	S2BVE
Selenium	3.6	mg/kg	1	U	U	Yes	S2BVE
Silver	1.0	mg/kg	1	UN	R	Yes	S2BVE
Sodium	323	mg/kg	1	J	J	Yes	S2BVE
Thallium	2.6	mg/kg	1	UN	UJ	Yes	S2BVE
Vanadium	12.0	mg/kg	1	N	J	Yes	S2BVE
Zinc	19.2	mg/kg	1			Yes	S2BVE

Case No:	43102	Contract:	EPW09035	SDG No:	ME3PB2	Lab Code:	A4
Sample Number:	ME3PC1	Method:	CN	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	SB-12	pH:		Sample Date:	11062012	Sample Time:	10:55:00
% Moisture :		% Solids :		93.9			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Cyanide	0.52	mg/kg	1	U	U	Yes	S2BVE

Case No:	43102	Contract:	EPW09035	SDG No:	ME3PB2	Lab Code:	A4
Sample Number:	ME3PC1	Method:	Hg	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	SB-12	pH:		Sample Date:	11062012	Sample Time:	10:55:00
% Moisture :		% Solids :	93.9				

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Mercury	0.10	mg/kg	1	U	U	Yes	S2BVE



**USEPA Contract Laboratory Program  
Inorganic Traffic Report & Chain of Custody Record**

*May 2*

Case No: 43102  
 DAS No: ME3PB2  
 SDG No: L

Date Shipped: 11/7/12  
 Carrier Name: UPS  
 Airbill: 1Z5490W42210093768  
 Shipped to: A4 Scientific, Inc.  
 1544 Sawdust Road  
 Suite 505  
 The Woodlands TX 77380  
 (281) 292-5277

Chain of Custody Record		Sampler Signature:
Relinquished By	(Date / Time)	Received By
1. <i>John Spilberg</i>	11/7/12 - 10:55	<i>Rosen</i> 11/8/12 - 9:49
2. _____	_____	_____
3. _____	11/8/12	_____
4. _____	_____	_____

**For Lab Use Only**

Lab Contract No: EPW09035  
 Unit Price: \_\_\_\_\_  
 Transfer To: \_\_\_\_\_  
 Lab Contract No: \_\_\_\_\_  
 Unit Price: \_\_\_\_\_

INORGANIC SAMPLE No.	MATRIX/SAMPLER	CONC/TYPE	ANALYSIS/TURNAROUND	TAG No./PRESERVATIVE/ Bottles	STATION LOCATION	SAMPLE COLLECT DATE/TIME	ORGANIC SAMPLE No.	FOR LAB USE ONLY Sample Condition On Receipt	
ME3PA9	Subsurface Soil (>12")/ JOHN SPIELBERG	L/G	TM/CN (21)	51302044 (1)	SB-01	11/5/12 - 1005	E3PA9		
ME3PB0	Subsurface Soil (>12")/ JOHN SPIELBERG	L/G	TM/CN (21)	51302046 (1)	SB-02	1435	E3PB0		
ME3PB1	Subsurface Soil (>12")/ JOHN SPIELBERG	L/G	TM/CN (21)	51302048 (1)	SB-02D		1435	E3PB1	
ME3PB2	Subsurface Soil (>12")/ JOHN SPIELBERG	L/G	TM/CN (21)	51302051, 51302052 (2)	SB-03		11/6/12 - 1450	E3PB2	0016825-01 7345x1 SD
ME3PB3	Subsurface Soil (>12")/ JOHN SPIELBERG	L/G	TM/CN (21)	51302054 (1)	SB-04	1300	E3PB3		
ME3PB4	Subsurface Soil (>12")/ JOHN SPIELBERG	L/G	TM/CN (21)	51302056 (1)	SB-05	11/5/12 - 1350	E3PB4	0016825-02	
ME3PB5	Subsurface Soil (>12")/ JOHN SPIELBERG	L/G	TM/CN (21)	51302058 (1)	SB-06	1145	E3PB5	↓ 03	

Shipment for Case Complete? <input checked="" type="checkbox"/>	Sample(s) to be used for laboratory QC: ME3PB2	Additional Sampler Signature(s): <i>John Spilberg</i>	Cooler Temperature Upon Receipt: 4°C	Chain of Custody Seal Number: 132735, 132736
Analysis Key:	Concentration: <input checked="" type="radio"/> Low M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G	Custody Seal Intact? <input checked="" type="checkbox"/>	Shipment Iced? <input checked="" type="checkbox"/>

TM/CN = CLP TAL Total Metals and Cyanide - soil

0002

TR Number: 5-094688160-110212-0002

**LABORATORY COPY**



**USEPA Contract Laboratory Program  
Inorganic Traffic Report & Chain of Custody Record**

*Long 2*

Case No: 43102  
DAS No: ME3PB2  
SDG No: L

Date Shipped: 11/7/12  
Carrier Name: UPS  
Airbill: 1Z5490W42210093768  
Shipped to: A4 Scientific, Inc.  
1544 Sawdust Road  
Suite 505  
The Woodlands TX 77380  
(281) 292-5277

Chain of Custody Record		Sampler Signature: <i>John Spielberg</i>	
Relinquished By	(Date / Time)	Received By	(Date / Time)
1. <i>John Spielberg</i>	11/7/12-1055	<i>Receiv</i>	11/8/12 - 8:55
2. _____			9:49
3. _____			
4. _____			

**For Lab Use Only**

Lab Contract No: EPW09025  
Unit Price: \_\_\_\_\_  
Transfer To: \_\_\_\_\_  
Lab Contract No: 11/8/12  
Unit Price: \_\_\_\_\_

INORGANIC SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/ Bottles	STATION LOCATION	SAMPLE COLLECT DATE/TIME	ORGANIC SAMPLE No.	FOR LAB USE ONLY Sample Condition On Receipt
ME3PB6	Subsurface Soil (>12")/ JOHN SPIELBERG	L/G	TM/CN (21)	51302060 (1)	SB-07	<i>did not collect 11/7/12</i>	E3PB6	
ME3PB7	Subsurface Soil (>12")/ JOHN SPIELBERG	L/G	TM/CN (21)	51302062 (1)	SB-08	11/4/12 - 1545	E3PB7	001682S-04
ME3PB8	Subsurface Soil (>12")/ JOHN SPIELBERG	L/G	TM/CN (21)	51302064 (1)	SB-09	1215	E3PB8	05
ME3PB9	Subsurface Soil (>12")/ JOHN SPIELBERG	L/G	TM/CN (21)	51302066 (1)	SB-10	11/5/12 - 1520	E3PB9	06
ME3PC0	Subsurface Soil (>12")/ JOHN SPIELBERG	L/G	TM/CN (21)	51302068 (1)	SB-11	11/6/12 - 835	E3PC0	07
ME3PC1	Subsurface Soil (>12")/ JOHN SPIELBERG	L/G	TM/CN (21)	51302070 (1)	SB-12	1055	E3PC1	08 Final by SDG

Shipment for Case Complete: <input checked="" type="checkbox"/>	Sample(s) to be used for laboratory QC: ME3PB2	Additional Sampler Signature(s): <i>John Spielberg</i>	Cooler Temperature Upon Receipt: 4°C	Chain of Custody Seal Number: 132735, 132736
Analysis Key:	Concentration: <input checked="" type="checkbox"/> = Low, <input type="checkbox"/> = Low/Medium, <input type="checkbox"/> = High	Type/Designate: Composite = C, Grab = G	Custody Seal Intact? <input checked="" type="checkbox"/>	Shipment Iced? <input checked="" type="checkbox"/>

TM/CN = CLP TAL Total Metals and Cyanide - soil

TR Number: 5-094688160-110212-0002

**LABORATORY COPY**

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY ~ REGION V

ESD Central Regional Laboratory  
Data Tracking Form for Contract Samples

Sample Delivery Group: ME3PB2 CERCLIS No: TBA

Case No: 43102 Site Name/Location: C&H TAMARACK OPERATIONS (MI)

Contractor or EPA Lab: A4 SCIENTIFIC Data User: MDEA

No. of Samples: 8 Date Sampled or Date Received: 29 NOV 2012

Have Chain-of-Custody records been received? Yes  No

Have traffic reports or packing lists been received? Yes  No

If no, are traffic reports or packing list numbers written on the Chain-of-Custody Record?  
Yes  No

If no, which traffic report or packing list numbers are missing?  
\_\_\_\_\_

Are basic data forms in? Yes  No

No of samples claimed: 8 No. of samples received: \_\_\_\_\_

Received by: PATA JOEYNER Date: 29 NOV 2012

Received by LSSS: PATA JOEYNER Date: 3 DEC 2012

Review started: 12-11-12 Reviewer Signature: [Signature]

Total time spent on review: 9.5 + 1.5 Date review completed: 12-13-12

Copied by: A. C. Hawsey Date: December 17, 2012

Mailed to user by: PATA JOEYNER Date: 18 DEC 2012

**DATA USER:**

Please fill in the blanks below and return this form to:

Sylvia Griffin, Data Mgmt. Coordinator, Region V, ML-10C

Data received by: \_\_\_\_\_ Date: \_\_\_\_\_

Data review received by: \_\_\_\_\_ Date: \_\_\_\_\_

- Inorganic Data Complete  Suitable for Intended Purpose  T if OK
- Organic Data Complete  Suitable for Intended Purpose  T if OK
- Dioxin data Complete  Suitable for Intended Purpose  T if OK
- SAS Data Complete  Suitable for Intended Purpose  T if OK

**PROBLEMS:** Please indicate reasons why data are not suitable for your uses.

\_\_\_\_\_  
\_\_\_\_\_

Received by Data Mgmt. Coordinator for Files. Date: \_\_\_\_\_

**ESAT Controlled Number:** ESAT5.417.00338-pj-200N13

**DATE:** January 2, 2013

Michigan Department of Environmental Quality  
MDEQ - RRD Superfund  
**Attn: Mr. Joe Walczak**  
525 W. Allegan  
Constitution Hall, 4<sup>th</sup> Floor, North  
P.O. Box 30242  
Lansing, MI 48909-7742

**Site Name: C & H Tamarack Operations (MI) - level 3 data validation**

<u>Case</u>	<u>Lab</u>	<u>Samples</u>	<u>SDG</u>	<u>Matrix</u>
43102	KAP Technologies	20	E3P89	soil

**Analysis: semivolatiles, pesticides, aroclor**

Upon receipt of data, please check each package for completeness and note any missing deliverables below.

**PLEASE!!!! Send this form back to Sylvia Griffin, Data Management Coordinator after filling in the blanks below.**

Data Received by: \_\_\_\_\_ Date: \_\_\_\_\_

**PROBLEMS:**

Please indicate if data is complete, and note if there are any deliverables missing from the cases noted above.

\_\_\_\_\_  
\_\_\_\_\_

Received by Data Management Coordinator, CRL for file.

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

**FROM: U.S. EPA - Region 5**  
Central Regional Laboratory  
536 S. Clark, 10th Floor  
Chicago, IL 60605

Sent By: Pat A. Joyner  
Data Coordinator  
ESAT Region 5 **TechLaw Inc.**

**RECEIVED**  
JAN 4 2013  
**SUPERFUND**



# ESAT 5,416,00167  
act  
1-2-2013

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION V  
SUPERFUND DIVISION

DATE:

SUBJECT: Review of Data  
Received for Review on: November 29, 2012

FROM: Timothy Prendiville, Supervisor (SR-6J)  
Superfund Contract Management Section

TO: Data User: MDEQ  
Email address: walczakj@michigan.gov

**Level 3 Data Validation for the EXES program**

We have reviewed the data for the following case:

Site Name: C & H Tamarack Operations (MI)

Case Number: 43102 SDG Number: E3P89

Number and Type of Samples: 20 soil samples (20 SVOA, 20 pesticide, 20 aroclor)

Sample Numbers: E3P89 - E3P99, E3PA0 - E3PA4, E3PA9, E3PB0, E3PB1, E3PB3

Laboratory: KAP Hrs for Review: \_\_\_\_\_

Following are our findings:

CC: Howard Pham  
Region 5 TPO  
Mail Code: SA-5J

Case Number: 43102  
Site Name: C & H Tamarack Operation (MI)

Page 2 of 17  
SDG Number: E3P89  
Laboratory: KAP

**Below is a summary of the out-of-control audits and the possible effects on the data for this case:**

Twenty (20) soil samples labeled E3P89 - E3P99, E3PA0 – E3PA4, E3PA9, E3PB0, E3PB1 and E3PB3 were collected on 11/05/12 and 11/06/12. The samples were received by KAP Technologies, Inc. located in The Woodland, TX on 11/08/12. The samples arrived intact and at the proper shipping temperature range of 2 - 6°C. The samples were analyzed for the semivolatile, pesticide and aroclor target compounds. All samples were analyzed according to CLP SOW SOM01.2 and reviewed according to the NFG for SOM01.2 and the SOP for ESAT 5/TechLaw Validation of Contract Laboratory Program Organic Data (Version 2.6.2).

Samples E3P92 was designated by the samplers to be used for laboratory QC, i.e. MS / MSD analyses. Sample E3P92 was used as parent sample for the semivolatile and pesticide MS / MSD analyses. Sample E3PB3 was used as parent sample for the aroclor MS / MSD analyses.

No samples were identified as field blanks. Samples E3P90/E3P91, E3PA1/E3PA2 and E3PB0/E3PB1 were identified as field duplicate pairs.

### **1. HOLDING TIME**

No problems were found.

### **2. GC/MS TUNING AND GC INSTRUMENT PERFORMANCE**

No problems were found.

### **3. CALIBRATION**

The following semivolatile samples are associated with an opening CCV percent difference (%D) outside criteria. The compounds were not detected in the samples. Non-detected compounds are qualified "UJ".

E3P92DL, E3P97DL, E3PB1  
4-Methylphenol, N-Nitroso-di-n-propylamine, Pentachlorophenol

The following semivolatile samples are associated with a continuing calibration in which a surrogate/DMC exceeded percent difference (%D) criteria. Detected and non-detected compounds are not qualified.

E3P92DL, E3P97DL, E3PB1  
4-Methylphenol-d<sub>8</sub>

### **4. BLANKS**

The following semivolatile sample has TIC concentrations reported less than 5X the method blank concentration. Detected compound is qualified "U" and deleted from the TIC report.

Unknown @ 18.64  
E3P94

### **5. DEUTERATED MONITORING COMPOUND AND SURROGATE RECOVERY**

The following semivolatile samples have deuterated monitoring compound recovery above the upper limit of the criteria window. Detected compounds are qualified "J". Non-detected compounds are not qualified.

E3P90  
Hexachlorobenzene, Atrazine, Phenanthrene, Anthracene

The following pesticide samples have surrogate percent recoveries which exceed the upper limit of the criteria window. Detected compounds are qualified "J". Non-detected compounds are not qualified.

E3P92, E3P92MS, E3P92MSD, E3P97, E3PA3  
alpha-BHC, beta-BHC, delta-BHC, gamma-BHC (Lindane), Heptachlor, Aldrin,  
Heptachlor epoxide, Endosulfan I, Dieldrin, 4,4'-DDE, Endrin, Endosulfan II,  
4,4'-DDD, Endosulfan sulfate, 4,4'-DDT, Methoxychlor, Endrin ketone,  
Endrin aldehyde, alpha-Chlordane, gamma-Chlordane, Toxaphene

The following diluted pesticide samples have surrogate percent recoveries which exceed the upper limit of the criteria window. Detected and non-detected compounds are not qualified because the samples have a dilution factor of 5.0 or greater.

E3P93DL  
alpha-BHC, beta-BHC, delta-BHC, gamma-BHC (Lindane), Heptachlor, Aldrin,  
Heptachlor epoxide, Endosulfan I, Dieldrin, 4,4'-DDE, Endrin, Endosulfan II,  
4,4'-DDD, Endosulfan sulfate, 4,4'-DDT, Methoxychlor, Endrin ketone,  
Endrin aldehyde, alpha-Chlordane, gamma-Chlordane, Toxaphene

The following pesticide samples have surrogate percent recoveries outside the lower limit of the criteria window, but greater than 10%. The compounds were not detected in the samples. Non-detected compounds are qualified "UJ".

E3P99, E3PA0, E3PA2, E3PA9, E3PB3  
alpha-BHC, beta-BHC, delta-BHC, gamma-BHC (Lindane), Heptachlor, Aldrin,  
Heptachlor epoxide, Endosulfan I, Dieldrin, 4,4'-DDE, Endrin, Endosulfan II,  
4,4'-DDD, Endosulfan sulfate, 4,4'-DDT, Methoxychlor, Endrin ketone,  
Endrin aldehyde, alpha-Chlordane, gamma-Chlordane, Toxaphene

The following aroclor samples have surrogate percent recoveries which exceed the upper limit of the criteria window on only 1 GC column. Detected and non-detected compounds are not qualified as the lower of the 2 possible values (i.e. the reported value) is within the acceptance range.

E3PA3, E3PA4

The following aroclor samples have surrogate percent recoveries less than the primary minimum criteria but greater than or equal to the expanded minimum criteria. The compounds were not detected in the sample. Non-detected compounds are qualified "UJ".

E3PA2  
Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254,  
Aroclor-1260, Aroclor-1262, Aroclor-1268

**6A. MATRIX SPIKE/MATRIX SPIKE DUPLICATE**

Samples E3P92 was designated by the samplers to be used for laboratory QC, i.e. MS / MSD analyses. Sample E3P92 was used as parent sample for the semivolatile and pesticide MS / MSD analyses. Sample E3PB3 was used as parent sample for the aroclor MS / MSD analyses.

The relative percent difference (RPD) between semivolatile analyte results is less than the lower acceptance limit. Detected Pyrene in the unspiked samples (E3P92 and E3P92DL) is qualified “J”.

E3P92MS, E3P92MSD  
Pyrene

The following semivolatile matrix spike/matrix spike duplicate samples have percent recoveries greater than the upper acceptance criteria. The compounds were not detected in the unspiked samples (E3P92 and E3P92DL). Non-detected compounds are not qualified.

E3P92MS  
Phenol, 2-Chlorophenol, 4-Chloro-3-methylphenol, 4-Nitrophenol

E3P92MSD  
Phenol, 2-Chlorophenol, 4-Chloro-3-methylphenol, 4-Nitrophenol, Pentachlorophenol

The following semivolatile matrix spike/matrix spike duplicate samples have percent recoveries that are less than the expanded lower acceptance limit. Detected Pyrene in the unspiked samples (E3P92 and E3P92DL) is qualified “J”.

E3P92MS, E3P92MSD  
Pyrene

No problems were found for the pesticide MS / MSD analyses.

The aroclor Form III – MS/MSD Summary was re-calculated using the lowest obtained value for each compound. The RPDs were re-calculated using these values.

	MS % Rec	MSD % Rec	RPD	RPD QC	REC QC
Aroclor-1016	73	71	3	0-15	29 - 135
Aroclor-1260	51	51	0	0-20	29 - 135

No problems were found for the aroclor MS / MSD analyses.

**6B. LABORATORY CONTROL SAMPLE**

No problems were found.

**7. FIELD BLANK AND FIELD DUPLICATE**

No samples were identified as field blanks. Samples E3P90/E3P91, E3PA1/E3PA2 and E3PB0/E3PB1 were identified as field duplicate pairs. Results for the duplicate samples are summarized in the following tables:

Analytes	Sample ID	E3P90	E3P91	RPDs
	DF, units	1, ug/Kg	1, ug/Kg	
Diethylphthalate		85	ND	200
Phenanthrene		700	540	26
Anthracene		110	98	12
Fluoranthene		920	680	30
Pyrene		840	640	27
Benzo(a)anthracene		370	310	18
Chrysene		470	420	11
Benzo(b)fluoranthene		330	340	3.0
Benzo(k)fluoranthene		320	280	13
Benzo(a)pyrene		340	290	16
Indeno(1,2,3-cd)pyrene		230	230	0
Benzo(g,h,i)perylene		260	260	0
SVOA TICs		3	3	
Endrin ketone		2.8	2.0	33

Analytes	Sample ID	E3PA1	E3PA2	RPDs
	DF, units	1, ug/Kg	1, ug/Kg	
Fluoranthene		130	140	7.4
Pyrene		120	120	0.0
Chrysene		90	92	2.2
Benzo(b)fluoranthene		85	ND	200
Benzo(k)fluoranthene		84	76	10
SVOA TICs		2	2	

Analytes	Sample ID	E3PB0	E3PB1	RPDs
	DF, units	1, ug/Kg	1, ug/Kg	
Phenanthrene		220	320	37
Fluoranthene		530	470	12
Pyrene		350	450	25
Benzo(a)anthracene		190	250	27
Chrysene		260	290	11
Bis(2-ethylhexyl)phthalate		ND	180	200
Benzo(b)fluoranthene		160	200	22
Benzo(k)fluoranthene		180	170	5.7
Benzo(a)pyrene		200	230	14
Indeno(1,2,3-cd)pyrene		130	140	7.4
Benzo(g,h,i)perylene		150	150	0
SVOA TICs		0	5	

Results are not qualified based upon the results of the field duplicates.

#### 8. INTERNAL STANDARDS

No problems were found.

#### 9. COMPOUND IDENTIFICATION

After reviewing the mass spectra and chromatograms it appears that all semivolatile, pesticide and aroclor compounds were properly identified.

#### 10. COMPOUND QUANTITATION AND REPORTED DETECTION LIMITS

The following semivolatile samples have compound concentrations less than the CRQL. Detected compounds are qualified "J".

E3P90  
Diethylphthalate, Anthracene

E3P91, E3P97DL  
Anthracene

E3P92, E3P92MS, E3P92MSD  
Benzaldehyde, Naphthalene, 2-Methylnaphthalene, Acenaphthylene

E3P92DL

Carbazole, Dibenzo(a,h)anthracene

E3P93

Diethylphthalate, Dibenzo(a,h)anthracene

E3P94

Diethylphthalate, Carbazole, Bis(2-ethylhexyl)phthalate

E3P95

Fluoranthene, Pyrene

E3P96

Acenaphthene, Fluorene, Carbazole, Dibenzo(a,h)anthracene

E3P97

Acenaphthylene

E3P98

Fluoranthene, Pyrene, Chrysene, Benzo(g,h,i)perylene

E3P99, E3PA0

Fluoranthene, Pyrene, Benzo(a)anthracene, Chrysene

E3PA1

Fluoranthene, Pyrene, Chrysene, Benzo(b)fluoranthene, Benzo(k)fluoranthene

E3PA2

Fluoranthene, Pyrene, Chrysene, Benzo(k)fluoranthene

E3PA3

Acenaphthylene, Anthracene, Carbazole

E3PA4

Fluorene, Carbazole, Bis(2-ethylhexyl)phthalate

E3PB0

Benzo(b)fluoranthene, Benzo(k)fluoranthene, Indeno(1,2,3-cd)pyrene,  
Benzo(g,h,i)perylene

E3PB1

Bis(2-ethylhexyl)phthalate, Benzo(k)fluoranthene, Indeno(1,2,3-cd)pyrene,  
Benzo(g,h,i)perylene



E3PB3

Benzo(a)anthracene, Chrysene, Benzo(b)fluoranthene, Benzo(k)fluoranthene,  
Benzo(a)pyrene, Indeno(1,2,3-cd)pyrene, Benzo(g,h,i)perylene

A library search indicates a match at or above 85% for the TIC compounds in the following volatile samples. Detected compounds are qualified "NJ".

CAS No.	57-10-3	n-Hexadecanoic acid @ 14.97 - 15.31
E3P93, E3P99, E3PB1		
CAS No.	58-22-0	Testosterone
E3P90		
CAS No.	82-05-3	7H-Benz[de]anthracen-7-one
E3PA3		
CAS No.	83-47-6	.gamma.-Sitosterol
E3P89, E3PB1		
CAS No.	84-65-1	9,10-Anthracenedione
CAS No.	613-12-7	Anthracene, 2-methyl-
CAS No.	1576-67-6	Phenanthrene, 3,6-dimethyl-
CAS No.	3674-66-6	Phenanthrene, 2,5-dimethyl-
CAS No.	5737-13-3	Cyclopenta(def)phenanthrenone
CAS No.	35465-71-5	2-Phenylnaphthalene
E3P97DL		
CAS No.	84-69-5	1,2-Benzenedicarboxylic acid, bis(2-methylpropyl) ester
E3PA9, E3PB3		
CAS No.	124-25-4	Tetradecanal
E3P89		
CAS No.	189-64-0	3,4:8,9-Dibenzopyrene
E3P99		
CAS No.	191-26-4	Dibenzo[def,mno]chrysene
E3PA2		
CAS No.	192-97-2	Benzo[e]pyrene
E3P96		
CAS No.	213-46-7	1,2:7,8-Dibenzophenanthrene
CAS No.	33543-31-6	Fluoranthene, 2-methyl-
E3P97		

Case Number: 43102  
Site Name: C & H Tamarack Operation (MI)

Page 10 of 17  
SDG Number: E3P89  
Laboratory: KAP

CAS No.	473-08-5	7-Isopropenyl-1,4a-dimethyl-4,4a,5,6,7,8-hexahydro-3H-naphthalen-2-one
CAS No.	20020-02-4	Naphthalene, 1,2,3,4-tetrachloro-
CAS No.	53555-64-9	Naphthalene, 1,3,5,7-tetrachloro-
CAS No.	55720-43-9	Naphthalene, 1,4,6,7-tetrachloro-
E3P93		
CAS No.	479-79-8	11H-Benzo[a]fluoren-11-one
CAS No.	1000110-40-2	1-(2-Aminobenzylidene)-1,2,3,4-tetrahydroacridine N-oxide
E3PA4		
CAS No.	604-39-7	Androst-4-en-3-one, 17-hydroxy-, (10.alpha.,17.beta.)-
E3P91		
CAS No.	1058-61-3	Stigmast-4-en-3-one @ 23.05 - 24.81
E3P92, E3P92DL, E3P95		
CAS No.	1599-67-3	1-Docosene
CAS No.	39827-01-5	Selenolo[3,4-b][1]benzoselenophen-3(1H)-one
E3P98		
CAS No.	2381-21-7	Pyrene, 1-methyl- @ 16.33 - 16.81
E3P92DL, E3P97DL, E3PA4		
CAS No.	3353-12-6	Pyrene, 4-methyl-
E3P92DL		
CAS No.	53584-60-4	28-Nor-17.alpha.(H)-hopane
CAS No.	55591-14-5	Piperazine, 1-methyl-4-(1,2,3,4-tetrahydro-3,7-dimethyl-2-phthalenyl)-
CAS No.	78782-15-7	Dammarane-3,12,25-triol, 20,24-epoxy-, 12-acetate 3-(hydrogen
E3P94		
CAS No.	74685-29-3	9-Eicosene, (E)-
E3PB1		
CAS No.	350816-89-6	2,2,2-Trichlorethyl-3-[2-(brommethyl)-4-chlor-1,3-oxazol-5-yl]-2-
E3PA0		
CAS No.	1000214-20-7	Stigmasterol, 22,23-dihydro-
E3P95		

A library search indicates a match below 85% for the TIC compounds in the following volatile samples. Detected compounds are qualified "J".

Case Number: 43102  
Site Name: C & H Tamarack Operation (MI)

Page 11 of 17  
SDG Number: E3P89  
Laboratory: KAP

Unknown @ 12.90; Unknown @ 13.15; Unknown @ 13.19; Unknown @ 13.24;  
Unknown @ 13.28; Unknown @ 13.52; Unknown @ 19.57; Unknown @ 19.79;  
Unknown @ 19.85; Unknown @ 20.06  
E3P94

Unknown @ 14.53; Unknown @ 16.66  
E3P97DL

Unknown @ 14.62  
E3PA1

Unknown @ 14.99  
E3P92DL, E3P97DL

Unknown @ 15.35; Unknown @ 20.37; Unknown @ 21.56  
E3P97

Unknown @ 15.48; Unknown @ 18.42  
E3P93

Unknown @ 15.53  
E3P92DL, E3PA1, E3PA2, E3PB3

Unknown @ 16.90  
E3PB1

Unknown @ 17.02  
E3P97, E3PA3

Unknown @ 17.27; Unknown @ 20.10  
E3P99, E3PA0

Unknown @ 17.35; Unknown @ 17.73; Unknown @ 17.88; Unknown @ 17.99;  
Unknown @ 18.38; Unknown @ 18.86; Unknown @ 18.93; Unknown @ 19.03;  
Unknown @ 19.73; Unknown @ 19.94; Unknown @ 20.51; Unknown @ 20.75;  
Unknown @ 20.83; Unknown @ 21.36  
E3P99

Unknown @ 17.60  
E3PA9

Unknown @ 17.65 - 17.68  
E3P93, E3P99

Case Number: 43102  
Site Name: C & H Tamarack Operation (MI)

Page 12 of 17  
SDG Number: E3P89  
Laboratory: KAP

Unknown @ 17.82  
E3PA4

Unknown @ 18.15 - 18.18  
E3P99, E3PA3, E3PA4

Unknown @ 18.24  
E3PA3

Unknown @ 18.46 - 18.49  
E3P92, E3P94, E3P99

Unknown @ 18.64  
E3P97, SBLK58

Unknown @ 18.80  
E3P92, E3P97

Unknown @ 19.08; Unknown @ 21.76  
E3P98

Unknown @ 19.19  
E3P98, E3P99

Unknown @ 19.65 - 19.69  
E3P93, E3P94, E3P99, E3PB1

Unknown @ 20.27  
E3P94, E3P99

Unknown @ 20.33; Unknown @ 21.61; Unknown @ 22.13; Unknown @ 22.60;  
Unknown @ 24.61  
E3P92DL

Unknown @ 20.59  
E3P91, E3P92

Unknown @ 20.90 - 20.95  
E3P92, E3P94, E3P96, E3P97, E3P99

Unknown @ 21.29 - 21.32  
E3P92, E3P94, E3P97

Unknown @ 21.50  
E3P94, E3P96

Case Number: 43102  
Site Name: C & H Tamarack Operation (MI)

Page 13 of 17  
SDG Number: E3P89  
Laboratory: KAP

Unknown @ 23.33; Unknown @ 23.65; Unknown @ 23.88; Unknown @ 24.59  
E3P92

Unknown @ 23.79  
E3P90, E3P91

Unknown @ 24.39  
E3P90

The following pesticide samples have compound concentrations less than the CRQL. Detected compounds are qualified "J".

E3P90, E3P91  
Endrin ketone

E3P92  
Endrin, Endrin aldehyde

E3P92MS, E3P92MSD  
Endrin aldehyde

E3P93DL  
beta-BHC, Dieldrin, Endrin aldehyde

E3P94  
4,4'-DDT

PLCS71  
gamma-BHC (lindane), Heptachlor epoxide, Dieldrin, 4,4'-DDE, Endrin,  
Endosulfan sulfate, gamma-Chlordane

The relative percent differences between analyte results for the following pesticide samples are greater than 25%. The analyte concentrations are greater than 25% of the CRQL. Detected compounds are qualified "J".

E3P92  
Endrin, 4,4'-DDT, Endrin ketone, Endrin aldehyde

E3P92MS  
gamma-BHC (Lindane), Heptachlor, Endrin ketone, Endrin aldehyde

E3P92MSD  
Endrin ketone, Endrin aldehyde

Case Number: 43102  
Site Name: C & H Tamarack Operation (MI)

Page 14 of 17  
SDG Number: E3P89  
Laboratory: KAP

E3P93  
beta-BHC, Dieldrin, Endrin aldehyde

E3P93DL  
beta-BHC, Dieldrin

E3P94, E3P97, E3PA3  
4,4'-DDT

The following aroclor sample has compound concentrations less than the CRQL. Detected compound is qualified "J".

ALCS70  
Aroclor-1260

The relative percent differences between analyte results for the following pesticide samples are greater than 25%. The analyte concentrations are greater than 25% of the CRQL. Detected compounds are qualified "J".

E3P93, E3P93DL  
Aroclor-1260

E3PB3MS  
Aroclor-1016

E3PB3MSD  
Aroclor-1016, Aroclor-1260

The relative percent differences between analyte results for the following pesticide samples are greater than 25%. The results are less than 25% of the CRQL. Detected compounds are qualified "U" as false positives. Reported sample concentrations have been elevated to the CRQL.

E3P97  
Aroclor-1260

## 11. SYSTEM PERFORMANCE

GC/MS baseline indicated acceptable performance. The GC baselines for the pesticide and aroclor analyses were acceptable.

12. ADDITIONAL INFORMATION

The following semivolatile samples have compound concentrations which exceed the instruments calibration range. The detected results are qualified "J". The results from the diluted analyses should be considered the final concentrations for the affected compounds.

✓ SS-03  
E3P92  
Phenanthrene, Fluoranthene, Pyrene, Chrysene

JEF 3/21/13

✓ SS-08  
E3P97  
Fluoranthene, Pyrene, Benzo(a)anthracene, Chrysene, Benzo(b)fluoranthene

The following semivolatile samples have compound concentrations which exceed the instruments calibration range. The detected results are qualified "J". No dilution was required because these are laboratory QC samples.

E3P92MS, E3P92MSD  
Phenanthrene, Fluoranthene, Pyrene

The following pesticide samples have compound concentrations which exceed the instruments calibration range. The detected results are qualified "J". The results from the diluted analyses should be considered the final concentrations for the affected compounds.

✓ SS-04  
E3P93  
4,4'-DDE, 4,4'-DDT

JEF 3/21/13

The following aroclor samples have compound concentrations which exceed the instruments calibration range. The detected results are qualified "J". The results from the diluted analyses should be considered the final concentrations for the affected compounds.

✓ SS-04  
E3P93  
Aroclor-1248, Aroclor-1254

JEF 3/14/13

The following semivolatile samples have compounds identified by two different CAS No. in the samples. An internet search of the CAS Numbers indicate that the 2 names are synonyms for the same compound. Copies of the chromatograms are included with the validation report.

CAS No. 58-22-0 Testosterone  
E3P90

Versus

CAS No. 604-39-7 Androst-4-en-3-one, 17-hydroxy-  
E3P91

Case Number: 43102  
Site Name: C & H Tamarack Operation (MI)

Page 16 of 17  
SDG Number: E3P89  
Laboratory: KAP

The following semivolatile samples have a compound identified by CAS No. in some samples and as an Unknown TIC in other samples. A comparison of the chromatograms demonstrated that the same compound was present in the respective samples. Copies of the chromatograms are included with the validation report.

CAS No. 84-69-5 1,2-Benzenedicarboxylic acid, bis(2-methylpropyl)ester [@ 14.62]  
E3PB3, E3PA9  
versus  
Unknown @ 14.62  
E3PA1

CAS No. 78782-15-7 Dammarane-3,12,25-triol, 20,24-epoxy-, 12-acetate 3 [@ 17.65]  
E3P94  
versus  
Unknown @ 17.65  
E3P93

CAS No. 53584-60-4 28-Nor-17.alpha.(H)-hopane [@ 20.59]  
E3P94  
versus  
Unknown @ 20.59  
E3P91

TICs with no CAS Numbers were not reported in the EXES Sample Summary Report for the semivolatile fraction. Please refer to Word document "43102 sdg E3P89 TIC" for the validated TIC results.

All sample results were reported on forms from CLP SOW SOM01.2 (6/2007). All QC results were reported on forms from CLP SOW SOM01.1 (5/2005). Sample results are not qualified for this non-compliance.

EXEs did not include the following pesticide and aroclor samples. Form Is for these samples are included with the hard copy data package.

ALCS70, PLCS71



CADRE Data Qualifier Sheet

<u>Qualifiers</u>	<u>Data Qualifier Definitions</u>
U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
J	The analyte was positively identified; the associated numerical value is an approximate concentration of the analyte in the sample.
UJ	The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the action limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
N	The analysis indicates the presence of an analyte for which there is presumptive evidence to make a tentative identification.
NJ	The analysis indicates the presence of an analyte for which there is presumptive evidence to make a tentative identification and the associated numerical value represents its approximate concentration.
R	The data are unusable. (The compound may or may not be present.)

## Sample Summary Report

Case No:	43102	Contract:	EPW11031	SDG No:	E3P89	Lab Code:	KAP
Sample Number:	ABLK70	Method:	Aroclor	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:		pH:		Sample Date:		Sample Time:	
% Moisture :	0.00			% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aroclor-1016	33	UG/KG	1.0	U	U	Yes	
Aroclor-1221	33	UG/KG	1.0	U	U	Yes	
Aroclor-1232	33	UG/KG	1.0	U	U	Yes	
Aroclor-1242	33	UG/KG	1.0	U	U	Yes	
Aroclor-1248	33	UG/KG	1.0	U	U	Yes	
Aroclor-1254	33	UG/KG	1.0	U	U	Yes	
Aroclor-1260	33	UG/KG	1.0	U	U	Yes	
Aroclor-1262	33	UG/KG	1.0	U	U	Yes	
Aroclor-1268	33	UG/KG	1.0	U	U	Yes	

Case No:	43102	Contract:	EPW11031	SDG No:	E3P89	Lab Code:	KAP
Sample Number:	E3P89	Method:	Aroclor	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	SS-01	pH:	7.0	Sample Date:	11/06/2012	Sample Time:	16:33:00
% Moisture :	12			% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aroclor-1016	38	UG/KG	1.0	U	U	Yes	
Aroclor-1221	38	UG/KG	1.0	U	U	Yes	
Aroclor-1232	38	UG/KG	1.0	U	U	Yes	
Aroclor-1242	38	UG/KG	1.0	U	U	Yes	
Aroclor-1248	38	UG/KG	1.0	U	U	Yes	
Aroclor-1254	38	UG/KG	1.0	U	U	Yes	
Aroclor-1260	38	UG/KG	1.0	U	U	Yes	
Aroclor-1262	38	UG/KG	1.0	U	U	Yes	
Aroclor-1268	38	UG/KG	1.0	U	U	Yes	

Case No:	43102	Contract:	BPW11031	SDG No:	E3P89	Lab Code:	KAP
Sample Number:	E3P89	Method:	BNA	Matrix:	SOIL	MA Number:	DEFAULT
Sample Location:	SS-01	pH:	7.0	Sample Date:	11/06/2012	Sample Time:	16:33:00
% Moisture :	12			% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Benzaldehyde	190	UG/KG	1.0	U	U	Yes	
Phenol	190	UG/KG	1.0	U	U	Yes	
Bis(2-chloroethyl)ether	190	UG/KG	1.0	U	U	Yes	
2-Chlorophenol	190	UG/KG	1.0	U	U	Yes	
2-Methylphenol	190	UG/KG	1.0	U	U	Yes	
2,2'-Oxybis(1-chloropropane)	190	UG/KG	1.0	U	U	Yes	
Acetophenone	190	UG/KG	1.0	U	U	Yes	
4-Methylphenol	190	UG/KG	1.0	U	U	Yes	
N-Nitroso-di-n-propylamine	190	UG/KG	1.0	U	U	Yes	
Hexachloroethane	190	UG/KG	1.0	U	U	Yes	
Nitrobenzene	190	UG/KG	1.0	U	U	Yes	
Isophorone	190	UG/KG	1.0	U	U	Yes	
2-Nitrophenol	190	UG/KG	1.0	U	U	Yes	
2,4-Dimethylphenol	190	UG/KG	1.0	U	U	Yes	
Bis(2-chloroethoxy)methane	190	UG/KG	1.0	U	U	Yes	
2,4-Dichlorophenol	190	UG/KG	1.0	U	U	Yes	
Naphthalene	190	UG/KG	1.0	U	U	Yes	
4-Chloroaniline	190	UG/KG	1.0	U	U	Yes	
Hexachlorobutadiene	190	UG/KG	1.0	U	U	Yes	
Caprolactam	190	UG/KG	1.0	U	U	Yes	
4-Chloro-3-methylphenol	190	UG/KG	1.0	U	U	Yes	
2-Methylnaphthalene	190	UG/KG	1.0	U	U	Yes	
Hexachlorocyclopentadiene	190	UG/KG	1.0	U	U	Yes	
2,4,6-Trichlorophenol	190	UG/KG	1.0	U	U	Yes	
2,4,5-Trichlorophenol	190	UG/KG	1.0	U	U	Yes	
1,1'-Biphenyl	190	UG/KG	1.0	U	U	Yes	
2-Chloronaphthalene	190	UG/KG	1.0	U	U	Yes	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
2-Nitroaniline	370	UG/KG	1.0	U	U	Yes	
Dimethylphthalate	190	UG/KG	1.0	U	U	Yes	
2,6-Dinitrotoluene	190	UG/KG	1.0	U	U	Yes	
Acenaphthylene	190	UG/KG	1.0	U	U	Yes	
3-Nitroaniline	370	UG/KG	1.0	U	U	Yes	
Acenaphthene	190	UG/KG	1.0	U	U	Yes	
2,4-Dinitrophenol	370	UG/KG	1.0	U	U	Yes	
4-Nitrophenol	370	UG/KG	1.0	U	U	Yes	
Dibenzofuran	190	UG/KG	1.0	U	U	Yes	
2,4-Dinitrotoluene	190	UG/KG	1.0	U	U	Yes	
Diethylphthalate	190	UG/KG	1.0	U	U	Yes	
Fluorene	190	UG/KG	1.0	U	U	Yes	
4-Chlorophenylphenylether	190	UG/KG	1.0	U	U	Yes	
4-Nitroaniline	370	UG/KG	1.0	U	U	Yes	
4,6-Dinitro-2-methylphenol	370	UG/KG	1.0	U	U	Yes	
N-Nitrosodiphenylamine	190	UG/KG	1.0	U	U	Yes	
1,2,4,5-Tetrachlorobenzene	190	UG/KG	1.0	U	U	Yes	
4-Bromophenylphenylether	190	UG/KG	1.0	U	U	Yes	
Hexachlorobenzene	190	UG/KG	1.0	U	U	Yes	
Atrazine	190	UG/KG	1.0	U	U	Yes	
Pentachlorophenol	370	UG/KG	1.0	U	U	Yes	
Phenanthrene	190	UG/KG	1.0	U	U	Yes	
Anthracene	190	UG/KG	1.0	U	U	Yes	
Carbazole	190	UG/KG	1.0	U	U	Yes	
Di-n-butylphthalate	190	UG/KG	1.0	U	U	Yes	
Fluoranthene	190	UG/KG	1.0	U	U	Yes	
Pyrene	190	UG/KG	1.0	U	U	Yes	
Butylbenzylphthalate	190	UG/KG	1.0	U	U	Yes	
3,3'-Dichlorobenzidine	190	UG/KG	1.0	U	U	Yes	
Benzo(a)anthracene	190	UG/KG	1.0	U	U	Yes	
Chrysene	190	UG/KG	1.0	U	U	Yes	
Bis(2-ethylhexyl)	190	UG/KG	1.0	U	U	Yes	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
phthalate	190	UG/KG	1.0	U	U	Yes	
Di-n-octylphthalate	190	UG/KG	1.0	U	U	Yes	
Benzo(b)fluorant hene	190	UG/KG	1.0	U	U	Yes	
Benzo(k)fluorant hene	190	UG/KG	1.0	U	U	Yes	
Benzo(a)pyrene	190	UG/KG	1.0	U	U	Yes	
Indeno(1,2,3-cd)pyrene	190	UG/KG	1.0	U	U	Yes	
Dibenzo(a,h)anthracene	190	UG/KG	1.0	U	U	Yes	
Benzo(g,h,i)perylene	190	UG/KG	1.0	U	U	Yes	
2,3,4,6-Tetrachlorophenol	190	UG/KG	1.0	U	U	Yes	
.gamma.-Sitosterol			1.0	NJ		Yes	
Tetradecanal			1.0	NJ		Yes	

Case No:	43102	Contract:	EPW11031	SDG No:	E3P89	Lab Code:	KAP
Sample Number:	E3P89	Method:	Pest	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	SS-01	pH:	7.0	Sample Date:	11/06/2012	Sample Time:	16:33:00
% Moisture :	12.00			% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
alpha-BHC	1.9	UG/KG	1.0	U	U	Yes	
beta-BHC	1.9	UG/KG	1.0	U	U	Yes	
delta-BHC	1.9	UG/KG	1.0	U	U	Yes	
gamma-BHC (Lindane)	1.9	UG/KG	1.0	U	U	Yes	
Heptachlor	1.9	UG/KG	1.0	U	U	Yes	
Aldrin	1.9	UG/KG	1.0	U	U	Yes	
Heptachlor epoxide	1.9	UG/KG	1.0	U	U	Yes	
Endosulfan I	1.9	UG/KG	1.0	U	U	Yes	
Dieldrin	3.7	UG/KG	1.0	U	U	Yes	
4,4'-DDE	3.7	UG/KG	1.0	U	U	Yes	
Endrin	3.7	UG/KG	1.0	U	U	Yes	
Endosulfan II	3.7	UG/KG	1.0	U	U	Yes	
4,4'-DDD	3.7	UG/KG	1.0	U	U	Yes	
Endosulfan sulfate	3.7	UG/KG	1.0	U	U	Yes	
4,4'-DDT	3.7	UG/KG	1.0	U	U	Yes	
Methoxychlor	19	UG/KG	1.0	U	U	Yes	
Endrin ketone	3.7	UG/KG	1.0	U	U	Yes	
Endrin aldehyde	3.7	UG/KG	1.0	U	U	Yes	
alpha-Chlordane	1.9	UG/KG	1.0	U	U	Yes	
gamma- Chlordane	1.9	UG/KG	1.0	U	U	Yes	
Toxaphene	190	UG/KG	1.0	U	U	Yes	

Case No:	43102	Contract:	EPW11031	SDG No:	E3P89	Lab Code:	KAP
Sample Number:	E3P90	Method:	Pest	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	SS-02	pH:	6.1	Sample Date:	11/05/2012	Sample Time:	11:23:00
% Moisture :	14.00			% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
alpha-BHC	2.0	UG/KG	1.0	U	U	Yes	
beta-BHC	2.0	UG/KG	1.0	U	U	Yes	
delta-BHC	2.0	UG/KG	1.0	U	U	Yes	
gamma-BHC (Lindane)	2.0	UG/KG	1.0	U	U	Yes	
Heptachlor	2.0	UG/KG	1.0	U	U	Yes	
Aldrin	2.0	UG/KG	1.0	U	U	Yes	
Heptachlor epoxide	2.0	UG/KG	1.0	U	U	Yes	
Endosulfan I	2.0	UG/KG	1.0	U	U	Yes	
Dieldrin	3.8	UG/KG	1.0	U	U	Yes	
4,4'-DDE	3.8	UG/KG	1.0	U	U	Yes	
Endrin	3.8	UG/KG	1.0	U	U	Yes	
Endosulfan II	3.8	UG/KG	1.0	U	U	Yes	
4,4'-DDD	3.8	UG/KG	1.0	U	U	Yes	
Endosulfan sulfate	3.8	UG/KG	1.0	U	U	Yes	
4,4'-DDT	3.8	UG/KG	1.0	U	U	Yes	
Methoxychlor	20	UG/KG	1.0	U	U	Yes	
Endrin ketone	2.8	UG/KG	1.0	J	J	Yes	
Endrin aldehyde	3.8	UG/KG	1.0	U	U	Yes	
alpha-Chlordane	2.0	UG/KG	1.0	U	U	Yes	
gamma- Chlordane	2.0	UG/KG	1.0	U	U	Yes	
Toxaphene	200	UG/KG	1.0	U	U	Yes	



Case No: 43102	Contract: EPW11031	SDG No: E3P89	Lab Code: KAP
Sample Number: E3P90	Method: BNA	Matrix: SOIL	MA Number: DEFAULT
Sample Location: SS-02	pH: 6.1	Sample Date: 11/05/2012	Sample Time: 11:23:00
% Moisture : 14		% Solids :	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Benzaldehyde	200	UG/KG	1.0	U	U	Yes	
Phenol	200	UG/KG	1.0	U	U	Yes	
Bis(2-chloroethyl)ether	200	UG/KG	1.0	U	U	Yes	
2-Chlorophenol	200	UG/KG	1.0	U	U	Yes	
2-Methylphenol	200	UG/KG	1.0	U	U	Yes	
2,2'-Oxybis(1-chloropropane)	200	UG/KG	1.0	U	U	Yes	
Acetophenone	200	UG/KG	1.0	U	U	Yes	
4-Methylphenol	200	UG/KG	1.0	U	U	Yes	
N-Nitroso-di-n-propylamine	200	UG/KG	1.0	U	U	Yes	
Hexachloroethane	200	UG/KG	1.0	U	U	Yes	
Nitrobenzene	200	UG/KG	1.0	U	U	Yes	
Isophorone	200	UG/KG	1.0	U	U	Yes	
2-Nitrophenol	200	UG/KG	1.0	U	U	Yes	
2,4-Dimethylphenol	200	UG/KG	1.0	U	U	Yes	
Bis(2-chloroethoxy)methane	200	UG/KG	1.0	U	U	Yes	
2,4-Dichlorophenol	200	UG/KG	1.0	U	U	Yes	
Naphthalene	200	UG/KG	1.0	U	U	Yes	
4-Chloroaniline	200	UG/KG	1.0	U	U	Yes	
Hexachlorobutadiene	200	UG/KG	1.0	U	U	Yes	
Caprolactam	200	UG/KG	1.0	U	U	Yes	
4-Chloro-3-methylphenol	200	UG/KG	1.0	U	U	Yes	
2-Methylnaphthalene	200	UG/KG	1.0	U	U	Yes	
Hexachlorocyclopentadiene	200	UG/KG	1.0	U	U	Yes	
2,4,6-Trichlorophenol	200	UG/KG	1.0	U	U	Yes	
2,4,5-Trichlorophenol	200	UG/KG	1.0	U	U	Yes	
1,1'-Biphenyl	200	UG/KG	1.0	U	U	Yes	
2-Chloronaphthalene	200	UG/KG	1.0	U	U	Yes	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
2-Nitroaniline	380	UG/KG	1.0	U	U	Yes	
Dimethylphthalate	200	UG/KG	1.0	U	U	Yes	
2,6-Dinitrotoluene	200	UG/KG	1.0	U	U	Yes	
Acenaphthylene	200	UG/KG	1.0	U	U	Yes	
3-Nitroaniline	380	UG/KG	1.0	U	U	Yes	
Acenaphthene	200	UG/KG	1.0	U	U	Yes	
2,4-Dinitrophenol	380	UG/KG	1.0	U	U	Yes	
4-Nitrophenol	380	UG/KG	1.0	U	U	Yes	
Dibenzofuran	200	UG/KG	1.0	U	U	Yes	
2,4-Dinitrotoluene	200	UG/KG	1.0	U	U	Yes	
Diethylphthalate	85	UG/KG	1.0	J	J	Yes	
Fluorene	200	UG/KG	1.0	U	U	Yes	
4-Chlorophenylphenylether	200	UG/KG	1.0	U	U	Yes	
4-Nitroaniline	380	UG/KG	1.0	U	U	Yes	
4,6-Dinitro-2-methylphenol	380	UG/KG	1.0	U	U	Yes	
N-Nitrosodiphenylamine	200	UG/KG	1.0	U	U	Yes	
1,2,4,5-tetrachlorobenzene	200	UG/KG	1.0	U	U	Yes	
4-Bromophenylphenylether	200	UG/KG	1.0	U	U	Yes	
Hexachlorobenzene	200	UG/KG	1.0	U	U	Yes	
Atrazine	200	UG/KG	1.0	U	U	Yes	
Pentachlorophenol	380	UG/KG	1.0	U	U	Yes	
Phenanthrene	700	UG/KG	1.0		J	Yes	
Anthracene	110	UG/KG	1.0	J	J	Yes	
Carbazole	200	UG/KG	1.0	U	U	Yes	
Di-n-butylphthalate	200	UG/KG	1.0	U	U	Yes	
Fluoranthene	920	UG/KG	1.0			Yes	
Pyrene	840	UG/KG	1.0			Yes	
Butylbenzylphthalate	200	UG/KG	1.0	U	U	Yes	
3,3'-Dichlorobenzidine	200	UG/KG	1.0	U	U	Yes	
Benzo(a)anthracene	370	UG/KG	1.0			Yes	
Chrysene	470	UG/KG	1.0			Yes	
Bis(2-ethylhexyl)	200	UG/KG	1.0	U	U	Yes	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
phthalate	200	UG/KG	1.0	U	U	Yes	
Di-n-octylphthalate	200	UG/KG	1.0	U	U	Yes	
Benzo(b)fluorant hene	330	UG/KG	1.0			Yes	
Benzo(k)fluorant hene	320	UG/KG	1.0			Yes	
Benzo(a)pyrene	340	UG/KG	1.0			Yes	
Indeno(1,2,3-cd)pyrene	230	UG/KG	1.0			Yes	
Dibenzo(a,h)anthracene	200	UG/KG	1.0	U	U	Yes	
Benzo(g,h,i)perylene	260	UG/KG	1.0			Yes	
2,3,4,6-Tetrachlorophenol	200	UG/KG	1.0	U	U	Yes	
Testosterone			1.0	NJ		Yes	
Total Alkanes			1.0	J		Yes	

Case No:	43102	Contract:	EPW11031	SDG No:	E3P89	Lab Code:	KAP
Sample Number:	E3P90	Method:	Aroclor	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	SS-02	pH:	6.1	Sample Date:	11/05/2012	Sample Time:	11:23:00
% Moisture :	14			% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aroclor-1016	38	UG/KG	1.0	U	U	Yes	
Aroclor-1221	38	UG/KG	1.0	U	U	Yes	
Aroclor-1232	38	UG/KG	1.0	U	U	Yes	
Aroclor-1242	38	UG/KG	1.0	U	U	Yes	
Aroclor-1248	38	UG/KG	1.0	U	U	Yes	
Aroclor-1254	38	UG/KG	1.0	U	U	Yes	
Aroclor-1260	38	UG/KG	1.0	U	U	Yes	
Aroclor-1262	38	UG/KG	1.0	U	U	Yes	
Aroclor-1268	38	UG/KG	1.0	U	U	Yes	

Case No:	43102	Contract:	EPW11031	SDG No:	E3P89	Lab Code:	KAP
Sample Number:	E3P91	Method:	BNA	Matrix:	SOIL	MA Number:	DEFAULT
Sample Location:	SS-02D	pH:	5.9	Sample Date:	11/05/2012	Sample Time:	11:23:00
% Moisture :	13			% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Benzaldehyde	190	UG/KG	1.0	U	U	Yes	
Phenol	190	UG/KG	1.0	U	U	Yes	
Bis(2-chloroethyl)ether	190	UG/KG	1.0	U	U	Yes	
2-Chlorophenol	190	UG/KG	1.0	U	U	Yes	
2-Methylphenol	190	UG/KG	1.0	U	U	Yes	
2,2'-Oxybis(1-chloropropane)	190	UG/KG	1.0	U	U	Yes	
Acetophenone	190	UG/KG	1.0	U	U	Yes	
4-Methylphenol	190	UG/KG	1.0	U	U	Yes	
N-Nitroso-di-n-propylamine	190	UG/KG	1.0	U	U	Yes	
Hexachloroethane	190	UG/KG	1.0	U	U	Yes	
Nitrobenzene	190	UG/KG	1.0	U	U	Yes	
Isophorone	190	UG/KG	1.0	U	U	Yes	
2-Nitrophenol	190	UG/KG	1.0	U	U	Yes	
2,4-Dimethylphenol	190	UG/KG	1.0	U	U	Yes	
Bis(2-chloroethoxy)methane	190	UG/KG	1.0	U	U	Yes	
2,4-Dichlorophenol	190	UG/KG	1.0	U	U	Yes	
Naphthalene	190	UG/KG	1.0	U	U	Yes	
4-Chloroaniline	190	UG/KG	1.0	U	U	Yes	
Hexachlorobutadiene	190	UG/KG	1.0	U	U	Yes	
Caprolactam	190	UG/KG	1.0	U	U	Yes	
4-Chloro-3-methylphenol	190	UG/KG	1.0	U	U	Yes	
2-Methylnaphthalene	190	UG/KG	1.0	U	U	Yes	
Hexachlorocyclopentadiene	190	UG/KG	1.0	U	U	Yes	
2,4,6-Trichlorophenol	190	UG/KG	1.0	U	U	Yes	
2,4,5-Trichlorophenol	190	UG/KG	1.0	U	U	Yes	
1,1'-Biphenyl	190	UG/KG	1.0	U	U	Yes	
2-Chloronaphthalene	190	UG/KG	1.0	U	U	Yes	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
2-Nitroaniline	380	UG/KG	1.0	U	U	Yes	
Dimethylphthalate	190	UG/KG	1.0	U	U	Yes	
2,6-Dinitrotoluene	190	UG/KG	1.0	U	U	Yes	
Acenaphthylene	190	UG/KG	1.0	U	U	Yes	
3-Nitroaniline	380	UG/KG	1.0	U	U	Yes	
Acenaphthene	190	UG/KG	1.0	U	U	Yes	
2,4-Dinitrophenol	380	UG/KG	1.0	U	U	Yes	
4-Nitrophenol	380	UG/KG	1.0	U	U	Yes	
Dibenzofuran	190	UG/KG	1.0	U	U	Yes	
2,4-Dinitrotoluene	190	UG/KG	1.0	U	U	Yes	
Diethylphthalate	190	UG/KG	1.0	U	U	Yes	
Fluorene	190	UG/KG	1.0	U	U	Yes	
4-Chlorophenylphenylether	190	UG/KG	1.0	U	U	Yes	
4-Nitroaniline	380	UG/KG	1.0	U	U	Yes	
4,6-Dinitro-2-methylphenol	380	UG/KG	1.0	U	U	Yes	
N-Nitrosodiphenylamine	190	UG/KG	1.0	U	U	Yes	
1,2,4,5-tetrachlorobenzene	190	UG/KG	1.0	U	U	Yes	
4-Bromophenylphenylether	190	UG/KG	1.0	U	U	Yes	
Hexachlorobenzene	190	UG/KG	1.0	U	U	Yes	
Atrazine	190	UG/KG	1.0	U	U	Yes	
Pentachlorophenol	380	UG/KG	1.0	U	U	Yes	
Phenanthrene	540	UG/KG	1.0			Yes	
Anthracene	98	UG/KG	1.0	J	J	Yes	
Carbazole	190	UG/KG	1.0	U	U	Yes	
Di-n-butylphthalate	190	UG/KG	1.0	U	U	Yes	
Fluoranthene	680	UG/KG	1.0			Yes	
Pyrene	640	UG/KG	1.0			Yes	
Butylbenzylphthalate	190	UG/KG	1.0	U	U	Yes	
3,3'-Dichlorobenzidine	190	UG/KG	1.0	U	U	Yes	
Benzo(a)anthracene	310	UG/KG	1.0			Yes	
Chrysene	420	UG/KG	1.0			Yes	
Bis(2-ethylhexyl)	190	UG/KG	1.0	U	U	Yes	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
phthalate	190	UG/KG	1.0	U	U	Yes	
Di-n-octylphthalate	190	UG/KG	1.0	U	U	Yes	
Benzo(b)fluoranthene	340	UG/KG	1.0			Yes	
Benzo(k)fluoranthene	280	UG/KG	1.0			Yes	
Benzo(a)pyrene	290	UG/KG	1.0			Yes	
Indeno(1,2,3-cd)pyrene	230	UG/KG	1.0			Yes	
Dibenzo(a,h)anthracene	190	UG/KG	1.0	U	U	Yes	
Benzo(g,h,i)perylene	260	UG/KG	1.0			Yes	
2,3,4,6-Tetrachlorophenol	190	UG/KG	1.0	U	U	Yes	
Total Alkanes			1.0	J		Yes	
Androst-4-en-3-one, 17-hydroxy-(10.alpha.,17.beta)			1.0	NJ		Yes	

Case No:	43102	Contract:	EPW11031	SDG No:	E3P89	Lab Code:	KAP
Sample Number:	E3P91	Method:	Aroclor	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	SS-02D	pH:	5.9	Sample Date:	11/05/2012	Sample Time:	11:23:00
% Moisture :	13			% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aroclor-1016	38	UG/KG	1.0	U	U	Yes	
Aroclor-1221	38	UG/KG	1.0	U	U	Yes	
Aroclor-1232	38	UG/KG	1.0	U	U	Yes	
Aroclor-1242	38	UG/KG	1.0	U	U	Yes	
Aroclor-1248	38	UG/KG	1.0	U	U	Yes	
Aroclor-1254	38	UG/KG	1.0	U	U	Yes	
Aroclor-1260	38	UG/KG	1.0	U	U	Yes	
Aroclor-1262	38	UG/KG	1.0	U	U	Yes	
Aroclor-1268	38	UG/KG	1.0	U	U	Yes	



Case No:	43102	Contract:	EPW11031	SDG No:	E3P89	Lab Code:	KAP
Sample Number:	E3P91	Method:	Pest	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	SS-02D	pH:	5.9	Sample Date:	11/05/2012	Sample Time:	11:23:00
% Moisture :	13.00			% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
alpha-BHC	1.9	UG/KG	1.0	U	U	Yes	
beta-BHC	1.9	UG/KG	1.0	U	U	Yes	
delta-BHC	1.9	UG/KG	1.0	U	U	Yes	
gamma-BHC (Lindane)	1.9	UG/KG	1.0	U	U	Yes	
Heptachlor	1.9	UG/KG	1.0	U	U	Yes	
Aldrin	1.9	UG/KG	1.0	U	U	Yes	
Heptachlor epoxide	1.9	UG/KG	1.0	U	U	Yes	
Endosulfan I	1.9	UG/KG	1.0	U	U	Yes	
Dieldrin	3.8	UG/KG	1.0	U	U	Yes	
4,4'-DDE	3.8	UG/KG	1.0	U	U	Yes	
Endrin	3.8	UG/KG	1.0	U	U	Yes	
Endosulfan II	3.8	UG/KG	1.0	U	U	Yes	
4,4'-DDD	3.8	UG/KG	1.0	U	U	Yes	
Endosulfan sulfate	3.8	UG/KG	1.0	U	U	Yes	
4,4'-DDT	3.8	UG/KG	1.0	U	U	Yes	
Methoxychlor	19	UG/KG	1.0	U	U	Yes	
Endrin ketone	2.0	UG/KG	1.0	J	J	Yes	
Endrin aldehyde	3.8	UG/KG	1.0	U	U	Yes	
alpha-Chlordane	1.9	UG/KG	1.0	U	U	Yes	
gamma- Chlordane	1.9	UG/KG	1.0	U	U	Yes	
Toxaphene	190	UG/KG	1.0	U	U	Yes	

Case No:	43102	Contract:	EPW11031	SDG No:	E3P89	Lab Code:	KAP
Sample Number:	E3P92	Method:	Pest	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	SS-03	pH:	6.7	Sample Date:	11/05/2012	Sample Time:	12:23:00
% Moisture :	54.00			% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
alpha-BHC	3.7	UG/KG	1.0	U	U	Yes	
beta-BHC	3.7	UG/KG	1.0	U	U	Yes	
delta-BHC	3.7	UG/KG	1.0	U	U	Yes	
gamma-BHC (Lindane)	3.7	UG/KG	1.0	U	U	Yes	
Heptachlor	3.7	UG/KG	1.0	U	U	Yes	
Aldrin	3.7	UG/KG	1.0	U	U	Yes	
Heptachlor epoxide	3.7	UG/KG	1.0	U	U	Yes	
Endosulfan I	3.7	UG/KG	1.0	U	U	Yes	
Dieldrin	7.2	UG/KG	1.0	U	U	Yes	
4,4'-DDE	7.2	UG/KG	1.0	U	U	Yes	
Endrin	5.0	UG/KG	1.0	JP	J	Yes	
Endosulfan II	7.2	UG/KG	1.0	U	U	Yes	
4,4'-DDD	7.2	UG/KG	1.0	U	U	Yes	
Endosulfan sulfate	7.2	UG/KG	1.0	U	U	Yes	
4,4'-DDT	8.5	UG/KG	1.0	P	J	Yes	
Methoxychlor	37	UG/KG	1.0	U	U	Yes	
Endrin ketone	29	UG/KG	1.0	P	J	Yes	
Endrin aldehyde	5.2	UG/KG	1.0	JP	J	Yes	
alpha-Chlordane	3.7	UG/KG	1.0	U	U	Yes	
gamma- Chlordane	3.7	UG/KG	1.0	U	U	Yes	
Toxaphene	370	UG/KG	1.0	U	U	Yes	

Case No:	43102	Contract:	EPW11031	SDG No:	E3P89	Lab Code:	KAP
Sample Number:	E3P92	Method:	BNA	Matrix:	SOIL	MA Number:	DEFAULT
Sample Location:	SS-03	pH:	6.7	Sample Date:	11/05/2012	Sample Time:	12:23:00
% Moisture :	54			% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Benzaldehyde	160	UG/KG	1.0	J	J	Yes	
Phenol	370	UG/KG	1.0	U	U	Yes	
Bis(2-chloroethyl)ether	370	UG/KG	1.0	U	U	Yes	
2-Chlorophenol	370	UG/KG	1.0	U	U	Yes	
2-Methylphenol	370	UG/KG	1.0	U	U	Yes	
2,2'-Oxybis(1-chloropropane)	370	UG/KG	1.0	U	U	Yes	
Acetophenone	370	UG/KG	1.0	U	U	Yes	
4-Methylphenol	370	UG/KG	1.0	U	U	Yes	
N-Nitroso-di-n-propylamine	370	UG/KG	1.0	U	U	Yes	
Hexachloroethane	370	UG/KG	1.0	U	U	Yes	
Nitrobenzene	370	UG/KG	1.0	U	U	Yes	
Isophorone	370	UG/KG	1.0	U	U	Yes	
2-Nitrophenol	370	UG/KG	1.0	U	U	Yes	
2,4-Dimethylphenol	370	UG/KG	1.0	U	U	Yes	
Bis(2-chloroethoxy)methane	370	UG/KG	1.0	U	U	Yes	
2,4-Dichlorophenol	370	UG/KG	1.0	U	U	Yes	
Naphthalene	210	UG/KG	1.0	J	J	Yes	
4-Chloroaniline	370	UG/KG	1.0	U	U	Yes	
Hexachlorobutadiene	370	UG/KG	1.0	U	U	Yes	
Caprolactam	370	UG/KG	1.0	U	U	Yes	
4-Chloro-3-methylphenol	370	UG/KG	1.0	U	U	Yes	
2-Methylnaphthalene	160	UG/KG	1.0	J	J	Yes	
Hexachlorocyclopentadiene	370	UG/KG	1.0	U	U	Yes	
2,4,6-Trichlorophenol	370	UG/KG	1.0	U	U	Yes	
2,4,5-Trichlorophenol	370	UG/KG	1.0	U	U	Yes	
1,1'-Biphenyl	370	UG/KG	1.0	U	U	Yes	
2-Chloronaphthalene	370	UG/KG	1.0	U	U	Yes	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
2-Nitroaniline	720	UG/KG	1.0	U	U	Yes	
Dimethylphthalate	370	UG/KG	1.0	U	U	Yes	
2,6-Dinitrotoluene	370	UG/KG	1.0	U	U	Yes	
Acenaphthylene	150	UG/KG	1.0	J	J	Yes	
3-Nitroaniline	720	UG/KG	1.0	U	U	Yes	
Acenaphthene	590	UG/KG	1.0			Yes	
2,4-Dinitrophenol	720	UG/KG	1.0	U	U	Yes	
4-Nitrophenol	720	UG/KG	1.0	U	U	Yes	
Dibenzofuran	400	UG/KG	1.0			Yes	
2,4-Dinitrotoluene	370	UG/KG	1.0	U	U	Yes	
Diethylphthalate	370	UG/KG	1.0	U	U	Yes	
Fluorene	470	UG/KG	1.0			Yes	
4-Chlorophenylphenylether	370	UG/KG	1.0	U	U	Yes	
4-Nitroaniline	720	UG/KG	1.0	U	U	Yes	
4,6-Dinitro-2-methylphenol	720	UG/KG	1.0	U	U	Yes	
N-Nitrosodiphenylamine	370	UG/KG	1.0	U	U	Yes	
1,2,4,5-tetrachlorobenzene	370	UG/KG	1.0	U	U	Yes	
4-Bromophenylphenylether	370	UG/KG	1.0	U	U	Yes	
Hexachlorobenzene	370	UG/KG	1.0	U	U	Yes	
Atrazine	370	UG/KG	1.0	U	U	Yes	
Pentachlorophenol	720	UG/KG	1.0	U	U	Yes	
<del>Phenanthrene</del>	<del>8800</del>	<del>UG/KG</del>	<del>1.0</del>	<del>E</del>	<del>J</del>	<del>Yes</del>	
Anthracene	1700	UG/KG	1.0			Yes	
Carbazole	1100	UG/KG	1.0			Yes	
Di-n-butylphthalate	370	UG/KG	1.0	U	U	Yes	
<del>Fluoranthene</del>	<del>11000</del>	<del>UG/KG</del>	<del>1.0</del>	<del>E</del>	<del>J</del>	<del>Yes</del>	
<del>Pyrene</del>	<del>9800</del>	<del>UG/KG</del>	<del>1.0</del>	<del>E</del>	<del>J</del>	<del>Yes</del>	
Butylbenzylphthalate	370	UG/KG	1.0	U	U	Yes	
3,3'-Dichlorobenzidine	370	UG/KG	1.0	U	U	Yes	
Benzo(a)anthracene	5300	UG/KG	1.0			Yes	
<del>Chrysene</del>	<del>5900</del>	<del>UG/KG</del>	<del>1.0</del>	<del>E</del>	<del>J</del>	<del>Yes</del>	
Bis(2-ethylhexyl)	370	UG/KG	1.0	U	U	Yes	

\* See narrative, p. 15 - JST 3/21/13

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
phthalate	370	UG/KG	1.0	U	U	Yes	
Di-n-octylphthalate	370	UG/KG	1.0	U	U	Yes	
Benzo(b)fluorant hene	4500	UG/KG	1.0			Yes	
Benzo(k)fluorant hene	3700	UG/KG	1.0			Yes	
Benzo(a)pyrene	4500	UG/KG	1.0			Yes	
Indeno(1,2,3-cd)pyrene	3200	UG/KG	1.0			Yes	
Dibenzo(a,h)anthracene	1200	UG/KG	1.0			Yes	
Benzo(g,h,i)perylene	3600	UG/KG	1.0			Yes	
2,3,4,6-Tetrachlorophenol	370	UG/KG	1.0	U	U	Yes	
Stigmast-4-en-3-one			1.0	NJ		Yes	

Case No:	43102	Contract:	EPW11031	SDG No:	E3P89	Lab Code:	KAP
Sample Number:	E3P92	Method:	Aroclor	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	SS-03	pH:	6.7	Sample Date:	11/05/2012	Sample Time:	12:23:00
% Moisture :	54			% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aroclor-1016	71	UG/KG	1.0	U	U	Yes	
Aroclor-1221	71	UG/KG	1.0	U	U	Yes	
Aroclor-1232	71	UG/KG	1.0	U	U	Yes	
Aroclor-1242	71	UG/KG	1.0	U	U	Yes	
Aroclor-1248	71	UG/KG	1.0	U	U	Yes	
Aroclor-1254	71	UG/KG	1.0	U	U	Yes	
Aroclor-1260	71	UG/KG	1.0	U	U	Yes	
Aroclor-1262	71	UG/KG	1.0	U	U	Yes	
Aroclor-1268	71	UG/KG	1.0	U	U	Yes	

Case No: 43102	Contract: EPW11031	SDG No: E3P89	Lab Code: KAP
Sample Number: E3P92DL	Method: BNA	Matrix: SOIL	MA Number: DEFAULT
Sample Location: SS-03	pH: 6.7	Sample Date: 11/05/2012	Sample Time: 12:23:00
% Moisture: 54		% Solids:	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Benzaldehyde	1900	UG/KG	5.0	U	U	Yes	
Phenol	1900	UG/KG	5.0	U	U	Yes	
Bis(2-chloroethyl)ether	1900	UG/KG	5.0	U	U	Yes	
2-Chlorophenol	1900	UG/KG	5.0	U	U	Yes	
2-Methylphenol	1900	UG/KG	5.0	U	U	Yes	
2,2'-Oxybis(1-chloropropane)	1900	UG/KG	5.0	U	U	Yes	
Acetophenone	1900	UG/KG	5.0	U	U	Yes	
4-Methylphenol	1900	UG/KG	5.0	U	UJ	Yes	
N-Nitroso-di-n-propylamine	1900	UG/KG	5.0	U	UJ	Yes	
Hexachloroethane	1900	UG/KG	5.0	U	U	Yes	
Nitrobenzene	1900	UG/KG	5.0	U	U	Yes	
Isophorone	1900	UG/KG	5.0	U	U	Yes	
2-Nitrophenol	1900	UG/KG	5.0	U	U	Yes	
2,4-Dimethylphenol	1900	UG/KG	5.0	U	U	Yes	
Bis(2-chloroethoxy)methane	1900	UG/KG	5.0	U	U	Yes	
2,4-Dichlorophenol	1900	UG/KG	5.0	U	U	Yes	
Naphthalene	1900	UG/KG	5.0	U	U	Yes	
4-Chloroaniline	1900	UG/KG	5.0	U	U	Yes	
Hexachlorobutadiene	1900	UG/KG	5.0	U	U	Yes	
Caprolactam	1900	UG/KG	5.0	U	U	Yes	
4-Chloro-3-methylphenol	1900	UG/KG	5.0	U	U	Yes	
2-Methylnaphthalene	1900	UG/KG	5.0	U	U	Yes	
Hexachlorocyclopentadiene	1900	UG/KG	5.0	U	U	Yes	
2,4,6-Trichlorophenol	1900	UG/KG	5.0	U	U	Yes	
2,4,5-Trichlorophenol	1900	UG/KG	5.0	U	U	Yes	
1,1'-Biphenyl	1900	UG/KG	5.0	U	U	Yes	
2-Chloronaphthalene	1900	UG/KG	5.0	U	U	Yes	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
2-Nitroaniline	3600	UG/KG	5.0	U	U	Yes	
Dimethylphthalate	1900	UG/KG	5.0	U	U	Yes	
2,6-Dinitrotoluene	1900	UG/KG	5.0	U	U	Yes	
Acenaphthylene	1900	UG/KG	5.0	U	U	Yes	
3-Nitroaniline	3600	UG/KG	5.0	U	U	Yes	
Acenaphthene	1900	UG/KG	5.0	U	U	Yes	
2,4-Dinitrophenol	3600	UG/KG	5.0	U	U	Yes	
4-Nitrophenol	3600	UG/KG	5.0	U	U	Yes	
Dibenzofuran	1900	UG/KG	5.0	U	U	Yes	
2,4-Dinitrotoluene	1900	UG/KG	5.0	U	U	Yes	
Diethylphthalate	1900	UG/KG	5.0	U	U	Yes	
Fluorene	1900	UG/KG	5.0	U	U	Yes	
4-Chlorophenylphenylether	1900	UG/KG	5.0	U	U	Yes	
4-Nitroaniline	3600	UG/KG	5.0	U	U	Yes	
4,6-Dinitro-2-methylphenol	3600	UG/KG	5.0	U	U	Yes	
N-Nitrosodiphenylamine	1900	UG/KG	5.0	U	U	Yes	
1,2,4,5-tetrachlorobenzene	1900	UG/KG	5.0	U	U	Yes	
4-Bromophenylphenylether	1900	UG/KG	5.0	U	U	Yes	
Hexachlorobenzene	1900	UG/KG	5.0	U	U	Yes	
Atrazine	1900	UG/KG	5.0	U	U	Yes	
Pentachlorophenol	3600	UG/KG	5.0	U	UJ	Yes	
Phenanthrene	9200	UG/KG	5.0	D		Yes	
Anthracene	2100	UG/KG	5.0	D		Yes	
Carbazole	1200	UG/KG	5.0	DJ	J	Yes	
Di-n-butylphthalate	1900	UG/KG	5.0	U	U	Yes	
Fluoranthene	8900	UG/KG	5.0	D		Yes	
Pyrene	10000	UG/KG	5.0	D	J	Yes	
Butylbenzylphthalate	1900	UG/KG	5.0	U	U	Yes	
3,3'-Dichlorobenzidine	1900	UG/KG	5.0	U	U	Yes	
Benzo(a)anthracene	5700	UG/KG	5.0	D		Yes	
Chrysene	6200	UG/KG	5.0	D		Yes	
Bis(2-ethylhexyl)	1900	UG/KG	5.0	U	U	Yes	

★ Use these (see narrative, p. 15) - JEF 3/21/13



Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
phthalate	1900	UG/KG	5.0	U	U	Yes	
Di-n-octylphthalate	1900	UG/KG	5.0	U	U	Yes	
Benzo(b)fluorant hene	4400	UG/KG	5.0	D		Yes	
Benzo(k)fluorant hene	4200	UG/KG	5.0	D		Yes	
Benzo(a)pyrene	4800	UG/KG	5.0	D		Yes	
Indeno(1,2,3-cd)pyrene	3000	UG/KG	5.0	D		Yes	
Dibenzo(a,h)anthracene	1700	UG/KG	5.0	DJ	J	Yes	
Benzo(g,h,i)perylene	3200	UG/KG	5.0	D		Yes	
2,3,4,6-Tetrachlorophenol	1900	UG/KG	5.0	U	U	Yes	
Stigmast-4-en-3-one			5.0	DNJ		Yes	
Pyrene, 1-methyl-			5.0	DNJ		Yes	
Pyrene, 4-methyl-			5.0	DNJ		Yes	

Case No:	43102	Contract:	EPW11031	SDG No:	E3P89	Lab Code:	KAP
Sample Number:	E3P92MS	Method:	BNA	Matrix:	SOIL	MA Number:	DEFAULT
Sample Location:	SS-03	pH:	6.7	Sample Date:	11/05/2012	Sample Time:	12:23:00
% Moisture :	54			% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Phenol	3200	UG/KG	1.0			Yes	
Benzaldehyde	160	UG/KG	1.0	J	J	Yes	
2-Chlorophenol	3100	UG/KG	1.0			Yes	
N-Nitroso-di-n-propylamine	1300	UG/KG	1.0			Yes	
Bis(2-chloroethyl)ether	370	UG/KG	1.0	U	U	Yes	
4-Chloro-3-methylphenol	3400	UG/KG	1.0			Yes	
Acenaphthene	1900	UG/KG	1.0			Yes	
2-Methylphenol	370	UG/KG	1.0	U	U	Yes	
4-Nitrophenol	3500	UG/KG	1.0			Yes	
2,2'-Oxybis(1-chloropropane)	370	UG/KG	1.0	U	U	Yes	
2,4-Dinitrotoluene	1500	UG/KG	1.0			Yes	
Acetophenone	370	UG/KG	1.0	U	U	Yes	
Pentachlorophenol	3000	UG/KG	1.0			Yes	
Methylphenol	370	UG/KG	1.0	U	U	Yes	
Pyrene	9000	UG/KG	1.0	E	J	Yes	
Hexachloroethane	370	UG/KG	1.0	U	U	Yes	
Nitrobenzene	370	UG/KG	1.0	U	U	Yes	
Isophorone	370	UG/KG	1.0	U	U	Yes	
2-Nitrophenol	370	UG/KG	1.0	U	U	Yes	
2,4-Dimethylphenol	370	UG/KG	1.0	U	U	Yes	
Bis(2-chloroethoxy)methane	370	UG/KG	1.0	U	U	Yes	
2,4-Dichlorophenol	370	UG/KG	1.0	U	U	Yes	
Naphthalene	220	UG/KG	1.0	J	J	Yes	
4-Chloroaniline	370	UG/KG	1.0	U	U	Yes	
Hexachlorobutadiene	370	UG/KG	1.0	U	U	Yes	
Caprolactam	370	UG/KG	1.0	U	U	Yes	
2-Methylnaphthalene	190	UG/KG	1.0	J	J	Yes	
Hexachlorocyclopentadiene	370	UG/KG	1.0	U	U	Yes	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
2,4,6-Trichlorophenol	370	UG/KG	1.0	U	U	Yes	
2,4,5-Trichlorophenol	370	UG/KG	1.0	U	U	Yes	
1,1'-Biphenyl	370	UG/KG	1.0	U	U	Yes	
2-Chloronaphthalene	370	UG/KG	1.0	U	U	Yes	
2-Nitroaniline	720	UG/KG	1.0	U	U	Yes	
Dimethylphthalate	370	UG/KG	1.0	U	U	Yes	
2,6-Dinitrotoluene	370	UG/KG	1.0	U	U	Yes	
Acenaphthylene	170	UG/KG	1.0	J	J	Yes	
3-Nitroaniline	720	UG/KG	1.0	U	U	Yes	
2,4-Dinitrophenol	720	UG/KG	1.0	U	U	Yes	
Dibenzofuran	390	UG/KG	1.0			Yes	
Diethylphthalate	370	UG/KG	1.0	U	U	Yes	
Fluorene	460	UG/KG	1.0			Yes	
4-Chlorophenylphenylether	370	UG/KG	1.0	U	U	Yes	
4-Nitroaniline	720	UG/KG	1.0	U	U	Yes	
4,6-Dinitro-2-methylphenol	720	UG/KG	1.0	U	U	Yes	
N-Nitrosodiphenylamine	370	UG/KG	1.0	U	U	Yes	
1,2,4,5-Tetrachlorobenzene	370	UG/KG	1.0	U	U	Yes	
4-Bromophenylphenylether	370	UG/KG	1.0	U	U	Yes	
Hexachlorobenzene	370	UG/KG	1.0	U	U	Yes	
Atrazine	370	UG/KG	1.0	U	U	Yes	
Phenanthrene	8800	UG/KG	1.0	E	J	Yes	
Anthracene	1800	UG/KG	1.0			Yes	
Carbazole	1200	UG/KG	1.0			Yes	
Di-n-butylphthalate	370	UG/KG	1.0	U	U	Yes	
Fluoranthene	11000	UG/KG	1.0	E	J	Yes	
Butylbenzylphthalate	370	UG/KG	1.0	U	U	Yes	
3,3'-Dichlorobenzidine	370	UG/KG	1.0	U	U	Yes	
Benzo(a)anthracene	5100	UG/KG	1.0			Yes	
Chrysene	5600	UG/KG	1.0			Yes	
Bis(2-ethylhexyl)	370	UG/KG	1.0	U	U	Yes	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
phthalate	370	UG/KG	1.0	U	U	Yes	
Di-n-octylphthalate	370	UG/KG	1.0	U	U	Yes	
Benzo(b)fluorant hene	3700	UG/KG	1.0			Yes	
Benzo(k)fluorant hene	3700	UG/KG	1.0			Yes	
Benzo(a)pyrene	4300	UG/KG	1.0			Yes	
Indeno(1,2,3-cd)pyrene	3300	UG/KG	1.0			Yes	
Dibenzo(a,h)anthracene	1300	UG/KG	1.0			Yes	
Benzo(g,h,i)perylene	3700	UG/KG	1.0			Yes	
2,3,4,6-Tetrachlorophenol	370	UG/KG	1.0	U	U	Yes	

Case No: 43102	Contract: EPW11031	SDG No: E3P89	Lab Code: KAP
Sample Number: E3P92MS	Method: Pest	Matrix: Soil	MA Number: DBFAULT
Sample Location:	pH: 6.7	Sample Date: 11/05/2012	Sample Time: 12:23:00
% Moisture : 54.00	% Solids :		

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
gamma-BHC (Lindane)	22	UG/KG	1.0	P	J	Yes	
alpha-BHC	3.7	UG/KG	1.0	U	U	Yes	
Heptachlor	22	UG/KG	1.0	P	J	Yes	
beta-BHC	3.7	UG/KG	1.0	U	U	Yes	
Aldrin	22	UG/KG	1.0		J	Yes	
delta-BHC	3.7	UG/KG	1.0	U	U	Yes	
Dieldrin	40	UG/KG	1.0		J	Yes	
Endrin	49	UG/KG	1.0		J	Yes	
4,4'-DDT	52	UG/KG	1.0		J	Yes	
Heptachlor epoxide	3.7	UG/KG	1.0	U	U	Yes	
Endosulfan I	3.7	UG/KG	1.0	U	U	Yes	
4,4'-DDE	7.2	UG/KG	1.0	U	U	Yes	
Endosulfan II	7.2	UG/KG	1.0	U	U	Yes	
4,4'-DDD	7.2	UG/KG	1.0	U	U	Yes	
Endosulfan sulfate	7.2	UG/KG	1.0	U	U	Yes	
Methoxychlor	37	UG/KG	1.0	U	U	Yes	
Endrin ketone	10	UG/KG	1.0	P	J	Yes	
Endrin aldehyde	6.8	UG/KG	1.0	JP	J	Yes	
alpha-Chlordane	3.7	UG/KG	1.0	U	U	Yes	
gamma-Chlordane	3.7	UG/KG	1.0	U	U	Yes	
Toxaphene	370	UG/KG	1.0	U	U	Yes	

Case No: 43102	Contract: EPW11031	SDG No: E3P89	Lab Code: KAP
Sample Number: E3P92MSD	Method: Pest	Matrix: Soil	MA Number: DEFAULT
Sample Location:	pH: 6.7	Sample Date: 11/05/2012	Sample Time: 12:23:00
% Moisture : 54.00		% Solids :	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
gamma-BHC (Lindane)	22	UG/KG	1.0		J	Yes	
alpha-BHC	3.7	UG/KG	1.0	U	U	Yes	
Heptachlor	22	UG/KG	1.0		J	Yes	
beta-BHC	3.7	UG/KG	1.0	U	U	Yes	
Aldrin	22	UG/KG	1.0		J	Yes	
delta-BHC	3.7	UG/KG	1.0	U	U	Yes	
Dieldrin	43	UG/KG	1.0		J	Yes	
Endrin	49	UG/KG	1.0		J	Yes	
4,4'-DDT	55	UG/KG	1.0		J	Yes	
Heptachlor epoxide	3.7	UG/KG	1.0	U	U	Yes	
Endosulfan I	3.7	UG/KG	1.0	U	U	Yes	
4,4'-DDE	7.2	UG/KG	1.0	U	U	Yes	
Endosulfan II	7.2	UG/KG	1.0	U	U	Yes	
4,4'-DDD	7.2	UG/KG	1.0	U	U	Yes	
Endosulfan sulfate	7.2	UG/KG	1.0	U	U	Yes	
Methoxychlor	37	UG/KG	1.0	U	U	Yes	
Endrin ketone	13	UG/KG	1.0	P	J	Yes	
Endrin aldehyde	4.0	UG/KG	1.0	JP	J	Yes	
alpha-Chlordane	3.7	UG/KG	1.0	U	U	Yes	
gamma-Chlordane	3.7	UG/KG	1.0	U	U	Yes	
Toxaphene	370	UG/KG	1.0	U	U	Yes	

Case No:	43102	Contract:	EPW11031	SDG No:	E3P89	Lab Code:	KAP
Sample Number:	E3P92MSD	Method:	BNA	Matrix:	SOIL	MA Number:	DEFAULT
Sample Location:	SS-03	pH:	6.7	Sample Date:	11/05/2012	Sample Time:	12:23:00
% Moisture :	54			% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Benzaldehyde	150	UG/KG	1.0	J	J	Yes	
Phenol	3300	UG/KG	1.0			Yes	
2-Chlorophenol	3300	UG/KG	1.0			Yes	
Bis(2-chloroethyl)ether	370	UG/KG	1.0	U	U	Yes	
N-Nitroso-di-n-propylamine	1400	UG/KG	1.0			Yes	
4-Chloro-3-methylphenol	3600	UG/KG	1.0			Yes	
2-Methylphenol	370	UG/KG	1.0	U	U	Yes	
Acenaphthene	2000	UG/KG	1.0			Yes	
2,2'-Oxybis(1-chloropropane)	370	UG/KG	1.0	U	U	Yes	
4-Nitrophenol	3900	UG/KG	1.0			Yes	
2,4-Dinitrotoluene	1600	UG/KG	1.0			Yes	
Acetophenone	370	UG/KG	1.0	U	U	Yes	
4-Methylphenol	370	UG/KG	1.0	U	U	Yes	
Pentachlorophenol	3200	UG/KG	1.0			Yes	
Pyrene	9500	UG/KG	1.0	E	J	Yes	
Hexachloroethane	370	UG/KG	1.0	U	U	Yes	
Nitrobenzene	370	UG/KG	1.0	U	U	Yes	
Isophorone	370	UG/KG	1.0	U	U	Yes	
2-Nitrophenol	370	UG/KG	1.0	U	U	Yes	
2,4-Dimethylphenol	370	UG/KG	1.0	U	U	Yes	
Bis(2-chloroethoxy)methane	370	UG/KG	1.0	U	U	Yes	
2,4-Dichlorophenol	370	UG/KG	1.0	U	U	Yes	
Naphthalene	210	UG/KG	1.0	J	J	Yes	
4-Chloroaniline	370	UG/KG	1.0	U	U	Yes	
Hexachlorobutadiene	370	UG/KG	1.0	U	U	Yes	
Caprolactam	370	UG/KG	1.0	U	U	Yes	
2-Methylnaphthalene	180	UG/KG	1.0	J	J	Yes	
Hexachlorocyclopentadiene	370	UG/KG	1.0	U	U	Yes	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
2,4,6-Trichlorophenol	370	UG/KG	1.0	U	U	Yes	
2,4,5-Trichlorophenol	370	UG/KG	1.0	U	U	Yes	
1,1'-Biphenyl	370	UG/KG	1.0	U	U	Yes	
2-Chloronaphthalene	370	UG/KG	1.0	U	U	Yes	
2-Nitroaniline	720	UG/KG	1.0	U	U	Yes	
Dimethylphthalate	370	UG/KG	1.0	U	U	Yes	
2,6-Dinitrotoluene	370	UG/KG	1.0	U	U	Yes	
Acenaphthylene	190	UG/KG	1.0	J	J	Yes	
3-Nitroaniline	720	UG/KG	1.0	U	U	Yes	
2,4-Dinitrophenol	720	UG/KG	1.0	U	U	Yes	
Dibenzofuran	390	UG/KG	1.0			Yes	
Diethylphthalate	370	UG/KG	1.0	U	U	Yes	
Fluorene	480	UG/KG	1.0			Yes	
4-Chlorophenylphenylether	370	UG/KG	1.0	U	U	Yes	
4-Nitroaniline	720	UG/KG	1.0	U	U	Yes	
4,6-Dinitro-2-methylphenol	720	UG/KG	1.0	U	U	Yes	
N-Nitrosodiphenylamine	370	UG/KG	1.0	U	U	Yes	
1,2,4,5-Tetrachlorobenzene	370	UG/KG	1.0	U	U	Yes	
4-Bromophenylphenylether	370	UG/KG	1.0	U	U	Yes	
Hexachlorobenzene	370	UG/KG	1.0	U	U	Yes	
Atrazine	370	UG/KG	1.0	U	U	Yes	
Phenanthrene	8900	UG/KG	1.0	E	J	Yes	
Anthracene	1800	UG/KG	1.0			Yes	
Carbazole	1200	UG/KG	1.0			Yes	
Di-n-butylphthalate	370	UG/KG	1.0	U	U	Yes	
Fluoranthene	12000	UG/KG	1.0	E	J	Yes	
Butylbenzylphthalate	370	UG/KG	1.0	U	U	Yes	
3,3'-Dichlorobenzidine	370	UG/KG	1.0	U	U	Yes	
Benzo(a)anthracene	5200	UG/KG	1.0			Yes	
Chrysene	5800	UG/KG	1.0			Yes	
Bis(2-ethylhexyl)	370	UG/KG	1.0	U	U	Yes	



Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
phthalate	370	UG/KG	1.0	U	U	Yes	
Di-n-octylphthalate	370	UG/KG	1.0	U	U	Yes	
Benzo(b)fluorant hene	5100	UG/KG	1.0			Yes	
Benzo(k)fluorant hene	3100	UG/KG	1.0			Yes	
Benzo(a)pyrene	4600	UG/KG	1.0			Yes	
Indeno(1,2,3-cd)pyrene	3400	UG/KG	1.0			Yes	
Dibenzo(a,h)anthracene	1600	UG/KG	1.0			Yes	
Benzo(g,h,i)perylene	3800	UG/KG	1.0			Yes	
2,3,4,6-Tetrachlorophenol	370	UG/KG	1.0	U	U	Yes	

Case No: 43102	Contract: EPW11031	SDG No: E3P89	Lab Code: KAP
Sample Number: E3P93	Method: Aroclor	Matrix: Soil	MA Number: DEFAULT
Sample Location: SS-04	pH: 7.1	Sample Date: 11/05/2012	Sample Time: 14:10:00
% Moisture: 15	% Solids :		

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aroclor-1016	38	UG/KG	1.0	U	U	Yes	
Aroclor-1221	38	UG/KG	1.0	U	U	Yes	
Aroclor-1232	38	UG/KG	1.0	U	U	Yes	
Aroclor-1242	38	UG/KG	1.0	U	U	Yes	
<del>Aroclor-1248</del>	<del>1000</del>	<del>UG/KG</del>	<del>1.0</del>	<del>E</del>	<del>J</del>	<del>Yes</del>	
<del>Aroclor-1254</del>	<del>1600</del>	<del>UG/KG</del>	<del>1.0</del>	<del>E</del>	<del>J</del>	<del>Yes</del>	
Aroclor-1260	330	UG/KG	1.0	P	J	Yes	
Aroclor-1262	38	UG/KG	1.0	U	U	Yes	
Aroclor-1268	38	UG/KG	1.0	U	U	Yes	

\* See narrative, p. 15 - J&J, 3/14/13

Case No: 43102	Contract: EPW11031	SDG No: E3P89	Lab Code: KAP
Sample Number: E3P93	Method: Pest	Matrix: Soil	MA Number: DEFAULT
Sample Location: SS-04	pH: 7.1	Sample Date: 11/05/2012	Sample Time: 14:10:00
% Moisture: 15.00	% Solids:		

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
alpha-BHC	2.0	UG/KG	1.0	U	U	Yes	
beta-BHC	2.0	UG/KG	1.0	P	J	Yes	
delta-BHC	2.0	UG/KG	1.0	U	U	Yes	
gamma-BHC (Lindane)	2.0	UG/KG	1.0	U	U	Yes	
Heptachlor	2.0	UG/KG	1.0	U	U	Yes	
Aldrin	2.0	UG/KG	1.0	U	U	Yes	
Heptachlor epoxide	2.0	UG/KG	1.0	U	U	Yes	
Endosulfan I	2.0	UG/KG	1.0	U	U	Yes	
Dieldrin	38	UG/KG	1.0	P	J	Yes	
<del>4,4'-DDE</del>	<del>90</del>	<del>UG/KG</del>	<del>1.0</del>	<del>E</del>	<del>J</del>	<del>Yes</del>	
Endrin	3.8	UG/KG	1.0	U	U	Yes	
Endosulfan II	3.8	UG/KG	1.0	U	U	Yes	
4,4'-DDD	3.8	UG/KG	1.0	U	U	Yes	
Endosulfan sulfate	3.8	UG/KG	1.0	U	U	Yes	
<del>4,4'-DDT</del>	<del>120</del>	<del>UG/KG</del>	<del>1.0</del>	<del>E</del>	<del>J</del>	<del>Yes</del>	
Methoxychlor	20	UG/KG	1.0	U	U	Yes	
Endrin ketone	3.8	UG/KG	1.0	U	U	Yes	
Endrin aldehyde	10	UG/KG	1.0	P	J	Yes	
alpha-Chlordane	2.0	UG/KG	1.0	U	U	Yes	
gamma-Chlordane	2.0	UG/KG	1.0	U	U	Yes	
Toxaphene	200	UG/KG	1.0	U	U	Yes	

*\* see narrative, p. 15 - JEF 3/21/13*

Case No:	43102	Contract:	EPW11031	SDG No:	E3P89	Lab Code:	KAP
Sample Number:	E3P93	Method:	BNA	Matrix:	SOIL	MA Number:	DEFAULT
Sample Location:	SS-04	pH:	7.1	Sample Date:	11/05/2012	Sample Time:	14:10:00
% Moisture :	15			% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Benzaldehyde	200	UG/KG	1.0	U	U	Yes	
Phenol	200	UG/KG	1.0	U	U	Yes	
Bis(2-chloroethyl)ether	200	UG/KG	1.0	U	U	Yes	
2-Chlorophenol	200	UG/KG	1.0	U	U	Yes	
2-Methylphenol	200	UG/KG	1.0	U	U	Yes	
2,2'-Oxybis(1-chloropropane)	200	UG/KG	1.0	U	U	Yes	
Acetophenone	200	UG/KG	1.0	U	U	Yes	
4-Methylphenol	200	UG/KG	1.0	U	U	Yes	
N-Nitroso-di-n-propylamine	200	UG/KG	1.0	U	U	Yes	
Hexachloroethane	200	UG/KG	1.0	U	U	Yes	
Nitrobenzene	200	UG/KG	1.0	U	U	Yes	
Isophorone	200	UG/KG	1.0	U	U	Yes	
2-Nitrophenol	200	UG/KG	1.0	U	U	Yes	
2,4-Dimethylphenol	200	UG/KG	1.0	U	U	Yes	
Bis(2-chloroethoxy)methane	200	UG/KG	1.0	U	U	Yes	
2,4-Dichlorophenol	200	UG/KG	1.0	U	U	Yes	
Naphthalene	200	UG/KG	1.0	U	U	Yes	
4-Chloroaniline	200	UG/KG	1.0	U	U	Yes	
Hexachlorobutadiene	200	UG/KG	1.0	U	U	Yes	
Caprolactam	200	UG/KG	1.0	U	U	Yes	
4-Chloro-3-methylphenol	200	UG/KG	1.0	U	U	Yes	
2-Methylnaphthalene	200	UG/KG	1.0	U	U	Yes	
Hexachlorocyclopentadiene	200	UG/KG	1.0	U	U	Yes	
2,4,6-Trichlorophenol	200	UG/KG	1.0	U	U	Yes	
2,4,5-Trichlorophenol	200	UG/KG	1.0	U	U	Yes	
1,1'-Biphenyl	200	UG/KG	1.0	U	U	Yes	
2-Chloronaphthalene	200	UG/KG	1.0	U	U	Yes	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
2-Nitroaniline	390	UG/KG	1.0	U	U	Yes	
Dimethylphthalate	200	UG/KG	1.0	U	U	Yes	
2,6-Dinitrotoluene	200	UG/KG	1.0	U	U	Yes	
Acenaphthylene	200	UG/KG	1.0	U	U	Yes	
3-Nitroaniline	390	UG/KG	1.0	U	U	Yes	
Acenaphthene	200	UG/KG	1.0	U	U	Yes	
2,4-Dinitrophenol	390	UG/KG	1.0	U	U	Yes	
4-Nitrophenol	390	UG/KG	1.0	U	U	Yes	
Dibenzofuran	200	UG/KG	1.0	U	U	Yes	
2,4-Dinitrotoluene	200	UG/KG	1.0	U	U	Yes	
Diethylphthalate	96	UG/KG	1.0	J	J	Yes	
Fluorene	200	UG/KG	1.0	U	U	Yes	
4-Chlorophenylphenylether	200	UG/KG	1.0	U	U	Yes	
4-Nitroaniline	390	UG/KG	1.0	U	U	Yes	
4,6-Dinitro-2-methylphenol	390	UG/KG	1.0	U	U	Yes	
N-Nitrosodiphenylamine	200	UG/KG	1.0	U	U	Yes	
1,2,4,5-Tetrachlorobenzene	200	UG/KG	1.0	U	U	Yes	
4-Bromophenylphenylether	200	UG/KG	1.0	U	U	Yes	
Hexachlorobenzene	200	UG/KG	1.0	U	U	Yes	
Atrazine	200	UG/KG	1.0	U	U	Yes	
Pentachlorophenol	390	UG/KG	1.0	U	U	Yes	
Phenanthrene	210	UG/KG	1.0			Yes	
Anthracene	200	UG/KG	1.0	U	U	Yes	
Carbazole	200	UG/KG	1.0	U	U	Yes	
Di-n-butylphthalate	200	UG/KG	1.0	U	U	Yes	
Fluoranthene	420	UG/KG	1.0			Yes	
Pyrene	400	UG/KG	1.0			Yes	
Butylbenzylphthalate	200	UG/KG	1.0	U	U	Yes	
3,3'-Dichlorobenzidine	200	UG/KG	1.0	U	U	Yes	
Benzo(a)anthracene	260	UG/KG	1.0			Yes	
Chrysene	360	UG/KG	1.0			Yes	
Bis(2-ethylhexyl)	2100	UG/KG	1.0			Yes	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
phthalate	2100	UG/KG	1.0			Yes	
Di-n-octylphthalate	200	UG/KG	1.0	U	U	Yes	
Benzo(b)fluoranthene	370	UG/KG	1.0			Yes	
Benzo(k)fluoranthene	260	UG/KG	1.0			Yes	
Benzo(a)pyrene	270	UG/KG	1.0			Yes	
Indeno(1,2,3-cd)pyrene	270	UG/KG	1.0			Yes	
Dibenzo(a,h)anthracene	110	UG/KG	1.0	J	J	Yes	
Benzo(g,h,i)perylene	370	UG/KG	1.0			Yes	
2,3,4,6-Tetrachlorophenol	200	UG/KG	1.0	U	U	Yes	
Naphthalene, 1,4,6,7-tetrachloro-			1.0	NJ		Yes	
Naphthalene, 1,3,5,7-tetrachloro-			1.0	NJ		Yes	
7-Isopropenyl-1,4a-dimethyl-4,4a,5,6,7,8-hexahydro-3H-naphthalen-2-one			1.0	NJ		Yes	
Total Alkanes			1.0	J		Yes	
n-Hexadecanoic acid			1.0	NJ		Yes	
Naphthalene, 1,2,3,4-tetrachloro-			1.0	NJ		Yes	

Case No:	43102	Contract:	EPW11031	SDG No:	E3P89	Lab Code:	KAP
Sample Number:	E3P93DL	Method:	Pest	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	SS-04	pH:	7.4	Sample Date:	11/06/2012	Sample Time:	17:10:00
% Moisture :	13.00			% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
alpha-BHC	19	UG/KG	10.0	U	U	Yes	
beta-BHC	4.8	UG/KG	10.0	DJP	J	Yes	
delta-BHC	19	UG/KG	10.0	U	U	Yes	
gamma-BHC (Lindane)	19	UG/KG	10.0	U	U	Yes	
Heptachlor	19	UG/KG	10.0	U	U	Yes	
Aldrin	19	UG/KG	10.0	U	U	Yes	
Heptachlor epoxide	19	UG/KG	10.0	U	U	Yes	
Endosulfan I	19	UG/KG	10.0	U	U	Yes	
Dieldrin	37	UG/KG	10.0	DJP	J	Yes	
4,4'-DDE	85	UG/KG	10.0	D		Yes	
Endrin	38	UG/KG	10.0	U	U	Yes	
Endosulfan II	38	UG/KG	10.0	U	U	Yes	
4,4'-DDD	38	UG/KG	10.0	U	U	Yes	
Endosulfan sulfate	38	UG/KG	10.0	U	U	Yes	
4,4'-DDT	100	UG/KG	10.0	D		Yes	
Methoxychlor	190	UG/KG	10.0	U	U	Yes	
Endrin ketone	38	UG/KG	10.0	U	U	Yes	
Endrin aldehyde	15	UG/KG	10.0	DJ	J	Yes	
alpha-Chlordane	19	UG/KG	10.0	U	U	Yes	
gamma- Chlordane	19	UG/KG	10.0	U	U	Yes	
Toxaphene	1900	UG/KG	10.0	U	U	Yes	

★ Use these results not those in sample number E3P93 (see narrative, p. 15) - JST 3/21/13

Case No: 43102	Contract: EPW11031	SDG No: E3P89	Lab Code: KAP
Sample Number: E3P93DL	Method: Aroclor	Matrix: Soil	MA Number: DEFAULT
Sample Location:	pH: 7.1	Sample Date: 11/05/2012	Sample Time: 14:10:00
% Moisture: 15		% Solids:	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aroclor-1016	190	UG/KG	5.0	U	U	Yes	
Aroclor-1221	190	UG/KG	5.0	U	U	Yes	
Aroclor-1232	190	UG/KG	5.0	U	U	Yes	
Aroclor-1242	190	UG/KG	5.0	U	U	Yes	
Aroclor-1248	1400	UG/KG	5.0	D		Yes	
Aroclor-1254	1900	UG/KG	5.0	D		Yes	
Aroclor-1260	460	UG/KG	5.0	DP	J	Yes	
Aroclor-1262	190	UG/KG	5.0	U	U	Yes	
Aroclor-1268	190	UG/KG	5.0	U	U	Yes	

★ Use these concentrations & not those in Sample Number E3P93 (see narrative, p. 15) - JSA, 3/14/13



Case No: 43102	Contract: EPW11031	SDG No: E3P89	Lab Code: KAP
Sample Number: E3P94	Method: Pest	Matrix: Soil	MA Number: DEFAULT
Sample Location: SS-05	pH: 8.1	Sample Date: 11/05/2012	Sample Time: 15:14:00
% Moisture: 8.00	% Solids:		

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
alpha-BHC	1.8	UG/KG	1.0	U	U	Yes	
beta-BHC	1.8	UG/KG	1.0	U	U	Yes	
delta-BHC	1.8	UG/KG	1.0	U	U	Yes	
gamma-BHC (Lindane)	1.8	UG/KG	1.0	U	U	Yes	
Heptachlor	1.8	UG/KG	1.0	U	U	Yes	
Aldrin	1.8	UG/KG	1.0	U	U	Yes	
Heptachlor epoxide	1.8	UG/KG	1.0	U	U	Yes	
Endosulfan I	1.8	UG/KG	1.0	U	U	Yes	
Dieldrin	3.6	UG/KG	1.0	U	U	Yes	
4,4'-DDE	3.6	UG/KG	1.0	U	U	Yes	
Endrin	3.6	UG/KG	1.0	U	U	Yes	
Endosulfan II	3.6	UG/KG	1.0	U	U	Yes	
4,4'-DDD	3.6	UG/KG	1.0	U	U	Yes	
Endosulfan sulfate	3.6	UG/KG	1.0	U	U	Yes	
4,4'-DDT	2.2	UG/KG	1.0	JP	J	Yes	
Methoxychlor	18	UG/KG	1.0	U	U	Yes	
Endrin ketone	3.6	UG/KG	1.0	U	U	Yes	
Endrin aldehyde	3.6	UG/KG	1.0	U	U	Yes	
alpha-Chlordane	1.8	UG/KG	1.0	U	U	Yes	
gamma- Chlordane	1.8	UG/KG	1.0	U	U	Yes	
Toxaphene	180	UG/KG	1.0	U	U	Yes	

Case No:	43102	Contract:	EPW11031	SDG No:	E3P89	Lab Code:	KAP
Sample Number:	E3P94	Method:	BNA	Matrix:	SOIL	MA Number:	DEFAULT
Sample Location:	SS-05	pH:	8.1	Sample Date:	11/05/2012	Sample Time:	15:14:00
% Moisture :	8.0			% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Benzaldehyde	180	UG/KG	1.0	U	U	Yes	
Phenol	180	UG/KG	1.0	U	U	Yes	
Bis(2-chloroethyl)ether	180	UG/KG	1.0	U	U	Yes	
2-Chlorophenol	180	UG/KG	1.0	U	U	Yes	
2-Methylphenol	180	UG/KG	1.0	U	U	Yes	
2,2'-Oxybis(1-chloropropane)	180	UG/KG	1.0	U	U	Yes	
Acetophenone	180	UG/KG	1.0	U	U	Yes	
4-Methylphenol	180	UG/KG	1.0	U	U	Yes	
N-Nitroso-di-n-propylamine	180	UG/KG	1.0	U	U	Yes	
Hexachloroethane	180	UG/KG	1.0	U	U	Yes	
Nitrobenzene	180	UG/KG	1.0	U	U	Yes	
Isophorone	180	UG/KG	1.0	U	U	Yes	
2-Nitrophenol	180	UG/KG	1.0	U	U	Yes	
2,4-dimethylphenol	180	UG/KG	1.0	U	U	Yes	
Bis(2-chloroethoxy)methane	180	UG/KG	1.0	U	U	Yes	
2,4-Dichlorophenol	180	UG/KG	1.0	U	U	Yes	
Naphthalene	180	UG/KG	1.0	U	U	Yes	
4-Chloroaniline	180	UG/KG	1.0	U	U	Yes	
Hexachlorobutadiene	180	UG/KG	1.0	U	U	Yes	
Caprolactam	180	UG/KG	1.0	U	U	Yes	
4-Chloro-3-methylphenol	180	UG/KG	1.0	U	U	Yes	
2-Methylnaphthalene	180	UG/KG	1.0	U	U	Yes	
Hexachlorocyclopentadiene	180	UG/KG	1.0	U	U	Yes	
2,4,6-Trichlorophenol	180	UG/KG	1.0	U	U	Yes	
2,4,5-Trichlorophenol	180	UG/KG	1.0	U	U	Yes	
1,1'-Biphenyl	180	UG/KG	1.0	U	U	Yes	
2-Chloronaphthalene	180	UG/KG	1.0	U	U	Yes	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
2-Nitroaniline	360	UG/KG	1.0	U	U	Yes	
Dimethylphthalate	180	UG/KG	1.0	U	U	Yes	
2,6-Dinitrotoluene	180	UG/KG	1.0	U	U	Yes	
Acenaphthylene	180	UG/KG	1.0	U	U	Yes	
3-Nitroaniline	360	UG/KG	1.0	U	U	Yes	
Acenaphthene	180	UG/KG	1.0	U	U	Yes	
2,4-Dinitrophenol	360	UG/KG	1.0	U	U	Yes	
4-Nitrophenol	360	UG/KG	1.0	U	U	Yes	
Dibenzofuran	180	UG/KG	1.0	U	U	Yes	
2,4-Dinitrotoluene	180	UG/KG	1.0	U	U	Yes	
Diethylphthalate	92	UG/KG	1.0	J	J	Yes	
Fluorene	180	UG/KG	1.0	U	U	Yes	
4-Chlorophenylphenylether	180	UG/KG	1.0	U	U	Yes	
4-Nitroaniline	360	UG/KG	1.0	U	U	Yes	
4,6-Dinitro-2-methylphenol	360	UG/KG	1.0	U	U	Yes	
N-Nitrosodiphenylamine	180	UG/KG	1.0	U	U	Yes	
1,2,4,5-Tetrachlorobenzene	180	UG/KG	1.0	U	U	Yes	
4-Bromophenylphenylether	180	UG/KG	1.0	U	U	Yes	
Hexachlorobenzene	180	UG/KG	1.0	U	U	Yes	
Atrazine	180	UG/KG	1.0	U	U	Yes	
Pentachlorophenol	360	UG/KG	1.0	U	U	Yes	
Phenanthrene	1300	UG/KG	1.0			Yes	
Anthracene	250	UG/KG	1.0			Yes	
Carbazole	110	UG/KG	1.0	J	J	Yes	
Di-n-butylphthalate	180	UG/KG	1.0	U	U	Yes	
Fluoranthene	1600	UG/KG	1.0			Yes	
Pyrene	1600	UG/KG	1.0			Yes	
Butylbenzylphthalate	180	UG/KG	1.0	U	U	Yes	
3,3'-Dichlorobenzidine	180	UG/KG	1.0	U	U	Yes	
Benzo(a)anthracene	810	UG/KG	1.0			Yes	
Chrysene	980	UG/KG	1.0			Yes	
Bis(2-ethylhexyl)	130	UG/KG	1.0	J	J	Yes	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
phthalate	130	UG/KG	1.0	J	J	Yes	
Di-n-octylphthalate	180	UG/KG	1.0	U	U	Yes	
Benzo(b)fluoranthene	850	UG/KG	1.0			Yes	
Benzo(k)fluoranthene	610	UG/KG	1.0			Yes	
Benzo(a)pyrene	780	UG/KG	1.0			Yes	
Indeno(1,2,3-cd)pyrene	610	UG/KG	1.0			Yes	
Dibenzo(a,h)anthracene	200	UG/KG	1.0			Yes	
Benzo(g,h,i)perylene	690	UG/KG	1.0			Yes	
2,3,4,6-Tetrachlorophenol	180	UG/KG	1.0	U	U	Yes	
Piperazine, 1-methyl-4-(1,2,3,4-tetrahydro-3,7-dimethyl-2-naphthalenyl)-			1.0	NJ		Yes	
Dammarane-3,12,25-triol, 20,24-epoxy-, 12-acetate 3-(hydrogen propanedioate), (3.alpha.,12.beta.24R			1.0	NJ		Yes	
28-Nor-17.alpha.(H)-			1.0	NJ		Yes	

Case No: 43102	Contract: EPW11031	SDG No: E3P89	Lab Code: KAP
Sample Number: E3P94	Method: Aroclor	Matrix: Soil	MA Number: DEFAULT
Sample Location: SS-05	pH: 8.1	Sample Date: 11/05/2012	Sample Time: 15:14:00
% Moisture: 8.0	% Solids :		

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aroclor-1016	36	UG/KG	1.0	U	U	Yes	
Aroclor-1221	36	UG/KG	1.0	U	U	Yes	
Aroclor-1232	36	UG/KG	1.0	U	U	Yes	
Aroclor-1242	36	UG/KG	1.0	U	U	Yes	
Aroclor-1248	36	UG/KG	1.0	U	U	Yes	
Aroclor-1254	36	UG/KG	1.0	U	U	Yes	
Aroclor-1260	36	UG/KG	1.0	U	U	Yes	
Aroclor-1262	36	UG/KG	1.0	U	U	Yes	
Aroclor-1268	36	UG/KG	1.0	U	U	Yes	

Case No:	43102	Contract:	EPW11031	SDG No:	E3P89	Lab Code:	KAP
Sample Number:	E3P95	Method:	Pest	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	SS-06	pH:	6.8	Sample Date:	11/06/2012	Sample Time:	09:06:00
% Moisture :	22.00			% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
alpha-BHC	2.2	UG/KG	1.0	U	U	Yes	
beta-BHC	2.2	UG/KG	1.0	U	U	Yes	
delta-BHC	2.2	UG/KG	1.0	U	U	Yes	
gamma-BHC (Lindane)	2.2	UG/KG	1.0	U	U	Yes	
Heptachlor	2.2	UG/KG	1.0	U	U	Yes	
Aldrin	2.2	UG/KG	1.0	U	U	Yes	
Heptachlor epoxide	2.2	UG/KG	1.0	U	U	Yes	
Endosulfan I	2.2	UG/KG	1.0	U	U	Yes	
Dieldrin	4.2	UG/KG	1.0	U	U	Yes	
4,4'-DDE	4.2	UG/KG	1.0	U	U	Yes	
Endrin	4.2	UG/KG	1.0	U	U	Yes	
Endosulfan II	4.2	UG/KG	1.0	U	U	Yes	
4,4'-DDD	4.2	UG/KG	1.0	U	U	Yes	
Endosulfan sulfate	4.2	UG/KG	1.0	U	U	Yes	
4,4'-DDT	4.2	UG/KG	1.0	U	U	Yes	
Methoxychlor	22	UG/KG	1.0	U	U	Yes	
Endrin ketone	4.2	UG/KG	1.0	U	U	Yes	
Endrin aldehyde	4.2	UG/KG	1.0	U	U	Yes	
alpha-Chlordane	2.2	UG/KG	1.0	U	U	Yes	
gamma- Chlordane	2.2	UG/KG	1.0	U	U	Yes	
Toxaphene	220	UG/KG	1.0	U	U	Yes	

Case No: 43102	Contract: EPW11031	SDG No: E3P89	Lab Code: KAP
Sample Number: E3P95	Method: BNA	Matrix: SOIL	MA Number: DEFAULT
Sample Location: SS-06	pH: 6.8	Sample Date: 11/06/2012	Sample Time: 09:06:00
% Moisture: 22		% Solids:	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Benzaldehyde	220	UG/KG	1.0	U	U	Yes	
Phenol	220	UG/KG	1.0	U	U	Yes	
Bis(2-chloroethyl)ether	220	UG/KG	1.0	U	U	Yes	
2-Chlorophenol	220	UG/KG	1.0	U	U	Yes	
2-Methylphenol	220	UG/KG	1.0	U	U	Yes	
2,2'-Oxybis(1-chloropropane)	220	UG/KG	1.0	U	U	Yes	
Acetophenone	220	UG/KG	1.0	U	U	Yes	
4-Methylphenol	220	UG/KG	1.0	U	U	Yes	
N-Nitroso-di-n-propylamine	220	UG/KG	1.0	U	U	Yes	
Hexachloroethane	220	UG/KG	1.0	U	U	Yes	
Nitrobenzene	220	UG/KG	1.0	U	U	Yes	
Isophorone	220	UG/KG	1.0	U	U	Yes	
2-Nitrophenol	220	UG/KG	1.0	U	U	Yes	
2,4-Dimethylphenol	220	UG/KG	1.0	U	U	Yes	
Bis(2-chloroethoxy)methane	220	UG/KG	1.0	U	U	Yes	
2,4-Dichlorophenol	220	UG/KG	1.0	U	U	Yes	
Naphthalene	220	UG/KG	1.0	U	U	Yes	
4-Chloroaniline	220	UG/KG	1.0	U	U	Yes	
Hexachlorobutadiene	220	UG/KG	1.0	U	U	Yes	
Caprolactam	220	UG/KG	1.0	U	U	Yes	
4-Chloro-3-methylphenol	220	UG/KG	1.0	U	U	Yes	
2-Methylnaphthalene	220	UG/KG	1.0	U	U	Yes	
Hexachlorocyclopentadiene	220	UG/KG	1.0	U	U	Yes	
2,4,6-Trichlorophenol	220	UG/KG	1.0	U	U	Yes	
2,4,5-Trichlorophenol	220	UG/KG	1.0	U	U	Yes	
1,1'-Biphenyl	220	UG/KG	1.0	U	U	Yes	
2-Chloronaphthalene	220	UG/KG	1.0	U	U	Yes	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
2-Nitroaniline	420	UG/KG	1.0	U	U	Yes	
Dimethylphthalate	220	UG/KG	1.0	U	U	Yes	
2,6-Dinitrotoluene	220	UG/KG	1.0	U	U	Yes	
Acenaphthylene	220	UG/KG	1.0	U	U	Yes	
3-Nitroaniline	420	UG/KG	1.0	U	U	Yes	
Acenaphthene	220	UG/KG	1.0	U	U	Yes	
2,4-Dinitrophenol	420	UG/KG	1.0	U	U	Yes	
4-Nitrophenol	420	UG/KG	1.0	U	U	Yes	
Dibenzofuran	220	UG/KG	1.0	U	U	Yes	
2,4-Dinitrotoluene	220	UG/KG	1.0	U	U	Yes	
Diethylphthalate	220	UG/KG	1.0	U	U	Yes	
Fluorene	220	UG/KG	1.0	U	U	Yes	
4-Chlorophenylphenylether	220	UG/KG	1.0	U	U	Yes	
4-Nitroaniline	420	UG/KG	1.0	U	U	Yes	
4,6-Dinitro-2-methylphenol	420	UG/KG	1.0	U	U	Yes	
N-Nitrosodiphenylamine	220	UG/KG	1.0	U	U	Yes	
1,2,4,5-Tetrachlorobenzene	220	UG/KG	1.0	U	U	Yes	
4-Bromophenylphenylether	220	UG/KG	1.0	U	U	Yes	
Hexachlorobenzene	220	UG/KG	1.0	U	U	Yes	
Atrazine	220	UG/KG	1.0	U	U	Yes	
Pentachlorophenol	420	UG/KG	1.0	U	U	Yes	
Phenanthrene	220	UG/KG	1.0	U	U	Yes	
Anthracene	220	UG/KG	1.0	U	U	Yes	
Carbazole	220	UG/KG	1.0	U	U	Yes	
Di-n-butylphthalate	220	UG/KG	1.0	U	U	Yes	
Fluoranthene	170	UG/KG	1.0	J	J	Yes	
Pyrene	130	UG/KG	1.0	J	J	Yes	
Butylbenzylphthalate	220	UG/KG	1.0	U	U	Yes	
3,3'-Dichlorobenzidine	220	UG/KG	1.0	U	U	Yes	
Benzo(a)anthracene	220	UG/KG	1.0	U	U	Yes	
Chrysene	220	UG/KG	1.0	U	U	Yes	
Bis(2-ethylhexyl)	220	UG/KG	1.0	U	U	Yes	



Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
phthalate	220	UG/KG	1.0	U	U	Yes	
Di-n-octylphthalate	220	UG/KG	1.0	U	U	Yes	
Benzo(b)fluorant hene	220	UG/KG	1.0	U	U	Yes	
Benzo(k)fluorant hene	220	UG/KG	1.0	U	U	Yes	
Benzo(a)pyrene	220	UG/KG	1.0	U	U	Yes	
Indeno(1,2,3-cd)pyrene	220	UG/KG	1.0	U	U	Yes	
Dibenzo(a,h)anthracene	220	UG/KG	1.0	U	U	Yes	
Benzo(g,h,i)perylene	220	UG/KG	1.0	U	U	Yes	
2,3,4,6-Tetrachlorophenol	220	UG/KG	1.0	U	U	Yes	
Total Alkanes			1.0	J		Yes	
Stigmast-4-en-3-one			1.0	NJ		Yes	
Stigmasterol, 22,23-dihydro-			1.0	NJ		Yes	

Case No:	43102	Contract:	EPWI1031	SDG No:	E3P89	Lab Code:	KAP
Sample Number:	E3P95	Method:	Aroclor	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	SS-06	pH:	6.8	Sample Date:	11/06/2012	Sample Time:	09:06:00
% Moisture :	22			% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aroclor-1016	42	UG/KG	1.0	U	U	Yes	
Aroclor-1221	42	UG/KG	1.0	U	U	Yes	
Aroclor-1232	42	UG/KG	1.0	U	U	Yes	
Aroclor-1242	42	UG/KG	1.0	U	U	Yes	
Aroclor-1248	42	UG/KG	1.0	U	U	Yes	
Aroclor-1254	42	UG/KG	1.0	U	U	Yes	
Aroclor-1260	42	UG/KG	1.0	U	U	Yes	
Aroclor-1262	42	UG/KG	1.0	U	U	Yes	
Aroclor-1268	42	UG/KG	1.0	U	U	Yes	

Case No:	43102	Contract:	EPW11031	SDG No:	E3P89	Lab Code:	KAP
Sample Number:	E3P96	Method:	Aroclor	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	SS-07	pH:	7.1	Sample Date:	11/06/2012	Sample Time:	08:30:00
% Moisture :	22			% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aroclor-1016	42	UG/KG	1.0	U	U	Yes	
Aroclor-1221	42	UG/KG	1.0	U	U	Yes	
Aroclor-1232	42	UG/KG	1.0	U	U	Yes	
Aroclor-1242	42	UG/KG	1.0	U	U	Yes	
Aroclor-1248	42	UG/KG	1.0	U	U	Yes	
Aroclor-1254	42	UG/KG	1.0	U	U	Yes	
Aroclor-1260	42	UG/KG	1.0	U	U	Yes	
Aroclor-1262	42	UG/KG	1.0	U	U	Yes	
Aroclor-1268	42	UG/KG	1.0	U	U	Yes	

Case No:	43102	Contract:	BPW11031	SDG No:	E3P89	Lab Code:	KAP
Sample Number:	E3P96	Method:	BNA	Matrix:	SOIL	MA Number:	DEFAULT
Sample Location:	SS-07	pH:	7.1	Sample Date:	11/06/2012	Sample Time:	08:30:00
% Moisture :	22			% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Benzaldehyde	220	UG/KG	1.0	U	U	Yes	
Phenol	220	UG/KG	1.0	U	U	Yes	
Bis(2-chloroethyl)ether	220	UG/KG	1.0	U	U	Yes	
2-Chlorophenol	220	UG/KG	1.0	U	U	Yes	
2-Methylphenol	220	UG/KG	1.0	U	U	Yes	
2,2'-Oxybis(1-chloropropane)	220	UG/KG	1.0	U	U	Yes	
Acetophenone	220	UG/KG	1.0	U	U	Yes	
4-Methylphenol	220	UG/KG	1.0	U	U	Yes	
N-Nitroso-di-n-propylamine	220	UG/KG	1.0	U	U	Yes	
Hexachloroethane	220	UG/KG	1.0	U	U	Yes	
Nitrobenzene	220	UG/KG	1.0	U	U	Yes	
Isophorone	220	UG/KG	1.0	U	U	Yes	
2-Nitrophenol	220	UG/KG	1.0	U	U	Yes	
2,4-dimethylphenol	220	UG/KG	1.0	U	U	Yes	
Bis(2-chloroethoxy)methane	220	UG/KG	1.0	U	U	Yes	
2,4-Dichlorophenol	220	UG/KG	1.0	U	U	Yes	
Naphthalene	220	UG/KG	1.0	U	U	Yes	
4-Chloroaniline	220	UG/KG	1.0	U	U	Yes	
Hexachlorobutadiene	220	UG/KG	1.0	U	U	Yes	
Caprolactam	220	UG/KG	1.0	U	U	Yes	
4-Chloro-3-methylphenol	220	UG/KG	1.0	U	U	Yes	
2-Methylnaphthalene	220	UG/KG	1.0	U	U	Yes	
Hexachlorocyclopentadiene	220	UG/KG	1.0	U	U	Yes	
2,4,6-Trichlorophenol	220	UG/KG	1.0	U	U	Yes	
2,4,5-Trichlorophenol	220	UG/KG	1.0	U	U	Yes	
1,1'-Biphenyl	220	UG/KG	1.0	U	U	Yes	
2-Chloronaphthalene	220	UG/KG	1.0	U	U	Yes	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
2-Nitroaniline	420	UG/KG	1.0	U	U	Yes	
Dimethylphthalate	220	UG/KG	1.0	U	U	Yes	
2,6-Dinitrotoluene	220	UG/KG	1.0	U	U	Yes	
Acenaphthylene	220	UG/KG	1.0	U	U	Yes	
3-Nitroaniline	420	UG/KG	1.0	U	U	Yes	
Acenaphthene	94	UG/KG	1.0	J	J	Yes	
2,4-Dinitrophenol	420	UG/KG	1.0	U	U	Yes	
4-Nitrophenol	420	UG/KG	1.0	U	U	Yes	
Dibenzofuran	220	UG/KG	1.0	U	U	Yes	
2,4-Dinitrotoluene	220	UG/KG	1.0	U	U	Yes	
Diethylphthalate	220	UG/KG	1.0	U	U	Yes	
Fluorene	86	UG/KG	1.0	J	J	Yes	
4-Chlorophenylphenylether	220	UG/KG	1.0	U	U	Yes	
4-Nitroaniline	420	UG/KG	1.0	U	U	Yes	
4,6-Dinitro-2-methylphenol	420	UG/KG	1.0	U	U	Yes	
N-Nitrosodiphenylamine	220	UG/KG	1.0	U	U	Yes	
1,2,4,5-Tetrachlorobenzene	220	UG/KG	1.0	U	U	Yes	
4-Bromophenylphenylether	220	UG/KG	1.0	U	U	Yes	
Hexachlorobenzene	220	UG/KG	1.0	U	U	Yes	
Atrazine	220	UG/KG	1.0	U	U	Yes	
Pentachlorophenol	420	UG/KG	1.0	U	U	Yes	
Phenanthrene	1400	UG/KG	1.0			Yes	
Anthracene	290	UG/KG	1.0			Yes	
Carbazole	140	UG/KG	1.0	J	J	Yes	
Di-n-butylphthalate	220	UG/KG	1.0	U	U	Yes	
Fluoranthene	2200	UG/KG	1.0			Yes	
Pyrene	2000	UG/KG	1.0			Yes	
Butylbenzylphthalate	220	UG/KG	1.0	U	U	Yes	
3,3'-Dichlorobenzidine	220	UG/KG	1.0	U	U	Yes	
Benzo(a)anthracene	1000	UG/KG	1.0			Yes	
Chrysene	1100	UG/KG	1.0			Yes	
Bis(2-ethylhexyl)	220	UG/KG	1.0	U	U	Yes	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
phthalate	220	UG/KG	1.0	U	U	Yes	
Di-n-octylphthalate	220	UG/KG	1.0	U	U	Yes	
Benzo(b)fluoranthene	840	UG/KG	1.0			Yes	
Benzo(k)fluoranthene	740	UG/KG	1.0			Yes	
Benzo(a)pyrene	900	UG/KG	1.0			Yes	
Indeno(1,2,3-cd)pyrene	600	UG/KG	1.0			Yes	
Dibenzo(a,h)anthracene	200	UG/KG	1.0	J	J	Yes	
Benzo(g,h,i)perylene	700	UG/KG	1.0			Yes	
2,3,4,6-Tetrachlorophenol	220	UG/KG	1.0	U	U	Yes	
Benzo[e]pyrene			1.0	NJ		Yes	

Case No:	43102	Contract:	EPW11031	SDG No:	E3P89	Lab Code:	KAP
Sample Number:	E3P96	Method:	Pest	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	SS-07	pH:	7.1	Sample Date:	11/06/2012	Sample Time:	08:30:00
% Moisture :	22.00			% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
alpha-BHC	2.2	UG/KG	1.0	U	U	Yes	
beta-BHC	2.2	UG/KG	1.0	U	U	Yes	
delta-BHC	2.2	UG/KG	1.0	U	U	Yes	
gamma-BHC (Lindane)	2.2	UG/KG	1.0	U	U	Yes	
Heptachlor	2.2	UG/KG	1.0	U	U	Yes	
Aldrin	2.2	UG/KG	1.0	U	U	Yes	
Heptachlor epoxide	2.2	UG/KG	1.0	U	U	Yes	
Endosulfan I	2.2	UG/KG	1.0	U	U	Yes	
Dieldrin	4.2	UG/KG	1.0	U	U	Yes	
4,4'-DDE	4.2	UG/KG	1.0	U	U	Yes	
Endrin	4.2	UG/KG	1.0	U	U	Yes	
Endosulfan II	4.2	UG/KG	1.0	U	U	Yes	
4,4'-DDD	4.2	UG/KG	1.0	U	U	Yes	
Endosulfan sulfate	4.2	UG/KG	1.0	U	U	Yes	
4,4'-DDT	4.2	UG/KG	1.0	U	U	Yes	
Methoxychlor	22	UG/KG	1.0	U	U	Yes	
Endrin ketone	4.2	UG/KG	1.0	U	U	Yes	
Endrin aldehyde	4.2	UG/KG	1.0	U	U	Yes	
alpha-Chlordane	2.2	UG/KG	1.0	U	U	Yes	
gamma- Chlordane	2.2	UG/KG	1.0	U	U	Yes	
Toxaphene	220	UG/KG	1.0	U	U	Yes	

Case No:	43102	Contract:	EPW11031	SDG No:	E3P89	Lab Code:	KAP
Sample Number:	E3P97	Method:	Aroclor	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	SS-08	pH:	8.3	Sample Date:	11/06/2012	Sample Time:	11:00:00
% Moisture :	22			% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aroclor-1016	42	UG/KG	1.0	U	U	Yes	
Aroclor-1221	42	UG/KG	1.0	U	U	Yes	
Aroclor-1232	42	UG/KG	1.0	U	U	Yes	
Aroclor-1242	42	UG/KG	1.0	U	U	Yes	
Aroclor-1248	42	UG/KG	1.0	U	U	Yes	
Aroclor-1254	42	UG/KG	1.0	U	U	Yes	
Aroclor-1260	42	UG/KG	1.0	JP	U	Yes	
Aroclor-1262	42	UG/KG	1.0	U	U	Yes	
Aroclor-1268	42	UG/KG	1.0	U	U	Yes	



Case No: 43102	Contract: EPW11031	SDG No: E3P89	Lab Code: KAP
Sample Number: E3P97	Method: Pest	Matrix: Soil	MA Number: DEFAULT
Sample Location: SS-08	pH: 8.3	Sample Date: 11/06/2012	Sample Time: 11:00:00
% Moisture: 22.00	% Solids:		

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
alpha-BHC	2.2	UG/KG	1.0	U	U	Yes	
beta-BHC	2.2	UG/KG	1.0	U	U	Yes	
delta-BHC	2.2	UG/KG	1.0	U	U	Yes	
gamma-BHC (Lindane)	2.2	UG/KG	1.0	U	U	Yes	
Heptachlor	2.2	UG/KG	1.0	U	U	Yes	
Aldrin	2.2	UG/KG	1.0	U	U	Yes	
Heptachlor epoxide	2.2	UG/KG	1.0	U	U	Yes	
Endosulfan I	2.2	UG/KG	1.0	U	U	Yes	
Dieldrin	4.2	UG/KG	1.0	U	U	Yes	
4,4'-DDE	4.2	UG/KG	1.0	U	U	Yes	
Endrin	4.2	UG/KG	1.0	U	U	Yes	
Endosulfan II	4.2	UG/KG	1.0	U	U	Yes	
4,4'-DDD	4.2	UG/KG	1.0	U	U	Yes	
Endosulfan sulfate	4.2	UG/KG	1.0	U	U	Yes	
4,4'-DDT	20	UG/KG	1.0	P	J	Yes	
Methoxychlor	22	UG/KG	1.0	U	U	Yes	
Endrin ketone	4.2	UG/KG	1.0	U	U	Yes	
Endrin aldehyde	4.2	UG/KG	1.0	U	U	Yes	
alpha-Chlordane	2.2	UG/KG	1.0	U	U	Yes	
gamma- Chlordane	2.2	UG/KG	1.0	U	U	Yes	
Toxaphene	220	UG/KG	1.0	U	U	Yes	

Case No: 43102	Contract: EPW11031	SDG No: E3P89	Lab Code: KAP
Sample Number: E3P97	Method: BNA	Matrix: SOIL	MA Number: DEFAULT
Sample Location: SS-08	pH: 8.3	Sample Date: 11/06/2012	Sample Time: 11:00:00
% Moisture : 22	% Solids :		

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Benzaldehyde	220	UG/KG	1.0	U	U	Yes	
Phenol	220	UG/KG	1.0	U	U	Yes	
Bis(2-chloroethyl)ether	220	UG/KG	1.0	U	U	Yes	
2-Chlorophenol	220	UG/KG	1.0	U	U	Yes	
2-Methylphenol	220	UG/KG	1.0	U	U	Yes	
2,2'-Oxybis(1-chloropropane)	220	UG/KG	1.0	U	U	Yes	
Acetophenone	220	UG/KG	1.0	U	U	Yes	
4-Methylphenol	220	UG/KG	1.0	U	U	Yes	
N-Nitroso-di-n-propylamine	220	UG/KG	1.0	U	U	Yes	
Hexachloroethane	220	UG/KG	1.0	U	U	Yes	
Nitrobenzene	220	UG/KG	1.0	U	U	Yes	
Isophorone	220	UG/KG	1.0	U	U	Yes	
2-Nitrophenol	220	UG/KG	1.0	U	U	Yes	
2,4-Dimethylphenol	220	UG/KG	1.0	U	U	Yes	
Bis(2-chloroethoxy)methane	220	UG/KG	1.0	U	U	Yes	
2,4-Dichlorophenol	220	UG/KG	1.0	U	U	Yes	
Naphthalene	220	UG/KG	1.0	U	U	Yes	
4-Chloroaniline	220	UG/KG	1.0	U	U	Yes	
Hexachlorobutadiene	220	UG/KG	1.0	U	U	Yes	
Caprolactam	220	UG/KG	1.0	U	U	Yes	
4-Chloro-3-methylphenol	220	UG/KG	1.0	U	U	Yes	
2-Methylnaphthalene	220	UG/KG	1.0	U	U	Yes	
Hexachlorocyclopentadiene	220	UG/KG	1.0	U	U	Yes	
2,4,6-Trichlorophenol	220	UG/KG	1.0	U	U	Yes	
2,4,5-Trichlorophenol	220	UG/KG	1.0	U	U	Yes	
1,1'-Biphenyl	220	UG/KG	1.0	U	U	Yes	
2-Chloronaphthalene	220	UG/KG	1.0	U	U	Yes	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
2-Nitroaniline	420	UG/KG	1.0	U	U	Yes	
Dimethylphthalate	220	UG/KG	1.0	U	U	Yes	
2,6-Dinitrotoluene	220	UG/KG	1.0	U	U	Yes	
Acenaphthylene	110	UG/KG	1.0	J	J	Yes	
3-Nitroaniline	420	UG/KG	1.0	U	U	Yes	
Acenaphthene	220	UG/KG	1.0	U	U	Yes	
2,4-Dinitrophenol	420	UG/KG	1.0	U	U	Yes	
4-Nitrophenol	420	UG/KG	1.0	U	U	Yes	
Dibenzofuran	220	UG/KG	1.0	U	U	Yes	
2,4-Dinitrotoluene	220	UG/KG	1.0	U	U	Yes	
Diethylphthalate	220	UG/KG	1.0	U	U	Yes	
Fluorene	220	UG/KG	1.0	U	U	Yes	
4-Chlorophenylphenylether	220	UG/KG	1.0	U	U	Yes	
4-Nitroaniline	420	UG/KG	1.0	U	U	Yes	
4,6-Dinitro-2-methylphenol	420	UG/KG	1.0	U	U	Yes	
N-Nitrosodiphenylamine	220	UG/KG	1.0	U	U	Yes	
1,2,4,5-Tetrachlorobenzene	220	UG/KG	1.0	U	U	Yes	
4-Bromophenylphenylether	220	UG/KG	1.0	U	U	Yes	
Hexachlorobenzene	220	UG/KG	1.0	U	U	Yes	
Atrazine	220	UG/KG	1.0	U	U	Yes	
Pentachlorophenol	420	UG/KG	1.0	U	U	Yes	
Phenanthrene	2200	UG/KG	1.0			Yes	
Anthracene	430	UG/KG	1.0			Yes	
Carbazole	280	UG/KG	1.0			Yes	
Di-n-butylphthalate	220	UG/KG	1.0	U	U	Yes	
<del>Fluoranthene</del>	<del>6700</del>	<del>UG/KG</del>	<del>1.0</del>	<del>E</del>	<del>J</del>	<del>Yes</del>	
<del>Pyrene</del>	<del>7700</del>	<del>UG/KG</del>	<del>1.0</del>	<del>E</del>	<del>J</del>	<del>Yes</del>	
Butylbenzylphthalate	220	UG/KG	1.0	U	U	Yes	
3,3'-Dichlorobenzidine	220	UG/KG	1.0	U	U	Yes	
<del>Benzo(a)anthracene</del>	<del>4300</del>	<del>UG/KG</del>	<del>1.0</del>	<del>E</del>	<del>J</del>	<del>Yes</del>	
<del>Chrysene</del>	<del>6200</del>	<del>UG/KG</del>	<del>1.0</del>	<del>E</del>	<del>J</del>	<del>Yes</del>	
Bis(2-ethylhexyl)	220	UG/KG	1.0	U	U	Yes	

★ See narrative, p. 15 - JES 3/21/13

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
phthalate	220	UG/KG	1.0	U	U	Yes	
Di-n-octylphthalate	220	UG/KG	1.0	U	U	Yes	
<del>Benzo(b)fluoranthene</del>	<del>3400</del>	<del>UG/KG</del>	<del>1.0</del>	<del>E</del>	<del>J</del>	<del>Yes</del>	
Benzo(k)fluoranthene	3100	UG/KG	1.0			Yes	
Benzo(a)pyrene	3200	UG/KG	1.0			Yes	
Indeno(1,2,3-cd)pyrene	2400	UG/KG	1.0			Yes	
Dibenzo(a,h)anthracene	1100	UG/KG	1.0			Yes	
Benzo(g,h,i)perylene	2600	UG/KG	1.0			Yes	
2,3,4,6-Tetrachlorophenol	220	UG/KG	1.0	U	U	Yes	
1,2:7,8-Dibenzophenanthrene			1.0	NJ		Yes	
Fluoranthene, 2-methyl-			1.0	NJ		Yes	

*See narrative, p. 15 - JEA 3/2/13*

Case No:	43102	Contract:	EPW11031	SDG No:	E3P89	Lab Code:	KAP
Sample Number:	E3P97DL	Method:	BNA	Matrix:	SOIL	MA Number:	DEFAULT
Sample Location:	SS-08	pH:	8.3	Sample Date:	11/06/2012	Sample Time:	11:00:00
% Moisture :	22			% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Benzaldehyde	1100	UG/KG	5.0	U	U	Yes	
Phenol	1100	UG/KG	5.0	U	U	Yes	
Bis(2-chloroethyl)ether	1100	UG/KG	5.0	U	U	Yes	
2-Chlorophenol	1100	UG/KG	5.0	U	U	Yes	
2-Methylphenol	1100	UG/KG	5.0	U	U	Yes	
2,2'-Oxybis(1-chloropropane)	1100	UG/KG	5.0	U	U	Yes	
Acetophenone	1100	UG/KG	5.0	U	U	Yes	
4-Methylphenol	1100	UG/KG	5.0	U	UJ	Yes	
N-Nitroso-di-n-propylamine	1100	UG/KG	5.0	U	UJ	Yes	
Hexachloroethane	1100	UG/KG	5.0	U	U	Yes	
Nitrobenzene	1100	UG/KG	5.0	U	U	Yes	
Isophorone	1100	UG/KG	5.0	U	U	Yes	
2-Nitrophenol	1100	UG/KG	5.0	U	U	Yes	
2,4-Dimethylphenol	1100	UG/KG	5.0	U	U	Yes	
Bis(2-chloroethoxy)methane	1100	UG/KG	5.0	U	U	Yes	
2,4-Dichlorophenol	1100	UG/KG	5.0	U	U	Yes	
Naphthalene	1100	UG/KG	5.0	U	U	Yes	
4-Chloroaniline	1100	UG/KG	5.0	U	U	Yes	
Hexachlorobutadiene	1100	UG/KG	5.0	U	U	Yes	
Caprolactam	1100	UG/KG	5.0	U	U	Yes	
4-Chloro-3-methylphenol	1100	UG/KG	5.0	U	U	Yes	
2-Methylnaphthalene	1100	UG/KG	5.0	U	U	Yes	
Hexachlorocyclopentadiene	1100	UG/KG	5.0	U	U	Yes	
2,4,6-Trichlorophenol	1100	UG/KG	5.0	U	U	Yes	
2,4,5-Trichlorophenol	1100	UG/KG	5.0	U	U	Yes	
1,1'-Biphenyl	1100	UG/KG	5.0	U	U	Yes	
2-Chloronaphthalene	1100	UG/KG	5.0	U	U	Yes	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
2-Nitroaniline	2100	UG/KG	5.0	U	U	Yes	
Dimethylphthalate	1100	UG/KG	5.0	U	U	Yes	
2,6-Dinitrotoluene	1100	UG/KG	5.0	U	U	Yes	
Acenaphthylene	1100	UG/KG	5.0	U	U	Yes	
3-Nitroaniline	2100	UG/KG	5.0	U	U	Yes	
Acenaphthene	1100	UG/KG	5.0	U	U	Yes	
2,4-Dinitrophenol	2100	UG/KG	5.0	U	U	Yes	
4-Nitrophenol	2100	UG/KG	5.0	U	U	Yes	
Dibenzofuran	1100	UG/KG	5.0	U	U	Yes	
2,4-Dinitrotoluene	1100	UG/KG	5.0	U	U	Yes	
Diethylphthalate	1100	UG/KG	5.0	U	U	Yes	
Fluorene	1100	UG/KG	5.0	U	U	Yes	
4-Chlorophenylphenylether	1100	UG/KG	5.0	U	U	Yes	
4-Nitroaniline	2100	UG/KG	5.0	U	U	Yes	
4,6-Dinitro-2-methylphenol	2100	UG/KG	5.0	U	U	Yes	
N-Nitrosodiphenylamine	1100	UG/KG	5.0	U	U	Yes	
1,2,4,5-Tetrachlorobenzene	1100	UG/KG	5.0	U	U	Yes	
4-Bromophenylphenylether	1100	UG/KG	5.0	U	U	Yes	
Hexachlorobenzene	1100	UG/KG	5.0	U	U	Yes	
Atrazine	1100	UG/KG	5.0	U	U	Yes	
Pentachlorophenol	2100	UG/KG	5.0	U	UJ	Yes	
Phenanthrene	2500	UG/KG	5.0	D		Yes	
Anthracene	430	UG/KG	5.0	DJ	J	Yes	
Carbazole	1100	UG/KG	5.0	U	U	Yes	
Di-n-butylphthalate	1100	UG/KG	5.0	U	U	Yes	
Fluoranthene	5400	UG/KG	5.0	D		Yes	
Pyrene	7800	UG/KG	5.0	D		Yes	
Butylbenzylphthalate	1100	UG/KG	5.0	U	U	Yes	
3,3'-Dichlorobenzidine	1100	UG/KG	5.0	U	U	Yes	
Benzo(a)anthracene	4100	UG/KG	5.0	D		Yes	
Chrysene	5400	UG/KG	5.0	D		Yes	
Bis(2-ethylhexyl)	1100	UG/KG	5.0	U	U	Yes	

★ Use these (see narrative, p. 15) - JES 3/21/13

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
phthalate	1100	UG/KG	5.0	U	U	Yes	
Di-n-octylphthalate	1100	UG/KG	5.0	U	U	Yes	
Benzo(b)fluoranthene	4200	UG/KG	5.0	D		Yes	
Benzo(k)fluoranthene	3600	UG/KG	5.0	D		Yes	
Benzo(a)pyrene	3400	UG/KG	5.0	D		Yes	
Indeno(1,2,3-cd)pyrene	2100	UG/KG	5.0	D		Yes	
Dibenzo(a,h)anthracene	1100	UG/KG	5.0	D		Yes	
Benzo(g,h,i)perylene	2300	UG/KG	5.0	D		Yes	
2,3,4,6-Tetrachlorophenol	1100	UG/KG	5.0	U	U	Yes	
Phenanthrene, 3,6-dimethyl-			5.0	DNJ		Yes	
Anthracene, 2-methyl-			5.0	DNJ		Yes	
2-Phenylanthracene			5.0	DNJ		Yes	
9,10-Anthracenedione			5.0	DNJ		Yes	
Pyrene, 1-methyl-			5.0	DNJ		Yes	
Cyclopenta(def)phenanthrene			5.0	DNJ		Yes	
Phenanthrene, 2,5-dimethyl-			5.0	DNJ		Yes	

★ Use this (see narrative, p. 15) - JEF 3/21/13

Case No:	43102	Contract:	EPW11031	SDG No:	E3P89	Lab Code:	KAP
Sample Number:	E3P98	Method:	Aroclor	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	SS-09	pH:	7.3	Sample Date:	11/06/2012	Sample Time:	10:00:00
% Moisture :	10			% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aroclor-1016	37	UG/KG	1.0	U	U	Yes	
Aroclor-1221	37	UG/KG	1.0	U	U	Yes	
Aroclor-1232	37	UG/KG	1.0	U	U	Yes	
Aroclor-1242	37	UG/KG	1.0	U	U	Yes	
Aroclor-1248	37	UG/KG	1.0	U	U	Yes	
Aroclor-1254	37	UG/KG	1.0	U	U	Yes	
Aroclor-1260	37	UG/KG	1.0	U	U	Yes	
Aroclor-1262	37	UG/KG	1.0	U	U	Yes	
Aroclor-1268	37	UG/KG	1.0	U	U	Yes	



Case No:	43102	Contract:	EPW11031	SDG No:	E3P89	Lab Code:	KAP
Sample Number:	E3P98	Method:	Pest	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	SS-09	pH:	7.3	Sample Date:	11/06/2012	Sample Time:	10:00:00
% Moisture :	10.00			% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
alpha-BHC	1.9	UG/KG	1.0	U	U	Yes	
beta-BHC	1.9	UG/KG	1.0	U	U	Yes	
delta-BHC	1.9	UG/KG	1.0	U	U	Yes	
gamma-BHC (Lindane)	1.9	UG/KG	1.0	U	U	Yes	
Heptachlor	1.9	UG/KG	1.0	U	U	Yes	
Aldrin	1.9	UG/KG	1.0	U	U	Yes	
Heptachlor epoxide	1.9	UG/KG	1.0	U	U	Yes	
Endosulfan I	1.9	UG/KG	1.0	U	U	Yes	
Dieldrin	3.7	UG/KG	1.0	U	U	Yes	
4,4'-DDE	3.7	UG/KG	1.0	U	U	Yes	
Endrin	3.7	UG/KG	1.0	U	U	Yes	
Endosulfan II	3.7	UG/KG	1.0	U	U	Yes	
4,4'-DDD	3.7	UG/KG	1.0	U	U	Yes	
Endosulfan sulfate	3.7	UG/KG	1.0	U	U	Yes	
4,4'-DDT	3.7	UG/KG	1.0	U	U	Yes	
Methoxychlor	19	UG/KG	1.0	U	U	Yes	
Endrin ketone	3.7	UG/KG	1.0	U	U	Yes	
Endrin aldehyde	3.7	UG/KG	1.0	U	U	Yes	
alpha-Chlordane	1.9	UG/KG	1.0	U	U	Yes	
gamma- Chlordane	1.9	UG/KG	1.0	U	U	Yes	
Toxaphene	190	UG/KG	1.0	U	U	Yes	

Case No:	43102	Contract:	BPW11031	SDG No:	E3P89	Lab Code:	KAP
Sample Number:	E3P98	Method:	BNA	Matrix:	SOIL	MA Number:	DEFAULT
Sample Location:	SS-09	pH:	7.3	Sample Date:	11/06/2012	Sample Time:	10:00:00
% Moisture :	10			% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Benzaldehyde	190	UG/KG	1.0	U	U	Yes	
Phenol	190	UG/KG	1.0	U	U	Yes	
Bis(2-chloroethyl)ether	190	UG/KG	1.0	U	U	Yes	
2-Chlorophenol	190	UG/KG	1.0	U	U	Yes	
2-Methylphenol	190	UG/KG	1.0	U	U	Yes	
2,2'-Oxybis(1-chloropropane)	190	UG/KG	1.0	U	U	Yes	
Acetophenone	190	UG/KG	1.0	U	U	Yes	
4-Methylphenol	190	UG/KG	1.0	U	U	Yes	
N-Nitroso-di-n-propylamine	190	UG/KG	1.0	U	U	Yes	
Hexachloroethane	190	UG/KG	1.0	U	U	Yes	
Nitrobenzene	190	UG/KG	1.0	U	U	Yes	
Isophorone	190	UG/KG	1.0	U	U	Yes	
2-Nitrophenol	190	UG/KG	1.0	U	U	Yes	
2,4-dimethylphenol	190	UG/KG	1.0	U	U	Yes	
Bis(2-chloroethoxy)methane	190	UG/KG	1.0	U	U	Yes	
2,4-Dichlorophenol	190	UG/KG	1.0	U	U	Yes	
Naphthalene	190	UG/KG	1.0	U	U	Yes	
4-Chloroaniline	190	UG/KG	1.0	U	U	Yes	
Hexachlorobutadiene	190	UG/KG	1.0	U	U	Yes	
Caprolactam	190	UG/KG	1.0	U	U	Yes	
4-Chloro-3-methylphenol	190	UG/KG	1.0	U	U	Yes	
2-Methylnaphthalene	190	UG/KG	1.0	U	U	Yes	
Hexachlorocyclopentadiene	190	UG/KG	1.0	U	U	Yes	
2,4,6-Trichlorophenol	190	UG/KG	1.0	U	U	Yes	
2,4,5-Trichlorophenol	190	UG/KG	1.0	U	U	Yes	
1,1'-Biphenyl	190	UG/KG	1.0	U	U	Yes	
2-Chloronaphthalene	190	UG/KG	1.0	U	U	Yes	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
2-Nitroaniline	360	UG/KG	1.0	U	U	Yes	
Dimethylphthalate	190	UG/KG	1.0	U	U	Yes	
2,6-Dinitrotoluene	190	UG/KG	1.0	U	U	Yes	
Acenaphthylene	190	UG/KG	1.0	U	U	Yes	
3-Nitroaniline	360	UG/KG	1.0	U	U	Yes	
Acenaphthene	190	UG/KG	1.0	U	U	Yes	
2,4-Dinitrophenol	360	UG/KG	1.0	U	U	Yes	
4-Nitrophenol	360	UG/KG	1.0	U	U	Yes	
Dibenzofuran	190	UG/KG	1.0	U	U	Yes	
2,4-Dinitrotoluene	190	UG/KG	1.0	U	U	Yes	
Diethylphthalate	190	UG/KG	1.0	U	U	Yes	
Fluorene	190	UG/KG	1.0	U	U	Yes	
4-Chlorophenylphenylether	190	UG/KG	1.0	U	U	Yes	
4-Nitroaniline	360	UG/KG	1.0	U	U	Yes	
4,6-Dinitro-2-methylphenol	360	UG/KG	1.0	U	U	Yes	
N-Nitrosodiphenylamine	190	UG/KG	1.0	U	U	Yes	
1,2,4,5-Tetrachlorobenzene	190	UG/KG	1.0	U	U	Yes	
4-Bromophenylphenylether	190	UG/KG	1.0	U	U	Yes	
Hexachlorobenzene	190	UG/KG	1.0	U	U	Yes	
Atrazine	190	UG/KG	1.0	U	U	Yes	
Pentachlorophenol	360	UG/KG	1.0	U	U	Yes	
Phenanthrene	190	UG/KG	1.0	U	U	Yes	
Anthracene	190	UG/KG	1.0	U	U	Yes	
Carbazole	190	UG/KG	1.0	U	U	Yes	
Di-n-butylphthalate	190	UG/KG	1.0	U	U	Yes	
Fluoranthene	110	UG/KG	1.0	J	J	Yes	
Pyrene	110	UG/KG	1.0	J	J	Yes	
Butylbenzylphthalate	190	UG/KG	1.0	U	U	Yes	
3,3'-Dichlorobenzidine	190	UG/KG	1.0	U	U	Yes	
Benzo(a)anthracene	190	UG/KG	1.0	U	U	Yes	
Chrysene	85	UG/KG	1.0	J	J	Yes	
Bis(2-ethylhexyl)	190	UG/KG	1.0	U	U	Yes	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
phthalate	190	UG/KG	1.0	U	U	Yes	
Di-n-octylphthalate	190	UG/KG	1.0	U	U	Yes	
Benzo(b)fluoranthene	190	UG/KG	1.0	U	U	Yes	
Benzo(k)fluoranthene	190	UG/KG	1.0	U	U	Yes	
Benzo(a)pyrene	190	UG/KG	1.0	U	U	Yes	
Indeno(1,2,3-cd)pyrene	190	UG/KG	1.0	U	U	Yes	
Dibenzo(a,h)anthracene	190	UG/KG	1.0	U	U	Yes	
Benzo(g,h,i)perylene	81	UG/KG	1.0	J	J	Yes	
2,3,4,6-Tetrachlorophenol	190	UG/KG	1.0	U	U	Yes	
1-Docosene			1.0	NJ		Yes	
Selenolo[3,4-b][1]benzoselenophen-3(1H)-one			1.0	NJ		Yes	

Case No:	43102	Contract:	EPW11031	SDG No:	E3P89	Lab Code:	KAP
Sample Number:	E3P99	Method:	Pest	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	SS-10	pH:	7.8	Sample Date:	11/06/2012	Sample Time:	12:23:00
% Moisture :	24.00			% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
alpha-BHC	2.2	UG/KG	1.0	U	UJ	Yes	
beta-BHC	2.2	UG/KG	1.0	U	UJ	Yes	
delta-BHC	2.2	UG/KG	1.0	U	UJ	Yes	
gamma-BHC (Lindane)	2.2	UG/KG	1.0	U	UJ	Yes	
Heptachlor	2.2	UG/KG	1.0	U	UJ	Yes	
Aldrin	2.2	UG/KG	1.0	U	UJ	Yes	
Heptachlor epoxide	2.2	UG/KG	1.0	U	UJ	Yes	
Endosulfan I	2.2	UG/KG	1.0	U	UJ	Yes	
Dieldrin	4.3	UG/KG	1.0	U	UJ	Yes	
4,4'-DDE	4.3	UG/KG	1.0	U	UJ	Yes	
Endrin	4.3	UG/KG	1.0	U	UJ	Yes	
Endosulfan II	4.3	UG/KG	1.0	U	UJ	Yes	
4,4'-DDD	4.3	UG/KG	1.0	U	UJ	Yes	
Endosulfan sulfate	4.3	UG/KG	1.0	U	UJ	Yes	
4,4'-DDT	4.3	UG/KG	1.0	U	UJ	Yes	
Methoxychlor	22	UG/KG	1.0	U	UJ	Yes	
Endrin ketone	4.3	UG/KG	1.0	U	UJ	Yes	
Endrin aldehyde	4.3	UG/KG	1.0	U	UJ	Yes	
alpha-Chlordane	2.2	UG/KG	1.0	U	UJ	Yes	
gamma- Chlordane	2.2	UG/KG	1.0	U	UJ	Yes	
Toxaphene	220	UG/KG	1.0	U	UJ	Yes	

Case No:	43102	Contract:	BPW11031	SDG No:	E3P89	Lab Code:	KAP
Sample Number:	E3P99	Method:	Aroclor	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	SS-10	pH:	7.8	Sample Date:	11/06/2012	Sample Time:	12:23:00
% Moisture :	24			% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aroclor-1016	43	UG/KG	1.0	U	U	Yes	
Aroclor-1221	43	UG/KG	1.0	U	U	Yes	
Aroclor-1232	43	UG/KG	1.0	U	U	Yes	
Aroclor-1242	43	UG/KG	1.0	U	U	Yes	
Aroclor-1248	43	UG/KG	1.0	U	U	Yes	
Aroclor-1254	43	UG/KG	1.0	U	U	Yes	
Aroclor-1260	43	UG/KG	1.0	U	U	Yes	
Aroclor-1262	43	UG/KG	1.0	U	U	Yes	
Aroclor-1268	43	UG/KG	1.0	U	U	Yes	

Case No:	43102	Contract:	EPW11031	SDG No:	E3P89	Lab Code:	KAP
Sample Number:	E3P99	Method:	BNA	Matrix:	SOIL	MA Number:	DEFAULT
Sample Location:	SS-10	pH:	7.8	Sample Date:	11/06/2012	Sample Time:	12:23:00
% Moisture :	24			% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Benzaldehyde	220	UG/KG	1.0	U	U	Yes	
Phenol	220	UG/KG	1.0	U	U	Yes	
Bis(2-chloroethyl)ether	220	UG/KG	1.0	U	U	Yes	
2-Chlorophenol	220	UG/KG	1.0	U	U	Yes	
2-Methylphenol	220	UG/KG	1.0	U	U	Yes	
2,2'-Oxybis(1-chloropropane)	220	UG/KG	1.0	U	U	Yes	
Acetophenone	220	UG/KG	1.0	U	U	Yes	
4-Methylphenol	220	UG/KG	1.0	U	U	Yes	
N-Nitroso-di-n-propylamine	220	UG/KG	1.0	U	U	Yes	
Hexachloroethane	220	UG/KG	1.0	U	U	Yes	
Nitrobenzene	220	UG/KG	1.0	U	U	Yes	
Isophorone	220	UG/KG	1.0	U	U	Yes	
2-Nitrophenol	220	UG/KG	1.0	U	U	Yes	
2,4-Dimethylphenol	220	UG/KG	1.0	U	U	Yes	
Bis(2-chloroethoxy)methane	220	UG/KG	1.0	U	U	Yes	
2,4-Dichlorophenol	220	UG/KG	1.0	U	U	Yes	
Naphthalene	220	UG/KG	1.0	U	U	Yes	
4-Chloroaniline	220	UG/KG	1.0	U	U	Yes	
Hexachlorobutadiene	220	UG/KG	1.0	U	U	Yes	
Caprolactam	220	UG/KG	1.0	U	U	Yes	
4-Chloro-3-methylphenol	220	UG/KG	1.0	U	U	Yes	
2-Methylnaphthalene	220	UG/KG	1.0	U	U	Yes	
Hexachlorocyclopentadiene	220	UG/KG	1.0	U	U	Yes	
2,4,6-Trichlorophenol	220	UG/KG	1.0	U	U	Yes	
2,4,5-Trichlorophenol	220	UG/KG	1.0	U	U	Yes	
1,1'-Biphenyl	220	UG/KG	1.0	U	U	Yes	
2-Chloronaphthalene	220	UG/KG	1.0	U	U	Yes	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
2-Nitroaniline	430	UG/KG	1.0	U	U	Yes	
Dimethylphthalate	220	UG/KG	1.0	U	U	Yes	
2,6-Dinitrotoluene	220	UG/KG	1.0	U	U	Yes	
Acenaphthylene	220	UG/KG	1.0	U	U	Yes	
3-Nitroaniline	430	UG/KG	1.0	U	U	Yes	
Acenaphthene	220	UG/KG	1.0	U	U	Yes	
2,4-Dinitrophenol	430	UG/KG	1.0	U	U	Yes	
4-Nitrophenol	430	UG/KG	1.0	U	U	Yes	
Dibenzofuran	220	UG/KG	1.0	U	U	Yes	
2,4-Dinitrotoluene	220	UG/KG	1.0	U	U	Yes	
Diethylphthalate	220	UG/KG	1.0	U	U	Yes	
Fluorene	220	UG/KG	1.0	U	U	Yes	
4-Chlorophenylphenylether	220	UG/KG	1.0	U	U	Yes	
4-Nitroaniline	430	UG/KG	1.0	U	U	Yes	
4,6-Dinitro-2-methylphenol	430	UG/KG	1.0	U	U	Yes	
N-Nitrosodiphenylamine	220	UG/KG	1.0	U	U	Yes	
1,2,4,5-Tetrachlorobenzene	220	UG/KG	1.0	U	U	Yes	
4-Bromophenylphenylether	220	UG/KG	1.0	U	U	Yes	
Hexachlorobenzene	220	UG/KG	1.0	U	U	Yes	
Atrazine	220	UG/KG	1.0	U	U	Yes	
Pentachlorophenol	430	UG/KG	1.0	U	U	Yes	
Phenanthrene	220	UG/KG	1.0	U	U	Yes	
Anthracene	220	UG/KG	1.0	U	U	Yes	
Carbazole	220	UG/KG	1.0	U	U	Yes	
Di-n-butylphthalate	220	UG/KG	1.0	U	U	Yes	
Fluoranthene	180	UG/KG	1.0	J	J	Yes	
Pyrene	180	UG/KG	1.0	J	J	Yes	
Butylbenzylphthalate	220	UG/KG	1.0	U	U	Yes	
3,3'-Dichlorobenzidine	220	UG/KG	1.0	U	U	Yes	
Benzo(a)anthracene	92	UG/KG	1.0	J	J	Yes	
Chrysene	150	UG/KG	1.0	J	J	Yes	
Bis(2-ethylhexyl)	220	UG/KG	1.0	U	U	Yes	



Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
phthalate	220	UG/KG	1.0	U	U	Yes	
Di-n-octylphthalate	220	UG/KG	1.0	U	U	Yes	
Benzo(b)fluoranthene	220	UG/KG	1.0	U	U	Yes	
Benzo(k)fluoranthene	220	UG/KG	1.0	U	U	Yes	
Benzo(a)pyrene	220	UG/KG	1.0	U	U	Yes	
Indeno(1,2,3-cd)pyrene	220	UG/KG	1.0	U	U	Yes	
Dibenzo(a,h)anthracene	220	UG/KG	1.0	U	U	Yes	
Benzo(g,h,i)perylene	220	UG/KG	1.0	U	U	Yes	
2,3,4,6-Tetrachlorophenol	220	UG/KG	1.0	U	U	Yes	
3,4:8,9-Dibenzopyrene			1.0	NJ		Yes	
Total Alkanes			1.0	J		Yes	
n-Hexadecanoic acid			1.0	NJ		Yes	

Case No:	43102	Contract:	EPW11031	SDG No:	E3P89	Lab Code:	KAP
Sample Number:	E3PA0	Method:	BNA	Matrix:	SOIL	MA Number:	DEFAULT
Sample Location:	SS-11	pH:	5.8	Sample Date:	11/06/2012	Sample Time:	12:51:00
% Moisture :	12			% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Benzaldehyde	190	UG/KG	1.0	U	U	Yes	
Phenol	190	UG/KG	1.0	U	U	Yes	
Bis(2-chloroethyl)ether	190	UG/KG	1.0	U	U	Yes	
2-Chlorophenol	190	UG/KG	1.0	U	U	Yes	
2-Methylphenol	190	UG/KG	1.0	U	U	Yes	
2,2'-Oxybis(1-chloropropane)	190	UG/KG	1.0	U	U	Yes	
Acetophenone	190	UG/KG	1.0	U	U	Yes	
4-Methylphenol	190	UG/KG	1.0	U	U	Yes	
N-Nitroso-di-n-propylamine	190	UG/KG	1.0	U	U	Yes	
Hexachloroethane	190	UG/KG	1.0	U	U	Yes	
Nitrobenzene	190	UG/KG	1.0	U	U	Yes	
Isophorone	190	UG/KG	1.0	U	U	Yes	
2-Nitrophenol	190	UG/KG	1.0	U	U	Yes	
2,4-Dimethylphenol	190	UG/KG	1.0	U	U	Yes	
Bis(2-chloroethoxy)methane	190	UG/KG	1.0	U	U	Yes	
2,4-Dichlorophenol	190	UG/KG	1.0	U	U	Yes	
Naphthalene	190	UG/KG	1.0	U	U	Yes	
4-Chloroaniline	190	UG/KG	1.0	U	U	Yes	
Hexachlorobutadiene	190	UG/KG	1.0	U	U	Yes	
Caprolactam	190	UG/KG	1.0	U	U	Yes	
4-Chloro-3-methylphenol	190	UG/KG	1.0	U	U	Yes	
2-Methylnaphthalene	190	UG/KG	1.0	U	U	Yes	
Hexachlorocyclopentadiene	190	UG/KG	1.0	U	U	Yes	
2,4,6-Trichlorophenol	190	UG/KG	1.0	U	U	Yes	
2,4,5-Trichlorophenol	190	UG/KG	1.0	U	U	Yes	
1,1'-Biphenyl	190	UG/KG	1.0	U	U	Yes	
2-Chloronaphthalene	190	UG/KG	1.0	U	U	Yes	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
2-Nitroaniline	370	UG/KG	1.0	U	U	Yes	
Dimethylphthalate	190	UG/KG	1.0	U	U	Yes	
2,6-Dinitrotoluene	190	UG/KG	1.0	U	U	Yes	
Acenaphthylene	190	UG/KG	1.0	U	U	Yes	
3-Nitroaniline	370	UG/KG	1.0	U	U	Yes	
Acenaphthene	190	UG/KG	1.0	U	U	Yes	
2,4-Dinitrophenol	370	UG/KG	1.0	U	U	Yes	
4-Nitrophenol	370	UG/KG	1.0	U	U	Yes	
Dibenzofuran	190	UG/KG	1.0	U	U	Yes	
2,4-Dinitrotoluene	190	UG/KG	1.0	U	U	Yes	
Diethylphthalate	190	UG/KG	1.0	U	U	Yes	
Fluorene	190	UG/KG	1.0	U	U	Yes	
4-Chlorophenylphenylether	190	UG/KG	1.0	U	U	Yes	
4-Nitroaniline	370	UG/KG	1.0	U	U	Yes	
4,6-Dinitro-2-methylphenol	370	UG/KG	1.0	U	U	Yes	
N-Nitrosodiphenylamine	190	UG/KG	1.0	U	U	Yes	
1,2,4,5-Tetrachlorobenzene	190	UG/KG	1.0	U	U	Yes	
4-Bromophenylphenylether	190	UG/KG	1.0	U	U	Yes	
Hexachlorobenzene	190	UG/KG	1.0	U	U	Yes	
Atrazine	190	UG/KG	1.0	U	U	Yes	
Pentachlorophenol	370	UG/KG	1.0	U	U	Yes	
Phenanthrene	190	UG/KG	1.0	U	U	Yes	
Anthracene	190	UG/KG	1.0	U	U	Yes	
Carbazole	190	UG/KG	1.0	U	U	Yes	
Di-n-butylphthalate	190	UG/KG	1.0	U	U	Yes	
Fluoranthene	150	UG/KG	1.0	J	J	Yes	
Pyrene	120	UG/KG	1.0	J	J	Yes	
Butylbenzylphthalate	190	UG/KG	1.0	U	U	Yes	
3,3'-Dichlorobenzidine	190	UG/KG	1.0	U	U	Yes	
Benzo(a)anthracene	82	UG/KG	1.0	J	J	Yes	
Chrysene	100	UG/KG	1.0	J	J	Yes	
Bis(2-ethylhexyl)	190	UG/KG	1.0	U	U	Yes	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
phthalate	190	UG/KG	1.0	U	U	Yes	
Di-n-octylphthalate	190	UG/KG	1.0	U	U	Yes	
Benzo(b)fluoranthene	190	UG/KG	1.0	U	U	Yes	
Benzo(k)fluoranthene	190	UG/KG	1.0	U	U	Yes	
Benzo(a)pyrene	190	UG/KG	1.0	U	U	Yes	
Indeno(1,2,3-cd)pyrene	190	UG/KG	1.0	U	U	Yes	
Dibenzo(a,h)anthracene	190	UG/KG	1.0	U	U	Yes	
Benzo(g,h,i)perylene	190	UG/KG	1.0	U	U	Yes	
2,3,4,6-Tetrachlorophenol	190	UG/KG	1.0	U	U	Yes	
Total Alkanes			1.0	J		Yes	
2,2,2-Trichlorethyl-3-[2-(bromomethyl)-4-chlor-1,3-oxazol-5-yl]-2-chlor-1H-indol-1-			1.0	NJ		Yes	

Case No:	43102	Contract:	BPW11031	SDG No:	E3P89	Lab Code:	KAP
Sample Number:	E3PA0	Method:	Aroclor	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	SS-11	pH:	5.8	Sample Date:	11/06/2012	Sample Time:	12:51:00
% Moisture :	12			% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aroclor-1016	37	UG/KG	1.0	U	U	Yes	
Aroclor-1221	37	UG/KG	1.0	U	U	Yes	
Aroclor-1232	37	UG/KG	1.0	U	U	Yes	
Aroclor-1242	37	UG/KG	1.0	U	U	Yes	
Aroclor-1248	37	UG/KG	1.0	U	U	Yes	
Aroclor-1254	37	UG/KG	1.0	U	U	Yes	
Aroclor-1260	37	UG/KG	1.0	U	U	Yes	
Aroclor-1262	37	UG/KG	1.0	U	U	Yes	
Aroclor-1268	37	UG/KG	1.0	U	U	Yes	