Cover sheet

SEMIVOLATILE ORGANICS

REGION I VALIDATION CHECKLIST for
OLIN CHEMICAL SUPERFUND SITE
Criteria and Qualifications: REGION I Organics Guideline (1996)

TIER I / (II) / (III) (circle one)

SITE: Olin Chemical Superfund Site Project #: 6107000612 SDG #: OCRI-01/01A

LAB #: TAL-Westfield

Sample IDs: Attach tracking sheet and/or sample listing.

This checklist is designed to be used with USEPA Region I Validation Guidelines Part II (12/1996). During Level III validation, calculation and transcription checks are completed for instrument tuning, surrogates, target compounds, spike recoveries, calibration data, and internal standards as specified in the guideline. These checks are documented on attached validation notes.

YES NO NA	
Data completeness ☑ ☐ ☐ All data summaries, QC forms and raw data available from hard copy or electronic data package ☑ ☐ ☐ Data summaries match EDD	Contact lab if missing data. Lab to respond with 24 hours.
Holding Times and Preservation ☑ ☐ ☐ Hold times met (Waters – Extract within 7 days, analyze within 40 days. Soils – extract within 14 days, analyze within 40 days)	
Instrument Performance Check (Tune) ☑ ☐ ☐ Tune available for each 12-hour period samples were analyzed ☑ ☐ ☐ Appropriate number of significant figures reported (at least 2) ☑ ☐ ☐ Mass/Charge list (m/z) criteria met	
Initial Calibration ☐ ☒ ☐ %RSD less than or equal to 30% ☑ ☐ ☐ RRF greater than or equal to 0.05	See below.
Continuing Calibration ☐ ☒ ☐ %D less than or equal to 25% ☐ ☒ ☐ RRF greater than or equal to 0.05.	See below.
Blank Contamination ☒ ☐ ☐ Method blank contamination ☒ ☐ ☐ Equipment/Rinseate blank contamination	Evaluate all blanks for contamination. Highest contaminant level used for action level. See below.
Surrogate Recoveries	

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TIER I / II / III (circle one)

☐	☒	☐	Surrogates percent recovery criteria met: Soil = (base/neutral 30%-130%, acid 30%-130%) Water = (base/neutral 30%-130%, acid 15%-110%)	See below.
Matrix Spikes and Laboratory Control Samples				
☐	☐	☑	MS/MSD percent recovery criteria met Soil and Water = (base/neutral 40%-140%, acid 30%-130%)	
☐	☐	☑	MS/MSD RPD criteria met (soils <50%, water <30%)	
☐	☐	☑	LCS percent recovery criteria met soil/water (base 40%-140%, acid 30%-130%)	
Field Duplicates				
☐	☐	☑	RPD criteria met (soils <50%, water <30%)	
Internal Standard				
☐	☒	☐	Area counts within -50 to +100 percent of calib. std.	
☑	☐	☐	Retention Time within 30 seconds of calib. std.	
Target Compounds				
☑	☐	☐	Reviewed narrative for anomalies	
Tentatively Identified Compounds (TICs)				
☐	☑	☐	TCL compounds reported as TICs	

Validator's Signature: _____

Date: 1/19/10

Reference:

MACTEC, Quality Assurance Project Plan for Remedial Investigation/Feasibility Study – Olin Chemical Superfund Site, Wilmington Property, 51 Eames Street, Wilmington, MA", MACTEC Engineering and Consulting. Draft .October 2008.

Dibenzofuran	166	112.655	112.655	114.655	110.989	114.655	114.655	114.322	113.512	1.438	4.520	333
2,4-Dinitrotoluene	166	103.323	102.656	98.9901	97.6569	95.9904	99.3234	99.3234	99.609	2.599	8.169	333
4-Nitrophenol-SPCC	166	84.9915	80.9919	63.9936	71.3262	58.3275	60.9939	57.3276	68.279	11.110	34.919	333
Fluorene	166	131.654	132.653	133.653	124.654	129.987	134.653	129.987	131.035	3.313	10.413	165
4-Chlorophenyl-phenylether	166	119.988	119.988	120.655	117.655	111.322	116.322	114.655	117.226	3.403	10.695	333
Diethylphthalate	166	119.321	119.655	121.655	113.989	116.988	121.655	116.655	118.560	2.826	8.883	333
4-Nitroaniline	166	104.656	97.6569	86.658	88.3245	86.9913	99.99	86.3247	92.943	7.628	23.975	333
4,6-Dinitro-2-methylphenol	166	143.652	149.985	143.986	141.986	124.988	129.987	144.319	139.843	8.916	28.023	333
Azobenzene	166	98.9901	103.323	103.99	100.99	102.656	101.323	102.656	101.990	1.689	5.307	333
n-Nitrosodiphenylamine-CCC	166	85.6581	86.9913	87.9912	89.991	87.3246	85.6581	90.6576	87.753	1.960	6.159	333
1,2-Diphenylhydrazine	166	97.6569	101.323	103.656	100.99	102.656	101.323	102.323	101.418	1.902	5.979	333
4-Bromophenyl-phenylether	166	113.655	119.655	118.988	120.988	114.989	118.988	127.987	119.321	4.638	14.578	333
Hexachlorobenzene	166	113.655	121.321	124.988	125.987	127.654	121.655	127.654	123.273	4.960	15.590	333
Pentachlorophenol-CCC	166	187.315	204.646	186.315	182.982	151.652	160.651	174.316	178.268	17.791	55.916	333
Pentachloronitrobenzene	166	105.656	111.322	116.655	112.655	105.656	108.323	106.989	109.608	4.116	12.935	333
Phenanthrene	166	131.654	127.321	130.987	129.654	132.653	134.987	129.654	130.987	2.457	7.722	165
Anthracene	166	132.32	131.654	134.987	134.32	130.987	134.32	131.987	132.939	1.568	4.929	165
Carbazole	166	118.655	117.655	116.655	114.655	115.655	120.988	111.656	116.560	2.992	9.403	333
Di-n-butylphthalate	166	131.654	132.653	136.653	138.32	138.653	154.651	157.651	141.462	10.414	32.732	333
Fluoranthene-CCC	166	127.987	127.654	125.987	121.321	118.988	129.32	121.321	124.654	4.041	12.701	165
Benzidine	166	0	0	0	0	0	0	0	0.000	0.000	0.000	333
Pyrene	166	134.32	140.653	153.985	142.652	148.652	143.986	147.319	144.509	6.288	19.764	165
Butylbenzylphthalate	166	115.655	118.988	125.321	118.655	124.321	125.321	124.321	121.797	3.938	12.378	333
3,3'-Dichlorobenzidine	166	99.3234	102.323	102.656	96.657	94.9905	97.3236	88.6578	97.419	4.802	15.093	333
Benzo[a]anthracene	166	151.652	157.318	154.651	145.319	153.318	155.651	145.985	151.985	4.678	14.703	165
Chrysene	166	154.318	159.651	159.651	154.651	152.318	150.318	151.985	154.699	3.684	11.577	165
bis(2-Ethylhexyl)phthalate	166	121.655	124.321	124.988	118.322	117.322	125.987	121.988	122.083	3.309	10.401	333
Di-n-octylphthalate-CCC	166	116.988	116.322	127.654	112.989	104.656	111.989	109.989	114.370	7.166	22.528	333
Benzo[b]fluoranthene	166	141.986	141.319	153.651	146.985	134.32	134.987	134.987	141.176	7.231	22.726	165
Benzo[k]fluoranthene	166	152.985	164.984	148.319	150.652	167.65	158.318	148.319	155.889	7.931	24.928	165
Benzo[a]pyrene-CCC	166	142.319	146.319	149.985	144.986	136.653	135.653	136.653	141.795	5.607	17.621	165
Indeno[1,2,3-cd]pyrene	166	140.986	142.652	143.319	146.319	147.652	151.652	135.32	143.986	5.228	16.430	165
Dibenz[a,h]anthracene	166	137.653	135.32	133.987	137.986	140.986	145.652	133.987	137.939	4.222	13.270	165
Benzo[g,h,i]perylene	166	138.32	141.653	145.652	149.652	141.319	140.986	142.986	142.938	3.694	11.609	165

(Acid)

(Acid)

6/14/10

PES SCORING EVALUATION REPORT

Lab Name: Test America
Contract: NA
SDG No.: OCRI-09
Lab File ID: NA
Date Analyzed: 09/24/2009
% Moisture: NA
Injection Vol. (uL): NA
Dilution Factor: 1.0

Case No.: NA
Matrix: Soil
Date Received: 09/01/2009
Sample Wt./Vol. (g/mL): NA
Decanted: N/A
GPC Cleanup: Unknown
Extraction Type: N/A

Lab Code: TESTAM
SAS/Client No.: NA
Lab Sample ID: 360-24365-20
Date Extracted: 09/11/2009
Level: N/A
Conc. Extract Vol. (uL): NA
pH: NA
Units: ug/Kg

Analysis Method: 8270C LL
Scoring Method: SOM01.1
Comments:

CAS No.	Analyte	Laboratory Results		PES Evaluation	
		Concentration	Q		
111-44-4	bis-(2-Chloroethyl)ether	1600		PASS	Within Limits
95-57-8	2-Chlorophenol	210		PASS	Within Limits
108-60-1	2,2'-oxybis(1-Chloropropane)	1200		PASS	Within Limits
621-64-7	N-Nitroso-di-n-propylamine	580		PASS	Within Limits
67-72-1	Hexachloroethane	730		PASS	Within Limits
78-59-1	Isophorone	570		PASS	Within Limits
111-91-1	bis(2-Chloroethoxy)methane	2900		FAIL	Action High
120-83-2	2,4-Dichlorophenol	730		PASS	Warning High
91-20-3	Naphthalene	400		PASS	Warning High
106-47-8	4-Chloroaniline	230		PASS	Within Limits
105-60-2	Caprolactam	240		PASS	Within Limits
77-47-4	Hexachlorocyclopentadiene	650		PASS	Within Limits
95-95-4	2,4,5-Trichlorophenol	800		PASS	Within Limits
91-58-7	2-Chloronaphthalene	600		PASS	Within Limits
606-20-2	2,6-Dinitrotoluene	1000		PASS	Within Limits
208-96-8	Acenaphthylene	310		PASS	Within Limits
51-28-5	2,4-Dinitrophenol	160		N.E.	Not Evaluated
132-64-9	Dibenzofuran	330		PASS	Within Limits
121-14-2	2,4-Dinitrotoluene	310		PASS	Within Limits
86-73-7	Fluorene	990		PASS	Within Limits
7005-72-3	4-Chlorophenyl-phenylether	440		PASS	Within Limits
95-94-3	1,2,4,5-Tetrachlorobenzene	820		PASS	Warning High
101-55-3	4-Bromophenyl-phenylether	540		PASS	Within Limits
118-74-1	Hexachlorobenzene	410		PASS	Within Limits
1912-24-9	Atrazine	0	U	N.E.	Not Evaluated
87-86-5	Pentachlorophenol	450		PASS	Within Limits
120-12-7	Anthracene	410		PASS	Within Limits
86-74-8	Carbazole	500		PASS	Within Limits
85-68-7	Butylbenzylphthalate	1000		PASS	Within Limits
91-94-1	3,3'-Dichlorobenzidine	46	J	N.E.	Not Evaluated
56-55-3	Benzo(a)anthracene	610		PASS	Within Limits
117-84-0	Di-n-octylphthalate	560		PASS	Within Limits
205-99-2	Benzo(b)fluoranthene	820		PASS	Within Limits
207-08-9	Benzo(k)fluoranthene	370		PASS	Within Limits
90-12-0	1-Methylnaphthalene	740		PASS	TIC Found
****	END Main Analytes	**********	****	****	**********
83-32-9	Acenaphthene	27	J	PASS	Less Than CRQL

PES SCORING EVALUATION REPORT

CAS No.	Analyte	Laboratory Results		PES Evaluation	
		Concentration	Q		
98-55-5	Alpha-Terpineol	25	J	N.E.	Non-spiked TIC
123-42-2	2-Pentanone,4-hydroxy-4-methyl-	5900	JN	N.E.	Non-spiked TIC
92-87-5	Benzidine	17	J	N.E.	Non-spiked TIC
****	END All Analytes	**********	****	****	**********

Client: Olin Corporation

Job Number: 360-24173-1
Sdg Number: OCRI-01

Client Sample ID: **OC-SB-405-0.0/1.0-XXX**

Lab Sample ID: 360-24173-1
Client Matrix: Solid
% Moisture: 5.8

Date Sampled: 08/18/2009 0830
Date Received: 08/18/2009 1900

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48213		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-47986		Lab File ID:	B9889.D
Dilution:	1.0			Initial Weight/Volume:	30.58 g
Date Analyzed:	08/28/2009 1333			Final Weight/Volume:	1.0 mL
Date Prepared:	08/20/2009 1253			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND	J	10	35
1,2,4,5-Tetrachlorobenzene		ND		10	35
1,2,4-Trichlorobenzene		ND		10	35
1,2-Dichlorobenzene		ND		10	35
1,3-Dichlorobenzene		ND		10	35
1,4-Dichlorobenzene		ND		10	35
2,3,4,6-Tetrachlorophenol		ND	J	10	35
2,4,5-Trichlorophenol		ND		10	35
2,4,6-Trichlorophenol		ND		10	35
2,4-Dichlorophenol		ND		10	35
2,4-Dimethylphenol		ND	J	14	35
2,4-Dinitrophenol		ND	J	10	35
2,6-Dinitrotoluene		ND		10	35
2,4-Dinitrotoluene		ND		10	35
2-Chloronaphthalene		ND		10	35
2-Chlorophenol		ND		10	35
2-Methylnaphthalene		ND		10	35
2-Methylphenol		ND		21	35
2-Nitroaniline		ND		10	170
2-Nitrophenol		ND		10	35
3,3'-Dichlorobenzidine		ND		10	69
3 & 4 Methylphenol		ND		10	35
3-Nitroaniline		ND		10	170
4,6-Dinitro-2-methylphenol		ND	J	10	170
4-Bromophenyl phenyl ether		ND		10	35
4-Chloro-3-methylphenol		ND		10	69
4-Chloroaniline		ND		10	69
4-Chlorophenyl phenyl ether		ND		10	35
4-Nitroaniline		ND		10	170
4-Nitrophenol		ND		10	170
Acenaphthene		ND		10	35
Acenaphthylene		ND		10	35
Acetophenone		ND		10	35
Aniline		ND	J	10	35
Anthracene		ND		10	35
Atrazine		ND	J	10	35
Azobenzene		ND		10	35
Benzaldehyde		ND		10	35
Benzo[a]anthracene		ND		10	35
Benzo[a]pyrene		ND		10	35
Benzo[b]fluoranthene		ND		10	35
Benzo[g,h,i]perylene		ND		10	35
Benzo[k]fluoranthene		ND		10	35
Benzoic acid		170	J CV	16	170
2,2'-oxybis[1-chloropropane]		ND		10	35
Benzyl alcohol		ND		30	69

Client: Olin Corporation

Job Number: 360-24173-1
Sdg Number: OCRI-01

Client Sample ID: **OC-SB-405-0.0/1.0-XXX**

Lab Sample ID: 360-24173-1
Client Matrix: Solid
% Moisture: 5.8

Date Sampled: 08/18/2009 0830
Date Received: 08/18/2009 1900

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48213		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-47986		Lab File ID:	B9889.D
Dilution:	1.0			Initial Weight/Volume:	30.58 g
Date Analyzed:	08/28/2009 1333			Final Weight/Volume:	1.0 mL
Date Prepared:	08/20/2009 1253			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Bis(2-chloroethoxy)methane		ND		10	35
Bis(2-chloroethyl)ether		ND		10	35
Bis(2-ethylhexyl) phthalate		35	J EB	10	35
Butyl benzyl phthalate		ND		10	35
Caprolactam		ND J		10	35
Carbazole		ND		10	35
Chrysene		ND		10	35
Dibenz(a,h)anthracene		ND		10	35
Dibenzofuran		ND		10	35
Diethyl phthalate		ND		10	35
Dimethyl phthalate		ND		10	35
Di-n-butyl phthalate		ND		31	35
Di-n-octyl phthalate		ND		17	35
Fluoranthene		ND		10	35
Fluorene		ND		10	35
Hexachlorobenzene		ND		10	35
Hexachlorobutadiene		ND		10	35
Hexachlorocyclopentadiene		ND		10	69
Hexachloroethane		ND		10	35
Indeno[1,2,3-cd]pyrene		ND		10	35
Isophorone		ND		10	35
Naphthalene		ND		10	83
Nitrobenzene		ND		10	35
N-Nitrosodimethylamine		ND		12	35
N-Nitrosodi-n-propylamine		ND		10	35
N-Nitrosodiphenylamine		ND		10	35
Pentachlorophenol		ND		10	35
Phenanthrene		ND		10	42
Phenol		ND		10	35
Pyrene		ND		10	35
1-Methylnaphthalene		ND J		10	35
Benzophenone		ND JJ		10	35
Diphenyl oxide		ND		10	35

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	72		30 - 130
Nitrobenzene-d5	62		30 - 130
Phenol-d5	87		30 - 130
2-Fluorophenol	86		30 - 130
2-Fluorobiphenyl	67		30 - 130
Terphenyl-d14	76		30 - 130

1/15/10

Client: Olin Corporation

Job Number: 360-24173-1
Sdg Number: OCRI-01

Client Sample ID: **OC-SB-405-0.0/1.0-XXX**

Lab Sample ID: 360-24173-1
Client Matrix: Solid % Moisture: 5.8

Date Sampled: 08/18/2009 0830
Date Received: 08/18/2009 1900

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48213		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-47986		Lab File ID:	B9889.D
Dilution:	1.0			Initial Weight/Volume:	30.58 g
Date Analyzed:	08/28/2009 1333			Final Weight/Volume:	1.0 mL
Date Prepared:	08/20/2009 1253			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** **10**

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Unknown	7.16	1900	T J
	Unknown	10.29	140	T J
	Unknown	16.04	330	T J
	Unknown	16.61	230	T J
593-49-7	Heptacosane	17.13	140	T J N
	Unknown	17.20	1800	T J
	Unknown	17.86	650	T J
6920-24-7	Hexadecane-1,2-diol	18.60	540	T J N
26603-23-6	p,p''-Dioctyldiphenylamine	19.39	690	T J N
1000194-63-7	2,2,4a,6a,8a,9,12b,14a-Octamethyl-1,2,3,	23.34	290	T J N

Client: Olin Corporation

Job Number: 360-24173-1
Sdg Number: OCRI-01

Client Sample ID: **OC-SB-405-8.0/9.0-XXX**

Lab Sample ID: 360-24173-3
Client Matrix: Solid % Moisture: 7.3

Date Sampled: 08/18/2009 0845
Date Received: 08/18/2009 1900

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48213		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-47986		Lab File ID:	B9891.D
Dilution:	1.0			Initial Weight/Volume:	30.46 g
Date Analyzed:	08/28/2009 1441			Final Weight/Volume:	1.0 mL
Date Prepared:	08/20/2009 1253			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND J	✓	11	35
1,2,4,5-Tetrachlorobenzene		ND		11	35
1,2,4-Trichlorobenzene		ND		11	35
1,2-Dichlorobenzene		ND		11	35
1,3-Dichlorobenzene		ND		11	35
1,4-Dichlorobenzene		ND		11	35
2,3,4,6-Tetrachlorophenol		ND J	✓	11	35
2,4,5-Trichlorophenol		ND		11	35
2,4,6-Trichlorophenol		ND		11	35
2,4-Dichlorophenol		ND		11	35
2,4-Dimethylphenol		ND J		14	35
2,4-Dinitrophenol		ND J		11	35
2,6-Dinitrotoluene		ND		11	35
2,4-Dinitrotoluene		ND		11	35
2-Chloronaphthalene		ND		11	35
2-Chlorophenol		ND		11	35
2-Methylnaphthalene		ND		11	35
2-Methylphenol		ND		21	35
2-Nitroaniline		ND		11	180
2-Nitrophenol		ND		11	35
3,3'-Dichlorobenzidine		ND		11	71
3 & 4 Methylphenol		ND		11	35
3-Nitroaniline		ND		11	180
4,6-Dinitro-2-methylphenol		ND J		11	180
4-Bromophenyl phenyl ether		ND		11	35
4-Chloro-3-methylphenol		ND		11	71
4-Chloroaniline		ND		11	71
4-Chlorophenyl phenyl ether		ND		11	35
4-Nitroaniline		ND		11	180
4-Nitrophenol		ND		11	180
Acenaphthene		ND		11	35
Acenaphthylene		ND		11	35
Acetophenone		ND		11	35
Aniline		ND J	✓	11	35
Anthracene		ND		11	35
Atrazine		ND J	✓	11	35
Azobenzene		ND		11	35
Benzaldehyde		ND		11	35
Benzo[a]anthracene		ND		11	35
Benzo[a]pyrene		ND		11	35
Benzo[b]fluoranthene		ND		11	35
Benzo[g,h,i]perylene		ND		11	35
Benzo[k]fluoranthene		ND		11	35
Benzoic acid		ND		16	180
2,2'-oxybis[1-chloropropane]		ND		11	35
Benzyl alcohol		ND J		30	71

1/19/10

Client: Olin Corporation

Job Number: 360-24173-1
Sdg Number: OCRI-01

Client Sample ID: **OC-SB-405-8.0/9.0-XXX**

Lab Sample ID: 360-24173-3
Client Matrix: Solid % Moisture: 7.3

Date Sampled: 08/18/2009 0845
Date Received: 08/18/2009 1900

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48213		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-47986		Lab File ID:	B9891.D
Dilution:	1.0			Initial Weight/Volume:	30.46 g
Date Analyzed:	08/28/2009 1441			Final Weight/Volume:	1.0 mL
Date Prepared:	08/20/2009 1253			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Bis(2-chloroethoxy)methane		ND		11	35
Bis(2-chloroethyl)ether		ND		11	35
Butyl benzyl phthalate		ND		11	35
Caprolactam		ND J		11	35
Carbazole		ND		11	35
Chrysene		ND		11	35
Dibenz(a,h)anthracene		ND		11	35
Dibenzofuran		ND		11	35
Diethyl phthalate		ND		11	35
Dimethyl phthalate		ND		11	35
Di-n-butyl phthalate		35 U	B	31	35
Di-n-octyl phthalate		ND		18	35
Fluoranthene		22	J	11	35
Fluorene		ND		11	35
Hexachlorobenzene		ND		11	35
Hexachlorobutadiene		ND		11	35
Hexachlorocyclopentadiene		ND		11	71
Hexachloroethane		ND		11	35
Indeno[1,2,3-cd]pyrene		ND		11	35
Isophorone		ND		11	35
Naphthalene		ND		11	85
Nitrobenzene		ND		11	35
N-Nitrosodimethylamine		ND		13	35
N-Nitrosodi-n-propylamine		ND		11	35
N-Nitrosodiphenylamine		ND		11	35
Pentachlorophenol		ND		11	35
Phenanthrene		ND		11	42
Phenol		ND		11	35
Pyrene		39		11	35
1-Methylnaphthalene		ND J		11	35
Benzophenone		ND J		11	35
Diphenyl oxide		30	J	11	35

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	77		30 - 130
Nitrobenzene-d5	64		30 - 130
Phenol-d5	87		30 - 130
2-Fluorophenol	88		30 - 130
2-Fluorobiphenyl	72		30 - 130
Terphenyl-d14	77		30 - 130

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Client: Olin Corporation

Job Number: 360-24173-1
Sdg Number: OCRI-01

Client Sample ID: **OC-SB-405-8.0/9.0-XXX**

Lab Sample ID: 360-24173-3
Client Matrix: Solid % Moisture: 7.3

Date Sampled: 08/18/2009 0845
Date Received: 08/18/2009 1900

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48213		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-47986		Lab File ID:	B9891.D
Dilution:	1.0			Initial Weight/Volume:	30.46 g
Date Analyzed:	08/28/2009 1441			Final Weight/Volume:	1.0 mL
Date Prepared:	08/20/2009 1253			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** **10**

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
107-39-1	1-Pentene, 2,4,4-trimethyl-	5.47	410	T J N
2207-3-6	Cyclohexane, 1,3-dimethyl-, trans-	6.50	820	T J N
	Unknown	7.16	460	T J
123-48-8	3-Heptene, 2,2,4,6,6-pentamethyl-	8.49	460	T J N
	Unknown	10.32	2400	T J
	Unknown	10.39	2000	T J
	Unknown	10.46	430	T J
719-22-2	2,5-Cyclohexadiene-1,4-dione, 2,6-bis(1,	11.02	540	T J N
	Unknown	13.16	620	T J
	Unknown	17.08	2100	T J

Client: Olin Corporation

Job Number: 360-24173-1
Sdg Number: OCRI-01

Client Sample ID: **OC-SB-405-8.0/9.0-XXX**

Lab Sample ID: 360-24173-3
Client Matrix: Solid % Moisture: 7.3

Date Sampled: 08/18/2009 0845
Date Received: 08/18/2009 1900

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48389		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-47986		Lab File ID:	B9932.D
Dilution:	50			Initial Weight/Volume:	30.46 g
Date Analyzed:	09/01/2009 0331	Run Type: DL		Final Weight/Volume:	1.0 mL
Date Prepared:	08/20/2009 1253			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Bis(2-ethylhexyl) phthalate		28000 EB		530	1800

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	0	D X	30 - 130
Nitrobenzene-d5	0	D X	30 - 130
Phenol-d5	0	D X	30 - 130
2-Fluorophenol	0	D X	30 - 130
2-Fluorobiphenyl	0	D X	30 - 130
Terphenyl-d14	0	D X	30 - 130

Client: Olin Corporation

Job Number: 360-24173-1
Sdg Number: OCRI-01

Client Sample ID: **OC-SB-416-0.0/1.0-XXX**

Lab Sample ID: 360-24173-4
Client Matrix: Solid % Moisture: 3.2

Date Sampled: 08/18/2009 1035
Date Received: 08/18/2009 1900

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48213		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-47986		Lab File ID:	B9892.D
Dilution:	1.0			Initial Weight/Volume:	30.31 g
Date Analyzed:	08/28/2009 1515			Final Weight/Volume:	1.0 mL
Date Prepared:	08/20/2009 1253			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND	J	10	34
1,2,4,5-Tetrachlorobenzene		ND		10	34
1,2,4-Trichlorobenzene		ND		10	34
1,2-Dichlorobenzene		ND		10	34
1,3-Dichlorobenzene		ND		10	34
1,4-Dichlorobenzene		ND		10	34
2,3,4,6-Tetrachlorophenol		ND	J	10	34
2,4,5-Trichlorophenol		ND		10	34
2,4,6-Trichlorophenol		ND		10	34
2,4-Dichlorophenol		ND		10	34
2,4-Dimethylphenol		ND	J	13	34
2,4-Dinitrophenol		ND	J	10	34
2,6-Dinitrotoluene		ND		10	34
2,4-Dinitrotoluene		ND		10	34
2-Chloronaphthalene		ND		10	34
2-Chlorophenol		ND		10	34
2-Methylnaphthalene		ND		10	34
2-Methylphenol		ND		20	34
2-Nitroaniline		ND		10	170
2-Nitrophenol		ND		10	34
3,3'-Dichlorobenzidine		ND		10	68
3 & 4 Methylphenol		ND		10	34
3-Nitroaniline		ND		10	170
4,6-Dinitro-2-methylphenol		ND	J	10	170
4-Bromophenyl phenyl ether		ND		10	34
4-Chloro-3-methylphenol		ND		10	68
4-Chloroaniline		ND		10	68
4-Chlorophenyl phenyl ether		ND		10	34
4-Nitroaniline		ND		10	170
4-Nitrophenol		ND		10	170
Acenaphthene		ND		10	34
Acenaphthylene		ND		10	34
Acetophenone		ND		10	34
Aniline		ND	J	10	34
Anthracene		ND		10	34
Atrazine		ND	J	10	34
Azobenzene		ND		10	34
Benzaldehyde		ND		10	34
Benzo[a]anthracene		ND		10	34
Benzo[a]pyrene		ND		10	34
Benzo[b]fluoranthene		ND		10	34
Benzo[g,h,i]perylene		ND		10	34
Benzo[k]fluoranthene		ND		10	34
Benzoic acid		ND		15	170
2,2'-oxybis[1-chloropropane]		ND		10	34
Benzyl alcohol		ND	J	29	68

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Client: Olin Corporation

Job Number: 360-24173-1
Sdg Number: OCRI-01

Client Sample ID: **OC-SB-416-0.0/1.0-XXX**

Lab Sample ID: 360-24173-4
Client Matrix: Solid % Moisture: 3.2

Date Sampled: 08/18/2009 1035
Date Received: 08/18/2009 1900

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48213		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-47986		Lab File ID:	B9892.D
Dilution:	1.0			Initial Weight/Volume:	30.31 g
Date Analyzed:	08/28/2009 1515			Final Weight/Volume:	1.0 mL
Date Prepared:	08/20/2009 1253			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Bis(2-chloroethoxy)methane		ND		10	34
Bis(2-chloroethyl)ether		ND		10	34
Butyl benzyl phthalate		ND		10	34
Caprolactam		ND		10	34
Carbazole		ND		10	34
Chrysene		ND		10	34
Dibenz(a,h)anthracene		ND		10	34
Dibenzofuran		ND		10	34
Diethyl phthalate		ND		10	34
Dimethyl phthalate		ND		10	34
Di-n-butyl phthalate		ND		30	34
Di-n-octyl phthalate		ND		17	34
Fluoranthene		ND		10	34
Fluorene		ND		10	34
Hexachlorobenzene		ND		10	34
Hexachlorobutadiene		ND		10	34
Hexachlorocyclopentadiene		ND		10	68
Hexachloroethane		ND		10	34
Indeno[1,2,3-cd]pyrene		ND		10	34
Isophorone		ND		10	34
Naphthalene		ND		10	82
Nitrobenzene		ND		10	34
N-Nitrosodimethylamine		ND		12	34
N-Nitrosodi-n-propylamine		ND		10	34
N-Nitrosodiphenylamine		ND		10	34
Pentachlorophenol		ND		10	34
Phenanthrene		ND		10	41
Phenol		ND		10	34
Pyrene		ND		10	34
1-Methylnaphthalene		ND	J	10	34
Benzophenone		ND	J	10	34
Diphenylamine		ND	J	2.0	34
Diphenyl oxide		ND	J	10	34

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	94		30 - 130
Nitrobenzene-d5	93		30 - 130
Phenol-d5	107		30 - 130
2-Fluorophenol	111		30 - 130
2-Fluorobiphenyl	84		30 - 130
Terphenyl-d14	90		30 - 130

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Client: Olin Corporation

Job Number: 360-24173-1
Sdg Number: OCRI-01

Client Sample ID: **OC-SB-416-0.0/1.0-XXX**

Lab Sample ID: 360-24173-4
Client Matrix: Solid % Moisture: 3.2

Date Sampled: 08/18/2009 1035
Date Received: 08/18/2009 1900

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48213		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-47986		Lab File ID:	B9892.D
Dilution:	1.0			Initial Weight/Volume:	30.31 g
Date Analyzed:	08/28/2009 1515			Final Weight/Volume:	1.0 mL
Date Prepared:	08/20/2009 1253			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 5

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Unknown	7.18	1600	T J
	Unknown	10.31	1800	T J
	Unknown	10.37	1300	T J
	Unknown	10.42	1200	T J
	Unknown	20.07	6.4	T J

Client: Olin Corporation

Job Number: 360-24173-1
Sdg Number: OCRI-01

Client Sample ID: **OC-SB-416-0.0/1.0-XXX**

Lab Sample ID: 360-24173-4
Client Matrix: Solid % Moisture: 3.2

Date Sampled: 08/18/2009 1035
Date Received: 08/18/2009 1900

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48389		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-47986		Lab File ID:	B9912.D
Dilution:	10			Initial Weight/Volume:	30.31 g
Date Analyzed:	08/31/2009 1610			Final Weight/Volume:	1.0 mL
Date Prepared:	08/20/2009 1253			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Bis(2-ethylhexyl) phthalate		4500	EB	100	340

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	30		30 - 130
Nitrobenzene-d5	85		30 - 130
Phenol-d5	83		30 - 130
2-Fluorophenol	91		30 - 130
2-Fluorobiphenyl	80		30 - 130
Terphenyl-d14	67		30 - 130

WCM 1/19/10

Client: Olin Corporation

Job Number: 360-24173-1
Sdg Number: OCRI-01

Client Sample ID: **OC-SB-416-0.0/1.0-XXX**

Lab Sample ID: 360-24173-4
Client Matrix: Solid % Moisture: 3.2

Date Sampled: 08/18/2009 1035
Date Received: 08/18/2009 1900

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48454		Instrument ID:	Inst. J
Preparation:	3550B	Prep Batch: 360-48297		Lab File ID:	J02791.D
Dilution:	1.0			Initial Weight/Volume:	100.45 g
Date Analyzed:	09/01/2009 2025			Final Weight/Volume:	1.0 mL
Date Prepared:	08/27/2009 1643			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodimethylamine		ND		1.2	5.1

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	43		30 - 130
2-Fluorobiphenyl	64		30 - 130
2-Fluorophenol	50		30 - 130
Nitrobenzene-d5	74		30 - 130
Phenol-d5	56		30 - 130
Terphenyl-d14	77		30 - 130

Client: Olin Corporation

Job Number: 360-24173-2
Sdg Number: OCRI-01A

Client Sample ID: **OC-SB-405-14/15-XXX**

Lab Sample ID: 360-24173-2
Client Matrix: Solid
% Moisture: 8.7

Date Sampled: 08/18/2009 0910
Date Received: 08/18/2009 1900

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48213		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-47986		Lab File ID:	B9890.D
Dilution:	1.0			Initial Weight/Volume:	30.38 g
Date Analyzed:	08/28/2009 1407			Final Weight/Volume:	1.0 mL
Date Prepared:	08/20/2009 1253			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND J		11	36
1,2,4,5-Tetrachlorobenzene		ND		2.4	36
1,2,4-Trichlorobenzene		ND		7.0	36
1,2-Dichlorobenzene		ND		3.9	36
1,3-Dichlorobenzene		ND		10	36
1,4-Dichlorobenzene		ND		6.5	36
1-Methylnaphthalene		ND J		2.2	36
2,2'-oxybis[1-chloropropane]		ND		3.6	36
2,3,4,6-Tetrachlorophenol		ND J		2.2	36
2,4,5-Trichlorophenol		ND		4.1	36
2,4,6-Trichlorophenol		ND		7.6	36
2,4-Dichlorophenol		ND		6.9	36
2,4-Dimethylphenol		ND J		6.3	36
2,4-Dinitrophenol		ND J		5.3	36
2,4-Dinitrotoluene		ND		5.1	36
2,6-Dinitrotoluene		ND		4.6	36
2-Chloronaphthalene		ND		5.5	36
2-Chlorophenol		ND		3.5	36
2-Methylnaphthalene		ND		28	36
2-Methylphenol		ND		5.1	36
2-Nitroaniline		ND		23	180
2-Nitrophenol		ND		4.2	36
3 & 4 Methylphenol		ND		6.8	36
3,3'-Dichlorobenzidine		ND		26	72
3-Nitroaniline		ND		10	180
4,6-Dinitro-2-methylphenol		ND J		9.2	180
4-Bromophenyl phenyl ether		ND		7.5	36
4-Chloro-3-methylphenol		ND		9.9	72
4-Chloroaniline		ND		15	72
4-Chlorophenyl phenyl ether		ND		5.7	36
4-Nitroaniline		ND		9.6	180
4-Nitrophenol		ND		7.0	180
Acenaphthene		ND		5.3	36
Acenaphthylene		ND		6.4	36
Acetophenone		ND		3.9	36
Aniline		ND J		19	36
Anthracene		ND		11	36
Atrazine		ND J		11	36
Azobenzene		ND		4.5	36
Benzaldehyde		ND		11	36
Benzo[a]anthracene		ND		6.9	36
Benzo[a]pyrene		ND		6.6	36
Benzo[b]fluoranthene		ND		8.3	36
Benzo[g,h,i]perylene		ND		7.0	36
Benzo[k]fluoranthene		ND		10	36
Benzoic acid		140 JEB	J	16	180

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Client: Olin Corporation

Job Number: 360-24173-2
Sdg Number: OCRI-01A

Client Sample ID: **OC-SB-405-14/15-XXX**

Lab Sample ID: 360-24173-2
Client Matrix: Solid
% Moisture: 8.7

Date Sampled: 08/18/2009 0910
Date Received: 08/18/2009 1900

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48213		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-47986		Lab File ID:	B9890.D
Dilution:	1.0			Initial Weight/Volume:	30.38 g
Date Analyzed:	08/28/2009 1407			Final Weight/Volume:	1.0 mL
Date Prepared:	08/20/2009 1253			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		2.2	36
Benzyl alcohol		ND		8.3	72
Bis(2-chloroethoxy)methane		ND		6.5	36
Bis(2-chloroethyl)ether		ND		8.8	36
Bis(2-ethylhexyl) phthalate		360		11	36
Butyl benzyl phthalate		ND		7.9	36
Caprolactam		ND		11	36
Carbazole		ND		36	36
Chrysene		ND		7.8	36
Dibenz(a,h)anthracene		ND		7.3	36
Dibenzofuran		ND		21	36
Diethyl phthalate		ND		5.1	36
Dimethyl phthalate		ND		5.3	36
Di-n-butyl phthalate		11	J B	11	36
Di-n-octyl phthalate		ND		10	36
Diphenyl oxide		ND		11	36
Fluoranthene		ND		23	36
Fluorene		ND		14	36
Hexachlorobenzene		ND		8.6	36
Hexachlorobutadiene		ND		7.2	36
Hexachlorocyclopentadiene		ND		9.8	72
Hexachloroethane		ND		6.9	36
Indeno[1,2,3-cd]pyrene		ND		11	36
Isophorone		ND		7.7	36
Naphthalene		ND		80	87
Nitrobenzene		ND		4.9	36
N-Nitrosodimethylamine		ND		4.2	36
N-Nitrosodi-n-propylamine		ND		4.1	36
N-Nitrosodiphenylamine		ND		7.2	36
Pentachlorophenol		ND		7.4	36
Phenanthrene		ND		41	43
Phenol		ND		4.5	36
Pyrene		ND		9.5	36

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	77		30 - 130
2-Fluorobiphenyl	73		30 - 130
2-Fluorophenol	100		30 - 130
Nitrobenzene-d5	66		30 - 130
Phenol-d5	96		30 - 130
Terphenyl-d14	80		30 - 130

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Client: Olin Corporation

Job Number: 360-24173-2
Sdg Number: OCRI-01A

Client Sample ID: **OC-SB-405-14/15-XXX**

Lab Sample ID: 360-24173-2
Client Matrix: Solid % Moisture: 8.7

Date Sampled: 08/18/2009 0910
Date Received: 08/18/2009 1900

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48213		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-47986		Lab File ID:	B9890.D
Dilution:	1.0			Initial Weight/Volume:	30.38 g
Date Analyzed:	08/28/2009 1407			Final Weight/Volume:	1.0 mL
Date Prepared:	08/20/2009 1253			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 8

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Unknown	7.17	2000	T J
	Unknown	10.30	150	T J
	Unknown	10.35	88	T J
	Unknown	13.55	65	T J
1438-62-6	1-Naphthalenepropanol, .alpha.-ethenylde	13.72	87	T J N
	Unknown	15.09	920	T J
	Unknown	17.01	170	T J
112-84-5	Erucylamide	17.76	150	T J N

Client: Olin Corporation

Job Number: 360-24173-2
Sdg Number: OCRI-01A

Client Sample ID: **OC-SB-416-13/14-XXX**

Lab Sample ID: 360-24173-5
Client Matrix: Solid
% Moisture: 6.9

Date Sampled: 08/18/2009 1105
Date Received: 08/18/2009 1900

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48213		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-47986		Lab File ID:	B9893.D
Dilution:	1.0			Initial Weight/Volume:	30.16 g
Date Analyzed:	08/28/2009 1549			Final Weight/Volume:	1.0 mL
Date Prepared:	08/20/2009 1253			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		11	36
1,2,4,5-Tetrachlorobenzene		ND		2.4	36
1,2,4-Trichlorobenzene		ND		6.9	36
1,2-Dichlorobenzene		ND		3.9	36
1,3-Dichlorobenzene		ND		10	36
1,4-Dichlorobenzene		ND		6.4	36
1-Methylnaphthalene		ND		2.1	36
2,2'-oxybis[1-chloropropane]		ND		3.6	36
2,3,4,6-Tetrachlorophenol		ND		2.1	36
2,4,5-Trichlorophenol		ND		4.0	36
2,4,6-Trichlorophenol		ND		7.5	36
2,4-Dichlorophenol		ND		6.9	36
2,4-Dimethylphenol		ND		6.2	36
2,4-Dinitrophenol		ND		5.2	36
2,4-Dinitrotoluene		ND		5.0	36
2,6-Dinitrotoluene		ND		4.5	36
2-Chloronaphthalene		ND		5.5	36
2-Chlorophenol		ND		3.5	36
2-Methylnaphthalene		ND		27	36
2-Methylphenol		ND		5.1	36
2-Nitroaniline		ND		23	180
2-Nitrophenol		ND		4.1	36
3 & 4 Methylphenol		ND		6.8	36
3,3'-Dichlorobenzidine		ND		26	71
3-Nitroaniline		ND		10	180
4,6-Dinitro-2-methylphenol		ND		9.1	180
4-Bromophenyl phenyl ether		ND		7.4	36
4-Chloro-3-methylphenol		ND		9.8	71
4-Chloroaniline		ND		14	71
4-Chlorophenyl phenyl ether		ND		5.7	36
4-Nitroaniline		ND		9.5	180
4-Nitrophenol		ND		6.9	180
Acenaphthene		ND		5.2	36
Acenaphthylene		ND		6.3	36
Acetophenone		ND		3.8	36
Aniline		ND		18	36
Anthracene		ND		11	36
Atrazine		ND		11	36
Azobenzene		ND		4.4	36
Benzaldehyde		ND		11	36
Benzo[a]anthracene		ND		6.8	36
Benzo[a]pyrene		ND		6.5	36
Benzo[b]fluoranthene		ND		8.2	36
Benzo[g,h,i]perylene		ND		6.9	36
Benzo[k]fluoranthene		ND		9.9	36
Benzoic acid		ND		15	180

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Client: Olin Corporation

Job Number: 360-24173-2
Sdg Number: OCRI-01A

Client Sample ID: **OC-SB-416-13/14-XXX**

Lab Sample ID: 360-24173-5
Client Matrix: Solid
% Moisture: 6.9

Date Sampled: 08/18/2009 1105
Date Received: 08/18/2009 1900

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48213		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-47986		Lab File ID:	B9893.D
Dilution:	1.0			Initial Weight/Volume:	30.16 g
Date Analyzed:	08/28/2009 1549			Final Weight/Volume:	1.0 mL
Date Prepared:	08/20/2009 1253			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND	J	2.1	36
Benzyl alcohol		ND		8.2	71
Bis(2-chloroethoxy)methane		ND		6.4	36
Bis(2-chloroethyl)ether		ND		8.7	36
Bis(2-ethylhexyl) phthalate		53	EB	11	36
Butyl benzyl phthalate		ND		7.8	36
Caprolactam		ND	J	11	36
Carbazole		ND		36	36
Chrysene		ND		7.7	36
Dibenz(a,h)anthracene		ND		7.2	36
Dibenzofuran		ND		21	36
Diethyl phthalate		ND		5.0	36
Dimethyl phthalate		ND		5.2	36
Di-n-butyl phthalate		14	J B	11	36
Di-n-octyl phthalate		ND		10	36
Diphenyl oxide		14	J	11	36
Fluoranthene		ND		23	36
Fluorene		ND		14	36
Hexachlorobenzene		ND		8.5	36
Hexachlorobutadiene		ND		7.1	36
Hexachlorocyclopentadiene		ND		9.7	71
Hexachloroethane		ND		6.8	36
Indeno[1,2,3-cd]pyrene		ND		11	36
Isophorone		ND		7.6	36
Naphthalene		ND		79	86
Nitrobenzene		ND		4.9	36
N-Nitrosodimethylamine		ND		4.1	36
N-Nitrosodi-n-propylamine		ND		4.0	36
N-Nitrosodiphenylamine		45	EB	7.1	36
Pentachlorophenol		ND		7.4	36
Phenanthrene		ND		41	43
Phenol		ND		4.5	36
Pyrene		ND		9.4	36

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	80		30 - 130
2-Fluorobiphenyl	74		30 - 130
2-Fluorophenol	102		30 - 130
Nitrobenzene-d5	72		30 - 130
Phenol-d5	98		30 - 130
Terphenyl-d14	84		30 - 130

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Client: Olin Corporation

Job Number: 360-24173-2
Sdg Number: OCRI-01A

Client Sample ID: **OC-SB-416-13/14-XXX**

Lab Sample ID: 360-24173-5
Client Matrix: Solid % Moisture: 6.9

Date Sampled: 08/18/2009 1105
Date Received: 08/18/2009 1900

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48213		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-47986		Lab File ID:	B9893.D
Dilution:	1.0			Initial Weight/Volume:	30.16 g
Date Analyzed:	08/28/2009 1549			Final Weight/Volume:	1.0 mL
Date Prepared:	08/20/2009 1253			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 4

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Unknown	7.18	2300	T J
694-87-1	Bicyclo[4.2.0]octa-1,3,5-triene	7.66	120	T J N
112-92-5	1-Octadecanol	13.58	72	T J N
24468-13-1	dl-2-Ethylhexyl chloroformate	17.14	110	T J N

Client: Olin Corporation

Job Number: 360-24173-1
Sdg Number: OCRI-01

Client Sample ID: **OC-SB-416-8.0/9.0-XXX**

Lab Sample ID: 360-24173-6
Client Matrix: Solid % Moisture: 6.4

Date Sampled: 08/18/2009 1045
Date Received: 08/18/2009 1900

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48213		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-47986		Lab File ID:	B9894.D
Dilution:	1.0			Initial Weight/Volume:	30.11 g
Date Analyzed:	08/28/2009 1623			Final Weight/Volume:	1.0 mL
Date Prepared:	08/20/2009 1253			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		17	J	11	35
1,2,4,5-Tetrachlorobenzene		ND		11	35
1,2,4-Trichlorobenzene		ND		11	35
1,2-Dichlorobenzene		ND		11	35
1,3-Dichlorobenzene		ND		11	35
1,4-Dichlorobenzene		ND		11	35
2,3,4,6-Tetrachlorophenol		ND	J	11	35
2,4,5-Trichlorophenol		ND		11	35
2,4,6-Trichlorophenol		ND		11	35
2,4-Dichlorophenol		ND		11	35
2,4-Dimethylphenol		ND	J	14	35
2,4-Dinitrophenol		ND	J	11	35
2,6-Dinitrotoluene		ND		11	35
2,4-Dinitrotoluene		ND		11	35
2-Chloronaphthalene		ND		11	35
2-Chlorophenol		ND		11	35
2-Methylnaphthalene		ND		11	35
2-Methylphenol		ND		21	35
2-Nitroaniline		ND		11	180
2-Nitrophenol		ND		11	35
3,3'-Dichlorobenzidine		ND		11	71
3 & 4 Methylphenol		ND		11	35
3-Nitroaniline		ND		11	180
4,6-Dinitro-2-methylphenol		ND	J	11	180
4-Bromophenyl phenyl ether		ND		11	35
4-Chloro-3-methylphenol		ND		11	71
4-Chloroaniline		ND		11	71
4-Chlorophenyl phenyl ether		ND		11	35
4-Nitroaniline		ND		11	180
4-Nitrophenol		ND		11	180
Acenaphthene		ND		11	35
Acenaphthylene		ND		11	35
Acetophenone		ND		11	35
Aniline		ND	J	11	35
Anthracene		ND		11	35
Atrazine		ND	J	11	35
Azobenzene		ND		11	35
Benzaldehyde		ND		11	35
Benzo[a]anthracene		ND		11	35
Benzo[a]pyrene		ND		11	35
Benzo[b]fluoranthene		ND		11	35
Benzo[g,h,i]perylene		ND		11	35
Benzo[k]fluoranthene		ND		11	35
Benzoic acid		ND		16	180
2,2'-oxybis[1-chloropropane]		ND		11	35
Benzyl alcohol		ND	J	30	71

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Client: Olin Corporation

Job Number: 360-24173-1
Sdg Number: OCRI-01

Client Sample ID: **OC-SB-416-8.0/9.0-XXX**

Lab Sample ID: 360-24173-6
Client Matrix: Solid % Moisture: 6.4

Date Sampled: 08/18/2009 1045
Date Received: 08/18/2009 1900

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48213		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-47986		Lab File ID:	B9894.D
Dilution:	1.0			Initial Weight/Volume:	30.11 g
Date Analyzed:	08/28/2009 1623			Final Weight/Volume:	1.0 mL
Date Prepared:	08/20/2009 1253			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Bis(2-chloroethoxy)methane		ND		11	35
Bis(2-chloroethyl)ether		ND		11	35
Butyl benzyl phthalate		ND		11	35
Caprolactam		ND	J	11	35
Carbazole		ND		11	35
Chrysene		ND		11	35
Dibenz(a,h)anthracene		ND		11	35
Dibenzofuran		ND		11	35
Diethyl phthalate		ND		11	35
Dimethyl phthalate		ND		11	35
Di-n-butyl phthalate		ND		31	35
Di-n-octyl phthalate		ND		18	35
Fluoranthene		ND		11	35
Fluorene		ND		11	35
Hexachlorobenzene		ND		11	35
Hexachlorobutadiene		ND		11	35
Hexachlorocyclopentadiene		ND		11	71
Hexachloroethane		ND		11	35
Indeno[1,2,3-cd]pyrene		ND		11	35
Isophorone		ND		11	35
Naphthalene		12	J	11	85
Nitrobenzene		ND		11	35
N-Nitrosodimethylamine		ND		13	35
N-Nitrosodi-n-propylamine		ND		11	35
N-Nitrosodiphenylamine		ND		11	35
Pentachlorophenol		ND		11	35
Phenanthrene		ND		11	43
Phenol		ND		11	35
Pyrene		ND		11	35
1-Methylnaphthalene		ND	J	11	35
Benzophenone		ND	J	11	35
Diphenyl oxide		360	J	11	35

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	64		30 - 130
Nitrobenzene-d5	64		30 - 130
Phenol-d5	83		30 - 130
2-Fluorophenol	85		30 - 130
2-Fluorobiphenyl	68		30 - 130
Terphenyl-d14	70		30 - 130

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Client: Olin Corporation

Job Number: 360-24173-1
Sdg Number: OCRI-01

Client Sample ID: **OC-SB-416-8.0/9.0-XXX**

Lab Sample ID: 360-24173-6
Client Matrix: Solid % Moisture: 6.4

Date Sampled: 08/18/2009 1045
Date Received: 08/18/2009 1900

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48213		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-47986		Lab File ID:	B9894.D
Dilution:	1.0			Initial Weight/Volume:	30.11 g
Date Analyzed:	08/28/2009 1623			Final Weight/Volume:	1.0 mL
Date Prepared:	08/20/2009 1253			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 9

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Unknown	7.18	740	T J
123-48-8	3-Heptene, 2,2,4,6,6-pentamethyl-	8.49	540	T J N
	Unknown	10.32	2100	T J
	Unknown	10.34	450	T J
	Unknown	10.37	1300	T J
	Unknown	10.42	1100	T J
1330-96-7	1,2-Benzenedicarboxylic acid, isodecyl o	16.84	91	T J N
	Unknown	17.53	120	T J
1000156-26-0	Cobalt, (.eta.-4-1,5-cyclooctadiene)(1-c	19.08	3.8	T J N

Client: Olin Corporation

Job Number: 360-24173-1
Sdg Number: OCRI-01

Client Sample ID: **OC-SB-416-8.0/9.0-XXX**

Lab Sample ID: 360-24173-6
Client Matrix: Solid % Moisture: 6.4

Date Sampled: 08/18/2009 1045
Date Received: 08/18/2009 1900

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48702		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-47986		Lab File ID:	B10128.D
Dilution:	1.0			Initial Weight/Volume:	30.11 g
Date Analyzed:	09/08/2009 1642	Run Type: DL3		Final Weight/Volume:	1.0 mL
Date Prepared:	08/20/2009 1253			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Diphenylamine		100		2.1	35

Client: Olin Corporation

Job Number: 360-24173-1
Sdg Number: OCRI-01

Client Sample ID: **OC-SB-416-8.0/9.0-XXX**

Lab Sample ID: 360-24173-6
Client Matrix: Solid
% Moisture: 6.4

Date Sampled: 08/18/2009 1045
Date Received: 08/18/2009 1900

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48389		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-47986		Lab File ID:	B9913.D
Dilution:	10			Initial Weight/Volume:	30.11 g
Date Analyzed:	08/31/2009 1644	Run Type: DL		Final Weight/Volume:	1.0 mL
Date Prepared:	08/20/2009 1253			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzo[a]pyrene		ND		110	350
Benzo[b]fluoranthene		ND		110	350
Benzo[g,h,i]perylene		ND		110	350
Benzo[k]fluoranthene		ND		110	350
Dibenz(a,h)anthracene		ND		110	350
Di-n-octyl phthalate		ND		180	350
Indeno[1,2,3-cd]pyrene		ND		110	350

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	0	X	30 - 130
Nitrobenzene-d5	66		30 - 130
Phenol-d5	70		30 - 130
2-Fluorophenol	75		30 - 130
2-Fluorobiphenyl	70		30 - 130
Terphenyl-d14	59		30 - 130

Client: Olin Corporation

Job Number: 360-24173-1
Sdg Number: OCRI-01

Client Sample ID: **OC-SB-416-8.0/9.0-XXX**

Lab Sample ID: 360-24173-6
Client Matrix: Solid
% Moisture: 6.4

Date Sampled: 08/18/2009 1045
Date Received: 08/18/2009 1900

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48389		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-47986		Lab File ID:	B9933.D
Dilution:	50			Initial Weight/Volume:	30.11 g
Date Analyzed:	09/01/2009 0405	Run Type: DL2		Final Weight/Volume:	1.0 mL
Date Prepared:	08/20/2009 1253			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Bis(2-ethylhexyl) phthalate		35000 J B		530	1800

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	0	D X	30 - 130
Nitrobenzene-d5	0	D X	30 - 130
Phenol-d5	0	D X	30 - 130
2-Fluorophenol	0	D X	30 - 130
2-Fluorobiphenyl	0	D X	30 - 130
Terphenyl-d14	0	D X	30 - 130

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Client: Olin Corporation

Job Number: 360-24173-1
Sdg Number: OCRI-01

Client Sample ID: **OC-SB-416-8.0/9.0-XXX**

Lab Sample ID: 360-24173-6
Client Matrix: Solid % Moisture: 6.4

Date Sampled: 08/18/2009 1045
Date Received: 08/18/2009 1900

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48454		Instrument ID:	Inst. J
Preparation:	3550B	Prep Batch: 360-48297		Lab File ID:	J02793.D
Dilution:	1.0			Initial Weight/Volume:	100.37 g
Date Analyzed:	09/01/2009 2125			Final Weight/Volume:	1.0 mL
Date Prepared:	08/27/2009 1643			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodimethylamine		ND		1.2	5.3

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	77		30 - 130
2-Fluorobiphenyl	70		30 - 130
2-Fluorophenol	70		30 - 130
Nitrobenzene-d5	84		30 - 130
Phenol-d5	74		30 - 130
Terphenyl-d14	704	X	30 - 130

Client: Olin Corporation

Job Number: 360-24173-1
Sdg Number: OCRI-01

Client Sample ID: **OC-EBK-001**

Lab Sample ID: 360-24173-8
Client Matrix: Water

Date Sampled: 08/18/2009 0830
Date Received: 08/18/2009 1900

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48209		Instrument ID:	Inst. B
Preparation:	3510C	Prep Batch: 360-48124		Lab File ID:	B9854.D
Dilution:	1.0			Initial Weight/Volume:	1000 mL
Date Analyzed:	08/27/2009 1741			Final Weight/Volume:	1.0 mL
Date Prepared:	08/25/2009 1151			Injection Volume:	1.0 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Aniline	ND	*	0.50	5.0
Phenol	ND	*	0.50	5.0
Bis(2-chloroethyl)ether	ND		0.50	5.0
Benzyl alcohol	ND		0.50	10
2-Methylphenol	ND		0.50	5.0
N-Nitrosodi-n-propylamine	ND		0.50	5.0
Hexachloroethane	ND		0.50	3.0
3 & 4 Methylphenol	ND		0.50	5.0
2-Chlorophenol	ND		0.50	5.0
Nitrobenzene	ND		0.50	5.0
Bis(2-chloroethoxy)methane	ND		0.50	5.0
Benzoic acid	ND		0.50	5.0
Isophorone	ND		0.50	5.0
2,4-Dimethylphenol	ND		0.50	5.0
2,4-Dichlorophenol	ND		0.50	5.0
4-Chloroaniline	ND		0.50	5.0
2,4,6-Trichlorophenol	ND		0.50	5.0
2,4,5-Trichlorophenol	ND		0.50	5.0
Hexachlorocyclopentadiene	ND		0.50	5.0
2-Methylnaphthalene	ND		0.050	1.0
2-Nitroaniline	ND		0.50	5.0
2-Chloronaphthalene	ND		0.50	5.0
4-Chloro-3-methylphenol	ND		0.50	5.0
2,6-Dinitrotoluene	ND		0.50	5.0
2-Nitrophenol	ND		0.50	5.0
3-Nitroaniline	ND		0.50	5.0
Dimethyl phthalate	ND		0.50	5.0
2,4-Dinitrophenol	ND		0.50	5.0
Acenaphthylene	ND		0.050	0.30
2,4-Dinitrotoluene	ND		0.50	5.0
Acenaphthene	ND		0.050	1.0
Dibenzofuran	ND		0.50	5.0
4-Nitrophenol	ND	*	0.50	5.0
Fluorene	ND		0.050	1.0
4-Nitroaniline	ND		0.50	5.0
4-Bromophenyl phenyl ether	ND		0.50	5.0
Hexachlorobenzene	ND		0.50	1.0
Diethyl phthalate	0.51	J	0.50	5.0
4-Chlorophenyl phenyl ether	ND		0.50	5.0
Pentachlorophenol	ND		0.50	1.0
N-Nitrosodiphenylamine	ND		0.50	5.0
4,6-Dinitro-2-methylphenol	ND		0.50	5.0
Phenanthrene	ND		0.085	0.20
Anthracene	ND		0.50	1.0
Di-n-butyl phthalate	1.1	J	0.60	5.0
Fluoranthene	ND		0.20	1.0

Client: Olin Corporation

Job Number: 360-24173-1
Sdg Number: OCRI-01

Client Sample ID: **OC-EBK-001**

Lab Sample ID: 360-24173-8
Client Matrix: Water

Date Sampled: 08/18/2009 0830
Date Received: 08/18/2009 1900

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48209		Instrument ID:	Inst. B
Preparation:	3510C	Prep Batch: 360-48124		Lab File ID:	B9854.D
Dilution:	1.0			Initial Weight/Volume:	1000 mL
Date Analyzed:	08/27/2009 1741			Final Weight/Volume:	1.0 mL
Date Prepared:	08/25/2009 1151			Injection Volume:	1.0 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Pyrene	ND		0.19	5.0
Butyl benzyl phthalate	ND		0.50	5.0
Benzo[a]anthracene	ND		0.17	0.30
Chrysene	ND		0.17	1.0
3,3'-Dichlorobenzidine	ND		0.50	5.0
Di-n-octyl phthalate	ND		0.73	5.0
Benzo[b]fluoranthene	ND		0.14	0.30
Benzo[k]fluoranthene	ND		0.17	0.30
Benzo[a]pyrene	ND		0.10	0.20
Indeno[1,2,3-cd]pyrene	ND		0.079	0.50
Dibenz(a,h)anthracene	ND		0.064	0.50
Benzo[g,h,i]perylene	ND		0.094	0.50
Acetophenone	0.62	J	0.50	5.0
Azobenzene	ND		0.50	5.0
Bis(2-ethylhexyl) phthalate	ND		0.50	2.0
bis (2-chloroisopropyl) ether	ND		0.50	5.0
1-Methylnaphthalene	ND		0.050	5.0
1,1'-Biphenyl	ND		0.50	5.0
1,2,4,5-Tetrachlorobenzene	ND		0.50	5.0
2,3,4,6-Tetrachlorophenol	ND		0.50	5.0
Atrazine	ND		0.50	5.0
Benzaldehyde	ND	*	0.50	5.0
Caprolactam	ND	*	0.50	5.0
Carbazole	ND		0.50	5.0
Benzophenone	ND		0.50	5.0
Diphenyl oxide	ND		0.50	5.0

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorobiphenyl	72		30 - 130
2-Fluorophenol	25		15 - 110
Nitrobenzene-d5	69		30 - 130
Phenol-d5	15		15 - 110
Terphenyl-d14	82		30 - 130
2,4,6-Tribromophenol	82		15 - 110

Client: Olin Corporation

Job Number: 360-24173-1
Sdg Number: OCRI-01

Client Sample ID: **OC-EBK-001**

Lab Sample ID: 360-24173-8
Client Matrix: Water

Date Sampled: 08/18/2009 0830
Date Received: 08/18/2009 1900

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48209		Instrument ID:	Inst. B
Preparation:	3510C	Prep Batch: 360-48124		Lab File ID:	B9854.D
Dilution:	1.0			Initial Weight/Volume:	1000 mL
Date Analyzed:	08/27/2009 1741			Final Weight/Volume:	1.0 mL
Date Prepared:	08/25/2009 1151			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 3

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
71-43-2	Benzene	4.88	0.34	T J N
111-14-8	Heptanoic acid	8.88	1.5	T J N
124-7-2	Octanoic Acid	9.39	3.5	T J N

Client: Olin Corporation

Job Number: 360-24173-1
Sdg Number: OCRI-01

Client Sample ID: **OC-EBK-001**

Lab Sample ID: 360-24173-8
Client Matrix: Water

Date Sampled: 08/18/2009 0830
Date Received: 08/18/2009 1900

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48209		Instrument ID:	Inst. B
Preparation:	3510C	Prep Batch: 360-48124		Lab File ID:	B9854.D
Dilution:	1.0			Initial Weight/Volume:	1000 mL
Date Analyzed:	08/27/2009 1741			Final Weight/Volume:	1.0 mL
Date Prepared:	08/25/2009 1151			Injection Volume:	1.0 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
N-Nitrosodimethylamine	ND	*	0.50	5.0

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	82		15 - 110
2-Fluorobiphenyl	72		30 - 130
2-Fluorophenol	25		15 - 110
Nitrobenzene-d5	69		30 - 130
Phenol-d5	15		15 - 110
Terphenyl-d14	82		30 - 130

Client: Olin Corporation

Job Number: 360-24173-1
Sdg Number: OCRI-01

Client Sample ID: **OC-SB-412-0.0/1.0-XXX**

Lab Sample ID: 360-24173-9
Client Matrix: Solid % Moisture: 3.3

Date Sampled: 08/18/2009 1245
Date Received: 08/19/2009 1700

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48213		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-47986		Lab File ID:	B9895.D
Dilution:	1.0			Initial Weight/Volume:	30.80 g
Date Analyzed:	08/28/2009 1657			Final Weight/Volume:	1.0 mL
Date Prepared:	08/20/2009 1253			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND J		10	34
1,2,4,5-Tetrachlorobenzene		ND		10	34
1,2,4-Trichlorobenzene		ND		10	34
1,2-Dichlorobenzene		ND		10	34
1,3-Dichlorobenzene		ND		10	34
1,4-Dichlorobenzene		ND		10	34
2,3,4,6-Tetrachlorophenol		ND J		10	34
2,4,5-Trichlorophenol		ND		10	34
2,4,6-Trichlorophenol		ND		10	34
2,4-Dichlorophenol		ND		10	34
2,4-Dimethylphenol		ND J		13	34
2,4-Dinitrophenol		ND J		10	34
2,6-Dinitrotoluene		ND		10	34
2,4-Dinitrotoluene		ND		10	34
2-Chloronaphthalene		ND		10	34
2-Chlorophenol		ND		10	34
2-Methylnaphthalene		ND		10	34
2-Methylphenol		ND		20	34
2-Nitroaniline		ND		10	170
2-Nitrophenol		ND		10	34
3,3'-Dichlorobenzidine		ND		10	67
3 & 4 Methylphenol		ND		10	34
3-Nitroaniline		ND		10	170
4,6-Dinitro-2-methylphenol		ND J		10	170
4-Bromophenyl phenyl ether		ND		10	34
4-Chloro-3-methylphenol		ND		10	67
4-Chloroaniline		ND		10	67
4-Chlorophenyl phenyl ether		ND		10	34
4-Nitroaniline		ND		10	170
4-Nitrophenol		ND		10	170
Acenaphthene		ND		10	34
Acenaphthylene		ND		10	34
Acetophenone		ND		10	34
Aniline		ND J		10	34
Anthracene		ND		10	34
Atrazine		ND J		10	34
Azobenzene		ND		10	34
Benzaldehyde		ND		10	34
Benzo[a]anthracene		ND		10	34
Benzo[a]pyrene		ND		10	34
Benzo[b]fluoranthene		ND		10	34
Benzo[g,h,i]perylene		ND		10	34
Benzo[k]fluoranthene		ND		10	34
Benzoic acid		ND		15	170
2,2'-oxybis[1-chloropropane]		ND		10	34
Benzyl alcohol		ND J		29	67

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Client: Olin Corporation

Job Number: 360-24173-1
Sdg Number: OCRI-01

Client Sample ID: **OC-SB-412-0.0/1.0-XXX**

Lab Sample ID: 360-24173-9
Client Matrix: Solid
% Moisture: 3.3

Date Sampled: 08/18/2009 1245
Date Received: 08/19/2009 1700

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48213		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-47986		Lab File ID:	B9895.D
Dilution:	1.0			Initial Weight/Volume:	30.80 g
Date Analyzed:	08/28/2009 1657			Final Weight/Volume:	1.0 mL
Date Prepared:	08/20/2009 1253			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Bis(2-chloroethoxy)methane		ND		10	34
Bis(2-chloroethyl)ether		ND		10	34
Butyl benzyl phthalate		ND		10	34
Caprolactam		ND J		10	34
Carbazole		ND		10	34
Chrysene		ND		10	34
Dibenz(a,h)anthracene		ND		10	34
Dibenzofuran		ND		10	34
Diethyl phthalate		ND		10	34
Dimethyl phthalate		ND		10	34
Di-n-butyl phthalate		ND		30	34
Di-n-octyl phthalate		ND		17	34
Fluoranthene		ND		10	34
Fluorene		ND		10	34
Hexachlorobenzene		ND		10	34
Hexachlorobutadiene		ND		10	34
Hexachlorocyclopentadiene		ND		10	67
Hexachloroethane		ND		10	34
Indeno[1,2,3-cd]pyrene		ND		10	34
Isophorone		ND		10	34
Naphthalene		ND		10	81
Nitrobenzene		ND		10	34
N-Nitrosodimethylamine		ND		12	34
N-Nitrosodi-n-propylamine		ND		10	34
N-Nitrosodiphenylamine		ND		10	34
Pentachlorophenol		ND		10	34
Phenanthrene		ND		10	40
Phenol		ND		10	34
Pyrene		ND		10	34
1-Methylnaphthalene		ND J		10	34
Benzophenone		ND J		10	34
Diphenylamine		6.9	J	2.0	34
Diphenyl oxide		21 J	J	10	34

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	66		30 - 130
Nitrobenzene-d5	73		30 - 130
Phenol-d5	104		30 - 130
2-Fluorophenol	102		30 - 130
2-Fluorobiphenyl	76		30 - 130
Terphenyl-d14	79		30 - 130

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Client: Olin Corporation

Job Number: 360-24173-1
Sdg Number: OCRI-01

Client Sample ID: **OC-SB-412-0.0/1.0-XXX**

Lab Sample ID: 360-24173-9
Client Matrix: Solid % Moisture: 3.3

Date Sampled: 08/18/2009 1245
Date Received: 08/19/2009 1700

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48213		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-47986		Lab File ID:	B9895.D
Dilution:	1.0			Initial Weight/Volume:	30.80 g
Date Analyzed:	08/28/2009 1657			Final Weight/Volume:	1.0 mL
Date Prepared:	08/20/2009 1253			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 4

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
110-86-1	Pyridine	6.01	4.2	J
	Unknown	7.17	1900	T J
123-48-8	3-Heptene, 2,2,4,6,6-pentamethyl-	8.49	120	T J N
	Unknown	21.39	2.4	T J

Client: Olin Corporation

Job Number: 360-24173-1
Sdg Number: OCRI-01

Client Sample ID: **OC-SB-412-0.0/1.0-XXX**

Lab Sample ID: 360-24173-9
Client Matrix: Solid

% Moisture: 3.3

Date Sampled: 08/18/2009 1245
Date Received: 08/19/2009 1700

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48389		Instrument ID:	Inst_B
Preparation:	3546	Prep Batch: 360-47986		Lab File ID:	B9934.D
Dilution:	1.0			Initial Weight/Volume:	30.80 g
Date Analyzed:	09/01/2009 0439	Run Type: DL		Final Weight/Volume:	1.0 mL
Date Prepared:	08/20/2009 1253			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Bis(2-ethylhexyl) phthalate		33	J EB	10	34

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	53		30 - 130
Nitrobenzene-d5	72		30 - 130
Phenol-d5	87		30 - 130
2-Fluorophenol	99		30 - 130
2-Fluorobiphenyl	76		30 - 130
Terphenyl-d14	79		30 - 130

Client: Olin Corporation

Job Number: 360-24173-1
Sdg Number: OCRI-01

Client Sample ID: **OC-SB-412-0.0/1.0-XXX**

Lab Sample ID: 360-24173-9
Client Matrix: Solid % Moisture: 3.3

Date Sampled: 08/18/2009 1245
Date Received: 08/19/2009 1700

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48454		Instrument ID:	Inst. J
Preparation:	3550B	Prep Batch: 360-48297		Lab File ID:	J02794.D
Dilution:	1.0			Initial Weight/Volume:	100.26 g
Date Analyzed:	09/01/2009 2155			Final Weight/Volume:	1.0 mL
Date Prepared:	08/27/2009 1643			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodimethylamine		ND		1.2	5.2

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	62		30 - 130
2-Fluorobiphenyl	55		30 - 130
2-Fluorophenol	50		30 - 130
Nitrobenzene-d5	57		30 - 130
Phenol-d5	57		30 - 130
Terphenyl-d14	79		30 - 130

Client: Olin Corporation

Job Number: 360-24173-2
Sdg Number: OCRI-01A

Client Sample ID: **OC-SB-412-12/13-XXX**

Lab Sample ID: 360-24173-10
Client Matrix: Solid
% Moisture: 10.0

Date Sampled: 08/18/2009 1310
Date Received: 08/19/2009 1700

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48213		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-47986		Lab File ID:	B9896.D
Dilution:	1.0			Initial Weight/Volume:	30.43 g
Date Analyzed:	08/28/2009 1731			Final Weight/Volume:	1.0 mL
Date Prepared:	08/20/2009 1253			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND	J	11	37
1,2,4,5-Tetrachlorobenzene		ND		2.5	37
1,2,4-Trichlorobenzene		ND		7.1	37
1,2-Dichlorobenzene		ND		4.0	37
1,3-Dichlorobenzene		ND		11	37
1,4-Dichlorobenzene		ND		6.6	37
1-Methylnaphthalene		43	J	2.2	37
2,2'-oxybis[1-chloropropane]		ND		3.7	37
2,3,4,6-Tetrachlorophenol		ND	J	2.2	37
2,4,5-Trichlorophenol		ND		4.1	37
2,4,6-Trichlorophenol		ND		7.7	37
2,4-Dichlorophenol		ND		7.0	37
2,4-Dimethylphenol		ND	J	6.4	37
2,4-Dinitrophenol		ND	J	5.4	37
2,4-Dinitrotoluene		ND		5.1	37
2,6-Dinitrotoluene		ND		4.6	37
2-Chloronaphthalene		ND		5.6	37
2-Chlorophenol		ND		3.6	37
2-Methylnaphthalene		64		28	37
2-Methylphenol		ND		5.2	37
2-Nitroaniline		ND		24	180
2-Nitrophenol		ND		4.2	37
3 & 4 Methylphenol		ND		6.9	37
3,3'-Dichlorobenzidine		ND		27	73
3-Nitroaniline		ND		10	180
4,6-Dinitro-2-methylphenol		ND	J	9.3	180
4-Bromophenyl phenyl ether		ND		7.6	37
4-Chloro-3-methylphenol		ND		10	73
4-Chloroaniline		ND		15	73
4-Chlorophenyl phenyl ether		ND		5.8	37
4-Nitroaniline		ND		9.7	180
4-Nitrophenol		ND		7.1	180
Acenaphthene		22	J	5.4	37
Acenaphthylene		ND		6.5	37
Acetophenone		ND		3.9	37
Aniline		ND	J	19	37
Anthracene		ND		12	37
Atrazine		ND	J	11	37
Azobenzene		ND		4.5	37
Benzaldehyde		ND		11	37
Benzo[a]anthracene		ND		7.0	37
Benzo[a]pyrene		ND		6.7	37
Benzo[b]fluoranthene		ND		8.4	37
Benzo[g,h,i]perylene		ND		7.1	37
Benzo[k]fluoranthene		ND		10	37
Benzoic acid		ND	J	16	180

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Client: Olin Corporation

Job Number: 360-24173-2
Sdg Number: OCRI-01A

Client Sample ID: **OC-SB-412-12/13-XXX**

Lab Sample ID: 360-24173-10
Client Matrix: Solid
% Moisture: 10.0

Date Sampled: 08/18/2009 1310
Date Received: 08/19/2009 1700

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48213		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-47986		Lab File ID:	B9896.D
Dilution:	1.0			Initial Weight/Volume:	30.43 g
Date Analyzed:	08/28/2009 1731			Final Weight/Volume:	1.0 mL
Date Prepared:	08/20/2009 1253			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND J		2.2	37
Benzyl alcohol		ND		8.4	73
Bis(2-chloroethoxy)methane		ND		6.6	37
Bis(2-chloroethyl)ether		ND		8.9	37
Bis(2-ethylhexyl) phthalate		15 [illegible]	J	12	37
Butyl benzyl phthalate		ND		8.0	37
Caprolactam		ND J		11	37
Carbazole		ND		36	37
Chrysene		ND		7.9	37
Dibenz(a,h)anthracene		ND		7.4	37
Dibenzofuran		29	J	21	37
Diethyl phthalate		ND		5.1	37
Dimethyl phthalate		ND		5.4	37
Di-n-butyl phthalate		ND		11	37
Di-n-octyl phthalate		ND		10	37
Diphenyl oxide		ND J		11	37
Fluoranthene		ND		23	37
Fluorene		25	J	14	37
Hexachlorobenzene		ND		8.7	37
Hexachlorobutadiene		ND		7.3	37
Hexachlorocyclopentadiene		ND		10	73
Hexachloroethane		ND		7.0	37
Indeno[1,2,3-cd]pyrene		ND		11	37
Isophorone		ND		7.8	37
Naphthalene		130		81	88
Nitrobenzene		ND		5.0	37
N-Nitrosodimethylamine		ND		4.2	37
N-Nitrosodi-n-propylamine		ND		4.1	37
N-Nitrosodiphenylamine		ND		7.3	37
Pentachlorophenol		ND		7.5	37
Phenanthrene		74		42	44
Phenol		ND		4.6	37
Pyrene		ND		9.7	37

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	63		30 - 130
2-Fluorobiphenyl	68		30 - 130
2-Fluorophenol	94		30 - 130
Nitrobenzene-d5	65		30 - 130
Phenol-d5	95		30 - 130
Terphenyl-d14	75		30 - 130

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Client: Olin Corporation

Job Number: 360-24173-2
Sdg Number: OCRI-01A

Client Sample ID: **OC-SB-412-12/13-XXX**

Lab Sample ID: 360-24173-10
Client Matrix: Solid
% Moisture: 10.0

Date Sampled: 08/18/2009 1310
Date Received: 08/19/2009 1700

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48213		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-47986		Lab File ID:	B9896.D
Dilution:	1.0			Initial Weight/Volume:	30.43 g
Date Analyzed:	08/28/2009 1731			Final Weight/Volume:	1.0 mL
Date Prepared:	08/20/2009 1253			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** **2**

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Unknown	7.16	2100	T J
	Unknown	14.62	140	T J

Client: Olin Corporation

Job Number: 360-24173-1
Sdg Number: OCRI-01

Client Sample ID: OC-SB-412-6.0/7.0-XXX

Lab Sample ID: 360-24173-11
Client Matrix: Solid % Moisture: 13.5

Date Sampled: 08/18/2009 1255
Date Received: 08/19/2009 1700

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48213		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-47986		Lab File ID:	B9897.D
Dilution:	1.0			Initial Weight/Volume:	30.23 g
Date Analyzed:	08/28/2009 1805			Final Weight/Volume:	1.0 mL
Date Prepared:	08/20/2009 1253			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		11	38
1,2,4,5-Tetrachlorobenzene		ND		11	38
1,2,4-Trichlorobenzene		ND		11	38
1,2-Dichlorobenzene		ND		11	38
1,3-Dichlorobenzene		ND		11	38
1,4-Dichlorobenzene		ND		11	38
2,3,4,6-Tetrachlorophenol		ND		11	38
2,4,5-Trichlorophenol		ND		11	38
2,4,6-Trichlorophenol		ND		11	38
2,4-Dichlorophenol		ND		11	38
2,4-Dimethylphenol		ND		15	38
2,4-Dinitrophenol		ND		11	38
2,6-Dinitrotoluene		ND		11	38
2,4-Dinitrotoluene		ND		11	38
2-Chloronaphthalene		ND		11	38
2-Chlorophenol		ND		11	38
2-Methylnaphthalene		ND		11	38
2-Methylphenol		ND		23	38
2-Nitroaniline		ND		11	190
2-Nitrophenol		ND		11	38
3,3'-Dichlorobenzidine		ND		11	77
3 & 4 Methylphenol		ND		11	38
3-Nitroaniline		ND		11	190
4,6-Dinitro-2-methylphenol		ND		11	190
4-Bromophenyl phenyl ether		ND		11	38
4-Chloro-3-methylphenol		ND		11	77
4-Chloroaniline		ND		11	77
4-Chlorophenyl phenyl ether		ND		11	38
4-Nitroaniline		ND		11	190
4-Nitrophenol		ND		11	190
Acenaphthene		ND		11	38
Acenaphthylene		14	J	11	38
Acetophenone		ND		11	38
Aniline		ND		11	38
Anthracene		15	J	11	38
Atrazine		ND		11	38
Azobenzene		ND		11	38
Benzaldehyde		ND		11	38
Benzo[a]anthracene		49		11	38
Benzo[a]pyrene		340		11	38
Benzo[b]fluoranthene		490		11	38
Benzo[g,h,i]perylene		490		11	38
Benzo[k]fluoranthene		220		11	38
Benzoic acid		160	J	17	190
2,2'-oxybis[1-chloropropane]		ND		11	38
Benzyl alcohol		ND		33	77

Client: Olin Corporation

Job Number: 360-24173-1
Sdg Number: OCRI-01

Client Sample ID: **OC-SB-412-6.0/7.0-XXX**

Lab Sample ID: 360-24173-11
Client Matrix: Solid
% Moisture: 13.5

Date Sampled: 08/18/2009 1255
Date Received: 08/19/2009 1700

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48213		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-47986		Lab File ID:	B9897.D
Dilution:	1.0			Initial Weight/Volume:	30.23 g
Date Analyzed:	08/28/2009 1805			Final Weight/Volume:	1.0 mL
Date Prepared:	08/20/2009 1253			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Bis(2-chloroethoxy)methane		ND		11	38
Bis(2-chloroethyl)ether		ND		11	38
Butyl benzyl phthalate		ND		11	38
Caprolactam		ND J	*	11	38
Carbazole		ND		11	38
Chrysene		89		11	38
Dibenz(a,h)anthracene		150		11	38
Dibenzofuran		ND		11	38
Diethyl phthalate		ND		11	38
Dimethyl phthalate		ND		11	38
Di-n-butyl phthalate		ND		34	38
Di-n-octyl phthalate		ND		19	38
Fluoranthene		33	J	11	38
Fluorene		ND		11	38
Hexachlorobenzene		ND		11	38
Hexachlorobutadiene		ND		11	38
Hexachlorocyclopentadiene		ND		11	77
Hexachloroethane		ND		11	38
Indeno[1,2,3-cd]pyrene		430		11	38
Isophorone		ND		11	38
Naphthalene		ND		11	92
Nitrobenzene		ND		11	38
N-Nitrosodimethylamine		ND		14	38
N-Nitrosodi-n-propylamine		ND		11	38
N-Nitrosodiphenylamine		ND		11	38
Pentachlorophenol		ND		11	38
Phenanthrene		19	J	11	46
Phenol		ND		11	38
Pyrene		18	J	11	38
1-Methylnaphthalene		ND J	*	11	38
Benzophenone		ND J	*	11	38
Diphenylamine		ND		2.3	38
Diphenyl oxide		ND J	*	11	38

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	73		30 - 130
Nitrobenzene-d5	72		30 - 130
Phenol-d5	102		30 - 130
2-Fluorophenol	104		30 - 130
2-Fluorobiphenyl	74		30 - 130
Terphenyl-d14	69		30 - 130

1/19/10

Client: Olin Corporation

Job Number: 360-24173-1
Sdg Number: OCRI-01

Client Sample ID: **OC-SB-412-6.0/7.0-XXX**

Lab Sample ID: 360-24173-11
Client Matrix: Solid % Moisture: 13.5

Date Sampled: 08/18/2009 1255
Date Received: 08/19/2009 1700

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48213		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-47986		Lab File ID:	B9897.D
Dilution:	1.0			Initial Weight/Volume:	30.23 g
Date Analyzed:	08/28/2009 1805			Final Weight/Volume:	1.0 mL
Date Prepared:	08/20/2009 1253			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 4

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
110-86-1	Pyridine	5.97	4.8	J *
	Unknown	7.17	2300	T J
	Unknown	10.20	53	T J
122-66-7	1,2-Diphenylhydrazine	11.80	10	J

Client: Olin Corporation

Job Number: 360-24173-1
Sdg Number: OCRI-01

Client Sample ID: **OC-SB-412-6.0/7.0-XXX**

Lab Sample ID: 360-24173-11
Client Matrix: Solid
% Moisture: 13.5

Date Sampled: 08/18/2009 1255
Date Received: 08/19/2009 1700

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48389		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-47986		Lab File ID:	B9915.D
Dilution:	5.0			Initial Weight/Volume:	30.23 g
Date Analyzed:	08/31/2009 1752	Run Type: DL		Final Weight/Volume:	1.0 mL
Date Prepared:	08/20/2009 1253			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Bis(2-ethylhexyl) phthalate		1500 EB		57	190

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	10	X	30 - 130
Nitrobenzene-d5	62		30 - 130
Phenol-d5	81		30 - 130
2-Fluorophenol	83		30 - 130
2-Fluorobiphenyl	68		30 - 130
Terphenyl-d14	54		30 - 130

W. Clute 1/11/10

Client: Olin Corporation

Job Number: 360-24173-1
Sdg Number: OCRI-01

Client Sample ID: **OC-SB-412-6.0/7.0-XXX**

Lab Sample ID: 360-24173-11
Client Matrix: Solid
% Moisture: 13.5

Date Sampled: 08/18/2009 1255
Date Received: 08/19/2009 1700

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48454		Instrument ID:	Inst. J
Preparation:	3550B	Prep Batch: 360-48297		Lab File ID:	J02796.D
Dilution:	1.0			Initial Weight/Volume:	100.14 g
Date Analyzed:	09/01/2009 2255			Final Weight/Volume:	1.0 mL
Date Prepared:	08/27/2009 1643			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodimethylamine		ND		1.3	5.8

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	72		30 - 130
2-Fluorobiphenyl	68		30 - 130
2-Fluorophenol	66		30 - 130
Nitrobenzene-d5	75		30 - 130
Phenol-d5	70		30 - 130
Terphenyl-d14	80		30 - 130

Client: Olin Corporation

Job Number: 360-24173-1
Sdg Number: OCRI-01

Client Sample ID: **OC-SB-420-0.0/1.0-XXX**

Lab Sample ID: 360-24173-12
Client Matrix: Solid % Moisture: 3.7

Date Sampled: 08/18/2009 1555
Date Received: 08/19/2009 1700

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48213		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-47986		Lab File ID:	B9898.D
Dilution:	1.0			Initial Weight/Volume:	30.55 g
Date Analyzed:	08/28/2009 1839			Final Weight/Volume:	1.0 mL
Date Prepared:	08/20/2009 1253			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		170 J	✓	10	34
1,2,4,5-Tetrachlorobenzene		ND		10	34
1,2,4-Trichlorobenzene		ND		10	34
1,2-Dichlorobenzene		ND		10	34
1,3-Dichlorobenzene		ND		10	34
1,4-Dichlorobenzene		ND		10	34
2,3,4,6-Tetrachlorophenol		R ~~ND~~	✓	10	34
2,4,5-Trichlorophenol		R ~~ND~~		10	34
2,4,6-Trichlorophenol		R ~~ND~~		10	34
2,4-Dichlorophenol		R ~~ND~~		10	34
2,4-Dimethylphenol		610 J		13	34
2,4-Dinitrophenol		R ~~ND~~		10	34
2,6-Dinitrotoluene		ND		10	34
2,4-Dinitrotoluene		ND		10	34
2-Chloronaphthalene		ND		10	34
2-Chlorophenol		~~ND~~ R		10	34
2-Methylnaphthalene		ND		10	34
2-Nitroaniline		ND		10	170
2-Nitrophenol		R ~~ND~~		10	34
3,3'-Dichlorobenzidine		ND		10	68
3-Nitroaniline		ND		10	170
4,6-Dinitro-2-methylphenol		R ~~ND~~		10	170
4-Bromophenyl phenyl ether		ND		10	34
4-Chloro-3-methylphenol		R ~~ND~~		10	68
4-Chloroaniline		ND		10	68
4-Chlorophenyl phenyl ether		ND		10	34
4-Nitroaniline		ND		10	170
4-Nitrophenol		R ~~ND~~		10	170
Acenaphthene		ND		10	34
Acenaphthylene		ND		10	34
Acetophenone		ND		10	34
Aniline		ND J	✓	10	34
Anthracene		ND		10	34
Atrazine		ND J	✓	10	34
Azobenzene		ND		10	34
Benzaldehyde		ND		10	34
Benzo[a]anthracene		ND		10	34
Benzo[a]pyrene		ND		10	34
Benzo[b]fluoranthene		ND		10	34
Benzo[g,h,i]perylene		ND		10	34
Benzo[k]fluoranthene		ND		10	34
Benzoic acid		R ~~ND~~		15	170
2,2'-oxybis[1-chloropropane]		ND		10	34
Benzyl alcohol		ND		29	68
Bis(2-chloroethoxy)methane		ND		10	34
Bis(2-chloroethyl)ether		ND		10	34

Client: Olin Corporation

Job Number: 360-24173-1
Sdg Number: OCRI-01

Client Sample ID: **OC-SB-420-0.0/1.0-XXX**

Lab Sample ID: 360-24173-12
Client Matrix: Solid % Moisture: 3.7

Date Sampled: 08/18/2009 1555
Date Received: 08/19/2009 1700

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48213		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-47986		Lab File ID:	B9898.D
Dilution:	1.0			Initial Weight/Volume:	30.55 g
Date Analyzed:	08/28/2009 1839			Final Weight/Volume:	1.0 mL
Date Prepared:	08/20/2009 1253			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Butyl benzyl phthalate		ND		10	34
Caprolactam		ND		10	34
Carbazole		ND		10	34
Chrysene		ND		10	34
Dibenz(a,h)anthracene		ND		10	34
Dibenzofuran		ND		10	34
Diethyl phthalate		ND		10	34
Dimethyl phthalate		ND		10	34
Di-n-butyl phthalate		ND		30	34
Di-n-octyl phthalate		ND		17	34
Fluoranthene		ND		10	34
Fluorene		ND		10	34
Hexachlorobenzene		ND		10	34
Hexachlorobutadiene		ND		10	34
Hexachlorocyclopentadiene		ND		10	68
Hexachloroethane		ND		10	34
Indeno[1,2,3-cd]pyrene		ND		10	34
Isophorone		ND		10	34
Naphthalene		140		10	82
Nitrobenzene		ND		10	34
N-Nitrosodimethylamine		ND		12	34
N-Nitrosodi-n-propylamine		ND		10	34
N-Nitrosodiphenylamine		460		10	34
Pentachlorophenol		ND		10	34
Phenanthrene		ND		10	41
Pyrene		ND		10	34
1-Methylnaphthalene		ND		10	34
Benzophenone		ND		10	34

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	4	X	30 - 130
Nitrobenzene-d5	65		30 - 130
Phenol-d5	0	X	30 - 130
2-Fluorophenol	0	X	30 - 130
2-Fluorobiphenyl	67		30 - 130
Terphenyl-d14	66		30 - 130

Client: Olin Corporation

Job Number: 360-24173-1
Sdg Number: OCRI-01

Client Sample ID: **OC-SB-420-0.0/1.0-XXX**

Lab Sample ID: 360-24173-12
Client Matrix: Solid % Moisture: 3.7

Date Sampled: 08/18/2009 1555
Date Received: 08/19/2009 1700

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48213		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-47986		Lab File ID:	B9898.D
Dilution:	1.0			Initial Weight/Volume:	30.55 g
Date Analyzed:	08/28/2009 1839			Final Weight/Volume:	1.0 mL
Date Prepared:	08/20/2009 1253			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 6

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
110-86-1	Pyridine	5.99	4.5	J *
3744-2-3	4-Penten-2-one, 4-methyl-	6.19	57	T J N
141-79-7	3-Penten-2-one, 4-methyl-	6.66	69	T J N
98-55-5	Alpha-Terpineol	9.78	100	
	Unknown	17.05	1200	T J
1000126-34-1	1,1"-Biphenyl, 5,2",3",4"-tetramethoxy-3	21.46	9.4	T J N

Client: Olin Corporation

Job Number: 360-24173-1
Sdg Number: OCRI-01

Client Sample ID: **OC-SB-420-0.0/1.0-XXX**

Lab Sample ID: 360-24173-12
Client Matrix: Solid % Moisture: 3.7

Date Sampled: 08/18/2009 1555
Date Received: 08/19/2009 1700

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48702		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-47986		Lab File ID:	B10129.D
Dilution:	1.0			Initial Weight/Volume:	30.55 g
Date Analyzed:	09/08/2009 1716			Final Weight/Volume:	1.0 mL
Date Prepared:	08/20/2009 1253			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Diphenylamine		410		2.0	34

Client: Olin Corporation

Job Number: 360-24173-1
Sdg Number: OCRI-01

Client Sample ID: **OC-SB-420-0.0/1.0-XXX**

Lab Sample ID: 360-24173-12
Client Matrix: Solid % Moisture: 3.7

Date Sampled: 08/18/2009 1555
Date Received: 08/19/2009 1700

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48750		Instrument ID:	NOEQUIP
Preparation:	3546	Prep Batch: 360-47986		Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	30.55 g
Date Analyzed:	09/08/2009 1716			Final Weight/Volume:	1.0 mL
Date Prepared:	08/20/2009 1253			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodiphenylamine		44	EQ	10	34

Client: Olin Corporation

Job Number: 360-24173-1
Sdg Number: OCRI-01

Client Sample ID: **OC-SB-420-0.0/1.0-XXX**

Lab Sample ID: 360-24173-12
Client Matrix: Solid % Moisture: 3.7

Date Sampled: 08/18/2009 1555
Date Received: 08/19/2009 1700

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48389		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-47986		Lab File ID:	B9916.D
Dilution:	10			Initial Weight/Volume:	30.55 g
Date Analyzed:	08/31/2009 1826	Run Type: DL		Final Weight/Volume:	1.0 mL
Date Prepared:	08/20/2009 1253			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
2-Methylphenol		3100		200	340
3 & 4 Methylphenol		1500		100	340
Benzo[a]pyrene		ND		100	340
Benzo[b]fluoranthene		ND		100	340
Benzo[g,h,i]perylene		ND		100	340
Benzo[k]fluoranthene		ND		100	340
Bis(2-ethylhexyl) phthalate		1500 EB		100	340
Dibenz(a,h)anthracene		ND		100	340
Di-n-octyl phthalate		ND		170	340
Indeno[1,2,3-cd]pyrene		ND		100	340
Diphenyl oxide		540 J		100	340

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	0	X	30 - 130
Nitrobenzene-d5	64		30 - 130
Phenol-d5	46		30 - 130
2-Fluorophenol	9	X	30 - 130
2-Fluorobiphenyl	69		30 - 130
Terphenyl-d14	57		30 - 130

1/19/10

Client: Olin Corporation

Job Number: 360-24173-1
Sdg Number: OCRI-01

Client Sample ID: **OC-SB-420-0.0/1.0-XXX**

Lab Sample ID: 360-24173-12
Client Matrix: Solid % Moisture: 3.7

Date Sampled: 08/18/2009 1555
Date Received: 08/19/2009 1700

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48389		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-47986		Lab File ID:	B9935.D
Dilution:	100			Initial Weight/Volume:	30.55 g
Date Analyzed:	09/01/2009 0513	Run Type: DL2		Final Weight/Volume:	1.0 mL
Date Prepared:	08/20/2009 1253			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Phenol		32000 J		1000	3400

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	0	D X	30 - 130
Nitrobenzene-d5	0	D X	30 - 130
Phenol-d5	0	D X	30 - 130
2-Fluorophenol	0	D X	30 - 130
2-Fluorobiphenyl	0	D X	30 - 130
Terphenyl-d14	0	D X	30 - 130

11/4/10

Client: Olin Corporation

Job Number: 360-24173-1
Sdg Number: OCRI-01

Client Sample ID: **OC-SB-420-0.0/1.0-XXX**

Lab Sample ID: 360-24173-12
Client Matrix: Solid % Moisture: 3.7

Date Sampled: 08/18/2009 1555
Date Received: 08/19/2009 1700

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48454		Instrument ID:	Inst. J
Preparation:	3550B	Prep Batch: 360-48297		Lab File ID:	J02797.D
Dilution:	1.0			Initial Weight/Volume:	100.50 g
Date Analyzed:	09/01/2009 2325			Final Weight/Volume:	1.0 mL
Date Prepared:	08/27/2009 1643			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodimethylamine		ND		1.2	5.2

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	1	X	30 - 130
2-Fluorobiphenyl	69		30 - 130
2-Fluorophenol	0	X	30 - 130
Nitrobenzene-d5	166	X	30 - 130
Phenol-d5	0	X	30 - 130
Terphenyl-d14	92		30 - 130

9/19/10

Client: Olin Corporation

Job Number: 360-24173-2
Sdg Number: OCRI-01A

Client Sample ID: **OC-SB-420-12/14-XXX**

Lab Sample ID: 360-24173-13
Client Matrix: Solid

% Moisture: 6.8

Date Sampled: 08/18/2009 1625
Date Received: 08/19/2009 1700

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48213		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-47986		Lab File ID:	B9899.D
Dilution:	1.0			Initial Weight/Volume:	30.02 g
Date Analyzed:	08/28/2009 1913			Final Weight/Volume:	1.0 mL
Date Prepared:	08/20/2009 1253			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND	J	11	36
1,2,4,5-Tetrachlorobenzene		ND		2.4	36
1,2,4-Trichlorobenzene		ND		6.9	36
1,2-Dichlorobenzene		ND		3.9	36
1,3-Dichlorobenzene		ND		10	36
1,4-Dichlorobenzene		ND		6.4	36
1-Methylnaphthalene		ND	J	2.1	36
2,2'-oxybis[1-chloropropane]		ND		3.6	36
2,3,4,6-Tetrachlorophenol		ND	J	2.1	36
2,4,5-Trichlorophenol		ND		4.0	36
2,4,6-Trichlorophenol		ND		7.5	36
2,4-Dichlorophenol		ND		6.9	36
2,4-Dimethylphenol		ND	J	6.2	36
2,4-Dinitrophenol		ND	J	5.2	36
2,4-Dinitrotoluene		ND		5.0	36
2,6-Dinitrotoluene		ND		4.5	36
2-Chloronaphthalene		ND		5.5	36
2-Chlorophenol		ND		3.5	36
2-Methylnaphthalene		ND		27	36
2-Methylphenol		ND		5.1	36
2-Nitroaniline		ND		23	180
2-Nitrophenol		ND		4.1	36
3 & 4 Methylphenol		ND		6.8	36
3,3'-Dichlorobenzidine		ND		26	72
3-Nitroaniline		ND		10	180
4,6-Dinitro-2-methylphenol		ND	J	9.1	180
4-Bromophenyl phenyl ether		ND		7.4	36
4-Chloro-3-methylphenol		ND		9.9	72
4-Chloroaniline		ND		14	72
4-Chlorophenyl phenyl ether		ND		5.7	36
4-Nitroaniline		ND		9.5	180
4-Nitrophenol		ND		7.0	180
Acenaphthene		ND		5.2	36
Acenaphthylene		ND		6.3	36
Acetophenone		ND		3.9	36
Aniline		ND	J	19	36
Anthracene		ND		11	36
Atrazine		ND	J	11	36
Azobenzene		ND		4.4	36
Benzaldehyde		ND		11	36
Benzo[a]anthracene		ND		6.9	36
Benzo[a]pyrene		ND		6.5	36
Benzo[b]fluoranthene		ND		8.2	36
Benzo[g,h,i]perylene		ND		6.9	36
Benzo[k]fluoranthene		ND		9.9	36
Benzoic acid		ND	J	15	180

Client: Olin Corporation

Job Number: 360-24173-2
Sdg Number: OCRI-01A

Client Sample ID: **OC-SB-420-12/14-XXX**

Lab Sample ID: 360-24173-13
Client Matrix: Solid
% Moisture: 6.8

Date Sampled: 08/18/2009 1625
Date Received: 08/19/2009 1700

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48213		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-47986		Lab File ID:	B9899.D
Dilution:	1.0			Initial Weight/Volume:	30.02 g
Date Analyzed:	08/28/2009 1913			Final Weight/Volume:	1.0 mL
Date Prepared:	08/20/2009 1253			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		2.1	36
Benzyl alcohol		ND		8.2	72
Bis(2-chloroethoxy)methane		ND		6.4	36
Bis(2-chloroethyl)ether		ND		8.7	36
Bis(2-ethylhexyl) phthalate		74		11	36
Butyl benzyl phthalate		ND		7.8	36
Caprolactam		ND		11	36
Carbazole		ND		36	36
Chrysene		ND		7.7	36
Dibenz(a,h)anthracene		ND		7.2	36
Dibenzofuran		ND		21	36
Diethyl phthalate		ND		5.0	36
Dimethyl phthalate		ND		5.3	36
Di-n-butyl phthalate		13	J B	11	36
Di-n-octyl phthalate		ND		10	36
Diphenyl oxide		19	J	11	36
Fluoranthene		ND		23	36
Fluorene		ND		14	36
Hexachlorobenzene		ND		8.5	36
Hexachlorobutadiene		ND		7.1	36
Hexachlorocyclopentadiene		ND		9.8	72
Hexachloroethane		ND		6.8	36
Indeno[1,2,3-cd]pyrene		ND		11	36
Isophorone		ND		7.7	36
Naphthalene		ND		79	86
Nitrobenzene		ND		4.9	36
N-Nitrosodimethylamine		ND		4.1	36
N-Nitrosodi-n-propylamine		ND		4.0	36
N-Nitrosodiphenylamine		13	J	7.2	36
Pentachlorophenol		ND		7.4	36
Phenanthrene		ND		41	43
Phenol		23	J	4.5	36
Pyrene		ND		9.5	36

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	73		30 - 130
2-Fluorobiphenyl	72		30 - 130
2-Fluorophenol	94		30 - 130
Nitrobenzene-d5	64		30 - 130
Phenol-d5	94		30 - 130
Terphenyl-d14	80		30 - 130

Client: Olin Corporation

Job Number: 360-24173-2
Sdg Number: OCRI-01A

Client Sample ID: **OC-SB-420-12/14-XXX**

Lab Sample ID: 360-24173-13
Client Matrix: Solid % Moisture: 6.8

Date Sampled: 08/18/2009 1625
Date Received: 08/19/2009 1700

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48213		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-47986		Lab File ID:	B9899.D
Dilution:	1.0			Initial Weight/Volume:	30.02 g
Date Analyzed:	08/28/2009 1913			Final Weight/Volume:	1.0 mL
Date Prepared:	08/20/2009 1253			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 5

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Unknown	7.17	2000	T J
289-16-7	1,2,4-Trithiolane	9.26	190	T J N
	Unknown	10.86	46	T J
292-46-6	Lenthionine	12.08	110	T J N
26603-23-6	p,p''-Dioctyldiphenylamine	19.37	640	T J N

Client: Olin Corporation

Job Number: 360-24173-1
Sdg Number: OCRI-01

Client Sample ID: **OC-SB-420-6.5/8.5-XXX**

Lab Sample ID: 360-24173-14
Client Matrix: Solid % Moisture: 7.7

Date Sampled: 08/18/2009 1610
Date Received: 08/19/2009 1700

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48213		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-47986		Lab File ID:	B9900.D
Dilution:	1.0			Initial Weight/Volume:	30.83 g
Date Analyzed:	08/28/2009 1947			Final Weight/Volume:	1.0 mL
Date Prepared:	08/20/2009 1253			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		71 J	✓	11	35
1,2,4,5-Tetrachlorobenzene		ND		11	35
1,2,4-Trichlorobenzene		ND		11	35
1,2-Dichlorobenzene		ND		11	35
1,3-Dichlorobenzene		ND		11	35
1,4-Dichlorobenzene		ND		11	35
2,3,4,6-Tetrachlorophenol		ND J	✓	11	35
2,4,5-Trichlorophenol		ND		11	35
2,4,6-Trichlorophenol		ND		11	35
2,4-Dichlorophenol		ND		11	35
2,4-Dimethylphenol		ND J		14	35
2,4-Dinitrophenol		ND J		11	35
2,6-Dinitrotoluene		ND		11	35
2,4-Dinitrotoluene		ND		11	35
2-Chloronaphthalene		ND		11	35
2-Chlorophenol		ND		11	35
2-Methylnaphthalene		ND		11	35
2-Methylphenol		ND		21	35
2-Nitroaniline		ND		11	180
2-Nitrophenol		ND		11	35
3,3'-Dichlorobenzidine		ND		11	70
3 & 4 Methylphenol		ND		11	35
3-Nitroaniline		ND		11	180
4,6-Dinitro-2-methylphenol		ND J		11	180
4-Bromophenyl phenyl ether		ND		11	35
4-Chloro-3-methylphenol		ND		11	70
4-Chloroaniline		ND		11	70
4-Chlorophenyl phenyl ether		ND		11	35
4-Nitroaniline		ND		11	180
4-Nitrophenol		ND		11	180
Acenaphthene		ND		11	35
Acenaphthylene		ND		11	35
Acetophenone		ND		11	35
Aniline		ND J	✓	11	35
Anthracene		ND		11	35
Atrazine		ND J	✓	11	35
Azobenzene		ND		11	35
Benzaldehyde		ND		11	35
Benzo[a]anthracene		ND		11	35
Benzo[a]pyrene		ND		11	35
Benzo[b]fluoranthene		ND		11	35
Benzo[g,h,i]perylene		ND		11	35
Benzo[k]fluoranthene		ND		11	35
Benzoic acid		ND		16	180
2,2'-oxybis[1-chloropropane]		ND		11	35
Benzyl alcohol		ND J		30	70

Client: Olin Corporation

Job Number: 360-24173-1
Sdg Number: OCRI-01

Client Sample ID: **OC-SB-420-6.5/8.5-XXX**

Lab Sample ID: 360-24173-14
Client Matrix: Solid
% Moisture: 7.7

Date Sampled: 08/18/2009 1610
Date Received: 08/19/2009 1700

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48213		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-47986		Lab File ID:	B9900.D
Dilution:	1.0			Initial Weight/Volume:	30.83 g
Date Analyzed:	08/28/2009 1947			Final Weight/Volume:	1.0 mL
Date Prepared:	08/20/2009 1253			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Bis(2-chloroethoxy)methane		ND		11	35
Bis(2-chloroethyl)ether		ND		11	35
Butyl benzyl phthalate		ND		11	35
Caprolactam		ND J	~~J~~	11	35
Carbazole		ND		11	35
Chrysene		ND		11	35
Dibenz(a,h)anthracene		ND		11	35
Dibenzofuran		ND		11	35
Diethyl phthalate		ND		11	35
Dimethyl phthalate		ND		11	35
Di-n-butyl phthalate		110 U	~~B~~	31	35
Di-n-octyl phthalate		ND		18	35
Fluoranthene		ND		11	35
Fluorene		ND		11	35
Hexachlorobenzene		ND		11	35
Hexachlorobutadiene		ND		11	35
Hexachlorocyclopentadiene		ND		11	70
Hexachloroethane		ND		11	35
Indeno[1,2,3-cd]pyrene		ND		11	35
Isophorone		ND		11	35
Naphthalene		ND		11	84
Nitrobenzene		ND		11	35
N-Nitrosodimethylamine		ND		12	35
N-Nitrosodi-n-propylamine		ND		11	35
N-Nitrosodiphenylamine		57		11	35
Pentachlorophenol		ND		11	35
Phenanthrene		ND		11	42
Phenol		78		11	35
Pyrene		ND		11	35
1-Methylnaphthalene		ND J	~~J~~	11	35
Benzophenone		ND J	~~J~~	11	35

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	62		30 - 130
Nitrobenzene-d5	64		30 - 130
Phenol-d5	84		30 - 130
2-Fluorophenol	94		30 - 130
2-Fluorobiphenyl	70		30 - 130
Terphenyl-d14	73		30 - 130

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Client: Olin Corporation

Job Number: 360-24173-1
Sdg Number: OCRI-01

Client Sample ID: **OC-SB-420-6.5/8.5-XXX**

Lab Sample ID: 360-24173-14
Client Matrix: Solid % Moisture: 7.7

Date Sampled: 08/18/2009 1610
Date Received: 08/19/2009 1700

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48213		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-47986		Lab File ID:	B9900.D
Dilution:	1.0			Initial Weight/Volume:	30.83 g
Date Analyzed:	08/28/2009 1947			Final Weight/Volume:	1.0 mL
Date Prepared:	08/20/2009 1253			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 9

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Unknown	7.16	980	T J
141-70-8	Heptane, 2,2,6,6-tetramethyl-4-methylene	8.42	270	T J N
123-48-8	3-Heptene, 2,2,4,6,6-pentamethyl-	8.48	450	T J N
54411-2-8	Cyclohexane, 1-methyl-3-pentyl-	8.71	260	T J N
	Unknown	10.34	240	T J
	Unknown	10.37	1000	T J
	Unknown	10.39	560	T J
	Unknown	17.04	240	T J
74298-93-4	1,1"-Biphenyl, 2,3",4,5"-tetrachloro-4"-	17.51	96	T J N

Client: Olin Corporation

Job Number: 360-24173-1
Sdg Number: OCRI-01

Client Sample ID: **OC-SB-420-6.5/8.5-XXX**

Lab Sample ID: 360-24173-14
Client Matrix: Solid
% Moisture: 7.7

Date Sampled: 08/18/2009 1610
Date Received: 08/19/2009 1700

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48702		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-47986		Lab File ID:	B10130.D
Dilution:	1.0			Initial Weight/Volume:	30.83 g
Date Analyzed:	09/08/2009 1750	Run Type: DL3		Final Weight/Volume:	1.0 mL
Date Prepared:	08/20/2009 1253			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Diphenylamine		38		2.1	35

Client: Olin Corporation

Job Number: 360-24173-1
Sdg Number: OCRI-01

Client Sample ID: **OC-SB-420-6.5/8.5-XXX**

Lab Sample ID: 360-24173-14
Client Matrix: Solid % Moisture: 7.7

Date Sampled: 08/18/2009 1610
Date Received: 08/19/2009 1700

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48750		Instrument ID:	NOEQUIP
Preparation:	3546	Prep Batch: 360-47986		Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	30.83 g
Date Analyzed:	09/08/2009 1750			Final Weight/Volume:	1.0 mL
Date Prepared:	08/20/2009 1253			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodiphenylamine		18	J03	11	35

Client: Olin Corporation

Job Number: 360-24173-1
Sdg Number: OCRI-01

Client Sample ID: **OC-SB-420-6.5/8.5-XXX**

Lab Sample ID: 360-24173-14
Client Matrix: Solid % Moisture: 7.7

Date Sampled: 08/18/2009 1610
Date Received: 08/19/2009 1700

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48389		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-47986		Lab File ID:	B9918.D
Dilution:	10			Initial Weight/Volume:	30.83 g
Date Analyzed:	08/31/2009 1934	Run Type: DL		Final Weight/Volume:	1.0 mL
Date Prepared:	08/20/2009 1253			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Diphenyl oxide		3100 J		110	350

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	0	X	30 - 130
Nitrobenzene-d5	70		30 - 130
Phenol-d5	78		30 - 130
2-Fluorophenol	83		30 - 130
2-Fluorobiphenyl	74		30 - 130
Terphenyl-d14	64		30 - 130

Client: Olin Corporation

Job Number: 360-24173-1
Sdg Number: OCRI-01

Client Sample ID: **OC-SB-420-6.5/8.5-XXX**

Lab Sample ID: 360-24173-14
Client Matrix: Solid % Moisture: 7.7

Date Sampled: 08/18/2009 1610
Date Received: 08/19/2009 1700

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48389		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-47986		Lab File ID:	B9936.D
Dilution:	50			Initial Weight/Volume:	30.83 g
Date Analyzed:	09/01/2009 0547	Run Type: DL2		Final Weight/Volume:	1.0 mL
Date Prepared:	08/20/2009 1253			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Bis(2-ethylhexyl) phthalate		28000 EB		530	1800

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	0	D X	30 - 130
Nitrobenzene-d5	0	D X	30 - 130
Phenol-d5	0	D X	30 - 130
2-Fluorophenol	0	D X	30 - 130
2-Fluorobiphenyl	0	D X	30 - 130
Terphenyl-d14	0	D X	30 - 130

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Client: Olin Corporation

Job Number: 360-24173-1
Sdg Number: OCRI-01

Client Sample ID: **OC-SB-420-6.5/8.5-XXX**

Lab Sample ID: 360-24173-14
Client Matrix: Solid
% Moisture: 7.7

Date Sampled: 08/18/2009 1610
Date Received: 08/19/2009 1700

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48454		Instrument ID:	Inst. J
Preparation:	3550B	Prep Batch: 360-48297		Lab File ID:	J02799.D
Dilution:	1.0			Initial Weight/Volume:	100.49 g
Date Analyzed:	09/02/2009 0024			Final Weight/Volume:	1.0 mL
Date Prepared:	08/27/2009 1643			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodimethylamine		ND		1.3	5.4

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	75		30 - 130
2-Fluorobiphenyl	70		30 - 130
2-Fluorophenol	71		30 - 130
Nitrobenzene-d5	81		30 - 130
Phenol-d5	76		30 - 130
Terphenyl-d14	285	X	30 - 130

Client: Olin Corporation

Job Number: 360-24173-1
Sdg Number: OCRI-01

Client Sample ID: **OC-SB-423-0.0/1.0-XXX**

Lab Sample ID: 360-24173-15
Client Matrix: Solid % Moisture: 4.9

Date Sampled: 08/18/2009 1420
Date Received: 08/19/2009 1700

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48213		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-47986		Lab File ID:	B9901.D
Dilution:	1.0			Initial Weight/Volume:	30.16 g
Date Analyzed:	08/28/2009 2021			Final Weight/Volume:	1.0 mL
Date Prepared:	08/20/2009 1253			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND	J	10	35
1,2,4,5-Tetrachlorobenzene		ND		10	35
1,2,4-Trichlorobenzene		ND		10	35
1,2-Dichlorobenzene		ND		10	35
1,3-Dichlorobenzene		ND		10	35
1,4-Dichlorobenzene		ND		10	35
2,3,4,6-Tetrachlorophenol		ND	J	10	35
2,4,5-Trichlorophenol		ND		10	35
2,4,6-Trichlorophenol		ND		10	35
2,4-Dichlorophenol		ND		10	35
2,4-Dimethylphenol		ND	J	14	35
2,4-Dinitrophenol		ND	J	10	35
2,6-Dinitrotoluene		ND		10	35
2,4-Dinitrotoluene		ND		10	35
2-Chloronaphthalene		ND		10	35
2-Chlorophenol		ND		10	35
2-Methylnaphthalene		ND		10	35
2-Methylphenol		ND		21	35
2-Nitroaniline		ND		10	170
2-Nitrophenol		ND		10	35
3,3'-Dichlorobenzidine		ND		10	70
3 & 4 Methylphenol		ND		10	35
3-Nitroaniline		ND		10	170
4,6-Dinitro-2-methylphenol		ND	J	10	170
4-Bromophenyl phenyl ether		ND		10	35
4-Chloro-3-methylphenol		ND		10	70
4-Chloroaniline		ND		10	70
4-Chlorophenyl phenyl ether		ND		10	35
4-Nitroaniline		ND		10	170
4-Nitrophenol		ND		10	170
Acenaphthene		ND		10	35
Acenaphthylene		ND		10	35
Acetophenone		ND		10	35
Aniline		ND	J	10	35
Anthracene		ND		10	35
Atrazine		ND	J	10	35
Azobenzene		ND		10	35
Benzaldehyde		ND		10	35
Benzo[a]anthracene		ND		10	35
Benzo[a]pyrene		ND		10	35
Benzo[b]fluoranthene		ND		10	35
Benzo[g,h,i]perylene		ND		10	35
Benzo[k]fluoranthene		ND		10	35
Benzoic acid		ND	J	16	170
2,2'-oxybis[1-chloropropane]		ND		10	35
Benzyl alcohol		ND		30	70

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Client: Olin Corporation

Job Number: 360-24173-1
Sdg Number: OCRI-01

Client Sample ID: **OC-SB-423-0.0/1.0-XXX**

Lab Sample ID: 360-24173-15
Client Matrix: Solid
% Moisture: 4.9

Date Sampled: 08/18/2009 1420
Date Received: 08/19/2009 1700

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48213		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-47986		Lab File ID:	B9901.D
Dilution:	1.0			Initial Weight/Volume:	30.16 g
Date Analyzed:	08/28/2009 2021			Final Weight/Volume:	1.0 mL
Date Prepared:	08/20/2009 1253			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Bis(2-chloroethoxy)methane		ND		10	35
Bis(2-chloroethyl)ether		ND		10	35
Butyl benzyl phthalate		ND		10	35
Caprolactam		ND		10	35
Carbazole		ND		10	35
Chrysene		ND		10	35
Dibenz(a,h)anthracene		ND		10	35
Dibenzofuran		ND		10	35
Diethyl phthalate		ND		10	35
Dimethyl phthalate		ND		10	35
Di-n-butyl phthalate		ND		31	35
Di-n-octyl phthalate		ND		18	35
Fluoranthene		ND		10	35
Fluorene		ND		10	35
Hexachlorobenzene		ND		10	35
Hexachlorobutadiene		ND		10	35
Hexachlorocyclopentadiene		ND		10	70
Hexachloroethane		ND		10	35
Indeno[1,2,3-cd]pyrene		ND		10	35
Isophorone		ND		10	35
Naphthalene		ND		10	84
Nitrobenzene		ND		10	35
N-Nitrosodimethylamine		ND		12	35
N-Nitrosodi-n-propylamine		ND		10	35
N-Nitrosodiphenylamine		ND		10	35
Pentachlorophenol		ND		10	35
Phenanthrene		ND		10	42
Phenol		ND		10	35
Pyrene		ND		10	35
1-Methylnaphthalene		ND		10	35
Benzophenone		ND		10	35
Diphenyl oxide		18	J	10	35

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	72		30 - 130
Nitrobenzene-d5	63		30 - 130
Phenol-d5	86		30 - 130
2-Fluorophenol	87		30 - 130
2-Fluorobiphenyl	67		30 - 130
Terphenyl-d14	77		30 - 130

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Client: Olin Corporation

Job Number: 360-24173-1
Sdg Number: OCRI-01

Client Sample ID: **OC-SB-423-0.0/1.0-XXX**

Lab Sample ID: 360-24173-15
Client Matrix: Solid % Moisture: 4.9

Date Sampled: 08/18/2009 1420
Date Received: 08/19/2009 1700

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48213		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-47986		Lab File ID:	B9901.D
Dilution:	1.0			Initial Weight/Volume:	30.16 g
Date Analyzed:	08/28/2009 2021			Final Weight/Volume:	1.0 mL
Date Prepared:	08/20/2009 1253			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** **10**

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Unknown	7.15	1700	T J
	Unknown	10.31	1700	T J
	Unknown	10.34	400	T J
	Unknown	10.37	1500	T J
	Unknown	10.42	1000	T J
	Unknown	10.54	84	T J
	Unknown	11.04	140	T J
	Unknown	11.19	97	T J
	Unknown	11.57	130	T J
1000194-63-7	2,2,4a,6a,8a,9,12b,14a-Octamethyl-1,2,3,	23.34	8.6	T J N

Client: Olin Corporation

Job Number: 360-24173-1
Sdg Number: OCRI-01

Client Sample ID: **OC-SB-423-0.0/1.0-XXX**

Lab Sample ID: 360-24173-15
Client Matrix: Solid
% Moisture: 4.9

Date Sampled: 08/18/2009 1420
Date Received: 08/19/2009 1700

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48389		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-47986		Lab File ID:	B9919.D
Dilution:	2.0			Initial Weight/Volume:	30.16 g
Date Analyzed:	08/31/2009 2008	Run Type: DL		Final Weight/Volume:	1.0 mL
Date Prepared:	08/20/2009 1253			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Bis(2-ethylhexyl) phthalate		630		21	70

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	61		30 - 130
Nitrobenzene-d5	66		30 - 130
Phenol-d5	61		30 - 130
2-Fluorophenol	68		30 - 130
2-Fluorobiphenyl	70		30 - 130
Terphenyl-d14	65		30 - 130

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Client: Olin Corporation

Job Number: 360-24173-1
Sdg Number: OCRI-01

Client Sample ID: **OC-SB-423-0.0/1.0-XXX**

Lab Sample ID: 360-24173-15
Client Matrix: Solid % Moisture: 4.9

Date Sampled: 08/18/2009 1420
Date Received: 08/19/2009 1700

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48454		Instrument ID:	Inst. J
Preparation:	3550B	Prep Batch: 360-48297		Lab File ID:	J02800.D
Dilution:	1.0			Initial Weight/Volume:	100.41 g
Date Analyzed:	09/02/2009 0054			Final Weight/Volume:	1.0 mL
Date Prepared:	08/27/2009 1643			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodimethylamine		ND		1.2	5.2

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	79		30 - 130
2-Fluorobiphenyl	65		30 - 130
2-Fluorophenol	63		30 - 130
Nitrobenzene-d5	72		30 - 130
Phenol-d5	66		30 - 130
Terphenyl-d14	82		30 - 130

Client: Olin Corporation

Job Number: 360-24173-2
Sdg Number: OCRI-01A

Client Sample ID: **OC-SB-423-13/14-XXX**

Lab Sample ID: 360-24173-16
Client Matrix: Solid
% Moisture: 6.4

Date Sampled: 08/18/2009 1445
Date Received: 08/19/2009 1700

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48213		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-47986		Lab File ID:	B9902.D
Dilution:	1.0			Initial Weight/Volume:	30.21 g
Date Analyzed:	08/28/2009 2055			Final Weight/Volume:	1.0 mL
Date Prepared:	08/20/2009 1253			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND J	J	11	35
1,2,4,5-Tetrachlorobenzene		ND		2.4	35
1,2,4-Trichlorobenzene		ND		6.9	35
1,2-Dichlorobenzene		ND		3.8	35
1,3-Dichlorobenzene		ND		10	35
1,4-Dichlorobenzene		ND		6.4	35
1-Methylnaphthalene		ND J	J	2.1	35
2,2'-oxybis[1-chloropropane]		ND		3.6	35
2,3,4,6-Tetrachlorophenol		ND J	J	2.1	35
2,4,5-Trichlorophenol		ND		4.0	35
2,4,6-Trichlorophenol		ND		7.4	35
2,4-Dichlorophenol		ND		6.8	35
2,4-Dimethylphenol		ND J		6.2	35
2,4-Dinitrophenol		ND J		5.2	35
2,4-Dinitrotoluene		ND		5.0	35
2,6-Dinitrotoluene		ND		4.5	35
2-Chloronaphthalene		ND		5.4	35
2-Chlorophenol		ND		3.4	35
2-Methylnaphthalene		ND		27	35
2-Methylphenol		ND		5.0	35
2-Nitroaniline		ND		23	180
2-Nitrophenol		ND		4.1	35
3 & 4 Methylphenol		ND		6.7	35
3,3'-Dichlorobenzidine		ND		26	71
3-Nitroaniline		ND		10	180
4,6-Dinitro-2-methylphenol		ND J		9.0	180
4-Bromophenyl phenyl ether		ND		7.4	35
4-Chloro-3-methylphenol		ND		9.8	71
4-Chloroaniline		ND		14	71
4-Chlorophenyl phenyl ether		ND		5.6	35
4-Nitroaniline		ND		9.4	180
4-Nitrophenol		ND		6.9	180
Acenaphthene		ND		5.2	35
Acenaphthylene		ND		6.2	35
Acetophenone		5.4	J B	3.8	35
Aniline		ND J	J	18	35
Anthracene		ND J		11	35
Atrazine		ND		11	35
Azobenzene		ND		4.4	35
Benzaldehyde		ND		11	35
Benzo[a]anthracene		ND		6.8	35
Benzo[a]pyrene		ND		6.5	35
Benzo[b]fluoranthene		ND		8.1	35
Benzo[g,h,i]perylene		ND		6.9	35
Benzo[k]fluoranthene		ND		9.8	35
Benzoic acid		ND J		15	180

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Client: Olin Corporation

Job Number: 360-24173-2
Sdg Number: OCRI-01A

Client Sample ID: **OC-SB-423-13/14-XXX**

Lab Sample ID: 360-24173-16
Client Matrix: Solid % Moisture: 6.4

Date Sampled: 08/18/2009 1445
Date Received: 08/19/2009 1700

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48213		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-47986		Lab File ID:	B9902.D
Dilution:	1.0			Initial Weight/Volume:	30.21 g
Date Analyzed:	08/28/2009 2055			Final Weight/Volume:	1.0 mL
Date Prepared:	08/20/2009 1253			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND	J	2.1	35
Benzyl alcohol		ND		8.2	71
Bis(2-chloroethoxy)methane		ND		6.4	35
Bis(2-chloroethyl)ether		ND		8.6	35
Bis(2-ethylhexyl) phthalate		110	EQ3	11	35
Butyl benzyl phthalate		ND		7.7	35
Caprolactam		ND	J	11	35
Carbazole		ND		35	35
Chrysene		ND		7.6	35
Dibenz(a,h)anthracene		ND		7.1	35
Dibenzofuran		ND		20	35
Diethyl phthalate		ND		5.0	35
Dimethyl phthalate		ND		5.2	35
Di-n-butyl phthalate		ND		11	35
Di-n-octyl phthalate		ND		10	35
Diphenyl oxide		ND	J	11	35
Fluoranthene		ND		22	35
Fluorene		ND		14	35
Hexachlorobenzene		ND		8.4	35
Hexachlorobutadiene		ND		7.0	35
Hexachlorocyclopentadiene		ND		9.7	71
Hexachloroethane		ND		6.7	35
Indeno[1,2,3-cd]pyrene		ND		11	35
Isophorone		ND		7.6	35
Naphthalene		ND		78	85
Nitrobenzene		ND		4.8	35
N-Nitrosodimethylamine		ND		4.1	35
N-Nitrosodi-n-propylamine		ND		4.0	35
N-Nitrosodiphenylamine		ND		7.1	35
Pentachlorophenol		ND		7.3	35
Phenanthrene		ND		41	42
Phenol		ND		4.4	35
Pyrene		ND		9.4	35

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	72		30 - 130
2-Fluorobiphenyl	70		30 - 130
2-Fluorophenol	92		30 - 130
Nitrobenzene-d5	66		30 - 130
Phenol-d5	90		30 - 130
Terphenyl-d14	80		30 - 130

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Client: Olin Corporation

Job Number: 360-24173-2
Sdg Number: OCRI-01A

Client Sample ID: **OC-SB-423-13/14-XXX**

Lab Sample ID: 360-24173-16
Client Matrix: Solid % Moisture: 6.4

Date Sampled: 08/18/2009 1445
Date Received: 08/19/2009 1700

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48213		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-47986		Lab File ID:	B9902.D
Dilution:	1.0			Initial Weight/Volume:	30.21 g
Date Analyzed:	08/28/2009 2055			Final Weight/Volume:	1.0 mL
Date Prepared:	08/20/2009 1253			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 6

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Unknown	7.17	1900	T J
1120-21-4	Undecane	9.03	71	T J N
289-16-7	1,2,4-Trithiolane	9.26	650	T J N
112-40-3	Dodecane	9.59	49	T J N
291-22-5	1,2,4,5-Tetrathiane	10.87	330	T J N
292-46-6	Lenthionine	12.07	470	T J N

Client: Olin Corporation

Job Number: 360-24173-1
Sdg Number: OCRI-01

Client Sample ID: **OC-SB-423-5.0/6.0-XXX**

Lab Sample ID: 360-24173-17
Client Matrix: Solid % Moisture: 6.6

Date Sampled: 08/18/2009 1430
Date Received: 08/19/2009 1700

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48213		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-47986		Lab File ID:	B9903.D
Dilution:	1.0			Initial Weight/Volume:	30.37 g
Date Analyzed:	08/28/2009 2129			Final Weight/Volume:	1.0 mL
Date Prepared:	08/20/2009 1253			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		11	35
1,2,4,5-Tetrachlorobenzene		ND		11	35
1,2,4-Trichlorobenzene		ND		11	35
1,2-Dichlorobenzene		ND		11	35
1,3-Dichlorobenzene		ND		11	35
1,4-Dichlorobenzene		ND		11	35
2,3,4,6-Tetrachlorophenol		ND		11	35
2,4,5-Trichlorophenol		ND		11	35
2,4,6-Trichlorophenol		ND		11	35
2,4-Dichlorophenol		ND		11	35
2,4-Dimethylphenol		ND		14	35
2,4-Dinitrophenol		ND		11	35
2,6-Dinitrotoluene		ND		11	35
2,4-Dinitrotoluene		ND		11	35
2-Chloronaphthalene		ND		11	35
2-Chlorophenol		ND		11	35
2-Methylnaphthalene		ND		11	35
2-Methylphenol		ND		21	35
2-Nitroaniline		ND		11	180
2-Nitrophenol		ND		11	35
3,3'-Dichlorobenzidine		ND		11	71
3 & 4 Methylphenol		ND		11	35
3-Nitroaniline		ND		11	180
4,6-Dinitro-2-methylphenol		ND		11	180
4-Bromophenyl phenyl ether		ND		11	35
4-Chloro-3-methylphenol		ND		11	71
4-Chloroaniline		ND		11	71
4-Chlorophenyl phenyl ether		ND		11	35
4-Nitroaniline		ND		11	180
4-Nitrophenol		ND		11	180
Acenaphthene		ND		11	35
Acenaphthylene		ND		11	35
Acetophenone		ND		11	35
Aniline		ND		11	35
Anthracene		ND		11	35
Atrazine		ND		11	35
Azobenzene		ND		11	35
Benzaldehyde		ND		11	35
Benzo[a]anthracene		ND		11	35
Benzo[a]pyrene		ND		11	35
Benzo[b]fluoranthene		ND		11	35
Benzo[g,h,i]perylene		ND		11	35
Benzo[k]fluoranthene		ND		11	35
Benzoic acid		ND		16	180
2,2'-oxybis[1-chloropropane]		ND		11	35
Benzyl alcohol		ND		30	71

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Client: Olin Corporation

Job Number: 360-24173-1
Sdg Number: OCRI-01

Client Sample ID: OC-SB-423-5.0/6.0-XXX

Lab Sample ID: 360-24173-17
Client Matrix: Solid % Moisture: 6.6

Date Sampled: 08/18/2009 1430
Date Received: 08/19/2009 1700

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48213		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-47986		Lab File ID:	B9903.D
Dilution:	1.0			Initial Weight/Volume:	30.37 g
Date Analyzed:	08/28/2009 2129			Final Weight/Volume:	1.0 mL
Date Prepared:	08/20/2009 1253			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Bis(2-chloroethoxy)methane		ND		11	35
Bis(2-chloroethyl)ether		ND		11	35
Bis(2-ethylhexyl) phthalate		320 EB		11	35
Butyl benzyl phthalate		ND		11	35
Caprolactam		ND J		11	35
Carbazole		ND		11	35
Chrysene		ND		11	35
Dibenz(a,h)anthracene		ND		11	35
Dibenzofuran		ND		11	35
Diethyl phthalate		ND		11	35
Dimethyl phthalate		ND		11	35
Di-n-butyl phthalate		ND		31	35
Di-n-octyl phthalate		ND		18	35
Fluoranthene		ND		11	35
Fluorene		ND		11	35
Hexachlorobenzene		ND		11	35
Hexachlorobutadiene		ND		11	35
Hexachlorocyclopentadiene		ND		11	71
Hexachloroethane		ND		11	35
Indeno[1,2,3-cd]pyrene		ND		11	35
Isophorone		ND		11	35
Naphthalene		ND		11	85
Nitrobenzene		ND		11	35
N-Nitrosodimethylamine		ND		12	35
N-Nitrosodi-n-propylamine		ND		11	35
N-Nitrosodiphenylamine		11	J	11	35
Pentachlorophenol		ND		11	35
Phenanthrene		ND		11	42
Phenol		ND		11	35
Pyrene		ND		11	35
1-Methylnaphthalene		ND JJ		11	35
Benzophenone		ND J		11	35
Diphenyl oxide		ND J		11	35

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	52		30 - 130
Nitrobenzene-d5	63		30 - 130
Phenol-d5	90		30 - 130
2-Fluorophenol	89		30 - 130
2-Fluorobiphenyl	73		30 - 130
Terphenyl-d14	81		30 - 130

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Client: Olin Corporation

Job Number: 360-24173-1
Sdg Number: OCRI-01

Client Sample ID: **OC-SB-423-5.0/6.0-XXX**

Lab Sample ID: 360-24173-17
Client Matrix: Solid % Moisture: 6.6

Date Sampled: 08/18/2009 1430
Date Received: 08/19/2009 1700

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48213		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-47986		Lab File ID:	B9903.D
Dilution:	1.0			Initial Weight/Volume:	30.37 g
Date Analyzed:	08/28/2009 2129			Final Weight/Volume:	1.0 mL
Date Prepared:	08/20/2009 1253			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** **10**

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Unknown	7.17	1800	T J
	Unknown	10.31	1800	T J
	Unknown	10.34	400	T J
	Unknown	10.37	1300	T J
	Unknown	10.42	1200	T J
	Unknown	10.45	170	T J
122-39-4	Diphenylamine	11.75	11	J
	Unknown	16.94	520	T J
	Unknown	21.33	7.5	T J
	Unknown	22.31	69	T J

Client: Olin Corporation

Job Number: 360-24173-1
Sdg Number: OCRI-01

Client Sample ID: **OC-SB-423-5.0/6.0-XXX**

Lab Sample ID: 360-24173-17
Client Matrix: Solid
% Moisture: 6.6

Date Sampled: 08/18/2009 1430
Date Received: 08/19/2009 1700

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48454		Instrument ID:	Inst. J
Preparation:	3550B	Prep Batch: 360-48297		Lab File ID:	J02802.D
Dilution:	1.0			Initial Weight/Volume:	100.56 g
Date Analyzed:	09/02/2009 0154			Final Weight/Volume:	1.0 mL
Date Prepared:	08/27/2009 1643			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodimethylamine		ND		1.2	5.3

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	73		30 - 130
2-Fluorobiphenyl	65		30 - 130
2-Fluorophenol	66		30 - 130
Nitrobenzene-d5	72		30 - 130
Phenol-d5	71		30 - 130
Terphenyl-d14	93		30 - 130

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Westfield Job No.: 360-24194-1 Analy Batch No.: 48241

SDG No.: OCRI-02

Instrument ID: Inst. B GC Column: Rtx-5ms ID: 0.25(um) Heated Purge: (Y/N) N

Calibration Start Date: 08/27/2009 09:11 Calibration End Date: 08/27/2009 13:43 Calibration ID: 4134

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD01 360-48241/3	B9840.D
Level 2	STD025 360-48241/4	B9841.D
Level 3	STD05 360-48241/5	B9842.D
Level 4	STD1 360-48241/6	B9843.D
Level 5	STD25 360-48241/7	B9844.D
Level 6	STD5 360-48241/2	B9839.D
Level 7	STD8 360-48241/8	B9845.D
Level 8	STD10 360-48241/9	B9846.D
Level 9	STD20 360-48241/10	B9847.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
Pyridine	+++++ 0.5365	0.3253 0.4797	0.3197 0.4793	0.5601 0.5834	0.5385	Lin1	-0.066	0.5430							0.9910		0.9900
1,4-Dioxane	0.4176 0.2519	0.3162 0.2092	0.2992 0.2046	0.2888 0.2451	0.2707	Lin1	0.0241	0.2302							0.9910		0.9900
N-Nitrosodimethylamine	0.4159 0.3352	0.3799 0.2992	0.3914 0.2776	0.3790 0.3256	0.3714	Ave		0.3528				13.0		15.0			
Benzoic acid	+++++ 0.0192	+++++ 0.0751	0.0010 0.1297	0.0097 +++++	0.0127	Qua	0.0952	-0.112	0.0229						0.9910		0.9900
Benzaldehyde	0.8057 0.7431	0.7969 0.6817	0.8364 0.6418	0.8222 0.7344	0.8352	Ave		0.7664				9.2		15.0			
Phenol	0.8057 0.7431	0.7969 0.6817	0.8364 0.6418	0.8222 0.7344	0.8352	Ave		0.7664				9.2		15.0			
Aniline	0.9060 0.8545	0.8849 0.8051	0.8146 0.8125	0.8066 0.8399	0.9547	Ave		0.8532				6.1		15.0			
Bis(2-chloroethyl)ether	0.8654 0.7617	0.8854 0.6255	0.9371 0.5432	0.8420 0.7112	0.7968	Qua	0.3118	0.4979	0.0096						0.9900		0.9900
2-Chlorophenol	0.6614 0.6050	0.6231 0.5592	0.6311 0.5292	0.6502 0.6300	0.6704	Ave		0.6177				7.6		15.0			
1,4-Dichlorobenzene	0.9050 0.7232	0.9246 0.6394	0.8856 0.5926	0.8446 0.6897	0.8262	Lin1	0.0572	0.6676							0.9910		0.9900
1,3-Dichlorobenzene	0.9496 0.7541	0.9224 0.6610	0.9369 0.6171	0.8633 0.7104	0.8535	Lin1	0.0589	0.6906							0.9920		0.9900
2-Methylphenol	0.2922 0.3681	0.3066 0.3483	0.3461 0.3368	0.3729 0.4097	0.3967	Ave		0.3530				11.0		15.0			
Benzyl alcohol	0.4383 0.4586	0.3915 0.4285	0.4361 0.4118	0.4543 0.4940	0.4901	Ave		0.4448				7.6		15.0			

Note: The ml coefficient is the same as Ave RRF for an Ave curve type.

Calculations checked (CCC) 1/19/10

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Westfield Job No.: 360-24194-1 Analy Batch No.: 48241

SDG No.: OCRI-02

Instrument ID: Inst. B GC Column: Rtx-5ms ID: 0.25(um) Heated Purge: (Y/N) N

Calibration Start Date: 08/27/2009 09:11 Calibration End Date: 08/27/2009 13:43 Calibration ID: 4134

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
3 & 4 Methylphenol	0.5670 0.5586	0.5702 0.5108	0.6004 0.4888	0.6171 0.5688	0.6106	Ave		0.5658				7.6		15.0			
1,2-Dichlorobenzene	0.9057 0.6967	0.8455 0.6282	0.8439 0.5785	0.7956 0.6620	0.7924	Ave		0.7498				15.0		15.0			
2,4-Dinitrophenol	+++++ 0.0207	+++++ 0.0485	0.0014 0.0736	0.0087 0.0963	0.0156	Lin	-0.393	0.1134			0.0500				0.9810	*	0.9900
4-Nitrophenol	+++++ 0.1129	+++++ 0.1245	0.0528 0.1450	0.0698 0.1398	0.0915	Lin1	-0.062	0.1397			0.0500				0.9920		0.9900
2,2'-oxybis[1-chloropropane]	1.2659 1.0244	1.2616 0.9031	1.2448 0.8205	1.1762 0.8943	1.1662	Lin1	0.0910	0.9034							0.9900		0.9900
N-Nitrosodi-n-propylamine	0.3611 0.4186	0.3780 0.3785	0.4117 0.3612	0.4321 0.4243	0.4443	Ave		0.4011			0.0500	7.9		15.0			
Acetophenone	0.8534 0.8455	0.8594 0.7478	0.9309 0.6999	0.9378 0.7932	0.9351	Ave		0.8448				10.0		15.0			
Caprolactam	+++++ 0.1136	0.0499 0.1189	0.0584 0.1240	0.0774 0.1347	0.0976	Lin1	-0.032	0.1286							0.9940		0.9900
Hexachloroethane	0.2895 0.2584	0.2661 0.2347	0.2848 0.2216	0.2808 0.2681	0.2844	Ave		0.2654				8.9		15.0			
Nitrobenzene	0.2062 0.3157	0.2167 0.2931	0.2446 0.3011	0.2675 0.2876	0.2969	Ave		0.2699				14.0		15.0			
4,6-Dinitro-2-methylphenol	+++++ 0.0312	+++++ 0.0580	0.0085 0.0868	0.0137 +++++	0.0209	Lin	-0.368	0.1194							0.9860	*	0.9900
Isophorone	0.4051 0.5649	0.4137 0.5390	0.4492 0.5376	0.5013 0.4989	0.5433	Ave		0.4948				12.0		15.0			
2,4-Dimethylphenol	0.2166 0.2567	0.2117 0.2373	0.2238 0.2426	0.2346 0.2356	0.2410	Ave		0.2333				6.0		15.0			
2-Nitrophenol	0.0555 0.1288	0.0512 0.1347	0.0626 0.1457	0.0932 0.1537	0.1115	Lin1	-0.021	0.1449							0.9910		0.9900
Bis(2-chloroethoxy)methane	0.3424 0.3573	0.3450 0.3372	0.3403 0.3392	0.3426 0.3178	0.3596	Ave		0.3424				3.5		15.0			
2,4-Dichlorophenol	0.1549 0.2333	0.1662 0.2263	0.1790 0.2359	0.2001 0.2360	0.2225	Lin2	-0.008	0.2225							0.9930		0.9900
Pentachlorophenol	+++++ 0.0739	+++++ 0.0956	0.0210 0.1069	0.0409 0.1210	0.0614	Lin	-0.148	0.1248							0.9910		0.9900
1,2,4-Trichlorobenzene	0.3057 0.2871	0.2968 0.2702	0.3001 0.2704	0.2818 0.2642	0.2907	Ave		0.2852				5.1		15.0			
Alpha-Terpineol	0.1964 0.2488	0.2101 0.2445	0.2099 0.2455	0.2202 0.2351	0.2481	Ave		0.2287				8.7		15.0			
Naphthalene	1.1053 0.9932	1.0485 0.9075	1.0448 0.8735	0.9980 0.6842	1.0208	Ave		0.9640				13.0		15.0			

Note: The ml coefficient is the same as Ave RRF for an Ave curve type.

1/19/10

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Westfield Job No.: 360-24194-1 Analy Batch No.: 48241

SDG No.: OCRI-02

Instrument ID: Inst. B GC Column: Rtx-5ms ID: 0.25(um) Heated Purge: (Y/N) N

Calibration Start Date: 08/27/2009 09:11 Calibration End Date: 08/27/2009 13:43 Calibration ID: 4134

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
4-Chloroaniline	0.4087 0.4621	0.4396 0.4369	0.4328 0.4710	0.4222 0.4455	0.4628	Ave		0.4424				4.6		15.0			
Hexachlorobutadiene	0.1448 0.1411	0.1462 0.1358	0.1436 0.1368	0.1395 0.1363	0.1440	Ave		0.1409				2.8		15.0			
4-Chloro-3-methylphenol	0.1380 0.2382	0.1586 0.2337	0.1804 0.2457	0.2011 0.2387	0.2260	Lin2	-0.011	0.2279							0.9920		0.9900
2-Methylnaphthalene	0.6118 0.5966	0.5929 0.5505	0.5862 0.5522	0.5852 0.4809	0.5956	Ave		0.5724				7.0		15.0			
1-Methylnaphthalene	0.6246 0.6126	0.6308 0.5643	0.6088 0.5640	0.6039 0.4929	0.6042	Ave		0.5896				7.3		15.0			
Hexachlorocyclopentadiene	0.0622 0.1610	0.0723 0.1757	0.1040 0.2086	0.1315 0.2083	0.1370	Lin	-0.105	0.2102			0.0500				0.9950		0.9900
1,2,4,5-Tetrachlorobenzene	0.2753 0.2541	0.2603 0.2370	0.2544 0.2444	0.2477 0.2407	0.2506	Ave		0.2516				4.6		15.0			
2,4,6-Trichlorophenol	0.1910 0.3139	0.2160 0.3243	0.2244 0.3392	0.2667 0.3501	0.2995	Lin1	-0.029	0.3383							0.9970		0.9900
2,4,5-Trichlorophenol	0.1834 0.3283	0.2005 0.3435	0.2558 0.3502	0.2793 0.3668	0.3106	Lin1	-0.032	0.3541							0.9970		0.9900
1,1'-Biphenyl	1.5708 1.5180	1.5579 1.4625	1.5345 1.4006	1.5193 1.1885	1.5607	Ave		1.4792				8.2		15.0			
2-Chloronaphthalene	1.3702 1.3875	1.3195 1.4088	1.3973 1.3079	1.3627 1.2216	1.4905	Ave		1.3629				5.5		15.0			
Phenyl ether	0.4322 0.4085	0.4071 0.3845	0.4063 0.3887	0.4015 0.3450	0.4008	Ave		0.3972				6.0		15.0			
2-Nitroaniline	0.1272 0.2908	0.1120 0.3018	0.1256 0.3152	0.1756 0.3189	0.2322	Lin1	-0.044	0.3095							0.9920		0.9900
Dimethyl phthalate	1.0929 1.2260	1.0764 1.2346	1.1360 1.2291	1.2230 1.1179	1.2396	Ave		1.1751				5.8		15.0			
Pentachloronitrobenzene	+++++ 0.0750	0.0314 0.0743	0.0394 0.0775	0.0533 0.0817	0.0643	Lin1	-0.018	0.0796							0.9970		0.9900
2,6-Dinitrotoluene	0.0889 0.2857	0.1134 0.2826	0.1441 0.2963	0.2094 0.3039	0.2533	Lin1	-0.039	0.2963							0.9970		0.9900
Acenaphthylene	1.4772 1.8295	1.5155 1.7378	1.6935 1.6822	1.7480 1.3656	1.8193	Ave		1.6521				9.8		15.0			
3-Nitroaniline	0.1032 0.2370	0.1159 0.2480	0.1451 0.2799	0.1917 0.2895	0.2262	Lin1	-0.035	0.2733							0.9920		0.9900
Acenaphthene	1.3058 1.2203	1.2529 1.1737	1.2252 1.1466	1.2258 1.0179	1.2268	Ave		1.1994				6.8		15.0			
2,4-Dinitrotoluene	0.0916 0.3348	0.1063 0.3376	0.1313 0.3655	0.2068 0.3764	0.2627	Lin1	-0.057	0.3599							0.9910		0.9900

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

* Checked 1/12/10

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Westfield Job No.: 360-24194-1 Analy Batch No.: 48241

SDG No.: OCRI-02

Instrument ID: Inst. B GC Column: Rtx-5ms ID: 0.25(um) Heated Purge: (Y/N) N

Calibration Start Date: 08/27/2009 09:11 Calibration End Date: 08/27/2009 13:43 Calibration ID: 4134

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
Dibenzofuran	1.7129 1.6201	1.6165 1.5360	1.6320 1.5008	1.6206 1.2452	1.6393	Ave		1.5693				8.7		15.0			
2,3,4,6-Tetrachlorophenol	0.0906 0.2419	0.1173 0.2445	0.1472 0.2638	0.1938 0.2769	0.2247	Lin1	-0.032	0.2639							0.9950		0.9900
Diethyl phthalate	1.0349 1.2059	1.0571 1.2028	1.1158 1.1980	1.1964 1.0454	1.1912	Ave		1.1386				6.6		15.0			
4-Chlorophenyl phenyl ether	0.6247 0.6109	0.6031 0.6008	0.5964 0.6066	0.6036 0.6049	0.6080	Ave		0.6066				1.3		15.0			
4-Nitroaniline	0.1335 0.1998	0.1097 0.2014	0.1262 0.2682	0.1537 0.2608	0.1595	Lin	-0.145	0.2633							0.9900		0.9900
Fluorene	1.3367 1.3576	1.2741 1.2916	1.3003 1.2823	1.3023 1.1173	1.3272	Ave		1.2877				5.4		15.0			
Diphenylamine	0.5913 0.7293	0.6285 0.7027	0.6746 0.6838	0.6739 0.6384	0.7209	Ave	A	0.6715				6.7		15.0			
N-Nitrosodiphenylamine	0.5913 0.7293	0.6285 0.7027	0.6746 0.6838	0.6739 0.6384	0.7209	Ave	A	0.6715				6.7		15.0			
1,2-Diphenylhydrazine	0.9349 1.3096	1.0148 1.2510	1.1587 1.1949	1.2082 1.0225	1.3196	Ave		1.1572				12.0		15.0			
Azobenzene	0.9349 1.3096	1.0148 1.2510	1.1587 1.1949	1.2082 1.0225	1.3196	Ave		1.1572				12.0		15.0			
Benzophenone	0.5699 0.8469	0.6528 0.8195	0.7370 0.7892	0.7809 0.7310	0.8275	Ave		0.7505				12.0		15.0			
4-Bromophenyl phenyl ether	0.1830 0.2039	0.1850 0.1983	0.1895 0.1972	0.1843 0.2061	0.2035	Ave		0.1945				4.7		15.0			
Atrazine	0.1228 0.2030	0.1389 0.2077	0.1637 0.2073	0.1810 0.2113	0.1995	Lin2	-0.009	0.1997							0.9940		0.9900
Hexachlorobenzene	0.2126 0.1961	0.1886 0.1942	0.1978 0.1909	0.1913 0.2029	0.1979	Ave		0.1969				3.7		15.0			
Benzidine	++++++ 0.1139	0.0304 0.1351	0.0312 0.1841	0.0446 0.1876	0.0856	Qua	-0.100	0.1454	0.0024						0.9910		0.9900
Phenanthrene	1.2648 1.1618	1.1590 1.0921	1.1639 1.0662	1.1397 0.9055	1.1557	Ave		1.1232				8.8		15.0			
Anthracene	0.9898 1.1359	0.9688 1.0999	1.0179 1.0705	1.0790 0.9065	1.1011	Ave		1.0410				7.2		15.0			
Carbazole	0.7993 0.8563	0.7950 0.8311	0.8439 0.8615	0.8706 0.7918	0.8806	Ave		0.8367				4.1		15.0			
Di-n-butyl phthalate	0.9632 1.2052	0.8483 1.2088	0.9088 1.1655	1.0566 0.9332	1.1688	Ave		1.0509				13.0		15.0			
Fluoranthene	0.9013 1.0813	0.8674 1.0461	0.8960 1.0662	0.9642 0.9502	1.0219	Ave		0.9772				8.2		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

A M Checked 1/12/10

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Westfield Job No.: 360-24194-1 Analy Batch No.: 48241

SDG No.: OCRI-02

Instrument ID: Inst. B GC Column: Rtx-5ms ID: 0.25(um) Heated Purge: (Y/N) N

Calibration Start Date: 08/27/2009 09:11 Calibration End Date: 08/27/2009 13:43 Calibration ID: 4134

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
Pyrene	1.6534 1.5357	1.5690 1.3969	1.6093 1.4016	1.4922 1.2801	1.5205	Ave		1.4954				7.9		15.0			
Butyl benzyl phthalate	0.3408 0.6259	0.3644 0.6134	0.4131 0.6439	0.5085 0.6377	0.5802	Lin1	-0.055	0.6338							0.9990		0.9900
Bis(2-ethylhexyl) phthalate	0.5267 0.8818	0.4810 0.8599	0.5561 0.8907	0.6848 0.8407	0.7893	Lin1	-0.069	0.8604							0.9980		0.9900
3,3'-Dichlorobenzidine	0.1497 0.1874	0.1481 0.2094	0.1691 0.2288	0.1815 0.2893	0.2009	Qua	0.0074	0.1609	0.0064						1.0000		0.9900
Benzo[a]anthracene	0.9124 1.0165	0.8564 0.9837	0.8850 0.9929	0.9250 0.9533	0.9608	Ave		0.9429				5.6		15.0			
Chrysene	1.0540 0.9853	0.9938 0.9456	1.0088 0.9542	0.9365 0.8936	0.9648	Ave		0.9707				4.8		15.0			
Di-n-octyl phthalate	1.3023 2.3308	1.0916 2.1273	1.2753 2.4922	1.7678 2.1938	1.9666	Lin1	-0.213	2.2622							0.9940		0.9900
Benzo[b]fluoranthene	1.2786 1.4219	1.2042 1.3203	1.2371 1.3730	1.2805 1.4486	1.3006	Ave		1.3183				6.2		15.0			
Benzo[k]fluoranthene	1.1340 1.3278	1.1603 1.2863	1.1597 1.3692	1.1654 1.3313	1.2534	Ave		1.2431				7.2		15.0			
Benzo[a]pyrene	0.6879 1.0127	0.7044 1.0243	0.7696 1.0390	0.8094 1.0849	0.9091	Lin1	-0.079	1.0511							0.9980		0.9900
Indeno[1,2,3-cd]pyrene	0.5731 0.6824	0.4426 0.7883	0.5584 0.7227	0.5004 0.7930	0.6185	Lin1	-0.064	0.7576							0.9930		0.9900
Dibenz(a,h)anthracene	0.4527 0.5353	0.3425 0.6193	0.4425 0.5700	0.3644 0.6347	0.4555	Lin1	-0.055	0.5992							0.9910		0.9900
Benzo[g,h,i]perylene	0.6297 0.6009	0.4582 0.6843	0.6064 0.6099	0.5077 0.6584	0.5702	Ave		0.5917				12.0		15.0			
2-Fluorophenol	0.5640 0.5510	0.5799 0.5150	0.5975 0.4785	0.5916 0.5792	0.6212	Ave		0.5642				7.8		15.0			
Phenol-d5	0.7106 0.6842	0.7243 0.6329	0.7326 0.5931	0.7371 0.6957	0.7517	Ave		0.6958				7.5		15.0			
Nitrobenzene-d5	0.2160 0.3378	0.2350 0.3132	0.2285 0.3215	0.2653 0.3152	0.3039	Lin1	-0.019	0.3189							0.9990		0.9900
2-Fluorobiphenyl	1.4301 1.3555	1.3980 1.3198	1.3882 1.2755	1.3524 1.1136	1.3944	Ave		1.3364				7.1		15.0			
2,4,6-Tribromophenol	0.0402 0.0658	0.0297 0.0713	0.0374 0.0740	0.0493 0.0822	0.0607	Lin1	-0.010	0.0761							0.9900		0.9900
Terphenyl-d14	1.0015 0.8772	0.9072 0.8041	0.9115 0.8214	0.8729 0.8094	0.8735	Ave		0.8754				7.1		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Westfield Job No.: 360-24194-1 Analy Batch No.: 48658

SDG No.: OCRI-02

Instrument ID: Inst. B GC Column: Rtx-5ms ID: 0.25(um) Heated Purge: (Y/N) N

Calibration Start Date: 09/07/2009 10:55 Calibration End Date: 09/07/2009 15:26 Calibration ID: 4231

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD01 360-48658/3	B10083.D
Level 2	STD025 360-48658/4	B10084.D
Level 3	STD05 360-48658/5	B10085.D
Level 4	STD1 360-48658/6	B10086.D
Level 5	STD25 360-48658/7	B10087.D
Level 6	STD5 360-48658/2	B10082.D
Level 7	STD8 360-48658/8	B10088.D
Level 8	STD10 360-48658/9	B10089.D
Level 9	STD20 360-48658/10	B10090.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
1,4-Dioxane	0.3578 0.1985	0.2741 0.1736	0.2501 0.1632	0.2456 0.1185	0.2216	Qua	0.0317	0.2083	-0.005						0.9990		0.9900
Pyridine	0.6205 0.5139	0.6251 0.4442	0.5778 0.4364	0.5939 +++++	0.5426	Ave		0.5443				14.0		15.0			
N-Nitrosodimethylamine	0.4094 0.3522	0.3757 0.3170	0.3921 0.2906	0.4165 +++++	0.3550	Ave		0.3636				12.0		15.0			
Benzaldehyde	0.9278 0.6811	0.7695 0.6116	0.8185 0.5658	0.7977 +++++	0.7689	Qua	0.0141	0.8042	-0.024						1.0000		0.9900
Phenol	0.9278 0.6811	0.7695 0.6116	0.8185 0.5658	0.7977 +++++	0.7689	Qua	0.0141	0.8042	-0.024						1.0000		0.9900
Aniline	0.9170 0.8426	0.9338 0.7106	0.9342 0.7066	0.9762 +++++	0.8510	Ave		0.8590				12.0		15.0			
Bis(2-chloroethyl)ether	0.8373 0.5494	0.6903 0.5139	0.7292 0.4640	0.6622 +++++	0.6951	Qua	0.0295	0.6773	-0.022						0.9980		0.9900
2-Chlorophenol	0.7289 0.6049	0.6990 0.5370	0.6856 0.5050	0.6831 +++++	0.6685	Ave		0.6390				13.0		15.0			
Benzoic acid	+++++ 0.1549	0.0125 0.1354	0.0146 0.1697	0.0348 0.1999	0.0478	Qua	-0.165	0.1490	0.0030						0.9950		0.9900
1,4-Dichlorobenzene	0.9115 0.6815	0.8237 0.6098	0.8593 0.5657	0.8060 +++++	0.7808	Qua	0.0265	0.8043	-0.024						1.0000		0.9900
1,3-Dichlorobenzene	0.9886 0.7160	0.8821 0.6313	0.8847 0.5885	0.8527 +++++	0.8050	Qua	0.0296	0.8390	-0.026						1.0000		0.9900
Benzyl alcohol	0.3394 0.4597	0.4330 0.4068	0.4344 0.3816	0.4783 +++++	0.4849	Ave		0.4273				12.0		15.0			
1,2-Dichlorobenzene	0.8842 0.6580	0.7931 0.5804	0.8038 0.5434	0.7840 +++++	0.7332	Qua	0.0254	0.7665	-0.023						1.0000		0.9900

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Westfield Job No.: 360-24194-1 Analy Batch No.: 48658

SDG No.: OCRI-02

Instrument ID: Inst. B GC Column: Rtx-5ms ID: 0.25(um) Heated Purge: (Y/N) N

Calibration Start Date: 09/07/2009 10:55 Calibration End Date: 09/07/2009 15:26 Calibration ID: 4231

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
2-Methylphenol	0.5785 0.5425	0.5955 0.4794	0.6297 0.4596	0.6071 +++++	0.5778	Ave		0.5588				11.0		15.0			
2,2'-oxybis[1-chloropropane]	1.2791 0.9507	1.1828 0.8237	1.1764 0.7565	1.1546 +++++	1.1053	Qua	0.0353	1.1502	-0.040						1.0000		0.9900
2,4-Dinitrophenol	+++++ 0.0820	+++++ 0.1039	0.0114 0.1153	0.0219 0.1349	0.0290	Lin	-0.203	0.1407			0.0500				0.9900		0.9900
4-Nitrophenol	+++++ 0.1637	+++++ 0.1664	0.0692 0.1616	0.1061 0.1665	0.1149	Lin2	-0.051	0.1636			0.0500				0.9900		0.9900
3 & 4 Methylphenol	0.6451 0.5520	0.6187 0.4894	0.6282 0.4660	0.6257 +++++	0.6007	Ave		0.5782				12.0		15.0			
N-Nitrosodi-n-propylamine	0.4506 0.4070	0.4185 0.3584	0.4387 0.3386	0.4373 +++++	0.4233	Ave		0.4091			0.0500	9.8		15.0			
Acetophenone	0.9380 0.7884	0.8976 0.6849	0.9006 0.6498	0.9079 +++++	0.8596	Ave		0.8284				13.0		15.0			
Hexachloroethane	0.3134 0.2509	0.2662 0.2262	0.2755 0.2161	0.2837 +++++	0.2702	Ave		0.2628				12.0		15.0			
Nitrobenzene	0.2666 0.2997	0.2599 0.2991	0.2697 0.3003	0.2890 0.2590	0.2965	Ave		0.2822				6.4		15.0			
Isophorone	0.4434 0.5221	0.4397 0.5046	0.4676 0.5004	0.4942 0.3997	0.5012	Ave		0.4748				8.4		15.0			
2,4-Dimethylphenol	0.2415 0.2512	0.2288 0.2415	0.2282 0.2410	0.2314 0.2222	0.2239	Ave		0.2344				4.2		15.0			
2-Nitrophenol	0.1116 0.1637	0.1117 0.1671	0.1159 0.1717	0.1353 0.1659	0.1373	Lin1	-0.012	0.1663							0.9970		0.9900
Bis(2-chloroethoxy)methane	0.3217 0.3152	0.3041 0.3150	0.3086 0.3156	0.3116 0.2697	0.3162	Ave		0.3086				5.0		15.0			
2,4-Dichlorophenol	0.2173 0.2432	0.1975 0.2455	0.2173 0.2506	0.2250 0.2297	0.2299	Ave		0.2285				7.3		15.0			
1,2,4-Trichlorobenzene	0.3118 0.2781	0.2721 0.2787	0.2845 0.2779	0.2754 0.2434	0.2747	Ave		0.2774				6.3		15.0			
Alpha-Terpineol	0.2161 0.2565	0.2171 0.2541	0.2217 0.2566	0.2373 0.2273	0.2438	Ave		0.2367				7.1		15.0			
Naphthalene	1.0225 0.8576	0.9116 0.7895	0.8952 0.7255	0.8832 +++++	0.8873	Ave		0.8716				10.0		15.0			
4-Chloroaniline	0.3482 0.3632	0.3133 0.3586	0.3448 0.3626	0.3465 0.3105	0.3510	Ave		0.3443				5.7		15.0			
Hexachlorobutadiene	0.1366 0.1330	0.1334 0.1353	0.1314 0.1360	0.1338 0.1264	0.1336	Ave		0.1333				2.3		15.0			
Caprolactam	0.0747 0.1303	0.0825 0.1271	0.0923 0.1317	0.1094 0.1228	0.1128	Lin1	-0.009	0.1264							0.9980		0.9900

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Westfield Job No.: 360-24194-1 Analy Batch No.: 48658

SDG No.: OCRI-02

Instrument ID: Inst. B GC Column: Rtx-5ms ID: 0.25(um) Heated Purge: (Y/N) N

Calibration Start Date: 09/07/2009 10:55 Calibration End Date: 09/07/2009 15:26 Calibration ID: 4231

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
Pyrene	1.5762 1.3308	1.3577 1.2947	1.3885 1.2717	1.3770 1.0122	1.4653	Ave		1.3416				11.0		15.0			
Butyl benzyl phthalate	0.5577 0.6721	0.5280 0.6590	0.5734 0.6851	0.6219 0.6466	0.6792	Ave		0.6248				9.3		15.0			
Bis(2-ethylhexyl) phthalate	0.6473 0.8723	0.6324 0.8467	0.6578 0.8579	0.7110 0.7411	0.7837	Ave		0.7500				13.0		15.0			
3,3'-Dichlorobenzidine	0.2226 0.3115	0.2502 0.3296	0.2457 0.3428	0.2704 0.3467	0.3061	Lin2	-0.011	0.3137							0.9900		0.9900
Benzo[a]anthracene	0.8770 0.9907	0.9058 0.9978	0.9175 0.9899	0.9149 0.8695	0.9823	Ave		0.9384				5.5		15.0			
Chrysene	1.0637 0.9271	0.9602 0.9598	0.8978 0.9429	0.9377 0.8190	0.9721	Ave		0.9423				6.9		15.0			
Di-n-octyl phthalate	1.2392 1.8711	1.1795 1.8056	1.3816 1.8559	1.5543 +++++	1.8359	Lin1	-0.116	1.8478							0.9980		0.9900
Benzo[b]fluoranthene	1.3983 1.2802	1.1419 1.3682	1.2507 1.3378	1.2319 1.4409	1.2864	Ave		1.3040				7.1		15.0			
Benzo[k]fluoranthene	1.2925 1.1676	1.0779 1.2116	1.1057 1.2898	1.1937 1.2015	1.3079	Ave		1.2054				6.8		15.0			
Benzo[a]pyrene	0.6581 0.9757	0.7718 1.0400	0.8284 1.0587	0.8467 1.0801	0.9784	Lin2	-0.039	0.9921							0.9930		0.9900
Indeno[1,2,3-cd]pyrene	0.6228 0.8068	0.6025 0.8074	0.5875 0.8088	0.6123 0.8336	0.6816	Ave		0.7070				15.0		15.0			
Dibenz(a,h)anthracene	0.4700 0.6654	0.4719 0.6448	0.4554 0.6503	0.5135 0.6893	0.5415	Lin1	-0.049	0.6648							0.9960		0.9900
Benzo[g,h,i]perylene	0.6252 0.6652	0.5951 0.6462	0.5489 0.6474	0.5492 0.6499	0.5887	Ave		0.6129				7.2		15.0			
2-Fluorophenol	0.5945 0.5465	0.6097 0.4855	0.6269 0.4543	0.6294 +++++	0.5998	Ave		0.5683				12.0		15.0			
Phenol-d5	0.7633 0.6531	0.7065 0.5870	0.7568 0.5457	0.7470 +++++	0.7147	Ave		0.6843				12.0		15.0			
Nitrobenzene-d5	0.2707 0.3005	0.2615 0.3012	0.2738 0.3062	0.2907 0.2740	0.2881	Ave		0.2852				5.5		15.0			
2-Fluorobiphenyl	1.4468 1.3281	1.2856 1.2817	1.2887 1.2095	1.3126 0.9259	1.3221	Ave		1.2668				11.0		15.0			
2,4,6-Tribromophenol	0.0362 0.0691	0.0502 0.0722	0.0522 0.0759	0.0575 0.0809	0.0628	Lin1	-0.007	0.0765							0.9950		0.9900
Terphenyl-d14	0.9580 0.7790	0.7974 0.7668	0.7920 0.7824	0.7942 0.7078	0.8381	Ave		0.8018				8.5		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24173-1

SDG No.: OCRI-01

Matrix: Water Level: Low Lab File ID: B9853.D

Lab ID: LCSD 360-48124/3-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
2,4-Dimethylphenol	10.0	9.13	91	0	20	30-130	
2,4-Dichlorophenol	10.0	8.80	88	1	20	30-130	
2,4,6-Trichlorophenol	10.0	8.66	87	0	20	30-130	
2-Chlorophenol	10.0	6.41	64	2	20	40-130	
2,4,5-Trichlorophenol	10.0	8.75	88	1	20	30-130	
2-Methylphenol	10.0	5.52	55	2	20	30-130	
2-Methylnaphthalene	10.0	7.69	77	1	20	40-140	
2-Nitroaniline	10.0	9.12	91	1	20	40-140	
2-Chloronaphthalene	10.0	6.51	65	1	20	40-140	
3 & 4 Methylphenol	10.0	4.96 J	50	1	20	30-130	
2,6-Dinitrotoluene	10.0	8.20	82	0	20	40-140	
2-Nitrophenol	10.0	8.79	88	1	20	30-130	
3-Nitroaniline	10.0	8.48	85	1	20	40-140	
4-Chloro-3-methylphenol	10.0	7.87	79	1	20	30-130	
2,4-Dinitrophenol	10.0	7.94	79	7	20	30-130	
4-Chloroaniline	10.0	8.19	82	0	20	40-140	
2,4-Dinitrotoluene	10.0	8.62	86	1	20	40-140	
Acenaphthene	10.0	8.96	90	1	20	40-140	
4-Nitrophenol	10.0	2.19 J	22	1	20	30-130	*
Acenaphthylene	10.0	8.59	86	1	20	40-140	
4-Nitroaniline	10.0	8.94	89	7	20	40-140	
4-Bromophenyl phenyl ether	10.0	8.53	85	1	20	40-140	
Aniline	10.0	2.62 J	26	7	20	40-140	*
4-Chlorophenyl phenyl ether	10.0	8.48	85	0	20	40-140	
4,6-Dinitro-2-methylphenol	10.0	9.10	91	4	20	30-130	
Anthracene	10.0	9.99	100	2	20	40-140	
Benzoic acid	10.0	4.76 J	48	2	20	30-130	
Benzyl alcohol	10.0	5.46 J	55	1	20	30-130	
Benzo[a]anthracene	10.0	10.4	104	2	20	40-140	
Bis(2-chloroethoxy)methane	10.0	8.45	84	1	20	40-140	
Bis(2-chloroethyl)ether	10.0	8.84	88	1	20	40-140	
3,3'-Dichlorobenzidine	10.0	10.5	105	1	20	40-140	
Butyl benzyl phthalate	10.0	8.99	90	1	20	40-140	
Benzo[b]fluoranthene	10.0	9.12	91	3	20	40-140	
Benzo[k]fluoranthene	10.0	9.98	100	0	20	40-140	
Benzo[a]pyrene	10.0	9.53	95	2	20	40-140	
Chrysene	10.0	9.71	97	2	20	40-140	
Benzo[g,h,i]perylene	10.0	10.7	107	1	20	40-140	
Dibenz(a,h)anthracene	10.0	9.61	96	0	20	40-140	
Acetophenone	10.0	8.24	82	1	20	40-140	
Dibenzofuran	10.0	8.20	82	1	20	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24173-1

SDG No.: OCRI-01

Matrix: Water Level: Low Lab File ID: B9853.D

Lab ID: LCSD 360-48124/3-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Azobenzene	10.0	8.97	90	3	20	40-140	
Diethyl phthalate	10.0	9.50	95	1	20	40-140	
Bis(2-ethylhexyl) phthalate	10.0	9.25	92	2	20	40-140	
Dimethyl phthalate	10.0	9.13	91	1	20	40-140	
Di-n-butyl phthalate	10.0	10.7	107	7	20	40-140	
Di-n-octyl phthalate	10.0	8.75	87	4	20	40-140	
Fluoranthene	10.0	9.65	96	1	20	40-140	
Fluorene	10.0	9.85	98	1	20	40-140	
Hexachlorobenzene	10.0	8.42	84	1	20	40-140	
bis (2-chloroisopropyl) ether	10.0	8.56	86	1	20	40-140	
Hexachlorocyclopentadiene	10.0	5.91	59	15	20	40-140	
Hexachloroethane	10.0	6.29	63	4	20	40-140	
Indeno[1,2,3-cd]pyrene	10.0	9.69	97	0	20	40-140	
Isophorone	10.0	8.02	80	1	20	40-140	
Nitrobenzene	10.0	9.22	92	0	20	40-140	
1,1'-Biphenyl	10.0	8.23	82	1	20	40-140	
1,2,4,5-Tetrachlorobenzene	10.0	7.37	74	3	20	40-140	
N-Nitrosodimethylamine	10.0	2.84 J	28	2	20	40-140	*
2,3,4,6-Tetrachlorophenol	10.0	7.62	76	0	20	40-140	
N-Nitrosodi-n-propylamine	10.0	8.67	87	0	20	40-140	
Atrazine	10.0	9.39	94	0	20	40-140	
N-Nitrosodiphenylamine	10.0	6.80	68	2	20	40-140	
Benzaldehyde	10.0	1.58 J	16	2	20	40-140	*
Pentachlorophenol	10.0	8.17	82	2	20	30-130	
Caprolactam	10.0	1.35 J	14	6	20	40-140	*
Carbazole	10.0	9.59	96	0	20	40-140	
Phenanthrene	10.0	8.85	88	2	20	40-140	
Phenol	10.0	1.58 J	16	2	20	30-130	*
Pyrene	10.0	8.86	89	2	20	40-140	
1-Methylnaphthalene	10.0	8.00	80	2	20	40-140	
Benzophenone	10.0	9.42	94	2	20	40-140	
Diphenyl oxide	10.0	8.16	82	1	20	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24173-1

SDG No.: OCRI-01

Matrix: Solid Level: Low Lab File ID: B9887.D

Lab ID: LCS 360-47986/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
1,2,4-Trichlorobenzene	333	236	71	40-140	
1,2-Dichlorobenzene	333	219	66	40-140	
1,3-Dichlorobenzene	333	238	71	40-140	
1,4-Dichlorobenzene	333	238	71	40-140	
2,4-Dimethylphenol	333	339	102	30-130	
2,4-Dichlorophenol	333	302	91	30-130	
2,4,6-Trichlorophenol	333	292	88	30-130	
2-Chlorophenol	333	260	78	30-130	
2,4,5-Trichlorophenol	333	307	92	30-130	
2-Methylphenol	333	274	82	30-130	
2-Methylnaphthalene	333	264	79	40-140	
2-Nitroaniline	333	316	95	40-140	
2-Chloronaphthalene	333	220	66	40-140	
3 & 4 Methylphenol	333	284	85	30-130	
2,6-Dinitrotoluene	333	284	85	40-140	
2-Nitrophenol	333	292	88	30-130	
3-Nitroaniline	333	285	86	40-140	
4-Chloro-3-methylphenol	333	320	96	30-130	
2,4-Dinitrophenol	333	237	71	30-130	
4-Chloroaniline	333	230	69	40-140	
2,4-Dinitrotoluene	333	307	92	40-140	
Acenaphthene	333	298	90	40-140	
4-Nitrophenol	333	329	99	30-130	
Acenaphthylene	333	276	83	40-140	
4-Nitroaniline	333	345	103	40-140	
4-Bromophenyl phenyl ether	333	278	83	40-140	
Aniline	333	94.2	28	40-140	*
4-Chlorophenyl phenyl ether	333	291	87	40-140	
4,6-Dinitro-2-methylphenol	333	298	90	30-130	
Anthracene	333	325	97	40-140	
Benzoic acid	333	160 J	48	30-130	
Benzyl alcohol	333	276	83	30-130	
Benzo[a]anthracene	333	351	105	40-140	
Bis(2-chloroethoxy)methane	333	262	78	40-140	
Bis(2-chloroethyl)ether	333	291	87	40-140	
3,3'-Dichlorobenzidine	333	334	100	40-140	
Butyl benzyl phthalate	333	295	88	40-140	
Benzo[b]fluoranthene	333	318	95	40-140	
Benzo[k]fluoranthene	333	339	102	40-140	
Benzo[a]pyrene	333	324	97	40-140	
Chrysene	333	327	98	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

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FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24173-1

SDG No.: OCRI-01

Matrix: Water Level: Low Lab File ID: B9852.D

Lab ID: LCS 360-48124/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
2,4-Dimethylphenol	10.0	9.14	91	30-130	
2,4-Dichlorophenol	10.0	8.72	87	30-130	
2,4,6-Trichlorophenol	10.0	8.68	87	30-130	
2-Chlorophenol	10.0	6.26	63	40-130	
2,4,5-Trichlorophenol	10.0	8.85	88	30-130	
2-Methylphenol	10.0	5.41	54	30-130	
2-Methylnaphthalene	10.0	7.77	78	40-140	
2-Nitroaniline	10.0	9.25	93	40-140	
2-Chloronaphthalene	10.0	6.59	66	40-140	
3 & 4 Methylphenol	10.0	4.93 J	49	30-130	
2,6-Dinitrotoluene	10.0	8.21	82	40-140	
2-Nitrophenol	10.0	8.73	87	30-130	
3-Nitroaniline	10.0	8.44	84	40-140	
4-Chloro-3-methylphenol	10.0	7.79	78	30-130	
2,4-Dinitrophenol	10.0	8.48	85	30-130	
4-Chloroaniline	10.0	8.17	82	40-140	
2,4-Dinitrotoluene	10.0	8.72	87	40-140	
Acenaphthene	10.0	9.07	91	40-140	
4-Nitrophenol	10.0	2.22 J	22	30-130	*
Acenaphthylene	10.0	8.51	85	40-140	
4-Nitroaniline	10.0	9.55	95	40-140	
4-Bromophenyl phenyl ether	10.0	8.43	84	40-140	
Aniline	10.0	2.80 J	28	40-140	*
4-Chlorophenyl phenyl ether	10.0	8.51	85	40-140	
4,6-Dinitro-2-methylphenol	10.0	9.47	95	30-130	
Anthracene	10.0	9.77	98	40-140	
Benzoic acid	10.0	4.68 J	47	30-130	
Benzyl alcohol	10.0	5.40 J	54	30-130	
Benzo[a]anthracene	10.0	10.3	103	40-140	
Bis(2-chloroethoxy)methane	10.0	8.38	84	40-140	
Bis(2-chloroethyl)ether	10.0	8.72	87	40-140	
3,3'-Dichlorobenzidine	10.0	10.6	106	40-140	
Butyl benzyl phthalate	10.0	8.90	89	40-140	
Benzo[b]fluoranthene	10.0	8.88	89	40-140	
Benzo[k]fluoranthene	10.0	9.94	99	40-140	
Benzo[a]pyrene	10.0	9.37	94	40-140	
Chrysene	10.0	9.56	96	40-140	
Benzo[g,h,i]perylene	10.0	10.6	106	40-140	
Dibenz(a,h)anthracene	10.0	9.64	96	40-140	
Acetophenone	10.0	8.18	82	40-140	
Dibenzofuran	10.0	8.10	81	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

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FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24173-1

SDG No.: OCRI-01

Matrix: Water Level: Low Lab File ID: B9852.D

Lab ID: LCS 360-48124/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Azobenzene	10.0	8.70	87	40-140	
Diethyl phthalate	10.0	9.36	94	40-140	
Bis(2-ethylhexyl) phthalate	10.0	9.10	91	40-140	
Dimethyl phthalate	10.0	9.03	90	40-140	
Di-n-butyl phthalate	10.0	9.98	100	40-140	
Di-n-octyl phthalate	10.0	8.39	84	40-140	
Fluoranthene	10.0	9.54	95	40-140	
Fluorene	10.0	9.78	98	40-140	
Hexachlorobenzene	10.0	8.33	83	40-140	
bis (2-chloroisopropyl) ether	10.0	8.52	85	40-140	
Hexachlorocyclopentadiene	10.0	6.86	69	40-140	
Hexachloroethane	10.0	6.55	66	40-140	
Indeno[1,2,3-cd]pyrene	10.0	9.66	97	40-140	
Isophorone	10.0	7.95	79	40-140	
Nitrobenzene	10.0	9.22	92	40-140	
1,1'-Biphenyl	10.0	8.11	81	40-140	
1,2,4,5-Tetrachlorobenzene	10.0	7.58	76	40-140	
N-Nitrosodimethylamine	10.0	2.79 J	28	40-140	*
2,3,4,6-Tetrachlorophenol	10.0	7.60	76	40-140	
N-Nitrosodi-n-propylamine	10.0	8.63	86	40-140	
Atrazine	10.0	9.42	94	40-140	
N-Nitrosodiphenylamine	10.0	6.70	67	40-140	
Benzaldehyde	10.0	1.54 J	15	40-140	*
Pentachlorophenol	10.0	8.36	84	30-130	
Caprolactam	10.0	1.28 J	13	40-140	*
Carbazole	10.0	9.63	96	40-140	
Phenanthrene	10.0	8.68	87	40-140	
Phenol	10.0	1.54 J	15	30-130	*
Pyrene	10.0	8.69	87	40-140	
1-Methylnaphthalene	10.0	7.81	78	40-140	
Benzophenone	10.0	9.19	92	40-140	
Diphenyl oxide	10.0	8.06	81	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24173-2

SDG No.: OCRI-01A

Matrix: Solid Level: Low Lab File ID: B9887.D

Lab ID: LCS 360-47986/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
Benzo[a]pyrene	333	324	97	40-140	
Benzo[b]fluoranthene	333	318	95	40-140	
Benzo[g,h,i]perylene	333	336	101	40-140	
Benzo[k]fluoranthene	333	339	102	40-140	
Benzoic acid	333	160 J	48	30-130	
Benzophenone	333	293	88	40-140	
Benzyl alcohol	333	276	83	30-130	
Bis(2-chloroethoxy)methane	333	262	78	40-140	
Bis(2-chloroethyl)ether	333	291	87	40-140	
Bis(2-ethylhexyl) phthalate	333	304	91	40-140	
Butyl benzyl phthalate	333	295	88	40-140	
Caprolactam	333	318	95	40-140	
Carbazole	333	336	101	40-140	
Chrysene	333	327	98	40-140	
Dibenz(a,h)anthracene	333	327	98	40-140	
Dibenzofuran	333	269	81	40-140	
Diethyl phthalate	333	321	96	40-140	
Dimethyl phthalate	333	301	90	40-140	
Di-n-butyl phthalate	333	344	103	40-140	
Di-n-octyl phthalate	333	284	85	40-140	
Diphenyl oxide	333	252	76	40-140	
Fluoranthene	333	326	98	40-140	
Fluorene	333	328	98	40-140	
Hexachlorobenzene	333	276	83	40-140	
Hexachlorobutadiene	333	240	72	40-140	
Hexachlorocyclopentadiene	333	264	79	40-140	
Hexachloroethane	333	229	69	40-140	
Indeno[1,2,3-cd]pyrene	333	321	96	40-140	
Isophorone	333	253	76	40-140	
Naphthalene	333	226	68	40-140	
Nitrobenzene	333	288	86	40-140	
N-Nitrosodimethylamine	333	242	72	40-140	
N-Nitrosodi-n-propylamine	333	278	83	40-140	
N-Nitrosodiphenylamine	333	221	66	40-140	
Pentachlorophenol	333	224	67	30-130	
Phenanthrene	333	287	86	40-140	
Phenol	333	267	80	30-130	
Pyrene	333	275	82	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24173-2

SDG No.: OCRI-01A

Matrix: Solid Level: Low Lab File ID: B9888.D

Lab ID: LCSD 360-47986/3-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCSD CONCENTRATION (ug/Kg)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1'-Biphenyl	333	449	135	56	30	40-140	*
1,2,4,5-Tetrachlorobenzene	333	264	79	2	30	40-140	
1,2,4-Trichlorobenzene	333	234	70	1	30	40-140	
1,2-Dichlorobenzene	333	209	63	5	30	40-140	
1,3-Dichlorobenzene	333	230	69	3	30	40-140	
1,4-Dichlorobenzene	333	229	69	4	30	40-140	
1-Methylnaphthalene	333	467	140	62	30	40-140	*
2,2'-oxybis[1-chloropropane]	333	263	79	3	30	40-140	
2,3,4,6-Tetrachlorophenol	333	532	160	71	30	40-140	*
2,4,5-Trichlorophenol	333	304	91	1	30	30-130	
2,4,6-Trichlorophenol	333	289	87	1	30	30-130	
2,4-Dichlorophenol	333	303	91	0	30	30-130	
2,4-Dimethylphenol	333	331	99	2	30	30-130	
2,4-Dinitrophenol	333	231	69	3	30	30-130	
2,4-Dinitrotoluene	333	302	91	2	30	40-140	
2,6-Dinitrotoluene	333	280	84	1	30	40-140	
2-Chloronaphthalene	333	220	66	0	30	40-140	
2-Chlorophenol	333	253	76	3	30	30-130	
2-Methylnaphthalene	333	265	80	0	30	40-140	
2-Methylphenol	333	224	67	20	30	30-130	
2-Nitroaniline	333	314	94	1	30	40-140	
2-Nitrophenol	333	295	88	1	30	30-130	
3 & 4 Methylphenol	333	292	88	3	30	30-130	
3,3'-Dichlorobenzidine	333	316	95	5	30	40-140	
3-Nitroaniline	333	270	81	5	30	40-140	
4,6-Dinitro-2-methylphenol	333	294	88	1	30	30-130	
4-Bromophenyl phenyl ether	333	275	83	1	30	40-140	
4-Chloro-3-methylphenol	333	322	97	0	30	30-130	
4-Chloroaniline	333	208	62	10	30	40-140	
4-Chlorophenyl phenyl ether	333	286	86	2	30	40-140	
4-Nitroaniline	333	334	100	3	30	40-140	
4-Nitrophenol	333	317	95	4	30	30-130	
Acenaphthene	333	297	89	1	30	40-140	
Acenaphthylene	333	276	83	0	30	40-140	
Acetophenone	333	245	73	3	30	40-140	
Aniline	333	249	75	90	30	40-140	*
Anthracene	333	320	96	1	30	40-140	
Atrazine	333	640	192	72	30	40-140	*
Azobenzene	333	360	108	25	30	40-140	
Benzaldehyde	333	259	78	3	30	40-140	
Benzo[a]anthracene	333	343	103	2	30	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

cc'd
11/19/10

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24173-2

SDG No.: OCRI-01A

Matrix: Solid Level: Low Lab File ID: B9888.D

Lab ID: LCSD 360-47986/3-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCSD CONCENTRATION (ug/Kg)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Benzo[a]pyrene	333	322	96	1	30	40-140	
Benzo[b]fluoranthene	333	313	94	1	30	40-140	
Benzo[g,h,i]perylene	333	326	98	3	30	40-140	
Benzo[k]fluoranthene	333	339	102	0	30	40-140	
Benzoic acid	333	159 J	48	0	30	30-130	
Benzophenone	333	492	148	51	30	40-140	*
Benzyl alcohol	333	229	69	18	30	30-130	
Bis(2-chloroethoxy)methane	333	262	79	0	30	40-140	
Bis(2-chloroethyl)ether	333	340	102	16	30	40-140	
Bis(2-ethylhexyl) phthalate	333	301	90	1	30	40-140	
Butyl benzyl phthalate	333	290	87	2	30	40-140	
Caprolactam	333	650	195	68	30	40-140	*
Carbazole	333	333	100	1	30	40-140	
Chrysene	333	312	94	5	30	40-140	
Dibenz(a,h)anthracene	333	320	96	2	30	40-140	
Dibenzofuran	333	266	80	1	30	40-140	
Diethyl phthalate	333	320	96	0	30	40-140	
Dimethyl phthalate	333	299	90	1	30	40-140	
Di-n-butyl phthalate	333	343	103	0	30	40-140	
Di-n-octyl phthalate	333	297	89	5	30	40-140	
Diphenyl oxide	333	512	154	68	30	40-140	*
Fluoranthene	333	322	97	1	30	40-140	
Fluorene	333	325	98	1	30	40-140	
Hexachlorobenzene	333	275	83	0	30	40-140	
Hexachlorobutadiene	333	237	71	1	30	40-140	
Hexachlorocyclopentadiene	333	249	75	6	30	40-140	
Hexachloroethane	333	221	66	3	30	40-140	
Indeno[1,2,3-cd]pyrene	333	316	95	1	30	40-140	
Isophorone	333	248	75	2	30	40-140	
Naphthalene	333	229	69	1	30	40-140	
Nitrobenzene	333	288	86	0	30	40-140	
N-Nitrosodimethylamine	333	232	70	4	30	40-140	
N-Nitrosodi-n-propylamine	333	264	79	5	30	40-140	
N-Nitrosodiphenylamine	333	216	65	3	30	40-140	
Pentachlorophenol	333	230	69	3	30	30-130	
Phenanthrene	333	286	86	0	30	40-140	
Phenol	333	259	78	3	30	30-130	
Pyrene	333	272	82	1	30	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Westfield Job No.: 360-24173-2

SDG No.: OCRI-01A

Lab File ID: B9884.D DFTPP Injection Date: 08/28/2009

Instrument ID: Inst. B DFTPP Injection Time: 10:44

Analysis Batch No.: 48213

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	30.0 - 60.0 % of mass 198	33.5	
68	Less than 2.0 % of mass 69	0.0	(0.0)1
69	Mass 69 relative abundance	32.0	
70	Less than 2.0 % of mass 69	0.2	(0.6)1
127	40.0 - 60.0 % of mass 198	45.1	
197	Less than 1.0 % of mass 198	0.0	
198	Base Peak, 100 % relative abundance	100.0	
199	5.0- 9.0 % of mass 198	7.2	
275	10.0 - 30.0 % of mass 198	28.7	
365	Greater than 1.0 % of mass 198	2.9	
441	Present but less than mass 443	12.3	
442	Greater than 40.0 % of mass 198	78.0	
443	17.0 - 23.0 % of mass 442	15.7	(20.1)2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCV 360-48213/2	B9885.D	08/28/2009	11:18
	MB 360-47986/1-A	B9886.D	08/28/2009	11:52
	LCS 360-47986/2-A	B9887.D	08/28/2009	12:25
	LCSD 360-47986/3-A	B9888.D	08/28/2009	12:59
OC-SB-405-14/15-XXX	360-24173-2	B9890.D	08/28/2009	14:07
OC-SB-416-13/14-XXX	360-24173-5	B9893.D	08/28/2009	15:49
OC-SB-412-12/13-XXX	360-24173-10	B9896.D	08/28/2009	17:31
OC-SB-420-12/14-XXX	360-24173-13	B9899.D	08/28/2009	19:13
OC-SB-423-13/14-XXX	360-24173-16	B9902.D	08/28/2009	20:55

ccd ✓ 1/19/10

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Westfield Job No.: 360-24173-1

SDG No.: OCRI-01

Lab Sample ID: CCV 360-48213/2 Calibration Date: 08/28/2009 11:18

Instrument ID: Inst. B Calib Start Date: 08/27/2009 09:11

GC Column: Rtx-5ms ID: 0.25(um) Calib End Date: 08/27/2009 13:43

Lab File ID: B9885.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Lin1		0.2450		5220	5000	4.3	30.0
N-Nitrosodimethylamine	Ave	0.3528	0.3586		5080	5000	1.6	30.0
Pyridine	Lin1		0.5693		5360	5000	7.3	30.0
Benzaldehyde	Ave	0.7664	0.7963		5200	5000	3.9	30.0
Phenol	Ave	0.7664	0.7963		5200	5000	3.9	20.0
Aniline	Ave	0.8532	0.9867		5780	5000	15.6	30.0
Bis(2-chloroethyl)ether	Qua		0.6798		5600	5000	12.0	30.0
2-Chlorophenol	Ave	0.6177	0.6674		5400	5000	8.0	30.0
1,4-Dichlorobenzene	Lin1		0.7289		5370	5000	7.5	20.0
1,3-Dichlorobenzene	Lin1		0.7527		5360	5000	7.3	30.0
2-Methylphenol	Ave	0.3530	0.4100		5810	5000	16.1	30.0
Benzyl alcohol	Ave	0.4448	0.5143		5780	5000	15.6	30.0
1,2-Dichlorobenzene	Ave	0.7498	0.7083		4720	5000	-5.5	30.0
3 & 4 Methylphenol	Ave	0.5658	0.5664		5010	5000	0.1	30.0
2,2'-oxybis[1-chloropropane]	Lin1		1.080		5870	5000	17.5	30.0
N-Nitrosodi-n-propylamine	Ave	0.4011	0.4619	0.0500	5760	5000	15.2	30.0
Acetophenone	Ave	0.8448	0.8788		5200	5000	4.0	30.0
Hexachloroethane	Ave	0.2654	0.2716		5120	5000	2.3	30.0
Nitrobenzene	Ave	0.2699	0.3207		5940	5000	18.8	30.0
Isophorone	Ave	0.4948	0.5771		5830	5000	16.6	30.0
2,4-Dimethylphenol	Ave	0.2333	0.1721		3690	5000	-26.2	30.0
2-Nitrophenol	Lin1		0.1563		5540	5000	10.8	20.0
Benzoic acid	Qua		0.0706		6610	5000	32.2*	30.0
Bis(2-chloroethoxy)methane	Ave	0.3424	0.3602		5260	5000	5.2	30.0
2,4-Dichlorophenol	Lin2		0.2375		5370	5000	7.5	20.0
1,2,4-Trichlorobenzene	Ave	0.2852	0.2810		4930	5000	-1.5	30.0
Alpha-Terpineol	Ave	0.2287	0.2639		5770	5000	15.4	30.0
Naphthalene	Ave	0.9640	0.9630		4990	5000	-0.1	30.0
4-Chloroaniline	Ave	0.4424	0.4760		5380	5000	7.6	30.0
Hexachlorobutadiene	Ave	0.1409	0.1399		4970	5000	-0.7	20.0
Caprolactam	Lin1		0.1416		5760	5000	15.1	30.0
4-Chloro-3-methylphenol	Lin2		0.2515		5560	5000	11.3	20.0
2-Methylnaphthalene	Ave	0.5724	0.5848		5110	5000	2.2	30.0
1-Methylnaphthalene	Ave	0.5896	0.5994		5080	5000	1.7	30.0
Hexachlorocyclopentadiene	Lin		0.1898	0.0500	5010	5000	0.3	30.0
1,2,4,5-Tetrachlorobenzene	Ave	0.2516	0.2489		4950	5000	-1.1	30.0
2,4,6-Trichlorophenol	Lin1		0.3394		5100	5000	2.0	20.0
2,4,5-Trichlorophenol	Lin1		0.3513		5050	5000	1.0	30.0
1,1'-Biphenyl	Ave	1.479	1.488		5030	5000	0.6	30.0
2-Chloronaphthalene	Ave	1.363	1.379		5060	5000	1.2	30.0
Phenyl ether	Ave	0.3972	0.4065		5120	5000	2.3	30.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Westfield Job No.: 360-24173-1

SDG No.: OCRI-01

Lab Sample ID: CCV 360-48213/2 Calibration Date: 08/28/2009 11:18

Instrument ID: Inst. B Calib Start Date: 08/27/2009 09:11

GC Column: Rtx-5ms ID: 0.25(um) Calib End Date: 08/27/2009 13:43

Lab File ID: B9885.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2-Nitroaniline	Lin1		0.3376		5600	5000	11.9	30.0
Dimethyl phthalate	Ave	1.175	1.311		5580	5000	11.6	30.0
2,6-Dinitrotoluene	Lin1		0.3071		5310	5000	6.2	30.0
Acenaphthylene	Ave	1.652	1.803		5460	5000	9.1	30.0
3-Nitroaniline	Lin1		0.2876		5390	5000	7.8	30.0
2,4-Dinitrophenol	Lin		0.0562	0.0500	5950	5000	18.9	30.0
4-Nitrophenol	Lin1		0.1372	0.0500	5360	5000	7.1	30.0
Acenaphthene	Ave	1.199	1.196		4990	5000	-0.3	20.0
2,4-Dinitrotoluene	Lin1		0.3771		5400	5000	8.0	30.0
Dibenzofuran	Ave	1.569	1.593		5080	5000	1.5	30.0
2,3,4,6-Tetrachlorophenol	Lin1		0.2521		4900	5000	-2.1	30.0
Diethyl phthalate	Ave	1.139	1.294		5680	5000	13.6	30.0
4-Chlorophenyl phenyl ether	Ave	0.6066	0.6254		5160	5000	3.1	30.0
4-Nitroaniline	Lin		0.2527		5350	5000	7.0	30.0
4,6-Dinitro-2-methylphenol	Lin		0.0747		6210	5000	24.3	30.0
Fluorene	Ave	1.288	1.360		5280	5000	5.6	30.0
Diphenylamine	Ave	0.6715	0.7183		5350	5000	7.0	30.0
N-Nitrosodiphenylamine	Ave	0.6715	0.7183		5350	5000	7.0	20.0
1,2-Diphenylhydrazine	Ave	1.157	1.290		5580	5000	11.5	30.0
Azobenzene	Ave	1.157	1.290		5580	5000	11.5	30.0
Benzophenone	Ave	0.7505	0.8386		5590	5000	11.7	30.0
4-Bromophenyl phenyl ether	Ave	0.1945	0.2000		5140	5000	2.8	30.0
Atrazine	Lin2		0.2172		5480	5000	9.6	30.0
Hexachlorobenzene	Ave	0.1969	0.1950		4950	5000	-1.0	30.0
Pentachlorophenol	Lin		0.0906		4820	5000	-3.6	20.0
Pentachloronitrobenzene	Lin1		0.0792		5200	5000	3.9	30.0
Phenanthrene	Ave	1.123	1.122		5000	5000	0.1	30.0
Anthracene	Ave	1.041	1.101		5290	5000	5.7	30.0
Carbazole	Ave	0.8367	0.9540		5700	5000	14.0	30.0
Di-n-butyl phthalate	Ave	1.051	1.303		6200	5000	24.0	30.0
Fluoranthene	Ave	0.9772	1.072		5490	5000	9.7	20.0
Benzidine	Qua		0.1386		5030	5000	0.6	30.0
Pyrene	Ave	1.495	1.435		4800	5000	-4.1	30.0
Butyl benzyl phthalate	Lin1		0.6723		5390	5000	7.8	30.0
Bis(2-ethylhexyl) phthalate	Lin1		0.9284		5480	5000	9.5	30.0
3,3'-Dichlorobenzidine	Qua		0.2520		6240	5000	24.7	30.0
Benzo[a]anthracene	Ave	0.9429	1.019		5400	5000	8.0	30.0
Chrysene	Ave	0.9707	0.9666		4980	5000	-0.4	30.0
Di-n-octyl phthalate	Lin1		2.654		5960	5000	19.2	20.0
Benzo[b]fluoranthene	Ave	1.318	1.411		5350	5000	7.0	30.0
Benzo[k]fluoranthene	Ave	1.243	1.405		5650	5000	13.0	30.0

1/19/10

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Westfield Job No.: 360-24173-1

SDG No.: OCRI-01

Lab Sample ID: CCV 360-48213/2 Calibration Date: 08/28/2009 11:18

Instrument ID: Inst. B Calib Start Date: 08/27/2009 09:11

GC Column: Rtx-5ms ID: 0.25(um) Calib End Date: 08/27/2009 13:43

Lab File ID: B9885.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Benzo[a]pyrene	Lin1		1.071		5170	5000	3.4	20.0
Indeno[1,2,3-cd]pyrene	Lin1		0.7406		4970	5000	-0.6	30.0
Dibenz(a,h)anthracene	Lin1		0.5862		4980	5000	-0.4	30.0
Benzo[g,h,i]perylene	Ave	0.5917	0.6062		5120	5000	2.4	30.0
2-Fluorophenol	Ave	0.5642	0.5903		5230	5000	4.6	30.0
Phenol-d5	Ave	0.6958	0.7492		5380	5000	7.7	30.0
Nitrobenzene-d5	Lin1		0.3519		5580	5000	11.5	30.0
2-Fluorobiphenyl	Ave	1.336	1.330		4980	5000	-0.5	30.0
2,4,6-Tribromophenol	Lin1		0.0739		4980	5000	-0.3	30.0
Terphenyl-d14	Ave	0.8754	0.8403		4800	5000	-4.0	30.0

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24173-1

SDG No.: OCRI-01

Matrix: Solid Level: Low Lab File ID: B9888.D

Lab ID: LCSD 360-47986/3-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCSD CONCENTRATION (ug/Kg)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,2,4-Trichlorobenzene	333	234	70	1	30	40-140	
1,2-Dichlorobenzene	333	209	63	5	30	40-140	
1,3-Dichlorobenzene	333	230	69	3	30	40-140	
1,4-Dichlorobenzene	333	229	69	4	30	40-140	
2,4-Dimethylphenol	333	331	99	2	30	30-130	
2,4-Dichlorophenol	333	303	91	0	30	30-130	
2,4,6-Trichlorophenol	333	289	87	1	30	30-130	
2-Chlorophenol	333	253	76	3	30	30-130	
2,4,5-Trichlorophenol	333	304	91	1	30	30-130	
2-Methylphenol	333	224	67	20	30	30-130	
2-Methylnaphthalene	333	265	80	0	30	40-140	
2-Nitroaniline	333	314	94	1	30	40-140	
2-Chloronaphthalene	333	220	66	0	30	40-140	
3 & 4 Methylphenol	333	292	88	3	30	30-130	
2,6-Dinitrotoluene	333	280	84	1	30	40-140	
2-Nitrophenol	333	295	88	1	30	30-130	
3-Nitroaniline	333	270	81	5	30	40-140	
4-Chloro-3-methylphenol	333	322	97	0	30	30-130	
2,4-Dinitrophenol	333	231	69	3	30	30-130	
4-Chloroaniline	333	208	62	10	30	40-140	
2,4-Dinitrotoluene	333	302	91	2	30	40-140	
Acenaphthene	333	297	89	1	30	40-140	
4-Nitrophenol	333	317	95	4	30	30-130	
Acenaphthylene	333	276	83	0	30	40-140	
4-Nitroaniline	333	334	100	3	30	40-140	
4-Bromophenyl phenyl ether	333	275	83	1	30	40-140	
Aniline	333	249	75	90	30	40-140	*
4-Chlorophenyl phenyl ether	333	286	86	2	30	40-140	
4,6-Dinitro-2-methylphenol	333	294	88	1	30	30-130	
Anthracene	333	320	96	1	30	40-140	
Benzoic acid	333	159 J	48	0	30	30-130	
Benzyl alcohol	333	229	69	18	30	30-130	
Benzo[a]anthracene	333	343	103	2	30	40-140	
Bis(2-chloroethoxy)methane	333	262	79	0	30	40-140	
Bis(2-chloroethyl)ether	333	340	102	16	30	40-140	
3,3'-Dichlorobenzidine	333	316	95	5	30	40-140	
Butyl benzyl phthalate	333	290	87	2	30	40-140	
Benzo[b]fluoranthene	333	313	94	1	30	40-140	
Benzo[k]fluoranthene	333	339	102	0	30	40-140	
Benzo[a]pyrene	333	322	96	1	30	40-140	
Chrysene	333	312	94	5	30	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24173-1

SDG No.: OCRI-01

Matrix: Solid Level: Low Lab File ID: B9888.D

Lab ID: LCSD 360-47986/3-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCSD CONCENTRATION (ug/Kg)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Benzo[g,h,i]perylene	333	326	98	3	30	40-140	
Dibenz(a,h)anthracene	333	320	96	2	30	40-140	
Acetophenone	333	245	73	3	30	40-140	
Dibenzofuran	333	266	80	1	30	40-140	
Azobenzene	333	360	108	25	30	40-140	
Diethyl phthalate	333	320	96	0	30	40-140	
Bis(2-ethylhexyl) phthalate	333	301	90	1	30	40-140	
Dimethyl phthalate	333	299	90	1	30	40-140	
Di-n-butyl phthalate	333	343	103	0	30	40-140	
Di-n-octyl phthalate	333	297	89	5	30	40-140	
Fluoranthene	333	322	97	1	30	40-140	
Fluorene	333	325	98	1	30	40-140	
Hexachlorobenzene	333	275	83	0	30	40-140	
2,2'-oxybis[1-chloropropane]	333	263	79	3	30	40-140	
Hexachlorobutadiene	333	237	71	1	30	40-140	
Hexachlorocyclopentadiene	333	249	75	6	30	40-140	
Hexachloroethane	333	221	66	3	30	40-140	
Indeno[1,2,3-cd]pyrene	333	316	95	1	30	40-140	
Isophorone	333	248	75	2	30	40-140	
Naphthalene	333	229	69	1	30	40-140	
Nitrobenzene	333	288	86	0	30	40-140	
1,1'-Biphenyl	333	449	135	56	30	40-140	*
1,2,4,5-Tetrachlorobenzene	333	264	79	2	30	40-140	
N-Nitrosodimethylamine	333	232	70	4	30	40-140	
2,3,4,6-Tetrachlorophenol	333	532	160	71	30	40-140	*
N-Nitrosodi-n-propylamine	333	264	79	5	30	40-140	
Atrazine	333	640	192	72	30	40-140	*
N-Nitrosodiphenylamine	333	216	65	3	30	40-140	
Benzaldehyde	333	259	78	3	30	40-140	
Pentachlorophenol	333	230	69	3	30	30-130	
Caprolactam	333	650	195	68	30	40-140	*
Carbazole	333	333	100	1	30	40-140	
Phenanthrene	333	286	86	0	30	40-140	
Phenol	333	259	78	3	30	30-130	
Pyrene	333	272	82	1	30	40-140	
1-Methylnaphthalene	333	467	140	62	30	40-140	*
Benzophenone	333	492	148	51	30	40-140	*
Diphenyl oxide	333	512	154	68	30	40-140	*

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Westfield | Job No.: 360-24173-1

SDG No.: OCRI-01

Sample No.: CCV 360-48454/2 | Date Analyzed: 09/01/2009 18:25

Instrument ID: Inst. J | GC Column: Rtx-5ms SIL with ID: 0.25(um)

Lab File ID (Standard): J02787.D | Heated Purge: (Y/N) N

		PHN		CRY		PD12	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12 HOUR STD		744077	10.26	625155	12.99	425787	14.54
UPPER LIMIT		1488154	10.76	1250310	13.49	851574	15.04
LOWER LIMIT		372039	9.76	312578	12.49	212894	14.04
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 360-48297/1-A		704426	10.26	528932	12.98	346248	14.54
LCS 360-48297/2-A		817530	10.26	676663	12.99	485800	14.54
LCSD 360-48297/3-A		795362	10.26	650680	12.99	496475	14.54
360-24173-4	OC-SB-416-0.0/1.0-XXX	754252	10.26	430830	12.99	1366957*	14.55
360-24173-6	OC-SB-416-8.0/9.0-XXX	746865	10.26	55550*	13.00	1294379*	14.56
360-24173-9	OC-SB-412-0.0/1.0-XXX	798502	10.26	568621	12.98	311724	14.55
360-24173-11	OC-SB-412-6.0/7.0-XXX	720714	10.26	481986	12.99	235337	14.55
360-24173-12	OC-SB-420-0.0/1.0-XXX	692931	10.26	320898	12.99	1360399*	14.55
360-24173-14	OC-SB-420-6.5/8.5-XXX	814784	10.26	141408*	13.00	1611806*	14.56
360-24173-15	OC-SB-423-0.0/1.0-XXX	780035	10.27	440572	12.99	890560*	14.56
360-24173-17	OC-SB-423-5.0/6.0-XXX	760621	10.26	404376	12.99	204865*	14.55

-6 chrysene-d12, perylene-d12

-12 perylene-d12, naphthalene-d8

-14 chrysene-d12, perylene-d12

PHN = Phenanthrene-d10
CRY = Chrysene-d12
PD12 = Perylene-d12

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.50 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270C LL

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Westfield Job No.: 360-24173-1

SDG No.: OCRI-01

Sample No.: CCV 360-48454/2 Date Analyzed: 09/01/2009 18:25

Instrument ID: Inst. J GC Column: Rtx-5ms SIL with ID: 0.25(um)

Lab File ID (Standard): J02787.D Heated Purge: (Y/N) N

		DCB		NPT		ACN	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12 HOUR STD		426594	5.78	1093907	7.02	451399	8.77
UPPER LIMIT		853188	6.28	2187814	7.52	902798	9.27
LOWER LIMIT		213297	5.28	546954	6.52	225700	8.27
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 360-48297/1-A		335195	5.78	817285	7.02	421478	8.77
LCS 360-48297/2-A		477292	5.78	1252262	7.02	487698	8.77
LCSD 360-48297/3-A		480971	5.78	1245500	7.02	469354	8.77
360-24173-4	OC-SB-416-0.0/1.0-XXX	343675	5.78	857921	7.02	452272	8.77
360-24173-6	OC-SB-416-8.0/9.0-XXX	359080	5.78	893300	7.02	485699	8.77
360-24173-9	OC-SB-412-0.0/1.0-XXX	390037	5.78	937431	7.02	484689	8.77
360-24173-11	OC-SB-412-6.0/7.0-XXX	355724	5.78	867505	7.02	440502	8.77
360-24173-12	OC-SB-420-0.0/1.0-XXX	362771	5.78	448737*	7.03	452008	8.77
360-24173-14	OC-SB-420-6.5/8.5-XXX	372485	5.78	945020	7.02	507901	8.77
360-24173-15	OC-SB-423-0.0/1.0-XXX	369710	5.78	905837	7.02	484412	8.77
360-24173-17	OC-SB-423-5.0/6.0-XXX	350398	5.78	870201	7.02	476174	8.77

DCB = 1,4-Dichlorobenzene-d4
NPT = Naphthalene-d8
ACN = Acenaphthene-d10

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.50 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270C LL

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Westfield | Job No.: 360-24173-1

SDG No.: OCRI-01

Client Sample ID: | Lab Sample ID: MB 360-48124/1-A

Matrix: Water | Lab File ID: B9851.D

Analysis Method: 8270C LL | Date Collected:

Extract. Method: 3510C | Date Extracted: 08/25/2009 11:51

Sample wt/vol: 1000(mL) | Date Analyzed: 08/27/2009 15:59

Con. Extract Vol.: 1.0(mL) | Dilution Factor: 1

Injection Volume: 1.0(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 48209 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
207-08-9	Benzo[k]fluoranthene	ND		0.30	0.17
50-32-8	Benzo[a]pyrene	ND		0.20	0.10
218-01-9	Chrysene	ND		1.0	0.17
191-24-2	Benzo[g,h,i]perylene	ND		0.50	0.094
53-70-3	Dibenz(a,h)anthracene	ND		0.50	0.064
98-86-2	Acetophenone	ND		5.0	0.50
132-64-9	Dibenzofuran	ND		5.0	0.50
103-33-3	Azobenzene	ND		5.0	0.50
84-66-2	Diethyl phthalate	ND		5.0	0.50
117-81-7	Bis(2-ethylhexyl) phthalate	ND		2.0	0.50
131-11-3	Dimethyl phthalate	ND		5.0	0.50
84-74-2	Di-n-butyl phthalate	0.680	J	5.0	0.60
117-84-0	Di-n-octyl phthalate	ND		5.0	0.73
206-44-0	Fluoranthene	ND		1.0	0.20
86-73-7	Fluorene	ND		1.0	0.050
118-74-1	Hexachlorobenzene	ND		1.0	0.50
108-60-1	bis (2-chloroisopropyl) ether	ND		5.0	0.50
77-47-4	Hexachlorocyclopentadiene	ND		5.0	0.50
67-72-1	Hexachloroethane	ND		3.0	0.50
193-39-5	Indeno[1,2,3-cd]pyrene	ND		0.50	0.079
78-59-1	Isophorone	ND		5.0	0.50
98-95-3	Nitrobenzene	ND		5.0	0.50
92-52-4	1,1'-Biphenyl	ND		5.0	0.50
95-94-3	1,2,4,5-Tetrachlorobenzene	ND		5.0	0.50
62-75-9	N-Nitrosodimethylamine	ND		5.0	0.040
58-90-2	2,3,4,6-Tetrachlorophenol	ND		5.0	0.50
621-64-7	N-Nitrosodi-n-propylamine	ND		5.0	0.50
1912-24-9	Atrazine	ND		5.0	0.50
86-30-6	N-Nitrosodiphenylamine	ND		5.0	0.50
100-52-7	Benzaldehyde	ND		5.0	0.50
87-86-5	Pentachlorophenol	ND		1.0	0.50
105-60-2	Caprolactam	ND		5.0	0.50
86-74-8	Carbazole	ND		5.0	0.50
85-01-8	Phenanthrene	ND		0.20	0.085

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Westfield | Job No.: 360-24173-1

SDG No.: OCRI-01

Client Sample ID: | Lab Sample ID: MB 360-48124/1-A

Matrix: Water | Lab File ID: B9851.D

Analysis Method: 8270C LL | Date Collected:

Extract. Method: 3510C | Date Extracted: 08/25/2009 11:51

Sample wt/vol: 1000(mL) | Date Analyzed: 08/27/2009 15:59

Con. Extract Vol.: 1.0(mL) | Dilution Factor: 1

Injection Volume: 1.0(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 48209 | Units: ug/L

Number TICs Found: 7 | TIC Result Total: 35.47

CAS NO.	COMPOUND NAME	RT	RESULT	Q
110-82-7	Cyclohexane	4.79	2.52	T J N
71-43-2	Benzene	4.93	15.3	T J N
	Unknown	5.12	14.1	T J
	Unknown	7.66	1.31	T J
772-0-9	1,3-Dioxane, 4-phenyl-	10.54	0.619	T J N
96-76-4	Phenol, 2,4-bis(1,1-dimethylethyl)-	11.13	0.902	T J N
	Unknown	11.17	0.719	T J

FORM II
GC/MS SEMI VOA SURROGATE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24173-1

SDG No.: OCRI-01

Matrix: Solid Level: Low

GC Column (1): Rtx-5ms ID: 0.25(um)

Client Sample ID	Lab Sample ID	2FP #	PHL #	NBZ #	FBP #	TBP #	TPH #
OC-SB-405-0.0/1.0-XXX	360-24173-1	86	87	62	67	72	76
OC-SB-405-8.0/9.0-XXX	360-24173-3	88	87	64	72	77	77
OC-SB-405-8.0/9.0-XXX DL	360-24173-3 DL	0 D X	0 D X	0 D X	0 D X	0 D X	0 D X
OC-SB-416-0.0/1.0-XXX	360-24173-4	111	107	93	84	94	90
OC-SB-416-0.0/1.0-XXX	360-24173-4	91	83	85	80	30	67
OC-SB-416-0.0/1.0-XXX	360-24173-4	50	56	74	64	43	77
OC-SB-416-8.0/9.0-XXX	360-24173-6	85	83	64	68	64	70
OC-SB-416-8.0/9.0-XXX	360-24173-6	70	74	84	70	77	704 X
OC-SB-416-8.0/9.0-XXX DL	360-24173-6 DL	75	70	66	70	0 X	59
OC-SB-416-8.0/9.0-XXX DL2	360-24173-6 DL2	0 D X	0 D X	0 D X	0 D X	0 D X	0 D X
OC-SB-412-0.0/1.0-XXX	360-24173-9	102	104	73	76	66	79
OC-SB-412-0.0/1.0-XXX	360-24173-9	50	57	57	55	62	79
OC-SB-412-0.0/1.0-XXX DL	360-24173-9 DL	99	87	72	76	53	79
OC-SB-412-6.0/7.0-XXX	360-24173-11	104	102	72	74	73	69
OC-SB-412-6.0/7.0-XXX	360-24173-11	66	70	75	68	72	80
OC-SB-412-6.0/7.0-XXX DL	360-24173-11 DL	83	81	62	68	10 X	54
OC-SB-420-0.0/1.0-XXX	360-24173-12	0 X	0 X	65	67	4 X	66
OC-SB-420-0.0/1.0-XXX	360-24173-12	0 X	0 X	166 X	69	1 X	92
OC-SB-420-0.0/1.0-XXX DL	360-24173-12 DL	9 X	46	64	69	0 X	57
OC-SB-420-0.0/1.0-XXX DL2	360-24173-12 DL2	0 D X	0 D X	0 D X	0 D X	0 D X	0 D X
OC-SB-420-6.5/8.5-XXX	360-24173-14	94	84	64	70	62	73
OC-SB-420-6.5/8.5-XXX	360-24173-14	71	76	81	70	75	285 X
OC-SB-420-6.5/8.5-XXX DL	360-24173-14 DL	83	78	70	74	0 X	64
OC-SB-420-6.5/8.5-XXX DL2	360-24173-14 DL2	0 D X	0 D X	0 D X	0 D X	0 D X	0 D X

	QC LIMITS
2FP = 2-Fluorophenol	30-130
PHL = Phenol-d5	30-130
NBZ = Nitrobenzene-d5	30-130
FBP = 2-Fluorobiphenyl	30-130
TBP = 2,4,6-Tribromophenol	30-130
TPH = Terphenyl-d14	30-130

Column to be used to flag recovery values

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Westfield | Job No.: 360-24173-1

SDG No.: OCRI-01

Client Sample ID: OC-SB-405-0.0/1.0-XXX | Lab Sample ID: 360-24173-1

Matrix: Solid | Lab File ID: B9889.D

Analysis Method: 8270C LL | Date Collected: 08/18/2009 08:30

Extract. Method: 3546 | Date Extracted: 08/20/2009 12:53

Sample wt/vol: 30.58(g) | Date Analyzed: 08/28/2009 13:33

Con. Extract Vol.: 1.0(mL) | Dilution Factor: 1

Injection Volume: 1.0(uL) | Level: (low/med) Low

% Moisture: 5.8 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 48213 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
120-12-7	Anthracene	ND		35	10
1912-24-9	Atrazine	ND	*	35	10
103-33-3	Azobenzene	ND		35	10
100-52-7	Benzaldehyde	ND		35	10
56-55-3	Benzo[a]anthracene	ND		35	10
50-32-8	Benzo[a]pyrene	ND		35	10
205-99-2	Benzo[b]fluoranthene	ND		35	10
191-24-2	Benzo[g,h,i]perylene	ND		35	10
207-08-9	Benzo[k]fluoranthene	ND		35	10
65-85-0	Benzoic acid	170	J	170	16
108-60-1	2,2'-oxybis[1-chloropropane]	ND		35	10
100-51-6	Benzyl alcohol	ND		69	30
111-91-1	Bis(2-chloroethoxy)methane	ND		35	10
111-44-4	Bis(2-chloroethyl)ether	ND		35	10
117-81-7	Bis(2-ethylhexyl) phthalate	35	J	35	10
85-68-7	Butyl benzyl phthalate	ND		35	10
105-60-2	Caprolactam	ND	*	35	10
86-74-8	Carbazole	ND		35	10
218-01-9	Chrysene	ND		35	10
53-70-3	Dibenz(a,h)anthracene	ND		35	10
132-64-9	Dibenzofuran	ND		35	10
84-66-2	Diethyl phthalate	ND		35	10
131-11-3	Dimethyl phthalate	ND		35	10
84-74-2	Di-n-butyl phthalate	ND		35	31
117-84-0	Di-n-octyl phthalate	ND		35	17
206-44-0	Fluoranthene	ND		35	10
86-73-7	Fluorene	ND		35	10
118-74-1	Hexachlorobenzene	ND		35	10
87-68-3	Hexachlorobutadiene	ND		35	10
77-47-4	Hexachlorocyclopentadiene	ND		69	10
67-72-1	Hexachloroethane	ND		35	10
193-39-5	Indeno[1,2,3-cd]pyrene	ND		35	10
78-59-1	Isophorone	ND		35	10
91-20-3	Naphthalene	ND		83	10

CC'd 1/19/10

TestAmerica Laboratories
Target Compound Quantitation Report

Data File:	\\wessvr06\chromdata\INSTB.i\20090826-4.b\B9889.D		
Lims ID:	360-24173-A-1-A	Client ID:	OC-SB-405-0.0/1.0-XXX
Inject. Date:	28-Aug-2009 13:33:30	Dil. Factor:	1.0000
Sample Type:	Client Sample		
Sample ID:	360-24173-A-1-A		
Misc. Info.:	360-0000975-020		
Operator:	MZ	Instrument ID:	Inst. B
Vol. Injected:	2.0000	ALS Bottle#:	52
Lims Batch ID:	48213	Lims Sample ID:	20
Detector:	MS SCAN		
Method:	\\wessvr06\chromdata\INSTB.i\20090826-4.b\8270B.m		
Last Update:	28-Aug-2009 15:12:13	Calib Date:	27-Aug-2009 13:43:30
Quant Method:	Internal Standard	Quant By:	Initial Calibration
Last ICal File:	\\wessvr06\chromdata\INSTB.i\20090827-1.b\B9847.D		
Limit Group:	SMS - 8270LL SVOA Calibration		
Integrator:	RTE		
Process Host:	WES1001		
Reviewed By:	sullivanp	Date:	28-Aug-2009 15:10:58
Reviewed By:	sullivanp	Date:	28-Aug-2009 15:13:26

Compound	Sig	RT	EXP RT	DLT RT	Response	Amount ug/mL	Flags
* 1 1,4-Dichlorobenzene-d4	150	8.604	8.592	0.012	587428	2.00	
* 2 Naphthalene-d8	136	9.715	9.712	0.003	1477483	2.00	
* 3 Acenaphthene-d10	164	11.229	11.232	-0.003	747576	2.00	
* 4 Phenanthrene-d10	188	12.557	12.559	-0.002	1256295	2.00	
* 5 Chrysene-d12	240	16.452	16.454	-0.002	790191	2.00	
* 6 Perylene-d12	264	19.462	19.450	0.012	431169	2.00	
$ 7 2-Fluorophenol	112	7.430	7.380	0.050	1425162	8.60	
$ 8 Phenol-d5	99	8.219	8.202	0.017	1787934	8.75	
$ 9 Nitrobenzene-d5	82	9.080	9.077	0.003	715399	3.09	
$ 10 2-Fluorobiphenyl	172	10.604	10.607	-0.002	1680259	3.36	
$ 11 2,4,6-Tribromophenol	330	11.907	11.910	-0.003	336620	7.17	
$ 12 Terphenyl-d14	244	14.547	14.545	0.002	1316171	3.81	
30 Acetophenone	105	8.931	8.923	0.008	18690	0.0753	
36 Benzoic acid	105	9.373	9.395	-0.022	62865	4.82	M
41 Naphthalene	128	9.734	9.731	0.003	27220	0.0382	
46 2-Methylnaphthalene	142	10.320	10.318	0.002	24609	0.0582	
47 1-Methylnaphthalene	142	10.412	10.414	-0.002	17114	0.0393	
66 Diethyl phthalate	149	11.499	11.501	-0.002	11737	0.0276	
80 Phenanthrene	178	12.581	12.588	-0.007	167729	0.2377	
81 Anthracene	178	12.634	12.636	-0.002	27500	0.0421	
83 Carbazole	167	12.768	12.770	-0.002	22340	0.0425	
84 Di-n-butyl phthalate	149	12.994	12.992	0.002	195825	0.2966	
87 Fluoranthene	202	14.028	14.030	-0.002	159817	0.2604	
85 Pyrene	202	14.418	14.420	-0.002	139324	0.2358	
89 Butyl benzyl phthalate	149	15.360	15.362	-0.002	32769	0.2170	
92 Bis(2-ethylhexyl) phthalate	149	16.250	16.252	-0.002	312420	1.00	

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FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Westfield | Job No.: 360-24173-1

SDG No.: OCRI-01

Client Sample ID: OC-SB-405-8.0/9.0-XXX | Lab Sample ID: 360-24173-3

Matrix: Solid | Lab File ID: B9891.D

Analysis Method: 8270C LL | Date Collected: 08/18/2009 08:45

Extract. Method: 3546 | Date Extracted: 08/20/2009 12:53

Sample wt/vol: 30.46(g) | Date Analyzed: 08/28/2009 14:41

Con. Extract Vol.: 1.0(mL) | Dilution Factor: 1

Injection Volume: 1.0(uL) | Level: (low/med) Low

% Moisture: 7.3 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 48213 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
120-12-7	Anthracene	ND		35	11
1912-24-9	Atrazine	ND	*	35	11
103-33-3	Azobenzene	ND		35	11
100-52-7	Benzaldehyde	ND		35	11
56-55-3	Benzo[a]anthracene	ND		35	11
50-32-8	Benzo[a]pyrene	ND		35	11
205-99-2	Benzo[b]fluoranthene	ND		35	11
191-24-2	Benzo[g,h,i]perylene	ND		35	11
207-08-9	Benzo[k]fluoranthene	ND		35	11
65-85-0	Benzoic acid	ND		180	16
108-60-1	2,2'-oxybis[1-chloropropane]	ND		35	11
100-51-6	Benzyl alcohol	ND		71	30
111-91-1	Bis(2-chloroethoxy)methane	ND		35	11
111-44-4	Bis(2-chloroethyl)ether	ND		35	11
85-68-7	Butyl benzyl phthalate	ND		35	11
105-60-2	Caprolactam	ND	*	35	11
86-74-8	Carbazole	ND		35	11
218-01-9	Chrysene	ND		35	11
53-70-3	Dibenz(a,h)anthracene	ND		35	11
132-64-9	Dibenzofuran	ND		35	11
84-66-2	Diethyl phthalate	ND		35	11
131-11-3	Dimethyl phthalate	ND		35	11
84-74-2	Di-n-butyl phthalate	35	B	35	31
117-84-0	Di-n-octyl phthalate	ND		35	18
206-44-0	Fluoranthene	22	J	35	11
86-73-7	Fluorene	ND		35	11
118-74-1	Hexachlorobenzene	ND		35	11
87-68-3	Hexachlorobutadiene	ND		35	11
77-47-4	Hexachlorocyclopentadiene	ND		71	11
67-72-1	Hexachloroethane	ND		35	11
193-39-5	Indeno[1,2,3-cd]pyrene	ND		35	11
78-59-1	Isophorone	ND		35	11
91-20-3	Naphthalene	ND		85	11
98-95-3	Nitrobenzene	ND		35	11

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FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Westfield | Job No.: 360-24173-1

SDG No.: OCRI-01

Client Sample ID: OC-SB-405-8.0/9.0-XXX | Lab Sample ID: 360-24173-3

Matrix: Solid | Lab File ID: B9891.D

Analysis Method: 8270C LL | Date Collected: 08/18/2009 08:45

Extract. Method: 3546 | Date Extracted: 08/20/2009 12:53

Sample wt/vol: 30.46(g) | Date Analyzed: 08/28/2009 14:41

Con. Extract Vol.: 1.0(mL) | Dilution Factor: 1

Injection Volume: 1.0(uL) | Level: (low/med) Low

% Moisture: 7.3 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 48213 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
62-75-9	N-Nitrosodimethylamine	ND		35	13
621-64-7	N-Nitrosodi-n-propylamine	ND		35	11
86-30-6	N-Nitrosodiphenylamine	ND		35	11
87-86-5	Pentachlorophenol	ND		35	11
85-01-8	Phenanthrene	ND		42	11
108-95-2	Phenol	ND		35	11
129-00-0	Pyrene	39		35	11
90-12-0	1-Methylnaphthalene	ND	*	35	11
119-61-9	Benzophenone	ND	*	35	11
101-84-8	Diphenyl oxide	30	J *	35	11

CAS NO.	SURROGATE	%REC	LIMITS	Q
118-79-6	2,4,6-Tribromophenol	77	30-130	
4165-60-0	Nitrobenzene-d5	64	30-130	
4165-62-2	Phenol-d5	87	30-130	
367-12-4	2-Fluorophenol	88	30-130	
321-60-8	2-Fluorobiphenyl	72	30-130	
1718-51-0	Terphenyl-d14	77	30-130	

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Westfield | Job No.: 360-24173-1

SDG No.: OCRI-01

Client Sample ID: OC-SB-405-8.0/9.0-XXX DL | Lab Sample ID: 360-24173-3 DL

Matrix: Solid | Lab File ID: B9932.D

Analysis Method: 8270C LL | Date Collected: 08/18/2009 08:45

Extract. Method: 3546 | Date Extracted: 08/20/2009 12:53

Sample wt/vol: 30.46(g) | Date Analyzed: 09/01/2009 03:31

Con. Extract Vol.: 1.0(mL) | Dilution Factor: 50

Injection Volume: 1.0(uL) | Level: (low/med) Low

% Moisture: 7.3 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 48389 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
117-81-7	Bis(2-ethylhexyl) phthalate	28000		1800	530

CAS NO.	SURROGATE	%REC	LIMITS	Q
118-79-6	2,4,6-Tribromophenol	0	30-130	D X
4165-60-0	Nitrobenzene-d5	0	30-130	D X
4165-62-2	Phenol-d5	0	30-130	D X
367-12-4	2-Fluorophenol	0	30-130	D X
321-60-8	2-Fluorobiphenyl	0	30-130	D X
1718-51-0	Terphenyl-d14	0	30-130	D X

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FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Westfield | Job No.: 360-24173-1

SDG No.: OCRI-01

Client Sample ID: OC-SB-416-0.0/1.0-XXX | Lab Sample ID: 360-24173-4

Matrix: Solid | Lab File ID: B9892.D

Analysis Method: 8270C LL | Date Collected: 08/18/2009 10:35

Extract. Method: 3546 | Date Extracted: 08/20/2009 12:53

Sample wt/vol: 30.31(g) | Date Analyzed: 08/28/2009 15:15

Con. Extract Vol.: 1.0(mL) | Dilution Factor: 1

Injection Volume: 1.0(uL) | Level: (low/med) Low

% Moisture: 3.2 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 48213 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
92-52-4	1,1'-Biphenyl	ND	*	34	10
95-94-3	1,2,4,5-Tetrachlorobenzene	ND		34	10
120-82-1	1,2,4-Trichlorobenzene	ND		34	10
95-50-1	1,2-Dichlorobenzene	ND		34	10
541-73-1	1,3-Dichlorobenzene	ND		34	10
106-46-7	1,4-Dichlorobenzene	ND		34	10
58-90-2	2,3,4,6-Tetrachlorophenol	ND	*	34	10
95-95-4	2,4,5-Trichlorophenol	ND		34	10
88-06-2	2,4,6-Trichlorophenol	ND		34	10
120-83-2	2,4-Dichlorophenol	ND		34	10
105-67-9	2,4-Dimethylphenol	ND		34	13
51-28-5	2,4-Dinitrophenol	ND		34	10
606-20-2	2,6-Dinitrotoluene	ND		34	10
121-14-2	2,4-Dinitrotoluene	ND		34	10
91-58-7	2-Chloronaphthalene	ND		34	10
95-57-8	2-Chlorophenol	ND		34	10
91-57-6	2-Methylnaphthalene	ND		34	10
95-48-7	2-Methylphenol	ND		34	20
88-74-4	2-Nitroaniline	ND		170	10
88-75-5	2-Nitrophenol	ND		34	10
91-94-1	3,3'-Dichlorobenzidine	ND		68	10
15831-10-4	3 & 4 Methylphenol	ND		34	10
99-09-2	3-Nitroaniline	ND		170	10
534-52-1	4,6-Dinitro-2-methylphenol	ND		170	10
101-55-3	4-Bromophenyl phenyl ether	ND		34	10
59-50-7	4-Chloro-3-methylphenol	ND		68	10
106-47-8	4-Chloroaniline	ND		68	10
7005-72-3	4-Chlorophenyl phenyl ether	ND		34	10
100-01-6	4-Nitroaniline	ND		170	10
100-02-7	4-Nitrophenol	ND		170	10
83-32-9	Acenaphthene	ND		34	10
208-96-8	Acenaphthylene	ND		34	10
98-86-2	Acetophenone	ND		34	10
62-53-3	Aniline	ND	*	34	10

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Westfield Job No.: 360-24173-1

SDG No.: OCRI-01

Client Sample ID: OC-SB-416-0.0/1.0-XXX Lab Sample ID: 360-24173-4

Matrix: Solid Lab File ID: J02791.D

Analysis Method: 8270C LL Date Collected: 08/18/2009 10:35

Extract. Method: 3550B Date Extracted: 08/27/2009 16:43

Sample wt/vol: 100.45(g) Date Analyzed: 09/01/2009 20:25

Con. Extract Vol.: 1.0(mL) Dilution Factor: 1

Injection Volume: 1.0(uL) Level: (low/med) Low

% Moisture: 3.2 GPC Cleanup:(Y/N) N

Analysis Batch No.: 48454 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
62-75-9	N-Nitrosodimethylamine	ND		5.1	1.2

CAS NO.	SURROGATE	%REC	LIMITS	Q
118-79-6	2,4,6-Tribromophenol	43	30-130	
321-60-8	2-Fluorobiphenyl	64	30-130	
367-12-4	2-Fluorophenol	50	30-130	
4165-60-0	Nitrobenzene-d5	74	30-130	
4165-62-2	Phenol-d5	56	30-130	
1718-51-0	Terphenyl-d14	77	30-130	

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Westfield | Job No.: 360-24173-1

SDG No.: OCRI-01

Client Sample ID: OC-SB-416-0.0/1.0-XXX | Lab Sample ID: 360-24173-4

Matrix: Solid | Lab File ID: B9912.D

Analysis Method: 8270C LL | Date Collected: 08/18/2009 10:35

Extract. Method: 3546 | Date Extracted: 08/20/2009 12:53

Sample wt/vol: 30.31(g) | Date Analyzed: 08/31/2009 16:10

Con. Extract Vol.: 1.0(mL) | Dilution Factor: 10

Injection Volume: 1.0(uL) | Level: (low/med) Low

% Moisture: 3.2 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 48389 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
117-81-7	Bis(2-ethylhexyl) phthalate	4500		340	100

CAS NO.	SURROGATE	%REC	LIMITS	Q
118-79-6	2,4,6-Tribromophenol	30	30-130	
4165-60-0	Nitrobenzene-d5	85	30-130	
4165-62-2	Phenol-d5	83	30-130	
367-12-4	2-Fluorophenol	91	30-130	
321-60-8	2-Fluorobiphenyl	80	30-130	
1718-51-0	Terphenyl-d14	67	30-130	

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Westfield Job No.: 360-24173-1

SDG No.: OCRI-01

Client Sample ID: OC-SB-416-8.0/9.0-XXX Lab Sample ID: 360-24173-6

Matrix: Solid Lab File ID: B9894.D

Analysis Method: 8270C LL Date Collected: 08/18/2009 10:45

Extract. Method: 3546 Date Extracted: 08/20/2009 12:53

Sample wt/vol: 30.11(g) Date Analyzed: 08/28/2009 16:23

Con. Extract Vol.: 1.0(mL) Dilution Factor: 1

Injection Volume: 1.0(uL) Level: (low/med) Low

% Moisture: 6.4 GPC Cleanup:(Y/N) N

Analysis Batch No.: 48213 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
92-52-4	1,1'-Biphenyl	17	J *	35	11
95-94-3	1,2,4,5-Tetrachlorobenzene	ND		35	11
120-82-1	1,2,4-Trichlorobenzene	ND		35	11
95-50-1	1,2-Dichlorobenzene	ND		35	11
541-73-1	1,3-Dichlorobenzene	ND		35	11
106-46-7	1,4-Dichlorobenzene	ND		35	11
58-90-2	2,3,4,6-Tetrachlorophenol	ND	*	35	11
95-95-4	2,4,5-Trichlorophenol	ND		35	11
88-06-2	2,4,6-Trichlorophenol	ND		35	11
120-83-2	2,4-Dichlorophenol	ND		35	11
105-67-9	2,4-Dimethylphenol	ND		35	14
51-28-5	2,4-Dinitrophenol	ND		35	11
606-20-2	2,6-Dinitrotoluene	ND		35	11
121-14-2	2,4-Dinitrotoluene	ND		35	11
91-58-7	2-Chloronaphthalene	ND		35	11
95-57-8	2-Chlorophenol	ND		35	11
91-57-6	2-Methylnaphthalene	ND		35	11
95-48-7	2-Methylphenol	ND		35	21
88-74-4	2-Nitroaniline	ND		180	11
88-75-5	2-Nitrophenol	ND		35	11
91-94-1	3,3'-Dichlorobenzidine	ND		71	11
15831-10-4	3 & 4 Methylphenol	ND		35	11
99-09-2	3-Nitroaniline	ND		180	11
534-52-1	4,6-Dinitro-2-methylphenol	ND		180	11
101-55-3	4-Bromophenyl phenyl ether	ND		35	11
59-50-7	4-Chloro-3-methylphenol	ND		71	11
106-47-8	4-Chloroaniline	ND		71	11
7005-72-3	4-Chlorophenyl phenyl ether	ND		35	11
100-01-6	4-Nitroaniline	ND		180	11
100-02-7	4-Nitrophenol	ND		180	11
83-32-9	Acenaphthene	ND		35	11
208-96-8	Acenaphthylene	ND		35	11
98-86-2	Acetophenone	ND		35	11
62-53-3	Aniline	ND	*	35	11

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Westfield | Job No.: 360-24173-1

SDG No.: OCRI-01

Client Sample ID: OC-SB-416-8.0/9.0-XXX | Lab Sample ID: 360-24173-6

Matrix: Solid | Lab File ID: B9894.D

Analysis Method: 8270C LL | Date Collected: 08/18/2009 10:45

Extract. Method: 3546 | Date Extracted: 08/20/2009 12:53

Sample wt/vol: 30.11(g) | Date Analyzed: 08/28/2009 16:23

Con. Extract Vol.: 1.0(mL) | Dilution Factor: 1

Injection Volume: 1.0(uL) | Level: (low/med) Low

% Moisture: 6.4 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 48213 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
120-12-7	Anthracene	ND		35	11
1912-24-9	Atrazine	ND	*	35	11
103-33-3	Azobenzene	ND		35	11
100-52-7	Benzaldehyde	ND		35	11
56-55-3	Benzo[a]anthracene	ND		35	11
50-32-8	Benzo[a]pyrene	ND		35	11
205-99-2	Benzo[b]fluoranthene	ND		35	11
191-24-2	Benzo[g,h,i]perylene	ND		35	11
207-08-9	Benzo[k]fluoranthene	ND		35	11
65-85-0	Benzoic acid	ND		180	16
108-60-1	2,2'-oxybis[1-chloropropane]	ND		35	11
100-51-6	Benzyl alcohol	ND		71	30
111-91-1	Bis(2-chloroethoxy)methane	ND		35	11
111-44-4	Bis(2-chloroethyl)ether	ND		35	11
85-68-7	Butyl benzyl phthalate	ND		35	11
105-60-2	Caprolactam	ND	*	35	11
86-74-8	Carbazole	ND		35	11
218-01-9	Chrysene	ND		35	11
53-70-3	Dibenz(a,h)anthracene	ND		35	11
132-64-9	Dibenzofuran	ND		35	11
84-66-2	Diethyl phthalate	ND		35	11
131-11-3	Dimethyl phthalate	ND		35	11
84-74-2	Di-n-butyl phthalate	ND		35	31
117-84-0	Di-n-octyl phthalate	ND		35	18
206-44-0	Fluoranthene	ND		35	11
86-73-7	Fluorene	ND		35	11
118-74-1	Hexachlorobenzene	ND		35	11
87-68-3	Hexachlorobutadiene	ND		35	11
77-47-4	Hexachlorocyclopentadiene	ND		71	11
67-72-1	Hexachloroethane	ND		35	11
193-39-5	Indeno[1,2,3-cd]pyrene	ND		35	11
78-59-1	Isophorone	ND		35	11
91-20-3	Naphthalene	12	J	85	11
98-95-3	Nitrobenzene	ND		35	11

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Westfield | Job No.: 360-24173-1

SDG No.: OCRI-01

Client Sample ID: OC-SB-416-8.0/9.0-XXX | Lab Sample ID: 360-24173-6

Matrix: Solid | Lab File ID: B9894.D

Analysis Method: 8270C LL | Date Collected: 08/18/2009 10:45

Extract. Method: 3546 | Date Extracted: 08/20/2009 12:53

Sample wt/vol: 30.11(g) | Date Analyzed: 08/28/2009 16:23

Con. Extract Vol.: 1.0(mL) | Dilution Factor: 1

Injection Volume: 1.0(uL) | Level: (low/med) Low

% Moisture: 6.4 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 48213 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
62-75-9	N-Nitrosodimethylamine	ND		35	13
621-64-7	N-Nitrosodi-n-propylamine	ND		35	11
86-30-6	N-Nitrosodiphenylamine	ND		35	11
87-86-5	Pentachlorophenol	ND		35	11
85-01-8	Phenanthrene	ND		43	11
108-95-2	Phenol	ND		35	11
129-00-0	Pyrene	ND		35	11
90-12-0	1-Methylnaphthalene	ND	*	35	11
119-61-9	Benzophenone	ND	*	35	11
101-84-8	Diphenyl oxide	360	*	35	11

CAS NO.	SURROGATE	%REC	LIMITS	Q
118-79-6	2,4,6-Tribromophenol	64	30-130	
4165-60-0	Nitrobenzene-d5	64	30-130	
4165-62-2	Phenol-d5	83	30-130	
367-12-4	2-Fluorophenol	85	30-130	
321-60-8	2-Fluorobiphenyl	68	30-130	
1718-51-0	Terphenyl-d14	70	30-130	

rcld
9/19/10

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Westfield | Job No.: 360-24173-1

SDG No.: OCRI-01

Client Sample ID: OC-SB-416-8.0/9.0-XXX | Lab Sample ID: 360-24173-6

Matrix: Solid | Lab File ID: J02793.D

Analysis Method: 8270C LL | Date Collected: 08/18/2009 10:45

Extract. Method: 3550B | Date Extracted: 08/27/2009 16:43

Sample wt/vol: 100.37(g) | Date Analyzed: 09/01/2009 21:25

Con. Extract Vol.: 1.0(mL) | Dilution Factor: 1

Injection Volume: 1.0(uL) | Level: (low/med) Low

% Moisture: 6.4 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 48454 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
62-75-9	N-Nitrosodimethylamine	ND		5.3	1.2

CAS NO.	SURROGATE	%REC	LIMITS	Q
118-79-6	2,4,6-Tribromophenol	77	30-130	
321-60-8	2-Fluorobiphenyl	70	30-130	
367-12-4	2-Fluorophenol	70	30-130	
4165-60-0	Nitrobenzene-d5	84	30-130	
4165-62-2	Phenol-d5	74	30-130	
1718-51-0	Terphenyl-d14	704	30-130	X

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Westfield | Job No.: 360-24173-1

SDG No.: OCRI-01

Client Sample ID: OC-SB-416-8.0/9.0-XXX DL3 | Lab Sample ID: 360-24173-6 DL3

Matrix: Solid | Lab File ID: B10128.D

Analysis Method: 8270C LL | Date Collected: 08/18/2009 10:45

Extract. Method: 3546 | Date Extracted: 08/20/2009 12:53

Sample wt/vol: 30.11(g) | Date Analyzed: 09/08/2009 16:42

Con. Extract Vol.: 1.0(mL) | Dilution Factor: 1

Injection Volume: 1.0(uL) | Level: (low/med) Low

% Moisture: 6.4 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 48702 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
122-39-4	Diphenylamine	100		35	2.1

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Westfield | Job No.: 360-24173-1

SDG No.: OCRI-01

Client Sample ID: OC-SB-416-8.0/9.0-XXX DL | Lab Sample ID: 360-24173-6 DL

Matrix: Solid | Lab File ID: B9913.D

Analysis Method: 8270C LL | Date Collected: 08/18/2009 10:45

Extract. Method: 3546 | Date Extracted: 08/20/2009 12:53

Sample wt/vol: 30.11(g) | Date Analyzed: 08/31/2009 16:44

Con. Extract Vol.: 1.0(mL) | Dilution Factor: 10

Injection Volume: 1.0(uL) | Level: (low/med) Low

% Moisture: 6.4 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 48389 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
50-32-8	Benzo[a]pyrene	ND		350	110
205-99-2	Benzo[b]fluoranthene	ND		350	110
191-24-2	Benzo[g,h,i]perylene	ND		350	110
207-08-9	Benzo[k]fluoranthene	ND		350	110
53-70-3	Dibenz(a,h)anthracene	ND		350	110
117-84-0	Di-n-octyl phthalate	ND		350	180
193-39-5	Indeno[1,2,3-cd]pyrene	ND		350	110

CAS NO.	SURROGATE	%REC	LIMITS	Q
118-79-6	2,4,6-Tribromophenol	0	30-130	X
4165-60-0	Nitrobenzene-d5	66	30-130	
4165-62-2	Phenol-d5	70	30-130	
367-12-4	2-Fluorophenol	75	30-130	
321-60-8	2-Fluorobiphenyl	70	30-130	
1718-51-0	Terphenyl-d14	59	30-130	

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Westfield | Job No.: 360-24173-1

SDG No.: OCRI-01

Client Sample ID: OC-SB-416-8.0/9.0-XXX DL2 | Lab Sample ID: 360-24173-6 DL2

Matrix: Solid | Lab File ID: B9933.D

Analysis Method: 8270C LL | Date Collected: 08/18/2009 10:45

Extract. Method: 3546 | Date Extracted: 08/20/2009 12:53

Sample wt/vol: 30.11(g) | Date Analyzed: 09/01/2009 04:05

Con. Extract Vol.: 1.0(mL) | Dilution Factor: 50

Injection Volume: 1.0(uL) | Level: (low/med) Low

% Moisture: 6.4 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 48389 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
117-81-7	Bis(2-ethylhexyl) phthalate	35000		1800	530

CAS NO.	SURROGATE	%REC	LIMITS	Q
118-79-6	2,4,6-Tribromophenol	0	30-130	D X
4165-60-0	Nitrobenzene-d5	0	30-130	D X
4165-62-2	Phenol-d5	0	30-130	D X
367-12-4	2-Fluorophenol	0	30-130	D X
321-60-8	2-Fluorobiphenyl	0	30-130	D X
1718-51-0	Terphenyl-d14	0	30-130	D X

cc'd

1/19/10

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Westfield | Job No.: 360-24173-1

SDG No.: OCRI-01

Client Sample ID: OC-EBK-001 | Lab Sample ID: 360-24173-8

Matrix: Water | Lab File ID: B9854.D

Analysis Method: 8270C LL | Date Collected: 08/18/2009 08:30

Extract. Method: 3510C | Date Extracted: 08/25/2009 11:51

Sample wt/vol: 1000(mL) | Date Analyzed: 08/27/2009 17:41

Con. Extract Vol.: 1.0(mL) | Dilution Factor: 1

Injection Volume: 1.0(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 48209 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
86-73-7	Fluorene	ND		1.0	0.050
100-01-6	4-Nitroaniline	ND		5.0	0.50
101-55-3	4-Bromophenyl phenyl ether	ND		5.0	0.50
118-74-1	Hexachlorobenzene	ND		1.0	0.50
84-66-2	Diethyl phthalate	0.51	J	5.0	0.50
7005-72-3	4-Chlorophenyl phenyl ether	ND		5.0	0.50
87-86-5	Pentachlorophenol	ND		1.0	0.50
86-30-6	N-Nitrosodiphenylamine	ND		5.0	0.50
534-52-1	4,6-Dinitro-2-methylphenol	ND		5.0	0.50
85-01-8	Phenanthrene	ND		0.20	0.085
120-12-7	Anthracene	ND		1.0	0.50
84-74-2	Di-n-butyl phthalate	1.1	J	5.0	0.60
206-44-0	Fluoranthene	ND		1.0	0.20
129-00-0	Pyrene	ND		5.0	0.19
85-68-7	Butyl benzyl phthalate	ND		5.0	0.50
56-55-3	Benzo[a]anthracene	ND		0.30	0.17
218-01-9	Chrysene	ND		1.0	0.17
91-94-1	3,3'-Dichlorobenzidine	ND		5.0	0.50
117-84-0	Di-n-octyl phthalate	ND		5.0	0.73
205-99-2	Benzo[b]fluoranthene	ND		0.30	0.14
207-08-9	Benzo[k]fluoranthene	ND		0.30	0.17
50-32-8	Benzo[a]pyrene	ND		0.20	0.10
193-39-5	Indeno[1,2,3-cd]pyrene	ND		0.50	0.079
53-70-3	Dibenz(a,h)anthracene	ND		0.50	0.064
191-24-2	Benzo[g,h,i]perylene	ND		0.50	0.094
98-86-2	Acetophenone	0.62	J	5.0	0.50
103-33-3	Azobenzene	ND		5.0	0.50
117-81-7	Bis(2-ethylhexyl) phthalate	ND		2.0	0.50
108-60-1	bis (2-chloroisopropyl) ether	ND		5.0	0.50
90-12-0	1-Methylnaphthalene	ND		5.0	0.050
92-52-4	1,1'-Biphenyl	ND		5.0	0.50
95-94-3	1,2,4,5-Tetrachlorobenzene	ND		5.0	0.50
58-90-2	2,3,4,6-Tetrachlorophenol	ND		5.0	0.50
1912-24-9	Atrazine	ND		5.0	0.50

CCdo 1/19/10

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Westfield | Job No.: 360-24173-1

SDG No.: OCRI-01

Client Sample ID: OC-SB-412-0.0/1.0-XXX | Lab Sample ID: 360-24173-9

Matrix: Solid | Lab File ID: B9895.D

Analysis Method: 8270C LL | Date Collected: 08/18/2009 12:45

Extract. Method: 3546 | Date Extracted: 08/20/2009 12:53

Sample wt/vol: 30.80(g) | Date Analyzed: 08/28/2009 16:57

Con. Extract Vol.: 1.0(mL) | Dilution Factor: 1

Injection Volume: 1.0(uL) | Level: (low/med) Low

% Moisture: 3.3 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 48213 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
62-75-9	N-Nitrosodimethylamine	ND		34	12
621-64-7	N-Nitrosodi-n-propylamine	ND		34	10
86-30-6	N-Nitrosodiphenylamine	ND		34	10
87-86-5	Pentachlorophenol	ND		34	10
85-01-8	Phenanthrene	ND		40	10
108-95-2	Phenol	ND		34	10
129-00-0	Pyrene	ND		34	10
90-12-0	1-Methylnaphthalene	ND	*	34	10
119-61-9	Benzophenone	ND	*	34	10
122-39-4	Diphenylamine	6.9	J	34	2.0
101-84-8	Diphenyl oxide	21	J *	34	10

CAS NO.	SURROGATE	%REC	LIMITS	Q
118-79-6	2,4,6-Tribromophenol	66	30-130	
4165-60-0	Nitrobenzene-d5	73	30-130	
4165-62-2	Phenol-d5	104	30-130	
367-12-4	2-Fluorophenol	102	30-130	
321-60-8	2-Fluorobiphenyl	76	30-130	
1718-51-0	Terphenyl-d14	79	30-130	

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Westfield Job No.: 360-24173-1

SDG No.: OCRI-01

Client Sample ID: OC-SB-412-0.0/1.0-XXX DL Lab Sample ID: 360-24173-9 DL

Matrix: Solid Lab File ID: B9934.D

Analysis Method: 8270C LL Date Collected: 08/18/2009 12:45

Extract. Method: 3546 Date Extracted: 08/20/2009 12:53

Sample wt/vol: 30.80(g) Date Analyzed: 09/01/2009 04:39

Con. Extract Vol.: 1.0(mL) Dilution Factor: 1

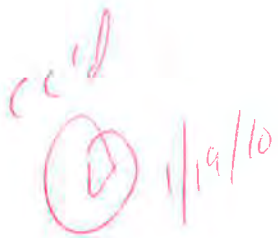
Injection Volume: 1.0(uL) Level: (low/med) Low

% Moisture: 3.3 GPC Cleanup:(Y/N) N

Analysis Batch No.: 48389 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
117-81-7	Bis(2-ethylhexyl) phthalate	33	J	34	10

CAS NO.	SURROGATE	%REC	LIMITS	Q
118-79-6	2,4,6-Tribromophenol	53	30-130	
4165-60-0	Nitrobenzene-d5	72	30-130	
4165-62-2	Phenol-d5	87	30-130	
367-12-4	2-Fluorophenol	99	30-130	
321-60-8	2-Fluorobiphenyl	76	30-130	
1718-51-0	Terphenyl-d14	79	30-130	



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Westfield Job No.: 360-24173-1

SDG No.: OCRI-01

Client Sample ID: OC-SB-412-0.0/1.0-XXX Lab Sample ID: 360-24173-9

Matrix: Solid Lab File ID: J02794.D

Analysis Method: 8270C LL Date Collected: 08/18/2009 12:45

Extract. Method: 3550B Date Extracted: 08/27/2009 16:43

Sample wt/vol: 100.26(g) Date Analyzed: 09/01/2009 21:55

Con. Extract Vol.: 1.0(mL) Dilution Factor: 1

Injection Volume: 1.0(uL) Level: (low/med) Low

% Moisture: 3.3 GPC Cleanup:(Y/N) N

Analysis Batch No.: 48454 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
62-75-9	N-Nitrosodimethylamine	ND		5.2	1.2

CAS NO.	SURROGATE	%REC	LIMITS	Q
118-79-6	2,4,6-Tribromophenol	62	30-130	
321-60-8	2-Fluorobiphenyl	55	30-130	
367-12-4	2-Fluorophenol	50	30-130	
4165-60-0	Nitrobenzene-d5	57	30-130	
4165-62-2	Phenol-d5	57	30-130	
1718-51-0	Terphenyl-d14	79	30-130	

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Westfield | Job No.: 360-24173-1

SDG No.: OCRI-01

Client Sample ID: OC-SB-412-6.0/7.0-XXX | Lab Sample ID: 360-24173-11

Matrix: Solid | Lab File ID: B9897.D

Analysis Method: 8270C LL | Date Collected: 08/18/2009 12:55

Extract. Method: 3546 | Date Extracted: 08/20/2009 12:53

Sample wt/vol: 30.23(g) | Date Analyzed: 08/28/2009 18:05

Con. Extract Vol.: 1.0(mL) | Dilution Factor: 1

Injection Volume: 1.0(uL) | Level: (low/med) Low

% Moisture: 13.5 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 48213 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
120-12-7	Anthracene	15	J	38	11
1912-24-9	Atrazine	ND	*	38	11
103-33-3	Azobenzene	ND		38	11
100-52-7	Benzaldehyde	ND		38	11
56-55-3	Benzo[a]anthracene	49		38	11
50-32-8	Benzo[a]pyrene	340		38	11
205-99-2	Benzo[b]fluoranthene	490		38	11
191-24-2	Benzo[g,h,i]perylene	490		38	11
207-08-9	Benzo[k]fluoranthene	220		38	11
65-85-0	Benzoic acid	160	J	190	17
108-60-1	2,2'-oxybis[1-chloropropane]	ND		38	11
100-51-6	Benzyl alcohol	ND		77	33
111-91-1	Bis(2-chloroethoxy)methane	ND		38	11
111-44-4	Bis(2-chloroethyl)ether	ND		38	11
85-68-7	Butyl benzyl phthalate	ND		38	11
105-60-2	Caprolactam	ND	*	38	11
86-74-8	Carbazole	ND		38	11
218-01-9	Chrysene	89		38	11
53-70-3	Dibenz(a,h)anthracene	150		38	11
132-64-9	Dibenzofuran	ND		38	11
84-66-2	Diethyl phthalate	ND		38	11
131-11-3	Dimethyl phthalate	ND		38	11
84-74-2	Di-n-butyl phthalate	ND		38	34
117-84-0	Di-n-octyl phthalate	ND		38	19
206-44-0	Fluoranthene	33	J	38	11
86-73-7	Fluorene	ND		38	11
118-74-1	Hexachlorobenzene	ND		38	11
87-68-3	Hexachlorobutadiene	ND		38	11
77-47-4	Hexachlorocyclopentadiene	ND		77	11
67-72-1	Hexachloroethane	ND		38	11
193-39-5	Indeno[1,2,3-cd]pyrene	430		38	11
78-59-1	Isophorone	ND		38	11
91-20-3	Naphthalene	ND		92	11
98-95-3	Nitrobenzene	ND		38	11

CC1 (W) 1/19/10

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Westfield | Job No.: 360-24173-1

SDG No.: OCRI-01

Client Sample ID: OC-SB-412-6.0/7.0-XXX | Lab Sample ID: 360-24173-11

Matrix: Solid | Lab File ID: J02796.D

Analysis Method: 8270C LL | Date Collected: 08/18/2009 12:55

Extract. Method: 3550B | Date Extracted: 08/27/2009 16:43

Sample wt/vol: 100.14(g) | Date Analyzed: 09/01/2009 22:55

Con. Extract Vol.: 1.0(mL) | Dilution Factor: 1

Injection Volume: 1.0(uL) | Level: (low/med) Low

% Moisture: 13.5 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 48454 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
62-75-9	N-Nitrosodimethylamine	ND		5.8	1.3

CAS NO.	SURROGATE	%REC	LIMITS	Q
118-79-6	2,4,6-Tribromophenol	72	30-130	
321-60-8	2-Fluorobiphenyl	68	30-130	
367-12-4	2-Fluorophenol	66	30-130	
4165-60-0	Nitrobenzene-d5	75	30-130	
4165-62-2	Phenol-d5	70	30-130	
1718-51-0	Terphenyl-d14	80	30-130	

cc'd

1/19/10

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Westfield Job No.: 360-24173-1

SDG No.: OCRI-01

Client Sample ID: OC-SB-412-6.0/7.0-XXX DL Lab Sample ID: 360-24173-11 DL

Matrix: Solid Lab File ID: B9915.D

Analysis Method: 8270C LL Date Collected: 08/18/2009 12:55

Extract. Method: 3546 Date Extracted: 08/20/2009 12:53

Sample wt/vol: 30.23(g) Date Analyzed: 08/31/2009 17:52

Con. Extract Vol.: 1.0(mL) Dilution Factor: 5

Injection Volume: 1.0(uL) Level: (low/med) Low

% Moisture: 13.5 GPC Cleanup:(Y/N) N

Analysis Batch No.: 48389 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
117-81-7	Bis(2-ethylhexyl) phthalate	1500		190	57

CAS NO.	SURROGATE	%REC	LIMITS	Q
118-79-6	2,4,6-Tribromophenol	10	30-130	X
4165-60-0	Nitrobenzene-d5	62	30-130	
4165-62-2	Phenol-d5	81	30-130	
367-12-4	2-Fluorophenol	83	30-130	
321-60-8	2-Fluorobiphenyl	68	30-130	
1718-51-0	Terphenyl-d14	54	30-130	

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Westfield Job No.: 360-24173-1

SDG No.: OCRI-01

Client Sample ID: OC-SB-420-0.0/1.0-XXX Lab Sample ID: 360-24173-12

Matrix: Solid Lab File ID: B9898.D

Analysis Method: 8270C LL Date Collected: 08/18/2009 15:55

Extract. Method: 3546 Date Extracted: 08/20/2009 12:53

Sample wt/vol: 30.55(g) Date Analyzed: 08/28/2009 18:39

Con. Extract Vol.: 1.0(mL) Dilution Factor: 1

Injection Volume: 1.0(uL) Level: (low/med) Low

% Moisture: 3.7 GPC Cleanup:(Y/N) N

Analysis Batch No.: 48213 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
92-52-4	1,1'-Biphenyl	170	*	34	10
95-94-3	1,2,4,5-Tetrachlorobenzene	ND		34	10
120-82-1	1,2,4-Trichlorobenzene	ND		34	10
95-50-1	1,2-Dichlorobenzene	ND		34	10
541-73-1	1,3-Dichlorobenzene	ND		34	10
106-46-7	1,4-Dichlorobenzene	ND		34	10
58-90-2	2,3,4,6-Tetrachlorophenol	ND	*	34	10
95-95-4	2,4,5-Trichlorophenol	ND		34	10
88-06-2	2,4,6-Trichlorophenol	ND		34	10
120-83-2	2,4-Dichlorophenol	ND		34	10
105-67-9	2,4-Dimethylphenol	610		34	13
51-28-5	2,4-Dinitrophenol	ND		34	10
606-20-2	2,6-Dinitrotoluene	ND		34	10
121-14-2	2,4-Dinitrotoluene	ND		34	10
91-58-7	2-Chloronaphthalene	ND		34	10
95-57-8	2-Chlorophenol	ND		34	10
91-57-6	2-Methylnaphthalene	ND		34	10
88-74-4	2-Nitroaniline	ND		170	10
88-75-5	2-Nitrophenol	ND		34	10
91-94-1	3,3'-Dichlorobenzidine	ND		68	10
99-09-2	3-Nitroaniline	ND		170	10
534-52-1	4,6-Dinitro-2-methylphenol	ND		170	10
101-55-3	4-Bromophenyl phenyl ether	ND		34	10
59-50-7	4-Chloro-3-methylphenol	ND		68	10
106-47-8	4-Chloroaniline	ND		68	10
7005-72-3	4-Chlorophenyl phenyl ether	ND		34	10
100-01-6	4-Nitroaniline	ND		170	10
100-02-7	4-Nitrophenol	ND		170	10
83-32-9	Acenaphthene	ND		34	10
208-96-8	Acenaphthylene	ND		34	10
98-86-2	Acetophenone	ND		34	10
62-53-3	Aniline	ND	*	34	10
120-12-7	Anthracene	ND		34	10
1912-24-9	Atrazine	ND	*	34	10

cc 1 @ 1/19/10

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Westfield | Job No.: 360-24173-1

SDG No.: OCRI-01

Client Sample ID: OC-SB-420-0.0/1.0-XXX | Lab Sample ID: 360-24173-12

Matrix: Solid | Lab File ID: B9898.D

Analysis Method: 8270C LL | Date Collected: 08/18/2009 15:55

Extract. Method: 3546 | Date Extracted: 08/20/2009 12:53

Sample wt/vol: 30.55(g) | Date Analyzed: 08/28/2009 18:39

Con. Extract Vol.: 1.0(mL) | Dilution Factor: 1

Injection Volume: 1.0(uL) | Level: (low/med) Low

% Moisture: 3.7 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 48213 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
103-33-3	Azobenzene	ND		34	10
100-52-7	Benzaldehyde	ND		34	10
56-55-3	Benzo[a]anthracene	ND		34	10
50-32-8	Benzo[a]pyrene	ND		34	10
205-99-2	Benzo[b]fluoranthene	ND		34	10
191-24-2	Benzo[g,h,i]perylene	ND		34	10
207-08-9	Benzo[k]fluoranthene	ND		34	10
65-85-0	Benzoic acid	ND		170	15
108-60-1	2,2'-oxybis[1-chloropropane]	ND		34	10
100-51-6	Benzyl alcohol	ND		68	29
111-91-1	Bis(2-chloroethoxy)methane	ND		34	10
111-44-4	Bis(2-chloroethyl)ether	ND		34	10
85-68-7	Butyl benzyl phthalate	ND		34	10
105-60-2	Caprolactam	ND	*	34	10
86-74-8	Carbazole	ND		34	10
218-01-9	Chrysene	ND		34	10
53-70-3	Dibenz(a,h)anthracene	ND		34	10
132-64-9	Dibenzofuran	ND		34	10
84-66-2	Diethyl phthalate	ND		34	10
131-11-3	Dimethyl phthalate	ND		34	10
84-74-2	Di-n-butyl phthalate	ND		34	30
117-84-0	Di-n-octyl phthalate	ND		34	17
206-44-0	Fluoranthene	ND		34	10
86-73-7	Fluorene	ND		34	10
118-74-1	Hexachlorobenzene	ND		34	10
87-68-3	Hexachlorobutadiene	ND		34	10
77-47-4	Hexachlorocyclopentadiene	ND		68	10
67-72-1	Hexachloroethane	ND		34	10
193-39-5	Indeno[1,2,3-cd]pyrene	ND		34	10
78-59-1	Isophorone	ND		34	10
91-20-3	Naphthalene	140		82	10
98-95-3	Nitrobenzene	ND		34	10
62-75-9	N-Nitrosodimethylamine	ND		34	12
621-64-7	N-Nitrosodi-n-propylamine	ND		34	10

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Westfield Job No.: 360-24173-1

SDG No.: OCRI-01

Client Sample ID: OC-SB-420-0.0/1.0-XXX Lab Sample ID: 360-24173-12

Matrix: Solid Lab File ID: B9898.D

Analysis Method: 8270C LL Date Collected: 08/18/2009 15:55

Extract. Method: 3546 Date Extracted: 08/20/2009 12:53

Sample wt/vol: 30.55(g) Date Analyzed: 08/28/2009 18:39

Con. Extract Vol.: 1.0(mL) Dilution Factor: 1

Injection Volume: 1.0(uL) Level: (low/med) Low

% Moisture: 3.7 GPC Cleanup:(Y/N) N

Analysis Batch No.: 48213 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
86-30-6	N-Nitrosodiphenylamine	460		34	10
87-86-5	Pentachlorophenol	ND		34	10
85-01-8	Phenanthrene	ND		41	10
129-00-0	Pyrene	ND		34	10
90-12-0	1-Methylnaphthalene	ND	*	34	10
119-61-9	Benzophenone	ND	*	34	10

CAS NO.	SURROGATE	%REC	LIMITS	Q
118-79-6	2,4,6-Tribromophenol	4	30-130	X
4165-60-0	Nitrobenzene-d5	65	30-130	
4165-62-2	Phenol-d5	0	30-130	X
367-12-4	2-Fluorophenol	0	30-130	X
321-60-8	2-Fluorobiphenyl	67	30-130	
1718-51-0	Terphenyl-d14	66	30-130	

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Westfield Job No.: 360-24173-1

SDG No.: OCRI-01

Client Sample ID: OC-SB-420-0.0/1.0-XXX Lab Sample ID: 360-24173-12

Matrix: Solid Lab File ID: J02797.D

Analysis Method: 8270C LL Date Collected: 08/18/2009 15:55

Extract. Method: 3550B Date Extracted: 08/27/2009 16:43

Sample wt/vol: 100.50(g) Date Analyzed: 09/01/2009 23:25

Con. Extract Vol.: 1.0(mL) Dilution Factor: 1

Injection Volume: 1.0(uL) Level: (low/med) Low

% Moisture: 3.7 GPC Cleanup:(Y/N) N

Analysis Batch No.: 48454 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
62-75-9	N-Nitrosodimethylamine	ND		5.2	1.2

CAS NO.	SURROGATE	%REC	LIMITS	Q
118-79-6	2,4,6-Tribromophenol	1	30-130	X
321-60-8	2-Fluorobiphenyl	69	30-130	
367-12-4	2-Fluorophenol	0	30-130	X
4165-60-0	Nitrobenzene-d5	166	30-130	X
4165-62-2	Phenol-d5	0	30-130	X
1718-51-0	Terphenyl-d14	92	30-130	

cc'd
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FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Westfield Job No.: 360-24173-1

SDG No.: OCRI-01

Client Sample ID: OC-SB-420-0.0/1.0-XXX Lab Sample ID: 360-24173-12

Matrix: Solid Lab File ID: B10129.D

Analysis Method: 8270C LL Date Collected: 08/18/2009 15:55

Extract. Method: 3546 Date Extracted: 08/20/2009 12:53

Sample wt/vol: 30.55(g) Date Analyzed: 09/08/2009 17:16

Con. Extract Vol.: 1.0(mL) Dilution Factor: 1

Injection Volume: 1.0(uL) Level: (low/med) Low

% Moisture: 3.7 GPC Cleanup:(Y/N) N

Analysis Batch No.: 48702 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
122-39-4	Diphenylamine	410		34	2.0

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GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Westfield | Job No.: 360-24173-1

SDG No.: OCRI-01

Client Sample ID: OC-SB-420-0.0/1.0-XXX | Lab Sample ID: 360-24173-12

Matrix: Solid | Lab File ID:

Analysis Method: 8270C LL | Date Collected: 08/18/2009 15:55

Extract. Method: 3546 | Date Extracted: 08/20/2009 12:53

Sample wt/vol: 30.55(g) | Date Analyzed: 09/08/2009 17:16

Con. Extract Vol.: 1.0(mL) | Dilution Factor: 1

Injection Volume: 1.0(uL) | Level: (low/med) Low

% Moisture: 3.7 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 48750 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
86-30-6	N-Nitrosodiphenylamine	44		34	10

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GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Westfield | Job No.: 360-24173-1

SDG No.: OCRI-01

Client Sample ID: OC-SB-420-0.0/1.0-XXX DL | Lab Sample ID: 360-24173-12 DL

Matrix: Solid | Lab File ID: B9916.D

Analysis Method: 8270C LL | Date Collected: 08/18/2009 15:55

Extract. Method: 3546 | Date Extracted: 08/20/2009 12:53

Sample wt/vol: 30.55(g) | Date Analyzed: 08/31/2009 18:26

Con. Extract Vol.: 1.0(mL) | Dilution Factor: 10

Injection Volume: 1.0(uL) | Level: (low/med) Low

% Moisture: 3.7 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 48389 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
95-48-7	2-Methylphenol	3100		340	200
15831-10-4	3 & 4 Methylphenol	1500		340	100
50-32-8	Benzo[a]pyrene	ND		340	100
205-99-2	Benzo[b]fluoranthene	ND		340	100
191-24-2	Benzo[g,h,i]perylene	ND		340	100
207-08-9	Benzo[k]fluoranthene	ND		340	100
117-81-7	Bis(2-ethylhexyl) phthalate	1500		340	100
53-70-3	Dibenz(a,h)anthracene	ND		340	100
117-84-0	Di-n-octyl phthalate	ND		340	170
193-39-5	Indeno[1,2,3-cd]pyrene	ND		340	100
101-84-8	Diphenyl oxide	540		340	100

CAS NO.	SURROGATE	%REC	LIMITS	Q
118-79-6	2,4,6-Tribromophenol	0	30-130	X
4165-60-0	Nitrobenzene-d5	64	30-130	
4165-62-2	Phenol-d5	46	30-130	
367-12-4	2-Fluorophenol	9	30-130	X
321-60-8	2-Fluorobiphenyl	69	30-130	
1718-51-0	Terphenyl-d14	57	30-130	

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GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Westfield | Job No.: 360-24173-1

SDG No.: OCRI-01

Client Sample ID: OC-SB-420-0.0/1.0-XXX DL2 | Lab Sample ID: 360-24173-12 DL2

Matrix: Solid | Lab File ID: B9935.D

Analysis Method: 8270C LL | Date Collected: 08/18/2009 15:55

Extract. Method: 3546 | Date Extracted: 08/20/2009 12:53

Sample wt/vol: 30.55(g) | Date Analyzed: 09/01/2009 05:13

Con. Extract Vol.: 1.0(mL) | Dilution Factor: 100

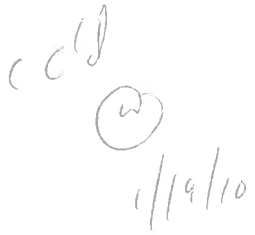
Injection Volume: 1.0(uL) | Level: (low/med) Low

% Moisture: 3.7 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 48389 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
108-95-2	Phenol	32000		3400	1000

CAS NO.	SURROGATE	%REC	LIMITS	Q
118-79-6	2,4,6-Tribromophenol	0	30-130	D X
4165-60-0	Nitrobenzene-d5	0	30-130	D X
4165-62-2	Phenol-d5	0	30-130	D X
367-12-4	2-Fluorophenol	0	30-130	D X
321-60-8	2-Fluorobiphenyl	0	30-130	D X
1718-51-0	Terphenyl-d14	0	30-130	D X



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Westfield | Job No.: 360-24173-1

SDG No.: OCRI-01

Client Sample ID: OC-SB-420-6.5/8.5-XXX | Lab Sample ID: 360-24173-14

Matrix: Solid | Lab File ID: B9900.D

Analysis Method: 8270C LL | Date Collected: 08/18/2009 16:10

Extract. Method: 3546 | Date Extracted: 08/20/2009 12:53

Sample wt/vol: 30.83(g) | Date Analyzed: 08/28/2009 19:47

Con. Extract Vol.: 1.0(mL) | Dilution Factor: 1

Injection Volume: 1.0(uL) | Level: (low/med) Low

% Moisture: 7.7 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 48213 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
92-52-4	1,1'-Biphenyl	71	*	35	11
95-94-3	1,2,4,5-Tetrachlorobenzene	ND		35	11
120-82-1	1,2,4-Trichlorobenzene	ND		35	11
95-50-1	1,2-Dichlorobenzene	ND		35	11
541-73-1	1,3-Dichlorobenzene	ND		35	11
106-46-7	1,4-Dichlorobenzene	ND		35	11
58-90-2	2,3,4,6-Tetrachlorophenol	ND	*	35	11
95-95-4	2,4,5-Trichlorophenol	ND		35	11
88-06-2	2,4,6-Trichlorophenol	ND		35	11
120-83-2	2,4-Dichlorophenol	ND		35	11
105-67-9	2,4-Dimethylphenol	ND		35	14
51-28-5	2,4-Dinitrophenol	ND		35	11
606-20-2	2,6-Dinitrotoluene	ND		35	11
121-14-2	2,4-Dinitrotoluene	ND		35	11
91-58-7	2-Chloronaphthalene	ND		35	11
95-57-8	2-Chlorophenol	ND		35	11
91-57-6	2-Methylnaphthalene	ND		35	11
95-48-7	2-Methylphenol	ND		35	21
88-74-4	2-Nitroaniline	ND		180	11
88-75-5	2-Nitrophenol	ND		35	11
91-94-1	3,3'-Dichlorobenzidine	ND		70	11
15831-10-4	3 & 4 Methylphenol	ND		35	11
99-09-2	3-Nitroaniline	ND		180	11
534-52-1	4,6-Dinitro-2-methylphenol	ND		180	11
101-55-3	4-Bromophenyl phenyl ether	ND		35	11
59-50-7	4-Chloro-3-methylphenol	ND		70	11
106-47-8	4-Chloroaniline	ND		70	11
7005-72-3	4-Chlorophenyl phenyl ether	ND		35	11
100-01-6	4-Nitroaniline	ND		180	11
100-02-7	4-Nitrophenol	ND		180	11
83-32-9	Acenaphthene	ND		35	11
208-96-8	Acenaphthylene	ND		35	11
98-86-2	Acetophenone	ND		35	11
62-53-3	Aniline	ND	*	35	11

CCB 1/19/10

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Westfield | Job No.: 360-24173-1

SDG No.: OCRI-01

Client Sample ID: OC-SB-420-6.5/8.5-XXX | Lab Sample ID: 360-24173-14

Matrix: Solid | Lab File ID: B9900.D

Analysis Method: 8270C LL | Date Collected: 08/18/2009 16:10

Extract. Method: 3546 | Date Extracted: 08/20/2009 12:53

Sample wt/vol: 30.83(g) | Date Analyzed: 08/28/2009 19:47

Con. Extract Vol.: 1.0(mL) | Dilution Factor: 1

Injection Volume: 1.0(uL) | Level: (low/med) Low

% Moisture: 7.7 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 48213 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
120-12-7	Anthracene	ND		35	11
1912-24-9	Atrazine	ND	*	35	11
103-33-3	Azobenzene	ND		35	11
100-52-7	Benzaldehyde	ND		35	11
56-55-3	Benzo[a]anthracene	ND		35	11
50-32-8	Benzo[a]pyrene	ND		35	11
205-99-2	Benzo[b]fluoranthene	ND		35	11
191-24-2	Benzo[g,h,i]perylene	ND		35	11
207-08-9	Benzo[k]fluoranthene	ND		35	11
65-85-0	Benzoic acid	ND		180	16
108-60-1	2,2'-oxybis[1-chloropropane]	ND		35	11
100-51-6	Benzyl alcohol	ND		70	30
111-91-1	Bis(2-chloroethoxy)methane	ND		35	11
111-44-4	Bis(2-chloroethyl)ether	ND		35	11
85-68-7	Butyl benzyl phthalate	ND		35	11
105-60-2	Caprolactam	ND	*	35	11
86-74-8	Carbazole	ND		35	11
218-01-9	Chrysene	ND		35	11
53-70-3	Dibenz(a,h)anthracene	ND		35	11
132-64-9	Dibenzofuran	ND		35	11
84-66-2	Diethyl phthalate	ND		35	11
131-11-3	Dimethyl phthalate	ND		35	11
84-74-2	Di-n-butyl phthalate	110	B	35	31
117-84-0	Di-n-octyl phthalate	ND		35	18
206-44-0	Fluoranthene	ND		35	11
86-73-7	Fluorene	ND		35	11
118-74-1	Hexachlorobenzene	ND		35	11
87-68-3	Hexachlorobutadiene	ND		35	11
77-47-4	Hexachlorocyclopentadiene	ND		70	11
67-72-1	Hexachloroethane	ND		35	11
193-39-5	Indeno[1,2,3-cd]pyrene	ND		35	11
78-59-1	Isophorone	ND		35	11
91-20-3	Naphthalene	ND		84	11
98-95-3	Nitrobenzene	ND		35	11

ccd 9/1/10

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Westfield Job No.: 360-24173-1

SDG No.: OCRI-01

Client Sample ID: OC-SB-420-6.5/8.5-XXX Lab Sample ID: 360-24173-14

Matrix: Solid Lab File ID: B9900.D

Analysis Method: 8270C LL Date Collected: 08/18/2009 16:10

Extract. Method: 3546 Date Extracted: 08/20/2009 12:53

Sample wt/vol: 30.83(g) Date Analyzed: 08/28/2009 19:47

Con. Extract Vol.: 1.0(mL) Dilution Factor: 1

Injection Volume: 1.0(uL) Level: (low/med) Low

% Moisture: 7.7 GPC Cleanup:(Y/N) N

Analysis Batch No.: 48213 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
62-75-9	N-Nitrosodimethylamine	ND		35	12
621-64-7	N-Nitrosodi-n-propylamine	ND		35	11
86-30-6	N-Nitrosodiphenylamine	57		35	11
87-86-5	Pentachlorophenol	ND		35	11
85-01-8	Phenanthrene	ND		42	11
108-95-2	Phenol	78		35	11
129-00-0	Pyrene	ND		35	11
90-12-0	1-Methylnaphthalene	ND	*	35	11
119-61-9	Benzophenone	ND	*	35	11

CAS NO.	SURROGATE	%REC	LIMITS	Q
118-79-6	2,4,6-Tribromophenol	62	30-130	
4165-60-0	Nitrobenzene-d5	64	30-130	
4165-62-2	Phenol-d5	84	30-130	
367-12-4	2-Fluorophenol	94	30-130	
321-60-8	2-Fluorobiphenyl	70	30-130	
1718-51-0	Terphenyl-d14	73	30-130	

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Westfield | Job No.: 360-24173-1

SDG No.: OCRI-01

Client Sample ID: OC-SB-420-6.5/8.5-XXX | Lab Sample ID: 360-24173-14

Matrix: Solid | Lab File ID: J02799.D

Analysis Method: 8270C LL | Date Collected: 08/18/2009 16:10

Extract. Method: 3550B | Date Extracted: 08/27/2009 16:43

Sample wt/vol: 100.49(g) | Date Analyzed: 09/02/2009 00:24

Con. Extract Vol.: 1.0(mL) | Dilution Factor: 1

Injection Volume: 1.0(uL) | Level: (low/med) Low

% Moisture: 7.7 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 48454 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
62-75-9	N-Nitrosodimethylamine	ND		5.4	1.3

CAS NO.	SURROGATE	%REC	LIMITS	Q
118-79-6	2,4,6-Tribromophenol	75	30-130	
321-60-8	2-Fluorobiphenyl	70	30-130	
367-12-4	2-Fluorophenol	71	30-130	
4165-60-0	Nitrobenzene-d5	81	30-130	
4165-62-2	Phenol-d5	76	30-130	
1718-51-0	Terphenyl-d14	285	30-130	X

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Westfield Job No.: 360-24173-1

SDG No.: OCRI-01

Client Sample ID: OC-SB-420-6.5/8.5-XXX DL3 Lab Sample ID: 360-24173-14 DL3

Matrix: Solid Lab File ID: B10130.D

Analysis Method: 8270C LL Date Collected: 08/18/2009 16:10

Extract. Method: 3546 Date Extracted: 08/20/2009 12:53

Sample wt/vol: 30.83(g) Date Analyzed: 09/08/2009 17:50

Con. Extract Vol.: 1.0(mL) Dilution Factor: 1

Injection Volume: 1.0(uL) Level: (low/med) Low

% Moisture: 7.7 GPC Cleanup:(Y/N) N

Analysis Batch No.: 48702 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
122-39-4	Diphenylamine	38		35	2.1

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GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Westfield | Job No.: 360-24173-1

SDG No.: OCRI-01

Client Sample ID: OC-SB-420-6.5/8.5-XXX | Lab Sample ID: 360-24173-14

Matrix: Solid | Lab File ID:

Analysis Method: 8270C LL | Date Collected: 08/18/2009 16:10

Extract. Method: 3546 | Date Extracted: 08/20/2009 12:53

Sample wt/vol: 30.83(g) | Date Analyzed: 09/08/2009 17:50

Con. Extract Vol.: 1.0(mL) | Dilution Factor: 1

Injection Volume: 1.0(uL) | Level: (low/med) Low

% Moisture: 7.7 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 48750 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
86-30-6	N-Nitrosodiphenylamine	18	J	35	11

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GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Westfield | Job No.: 360-24173-1

SDG No.: OCRI-01

Client Sample ID: OC-SB-420-6.5/8.5-XXX DL | Lab Sample ID: 360-24173-14 DL

Matrix: Solid | Lab File ID: B9918.D

Analysis Method: 8270C LL | Date Collected: 08/18/2009 16:10

Extract. Method: 3546 | Date Extracted: 08/20/2009 12:53

Sample wt/vol: 30.83(g) | Date Analyzed: 08/31/2009 19:34

Con. Extract Vol.: 1.0(mL) | Dilution Factor: 10

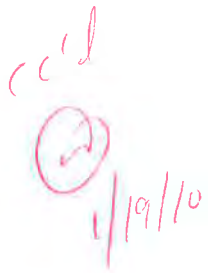
Injection Volume: 1.0(uL) | Level: (low/med) Low

% Moisture: 7.7 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 48389 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
101-84-8	Diphenyl oxide	3100		350	110

CAS NO.	SURROGATE	%REC	LIMITS	Q
118-79-6	2,4,6-Tribromophenol	0	30-130	X
4165-60-0	Nitrobenzene-d5	70	30-130	
4165-62-2	Phenol-d5	78	30-130	
367-12-4	2-Fluorophenol	83	30-130	
321-60-8	2-Fluorobiphenyl	74	30-130	
1718-51-0	Terphenyl-d14	64	30-130	



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Westfield Job No.: 360-24173-1

SDG No.: OCRI-01

Client Sample ID: OC-SB-420-6.5/8.5-XXX DL2 Lab Sample ID: 360-24173-14 DL2

Matrix: Solid Lab File ID: B9936.D

Analysis Method: 8270C LL Date Collected: 08/18/2009 16:10

Extract. Method: 3546 Date Extracted: 08/20/2009 12:53

Sample wt/vol: 30.83(g) Date Analyzed: 09/01/2009 05:47

Con. Extract Vol.: 1.0(mL) Dilution Factor: 50

Injection Volume: 1.0(uL) Level: (low/med) Low

% Moisture: 7.7 GPC Cleanup:(Y/N) N

Analysis Batch No.: 48389 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
117-81-7	Bis(2-ethylhexyl) phthalate	28000		1800	530

CAS NO.	SURROGATE	%REC	LIMITS	Q
118-79-6	2,4,6-Tribromophenol	0	30-130	D X
4165-60-0	Nitrobenzene-d5	0	30-130	D X
4165-62-2	Phenol-d5	0	30-130	D X
367-12-4	2-Fluorophenol	0	30-130	D X
321-60-8	2-Fluorobiphenyl	0	30-130	D X
1718-51-0	Terphenyl-d14	0	30-130	D X

cc'd

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FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Westfield | Job No.: 360-24173-1

SDG No.: OCRI-01

Client Sample ID: OC-SB-423-0.0/1.0-XXX | Lab Sample ID: 360-24173-15

Matrix: Solid | Lab File ID: B9901.D

Analysis Method: 8270C LL | Date Collected: 08/18/2009 14:20

Extract. Method: 3546 | Date Extracted: 08/20/2009 12:53

Sample wt/vol: 30.16(g) | Date Analyzed: 08/28/2009 20:21

Con. Extract Vol.: 1.0(mL) | Dilution Factor: 1

Injection Volume: 1.0(uL) | Level: (low/med) Low

% Moisture: 4.9 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 48213 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
62-75-9	N-Nitrosodimethylamine	ND		35	12
621-64-7	N-Nitrosodi-n-propylamine	ND		35	10
86-30-6	N-Nitrosodiphenylamine	ND		35	10
87-86-5	Pentachlorophenol	ND		35	10
85-01-8	Phenanthrene	ND		42	10
108-95-2	Phenol	ND		35	10
129-00-0	Pyrene	ND		35	10
90-12-0	1-Methylnaphthalene	ND	*	35	10
119-61-9	Benzophenone	ND	*	35	10
101-84-8	Diphenyl oxide	18	J *	35	10

CAS NO.	SURROGATE	%REC	LIMITS	Q
118-79-6	2,4,6-Tribromophenol	72	30-130	
4165-60-0	Nitrobenzene-d5	63	30-130	
4165-62-2	Phenol-d5	86	30-130	
367-12-4	2-Fluorophenol	87	30-130	
321-60-8	2-Fluorobiphenyl	67	30-130	
1718-51-0	Terphenyl-d14	77	30-130	

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FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Westfield Job No.: 360-24173-1

SDG No.: OCRI-01

Client Sample ID: OC-SB-423-0.0/1.0-XXX Lab Sample ID: 360-24173-15

Matrix: Solid Lab File ID: J02800.D

Analysis Method: 8270C LL Date Collected: 08/18/2009 14:20

Extract. Method: 3550B Date Extracted: 08/27/2009 16:43

Sample wt/vol: 100.41(g) Date Analyzed: 09/02/2009 00:54

Con. Extract Vol.: 1.0(mL) Dilution Factor: 1

Injection Volume: 1.0(uL) Level: (low/med) Low

% Moisture: 4.9 GPC Cleanup:(Y/N) N

Analysis Batch No.: 48454 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
62-75-9	N-Nitrosodimethylamine	ND		5.2	1.2

CAS NO.	SURROGATE	%REC	LIMITS	Q
118-79-6	2,4,6-Tribromophenol	79	30-130	
321-60-8	2-Fluorobiphenyl	65	30-130	
367-12-4	2-Fluorophenol	63	30-130	
4165-60-0	Nitrobenzene-d5	72	30-130	
4165-62-2	Phenol-d5	66	30-130	
1718-51-0	Terphenyl-d14	82	30-130	

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Westfield | Job No.: 360-24173-1

SDG No.: OCRI-01

Client Sample ID: OC-SB-423-0.0/1.0-XXX DL | Lab Sample ID: 360-24173-15 DL

Matrix: Solid | Lab File ID: B9919.D

Analysis Method: 8270C LL | Date Collected: 08/18/2009 14:20

Extract. Method: 3546 | Date Extracted: 08/20/2009 12:53

Sample wt/vol: 30.16(g) | Date Analyzed: 08/31/2009 20:08

Con. Extract Vol.: 1.0(mL) | Dilution Factor: 2

Injection Volume: 1.0(uL) | Level: (low/med) Low

% Moisture: 4.9 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 48389 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
117-81-7	Bis(2-ethylhexyl) phthalate	630		70	21

CAS NO.	SURROGATE	%REC	LIMITS	Q
118-79-6	2,4,6-Tribromophenol	61	30-130	
4165-60-0	Nitrobenzene-d5	66	30-130	
4165-62-2	Phenol-d5	61	30-130	
367-12-4	2-Fluorophenol	68	30-130	
321-60-8	2-Fluorobiphenyl	70	30-130	
1718-51-0	Terphenyl-d14	65	30-130	

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Westfield | Job No.: 360-24173-1

SDG No.: OCRI-01

Client Sample ID: OC-SB-423-5.0/6.0-XXX | Lab Sample ID: 360-24173-17

Matrix: Solid | Lab File ID: B9903.D

Analysis Method: 8270C LL | Date Collected: 08/18/2009 14:30

Extract. Method: 3546 | Date Extracted: 08/20/2009 12:53

Sample wt/vol: 30.37(g) | Date Analyzed: 08/28/2009 21:29

Con. Extract Vol.: 1.0(mL) | Dilution Factor: 1

Injection Volume: 1.0(uL) | Level: (low/med) Low

% Moisture: 6.6 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 48213 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
120-12-7	Anthracene	ND		35	11
1912-24-9	Atrazine	ND	*	35	11
103-33-3	Azobenzene	ND		35	11
100-52-7	Benzaldehyde	ND		35	11
56-55-3	Benzo[a]anthracene	ND		35	11
50-32-8	Benzo[a]pyrene	ND		35	11
205-99-2	Benzo[b]fluoranthene	ND		35	11
191-24-2	Benzo[g,h,i]perylene	ND		35	11
207-08-9	Benzo[k]fluoranthene	ND		35	11
65-85-0	Benzoic acid	ND		180	16
108-60-1	2,2'-oxybis[1-chloropropane]	ND		35	11
100-51-6	Benzyl alcohol	ND		71	30
111-91-1	Bis(2-chloroethoxy)methane	ND		35	11
111-44-4	Bis(2-chloroethyl)ether	ND		35	11
117-81-7	Bis(2-ethylhexyl) phthalate	320		35	11
85-68-7	Butyl benzyl phthalate	ND		35	11
105-60-2	Caprolactam	ND	*	35	11
86-74-8	Carbazole	ND		35	11
218-01-9	Chrysene	ND		35	11
53-70-3	Dibenz(a,h)anthracene	ND		35	11
132-64-9	Dibenzofuran	ND		35	11
84-66-2	Diethyl phthalate	ND		35	11
131-11-3	Dimethyl phthalate	ND		35	11
84-74-2	Di-n-butyl phthalate	ND		35	31
117-84-0	Di-n-octyl phthalate	ND		35	18
206-44-0	Fluoranthene	ND		35	11
86-73-7	Fluorene	ND		35	11
118-74-1	Hexachlorobenzene	ND		35	11
87-68-3	Hexachlorobutadiene	ND		35	11
77-47-4	Hexachlorocyclopentadiene	ND		71	11
67-72-1	Hexachloroethane	ND		35	11
193-39-5	Indeno[1,2,3-cd]pyrene	ND		35	11
78-59-1	Isophorone	ND		35	11
91-20-3	Naphthalene	ND		85	11

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FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Westfield | Job No.: 360-24173-1

SDG No.: OCRI-01

Client Sample ID: OC-SB-423-5.0/6.0-XXX | Lab Sample ID: 360-24173-17

Matrix: Solid | Lab File ID: B9903.D

Analysis Method: 8270C LL | Date Collected: 08/18/2009 14:30

Extract. Method: 3546 | Date Extracted: 08/20/2009 12:53

Sample wt/vol: 30.37(g) | Date Analyzed: 08/28/2009 21:29

Con. Extract Vol.: 1.0(mL) | Dilution Factor: 1

Injection Volume: 1.0(uL) | Level: (low/med) Low

% Moisture: 6.6 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 48213 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
98-95-3	Nitrobenzene	ND		35	11
62-75-9	N-Nitrosodimethylamine	ND		35	12
621-64-7	N-Nitrosodi-n-propylamine	ND		35	11
86-30-6	N-Nitrosodiphenylamine	11	J	35	11
87-86-5	Pentachlorophenol	ND		35	11
85-01-8	Phenanthrene	ND		42	11
108-95-2	Phenol	ND		35	11
129-00-0	Pyrene	ND		35	11
90-12-0	1-Methylnaphthalene	ND	*	35	11
119-61-9	Benzophenone	ND	*	35	11
101-84-8	Diphenyl oxide	ND	*	35	11

CAS NO.	SURROGATE	%REC	LIMITS	Q
118-79-6	2,4,6-Tribromophenol	52	30-130	
4165-60-0	Nitrobenzene-d5	63	30-130	
4165-62-2	Phenol-d5	90	30-130	
367-12-4	2-Fluorophenol	89	30-130	
321-60-8	2-Fluorobiphenyl	73	30-130	
1718-51-0	Terphenyl-d14	81	30-130	

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FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Westfield | Job No.: 360-24173-1

SDG No.: OCRI-01

Client Sample ID: OC-SB-423-5.0/6.0-XXX | Lab Sample ID: 360-24173-17

Matrix: Solid | Lab File ID: J02802.D

Analysis Method: 8270C LL | Date Collected: 08/18/2009 14:30

Extract. Method: 3550B | Date Extracted: 08/27/2009 16:43

Sample wt/vol: 100.56(g) | Date Analyzed: 09/02/2009 01:54

Con. Extract Vol.: 1.0(mL) | Dilution Factor: 1

Injection Volume: 1.0(uL) | Level: (low/med) Low

% Moisture: 6.6 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 48454 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
62-75-9	N-Nitrosodimethylamine	ND		5.3	1.2

CAS NO.	SURROGATE	%REC	LIMITS	Q
118-79-6	2,4,6-Tribromophenol	73	30-130	
321-60-8	2-Fluorobiphenyl	65	30-130	
367-12-4	2-Fluorophenol	66	30-130	
4165-60-0	Nitrobenzene-d5	72	30-130	
4165-62-2	Phenol-d5	71	30-130	
1718-51-0	Terphenyl-d14	93	30-130	

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FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Westfield | Job No.: 360-24173-2

SDG No.: OCRI-01A

Client Sample ID: OC-SB-405-14/15-XXX | Lab Sample ID: 360-24173-2

Matrix: Solid | Lab File ID: B9890.D

Analysis Method: 8270C LL | Date Collected: 08/18/2009 09:10

Extract. Method: 3546 | Date Extracted: 08/20/2009 12:53

Sample wt/vol: 30.38(g) | Date Analyzed: 08/28/2009 14:07

Con. Extract Vol.: 1.0(mL) | Dilution Factor: 1

Injection Volume: 1.0(uL) | Level: (low/med) Low

% Moisture: 8.7 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 48213 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
98-86-2	Acetophenone	ND		36	3.9
62-53-3	Aniline	ND	*	36	19
120-12-7	Anthracene	ND		36	11
1912-24-9	Atrazine	ND	*	36	11
103-33-3	Azobenzene	ND		36	4.5
100-52-7	Benzaldehyde	ND		36	11
56-55-3	Benzo[a]anthracene	ND		36	6.9
50-32-8	Benzo[a]pyrene	ND		36	6.6
205-99-2	Benzo[b]fluoranthene	ND		36	8.3
191-24-2	Benzo[g,h,i]perylene	ND		36	7.0
207-08-9	Benzo[k]fluoranthene	ND		36	10
65-85-0	Benzoic acid	140	J	180	16
119-61-9	Benzophenone	ND	*	36	2.2
100-51-6	Benzyl alcohol	ND		72	8.3
111-91-1	Bis(2-chloroethoxy)methane	ND		36	6.5
111-44-4	Bis(2-chloroethyl)ether	ND		36	8.8
117-81-7	Bis(2-ethylhexyl) phthalate	360		36	11
85-68-7	Butyl benzyl phthalate	ND		36	7.9
105-60-2	Caprolactam	ND	*	36	11
86-74-8	Carbazole	ND		36	36
218-01-9	Chrysene	ND		36	7.8
53-70-3	Dibenz(a,h)anthracene	ND		36	7.3
132-64-9	Dibenzofuran	ND		36	21
84-66-2	Diethyl phthalate	ND		36	5.1
131-11-3	Dimethyl phthalate	ND		36	5.3
84-74-2	Di-n-butyl phthalate	11	J B	36	11
117-84-0	Di-n-octyl phthalate	ND		36	10
101-84-8	Diphenyl oxide	ND	*	36	11
206-44-0	Fluoranthene	ND		36	23
86-73-7	Fluorene	ND		36	14
118-74-1	Hexachlorobenzene	ND		36	8.6
87-68-3	Hexachlorobutadiene	ND		36	7.2
77-47-4	Hexachlorocyclopentadiene	ND		72	9.8
67-72-1	Hexachloroethane	ND		36	6.9

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FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Westfield | Job No.: 360-24173-2

SDG No.: OCRI-01A

Client Sample ID: OC-SB-416-13/14-XXX | Lab Sample ID: 360-24173-5

Matrix: Solid | Lab File ID: B9893.D

Analysis Method: 8270C LL | Date Collected: 08/18/2009 11:05

Extract. Method: 3546 | Date Extracted: 08/20/2009 12:53

Sample wt/vol: 30.16(g) | Date Analyzed: 08/28/2009 15:49

Con. Extract Vol.: 1.0(mL) | Dilution Factor: 1

Injection Volume: 1.0(uL) | Level: (low/med) Low

% Moisture: 6.9 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 48213 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
98-86-2	Acetophenone	ND		36	3.8
62-53-3	Aniline	ND	*	36	18
120-12-7	Anthracene	ND		36	11
1912-24-9	Atrazine	ND	*	36	11
103-33-3	Azobenzene	ND		36	4.4
100-52-7	Benzaldehyde	ND		36	11
56-55-3	Benzo[a]anthracene	ND		36	6.8
50-32-8	Benzo[a]pyrene	ND		36	6.5
205-99-2	Benzo[b]fluoranthene	ND		36	8.2
191-24-2	Benzo[g,h,i]perylene	ND		36	6.9
207-08-9	Benzo[k]fluoranthene	ND		36	9.9
65-85-0	Benzoic acid	ND		180	15
119-61-9	Benzophenone	ND	*	36	2.1
100-51-6	Benzyl alcohol	ND		71	8.2
111-91-1	Bis(2-chloroethoxy)methane	ND		36	6.4
111-44-4	Bis(2-chloroethyl)ether	ND		36	8.7
117-81-7	Bis(2-ethylhexyl) phthalate	53		36	11
85-68-7	Butyl benzyl phthalate	ND		36	7.8
105-60-2	Caprolactam	ND	*	36	11
86-74-8	Carbazole	ND		36	36
218-01-9	Chrysene	ND		36	7.7
53-70-3	Dibenz(a,h)anthracene	ND		36	7.2
132-64-9	Dibenzofuran	ND		36	21
84-66-2	Diethyl phthalate	ND		36	5.0
131-11-3	Dimethyl phthalate	ND		36	5.2
84-74-2	Di-n-butyl phthalate	14	J B	36	11
117-84-0	Di-n-octyl phthalate	ND		36	10
101-84-8	Diphenyl oxide	14	J *	36	11
206-44-0	Fluoranthene	ND		36	23
86-73-7	Fluorene	ND		36	14
118-74-1	Hexachlorobenzene	ND		36	8.5
87-68-3	Hexachlorobutadiene	ND		36	7.1
77-47-4	Hexachlorocyclopentadiene	ND		71	9.7
67-72-1	Hexachloroethane	ND		36	6.8

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Westfield | Job No.: 360-24173-2

SDG No.: OCRI-01A

Client Sample ID: OC-SB-416-13/14-XXX | Lab Sample ID: 360-24173-5

Matrix: Solid | Lab File ID: B9893.D

Analysis Method: 8270C LL | Date Collected: 08/18/2009 11:05

Extract. Method: 3546 | Date Extracted: 08/20/2009 12:53

Sample wt/vol: 30.16(g) | Date Analyzed: 08/28/2009 15:49

Con. Extract Vol.: 1.0(mL) | Dilution Factor: 1

Injection Volume: 1.0(uL) | Level: (low/med) Low

% Moisture: 6.9 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 48213 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
193-39-5	Indeno[1,2,3-cd]pyrene	ND		36	11
78-59-1	Isophorone	ND		36	7.6
91-20-3	Naphthalene	ND		86	79
98-95-3	Nitrobenzene	ND		36	4.9
62-75-9	N-Nitrosodimethylamine	ND		36	4.1
621-64-7	N-Nitrosodi-n-propylamine	ND		36	4.0
86-30-6	N-Nitrosodiphenylamine	45		36	7.1
87-86-5	Pentachlorophenol	ND		36	7.4
85-01-8	Phenanthrene	ND		43	41
108-95-2	Phenol	ND		36	4.5
129-00-0	Pyrene	ND		36	9.4

CAS NO.	SURROGATE	%REC	LIMITS	Q
118-79-6	2,4,6-Tribromophenol	80	30-130	
321-60-8	2-Fluorobiphenyl	74	30-130	
367-12-4	2-Fluorophenol	102	30-130	
4165-60-0	Nitrobenzene-d5	72	30-130	
4165-62-2	Phenol-d5	98	30-130	
1718-51-0	Terphenyl-d14	84	30-130	

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Westfield | Job No.: 360-24173-2

SDG No.: OCRI-01A

Client Sample ID: OC-SB-412-12/13-XXX | Lab Sample ID: 360-24173-10

Matrix: Solid | Lab File ID: B9896.D

Analysis Method: 8270C LL | Date Collected: 08/18/2009 13:10

Extract. Method: 3546 | Date Extracted: 08/20/2009 12:53

Sample wt/vol: 30.43(g) | Date Analyzed: 08/28/2009 17:31

Con. Extract Vol.: 1.0(mL) | Dilution Factor: 1

Injection Volume: 1.0(uL) | Level: (low/med) Low

% Moisture: 10.0 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 48213 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
92-52-4	1,1'-Biphenyl	ND	*	37	11
95-94-3	1,2,4,5-Tetrachlorobenzene	ND		37	2.5
120-82-1	1,2,4-Trichlorobenzene	ND		37	7.1
95-50-1	1,2-Dichlorobenzene	ND		37	4.0
541-73-1	1,3-Dichlorobenzene	ND		37	11
106-46-7	1,4-Dichlorobenzene	ND		37	6.6
90-12-0	1-Methylnaphthalene	43	*	37	2.2
108-60-1	2,2'-oxybis[1-chloropropane]	ND		37	3.7
58-90-2	2,3,4,6-Tetrachlorophenol	ND	*	37	2.2
95-95-4	2,4,5-Trichlorophenol	ND		37	4.1
88-06-2	2,4,6-Trichlorophenol	ND		37	7.7
120-83-2	2,4-Dichlorophenol	ND		37	7.0
105-67-9	2,4-Dimethylphenol	ND		37	6.4
51-28-5	2,4-Dinitrophenol	ND		37	5.4
121-14-2	2,4-Dinitrotoluene	ND		37	5.1
606-20-2	2,6-Dinitrotoluene	ND		37	4.6
91-58-7	2-Chloronaphthalene	ND		37	5.6
95-57-8	2-Chlorophenol	ND		37	3.6
91-57-6	2-Methylnaphthalene	64		37	28
95-48-7	2-Methylphenol	ND		37	5.2
88-74-4	2-Nitroaniline	ND		180	24
88-75-5	2-Nitrophenol	ND		37	4.2
15831-10-4	3 & 4 Methylphenol	ND		37	6.9
91-94-1	3,3'-Dichlorobenzidine	ND		73	27
99-09-2	3-Nitroaniline	ND		180	10
534-52-1	4,6-Dinitro-2-methylphenol	ND		180	9.3
101-55-3	4-Bromophenyl phenyl ether	ND		37	7.6
59-50-7	4-Chloro-3-methylphenol	ND		73	10
106-47-8	4-Chloroaniline	ND		73	15
7005-72-3	4-Chlorophenyl phenyl ether	ND		37	5.8
100-01-6	4-Nitroaniline	ND		180	9.7
100-02-7	4-Nitrophenol	ND		180	7.1
83-32-9	Acenaphthene	22	J	37	5.4
208-96-8	Acenaphthylene	ND		37	6.5

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FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Westfield | Job No.: 360-24173-2

SDG No.: OCRI-01A

Client Sample ID: OC-SB-412-12/13-XXX | Lab Sample ID: 360-24173-10

Matrix: Solid | Lab File ID: B9896.D

Analysis Method: 8270C LL | Date Collected: 08/18/2009 13:10

Extract. Method: 3546 | Date Extracted: 08/20/2009 12:53

Sample wt/vol: 30.43(g) | Date Analyzed: 08/28/2009 17:31

Con. Extract Vol.: 1.0(mL) | Dilution Factor: 1

Injection Volume: 1.0(uL) | Level: (low/med) Low

% Moisture: 10.0 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 48213 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
98-86-2	Acetophenone	ND		37	3.9
62-53-3	Aniline	ND	*	37	19
120-12-7	Anthracene	ND		37	12
1912-24-9	Atrazine	ND	*	37	11
103-33-3	Azobenzene	ND		37	4.5
100-52-7	Benzaldehyde	ND		37	11
56-55-3	Benzo[a]anthracene	ND		37	7.0
50-32-8	Benzo[a]pyrene	ND		37	6.7
205-99-2	Benzo[b]fluoranthene	ND		37	8.4
191-24-2	Benzo[g,h,i]perylene	ND		37	7.1
207-08-9	Benzo[k]fluoranthene	ND		37	10
65-85-0	Benzoic acid	ND		180	16
119-61-9	Benzophenone	ND	*	37	2.2
100-51-6	Benzyl alcohol	ND		73	8.4
111-91-1	Bis(2-chloroethoxy)methane	ND		37	6.6
111-44-4	Bis(2-chloroethyl)ether	ND		37	8.9
117-81-7	Bis(2-ethylhexyl) phthalate	15	J	37	12
85-68-7	Butyl benzyl phthalate	ND		37	8.0
105-60-2	Caprolactam	ND	*	37	11
86-74-8	Carbazole	ND		37	36
218-01-9	Chrysene	ND		37	7.9
53-70-3	Dibenz(a,h)anthracene	ND		37	7.4
132-64-9	Dibenzofuran	29	J	37	21
84-66-2	Diethyl phthalate	ND		37	5.1
131-11-3	Dimethyl phthalate	ND		37	5.4
84-74-2	Di-n-butyl phthalate	ND		37	11
117-84-0	Di-n-octyl phthalate	ND		37	10
101-84-8	Diphenyl oxide	ND	*	37	11
206-44-0	Fluoranthene	ND		37	23
86-73-7	Fluorene	25	J	37	14
118-74-1	Hexachlorobenzene	ND		37	8.7
87-68-3	Hexachlorobutadiene	ND		37	7.3
77-47-4	Hexachlorocyclopentadiene	ND		73	10
67-72-1	Hexachloroethane	ND		37	7.0

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FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Westfield | Job No.: 360-24173-2

SDG No.: OCRI-01A

Client Sample ID: OC-SB-412-12/13-XXX | Lab Sample ID: 360-24173-10

Matrix: Solid | Lab File ID: B9896.D

Analysis Method: 8270C LL | Date Collected: 08/18/2009 13:10

Extract. Method: 3546 | Date Extracted: 08/20/2009 12:53

Sample wt/vol: 30.43(g) | Date Analyzed: 08/28/2009 17:31

Con. Extract Vol.: 1.0(mL) | Dilution Factor: 1

Injection Volume: 1.0(uL) | Level: (low/med) Low

% Moisture: 10.0 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 48213 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
193-39-5	Indeno[1,2,3-cd]pyrene	ND		37	11
78-59-1	Isophorone	ND		37	7.8
91-20-3	Naphthalene	130		88	81
98-95-3	Nitrobenzene	ND		37	5.0
62-75-9	N-Nitrosodimethylamine	ND		37	4.2
621-64-7	N-Nitrosodi-n-propylamine	ND		37	4.1
86-30-6	N-Nitrosodiphenylamine	ND		37	7.3
87-86-5	Pentachlorophenol	ND		37	7.5
85-01-8	Phenanthrene	74		44	42
108-95-2	Phenol	ND		37	4.6
129-00-0	Pyrene	ND		37	9.7

CAS NO.	SURROGATE	%REC	LIMITS	Q
118-79-6	2,4,6-Tribromophenol	63	30-130	
321-60-8	2-Fluorobiphenyl	68	30-130	
367-12-4	2-Fluorophenol	94	30-130	
4165-60-0	Nitrobenzene-d5	65	30-130	
4165-62-2	Phenol-d5	95	30-130	
1718-51-0	Terphenyl-d14	75	30-130	

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Westfield | Job No.: 360-24173-2

SDG No.: OCRI-01A

Client Sample ID: OC-SB-420-12/14-XXX | Lab Sample ID: 360-24173-13

Matrix: Solid | Lab File ID: B9899.D

Analysis Method: 8270C LL | Date Collected: 08/18/2009 16:25

Extract. Method: 3546 | Date Extracted: 08/20/2009 12:53

Sample wt/vol: 30.02(g) | Date Analyzed: 08/28/2009 19:13

Con. Extract Vol.: 1.0(mL) | Dilution Factor: 1

Injection Volume: 1.0(uL) | Level: (low/med) Low

% Moisture: 6.8 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 48213 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
98-86-2	Acetophenone	ND		36	3.9
62-53-3	Aniline	ND	*	36	19
120-12-7	Anthracene	ND		36	11
1912-24-9	Atrazine	ND	*	36	11
103-33-3	Azobenzene	ND		36	4.4
100-52-7	Benzaldehyde	ND		36	11
56-55-3	Benzo[a]anthracene	ND		36	6.9
50-32-8	Benzo[a]pyrene	ND		36	6.5
205-99-2	Benzo[b]fluoranthene	ND		36	8.2
191-24-2	Benzo[g,h,i]perylene	ND		36	6.9
207-08-9	Benzo[k]fluoranthene	ND		36	9.9
65-85-0	Benzoic acid	ND		180	15
119-61-9	Benzophenone	ND	*	36	2.1
100-51-6	Benzyl alcohol	ND		72	8.2
111-91-1	Bis(2-chloroethoxy)methane	ND		36	6.4
111-44-4	Bis(2-chloroethyl)ether	ND		36	8.7
117-81-7	Bis(2-ethylhexyl) phthalate	74		36	11
85-68-7	Butyl benzyl phthalate	ND		36	7.8
105-60-2	Caprolactam	ND	*	36	11
86-74-8	Carbazole	ND		36	36
218-01-9	Chrysene	ND		36	7.7
53-70-3	Dibenz(a,h)anthracene	ND		36	7.2
132-64-9	Dibenzofuran	ND		36	21
84-66-2	Diethyl phthalate	ND		36	5.0
131-11-3	Dimethyl phthalate	ND		36	5.3
84-74-2	Di-n-butyl phthalate	13	J B	36	11
117-84-0	Di-n-octyl phthalate	ND		36	10
101-84-8	Diphenyl oxide	19	J *	36	11
206-44-0	Fluoranthene	ND		36	23
86-73-7	Fluorene	ND		36	14
118-74-1	Hexachlorobenzene	ND		36	8.5
87-68-3	Hexachlorobutadiene	ND		36	7.1
77-47-4	Hexachlorocyclopentadiene	ND		72	9.8
67-72-1	Hexachloroethane	ND		36	6.8

ccd 1/19/10

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Westfield | Job No.: 360-24173-2

SDG No.: OCRI-01A

Client Sample ID: OC-SB-420-12/14-XXX | Lab Sample ID: 360-24173-13

Matrix: Solid | Lab File ID: B9899.D

Analysis Method: 8270C LL | Date Collected: 08/18/2009 16:25

Extract. Method: 3546 | Date Extracted: 08/20/2009 12:53

Sample wt/vol: 30.02(g) | Date Analyzed: 08/28/2009 19:13

Con. Extract Vol.: 1.0(mL) | Dilution Factor: 1

Injection Volume: 1.0(uL) | Level: (low/med) Low

% Moisture: 6.8 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 48213 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
193-39-5	Indeno[1,2,3-cd]pyrene	ND		36	11
78-59-1	Isophorone	ND		36	7.7
91-20-3	Naphthalene	ND		86	79
98-95-3	Nitrobenzene	ND		36	4.9
62-75-9	N-Nitrosodimethylamine	ND		36	4.1
621-64-7	N-Nitrosodi-n-propylamine	ND		36	4.0
86-30-6	N-Nitrosodiphenylamine	13	J	36	7.2
87-86-5	Pentachlorophenol	ND		36	7.4
85-01-8	Phenanthrene	ND		43	41
108-95-2	Phenol	23	J	36	4.5
129-00-0	Pyrene	ND		36	9.5

CAS NO.	SURROGATE	%REC	LIMITS	Q
118-79-6	2,4,6-Tribromophenol	73	30-130	
321-60-8	2-Fluorobiphenyl	72	30-130	
367-12-4	2-Fluorophenol	94	30-130	
4165-60-0	Nitrobenzene-d5	64	30-130	
4165-62-2	Phenol-d5	94	30-130	
1718-51-0	Terphenyl-d14	80	30-130	

ccd
(2)
1/19/10

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Westfield | Job No.: 360-24173-2

SDG No.: OCRI-01A

Client Sample ID: OC-SB-423-13/14-XXX | Lab Sample ID: 360-24173-16

Matrix: Solid | Lab File ID: B9902.D

Analysis Method: 8270C LL | Date Collected: 08/18/2009 14:45

Extract. Method: 3546 | Date Extracted: 08/20/2009 12:53

Sample wt/vol: 30.21(g) | Date Analyzed: 08/28/2009 20:55

Con. Extract Vol.: 1.0(mL) | Dilution Factor: 1

Injection Volume: 1.0(uL) | Level: (low/med) Low

% Moisture: 6.4 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 48213 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
98-86-2	Acetophenone	5.4	J B	35	3.8
62-53-3	Aniline	ND	*	35	18
120-12-7	Anthracene	ND		35	11
1912-24-9	Atrazine	ND	*	35	11
103-33-3	Azobenzene	ND		35	4.4
100-52-7	Benzaldehyde	ND		35	11
56-55-3	Benzo[a]anthracene	ND		35	6.8
50-32-8	Benzo[a]pyrene	ND		35	6.5
205-99-2	Benzo[b]fluoranthene	ND		35	8.1
191-24-2	Benzo[g,h,i]perylene	ND		35	6.9
207-08-9	Benzo[k]fluoranthene	ND		35	9.8
65-85-0	Benzoic acid	ND		180	15
119-61-9	Benzophenone	ND	*	35	2.1
100-51-6	Benzyl alcohol	ND		71	8.2
111-91-1	Bis(2-chloroethoxy)methane	ND		35	6.4
111-44-4	Bis(2-chloroethyl)ether	ND		35	8.6
117-81-7	Bis(2-ethylhexyl) phthalate	110		35	11
85-68-7	Butyl benzyl phthalate	ND		35	7.7
105-60-2	Caprolactam	ND	*	35	11
86-74-8	Carbazole	ND		35	35
218-01-9	Chrysene	ND		35	7.6
53-70-3	Dibenz(a,h)anthracene	ND		35	7.1
132-64-9	Dibenzofuran	ND		35	20
84-66-2	Diethyl phthalate	ND		35	5.0
131-11-3	Dimethyl phthalate	ND		35	5.2
84-74-2	Di-n-butyl phthalate	ND		35	11
117-84-0	Di-n-octyl phthalate	ND		35	10
101-84-8	Diphenyl oxide	ND	*	35	11
206-44-0	Fluoranthene	ND		35	22
86-73-7	Fluorene	ND		35	14
118-74-1	Hexachlorobenzene	ND		35	8.4
87-68-3	Hexachlorobutadiene	ND		35	7.0
77-47-4	Hexachlorocyclopentadiene	ND		71	9.7
67-72-1	Hexachloroethane	ND		35	6.7

Olin sheet

SEMIVOLATILE ORGANICS

REGION I VALIDATION CHECKLIST for
OLIN CHEMICAL SUPERFUND SITE
Criteria and Qualifications: REGION I Organics Guideline (1996)

TIER I / (II) / (III) (circle one)

SITE: Olin Chemical Superfund Site Project #: 6107/0006.12 SDG #: OCRI-02/02A

LAB #: TAL-Westfield

Sample IDs: Attach tracking sheet and/or sample listing.

This checklist is designed to be used with USEPA Region I Validation Guidelines Part II (12/1996). During Level III validation, calculation and transcription checks are completed for instrument tuning, surrogates, target compounds, spike recoveries, calibration data, and internal standards as specified in the guideline. These checks are documented on attached validation notes.

YES NO NA	
Data completeness ☑ ☐ ☐ All data summaries, QC forms and raw data available from hard copy or electronic data package ☑ ☐ ☐ Data summaries match EDD	Contact lab if missing data. Lab to respond with 24 hours.
Holding Times and Preservation ☑ ☐ ☐ Hold times met (Waters – Extract within 7 days, analyze within 40 days. Soils – extract within 14 days, analyze within 40 days)	
Instrument Performance Check (Tune) ☑ ☐ ☐ Tune available for each 12-hour period samples were analyzed ☑ ☐ ☐ Appropriate number of significant figures reported (at least 2) ☑ ☐ ☐ Mass/Charge list (m/z) criteria met	
Initial Calibration ☐ ☒ ☐ %RSD less than or equal to 30% ☑ ☐ ☐ RRF greater than or equal to 0.05	See below.
Continuing Calibration ☐ ☒ ☐ %D less than or equal to 25% ☐ ☒ ☐ RRF greater than or equal to 0.05.	See below.
Blank Contamination ☒ ☐ ☐ Method blank contamination ☒ ☐ ☐ Equipment/Rinseate blank contamination	Evaluate all blanks for contamination. Highest contaminant level used for action level. See below.
Surrogate Recoveries	

SEMIVOLATILE ORGANICS

REGION I VALIDATION CHECKLIST for
OLIN CHEMICAL SUPERFUND SITE
Criteria and Qualifications: REGION I Organics Guideline (1996)

TIER I / II / III (circle one)

☐	☒	☐	Surrogates percent recovery criteria met: Soil = (base/neutral 30%-130%, acid 30%-130%) Water = (base/neutral 30%-130%, acid 15%-110%)	See below.
Matrix Spikes and Laboratory Control Samples				
☐	☒	☐	MS/MSD percent recovery criteria met Soil and Water = (base/neutral 40%-140%, acid 30%-130%)	
☑	☐	☐	MS/MSD RPD criteria met (soils <50%, water <30%)	
☐	☒	☐	LCS percent recovery criteria met soil/water (base 40%-140%, acid 30%-130%)	See below.
Field Duplicates				
☐	☐	☑	RPD criteria met (soils <50%, water <30%)	
Internal Standard				
☐	☒	☐	Area counts within -50 to +100 percent of calib. std.	
☑	☐	☐	Retention Time within 30 seconds of calib. std.	
Target Compounds				
☑	☐	☐	Reviewed narrative for anomalies	
Tentatively Identified Compounds (TICs)				
☐	☑	☐	TCL compounds reported as TICs	

Validator's Signature: _____

Date: 1/13/2010

Reference:

MACTEC, Quality Assurance Project Plan for Remedial Investigation/Feasibility Study – Olin Chemical Superfund Site, Wilmington Property, 51 Eames Street, Wilmington, MA", MACTEC Engineering and Consulting. Draft .October 2008.

PES SCORING EVALUATION REPORT

Lab Name: Test America
Contract: NA
SDG No.: OCRI-09
Lab File ID: NA
Date Analyzed: 09/24/2009
% Moisture: NA
Injection Vol. (uL): NA
Dilution Factor: 1.0

Case No.: NA
Matrix: Soil
Date Received: 09/01/2009
Sample Wt./Vol. (g/mL): NA
Decanted: N/A
GPC Cleanup: Unknown
Extraction Type: N/A

Lab Code: TESTAM
SAS/Client No.: NA
Lab Sample ID: 360-24365-20
Date Extracted: 09/11/2009
Level: N/A
Conc. Extract Vol. (uL): NA
pH: NA
Units: ug/Kg

Analysis Method: 8270C LL
Scoring Method: SOM01.1
Comments:

CAS No.	Analyte	Laboratory Results		PES Evaluation	
		Concentration	Q		
111-44-4	bis-(2-Chloroethyl)ether	1600		PASS	Within Limits
95-57-8	2-Chlorophenol	210		PASS	Within Limits
108-60-1	2,2'-oxybis(1-Chloropropane)	1200		PASS	Within Limits
621-64-7	N-Nitroso-di-n-propylamine	580		PASS	Within Limits
67-72-1	Hexachloroethane	730		PASS	Within Limits
78-59-1	Isophorone	570		PASS	Within Limits
111-91-1	bis(2-Chloroethoxy)methane	2900		FAIL	Action High
120-83-2	2,4-Dichlorophenol	730		PASS	Warning High
91-20-3	Naphthalene	400		PASS	Warning High
106-47-8	4-Chloroaniline	230		PASS	Within Limits
105-60-2	Caprolactam	240		PASS	Within Limits
77-47-4	Hexachlorocyclopentadiene	650		PASS	Within Limits
95-95-4	2,4,5-Trichlorophenol	800		PASS	Within Limits
91-58-7	2-Chloronaphthalene	600		PASS	Within Limits
606-20-2	2,6-Dinitrotoluene	1000		PASS	Within Limits
208-96-8	Acenaphthylene	310		PASS	Within Limits
51-28-5	2,4-Dinitrophenol	160		N.E.	Not Evaluated
132-64-9	Dibenzofuran	330		PASS	Within Limits
121-14-2	2,4-Dinitrotoluene	310		PASS	Within Limits
86-73-7	Fluorene	990		PASS	Within Limits
7005-72-3	4-Chlorophenyl-phenylether	440		PASS	Within Limits
95-94-3	1,2,4,5-Tetrachlorobenzene	820		PASS	Warning High
101-55-3	4-Bromophenyl-phenylether	540		PASS	Within Limits
118-74-1	Hexachlorobenzene	410		PASS	Within Limits
1912-24-9	Atrazine	0	U	N.E.	Not Evaluated
87-86-5	Pentachlorophenol	450		PASS	Within Limits
120-12-7	Anthracene	410		PASS	Within Limits
86-74-8	Carbazole	500		PASS	Within Limits
85-68-7	Butylbenzylphthalate	1000		PASS	Within Limits
91-94-1	3,3'-Dichlorobenzidine	46	J	N.E.	Not Evaluated
56-55-3	Benzo(a)anthracene	610		PASS	Within Limits
117-84-0	Di-n-octylphthalate	560		PASS	Within Limits
205-99-2	Benzo(b)fluoranthene	820		PASS	Within Limits
207-08-9	Benzo(k)fluoranthene	370		PASS	Within Limits
90-12-0	1-Methylnaphthalene	740		PASS	TIC Found
****	END Main Analytes	**********	****	****	**********
83-32-9	Acenaphthene	27	J	PASS	Less Than CRQL

PES SCORING EVALUATION REPORT

CAS No.	Analyte	Laboratory Results		PES Evaluation	
		Concentration	Q		
98-55-5	Alpha-Terpineol	25	J	N.E.	Non-spiked TIC
123-42-2	2-Pentanone,4-hydroxy-4-methyl-	5900	JN	N.E.	Non-spiked TIC
92-87-5	Benzidine	17	J	N.E.	Non-spiked TIC
****	END All Analytes	**********	****	****	**********

Client: Olin Corporation

Job Number: 360-24194-1
Sdg Number: OCRI-02

Client Sample ID: **OC-SB-421-0.0/1.0-XXX**

Lab Sample ID: 360-24194-1
Client Matrix: Solid % Moisture: 4.7

Date Sampled: 08/19/2009 0740
Date Received: 08/19/2009 1730

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48454		Instrument ID:	Inst. J
Preparation:	3550B	Prep Batch: 360-48297		Lab File ID:	J02803.D
Dilution:	10			Initial Weight/Volume:	100.70 g
Date Analyzed:	09/02/2009 0224			Final Weight/Volume:	5.0 mL
Date Prepared:	08/27/2009 1643			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodimethylamine		ND		60	260

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	0	X D	30 - 130
2-Fluorobiphenyl	0	X D	30 - 130
2-Fluorophenol	0	X D	30 - 130
Nitrobenzene-d5	0	X D	30 - 130
Phenol-d5	0	X D	30 - 130
Terphenyl-d14	0	X D	30 - 130

Client: Olin Corporation

Job Number: 360-24194-1
Sdg Number: OCRI-02

Client Sample ID: **OC-SB-421-0.0/1.0-XXX**

Lab Sample ID: 360-24194-1
Client Matrix: Solid
% Moisture: 4.7

Date Sampled: 08/19/2009 0740
Date Received: 08/19/2009 1730

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48213		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-47986		Lab File ID:	B9904.D
Dilution:	5.0			Initial Weight/Volume:	30.20 g
Date Analyzed:	08/28/2009 2203			Final Weight/Volume:	2.0 mL
Date Prepared:	08/20/2009 1253			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		390 J		100	350
1,2,4,5-Tetrachlorobenzene		ND		100	350
1,2,4-Trichlorobenzene		ND		100	350
1,2-Dichlorobenzene		ND		100	350
1,3-Dichlorobenzene		ND		100	350
1,4-Dichlorobenzene		ND		100	350
1-Methylnaphthalene		ND J		100	350
2,2'-oxybis[1-chloropropane]		ND		100	350
2,3,4,6-Tetrachlorophenol		ND J		100	350
2,4,5-Trichlorophenol		ND		100	350
2,4,6-Trichlorophenol		ND		100	350
2,4-Dichlorophenol		ND		100	350
2,4-Dimethylphenol		ND J		140	350
2,4-Dinitrophenol		ND J		100	350
2,4-Dinitrotoluene		ND		100	350
2,6-Dinitrotoluene		ND		100	350
2-Chloronaphthalene		ND		100	350
2-Chlorophenol		ND		100	350
2-Methylnaphthalene		ND		100	350
2-Methylphenol		ND		210	350
2-Nitroaniline		ND		100	1700
2-Nitrophenol		ND		100	350
3 & 4 Methylphenol		ND		100	350
3,3'-Dichlorobenzidine		ND		100	700
3-Nitroaniline		ND		100	1700
4,6-Dinitro-2-methylphenol		ND J		100	1700
4-Bromophenyl phenyl ether		ND		100	350
4-Chloro-3-methylphenol		ND		100	700
4-Chloroaniline		ND		100	700
4-Chlorophenyl phenyl ether		ND		100	350
4-Nitroaniline		ND		100	1700
4-Nitrophenol		ND		100	1700
Acenaphthene		120	J	100	350
Acenaphthylene		ND		100	350
Acetophenone		ND		100	350
Aniline		690 J		100	350
Anthracene		ND		100	350
Atrazine		ND J		100	350
Azobenzene		ND		100	350
Benzaldehyde		ND		100	350
Benzo[a]anthracene		ND		100	350
Benzo[a]pyrene		ND		100	350
Benzo[b]fluoranthene		ND		100	350
Benzo[g,h,i]perylene		ND		100	350
Benzo[k]fluoranthene		ND		100	350
Benzoic acid		ND J		160	1700

3/13/2010

Client: Olin Corporation

Job Number: 360-24194-1
Sdg Number: OCRI-02

Client Sample ID: **OC-SB-421-0.0/1.0-XXX**

Lab Sample ID: 360-24194-1
Client Matrix: Solid % Moisture: 4.7

Date Sampled: 08/19/2009 0740
Date Received: 08/19/2009 1730

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method: 8270C LL
Preparation: 3546
Dilution: 5.0
Date Analyzed: 08/28/2009 2203
Date Prepared: 08/20/2009 1253

Analysis Batch: 360-48213
Prep Batch: 360-47986

Instrument ID: Inst. B
Lab File ID: B9904.D
Initial Weight/Volume: 30.20 g
Final Weight/Volume: 2.0 mL
Injection Volume: 1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		100	350
Benzyl alcohol		ND		300	700
Bis(2-chloroethoxy)methane		ND		100	350
Bis(2-chloroethyl)ether		ND		100	350
Butyl benzyl phthalate		ND		100	350
Caprolactam		ND		100	350
Carbazole		ND		100	350
Chrysene		ND		100	350
Dibenz(a,h)anthracene		ND		100	350
Dibenzofuran		ND		100	350
Diethyl phthalate		ND		100	350
Dimethyl phthalate		ND		100	350
Di-n-butyl phthalate		ND		310	350
Di-n-octyl phthalate		ND		180	350
Diphenyl oxide		1700		100	350
Fluoranthene		ND		100	350
Fluorene		ND		100	350
Hexachlorobenzene		ND		100	350
Hexachlorobutadiene		ND		100	350
Hexachlorocyclopentadiene		ND		100	700
Hexachloroethane		ND		100	350
Indeno[1,2,3-cd]pyrene		ND		100	350
Isophorone		ND		100	350
Naphthalene		ND		100	830
Nitrobenzene		ND		100	350
N-Nitrosodimethylamine		ND		120	350
N-Nitrosodi-n-propylamine		ND		100	350
N-Nitrosodiphenylamine		5800		100	350
Pentachlorophenol		ND		100	350
Phenanthrene		ND		100	420
Phenol		130	J	100	350
Pyrene		ND		100	350

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	41		30 - 130
2-Fluorophenol	66		30 - 130
2-Fluorobiphenyl	63		30 - 130
Nitrobenzene-d5	54		30 - 130
Phenol-d5	48		30 - 130
Terphenyl-d14	76		30 - 130

Client: Olin Corporation

Job Number: 360-24194-1
Sdg Number: OCRI-02

Client Sample ID: **OC-SB-421-0.0/1.0-XXX**

Lab Sample ID: 360-24194-1
Client Matrix: Solid % Moisture: 4.7

Date Sampled: 08/19/2009 0740
Date Received: 08/19/2009 1730

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48213		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-47986		Lab File ID:	B9904.D
Dilution:	5.0			Initial Weight/Volume:	30.20 g
Date Analyzed:	08/28/2009 2203			Final Weight/Volume:	2.0 mL
Date Prepared:	08/20/2009 1253			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 9

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
110-86-1	Pyridine	6.04	46	J *
	Unknown	10.31	19000	T J
	Unknown	10.36	15000	T J
	Unknown	10.41	12000	T J
122-66-7	1,2-Diphenylhydrazine	11.78	360	
	Unknown	12.12	6100	T J
	Unknown	15.25	11000	T J
26603-23-6	p,p''-Dioctyldiphenylamine	16.64	5800	T J N
	Unknown	17.53	5500	T J

Client: Olin Corporation

Job Number: 360-24194-1
Sdg Number: OCRI-02

Client Sample ID: **OC-SB-421-0.0/1.0-XXX**

Lab Sample ID: 360-24194-1
Client Matrix: Solid % Moisture: 4.7

Date Sampled: 08/19/2009 0740
Date Received: 08/19/2009 1730

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48702		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-47986		Lab File ID:	B10131.D
Dilution:	5.0			Initial Weight/Volume:	30.20 g
Date Analyzed:	09/08/2009 1824	Run Type: DL2		Final Weight/Volume:	2.0 mL
Date Prepared:	08/20/2009 1253			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Diphenylamine		5000		100	350

Client: Olin Corporation

Job Number: 360-24194-1
Sdg Number: OCRI-02

Client Sample ID: **OC-SB-421-0.0/1.0-XXX**

Lab Sample ID: 360-24194-1
Client Matrix: Solid % Moisture: 4.7

Date Sampled: 08/19/2009 0740
Date Received: 08/19/2009 1730

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48750		Instrument ID:	NOEQUIP
Preparation:	3546	Prep Batch: 360-47986		Lab File ID:	N/A
Dilution:	5.0			Initial Weight/Volume:	30.20 g
Date Analyzed:	09/08/2009 1824			Final Weight/Volume:	2.0 mL
Date Prepared:	08/20/2009 1253			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodiphenylamine		750 EB		100	350

Client: Olin Corporation

Job Number: 360-24194-1
Sdg Number: OCRI-02

Client Sample ID: **OC-SB-421-0.0/1.0-XXX**

Lab Sample ID: 360-24194-1
Client Matrix: Solid
% Moisture: 4.7

Date Sampled: 08/19/2009 0740
Date Received: 08/19/2009 1730

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48389		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-47986		Lab File ID:	B9937.D
Dilution:	20			Initial Weight/Volume:	30.20 g
Date Analyzed:	09/01/2009 0621	Run Type: DL		Final Weight/Volume:	2.0 mL
Date Prepared:	08/20/2009 1253			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Bis(2-ethylhexyl) phthalate		21000 EB		420	1400

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	0	D X	30 - 130
2-Fluorophenol	0	D X	30 - 130
2-Fluorobiphenyl	0	D X	30 - 130
Nitrobenzene-d5	0	D X	30 - 130
Phenol-d5	0	D X	30 - 130
Terphenyl-d14	0	D X	30 - 130

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Client: Olin Corporation

Job Number: 360-24194-2
Sdg Number: OCRI-02A

Client Sample ID: **OC-SB-421-10.5/12.5-XXX**

Lab Sample ID: 360-24194-2
Client Matrix: Solid % Moisture: 9.1

Date Sampled: 08/19/2009 0805
Date Received: 08/19/2009 1730

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48213		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-47986		Lab File ID:	B9905.D
Dilution:	1.0			Initial Weight/Volume:	30.61 g
Date Analyzed:	08/28/2009 2237			Final Weight/Volume:	1.0 mL
Date Prepared:	08/20/2009 1253			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,2,4,5-Tetrachlorobenzene		ND		2.4	36
1,2,4-Trichlorobenzene		ND		7.0	36
1,2-Dichlorobenzene		ND		3.9	36
1,3-Dichlorobenzene		ND		10	36
1,4-Dichlorobenzene		ND		6.5	36
1-Methylnaphthalene		58 J		2.2	36
2,2'-oxybis[1-chloropropane]		ND		3.6	36
2,3,4,6-Tetrachlorophenol		ND J		2.2	36
2,4,5-Trichlorophenol		ND		4.1	36
2,4,6-Trichlorophenol		ND		7.5	36
2,4-Dichlorophenol		ND		6.9	36
2,4-Dimethylphenol		35 J	J	6.3	36
2,4-Dinitrophenol		ND J		5.3	36
2,4-Dinitrotoluene		ND		5.1	36
2,6-Dinitrotoluene		ND		4.6	36
2-Chloronaphthalene		ND		5.5	36
2-Chlorophenol		ND		3.5	36
2-Methylnaphthalene		ND		27	36
2-Methylphenol		ND		5.1	36
2-Nitroaniline		ND		23	180
2-Nitrophenol		ND		4.2	36
3 & 4 Methylphenol		ND		6.8	36
3,3'-Dichlorobenzidine		ND		26	72
3-Nitroaniline		ND		10	180
4,6-Dinitro-2-methylphenol		ND J		9.2	180
4-Bromophenyl phenyl ether		ND		7.5	36
4-Chloro-3-methylphenol		ND		9.9	72
4-Chloroaniline		ND		15	72
4-Chlorophenyl phenyl ether		ND		5.7	36
4-Nitroaniline		ND		9.6	180
4-Nitrophenol		ND		7.0	180
Acenaphthene		ND		5.3	36
Acenaphthylene		ND		6.4	36
Acetophenone		8.5	J B	3.9	36
Aniline		ND J		19	36
Anthracene		ND		11	36
Atrazine		ND J		11	36
Azobenzene		ND		4.5	36
Benzaldehyde		ND		11	36
Benzo[a]anthracene		ND		6.9	36
Benzo[a]pyrene		ND		6.6	36
Benzo[b]fluoranthene		ND		8.2	36
Benzo[g,h,i]perylene		ND		7.0	36
Benzo[k]fluoranthene		ND		10	36
Benzoic acid		ND J		15	180
Benzophenone		3.5	J	2.2	36

Client: Olin Corporation

Job Number: 360-24194-2
Sdg Number: OCRI-02A

Client Sample ID: **OC-SB-421-10.5/12.5-XXX**

Lab Sample ID: 360-24194-2
Client Matrix: Solid % Moisture: 9.1

Date Sampled: 08/19/2009 0805
Date Received: 08/19/2009 1730

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method: 8270C LL
Preparation: 3546
Dilution: 1.0
Date Analyzed: 08/28/2009 2237
Date Prepared: 08/20/2009 1253

Analysis Batch: 360-48213
Prep Batch: 360-47986

Instrument ID: Inst. B
Lab File ID: B9905.D
Initial Weight/Volume: 30.61 g
Final Weight/Volume: 1.0 mL
Injection Volume: 1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzyl alcohol		ND		8.3	72
Bis(2-chloroethoxy)methane		ND		6.5	36
Bis(2-chloroethyl)ether		ND		8.7	36
Butyl benzyl phthalate		ND		7.9	36
Caprolactam		ND	J	11	36
Carbazole		ND		36	36
Chrysene		ND		7.8	36
Dibenz(a,h)anthracene		ND		7.3	36
Dibenzofuran		38		21	36
Diethyl phthalate		ND		5.1	36
Dimethyl phthalate		ND		5.3	36
Di-n-butyl phthalate		590	U B	11	36
Di-n-octyl phthalate		ND		10	36
Fluoranthene		ND		23	36
Fluorene		ND		14	36
Hexachlorobenzene		ND		8.5	36
Hexachlorobutadiene		ND		7.2	36
Hexachlorocyclopentadiene		ND		9.8	72
Hexachloroethane		ND		6.9	36
Indeno[1,2,3-cd]pyrene		ND		11	36
Isophorone		ND		7.7	36
Naphthalene		ND		80	86
Nitrobenzene		ND		4.9	36
N-Nitrosodimethylamine		ND		4.2	36
N-Nitrosodi-n-propylamine		ND		4.1	36
N-Nitrosodiphenylamine		670	EB	7.2	36
Pentachlorophenol		ND		7.4	36
Phenanthrene		ND		41	43
Phenol		210		4.5	36
Pyrene		15	J	9.5	36

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	61		30 - 130
2-Fluorobiphenyl	70		30 - 130
2-Fluorophenol	91		30 - 130
Nitrobenzene-d5	65		30 - 130
Phenol-d5	95		30 - 130
Terphenyl-d14	219	X	30 - 130

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Client: Olin Corporation

Job Number: 360-24194-2
Sdg Number: OCRI-02A

Client Sample ID: **OC-SB-421-10.5/12.5-XXX**

Lab Sample ID: 360-24194-2
Client Matrix: Solid % Moisture: 9.1

Date Sampled: 08/19/2009 0805
Date Received: 08/19/2009 1730

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48213		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-47986		Lab File ID:	B9905.D
Dilution:	1.0			Initial Weight/Volume:	30.61 g
Date Analyzed:	08/28/2009 2237			Final Weight/Volume:	1.0 mL
Date Prepared:	08/20/2009 1253			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 6

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Unknown	7.17	880	T J
	Unknown	10.36	410	T J
84-69-5	1,2-Benzenedicarboxylic acid, bis(2-meth	14.47	680	T J N
	Unknown	15.09	32	T J
	Unknown	15.14	70	T J
	Unknown	17.15	25	T J

Client: Olin Corporation

Job Number: 360-24194-2
Sdg Number: OCRI-02A

Client Sample ID: **OC-SB-421-10.5/12.5-XXX**

Lab Sample ID: 360-24194-2
Client Matrix: Solid
% Moisture: 9.1

Date Sampled: 08/19/2009 0805
Date Received: 08/19/2009 1730

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48389		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-47986		Lab File ID:	B9922.D
Dilution:	20			Initial Weight/Volume:	30.61 g
Date Analyzed:	08/31/2009 2150	Run Type: DL		Final Weight/Volume:	1.0 mL
Date Prepared:	08/20/2009 1253			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		11000 J		220	720

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	0	D X	30 - 130
2-Fluorobiphenyl	0	D X	30 - 130
2-Fluorophenol	0	D X	30 - 130
Nitrobenzene-d5	0	D X	30 - 130
Phenol-d5	0	D X	30 - 130
Terphenyl-d14	0	D X	30 - 130

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Client: Olin Corporation

Job Number: 360-24194-2
Sdg Number: OCRI-02A

Client Sample ID: **OC-SB-421-10.5/12.5-XXX**

Lab Sample ID: 360-24194-2
Client Matrix: Solid % Moisture: 9.1

Date Sampled: 08/19/2009 0805
Date Received: 08/19/2009 1730

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48389		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-47986		Lab File ID:	B9923.D
Dilution:	100			Initial Weight/Volume:	30.61 g
Date Analyzed:	08/31/2009 2224	Run Type: DL2		Final Weight/Volume:	1.0 mL
Date Prepared:	08/20/2009 1253			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Diphenyl oxide		74000 J		1100	3600

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	0	D X	30 - 130
2-Fluorobiphenyl	0	D X	30 - 130
2-Fluorophenol	0	D X	30 - 130
Nitrobenzene-d5	0	D X	30 - 130
Phenol-d5	0	D X	30 - 130
Terphenyl-d14	0	D X	30 - 130

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Client: Olin Corporation

Job Number: 360-24194-2
Sdg Number: OCRI-02A

Client Sample ID: **OC-SB-421-10.5/12.5-XXX**

Lab Sample ID: 360-24194-2
Client Matrix: Solid % Moisture: 9.1

Date Sampled: 08/19/2009 0805
Date Received: 08/19/2009 1730

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48389		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-47986		Lab File ID:	B9924.D
Dilution:	1000			Initial Weight/Volume:	30.61 g
Date Analyzed:	08/31/2009 2258	Run Type: DL3		Final Weight/Volume:	1.0 mL
Date Prepared:	08/20/2009 1253			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Bis(2-ethylhexyl) phthalate		420000 EB		11000	36000

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	0	D X	30 - 130
2-Fluorobiphenyl	0	D X	30 - 130
2-Fluorophenol	0	D X	30 - 130
Nitrobenzene-d5	0	D X	30 - 130
Phenol-d5	0	D X	30 - 130
Terphenyl-d14	0	D X	30 - 130

Client: Olin Corporation

Job Number: 360-24194-1
Sdg Number: OCRI-02

Client Sample ID: **OC-SB-421-8.0/10.0-XXX**

Lab Sample ID: 360-24194-3
Client Matrix: Solid % Moisture: 7.4

Date Sampled: 08/19/2009 0745
Date Received: 08/19/2009 1730

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48454		Instrument ID:	Inst. J
Preparation:	3550B	Prep Batch: 360-48297		Lab File ID:	J02805.D
Dilution:	1.0			Initial Weight/Volume:	100.22 g
Date Analyzed:	09/02/2009 0324			Final Weight/Volume:	1.0 mL
Date Prepared:	08/27/2009 1643			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodimethylamine		ND		1.2	5.4

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	66		30 - 130
2-Fluorobiphenyl	65		30 - 130
2-Fluorophenol	62		30 - 130
Nitrobenzene-d5	72		30 - 130
Phenol-d5	67		30 - 130
Terphenyl-d14	83		30 - 130

Client: Olin Corporation

Job Number: 360-24194-1
Sdg Number: OCRI-02

Client Sample ID: **OC-SB-421-8.0/10.0-XXX**

Lab Sample ID: 360-24194-3
Client Matrix: Solid
% Moisture: 7.4

Date Sampled: 08/19/2009 0745
Date Received: 08/19/2009 1730

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48702		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-47986		Lab File ID:	B10133.D
Dilution:	1.0			Initial Weight/Volume:	30.59 g
Date Analyzed:	09/08/2009 1932	Run Type: DL3		Final Weight/Volume:	1.0 mL
Date Prepared:	08/20/2009 1253			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Diphenylamine		ND		11	35

Client: Olin Corporation

Job Number: 360-24194-1
Sdg Number: OCRI-02

Client Sample ID: **OC-SB-421-8.0/10.0-XXX**

Lab Sample ID: 360-24194-3
Client Matrix: Solid % Moisture: 7.4

Date Sampled: 08/19/2009 0745
Date Received: 08/19/2009 1730

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48750		Instrument ID:	NOEQUIP
Preparation:	3546	Prep Batch: 360-47986		Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	30.59 g
Date Analyzed:	09/08/2009 1932			Final Weight/Volume:	1.0 mL
Date Prepared:	08/20/2009 1253			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodiphenylamine		ND		11	35

Client: Olin Corporation

Job Number: 360-24194-1
Sdg Number: OCRI-02

Client Sample ID: **OC-SB-421-8.0/10.0-XXX**

Lab Sample ID: 360-24194-3
Client Matrix: Solid % Moisture: 7.4

Date Sampled: 08/19/2009 0745
Date Received: 08/19/2009 1730

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48751		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-47986		Lab File ID:	B10168.D
Dilution:	10			Initial Weight/Volume:	30.59 g
Date Analyzed:	09/10/2009 0840			Final Weight/Volume:	1.0 mL
Date Prepared:	08/20/2009 1253			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		110	350
1,2,4,5-Tetrachlorobenzene		ND		110	350
1,2,4-Trichlorobenzene		ND		110	350
1,2-Dichlorobenzene		ND		110	350
1,3-Dichlorobenzene		ND	J	110	350
1,4-Dichlorobenzene		ND		110	350
1-Methylnaphthalene		ND		110	350
2,2'-oxybis[1-chloropropane]		ND		110	350
2,3,4,6-Tetrachlorophenol		ND		110	350
2,4,5-Trichlorophenol		ND		110	350
2,4,6-Trichlorophenol		ND		110	350
2,4-Dichlorophenol		ND		110	350
2,4-Dimethylphenol		ND		140	350
2,4-Dinitrophenol		ND	J	110	350
2,4-Dinitrotoluene		ND		110	350
2,6-Dinitrotoluene		ND		110	350
2-Chloronaphthalene		ND		110	350
2-Chlorophenol		ND		110	350
2-Methylnaphthalene		ND		110	350
2-Methylphenol		ND		210	350
2-Nitroaniline		ND		110	1800
2-Nitrophenol		ND		110	350
3 & 4 Methylphenol		ND		110	350
3,3'-Dichlorobenzidine		ND	J	110	710
3-Nitroaniline		ND		110	1800
4,6-Dinitro-2-methylphenol		ND		110	1800
4-Bromophenyl phenyl ether		ND		110	350
4-Chloro-3-methylphenol		ND		110	710
4-Chloroaniline		ND		110	710
4-Chlorophenyl phenyl ether		ND		110	350
4-Nitroaniline		ND		110	1800
4-Nitrophenol		ND		110	1800
Acenaphthene		ND		110	350
Acenaphthylene		ND		110	350
Acetophenone		ND		110	350
Aniline		ND	J	110	350
Anthracene		ND		110	350
Atrazine		ND		110	350
Azobenzene		ND		110	350
Benzaldehyde		ND		110	350
Benzo[a]anthracene		ND		110	350
Benzo[a]pyrene		ND		110	350
Benzo[b]fluoranthene		ND		110	350
Benzo[g,h,i]perylene		ND		110	350
Benzo[k]fluoranthene		ND		110	350
Benzoic acid		ND	J	160	1800

Client: Olin Corporation

Job Number: 360-24194-1
Sdg Number: OCRI-02

Client Sample ID: **OC-SB-421-8.0/10.0-XXX**

Lab Sample ID: 360-24194-3
Client Matrix: Solid % Moisture: 7.4

Date Sampled: 08/19/2009 0745
Date Received: 08/19/2009 1730

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48751		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-47986		Lab File ID:	B10168.D
Dilution:	10			Initial Weight/Volume:	30.59 g
Date Analyzed:	09/10/2009 0840			Final Weight/Volume:	1.0 mL
Date Prepared:	08/20/2009 1253			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		110	350
Benzyl alcohol		ND J		300	710
Bis(2-chloroethoxy)methane		ND		110	350
Bis(2-chloroethyl)ether		ND J		110	350
Bis(2-ethylhexyl) phthalate		890 SEB		110	350
Butyl benzyl phthalate		ND		110	350
Caprolactam		ND		110	350
Carbazole		ND		110	350
Chrysene		ND		110	350
Dibenz(a,h)anthracene		ND		110	350
Dibenzofuran		ND		110	350
Diethyl phthalate		ND		110	350
Dimethyl phthalate		ND		110	350
Di-n-butyl phthalate		ND		310	350
Di-n-octyl phthalate		ND		180	350
Diphenyl oxide		ND		110	350
Fluoranthene		ND		110	350
Fluorene		ND		110	350
Hexachlorobenzene		ND		110	350
Hexachlorobutadiene		ND		110	350
Hexachlorocyclopentadiene		ND R		110	710
Hexachloroethane		ND		110	350
Indeno[1,2,3-cd]pyrene		ND		110	350
Isophorone		ND		110	350
Naphthalene		ND		110	850
Nitrobenzene		ND		110	350
N-Nitrosodimethylamine		ND		120	350
N-Nitrosodi-n-propylamine		ND		110	350
N-Nitrosodiphenylamine		ND		110	350
Pentachlorophenol		ND		110	350
Phenanthrene		ND		110	420
Phenol		ND		110	350
Pyrene		ND		110	350

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	113		30 - 130
2-Fluorophenol	86		30 - 130
2-Fluorobiphenyl	71		30 - 130
Nitrobenzene-d5	70		30 - 130
Phenol-d5	73		30 - 130
Terphenyl-d14	80		30 - 130

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Client: Olin Corporation

Job Number: 360-24194-1
Sdg Number: OCRI-02

Client Sample ID: **OC-SB-421-8.0/10.0-XXX**

Lab Sample ID: 360-24194-3
Client Matrix: Solid % Moisture: 7.4

Date Sampled: 08/19/2009 0745
Date Received: 08/19/2009 1730

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48751		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-47986		Lab File ID:	B10168.D
Dilution:	10			Initial Weight/Volume:	30.59 g
Date Analyzed:	09/10/2009 0840			Final Weight/Volume:	1.0 mL
Date Prepared:	08/20/2009 1253			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 5

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Unknown	10.70	2000	T J
3910-35-8	1H-Indene, 2,3-dihydro-1,1,3-trimethyl-3	11.14	530	T J N
	Unknown	12.60	410	T J
26603-23-6	p,p''-Dioctyldiphenylamine	17.54	2100	T J N
	Unknown	18.51	1900	T J

Client: Olin Corporation

Job Number: 360-24194-1
Sdg Number: OCRI-02

Client Sample ID: **OC-SB-424-0.0/1.0-XXX**

Lab Sample ID: 360-24194-4
Client Matrix: Solid
% Moisture: 3.1

Date Sampled: 08/19/2009 1135
Date Received: 08/19/2009 1730

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48454		Instrument ID:	Inst. J
Preparation:	3550B	Prep Batch: 360-48297		Lab File ID:	J02806.D
Dilution:	1.0			Initial Weight/Volume:	100.04 g
Date Analyzed:	09/02/2009 0353			Final Weight/Volume:	1.0 mL
Date Prepared:	08/27/2009 1643			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodimethylamine		ND		1.2	5.2

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	60		30 - 130
2-Fluorobiphenyl	62		30 - 130
2-Fluorophenol	61		30 - 130
Nitrobenzene-d5	64		30 - 130
Phenol-d5	63		30 - 130
Terphenyl-d14	90		30 - 130

Client: Olin Corporation

Job Number: 360-24194-1
Sdg Number: OCRI-02

Client Sample ID: **OC-SB-424-0.0/1.0-XXX**

Lab Sample ID: 360-24194-4
Client Matrix: Solid % Moisture: 3.1

Date Sampled: 08/19/2009 1135
Date Received: 08/19/2009 1730

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48751		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48119		Lab File ID:	B10156.D
Dilution:	1.0			Initial Weight/Volume:	30.51 g
Date Analyzed:	09/10/2009 0155			Final Weight/Volume:	1.0 mL
Date Prepared:	08/25/2009 1123			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		10	34
1,2,4,5-Tetrachlorobenzene		ND		10	34
1,2,4-Trichlorobenzene		ND		10	34
1,2-Dichlorobenzene		ND		10	34
1,3-Dichlorobenzene		ND	J	10	34
1,4-Dichlorobenzene		ND		10	34
1-Methylnaphthalene		ND		10	34
2,2'-oxybis[1-chloropropane]		ND		10	34
2,3,4,6-Tetrachlorophenol		ND		10	34
2,4,5-Trichlorophenol		ND		10	34
2,4,6-Trichlorophenol		ND		10	34
2,4-Dichlorophenol		ND		10	34
2,4-Dimethylphenol		ND		13	34
2,4-Dinitrophenol		ND	J	10	34
2,4-Dinitrotoluene		ND		10	34
2,6-Dinitrotoluene		ND		10	34
2-Chloronaphthalene		ND		10	34
2-Chlorophenol		ND		10	34
2-Methylnaphthalene		ND		10	34
2-Methylphenol		ND		20	34
2-Nitroaniline		ND		10	170
2-Nitrophenol		ND		10	34
3 & 4 Methylphenol		ND		10	34
3,3'-Dichlorobenzidine		ND	J	10	68
3-Nitroaniline		ND		10	170
4,6-Dinitro-2-methylphenol		ND		10	170
4-Bromophenyl phenyl ether		ND		10	34
4-Chloro-3-methylphenol		ND		10	68
4-Chloroaniline		ND		10	68
4-Chlorophenyl phenyl ether		ND		10	34
4-Nitroaniline		ND		10	170
4-Nitrophenol		ND		10	170
Acenaphthene		ND		10	34
Acenaphthylene		ND		10	34
Acetophenone		ND		10	34
Aniline		ND	J	10	34
Anthracene		ND		10	34
Atrazine		ND		10	34
Azobenzene		ND		10	34
Benzaldehyde		16	J	10	34
Benzo[a]anthracene		ND		10	34
Benzo[a]pyrene		88		10	34
Benzo[b]fluoranthene		ND		10	34
Benzo[g,h,i]perylene		ND		10	34
Benzo[k]fluoranthene		ND		10	34
Benzoic acid		130	J	15	170

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Client: Olin Corporation

Job Number: 360-24194-1
Sdg Number: OCRI-02

Client Sample ID: **OC-SB-424-0.0/1.0-XXX**

Lab Sample ID: 360-24194-4
Client Matrix: Solid % Moisture: 3.1

Date Sampled: 08/19/2009 1135
Date Received: 08/19/2009 1730

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48751		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48119		Lab File ID:	B10156.D
Dilution:	1.0			Initial Weight/Volume:	30.51 g
Date Analyzed:	09/10/2009 0155			Final Weight/Volume:	1.0 mL
Date Prepared:	08/25/2009 1123			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		10	34
Benzyl alcohol		ND		29	68
Bis(2-chloroethoxy)methane		ND		10	34
Bis(2-chloroethyl)ether		ND		10	34
Bis(2-ethylhexyl) phthalate		31	J	10	34
Butyl benzyl phthalate		ND		10	34
Caprolactam		ND		10	34
Carbazole		ND		10	34
Chrysene		11	J	10	34
Dibenz(a,h)anthracene		ND		10	34
Dibenzofuran		ND		10	34
Diethyl phthalate		ND		10	34
Dimethyl phthalate		ND		10	34
Di-n-butyl phthalate		ND		30	34
Di-n-octyl phthalate		ND		17	34
Diphenyl oxide		ND		10	34
Diphenylamine		ND		10	34
Fluoranthene		14	J	10	34
Fluorene		ND		10	34
Hexachlorobenzene		ND		10	34
Hexachlorobutadiene		ND		10	34
Hexachlorocyclopentadiene		ND		10	68
Hexachloroethane		ND		10	34
Indeno[1,2,3-cd]pyrene		ND		10	34
Isophorone		ND		10	34
Naphthalene		ND		10	81
Nitrobenzene		ND		10	34
N-Nitrosodimethylamine		ND		12	34
N-Nitrosodi-n-propylamine		ND		10	34
N-Nitrosodiphenylamine		ND		10	34
Pentachlorophenol		ND		10	34
Phenanthrene		ND		10	41
Phenol		ND		10	34
Pyrene		16	J	10	34

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	68		30 - 130
2-Fluorophenol	88		30 - 130
2-Fluorobiphenyl	68		30 - 130
Nitrobenzene-d5	64		30 - 130
Phenol-d5	83		30 - 130
Terphenyl-d14	69		30 - 130

Client: Olin Corporation

Job Number: 360-24194-1
Sdg Number: OCRI-02

Client Sample ID: **OC-SB-424-0.0/1.0-XXX**

Lab Sample ID: 360-24194-4
Client Matrix: Solid % Moisture: 3.1

Date Sampled: 08/19/2009 1135
Date Received: 08/19/2009 1730

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48751		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48119		Lab File ID:	B10156.D
Dilution:	1.0			Initial Weight/Volume:	30.51 g
Date Analyzed:	09/10/2009 0155			Final Weight/Volume:	1.0 mL
Date Prepared:	08/25/2009 1123			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 6

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
57-10-3	n-Hexadecanoic acid	11.80	130	T J N
646-31-1	Tetracosane	13.54	78	T J N
630-6-8	Hexatriacontane	14.13	120	T J N
593-49-7	Heptacosane	15.49	110	T J N
630-1-3	Hexacosane	16.47	190	T J N
630-6-8	Hexatriacontane	17.57	180	T J N

Client: Olin Corporation

Job Number: 360-24194-2
Sdg Number: OCRI-02A

Client Sample ID: **OC-SB-424-17/19-XXX**

Lab Sample ID: 360-24194-5
Client Matrix: Solid
% Moisture: 11.2

Date Sampled: 08/19/2009 1235
Date Received: 08/19/2009 1730

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48751		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48119		Lab File ID:	B10157.D
Dilution:	1.0			Initial Weight/Volume:	30.59 g
Date Analyzed:	09/10/2009 0228			Final Weight/Volume:	1.0 mL
Date Prepared:	08/25/2009 1123			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		92		11	37
1,2,4,5-Tetrachlorobenzene		ND		2.5	37
1,2,4-Trichlorobenzene		ND		7.2	37
1,2-Dichlorobenzene		ND		4.0	37
1,3-Dichlorobenzene		ND J		11	37
1,4-Dichlorobenzene		ND		6.6	37
1-Methylnaphthalene		ND		2.2	37
2,2'-oxybis[1-chloropropane]		ND		3.7	37
2,3,4,6-Tetrachlorophenol		ND		2.2	37
2,4,5-Trichlorophenol		ND		4.2	37
2,4,6-Trichlorophenol		ND		7.7	37
2,4-Dichlorophenol		ND		7.1	37
2,4-Dimethylphenol		ND		6.4	37
2,4-Dinitrophenol		ND J		5.4	37
2,4-Dinitrotoluene		ND		5.2	37
2,6-Dinitrotoluene		ND		4.7	37
2-Chloronaphthalene		ND		5.7	37
2-Chlorophenol		ND		3.6	37
2-Methylnaphthalene		ND		28	37
2-Methylphenol		ND		5.3	37
2-Nitroaniline		ND		24	180
2-Nitrophenol		ND		4.3	37
3 & 4 Methylphenol		ND		7.0	37
3,3'-Dichlorobenzidine		ND J		27	74
3-Nitroaniline		ND		11	180
4,6-Dinitro-2-methylphenol		ND		9.4	180
4-Bromophenyl phenyl ether		11	J	7.7	37
4-Chloro-3-methylphenol		ND		10	74
4-Chloroaniline		ND		15	74
4-Chlorophenyl phenyl ether		ND		5.9	37
4-Nitroaniline		ND		9.8	180
4-Nitrophenol		ND		7.2	180
Acenaphthene		ND		5.4	37
Acenaphthylene		ND		6.5	37
Acetophenone		ND		4.0	37
Aniline		ND J		19	37
Anthracene		ND		12	37
Atrazine		ND		11	37
Azobenzene		ND		4.6	37
Benzaldehyde		ND		11	37
Benzo[a]anthracene		ND		7.1	37
Benzo[a]pyrene		ND		6.7	37
Benzo[b]fluoranthene		ND		8.4	37
Benzo[g,h,i]perylene		ND		7.2	37
Benzo[k]fluoranthene		ND		10	37
Benzoic acid		56 EB	J	16	180

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Client: Olin Corporation

Job Number: 360-24194-2
Sdg Number: OCRI-02A

Client Sample ID: **OC-SB-424-17/19-XXX**

Lab Sample ID: 360-24194-5
Client Matrix: Solid % Moisture: 11.2

Date Sampled: 08/19/2009 1235
Date Received: 08/19/2009 1730

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48751		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48119		Lab File ID:	B10157.D
Dilution:	1.0			Initial Weight/Volume:	30.59 g
Date Analyzed:	09/10/2009 0228			Final Weight/Volume:	1.0 mL
Date Prepared:	08/25/2009 1123			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		2.2	37
Benzyl alcohol		ND		8.5	74
Bis(2-chloroethoxy)methane		ND		6.6	37
Bis(2-chloroethyl)ether		ND J	✓	9.0	37
Butyl benzyl phthalate		ND		8.0	37
Caprolactam		ND		11	37
Carbazole		ND		37	37
Chrysene		ND		7.9	37
Dibenz(a,h)anthracene		ND		7.4	37
Dibenzofuran		ND		21	37
Diethyl phthalate		ND		5.2	37
Dimethyl phthalate		ND		5.4	37
Di-n-butyl phthalate		~~14~~ U	~~J B~~	11	37
Di-n-octyl phthalate		ND		10	37
Diphenyl oxide		69		11	37
Fluoranthene		ND		23	37
Fluorene		ND		14	37
Hexachlorobenzene		ND		8.7	37
Hexachlorobutadiene		ND		7.3	37
Hexachlorocyclopentadiene		ND		10	74
Hexachloroethane		ND		7.0	37
Indeno[1,2,3-cd]pyrene		ND		11	37
Isophorone		ND		7.9	37
Naphthalene		ND		82	88
Nitrobenzene		ND		5.0	37
N-Nitrosodimethylamine		ND		4.3	37
N-Nitrosodi-n-propylamine		ND		4.2	37
N-Nitrosodiphenylamine		18	J	7.4	37
Pentachlorophenol		ND		7.6	37
Phenanthrene		ND		42	44
Phenol		ND		4.6	37
Pyrene		ND		9.8	37

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	78		30 - 130
2-Fluorobiphenyl	65		30 - 130
2-Fluorophenol	103		30 - 130
Nitrobenzene-d5	63		30 - 130
Phenol-d5	98		30 - 130
Terphenyl-d14	71		30 - 130

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Client: Olin Corporation

Job Number: 360-24194-2
Sdg Number: OCRI-02A

Client Sample ID: **OC-SB-424-17/19-XXX**

Lab Sample ID: 360-24194-5
Client Matrix: Solid % Moisture: 11.2

Date Sampled: 08/19/2009 1235
Date Received: 08/19/2009 1730

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48751		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48119		Lab File ID:	B10157.D
Dilution:	1.0			Initial Weight/Volume:	30.59 g
Date Analyzed:	09/10/2009 0228			Final Weight/Volume:	1.0 mL
Date Prepared:	08/25/2009 1123			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 3

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Unknown	5.46	110	T J
112-84-5	Erucylamide	16.03	97	T J N
26603-23-6	p,p"-Dioctyldiphenylamine	17.08	76	T J N

Client: Olin Corporation

Job Number: 360-24194-2
Sdg Number: OCRI-02A

Client Sample ID: **OC-SB-424-17/19-XXX**

Lab Sample ID: 360-24194-5
Client Matrix: Solid
% Moisture: 11.2

Date Sampled: 08/19/2009 1235
Date Received: 08/19/2009 1730

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48751		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48119		Lab File ID:	B10171.D
Dilution:	2.0			Initial Weight/Volume:	30.59 g
Date Analyzed:	09/10/2009 1021	Run Type: DL		Final Weight/Volume:	1.0 mL
Date Prepared:	08/25/2009 1123			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Bis(2-ethylhexyl) phthalate		1100 EMB		23	74

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	85		30 - 130
2-Fluorobiphenyl	84		30 - 130
2-Fluorophenol	101		30 - 130
Nitrobenzene-d5	76		30 - 130
Phenol-d5	93		30 - 130
Terphenyl-d14	104		30 - 130

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Client: Olin Corporation

Job Number: 360-24194-1
Sdg Number: OCRI-02

Client Sample ID: **OC-SB-424-7.0/9.0-XXX**

Lab Sample ID: 360-24194-6
Client Matrix: Solid % Moisture: 6.0

Date Sampled: 08/19/2009 1215
Date Received: 08/19/2009 1730

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48454		Instrument ID:	Inst. J
Preparation:	3550B	Prep Batch: 360-48297		Lab File ID:	J02808.D
Dilution:	1.0			Initial Weight/Volume:	100.32 g
Date Analyzed:	09/02/2009 0453			Final Weight/Volume:	1.0 mL
Date Prepared:	08/27/2009 1643			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodimethylamine		ND		1.2	5.3

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	61		30 - 130
2-Fluorobiphenyl	64		30 - 130
2-Fluorophenol	67		30 - 130
Nitrobenzene-d5	72		30 - 130
Phenol-d5	69		30 - 130
Terphenyl-d14	94		30 - 130

Client: Olin Corporation

Job Number: 360-24194-1
Sdg Number: OCRI-02

Client Sample ID: **OC-SB-424-7.0/9.0-XXX**

Lab Sample ID: 360-24194-6
Client Matrix: Solid % Moisture: 6.0

Date Sampled: 08/19/2009 1215
Date Received: 08/19/2009 1730

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48751		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48119		Lab File ID:	B10158.D
Dilution:	1.0			Initial Weight/Volume:	30.69 g
Date Analyzed:	09/10/2009 0302			Final Weight/Volume:	1.0 mL
Date Prepared:	08/25/2009 1123			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		10	35
1,2,4,5-Tetrachlorobenzene		ND		10	35
1,2,4-Trichlorobenzene		ND		10	35
1,2-Dichlorobenzene		ND		10	35
1,3-Dichlorobenzene		ND	J	10	35
1,4-Dichlorobenzene		ND		10	35
1-Methylnaphthalene		ND		10	35
2,2'-oxybis[1-chloropropane]		ND		10	35
2,3,4,6-Tetrachlorophenol		ND		10	35
2,4,5-Trichlorophenol		ND		10	35
2,4,6-Trichlorophenol		ND		10	35
2,4-Dichlorophenol		ND		10	35
2,4-Dimethylphenol		ND		14	35
2,4-Dinitrophenol		ND		10	35
2,4-Dinitrotoluene		ND		10	35
2,6-Dinitrotoluene		ND		10	35
2-Chloronaphthalene		ND		10	35
2-Chlorophenol		ND		10	35
2-Methylnaphthalene		ND		10	35
2-Methylphenol		ND		21	35
2-Nitroaniline		ND		10	170
2-Nitrophenol		ND		10	35
3 & 4 Methylphenol		ND		10	35
3,3'-Dichlorobenzidine		ND	J	10	69
3-Nitroaniline		ND		10	170
4,6-Dinitro-2-methylphenol		ND	J	10	170
4-Bromophenyl phenyl ether		ND		10	35
4-Chloro-3-methylphenol		ND		10	69
4-Chloroaniline		ND		10	69
4-Chlorophenyl phenyl ether		ND		10	35
4-Nitroaniline		ND		10	170
4-Nitrophenol		ND		10	170
Acenaphthene		ND		10	35
Acenaphthylene		ND		10	35
Acetophenone		34	J	10	35
Aniline		ND		10	35
Anthracene		ND		10	35
Atrazine		ND		10	35
Azobenzene		ND		10	35
Benzaldehyde		14	J	10	35
Benzo[a]anthracene		ND		10	35
Benzo[a]pyrene		ND		10	35
Benzo[b]fluoranthene		ND		10	35
Benzo[g,h,i]perylene		ND		10	35
Benzo[k]fluoranthene		ND		10	35
Benzoic acid		ND	J	16	170

Client: Olin Corporation

Job Number: 360-24194-1
Sdg Number: OCRI-02

Client Sample ID: **OC-SB-424-7.0/9.0-XXX**

Lab Sample ID: 360-24194-6
Client Matrix: Solid % Moisture: 6.0

Date Sampled: 08/19/2009 1215
Date Received: 08/19/2009 1730

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48751		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48119		Lab File ID:	B10158.D
Dilution:	1.0			Initial Weight/Volume:	30.69 g
Date Analyzed:	09/10/2009 0302			Final Weight/Volume:	1.0 mL
Date Prepared:	08/25/2009 1123			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		10	35
Benzyl alcohol		ND		30	69
Bis(2-chloroethoxy)methane		ND		10	35
Bis(2-chloroethyl)ether		ND		10	35
Bis(2-ethylhexyl) phthalate		17	J	10	35
Butyl benzyl phthalate		ND		10	35
Caprolactam		ND		10	35
Carbazole		ND		10	35
Chrysene		ND		10	35
Dibenz(a,h)anthracene		ND		10	35
Dibenzofuran		ND		10	35
Diethyl phthalate		ND		10	35
Dimethyl phthalate		ND		10	35
Di-n-butyl phthalate		ND		30	35
Di-n-octyl phthalate		ND		17	35
Diphenyl oxide		ND		10	35
Fluoranthene		ND		10	35
Fluorene		ND		10	35
Hexachlorobenzene		ND		10	35
Hexachlorobutadiene		ND		10	35
Hexachlorocyclopentadiene		ND		10	69
Hexachloroethane		ND		10	35
Indeno[1,2,3-cd]pyrene		ND		10	35
Isophorone		ND		10	35
Naphthalene		ND		10	83
Nitrobenzene		ND		10	35
N-Nitrosodimethylamine		ND		12	35
N-Nitrosodi-n-propylamine		ND		10	35
N-Nitrosodiphenylamine		420		10	35
Pentachlorophenol		ND		10	35
Phenanthrene		ND		10	42
Phenol		ND		10	35
Pyrene		ND		10	35

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	84		30 - 130
2-Fluorophenol	100		30 - 130
2-Fluorobiphenyl	74		30 - 130
Nitrobenzene-d5	70		30 - 130
Phenol-d5	95		30 - 130
Terphenyl-d14	90		30 - 130

Client: Olin Corporation

Job Number: 360-24194-1
Sdg Number: OCRI-02

Client Sample ID: **OC-SB-424-7.0/9.0-XXX**

Lab Sample ID: 360-24194-6
Client Matrix: Solid % Moisture: 6.0

Date Sampled: 08/19/2009 1215
Date Received: 08/19/2009 1730

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48751		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48119		Lab File ID:	B10158.D
Dilution:	1.0			Initial Weight/Volume:	30.69 g
Date Analyzed:	09/10/2009 0302			Final Weight/Volume:	1.0 mL
Date Prepared:	08/25/2009 1123			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 9

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Unknown	9.31	100	T J
1198-37-4	Quinoline, 2,4-dimethyl-	10.00	32	T J N
122-66-7	1,2-Diphenylhydrazine	10.73	48	
3910-35-8	1H-Indene, 2,3-dihydro-1,1,3-trimethyl-3	11.14	180	T J N
22768-22-5	2,4-Diphenyl-4-methyl-2(E)-pentene	11.54	130	T J N
112-39-0	Hexadecanoic acid, methyl ester	11.67	78	T J N
112-61-8	Octadecanoic acid, methyl ester	12.36	130	T J N
112-84-5	Erucylamide	16.03	210	T J N
	Unknown	16.79	160	T J

Client: Olin Corporation

Job Number: 360-24194-1
Sdg Number: OCRI-02

Client Sample ID: **OC-SB-424-7.0/9.0-XXX**

Lab Sample ID: 360-24194-6
Client Matrix: Solid
% Moisture: 6.0

Date Sampled: 08/19/2009 1215
Date Received: 08/19/2009 1730

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48766		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48119		Lab File ID:	B10175.D
Dilution:	1.0			Initial Weight/Volume:	30.69 g
Date Analyzed:	09/10/2009 1236			Final Weight/Volume:	1.0 mL
Date Prepared:	08/25/2009 1123			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Diphenylamine		250		10	35

Client: Olin Corporation

Job Number: 360-24194-1
Sdg Number: OCRI-02

Client Sample ID: **OC-SB-425-0.0/1.0-XXX**

Lab Sample ID: 360-24194-7
Client Matrix: Solid
% Moisture: 2.9

Date Sampled: 08/19/2009 0955
Date Received: 08/19/2009 1730

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48456		Instrument ID:	Inst. J
Preparation:	3550B	Prep Batch: 360-48381		Lab File ID:	J02814.D
Dilution:	1.0			Initial Weight/Volume:	100.49 g
Date Analyzed:	09/02/2009 0751			Final Weight/Volume:	1.0 mL
Date Prepared:	08/31/2009 1206			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodimethylamine		ND		1.2	5.1

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	43		30 - 130
2-Fluorobiphenyl	57		30 - 130
2-Fluorophenol	38		30 - 130
Nitrobenzene-d5	59		30 - 130
Phenol-d5	42		30 - 130
Terphenyl-d14	68		30 - 130

Client: Olin Corporation

Job Number: 360-24194-1
Sdg Number: OCRI-02

Client Sample ID: **OC-SB-425-0.0/1.0-XXX**

Lab Sample ID: 360-24194-7
Client Matrix: Solid
% Moisture: 2.9

Date Sampled: 08/19/2009 0955
Date Received: 08/19/2009 1730

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48751		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48119		Lab File ID:	B10160.D
Dilution:	5.0			Initial Weight/Volume:	30.24 g
Date Analyzed:	09/10/2009 0410			Final Weight/Volume:	1.0 mL
Date Prepared:	08/25/2009 1123			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		51	170
1,2,4,5-Tetrachlorobenzene		ND		51	170
1,2,4-Trichlorobenzene		ND		51	170
1,2-Dichlorobenzene		ND		51	170
1,3-Dichlorobenzene		ND		51	170
1,4-Dichlorobenzene		ND		51	170
1-Methylnaphthalene		ND		51	170
2,2'-oxybis[1-chloropropane]		ND		51	170
2,3,4,6-Tetrachlorophenol		ND		51	170
2,4,5-Trichlorophenol		ND		51	170
2,4,6-Trichlorophenol		ND		51	170
2,4-Dichlorophenol		ND		51	170
2,4-Dimethylphenol		ND		67	170
2,4-Dinitrophenol		ND		51	170
2,4-Dinitrotoluene		ND		51	170
2,6-Dinitrotoluene		ND		51	170
2-Chloronaphthalene		ND		51	170
2-Chlorophenol		ND		51	170
2-Methylnaphthalene		ND		51	170
2-Methylphenol		ND		100	170
2-Nitroaniline		ND		51	850
2-Nitrophenol		ND		51	170
3 & 4 Methylphenol		ND		51	170
3,3'-Dichlorobenzidine		ND		51	340
3-Nitroaniline		ND		51	850
4,6-Dinitro-2-methylphenol		ND		51	850
4-Bromophenyl phenyl ether		ND		51	170
4-Chloro-3-methylphenol		ND		51	340
4-Chloroaniline		ND		51	340
4-Chlorophenyl phenyl ether		ND		51	170
4-Nitroaniline		ND		51	850
4-Nitrophenol		ND		51	850
Acenaphthene		ND		51	170
Acenaphthylene		ND		51	170
Acetophenone		ND		51	170
Aniline		150	J	51	170
Anthracene		ND		51	170
Atrazine		ND		51	170
Azobenzene		ND		51	170
Benzaldehyde		ND		51	170
Benzo[a]anthracene		ND		51	170
Benzo[a]pyrene		ND		51	170
Benzo[b]fluoranthene		ND		51	170
Benzo[g,h,i]perylene		ND		51	170
Benzo[k]fluoranthene		ND		51	170
Benzoic acid		ND		77	850

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Client: Olin Corporation

Job Number: 360-24194-1
Sdg Number: OCRI-02

Client Sample ID: **OC-SB-424-7.0/9.0-XXX**

Lab Sample ID: 360-24194-6
Client Matrix: Solid

% Moisture: 6.0

Date Sampled: 08/19/2009 1215
Date Received: 08/19/2009 1730

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48889		Instrument ID:	NOEQUIP
Preparation:	3546	Prep Batch: 360-48119		Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	30.69 g
Date Analyzed:	09/10/2009 1236	Run Type: DL2		Final Weight/Volume:	1.0 mL
Date Prepared:	08/25/2009 1123			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodiphenylamine		~~ND~~ 170		10	35

1/13/10

List as 170 DL1

in EDD

Client: Olin Corporation

Job Number: 360-24194-1
Sdg Number: OCRI-02

Client Sample ID: **OC-SB-425-0.0/1.0-XXX**

Lab Sample ID: 360-24194-7
Client Matrix: Solid % Moisture: 2.9

Date Sampled: 08/19/2009 0955
Date Received: 08/19/2009 1730

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48751		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48119		Lab File ID:	B10160.D
Dilution:	5.0			Initial Weight/Volume:	30.24 g
Date Analyzed:	09/10/2009 0410			Final Weight/Volume:	1.0 mL
Date Prepared:	08/25/2009 1123			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		51	170
Benzyl alcohol		ND		150	340
Bis(2-chloroethoxy)methane		ND		51	170
Bis(2-chloroethyl)ether		ND		51	170
Butyl benzyl phthalate		ND		51	170
Caprolactam		ND		51	170
Carbazole		ND		51	170
Chrysene		ND		51	170
Dibenz(a,h)anthracene		ND		51	170
Dibenzofuran		ND		51	170
Diethyl phthalate		ND		51	170
Dimethyl phthalate		ND		51	170
Di-n-butyl phthalate		ND		150	170
Di-n-octyl phthalate		ND		86	170
Diphenyl oxide		ND		51	170
Fluoranthene		ND		51	170
Fluorene		ND		51	170
Hexachlorobenzene		ND		51	170
Hexachlorobutadiene		ND		51	170
Hexachlorocyclopentadiene		ND		51	340
Hexachloroethane		ND		51	170
Indeno[1,2,3-cd]pyrene		ND		51	170
Isophorone		ND		51	170
Naphthalene		ND		51	410
Nitrobenzene		ND		51	170
N-Nitrosodimethylamine		ND		60	170
N-Nitrosodi-n-propylamine		ND		51	170
N-Nitrosodiphenylamine		660		51	170
Pentachlorophenol		ND		51	170
Phenanthrene		ND		51	200
Phenol		ND		51	170
Pyrene		ND		51	170

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	78		30 - 130
2-Fluorophenol	70		30 - 130
2-Fluorobiphenyl	56		30 - 130
Nitrobenzene-d5	53		30 - 130
Phenol-d5	61		30 - 130
Terphenyl-d14	59		30 - 130

Client: Olin Corporation

Job Number: 360-24194-1
Sdg Number: OCRI-02

Client Sample ID: **OC-SB-425-0.0/1.0-XXX**

Lab Sample ID: 360-24194-7
Client Matrix: Solid % Moisture: 2.9

Date Sampled: 08/19/2009 0955
Date Received: 08/19/2009 1730

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48751		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48119		Lab File ID:	B10160.D
Dilution:	5.0			Initial Weight/Volume:	30.24 g
Date Analyzed:	09/10/2009 0410			Final Weight/Volume:	1.0 mL
Date Prepared:	08/25/2009 1123			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 7

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
122-66-7	1,2-Diphenylhydrazine	10.73	70	J
	Unknown	15.29	810	T J
26603-23-6	p,p"-Dioctyldiphenylamine	17.25	63000	T J N
26603-23-6	p,p"-Dioctyldiphenylamine	17.61	6300	T J N
	Unknown	18.24	790	T J
	Unknown	18.39	670	T J
	Unknown	19.03	570	T J

Client: Olin Corporation

Job Number: 360-24194-1
Sdg Number: OCRI-02

Client Sample ID: **OC-SB-425-0.0/1.0-XXX**

Lab Sample ID: 360-24194-7
Client Matrix: Solid % Moisture: 2.9

Date Sampled: 08/19/2009 0955
Date Received: 08/19/2009 1730

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48889		Instrument ID:	NOEQUIP
Preparation:	3546	Prep Batch: 360-48119		Lab File ID:	N/A
Dilution:	5.0			Initial Weight/Volume:	30.24 g
Date Analyzed:	09/10/2009 1452	Run Type: DL2		Final Weight/Volume:	1.0 mL
Date Prepared:	08/25/2009 1123			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodiphenylamine		~~ND~~ 470		51	170

Ctd on 470

W. Colin 1/13/2010

Client: Olin Corporation

Job Number: 360-24194-1
Sdg Number: OCRI-02

Client Sample ID: **OC-SB-425-0.0/1.0-XXX**

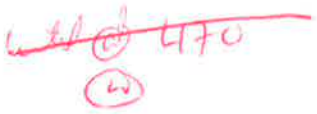
Lab Sample ID: 360-24194-7
Client Matrix: Solid % Moisture: 2.9

Date Sampled: 08/19/2009 0955
Date Received: 08/19/2009 1730

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48766		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48119		Lab File ID:	B10179.D
Dilution:	5.0			Initial Weight/Volume:	30.24 g
Date Analyzed:	09/10/2009 1452			Final Weight/Volume:	1.0 mL
Date Prepared:	08/25/2009 1123			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Diphenylamine		190		51	170



Client: Olin Corporation

Job Number: 360-24194-1
Sdg Number: OCRI-02

Client Sample ID: **OC-SB-425-0.0/1.0-XXX**

Lab Sample ID: 360-24194-7
Client Matrix: Solid % Moisture: 2.9

Date Sampled: 08/19/2009 0955
Date Received: 08/19/2009 1730

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48751		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48119		Lab File ID:	B10159.D
Dilution:	10			Initial Weight/Volume:	30.24 g
Date Analyzed:	09/10/2009 0336	Run Type: DL		Final Weight/Volume:	1.0 mL
Date Prepared:	08/25/2009 1123			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Bis(2-ethylhexyl) phthalate		4300		100	340

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	98		30 - 130
2-Fluorophenol	64		30 - 130
2-Fluorobiphenyl	52		30 - 130
Nitrobenzene-d5	49		30 - 130
Phenol-d5	55		30 - 130
Terphenyl-d14	54		30 - 130

Client: Olin Corporation

Job Number: 360-24194-1
Sdg Number: OCRI-02

Client Sample ID: **OC-SB-425-6.0/8.0-XXX**

Lab Sample ID: 360-24194-9
Client Matrix: Solid % Moisture: 8.4

Date Sampled: 08/19/2009 1005
Date Received: 08/19/2009 1730

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48456		Instrument ID:	Inst. J
Preparation:	3550B	Prep Batch: 360-48381		Lab File ID:	J02816.D
Dilution:	1.0			Initial Weight/Volume:	100.08 g
Date Analyzed:	09/02/2009 0851			Final Weight/Volume:	1.0 mL
Date Prepared:	08/31/2009 1206			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodimethylamine		ND		1.3	5.5

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	46		30 - 130
2-Fluorobiphenyl	59		30 - 130
2-Fluorophenol	54		30 - 130
Nitrobenzene-d5	58		30 - 130
Phenol-d5	57		30 - 130
Terphenyl-d14	92		30 - 130

Client: Olin Corporation

Job Number: 360-24194-1
Sdg Number: OCRI-02

Client Sample ID: **OC-SB-425-6.0/8.0-XXX**

Lab Sample ID: 360-24194-9
Client Matrix: Solid % Moisture: 8.4

Date Sampled: 08/19/2009 1005
Date Received: 08/19/2009 1730

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48751		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48119		Lab File ID:	B10162.D
Dilution:	5.0			Initial Weight/Volume:	30.37 g
Date Analyzed:	09/10/2009 0517			Final Weight/Volume:	1.0 mL
Date Prepared:	08/25/2009 1123			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		54	180
1,2,4,5-Tetrachlorobenzene		ND		54	180
1,2,4-Trichlorobenzene		ND		54	180
1,2-Dichlorobenzene		ND		54	180
1,3-Dichlorobenzene		ND	J	54	180
1,4-Dichlorobenzene		ND		54	180
1-Methylnaphthalene		ND		54	180
2,2'-oxybis[1-chloropropane]		ND		54	180
2,3,4,6-Tetrachlorophenol		ND		54	180
2,4,5-Trichlorophenol		ND		54	180
2,4,6-Trichlorophenol		ND		54	180
2,4-Dichlorophenol		ND		54	180
2,4-Dimethylphenol		ND	J	71	180
2,4-Dinitrophenol		ND		54	180
2,4-Dinitrotoluene		ND		54	180
2,6-Dinitrotoluene		ND		54	180
2-Chloronaphthalene		ND		54	180
2-Chlorophenol		ND		54	180
2-Methylnaphthalene		ND		54	180
2-Methylphenol		ND		110	180
2-Nitroaniline		ND		54	900
2-Nitrophenol		ND		54	180
3 & 4 Methylphenol		ND		54	180
3,3'-Dichlorobenzidine		ND	J	54	360
3-Nitroaniline		ND		54	900
4,6-Dinitro-2-methylphenol		ND		54	900
4-Bromophenyl phenyl ether		ND		54	180
4-Chloro-3-methylphenol		ND		54	360
4-Chloroaniline		ND		54	360
4-Chlorophenyl phenyl ether		ND		54	180
4-Nitroaniline		ND		54	900
4-Nitrophenol		ND		54	900
Acenaphthene		ND		54	180
Acenaphthylene		ND		54	180
Acetophenone		ND		54	180
Aniline		ND	J	54	180
Anthracene		ND		54	180
Atrazine		ND		54	180
Azobenzene		ND		54	180
Benzaldehyde		ND		54	180
Benzo[a]anthracene		ND		54	180
Benzo[a]pyrene		ND		54	180
Benzo[b]fluoranthene		ND		54	180
Benzo[g,h,i]perylene		ND		54	180
Benzo[k]fluoranthene		ND		54	180
Benzoic acid		ND	J	81	900

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Client: Olin Corporation

Job Number: 360-24194-1
Sdg Number: OCRI-02

Client Sample ID: OC-SB-425-6.0/8.0-XXX

Lab Sample ID: 360-24194-9
Client Matrix: Solid % Moisture: 8.4

Date Sampled: 08/19/2009 1005
Date Received: 08/19/2009 1730

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48751		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48119		Lab File ID:	B10162.D
Dilution:	5.0			Initial Weight/Volume:	30.37 g
Date Analyzed:	09/10/2009 0517			Final Weight/Volume:	1.0 mL
Date Prepared:	08/25/2009 1123			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		54	180
Benzyl alcohol		ND		150	360
Bis(2-chloroethoxy)methane		ND		54	180
Bis(2-chloroethyl)ether		ND	J	54	180
Bis(2-ethylhexyl) phthalate		ND		54	180
Butyl benzyl phthalate		ND		54	180
Caprolactam		ND		54	180
Carbazole		ND		54	180
Chrysene		ND		54	180
Dibenz(a,h)anthracene		ND		54	180
Dibenzofuran		ND		54	180
Diethyl phthalate		ND		54	180
Dimethyl phthalate		ND		54	180
Di-n-butyl phthalate		ND		160	180
Di-n-octyl phthalate		ND		91	180
Diphenyl oxide		ND		54	180
Diphenylamine		ND		54	180
Fluoranthene		ND		54	180
Fluorene		ND		54	180
Hexachlorobenzene		ND		54	180
Hexachlorobutadiene		ND		54	180
Hexachlorocyclopentadiene		ND		54	360
Hexachloroethane		ND		54	180
Indeno[1,2,3-cd]pyrene		ND		54	180
Isophorone		ND		54	180
Naphthalene		ND		54	430
Nitrobenzene		ND		54	180
N-Nitrosodimethylamine		ND		64	180
N-Nitrosodi-n-propylamine		ND		54	180
N-Nitrosodiphenylamine		ND		54	180
Pentachlorophenol		ND		54	180
Phenanthrene		ND		54	220
Phenol		ND		54	180
Pyrene		ND		54	180

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	67		30 - 130
2-Fluorophenol	70		30 - 130
2-Fluorobiphenyl	60		30 - 130
Nitrobenzene-d5	52		30 - 130
Phenol-d5	59		30 - 130
Terphenyl-d14	66		30 - 130

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Client: Olin Corporation

Job Number: 360-24194-1
Sdg Number: OCRI-02

Client Sample ID: **OC-SB-425-6.0/8.0-XXX**

Lab Sample ID: 360-24194-9
Client Matrix: Solid
% Moisture: 8.4

Date Sampled: 08/19/2009 1005
Date Received: 08/19/2009 1730

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48751		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48119		Lab File ID:	B10162.D
Dilution:	5.0			Initial Weight/Volume:	30.37 g
Date Analyzed:	09/10/2009 0517			Final Weight/Volume:	1.0 mL
Date Prepared:	08/25/2009 1123			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 3

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Unknown	9.32	6200	T J
	Unknown	9.38	4500	T J
	Unknown	17.54	6.5	T J

Client: Olin Corporation

Job Number: 360-24194-1
Sdg Number: OCRI-02

Client Sample ID: **OC-EBK-002**

Lab Sample ID: 360-24194-12
Client Matrix: Water

Date Sampled: 08/19/2009 0930
Date Received: 08/19/2009 1730

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48209		Instrument ID:	Inst. B
Preparation:	3510C	Prep Batch: 360-48124		Lab File ID:	B9855.D
Dilution:	1.0			Initial Weight/Volume:	1000 mL
Date Analyzed:	08/27/2009 1814			Final Weight/Volume:	1.0 mL
Date Prepared:	08/25/2009 1151			Injection Volume:	1.0 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1'-Biphenyl	ND		0.50	5.0
1,2,4,5-Tetrachlorobenzene	ND		0.50	5.0
1-Methylnaphthalene	ND		0.50	5.0
2,3,4,6-Tetrachlorophenol	ND		0.50	5.0
2,4,5-Trichlorophenol	ND		0.50	5.0
2,4,6-Trichlorophenol	ND		0.50	5.0
2,4-Dichlorophenol	ND		0.50	5.0
2,4-Dimethylphenol	ND		0.50	5.0
2,4-Dinitrophenol	ND		0.50	5.0
2,4-Dinitrotoluene	ND		0.50	5.0
2,6-Dinitrotoluene	ND		0.50	5.0
2-Chloronaphthalene	ND		0.50	5.0
2-Chlorophenol	ND		0.50	5.0
2-Methylnaphthalene	ND		0.050	1.0
2-Methylphenol	ND		0.50	5.0
2-Nitroaniline	ND		0.50	5.0
2-Nitrophenol	ND		0.50	5.0
3 & 4 Methylphenol	ND		0.50	5.0
3,3'-Dichlorobenzidine	ND		0.50	5.0
3-Nitroaniline	ND		0.50	5.0
4,6-Dinitro-2-methylphenol	ND		0.50	5.0
4-Bromophenyl phenyl ether	ND		0.50	5.0
4-Chloro-3-methylphenol	ND		0.50	5.0
4-Chloroaniline	ND		0.50	5.0
4-Chlorophenyl phenyl ether	ND		0.50	5.0
4-Nitroaniline	ND		0.50	5.0
4-Nitrophenol	ND	*	0.50	5.0
Acenaphthene	ND		0.050	1.0
Acenaphthylene	ND		0.050	0.30
Acetophenone	ND		0.50	5.0
Aniline	ND	*	0.50	5.0
Anthracene	ND		0.070	1.0
Atrazine	ND		0.50	5.0
Azobenzene	ND		0.50	5.0
Benzaldehyde	ND	*	0.50	5.0
Benzo[a]anthracene	ND		0.17	0.30
Benzo[a]pyrene	ND		0.10	0.20
Benzo[b]fluoranthene	ND		0.14	0.30
Benzo[g,h,i]perylene	ND		0.094	0.50
Benzo[k]fluoranthene	ND		0.17	0.30
Benzoic acid	ND		0.50	5.0
Benzophenone	ND		0.50	5.0
Benzyl alcohol	ND		0.50	10
bis (2-chloroisopropyl) ether	ND		0.50	5.0
Bis(2-chloroethoxy)methane	ND		0.50	5.0
Bis(2-chloroethyl)ether	ND		0.50	5.0

Client: Olin Corporation

Job Number: 360-24194-1
Sdg Number: OCRI-02

Client Sample ID: **OC-EBK-002**

Lab Sample ID: 360-24194-12
Client Matrix: Water

Date Sampled: 08/19/2009 0930
Date Received: 08/19/2009 1730

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48209		Instrument ID:	Inst. B
Preparation:	3510C	Prep Batch: 360-48124		Lab File ID:	B9855.D
Dilution:	1.0			Initial Weight/Volume:	1000 mL
Date Analyzed:	08/27/2009 1814			Final Weight/Volume:	1.0 mL
Date Prepared:	08/25/2009 1151			Injection Volume:	1.0 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Bis(2-ethylhexyl) phthalate	5.1		0.50	2.0
Butyl benzyl phthalate	ND		0.50	5.0
Caprolactam	ND	*	0.50	5.0
Carbazole	ND		0.50	5.0
Chrysene	ND		0.17	1.0
Dibenz(a,h)anthracene	ND		0.064	0.50
Dibenzofuran	ND		0.50	5.0
Diethyl phthalate	0.74	J	0.50	5.0
Dimethyl phthalate	ND		0.50	5.0
Di-n-butyl phthalate	0.90	J B	0.60	5.0
Di-n-octyl phthalate	ND		0.73	5.0
Diphenyl oxide	ND		0.50	5.0
Diphenylamine	ND		0.50	5.0
Fluoranthene	ND		0.20	1.0
Fluorene	ND		0.050	1.0
Hexachlorobenzene	ND		0.50	1.0
Hexachlorocyclopentadiene	ND		0.050	5.0
Hexachloroethane	ND		0.50	3.0
Indeno[1,2,3-cd]pyrene	ND		0.079	0.50
Isophorone	ND		0.50	5.0
Nitrobenzene	ND		0.50	5.0
N-Nitrosodi-n-propylamine	ND		0.50	5.0
N-Nitrosodiphenylamine	ND		0.50	5.0
Pentachlorophenol	ND		0.50	1.0
Phenanthrene	ND		0.50	0.20
Phenol	ND	*	0.50	5.0
Pyrene	ND		0.19	5.0

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	68		15 - 110
2-Fluorobiphenyl	64		30 - 130
2-Fluorophenol	24		15 - 110
Nitrobenzene-d5	65		30 - 130
Phenol-d5	14	X	15 - 110
Terphenyl-d14	74		30 - 130

Client: Olin Corporation

Job Number: 360-24194-1
Sdg Number: OCRI-02

Client Sample ID: **OC-EBK-002**

Lab Sample ID: 360-24194-12
Client Matrix: Water

Date Sampled: 08/19/2009 0930
Date Received: 08/19/2009 1730

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48209		Instrument ID:	Inst. B
Preparation:	3510C	Prep Batch: 360-48124		Lab File ID:	B9855.D
Dilution:	1.0			Initial Weight/Volume:	1000 mL
Date Analyzed:	08/27/2009 1814			Final Weight/Volume:	1.0 mL
Date Prepared:	08/25/2009 1151			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 3

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
71-43-2	Benzene	4.92	11	T J N
96-76-4	Phenol, 2,4-bis(1,1-dimethylethyl)-	11.13	0.60	T J N
26603-23-6	p,p"-Dioctyldiphenylamine	19.36	8.4	T J N

Client: Olin Corporation

Job Number: 360-24194-1
Sdg Number: OCRI-02

Client Sample ID: **OC-EBK-002**

Lab Sample ID: 360-24194-12
Client Matrix: Water

Date Sampled: 08/19/2009 0930
Date Received: 08/19/2009 1730

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48209		Instrument ID:	Inst. B
Preparation:	3510C	Prep Batch: 360-48124		Lab File ID:	B9855.D
Dilution:	1.0			Initial Weight/Volume:	1000 mL
Date Analyzed:	08/27/2009 1814			Final Weight/Volume:	1.0 mL
Date Prepared:	08/25/2009 1151			Injection Volume:	1.0 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
N-Nitrosodimethylamine	ND	*	0.50	5.0

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	68		15 - 110
2-Fluorobiphenyl	64		30 - 130
2-Fluorophenol	24		15 - 110
Nitrobenzene-d5	65		30 - 130
Phenol-d5	14	X	15 - 110
Terphenyl-d14	74		30 - 130

Client: Olin Corporation

Job Number: 360-24194-2
Sdg Number: OCRI-02A

Client Sample ID: **OC-SB-425-18/20-XXX**

Lab Sample ID: 360-24194-8
Client Matrix: Solid % Moisture: 7.4

Date Sampled: 08/19/2009 1025
Date Received: 08/19/2009 1730

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48751		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48119		Lab File ID:	B10161.D
Dilution:	1.0			Initial Weight/Volume:	30.43 g
Date Analyzed:	09/10/2009 0443			Final Weight/Volume:	1.0 mL
Date Prepared:	08/25/2009 1123			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		150		11	35
1,2,4,5-Tetrachlorobenzene		ND		2.4	35
1,2,4-Trichlorobenzene		ND		6.9	35
1,2-Dichlorobenzene		ND		3.8	35
1,3-Dichlorobenzene		ND	J	10	35
1,4-Dichlorobenzene		ND		6.4	35
1-Methylnaphthalene		ND		2.1	35
2,2'-oxybis[1-chloropropane]		ND		3.6	35
2,3,4,6-Tetrachlorophenol		ND		2.1	35
2,4,5-Trichlorophenol		ND		4.0	35
2,4,6-Trichlorophenol		ND		7.4	35
2,4-Dichlorophenol		ND		6.8	35
2,4-Dimethylphenol		ND		6.2	35
2,4-Dinitrophenol		ND	J	5.2	35
2,4-Dinitrotoluene		ND		5.0	35
2,6-Dinitrotoluene		ND		4.5	35
2-Chloronaphthalene		ND		5.5	35
2-Chlorophenol		ND		3.5	35
2-Methylnaphthalene		ND		27	35
2-Methylphenol		ND		5.1	35
2-Nitroaniline		ND		23	180
2-Nitrophenol		ND		4.1	35
3 & 4 Methylphenol		ND		6.7	35
3,3'-Dichlorobenzidine		ND	J	26	71
3-Nitroaniline		ND		10	180
4,6-Dinitro-2-methylphenol		ND		9.1	180
4-Bromophenyl phenyl ether		ND		7.4	35
4-Chloro-3-methylphenol		ND		9.8	71
4-Chloroaniline		ND		14	71
4-Chlorophenyl phenyl ether		ND		5.6	35
4-Nitroaniline		ND		9.5	180
4-Nitrophenol		ND		6.9	180
Acenaphthene		ND		5.2	35
Acenaphthylene		ND		6.3	35
Acetophenone		ND		3.8	35
Aniline		ND	J	18	35
Anthracene		ND		11	35
Atrazine		ND		11	35
Azobenzene		ND		4.4	35
Benzaldehyde		ND		11	35
Benzo[a]anthracene		ND		6.8	35
Benzo[a]pyrene		ND		6.5	35
Benzo[b]fluoranthene		ND		8.1	35
Benzo[g,h,i]perylene		ND		6.9	35
Benzo[k]fluoranthene		ND		9.8	35
Benzoic acid		ND	J	15	180

11/3/10

Client: Olin Corporation

Job Number: 360-24194-2
Sdg Number: OCRI-02A

Client Sample ID: **OC-SB-425-18/20-XXX**

Lab Sample ID: 360-24194-8
Client Matrix: Solid

% Moisture: 7.4

Date Sampled: 08/19/2009 1025
Date Received: 08/19/2009 1730

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48751		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48119		Lab File ID:	B10161.D
Dilution:	1.0			Initial Weight/Volume:	30.43 g
Date Analyzed:	09/10/2009 0443			Final Weight/Volume:	1.0 mL
Date Prepared:	08/25/2009 1123			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		2.1	35
Benzyl alcohol		ND		8.2	71
Bis(2-chloroethoxy)methane		ND		6.4	35
Bis(2-chloroethyl)ether		ND	J	8.6	35
Bis(2-ethylhexyl) phthalate		62	EB	11	35
Butyl benzyl phthalate		ND		7.8	35
Caprolactam		ND		11	35
Carbazole		ND		35	35
Chrysene		ND		7.7	35
Dibenz(a,h)anthracene		ND		7.2	35
Dibenzofuran		ND		21	35
Diethyl phthalate		ND		5.0	35
Dimethyl phthalate		ND		5.2	35
Di-n-butyl phthalate		24	U J B	11	35
Di-n-octyl phthalate		ND		10	35
Diphenyl oxide		64		11	35
Fluoranthene		ND		22	35
Fluorene		ND		14	35
Hexachlorobenzene		ND		8.4	35
Hexachlorobutadiene		ND		7.1	35
Hexachlorocyclopentadiene		ND		9.7	71
Hexachloroethane		ND		6.8	35
Indeno[1,2,3-cd]pyrene		ND		11	35
Isophorone		ND		7.6	35
Naphthalene		ND		79	85
Nitrobenzene		ND		4.8	35
N-Nitrosodimethylamine		ND		4.1	35
N-Nitrosodi-n-propylamine		ND		4.0	35
N-Nitrosodiphenylamine		170	EB	7.1	35
Pentachlorophenol		ND		7.3	35
Phenanthrene		ND		41	43
Phenol		ND		4.4	35
Pyrene		ND		9.4	35

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	87		30 - 130
2-Fluorobiphenyl	77		30 - 130
2-Fluorophenol	80		30 - 130
Nitrobenzene-d5	76		30 - 130
Phenol-d5	79		30 - 130
Terphenyl-d14	96		30 - 130

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Client: Olin Corporation

Job Number: 360-24194-2
Sdg Number: OCRI-02A

Client Sample ID: **OC-SB-425-18/20-XXX**

Lab Sample ID: 360-24194-8
Client Matrix: Solid % Moisture: 7.4

Date Sampled: 08/19/2009 1025
Date Received: 08/19/2009 1730

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48751		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48119		Lab File ID:	B10161.D
Dilution:	1.0			Initial Weight/Volume:	30.43 g
Date Analyzed:	09/10/2009 0443			Final Weight/Volume:	1.0 mL
Date Prepared:	08/25/2009 1123			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 8

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Unknown	11.82	88	T J
1560-89-0	Heptadecane, 2-methyl-	13.54	50	T J N
	Unknown	13.72	60	T J
629-99-2	Pentacosane	14.13	52	T J N
630-1-3	Hexacosane	14.85	46	T J N
7225-64-1	Heptadecane, 9-octyl-	15.49	49	T J N
112-84-5	Erucylamide	16.02	150	T J N
26603-23-6	p,p''-Dioctyldiphenylamine	17.09	1300	T J N

Client: Olin Corporation

Job Number: 360-24194-1
Sdg Number: OCRI-02

Client Sample ID: **OC-SB-421-0.0/1.0-XXX**

Lab Sample ID: 360-24194-1
Client Matrix: Solid % Moisture: 4.7

Date Sampled: 08/19/2009 0740
Date Received: 08/19/2009 1730

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48454		Instrument ID:	Inst. J
Preparation:	3550B	Prep Batch: 360-48297		Lab File ID:	J02803.D
Dilution:	10			Initial Weight/Volume:	100.70 g
Date Analyzed:	09/02/2009 0224			Final Weight/Volume:	5.0 mL
Date Prepared:	08/27/2009 1643			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodimethylamine		ND		60	260

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	0	X D	30 - 130
2-Fluorobiphenyl	0	X D	30 - 130
2-Fluorophenol	0	X D	30 - 130
Nitrobenzene-d5	0	X D	30 - 130
Phenol-d5	0	X D	30 - 130
Terphenyl-d14	0	X D	30 - 130

Client: Olin Corporation

Job Number: 360-24194-1
Sdg Number: OCRI-02

Client Sample ID: **OC-SB-421-0.0/1.0-XXX**

Lab Sample ID: 360-24194-1
Client Matrix: Solid
% Moisture: 4.7

Date Sampled: 08/19/2009 0740
Date Received: 08/19/2009 1730

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48213		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-47986		Lab File ID:	B9904.D
Dilution:	5.0			Initial Weight/Volume:	30.20 g
Date Analyzed:	08/28/2009 2203			Final Weight/Volume:	2.0 mL
Date Prepared:	08/20/2009 1253			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		390		100	350
1,2,4,5-Tetrachlorobenzene		ND		100	350
1,2,4-Trichlorobenzene		ND		100	350
1,2-Dichlorobenzene		ND		100	350
1,3-Dichlorobenzene		ND		100	350
1,4-Dichlorobenzene		ND		100	350
1-Methylnaphthalene		ND		100	350
2,2'-oxybis[1-chloropropane]		ND		100	350
2,3,4,6-Tetrachlorophenol		ND		100	350
2,4,5-Trichlorophenol		ND		100	350
2,4,6-Trichlorophenol		ND		100	350
2,4-Dichlorophenol		ND		100	350
2,4-Dimethylphenol		ND	J	140	350
2,4-Dinitrophenol		ND	J	100	350
2,4-Dinitrotoluene		ND		100	350
2,6-Dinitrotoluene		ND		100	350
2-Chloronaphthalene		ND		100	350
2-Chlorophenol		ND		100	350
2-Methylnaphthalene		ND		100	350
2-Methylphenol		ND		210	350
2-Nitroaniline		ND		100	1700
2-Nitrophenol		ND		100	350
3 & 4 Methylphenol		ND		100	350
3,3'-Dichlorobenzidine		ND		100	700
3-Nitroaniline		ND		100	1700
4,6-Dinitro-2-methylphenol		ND	J	100	1700
4-Bromophenyl phenyl ether		ND		100	350
4-Chloro-3-methylphenol		ND		100	700
4-Chloroaniline		ND		100	700
4-Chlorophenyl phenyl ether		ND		100	350
4-Nitroaniline		ND		100	1700
4-Nitrophenol		ND		100	1700
Acenaphthene		120	J	100	350
Acenaphthylene		ND		100	350
Acetophenone		ND		100	350
Aniline		690	J	100	350
Anthracene		ND		100	350
Atrazine		ND		100	350
Azobenzene		ND		100	350
Benzaldehyde		ND		100	350
Benzo[a]anthracene		ND		100	350
Benzo[a]pyrene		ND		100	350
Benzo[b]fluoranthene		ND		100	350
Benzo[g,h,i]perylene		ND		100	350
Benzo[k]fluoranthene		ND		100	350
Benzoic acid		ND	J	160	1700

12/31/09

Client: Olin Corporation

Job Number: 360-24194-1
Sdg Number: OCRI-02

Client Sample ID: **OC-SB-421-0.0/1.0-XXX**

Lab Sample ID: 360-24194-1
Client Matrix: Solid % Moisture: 4.7

Date Sampled: 08/19/2009 0740
Date Received: 08/19/2009 1730

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48213		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-47986		Lab File ID:	B9904.D
Dilution:	5.0			Initial Weight/Volume:	30.20 g
Date Analyzed:	08/28/2009 2203			Final Weight/Volume:	2.0 mL
Date Prepared:	08/20/2009 1253			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		100	350
Benzyl alcohol		ND		300	700
Bis(2-chloroethoxy)methane		ND		100	350
Bis(2-chloroethyl)ether		ND		100	350
Butyl benzyl phthalate		ND		100	350
Caprolactam		ND		100	350
Carbazole		ND		100	350
Chrysene		ND		100	350
Dibenz(a,h)anthracene		ND		100	350
Dibenzofuran		ND		100	350
Diethyl phthalate		ND		100	350
Dimethyl phthalate		ND		100	350
Di-n-butyl phthalate		ND		310	350
Di-n-octyl phthalate		ND		180	350
Diphenyl oxide		1700		100	350
Fluoranthene		ND		100	350
Fluorene		ND		100	350
Hexachlorobenzene		ND		100	350
Hexachlorobutadiene		ND		100	350
Hexachlorocyclopentadiene		ND		100	700
Hexachloroethane		ND		100	350
Indeno[1,2,3-cd]pyrene		ND		100	350
Isophorone		ND		100	350
Naphthalene		ND		100	830
Nitrobenzene		ND		100	350
N-Nitrosodimethylamine		ND		120	350
N-Nitrosodi-n-propylamine		ND		100	350
N-Nitrosodiphenylamine		5800		100	350
Pentachlorophenol		ND		100	350
Phenanthrene		ND		100	420
Phenol		130	J	100	350
Pyrene		ND		100	350

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	41		30 - 130
2-Fluorophenol	66		30 - 130
2-Fluorobiphenyl	63		30 - 130
Nitrobenzene-d5	54		30 - 130
Phenol-d5	48		30 - 130
Terphenyl-d14	76		30 - 130

12/31/09

Client: Olin Corporation

Job Number: 360-24194-1
Sdg Number: OCRI-02

Client Sample ID: **OC-SB-421-0.0/1.0-XXX**

Lab Sample ID: 360-24194-1
Client Matrix: Solid % Moisture: 4.7

Date Sampled: 08/19/2009 0740
Date Received: 08/19/2009 1730

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48213		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-47986		Lab File ID:	B9904.D
Dilution:	5.0			Initial Weight/Volume:	30.20 g
Date Analyzed:	08/28/2009 2203			Final Weight/Volume:	2.0 mL
Date Prepared:	08/20/2009 1253			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 9

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
110-86-1	Pyridine	6.04	46	J *
	Unknown	10.31	19000	T J
	Unknown	10.36	15000	T J
	Unknown	10.41	12000	T J
122-66-7	1,2-Diphenylhydrazine	11.78	360	
	Unknown	12.12	6100	T J
	Unknown	15.25	11000	T J
26603-23-6	p,p''-Dioctyldiphenylamine	16.64	5800	T J N
	Unknown	17.53	5500	T J

Client: Olin Corporation

Job Number: 360-24194-1
Sdg Number: OCRI-02

Client Sample ID: **OC-SB-421-0.0/1.0-XXX**

Lab Sample ID: 360-24194-1
Client Matrix: Solid % Moisture: 4.7

Date Sampled: 08/19/2009 0740
Date Received: 08/19/2009 1730

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48702		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-47986		Lab File ID:	B10131.D
Dilution:	5.0			Initial Weight/Volume:	30.20 g
Date Analyzed:	09/08/2009 1824	Run Type: DL2		Final Weight/Volume:	2.0 mL
Date Prepared:	08/20/2009 1253			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Diphenylamine		5000		100	350

Client: Olin Corporation

Job Number: 360-24194-1
Sdg Number: OCRI-02

Client Sample ID: **OC-SB-421-0.0/1.0-XXX**

Lab Sample ID: 360-24194-1
Client Matrix: Solid
% Moisture: 4.7

Date Sampled: 08/19/2009 0740
Date Received: 08/19/2009 1730

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48750		Instrument ID:	NOEQUIP
Preparation:	3546	Prep Batch: 360-47986		Lab File ID:	N/A
Dilution:	5.0			Initial Weight/Volume:	30.20 g
Date Analyzed:	09/08/2009 1824			Final Weight/Volume:	2.0 mL
Date Prepared:	08/20/2009 1253			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodiphenylamine		750		100	350

Client: Olin Corporation

Job Number: 360-24194-1
Sdg Number: OCRI-02

Client Sample ID: **OC-SB-421-0.0/1.0-XXX**

Lab Sample ID: 360-24194-1
Client Matrix: Solid
% Moisture: 4.7

Date Sampled: 08/19/2009 0740
Date Received: 08/19/2009 1730

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48389		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-47986		Lab File ID:	B9937.D
Dilution:	20			Initial Weight/Volume:	30.20 g
Date Analyzed:	09/01/2009 0621	Run Type: DL		Final Weight/Volume:	2.0 mL
Date Prepared:	08/20/2009 1253			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Bis(2-ethylhexyl) phthalate		21000		420	1400

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	0	D X	30 - 130
2-Fluorophenol	0	D X	30 - 130
2-Fluorobiphenyl	0	D X	30 - 130
Nitrobenzene-d5	0	D X	30 - 130
Phenol-d5	0	D X	30 - 130
Terphenyl-d14	0	D X	30 - 130

Client: Olin Corporation

Job Number: 360-24194-1
Sdg Number: OCRI-02

Client Sample ID: **OC-SB-421-8.0/10.0-XXX**

Lab Sample ID: 360-24194-3
Client Matrix: Solid
% Moisture: 7.4

Date Sampled: 08/19/2009 0745
Date Received: 08/19/2009 1730

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48454		Instrument ID:	Inst. J
Preparation:	3550B	Prep Batch: 360-48297		Lab File ID:	J02805.D
Dilution:	1.0			Initial Weight/Volume:	100.22 g
Date Analyzed:	09/02/2009 0324			Final Weight/Volume:	1.0 mL
Date Prepared:	08/27/2009 1643			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodimethylamine		ND		1.2	5.4

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	66		30 - 130
2-Fluorobiphenyl	65		30 - 130
2-Fluorophenol	62		30 - 130
Nitrobenzene-d5	72		30 - 130
Phenol-d5	67		30 - 130
Terphenyl-d14	83		30 - 130

Client: Olin Corporation

Job Number: 360-24194-1
Sdg Number: OCRI-02

Client Sample ID: **OC-SB-421-8.0/10.0-XXX**

Lab Sample ID: 360-24194-3
Client Matrix: Solid
% Moisture: 7.4

Date Sampled: 08/19/2009 0745
Date Received: 08/19/2009 1730

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48702		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-47986		Lab File ID:	B10133.D
Dilution:	1.0			Initial Weight/Volume:	30.59 g
Date Analyzed:	09/08/2009 1932	Run Type: DL3		Final Weight/Volume:	1.0 mL
Date Prepared:	08/20/2009 1253			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Diphenylamine		ND		11	35

Client: Olin Corporation

Job Number: 360-24194-1
Sdg Number: OCRI-02

Client Sample ID: **OC-SB-421-8.0/10.0-XXX**

Lab Sample ID: 360-24194-3
Client Matrix: Solid
% Moisture: 7.4

Date Sampled: 08/19/2009 0745
Date Received: 08/19/2009 1730

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48750		Instrument ID:	NOEQUIP
Preparation:	3546	Prep Batch: 360-47986		Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	30.59 g
Date Analyzed:	09/08/2009 1932			Final Weight/Volume:	1.0 mL
Date Prepared:	08/20/2009 1253			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodiphenylamine		ND		11	35

Client: Olin Corporation

Job Number: 360-24194-1
Sdg Number: OCRI-02

Client Sample ID: **OC-SB-421-8.0/10.0-XXX**

Lab Sample ID: 360-24194-3
Client Matrix: Solid
% Moisture: 7.4

Date Sampled: 08/19/2009 0745
Date Received: 08/19/2009 1730

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48751		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-47986		Lab File ID:	B10168.D
Dilution:	10			Initial Weight/Volume:	30.59 g
Date Analyzed:	09/10/2009 0840			Final Weight/Volume:	1.0 mL
Date Prepared:	08/20/2009 1253			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		110	350
1,2,4,5-Tetrachlorobenzene		ND		110	350
1,2,4-Trichlorobenzene		ND		110	350
1,2-Dichlorobenzene		ND		110	350
1,3-Dichlorobenzene		ND	J	110	350
1,4-Dichlorobenzene		ND		110	350
1-Methylnaphthalene		ND		110	350
2,2'-oxybis[1-chloropropane]		ND		110	350
2,3,4,6-Tetrachlorophenol		ND		110	350
2,4,5-Trichlorophenol		ND		110	350
2,4,6-Trichlorophenol		ND		110	350
2,4-Dichlorophenol		ND		110	350
2,4-Dimethylphenol		ND		140	350
2,4-Dinitrophenol		ND	J	110	350
2,4-Dinitrotoluene		ND		110	350
2,6-Dinitrotoluene		ND		110	350
2-Chloronaphthalene		ND		110	350
2-Chlorophenol		ND		110	350
2-Methylnaphthalene		ND		110	350
2-Methylphenol		ND		210	350
2-Nitroaniline		ND		110	1800
2-Nitrophenol		ND		110	350
3 & 4 Methylphenol		ND		110	350
3,3'-Dichlorobenzidine		ND	J	110	710
3-Nitroaniline		ND		110	1800
4,6-Dinitro-2-methylphenol		ND		110	1800
4-Bromophenyl phenyl ether		ND		110	350
4-Chloro-3-methylphenol		ND		110	710
4-Chloroaniline		ND		110	710
4-Chlorophenyl phenyl ether		ND		110	350
4-Nitroaniline		ND		110	1800
4-Nitrophenol		ND		110	1800
Acenaphthene		ND		110	350
Acenaphthylene		ND		110	350
Acetophenone		ND		110	350
Aniline		ND	J	110	350
Anthracene		ND		110	350
Atrazine		ND		110	350
Azobenzene		ND		110	350
Benzaldehyde		ND		110	350
Benzo[a]anthracene		ND		110	350
Benzo[a]pyrene		ND		110	350
Benzo[b]fluoranthene		ND		110	350
Benzo[g,h,i]perylene		ND		110	350
Benzo[k]fluoranthene		ND		110	350
Benzoic acid		ND	J	160	1800

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Client: Olin Corporation

Job Number: 360-24194-1
Sdg Number: OCRI-02

Client Sample ID: **OC-SB-421-8.0/10.0-XXX**

Lab Sample ID: 360-24194-3
Client Matrix: Solid % Moisture: 7.4

Date Sampled: 08/19/2009 0745
Date Received: 08/19/2009 1730

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48751		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-47986		Lab File ID:	B10168.D
Dilution:	10			Initial Weight/Volume:	30.59 g
Date Analyzed:	09/10/2009 0840			Final Weight/Volume:	1.0 mL
Date Prepared:	08/20/2009 1253			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		110	350
Benzyl alcohol		ND	J	300	710
Bis(2-chloroethoxy)methane		ND		110	350
Bis(2-chloroethyl)ether		ND	J	110	350
Bis(2-ethylhexyl) phthalate		890	J	110	350
Butyl benzyl phthalate		ND		110	350
Caprolactam		ND		110	350
Carbazole		ND		110	350
Chrysene		ND		110	350
Dibenz(a,h)anthracene		ND		110	350
Dibenzofuran		ND		110	350
Diethyl phthalate		ND		110	350
Dimethyl phthalate		ND		110	350
Di-n-butyl phthalate		ND		310	350
Di-n-octyl phthalate		ND		180	350
Diphenyl oxide		ND		110	350
Fluoranthene		ND		110	350
Fluorene		ND		110	350
Hexachlorobenzene		ND		110	350
Hexachlorobutadiene		ND		110	350
Hexachlorocyclopentadiene		ND	~~J~~ R	110	710
Hexachloroethane		ND		110	350
Indeno[1,2,3-cd]pyrene		ND		110	350
Isophorone		ND		110	350
Naphthalene		ND		110	850
Nitrobenzene		ND		110	350
N-Nitrosodimethylamine		ND		120	350
N-Nitrosodi-n-propylamine		ND		110	350
N-Nitrosodiphenylamine		ND		110	350
Pentachlorophenol		ND		110	350
Phenanthrene		ND		110	420
Phenol		ND		110	350
Pyrene		ND		110	350

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	113		30 - 130
2-Fluorophenol	86		30 - 130
2-Fluorobiphenyl	71		30 - 130
Nitrobenzene-d5	70		30 - 130
Phenol-d5	73		30 - 130
Terphenyl-d14	80		30 - 130

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Client: Olin Corporation

Job Number: 360-24194-1
Sdg Number: OCRI-02

Client Sample ID: **OC-SB-421-8.0/10.0-XXX**

Lab Sample ID: 360-24194-3
Client Matrix: Solid % Moisture: 7.4

Date Sampled: 08/19/2009 0745
Date Received: 08/19/2009 1730

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48751		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-47986		Lab File ID:	B10168.D
Dilution:	10			Initial Weight/Volume:	30.59 g
Date Analyzed:	09/10/2009 0840			Final Weight/Volume:	1.0 mL
Date Prepared:	08/20/2009 1253			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 5

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Unknown	10.70	2000	T J
3910-35-8	1H-Indene, 2,3-dihydro-1,1,3-trimethyl-3	11.14	530	T J N
	Unknown	12.60	410	T J
26603-23-6	p,p"-Dioctyldiphenylamine	17.54	2100	T J N
	Unknown	18.51	1900	T J

Client: Olin Corporation

Job Number: 360-24194-1
Sdg Number: OCRI-02

Client Sample ID: **OC-SB-424-0.0/1.0-XXX**

Lab Sample ID: 360-24194-4
Client Matrix: Solid
% Moisture: 3.1

Date Sampled: 08/19/2009 1135
Date Received: 08/19/2009 1730

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48454		Instrument ID:	Inst. J
Preparation:	3550B	Prep Batch: 360-48297		Lab File ID:	J02806.D
Dilution:	1.0			Initial Weight/Volume:	100.04 g
Date Analyzed:	09/02/2009 0353			Final Weight/Volume:	1.0 mL
Date Prepared:	08/27/2009 1643			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodimethylamine		ND		1.2	5.2

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	60		30 - 130
2-Fluorobiphenyl	62		30 - 130
2-Fluorophenol	61		30 - 130
Nitrobenzene-d5	64		30 - 130
Phenol-d5	63		30 - 130
Terphenyl-d14	90		30 - 130

Client: Olin Corporation

Job Number: 360-24194-1
Sdg Number: OCRI-02

Client Sample ID: **OC-SB-424-0.0/1.0-XXX**

Lab Sample ID: 360-24194-4
Client Matrix: Solid
% Moisture: 3.1

Date Sampled: 08/19/2009 1135
Date Received: 08/19/2009 1730

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48751		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48119		Lab File ID:	B10156.D
Dilution:	1.0			Initial Weight/Volume:	30.51 g
Date Analyzed:	09/10/2009 0155			Final Weight/Volume:	1.0 mL
Date Prepared:	08/25/2009 1123			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		10	34
1,2,4,5-Tetrachlorobenzene		ND		10	34
1,2,4-Trichlorobenzene		ND		10	34
1,2-Dichlorobenzene		ND		10	34
1,3-Dichlorobenzene		ND	J	10	34
1,4-Dichlorobenzene		ND		10	34
1-Methylnaphthalene		ND		10	34
2,2'-oxybis[1-chloropropane]		ND		10	34
2,3,4,6-Tetrachlorophenol		ND		10	34
2,4,5-Trichlorophenol		ND		10	34
2,4,6-Trichlorophenol		ND		10	34
2,4-Dichlorophenol		ND		10	34
2,4-Dimethylphenol		ND		13	34
2,4-Dinitrophenol		ND	J	10	34
2,4-Dinitrotoluene		ND		10	34
2,6-Dinitrotoluene		ND		10	34
2-Chloronaphthalene		ND		10	34
2-Chlorophenol		ND		10	34
2-Methylnaphthalene		ND		10	34
2-Methylphenol		ND		20	34
2-Nitroaniline		ND		10	170
2-Nitrophenol		ND		10	34
3 & 4 Methylphenol		ND		10	34
3,3'-Dichlorobenzidine		ND	J	10	68
3-Nitroaniline		ND		10	170
4,6-Dinitro-2-methylphenol		ND		10	170
4-Bromophenyl phenyl ether		ND		10	34
4-Chloro-3-methylphenol		ND		10	68
4-Chloroaniline		ND		10	68
4-Chlorophenyl phenyl ether		ND		10	34
4-Nitroaniline		ND		10	170
4-Nitrophenol		ND		10	170
Acenaphthene		ND		10	34
Acenaphthylene		ND		10	34
Acetophenone		ND		10	34
Aniline		ND	J	10	34
Anthracene		ND		10	34
Atrazine		ND		10	34
Azobenzene		ND		10	34
Benzaldehyde		16	J	10	34
Benzo[a]anthracene		ND		10	34
Benzo[a]pyrene		88		10	34
Benzo[b]fluoranthene		ND		10	34
Benzo[g,h,i]perylene		ND		10	34
Benzo[k]fluoranthene		ND		10	34
Benzoic acid		130	J	15	170

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Client: Olin Corporation

Job Number: 360-24194-1
Sdg Number: OCRI-02

Client Sample ID: **OC-SB-424-0.0/1.0-XXX**

Lab Sample ID: 360-24194-4
Client Matrix: Solid % Moisture: 3.1

Date Sampled: 08/19/2009 1135
Date Received: 08/19/2009 1730

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48751		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48119		Lab File ID:	B10156.D
Dilution:	1.0			Initial Weight/Volume:	30.51 g
Date Analyzed:	09/10/2009 0155			Final Weight/Volume:	1.0 mL
Date Prepared:	08/25/2009 1123			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		10	34
Benzyl alcohol		ND		29	68
Bis(2-chloroethoxy)methane		ND		10	34
Bis(2-chloroethyl)ether		ND	J	10	34
Bis(2-ethylhexyl) phthalate		31	J	10	34
Butyl benzyl phthalate		ND		10	34
Caprolactam		ND		10	34
Carbazole		ND		10	34
Chrysene		11	J	10	34
Dibenz(a,h)anthracene		ND		10	34
Dibenzofuran		ND		10	34
Diethyl phthalate		ND		10	34
Dimethyl phthalate		ND		10	34
Di-n-butyl phthalate		ND		30	34
Di-n-octyl phthalate		ND		17	34
Diphenyl oxide		ND		10	34
Diphenylamine		ND		10	34
Fluoranthene		14	J	10	34
Fluorene		ND		10	34
Hexachlorobenzene		ND		10	34
Hexachlorobutadiene		ND		10	34
Hexachlorocyclopentadiene		ND		10	68
Hexachloroethane		ND		10	34
Indeno[1,2,3-cd]pyrene		ND		10	34
Isophorone		ND		10	34
Naphthalene		ND		10	81
Nitrobenzene		ND		10	34
N-Nitrosodimethylamine		ND		12	34
N-Nitrosodi-n-propylamine		ND		10	34
N-Nitrosodiphenylamine		ND		10	34
Pentachlorophenol		ND		10	34
Phenanthrene		ND		10	41
Phenol		ND		10	34
Pyrene		16	J	10	34

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	68		30 - 130
2-Fluorophenol	88		30 - 130
2-Fluorobiphenyl	68		30 - 130
Nitrobenzene-d5	64		30 - 130
Phenol-d5	83		30 - 130
Terphenyl-d14	69		30 - 130

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Client: Olin Corporation

Job Number: 360-24194-1
Sdg Number: OCRI-02

Client Sample ID: **OC-SB-424-0.0/1.0-XXX**

Lab Sample ID: 360-24194-4
Client Matrix: Solid % Moisture: 3.1

Date Sampled: 08/19/2009 1135
Date Received: 08/19/2009 1730

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48751		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48119		Lab File ID:	B10156.D
Dilution:	1.0			Initial Weight/Volume:	30.51 g
Date Analyzed:	09/10/2009 0155			Final Weight/Volume:	1.0 mL
Date Prepared:	08/25/2009 1123			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 6

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
57-10-3	n-Hexadecanoic acid	11.80	130	T J N
646-31-1	Tetracosane	13.54	78	T J N
630-6-8	Hexatriacontane	14.13	120	T J N
593-49-7	Heptacosane	15.49	110	T J N
630-1-3	Hexacosane	16.47	190	T J N
630-6-8	Hexatriacontane	17.57	180	T J N

Client: Olin Corporation

Job Number: 360-24194-1
Sdg Number: OCRI-02

Client Sample ID: **OC-SB-424-7.0/9.0-XXX**

Lab Sample ID: 360-24194-6
Client Matrix: Solid
% Moisture: 6.0

Date Sampled: 08/19/2009 1215
Date Received: 08/19/2009 1730

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48454		Instrument ID:	Inst. J
Preparation:	3550B	Prep Batch: 360-48297		Lab File ID:	J02808.D
Dilution:	1.0			Initial Weight/Volume:	100.32 g
Date Analyzed:	09/02/2009 0453			Final Weight/Volume:	1.0 mL
Date Prepared:	08/27/2009 1643			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodimethylamine		ND		1.2	5.3

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	61		30 - 130
2-Fluorobiphenyl	64		30 - 130
2-Fluorophenol	67		30 - 130
Nitrobenzene-d5	72		30 - 130
Phenol-d5	69		30 - 130
Terphenyl-d14	94		30 - 130

Client: Olin Corporation

Job Number: 360-24194-1
Sdg Number: OCRI-02

Client Sample ID: **OC-SB-424-7.0/9.0-XXX**

Lab Sample ID: 360-24194-6
Client Matrix: Solid % Moisture: 6.0

Date Sampled: 08/19/2009 1215
Date Received: 08/19/2009 1730

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48751		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48119		Lab File ID:	B10158.D
Dilution:	1.0			Initial Weight/Volume:	30.69 g
Date Analyzed:	09/10/2009 0302			Final Weight/Volume:	1.0 mL
Date Prepared:	08/25/2009 1123			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		10	35
1,2,4,5-Tetrachlorobenzene		ND		10	35
1,2,4-Trichlorobenzene		ND		10	35
1,2-Dichlorobenzene		ND		10	35
1,3-Dichlorobenzene		ND	J	10	35
1,4-Dichlorobenzene		ND		10	35
1-Methylnaphthalene		ND		10	35
2,2'-oxybis[1-chloropropane]		ND		10	35
2,3,4,6-Tetrachlorophenol		ND		10	35
2,4,5-Trichlorophenol		ND		10	35
2,4,6-Trichlorophenol		ND		10	35
2,4-Dichlorophenol		ND		10	35
2,4-Dimethylphenol		ND		14	35
2,4-Dinitrophenol		ND	R	10	35
2,4-Dinitrotoluene		ND		10	35
2,6-Dinitrotoluene		ND		10	35
2-Chloronaphthalene		ND		10	35
2-Chlorophenol		ND		10	35
2-Methylnaphthalene		ND		10	35
2-Methylphenol		ND		21	35
2-Nitroaniline		ND		10	170
2-Nitrophenol		ND		10	35
3 & 4 Methylphenol		ND		10	35
3,3'-Dichlorobenzidine		ND	J	10	69
3-Nitroaniline		ND		10	170
4,6-Dinitro-2-methylphenol		ND	R	10	170
4-Bromophenyl phenyl ether		ND		10	35
4-Chloro-3-methylphenol		ND		10	69
4-Chloroaniline		ND		10	69
4-Chlorophenyl phenyl ether		ND		10	35
4-Nitroaniline		ND		10	170
4-Nitrophenol		ND		10	170
Acenaphthene		ND		10	35
Acenaphthylene		ND		10	35
Acetophenone		34	J	10	35
Aniline		ND	J	10	35
Anthracene		ND		10	35
Atrazine		ND		10	35
Azobenzene		ND		10	35
Benzaldehyde		14	J	10	35
Benzo[a]anthracene		ND		10	35
Benzo[a]pyrene		ND		10	35
Benzo[b]fluoranthene		ND		10	35
Benzo[g,h,i]perylene		ND		10	35
Benzo[k]fluoranthene		ND		10	35
Benzoic acid		ND	J	16	170

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Client: Olin Corporation

Job Number: 360-24194-1
Sdg Number: OCRI-02

Client Sample ID: **OC-SB-424-7.0/9.0-XXX**

Lab Sample ID: 360-24194-6
Client Matrix: Solid % Moisture: 6.0

Date Sampled: 08/19/2009 1215
Date Received: 08/19/2009 1730

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48751		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48119		Lab File ID:	B10158.D
Dilution:	1.0			Initial Weight/Volume:	30.69 g
Date Analyzed:	09/10/2009 0302			Final Weight/Volume:	1.0 mL
Date Prepared:	08/25/2009 1123			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		10	35
Benzyl alcohol		ND		30	69
Bis(2-chloroethoxy)methane		ND		10	35
Bis(2-chloroethyl)ether		ND J		10	35
Bis(2-ethylhexyl) phthalate		~~17~~ J	J	10	35
Butyl benzyl phthalate		ND J		10	35
Caprolactam		ND		10	35
Carbazole		ND		10	35
Chrysene		ND		10	35
Dibenz(a,h)anthracene		ND		10	35
Dibenzofuran		ND		10	35
Diethyl phthalate		ND		10	35
Dimethyl phthalate		ND		10	35
Di-n-butyl phthalate		ND		30	35
Di-n-octyl phthalate		ND J		17	35
Diphenyl oxide		ND		10	35
Fluoranthene		ND		10	35
Fluorene		ND		10	35
Hexachlorobenzene		ND		10	35
Hexachlorobutadiene		ND		10	35
Hexachlorocyclopentadiene		~~ND~~ R		10	69
Hexachloroethane		ND		10	35
Indeno[1,2,3-cd]pyrene		ND		10	35
Isophorone		ND		10	35
Naphthalene		ND		10	83
Nitrobenzene		ND		10	35
N-Nitrosodimethylamine		ND		12	35
N-Nitrosodi-n-propylamine		ND		10	35
N-Nitrosodiphenylamine		420		10	35
Pentachlorophenol		ND		10	35
Phenanthrene		ND		10	42
Phenol		ND		10	35
Pyrene		ND		10	35

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	84		30 - 130
2-Fluorophenol	100		30 - 130
2-Fluorobiphenyl	74		30 - 130
Nitrobenzene-d5	70		30 - 130
Phenol-d5	95		30 - 130
Terphenyl-d14	90		30 - 130

12/3/09

Client: Olin Corporation

Job Number: 360-24194-1
Sdg Number: OCRI-02

Client Sample ID: OC-SB-424-7.0/9.0-XXX

Lab Sample ID: 360-24194-6
Client Matrix: Solid % Moisture: 6.0

Date Sampled: 08/19/2009 1215
Date Received: 08/19/2009 1730

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48751		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48119		Lab File ID:	B10158.D
Dilution:	1.0			Initial Weight/Volume:	30.69 g
Date Analyzed:	09/10/2009 0302			Final Weight/Volume:	1.0 mL
Date Prepared:	08/25/2009 1123			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 9

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Unknown	9.31	100	T J
1198-37-4	Quinoline, 2,4-dimethyl-	10.00	32	T J N
122-66-7	1,2-Diphenylhydrazine	10.73	48	
3910-35-8	1H-Indene, 2,3-dihydro-1,1,3-trimethyl-3	11.14	180	T J N
22768-22-5	2,4-Diphenyl-4-methyl-2(E)-pentene	11.54	130	T J N
112-39-0	Hexadecanoic acid, methyl ester	11.67	78	T J N
112-61-8	Octadecanoic acid, methyl ester	12.36	130	T J N
112-84-5	Erucylamide	16.03	210	T J N
	Unknown	16.79	160	T J

Client: Olin Corporation

Job Number: 360-24194-1
Sdg Number: OCRI-02

Client Sample ID: **OC-SB-424-7.0/9.0-XXX**

Lab Sample ID: 360-24194-6
Client Matrix: Solid % Moisture: 6.0

Date Sampled: 08/19/2009 1215
Date Received: 08/19/2009 1730

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48766		Instrument ID:	Inst_B
Preparation:	3546	Prep Batch: 360-48119		Lab File ID:	B10175.D
Dilution:	1.0			Initial Weight/Volume:	30.69 g
Date Analyzed:	09/10/2009 1236			Final Weight/Volume:	1.0 mL
Date Prepared:	08/25/2009 1123			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Diphenylamine		250		10	35

Client: Olin Corporation

Job Number: 360-24194-1
Sdg Number: OCRI-02

Client Sample ID: **OC-SB-424-7.0/9.0-XXX**

Lab Sample ID: 360-24194-6
Client Matrix: Solid
% Moisture: 6.0

Date Sampled: 08/19/2009 1215
Date Received: 08/19/2009 1730

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48889		Instrument ID:	NOEQUIP
Preparation:	3546	Prep Batch: 360-48119		Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	30.69 g
Date Analyzed:	09/10/2009 1236	Run Type: DL2		Final Weight/Volume:	1.0 mL
Date Prepared:	08/25/2009 1123			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodiphenylamine		ND		10	35

Client: Olin Corporation

Job Number: 360-24194-1
Sdg Number: OCRI-02

Client Sample ID: **OC-SB-425-0.0/1.0-XXX**

Lab Sample ID: 360-24194-7
Client Matrix: Solid % Moisture: 2.9

Date Sampled: 08/19/2009 0955
Date Received: 08/19/2009 1730

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48456		Instrument ID:	Inst. J
Preparation:	3550B	Prep Batch: 360-48381		Lab File ID:	J02814.D
Dilution:	1.0			Initial Weight/Volume:	100.49 g
Date Analyzed:	09/02/2009 0751			Final Weight/Volume:	1.0 mL
Date Prepared:	08/31/2009 1206			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodimethylamine		ND		1.2	5.1

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	43		30 - 130
2-Fluorobiphenyl	57		30 - 130
2-Fluorophenol	38		30 - 130
Nitrobenzene-d5	59		30 - 130
Phenol-d5	42		30 - 130
Terphenyl-d14	68		30 - 130

Client: Olin Corporation

Job Number: 360-24194-1
Sdg Number: OCRI-02

Client Sample ID: **OC-SB-425-0.0/1.0-XXX**

Lab Sample ID: 360-24194-7
Client Matrix: Solid
% Moisture: 2.9

Date Sampled: 08/19/2009 0955
Date Received: 08/19/2009 1730

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48751		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48119		Lab File ID:	B10160.D
Dilution:	5.0			Initial Weight/Volume:	30.24 g
Date Analyzed:	09/10/2009 0410			Final Weight/Volume:	1.0 mL
Date Prepared:	08/25/2009 1123			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		51	170
1,2,4,5-Tetrachlorobenzene		ND		51	170
1,2,4-Trichlorobenzene		ND		51	170
1,2-Dichlorobenzene		ND		51	170
1,3-Dichlorobenzene		ND		51	170
1,4-Dichlorobenzene		ND		51	170
1-Methylnaphthalene		ND		51	170
2,2'-oxybis[1-chloropropane]		ND		51	170
2,3,4,6-Tetrachlorophenol		ND		51	170
2,4,5-Trichlorophenol		ND		51	170
2,4,6-Trichlorophenol		ND		51	170
2,4-Dichlorophenol		ND		51	170
2,4-Dimethylphenol		ND		67	170
2,4-Dinitrophenol		ND		51	170
2,4-Dinitrotoluene		ND		51	170
2,6-Dinitrotoluene		ND		51	170
2-Chloronaphthalene		ND		51	170
2-Chlorophenol		ND		51	170
2-Methylnaphthalene		ND		51	170
2-Methylphenol		ND		100	170
2-Nitroaniline		ND		51	850
2-Nitrophenol		ND		51	170
3 & 4 Methylphenol		ND		51	170
3,3'-Dichlorobenzidine		ND		51	340
3-Nitroaniline		ND		51	850
4,6-Dinitro-2-methylphenol		ND		51	850
4-Bromophenyl phenyl ether		ND		51	170
4-Chloro-3-methylphenol		ND		51	340
4-Chloroaniline		ND		51	340
4-Chlorophenyl phenyl ether		ND		51	170
4-Nitroaniline		ND		51	850
4-Nitrophenol		ND		51	850
Acenaphthene		ND		51	170
Acenaphthylene		ND		51	170
Acetophenone		ND		51	170
Aniline		150	J	51	170
Anthracene		ND		51	170
Atrazine		ND		51	170
Azobenzene		ND		51	170
Benzaldehyde		ND		51	170
Benzo[a]anthracene		ND		51	170
Benzo[a]pyrene		ND		51	170
Benzo[b]fluoranthene		ND		51	170
Benzo[g,h,i]perylene		ND		51	170
Benzo[k]fluoranthene		ND		51	170
Benzoic acid		ND		77	850

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Client: Olin Corporation

Job Number: 360-24194-1
Sdg Number: OCRI-02

Client Sample ID: **OC-SB-425-0.0/1.0-XXX**

Lab Sample ID: 360-24194-7
Client Matrix: Solid % Moisture: 2.9

Date Sampled: 08/19/2009 0955
Date Received: 08/19/2009 1730

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48751		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48119		Lab File ID:	B10160.D
Dilution:	5.0			Initial Weight/Volume:	30.24 g
Date Analyzed:	09/10/2009 0410			Final Weight/Volume:	1.0 mL
Date Prepared:	08/25/2009 1123			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		51	170
Benzyl alcohol		ND		150	340
Bis(2-chloroethoxy)methane		ND		51	170
Bis(2-chloroethyl)ether		ND		51	170
Butyl benzyl phthalate		ND		51	170
Caprolactam		ND		51	170
Carbazole		ND		51	170
Chrysene		ND		51	170
Dibenz(a,h)anthracene		ND		51	170
Dibenzofuran		ND		51	170
Diethyl phthalate		ND		51	170
Dimethyl phthalate		ND		51	170
Di-n-butyl phthalate		ND		150	170
Di-n-octyl phthalate		ND		86	170
Diphenyl oxide		ND		51	170
Fluoranthene		ND		51	170
Fluorene		ND		51	170
Hexachlorobenzene		ND		51	170
Hexachlorobutadiene		ND		51	170
Hexachlorocyclopentadiene		ND		51	340
Hexachloroethane		ND		51	170
Indeno[1,2,3-cd]pyrene		ND		51	170
Isophorone		ND		51	170
Naphthalene		ND		51	410
Nitrobenzene		ND		51	170
N-Nitrosodimethylamine		ND		60	170
N-Nitrosodi-n-propylamine		ND		51	170
N-Nitrosodiphenylamine		660		51	170
Pentachlorophenol		ND		51	170
Phenanthrene		ND		51	200
Phenol		ND		51	170
Pyrene		ND		51	170

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	78		30 - 130
2-Fluorophenol	70		30 - 130
2-Fluorobiphenyl	56		30 - 130
Nitrobenzene-d5	53		30 - 130
Phenol-d5	61		30 - 130
Terphenyl-d14	59		30 - 130

Client: Olin Corporation

Job Number: 360-24194-1
Sdg Number: OCRI-02

Client Sample ID: **OC-SB-425-0.0/1.0-XXX**

Lab Sample ID: 360-24194-7
Client Matrix: Solid % Moisture: 2.9

Date Sampled: 08/19/2009 0955
Date Received: 08/19/2009 1730

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48751		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48119		Lab File ID:	B10160.D
Dilution:	5.0			Initial Weight/Volume:	30.24 g
Date Analyzed:	09/10/2009 0410			Final Weight/Volume:	1.0 mL
Date Prepared:	08/25/2009 1123			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 7

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
122-66-7	1,2-Diphenylhydrazine	10.73	70	J
	Unknown	15.29	810	T J
26603-23-6	p,p''-Dioctyldiphenylamine	17.25	63000	T J N
26603-23-6	p,p''-Dioctyldiphenylamine	17.61	6300	T J N
	Unknown	18.24	790	T J
	Unknown	18.39	670	T J
	Unknown	19.03	570	T J

Client: Olin Corporation

Job Number: 360-24194-1
Sdg Number: OCRI-02

Client Sample ID: **OC-SB-425-0.0/1.0-XXX**

Lab Sample ID: 360-24194-7
Client Matrix: Solid
% Moisture: 2.9

Date Sampled: 08/19/2009 0955
Date Received: 08/19/2009 1730

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48766		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48119		Lab File ID:	B10179.D
Dilution:	5.0			Initial Weight/Volume:	30.24 g
Date Analyzed:	09/10/2009 1452			Final Weight/Volume:	1.0 mL
Date Prepared:	08/25/2009 1123			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Diphenylamine		190		51	170

Client: Olin Corporation

Job Number: 360-24194-1
Sdg Number: OCRI-02

Client Sample ID: **OC-SB-425-0.0/1.0-XXX**

Lab Sample ID: 360-24194-7
Client Matrix: Solid
% Moisture: 2.9

Date Sampled: 08/19/2009 0955
Date Received: 08/19/2009 1730

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48889		Instrument ID:	NOEQUIP
Preparation:	3546	Prep Batch: 360-48119		Lab File ID:	N/A
Dilution:	5.0			Initial Weight/Volume:	30.24 g
Date Analyzed:	09/10/2009 1452	Run Type: DL2		Final Weight/Volume:	1.0 mL
Date Prepared:	08/25/2009 1123			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodiphenylamine		ND		51	170

Client: Olin Corporation

Job Number: 360-24194-1
Sdg Number: OCRI-02

Client Sample ID: **OC-SB-425-0.0/1.0-XXX**

Lab Sample ID: 360-24194-7
Client Matrix: Solid
% Moisture: 2.9

Date Sampled: 08/19/2009 0955
Date Received: 08/19/2009 1730

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48751		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48119		Lab File ID:	B10159.D
Dilution:	10			Initial Weight/Volume:	30.24 g
Date Analyzed:	09/10/2009 0336	Run Type: DL		Final Weight/Volume:	1.0 mL
Date Prepared:	08/25/2009 1123			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Bis(2-ethylhexyl) phthalate		4300	J	100	340

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	98		30 - 130
2-Fluorophenol	64		30 - 130
2-Fluorobiphenyl	52		30 - 130
Nitrobenzene-d5	49		30 - 130
Phenol-d5	55		30 - 130
Terphenyl-d14	54		30 - 130

12/31/09

Client: Olin Corporation

Job Number: 360-24194-1
Sdg Number: OCRI-02

Client Sample ID: **OC-SB-425-6.0/8.0-XXX**

Lab Sample ID: 360-24194-9
Client Matrix: Solid
% Moisture: 8.4

Date Sampled: 08/19/2009 1005
Date Received: 08/19/2009 1730

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48456		Instrument ID:	Inst. J
Preparation:	3550B	Prep Batch: 360-48381		Lab File ID:	J02816.D
Dilution:	1.0			Initial Weight/Volume:	100.08 g
Date Analyzed:	09/02/2009 0851			Final Weight/Volume:	1.0 mL
Date Prepared:	08/31/2009 1206			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodimethylamine		ND		1.3	5.5

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	46		30 - 130
2-Fluorobiphenyl	59		30 - 130
2-Fluorophenol	54		30 - 130
Nitrobenzene-d5	58		30 - 130
Phenol-d5	57		30 - 130
Terphenyl-d14	92		30 - 130

Client: Olin Corporation

Job Number: 360-24194-1
Sdg Number: OCRI-02

Client Sample ID: **OC-SB-425-6.0/8.0-XXX**

Lab Sample ID: 360-24194-9
Client Matrix: Solid % Moisture: 8.4

Date Sampled: 08/19/2009 1005
Date Received: 08/19/2009 1730

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48751		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48119		Lab File ID:	B10162.D
Dilution:	5.0			Initial Weight/Volume:	30.37 g
Date Analyzed:	09/10/2009 0517			Final Weight/Volume:	1.0 mL
Date Prepared:	08/25/2009 1123			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		54	180
1,2,4,5-Tetrachlorobenzene		ND		54	180
1,2,4-Trichlorobenzene		ND		54	180
1,2-Dichlorobenzene		ND		54	180
1,3-Dichlorobenzene		ND	J ✓	54	180
1,4-Dichlorobenzene		ND		54	180
1-Methylnaphthalene		ND		54	180
2,2'-oxybis[1-chloropropane]		ND		54	180
2,3,4,6-Tetrachlorophenol		ND		54	180
2,4,5-Trichlorophenol		ND		54	180
2,4,6-Trichlorophenol		ND		54	180
2,4-Dichlorophenol		ND		54	180
2,4-Dimethylphenol		ND		71	180
2,4-Dinitrophenol		ND	J	54	180
2,4-Dinitrotoluene		ND		54	180
2,6-Dinitrotoluene		ND		54	180
2-Chloronaphthalene		ND		54	180
2-Chlorophenol		ND		54	180
2-Methylnaphthalene		ND		54	180
2-Methylphenol		ND		110	180
2-Nitroaniline		ND		54	900
2-Nitrophenol		ND		54	180
3 & 4 Methylphenol		ND		54	180
3,3'-Dichlorobenzidine		ND	J ✓	54	360
3-Nitroaniline		ND		54	900
4,6-Dinitro-2-methylphenol		ND		54	900
4-Bromophenyl phenyl ether		ND		54	180
4-Chloro-3-methylphenol		ND		54	360
4-Chloroaniline		ND		54	360
4-Chlorophenyl phenyl ether		ND		54	180
4-Nitroaniline		ND		54	900
4-Nitrophenol		ND		54	900
Acenaphthene		ND		54	180
Acenaphthylene		ND		54	180
Acetophenone		ND		54	180
Aniline		ND	J ✓	54	180
Anthracene		ND		54	180
Atrazine		ND		54	180
Azobenzene		ND		54	180
Benzaldehyde		ND		54	180
Benzo[a]anthracene		ND		54	180
Benzo[a]pyrene		ND		54	180
Benzo[b]fluoranthene		ND		54	180
Benzo[g,h,i]perylene		ND		54	180
Benzo[k]fluoranthene		ND		54	180
Benzoic acid		ND	J ✓	81	900

12/31/09

Client: Olin Corporation

Job Number: 360-24194-1
Sdg Number: OCRI-02

Client Sample ID: **OC-SB-425-6.0/8.0-XXX**

Lab Sample ID: 360-24194-9
Client Matrix: Solid % Moisture: 8.4

Date Sampled: 08/19/2009 1005
Date Received: 08/19/2009 1730

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48751		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48119		Lab File ID:	B10162.D
Dilution:	5.0			Initial Weight/Volume:	30.37 g
Date Analyzed:	09/10/2009 0517			Final Weight/Volume:	1.0 mL
Date Prepared:	08/25/2009 1123			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		54	180
Benzyl alcohol		ND		150	360
Bis(2-chloroethoxy)methane		ND		54	180
Bis(2-chloroethyl)ether		ND	3	54	180
Bis(2-ethylhexyl) phthalate		ND		54	180
Butyl benzyl phthalate		ND		54	180
Caprolactam		ND		54	180
Carbazole		ND		54	180
Chrysene		ND		54	180
Dibenz(a,h)anthracene		ND		54	180
Dibenzofuran		ND		54	180
Diethyl phthalate		ND		54	180
Dimethyl phthalate		ND		54	180
Di-n-butyl phthalate		ND		160	180
Di-n-octyl phthalate		ND		91	180
Diphenyl oxide		ND		54	180
Diphenylamine		ND		54	180
Fluoranthene		ND		54	180
Fluorene		ND		54	180
Hexachlorobenzene		ND		54	180
Hexachlorobutadiene		ND		54	180
Hexachlorocyclopentadiene		ND		54	360
Hexachloroethane		ND		54	180
Indeno[1,2,3-cd]pyrene		ND		54	180
Isophorone		ND		54	180
Naphthalene		ND		54	430
Nitrobenzene		ND		54	180
N-Nitrosodimethylamine		ND		64	180
N-Nitrosodi-n-propylamine		ND		54	180
N-Nitrosodiphenylamine		ND		54	180
Pentachlorophenol		ND		54	180
Phenanthrene		ND		54	220
Phenol		ND		54	180
Pyrene		ND		54	180

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	67		30 - 130
2-Fluorophenol	70		30 - 130
2-Fluorobiphenyl	60		30 - 130
Nitrobenzene-d5	52		30 - 130
Phenol-d5	59		30 - 130
Terphenyl-d14	66		30 - 130

12/31/09

Client: Olin Corporation

Job Number: 360-24194-1
Sdg Number: OCRI-02

Client Sample ID: **OC-SB-425-6.0/8.0-XXX**

Lab Sample ID: 360-24194-9
Client Matrix: Solid % Moisture: 8.4

Date Sampled: 08/19/2009 1005
Date Received: 08/19/2009 1730

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48751		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48119		Lab File ID:	B10162.D
Dilution:	5.0			Initial Weight/Volume:	30.37 g
Date Analyzed:	09/10/2009 0517			Final Weight/Volume:	1.0 mL
Date Prepared:	08/25/2009 1123			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 3

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Unknown	9.32	6200	T J
	Unknown	9.38	4500	T J
	Unknown	17.54	6.5	T J

FORM IV
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Westfield Job No.: 360-24194-1

SDG No.: OCRI-02

Lab File ID: B9886.D Lab Sample ID: MB 360-47986/1-A

Matrix: Solid Date Extracted: 08/20/2009 12:53

Instrument ID: Inst. B Date Analyzed: 08/28/2009 11:52

Level:(Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 360-47986/2-A	B9887.D	08/28/2009 12:25
	LCSD 360-47986/3-A	B9888.D	08/28/2009 12:59
OC-SB-421-0.0/1.0-XXX	360-24194-1	B9904.D	08/28/2009 22:03
OC-SB-421-0.0/1.0-XXX DL	360-24194-1 DL	B9937.D	09/01/2009 06:21
OC-SB-421-0.0/1.0-XXX DL2	360-24194-1 DL2	B10131.D	09/08/2009 18:24
OC-SB-421-0.0/1.0-XXX	360-24194-1		09/08/2009 18:24
OC-SB-421-8.0/10.0-XXX DL3	360-24194-3 DL3	B10133.D	09/08/2009 19:32
OC-SB-421-8.0/10.0-XXX	360-24194-3		09/08/2009 19:32
OC-SB-421-8.0/10.0-XXX	360-24194-3	B10168.D	09/10/2009 08:40
OC-SB-421-8.0/10.0-XXX MS	360-24194-3 MS	B10169.D	09/10/2009 09:13
OC-SB-421-8.0/10.0-XXX MSD	360-24194-3 MSD	B10170.D	09/10/2009 09:47

ug/kg AL mult AL Soil

Acetophenone 4.17 ~~ug/L~~ 5x ug/kg 20.85

Diethyl phthalate 4.98 ~~ug/L~~ 10x 49.8

Di-n-butyl phthalate 30.2 ug/L 10x 302

Client: Olin Corporation

Job Number: 360-24194-2
Sdg Number: OCRI-02A

Method Blank - Batch: 360-47986

Method: 8270C LL
Preparation: 3546

Lab Sample ID: MB 360-47986/1-A
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 08/28/2009 1152
Date Prepared: 08/20/2009 1253

Analysis Batch: 360-48213
Prep Batch: 360-47986
Units: ug/Kg

Instrument ID: Agilent 6890/5973 GC/MS
Lab File ID: B9886.D
Initial Weight/Volume: 30.00 g
Final Weight/Volume: 1.0 mL
Injection Volume: 1.0 uL

Analyte	Result	Qual	MDL	RL
1,1'-Biphenyl	ND		10	33
1,2,4,5-Tetrachlorobenzene	ND		2.2	33
1,2,4-Trichlorobenzene	ND		6.5	33
1,2-Dichlorobenzene	ND		3.6	33
1,3-Dichlorobenzene	ND		9.7	33
1,4-Dichlorobenzene	ND		6.0	33
1-Methylnaphthalene	ND		2.0	33
2,2'-oxybis[1-chloropropane]	ND		3.4	33
2,3,4,6-Tetrachlorophenol	ND		2.0	33
2,4,5-Trichlorophenol	ND		3.8	33
2,4,6-Trichlorophenol	ND		7.0	33
2,4-Dichlorophenol	ND		6.4	33
2,4-Dimethylphenol	ND		5.8	33
2,4-Dinitrophenol	ND		4.9	33
2,4-Dinitrotoluene	ND		4.7	33
2,6-Dinitrotoluene	ND		4.2	33
2-Chloronaphthalene	ND		5.1	33
2-Chlorophenol	ND		3.3	33
2-Methylnaphthalene	ND		25	33
2-Methylphenol	ND		4.8	33
2-Nitroaniline	ND		21	170
2-Nitrophenol	ND		3.9	33
3 & 4 Methylphenol	ND		6.3	33
3,3'-Dichlorobenzidine	ND		24	67
3-Nitroaniline	ND		9.5	170
4,6-Dinitro-2-methylphenol	ND		8.5	170
4-Bromophenyl phenyl ether	ND		6.9	33
4-Chloro-3-methylphenol	ND		9.2	67
4-Chloroaniline	ND		14	67
4-Chlorophenyl phenyl ether	ND		5.3	33
4-Nitroaniline	ND		8.9	170
4-Nitrophenol	ND		6.5	170
Acenaphthene	ND		4.9	33
Acenaphthylene	ND		5.9	33
Acetophenone	4.17	J	3.6	33
Aniline	ND		17	33
Anthracene	ND		11	33
Atrazine	ND		10	33
Azobenzene	ND		4.1	33
Benzaldehyde	ND		10	33
Benzo[a]anthracene	ND		6.4	33

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: Olin Corporation

Job Number: 360-24194-2
Sdg Number: OCRI-02A

Method Blank - Batch: 360-47986

Method: 8270C LL
Preparation: 3546

Lab Sample ID: MB 360-47986/1-A
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 08/28/2009 1152
Date Prepared: 08/20/2009 1253

Analysis Batch: 360-48213
Prep Batch: 360-47986
Units: ug/Kg

Instrument ID: Agilent 6890/5973 GC/MS
Lab File ID: B9886.D
Initial Weight/Volume: 30.00 g
Final Weight/Volume: 1.0 mL
Injection Volume: 1.0 uL

Analyte	Result	Qual	MDL	RL
Benzo[a]pyrene	ND		6.1	33
Benzo[b]fluoranthene	ND		7.6	33
Benzo[g,h,i]perylene	ND		6.5	33
Benzo[k]fluoranthene	ND		9.2	33
Benzoic acid	ND		14	170
Benzophenone	ND		2.0	33
Benzyl alcohol	ND		7.7	67
Bis(2-chloroethoxy)methane	ND		6.0	33
Bis(2-chloroethyl)ether	ND		8.1	33
Bis(2-ethylhexyl) phthalate	ND		11	33
Butyl benzyl phthalate	ND		7.3	33
Caprolactam	ND		10	33
Carbazole	ND		33	33
Chrysene	ND		7.2	33
Dibenz(a,h)anthracene	ND		6.7	33
Dibenzofuran	ND		19	33
Diethyl phthalate	4.98	J	4.7	33
Dimethyl phthalate	ND		4.9	33
Di-n-butyl phthalate	30.2	J	10	33
Di-n-octyl phthalate	ND		9.4	33
Diphenyl oxide	ND		10	33
Fluoranthene	ND		21	33
Fluorene	ND		13	33
Hexachlorobenzene	ND		7.9	33
Hexachlorobutadiene	ND		6.6	33
Hexachlorocyclopentadiene	ND		9.1	67
Hexachloroethane	ND		6.4	33
Indeno[1,2,3-cd]pyrene	ND		10	33
Isophorone	ND		7.1	33
Naphthalene	ND		74	80
Nitrobenzene	ND		4.5	33
N-Nitrosodimethylamine	ND		3.9	33
N-Nitrosodi-n-propylamine	ND		3.8	33
N-Nitrosodiphenylamine	ND		6.7	33
Pentachlorophenol	ND		6.9	33
Phenanthrene	ND		38	40
Phenol	ND		4.2	33
Pyrene	ND		8.8	33

Surrogate	% Rec	Acceptance Limits
2,4,6-Tribromophenol	73	30 - 130

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: Olin Corporation

Job Number: 360-24194-2
Sdg Number: OCRI-02A

Surrogate	% Rec	Acceptance Limits
2-Fluorobiphenyl	74	30 - 130
2-Fluorophenol	97	30 - 130
Nitrobenzene-d5	70	30 - 130
Phenol-d5	98	30 - 130
Terphenyl-d14	76	30 - 130

Method Blank TICs- Batch: 360-47986

Cas Number	Analyte	RT	Est. Result	Qual
	Unknown	4.86	21.2	T J
	Unknown	4.97	87.7	T J
71-43-2	Benzene	5.13	41.5	T J N
	Unknown	7.16	1680	T J
	Unknown	7.69	48.0	T J
96-48-0	Butyrolactone	7.78	37.3	T J N

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IV
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Westfield Job No.: 360-24194-1

SDG No.: OCRI-02

Lab File ID: B10153.D Lab Sample ID: MB 360-48119/1-A

Matrix: Solid Date Extracted: 08/25/2009 11:23

Instrument ID: Inst. B Date Analyzed: 09/10/2009 00:13

Level:(Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 360-48119/2-A	B10154.D	09/10/2009 00:47
	LCSD 360-48119/3-A	B10155.D	09/10/2009 01:21
OC-SB-424-0.0/1.0-XXX	360-24194-4	B10156.D	09/10/2009 01:55
OC-SB-424-7.0/9.0-XXX	360-24194-6	B10158.D	09/10/2009 03:02
OC-SB-425-0.0/1.0-XXX DL	360-24194-7 DL	B10159.D	09/10/2009 03:36
OC-SB-425-0.0/1.0-XXX	360-24194-7	B10160.D	09/10/2009 04:10
OC-SB-425-6.0/8.0-XXX	360-24194-9	B10162.D	09/10/2009 05:17
OC-SB-424-7.0/9.0-XXX DL2	360-24194-6 DL2		09/10/2009 12:36
OC-SB-425-0.0/1.0-XXX DL2	360-24194-7 DL2		09/10/2009 14:52

		AL meth.	AL Soil (ug/kg)
Caprolactam	13.8 ~~ug/L~~	5x	~~2300~~ 69
diethyl phthalate	4.70 ug/L	10x	~~1567~~ 47
di-n-butyl phthalate	23.2 ug/L	10x	~~7733~~ 232

-4, -5, -6, -7, -8, -9

Client: Olin Corporation

Job Number: 360-24194-2
Sdg Number: OCRI-02A

Method Blank - Batch: 360-48119

Method: 8270C LL
Preparation: 3546

Lab Sample ID: MB 360-48119/1-A
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 09/10/2009 0013
Date Prepared: 08/25/2009 1123

Analysis Batch: 360-48751
Prep Batch: 360-48119
Units: ug/Kg

Instrument ID: Agilent 6890/5973 GC/MS
Lab File ID: B10153.D
Initial Weight/Volume: 30.00 g
Final Weight/Volume: 1.0 mL
Injection Volume: 1.0 uL

Analyte	Result	Qual	MDL	RL
Benzo[a]pyrene	ND		6.1	33
Benzo[b]fluoranthene	ND		7.6	33
Benzo[g,h,i]perylene	ND		6.5	33
Benzo[k]fluoranthene	ND		9.2	33
Benzoic acid	ND		14	170
Benzophenone	2.11	J	2.0	33
Benzyl alcohol	ND		7.7	67
Bis(2-chloroethoxy)methane	ND		6.0	33
Bis(2-chloroethyl)ether	ND		8.1	33
Bis(2-ethylhexyl) phthalate	ND		11	33
Butyl benzyl phthalate	ND		7.3	33
Caprolactam	13.8	J	10	33
Carbazole	ND		33	33
Chrysene	ND		7.2	33
Dibenz(a,h)anthracene	ND		6.7	33
Dibenzofuran	ND		19	33
Diethyl phthalate	4.70	J	4.7	33
Dimethyl phthalate	ND		4.9	33
Di-n-butyl phthalate	23.2	J	10	33
Di-n-octyl phthalate	ND		9.4	33
Diphenyl oxide	ND		10	33
Fluoranthene	ND		21	33
Fluorene	ND		13	33
Hexachlorobenzene	ND		7.9	33
Hexachlorobutadiene	ND		6.6	33
Hexachlorocyclopentadiene	ND		9.1	67
Hexachloroethane	ND		6.4	33
Indeno[1,2,3-cd]pyrene	ND		10	33
Isophorone	ND		7.1	33
Naphthalene	ND		74	80
Nitrobenzene	ND		4.5	33
N-Nitrosodimethylamine	ND		3.9	33
N-Nitrosodi-n-propylamine	ND		3.8	33
N-Nitrosodiphenylamine	ND		6.7	33
Pentachlorophenol	ND		6.9	33
Phenanthrene	ND		38	40
Phenol	ND		4.2	33
Pyrene	ND		8.8	33

Surrogate	% Rec	Acceptance Limits
2,4,6-Tribromophenol	66	30 - 130

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: Olin Corporation

Job Number: 360-24194-2
Sdg Number: OCRI-02A

Surrogate	% Rec	Acceptance Limits
2-Fluorobiphenyl	69	30 - 130
2-Fluorophenol	91	30 - 130
Nitrobenzene-d5	69	30 - 130
Phenol-d5	82	30 - 130
Terphenyl-d14	70	30 - 130

Method Blank TICs- Batch: 360-48119

Cas Number	Analyte	RT	Est. Result	Qual
541-5-9	Cyclotrisiloxane, hexamethyl-	5.75	21.6	T J N
	Unknown	6.08	3280	T J
111-76-2	Ethanol, 2-butoxy-	6.65	35.7	T J N
	Unknown	6.76	28.2	T J
111-90-0	Ethanol, 2-(2-ethoxyethoxy)-	7.44	18.1	T J N
541-2-6	Cyclopentasiloxane, decamethyl-	8.28	13.2	T J N

Calculations are performed before rounding to avoid round-off errors in calculated results.

Olin 001-1 Equipment blank issues

		Action Limit (ug/L)		units ug/L
acetophenone	1.5 ug/L	7.5 (5x)	CK	0.5
anthracene	0.58 ug/L	2.9 (5x)	CK	0.19
benzoic acid	3.9 ug/L	19.5 5x	CK	1.3
benzyl alcohol	0.67 ug/L	3.35 5x	CK	0.22
bis (2-ethylhexyl) phthalate	44 ug/L	440 10x		29
butyl benzyl phthalate	1.2 ug/L	12 10x	CK	0.80
diethyl phthalate	0.78 ug/L	7.8 10x	CK	0.52
di-n-butyl phthalate	1.8 ug/L	18 10x	CK	1.2
N-nitrosodiphenylamine	0.75 ug/L	3.75 5x	CK	0.25

$$\frac{\frac{30.2\ ug}{L} \cdot 1 \cdot L}{30\ g} = \frac{1.0\ ug}{g} \cdot \frac{1000\ g}{1\ kg} \qquad 100\%$$

$$\frac{\frac{300\ ug}{L}}{0.03\ kg} = 10{,}000\ ug/kg$$

TestAmerica Laboratories
Target Compound Quantitation Report

Data File:	\\wessvr06\chromdata\INSTB.i\20090908-2.b\B10131.D		
Lims ID:	360-24194-A-1-A	Client ID:	OC-SB-421-0.0/1.0-XXX
Inject. Date:	08-Sep-2009 18:24:30	Dil. Factor:	5.0000
Sample Type:	Client Sample		
Sample ID:	360-24194-A-1-A		
Misc. Info.:	360-0001107-016		
Operator:	MZ	Instrument ID:	Inst. B
Vol. Injected:	2.0000	ALS Bottle#:	7
Lims Batch ID:	48702	Lims Sample ID:	16
Detector:	MS SCAN		
Method:	\\wessvr06\chromdata\INSTB.i\20090908-2.b\8270B.m		
Last Update:	09-Sep-2009 08:46:25	Calib Date:	07-Sep-2009 14:52:30
Quant Method:	Internal Standard	Quant By:	Initial Calibration
Last ICal File:	\\wessvr06\chromdata\INSTB.i\20090907-1.b\B10089.D		
Limit Group:	SMS - 8270LL SVOA Calibration		
Integrator:	RTE		
Process Host:	WES1001		
Reviewed By:	sullivanp	Date:	09-Sep-2009 08:46:25

Compound	Sig	RT	EXP RT	DLT RT	Response	Amount ug/mL	Flags
* 1 1,4-Dichlorobenzene-d4	150	7.721	7.736	-0.015	524501	2.00	
* 2 Naphthalene-d8	136	8.860	8.866	-0.006	1302079	2.00	
* 3 Acenaphthene-d10	164	10.375	10.376	-0.001	655032	2.00	
* 4 Phenanthrene-d10	188	11.640	11.626	0.014	1002960	2.00	
* 5 Chrysene-d12	240	15.131	15.113	0.018	599521	2.00	M
* 6 Perylene-d12	264	17.555	17.522	0.033	9899150	2.00	sM
71 Diphenylamine	169	10.890	10.891	-0.001	4779554	14.5	

QC Flag Legend

Processing Flags
s - Failed ISTD Recovery Test

Review Flags
M - Manually Integrated

N-nitroso diphenylamine = N-nitrosodiphenylamine − diphenylamine (71 Flags)

5788 − 4931 = 857

$$\frac{4779554 \times 2000\ ug \times 1\ uL \times 2 \times 5}{2} = 4931\ ug/kg$$

$$1002960 \times 0.6705 \times 0.0302\ Kg \times 0.953 \times 1000$$

1/13/10

TestAmerica Laboratories
Target Compound Quantitation Report

Data File:	\\wessvr06\chromdata\INSTB.i\20090826-4.b\B9904.D		
Lims ID:	360-24194-A-1-A	Client ID:	OC-SB-421-0.0/1.0-XXX
Inject. Date:	28-Aug-2009 22:03:30	Dil. Factor:	5.0000
Sample Type:	Client Sample		
Sample ID:	360-24194-A-1-A		
Misc. Info.:	360-0000975-035		
Operator:	MZ	Instrument ID:	Inst. B
Vol. Injected:	2.0000	ALS Bottle#:	67
Lims Batch ID:	48213	Lims Sample ID:	35
Detector:	MS SCAN		
Method:	\\wessvr06\chromdata\INSTB.i\20090826-4.b\8270B.m		
Last Update:	08-Sep-2009 16:47:52	Calib Date:	27-Aug-2009 13:43:30
Quant Method:	Internal Standard	Quant By:	Initial Calibration
Last ICal File:	\\wessvr06\chromdata\INSTB.i\20090827-1.b\B9847.D		
Limit Group:	SMS - 8270LL SVOA Calibration		
Integrator:	RTE		
Process Host:	WES1001		
Reviewed By:	sullivanp	Date:	31-Aug-2009 13:37:23
Reviewed By:	sullivanp	Date:	08-Sep-2009 16:47:52

Compound	Sig	RT	EXP RT	DLT RT	Response	Amount ug/mL	Flags
* 1 1,4-Dichlorobenzene-d4	150	8.595	8.592	0.003	339565	2.00	s
* 2 Naphthalene-d8	136	9.715	9.712	0.003	760617	2.00	
* 3 Acenaphthene-d10	164	11.239	11.232	0.007	455657	2.00	
* 4 Phenanthrene-d10	188	12.567	12.559	0.008	717290	2.00	
* 5 Chrysene-d12	240	16.467	16.454	0.013	358401	2.00	s
* 6 Perylene-d12	264	20.318	19.450	0.868	902434	2.00	s
$ 7 2-Fluorophenol	112	7.392	7.380	0.012	62956	0.6572	
$ 8 Phenol-d5	99	8.215	8.202	0.013	56618	0.4793	
$ 9 Nitrobenzene-d5	82	9.085	9.077	0.008	25815	0.2714	
$ 10 2-Fluorobiphenyl	172	10.609	10.607	0.003	96443	0.3168	
$ 11 2,4,6-Tribromophenol	330	11.927	11.910	0.017	7775	0.4130	
$ 12 Terphenyl-d14	244	14.553	14.545	0.008	59575	0.3798	
18 Phenol	94	8.229	8.217	0.012	48853	0.3755	
19 Aniline	93	8.296	8.293	0.003	285819	1.97	
52 1,1'-Biphenyl	154	10.710	10.707	0.003	375979	1.12	
54 Phenyl ether	170	10.787	10.784	0.003	741347	4.91	
61 Acenaphthene	153	11.268	11.265	0.003	94817	0.3470	
72 N-Nitrosodiphenylamine	169	11.778	11.751	0.027	~~4006678~~	16.6	
71 Diphenylamine	169	11.778	11.751	0.027	4006678	16.6	
84 Di-n-butyl phthalate	149	12.999	12.992	0.007	85111	0.2258	
87 Fluoranthene	202	14.038	14.030	0.008	8159	0.0233	
92 Bis(2-ethylhexyl) phthalate	149	16.269	16.252	0.017	8551969	55.5	

QC Flag Legend

Processing Flags
s - Failed ISTD Recovery Test

$\frac{285819 \times 2000\ ug/L \times 1mL \times 5 \times 2}{339565 \times 0.8532 \times 0.0302\ Kg \times 0.953 \times 1000\ \frac{mL}{L}} = 6.85\ ug/Kg$

$\frac{375979 \times 2000\ ug/L \times 1mL \times 5 \times 2}{455657 \times 1.4792 \times 0.0302\ Kg \times 0.953 \times 1000\ \frac{mL}{L}} = 3P7\ ug/Kg$

$\frac{94817 \times 2000\ ug/L \times 1mL \times 5 \times 2}{455657 \times 1.1794 \times 0.0302\ Kg \times 0.953 \times 1000\ \frac{mL}{L}} = 120\ ug/Kg$

$\frac{4006678 \times 2000\ ug/L \times 1mL \times 5 \times 2}{717290 \times 0.0715 \times 0.0302\ Kg \times 0.953 \times 1000} = 5780\ ug/Kg$

1/13/10

Hair volume is 2uL on chromatogram,

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Westfield | Job No.: 360-24194-1

SDG No.: OCRI-02

Client Sample ID: OC-SB-421-0.0/1.0-XXX | Lab Sample ID: 360-24194-1

Matrix: Solid | Lab File ID: B9904.D

Analysis Method: 8270C LL | Date Collected: 08/19/2009 07:40

Extract. Method: 3546 | Date Extracted: 08/20/2009 12:53

Sample wt/vol: 30.20(g) * 1 | Date Analyzed: 08/28/2009 22:03

Con. Extract Vol.: 2.0(mL) | Dilution Factor: 5

Injection Volume: 1.0(uL) * 1 | Level: (low/med) Low

% Moisture: 4.7 * 1 = 100 - 4.7 = 95.3 (or 0.953) | GPC Cleanup: (Y/N) N

Analysis Batch No.: 48213 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
92-52-4	1,1'-Biphenyl	390	*	350	100
95-94-3	1,2,4,5-Tetrachlorobenzene	ND		350	100
120-82-1	1,2,4-Trichlorobenzene	ND		350	100
95-50-1	1,2-Dichlorobenzene	ND		350	100
541-73-1	1,3-Dichlorobenzene	ND		350	100
106-46-7	1,4-Dichlorobenzene	ND		350	100
90-12-0	1-Methylnaphthalene	ND	*	350	100
108-60-1	2,2'-oxybis[1-chloropropane]	ND		350	100
58-90-2	2,3,4,6-Tetrachlorophenol	ND	*	350	100
95-95-4	2,4,5-Trichlorophenol	ND		350	100
88-06-2	2,4,6-Trichlorophenol	ND		350	100
120-83-2	2,4-Dichlorophenol	ND		350	100
105-67-9	2,4-Dimethylphenol	ND		350	140
51-28-5	2,4-Dinitrophenol	ND		350	100
121-14-2	2,4-Dinitrotoluene	ND		350	100
606-20-2	2,6-Dinitrotoluene	ND		350	100
91-58-7	2-Chloronaphthalene	ND		350	100
95-57-8	2-Chlorophenol	ND		350	100
91-57-6	2-Methylnaphthalene	ND		350	100
95-48-7	2-Methylphenol	ND		350	210
88-74-4	2-Nitroaniline	ND		1700	100
88-75-5	2-Nitrophenol	ND		350	100
15831-10-4	3 & 4 Methylphenol	ND		350	100
91-94-1	3,3'-Dichlorobenzidine	ND		700	100
99-09-2	3-Nitroaniline	ND		1700	100
534-52-1	4,6-Dinitro-2-methylphenol	ND		1700	100
101-55-3	4-Bromophenyl phenyl ether	ND		350	100
59-50-7	4-Chloro-3-methylphenol	ND		700	100
106-47-8	4-Chloroaniline	ND		700	100
7005-72-3	4-Chlorophenyl phenyl ether	ND		350	100
100-01-6	4-Nitroaniline	ND		1700	100
100-02-7	4-Nitrophenol	ND		1700	100
83-32-9	Acenaphthene	120	J	350	100
208-96-8	Acenaphthylene	ND		350	100

Benzaldehyde

$$\frac{37579 \times 2000\ \mu g \times 1\ mL \times 1 \times 1}{0.7664 \times 545713 \times 0.03514\ g \times 0.969 \times 1000} = 5.44\ mg/kg$$

0.5042 580858 0.03051

~~OK~~ below limit again

Benzoic Acid

$$\frac{200039 \times 2000 \times 1 \times 1}{0.1490 \times 580858 \times 0.03051 \times 0.969 \times 1000} = 156\ mg/kg\ OK$$

Fluoranthene

$$\frac{249788 \times 2000 \times 1 \times 1}{0.9779 \times 1235082 \times 0.03051 \times 0.969 \times 1000} = 13.99\ mg/kg\ OK$$

Bis(2-ethylhexyl) phthalate

$$\frac{310063 \times 2000 \times 1 \times 1}{0.7002 \times 1235081 \times 0.03051 \times 0.969 \times 1000} = 30.82\ mg/kg\ OK$$

97 R48

TestAmerica Laboratories
Target Compound Quantitation Report

Data File:	\\wessvr06\chromdata\INSTB.i\20090909-2.b\B10156.D		
Lims ID:	360-24194-A-4-B	Client ID:	OC-SB-424-0.0/1.0-XXX
Inject. Date:	10-Sep-2009 01:55:30	Dil. Factor:	1.0000
Sample Type:	Client Sample		
Sample ID:	360-24194-A-4-B		
Misc. Info.:	360-0001117-006		
Operator:	MZ	Instrument ID:	Inst. B
Vol. Injected:	2.0000	ALS Bottle#:	17
Lims Batch ID:	48751	Lims Sample ID:	6
Detector:	MS SCAN		
Method:	\\wessvr06\chromdata\INSTB.i\20090909-2.b\8270B.m		
Last Update:	10-Sep-2009 08:27:45	Calib Date:	09-Sep-2009 21:58:30
Quant Method:	Internal Standard	Quant By:	Initial Calibration
Last ICal File:	\\wessvr06\chromdata\INSTB.i\20090909-4.b\B10149.D		
Limit Group:	SMS - 8270LL SVOA Calibration		
Integrator:	RTE		
Process Host:	WES1001		
Reviewed By:	sullivanp	Date:	10-Sep-2009 08:27:45
Reviewed By:	sullivanp	Date:	10-Sep-2009 08:28:27

Compound	Sig	RT	EXP RT	DLT RT	Response	Amount ug/mL	Flags
* 1 1,4-Dichlorobenzene-d4	150	7.574	7.574	0.000	580858	2.00	
* 2 Naphthalene-d8	136	8.709	8.705	0.004	1409156	2.00	
* 3 Acenaphthene-d10	164	10.214	10.215	-0.001	701342	2.00	
* 4 Phenanthrene-d10	188	11.460	11.461	-0.001	1235082	2.00	
* 5 Chrysene-d12	240	14.763	14.760	0.003	971948	2.00	
* 6 Perylene-d12	264	17.187	17.183	0.004	693250	2.00	
$ 7 2-Fluorophenol	112	6.386	6.359	0.027	1290235	8.78	
$ 8 Phenol-d5	99	7.262	7.253	0.009	1621047	8.26	
$ 9 Nitrobenzene-d5	82	8.093	8.090	0.003	630844	3.18	
$ 10 2-Fluorobiphenyl	172	9.613	9.614	-0.001	1546381	3.39	
$ 11 2,4,6-Tribromophenol	330	10.887	10.884	0.003	303704	6.78	
$ 12 Terphenyl-d14	244	12.941	12.942	-0.001	1273685	3.46	
17 Benzaldehyde	105	7.185	7.186	-0.001	37579	0.4667	
21 2-Chlorophenol	128	7.420	7.412	0.008	9818	0.0552	
22 1,4-Dichlorobenzene	146	7.545	7.542	0.003	9517	0.0448	
23 1,3-Dichlorobenzene	146	7.589	7.590	-0.001	8949	0.0401	
26 2-Methylphenol	108	7.805	7.796	0.009	11563	0.0756	
28 3 & 4 Methylphenol	108	7.925	7.922	0.003	11502	0.0739	
30 Acetophenone	105	7.944	7.946	-0.002	22381	0.0957	
35 2,4-Dimethylphenol	107	8.382	8.383	-0.001	12409	0.0761	
36 Benzoic acid	105	8.440	8.447	-0.007	200039	3.91	
41 Naphthalene	128	8.723	8.725	-0.002	34936	0.0626	
46 2-Methylnaphthalene	142	9.305	9.306	-0.001	23046	0.0628	
47 1-Methylnaphthalene	142	9.401	9.403	-0.002	23316	0.0625	
52 1,1'-Biphenyl	154	9.695	9.696	-0.001	34549	0.0687	M
54 Phenyl ether	170	9.781	9.783	-0.002	20916	0.0839	
56 Dimethyl phthalate	163	9.959	9.960	-0.001	42779	0.1003	
58 Acenaphthylene	152	10.089	10.090	-0.001	43219	0.0769	
61 Acenaphthene	153	10.243	10.244	-0.001	33288	0.0844	
64 Dibenzofuran	168	10.368	10.369	-0.001	45092	0.0867	

1/13/10

Report Date: 10-Sep-2009 08:28:28 Chrom Revision: 1.0.2009.827
Data File: \\wessvr06\chromdata\NSTB.i\20090909-2.b\B10156.D

Compound	Sig	RT	EXP RT	DLT RT	Response	Amount ug/mL	Flags
66 Diethyl phthalate	149	10.536	10.538	-0.002	50109	0.1137	
69 Fluorene	166	10.661	10.663	-0.002	45860	0.1069	
71 Diphenylamine	169	10.729	10.730	-0.001	42676	0.1069	
72 N-Nitrosodiphenylamine	169	10.729	10.730	-0.001	42676	0.1069	
80 Phenanthrene	178	11.479	11.480	-0.001	160235	0.2560	M
81 Anthracene	178	11.517	11.519	-0.001	71888	0.1233	M
83 Carbazole	167	11.638	11.639	-0.001	66145	0.1215	
84 Di-n-butyl phthalate	149	11.883	11.884	-0.001	282357	0.3734	
85 Pyrene	202	12.566	12.567	-0.001	282887	0.4858	
87 Fluoranthene	202	12.830	12.826	0.004	249788	0.4136	
89 Butyl benzyl phthalate	149	13.600	13.596	0.004	50159	0.1823	
92 Bis(2-ethylhexyl) phthalate	149	14.662	14.663	-0.001	310063	0.9112	
93 Benzo[a]anthracene	228	14.720	14.721	-0.001	107333	0.2485	
94 Chrysene	228	14.821	14.817	0.004	134807	0.3178	
95 Di-n-octyl phthalate	149	15.821	15.818	0.003	72519	0.2417	
97 Benzo[b]fluoranthene	252	16.547	16.544	0.003	110057	0.2676	
98 Benzo[k]fluoranthene	252	16.576	16.577	-0.001	106187	0.2725	
99 Benzo[a]pyrene	252	17.120	17.082	0.038	783508	2.59	
100 Indeno[1,2,3-cd]pyrene	276	19.327	19.318	0.009	52012	0.2543	
101 Dibenz(a,h)anthracene	278	19.327	19.323	0.004	27607	0.1864	
102 Benzo[g,h,i]perylene	276	19.957	19.953	0.004	47270	0.2368	

QC Flag Legend

Review Flags
M - Manually Integrated

1/12/10

TestAmerica Laboratories
Target Compound Quantitation Report

Data File:	\\wessvr06\chromdata\NSTB.i\20090909-2.b\B10158.D		
Lims ID:	360-24194-A-6-B	Client ID:	OC-SB-424-7.0/9.0-XXX
Inject. Date:	10-Sep-2009 03:02:30	Dil. Factor:	1.0000
Sample Type:	Client Sample		
Sample ID:	360-24194-A-6-B		
Misc. Info.:	360-0001117-008		
Operator:	MZ	Instrument ID:	Inst. B
Vol. Injected:	2.0000	ALS Bottle#:	19
Lims Batch ID:	48751	Lims Sample ID:	8
Detector:	MS SCAN		
Method:	\\wessvr06\chromdata\NSTB.i\20090909-2.b\8270B.m		
Last Update:	10-Sep-2009 08:33:44	Calib Date:	09-Sep-2009 21:58:30
Quant Method:	Internal Standard	Quant By:	Initial Calibration
Last ICal File:	\\wessvr06\chromdata\NSTB.i\20090909-4.b\B10149.D		
Limit Group:	SMS - 8270LL SVOA Calibration		
Integrator:	RTE		
Process Host:	WES1001		
Reviewed By:	sullivanp	Date:	10-Sep-2009 08:33:44

Compound	Sig	RT	EXP RT	DLT RT	Response	Amount ug/mL	Flags
* 1 1,4-Dichlorobenzene-d4	150	7.572	7.574	-0.002	545893	2.00	
* 2 Naphthalene-d8	136	8.707	8.705	0.002	1344457	2.00	
* 3 Acenaphthene-d10	164	10.217	10.215	0.002	674717	2.00	
* 4 Phenanthrene-d10	188	11.463	11.461	0.002	1161372	2.00	
* 5 Chrysene-d12	240	14.766	14.760	0.006	895435	2.00	
* 6 Perylene-d12	264	17.185	17.183	0.002	630913	2.00	
$ 7 2-Fluorophenol	112	6.389	6.359	0.030	1379756	10.0	
$ 8 Phenol-d5	99	7.265	7.253	0.012	1760396	9.54	
$ 9 Nitrobenzene-d5	82	8.092	8.090	0.002	663047	3.50	
$ 10 2-Fluorobiphenyl	172	9.611	9.614	-0.003	1615909	3.68	
$ 11 2,4,6-Tribromophenol	330	10.890	10.884	0.006	361855	8.43	
$ 12 Terphenyl-d14	244	12.944	12.942	0.002	1530754	4.52	
17 Benzaldehyde	105	7.188	7.186	0.002	30580	0.4041	
19 Aniline	93	7.313	7.311	0.002	29185	0.1378	
30 Acetophenone	105	7.947	7.946	0.001	218109	0.99	
41 Naphthalene	128	8.722	8.725	-0.003	20155	0.0379	
52 1,1'-Biphenyl	154	9.693	9.696	-0.003	66011	0.1363	
54 Phenyl ether	170	9.780	9.783	-0.003	20540	0.0863	
66 Diethyl phthalate	149	10.539	10.538	0.001	19060	0.0449	
71 Diphenylamine	169	10.732	10.730	0.002	4582666	12.2	
72 N-Nitrosodiphenylamine	169	10.732	10.730	0.002	4582666	12.2	
84 Di-n-butyl phthalate	149	11.886	11.884	0.002	324512	0.4563	
89 Butyl benzyl phthalate	149	13.598	13.596	0.002	18672	0.0737	
92 Bis(2-ethylhexyl) phthalate	149	14.665	14.663	0.002	150107	0.4788	

30520 x 2000/5 x 1mL/1mL = 4.016 OK but end line spread
54593 x 0.7042 x 0.03069 x 0.94 x 1000

1/13/10

Report Date: 10-Sep-2009 08:12:22 Chrom Revision: 1.0.2009.827

TestAmerica Laboratories
Target Compound Quantitation Report

Data File:	\\wessvr06\chromdata\INSTB.i\20090909-2.b\B10160.D		
Lims ID:	360-24194-A-7-B	Client ID:	OC-SB-425-0.0/1.0-XXX
Inject. Date:	10-Sep-2009 04:10:30	Dil. Factor:	5.0000
Sample Type:	Client Sample		
Sample ID:	360-24194-A-7-B		
Misc. Info.:	360-0001117-010		
Operator:	MZ	Instrument ID:	Inst. B
Vol. Injected:	2.0000	ALS Bottle#:	21
Lims Batch ID:	48751	Lims Sample ID:	10
Detector:	MS SCAN		
Method:	\\wessvr06\chromdata\INSTB.i\20090909-2.b\8270B.m		
Last Update:	10-Sep-2009 08:08:52	Calib Date:	09-Sep-2009 21:58:30
Quant Method:	Internal Standard	Quant By:	Initial Calibration
Last ICal File:	\\wessvr06\chromdata\INSTB.i\20090909-4.b\B10149.D		
Limit Group:	SMS - 8270LL SVOA Calibration		
Integrator:	RTE		
Process Host:	WES1001		
Reviewed By:	sullivanp	Date:	10-Sep-2009 08:07:25
Reviewed By:	sullivanp	Date:	10-Sep-2009 08:12:21

Compound	Sig	RT	EXP RT	DLT RT	Response	Amount ug/mL	Flags
* 1 1,4-Dichlorobenzene-d4	150	7.573	7.574	-0.001	501134	2.00	
* 2 Naphthalene-d8	136	8.708	8.705	0.003	1189506	2.00	
* 3 Acenaphthene-d10	164	10.218	10.215	0.003	581607	2.00	
* 4 Phenanthrene-d10	188	11.463	11.461	0.002	939379	2.00	
* 5 Chrysene-d12	240	14.767	14.760	0.007	652378	2.00	
* 6 Perylene-d12	264	17.109	17.183	-0.074	727776	2.00	M
$ 7 2-Fluorophenol	112	6.380	6.359	0.021	176228	1.39	
$ 8 Phenol-d5	99	7.260	7.253	0.007	205038	1.21	
$ 9 Nitrobenzene-d5	82	8.092	8.090	0.002	88196	0.5268	
$ 10 2-Fluorobiphenyl	172	9.612	9.614	-0.002	213830	0.5649	
$ 11 2,4,6-Tribromophenol	330	10.886	10.884	0.002	35263	1.56	
$ 12 Terphenyl-d14	244	12.944	12.942	0.002	145782	0.5905	
17 Benzaldehyde	105	7.188	7.186	0.002	9233	0.1329	
18 Phenol	94	7.270	7.263	0.007	32241	0.1891	
19 Aniline	93	7.313	7.311	0.002	167996	0.8639	
30 Acetophenone	105	7.948	7.946	0.002	60316	0.2988	
41 Naphthalene	128	8.727	8.725	0.002	10044	0.0213	
42 4-Chloroaniline	127	8.770	8.768	0.002	4892	0.0264	
46 2-Methylnaphthalene	142	9.304	9.306	-0.002	9359	0.0302	
47 1-Methylnaphthalene	142	9.405	9.403	0.002	6951	0.0221	
52 1,1'-Biphenyl	154	9.694	9.696	-0.002	26854	0.0643	
54 Phenyl ether	170	9.780	9.783	-0.003	43536	0.2068	
56 Dimethyl phthalate	163	9.958	9.960	-0.002	17108	0.0484	
58 Acenaphthylene	152	10.093	10.090	0.003	11871	0.0255	
66 Diethyl phthalate	149	10.540	10.538	0.002	6553	0.0179	
71 Diphenylamine	169	10.732	10.730	0.002	1175362	3.87	
72 N-Nitrosodiphenylamine	169	10.732	10.730	0.002	1175362	3.87	
80 Phenanthrene	178	11.483	11.480	0.003	37368	0.0785	M
83 Carbazole	167	11.641	11.639	0.002	21820	0.0527	
84 Di-n-butyl phthalate	149	11.882	11.884	-0.002	168822	0.2935	

1167940 × 2000 mL / 1 mL × 1 mL / 1 mL × 5

0.7741 × 501134 × 0.03024 × 0.471 × 1000 = ~~29.442~~ (5) 1/13/10

147 ng/L

09/17/2009

1/13/10

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Westfield Job No.: 360-24194-1 Analy Batch No.: 48761

SDG No.: OCRI-02

Instrument ID: Inst. B GC Column: Rtx-5ms ID: 0.25(um) Heated Purge: (Y/N) N

Calibration Start Date: 09/09/2009 17:26 Calibration End Date: 09/09/2009 21:58 Calibration ID: 4274

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD01 360-48761/3	B10142.D
Level 2	STD025 360-48761/4	B10143.D
Level 3	STD05 360-48761/5	B10144.D
Level 4	STD1 360-48761/6	B10145.D
Level 5	STD25 360-48761/7	B10146.D
Level 6	STD5 360-48761/2	B10141.D
Level 7	STD8 360-48761/8	B10147.D
Level 8	STD10 360-48761/9	B10148.D
Level 9	STD20 360-48761/10	B10149.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
1,4-Dioxane	0.4673 0.1896	0.3206 0.1712	0.2624 0.1628	0.2390 +++++	0.2086	Lin1	0.0368	0.1707							0.9930		0.9900
Pyridine	0.6176 0.4794	0.5831 0.4474	0.6011 0.4297	0.5453 +++++	0.5096	Ave		0.5267				14.0		15.0			
N-Nitrosodimethylamine	0.3562 0.3278	0.4236 0.2969	0.4054 0.2848	0.3818 +++++	0.3416	Ave		0.3522				14.0		15.0			
Benzoic acid	+++++ 0.0491	+++++ 0.1011	0.0103 0.1173	0.0139 0.1359	0.0277	Qua	-0.116	0.0926	0.0025						0.9910		0.9900
Benzaldehyde	0.3221 0.2480	0.3159 0.2287	0.3024 0.2204	0.2983 +++++	0.2825	Ave		0.2773				14.0		15.0			
Phenol	0.6698 0.6493	0.7650 0.5910	0.7667 0.5642	0.7361 +++++	0.7008	Ave		0.6804				11.0		15.0			
Aniline	0.7542 0.7838	0.7845 0.7110	0.8481 0.6721	0.8372 +++++	0.8178	Ave		0.7761				7.9		15.0			
Bis(2-chloroethyl)ether	0.6535 0.5417	0.6398 0.4683	0.6375 0.4448	0.6537 +++++	0.5860	Ave		0.5782				15.0		15.0			
2-Chlorophenol	0.6132 0.5960	0.6871 0.5255	0.6732 0.4939	0.6796 +++++	0.6337	Ave		0.6128				12.0		15.0			
1,4-Dichlorobenzene	0.8290 0.6869	0.8164 0.5987	0.8140 0.5716	0.8059 +++++	0.7307	Ave		0.7317				14.0		15.0			
1,3-Dichlorobenzene	0.8705 0.7103	0.8873 0.6179	0.8764 0.5931	0.8246 +++++	0.7603	Ave		0.7676				15.0		15.0			
Benzyl alcohol	0.3821 0.4605	0.4344 0.4189	0.4501 0.3919	0.4822 0.2899	0.4777	Ave		0.4208				14.0		15.0			
1,2-Dichlorobenzene	0.8257 0.6512	0.8275 0.5720	0.7927 0.5423	0.7653 +++++	0.7004	Qua	0.0282	0.7401	-0.020						1.0000		0.9900

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM III
GC/MS SEMI VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24194-1

SDG No.: OCRI-02

Matrix: Solid Level: Low Lab File ID: B10169.D

Lab ID: 360-24194-3 MS Client ID: OC-SB-421-8.0/10.0-XXX MS

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	QC LIMITS REC	#
1,1'-Biphenyl	351	ND	301 J	86	40-140	
1,2,4,5-Tetrachlorobenzene	351	ND	313 J	89	40-140	
1,2,4-Trichlorobenzene	351	ND	259 J	74	40-140	
1,2-Dichlorobenzene	351	ND	257 J	73	40-140	
1,3-Dichlorobenzene	351	ND	278 J	79	40-140	
1,4-Dichlorobenzene	351	ND	266 J	76	40-140	
1-Methylnaphthalene	351	ND	311 J	89	40-140	
2,3,4,6-Tetrachlorophenol	351	ND	297 J	85	40-140	
2,4,5-Trichlorophenol	351	ND	324 J	92	30-130	
2,4,6-Trichlorophenol	351	ND	293 J	84	30-130	
2,4-Dichlorophenol	351	ND	267 J	76	30-130	
2,4-Dimethylphenol	351	ND	312 J	89	30-130	
2,4-Dinitrophenol	351	ND	619	176	30-130	F
2,4-Dinitrotoluene	351	ND	256 J	73	40-140	
2,6-Dinitrotoluene	351	ND	244 J	69	40-140	
2-Chloronaphthalene	351	ND	252 J	72	40-140	
2-Chlorophenol	351	ND	301 J	86	30-130	
2-Methylnaphthalene	351	ND	315 J	90	40-140	
2-Methylphenol	351	ND	329 J	94	30-130	
2-Nitroaniline	351	ND	302 J	86	40-140	
2-Nitrophenol	351	ND	246 J	70	30-130	
3 & 4 Methylphenol	351	ND	324 J	92	30-130	
3,3'-Dichlorobenzidine	351	ND	131 J	37	40-140	F
3-Nitroaniline	351	ND	294 J	84	40-140	
4,6-Dinitro-2-methylphenol	351	ND	293 J	84	30-130	
4-Bromophenyl phenyl ether	351	ND	296 J	84	40-140	
4-Chloro-3-methylphenol	351	ND	300 J	85	30-130	
4-Chloroaniline	351	ND	239 J	68	40-140	
4-Chlorophenyl phenyl ether	351	ND	295 J	84	40-140	
4-Nitroaniline	351	ND	296 J	84	40-140	
4-Nitrophenol	351	ND	150 J	43	30-130	
Acenaphthene	351	ND	334 J	95	40-140	
Acenaphthylene	351	ND	303 J	86	40-140	
Acetophenone	351	ND	362	103	40-140	
Aniline	351	ND	164 J	47	40-140	
Anthracene	351	ND	384	109	40-140	
Atrazine	351	ND	294 J	84	40-140	
Azobenzene	351	ND	289 J	82	40-140	
2,2'-oxybis[1-chloropropane]	351	ND	298 J	85	40-140	
Benzaldehyde	351	ND	497	142	40-140	F
Benzo[a]anthracene	351	ND	353	101	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

11/13/10 (2)

FORM III
GC/MS SEMI VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24194-1

SDG No.: OCRI-02

Matrix: Solid Level: Low Lab File ID: B10170.D

Lab ID: 360-24194-3 MSD Client ID: OC-SB-421-8.0/10.0-XXX MSD

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1'-Biphenyl	355	284 J	80	6	30	40-140	
1,2,4,5-Tetrachlorobenzene	355	292 J	82	7	30	40-140	
1,2,4-Trichlorobenzene	355	257 J	73	1	30	40-140	
1,2-Dichlorobenzene	355	252 J	71	2	30	40-140	
1,3-Dichlorobenzene	355	261 J	74	6	30	40-140	
1,4-Dichlorobenzene	355	266 J	75	0	30	40-140	
1-Methylnaphthalene	355	300 J	85	4	30	40-140	
2,3,4,6-Tetrachlorophenol	355	293 J	83	1	30	40-140	
2,4,5-Trichlorophenol	355	270 J	76	18	30	30-130	
2,4,6-Trichlorophenol	355	258 J	73	13	30	30-130	
2,4-Dichlorophenol	355	241 J	68	10	30	30-130	
2,4-Dimethylphenol	355	289 J	82	8	30	30-130	
2,4-Dinitrophenol	355	621	175	0	30	30-130	F
2,4-Dinitrotoluene	355	241 J	68	6	30	40-140	
2,6-Dinitrotoluene	355	247 J	70	1	30	40-140	
2-Chloronaphthalene	355	233 J	66	8	30	40-140	
2-Chlorophenol	355	292 J	82	3	30	30-130	
2-Methylnaphthalene	355	302 J	85	4	30	40-140	
2-Methylphenol	355	290 J	82	13	30	30-130	
2-Nitroaniline	355	255 J	72	17	30	40-140	
2-Nitrophenol	355	244 J	69	1	30	30-130	
3 & 4 Methylphenol	355	284 J	80	13	30	30-130	
3,3'-Dichlorobenzidine	355	127 J	36	3		40-140	F
3-Nitroaniline	355	277 J	78	6	30	40-140	
4,6-Dinitro-2-methylphenol	355	296 J	83	1	30	30-130	
4-Bromophenyl phenyl ether	355	273 J	77	8	30	40-140	
4-Chloro-3-methylphenol	355	295 J	83	2	30	30-130	
4-Chloroaniline	355	235 J	66	2	30	40-140	
4-Chlorophenyl phenyl ether	355	272 J	77	8	30	40-140	
4-Nitroaniline	355	284 J	80	4	30	40-140	
4-Nitrophenol	355	153 J	43	2	30	30-130	
Acenaphthene	355	359	101	7	30	40-140	
Acenaphthylene	355	285 J	80	6	30	40-140	
Acetophenone	355	348 J	98	4	30	40-140	
Aniline	355	157 J	44	4	30	40-140	
Anthracene	355	369	104	4	30	40-140	
Atrazine	355	292 J	82	1	30	40-140	
Azobenzene	355	271 J	76	6	30	40-140	
2,2'-oxybis[1-chloropropane]	355	292 J	82	2	30	40-140	
Benzaldehyde	355	481	136	3	30	40-140	
Benzo[a]anthracene	355	346 J	98	2	30	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Westfield Job No.: 360-24194-2

SDG No.: OCRI-02A

Lab Sample ID: CCV 360-48751/2 Calibration Date: 09/09/2009 23:39

Instrument ID: Inst. B Calib Start Date: 09/09/2009 17:26

GC Column: Rtx-5ms ID: 0.25(um) Calib End Date: 09/09/2009 21:58

Lab File ID: B10152.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Lin1		0.1819		5110	5000	2.2	30.0
Pyridine	Ave	0.5267	0.4733		4490	5000	-10.1	30.0
N-Nitrosodimethylamine	Ave	0.3522	0.3120		4430	5000	-11.4	30.0
Benzaldehyde	Ave	0.2773	0.2526		4550	5000	-8.9	30.0
Phenol	Ave	0.6804	0.6431		4730	5000	-5.5	20.0
Aniline	Ave	0.7761	0.7562		4870	5000	-2.6	30.0
Bis(2-chloroethyl)ether	Ave	0.5782	0.5309		4590	5000	-8.2	30.0
2-Chlorophenol	Ave	0.6128	0.5778		4710	5000	-5.7	30.0
1,4-Dichlorobenzene	Ave	0.7317	0.6637		4540	5000	-9.3	20.0
1,3-Dichlorobenzene	Ave	0.7676	0.6685		4350	5000	-12.9	30.0
Benzyl alcohol	Ave	0.4208	0.4418		5250	5000	5.0	30.0
1,2-Dichlorobenzene	Qua		0.6279		4850	5000	-2.9	30.0
2-Methylphenol	Ave	0.5265	0.4980		4730	5000	-5.4	30.0
2,2'-oxybis[1-chloropropane]	Ave	0.9915	0.9127		4600	5000	-7.9	30.0
3 & 4 Methylphenol	Ave	0.5360	0.5253		4900	5000	-2.0	30.0
Acetophenone	Ave	0.8057	0.7592		4710	5000	-5.8	30.0
N-Nitrosodi-n-propylamine	Ave	0.4006	0.3828	0.0500	4780	5000	-4.5	30.0
Hexachloroethane	Ave	0.2576	0.2451		4760	5000	-4.9	30.0
Nitrobenzene	Ave	0.2799	0.2803		5010	5000	0.2	30.0
Isophorone	Ave	0.4565	0.4882		5350	5000	7.0	30.0
2,4-Dimethylphenol	Ave	0.2315	0.2337		5050	5000	0.9	30.0
2-Nitrophenol	Lin2		0.1561		5240	5000	4.7	20.0
Benzoic acid	Qua		0.0878		5250	5000	5.0	30.0
Bis(2-chloroethoxy)methane	Ave	0.2908	0.2969		5110	5000	2.1	30.0
2,4-Dichlorophenol	Ave	0.2100	0.2215		5270	5000	5.5	20.0
1,2,4-Trichlorobenzene	Ave	0.2601	0.2567		4930	5000	-1.3	30.0
Alpha-Terpineol	Ave	0.2130	0.2270		5330	5000	6.6	30.0
Naphthalene	Ave	0.7917	0.7931		5010	5000	0.2	30.0
4-Chloroaniline	Ave	0.3117	0.3342		5360	5000	7.2	30.0
Hexachlorobutadiene	Ave	0.1298	0.1279		4930	5000	-1.5	20.0
Caprolactam	Lin2		0.1174		5310	5000	6.2	30.0
4-Chloro-3-methylphenol	Ave	0.2098	0.2202		5250	5000	5.0	20.0
2-Methylnaphthalene	Ave	0.5207	0.5270		5060	5000	1.2	30.0
1-Methylnaphthalene	Ave	0.5291	0.5345		5050	5000	1.0	30.0
1,2,4,5-Tetrachlorobenzene	Ave	0.2204	0.2263		5130	5000	2.7	30.0
Hexachlorocyclopentadiene	Lin		0.1963	0.0500	4790	5000	-4.1	30.0
2,4,6-Trichlorophenol	Lin2		0.3625		5560	5000	11.3	20.0
2,4,5-Trichlorophenol	Lin2		0.3421		5000	5000	0.0	30.0
1,1'-Biphenyl	Ave	1.435	1.487		5180	5000	3.6	30.0
2-Chloronaphthalene	Ave	1.279	1.349		5270	5000	5.5	30.0
Phenyl ether	Ave	0.3539	0.3513		4960	5000	-0.7	30.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Westfield Job No.: 360-24194-2

SDG No.: OCRI-02A

Lab Sample ID: CCV 360-48751/2 Calibration Date: 09/09/2009 23:39

Instrument ID: Inst. B Calib Start Date: 09/09/2009 17:26

GC Column: Rtx-5ms ID: 0.25(um) Calib End Date: 09/09/2009 21:58

Lab File ID: B10152.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2-Nitroaniline	Lin2		0.3351		5220	5000	4.4	30.0
Dimethyl phthalate	Ave	1.216	1.265		5200	5000	4.0	30.0
2,6-Dinitrotoluene	Ave	0.2831	0.3057		5400	5000	8.0	30.0
Acenaphthylene	Ave	1.602	1.757		5480	5000	9.7	30.0
3-Nitroaniline	Ave	0.2882	0.3169		5500	5000	10.0	30.0
Acenaphthene	Ave	1.124	1.174		5220	5000	4.4	20.0
2,4-Dinitrophenol	Qua		0.0890	0.0500	4870	5000	-2.6	30.0
4-Nitrophenol	Lin		0.1493	0.0500	4890	5000	-2.1	30.0
Dibenzofuran	Ave	1.484	1.555		5240	5000	4.8	30.0
2,4-Dinitrotoluene	Lin2		0.3927		5190	5000	3.8	30.0
2,3,4,6-Tetrachlorophenol	Lin1		0.2485		5010	5000	0.3	30.0
Diethyl phthalate	Ave	1.257	1.275		5070	5000	1.4	30.0
4-Chlorophenyl phenyl ether	Ave	0.5784	0.5924		5120	5000	2.4	30.0
Fluorene	Ave	1.224	1.302		5320	5000	6.4	30.0
4-Nitroaniline	Lin2		0.3085		5310	5000	6.2	30.0
4,6-Dinitro-2-methylphenol	Qua		0.0927		5090	5000	1.9	30.0
Diphenylamine	Ave	0.6467	0.6836		5290	5000	5.7	30.0
N-Nitrosodiphenylamine	Ave	0.6467	0.6836		5290	5000	5.7	20.0
1,2-Diphenylhydrazine	Ave	0.7041	0.7699		5470	5000	9.3	30.0
Azobenzene	Ave	0.7041	0.7699		5470	5000	9.3	30.0
Benzophenone	Ave	0.5911	0.6305		5330	5000	6.7	30.0
4-Bromophenyl phenyl ether	Ave	0.1838	0.1864		5070	5000	1.4	30.0
Atrazine	Ave	0.1802	0.1923		5340	5000	6.7	30.0
Hexachlorobenzene	Ave	0.1712	0.1690		4940	5000	-1.3	30.0
Pentachlorophenol	Lin1		0.0765		5610	5000	12.3	20.0
Pentachloronitrobenzene	Lin2		0.0713		5020	5000	0.4	30.0
Phenanthrene	Ave	1.014	1.054		5200	5000	4.0	30.0
Anthracene	Ave	0.9445	1.027		5440	5000	8.8	30.0
Carbazole	Ave	0.8818	0.9090		5150	5000	3.1	30.0
Di-n-butyl phthalate	Ave	1.225	1.175		4800	5000	-4.0	30.0
Pyrene	Ave	1.198	1.220		5090	5000	1.8	30.0
Benzidine	Lin		0.7565		4530	5000	-9.3	30.0
Fluoranthene	Ave	0.9779	1.006		5140	5000	2.8	20.0
Butyl benzyl phthalate	Ave	0.5662	0.6351		5610	5000	12.2	30.0
3,3'-Dichlorobenzidine	Lin2		0.7661		5390	5000	7.8	30.0
Bis(2-ethylhexyl) phthalate	Ave	0.7002	0.7916		5650	5000	13.1	30.0
Benzo[a]anthracene	Ave	0.8888	0.9524		5360	5000	7.2	30.0
Chrysene	Ave	0.8727	0.9042		5180	5000	3.6	30.0
Di-n-octyl phthalate	Lin1		1.593		4850	5000	-3.1	20.0
Benzo[b]fluoranthene	Ave	1.187	1.160		4890	5000	-2.2	30.0
Benzo[k]fluoranthene	Ave	1.124	1.273		5660	5000	13.2	30.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Westfield Job No.: 360-24194-2

SDG No.: OCRI-02A

Lab Sample ID: CCV 360-48751/2 Calibration Date: 09/09/2009 23:39

Instrument ID: Inst. B Calib Start Date: 09/09/2009 17:26

GC Column: Rtx-5ms ID: 0.25(um) Calib End Date: 09/09/2009 21:58

Lab File ID: B10152.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Benzo[a]pyrene	Ave	0.8727	0.9535		5460	5000	9.3	20.0
Indeno[1,2,3-cd]pyrene	Lin1		0.7457		4870	5000	-2.5	30.0
Dibenz(a,h)anthracene	Lin1		0.6040		4800	5000	-4.1	30.0
Benzo[g,h,i]perylene	Ave	0.5758	0.5971		5190	5000	3.7	30.0
2-Fluorophenol	Ave	0.5060	0.4727		4670	5000	-6.6	30.0
Phenol-d5	Ave	0.6760	0.6313		4670	5000	-6.6	30.0
Nitrobenzene-d5	Ave	0.2815	0.2875		5110	5000	2.1	30.0
2-Fluorobiphenyl	Ave	1.302	1.353		5200	5000	4.0	30.0
2,4,6-Tribromophenol	Lin		0.0683		4900	5000	-2.0	30.0
Terphenyl-d14	Ave	0.7569	0.7791		5150	5000	2.9	30.0

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FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Westfield Job No.: 360-24194-2

SDG No.: OCRI-02A

Lab Sample ID: CCV 360-48389/2 Calibration Date: 08/31/2009 15:03

Instrument ID: Inst. B Calib Start Date: 08/27/2009 09:11

GC Column: Rtx-5ms ID: 0.25(um) Calib End Date: 08/27/2009 13:43

Lab File ID: B9910.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Lin1		0.2503		5330	5000	6.6	30.0
N-Nitrosodimethylamine	Ave	0.3528	0.3307		4690	5000	-6.3	30.0
Pyridine	Lin1		0.6009		5650	5000	13.1	30.0
Benzaldehyde	Ave	0.7664	0.7244		4730	5000	-5.5	30.0
Phenol	Ave	0.7664	0.7244		4730	5000	-5.5	20.0
Aniline	Ave	0.8532	0.6338		3710	5000	-25.7	30.0
Bis(2-chloroethyl)ether	Qua		0.8051		6620	5000	32.4*	30.0
2-Chlorophenol	Ave	0.6177	0.6256		5060	5000	1.3	30.0
1,4-Dichlorobenzene	Lin1		0.7231		5330	5000	6.6	20.0
1,3-Dichlorobenzene	Lin1		0.7388		5260	5000	5.3	30.0
2-Methylphenol	Ave	0.3530	0.2831		4010	5000	-19.8	30.0
Benzyl alcohol	Ave	0.4448	0.3490		3920	5000	-21.5	30.0
1,2-Dichlorobenzene	Ave	0.7498	0.6802		4540	5000	-9.3	30.0
3 & 4 Methylphenol	Ave	0.5658	0.5885		5200	5000	4.0	30.0
2,2'-oxybis[1-chloropropane]	Lin1		0.9798		5320	5000	6.4	30.0
N-Nitrosodi-n-propylamine	Ave	0.4011	0.4203	0.0500	5240	5000	4.8	30.0
Acetophenone	Ave	0.8448	0.8153		4830	5000	-3.5	30.0
Hexachloroethane	Ave	0.2654	0.2537		4780	5000	-4.4	30.0
Nitrobenzene	Ave	0.2699	0.2941		5450	5000	9.0	30.0
Isophorone	Ave	0.4948	0.5335		5390	5000	7.8	30.0
2,4-Dimethylphenol	Ave	0.2333	0.2360		5060	5000	1.1	30.0
2-Nitrophenol	Lin1		0.1425		5060	5000	1.2	20.0
Benzoic acid	Qua		0.0743		6710	5000	34.1*	30.0
Bis(2-chloroethoxy)methane	Ave	0.3424	0.3322		4850	5000	-3.0	30.0
2,4-Dichlorophenol	Lin2		0.2259		5110	5000	2.3	20.0
1,2,4-Trichlorobenzene	Ave	0.2852	0.2695		4730	5000	-5.5	30.0
Alpha-Terpineol	Ave	0.2287	0.2353		5140	5000	2.8	30.0
Naphthalene	Ave	0.9640	0.9120		4730	5000	-5.4	30.0
4-Chloroaniline	Ave	0.4424	0.2838		3210	5000	-35.9*	30.0
Hexachlorobutadiene	Ave	0.1409	0.1352		4800	5000	-4.0	20.0
Caprolactam	Lin1		0.1214		4970	5000	-0.6	30.0
4-Chloro-3-methylphenol	Lin2		0.2185		4840	5000	-3.2	20.0
2-Methylnaphthalene	Ave	0.5724	0.5479		4790	5000	-4.3	30.0
1-Methylnaphthalene	Ave	0.5896	0.5557		4710	5000	-5.7	30.0
Hexachlorocyclopentadiene	Lin		0.0005*	0.0500	509	5000	-89.8*	30.0
1,2,4,5-Tetrachlorobenzene	Ave	0.2516	0.2381		4730	5000	-5.4	30.0
2,4,6-Trichlorophenol	Lin1		0.2896		4370	5000	-12.7	20.0
2,4,5-Trichlorophenol	Lin1		0.2971		4290	5000	-14.3	30.0
1,1'-Biphenyl	Ave	1.479	1.405		4750	5000	-5.0	30.0
2-Chloronaphthalene	Ave	1.363	1.334		4900	5000	-2.1	30.0
Phenyl ether	Ave	0.3972	0.3792		4770	5000	-4.5	30.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Westfield Job No.: 360-24194-2

SDG No.: OCRI-02A

Lab Sample ID: CCV 360-48389/2 Calibration Date: 08/31/2009 15:03

Instrument ID: Inst. B Calib Start Date: 08/27/2009 09:11

GC Column: Rtx-5ms ID: 0.25(um) Calib End Date: 08/27/2009 13:43

Lab File ID: B9910.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2-Nitroaniline	Lin1		0.2996		4980	5000	-0.3	30.0
Dimethyl phthalate	Ave	1.175	1.243		5290	5000	5.7	30.0
2,6-Dinitrotoluene	Lin1		0.2840		4920	5000	-1.6	30.0
Acenaphthylene	Ave	1.652	1.743		5280	5000	5.5	30.0
3-Nitroaniline	Lin1		0.1739		3310	5000	-33.8*	30.0
2,4-Dinitrophenol	Lin		0.0229*	0.0500	4480	5000	-10.5	30.0
4-Nitrophenol	Lin1		0.0943	0.0500	3820	5000	-23.6	30.0
Acenaphthene	Ave	1.199	1.140		4750	5000	-4.9	20.0
2,4-Dinitrotoluene	Lin1		0.3430		4930	5000	-1.5	30.0
Dibenzofuran	Ave	1.569	1.524		4850	5000	-2.9	30.0
2,3,4,6-Tetrachlorophenol	Lin1		0.1744		3430	5000	-31.5*	30.0
Diethyl phthalate	Ave	1.139	1.215		5330	5000	6.7	30.0
4-Chlorophenyl phenyl ether	Ave	0.6066	0.5834		4810	5000	-3.8	30.0
4-Nitroaniline	Lin		0.2031		4410	5000	-11.9	30.0
Fluorene	Ave	1.288	1.271		4940	5000	-1.3	30.0
4,6-Dinitro-2-methylphenol	Lin		0.0508		5210	5000	4.2	30.0
Diphenylamine	Ave	0.6715	0.6589		4910	5000	-1.9	30.0
N-Nitrosodiphenylamine	Ave	0.6715	0.6589		4910	5000	-1.9	20.0
1,2-Diphenylhydrazine	Ave	1.157	1.152		4980	5000	-0.4	30.0
Azobenzene	Ave	1.157	1.152		4980	5000	-0.4	30.0
Benzophenone	Ave	0.7505	0.7650		5100	5000	1.9	30.0
4-Bromophenyl phenyl ether	Ave	0.1945	0.1876		4820	5000	-3.6	30.0
Atrazine	Lin2		0.1847		4670	5000	-6.6	30.0
Hexachlorobenzene	Ave	0.1969	0.1811		4600	5000	-8.0	30.0
Pentachloronitrobenzene	Lin1		0.0676		4470	5000	-10.6	30.0
Pentachlorophenol	Lin		0.0025		1290	5000	-74.2*	20.0
Phenanthrene	Ave	1.123	1.046		4660	5000	-6.8	30.0
Anthracene	Ave	1.041	1.063		5110	5000	2.2	30.0
Carbazole	Ave	0.8367	0.6692		4000	5000	-20.0	30.0
Di-n-butyl phthalate	Ave	1.051	1.205		5730	5000	14.7	30.0
Fluoranthene	Ave	0.9772	0.9940		5090	5000	1.7	20.0
Benzidine	Qua		0.0727		3030	5000	-39.4*	30.0
Pyrene	Ave	1.495	1.264		4230	5000	-15.5	30.0
Butyl benzyl phthalate	Lin1		0.5941		4770	5000	-4.5	30.0
Bis(2-ethylhexyl) phthalate	Lin1		0.8466		5000	5000	0.0	30.0
3,3'-Dichlorobenzidine	Qua		0.2405		6000	5000	19.9	30.0
Benzo[a]anthracene	Ave	0.9429	0.9342		4950	5000	-0.9	30.0
Chrysene	Ave	0.9707	0.8956		4610	5000	-7.7	30.0
Di-n-octyl phthalate	Lin1		1.772		4010	5000	-19.8	20.0
Benzo[b]fluoranthene	Ave	1.318	1.121		4250	5000	-15.0	30.0
Benzo[k]fluoranthene	Ave	1.243	1.089		4380	5000	-12.4	30.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Westfield Job No.: 360-24194-2

SDG No.: OCRI-02A

Lab Sample ID: CCV 360-48389/2 Calibration Date: 08/31/2009 15:03

Instrument ID: Inst. B Calib Start Date: 08/27/2009 09:11

GC Column: Rtx-5ms ID: 0.25(um) Calib End Date: 08/27/2009 13:43

Lab File ID: B9910.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Benzo[a]pyrene	Lin1		0.9336		4520	5000	-9.7	20.0
Indeno[1,2,3-cd]pyrene	Lin1		0.7779		5220	5000	4.4	30.0
Dibenz(a,h)anthracene	Lin1		0.6182		5250	5000	5.0	30.0
Benzo[g,h,i]perylene	Ave	0.5917	0.6304		5330	5000	6.5	30.0
2-Fluorophenol	Ave	0.5642	0.5766		5110	5000	2.2	30.0
Phenol-d5	Ave	0.6958	0.6794		4880	5000	-2.4	30.0
Nitrobenzene-d5	Lin1		0.3176		5040	5000	0.8	30.0
2-Fluorobiphenyl	Ave	1.336	1.300		4860	5000	-2.7	30.0
2,4,6-Tribromophenol	Lin1		0.0365		2520	5000	-49.5*	30.0
Terphenyl-d14	Ave	0.8754	0.7349		4200	5000	-16.1	30.0

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Westfield Job No.: 360-24194-2

SDG No.: OCRI-02A

Instrument ID: Inst. B Start Date: 08/28/2009 10:44

Analysis Batch Number: 48213 End Date: 08/29/2009 00:19

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 360-48213/1		08/28/2009 10:44	1	B9884.D	Rtx-5ms 0.25(um)
CCV 360-48213/2 CCVIS		08/28/2009 11:18	1	B9885.D	Rtx-5ms 0.25(um)
MB 360-47986/1-A		08/28/2009 11:52	1	B9886.D	Rtx-5ms 0.25(um)
LCS 360-47986/2-A		08/28/2009 12:25	1	B9887.D	Rtx-5ms 0.25(um)
LCSD 360-47986/3-A		08/28/2009 12:59	1	B9888.D	Rtx-5ms 0.25(um)
ZZZZZ		08/28/2009 13:33	1		Rtx-5ms 0.25(um)
ZZZZZ		08/28/2009 14:07	1		Rtx-5ms 0.25(um)
ZZZZZ		08/28/2009 14:41	1		Rtx-5ms 0.25(um)
ZZZZZ		08/28/2009 15:15	1		Rtx-5ms 0.25(um)
ZZZZZ		08/28/2009 15:49	1		Rtx-5ms 0.25(um)
ZZZZZ		08/28/2009 16:23	1		Rtx-5ms 0.25(um)
ZZZZZ		08/28/2009 16:57	1		Rtx-5ms 0.25(um)
ZZZZZ		08/28/2009 17:31	1		Rtx-5ms 0.25(um)
ZZZZZ		08/28/2009 18:05	1		Rtx-5ms 0.25(um)
ZZZZZ		08/28/2009 18:39	1		Rtx-5ms 0.25(um)
ZZZZZ		08/28/2009 19:13	1		Rtx-5ms 0.25(um)
ZZZZZ		08/28/2009 19:47	1		Rtx-5ms 0.25(um)
ZZZZZ		08/28/2009 20:21	1		Rtx-5ms 0.25(um)
ZZZZZ		08/28/2009 20:55	1		Rtx-5ms 0.25(um)
ZZZZZ		08/28/2009 21:29	1		Rtx-5ms 0.25(um)
ZZZZZ		08/28/2009 22:03	5		Rtx-5ms 0.25(um)
360-24194-2	OC-SB-421-10.5/12.5-XX	08/28/2009 22:37	1	B9905.D	Rtx-5ms 0.25(um)
ZZZZZ		08/28/2009 23:11	1		Rtx-5ms 0.25(um)
ZZZZZ		08/28/2009 23:45	1		Rtx-5ms 0.25(um)
ZZZZZ		08/29/2009 00:19	1		Rtx-5ms 0.25(um)

2,4-dimethylphenol -32.2

~~2,4-nitrophenol~~

Benzoic Acid 32.2

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Westfield Job No.: 360-24194-2

SDG No.: OCRI-02A

Lab Sample ID: CCV 360-48213/2 Calibration Date: 08/28/2009 11:18

Instrument ID: Inst. B Calib Start Date: 08/27/2009 09:11

GC Column: Rtx-5ms ID: 0.25(um) Calib End Date: 08/27/2009 13:43

Lab File ID: B9885.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Lin1		0.2450		5220	5000	4.3	30.0
N-Nitrosodimethylamine	Ave	0.3528	0.3586		5080	5000	1.6	30.0
Pyridine	Lin1		0.5693		5360	5000	7.3	30.0
Benzaldehyde	Ave	0.7664	0.7963		5200	5000	3.9	30.0
Phenol	Ave	0.7664	0.7963		5200	5000	3.9	20.0
Aniline	Ave	0.8532	0.9867		5780	5000	15.6	30.0
Bis(2-chloroethyl)ether	Qua		0.6798		5600	5000	12.0	30.0
2-Chlorophenol	Ave	0.6177	0.6674		5400	5000	8.0	30.0
1,4-Dichlorobenzene	Lin1		0.7289		5370	5000	7.5	20.0
1,3-Dichlorobenzene	Lin1		0.7527		5360	5000	7.3	30.0
2-Methylphenol	Ave	0.3530	0.4100		5810	5000	16.1	30.0
Benzyl alcohol	Ave	0.4448	0.5143		5780	5000	15.6	30.0
1,2-Dichlorobenzene	Ave	0.7498	0.7083		4720	5000	-5.5	30.0
3 & 4 Methylphenol	Ave	0.5658	0.5664		5010	5000	0.1	30.0
2,2'-oxybis[1-chloropropane]	Lin1		1.080		5870	5000	17.5	30.0
N-Nitrosodi-n-propylamine	Ave	0.4011	0.4619	0.0500	5760	5000	15.2	30.0
Acetophenone	Ave	0.8448	0.8788		5200	5000	4.0	30.0
Hexachloroethane	Ave	0.2654	0.2716		5120	5000	2.3	30.0
Nitrobenzene	Ave	0.2699	0.3207		5940	5000	18.8	30.0
Isophorone	Ave	0.4948	0.5771		5830	5000	16.6	30.0
2,4-Dimethylphenol	Ave	0.2333	0.1721		3690	5000	-26.2	30.0
2-Nitrophenol	Lin1		0.1563		5540	5000	10.8	20.0
Benzoic acid	Qua		0.0706		6610	5000	32.2*	30.0
Bis(2-chloroethoxy)methane	Ave	0.3424	0.3602		5260	5000	5.2	30.0
2,4-Dichlorophenol	Lin2		0.2375		5370	5000	7.5	20.0
1,2,4-Trichlorobenzene	Ave	0.2852	0.2810		4930	5000	-1.5	30.0
Alpha-Terpineol	Ave	0.2287	0.2639		5770	5000	15.4	30.0
Naphthalene	Ave	0.9640	0.9630		4990	5000	-0.1	30.0
4-Chloroaniline	Ave	0.4424	0.4760		5380	5000	7.6	30.0
Hexachlorobutadiene	Ave	0.1409	0.1399		4970	5000	-0.7	20.0
Caprolactam	Lin1		0.1416		5760	5000	15.1	30.0
4-Chloro-3-methylphenol	Lin2		0.2515		5560	5000	11.3	20.0
2-Methylnaphthalene	Ave	0.5724	0.5848		5110	5000	2.2	30.0
1-Methylnaphthalene	Ave	0.5896	0.5994		5080	5000	1.7	30.0
Hexachlorocyclopentadiene	Lin		0.1898	0.0500	5010	5000	0.3	30.0
1,2,4,5-Tetrachlorobenzene	Ave	0.2516	0.2489		4950	5000	-1.1	30.0
2,4,6-Trichlorophenol	Lin1		0.3394		5100	5000	2.0	20.0
2,4,5-Trichlorophenol	Lin1		0.3513		5050	5000	1.0	30.0
1,1'-Biphenyl	Ave	1.479	1.488		5030	5000	0.6	30.0
2-Chloronaphthalene	Ave	1.363	1.379		5060	5000	1.2	30.0
Phenyl ether	Ave	0.3972	0.4065		5120	5000	2.3	30.0

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Westfield Job No.: 360-24194-2 Analy Batch No.: 48761

SDG No.: OCRI-02A

Instrument ID: Inst. B GC Column: Rtx-5ms ID: 0.25(um) Heated Purge: (Y/N) N

Calibration Start Date: 09/09/2009 17:26 Calibration End Date: 09/09/2009 21:58 Calibration ID: 4274

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
2-Methylphenol	0.5143 0.5090	0.5894 0.4599	0.5743 0.4446	0.5664 +++++	0.5543	Ave		0.5265				10.0		15.0			
2,2'-oxybis[1-chloropropane]	1.0911 0.9284	1.0786 0.8153	1.1300 0.7472	1.1034 +++++	1.0378	Ave		0.9915				15.0		15.0			
3 & 4 Methylphenol	0.5217 0.5299	0.5423 0.4867	0.5916 0.4564	0.5967 +++++	0.5626	Ave		0.5360				9.1		15.0			
Acetophenone	0.8164 0.7686	0.9015 0.6799	0.9045 0.6568	0.8841 +++++	0.8334	Ave		0.8057				12.0		15.0			
N-Nitrosodi-n-propylamine	0.3965 0.3803	0.4404 0.3575	0.4539 0.3420	0.4272 +++++	0.4073	Ave		0.4006			0.0500	9.9		15.0			
2,4-Dinitrophenol	+++++ 0.0471	+++++ 0.1179	0.0040 0.1299	0.0121 0.1312	0.0293	Qua	-0.248	0.1416	0.0002		0.0500				0.9830	*	0.9900
Hexachloroethane	0.2607 0.2443	0.2997 0.2224	0.2789 0.2123	0.2784 +++++	0.2639	Ave		0.2576				12.0		15.0			
Nitrobenzene	0.2623 0.2938	0.2818 0.2898	0.2969 0.2726	0.2906 0.2507	0.2803	Ave		0.2799				5.5		15.0			
Isophorone	0.3903 0.4876	0.4277 0.4921	0.4842 0.4567	0.4918 0.3995	0.4784	Ave		0.4565				8.9		15.0			
2,4-Dimethylphenol	0.2075 0.2456	0.2277 0.2470	0.2397 0.2354	0.2374 0.2124	0.2307	Ave		0.2315				5.9		15.0			
2-Nitrophenol	0.0972 0.1528	0.1142 0.1632	0.1311 0.1606	0.1368 0.1448	0.1439	Lin2	-0.006	0.1502							0.9950		0.9900
Bis(2-chloroethoxy)methane	0.2854 0.2970	0.2981 0.2955	0.3106 0.2735	0.3098 0.2551	0.2920	Ave		0.2908				6.0		15.0			
2,4-Dichlorophenol	0.1791 0.2297	0.1925 0.2314	0.2067 0.2219	0.2080 0.2077	0.2133	Ave		0.2100				8.0		15.0			
1,2,4-Trichlorobenzene	0.2516 0.2642	0.2753 0.2618	0.2745 0.2484	0.2809 0.2250	0.2594	Ave		0.2601				6.6		15.0			
Alpha-Terpineol	0.1871 0.2301	0.1873 0.2355	0.2213 0.2201	0.2207 0.2019	0.2131	Ave		0.2130				8.2		15.0			
Naphthalene	0.8709 0.8169	0.8833 0.7645	0.8817 0.7001	0.8571 0.5218	0.8289	Ave		0.7917				15.0		15.0			
4-Chloroaniline	0.2570 0.3336	0.2908 0.3409	0.3182 0.3291	0.3277 0.2859	0.3220	Ave		0.3117				8.9		15.0			
Hexachlorobutadiene	0.1360 0.1301	0.1282 0.1300	0.1414 0.1226	0.1356 0.1154	0.1288	Ave		0.1298				5.9		15.0			
Caprolactam	0.0743 0.1138	0.0789 0.1238	0.0920 0.1192	0.1006 0.1099	0.1096	Lin2	-0.005	0.1114							0.9920		0.9900
4-Chloro-3-methylphenol	0.1794 0.2232	0.1935 0.2328	0.2120 0.2204	0.2090 0.2045	0.2134	Ave		0.2098				7.6		15.0			

Note: The ml coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Westfield Job No.: 360-24194-2 Analy Batch No.: 48241

SDG No.: OCRI-02A

Instrument ID: Inst. B GC Column: Rtx-5ms ID: 0.25(um) Heated Purge: (Y/N) N

Calibration Start Date: 08/27/2009 09:11 Calibration End Date: 08/27/2009 13:43 Calibration ID: 4134

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
3 & 4 Methylphenol	0.5670 0.5586	0.5702 0.5108	0.6004 0.4888	0.6171 0.5688	0.6106	Ave		0.5658				7.6		15.0			
1,2-Dichlorobenzene	0.9057 0.6967	0.8455 0.6282	0.8439 0.5785	0.7956 0.6620	0.7924	Ave		0.7498				15.0		15.0			
2,4-Dinitrophenol	+++++ 0.0207	+++++ 0.0485	0.0014 0.0736	0.0087 0.0963	0.0156	Lin	-0.393	0.1134			0.0500				0.9810	*	0.9900
4-Nitrophenol	+++++ 0.1129	+++++ 0.1245	0.0528 0.1450	0.0698 0.1398	0.0915	Lin1	-0.062	0.1397			0.0500				0.9920		0.9900
2,2'-oxybis[1-chloropropane]	1.2659 1.0244	1.2616 0.9031	1.2448 0.8205	1.1762 0.8943	1.1662	Lin1	0.0910	0.9034							0.9900		0.9900
N-Nitrosodi-n-propylamine	0.3611 0.4186	0.3780 0.3785	0.4117 0.3612	0.4321 0.4243	0.4443	Ave		0.4011			0.0500	7.9		15.0			
Acetophenone	0.8534 0.8455	0.8594 0.7478	0.9309 0.6999	0.9378 0.7932	0.9351	Ave		0.8448				10.0		15.0			
Caprolactam	+++++ 0.1136	0.0499 0.1189	0.0584 0.1240	0.0774 0.1347	0.0976	Lin1	-0.032	0.1286							0.9940		0.9900
Hexachloroethane	0.2895 0.2584	0.2661 0.2347	0.2848 0.2216	0.2808 0.2681	0.2844	Ave		0.2654				8.9		15.0			
Nitrobenzene	0.2062 0.3157	0.2167 0.2931	0.2446 0.3011	0.2675 0.2876	0.2969	Ave		0.2699				14.0		15.0			
4,6-Dinitro-2-methylphenol	+++++ 0.0312	+++++ 0.0580	0.0085 0.0868	0.0137 +++++	0.0209	Lin	-0.368	0.1194							0.9860	*	0.9900
Isophorone	0.4051 0.5649	0.4137 0.5390	0.4492 0.5376	0.5013 0.4989	0.5433	Ave		0.4948				12.0		15.0			
2,4-Dimethylphenol	0.2166 0.2567	0.2117 0.2373	0.2238 0.2426	0.2346 0.2356	0.2410	Ave		0.2333				6.0		15.0			
2-Nitrophenol	0.0555 0.1288	0.0512 0.1347	0.0626 0.1457	0.0932 0.1537	0.1115	Lin1	-0.021	0.1449							0.9910		0.9900
Bis(2-chloroethoxy)methane	0.3424 0.3573	0.3450 0.3372	0.3403 0.3392	0.3426 0.3178	0.3596	Ave		0.3424				3.5		15.0			
2,4-Dichlorophenol	0.1549 0.2333	0.1662 0.2263	0.1790 0.2359	0.2001 0.2360	0.2225	Lin2	-0.008	0.2225							0.9930		0.9900
Pentachlorophenol	+++++ 0.0739	+++++ 0.0956	0.0210 0.1069	0.0409 0.1210	0.0614	Lin	-0.148	0.1248							0.9910		0.9900
1,2,4-Trichlorobenzene	0.3057 0.2871	0.2968 0.2702	0.3001 0.2704	0.2818 0.2642	0.2907	Ave		0.2852				5.1		15.0			
Alpha-Terpineol	0.1964 0.2488	0.2101 0.2445	0.2099 0.2455	0.2202 0.2351	0.2481	Ave		0.2287				8.7		15.0			
Naphthalene	1.1053 0.9932	1.0485 0.9075	1.0448 0.8735	0.9980 0.6842	1.0208	Ave		0.9640				13.0		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Westfield Job No.: 360-24194-2 Analy Batch No.: 48241

SDG No.: OCRI-02A

Instrument ID: Inst. B GC Column: Rtx-5ms ID: 0.25(um) Heated Purge: (Y/N) N

Calibration Start Date: 08/27/2009 09:11 Calibration End Date: 08/27/2009 13:43 Calibration ID: 4134

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD01 360-48241/3	B9840.D
Level 2	STD025 360-48241/4	B9841.D
Level 3	STD05 360-48241/5	B9842.D
Level 4	STD1 360-48241/6	B9843.D
Level 5	STD25 360-48241/7	B9844.D
Level 6	STD5 360-48241/2	B9839.D
Level 7	STD8 360-48241/8	B9845.D
Level 8	STD10 360-48241/9	B9846.D
Level 9	STD20 360-48241/10	B9847.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
Pyridine	+++++ 0.5365	0.3253 0.4797	0.3197 0.4793	0.5601 0.5834	0.5385	Lin1	-0.066	0.5430							0.9910		0.9900
1,4-Dioxane	0.4176 0.2519	0.3162 0.2092	0.2992 0.2046	0.2888 0.2451	0.2707	Lin1	0.0241	0.2302							0.9910		0.9900
N-Nitrosodimethylamine	0.4159 0.3352	0.3799 0.2992	0.3914 0.2776	0.3790 0.3256	0.3714	Ave		0.3528				13.0		15.0			
Benzoic acid	+++++ 0.0192	+++++ 0.0751	0.0010 0.1297	0.0097 +++++	0.0127	Qua	0.0952	-0.112	0.0229						0.9910		0.9900
Benzaldehyde	0.8057 0.7431	0.7969 0.6817	0.8364 0.6418	0.8222 0.7344	0.8352	Ave		0.7664				9.2		15.0			
Phenol	0.8057 0.7431	0.7969 0.6817	0.8364 0.6418	0.8222 0.7344	0.8352	Ave		0.7664				9.2		15.0			
Aniline	0.9060 0.8545	0.8849 0.8051	0.8146 0.8125	0.8066 0.8399	0.9547	Ave		0.8532				6.1		15.0			
Bis(2-chloroethyl)ether	0.8654 0.7617	0.8854 0.6255	0.9371 0.5432	0.8420 0.7112	0.7968	Qua	0.3118	0.4979	0.0096						0.9900		0.9900
2-Chlorophenol	0.6614 0.6050	0.6231 0.5592	0.6311 0.5292	0.6502 0.6300	0.6704	Ave		0.6177				7.6		15.0			
1,4-Dichlorobenzene	0.9050 0.7232	0.9246 0.6394	0.8856 0.5926	0.8446 0.6897	0.8262	Lin1	0.0572	0.6676							0.9910		0.9900
1,3-Dichlorobenzene	0.9496 0.7541	0.9224 0.6610	0.9369 0.6171	0.8633 0.7104	0.8535	Lin1	0.0589	0.6906							0.9920		0.9900
2-Methylphenol	0.2922 0.3681	0.3066 0.3483	0.3461 0.3368	0.3729 0.4097	0.3967	Ave		0.3530				11.0		15.0			
Benzyl alcohol	0.4383 0.4586	0.3915 0.4285	0.4361 0.4118	0.4543 0.4940	0.4901	Ave		0.4448				7.6		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Westfield Job No.: 360-24194-2 Analy Batch No.: 48241

SDG No.: OCRI-02A

Instrument ID: Inst. B GC Column: Rtx-5ms ID: 0.25(um) Heated Purge: (Y/N) N

Calibration Start Date: 08/27/2009 09:11 Calibration End Date: 08/27/2009 13:43 Calibration ID: 4134

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
4-Chloroaniline	0.4087 0.4621	0.4396 0.4369	0.4328 0.4710	0.4222 0.4455	0.4628	Ave		0.4424				4.6		15.0			
Hexachlorobutadiene	0.1448 0.1411	0.1462 0.1358	0.1436 0.1368	0.1395 0.1363	0.1440	Ave		0.1409				2.8		15.0			
4-Chloro-3-methylphenol	0.1380 0.2382	0.1586 0.2337	0.1804 0.2457	0.2011 0.2387	0.2260	Lin2	-0.011	0.2279							0.9920		0.9900
2-Methylnaphthalene	0.6118 0.5966	0.5929 0.5505	0.5862 0.5522	0.5852 0.4809	0.5956	Ave		0.5724				7.0		15.0			
1-Methylnaphthalene	0.6246 0.6126	0.6308 0.5643	0.6088 0.5640	0.6039 0.4929	0.6042	Ave		0.5896				7.3		15.0			
Hexachlorocyclopentadiene	0.0622 0.1610	0.0723 0.1757	0.1040 0.2086	0.1315 0.2083	0.1370	Lin	-0.105	0.2102			0.0500				0.9950		0.9900
1,2,4,5-Tetrachlorobenzene	0.2753 0.2541	0.2603 0.2370	0.2544 0.2444	0.2477 0.2407	0.2506	Ave		0.2516				4.6		15.0			
2,4,6-Trichlorophenol	0.1910 0.3139	0.2160 0.3243	0.2244 0.3392	0.2667 0.3501	0.2995	Lin1	-0.029	0.3383							0.9970		0.9900
2,4,5-Trichlorophenol	0.1834 0.3283	0.2005 0.3435	0.2558 0.3502	0.2793 0.3668	0.3106	Lin1	-0.032	0.3541							0.9970		0.9900
1,1'-Biphenyl	1.5708 1.5180	1.5579 1.4625	1.5345 1.4006	1.5193 1.1885	1.5607	Ave		1.4792				8.2		15.0			
2-Chloronaphthalene	1.3702 1.3875	1.3195 1.4088	1.3973 1.3079	1.3627 1.2216	1.4905	Ave		1.3629				5.5		15.0			
Phenyl ether	0.4322 0.4085	0.4071 0.3845	0.4063 0.3887	0.4015 0.3450	0.4008	Ave		0.3972				6.0		15.0			
2-Nitroaniline	0.1272 0.2908	0.1120 0.3018	0.1256 0.3152	0.1756 0.3189	0.2322	Lin1	-0.044	0.3095							0.9920		0.9900
Dimethyl phthalate	1.0929 1.2260	1.0764 1.2346	1.1360 1.2291	1.2230 1.1179	1.2396	Ave		1.1751				5.8		15.0			
Pentachloronitrobenzene	+++++ 0.0750	0.0314 0.0743	0.0394 0.0775	0.0533 0.0817	0.0643	Lin1	-0.018	0.0796							0.9970		0.9900
2,6-Dinitrotoluene	0.0889 0.2857	0.1134 0.2826	0.1441 0.2963	0.2094 0.3039	0.2533	Lin1	-0.039	0.2963							0.9970		0.9900
Acenaphthylene	1.4772 1.8295	1.5155 1.7378	1.6935 1.6822	1.7480 1.3656	1.8193	Ave		1.6521				9.8		15.0			
3-Nitroaniline	0.1032 0.2370	0.1159 0.2480	0.1451 0.2799	0.1917 0.2895	0.2262	Lin1	-0.035	0.2733							0.9920		0.9900
Acenaphthene	1.3058 1.2203	1.2529 1.1737	1.2252 1.1466	1.2258 1.0179	1.2268	Ave		1.1994				6.8		15.0			
2,4-Dinitrotoluene	0.0916 0.3348	0.1063 0.3376	0.1313 0.3655	0.2068 0.3764	0.2627	Lin1	-0.057	0.3599							0.9910		0.9900

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Westfield Job No.: 360-24194-2 Analy Batch No.: 48241

SDG No.: OCRI-02A

Instrument ID: Inst. B GC Column: Rtx-5ms ID: 0.25(um) Heated Purge: (Y/N) N

Calibration Start Date: 08/27/2009 09:11 Calibration End Date: 08/27/2009 13:43 Calibration ID: 4134

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
Dibenzofuran	1.7129 1.6201	1.6165 1.5360	1.6320 1.5008	1.6206 1.2452	1.6393	Ave		1.5693				8.7		15.0			
2,3,4,6-Tetrachlorophenol	0.0906 0.2419	0.1173 0.2445	0.1472 0.2638	0.1938 0.2769	0.2247	Lin1	-0.032	0.2639							0.9950		0.9900
Diethyl phthalate	1.0349 1.2059	1.0571 1.2028	1.1158 1.1980	1.1964 1.0454	1.1912	Ave		1.1386				6.6		15.0			
4-Chlorophenyl phenyl ether	0.6247 0.6109	0.6031 0.6008	0.5964 0.6066	0.6036 0.6049	0.6080	Ave		0.6066				1.3		15.0			
4-Nitroaniline	0.1335 0.1998	0.1097 0.2014	0.1262 0.2682	0.1537 0.2608	0.1595	Lin	-0.145	0.2633							0.9900		0.9900
Fluorene	1.3367 1.3576	1.2741 1.2916	1.3003 1.2823	1.3023 1.1173	1.3272	Ave		1.2877				5.4		15.0			
Diphenylamine	0.5913 0.7293	0.6285 0.7027	0.6746 0.6838	0.6739 0.6384	0.7209	Ave		0.6715				6.7		15.0			
N-Nitrosodiphenylamine	0.5913 0.7293	0.6285 0.7027	0.6746 0.6838	0.6739 0.6384	0.7209	Ave		0.6715				6.7		15.0			
1,2-Diphenylhydrazine	0.9349 1.3096	1.0148 1.2510	1.1587 1.1949	1.2082 1.0225	1.3196	Ave		1.1572				12.0		15.0			
Azobenzene	0.9349 1.3096	1.0148 1.2510	1.1587 1.1949	1.2082 1.0225	1.3196	Ave		1.1572				12.0		15.0			
Benzophenone	0.5699 0.8469	0.6528 0.8195	0.7370 0.7892	0.7809 0.7310	0.8275	Ave		0.7505				12.0		15.0			
4-Bromophenyl phenyl ether	0.1830 0.2039	0.1850 0.1983	0.1895 0.1972	0.1843 0.2061	0.2035	Ave		0.1945				4.7		15.0			
Atrazine	0.1228 0.2030	0.1389 0.2077	0.1637 0.2073	0.1810 0.2113	0.1995	Lin2	-0.009	0.1997							0.9940		0.9900
Hexachlorobenzene	0.2126 0.1961	0.1886 0.1942	0.1978 0.1909	0.1913 0.2029	0.1979	Ave		0.1969				3.7		15.0			
Benzidine	+++++ 0.1139	0.0304 0.1351	0.0312 0.1841	0.0446 0.1876	0.0856	Qua	-0.100	0.1454	0.0024						0.9910		0.9900
Phenanthrene	1.2648 1.1618	1.1590 1.0921	1.1639 1.0662	1.1397 0.9055	1.1557	Ave		1.1232				8.8		15.0			
Anthracene	0.9898 1.1359	0.9688 1.0999	1.0179 1.0705	1.0790 0.9065	1.1011	Ave		1.0410				7.2		15.0			
Carbazole	0.7993 0.8563	0.7950 0.8311	0.8439 0.8615	0.8706 0.7918	0.8806	Ave		0.8367				4.1		15.0			
Di-n-butyl phthalate	0.9632 1.2052	0.8483 1.2088	0.9088 1.1655	1.0566 0.9332	1.1688	Ave		1.0509				13.0		15.0			
Fluoranthene	0.9013 1.0813	0.8674 1.0461	0.8960 1.0662	0.9642 0.9502	1.0219	Ave		0.9772				8.2		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Westfield Job No.: 360-24194-2 Analy Batch No.: 48241

SDG No.: OCRI-02A

Instrument ID: Inst. B GC Column: Rtx-5ms ID: 0.25(um) Heated Purge: (Y/N) N

Calibration Start Date: 08/27/2009 09:11 Calibration End Date: 08/27/2009 13:43 Calibration ID: 4134

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
Pyrene	1.6534	1.5690	1.6093	1.4922	1.5205	Ave		1.4954				7.9		15.0			
	1.5357	1.3969	1.4016	1.2801													
Butyl benzyl phthalate	0.3408	0.3644	0.4131	0.5085	0.5802	Lin1	-0.055	0.6338							0.9990		0.9900
	0.6259	0.6134	0.6439	0.6377													
Bis(2-ethylhexyl) phthalate	0.5267	0.4810	0.5561	0.6848	0.7893	Lin1	-0.069	0.8604							0.9980		0.9900
	0.8818	0.8599	0.8907	0.8407													
3,3'-Dichlorobenzidine	0.1497	0.1481	0.1691	0.1815	0.2009	Qua	0.0074	0.1609	0.0064						1.0000		0.9900
	0.1874	0.2094	0.2288	0.2893													
Benzo[a]anthracene	0.9124	0.8564	0.8850	0.9250	0.9608	Ave		0.9429				5.6		15.0			
	1.0165	0.9837	0.9929	0.9533													
Chrysene	1.0540	0.9938	1.0088	0.9365	0.9648	Ave		0.9707				4.8		15.0			
	0.9853	0.9456	0.9542	0.8936													
Di-n-octyl phthalate	1.3023	1.0916	1.2753	1.7678	1.9666	Lin1	-0.213	2.2622							0.9940		0.9900
	2.3308	2.1273	2.4922	2.1938													
Benzo[b]fluoranthene	1.2786	1.2042	1.2371	1.2805	1.3006	Ave		1.3183				6.2		15.0			
	1.4219	1.3203	1.3730	1.4486													
Benzo[k]fluoranthene	1.1340	1.1603	1.1597	1.1654	1.2534	Ave		1.2431				7.2		15.0			
	1.3278	1.2863	1.3692	1.3313													
Benzo[a]pyrene	0.6879	0.7044	0.7696	0.8094	0.9091	Lin1	-0.079	1.0511							0.9980		0.9900
	1.0127	1.0243	1.0390	1.0849													
Indeno[1,2,3-cd]pyrene	0.5731	0.4426	0.5584	0.5004	0.6185	Lin1	-0.064	0.7576							0.9930		0.9900
	0.6824	0.7883	0.7227	0.7930													
Dibenz(a,h)anthracene	0.4527	0.3425	0.4425	0.3644	0.4555	Lin1	-0.055	0.5992							0.9910		0.9900
	0.5353	0.6193	0.5700	0.6347													
Benzo[g,h,i]perylene	0.6297	0.4582	0.6064	0.5077	0.5702	Ave		0.5917				12.0		15.0			
	0.6009	0.6843	0.6099	0.6584													
2-Fluorophenol	0.5640	0.5799	0.5975	0.5916	0.6212	Ave		0.5642				7.8		15.0			
	0.5510	0.5150	0.4785	0.5792													
Phenol-d5	0.7106	0.7243	0.7326	0.7371	0.7517	Ave		0.6958				7.5		15.0			
	0.6842	0.6329	0.5931	0.6957													
Nitrobenzene-d5	0.2160	0.2350	0.2285	0.2653	0.3039	Lin1	-0.019	0.3189							0.9990		0.9900
	0.3378	0.3132	0.3215	0.3152													
2-Fluorobiphenyl	1.4301	1.3980	1.3882	1.3524	1.3944	Ave		1.3364				7.1		15.0			
	1.3555	1.3198	1.2755	1.1136													
2,4,6-Tribromophenol	0.0402	0.0297	0.0374	0.0493	0.0607	Lin1	-0.010	0.0761							0.9900		0.9900
	0.0658	0.0713	0.0740	0.0822													
Terphenyl-d14	1.0015	0.9072	0.9115	0.8729	0.8735	Ave		0.8754				7.1		15.0			
	0.8772	0.8041	0.8214	0.8094													

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Westfield Job No.: 360-24194-2

SDG No.: OCRI-02A

Lab File ID: B9884.D DFTPP Injection Date: 08/28/2009

Instrument ID: Inst. B DFTPP Injection Time: 10:44

Analysis Batch No.: 48213

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	30.0 - 60.0 % of mass 198	33.5	
68	Less than 2.0 % of mass 69	0.0	(0.0)1
69	Mass 69 relative abundance	32.0	
70	Less than 2.0 % of mass 69	0.2	(0.6)1
127	40.0 - 60.0 % of mass 198	45.1	
197	Less than 1.0 % of mass 198	0.0	
198	Base Peak, 100 % relative abundance	100.0	
199	5.0- 9.0 % of mass 198	7.2	
275	10.0 - 30.0 % of mass 198	28.7	
365	Greater than 1.0 % of mass 198	2.9	
441	Present but less than mass 443	12.3	
442	Greater than 40.0 % of mass 198	78.0	
443	17.0 - 23.0 % of mass 442	15.7	(20.1)2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCV 360-48213/2	B9885.D	08/28/2009	11:18
	MB 360-47986/1-A	B9886.D	08/28/2009	11:52
	LCS 360-47986/2-A	B9887.D	08/28/2009	12:25
	LCSD 360-47986/3-A	B9888.D	08/28/2009	12:59
OC-SB-421-10.5/12.5-XXX	360-24194-2	B9905.D	08/28/2009	22:37

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Westfield Job No.: 360-24194-2

SDG No.: OCRI-02A

Lab File ID: B9909.D DFTPP Injection Date: 08/31/2009

Instrument ID: Inst. B DFTPP Injection Time: 14:28

Analysis Batch No.: 48389

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	30.0 - 60.0 % of mass 198	38.0	
68	Less than 2.0 % of mass 69	0.0	(0.0)1
69	Mass 69 relative abundance	35.2	
70	Less than 2.0 % of mass 69	0.2	(0.6)1
127	40.0 - 60.0 % of mass 198	47.7	
197	Less than 1.0 % of mass 198	0.0	
198	Base Peak, 100 % relative abundance	100.0	
199	5.0- 9.0 % of mass 198	6.9	
275	10.0 - 30.0 % of mass 198	24.7	
365	Greater than 1.0 % of mass 198	2.4	
441	Present but less than mass 443	8.4	
442	Greater than 40.0 % of mass 198	53.5	
443	17.0 - 23.0 % of mass 442	10.5	(19.7)2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCV 360-48389/2	B9910.D	08/31/2009	15:03
OC-SB-421-10.5/12.5-XXX DL	360-24194-2 DL	B9922.D	08/31/2009	21:50
OC-SB-421-10.5/12.5-XXX DL2	360-24194-2 DL2	B9923.D	08/31/2009	22:24
OC-SB-421-10.5/12.5-XXX DL3	360-24194-2 DL3	B9924.D	08/31/2009	22:58

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Westfield Job No.: 360-24194-2

SDG No.: OCRI-02A

Lab File ID: B10151.D DFTPP Injection Date: 09/09/2009

Instrument ID: Inst. B DFTPP Injection Time: 23:05

Analysis Batch No.: 48751

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	30.0 - 60.0 % of mass 198	39.4	
68	Less than 2.0 % of mass 69	0.0	(0.0)1
69	Mass 69 relative abundance	39.8	
70	Less than 2.0 % of mass 69	0.2	(0.6)1
127	40.0 - 60.0 % of mass 198	50.5	
197	Less than 1.0 % of mass 198	0.0	
198	Base Peak, 100 % relative abundance	100.0	
199	5.0- 9.0 % of mass 198	7.2	
275	10.0 - 30.0 % of mass 198	26.6	
365	Greater than 1.0 % of mass 198	3.1	
441	Present but less than mass 443	12.4	
442	Greater than 40.0 % of mass 198	76.3	
443	17.0 - 23.0 % of mass 442	15.4	(20.1)2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCV 360-48751/2	B10152.D	09/09/2009	23:39
	MB 360-48119/1-A	B10153.D	09/10/2009	00:13
	LCS 360-48119/2-A	B10154.D	09/10/2009	00:47
	LCSD 360-48119/3-A	B10155.D	09/10/2009	01:21
OC-SB-424-17/19-XXX	360-24194-5	B10157.D	09/10/2009	02:28
OC-SB-425-18/20-XXX	360-24194-8	B10161.D	09/10/2009	04:43
OC-SB-424-17/19-XXX DL	360-24194-5 DL	B10171.D	09/10/2009	10:21

Client: Olin Corporation

Job Number: 360-24194-2
Sdg Number: OCRI-02A

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 360-48119

Method: 8270C LL
Preparation: 3546

LCS Lab Sample ID:	LCS 360-48119/2-A	Analysis Batch:	360-48751	Instrument ID:	Agilent 6890/5973 GC/MS
Client Matrix:	Solid	Prep Batch:	360-48119	Lab File ID:	B10154.D
Dilution:	1.0	Units:	ug/Kg	Initial Weight/Volume:	30.00 g
Date Analyzed:	09/10/2009 0047			Final Weight/Volume:	1.0 mL
Date Prepared:	08/25/2009 1123			Injection Volume:	1.0 uL

LCSD Lab Sample ID:	LCSD 360-48119/3-A	Analysis Batch:	360-48751	Instrument ID:	Agilent 6890/5973 GC/MS
Client Matrix:	Solid	Prep Batch:	360-48119	Lab File ID:	B10155.D
Dilution:	1.0	Units:	ug/Kg	Initial Weight/Volume:	30.00 g
Date Analyzed:	09/10/2009 0121			Final Weight/Volume:	1.0 mL
Date Prepared:	08/25/2009 1123			Injection Volume:	1.0 uL

Analyte	% Rec. LCS	% Rec. LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
1,1'-Biphenyl	72	70	40 - 140	3	30		
1,2,4,5-Tetrachlorobenzene	60	57	40 - 140	5	30		
1,2,4-Trichlorobenzene	52	47	40 - 140	10	30		
1,2-Dichlorobenzene	50	42	40 - 140	16	30		
1,3-Dichlorobenzene	41	38	40 - 140	8	30		*
1,4-Dichlorobenzene	54	56	40 - 140	2	30		
1-Methylnaphthalene	51	54	40 - 140	6	30		
2,2'-oxybis[1-chloropropane]	49	45	40 - 140	10	30		
2,3,4,6-Tetrachlorophenol	73	71	40 - 140	2	30		
2,4,5-Trichlorophenol	79	85	30 - 130	7	30		
2,4,6-Trichlorophenol	95	85	30 - 130	10	30		
2,4-Dichlorophenol	55	64	30 - 130	15	30		
2,4-Dimethylphenol	57	63	30 - 130	10	30		
2,4-Dinitrophenol	58	56	30 - 130	4	30		
2,4-Dinitrotoluene	82	83	40 - 140	2	30		
2,6-Dinitrotoluene	80	82	40 - 140	3	30		
2-Chloronaphthalene	67	61	40 - 140	9	30		
2-Chlorophenol	50	48	30 - 130	4	30		
2-Methylnaphthalene	49	56	40 - 140	13	30		
2-Methylphenol	48	54	30 - 130	12	30		
2-Nitroaniline	81	83	40 - 140	3	30		
2-Nitrophenol	47	56	30 - 130	16	30		
3 & 4 Methylphenol	52	57	30 - 130	8	30		
3,3'-Dichlorobenzidine	33	33	40 - 140	1	30	*	*
3-Nitroaniline	84	86	40 - 140	2	30		
4,6-Dinitro-2-methylphenol	74	73	30 - 130	2	30		
4-Bromophenyl phenyl ether	72	78	40 - 140	8	30		
4-Chloro-3-methylphenol	60	64	30 - 130	6	30		
4-Chloroaniline	43	49	40 - 140	12	30		
4-Chlorophenyl phenyl ether	78	78	40 - 140	0	30		
4-Nitroaniline	87	89	40 - 140	2	30		
4-Nitrophenol	88	83	30 - 130	7	30		

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: Olin Corporation

Job Number: 360-24194-2
Sdg Number: OCRI-02A

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 360-48119

Method: 8270C LL
Preparation: 3546

LCS Lab Sample ID:	LCS 360-48119/2-A	Analysis Batch:	360-48751	Instrument ID:	Agilent 6890/5973 GC/MS
Client Matrix:	Solid	Prep Batch:	360-48119	Lab File ID:	B10154.D
Dilution:	1.0	Units:	ug/Kg	Initial Weight/Volume:	30.00 g
Date Analyzed:	09/10/2009 0047			Final Weight/Volume:	1.0 mL
Date Prepared:	08/25/2009 1123			Injection Volume:	1.0 uL

LCSD Lab Sample ID:	LCSD 360-48119/3-A	Analysis Batch:	360-48751	Instrument ID:	Agilent 6890/5973 GC/MS
Client Matrix:	Solid	Prep Batch:	360-48119	Lab File ID:	B10155.D
Dilution:	1.0	Units:	ug/Kg	Initial Weight/Volume:	30.00 g
Date Analyzed:	09/10/2009 0121			Final Weight/Volume:	1.0 mL
Date Prepared:	08/25/2009 1123			Injection Volume:	1.0 uL

	% Rec.						
Analyte	LCS	LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Acenaphthene	84	86	40 - 140	2	30		
Acenaphthylene	77	75	40 - 140	2	30		
Acetophenone	52	47	40 - 140	9	30		
Aniline	38	31	40 - 140	20	30	*	*
Anthracene	87	89	40 - 140	3	30		
Atrazine	91	91	40 - 140	0	30		
Azobenzene	77	79	40 - 140	3	30		
Benzaldehyde	83	81	40 - 140	2	30		
Benzo[a]anthracene	99	99	40 - 140	0	30		
Benzo[a]pyrene	101	102	40 - 140	1	30		
Benzo[b]fluoranthene	90	85	40 - 140	5	30		
Benzo[g,h,i]perylene	87	93	40 - 140	7	30		
Benzo[k]fluoranthene	95	92	40 - 140	3	30		
Benzoic acid	27	33	30 - 130	18	30	J *	J
Benzophenone	74	81	40 - 140	8	30		
Benzyl alcohol	53	53	30 - 130	0	30		
Bis(2-chloroethoxy)methane	45	52	40 - 140	15	30		
Bis(2-chloroethyl)ether	34	40	40 - 140	15	30	*	
Bis(2-ethylhexyl) phthalate	93	93	40 - 140	0	30		
Butyl benzyl phthalate	84	85	40 - 140	1	30		
Caprolactam	56	67	40 - 140	17	30		
Carbazole	81	83	40 - 140	2	30		
Chrysene	93	94	40 - 140	1	30		
Dibenz(a,h)anthracene	81	86	40 - 140	6	30		
Dibenzofuran	75	75	40 - 140	1	30		
Diethyl phthalate	79	79	40 - 140	0	30		
Dimethyl phthalate	76	77	40 - 140	1	30		
Di-n-butyl phthalate	74	73	40 - 140	2	30		
Di-n-octyl phthalate	85	82	40 - 140	3	30		
Diphenyl oxide	53	56	40 - 140	6	30		
Fluoranthene	94	96	40 - 140	2	30		
Fluorene	93	90	40 - 140	2	30		

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: Olin Corporation

Job Number: 360-24194-2
Sdg Number: OCRI-02A

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 360-47986

Method: 8270C LL
Preparation: 3546

LCS Lab Sample ID:	LCS 360-47986/2-A	Analysis Batch:	360-48213	Instrument ID:	Agilent 6890/5973 GC/MS
Client Matrix:	Solid	Prep Batch:	360-47986	Lab File ID:	B9887.D
Dilution:	1.0	Units:	ug/Kg	Initial Weight/Volume:	30.00 g
Date Analyzed:	08/28/2009 1225			Final Weight/Volume:	1.0 mL
Date Prepared:	08/20/2009 1253			Injection Volume:	1.0 uL

LCSD Lab Sample ID:	LCSD 360-47986/3-A	Analysis Batch:	360-48213	Instrument ID:	Agilent 6890/5973 GC/MS
Client Matrix:	Solid	Prep Batch:	360-47986	Lab File ID:	B9888.D
Dilution:	1.0	Units:	ug/Kg	Initial Weight/Volume:	30.00 g
Date Analyzed:	08/28/2009 1259			Final Weight/Volume:	1.0 mL
Date Prepared:	08/20/2009 1253			Injection Volume:	1.0 uL

Analyte	% Rec. LCS	% Rec. LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Acenaphthene	90	89	40 - 140	1	30		
Acenaphthylene	83	83	40 - 140	0	30		
Acetophenone	75	73	40 - 140	3	30		
Aniline	28	75	40 - 140	90	30	*	*
Anthracene	97	96	40 - 140	1	30		
Atrazine	91	192	40 - 140	72	30		*
Azobenzene	84	108	40 - 140	25	30		
Benzaldehyde	80	78	40 - 140	3	30		
Benzo[a]anthracene	105	103	40 - 140	2	30		
Benzo[a]pyrene	97	96	40 - 140	1	30		
Benzo[b]fluoranthene	95	94	40 - 140	1	30		
Benzo[g,h,i]perylene	101	98	40 - 140	3	30		
Benzo[k]fluoranthene	102	102	40 - 140	0	30		
Benzoic acid	48	48	30 - 130	0	30	J	J
Benzophenone	88	148	40 - 140	51	30		*
Benzyl alcohol	83	69	30 - 130	18	30		
Bis(2-chloroethoxy)methane	78	79	40 - 140	0	30		
Bis(2-chloroethyl)ether	87	102	40 - 140	16	30		
Bis(2-ethylhexyl) phthalate	91	90	40 - 140	1	30		
Butyl benzyl phthalate	88	87	40 - 140	2	30		
Caprolactam	95	195	40 - 140	68	30		*
Carbazole	101	100	40 - 140	1	30		
Chrysene	98	94	40 - 140	5	30		
Dibenz(a,h)anthracene	98	96	40 - 140	2	30		
Dibenzofuran	81	80	40 - 140	1	30		
Diethyl phthalate	96	96	40 - 140	0	30		
Dimethyl phthalate	90	90	40 - 140	1	30		
Di-n-butyl phthalate	103	103	40 - 140	0	30		
Di-n-octyl phthalate	85	89	40 - 140	5	30		
Diphenyl oxide	76	154	40 - 140	68	30		*
Fluoranthene	98	97	40 - 140	1	30		
Fluorene	98	98	40 - 140	1	30		

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: Olin Corporation

Job Number: 360-24194-2
Sdg Number: OCRI-02A

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 360-47986

Method: 8270C LL
Preparation: 3546

LCS Lab Sample ID:	LCS 360-47986/2-A	Analysis Batch:	360-48213	Instrument ID:	Agilent 6890/5973 GC/MS
Client Matrix:	Solid	Prep Batch:	360-47986	Lab File ID:	B9887.D
Dilution:	1.0	Units:	ug/Kg	Initial Weight/Volume:	30.00 g
Date Analyzed:	08/28/2009 1225			Final Weight/Volume:	1.0 mL
Date Prepared:	08/20/2009 1253			Injection Volume:	1.0 uL

LCSD Lab Sample ID:	LCSD 360-47986/3-A	Analysis Batch:	360-48213	Instrument ID:	Agilent 6890/5973 GC/MS
Client Matrix:	Solid	Prep Batch:	360-47986	Lab File ID:	B9888.D
Dilution:	1.0	Units:	ug/Kg	Initial Weight/Volume:	30.00 g
Date Analyzed:	08/28/2009 1259			Final Weight/Volume:	1.0 mL
Date Prepared:	08/20/2009 1253			Injection Volume:	1.0 uL

	% Rec.						
Analyte	LCS	LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
1,1'-Biphenyl	76	135	40 - 140	56	30		
1,2,4,5-Tetrachlorobenzene	77	79	40 - 140	2	30		
1,2,4-Trichlorobenzene	71	70	40 - 140	1	30		
1,2-Dichlorobenzene	66	63	40 - 140	5	30		
1,3-Dichlorobenzene	71	69	40 - 140	3	30		
1,4-Dichlorobenzene	71	69	40 - 140	4	30		
1-Methylnaphthalene	74	140	40 - 140	62	30		
2,2'-oxybis[1-chloropropane]	81	79	40 - 140	3	30		
2,3,4,6-Tetrachlorophenol	76	160	40 - 140	71	30		
2,4,5-Trichlorophenol	92	91	30 - 130	1	30		
2,4,6-Trichlorophenol	88	87	30 - 130	1	30		
2,4-Dichlorophenol	91	91	30 - 130	0	30		
2,4-Dimethylphenol	102	99	30 - 130	2	30		
2,4-Dinitrophenol	71	69	30 - 130	3	30		
2,4-Dinitrotoluene	92	91	40 - 140	2	30		
2,6-Dinitrotoluene	85	84	40 - 140	1	30		
2-Chloronaphthalene	66	66	40 - 140	0	30		
2-Chlorophenol	78	76	30 - 130	3	30		
2-Methylnaphthalene	79	80	40 - 140	0	30		
2-Methylphenol	82	67	30 - 130	20	30		
2-Nitroaniline	95	94	40 - 140	1	30		
2-Nitrophenol	88	88	30 - 130	1	30		
3 & 4 Methylphenol	85	88	30 - 130	3	30		
3,3'-Dichlorobenzidine	100	95	40 - 140	5	30		
3-Nitroaniline	86	81	40 - 140	5	30		
4,6-Dinitro-2-methylphenol	90	88	30 - 130	1	30		
4-Bromophenyl phenyl ether	83	83	40 - 140	1	30		
4-Chloro-3-methylphenol	96	97	30 - 130	0	30		
4-Chloroaniline	69	62	40 - 140	10	30		
4-Chlorophenyl phenyl ether	87	86	40 - 140	2	30		
4-Nitroaniline	103	100	40 - 140	3	30		
4-Nitrophenol	99	95	30 - 130	4	30		

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: Olin Corporation

Job Number: 360-24194-2
Sdg Number: OCRI-02A

Surrogate Recovery Report

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Client Matrix: Solid

Lab Sample ID	Client Sample ID	2FP %Rec	PHL %Rec	NBZ %Rec	FBP %Rec	TBP %Rec	TPH %Rec
360-24194-2	OC-SB-421-10.5/12.5 -XXX	91	95	65	70	61	219X
360-24194-2 DL	OC-SB-421-10.5/12.5 -XXX DL	0D X	0D X	0D X	0D X	0D X	0D X
360-24194-2 DL2	OC-SB-421-10.5/12.5 -XXX DL2	0D X	0D X	0D X	0D X	0D X	0D X
360-24194-2 DL3	OC-SB-421-10.5/12.5 -XXX DL3	0D X	0D X	0D X	0D X	0D X	0D X
360-24194-5	OC-SB-424-17/19-XX X	103	98	63	65	78	71
360-24194-5 DL	OC-SB-424-17/19-XX X DL	101	93	76	84	85	104
360-24194-8	OC-SB-425-18/20-XX X	80	79	76	77	87	96
MB 360-47986/1-A		97	98	70	74	73	76
MB 360-48119/1-A		91	82	69	69	66	70
LCS 360-47986/2-A		71	73	80	73	78	67
LCS 360-48119/2-A		59	54	50	69	71	71
LCSD 360-47986/3-A		72	74	82	76	80	69
LCSD 360-48119/3-A		57	48	47	68	69	70

Surrogate	Acceptance Limits
2FP = 2-Fluorophenol	30-130
PHL = Phenol-d5	30-130
NBZ = Nitrobenzene-d5	30-130
FBP = 2-Fluorobiphenyl	30-130
TBP = 2,4,6-Tribromophenol	30-130
TPH = Terphenyl-d14	30-130

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Westfield Job No.: 360-24194-1

SDG No.: OCRI-02

Instrument ID: Inst. B Start Date: 09/10/2009 10:55

Analysis Batch Number: 48766 End Date: 09/10/2009 15:26

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 360-48766/1		09/10/2009 10:55	1	B10172.D	Rtx-5ms SIL with guard column 0.25(um)
CCV 360-48766/2 CCVIS		09/10/2009 11:29	1	B10173.D	Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/10/2009 12:03	1		Rtx-5ms SIL with guard column 0.25(um)
360-24194-6	OC-SB-424-7.0/9.0-XXX	09/10/2009 12:36	1	B10175.D	Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/10/2009 13:10	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/10/2009 13:44	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/10/2009 14:18	1		Rtx-5ms SIL with guard column 0.25(um)
360-24194-7	OC-SB-425-0.0/1.0-XXX	09/10/2009 14:52	5	B10179.D	Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/10/2009 15:26	2		Rtx-5ms SIL with guard column 0.25(um)

Hexachlorocyclopentadiene RL 0.0124 20 J8

all low Reject.

2,4-dinitrophenol 0.0168 J3

4,6-dinitro-2-methylphenol 0.0207 J9

butyl benzyl phthalate 29

bis(2-ethylhexyl) phthalate 29 49

di-n-octyl phthalate

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24194-1

SDG No.: OCRI-02

Matrix: Solid Level: Low Lab File ID: B10154.D

Lab ID: LCS 360-48119/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
1,1'-Biphenyl	333	241	72	40-140	
1,2,4,5-Tetrachlorobenzene	333	200	60	40-140	
1,2,4-Trichlorobenzene	333	174	52	40-140	
1,2-Dichlorobenzene	333	165	50	40-140	
1,3-Dichlorobenzene	333	137	41	40-140	
1,4-Dichlorobenzene	333	182	54	40-140	
1-Methylnaphthalene	333	171	51	40-140	
2,3,4,6-Tetrachlorophenol	333	242	73	40-140	
2,4,5-Trichlorophenol	333	265	79	30-130	
2,4,6-Trichlorophenol	333	315	95	30-130	
2,4-Dichlorophenol	333	184	55	30-130	
2,4-Dimethylphenol	333	189	57	30-130	
2,4-Dinitrophenol	333	192	58	30-130	
2,4-Dinitrotoluene	333	274	82	40-140	
2,6-Dinitrotoluene	333	266	80	40-140	
2-Chloronaphthalene	333	223	67	40-140	
2-Chlorophenol	333	166	50	30-130	
2-Methylnaphthalene	333	165	49	40-140	
2-Methylphenol	333	159	48	30-130	
2-Nitroaniline	333	270	81	40-140	
2-Nitrophenol	333	158	47	30-130	
3 & 4 Methylphenol	333	173	52	30-130	
3,3'-Dichlorobenzidine	333	111	33	40-140	*
3-Nitroaniline	333	282	84	40-140	
4,6-Dinitro-2-methylphenol	333	248	74	30-130	
4-Bromophenyl phenyl ether	333	241	72	40-140	
4-Chloro-3-methylphenol	333	201	60	30-130	
4-Chloroaniline	333	145	43	40-140	
4-Chlorophenyl phenyl ether	333	260	78	40-140	
4-Nitroaniline	333	289	87	40-140	
4-Nitrophenol	333	295	88	30-130	
Acenaphthene	333	280	84	40-140	
Acenaphthylene	333	255	77	40-140	
Acetophenone	333	174	52	40-140	
Aniline	333	127	38	40-140	*
Anthracene	333	290	87	40-140	
Atrazine	333	303	91	40-140	
Azobenzene	333	256	77	40-140	
2,2'-oxybis[1-chloropropane]	333	164	49	40-140	
Benzaldehyde	333	276	83	40-140	
Benzo[a]anthracene	333	331	99	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24194-1

SDG No.: OCRI-02

Matrix: Solid Level: Low Lab File ID: B10154.D

Lab ID: LCS 360-48119/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
Benzo[a]pyrene	333	337	101	40-140	
Benzo[b]fluoranthene	333	299	90	40-140	
Benzo[g,h,i]perylene	333	289	87	40-140	
Benzo[k]fluoranthene	333	316	95	40-140	
Benzoic acid	333	91.0	27	30-130	*
Benzophenone	333	248	74	40-140	
Benzyl alcohol	333	178	53	30-130	
Bis(2-chloroethoxy)methane	333	149	45	40-140	
Bis(2-chloroethyl)ether	333	114	34	40-140	*
Bis(2-ethylhexyl) phthalate	333	311	93	40-140	
Butyl benzyl phthalate	333	280	84	40-140	
Caprolactam	333	187	56	40-140	
Carbazole	333	271	81	40-140	
Chrysene	333	310	93	40-140	
Dibenz(a,h)anthracene	333	270	81	40-140	
Dibenzofuran	333	249	75	40-140	
Diethyl phthalate	333	263	79	40-140	
Dimethyl phthalate	333	254	76	40-140	
Di-n-butyl phthalate	333	247	74	40-140	
Di-n-octyl phthalate	333	282	85	40-140	
Diphenyl oxide	333	176	53	40-140	
Fluoranthene	333	313	94	40-140	
Fluorene	333	309	93	40-140	
Hexachlorobenzene	333	272	82	40-140	
Hexachlorobutadiene	333	146	44	40-140	
Hexachlorocyclopentadiene	333	242	72	40-140	
Hexachloroethane	333	167	50	40-140	
Indeno[1,2,3-cd]pyrene	333	276	83	40-140	
Isophorone	333	138	42	40-140	
Naphthalene	333	184	55	40-140	
Nitrobenzene	333	150	45	40-140	
N-Nitrosodimethylamine	333	183	55	40-140	
N-Nitrosodi-n-propylamine	333	185	56	40-140	
N-Nitrosodiphenylamine	333	194	58	40-140	
Pentachlorophenol	333	254	76	30-130	
Phenanthrene	333	300	90	40-140	
Phenol	333	199	60	30-130	
Pyrene	333	254	76	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24194-1

SDG No.: OCRI-02

Matrix: Solid Level: Low Lab File ID: B10155.D

Lab ID: LCSD 360-48119/3-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCSD CONCENTRATION (ug/Kg)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1'-Biphenyl	333	232	70	3	30	40-140	
1,2,4,5-Tetrachlorobenzene	333	189	57	5	30	40-140	
1,2,4-Trichlorobenzene	333	157	47	10	30	40-140	
1,2-Dichlorobenzene	333	141	42	16	30	40-140	
1,3-Dichlorobenzene	333	127	38	8	30	40-140	*
1,4-Dichlorobenzene	333	186	56	2	30	40-140	
1-Methylnaphthalene	333	181	54	6	30	40-140	
2,3,4,6-Tetrachlorophenol	333	236	71	2	30	40-140	
2,4,5-Trichlorophenol	333	285	85	7	30	30-130	
2,4,6-Trichlorophenol	333	285	85	10	30	30-130	
2,4-Dichlorophenol	333	214	64	15	30	30-130	
2,4-Dimethylphenol	333	209	63	10	30	30-130	
2,4-Dinitrophenol	333	185	56	4	30	30-130	
2,4-Dinitrotoluene	333	278	83	2	30	40-140	
2,6-Dinitrotoluene	333	273	82	3	30	40-140	
2-Chloronaphthalene	333	204	61	9	30	40-140	
2-Chlorophenol	333	159	48	4	30	30-130	
2-Methylnaphthalene	333	188	56	13	30	40-140	
2-Methylphenol	333	179	54	12	30	30-130	
2-Nitroaniline	333	278	83	3	30	40-140	
2-Nitrophenol	333	185	56	16	30	30-130	
3 & 4 Methylphenol	333	189	57	8	30	30-130	
3,3'-Dichlorobenzidine	333	110	33	1	30	40-140	*
3-Nitroaniline	333	287	86	2	30	40-140	
4,6-Dinitro-2-methylphenol	333	243	73	2	30	30-130	
4-Bromophenyl phenyl ether	333	262	78	8	30	40-140	
4-Chloro-3-methylphenol	333	213	64	6	30	30-130	
4-Chloroaniline	333	163	49	12	30	40-140	
4-Chlorophenyl phenyl ether	333	261	78	0	30	40-140	
4-Nitroaniline	333	295	89	2	30	40-140	
4-Nitrophenol	333	276	83	7	30	30-130	
Acenaphthene	333	285	86	2	30	40-140	
Acenaphthylene	333	250	75	2	30	40-140	
Acetophenone	333	158	47	9	30	40-140	
Aniline	333	104	31	20	30	40-140	*
Anthracene	333	298	89	3	30	40-140	
Atrazine	333	303	91	0	30	40-140	
Azobenzene	333	263	79	3	30	40-140	
2,2'-oxybis[1-chloropropane]	333	149	45	10	30	40-140	
Benzaldehyde	333	270	81	2	30	40-140	
Benzo[a]anthracene	333	331	99	0	30	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24194-1

SDG No.: OCRI-02

Matrix: Solid Level: Low Lab File ID: B9887.D

Lab ID: LCS 360-47986/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
1,1'-Biphenyl	333	252	76	40-140	
1,2,4,5-Tetrachlorobenzene	333	258	77	40-140	
1,2,4-Trichlorobenzene	333	236	71	40-140	
1,2-Dichlorobenzene	333	219	66	40-140	
1,3-Dichlorobenzene	333	238	71	40-140	
1,4-Dichlorobenzene	333	238	71	40-140	
1-Methylnaphthalene	333	245	74	40-140	
2,3,4,6-Tetrachlorophenol	333	253	76	40-140	
2,4,5-Trichlorophenol	333	307	92	30-130	
2,4,6-Trichlorophenol	333	292	88	30-130	
2,4-Dichlorophenol	333	302	91	30-130	
2,4-Dimethylphenol	333	339	102	30-130	
2,4-Dinitrophenol	333	237	71	30-130	
2,4-Dinitrotoluene	333	307	92	40-140	
2,6-Dinitrotoluene	333	284	85	40-140	
2-Chloronaphthalene	333	220	66	40-140	
2-Chlorophenol	333	260	78	30-130	
2-Methylnaphthalene	333	264	79	40-140	
2-Methylphenol	333	274	82	30-130	
2-Nitroaniline	333	316	95	40-140	
2-Nitrophenol	333	292	88	30-130	
3 & 4 Methylphenol	333	284	85	30-130	
3,3'-Dichlorobenzidine	333	334	100	40-140	
3-Nitroaniline	333	285	86	40-140	
4,6-Dinitro-2-methylphenol	333	298	90	30-130	
4-Bromophenyl phenyl ether	333	278	83	40-140	
4-Chloro-3-methylphenol	333	320	96	30-130	
4-Chloroaniline	333	230	69	40-140	
4-Chlorophenyl phenyl ether	333	291	87	40-140	
4-Nitroaniline	333	345	103	40-140	
4-Nitrophenol	333	329	99	30-130	
Acenaphthene	333	298	90	40-140	
Acenaphthylene	333	276	83	40-140	
Acetophenone	333	251	75	40-140	
Aniline	333	94.2	28	40-140	*
Anthracene	333	325	97	40-140	
Atrazine	333	302	91	40-140	
Azobenzene	333	280	84	40-140	
2,2'-oxybis[1-chloropropane]	333	272	81	40-140	
Benzaldehyde	333	267	80	40-140	
Benzo[a]anthracene	333	351	105	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

CCJ
(W) 1/13/12

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24194-1

SDG No.: OCRI-02

Matrix: Solid Level: Low Lab File ID: B9887.D

Lab ID: LCS 360-47986/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
Benzo[a]pyrene	333	324	97	40-140	
Benzo[b]fluoranthene	333	318	95	40-140	
Benzo[g,h,i]perylene	333	336	101	40-140	
Benzo[k]fluoranthene	333	339	102	40-140	
Benzoic acid	333	160 J	48	30-130	
Benzophenone	333	293	88	40-140	
Benzyl alcohol	333	276	83	30-130	
Bis(2-chloroethoxy)methane	333	262	78	40-140	
Bis(2-chloroethyl)ether	333	291	87	40-140	
Bis(2-ethylhexyl) phthalate	333	304	91	40-140	
Butyl benzyl phthalate	333	295	88	40-140	
Caprolactam	333	318	95	40-140	
Carbazole	333	336	101	40-140	
Chrysene	333	327	98	40-140	
Dibenz(a,h)anthracene	333	327	98	40-140	
Dibenzofuran	333	269	81	40-140	
Diethyl phthalate	333	321	96	40-140	
Dimethyl phthalate	333	301	90	40-140	
Di-n-butyl phthalate	333	344	103	40-140	
Di-n-octyl phthalate	333	284	85	40-140	
Diphenyl oxide	333	252	76	40-140	
Fluoranthene	333	326	98	40-140	
Fluorene	333	328	98	40-140	
Hexachlorobenzene	333	276	83	40-140	
Hexachlorobutadiene	333	240	72	40-140	
Hexachlorocyclopentadiene	333	264	79	40-140	
Hexachloroethane	333	229	69	40-140	
Indeno[1,2,3-cd]pyrene	333	321	96	40-140	
Isophorone	333	253	76	40-140	
Naphthalene	333	226	68	40-140	
Nitrobenzene	333	288	86	40-140	
N-Nitrosodimethylamine	333	242	72	40-140	
N-Nitrosodi-n-propylamine	333	278	83	40-140	
N-Nitrosodiphenylamine	333	221	66	40-140	
Pentachlorophenol	333	224	67	30-130	
Phenanthrene	333	287	86	40-140	
Phenol	333	267	80	30-130	
Pyrene	333	275	82	40-140	

CCJ
(W) 1/13/10

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24194-1

SDG No.: OCRI-02

Matrix: Solid Level: Low Lab File ID: B9888.D

Lab ID: LCSD 360-47986/3-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCSD CONCENTRATION (ug/Kg)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1'-Biphenyl	333	449	135	56	30	40-140	*
1,2,4,5-Tetrachlorobenzene	333	264	79	2	30	40-140	
1,2,4-Trichlorobenzene	333	234	70	1	30	40-140	
1,2-Dichlorobenzene	333	209	63	5	30	40-140	
1,3-Dichlorobenzene	333	230	69	3	30	40-140	
1,4-Dichlorobenzene	333	229	69	4	30	40-140	
1-Methylnaphthalene	333	467	140	62	30	40-140	*
2,3,4,6-Tetrachlorophenol	333	532	160	71	30	40-140	*
2,4,5-Trichlorophenol	333	304	91	1	30	30-130	
2,4,6-Trichlorophenol	333	289	87	1	30	30-130	
2,4-Dichlorophenol	333	303	91	0	30	30-130	
2,4-Dimethylphenol	333	331	99	2	30	30-130	
2,4-Dinitrophenol	333	231	69	3	30	30-130	
2,4-Dinitrotoluene	333	302	91	2	30	40-140	
2,6-Dinitrotoluene	333	280	84	1	30	40-140	
2-Chloronaphthalene	333	220	66	0	30	40-140	
2-Chlorophenol	333	253	76	3	30	30-130	
2-Methylnaphthalene	333	265	80	0	30	40-140	
2-Methylphenol	333	224	67	20	30	30-130	
2-Nitroaniline	333	314	94	1	30	40-140	
2-Nitrophenol	333	295	88	1	30	30-130	
3 & 4 Methylphenol	333	292	88	3	30	30-130	
3,3'-Dichlorobenzidine	333	316	95	5	30	40-140	
3-Nitroaniline	333	270	81	5	30	40-140	
4,6-Dinitro-2-methylphenol	333	294	88	1	30	30-130	
4-Bromophenyl phenyl ether	333	275	83	1	30	40-140	
4-Chloro-3-methylphenol	333	322	97	0	30	30-130	
4-Chloroaniline	333	208	62	10	30	40-140	
4-Chlorophenyl phenyl ether	333	286	86	2	30	40-140	
4-Nitroaniline	333	334	100	3	30	40-140	
4-Nitrophenol	333	317	95	4	30	30-130	
Acenaphthene	333	297	89	1	30	40-140	
Acenaphthylene	333	276	83	0	30	40-140	
Acetophenone	333	245	73	3	30	40-140	
Aniline	333	249	75	90	30	40-140	*
Anthracene	333	320	96	1	30	40-140	
Atrazine	333	640	192	72	30	40-140	*
Azobenzene	333	360	108	25	30	40-140	
2,2'-oxybis[1-chloropropane]	333	263	79	3	30	40-140	
Benzaldehyde	333	259	78	3	30	40-140	
Benzo[a]anthracene	333	343	103	2	30	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

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FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24194-1

SDG No.: OCRI-02

Matrix: Solid Level: Low Lab File ID: B9888.D

Lab ID: LCSD 360-47986/3-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCSD CONCENTRATION (ug/Kg)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Benzo[a]pyrene	333	322	96	1	30	40-140	
Benzo[b]fluoranthene	333	313	94	1	30	40-140	
Benzo[g,h,i]perylene	333	326	98	3	30	40-140	
Benzo[k]fluoranthene	333	339	102	0	30	40-140	
Benzoic acid	333	159 J	48	0	30	30-130	
Benzophenone	333	492	148	51	30	40-140	*
Benzyl alcohol	333	229	69	18	30	30-130	
Bis(2-chloroethoxy)methane	333	262	79	0	30	40-140	
Bis(2-chloroethyl)ether	333	340	102	16	30	40-140	
Bis(2-ethylhexyl) phthalate	333	301	90	1	30	40-140	
Butyl benzyl phthalate	333	290	87	2	30	40-140	
Caprolactam	333	650	195	68	30	40-140	*
Carbazole	333	333	100	1	30	40-140	
Chrysene	333	312	94	5	30	40-140	
Dibenz(a,h)anthracene	333	320	96	2	30	40-140	
Dibenzofuran	333	266	80	1	30	40-140	
Diethyl phthalate	333	320	96	0	30	40-140	
Dimethyl phthalate	333	299	90	1	30	40-140	
Di-n-butyl phthalate	333	343	103	0	30	40-140	
Di-n-octyl phthalate	333	297	89	5	30	40-140	
Diphenyl oxide	333	512	154	68	30	40-140	*
Fluoranthene	333	322	97	1	30	40-140	
Fluorene	333	325	98	1	30	40-140	
Hexachlorobenzene	333	275	83	0	30	40-140	
Hexachlorobutadiene	333	237	71	1	30	40-140	
Hexachlorocyclopentadiene	333	249	75	6	30	40-140	
Hexachloroethane	333	221	66	3	30	40-140	
Indeno[1,2,3-cd]pyrene	333	316	95	1	30	40-140	
Isophorone	333	248	75	2	30	40-140	
Naphthalene	333	229	69	1	30	40-140	
Nitrobenzene	333	288	86	0	30	40-140	
N-Nitrosodimethylamine	333	232	70	4	30	40-140	
N-Nitrosodi-n-propylamine	333	264	79	5	30	40-140	
N-Nitrosodiphenylamine	333	216	65	3	30	40-140	
Pentachlorophenol	333	230	69	3	30	30-130	
Phenanthrene	333	286	86	0	30	40-140	
Phenol	333	259	78	3	30	30-130	
Pyrene	333	272	82	1	30	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24194-1

SDG No.: OCRI-02

Matrix: Solid Level: Low Lab File ID: J02789.D

Lab ID: LCS 360-48297/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
N-Nitrosodimethylamine	100	67.4	67	40-140	

1/13/10

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24194-1

SDG No.: OCRI-02

Matrix: Solid Level: Low Lab File ID: J02790.D

Lab ID: LCSD 360-48297/3-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCSD CONCENTRATION (ug/Kg)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
N-Nitrosodimethylamine	100	71.4	71	6	30	40-140	

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1/13/10

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24194-1

SDG No.: OCRI-02

Matrix: Water Level: Low Lab File ID: B9852.D

Lab ID: LCS 360-48124/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1'-Biphenyl	10.0	8.11	81	40-140	
1,2,4,5-Tetrachlorobenzene	10.0	7.58	76	40-140	
1-Methylnaphthalene	10.0	7.81	78	40-140	
2,3,4,6-Tetrachlorophenol	10.0	7.60	76	40-140	
2,4,5-Trichlorophenol	10.0	8.85	88	30-130	
2,4,6-Trichlorophenol	10.0	8.68	87	30-130	
2,4-Dichlorophenol	10.0	8.72	87	30-130	
2,4-Dimethylphenol	10.0	9.14	91	30-130	
2,4-Dinitrophenol	10.0	8.48	85	30-130	
2,4-Dinitrotoluene	10.0	8.72	87	40-140	
2,6-Dinitrotoluene	10.0	8.21	82	40-140	
2-Chloronaphthalene	10.0	6.59	66	40-140	
2-Chlorophenol	10.0	6.26	63	40-130	
2-Methylnaphthalene	10.0	7.77	78	40-140	
2-Methylphenol	10.0	5.41	54	30-130	
2-Nitroaniline	10.0	9.25	93	40-140	
2-Nitrophenol	10.0	8.73	87	30-130	
3 & 4 Methylphenol	10.0	4.93 J	49	30-130	
3,3'-Dichlorobenzidine	10.0	10.6	106	40-140	
3-Nitroaniline	10.0	8.44	84	40-140	
4,6-Dinitro-2-methylphenol	10.0	9.47	95	30-130	
4-Bromophenyl phenyl ether	10.0	8.43	84	40-140	
4-Chloro-3-methylphenol	10.0	7.79	78	30-130	
4-Chloroaniline	10.0	8.17	82	40-140	
4-Chlorophenyl phenyl ether	10.0	8.51	85	40-140	
4-Nitroaniline	10.0	9.55	95	40-140	
4-Nitrophenol	10.0	2.22 J	22	30-130	*
Acenaphthene	10.0	9.07	91	40-140	
Acenaphthylene	10.0	8.51	85	40-140	
Acetophenone	10.0	8.18	82	40-140	
Aniline	10.0	2.80 J	28	40-140	*
Anthracene	10.0	9.77	98	40-140	
Atrazine	10.0	9.42	94	40-140	
Azobenzene	10.0	8.70	87	40-140	
Benzaldehyde	10.0	1.54 J	15	40-140	*
bis (2-chloroisopropyl) ether	10.0	8.52	85	40-140	
Benzo[a]anthracene	10.0	10.3	103	40-140	
Benzo[a]pyrene	10.0	9.37	94	40-140	
Benzo[b]fluoranthene	10.0	8.88	89	40-140	
Benzo[g,h,i]perylene	10.0	10.6	106	40-140	
Benzo[k]fluoranthene	10.0	9.94	99	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24194-1

SDG No.: OCRI-02

Matrix: Water Level: Low Lab File ID: B9852.D

Lab ID: LCS 360-48124/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Benzoic acid	10.0	4.68 J	47	30-130	
Benzophenone	10.0	9.19	92	40-140	
Benzyl alcohol	10.0	5.40 J	54	30-130	
Bis(2-chloroethoxy)methane	10.0	8.38	84	40-140	
Bis(2-chloroethyl)ether	10.0	8.72	87	40-140	
Bis(2-ethylhexyl) phthalate	10.0	9.10	91	40-140	
Butyl benzyl phthalate	10.0	8.90	89	40-140	
Caprolactam	10.0	1.28 J	13	40-140	*
Carbazole	10.0	9.63	96	40-140	
Chrysene	10.0	9.56	96	40-140	
Dibenz(a,h)anthracene	10.0	9.64	96	40-140	
Dibenzofuran	10.0	8.10	81	40-140	
Diethyl phthalate	10.0	9.36	94	40-140	
Dimethyl phthalate	10.0	9.03	90	40-140	
Di-n-butyl phthalate	10.0	9.98	100	40-140	
Di-n-octyl phthalate	10.0	8.39	84	40-140	
Diphenyl oxide	10.0	8.06	81	40-140	
Fluoranthene	10.0	9.54	95	40-140	
Fluorene	10.0	9.78	98	40-140	
Hexachlorobenzene	10.0	8.33	83	40-140	
Hexachlorocyclopentadiene	10.0	6.86	69	40-140	
Hexachloroethane	10.0	6.55	66	40-140	
Indeno[1,2,3-cd]pyrene	10.0	9.66	97	40-140	
Isophorone	10.0	7.95	79	40-140	
Nitrobenzene	10.0	9.22	92	40-140	
N-Nitrosodimethylamine	10.0	2.79 J	28	40-140	*
N-Nitrosodi-n-propylamine	10.0	8.63	86	40-140	
N-Nitrosodiphenylamine	10.0	6.70	67	40-140	
Pentachlorophenol	10.0	8.36	84	30-130	
Phenanthrene	10.0	8.68	87	40-140	
Phenol	10.0	1.54 J	15	30-130	*
Pyrene	10.0	8.69	87	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24194-1

SDG No.: OCRI-02

Matrix: Water Level: Low Lab File ID: B9853.D

Lab ID: LCSD 360-48124/3-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1'-Biphenyl	10.0	8.23	82	1	20	40-140	
1,2,4,5-Tetrachlorobenzene	10.0	7.37	74	3	20	40-140	
1-Methylnaphthalene	10.0	8.00	80	2	20	40-140	
2,3,4,6-Tetrachlorophenol	10.0	7.62	76	0	20	40-140	
2,4,5-Trichlorophenol	10.0	8.75	88	1	20	30-130	
2,4,6-Trichlorophenol	10.0	8.66	87	0	20	30-130	
2,4-Dichlorophenol	10.0	8.80	88	1	20	30-130	
2,4-Dimethylphenol	10.0	9.13	91	0	20	30-130	
2,4-Dinitrophenol	10.0	7.94	79	7	20	30-130	
2,4-Dinitrotoluene	10.0	8.62	86	1	20	40-140	
2,6-Dinitrotoluene	10.0	8.20	82	0	20	40-140	
2-Chloronaphthalene	10.0	6.51	65	1	20	40-140	
2-Chlorophenol	10.0	6.41	64	2	20	40-130	
2-Methylnaphthalene	10.0	7.69	77	1	20	40-140	
2-Methylphenol	10.0	5.52	55	2	20	30-130	
2-Nitroaniline	10.0	9.12	91	1	20	40-140	
2-Nitrophenol	10.0	8.79	88	1	20	30-130	
3 & 4 Methylphenol	10.0	4.96 J	50	1	20	30-130	
3,3'-Dichlorobenzidine	10.0	10.5	105	1	20	40-140	
3-Nitroaniline	10.0	8.48	85	1	20	40-140	
4,6-Dinitro-2-methylphenol	10.0	9.10	91	4	20	30-130	
4-Bromophenyl phenyl ether	10.0	8.53	85	1	20	40-140	
4-Chloro-3-methylphenol	10.0	7.87	79	1	20	30-130	
4-Chloroaniline	10.0	8.19	82	0	20	40-140	
4-Chlorophenyl phenyl ether	10.0	8.48	85	0	20	40-140	
4-Nitroaniline	10.0	8.94	89	7	20	40-140	
4-Nitrophenol	10.0	2.19 J	22	1	20	30-130	*
Acenaphthene	10.0	8.96	90	1	20	40-140	
Acenaphthylene	10.0	8.59	86	1	20	40-140	
Acetophenone	10.0	8.24	82	1	20	40-140	
Aniline	10.0	2.62 J	26	7	20	40-140	*
Anthracene	10.0	9.99	100	2	20	40-140	
Atrazine	10.0	9.39	94	0	20	40-140	
Azobenzene	10.0	8.97	90	3	20	40-140	
Benzaldehyde	10.0	1.58 J	16	2	20	40-140	*
bis (2-chloroisopropyl) ether	10.0	8.56	86	1	20	40-140	
Benzo[a]anthracene	10.0	10.4	104	2	20	40-140	
Benzo[a]pyrene	10.0	9.53	95	2	20	40-140	
Benzo[b]fluoranthene	10.0	9.12	91	3	20	40-140	
Benzo[g,h,i]perylene	10.0	10.7	107	1	20	40-140	
Benzo[k]fluoranthene	10.0	9.98	100	0	20	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24194-1

SDG No.: OCRI-02

Matrix: Water Level: Low Lab File ID: B9853.D

Lab ID: LCSD 360-48124/3-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Benzoic acid	10.0	4.76 J	48	2	20	30-130	
Benzophenone	10.0	9.42	94	2	20	40-140	
Benzyl alcohol	10.0	5.46 J	55	1	20	30-130	
Bis(2-chloroethoxy)methane	10.0	8.45	84	1	20	40-140	
Bis(2-chloroethyl)ether	10.0	8.84	88	1	20	40-140	
Bis(2-ethylhexyl) phthalate	10.0	9.25	92	2	20	40-140	
Butyl benzyl phthalate	10.0	8.99	90	1	20	40-140	
Caprolactam	10.0	1.35 J	14	6	20	40-140	*
Carbazole	10.0	9.59	96	0	20	40-140	
Chrysene	10.0	9.71	97	2	20	40-140	
Dibenz(a,h)anthracene	10.0	9.61	96	0	20	40-140	
Dibenzofuran	10.0	8.20	82	1	20	40-140	
Diethyl phthalate	10.0	9.50	95	1	20	40-140	
Dimethyl phthalate	10.0	9.13	91	1	20	40-140	
Di-n-butyl phthalate	10.0	10.7	107	7	20	40-140	
Di-n-octyl phthalate	10.0	8.75	87	4	20	40-140	
Diphenyl oxide	10.0	8.16	82	1	20	40-140	
Fluoranthene	10.0	9.65	96	1	20	40-140	
Fluorene	10.0	9.85	98	1	20	40-140	
Hexachlorobenzene	10.0	8.42	84	1	20	40-140	
Hexachlorocyclopentadiene	10.0	5.91	59	15	20	40-140	
Hexachloroethane	10.0	6.29	63	4	20	40-140	
Indeno[1,2,3-cd]pyrene	10.0	9.69	97	0	20	40-140	
Isophorone	10.0	8.02	80	1	20	40-140	
Nitrobenzene	10.0	9.22	92	0	20	40-140	
N-Nitrosodimethylamine	10.0	2.84 J	28	2	20	40-140	*
N-Nitrosodi-n-propylamine	10.0	8.67	87	0	20	40-140	
N-Nitrosodiphenylamine	10.0	6.80	68	2	20	40-140	
Pentachlorophenol	10.0	8.17	82	2	20	30-130	
Phenanthrene	10.0	8.85	88	2	20	40-140	
Phenol	10.0	1.58 J	16	2	20	30-130	*
Pyrene	10.0	8.86	89	2	20	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Westfield Job No.: 360-24194-1

SDG No.: OCRI-02

Sample No.: CCV 360-48454/2 Date Analyzed: 09/01/2009 18:25

Instrument ID: Inst. J GC Column: Rtx-5ms SIL with ID: 0.25(um)

Lab File ID (Standard): J02787.D Heated Purge: (Y/N) N

		PHN		CRY		PD12	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12 HOUR STD		744077	10.26	625155	12.99	425787	14.54
UPPER LIMIT		1488154	10.76	1250310	13.49	851574	15.04
LOWER LIMIT		372039	9.76	312578	12.49	212894	14.04
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 360-48297/1-A		704426	10.26	528932	12.98	346248	14.54
LCS 360-48297/2-A		817530	10.26	676663	12.99	485800	14.54
LCSD 360-48297/3-A		795362	10.26	650680	12.99	496475	14.54
360-24194-1	OC-SB-421-0.0/1.0-XXX	737603	10.27	389455	12.99	2172591*	14.55
360-24194-3	OC-SB-421-8.0/10.0-XXX	822821	10.26	455561	13.00	390909	14.56
360-24194-4	OC-SB-424-0.0/1.0-XXX	794298	10.26	428227	12.99	485387	14.54
360-24194-6	OC-SB-424-7.0/9.0-XXX	863178	10.27	451411	12.99	207142*	14.56

1 n/q

48.6 %

PHN = Phenanthrene-d10
CRY = Chrysene-d12
PD12 = Perylene-d12

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.50 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270C LL

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Westfield Job No.: 360-24194-1

SDG No.: OCRI-02

Sample No.: CCV 360-48766/2 Date Analyzed: 09/10/2009 11:29

Instrument ID: Inst. B GC Column: Rtx-5ms SIL with ID: 0.25(um)

Lab File ID (Standard): B10173.D Heated Purge: (Y/N) N

		PHN		CRY		PD12	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12 HOUR STD		1528182	11.46	993835	14.77	477120	17.20
UPPER LIMIT		3056364	11.96	1987670	15.27	954240	17.70
LOWER LIMIT		764091	10.96	496918	14.27	238560	16.70
LAB SAMPLE ID	CLIENT SAMPLE ID						
360-24194-6	OC-SB-424-7.0/9.0-XXX	1058211	11.47	790790	14.77	450522	17.20
360-24194-7	OC-SB-425-0.0/1.0-XXX	948237	11.47	702263	14.77	179608*	17.08

30%

PHN = Phenanthrene-d10
CRY = Chrysene-d12
PD12 = Perylene-d12

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.50 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270C LL

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Westfield Job No.: 360-24194-1

SDG No.: OCRI-02

Sample No.: CCV 360-48456/2 Date Analyzed: 09/02/2009 05:52

Instrument ID: Inst. J GC Column: Rtx-5ms SIL with ID: 0.25(um)

Lab File ID (Standard): J02810.D Heated Purge: (Y/N) N

		PHN		CRY		PD12	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12 HOUR STD		957360	10.27	553484	12.99	225187	14.56
UPPER LIMIT		1914720	10.77	1106968	13.49	450374	15.06
LOWER LIMIT		478680	9.77	276742	12.49	112594	14.06
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 360-48381/1-A		738036	10.26	419400	13.00	206496	14.56
LCS 360-48381/2-A		786709	10.26	405763	12.99	159561	14.56
LCSD 360-48381/3-A		792313	10.26	459645	13.00	197651	14.56
360-24194-7	OC-SB-425-0.0/1.0-XXX	565585	10.27	196139*	13.01	2052247*	14.54
360-24194-9	OC-SB-425-6.0/8.0-XXX	657094	10.27	278555	13.00	1472969*	14.57

35%

* not applicable

PHN = Phenanthrene-d10
CRY = Chrysene-d12
PD12 = Perylene-d12

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.50 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270C LL

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Westfield Job No.: 360-24194-1

SDG No.: OCRI-02

Sample No.: CCV 360-48766/2 Date Analyzed: 09/10/2009 11:29

Instrument ID: Inst. B GC Column: Rtx-5ms SIL with ID: 0.25(um)

Lab File ID (Standard): B10173.D Heated Purge: (Y/N) N

		DCB		NPT		ACN	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12 HOUR STD		1084136	7.58	2270385	8.71	959904	10.22
UPPER LIMIT		2168272	8.08	4540770	9.21	1919808	10.72
LOWER LIMIT		542068	7.08	1135193	8.21	479952	9.72
LAB SAMPLE ID	CLIENT SAMPLE ID						
360-24194-6	OC-SB-424-7.0/9.0-XXX	542702	7.57	1298232	8.71	648683	10.22
360-24194-7	OC-SB-425-0.0/1.0-XXX	470412*	7.57	1131103*	8.71	571144	10.22

43% 49.8%

DCB = 1,4-Dichlorobenzene-d4
NPT = Naphthalene-d8
ACN = Acenaphthene-d10

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.50 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270C LL

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Westfield Job No.: 360-24194-1

SDG No.: OCRI-02

Sample No.: CCV 360-48389/45 Date Analyzed: 09/01/2009 02:57

Instrument ID: Inst. B GC Column: Rtx-5ms SIL with ID: 0.25(um)

Lab File ID (Standard): B9931.D Heated Purge: (Y/N) N

		PHN		CRY		PD12	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12 HOUR STD		772766	12.54	520297	16.42	251133	19.41
UPPER LIMIT		1545532	13.04	1040594	16.92	502266	19.91
LOWER LIMIT		386383	12.04	260149	15.92	125567	18.91
LAB SAMPLE ID	CLIENT SAMPLE ID						
360-24194-1 DL	OC-SB-421-0.0/1.0-XXX DL	809073	12.54	461151	16.43	1276860*	19.38

n/a

PHN = Phenanthrene-d10
CRY = Chrysene-d12
PD12 = Perylene-d12

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.50 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270C LL

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Westfield Job No.: 360-24194-1

SDG No.: OCRI-02

Sample No.: CCV 360-48702/2 Date Analyzed: 09/08/2009 15:27

Instrument ID: Inst. B GC Column: Rtx-5ms SIL with ID: 0.25(um)

Lab File ID (Standard): B10124.D Heated Purge: (Y/N) N

		PHN		CRY		PD12	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12 HOUR STD		1215551	11.63	960023	15.11	685314	17.52
UPPER LIMIT		2431102	12.13	1920046	15.61	1370628	18.02
LOWER LIMIT		607776	11.13	480012	14.61	342657	17.02
LAB SAMPLE ID	CLIENT SAMPLE ID						
360-24194-1 DL2	OC-SB-421-0.0/1.0-XXX DL2	1002960	11.64	599521	15.13	9899150*	17.56
360-24194-3 DL3	OC-SB-421-8.0/10.0-XX X DL3	1401445	11.62	930449	15.12	383548	17.38

PHN = Phenanthrene-d10
CRY = Chrysene-d12
PD12 = Perylene-d12

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.50 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270C LL

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Westfield Job No.: 360-24194-1

SDG No.: OCRI-02

Lab Sample ID: CCV 360-48456/2 Calibration Date: 09/02/2009 05:52

Instrument ID: Inst. J Calib Start Date: 09/01/2009 12:25

GC Column: Rtx-5ms ID: 0.25(um) Calib End Date: 09/01/2009 16:25

Lab File ID: J02810.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
N-Nitrosodimethylamine	Ave	0.2617	0.2488		4750	5000	-4.9	30.0
2-Fluorophenol	Ave	0.6006	0.5950		4950	5000	-0.9	30.0
Phenol-d5	Ave	0.7673	0.7410		4830	5000	-3.4	30.0
Nitrobenzene-d5	Qua		0.2510		5130	5000	2.6	30.0
2-Fluorobiphenyl	Ave	1.285	1.213		4720	5000	-5.6	30.0
2,4,6-Tribromophenol	Lin2		0.0592		3830	5000	-23.4	30.0
Terphenyl-d14	Ave	0.8071	0.9612		5950	5000	19.1	30.0

OK

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Westfield Job No.: 360-24194-1

SDG No.: OCRI-02

Lab Sample ID: CCV 360-48456/2 Calibration Date: 09/02/2009 05:52

Instrument ID: Inst. J Calib Start Date: 08/31/2009 23:25

GC Column: Rtx-5ms ID: 0.25(um) Calib End Date: 09/01/2009 10:24

Lab File ID: J02810.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Acenaphthene	None		1.058			5000	-100.0*	20.0
4-Nitrophenol	None		0.0297*	0.0500		5000	-100.0*	30.0
2,4-Dinitrotoluene	None		0.3069			5000	-100.0*	30.0
Dibenzofuran	None		1.477			5000	-100.0*	30.0
Diethyl phthalate	None		1.212			5000	-100.0*	30.0
Benzophenone	None		0.0001			5000	-100.0*	30.0
2,4-Dinitrophenol	None		0.0001*	0.0500		5000	-100.0*	30.0
4-Chlorophenyl phenyl ether	None		0.5788			5000	-100.0*	30.0
Fluorene	None		1.211			5000	-100.0*	30.0
4-Nitroaniline	None		0.3218			5000	-100.0*	30.0
4,6-Dinitro-2-methylphenol	None		0.0000			5000	-100.0*	30.0
Azobenzene	None		1.145			5000	-100.0*	30.0
Diphenylamine	None		0.0027			5000	-100.0*	30.0
2,3,4,6-Tetrachlorophenol	None		0.0001			5000	-100.0*	30.0
Atrazine	None		0.0001			5000	-100.0*	30.0
N-Nitrosodiphenylamine	None		0.0252			5000	-100.0*	20.0
Hexachlorobenzene	None		0.1875			5000	-100.0*	30.0
Pentachloronitrobenzene	None		0.0630			5000	-100.0*	30.0
Pentachlorophenol	None		0.0023			5000	-100.0*	20.0
1,2-Diphenylhydrazine	None		0.0012			5000	-100.0*	30.0
Anthracene	None		0.9963			5000	-100.0*	30.0
Phenanthrene	None		0.9963			5000	-100.0*	30.0
Carbazole	None		0.8950			5000	-100.0*	30.0
Di-n-butyl phthalate	None		1.168			5000	-100.0*	30.0
Pyrene	None		1.525			5000	-100.0*	30.0
Benzidine	None		0.1813			5000	-100.0*	30.0
Fluoranthene	None		0.8952			5000	-100.0*	20.0
Butyl benzyl phthalate	None		0.7692			5000	-100.0*	30.0
Bis(2-ethylhexyl) phthalate	None		1.031			5000	-100.0*	30.0
Benzo[a]anthracene	None		0.9327			5000	-100.0*	30.0
3,3'-Dichlorobenzidine	None		0.0000			5000	-100.0*	30.0
Di-n-octyl phthalate	None		3.383			5000	-100.0*	20.0
Benzo[b]fluoranthene	None		1.016			5000	-100.0*	30.0
Benzo[k]fluoranthene	None		1.016			5000	-100.0*	30.0
Benzo[a]pyrene	None		0.0001			5000	-100.0*	20.0
Pyridine	Lin2					5000	-100.0*	30.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Westfield Job No.: 360-24194-1

SDG No.: OCRI-02

Lab Sample ID: CCV 360-48456/2 Calibration Date: 09/02/2009 05:52

Instrument ID: Inst. J Calib Start Date: 08/31/2009 23:25

GC Column: Rtx-5ms ID: 0.25(um) Calib End Date: 09/01/2009 10:24

Lab File ID: J02810.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Lin2		0.0002			5000	-100.0*	30.0
2-Methylphenol	Lin2		0.5931			5000	-100.0*	30.0
Benzyl alcohol	Lin2		0.1832			5000	-100.0*	30.0
Benzaldehyde	Lin2		0.0001			5000	-100.0*	30.0
2,4-Dimethylphenol	None		0.2076			5000	-100.0*	30.0
Acetophenone	Lin2		0.0165			5000	-100.0*	30.0
Nitrobenzene	None		0.0636			5000	-100.0*	30.0
Bis(2-chloroethoxy)methane	None		0.2867			5000	-100.0*	30.0
Bis(2-chloroethyl)ether	Lin2		0.7371			5000	-100.0*	30.0
Benzoic acid	None		0.0058			5000	-100.0*	30.0
2-Chlorophenol	Lin2		0.0197			5000	-100.0*	30.0
1,2,4-Trichlorobenzene	None		0.2224			5000	-100.0*	30.0
1,3-Dichlorobenzene	Lin2		0.0238			5000	-100.0*	30.0
1,4-Dichlorobenzene	Ave	0.0012	0.0238			5000	1850.0*	20.0
2,2'-oxybis[1-chloropropane]	Lin2		0.0090			5000	-100.0*	30.0
Alpha-Terpineol	None		0.1653			5000	-100.0*	30.0
Hexachloroethane	Lin2		0.0013			5000	-100.0*	30.0
Naphthalene	None		0.7254			5000	-100.0*	30.0
4-Chloroaniline	None		0.3007			5000	-100.0*	30.0
2,4-Dichlorophenol	None		0.1861			5000	-100.0*	20.0
Hexachlorobutadiene	None		0.1138			5000	-100.0*	20.0
N-Nitrosodi-n-propylamine	Ave	0.0116	0.0004*	0.0500		5000	-96.9*	30.0
3 & 4 Methylphenol	Lin2		0.0001			5000	-100.0*	30.0
Phenol	Ave	0.0299	0.0003			5000	-99.1*	20.0
Aniline	Lin2		0.0002			5000	-100.0*	30.0
1,2-Dichlorobenzene	Lin2		0.0007			5000	-100.0*	30.0
4-Chloro-3-methylphenol	None		0.1948			5000	-100.0*	20.0
2-Methylnaphthalene	None		0.4590			5000	-100.0*	30.0
Caprolactam	None		0.0016			5000	-100.0*	30.0
2,4,6-Trichlorophenol	None		0.2638			5000	-100.0*	20.0
2,4,5-Trichlorophenol	None		0.2859			5000	-100.0*	30.0
2-Chloronaphthalene	None		1.143			5000	-100.0*	30.0
1-Methylnaphthalene	None		0.1101			5000	-100.0*	30.0
2-Nitroaniline	None		0.3023			5000	-100.0*	30.0
Dimethyl phthalate	None		1.241			5000	-100.0*	30.0
2,6-Dinitrotoluene	None		0.2578			5000	-100.0*	30.0
Isophorone	None		0.0002			5000	-100.0*	30.0
1,1'-Biphenyl	None		0.0002			5000	-100.0*	30.0
2-Nitrophenol	None		0.0001			5000	-100.0*	20.0
Acenaphthylene	None		1.684			5000	-100.0*	30.0
3-Nitroaniline	None		0.3301			5000	-100.0*	30.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Westfield Job No.: 360-24194-1

SDG No.: OCRI-02

Lab Sample ID: CCV 360-48702/2 Calibration Date: 09/08/2009 15:27

Instrument ID: Inst. B Calib Start Date: 09/07/2009 10:55

GC Column: Rtx-5ms ID: 0.25(um) Calib End Date: 09/07/2009 15:26

Lab File ID: B10124.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Qua		0.1775		4570	5000	-8.6	30.0
Pyridine	Ave	0.5443	0.4828		4440	5000	-11.3	30.0
N-Nitrosodimethylamine	Ave	0.3636	0.3188		4380	5000	-12.3	30.0
Benzaldehyde	Qua		0.6324		4530	5000	-9.4	30.0
Phenol	Qua		0.6324		4530	5000	-9.4	20.0
Aniline	Ave	0.8590	0.7647		4450	5000	-11.0	30.0
Bis(2-chloroethyl)ether	Qua		0.5488		4720	5000	-5.7	30.0
2-Chlorophenol	Ave	0.6390	0.5741		4490	5000	-10.2	30.0
1,4-Dichlorobenzene	Qua		0.6745		4880	5000	-2.4	20.0
1,3-Dichlorobenzene	Qua		0.6945		4810	5000	-3.8	30.0
Benzyl alcohol	Ave	0.4273	0.4404		5150	5000	3.1	30.0
1,2-Dichlorobenzene	Qua		0.6217		4670	5000	-6.5	30.0
2-Methylphenol	Ave	0.5588	0.5198		4650	5000	-7.0	30.0
2,2'-oxybis[1-chloropropane]	Qua		0.9102		4700	5000	-6.1	30.0
3 & 4 Methylphenol	Ave	0.5782	0.5334		4610	5000	-7.7	30.0
Acetophenone	Ave	0.8284	0.7690		4640	5000	-7.2	30.0
N-Nitrosodi-n-propylamine	Ave	0.4091	0.3975	0.0500	4860	5000	-2.8	30.0
Hexachloroethane	Ave	0.2628	0.2429		4620	5000	-7.6	30.0
Nitrobenzene	Ave	0.2822	0.3137		5560	5000	11.2	30.0
Isophorone	Ave	0.4748	0.5480		5770	5000	15.4	30.0
2,4-Dimethylphenol	Ave	0.2344	0.2526		5390	5000	7.8	30.0
2-Nitrophenol	Lin1		0.1741		5310	5000	6.1	20.0
Benzoic acid	Qua		0.1003		4130	5000	-17.3	30.0
Bis(2-chloroethoxy)methane	Ave	0.3086	0.3336		5400	5000	8.1	30.0
2,4-Dichlorophenol	Ave	0.2285	0.2497		5470	5000	9.3	20.0
1,2,4-Trichlorobenzene	Ave	0.2774	0.2891		5210	5000	4.2	30.0
Alpha-Terpineol	Ave	0.2367	0.2616		5530	5000	10.5	30.0
Naphthalene	Ave	0.8716	0.8704		4990	5000	-0.1	30.0
4-Chloroaniline	Ave	0.3443	0.3689		5360	5000	7.1	30.0
Hexachlorobutadiene	Ave	0.1333	0.1441		5410	5000	8.1	20.0
Caprolactam	Lin1		0.1294		5190	5000	3.8	30.0
4-Chloro-3-methylphenol	Ave	0.2248	0.2461		5480	5000	9.5	20.0
2-Methylnaphthalene	Ave	0.5530	0.5671		5130	5000	2.5	30.0
1-Methylnaphthalene	Ave	0.5681	0.5871		5170	5000	3.3	30.0
1,2,4,5-Tetrachlorobenzene	Ave	0.2448	0.2405		4910	5000	-1.8	30.0
Hexachlorocyclopentadiene	Lin		0.0361*	0.0500	1320	5000	-73.6*	30.0
2,4,6-Trichlorophenol	Ave	0.3200	0.3310		5170	5000	3.4	20.0
2,4,5-Trichlorophenol	Ave	0.3340	0.3446		5160	5000	3.2	30.0
1,1'-Biphenyl	Ave	1.412	1.522		5390	5000	7.9	30.0
2-Chloronaphthalene	Ave	1.281	1.403		5480	5000	9.5	30.0
Phenyl ether	Ave	0.3877	0.3928		5060	5000	1.3	30.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Westfield Job No.: 360-24194-1

SDG No.: OCRI-02

Lab Sample ID: CCV 360-48702/2 Calibration Date: 09/08/2009 15:27

Instrument ID: Inst. B Calib Start Date: 09/07/2009 10:55

GC Column: Rtx-5ms ID: 0.25(um) Calib End Date: 09/07/2009 15:26

Lab File ID: B10124.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2-Nitroaniline	Lin1		0.3593		5420	5000	8.5	30.0
Dimethyl phthalate	Ave	1.194	1.289		5400	5000	7.9	30.0
2,6-Dinitrotoluene	Ave	0.2790	0.3166		5670	5000	13.5	30.0
Acenaphthylene	Ave	1.625	1.784		5490	5000	9.8	30.0
3-Nitroaniline	Ave	0.2884	0.3165		5490	5000	9.8	30.0
Acenaphthene	Ave	1.150	1.189		5170	5000	3.4	20.0
2,4-Dinitrophenol	Lin		0.0611	0.0500	3610	5000	-27.7	30.0
4-Nitrophenol	Lin2		0.1440	0.0500	4710	5000	-5.8	30.0
2,4-Dinitrotoluene	Lin1		0.4116		5280	5000	5.7	30.0
Dibenzofuran	Ave	1.501	1.583		5270	5000	5.5	30.0
2,3,4,6-Tetrachlorophenol	Lin1		0.2340		4410	5000	-11.8	30.0
Diethyl phthalate	Ave	1.214	1.296		5340	5000	6.8	30.0
4-Chlorophenyl phenyl ether	Ave	0.5927	0.5889		4970	5000	-0.6	30.0
Fluorene	Ave	1.263	1.320		5220	5000	4.5	30.0
4-Nitroaniline	Ave	0.2793	0.2954		5290	5000	5.8	30.0
4,6-Dinitro-2-methylphenol	Lin		0.0858		4490	5000	-10.2	30.0
Diphenylamine	Ave	0.6577	0.7052		5360	5000	7.2	30.0
N-Nitrosodiphenylamine	Ave	0.6577	0.7052		5360	5000	7.2	20.0
1,2-Diphenylhydrazine	Ave	0.7276	0.8069		5550	5000	10.9	30.0
Azobenzene	Ave	0.7276	0.8069		5550	5000	10.9	30.0
Benzophenone	Ave	0.5990	0.6354		5300	5000	6.1	30.0
4-Bromophenyl phenyl ether	Ave	0.1914	0.1961		5120	5000	2.5	30.0
Atrazine	Ave	0.1896	0.1871		4930	5000	-1.3	30.0
Hexachlorobenzene	Ave	0.1829	0.1837		5020	5000	0.4	30.0
Pentachlorophenol	Lin		0.0773		4030	5000	-19.4	20.0
Pentachloronitrobenzene	Ave	0.0682	0.0781		5720	5000	14.4	30.0
Phenanthrene	Ave	1.057	1.120		5300	5000	6.0	30.0
Anthracene	Ave	0.9924	1.078		5430	5000	8.6	30.0
Carbazole	Ave	0.8861	0.8723		4920	5000	-1.6	30.0
Di-n-butyl phthalate	Ave	1.202	1.282		5330	5000	6.6	30.0
Pyrene	Ave	1.342	1.290		4810	5000	-3.8	30.0
Benzidine	Ave	0.1292	0.1229		4760	5000	-4.9	30.0
Fluoranthene	Ave	0.9854	1.078		5470	5000	9.4	20.0
Butyl benzyl phthalate	Ave	0.6248	0.7197		5760	5000	15.2	30.0
3,3'-Dichlorobenzidine	Lin2		0.2933		4710	5000	-5.8	30.0
Bis(2-ethylhexyl) phthalate	Ave	0.7500	0.9559		6370	5000	27.5	30.0
Benzo[a]anthracene	Ave	0.9384	0.9732		5190	5000	3.7	30.0
Chrysene	Ave	0.9423	0.9391		4980	5000	-0.3	30.0
Di-n-octyl phthalate	Lin1		2.181		5960	5000	19.3	20.0
Benzo[b]fluoranthene	Ave	1.304	1.333		5110	5000	2.2	30.0
Benzo[k]fluoranthene	Ave	1.205	1.146		4750	5000	-4.9	30.0

FORM IV
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Westfield Job No.: 360-24194-1

SDG No.: OCRI-02

Lab File ID: B10153.D Lab Sample ID: MB 360-48119/1-A

Matrix: Solid Date Extracted: 08/25/2009 11:23

Instrument ID: Inst. B Date Analyzed: 09/10/2009 00:13

Level:(Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 360-48119/2-A *	B10154.D	09/10/2009 00:47
	LCSD 360-48119/3-A ♦	B10155.D	09/10/2009 01:21
OC-SB-424-0.0/1.0-XXX	360-24194-4	B10156.D	09/10/2009 01:55
OC-SB-424-7.0/9.0-XXX	360-24194-6	B10158.D	09/10/2009 03:02
OC-SB-425-0.0/1.0-XXX DL	360-24194-7 DL	B10159.D	09/10/2009 03:36
OC-SB-425-0.0/1.0-XXX	360-24194-7	B10160.D	09/10/2009 04:10
OC-SB-425-6.0/8.0-XXX	360-24194-9	B10162.D	09/10/2009 05:17
OC-SB-424-7.0/9.0-XXX DL2	360-24194-6 DL2		09/10/2009 12:36
OC-SB-425-0.0/1.0-XXX DL2	360-24194-7 DL2		09/10/2009 14:52

Compound % Recovery

* 3,3'-dichlorobenzidine 33

aniline 38

benzoic acid 27

bis(2-chloroethyl)eth 34

♦ 1,3-dichlorobenzene 38

3,3'-dichlorobenzidine 33

aniline 31

Blank

Caprolactam (3.7 µg/L)

AL = 1.27 µg/L

AM NO

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Westfield | Job No.: 360-24194-1

SDG No.: OCRI-02

Client Sample ID: | Lab Sample ID: MB 360-47986/1-A

Matrix: Solid | Lab File ID: B9886.D

Analysis Method: 8270C LL | Date Collected:

Extract. Method: 3546 | Date Extracted: 08/20/2009 12:53

Sample wt/vol: 30.00(g) | Date Analyzed: 08/28/2009 11:52

Con. Extract Vol.: 1.0(mL) | Dilution Factor: 1

Injection Volume: 1.0(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 48213 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
62-53-3	Aniline	ND		33	10
120-12-7	Anthracene	ND		33	10
1912-24-9	Atrazine	ND		33	10
103-33-3	Azobenzene	ND		33	10
108-60-1	2,2'-oxybis[1-chloropropane]	ND		33	10
100-52-7	Benzaldehyde	ND		33	10
56-55-3	Benzo[a]anthracene	ND		33	10
50-32-8	Benzo[a]pyrene	ND		33	10
205-99-2	Benzo[b]fluoranthene	ND		33	10
191-24-2	Benzo[g,h,i]perylene	ND		33	10
207-08-9	Benzo[k]fluoranthene	ND		33	10
65-85-0	Benzoic acid	ND		170	15
119-61-9	Benzophenone	ND		33	10
100-51-6	Benzyl alcohol	ND		67	28
111-91-1	Bis(2-chloroethoxy)methane	ND		33	10
111-44-4	Bis(2-chloroethyl)ether	ND		33	10
117-81-7	Bis(2-ethylhexyl) phthalate	ND		33	10
85-68-7	Butyl benzyl phthalate	ND		33	10
105-60-2	Caprolactam	ND		33	10
86-74-8	Carbazole	ND		33	10
218-01-9	Chrysene	ND		33	10
53-70-3	Dibenz(a,h)anthracene	ND		33	10
132-64-9	Dibenzofuran	ND		33	10
84-66-2	Diethyl phthalate	ND		33	10
131-11-3	Dimethyl phthalate	ND		33	10
84-74-2	Di-n-butyl phthalate	30.2	J	33	29
117-84-0	Di-n-octyl phthalate	ND		33	17
101-84-8	Diphenyl oxide	ND		33	10
122-39-4	Diphenylamine	ND		33	10
206-44-0	Fluoranthene	ND		33	10
86-73-7	Fluorene	ND		33	10
118-74-1	Hexachlorobenzene	ND		33	10
87-68-3	Hexachlorobutadiene	ND		33	10
77-47-4	Hexachlorocyclopentadiene	ND		67	10

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Westfield | Job No.: 360-24194-1

SDG No.: OCRI-02

Client Sample ID: | Lab Sample ID: MB 360-48119/1-A

Matrix: Solid | Lab File ID: B10153.D

Analysis Method: 8270C LL | Date Collected:

Extract. Method: 3546 | Date Extracted: 08/25/2009 11:23

Sample wt/vol: 30.00(g) | Date Analyzed: 09/10/2009 00:13

Con. Extract Vol.: 1.0(mL) | Dilution Factor: 1

Injection Volume: 1.0(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 48751 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
62-53-3	Aniline	ND		0.033	10
120-12-7	Anthracene	ND		0.033	10
1912-24-9	Atrazine	ND		0.033	10
103-33-3	Azobenzene	ND		0.033	10
108-60-1	2,2'-oxybis[1-chloropropane]	ND		0.033	10
100-52-7	Benzaldehyde	ND		0.033	10
56-55-3	Benzo[a]anthracene	ND		0.033	10
50-32-8	Benzo[a]pyrene	ND		0.033	10
205-99-2	Benzo[b]fluoranthene	ND		0.033	10
191-24-2	Benzo[g,h,i]perylene	ND		0.033	10
207-08-9	Benzo[k]fluoranthene	ND		0.033	10
65-85-0	Benzoic acid	ND		0.17	15
119-61-9	Benzophenone	ND		0.033	10
100-51-6	Benzyl alcohol	ND		0.067	28
111-91-1	Bis(2-chloroethoxy)methane	ND		0.033	10
111-44-4	Bis(2-chloroethyl)ether	ND		0.033	10
117-81-7	Bis(2-ethylhexyl) phthalate	ND		0.033	10
85-68-7	Butyl benzyl phthalate	ND		0.033	10
105-60-2	Caprolactam	13.8		0.033	10
86-74-8	Carbazole	ND		0.033	10
218-01-9	Chrysene	ND		0.033	10
53-70-3	Dibenz(a,h)anthracene	ND		0.033	10
132-64-9	Dibenzofuran	ND		0.033	10
84-66-2	Diethyl phthalate	ND		0.033	10
131-11-3	Dimethyl phthalate	ND		0.033	10
84-74-2	Di-n-butyl phthalate	ND		0.033	29
117-84-0	Di-n-octyl phthalate	ND		0.033	17
101-84-8	Diphenyl oxide	ND		0.033	10
122-39-4	Diphenylamine	ND		0.033	10
206-44-0	Fluoranthene	ND		0.033	10
86-73-7	Fluorene	ND		0.033	10
118-74-1	Hexachlorobenzene	ND		0.033	10
87-68-3	Hexachlorobutadiene	ND		0.033	10
77-47-4	Hexachlorocyclopentadiene	ND		0.067	10

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Westfield | Job No.: 360-24194-1

SDG No.: OCRI-02

Client Sample ID: | Lab Sample ID: MB 360-48124/1-A

Matrix: Water | Lab File ID: B9851.D

Analysis Method: 8270C LL | Date Collected:

Extract. Method: 3510C | Date Extracted: 08/25/2009 11:51

Sample wt/vol: 1000(mL) | Date Analyzed: 08/27/2009 15:59

Con. Extract Vol.: 1.0(mL) | Dilution Factor: 1

Injection Volume: 1.0(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 48209 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-52-7	Benzaldehyde	ND		5.0	0.50
108-60-1	bis (2-chloroisopropyl) ether	ND		5.0	0.50
56-55-3	Benzo[a]anthracene	ND		0.30	0.17
50-32-8	Benzo[a]pyrene	ND		0.20	0.10
205-99-2	Benzo[b]fluoranthene	ND		0.30	0.14
191-24-2	Benzo[g,h,i]perylene	ND		0.50	0.094
207-08-9	Benzo[k]fluoranthene	ND		0.30	0.17
65-85-0	Benzoic acid	ND		5.0	0.50
119-61-9	Benzophenone	ND		5.0	0.50
100-51-6	Benzyl alcohol	ND		10	0.50
111-91-1	Bis(2-chloroethoxy)methane	ND		5.0	0.50
111-44-4	Bis(2-chloroethyl)ether	ND		5.0	0.50
117-81-7	Bis(2-ethylhexyl) phthalate	ND		2.0	0.50
85-68-7	Butyl benzyl phthalate	ND		5.0	0.50
105-60-2	Caprolactam	ND		5.0	0.50
86-74-8	Carbazole	ND		5.0	0.50
218-01-9	Chrysene	ND		1.0	0.17
53-70-3	Dibenz(a,h)anthracene	ND		0.50	0.064
132-64-9	Dibenzofuran	ND		5.0	0.50
84-66-2	Diethyl phthalate	ND		5.0	0.50
131-11-3	Dimethyl phthalate	ND		5.0	0.50
84-74-2	Di-n-butyl phthalate	0.680	J	5.0	0.60
117-84-0	Di-n-octyl phthalate	ND		5.0	0.73
101-84-8	Diphenyl oxide	ND		5.0	0.50
122-39-4	Diphenylamine	ND		5.0	0.50
206-44-0	Fluoranthene	ND		1.0	0.20
86-73-7	Fluorene	ND		1.0	0.050
118-74-1	Hexachlorobenzene	ND		1.0	0.50
77-47-4	Hexachlorocyclopentadiene	ND		5.0	0.050
67-72-1	Hexachloroethane	ND		3.0	0.50
193-39-5	Indeno[1,2,3-cd]pyrene	ND		0.50	0.079
78-59-1	Isophorone	ND		5.0	0.50
98-95-3	Nitrobenzene	ND		5.0	0.50
62-75-9	N-Nitrosodimethylamine	ND		5.0	0.040

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Westfield Job No.: 360-24194-1

SDG No.: OCRI-02

Lab Sample ID: CCV 360-48766/2 Calibration Date: 09/10/2009 11:29

Instrument ID: Inst. B Calib Start Date: 09/09/2009 17:26

GC Column: Rtx-5ms ID: 0.25(um) Calib End Date: 09/09/2009 21:58

Lab File ID: B10173.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Lin1		0.1830		5150	5000	2.9	30.0
Pyridine	Ave	0.5267	0.4666		4430	5000	-11.4	30.0
N-Nitrosodimethylamine	Ave	0.3522	0.3168		4500	5000	-10.1	30.0
Benzaldehyde	Ave	0.2773	0.2616		4720	5000	-5.7	30.0
Phenol	Ave	0.6804	0.6229		4580	5000	-8.5	20.0
Aniline	Ave	0.7761	0.7530		4850	5000	-3.0	30.0
Bis(2-chloroethyl)ether	Ave	0.5782	0.5160		4460	5000	-10.7	30.0
2-Chlorophenol	Ave	0.6128	0.5701		4650	5000	-7.0	30.0
1,4-Dichlorobenzene	Ave	0.7317	0.6586		4500	5000	-10.0	20.0
1,3-Dichlorobenzene	Ave	0.7676	0.6866		4470	5000	-10.5	30.0
Benzyl alcohol	Ave	0.4208	0.3688		4380	5000	-12.4	30.0
1,2-Dichlorobenzene	Qua		0.6179		4760	5000	-4.8	30.0
2-Methylphenol	Ave	0.5265	0.5251		4990	5000	-0.3	30.0
2,2'-oxybis[1-chloropropane]	Ave	0.9915	0.8753		4410	5000	-11.7	30.0
3 & 4 Methylphenol	Ave	0.5360	0.5251		4900	5000	-2.0	30.0
Acetophenone	Ave	0.8057	0.7537		4680	5000	-6.4	30.0
N-Nitrosodi-n-propylamine	Ave	0.4006	0.3778	0.0500	4720	5000	-5.7	30.0
Hexachloroethane	Ave	0.2576	0.2104		4080	5000	-18.3	30.0
Nitrobenzene	Ave	0.2799	0.2642		4720	5000	-5.6	30.0
Isophorone	Ave	0.4565	0.4642		5080	5000	1.7	30.0
2,4-Dimethylphenol	Ave	0.2315	0.2114		4570	5000	-8.7	30.0
2-Nitrophenol	Lin2		0.1424		4780	5000	-4.4	20.0
Benzoic acid	Qua		0.1074		6060	5000	21.2	30.0
Bis(2-chloroethoxy)methane	Ave	0.2908	0.2777		4770	5000	-4.5	30.0
2,4-Dichlorophenol	Ave	0.2100	0.2135		5080	5000	1.6	20.0
1,2,4-Trichlorobenzene	Ave	0.2601	0.2461		4730	5000	-5.4	30.0
Alpha-Terpineol	Ave	0.2130	0.2118		4970	5000	-0.6	30.0
Naphthalene	Ave	0.7917	0.7473		4720	5000	-5.6	30.0
4-Chloroaniline	Ave	0.3117	0.3133		5030	5000	0.5	30.0
Hexachlorobutadiene	Ave	0.1298	0.1212		4670	5000	-6.6	20.0
Caprolactam	Lin2		0.1133		5120	5000	2.5	30.0
4-Chloro-3-methylphenol	Ave	0.2098	0.2094		4990	5000	-0.2	20.0
2-Methylnaphthalene	Ave	0.5207	0.5064		4860	5000	-2.8	30.0
1-Methylnaphthalene	Ave	0.5291	0.5159		4880	5000	-2.5	30.0
1,2,4,5-Tetrachlorobenzene	Ave	0.2204	0.2159		4900	5000	-2.0	30.0
Hexachlorocyclopentadiene	Lin		0.0124*	0.0500	611	5000	-87.8*	30.0
2,4,6-Trichlorophenol	Lin2		0.3291		5060	5000	1.1	20.0
2,4,5-Trichlorophenol	Lin2		0.3720		5440	5000	8.7	30.0
1,1'-Biphenyl	Ave	1.435	1.464		5100	5000	2.0	30.0
2-Chloronaphthalene	Ave	1.279	1.300		5090	5000	1.7	30.0
Phenyl ether	Ave	0.3539	0.3412		4820	5000	-3.6	30.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Westfield Job No.: 360-24194-1

SDG No.: OCRI-02

Lab Sample ID: CCV 360-48454/2 Calibration Date: 09/01/2009 18:25

Instrument ID: Inst. J Calib Start Date: 09/01/2009 12:25

GC Column: Rtx-5ms ID: 0.25(um) Calib End Date: 09/01/2009 16:25

Lab File ID: J02787.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
N-Nitrosodimethylamine	Ave	0.2617	0.2541		4850	5000	-2.9	30.0
2-Fluorophenol	Ave	0.6006	0.5926		4930	5000	-1.3	30.0
Phenol-d5	Ave	0.7673	0.7316		4770	5000	-4.7	30.0
Nitrobenzene-d5	Qua		0.2528		5170	5000	3.4	30.0
2-Fluorobiphenyl	Ave	1.285	1.226		4770	5000	-4.5	30.0
2,4,6-Tribromophenol	Lin2		0.0788		5080	5000	1.5	30.0
Terphenyl-d14	Ave	0.8071	0.7503		4650	5000	-7.0	30.0

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FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Westfield Job No.: 360-24194-1

SDG No.: OCRI-02

Lab Sample ID: CCV 360-48209/2 Calibration Date: 08/27/2009 15:25

Instrument ID: Inst. B Calib Start Date: 08/27/2009 09:11

GC Column: Rtx-5ms ID: 0.25(um) Calib End Date: 08/27/2009 13:43

Lab File ID: B9850.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Lin1		0.2483		5290	5000	5.8	30.0
N-Nitrosodimethylamine	Ave	0.3528	0.3393		4810	5000	-3.8	30.0
Pyridine	Lin1		0.5404		5100	5000	2.0	30.0
Benzaldehyde	Ave	0.7664	0.7682		5010	5000	0.2	30.0
Phenol	Ave	0.7664	0.7682		5010	5000	0.2	20.0
Aniline	Ave	0.8532	0.9288		5440	5000	8.9	30.0
Bis(2-chloroethyl)ether	Qua		0.6905		5690	5000	13.8	30.0
2-Chlorophenol	Ave	0.6177	0.6375		5160	5000	3.2	30.0
1,4-Dichlorobenzene	Lin1		0.7254		5350	5000	7.0	20.0
1,3-Dichlorobenzene	Lin1		0.7509		5350	5000	7.0	30.0
2-Methylphenol	Ave	0.3530	0.3843		5440	5000	8.9	30.0
Benzyl alcohol	Ave	0.4448	0.4756		5350	5000	6.9	30.0
1,2-Dichlorobenzene	Ave	0.7498	0.6970		4650	5000	-7.1	30.0
3 & 4 Methylphenol	Ave	0.5658	0.5841		5160	5000	3.2	30.0
2,2'-oxybis[1-chloropropane]	Lin1		1.036		5630	5000	12.6	30.0
N-Nitrosodi-n-propylamine	Ave	0.4011	0.4281	0.0500	5340	5000	6.7	30.0
Acetophenone	Ave	0.8448	0.8482		5020	5000	0.4	30.0
Hexachloroethane	Ave	0.2654	0.2660		5010	5000	0.2	30.0
Nitrobenzene	Ave	0.2699	0.3103		5750	5000	15.0	30.0
Isophorone	Ave	0.4948	0.5640		5700	5000	14.0	30.0
2,4-Dimethylphenol	Ave	0.2333	0.2496		5350	5000	7.0	30.0
2-Nitrophenol	Lin1		0.1494		5300	5000	6.0	20.0
Benzoic acid	Qua		0.0492		6000	5000	20.1	30.0
Bis(2-chloroethoxy)methane	Ave	0.3424	0.3541		5170	5000	3.4	30.0
2,4-Dichlorophenol	Lin2		0.2354		5330	5000	6.6	20.0
1,2,4-Trichlorobenzene	Ave	0.2852	0.2796		4900	5000	-2.0	30.0
Alpha-Terpineol	Ave	0.2287	0.2552		5580	5000	11.6	30.0
Naphthalene	Ave	0.9640	0.9779		5070	5000	1.4	30.0
4-Chloroaniline	Ave	0.4424	0.4645		5250	5000	5.0	30.0
Hexachlorobutadiene	Ave	0.1409	0.1360		4820	5000	-3.5	20.0
Caprolactam	Lin1		0.1255		5130	5000	2.6	30.0
4-Chloro-3-methylphenol	Lin2		0.2391		5290	5000	5.8	20.0
2-Methylnaphthalene	Ave	0.5724	0.5798		5060	5000	1.3	30.0
1-Methylnaphthalene	Ave	0.5896	0.5942		5040	5000	0.8	30.0
Hexachlorocyclopentadiene	Lin		0.1842	0.0500	4880	5000	-2.4	30.0
1,2,4,5-Tetrachlorobenzene	Ave	0.2516	0.2472		4910	5000	-1.7	30.0
2,4,6-Trichlorophenol	Lin1		0.3220		4840	5000	-3.1	20.0
2,4,5-Trichlorophenol	Lin1		0.3430		4930	5000	-1.3	30.0
1,1'-Biphenyl	Ave	1.479	1.518		5130	5000	2.6	30.0
2-Chloronaphthalene	Ave	1.363	1.332		4890	5000	-2.2	30.0
Phenyl ether	Ave	0.3972	0.3976		5010	5000	0.1	30.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Westfield Job No.: 360-24194-1

SDG No.: OCRI-02

Lab Sample ID: CCV 360-48209/2 Calibration Date: 08/27/2009 15:25

Instrument ID: Inst. B Calib Start Date: 08/27/2009 09:11

GC Column: Rtx-5ms ID: 0.25(um) Calib End Date: 08/27/2009 13:43

Lab File ID: B9850.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2-Nitroaniline	Lin1		0.3056		5080	5000	1.6	30.0
Dimethyl phthalate	Ave	1.175	1.291		5490	5000	9.8	30.0
2,6-Dinitrotoluene	Lin1		0.2901		5030	5000	0.5	30.0
Acenaphthylene	Ave	1.652	1.824		5520	5000	10.4	30.0
3-Nitroaniline	Lin1		0.2666		5000	5000	0.1	30.0
2,4-Dinitrophenol	Lin		0.0419*	0.0500	5310	5000	6.3	30.0
4-Nitrophenol	Lin1		0.1273	0.0500	5000	5000	0.1	30.0
Acenaphthene	Ave	1.199	1.217		5070	5000	1.4	20.0
2,4-Dinitrotoluene	Lin1		0.3493		5010	5000	0.3	30.0
Dibenzofuran	Ave	1.569	1.610		5130	5000	2.6	30.0
2,3,4,6-Tetrachlorophenol	Lin1		0.2529		4910	5000	-1.7	30.0
Diethyl phthalate	Ave	1.139	1.267		5570	5000	11.3	30.0
4-Chlorophenyl phenyl ether	Ave	0.6066	0.6172		5090	5000	1.8	30.0
4-Nitroaniline	Lin		0.2318		4950	5000	-1.0	30.0
4,6-Dinitro-2-methylphenol	Lin		0.0617		5670	5000	13.3	30.0
Fluorene	Ave	1.288	1.343		5220	5000	4.3	30.0
Diphenylamine	Ave	0.6715	0.7304		5440	5000	8.8	30.0
N-Nitrosodiphenylamine	Ave	0.6715	0.7304		5440	5000	8.8	20.0
1,2-Diphenylhydrazine	Ave	1.157	1.328		5740	5000	14.7	30.0
Azobenzene	Ave	1.157	1.328		5740	5000	14.7	30.0
Benzophenone	Ave	0.7505	0.8537		5690	5000	13.7	30.0
4-Bromophenyl phenyl ether	Ave	0.1945	0.2043		5250	5000	5.0	30.0
Atrazine	Lin2		0.2153		5440	5000	8.7	30.0
Hexachlorobenzene	Ave	0.1969	0.1980		5030	5000	0.6	30.0
Pentachlorophenol	Lin		0.0932		4920	5000	-1.6	20.0
Pentachloronitrobenzene	Lin1		0.0773		5080	5000	1.5	30.0
Phenanthrene	Ave	1.123	1.146		5100	5000	2.0	30.0
Anthracene	Ave	1.041	1.151		5530	5000	10.5	30.0
Carbazole	Ave	0.8367	0.9066		5420	5000	8.4	30.0
Di-n-butyl phthalate	Ave	1.051	1.303		6200	5000	24.0	30.0
Fluoranthene	Ave	0.9772	1.087		5560	5000	11.2	20.0
Benzidine	Qua		0.1434		5170	5000	3.4	30.0
Pyrene	Ave	1.495	1.490		4980	5000	-0.4	30.0
Butyl benzyl phthalate	Lin1		0.6658		5340	5000	6.8	30.0
Bis(2-ethylhexyl) phthalate	Lin1		0.9133		5390	5000	7.8	30.0
3,3'-Dichlorobenzidine	Qua		0.2245		5660	5000	13.1	30.0
Benzo[a]anthracene	Ave	0.9429	1.006		5330	5000	6.7	30.0
Chrysene	Ave	0.9707	0.9800		5050	5000	1.0	30.0
Di-n-octyl phthalate	Lin1		2.365		5320	5000	6.4	20.0
Benzo[b]fluoranthene	Ave	1.318	1.379		5230	5000	4.6	30.0
Benzo[k]fluoranthene	Ave	1.243	1.340		5390	5000	7.8	30.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Westfield Job No.: 360-24194-1

SDG No.: OCRI-02

Lab Sample ID: CCV 360-48389/45 Calibration Date: 09/01/2009 02:57

Instrument ID: Inst. B Calib Start Date: 08/27/2009 09:11

GC Column: Rtx-5ms ID: 0.25(um) Calib End Date: 08/27/2009 13:43

Lab File ID: B9931.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Lin1		0.2530		5390	5000	7.8	30.0
N-Nitrosodimethylamine	Ave	0.3528	0.3400		4820	5000	-3.6	30.0
Pyridine	Lin1		0.5807		5470	5000	9.4	30.0
Benzaldehyde	Ave	0.7664	0.6897		4500	5000	-10.0	30.0
Phenol	Ave	0.7664	0.6897		4500	5000	-10.0	20.0
Aniline	Ave	0.8532	0.7728		4530	5000	-9.4	30.0
Bis(2-chloroethyl)ether	Qua		0.7203		5930	5000	18.6	30.0
2-Chlorophenol	Ave	0.6177	0.6204		5020	5000	0.4	30.0
1,4-Dichlorobenzene	Lin1		0.7206		5310	5000	6.2	20.0
1,3-Dichlorobenzene	Lin1		0.7416		5280	5000	5.7	30.0
2-Methylphenol	Ave	0.3530	0.2153		3050	5000	-39.0*	30.0
Benzyl alcohol	Ave	0.4448	0.2679		3010	5000	-39.8*	30.0
1,2-Dichlorobenzene	Ave	0.7498	0.6883		4590	5000	-8.2	30.0
3 & 4 Methylphenol	Ave	0.5658	0.5763		5090	5000	1.9	30.0
2,2'-oxybis[1-chloropropane]	Lin1		0.9900		5380	5000	7.6	30.0
N-Nitrosodi-n-propylamine	Ave	0.4011	0.4033	0.0500	5030	5000	0.6	30.0
Acetophenone	Ave	0.8448	0.7718		4570	5000	-8.6	30.0
Hexachloroethane	Ave	0.2654	0.2418		4560	5000	-8.9	30.0
Nitrobenzene	Ave	0.2699	0.2826		5230	5000	4.7	30.0
Isophorone	Ave	0.4948	0.4851		4900	5000	-2.0	30.0
2,4-Dimethylphenol	Ave	0.2333	0.2123		4550	5000	-9.0	30.0
Benzoic acid	Qua		0.0065		4260	5000	-14.7	30.0
2-Nitrophenol	Lin1		0.1364		4850	5000	-3.0	20.0
Bis(2-chloroethoxy)methane	Ave	0.3424	0.3077		4490	5000	-10.1	30.0
2,4-Dichlorophenol	Lin2		0.2124		4810	5000	-3.8	20.0
1,2,4-Trichlorobenzene	Ave	0.2852	0.2603		4560	5000	-8.7	30.0
Alpha-Terpineol	Ave	0.2287	0.2313		5060	5000	1.1	30.0
Naphthalene	Ave	0.9640	0.9001		4670	5000	-6.6	30.0
4-Chloroaniline	Ave	0.4424	0.3283		3710	5000	-25.8	30.0
Hexachlorobutadiene	Ave	0.1409	0.1297		4600	5000	-8.0	20.0
Caprolactam	Lin1		0.1040		4290	5000	-14.1	30.0
4-Chloro-3-methylphenol	Lin2		0.2059		4560	5000	-8.7	20.0
2-Methylnaphthalene	Ave	0.5724	0.5451		4760	5000	-4.8	30.0
Hexachlorocyclopentadiene	Lin		0.0002*	0.0500	502	5000	-90.0*	30.0
1-Methylnaphthalene	Ave	0.5896	0.5621		4770	5000	-4.7	30.0
1,2,4,5-Tetrachlorobenzene	Ave	0.2516	0.2355		4680	5000	-6.4	30.0
2,4,6-Trichlorophenol	Lin1		0.2658		4010	5000	-19.7	20.0
2,4,5-Trichlorophenol	Lin1		0.2971		4290	5000	-14.3	30.0
1,1'-Biphenyl	Ave	1.479	1.459		4930	5000	-1.4	30.0
2-Chloronaphthalene	Ave	1.363	1.282		4700	5000	-6.0	30.0
Phenyl ether	Ave	0.3972	0.3754		4730	5000	-5.5	30.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Westfield Job No.: 360-24194-1

SDG No.: OCRI-02

Lab Sample ID: CCV 360-48389/45 Calibration Date: 09/01/2009 02:57

Instrument ID: Inst. B Calib Start Date: 08/27/2009 09:11

GC Column: Rtx-5ms ID: 0.25(um) Calib End Date: 08/27/2009 13:43

Lab File ID: B9931.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Benzo[a]pyrene	Lin1		0.9847		4760	5000	-4.8	20.0
Indeno[1,2,3-cd]pyrene	Lin1		0.7949		5330	5000	6.6	30.0
Dibenz(a,h)anthracene	Lin1		0.6459		5480	5000	9.6	30.0
Benzo[g,h,i]perylene	Ave	0.5917	0.6368		5380	5000	7.6	30.0
2-Fluorophenol	Ave	0.5642	0.5366		4760	5000	-4.9	30.0
Phenol-d5	Ave	0.6958	0.6637		4770	5000	-4.6	30.0
Nitrobenzene-d5	Lin1		0.2797		4440	5000	-11.1	30.0
2-Fluorobiphenyl	Ave	1.336	1.303		4870	5000	-2.5	30.0
2,4,6-Tribromophenol	Lin1		0.0382		2640	5000	-47.2*	30.0
Terphenyl-d14	Ave	0.8754	0.8520		4870	5000	-2.7	30.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Westfield Job No.: 360-24194-1

SDG No.: OCRI-02

Lab Sample ID: CCV 360-48213/2 Calibration Date: 08/28/2009 11:18

Instrument ID: Inst. B Calib Start Date: 08/27/2009 09:11

GC Column: Rtx-5ms ID: 0.25(um) Calib End Date: 08/27/2009 13:43

Lab File ID: B9885.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Lin1		0.2450		5220	5000	4.3	30.0
N-Nitrosodimethylamine	Ave	0.3528	0.3586		5080	5000	1.6	30.0
Pyridine	Lin1		0.5693		5360	5000	7.3	30.0
Benzaldehyde	Ave	0.7664	0.7963		5200	5000	3.9	30.0
Phenol	Ave	0.7664	0.7963		5200	5000	3.9	20.0
Aniline	Ave	0.8532	0.9867		5780	5000	15.6	30.0
Bis(2-chloroethyl)ether	Qua		0.6798		5600	5000	12.0	30.0
2-Chlorophenol	Ave	0.6177	0.6674		5400	5000	8.0	30.0
1,4-Dichlorobenzene	Lin1		0.7289		5370	5000	7.5	20.0
1,3-Dichlorobenzene	Lin1		0.7527		5360	5000	7.3	30.0
2-Methylphenol	Ave	0.3530	0.4100		5810	5000	16.1	30.0
Benzyl alcohol	Ave	0.4448	0.5143		5780	5000	15.6	30.0
1,2-Dichlorobenzene	Ave	0.7498	0.7083		4720	5000	-5.5	30.0
3 & 4 Methylphenol	Ave	0.5658	0.5664		5010	5000	0.1	30.0
2,2'-oxybis[1-chloropropane]	Lin1		1.080		5870	5000	17.5	30.0
N-Nitrosodi-n-propylamine	Ave	0.4011	0.4619	0.0500	5760	5000	15.2	30.0
Acetophenone	Ave	0.8448	0.8788		5200	5000	4.0	30.0
Hexachloroethane	Ave	0.2654	0.2716		5120	5000	2.3	30.0
Nitrobenzene	Ave	0.2699	0.3207		5940	5000	18.8	30.0
Isophorone	Ave	0.4948	0.5771		5830	5000	16.6	30.0
2,4-Dimethylphenol	Ave	0.2333	0.1721		3690	5000	-26.2	30.0
2-Nitrophenol	Lin1		0.1563		5540	5000	10.8	20.0
Benzoic acid	Qua		0.0706		6610	5000	32.2*	30.0
Bis(2-chloroethoxy)methane	Ave	0.3424	0.3602		5260	5000	5.2	30.0
2,4-Dichlorophenol	Lin2		0.2375		5370	5000	7.5	20.0
1,2,4-Trichlorobenzene	Ave	0.2852	0.2810		4930	5000	-1.5	30.0
Alpha-Terpineol	Ave	0.2287	0.2639		5770	5000	15.4	30.0
Naphthalene	Ave	0.9640	0.9630		4990	5000	-0.1	30.0
4-Chloroaniline	Ave	0.4424	0.4760		5380	5000	7.6	30.0
Hexachlorobutadiene	Ave	0.1409	0.1399		4970	5000	-0.7	20.0
Caprolactam	Lin1		0.1416		5760	5000	15.1	30.0
4-Chloro-3-methylphenol	Lin2		0.2515		5560	5000	11.3	20.0
2-Methylnaphthalene	Ave	0.5724	0.5848		5110	5000	2.2	30.0
1-Methylnaphthalene	Ave	0.5896	0.5994		5080	5000	1.7	30.0
Hexachlorocyclopentadiene	Lin		0.1898	0.0500	5010	5000	0.3	30.0
1,2,4,5-Tetrachlorobenzene	Ave	0.2516	0.2489		4950	5000	-1.1	30.0
2,4,6-Trichlorophenol	Lin1		0.3394		5100	5000	2.0	20.0
2,4,5-Trichlorophenol	Lin1		0.3513		5050	5000	1.0	30.0
1,1'-Biphenyl	Ave	1.479	1.488		5030	5000	0.6	30.0
2-Chloronaphthalene	Ave	1.363	1.379		5060	5000	1.2	30.0
Phenyl ether	Ave	0.3972	0.4065		5120	5000	2.3	30.0

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Westfield Job No.: 360-24194-1 Analy Batch No.: 48761

SDG No.: OCRI-02

Instrument ID: Inst. B GC Column: Rtx-5ms ID: 0.25(um) Heated Purge: (Y/N) N

Calibration Start Date: 09/09/2009 17:26 Calibration End Date: 09/09/2009 21:58 Calibration ID: 4274

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
2-Methylphenol	0.5143 0.5090	0.5894 0.4599	0.5743 0.4446	0.5664 +++++	0.5543	Ave		0.5265				10.0		15.0			
2,2'-oxybis[1-chloropropane]	1.0911 0.9284	1.0786 0.8153	1.1300 0.7472	1.1034 +++++	1.0378	Ave		0.9915				15.0		15.0			
3 & 4 Methylphenol	0.5217 0.5299	0.5423 0.4867	0.5916 0.4564	0.5967 +++++	0.5626	Ave		0.5360				9.1		15.0			
Acetophenone	0.8164 0.7686	0.9015 0.6799	0.9045 0.6568	0.8841 +++++	0.8334	Ave		0.8057				12.0		15.0			
N-Nitrosodi-n-propylamine	0.3965 0.3803	0.4404 0.3575	0.4539 0.3420	0.4272 +++++	0.4073	Ave		0.4006			0.0500	9.9		15.0			
2,4-Dinitrophenol	+++++ 0.0471	+++++ 0.1179	0.0040 0.1299	0.0121 0.1312	0.0293	Qua	-0.248	0.1416	0.0002		0.0500				0.9830	*	0.9900
Hexachloroethane	0.2607 0.2443	0.2997 0.2224	0.2789 0.2123	0.2784 +++++	0.2639	Ave		0.2576				12.0		15.0			
Nitrobenzene	0.2623 0.2938	0.2818 0.2898	0.2969 0.2726	0.2906 0.2507	0.2803	Ave		0.2799				5.5		15.0			
Isophorone	0.3903 0.4876	0.4277 0.4921	0.4842 0.4567	0.4918 0.3995	0.4784	Ave		0.4565				8.9		15.0			
2,4-Dimethylphenol	0.2075 0.2456	0.2277 0.2470	0.2397 0.2354	0.2374 0.2124	0.2307	Ave		0.2315				5.9		15.0			
2-Nitrophenol	0.0972 0.1528	0.1142 0.1632	0.1311 0.1606	0.1368 0.1448	0.1439	Lin2	-0.006	0.1502							0.9950		0.9900
Bis(2-chloroethoxy)methane	0.2854 0.2970	0.2981 0.2955	0.3106 0.2735	0.3098 0.2551	0.2920	Ave		0.2908				6.0		15.0			
2,4-Dichlorophenol	0.1791 0.2297	0.1925 0.2314	0.2067 0.2219	0.2080 0.2077	0.2133	Ave		0.2100				8.0		15.0			
1,2,4-Trichlorobenzene	0.2516 0.2642	0.2753 0.2618	0.2745 0.2484	0.2809 0.2250	0.2594	Ave		0.2601				6.6		15.0			
Alpha-Terpineol	0.1871 0.2301	0.1873 0.2355	0.2213 0.2201	0.2207 0.2019	0.2131	Ave		0.2130				8.2		15.0			
Naphthalene	0.8709 0.8169	0.8833 0.7645	0.8817 0.7001	0.8571 0.5218	0.8289	Ave		0.7917				15.0		15.0			
4-Chloroaniline	0.2570 0.3336	0.2908 0.3409	0.3182 0.3291	0.3277 0.2859	0.3220	Ave		0.3117				8.9		15.0			
Hexachlorobutadiene	0.1360 0.1301	0.1282 0.1300	0.1414 0.1226	0.1356 0.1154	0.1288	Ave		0.1298				5.9		15.0			
Caprolactam	0.0743 0.1138	0.0789 0.1238	0.0920 0.1192	0.1006 0.1099	0.1096	Lin2	-0.005	0.1114							0.9920		0.9900
4-Chloro-3-methylphenol	0.1794 0.2232	0.1935 0.2328	0.2120 0.2204	0.2090 0.2045	0.2134	Ave		0.2098				7.6		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Westfield Job No.: 360-24194-1 Analy Batch No.: 48241

SDG No.: OCRI-02

Instrument ID: Inst. B GC Column: Rtx-5ms ID: 0.25(um) Heated Purge: (Y/N) N

Calibration Start Date: 08/27/2009 09:11 Calibration End Date: 08/27/2009 13:43 Calibration ID: 4134

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
3 & 4 Methylphenol	0.5670 0.5586	0.5702 0.5108	0.6004 0.4888	0.6171 0.5688	0.6106	Ave		0.5658				7.6		15.0			
1,2-Dichlorobenzene	0.9057 0.6967	0.8455 0.6282	0.8439 0.5785	0.7956 0.6620	0.7924	Ave		0.7498				15.0		15.0			
2,4-Dinitrophenol	+++++ 0.0207	+++++ 0.0485	0.0014 0.0736	0.0087 0.0963	0.0156	Lin	-0.393	0.1134			0.0500				0.9810	*	0.9900
4-Nitrophenol	+++++ 0.1129	+++++ 0.1245	0.0528 0.1450	0.0698 0.1398	0.0915	Lin1	-0.062	0.1397			0.0500				0.9920		0.9900
2,2'-oxybis[1-chloropropane]	1.2659 1.0244	1.2616 0.9031	1.2448 0.8205	1.1762 0.8943	1.1662	Lin1	0.0910	0.9034							0.9900		0.9900
N-Nitrosodi-n-propylamine	0.3611 0.4186	0.3780 0.3785	0.4117 0.3612	0.4321 0.4243	0.4443	Ave		0.4011			0.0500	7.9		15.0			
Acetophenone	0.8534 0.8455	0.8594 0.7478	0.9309 0.6999	0.9378 0.7932	0.9351	Ave		0.8448				10.0		15.0			
Caprolactam	+++++ 0.1136	0.0499 0.1189	0.0584 0.1240	0.0774 0.1347	0.0976	Lin1	-0.032	0.1286							0.9940		0.9900
Hexachloroethane	0.2895 0.2584	0.2661 0.2347	0.2848 0.2216	0.2808 0.2681	0.2844	Ave		0.2654				8.9		15.0			
Nitrobenzene	0.2062 0.3157	0.2167 0.2931	0.2446 0.3011	0.2675 0.2876	0.2969	Ave		0.2699				14.0		15.0			
4,6-Dinitro-2-methylphenol	+++++ 0.0312	+++++ 0.0580	0.0085 0.0868	0.0137 +++++	0.0209	Lin	-0.368	0.1194							0.9860	*	0.9900
Isophorone	0.4051 0.5649	0.4137 0.5390	0.4492 0.5376	0.5013 0.4989	0.5433	Ave		0.4948				12.0		15.0			
2,4-Dimethylphenol	0.2166 0.2567	0.2117 0.2373	0.2238 0.2426	0.2346 0.2356	0.2410	Ave		0.2333				6.0		15.0			
2-Nitrophenol	0.0555 0.1288	0.0512 0.1347	0.0626 0.1457	0.0932 0.1537	0.1115	Lin1	-0.021	0.1449							0.9910		0.9900
Bis(2-chloroethoxy)methane	0.3424 0.3573	0.3450 0.3372	0.3403 0.3392	0.3426 0.3178	0.3596	Ave		0.3424				3.5		15.0			
2,4-Dichlorophenol	0.1549 0.2333	0.1662 0.2263	0.1790 0.2359	0.2001 0.2360	0.2225	Lin2	-0.008	0.2225							0.9930		0.9900
Pentachlorophenol	+++++ 0.0739	+++++ 0.0956	0.0210 0.1069	0.0409 0.1210	0.0614	Lin	-0.148	0.1248							0.9910		0.9900
1,2,4-Trichlorobenzene	0.3057 0.2871	0.2968 0.2702	0.3001 0.2704	0.2818 0.2642	0.2907	Ave		0.2852				5.1		15.0			
Alpha-Terpineol	0.1964 0.2488	0.2101 0.2445	0.2099 0.2455	0.2202 0.2351	0.2481	Ave		0.2287				8.7		15.0			
Naphthalene	1.1053 0.9932	1.0485 0.9075	1.0448 0.8735	0.9980 0.6842	1.0208	Ave		0.9640				13.0		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM II
GC/MS SEMI VOA SURROGATE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24194-1

SDG No.: OCRI-02

Matrix: Solid Level: Low

GC Column (1): Rtx-5ms ID: 0.25 (um)

Client Sample ID	Lab Sample ID	2FP #	PHL #	NBZ #	FBP #	TBP #	TPH #
OC-SB-421-0.0/1.0-XXX	360-24194-1 5x	66	48	54	63	41	76
OC-SB-421-0.0/1.0-XXX	360-24194-1 10x	0 X D	0 X D	0 X D	0 X D	0 X D	0 X D
OC-SB-421-0.0/1.0-XXX DL	360-24194-1 DL 20x	0 D X	0 D X	0 D X	0 D X	0 D X	0 D X
OC-SB-421-8.0/10.0-XXX	360-24194-3	86	73	70	71	113	80
OC-SB-421-8.0/10.0-XXX	360-24194-3	62	67	72	65	66	83
OC-SB-424-0.0/1.0-XXX	360-24194-4	88	83	64	68	68	69
OC-SB-424-0.0/1.0-XXX	360-24194-4	61	63	64	62	60	90
OC-SB-424-7.0/9.0-XXX	360-24194-6	100	95	70	74	84	90
OC-SB-424-7.0/9.0-XXX	360-24194-6	67	69	72	64	61	94
OC-SB-425-0.0/1.0-XXX	360-24194-7	70	61	53	56	78	59
OC-SB-425-0.0/1.0-XXX	360-24194-7	38	42	59	57	43	68
OC-SB-425-0.0/1.0-XXX DL	360-24194-7 DL	64	55	49	52	98	54
OC-SB-425-6.0/8.0-XXX	360-24194-9	70	59	52	60	67	66
OC-SB-425-6.0/8.0-XXX	360-24194-9	54	57	58	59	46	92
	MB 360-47986/1-A	97	98	70	74	73	76
	MB 360-48119/1-A	91	82	69	69	66	70
	MB 360-48297/1-A	74	76	69	70	70	78
	MB 360-48381/1-A	64	64	56	65	38	87
	LCS 360-47986/2-A	71	73	80	73	78	67
	LCS 360-48119/2-A	59	54	50	69	71	71
	LCS 360-48297/2-A	59	61	60	70	79	73
	LCS 360-48381/2-A	53	55	51	63	50	94
	LCSD 360-47986/3-A	72	74	82	76	80	69
	LCSD 360-48119/3-A	57	48	47	68	69	70
	LCSD 360-48297/3-A	58	60	59	70	78	71

} surrogates diluted out. re-injection not necessary

	QC LIMITS
2FP = 2-Fluorophenol	30-130
PHL = Phenol-d5	30-130
NBZ = Nitrobenzene-d5	30-130
FBP = 2-Fluorobiphenyl	30-130
TBP = 2,4,6-Tribromophenol	30-130
TPH = Terphenyl-d14	30-130

12/22/09

Column to be used to flag recovery values

FORM II 8270C LL

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Westfield Job No.: 360-24194-1 Analy Batch No.: 48434

SDG No.: OCRI-02

Instrument ID: Inst. J GC Column: Rtx-5ms ID: 0.25(um) Heated Purge: (Y/N) N

Calibration Start Date: 09/01/2009 12:25 Calibration End Date: 09/01/2009 16:25 Calibration ID: 4195

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD5 360-48434/2	J02775.D
Level 2	STD01 360-48434/3	J02776.D
Level 3	STD025 360-48434/4	J02777.D
Level 4	STD05 360-48434/5	J02778.D
Level 5	STD1 360-48434/6	J02779.D
Level 6	STD25 360-48434/7	J02780.D
Level 7	STD8 360-48434/8	J02781.D
Level 8	STD10 360-48434/9	J02782.D
Level 9	STD20 360-48434/10	J02783.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
4-Bromophenyl phenyl ether						Ave		0.1698						15.0			
Benzo[g,h,i]perylene						None											
Chrysene						Ave		0.9106						15.0			
Dibenz(a,h)anthracene						None											
Hexachlorocyclopentadiene						Ave		0.2142			0.0500			15.0			
Indeno[1,2,3-cd]pyrene						None											
1,1'-Biphenyl	+++++ +++++	+++++	+++++	+++++	+++++	Ave		0.0124						15.0			
1,2,4,5-Tetrachlorobenzene						Ave		0.1121						15.0			
1,2,4-Trichlorobenzene	+++++ +++++	+++++	+++++	+++++	+++++	Ave		0.1290						15.0			
1,2-Dichlorobenzene	+++++ +++++	+++++	+++++	+++++	+++++	Ave		0.0008						15.0			
1,2-Diphenylhydrazine	+++++ +++++	+++++	+++++	+++++	+++++	Ave		0						15.0			
1,3-Dichlorobenzene	+++++ +++++	+++++	+++++	+++++	+++++	Ave		0.0255						15.0			
1,4-Dichlorobenzene	+++++ +++++	+++++	+++++	+++++	+++++	Ave		0.0255						15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Westfield | Job No.: 360-24194-1

SDG No.: OCRI-02

Client Sample ID: OC-SB-421-8.0/10.0-XXX | Lab Sample ID: 360-24194-3

Matrix: Solid | Lab File ID: J02805.D

Analysis Method: 8270C LL | Date Collected: 08/19/2009 07:45

Extract. Method: 3550B | Date Extracted: 08/27/2009 16:43

Sample wt/vol: 100.22(g) | Date Analyzed: 09/02/2009 03:24

Con. Extract Vol.: 1.0(mL) | Dilution Factor: 1

Injection Volume: 1.0(uL) | Level: (low/med) Low

% Moisture: 7.4 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 48454 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
62-75-9	N-Nitrosodimethylamine	ND		5.4	1.2

CAS NO.	SURROGATE	%REC	LIMITS	Q
118-79-6	2,4,6-Tribromophenol	66	30-130	
321-60-8	2-Fluorobiphenyl	65	30-130	
367-12-4	2-Fluorophenol	62	30-130	
4165-60-0	Nitrobenzene-d5	72	30-130	
4165-62-2	Phenol-d5	67	30-130	
1718-51-0	Terphenyl-d14	83	30-130	

1/13/10

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Westfield | Job No.: 360-24194-1

SDG No.: OCRI-02

Client Sample ID: OC-SB-421-8.0/10.0-XXX | Lab Sample ID: 360-24194-3 DL3

Matrix: Solid | Lab File ID: B10133.D

Analysis Method: 8270C LL | Date Collected: 08/19/2009 07:45

Extract. Method: 3546 | Date Extracted: 08/20/2009 12:53

Sample wt/vol: 30.59(g) | Date Analyzed: 09/08/2009 19:32

Con. Extract Vol.: 1.0(mL) | Dilution Factor: 1

Injection Volume: 1.0(uL) | Level: (low/med) Low

% Moisture: 7.4 | GPC Cleanup: (Y/N) N

Analysis Batch No.: 48702 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
122-39-4	Diphenylamine	ND		35	11

1/13/10

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Westfield | Job No.: 360-24194-1

SDG No.: OCRI-02

Client Sample ID: OC-SB-421-8.0/10.0-XXX | Lab Sample ID: 360-24194-3

Matrix: Solid | Lab File ID:

Analysis Method: 8270C LL | Date Collected: 08/19/2009 07:45

Extract. Method: 3546 | Date Extracted: 08/20/2009 12:53

Sample wt/vol: 30.59(g) | Date Analyzed: 09/08/2009 19:32

Con. Extract Vol.: 1.0(mL) | Dilution Factor: 1

Injection Volume: 1.0(uL) | Level: (low/med) Low

% Moisture: 7.4 | GPC Cleanup: (Y/N) N

Analysis Batch No.: 48750 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
86-30-6	N-Nitrosodiphenylamine	ND		35	11

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Westfield | Job No.: 360-24194-1

SDG No.: OCRI-02

Client Sample ID: OC-SB-421-8.0/10.0-XXX | Lab Sample ID: 360-24194-3

Matrix: Solid | Lab File ID: B10168.D

Analysis Method: 8270C LL | Date Collected: 08/19/2009 07:45

Extract. Method: 3546 | Date Extracted: 08/20/2009 12:53

Sample wt/vol: 30.59(g) | Date Analyzed: 09/10/2009 08:40

Con. Extract Vol.: 1.0(mL) | Dilution Factor: 10

Injection Volume: 1.0(uL) | Level: (low/med) Low

% Moisture: 7.4 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 48751 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
92-52-4	1,1'-Biphenyl	ND		350	110
95-94-3	1,2,4,5-Tetrachlorobenzene	ND		350	110
120-82-1	1,2,4-Trichlorobenzene	ND		350	110
95-50-1	1,2-Dichlorobenzene	ND		350	110
541-73-1	1,3-Dichlorobenzene	ND		350	110
106-46-7	1,4-Dichlorobenzene	ND		350	110
90-12-0	1-Methylnaphthalene	ND		350	110
108-60-1	2,2'-oxybis[1-chloropropane]	ND		350	110
58-90-2	2,3,4,6-Tetrachlorophenol	ND		350	110
95-95-4	2,4,5-Trichlorophenol	ND		350	110
88-06-2	2,4,6-Trichlorophenol	ND		350	110
120-83-2	2,4-Dichlorophenol	ND		350	110
105-67-9	2,4-Dimethylphenol	ND		350	140
51-28-5	2,4-Dinitrophenol	ND		350	110
121-14-2	2,4-Dinitrotoluene	ND		350	110
606-20-2	2,6-Dinitrotoluene	ND		350	110
91-58-7	2-Chloronaphthalene	ND		350	110
95-57-8	2-Chlorophenol	ND		350	110
91-57-6	2-Methylnaphthalene	ND		350	110
95-48-7	2-Methylphenol	ND		350	210
88-74-4	2-Nitroaniline	ND		1800	110
88-75-5	2-Nitrophenol	ND		350	110
15831-10-4	3 & 4 Methylphenol	ND		350	110
91-94-1	3,3'-Dichlorobenzidine	ND		710	110
99-09-2	3-Nitroaniline	ND		1800	110
534-52-1	4,6-Dinitro-2-methylphenol	ND		1800	110
101-55-3	4-Bromophenyl phenyl ether	ND		350	110
59-50-7	4-Chloro-3-methylphenol	ND		710	110
106-47-8	4-Chloroaniline	ND		710	110
7005-72-3	4-Chlorophenyl phenyl ether	ND		350	110
100-01-6	4-Nitroaniline	ND		1800	110
100-02-7	4-Nitrophenol	ND		1800	110
83-32-9	Acenaphthene	ND		350	110
208-96-8	Acenaphthylene	ND		350	110

cc'd 9/13/10

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Westfield | Job No.: 360-24194-1

SDG No.: OCRI-02

Client Sample ID: OC-SB-421-8.0/10.0-XXX | Lab Sample ID: 360-24194-3

Matrix: Solid | Lab File ID: B10168.D

Analysis Method: 8270C LL | Date Collected: 08/19/2009 07:45

Extract. Method: 3546 | Date Extracted: 08/20/2009 12:53

Sample wt/vol: 30.59(g) | Date Analyzed: 09/10/2009 08:40

Con. Extract Vol.: 1.0(mL) | Dilution Factor: 10

Injection Volume: 1.0(uL) | Level: (low/med) Low

% Moisture: 7.4 | GPC Cleanup: (Y/N) N

Analysis Batch No.: 48751 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
98-86-2	Acetophenone	ND		350	110
62-53-3	Aniline	ND	*	350	110
120-12-7	Anthracene	ND		350	110
1912-24-9	Atrazine	ND		350	110
103-33-3	Azobenzene	ND		350	110
100-52-7	Benzaldehyde	ND		350	110
56-55-3	Benzo[a]anthracene	ND		350	110
50-32-8	Benzo[a]pyrene	ND		350	110
205-99-2	Benzo[b]fluoranthene	ND		350	110
191-24-2	Benzo[g,h,i]perylene	ND		350	110
207-08-9	Benzo[k]fluoranthene	ND		350	110
65-85-0	Benzoic acid	ND		1800	160
119-61-9	Benzophenone	ND		350	110
100-51-6	Benzyl alcohol	ND		710	300
111-91-1	Bis(2-chloroethoxy)methane	ND		350	110
111-44-4	Bis(2-chloroethyl)ether	ND		350	110
117-81-7	Bis(2-ethylhexyl) phthalate	890		350	110
85-68-7	Butyl benzyl phthalate	ND		350	110
105-60-2	Caprolactam	ND		350	110
86-74-8	Carbazole	ND		350	110
218-01-9	Chrysene	ND		350	110
53-70-3	Dibenz(a,h)anthracene	ND		350	110
132-64-9	Dibenzofuran	ND		350	110
84-66-2	Diethyl phthalate	ND		350	110
131-11-3	Dimethyl phthalate	ND		350	110
84-74-2	Di-n-butyl phthalate	ND		350	310
117-84-0	Di-n-octyl phthalate	ND		350	180
101-84-8	Diphenyl oxide	ND		350	110
206-44-0	Fluoranthene	ND		350	110
86-73-7	Fluorene	ND		350	110
118-74-1	Hexachlorobenzene	ND		350	110
87-68-3	Hexachlorobutadiene	ND		350	110
77-47-4	Hexachlorocyclopentadiene	ND		710	110
67-72-1	Hexachloroethane	ND		350	110

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Westfield | Job No.: 360-24194-1

SDG No.: OCRI-02

Client Sample ID: OC-SB-425-6.0/8.0-XXX | Lab Sample ID: 360-24194-9

Matrix: Solid | Lab File ID: B10162.D

Analysis Method: 8270C LL | Date Collected: 08/19/2009 10:05

Extract. Method: 3546 | Date Extracted: 08/25/2009 11:23

Sample wt/vol: 30.37(g) | Date Analyzed: 09/10/2009 05:17

Con. Extract Vol.: 1.0(mL) | Dilution Factor: 5

Injection Volume: 1.0(uL) | Level: (low/med) Low

% Moisture: 8.4 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 48751 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
92-52-4	1,1'-Biphenyl	ND		180	54
95-94-3	1,2,4,5-Tetrachlorobenzene	ND		180	54
120-82-1	1,2,4-Trichlorobenzene	ND		180	54
95-50-1	1,2-Dichlorobenzene	ND		180	54
541-73-1	1,3-Dichlorobenzene	ND	*	180	54
106-46-7	1,4-Dichlorobenzene	ND		180	54
90-12-0	1-Methylnaphthalene	ND		180	54
108-60-1	2,2'-oxybis[1-chloropropane]	ND		180	54
58-90-2	2,3,4,6-Tetrachlorophenol	ND		180	54
95-95-4	2,4,5-Trichlorophenol	ND		180	54
88-06-2	2,4,6-Trichlorophenol	ND		180	54
120-83-2	2,4-Dichlorophenol	ND		180	54
105-67-9	2,4-Dimethylphenol	ND		180	71
51-28-5	2,4-Dinitrophenol	ND		180	54
121-14-2	2,4-Dinitrotoluene	ND		180	54
606-20-2	2,6-Dinitrotoluene	ND		180	54
91-58-7	2-Chloronaphthalene	ND		180	54
95-57-8	2-Chlorophenol	ND		180	54
91-57-6	2-Methylnaphthalene	ND		180	54
95-48-7	2-Methylphenol	ND		180	110
88-74-4	2-Nitroaniline	ND		900	54
88-75-5	2-Nitrophenol	ND		180	54
15831-10-4	3 & 4 Methylphenol	ND		180	54
91-94-1	3,3'-Dichlorobenzidine	ND	*	360	54
99-09-2	3-Nitroaniline	ND		900	54
534-52-1	4,6-Dinitro-2-methylphenol	ND		900	54
101-55-3	4-Bromophenyl phenyl ether	ND		180	54
59-50-7	4-Chloro-3-methylphenol	ND		360	54
106-47-8	4-Chloroaniline	ND		360	54
7005-72-3	4-Chlorophenyl phenyl ether	ND		180	54
100-01-6	4-Nitroaniline	ND		900	54
100-02-7	4-Nitrophenol	ND		900	54
83-32-9	Acenaphthene	ND		180	54
208-96-8	Acenaphthylene	ND		180	54

cc'd 9/13/10

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Westfield Job No.: 360-24194-1

SDG No.: OCRI-02

Client Sample ID: OC-SB-425-6.0/8.0-XXX Lab Sample ID: 360-24194-9

Matrix: Solid Lab File ID: B10162.D

Analysis Method: 8270C LL Date Collected: 08/19/2009 10:05

Extract. Method: 3546 Date Extracted: 08/25/2009 11:23

Sample wt/vol: 30.37(g) Date Analyzed: 09/10/2009 05:17

Con. Extract Vol.: 1.0(mL) Dilution Factor: 5

Injection Volume: 1.0(uL) Level: (low/med) Low

% Moisture: 8.4 GPC Cleanup:(Y/N) N

Analysis Batch No.: 48751 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
98-86-2	Acetophenone	ND		180	54
62-53-3	Aniline	ND	*	180	54
120-12-7	Anthracene	ND		180	54
1912-24-9	Atrazine	ND		180	54
103-33-3	Azobenzene	ND		180	54
100-52-7	Benzaldehyde	ND		180	54
56-55-3	Benzo[a]anthracene	ND		180	54
50-32-8	Benzo[a]pyrene	ND		180	54
205-99-2	Benzo[b]fluoranthene	ND		180	54
191-24-2	Benzo[g,h,i]perylene	ND		180	54
207-08-9	Benzo[k]fluoranthene	ND		180	54
65-85-0	Benzoic acid	ND	*	900	81
119-61-9	Benzophenone	ND		180	54
100-51-6	Benzyl alcohol	ND		360	150
111-91-1	Bis(2-chloroethoxy)methane	ND		180	54
111-44-4	Bis(2-chloroethyl)ether	ND	*	180	54
117-81-7	Bis(2-ethylhexyl) phthalate	ND		180	54
85-68-7	Butyl benzyl phthalate	ND		180	54
105-60-2	Caprolactam	ND		180	54
86-74-8	Carbazole	ND		180	54
218-01-9	Chrysene	ND		180	54
53-70-3	Dibenz(a,h)anthracene	ND		180	54
132-64-9	Dibenzofuran	ND		180	54
84-66-2	Diethyl phthalate	ND		180	54
131-11-3	Dimethyl phthalate	ND		180	54
84-74-2	Di-n-butyl phthalate	ND		180	160
117-84-0	Di-n-octyl phthalate	ND		180	91
101-84-8	Diphenyl oxide	ND		180	54
122-39-4	Diphenylamine	ND		180	54
206-44-0	Fluoranthene	ND		180	54
86-73-7	Fluorene	ND		180	54
118-74-1	Hexachlorobenzene	ND		180	54
87-68-3	Hexachlorobutadiene	ND		180	54
77-47-4	Hexachlorocyclopentadiene	ND		360	54

ccd
1/15/10

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Westfield Job No.: 360-24194-1

SDG No.: OCRI-02

Client Sample ID: OC-EBK-002 Lab Sample ID: 360-24194-12

Matrix: Water Lab File ID: B9855.D

Analysis Method: 8270C LL Date Collected: 08/19/2009 09:30

Extract. Method: 3510C Date Extracted: 08/25/2009 11:51

Sample wt/vol: 1000(mL) Date Analyzed: 08/27/2009 18:14

Con. Extract Vol.: 1.0(mL) Dilution Factor: 1

Injection Volume: 1.0(uL) Level: (low/med) Low

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 48209 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
103-33-3	Azobenzene	ND		5.0	0.50
100-52-7	Benzaldehyde	ND	*	5.0	0.50
56-55-3	Benzo[a]anthracene	ND		0.30	0.17
50-32-8	Benzo[a]pyrene	ND		0.20	0.10
205-99-2	Benzo[b]fluoranthene	ND		0.30	0.14
191-24-2	Benzo[g,h,i]perylene	ND		0.50	0.094
207-08-9	Benzo[k]fluoranthene	ND		0.30	0.17
65-85-0	Benzoic acid	ND		5.0	0.50
119-61-9	Benzophenone	ND		5.0	0.50
100-51-6	Benzyl alcohol	ND		10	0.50
108-60-1	bis (2-chloroisopropyl) ether	ND		5.0	0.50
111-91-1	Bis(2-chloroethoxy)methane	ND		5.0	0.50
111-44-4	Bis(2-chloroethyl)ether	ND		5.0	0.50
117-81-7	Bis(2-ethylhexyl) phthalate	5.1		2.0	0.50
85-68-7	Butyl benzyl phthalate	ND		5.0	0.50
105-60-2	Caprolactam	ND	*	5.0	0.50
86-74-8	Carbazole	ND		5.0	0.50
218-01-9	Chrysene	ND		1.0	0.17
53-70-3	Dibenz(a,h)anthracene	ND		0.50	0.064
132-64-9	Dibenzofuran	ND		5.0	0.50
84-66-2	Diethyl phthalate	0.74	J	5.0	0.50
131-11-3	Dimethyl phthalate	ND		5.0	0.50
84-74-2	Di-n-butyl phthalate	0.90	J B	5.0	0.60
117-84-0	Di-n-octyl phthalate	ND		5.0	0.73
101-84-8	Diphenyl oxide	ND		5.0	0.50
122-39-4	Diphenylamine	ND		5.0	0.50
206-44-0	Fluoranthene	ND		1.0	0.20
86-73-7	Fluorene	ND		1.0	0.050
118-74-1	Hexachlorobenzene	ND		1.0	0.50
77-47-4	Hexachlorocyclopentadiene	ND		5.0	0.050
67-72-1	Hexachloroethane	ND		3.0	0.50
193-39-5	Indeno[1,2,3-cd]pyrene	ND		0.50	0.079
78-59-1	Isophorone	ND		5.0	0.50
98-95-3	Nitrobenzene	ND		5.0	0.50

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Westfield | Job No.: 360-24194-2

SDG No.: OCRI-02A

Client Sample ID: OC-SB-421-10.5/12.5-XXX | Lab Sample ID: 360-24194-2

Matrix: Solid | Lab File ID: B9905.D

Analysis Method: 8270C LL | Date Collected: 08/19/2009 08:05

Extract. Method: 3546 | Date Extracted: 08/20/2009 12:53

Sample wt/vol: 30.61(g) | Date Analyzed: 08/28/2009 22:37

Con. Extract Vol.: 1.0(mL) | Dilution Factor: 1

Injection Volume: 1.0(uL) | Level: (low/med) Low

% Moisture: 9.1 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 48213 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
95-94-3	1,2,4,5-Tetrachlorobenzene	ND		36	2.4
120-82-1	1,2,4-Trichlorobenzene	ND		36	7.0
95-50-1	1,2-Dichlorobenzene	ND		36	3.9
541-73-1	1,3-Dichlorobenzene	ND		36	10
106-46-7	1,4-Dichlorobenzene	ND		36	6.5
90-12-0	1-Methylnaphthalene	58	*	36	2.2
108-60-1	2,2'-oxybis[1-chloropropane]	ND		36	3.6
58-90-2	2,3,4,6-Tetrachlorophenol	ND	*	36	2.2
95-95-4	2,4,5-Trichlorophenol	ND		36	4.1
88-06-2	2,4,6-Trichlorophenol	ND		36	7.5
120-83-2	2,4-Dichlorophenol	ND		36	6.9
105-67-9	2,4-Dimethylphenol	35	J	36	6.3
51-28-5	2,4-Dinitrophenol	ND		36	5.3
121-14-2	2,4-Dinitrotoluene	ND		36	5.1
606-20-2	2,6-Dinitrotoluene	ND		36	4.6
91-58-7	2-Chloronaphthalene	ND		36	5.5
95-57-8	2-Chlorophenol	ND		36	3.5
91-57-6	2-Methylnaphthalene	ND		36	27
95-48-7	2-Methylphenol	ND		36	5.1
88-74-4	2-Nitroaniline	ND		180	23
88-75-5	2-Nitrophenol	ND		36	4.2
15831-10-4	3 & 4 Methylphenol	ND		36	6.8
91-94-1	3,3'-Dichlorobenzidine	ND		72	26
99-09-2	3-Nitroaniline	ND		180	10
534-52-1	4,6-Dinitro-2-methylphenol	ND		180	9.2
101-55-3	4-Bromophenyl phenyl ether	ND		36	7.5
59-50-7	4-Chloro-3-methylphenol	ND		72	9.9
106-47-8	4-Chloroaniline	ND		72	15
7005-72-3	4-Chlorophenyl phenyl ether	ND		36	5.7
100-01-6	4-Nitroaniline	ND		180	9.6
100-02-7	4-Nitrophenol	ND		180	7.0
83-32-9	Acenaphthene	ND		36	5.3
208-96-8	Acenaphthylene	ND		36	6.4
98-86-2	Acetophenone	8.5	J B	36	3.9

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Westfield | Job No.: 360-24194-2

SDG No.: OCRI-02A

Client Sample ID: OC-SB-421-10.5/12.5-XXX | Lab Sample ID: 360-24194-2

Matrix: Solid | Lab File ID: B9905.D

Analysis Method: 8270C LL | Date Collected: 08/19/2009 08:05

Extract. Method: 3546 | Date Extracted: 08/20/2009 12:53

Sample wt/vol: 30.61(g) | Date Analyzed: 08/28/2009 22:37

Con. Extract Vol.: 1.0(mL) | Dilution Factor: 1

Injection Volume: 1.0(uL) | Level: (low/med) Low

% Moisture: 9.1 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 48213 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
62-53-3	Aniline	ND	*	36	19
120-12-7	Anthracene	ND		36	11
1912-24-9	Atrazine	ND	*	36	11
103-33-3	Azobenzene	ND		36	4.5
100-52-7	Benzaldehyde	ND		36	11
56-55-3	Benzo[a]anthracene	ND		36	6.9
50-32-8	Benzo[a]pyrene	ND		36	6.6
205-99-2	Benzo[b]fluoranthene	ND		36	8.2
191-24-2	Benzo[g,h,i]perylene	ND		36	7.0
207-08-9	Benzo[k]fluoranthene	ND		36	10
65-85-0	Benzoic acid	ND		180	15
119-61-9	Benzophenone	3.5	J *	36	2.2
100-51-6	Benzyl alcohol	ND		72	8.3
111-91-1	Bis(2-chloroethoxy)methane	ND		36	6.5
111-44-4	Bis(2-chloroethyl)ether	ND		36	8.7
85-68-7	Butyl benzyl phthalate	ND		36	7.9
105-60-2	Caprolactam	ND	*	36	11
86-74-8	Carbazole	ND		36	36
218-01-9	Chrysene	ND		36	7.8
53-70-3	Dibenz(a,h)anthracene	ND		36	7.3
132-64-9	Dibenzofuran	38		36	21
84-66-2	Diethyl phthalate	ND		36	5.1
131-11-3	Dimethyl phthalate	ND		36	5.3
84-74-2	Di-n-butyl phthalate	590	B	36	11
117-84-0	Di-n-octyl phthalate	ND		36	10
206-44-0	Fluoranthene	ND		36	23
86-73-7	Fluorene	ND		36	14
118-74-1	Hexachlorobenzene	ND		36	8.5
87-68-3	Hexachlorobutadiene	ND		36	7.2
77-47-4	Hexachlorocyclopentadiene	ND		72	9.8
67-72-1	Hexachloroethane	ND		36	6.9
193-39-5	Indeno[1,2,3-cd]pyrene	ND		36	11
78-59-1	Isophorone	ND		36	7.7
91-20-3	Naphthalene	ND		86	80

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Westfield Job No.: 360-24194-2

SDG No.: OCRI-02A

Client Sample ID: OC-SB-421-10.5/12.5-XXX Lab Sample ID: 360-24194-2

Matrix: Solid Lab File ID: B9905.D

Analysis Method: 8270C LL Date Collected: 08/19/2009 08:05

Extract. Method: 3546 Date Extracted: 08/20/2009 12:53

Sample wt/vol: 30.61(g) Date Analyzed: 08/28/2009 22:37

Con. Extract Vol.: 1.0(mL) Dilution Factor: 1

Injection Volume: 1.0(uL) Level: (low/med) Low

% Moisture: 9.1 GPC Cleanup: (Y/N) N

Analysis Batch No.: 48213 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
98-95-3	Nitrobenzene	ND		36	4.9
62-75-9	N-Nitrosodimethylamine	ND		36	4.2
621-64-7	N-Nitrosodi-n-propylamine	ND		36	4.1
86-30-6	N-Nitrosodiphenylamine	670		36	7.2
87-86-5	Pentachlorophenol	ND		36	7.4
85-01-8	Phenanthrene	ND		43	41
108-95-2	Phenol	210		36	4.5
129-00-0	Pyrene	15	J	36	9.5

CAS NO.	SURROGATE	%REC	LIMITS	Q
118-79-6	2,4,6-Tribromophenol	61	30-130	
321-60-8	2-Fluorobiphenyl	70	30-130	
367-12-4	2-Fluorophenol	91	30-130	
4165-60-0	Nitrobenzene-d5	65	30-130	
4165-62-2	Phenol-d5	95	30-130	
1718-51-0	Terphenyl-d14	219	30-130	X

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Westfield | Job No.: 360-24194-2

SDG No.: OCRI-02A

Client Sample ID: OC-SB-421-10.5/12.5-XXX | Lab Sample ID: 360-24194-2 DL

Matrix: Solid | Lab File ID: B9922.D

Analysis Method: 8270C LL | Date Collected: 08/19/2009 08:05

Extract. Method: 3546 | Date Extracted: 08/20/2009 12:53

Sample wt/vol: 30.61(g) | Date Analyzed: 08/31/2009 21:50

Con. Extract Vol.: 1.0(mL) | Dilution Factor: 20

Injection Volume: 1.0(uL) | Level: (low/med) Low

% Moisture: 9.1 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 48389 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
92-52-4	1,1'-Biphenyl	11000		720	220

CAS NO.	SURROGATE	%REC	LIMITS	Q
118-79-6	2,4,6-Tribromophenol	0	30-130	D X
321-60-8	2-Fluorobiphenyl	0	30-130	D X
367-12-4	2-Fluorophenol	0	30-130	D X
4165-60-0	Nitrobenzene-d5	0	30-130	D X
4165-62-2	Phenol-d5	0	30-130	D X
1718-51-0	Terphenyl-d14	0	30-130	D X

cc'd
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1/13/10

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Westfield | Job No.: 360-24194-2

SDG No.: OCRI-02A

Client Sample ID: OC-SB-421-10.5/12.5-XXX | Lab Sample ID: 360-24194-2 DL2

Matrix: Solid | Lab File ID: B9923.D

Analysis Method: 8270C LL | Date Collected: 08/19/2009 08:05

Extract. Method: 3546 | Date Extracted: 08/20/2009 12:53

Sample wt/vol: 30.61(g) | Date Analyzed: 08/31/2009 22:24

Con. Extract Vol.: 1.0(mL) | Dilution Factor: 100

Injection Volume: 1.0(uL) | Level: (low/med) Low

% Moisture: 9.1 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 48389 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
101-84-8	Diphenyl oxide	74000		3600	1100

CAS NO.	SURROGATE	%REC	LIMITS	Q
118-79-6	2,4,6-Tribromophenol	0	30-130	D X
321-60-8	2-Fluorobiphenyl	0	30-130	D X
367-12-4	2-Fluorophenol	0	30-130	D X
4165-60-0	Nitrobenzene-d5	0	30-130	D X
4165-62-2	Phenol-d5	0	30-130	D X
1718-51-0	Terphenyl-d14	0	30-130	D X

CCVI (2) 1/13/10

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Westfield | Job No.: 360-24194-2

SDG No.: OCRI-02A

Client Sample ID: OC-SB-421-10.5/12.5-XXX | Lab Sample ID: 360-24194-2 DL3

Matrix: Solid | Lab File ID: B9924.D

Analysis Method: 8270C LL | Date Collected: 08/19/2009 08:05

Extract. Method: 3546 | Date Extracted: 08/20/2009 12:53

Sample wt/vol: 30.61(g) | Date Analyzed: 08/31/2009 22:58

Con. Extract Vol.: 1.0(mL) | Dilution Factor: 1000

Injection Volume: 1.0(uL) | Level: (low/med) Low

% Moisture: 9.1 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 48389 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
117-81-7	Bis(2-ethylhexyl) phthalate	420000		36000	11000

CAS NO.	SURROGATE	%REC	LIMITS	Q
118-79-6	2,4,6-Tribromophenol	0	30-130	D X
321-60-8	2-Fluorobiphenyl	0	30-130	D X
367-12-4	2-Fluorophenol	0	30-130	D X
4165-60-0	Nitrobenzene-d5	0	30-130	D X
4165-62-2	Phenol-d5	0	30-130	D X
1718-51-0	Terphenyl-d14	0	30-130	D X

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Westfield | Job No.: 360-24194-2

SDG No.: OCRI-02A

Client Sample ID: OC-SB-424-17/19-XXX | Lab Sample ID: 360-24194-5

Matrix: Solid | Lab File ID: B10157.D

Analysis Method: 8270C LL | Date Collected: 08/19/2009 12:35

Extract. Method: 3546 | Date Extracted: 08/25/2009 11:23

Sample wt/vol: 30.59(g) | Date Analyzed: 09/10/2009 02:28

Con. Extract Vol.: 1.0(mL) | Dilution Factor: 1

Injection Volume: 1.0(uL) | Level: (low/med) Low

% Moisture: 11.2 | GPC Cleanup: (Y/N) N

Analysis Batch No.: 48751 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
92-52-4	1,1'-Biphenyl	92		37	11
95-94-3	1,2,4,5-Tetrachlorobenzene	ND		37	2.5
120-82-1	1,2,4-Trichlorobenzene	ND		37	7.2
95-50-1	1,2-Dichlorobenzene	ND		37	4.0
541-73-1	1,3-Dichlorobenzene	ND	*	37	11
106-46-7	1,4-Dichlorobenzene	ND		37	6.6
90-12-0	1-Methylnaphthalene	ND		37	2.2
108-60-1	2,2'-oxybis[1-chloropropane]	ND		37	3.7
58-90-2	2,3,4,6-Tetrachlorophenol	ND		37	2.2
95-95-4	2,4,5-Trichlorophenol	ND		37	4.2
88-06-2	2,4,6-Trichlorophenol	ND		37	7.7
120-83-2	2,4-Dichlorophenol	ND		37	7.1
105-67-9	2,4-Dimethylphenol	ND		37	6.4
51-28-5	2,4-Dinitrophenol	ND		37	5.4
121-14-2	2,4-Dinitrotoluene	ND		37	5.2
606-20-2	2,6-Dinitrotoluene	ND		37	4.7
91-58-7	2-Chloronaphthalene	ND		37	5.7
95-57-8	2-Chlorophenol	ND		37	3.6
91-57-6	2-Methylnaphthalene	ND		37	28
95-48-7	2-Methylphenol	ND		37	5.3
88-74-4	2-Nitroaniline	ND		180	24
88-75-5	2-Nitrophenol	ND		37	4.3
15831-10-4	3 & 4 Methylphenol	ND		37	7.0
91-94-1	3,3'-Dichlorobenzidine	ND	*	74	27
99-09-2	3-Nitroaniline	ND		180	11
534-52-1	4,6-Dinitro-2-methylphenol	ND		180	9.4
101-55-3	4-Bromophenyl phenyl ether	11	J	37	7.7
59-50-7	4-Chloro-3-methylphenol	ND		74	10
106-47-8	4-Chloroaniline	ND		74	15
7005-72-3	4-Chlorophenyl phenyl ether	ND		37	5.9
100-01-6	4-Nitroaniline	ND		180	9.8
100-02-7	4-Nitrophenol	ND		180	7.2
83-32-9	Acenaphthene	ND		37	5.4
208-96-8	Acenaphthylene	ND		37	6.5

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Westfield | Job No.: 360-24194-2

SDG No.: OCRI-02A

Client Sample ID: OC-SB-424-17/19-XXX | Lab Sample ID: 360-24194-5

Matrix: Solid | Lab File ID: B10157.D

Analysis Method: 8270C LL | Date Collected: 08/19/2009 12:35

Extract. Method: 3546 | Date Extracted: 08/25/2009 11:23

Sample wt/vol: 30.59(g) | Date Analyzed: 09/10/2009 02:28

Con. Extract Vol.: 1.0(mL) | Dilution Factor: 1

Injection Volume: 1.0(uL) | Level: (low/med) Low

% Moisture: 11.2 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 48751 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
98-86-2	Acetophenone	ND		37	4.0
62-53-3	Aniline	ND	*	37	19
120-12-7	Anthracene	ND		37	12
1912-24-9	Atrazine	ND		37	11
103-33-3	Azobenzene	ND		37	4.6
100-52-7	Benzaldehyde	ND		37	11
56-55-3	Benzo[a]anthracene	ND		37	7.1
50-32-8	Benzo[a]pyrene	ND		37	6.7
205-99-2	Benzo[b]fluoranthene	ND		37	8.4
191-24-2	Benzo[g,h,i]perylene	ND		37	7.2
207-08-9	Benzo[k]fluoranthene	ND		37	10
65-85-0	Benzoic acid	56	J *	180	16
119-61-9	Benzophenone	ND		37	2.2
100-51-6	Benzyl alcohol	ND		74	8.5
111-91-1	Bis(2-chloroethoxy)methane	ND		37	6.6
111-44-4	Bis(2-chloroethyl)ether	ND	*	37	9.0
85-68-7	Butyl benzyl phthalate	ND		37	8.0
105-60-2	Caprolactam	ND		37	11
86-74-8	Carbazole	ND		37	37
218-01-9	Chrysene	ND		37	7.9
53-70-3	Dibenz(a,h)anthracene	ND		37	7.4
132-64-9	Dibenzofuran	ND		37	21
84-66-2	Diethyl phthalate	ND		37	5.2
131-11-3	Dimethyl phthalate	ND		37	5.4
84-74-2	Di-n-butyl phthalate	14	J B	37	11
117-84-0	Di-n-octyl phthalate	ND		37	10
101-84-8	Diphenyl oxide	69		37	11
206-44-0	Fluoranthene	ND		37	23
86-73-7	Fluorene	ND		37	14
118-74-1	Hexachlorobenzene	ND		37	8.7
87-68-3	Hexachlorobutadiene	ND		37	7.3
77-47-4	Hexachlorocyclopentadiene	ND		74	10
67-72-1	Hexachloroethane	ND		37	7.0
193-39-5	Indeno[1,2,3-cd]pyrene	ND		37	11

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Westfield | Job No.: 360-24194-2

SDG No.: OCRI-02A

Client Sample ID: OC-SB-424-17/19-XXX | Lab Sample ID: 360-24194-5

Matrix: Solid | Lab File ID: B10157.D

Analysis Method: 8270C LL | Date Collected: 08/19/2009 12:35

Extract. Method: 3546 | Date Extracted: 08/25/2009 11:23

Sample wt/vol: 30.59(g) | Date Analyzed: 09/10/2009 02:28

Con. Extract Vol.: 1.0(mL) | Dilution Factor: 1

Injection Volume: 1.0(uL) | Level: (low/med) Low

% Moisture: 11.2 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 48751 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
78-59-1	Isophorone	ND		37	7.9
91-20-3	Naphthalene	ND		88	82
98-95-3	Nitrobenzene	ND		37	5.0
62-75-9	N-Nitrosodimethylamine	ND		37	4.3
621-64-7	N-Nitrosodi-n-propylamine	ND		37	4.2
86-30-6	N-Nitrosodiphenylamine	18	J	37	7.4
87-86-5	Pentachlorophenol	ND		37	7.6
85-01-8	Phenanthrene	ND		44	42
108-95-2	Phenol	ND		37	4.6
129-00-0	Pyrene	ND		37	9.8

CAS NO.	SURROGATE	%REC	LIMITS	Q
118-79-6	2,4,6-Tribromophenol	78	30-130	
321-60-8	2-Fluorobiphenyl	65	30-130	
367-12-4	2-Fluorophenol	103	30-130	
4165-60-0	Nitrobenzene-d5	63	30-130	
4165-62-2	Phenol-d5	98	30-130	
1718-51-0	Terphenyl-d14	71	30-130	

1/13/10

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Westfield | Job No.: 360-24194-2

SDG No.: OCRI-02A

Client Sample ID: OC-SB-424-17/19-XXX DL | Lab Sample ID: 360-24194-5 DL

Matrix: Solid | Lab File ID: B10171.D

Analysis Method: 8270C LL | Date Collected: 08/19/2009 12:35

Extract. Method: 3546 | Date Extracted: 08/25/2009 11:23

Sample wt/vol: 30.59(g) | Date Analyzed: 09/10/2009 10:21

Con. Extract Vol.: 1.0(mL) | Dilution Factor: 2

Injection Volume: 1.0(uL) | Level: (low/med) Low

% Moisture: 11.2 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 48751 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
117-81-7	Bis(2-ethylhexyl) phthalate	1100		74	23

CAS NO.	SURROGATE	%REC	LIMITS	Q
118-79-6	2,4,6-Tribromophenol	85	30-130	
321-60-8	2-Fluorobiphenyl	84	30-130	
367-12-4	2-Fluorophenol	101	30-130	
4165-60-0	Nitrobenzene-d5	76	30-130	
4165-62-2	Phenol-d5	93	30-130	
1718-51-0	Terphenyl-d14	104	30-130	

acid

(2)

1/13/10

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Westfield | Job No.: 360-24194-2

SDG No.: OCRI-02A

Client Sample ID: OC-SB-425-18/20-XXX | Lab Sample ID: 360-24194-8

Matrix: Solid | Lab File ID: B10161.D

Analysis Method: 8270C LL | Date Collected: 08/19/2009 10:25

Extract. Method: 3546 | Date Extracted: 08/25/2009 11:23

Sample wt/vol: 30.43(g) | Date Analyzed: 09/10/2009 04:43

Con. Extract Vol.: 1.0(mL) | Dilution Factor: 1

Injection Volume: 1.0(uL) | Level: (low/med) Low

% Moisture: 7.4 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 48751 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
92-52-4	1,1'-Biphenyl	150		35	11
95-94-3	1,2,4,5-Tetrachlorobenzene	ND		35	2.4
120-82-1	1,2,4-Trichlorobenzene	ND		35	6.9
95-50-1	1,2-Dichlorobenzene	ND		35	3.8
541-73-1	1,3-Dichlorobenzene	ND	*	35	10
106-46-7	1,4-Dichlorobenzene	ND		35	6.4
90-12-0	1-Methylnaphthalene	ND		35	2.1
108-60-1	2,2'-oxybis[1-chloropropane]	ND		35	3.6
58-90-2	2,3,4,6-Tetrachlorophenol	ND		35	2.1
95-95-4	2,4,5-Trichlorophenol	ND		35	4.0
88-06-2	2,4,6-Trichlorophenol	ND		35	7.4
120-83-2	2,4-Dichlorophenol	ND		35	6.8
105-67-9	2,4-Dimethylphenol	ND		35	6.2
51-28-5	2,4-Dinitrophenol	ND		35	5.2
121-14-2	2,4-Dinitrotoluene	ND		35	5.0
606-20-2	2,6-Dinitrotoluene	ND		35	4.5
91-58-7	2-Chloronaphthalene	ND		35	5.5
95-57-8	2-Chlorophenol	ND		35	3.5
91-57-6	2-Methylnaphthalene	ND		35	27
95-48-7	2-Methylphenol	ND		35	5.1
88-74-4	2-Nitroaniline	ND		180	23
88-75-5	2-Nitrophenol	ND		35	4.1
15831-10-4	3 & 4 Methylphenol	ND		35	6.7
91-94-1	3,3'-Dichlorobenzidine	ND	*	71	26
99-09-2	3-Nitroaniline	ND		180	10
534-52-1	4,6-Dinitro-2-methylphenol	ND		180	9.1
101-55-3	4-Bromophenyl phenyl ether	ND		35	7.4
59-50-7	4-Chloro-3-methylphenol	ND		71	9.8
106-47-8	4-Chloroaniline	ND		71	14
7005-72-3	4-Chlorophenyl phenyl ether	ND		35	5.6
100-01-6	4-Nitroaniline	ND		180	9.5
100-02-7	4-Nitrophenol	ND		180	6.9
83-32-9	Acenaphthene	ND		35	5.2
208-96-8	Acenaphthylene	ND		35	6.3

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Westfield | Job No.: 360-24194-2

SDG No.: OCRI-02A

Client Sample ID: OC-SB-425-18/20-XXX | Lab Sample ID: 360-24194-8

Matrix: Solid | Lab File ID: B10161.D

Analysis Method: 8270C LL | Date Collected: 08/19/2009 10:25

Extract. Method: 3546 | Date Extracted: 08/25/2009 11:23

Sample wt/vol: 30.43(g) | Date Analyzed: 09/10/2009 04:43

Con. Extract Vol.: 1.0(mL) | Dilution Factor: 1

Injection Volume: 1.0(uL) | Level: (low/med) Low

% Moisture: 7.4 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 48751 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
98-86-2	Acetophenone	ND		35	3.8
62-53-3	Aniline	ND	*	35	18
120-12-7	Anthracene	ND		35	11
1912-24-9	Atrazine	ND		35	11
103-33-3	Azobenzene	ND		35	4.4
100-52-7	Benzaldehyde	ND		35	11
56-55-3	Benzo[a]anthracene	ND		35	6.8
50-32-8	Benzo[a]pyrene	ND		35	6.5
205-99-2	Benzo[b]fluoranthene	ND		35	8.1
191-24-2	Benzo[g,h,i]perylene	ND		35	6.9
207-08-9	Benzo[k]fluoranthene	ND		35	9.8
65-85-0	Benzoic acid	ND	*	180	15
119-61-9	Benzophenone	ND		35	2.1
100-51-6	Benzyl alcohol	ND		71	8.2
111-91-1	Bis(2-chloroethoxy)methane	ND		35	6.4
111-44-4	Bis(2-chloroethyl)ether	ND	*	35	8.6
117-81-7	Bis(2-ethylhexyl) phthalate	62		35	11
85-68-7	Butyl benzyl phthalate	ND		35	7.8
105-60-2	Caprolactam	ND		35	11
86-74-8	Carbazole	ND		35	35
218-01-9	Chrysene	ND		35	7.7
53-70-3	Dibenz(a,h)anthracene	ND		35	7.2
132-64-9	Dibenzofuran	ND		35	21
84-66-2	Diethyl phthalate	ND		35	5.0
131-11-3	Dimethyl phthalate	ND		35	5.2
84-74-2	Di-n-butyl phthalate	24	J B	35	11
117-84-0	Di-n-octyl phthalate	ND		35	10
101-84-8	Diphenyl oxide	64		35	11
206-44-0	Fluoranthene	ND		35	22
86-73-7	Fluorene	ND		35	14
118-74-1	Hexachlorobenzene	ND		35	8.4
87-68-3	Hexachlorobutadiene	ND		35	7.1
77-47-4	Hexachlorocyclopentadiene	ND		71	9.7
67-72-1	Hexachloroethane	ND		35	6.8

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Westfield | Job No.: 360-24194-2

SDG No.: OCRI-02A

Client Sample ID: OC-SB-425-18/20-XXX | Lab Sample ID: 360-24194-8

Matrix: Solid | Lab File ID: B10161.D

Analysis Method: 8270C LL | Date Collected: 08/19/2009 10:25

Extract. Method: 3546 | Date Extracted: 08/25/2009 11:23

Sample wt/vol: 30.43(g) | Date Analyzed: 09/10/2009 04:43

Con. Extract Vol.: 1.0(mL) | Dilution Factor: 1

Injection Volume: 1.0(uL) | Level: (low/med) Low

% Moisture: 7.4 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 48751 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
193-39-5	Indeno[1,2,3-cd]pyrene	ND		35	11
78-59-1	Isophorone	ND		35	7.6
91-20-3	Naphthalene	ND		85	79
98-95-3	Nitrobenzene	ND		35	4.8
62-75-9	N-Nitrosodimethylamine	ND		35	4.1
621-64-7	N-Nitrosodi-n-propylamine	ND		35	4.0
86-30-6	N-Nitrosodiphenylamine	170		35	7.1
87-86-5	Pentachlorophenol	ND		35	7.3
85-01-8	Phenanthrene	ND		43	41
108-95-2	Phenol	ND		35	4.4
129-00-0	Pyrene	ND		35	9.4

CAS NO.	SURROGATE	%REC	LIMITS	Q
118-79-6	2,4,6-Tribromophenol	87	30-130	
321-60-8	2-Fluorobiphenyl	77	30-130	
367-12-4	2-Fluorophenol	80	30-130	
4165-60-0	Nitrobenzene-d5	76	30-130	
4165-62-2	Phenol-d5	79	30-130	
1718-51-0	Terphenyl-d14	96	30-130	

rcld
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Cover sheet

SEMIVOLATILE ORGANICS

REGION I VALIDATION CHECKLIST for OLIN CHEMICAL SUPERFUND SITE
Criteria and Qualifications: REGION I Organics Guideline (1996)

TIER I / (II) / III (circle one)

SITE: Olin Chemical Superfund Site Project #: 6/07/000/6.12 SDG #: OCRI-03/03A

LAB #: _TAL-Westfield___

Sample IDs: Attach tracking sheet and/or sample listing.

This checklist is designed to be used with USEPA Region I Validation Guidelines Part II (12/1996). During Level III validation, calculation and transcription checks are completed for instrument tuning, surrogates, target compounds, spike recoveries, calibration data, and internal standards as specified in the guideline. These checks are documented on attached validation notes.

YES NO NA	
Data completeness ☑ ☐ ☐ All data summaries, QC forms and raw data available from hard copy or electronic data package ☑ ☐ ☐ Data summaries match EDD	Contact lab if missing data. Lab to respond with 24 hours.
Holding Times and Preservation ☑ ☐ ☐ Hold times met (Waters – Extract within 7 days, analyze within 40 days. Soils – extract within 14 days, analyze within 40 days)	
Instrument Performance Check (Tune) ☑ ☐ ☐ Tune available for each 12-hour period samples were analyzed ☑ ☐ ☐ Appropriate number of significant figures reported (at least 2) ☑ ☐ ☐ Mass/Charge list (m/z) criteria met	
Initial Calibration ☑ ☐ ☐ %RSD less than or equal to 30% ☑ ☐ ☐ RRF greater than or equal to 0.05	
Continuing Calibration ☑ ☐ ☐ %D less than or equal to 25% ☑ ☐ ☐ RRF greater than or equal to 0.05.	
Blank Contamination ☒ ☐ ☐ Method blank contamination ☒ ☐ ☐ Equipment/Rinseate blank contamination	Evaluate all blanks for contamination. Highest contaminant level used for action level. See below.
Surrogate Recoveries	

SEMIVOLATILE ORGANICS

REGION I VALIDATION CHECKLIST for
OLIN CHEMICAL SUPERFUND SITE
Criteria and Qualifications: REGION I Organics Guideline (1996)

TIER I / (II) (III) (circle one)

☐	☒	☐	Surrogates percent recovery criteria met: Soil = (base/neutral 30%-130%, acid 30%-130%) Water = (base/neutral 30%-130%, acid 15%-110%)	See below.
Matrix Spikes and Laboratory Control Samples				
☐	☒	☐	MS/MSD percent recovery criteria met Soil and Water = (base/neutral 40%-140%, acid 30%-130%)	See below.
☑	☐	☐	MS/MSD RPD criteria met (soils <50%, water <30%)	
☐	☒	☐	LCS percent recovery criteria met soil/water (base 40%-140%, acid 30%-130%)	
Field Duplicates				
☑	☐	☐	RPD criteria met (soils <50%, water <30%)	
Internal Standard				
☑	☐	☐	Area counts within -50 to +100 percent of calib. std.	
☑	☐	☐	Retention Time within 30 seconds of calib. std.	
Target Compounds				
☑	☐	☐	Reviewed narrative for anomalies	
Tentatively Identified Compounds (TICs)				
☐	☑	☐	TCL compounds reported as TICs	

Validator's Signature: _____

Date: 1/24/10

Reference:

MACTEC, Quality Assurance Project Plan for Remedial Investigation/Feasibility Study – Olin Chemical Superfund Site, Wilmington Property, 51 Eames Street, Wilmington, MA", MACTEC Engineering and Consulting. Draft .October 2008.

PES SCORING EVALUATION REPORT

Lab Name: Test America
Contract: NA
SDG No.: OCRI-09
Lab File ID: NA
Date Analyzed: 09/24/2009
% Moisture: NA
Injection Vol. (uL): NA
Dilution Factor: 1.0

Case No.: NA
Matrix: Soil
Date Received: 09/01/2009
Sample Wt./Vol. (g/mL): NA
Decanted: N/A
GPC Cleanup: Unknown
Extraction Type: N/A

Lab Code: TESTAM
SAS/Client No.: NA
Lab Sample ID: 360-24365-20
Date Extracted: 09/11/2009
Level: N/A
Conc. Extract Vol. (uL): NA
pH: NA
Units: ug/Kg

Analysis Method: 8270C LL
Scoring Method: SOM01.1
Comments:

CAS No.	Analyte	Laboratory Results		PES Evaluation	
		Concentration	Q		
111-44-4	bis-(2-Chloroethyl)ether	1600		PASS	Within Limits
95-57-8	2-Chlorophenol	210		PASS	Within Limits
108-60-1	2,2'-oxybis(1-Chloropropane)	1200		PASS	Within Limits
621-64-7	N-Nitroso-di-n-propylamine	580		PASS	Within Limits
67-72-1	Hexachloroethane	730		PASS	Within Limits
78-59-1	Isophorone	570		PASS	Within Limits
111-91-1	bis(2-Chloroethoxy)methane	2900		FAIL	Action High
120-83-2	2,4-Dichlorophenol	730		PASS	Warning High
91-20-3	Naphthalene	400		PASS	Warning High
106-47-8	4-Chloroaniline	230		PASS	Within Limits
105-60-2	Caprolactam	240		PASS	Within Limits
77-47-4	Hexachlorocyclopentadiene	650		PASS	Within Limits
95-95-4	2,4,5-Trichlorophenol	800		PASS	Within Limits
91-58-7	2-Chloronaphthalene	600		PASS	Within Limits
606-20-2	2,6-Dinitrotoluene	1000		PASS	Within Limits
208-96-8	Acenaphthylene	310		PASS	Within Limits
51-28-5	2,4-Dinitrophenol	160		N.E.	Not Evaluated
132-64-9	Dibenzofuran	330		PASS	Within Limits
121-14-2	2,4-Dinitrotoluene	310		PASS	Within Limits
86-73-7	Fluorene	990		PASS	Within Limits
7005-72-3	4-Chlorophenyl-phenylether	440		PASS	Within Limits
95-94-3	1,2,4,5-Tetrachlorobenzene	820		PASS	Warning High
101-55-3	4-Bromophenyl-phenylether	540		PASS	Within Limits
118-74-1	Hexachlorobenzene	410		PASS	Within Limits
1912-24-9	Atrazine	0	U	N.E.	Not Evaluated
87-86-5	Pentachlorophenol	450		PASS	Within Limits
120-12-7	Anthracene	410		PASS	Within Limits
86-74-8	Carbazole	500		PASS	Within Limits
85-68-7	Butylbenzylphthalate	1000		PASS	Within Limits
91-94-1	3,3'-Dichlorobenzidine	46	J	N.E.	Not Evaluated
56-55-3	Benzo(a)anthracene	610		PASS	Within Limits
117-84-0	Di-n-octylphthalate	560		PASS	Within Limits
205-99-2	Benzo(b)fluoranthene	820		PASS	Within Limits
207-08-9	Benzo(k)fluoranthene	370		PASS	Within Limits
90-12-0	1-Methylnaphthalene	740		PASS	TIC Found
****	END Main Analytes	**********	****	****	**********
83-32-9	Acenaphthene	27	J	PASS	Less Than CRQL

PES SCORING EVALUATION REPORT

CAS No.	Analyte	Laboratory Results		PES Evaluation	
		Concentration	Q		
98-55-5	Alpha-Terpineol	25	J	N.E.	Non-spiked TIC
123-42-2	2-Pentanone,4-hydroxy-4-methyl-	5900	JN	N.E.	Non-spiked TIC
92-87-5	Benzidine	17	J	N.E.	Non-spiked TIC
****	END All Analytes	**********	****	****	**********

SAMPLE SUMMARY

Client: Olin Corporation

Job Number: 360-24223-1
Sdg Number: OCRI-03

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
360-24223-1	OC-SB-415-0.0/1.0-XXX	Solid	08/20/2009 0845	08/20/2009 1800
360-24223-2	OC-SB-415-16/18-XXX	Solid	08/20/2009 0910	08/20/2009 1800
360-24223-3	OC-SB-415-5.0/7.0-XXX	Solid	08/20/2009 0850	08/20/2009 1800
360-24223-4	OC-SB-419-0.0/1.0-XXX	Solid	08/19/2009 1555	08/20/2009 1800
360-24223-5	OC-SB-419-17/19-XXX	Solid	08/19/2009 1640	08/20/2009 1800
360-24223-6	OC-SB-419-3.0/5.0-XXX	Solid	08/19/2009 1605	08/20/2009 1800
360-24223-7	OC-SB-426-0.0/1.0-XXX	Solid	08/19/2009 1415	08/20/2009 1800
360-24223-8	OC-SB-426-13/15-XXX	Solid	08/19/2009 1435	08/20/2009 1800
360-24223-9	OC-SB-426-5.0/7.0-XXX	Solid	08/19/2009 1425	08/20/2009 1800
360-24223-9MS	OC-SB-426-5.0/7.0-XMS	Solid	08/19/2009 1425	08/20/2009 1800
360-24223-9MSD	OC-SB-426-5.0/7.0-MSD	Solid	08/19/2009 1425	08/20/2009 1800
360-24223-10	OC-SB-426-5.0/7.0-DUP	Solid	08/19/2009 1425	08/20/2009 1800
360-24223-11	OC-SB-431-0.0/1.0-XXX	Solid	08/20/2009 1015	08/20/2009 1800
360-24223-12	OC-SB-431-7.0/9.0-XXX	Solid	08/20/2009 1025	08/20/2009 1800
360-24223-13	OC-SB-436-0.0/1.0-XXX	Solid	08/20/2009 1305	08/20/2009 1800
360-24223-14	OC-SB-436-13/15-XXX	Solid	08/20/2009 1325	08/20/2009 1800
360-24223-15	OC-SB-436-6.0/8.0-XXX	Solid	08/20/2009 1310	08/20/2009 1800
360-24223-16	OC-TBK-004	Solid	08/20/2009 1430	08/20/2009 1800

Form 1's edited
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Client: Olin Corporation

Job Number: 360-24223-1
Sdg Number: OCRI-03

Client Sample ID: **OC-SB-415-0.0/1.0-XXX**

Lab Sample ID: 360-24223-1
Client Matrix: Solid % Moisture: 4.9

Date Sampled: 08/20/2009 0845
Date Received: 08/20/2009 1800

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48751		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48259		Lab File ID:	B10163.D
Dilution:	1.0			Initial Weight/Volume:	30.35 g
Date Analyzed:	09/10/2009 0551			Final Weight/Volume:	1.0 mL
Date Prepared:	08/27/2009 1206			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		10	35
1,2,4,5-Tetrachlorobenzene		ND		10	35
1,2,4-Trichlorobenzene		ND		10	35
1,2-Dichlorobenzene		ND		10	35
1,3-Dichlorobenzene		ND		10	35
1,4-Dichlorobenzene		ND		10	35
1-Methylnaphthalene		ND		10	35
2,2'-oxybis[1-chloropropane]		ND		10	35
2,3,4,6-Tetrachlorophenol		ND		10	35
2,4,5-Trichlorophenol		ND		10	35
2,4,6-Trichlorophenol		ND		10	35
2,4-Dichlorophenol		ND		10	35
2,4-Dimethylphenol		ND		14	35
2,4-Dinitrophenol		ND		10	35
2,4-Dinitrotoluene		ND		10	35
2,6-Dinitrotoluene		ND		10	35
2-Chloronaphthalene		ND		10	35
2-Chlorophenol		ND		10	35
2-Methylnaphthalene		ND		10	35
2-Methylphenol		ND J	✓	21	35
2-Nitroaniline		ND		10	170
2-Nitrophenol		ND		10	35
3 & 4 Methylphenol		ND J	✓	10	35
3,3'-Dichlorobenzidine		ND		10	69
3-Nitroaniline		ND		10	170
4,6-Dinitro-2-methylphenol		ND		10	170
4-Bromophenyl phenyl ether		ND		10	35
4-Chloro-3-methylphenol		ND		10	69
4-Chloroaniline		ND		10	69
4-Chlorophenyl phenyl ether		ND		10	35
4-Nitroaniline		ND		10	170
4-Nitrophenol		ND		10	170
Acenaphthene		ND		10	35
Acenaphthylene		ND		10	35
Acetophenone		15	J/EB	10	35
Aniline		ND J	✓	10	35
Anthracene		ND		10	35
Atrazine		ND		10	35
Azobenzene		ND		10	35
Benzaldehyde		ND		10	35
Benzo[a]anthracene		ND		10	35
Benzo[a]pyrene		ND		10	35
Benzo[b]fluoranthene		ND		10	35
Benzo[g,h,i]perylene		ND		10	35
Benzo[k]fluoranthene		ND		10	35
Benzoic acid		ND J	✓	16	170

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Client: Olin Corporation

Job Number: 360-24223-1
Sdg Number: OCRI-03

Client Sample ID: **OC-SB-415-0.0/1.0-XXX**

Lab Sample ID: 360-24223-1
Client Matrix: Solid % Moisture: 4.9

Date Sampled: 08/20/2009 0845
Date Received: 08/20/2009 1800

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48751		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48259		Lab File ID:	B10163.D
Dilution:	1.0			Initial Weight/Volume:	30.35 g
Date Analyzed:	09/10/2009 0551			Final Weight/Volume:	1.0 mL
Date Prepared:	08/27/2009 1206			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		10	35
Benzyl alcohol		ND		30	69
Bis(2-chloroethoxy)methane		ND		10	35
Bis(2-chloroethyl)ether		ND	J	10	35
Bis(2-ethylhexyl) phthalate		~~29~~	~~J B~~	10	35
Butyl benzyl phthalate		ND		10	35
Caprolactam		ND		10	35
Carbazole		ND		10	35
Chrysene		ND		10	35
Dibenz(a,h)anthracene		ND		10	35
Dibenzofuran		ND		10	35
Diethyl phthalate		ND		10	35
Dimethyl phthalate		ND		10	35
Di-n-butyl phthalate		ND		30	35
Di-n-octyl phthalate		ND		17	35
Diphenyl oxide		ND		10	35
Fluoranthene		ND		10	35
Fluorene		ND		10	35
Hexachlorobenzene		ND		10	35
Hexachlorobutadiene		ND		10	35
Hexachlorocyclopentadiene		ND		10	69
Hexachloroethane		ND		10	35
Indeno[1,2,3-cd]pyrene		ND		10	35
Isophorone		ND		10	35
Naphthalene		ND		10	83
Nitrobenzene		ND		10	35
N-Nitrosodimethylamine		ND		10	35
N-Nitrosodi-n-propylamine		ND	J	10	35
N-Nitrosodiphenylamine		ND		10	35
Pentachlorophenol		ND		10	35
Phenanthrene		ND		10	42
Phenol		ND		10	35
Pyrene		ND		10	35

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	45		30 - 130
2-Fluorobiphenyl	62		30 - 130
2-Fluorophenol	81		30 - 130
Nitrobenzene-d5	60		30 - 130
Phenol-d5	74		30 - 130
Terphenyl-d14	67		30 - 130

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Client: Olin Corporation

Job Number: 360-24223-1
Sdg Number: OCRI-03

Client Sample ID: **OC-SB-415-0.0/1.0-XXX**

Lab Sample ID: 360-24223-1
Client Matrix: Solid % Moisture: 4.9

Date Sampled: 08/20/2009 0845
Date Received: 08/20/2009 1800

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48751		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48259		Lab File ID:	B10163.D
Dilution:	1.0			Initial Weight/Volume:	30.35 g
Date Analyzed:	09/10/2009 0551			Final Weight/Volume:	1.0 mL
Date Prepared:	08/27/2009 1206			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 6

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
3910-35-8	1H-Indene, 2,3-dihydro-1,1,3-trimethyl-3	11.14	71	T J N
630-6-8	Hexatriacontane	14.13	72	T J N
629-96-9	1-Eicosanol	14.23	120	T J N
112-95-8	Eicosane	15.49	84	T J N
1599-67-3	1-Docosene	15.58	140	T J N
	Unknown	16.79	120	T J

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Client: Olin Corporation

Job Number: 360-24223-1
Sdg Number: OCRI-03

Client Sample ID: **OC-SB-415-5.0/7.0-XXX**

Lab Sample ID: 360-24223-3
Client Matrix: Solid
% Moisture: 10.3

Date Sampled: 08/20/2009 0850
Date Received: 08/20/2009 1800

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48659		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48259		Lab File ID:	B10098.D
Dilution:	1.0			Initial Weight/Volume:	30.36 g
Date Analyzed:	09/07/2009 1959			Final Weight/Volume:	1.0 mL
Date Prepared:	08/27/2009 1206			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		11	37
1,2,4,5-Tetrachlorobenzene		ND		11	37
1,2,4-Trichlorobenzene		ND		11	37
1,2-Dichlorobenzene		ND		11	37
1,3-Dichlorobenzene		ND		11	37
1,4-Dichlorobenzene		ND		11	37
1-Methylnaphthalene		ND		11	37
2,2'-oxybis[1-chloropropane]		ND		11	37
2,3,4,6-Tetrachlorophenol		ND		11	37
2,4,5-Trichlorophenol		ND		11	37
2,4,6-Trichlorophenol		ND		11	37
2,4-Dichlorophenol		ND		11	37
2,4-Dimethylphenol		ND		14	37
2,4-Dinitrophenol		ND		11	37
2,4-Dinitrotoluene		ND		11	37
2,6-Dinitrotoluene		ND		11	37
2-Chloronaphthalene		ND		11	37
2-Chlorophenol		ND		11	37
2-Methylnaphthalene		ND		11	37
2-Methylphenol		ND J	✓	22	37
2-Nitroaniline		ND		11	180
2-Nitrophenol		ND		11	37
3 & 4 Methylphenol		ND J	✓	11	37
3,3'-Dichlorobenzidine		ND		11	74
3-Nitroaniline		ND		11	180
4,6-Dinitro-2-methylphenol		ND		11	180
4-Bromophenyl phenyl ether		ND		11	37
4-Chloro-3-methylphenol		ND		11	74
4-Chloroaniline		ND		11	74
4-Chlorophenyl phenyl ether		ND		11	37
4-Nitroaniline		ND		11	180
4-Nitrophenol		ND		11	180
Acenaphthene		ND		11	37
Acenaphthylene		ND		11	37
Acetophenone		ND J	✓	11	37
Aniline		ND J	✓	11	37
Anthracene		ND		11	37
Atrazine		ND		11	37
Azobenzene		ND		11	37
Benzaldehyde		ND		11	37
Benzo[a]anthracene		ND		11	37
Benzo[a]pyrene		ND		11	37
Benzo[b]fluoranthene		ND		11	37
Benzo[g,h,i]perylene		ND		11	37
Benzo[k]fluoranthene		ND		11	37
Benzoic acid		ND J	✓	17	180

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Client: Olin Corporation

Job Number: 360-24223-1
Sdg Number: OCRI-03

Client Sample ID: **OC-SB-415-5.0/7.0-XXX**

Lab Sample ID: 360-24223-3
Client Matrix: Solid
% Moisture: 10.3

Date Sampled: 08/20/2009 0850
Date Received: 08/20/2009 1800

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48659		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48259		Lab File ID:	B10098.D
Dilution:	1.0			Initial Weight/Volume:	30.36 g
Date Analyzed:	09/07/2009 1959			Final Weight/Volume:	1.0 mL
Date Prepared:	08/27/2009 1206			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		11	37
Benzyl alcohol		ND		31	74
Bis(2-chloroethoxy)methane		ND		11	37
Bis(2-chloroethyl)ether		ND	J	11	37
Bis(2-ethylhexyl) phthalate		ND		11	37
Butyl benzyl phthalate		ND		11	37
Caprolactam		ND		11	37
Carbazole		ND		11	37
Chrysene		ND		11	37
Dibenz(a,h)anthracene		ND		11	37
Dibenzofuran		ND		11	37
Diethyl phthalate		ND		11	37
Dimethyl phthalate		ND		11	37
Di-n-butyl phthalate		ND		32	37
Di-n-octyl phthalate		ND		19	37
Diphenyl oxide		ND		11	37
Fluoranthene		ND		11	37
Fluorene		ND		11	37
Hexachlorobenzene		ND		11	37
Hexachlorobutadiene		ND		11	37
Hexachlorocyclopentadiene		ND		11	74
Hexachloroethane		ND		11	37
Indeno[1,2,3-cd]pyrene		ND		11	37
Isophorone		ND		11	37
Naphthalene		ND		11	88
Nitrobenzene		ND		11	37
N-Nitrosodimethylamine		ND		11	37
N-Nitrosodi-n-propylamine		ND	J	11	37
N-Nitrosodiphenylamine		ND		11	37
Pentachlorophenol		ND		11	37
Phenanthrene		ND		11	44
Phenol		ND		11	37
Pyrene		ND		11	37

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	59		30 - 130
2-Fluorobiphenyl	61		30 - 130
2-Fluorophenol	69		30 - 130
Nitrobenzene-d5	52		30 - 130
Phenol-d5	70		30 - 130
Terphenyl-d14	59		30 - 130

Client: Olin Corporation

Job Number: 360-24223-1
Sdg Number: OCRI-03

Client Sample ID: **OC-SB-415-5.0/7.0-XXX**

Lab Sample ID: 360-24223-3
Client Matrix: Solid % Moisture: 10.3

Date Sampled: 08/20/2009 0850
Date Received: 08/20/2009 1800

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48659		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48259		Lab File ID:	B10098.D
Dilution:	1.0			Initial Weight/Volume:	30.36 g
Date Analyzed:	09/07/2009 1959			Final Weight/Volume:	1.0 mL
Date Prepared:	08/27/2009 1206			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 9

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
7785-70-8	1R-.alpha.-Pinene	7.47	1700	T J N
18172-67-3	Bicyclo[3.1.1]heptane, 6,6-dimethyl-2-me	7.83	73	T J N
5989-27-5	D-Limonene	8.17	200	T J N
98-55-5	Alpha-Terpineol	9.17	69	
122-39-4	Diphenylamine	11.23	2.9	J
25269-17-4	Thunbergol	13.02	81	T J N
	Unknown	14.05	150	T J
	Unknown	14.23	80	T J
	Unknown	18.69	86	T J

Client: Olin Corporation

Job Number: 360-24223-1
Sdg Number: OCRI-03

Client Sample ID: **OC-SB-419-0.0/1.0-XXX**

Lab Sample ID: 360-24223-4
Client Matrix: Solid
% Moisture: 2.6

Date Sampled: 08/19/2009 1555
Date Received: 08/20/2009 1800

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48456		Instrument ID:	Inst. J
Preparation:	3550B	Prep Batch: 360-48381		Lab File ID:	J02817.D
Dilution:	1.0			Initial Weight/Volume:	100.19 g
Date Analyzed:	09/02/2009 0921			Final Weight/Volume:	1.0 mL
Date Prepared:	08/31/2009 1206			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodimethylamine		ND		1.2	5.1

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	24	X	30 - 130
2-Fluorobiphenyl	62		30 - 130
2-Fluorophenol	22	X	30 - 130
Nitrobenzene-d5	58		30 - 130
Phenol-d5	54		30 - 130
Terphenyl-d14	98		30 - 130

Client: Olin Corporation

Job Number: 360-24223-1
Sdg Number: OCRI-03

Client Sample ID: **OC-SB-419-0.0/1.0-XXX**

Lab Sample ID: 360-24223-4
Client Matrix: Solid
% Moisture: 2.6

Date Sampled: 08/19/2009 1555
Date Received: 08/20/2009 1800

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48751		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48259		Lab File ID:	B10164.D
Dilution:	1.0			Initial Weight/Volume:	30.09 g
Date Analyzed:	09/10/2009 0625			Final Weight/Volume:	1.0 mL
Date Prepared:	08/27/2009 1206			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		10	34
1,2,4,5-Tetrachlorobenzene		ND		10	34
1,2,4-Trichlorobenzene		ND		10	34
1,2-Dichlorobenzene		ND		10	34
1,3-Dichlorobenzene		ND		10	34
1,4-Dichlorobenzene		ND		10	34
1-Methylnaphthalene		ND		10	34
2,2'-oxybis[1-chloropropane]		ND		10	34
2,3,4,6-Tetrachlorophenol		ND	U	10	34
2,4,5-Trichlorophenol		ND	U	10	34
2,4,6-Trichlorophenol		ND	U	10	34
2,4-Dichlorophenol		ND	U	10	34
2,4-Dimethylphenol		ND	U	13	34
2,4-Dinitrophenol		ND	U	10	34
2,4-Dinitrotoluene		ND		10	34
2,6-Dinitrotoluene		ND		10	34
2-Chloronaphthalene		ND		10	34
2-Chlorophenol		ND	U	10	34
2-Methylnaphthalene		ND		10	34
2-Methylphenol		ND	U	20	34
2-Nitroaniline		ND		10	170
2-Nitrophenol		ND	U	10	34
3 & 4 Methylphenol		ND	U	10	34
3,3'-Dichlorobenzidine		ND		10	68
3-Nitroaniline		ND		10	170
4,6-Dinitro-2-methylphenol		ND	U	10	170
4-Bromophenyl phenyl ether		ND		10	34
4-Chloro-3-methylphenol		ND	U	10	68
4-Chloroaniline		ND		10	68
4-Chlorophenyl phenyl ether		ND		10	34
4-Nitroaniline		ND		10	170
4-Nitrophenol		ND	U	10	170
Acenaphthene		ND		10	34
Acenaphthylene		ND		10	34
Acetophenone		ND	U	10	34
Aniline		ND	U	10	34
Anthracene		ND		10	34
Atrazine		ND		10	34
Azobenzene		ND		10	34
Benzaldehyde		ND		10	34
Benzo[a]anthracene		ND		10	34
Benzo[a]pyrene		ND		10	34
Benzo[b]fluoranthene		ND		10	34
Benzo[g,h,i]perylene		ND		10	34
Benzo[k]fluoranthene		ND		10	34
Benzoic acid		ND	U	15	170

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Client: Olin Corporation

Job Number: 360-24223-1
Sdg Number: OCRI-03

Client Sample ID: **OC-SB-419-0.0/1.0-XXX**

Lab Sample ID: 360-24223-4
Client Matrix: Solid % Moisture: 2.6

Date Sampled: 08/19/2009 1555
Date Received: 08/20/2009 1800

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48751		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48259		Lab File ID:	B10164.D
Dilution:	1.0			Initial Weight/Volume:	30.09 g
Date Analyzed:	09/10/2009 0625			Final Weight/Volume:	1.0 mL
Date Prepared:	08/27/2009 1206			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		10	34
Benzyl alcohol		ND		29	68
Bis(2-chloroethoxy)methane		ND		10	34
Bis(2-chloroethyl)ether		ND		10	34
Bis(2-ethylhexyl) phthalate		45	J B	10	34
Butyl benzyl phthalate		ND		10	34
Caprolactam		ND		10	34
Carbazole		ND		10	34
Chrysene		ND		10	34
Dibenz(a,h)anthracene		ND		10	34
Dibenzofuran		ND		10	34
Diethyl phthalate		ND		10	34
Dimethyl phthalate		ND		10	34
Di-n-butyl phthalate		ND		30	34
Di-n-octyl phthalate		ND		17	34
Diphenyl oxide		ND		10	34
Diphenylamine		ND		2.0	34
Fluoranthene		ND		10	34
Fluorene		ND		10	34
Hexachlorobenzene		ND		10	34
Hexachlorobutadiene		ND		10	34
Hexachlorocyclopentadiene		ND		10	68
Hexachloroethane		ND		10	34
Indeno[1,2,3-cd]pyrene		ND		10	34
Isophorone		ND		10	34
Naphthalene		ND		10	82
Nitrobenzene		ND		10	34
N-Nitrosodimethylamine		ND		10	34
N-Nitrosodi-n-propylamine		ND		10	34
N-Nitrosodiphenylamine		ND		10	34
Pentachlorophenol		ND		10	34
Phenanthrene		ND		10	41
Phenol		ND		10	34
Pyrene		11	J	10	34

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	27	X	30 - 130
2-Fluorophenol	69		30 - 130
2-Fluorobiphenyl	60		30 - 130
Nitrobenzene-d5	56		30 - 130
Phenol-d5	62		30 - 130
Terphenyl-d14	68		30 - 130

Client: Olin Corporation

Job Number: 360-24223-1
Sdg Number: OCRI-03

Client Sample ID: **OC-SB-419-0.0/1.0-XXX**

Lab Sample ID: 360-24223-4
Client Matrix: Solid % Moisture: 2.6

Date Sampled: 08/19/2009 1555
Date Received: 08/20/2009 1800

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48751		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48259		Lab File ID:	B10164.D
Dilution:	1.0			Initial Weight/Volume:	30.09 g
Date Analyzed:	09/10/2009 0625			Final Weight/Volume:	1.0 mL
Date Prepared:	08/27/2009 1206			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 4

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
100-97-0	Methenamine	8.91	130	T J N
100-97-0	Methenamine	8.93	850	T J N
3910-35-8	1H-Indene, 2,3-dihydro-1,1,3-trimethyl-3	11.14	47	T J N
112-84-5	Erucylamide	16.03	270	T J N

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Client: Olin Corporation

Job Number: 360-24223-1
Sdg Number: OCRI-03

Client Sample ID: **OC-SB-419-3.0/5.0-XXX**

Lab Sample ID: 360-24223-6
Client Matrix: Solid % Moisture: 7.9

Date Sampled: 08/19/2009 1605
Date Received: 08/20/2009 1800

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48456		Instrument ID:	Inst. J
Preparation:	3550B	Prep Batch: 360-48381		Lab File ID:	J02819.D
Dilution:	1.0			Initial Weight/Volume:	100.62 g
Date Analyzed:	09/02/2009 1021			Final Weight/Volume:	1.0 mL
Date Prepared:	08/31/2009 1206			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodimethylamine		ND		1.3	5.4

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	49		30 - 130
2-Fluorobiphenyl	61		30 - 130
2-Fluorophenol	62		30 - 130
Nitrobenzene-d5	59		30 - 130
Phenol-d5	61		30 - 130
Terphenyl-d14	104		30 - 130

Client: Olin Corporation

Job Number: 360-24223-1
Sdg Number: OCRI-03

Client Sample ID: **OC-SB-419-3.0/5.0-XXX**

Lab Sample ID: 360-24223-6
Client Matrix: Solid % Moisture: 7.9

Date Sampled: 08/19/2009 1605
Date Received: 08/20/2009 1800

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48659		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48259		Lab File ID:	B10100.D
Dilution:	1.0			Initial Weight/Volume:	30.00 g
Date Analyzed:	09/07/2009 2107			Final Weight/Volume:	1.0 mL
Date Prepared:	08/27/2009 1206			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		11	36
1,2,4,5-Tetrachlorobenzene		ND		11	36
1,2,4-Trichlorobenzene		ND		11	36
1,2-Dichlorobenzene		ND		11	36
1,3-Dichlorobenzene		ND		11	36
1,4-Dichlorobenzene		ND		11	36
1-Methylnaphthalene		ND		11	36
2,2'-oxybis[1-chloropropane]		ND		11	36
2,3,4,6-Tetrachlorophenol		ND		11	36
2,4,5-Trichlorophenol		ND		11	36
2,4,6-Trichlorophenol		ND		11	36
2,4-Dichlorophenol		ND		11	36
2,4-Dimethylphenol		ND		14	36
2,4-Dinitrophenol		ND		11	36
2,4-Dinitrotoluene		ND		11	36
2,6-Dinitrotoluene		ND		11	36
2-Chloronaphthalene		ND		11	36
2-Chlorophenol		ND		11	36
2-Methylnaphthalene		ND		11	36
2-Methylphenol		ND J		22	36
2-Nitroaniline		ND		11	180
2-Nitrophenol		ND		11	36
3 & 4 Methylphenol		ND J		11	36
3,3'-Dichlorobenzidine		ND		11	72
3-Nitroaniline		ND		11	180
4,6-Dinitro-2-methylphenol		ND		11	180
4-Bromophenyl phenyl ether		ND		11	36
4-Chloro-3-methylphenol		ND		11	72
4-Chloroaniline		ND		11	72
4-Chlorophenyl phenyl ether		ND		11	36
4-Nitroaniline		ND		11	180
4-Nitrophenol		ND		11	180
Acenaphthene		ND		11	36
Acenaphthylene		ND		11	36
Acetophenone		ND J		11	36
Aniline		ND J		11	36
Anthracene		ND		11	36
Atrazine		ND		11	36
Azobenzene		ND		11	36
Benzaldehyde		ND		11	36
Benzo[a]anthracene		ND		11	36
Benzo[a]pyrene		ND		11	36
Benzo[b]fluoranthene		ND		11	36
Benzo[g,h,i]perylene		ND		11	36
Benzo[k]fluoranthene		ND		11	36
Benzoic acid		ND J		16	180

Client: Olin Corporation

Job Number: 360-24223-1
Sdg Number: OCRI-03

Client Sample ID: **OC-SB-419-3.0/5.0-XXX**

Lab Sample ID: 360-24223-6
Client Matrix: Solid % Moisture: 7.9

Date Sampled: 08/19/2009 1605
Date Received: 08/20/2009 1800

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48659		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48259		Lab File ID:	B10100.D
Dilution:	1.0			Initial Weight/Volume:	30.00 g
Date Analyzed:	09/07/2009 2107			Final Weight/Volume:	1.0 mL
Date Prepared:	08/27/2009 1206			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		11	36
Benzyl alcohol		ND		31	72
Bis(2-chloroethoxy)methane		ND		11	36
Bis(2-chloroethyl)ether		ND	J	11	36
Bis(2-ethylhexyl) phthalate		ND		11	36
Butyl benzyl phthalate		ND		11	36
Caprolactam		ND		11	36
Carbazole		ND		11	36
Chrysene		ND		11	36
Dibenz(a,h)anthracene		ND		11	36
Dibenzofuran		ND		11	36
Diethyl phthalate		ND		11	36
Dimethyl phthalate		ND		11	36
Di-n-butyl phthalate		ND		32	36
Di-n-octyl phthalate		ND		18	36
Diphenyl oxide		ND		11	36
Diphenylamine		ND		2.2	36
Fluoranthene		ND		11	36
Fluorene		ND		11	36
Hexachlorobenzene		ND		11	36
Hexachlorobutadiene		ND		11	36
Hexachlorocyclopentadiene		ND		11	72
Hexachloroethane		ND		11	36
Indeno[1,2,3-cd]pyrene		ND		11	36
Isophorone		ND		11	36
Naphthalene		ND		11	87
Nitrobenzene		ND		11	36
N-Nitrosodimethylamine		ND		11	36
N-Nitrosodi-n-propylamine		ND	J	11	36
N-Nitrosodiphenylamine		ND		11	36
Pentachlorophenol		ND		11	36
Phenanthrene		ND		11	43
Phenol		ND		11	36
Pyrene		ND		11	36

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	55		30 - 130
2-Fluorophenol	66		30 - 130
2-Fluorobiphenyl	55		30 - 130
Nitrobenzene-d5	54		30 - 130
Phenol-d5	59		30 - 130
Terphenyl-d14	61		30 - 130

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Client: Olin Corporation

Job Number: 360-24223-1
Sdg Number: OCRI-03

Client Sample ID: **OC-SB-419-3.0/5.0-XXX**

Lab Sample ID: 360-24223-6
Client Matrix: Solid % Moisture: 7.9

Date Sampled: 08/19/2009 1605
Date Received: 08/20/2009 1800

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48659		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48259		Lab File ID:	B10100.D
Dilution:	1.0			Initial Weight/Volume:	30.00 g
Date Analyzed:	09/07/2009 2107			Final Weight/Volume:	1.0 mL
Date Prepared:	08/27/2009 1206			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 4

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
128-37-0	Butylated Hydroxytoluene	10.69	30	T J N
3910-35-8	1H-Indene, 2,3-dihydro-1,1,3-trimethyl-3	11.64	25	T J N
22768-22-5	2,4-Diphenyl-4-methyl-2(E)-pentene	12.04	22	T J N
	Unknown	17.77	41	T J

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Client: Olin Corporation

Job Number: 360-24223-1
Sdg Number: OCRI-03

Client Sample ID: **OC-SB-426-0.0/1.0-XXX**

Lab Sample ID: 360-24223-7
Client Matrix: Solid
% Moisture: 3.8

Date Sampled: 08/19/2009 1415
Date Received: 08/20/2009 1800

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48456		Instrument ID:	Inst. J
Preparation:	3550B	Prep Batch: 360-48381		Lab File ID:	J02820.D
Dilution:	5.0			Initial Weight/Volume:	100.37 g
Date Analyzed:	09/02/2009 1051			Final Weight/Volume:	2.0 mL
Date Prepared:	08/31/2009 1206			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodimethylamine		ND		12	52

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	45		30 - 130
2-Fluorobiphenyl	66		30 - 130
2-Fluorophenol	54		30 - 130
Nitrobenzene-d5	35		30 - 130
Phenol-d5	41		30 - 130
Terphenyl-d14	95		30 - 130

Client: Olin Corporation

Job Number: 360-24223-1
Sdg Number: OCRI-03

Client Sample ID: **OC-SB-426-0.0/1.0-XXX**

Lab Sample ID: 360-24223-7
Client Matrix: Solid % Moisture: 3.8

Date Sampled: 08/19/2009 1415
Date Received: 08/20/2009 1800

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48751		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48259		Lab File ID:	B10166.D
Dilution:	2.0			Initial Weight/Volume:	30.04 g
Date Analyzed:	09/10/2009 0732			Final Weight/Volume:	1.0 mL
Date Prepared:	08/27/2009 1206			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		21	69
1,2,4,5-Tetrachlorobenzene		ND		21	69
1,2,4-Trichlorobenzene		ND		21	69
1,2-Dichlorobenzene		ND		21	69
1,3-Dichlorobenzene		ND		21	69
1,4-Dichlorobenzene		ND		21	69
1-Methylnaphthalene		ND		21	69
2,2'-oxybis[1-chloropropane]		ND		21	69
2,3,4,6-Tetrachlorophenol		ND		21	69
2,4,5-Trichlorophenol		ND		21	69
2,4,6-Trichlorophenol		ND		21	69
2,4-Dichlorophenol		ND		21	69
2,4-Dimethylphenol		ND		27	69
2,4-Dinitrophenol		ND		21	69
2,4-Dinitrotoluene		ND		21	69
2,6-Dinitrotoluene		ND		21	69
2-Chloronaphthalene		ND		21	69
2-Chlorophenol		ND		21	69
2-Methylnaphthalene		ND		21	69
2-Methylphenol		ND J	✓	42	69
2-Nitroaniline		ND		21	350
2-Nitrophenol		ND		21	69
3 & 4 Methylphenol		ND J	✓	21	69
3,3'-Dichlorobenzidine		ND		21	140
3-Nitroaniline		ND		21	350
4,6-Dinitro-2-methylphenol		ND		21	350
4-Bromophenyl phenyl ether		ND		21	69
4-Chloro-3-methylphenol		ND		21	140
4-Chloroaniline		ND		21	140
4-Chlorophenyl phenyl ether		ND		21	69
4-Nitroaniline		ND		21	350
4-Nitrophenol		ND		21	350
Acenaphthene		ND		21	69
Acenaphthylene		ND		21	69
Acetophenone		ND J	✓	21	69
Aniline		ND J	✓	21	69
Anthracene		ND		21	69
Atrazine		ND		21	69
Azobenzene		ND		21	69
Benzaldehyde		ND		21	69
Benzo[a]anthracene		ND		21	69
Benzo[a]pyrene		ND		21	69
Benzo[b]fluoranthene		ND		21	69
Benzo[g,h,i]perylene		ND		21	69
Benzo[k]fluoranthene		ND		21	69
Benzoic acid		ND J	✓	31	350

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Client: Olin Corporation

Job Number: 360-24223-1
Sdg Number: OCRI-03

Client Sample ID: **OC-SB-426-0.0/1.0-XXX**

Lab Sample ID: 360-24223-7
Client Matrix: Solid
% Moisture: 3.8

Date Sampled: 08/19/2009 1415
Date Received: 08/20/2009 1800

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48751		Instrument ID:	Inst_B
Preparation:	3546	Prep Batch: 360-48259		Lab File ID:	B10166.D
Dilution:	2.0			Initial Weight/Volume:	30.04 g
Date Analyzed:	09/10/2009 0732			Final Weight/Volume:	1.0 mL
Date Prepared:	08/27/2009 1206			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		21	69
Benzyl alcohol		ND		59	140
Bis(2-chloroethoxy)methane		ND		21	69
Bis(2-chloroethyl)ether		ND		21	69
Butyl benzyl phthalate		ND		21	69
Caprolactam		ND		21	69
Carbazole		ND		21	69
Chrysene		ND		21	69
Dibenz(a,h)anthracene		ND		21	69
Dibenzofuran		ND		21	69
Diethyl phthalate		ND		21	69
Dimethyl phthalate		ND		21	69
Di-n-butyl phthalate		ND		61	69
Di-n-octyl phthalate		ND		35	69
Diphenyl oxide		ND		21	69
Fluoranthene		ND		21	69
Fluorene		ND		21	69
Hexachlorobenzene		ND		21	69
Hexachlorobutadiene		ND		21	69
Hexachlorocyclopentadiene		ND		21	140
Hexachloroethane		ND		21	69
Indeno[1,2,3-cd]pyrene		ND		21	69
Isophorone		ND		21	69
Naphthalene		ND		21	170
Nitrobenzene		ND		21	69
N-Nitrosodimethylamine		ND		21	69
N-Nitrosodi-n-propylamine		ND	J	21	69
N-Nitrosodiphenylamine		55	J	21	69
Pentachlorophenol		ND		21	69
Phenanthrene		ND		21	83
Phenol		ND		21	69
Pyrene		ND		21	69

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	76		30 - 130
2-Fluorophenol	94		30 - 130
2-Fluorobiphenyl	70		30 - 130
Nitrobenzene-d5	73		30 - 130
Phenol-d5	83		30 - 130
Terphenyl-d14	82		30 - 130

Client: Olin Corporation

Job Number: 360-24223-1
Sdg Number: OCRI-03

Client Sample ID: **OC-SB-426-0.0/1.0-XXX**

Lab Sample ID: 360-24223-7
Client Matrix: Solid % Moisture: 3.8

Date Sampled: 08/19/2009 1415
Date Received: 08/20/2009 1800

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48751		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48259		Lab File ID:	B10166.D
Dilution:	2.0			Initial Weight/Volume:	30.04 g
Date Analyzed:	09/10/2009 0732			Final Weight/Volume:	1.0 mL
Date Prepared:	08/27/2009 1206			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** **10**

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Unknown	11.09	520	T J
	Unknown	11.23	550	T J
	Unknown	11.74	440	T J
	Unknown	11.77	490	T J
630-1-3	Hexacosane	14.14	19	T J N
593-49-7	Heptacosane	14.86	18	T J N
629-99-2	Pentacosane	15.50	16	T J N
	Unknown	17.56	15	T J
	Unknown	18.01	11	T J
	Unknown	18.65	8.2	T J

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Client: Olin Corporation

Job Number: 360-24223-1
Sdg Number: OCRI-03

Client Sample ID: **OC-SB-426-0.0/1.0-XXX**

Lab Sample ID: 360-24223-7
Client Matrix: Solid % Moisture: 3.8

Date Sampled: 08/19/2009 1415
Date Received: 08/20/2009 1800

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48766		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48259		Lab File ID:	B10180.D
Dilution:	2.0			Initial Weight/Volume:	30.04 g
Date Analyzed:	09/10/2009 1526			Final Weight/Volume:	1.0 mL
Date Prepared:	08/27/2009 1206			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Diphenylamine		6.1	J	4.2	69

Client: Olin Corporation

Job Number: 360-24223-1
Sdg Number: OCRI-03

Client Sample ID: **OC-SB-426-0.0/1.0-XXX**

Lab Sample ID: 360-24223-7
Client Matrix: Solid % Moisture: 3.8

Date Sampled: 08/19/2009 1415
Date Received: 08/20/2009 1800

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48889		Instrument ID:	NOEQUIP
Preparation:	3546	Prep Batch: 360-48259		Lab File ID:	N/A
Dilution:	2.0			Initial Weight/Volume:	30.04 g
Date Analyzed:	09/10/2009 1526	Run Type: DL2		Final Weight/Volume:	1.0 mL
Date Prepared:	08/27/2009 1206			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodiphenylamine		~~ND~~ 49 JEB		21	69

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55 J - 6.1 J = 48.9 J (49 J)

1/21/10

Client: Olin Corporation

Job Number: 360-24223-1
Sdg Number: OCRI-03

Client Sample ID: **OC-SB-426-0.0/1.0-XXX**

Lab Sample ID: 360-24223-7
Client Matrix: Solid % Moisture: 3.8

Date Sampled: 08/19/2009 1415
Date Received: 08/20/2009 1800

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48751		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48259		Lab File ID:	B10167.D
Dilution:	20			Initial Weight/Volume:	30.04 g
Date Analyzed:	09/10/2009 0806	Run Type: DL		Final Weight/Volume:	1.0 mL
Date Prepared:	08/27/2009 1206			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Bis(2-ethylhexyl) phthalate		8300 J c B	~~B~~	210	690

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	0	D X	30 - 130
2-Fluorophenol	0	D X	30 - 130
2-Fluorobiphenyl	0	D X	30 - 130
Nitrobenzene-d5	0	D X	30 - 130
Phenol-d5	0	D X	30 - 130
Terphenyl-d14	0	D X	30 - 130

Client: Olin Corporation

Job Number: 360-24223-1
Sdg Number: OCRI-03

Client Sample ID: **OC-SB-426-5.0/7.0-XXX**

Lab Sample ID: 360-24223-9
Client Matrix: Solid
% Moisture: 14.2

Date Sampled: 08/19/2009 1425
Date Received: 08/20/2009 1800

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48456		Instrument ID:	Inst. J
Preparation:	3550B	Prep Batch: 360-48381		Lab File ID:	J02822.D
Dilution:	1.0			Initial Weight/Volume:	100.58 g
Date Analyzed:	09/02/2009 1151			Final Weight/Volume:	1.0 mL
Date Prepared:	08/31/2009 1206			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodimethylamine		ND		1.3	5.8

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	47		30 - 130
2-Fluorobiphenyl	58		30 - 130
2-Fluorophenol	59		30 - 130
Nitrobenzene-d5	56		30 - 130
Phenol-d5	57		30 - 130
Terphenyl-d14	91		30 - 130

Client: Olin Corporation

Job Number: 360-24223-1
Sdg Number: OCRI-03

Client Sample ID: **OC-SB-426-5.0/7.0-XXX**

Lab Sample ID: 360-24223-9
Client Matrix: Solid % Moisture: 14.2

Date Sampled: 08/19/2009 1425
Date Received: 08/20/2009 1800

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48659		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48259		Lab File ID:	B10102.D
Dilution:	1.0			Initial Weight/Volume:	30.20 g
Date Analyzed:	09/07/2009 2216			Final Weight/Volume:	1.0 mL
Date Prepared:	08/27/2009 1206			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		12	39
1,2,4,5-Tetrachlorobenzene		ND		12	39
1,2,4-Trichlorobenzene		ND		12	39
1,2-Dichlorobenzene		ND	J	12	39
1,3-Dichlorobenzene		ND	J	12	39
1,4-Dichlorobenzene		ND		12	39
1-Methylnaphthalene		ND		12	39
2,2'-oxybis[1-chloropropane]		ND		12	39
2,3,4,6-Tetrachlorophenol		ND		12	39
2,4,5-Trichlorophenol		ND		12	39
2,4,6-Trichlorophenol		ND		12	39
2,4-Dichlorophenol		ND		12	39
2,4-Dimethylphenol		ND		15	39
2,4-Dinitrophenol		ND	J	12	39
2,4-Dinitrotoluene		ND		12	39
2,6-Dinitrotoluene		ND		12	39
2-Chloronaphthalene		ND		12	39
2-Chlorophenol		ND		12	39
2-Methylnaphthalene		ND		12	39
2-Methylphenol		ND	J	23	39
2-Nitroaniline		ND		12	190
2-Nitrophenol		ND		12	39
3 & 4 Methylphenol		ND	J	12	39
3,3'-Dichlorobenzidine		ND		12	77
3-Nitroaniline		ND		12	190
4,6-Dinitro-2-methylphenol		ND		12	190
4-Bromophenyl phenyl ether		ND		12	39
4-Chloro-3-methylphenol		ND		12	77
4-Chloroaniline		ND		12	77
4-Chlorophenyl phenyl ether		ND		12	39
4-Nitroaniline		ND		12	190
4-Nitrophenol		ND		12	190
Acenaphthene		ND		12	39
Acenaphthylene		ND		12	39
Acetophenone		ND	J	12	39
Aniline		ND	J	12	39
Anthracene		ND		12	39
Atrazine		ND		12	39
Azobenzene		ND		12	39
Benzaldehyde		ND		12	39
Benzo[a]anthracene		ND		12	39
Benzo[a]pyrene		ND		12	39
Benzo[b]fluoranthene		ND		12	39
Benzo[g,h,i]perylene		ND		12	39
Benzo[k]fluoranthene		ND		12	39
Benzoic acid		ND	J	17	190

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Client: Olin Corporation

Job Number: 360-24223-1
Sdg Number: OCRI-03

Client Sample ID: **OC-SB-426-5.0/7.0-XXX**

Lab Sample ID: 360-24223-9
Client Matrix: Solid

% Moisture: 14.2

Date Sampled: 08/19/2009 1425
Date Received: 08/20/2009 1800

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48659		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48259		Lab File ID:	B10102.D
Dilution:	1.0			Initial Weight/Volume:	30.20 g
Date Analyzed:	09/07/2009 2216			Final Weight/Volume:	1.0 mL
Date Prepared:	08/27/2009 1206			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		12	39
Benzyl alcohol		ND	J	33	77
Bis(2-chloroethoxy)methane		ND		12	39
Bis(2-chloroethyl)ether		ND		12	39
Bis(2-ethylhexyl) phthalate		~~3400~~ 318	~~J~~ JB	12	39
Butyl benzyl phthalate		ND		12	39
Caprolactam		ND		12	39
Carbazole		ND		12	39
Chrysene		ND		12	39
Dibenz(a,h)anthracene		ND		12	39
Dibenzofuran		ND		12	39
Diethyl phthalate		ND		12	39
Dimethyl phthalate		ND		12	39
Di-n-butyl phthalate		ND		34	39
Di-n-octyl phthalate		ND		19	39
Diphenyl oxide		ND		12	39
Diphenylamine		ND		2.3	39
Fluoranthene		ND		12	39
Fluorene		ND		12	39
Hexachlorobenzene		ND		12	39
Hexachlorobutadiene		ND		12	39
Hexachlorocyclopentadiene		ND	J	12	77
Hexachloroethane		ND	J	12	39
Indeno[1,2,3-cd]pyrene		ND		12	39
Isophorone		ND		12	39
Naphthalene		ND		12	93
Nitrobenzene		ND		12	39
~~N-Nitrosodimethylamine~~		~~ND~~		~~12~~	~~39~~
N-Nitrosodi-n-propylamine		ND	J	12	39
N-Nitrosodiphenylamine		ND		12	39
Pentachlorophenol		ND		12	39
Phenanthrene		ND		12	46
Phenol		ND		12	39
Pyrene		ND		12	39

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	58		30 - 130
2-Fluorophenol	73		30 - 130
2-Fluorobiphenyl	64		30 - 130
Nitrobenzene-d5	59		30 - 130
Phenol-d5	70		30 - 130
Terphenyl-d14	61		30 - 130

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Client: Olin Corporation

Job Number: 360-24223-1
Sdg Number: OCRI-03

Client Sample ID: **OC-SB-426-5.0/7.0-XXX**

Lab Sample ID: 360-24223-9
Client Matrix: Solid % Moisture: 14.2

Date Sampled: 08/19/2009 1425
Date Received: 08/20/2009 1800

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48659		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48259		Lab File ID:	B10102.D
Dilution:	1.0			Initial Weight/Volume:	30.20 g
Date Analyzed:	09/07/2009 2216			Final Weight/Volume:	1.0 mL
Date Prepared:	08/27/2009 1206			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 4

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
321-60-8	1,1"-Biphenyl, 2-fluoro-	10.04	19	T J N
	Unknown	12.28	36	T J
26603-23-6	p,p"-Dioctyldiphenylamine	18.08	45	T J N
	Unknown	19.18	25	T J

Client: Olin Corporation

Job Number: 360-24223-1
Sdg Number: OCRI-03

Client Sample ID: **OC-SB-426-5.0/7.0-DUP**

Lab Sample ID: 360-24223-10
Client Matrix: Solid
% Moisture: 14.4

Date Sampled: 08/19/2009 1425
Date Received: 08/20/2009 1800

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48456		Instrument ID:	Inst. J
Preparation:	3550B	Prep Batch: 360-48381		Lab File ID:	J02825.D
Dilution:	1.0			Initial Weight/Volume:	100.05 g
Date Analyzed:	09/02/2009 1321			Final Weight/Volume:	1.0 mL
Date Prepared:	08/31/2009 1206			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodimethylamine		ND		1.4	5.8

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	51		30 - 130
2-Fluorobiphenyl	61		30 - 130
2-Fluorophenol	59		30 - 130
Nitrobenzene-d5	57		30 - 130
Phenol-d5	57		30 - 130
Terphenyl-d14	97		30 - 130

Client: Olin Corporation

Job Number: 360-24223-1
Sdg Number: OCRI-03

Client Sample ID: **OC-SB-426-5.0/7.0-DUP**

Lab Sample ID: 360-24223-10
Client Matrix: Solid
% Moisture: 14.4

Date Sampled: 08/19/2009 1425
Date Received: 08/20/2009 1800

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48659		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48259		Lab File ID:	B10103.D
Dilution:	1.0			Initial Weight/Volume:	30.20 g
Date Analyzed:	09/07/2009 2250			Final Weight/Volume:	1.0 mL
Date Prepared:	08/27/2009 1206			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		12	39
1,2,4,5-Tetrachlorobenzene		ND		12	39
1,2,4-Trichlorobenzene		ND		12	39
1,2-Dichlorobenzene		ND	J	12	39
1,3-Dichlorobenzene		ND	J	12	39
1,4-Dichlorobenzene		ND		12	39
1-Methylnaphthalene		ND		12	39
2,2'-oxybis[1-chloropropane]		ND		12	39
2,3,4,6-Tetrachlorophenol		ND		12	39
2,4,5-Trichlorophenol		ND		12	39
2,4,6-Trichlorophenol		ND		12	39
2,4-Dichlorophenol		ND		12	39
2,4-Dimethylphenol		ND		15	39
2,4-Dinitrophenol		ND	J	12	39
2,4-Dinitrotoluene		ND		12	39
2,6-Dinitrotoluene		ND		12	39
2-Chloronaphthalene		ND		12	39
2-Chlorophenol		ND		12	39
2-Methylnaphthalene		ND		12	39
2-Methylphenol		ND	J	23	39
2-Nitroaniline		ND		12	190
2-Nitrophenol		ND		12	39
3 & 4 Methylphenol		ND	J	12	39
3,3'-Dichlorobenzidine		ND		12	77
3-Nitroaniline		ND		12	190
4,6-Dinitro-2-methylphenol		ND		12	190
4-Bromophenyl phenyl ether		ND		12	39
4-Chloro-3-methylphenol		ND		12	77
4-Chloroaniline		ND		12	77
4-Chlorophenyl phenyl ether		ND		12	39
4-Nitroaniline		ND		12	190
4-Nitrophenol		ND		12	190
Acenaphthene		ND		12	39
Acenaphthylene		ND		12	39
Acetophenone		ND	J	12	39
Aniline		ND	J	12	39
Anthracene		ND		12	39
Atrazine		ND		12	39
Azobenzene		ND		12	39
Benzaldehyde		ND		12	39
Benzo[a]anthracene		ND		12	39
Benzo[a]pyrene		ND		12	39
Benzo[b]fluoranthene		ND		12	39
Benzo[g,h,i]perylene		ND		12	39
Benzo[k]fluoranthene		ND		12	39
Benzoic acid		ND	J	17	190

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Client: Olin Corporation

Job Number: 360-24223-1
Sdg Number: OCRI-03

Client Sample ID: **OC-SB-426-5.0/7.0-DUP**

Lab Sample ID: 360-24223-10
Client Matrix: Solid
% Moisture: 14.4

Date Sampled: 08/19/2009 1425
Date Received: 08/20/2009 1800

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48659		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48259		Lab File ID:	B10103.D
Dilution:	1.0			Initial Weight/Volume:	30.20 g
Date Analyzed:	09/07/2009 2250			Final Weight/Volume:	1.0 mL
Date Prepared:	08/27/2009 1206			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		12	39
Benzyl alcohol		ND J		33	77
Bis(2-chloroethoxy)methane		ND		12	39
Bis(2-chloroethyl)ether		ND		12	39
Bis(2-ethylhexyl) phthalate		ND J		12	39
Butyl benzyl phthalate		ND		12	39
Caprolactam		ND		12	39
Carbazole		ND		12	39
Chrysene		ND		12	39
Dibenz(a,h)anthracene		ND		12	39
Dibenzofuran		ND		12	39
Diethyl phthalate		ND		12	39
Dimethyl phthalate		ND		12	39
Di-n-butyl phthalate		ND		34	39
Di-n-octyl phthalate		ND		19	39
Diphenyl oxide		ND		12	39
Diphenylamine		ND		2.3	39
Fluoranthene		ND		12	39
Fluorene		ND		12	39
Hexachlorobenzene		ND		12	39
Hexachlorobutadiene		ND		12	39
Hexachlorocyclopentadiene		ND J		12	77
Hexachloroethane		ND J		12	39
Indeno[1,2,3-cd]pyrene		ND		12	39
Isophorone		ND		12	39
Naphthalene		ND		12	93
Nitrobenzene		ND		12	39
~~N-Nitrosodimethylamine~~		~~ND~~		~~12~~	~~39~~
N-Nitrosodi-n-propylamine		ND J		12	39
N-Nitrosodiphenylamine		ND		12	39
Pentachlorophenol		ND		12	39
Phenanthrene		ND		12	46
Phenol		ND		12	39
Pyrene		ND		12	39

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	46		30 - 130
2-Fluorophenol	64		30 - 130
2-Fluorobiphenyl	60		30 - 130
Nitrobenzene-d5	55		30 - 130
Phenol-d5	67		30 - 130
Terphenyl-d14	58		30 - 130

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Client: Olin Corporation

Job Number: 360-24223-1
Sdg Number: OCRI-03

Client Sample ID: **OC-SB-426-5.0/7.0-DUP**

Lab Sample ID: 360-24223-10
Client Matrix: Solid % Moisture: 14.4

Date Sampled: 08/19/2009 1425
Date Received: 08/20/2009 1800

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48659		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48259		Lab File ID:	B10103.D
Dilution:	1.0			Initial Weight/Volume:	30.20 g
Date Analyzed:	09/07/2009 2250			Final Weight/Volume:	1.0 mL
Date Prepared:	08/27/2009 1206			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 4

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
128-37-0	Butylated Hydroxytoluene	10.69	24	T J N
	Unknown	12.24	35	T J
	Unknown	12.28	36	T J
~~26603-23-6~~	~~p,p"-Dioctyldiphenylamine~~	18.08	~~36~~	~~T J N~~

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Client: Olin Corporation

Job Number: 360-24223-1
Sdg Number: OCRI-03

Client Sample ID: **OC-SB-431-0.0/1.0-XXX**

Lab Sample ID: 360-24223-11
Client Matrix: Solid % Moisture: 6.9

Date Sampled: 08/20/2009 1015
Date Received: 08/20/2009 1800

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48659		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48259		Lab File ID:	B10104.D
Dilution:	1.0			Initial Weight/Volume:	30.83 g
Date Analyzed:	09/07/2009 2324			Final Weight/Volume:	1.0 mL
Date Prepared:	08/27/2009 1206			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		10	35
1,2,4,5-Tetrachlorobenzene		ND		10	35
1,2,4-Trichlorobenzene		ND		10	35
1,2-Dichlorobenzene		ND		10	35
1,3-Dichlorobenzene		ND		10	35
1,4-Dichlorobenzene		ND		10	35
1-Methylnaphthalene		ND		10	35
2,2'-oxybis[1-chloropropane]		ND		10	35
2,3,4,6-Tetrachlorophenol		ND		10	35
2,4,5-Trichlorophenol		ND		10	35
2,4,6-Trichlorophenol		ND		10	35
2,4-Dichlorophenol		ND		10	35
2,4-Dimethylphenol		ND		14	35
2,4-Dinitrophenol		ND		10	35
2,4-Dinitrotoluene		ND		10	35
2,6-Dinitrotoluene		ND		10	35
2-Chloronaphthalene		ND		10	35
2-Chlorophenol		ND		10	35
2-Methylnaphthalene		ND		10	35
2-Methylphenol		ND J	*	21	35
2-Nitroaniline		ND		10	170
2-Nitrophenol		ND		10	35
3 & 4 Methylphenol		ND J	*	10	35
3,3'-Dichlorobenzidine		ND		10	70
3-Nitroaniline		ND		10	170
4,6-Dinitro-2-methylphenol		ND		10	170
4-Bromophenyl phenyl ether		ND		10	35
4-Chloro-3-methylphenol		ND		10	70
4-Chloroaniline		ND		10	70
4-Chlorophenyl phenyl ether		ND		10	35
4-Nitroaniline		ND		10	170
4-Nitrophenol		ND		10	170
Acenaphthene		ND		10	35
Acenaphthylene		ND		10	35
Acetophenone		ND J	*	10	35
Aniline		ND J	*	10	35
Anthracene		ND		10	35
Atrazine		ND		10	35
Azobenzene		ND		10	35
Benzaldehyde		ND		10	35
Benzo[a]anthracene		ND		10	35
Benzo[a]pyrene		ND		10	35
Benzo[b]fluoranthene		ND		10	35
Benzo[g,h,i]perylene		ND		10	35
Benzo[k]fluoranthene		ND		10	35
Benzoic acid		ND J	*	16	170

Client: Olin Corporation

Job Number: 360-24223-1
Sdg Number: OCRI-03

Client Sample ID: **OC-SB-431-0.0/1.0-XXX**

Lab Sample ID: 360-24223-11
Client Matrix: Solid % Moisture: 6.9

Date Sampled: 08/20/2009 1015
Date Received: 08/20/2009 1800

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48659		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48259		Lab File ID:	B10104.D
Dilution:	1.0			Initial Weight/Volume:	30.83 g
Date Analyzed:	09/07/2009 2324			Final Weight/Volume:	1.0 mL
Date Prepared:	08/27/2009 1206			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		10	35
Benzyl alcohol		ND		30	70
Bis(2-chloroethoxy)methane		ND		10	35
Bis(2-chloroethyl)ether		ND		10	35
Bis(2-ethylhexyl) phthalate		ND	J	10	35
Butyl benzyl phthalate		ND		10	35
Caprolactam		ND		10	35
Carbazole		ND		10	35
Chrysene		ND		10	35
Dibenz(a,h)anthracene		ND		10	35
Dibenzofuran		ND		10	35
Diethyl phthalate		ND		10	35
Dimethyl phthalate		ND		10	35
Di-n-butyl phthalate		ND		31	35
Di-n-octyl phthalate		ND		18	35
Diphenyl oxide		ND		10	35
Fluoranthene		ND		10	35
Fluorene		ND		10	35
Hexachlorobenzene		ND		10	35
Hexachlorobutadiene		ND		10	35
Hexachlorocyclopentadiene		ND		10	70
Hexachloroethane		ND		10	35
Indeno[1,2,3-cd]pyrene		ND		10	35
Isophorone		ND		10	35
Naphthalene		ND		10	84
Nitrobenzene		ND		10	35
N-Nitrosodimethylamine		ND		10	35
N-Nitrosodi-n-propylamine		ND	J	10	35
N-Nitrosodiphenylamine		ND		10	35
Pentachlorophenol		ND		10	35
Phenanthrene		ND		10	42
Phenol		ND		10	35
Pyrene		ND		10	35

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	57		30 - 130
2-Fluorobiphenyl	67		30 - 130
2-Fluorophenol	84		30 - 130
Nitrobenzene-d5	63		30 - 130
Phenol-d5	67		30 - 130
Terphenyl-d14	71		30 - 130

Client: Olin Corporation

Job Number: 360-24223-1
Sdg Number: OCRI-03

Client Sample ID: **OC-SB-431-0.0/1.0-XXX**

Lab Sample ID: 360-24223-11
Client Matrix: Solid % Moisture: 6.9

Date Sampled: 08/20/2009 1015
Date Received: 08/20/2009 1800

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48659		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48259		Lab File ID:	B10104.D
Dilution:	1.0			Initial Weight/Volume:	30.83 g
Date Analyzed:	09/07/2009 2324			Final Weight/Volume:	1.0 mL
Date Prepared:	08/27/2009 1206			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 3

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
321-60-8	1,1"-Biphenyl, 2-fluoro-	10.07	25	T J N
128-37-0	Butylated Hydroxytoluene	10.68	28	T J N
112-84-5	Erucylamide	16.78	130	T J N

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Client: Olin Corporation

Job Number: 360-24223-1
Sdg Number: OCRI-03

Client Sample ID: **OC-SB-431-7.0/9.0-XXX**

Lab Sample ID: 360-24223-12
Client Matrix: Solid % Moisture: 9.5

Date Sampled: 08/20/2009 1025
Date Received: 08/20/2009 1800

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48659		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48259		Lab File ID:	B10105.D
Dilution:	1.0			Initial Weight/Volume:	30.28 g
Date Analyzed:	09/07/2009 2359			Final Weight/Volume:	1.0 mL
Date Prepared:	08/27/2009 1206			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		11	37
1,2,4,5-Tetrachlorobenzene		ND		11	37
1,2,4-Trichlorobenzene		ND		11	37
1,2-Dichlorobenzene		ND		11	37
1,3-Dichlorobenzene		ND		11	37
1,4-Dichlorobenzene		ND		11	37
1-Methylnaphthalene		ND		11	37
2,2'-oxybis[1-chloropropane]		ND		11	37
2,3,4,6-Tetrachlorophenol		ND		11	37
2,4,5-Trichlorophenol		ND		11	37
2,4,6-Trichlorophenol		ND		11	37
2,4-Dichlorophenol		ND		11	37
2,4-Dimethylphenol		ND		14	37
2,4-Dinitrophenol		ND		11	37
2,4-Dinitrotoluene		ND		11	37
2,6-Dinitrotoluene		ND		11	37
2-Chloronaphthalene		ND		11	37
2-Chlorophenol		ND		11	37
2-Methylnaphthalene		ND		11	37
2-Methylphenol		ND J	✓	22	37
2-Nitroaniline		ND		11	180
2-Nitrophenol		ND		11	37
3 & 4 Methylphenol		ND J	✓	11	37
3,3'-Dichlorobenzidine		ND		11	73
3-Nitroaniline		ND		11	180
4,6-Dinitro-2-methylphenol		ND		11	180
4-Bromophenyl phenyl ether		ND		11	37
4-Chloro-3-methylphenol		ND		11	73
4-Chloroaniline		ND		11	73
4-Chlorophenyl phenyl ether		ND		11	37
4-Nitroaniline		ND		11	180
4-Nitrophenol		ND		11	180
Acenaphthene		ND		11	37
Acenaphthylene		ND		11	37
Acetophenone		ND J	✓	11	37
Aniline		ND J	✓	11	37
Anthracene		ND		11	37
Atrazine		ND		11	37
Azobenzene		ND		11	37
Benzaldehyde		ND		11	37
Benzo[a]anthracene		ND		11	37
Benzo[a]pyrene		ND		11	37
Benzo[b]fluoranthene		ND		11	37
Benzo[g,h,i]perylene		ND		11	37
Benzo[k]fluoranthene		ND		11	37
Benzoic acid		ND J	✓	16	180

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Client: Olin Corporation

Job Number: 360-24223-1
Sdg Number: OCRI-03

Client Sample ID: **OC-SB-431-7.0/9.0-XXX**

Lab Sample ID: 360-24223-12
Client Matrix: Solid % Moisture: 9.5

Date Sampled: 08/20/2009 1025
Date Received: 08/20/2009 1800

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48659		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48259		Lab File ID:	B10105.D
Dilution:	1.0			Initial Weight/Volume:	30.28 g
Date Analyzed:	09/07/2009 2359			Final Weight/Volume:	1.0 mL
Date Prepared:	08/27/2009 1206			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		11	37
Benzyl alcohol		ND		31	73
Bis(2-chloroethoxy)methane		ND		11	37
Bis(2-chloroethyl)ether		ND		11	37
Bis(2-ethylhexyl) phthalate		ND	J	11	37
Butyl benzyl phthalate		ND		11	37
Caprolactam		ND		11	37
Carbazole		ND		11	37
Chrysene		ND		11	37
Dibenz(a,h)anthracene		ND		11	37
Dibenzofuran		ND		11	37
Diethyl phthalate		ND		11	37
Dimethyl phthalate		ND		11	37
Di-n-butyl phthalate		ND		32	37
Di-n-octyl phthalate		ND		18	37
Diphenyl oxide		ND		11	37
Fluoranthene		ND		11	37
Fluorene		ND		11	37
Hexachlorobenzene		ND		11	37
Hexachlorobutadiene		ND		11	37
Hexachlorocyclopentadiene		ND		11	73
Hexachloroethane		ND		11	37
Indeno[1,2,3-cd]pyrene		ND		11	37
Isophorone		ND		11	37
Naphthalene		ND		11	88
Nitrobenzene		ND		11	37
N-Nitrosodimethylamine		ND		11	37
N-Nitrosodi-n-propylamine		ND	J	11	37
N-Nitrosodiphenylamine		ND		11	37
Pentachlorophenol		ND		11	37
Phenanthrene		ND		11	44
Phenol		ND		11	37
Pyrene		ND		11	37

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	51		30 - 130
2-Fluorobiphenyl	65		30 - 130
2-Fluorophenol	90		30 - 130
Nitrobenzene-d5	56		30 - 130
Phenol-d5	77		30 - 130
Terphenyl-d14	62		30 - 130

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Client: Olin Corporation

Job Number: 360-24223-1
Sdg Number: OCRI-03

Client Sample ID: **OC-SB-431-7.0/9.0-XXX**

Lab Sample ID: 360-24223-12
Client Matrix: Solid % Moisture: 9.5

Date Sampled: 08/20/2009 1025
Date Received: 08/20/2009 1800

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48659		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48259		Lab File ID:	B10105.D
Dilution:	1.0			Initial Weight/Volume:	30.28 g
Date Analyzed:	09/07/2009 2359			Final Weight/Volume:	1.0 mL
Date Prepared:	08/27/2009 1206			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 2

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
128-37-0	Butylated Hydroxytoluene	10.69	32	T J N
3910-35-8	1H-Indene, 2,3-dihydro-1,1,3-trimethyl-3	11.64	22	T J N

Client: Olin Corporation

Job Number: 360-24223-1
Sdg Number: OCRI-03

Client Sample ID: **OC-SB-436-0.0/1.0-XXX**

Lab Sample ID: 360-24223-13
Client Matrix: Solid % Moisture: 5.4

Date Sampled: 08/20/2009 1305
Date Received: 08/20/2009 1800

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48751		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48259		Lab File ID:	B10165.D
Dilution:	1.0			Initial Weight/Volume:	30.15 g
Date Analyzed:	09/10/2009 0658			Final Weight/Volume:	1.0 mL
Date Prepared:	08/27/2009 1206			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		11	35
1,2,4,5-Tetrachlorobenzene		ND		11	35
1,2,4-Trichlorobenzene		ND		11	35
1,2-Dichlorobenzene		ND		11	35
1,3-Dichlorobenzene		ND		11	35
1,4-Dichlorobenzene		ND		11	35
1-Methylnaphthalene		ND		11	35
2,2'-oxybis[1-chloropropane]		ND		11	35
2,3,4,6-Tetrachlorophenol		ND		11	35
2,4,5-Trichlorophenol		ND		11	35
2,4,6-Trichlorophenol		ND		11	35
2,4-Dichlorophenol		ND		11	35
2,4-Dimethylphenol		ND		14	35
2,4-Dinitrophenol		ND		11	35
2,4-Dinitrotoluene		ND		11	35
2,6-Dinitrotoluene		ND		11	35
2-Chloronaphthalene		ND		11	35
2-Chlorophenol		ND		11	35
2-Methylnaphthalene		ND		11	35
2-Methylphenol		ND J		21	35
2-Nitroaniline		ND		11	180
2-Nitrophenol		ND		11	35
3 & 4 Methylphenol		ND J		11	35
3,3'-Dichlorobenzidine		ND		11	70
3-Nitroaniline		ND		11	180
4,6-Dinitro-2-methylphenol		ND		11	180
4-Bromophenyl phenyl ether		ND		11	35
4-Chloro-3-methylphenol		ND		11	70
4-Chloroaniline		ND		11	70
4-Chlorophenyl phenyl ether		ND		11	35
4-Nitroaniline		ND		11	180
4-Nitrophenol		ND		11	180
Acenaphthene		ND		11	35
Acenaphthylene		ND		11	35
Acetophenone		11 EB	J	11	35
Aniline		ND J		11	35
Anthracene		ND		11	35
Atrazine		ND		11	35
Azobenzene		ND		11	35
Benzaldehyde		ND		11	35
Benzo[a]anthracene		35	J	11	35
Benzo[a]pyrene		69		11	35
Benzo[b]fluoranthene		36		11	35
Benzo[g,h,i]perylene		23	J	11	35
Benzo[k]fluoranthene		38		11	35
Benzoic acid		ND J		16	180

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Client: Olin Corporation

Job Number: 360-24223-1
Sdg Number: OCRI-03

Client Sample ID: **OC-SB-436-0.0/1.0-XXX**

Lab Sample ID: 360-24223-13
Client Matrix: Solid % Moisture: 5.4

Date Sampled: 08/20/2009 1305
Date Received: 08/20/2009 1800

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48751		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48259		Lab File ID:	B10165.D
Dilution:	1.0			Initial Weight/Volume:	30.15 g
Date Analyzed:	09/10/2009 0658			Final Weight/Volume:	1.0 mL
Date Prepared:	08/27/2009 1206			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		11	35
Benzyl alcohol		ND		30	70
Bis(2-chloroethoxy)methane		ND		11	35
Bis(2-chloroethyl)ether		ND		11	35
Bis(2-ethylhexyl) phthalate		160 JEB	B	11	35
Butyl benzyl phthalate		ND		11	35
Caprolactam		ND		11	35
Carbazole		ND		11	35
Chrysene		38		11	35
Dibenz(a,h)anthracene		ND		11	35
Dibenzofuran		ND		11	35
Diethyl phthalate		ND		11	35
Dimethyl phthalate		ND		11	35
Di-n-butyl phthalate		ND		31	35
Di-n-octyl phthalate		ND		18	35
Diphenyl oxide		ND		11	35
Fluoranthene		51		11	35
Fluorene		ND		11	35
Hexachlorobenzene		ND		11	35
Hexachlorobutadiene		ND		11	35
Hexachlorocyclopentadiene		ND		11	70
Hexachloroethane		ND		11	35
Indeno[1,2,3-cd]pyrene		20	J	11	35
Isophorone		ND		11	35
Naphthalene		ND		11	84
Nitrobenzene		ND		11	35
N-Nitrosodimethylamine		ND		11	35
N-Nitrosodi-n-propylamine		ND 3		11	35
N-Nitrosodiphenylamine		ND		11	35
Pentachlorophenol		ND		11	35
Phenanthrene		21	J	11	42
Phenol		ND		11	35
Pyrene		65		11	35

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	62		30 - 130
2-Fluorobiphenyl	59		30 - 130
2-Fluorophenol	78		30 - 130
Nitrobenzene-d5	59		30 - 130
Phenol-d5	69		30 - 130
Terphenyl-d14	67		30 - 130

Client: Olin Corporation

Job Number: 360-24223-1
Sdg Number: OCRI-03

Client Sample ID: **OC-SB-436-0.0/1.0-XXX**

Lab Sample ID: 360-24223-13
Client Matrix: Solid % Moisture: 5.4

Date Sampled: 08/20/2009 1305
Date Received: 08/20/2009 1800

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48751		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48259		Lab File ID:	B10165.D
Dilution:	1.0			Initial Weight/Volume:	30.15 g
Date Analyzed:	09/10/2009 0658			Final Weight/Volume:	1.0 mL
Date Prepared:	08/27/2009 1206			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 5

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
104-40-5	4-Nonylphenol	11.01	230	T J N
3910-35-8	1H-Indene, 2,3-dihydro-1,1,3-trimethyl-3	11.14	130	T J N
	Unknown	11.18	82	T J
593-49-7	Heptacosane	15.50	43	T J N
21129-9-9	1,2-Tetradecanediol	15.59	150	T J N

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Client: Olin Corporation

Job Number: 360-24223-1
Sdg Number: OCRI-03

Client Sample ID: **OC-SB-436-6.0/8.0-XXX**

Lab Sample ID: 360-24223-15
Client Matrix: Solid % Moisture: 7.9

Date Sampled: 08/20/2009 1310
Date Received: 08/20/2009 1800

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48659		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48259		Lab File ID:	B10107.D
Dilution:	1.0			Initial Weight/Volume:	30.53 g
Date Analyzed:	09/08/2009 0107			Final Weight/Volume:	1.0 mL
Date Prepared:	08/27/2009 1206			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		11	36
1,2,4,5-Tetrachlorobenzene		ND		11	36
1,2,4-Trichlorobenzene		ND		11	36
1,2-Dichlorobenzene		ND		11	36
1,3-Dichlorobenzene		ND		11	36
1,4-Dichlorobenzene		ND		11	36
1-Methylnaphthalene		ND		11	36
2,2'-oxybis[1-chloropropane]		ND		11	36
2,3,4,6-Tetrachlorophenol		ND		11	36
2,4,5-Trichlorophenol		ND		11	36
2,4,6-Trichlorophenol		ND		11	36
2,4-Dichlorophenol		ND		11	36
2,4-Dimethylphenol		ND		14	36
2,4-Dinitrophenol		ND		11	36
2,4-Dinitrotoluene		ND		11	36
2,6-Dinitrotoluene		ND		11	36
2-Chloronaphthalene		ND		11	36
2-Chlorophenol		ND		11	36
2-Methylnaphthalene		ND		11	36
2-Methylphenol		ND J	✓	21	36
2-Nitroaniline		ND		11	180
2-Nitrophenol		ND		11	36
3 & 4 Methylphenol		ND J	✓	11	36
3,3'-Dichlorobenzidine		ND		11	71
3-Nitroaniline		ND		11	180
4,6-Dinitro-2-methylphenol		ND		11	180
4-Bromophenyl phenyl ether		ND		11	36
4-Chloro-3-methylphenol		ND		11	71
4-Chloroaniline		ND		11	71
4-Chlorophenyl phenyl ether		ND		11	36
4-Nitroaniline		ND		11	180
4-Nitrophenol		ND		11	180
Acenaphthene		ND		11	36
Acenaphthylene		ND		11	36
Acetophenone		ND J	✓	11	36
Aniline		ND J	✓	11	36
Anthracene		ND		11	36
Atrazine		ND		11	36
Azobenzene		ND		11	36
Benzaldehyde		ND		11	36
Benzo[a]anthracene		ND		11	36
Benzo[a]pyrene		ND		11	36
Benzo[b]fluoranthene		ND		11	36
Benzo[g,h,i]perylene		ND		11	36
Benzo[k]fluoranthene		ND		11	36
Benzoic acid		ND J	✓	16	180

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Client: Olin Corporation

Job Number: 360-24223-1
Sdg Number: OCRI-03

Client Sample ID: **OC-SB-436-6.0/8.0-XXX**

Lab Sample ID: 360-24223-15
Client Matrix: Solid % Moisture: 7.9

Date Sampled: 08/20/2009 1310
Date Received: 08/20/2009 1800

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48659		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48259		Lab File ID:	B10107.D
Dilution:	1.0			Initial Weight/Volume:	30.53 g
Date Analyzed:	09/08/2009 0107			Final Weight/Volume:	1.0 mL
Date Prepared:	08/27/2009 1206			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		11	36
Benzyl alcohol		ND		30	71
Bis(2-chloroethoxy)methane		ND		11	36
Bis(2-chloroethyl)ether		ND		11	36
Bis(2-ethylhexyl) phthalate		ND	J	11	36
Butyl benzyl phthalate		ND		11	36
Caprolactam		ND		11	36
Carbazole		ND		11	36
Chrysene		ND		11	36
Dibenz(a,h)anthracene		ND		11	36
Dibenzofuran		ND		11	36
Diethyl phthalate		ND		11	36
Dimethyl phthalate		ND		11	36
Di-n-butyl phthalate		ND		31	36
Di-n-octyl phthalate		ND		18	36
Diphenyl oxide		ND		11	36
Fluoranthene		ND		11	36
Fluorene		ND		11	36
Hexachlorobenzene		ND		11	36
Hexachlorobutadiene		ND		11	36
Hexachlorocyclopentadiene		ND		11	71
Hexachloroethane		ND		11	36
Indeno[1,2,3-cd]pyrene		ND		11	36
Isophorone		ND		11	36
Naphthalene		ND		11	85
Nitrobenzene		ND		11	36
N-Nitrosodimethylamine		ND		11	36
N-Nitrosodi-n-propylamine		ND	J	11	36
N-Nitrosodiphenylamine		12	JCR	11	36
Pentachlorophenol		ND		11	36
Phenanthrene		ND		11	43
Phenol		ND		11	36
Pyrene		ND		11	36

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	53		30 - 130
2-Fluorobiphenyl	65		30 - 130
2-Fluorophenol	94		30 - 130
Nitrobenzene-d5	59		30 - 130
Phenol-d5	84		30 - 130
Terphenyl-d14	64		30 - 130

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Client: Olin Corporation

Job Number: 360-24223-1
Sdg Number: OCRI-03

Client Sample ID: **OC-SB-436-6.0/8.0-XXX**

Lab Sample ID: 360-24223-15
Client Matrix: Solid % Moisture: 7.9

Date Sampled: 08/20/2009 1310
Date Received: 08/20/2009 1800

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48659		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48259		Lab File ID:	B10107.D
Dilution:	1.0			Initial Weight/Volume:	30.53 g
Date Analyzed:	09/08/2009 0107			Final Weight/Volume:	1.0 mL
Date Prepared:	08/27/2009 1206			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 5

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
128-37-0	Butylated Hydroxytoluene	10.69	23	T J N
122-39-4	Diphenylamine	11.23	12	J
3910-35-8	1H-Indene, 2,3-dihydro-1,1,3-trimethyl-3	11.64	20	T J N
593-49-7	Heptacosane	16.19	19	T J N
26603-23-6	p,p''-Dioctyldiphenylamine	18.08	38	T J N

Client: Olin Corporation

Job Number: 360-24223-2
Sdg Number: OCRI-03A

Client Sample ID: **OC-SB-415-16/18-XXX**

Lab Sample ID: 360-24223-2
Client Matrix: Solid
% Moisture: 4.4

Date Sampled: 08/20/2009 0910
Date Received: 08/20/2009 1800

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48659		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48259		Lab File ID:	B10097.D
Dilution:	1.0			Initial Weight/Volume:	30.02 g
Date Analyzed:	09/07/2009 1925			Final Weight/Volume:	1.0 mL
Date Prepared:	08/27/2009 1206			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		10	35
1,2,4,5-Tetrachlorobenzene		ND		2.3	35
1,2,4-Trichlorobenzene		ND		6.8	35
1,2-Dichlorobenzene		ND		3.8	35
1,3-Dichlorobenzene		ND		10	35
1,4-Dichlorobenzene		ND		6.3	35
1-Methylnaphthalene		ND		2.1	35
2,2'-oxybis[1-chloropropane]		ND		3.5	35
2,3,4,6-Tetrachlorophenol		ND		2.1	35
2,4,5-Trichlorophenol		ND		3.9	35
2,4,6-Trichlorophenol		ND		7.3	35
2,4-Dichlorophenol		ND		6.7	35
2,4-Dimethylphenol		ND		6.1	35
2,4-Dinitrophenol		ND		5.1	35
2,4-Dinitrotoluene		ND		4.9	35
2,6-Dinitrotoluene		ND		4.4	35
2-Chloronaphthalene		ND		5.4	35
2-Chlorophenol		ND		3.4	35
2-Methylnaphthalene		ND		27	35
2-Methylphenol		ND J	✓	5.0	35
2-Nitroaniline		ND		22	170
2-Nitrophenol		ND		4.0	35
3 & 4 Methylphenol		ND J	✓	6.6	35
3,3'-Dichlorobenzidine		ND		25	70
3-Nitroaniline		ND		9.9	170
4,6-Dinitro-2-methylphenol		ND		8.9	170
4-Bromophenyl phenyl ether		ND		7.2	35
4-Chloro-3-methylphenol		ND		9.6	70
4-Chloroaniline		ND		14	70
4-Chlorophenyl phenyl ether		ND		5.5	35
4-Nitroaniline		ND		9.3	170
4-Nitrophenol		ND		6.8	170
Acenaphthene		ND		5.1	35
Acenaphthylene		ND		6.2	35
Acetophenone		ND J	✓	3.8	35
Aniline		ND J	✓	18	35
Anthracene		ND		11	35
Atrazine		ND		10	35
Azobenzene		ND		4.3	35
Benzaldehyde		ND		10	35
Benzo[a]anthracene		ND		6.7	35
Benzo[a]pyrene		ND		6.4	35
Benzo[b]fluoranthene		ND		8.0	35
Benzo[g,h,i]perylene		ND		6.8	35
Benzo[k]fluoranthene		ND		9.7	35
Benzoic acid		ND J	✓	15	170

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Client: Olin Corporation

Job Number: 360-24223-2
Sdg Number: OCRI-03A

Client Sample ID: **OC-SB-415-16/18-XXX**

Lab Sample ID: 360-24223-2
Client Matrix: Solid % Moisture: 4.4

Date Sampled: 08/20/2009 0910
Date Received: 08/20/2009 1800

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48659		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48259		Lab File ID:	B10097.D
Dilution:	1.0			Initial Weight/Volume:	30.02 g
Date Analyzed:	09/07/2009 1925			Final Weight/Volume:	1.0 mL
Date Prepared:	08/27/2009 1206			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		2.1	35
Benzyl alcohol		ND		8.0	70
Bis(2-chloroethoxy)methane		ND		6.3	35
Bis(2-chloroethyl)ether		ND		8.5	35
Bis(2-ethylhexyl) phthalate		ND	J	11	35
Butyl benzyl phthalate		ND		7.6	35
Caprolactam		ND		10	35
Carbazole		ND		35	35
Chrysene		ND		7.5	35
Dibenz(a,h)anthracene		ND		7.0	35
Dibenzofuran		ND		20	35
Diethyl phthalate		ND		4.9	35
Dimethyl phthalate		ND		5.1	35
Di-n-butyl phthalate		ND		10	35
Di-n-octyl phthalate		ND		9.9	35
Diphenyl oxide		ND		10	35
Fluoranthene		ND		22	35
Fluorene		ND		13	35
Hexachlorobenzene		ND		8.3	35
Hexachlorobutadiene		ND		6.9	35
Hexachlorocyclopentadiene		ND		9.5	70
Hexachloroethane		ND		6.6	35
Indeno[1,2,3-cd]pyrene		ND		11	35
Isophorone		ND		7.5	35
Naphthalene		ND		77	84
Nitrobenzene		ND		4.7	35
N-Nitrosodimethylamine		ND		4.0	35
N-Nitrosodi-n-propylamine		ND	J	3.9	35
N-Nitrosodiphenylamine		ND		7.0	35
Pentachlorophenol		ND		7.2	35
Phenanthrene		ND		40	42
Phenol		ND		4.4	35
Pyrene		ND		9.2	35

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	62		30 - 130
2-Fluorobiphenyl	65		30 - 130
2-Fluorophenol	103		30 - 130
Nitrobenzene-d5	59		30 - 130
Phenol-d5	82		30 - 130
Terphenyl-d14	70		30 - 130

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SAMPLE SUMMARY

Client: Olin Corporation

Job Number: 360-24223-2
Sdg Number: OCRI-03A

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
360-24223-2	OC-SB-415-16/18-XXX	Solid	08/20/2009 0910	08/20/2009 1800
360-24223-5	OC-SB-419-17/19-XXX	Solid	08/19/2009 1640	08/20/2009 1800
360-24223-8	OC-SB-426-13/15-XXX	Solid	08/19/2009 1435	08/20/2009 1800
360-24223-14	OC-SB-436-13/15-XXX	Solid	08/20/2009 1325	08/20/2009 1800

Form 1s edited

R. Cobb 1/21/10

Client: Olin Corporation

Job Number: 360-24223-2
Sdg Number: OCRI-03A

Client Sample ID: **OC-SB-415-16/18-XXX**

Lab Sample ID: 360-24223-2
Client Matrix: Solid % Moisture: 4.4

Date Sampled: 08/20/2009 0910
Date Received: 08/20/2009 1800

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48659		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48259		Lab File ID:	B10097.D
Dilution:	1.0			Initial Weight/Volume:	30.02 g
Date Analyzed:	09/07/2009 1925			Final Weight/Volume:	1.0 mL
Date Prepared:	08/27/2009 1206			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 2

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
128-37-0	Butylated Hydroxytoluene	10.69	28	T J N
~~22768-22-5~~	~~2,4-Diphenyl-4-methyl-2(E)-pentene~~	~~12.04~~	~~22~~	~~T J N~~

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Client: Olin Corporation

Job Number: 360-24223-2
Sdg Number: OCRI-03A

Client Sample ID: **OC-SB-419-17/19-XXX**

Lab Sample ID: 360-24223-5
Client Matrix: Solid
% Moisture: 7.8

Date Sampled: 08/19/2009 1640
Date Received: 08/20/2009 1800

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48659		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48259		Lab File ID:	B10099.D
Dilution:	1.0			Initial Weight/Volume:	30.24 g
Date Analyzed:	09/07/2009 2033			Final Weight/Volume:	1.0 mL
Date Prepared:	08/27/2009 1206			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		11	36
1,2,4,5-Tetrachlorobenzene		ND		2.4	36
1,2,4-Trichlorobenzene		ND		7.0	36
1,2-Dichlorobenzene		ND		3.9	36
1,3-Dichlorobenzene		ND		10	36
1,4-Dichlorobenzene		ND		6.5	36
1-Methylnaphthalene		ND		2.2	36
2,2'-oxybis[1-chloropropane]		ND		3.6	36
2,3,4,6-Tetrachlorophenol		ND		2.2	36
2,4,5-Trichlorophenol		ND		4.1	36
2,4,6-Trichlorophenol		ND		7.5	36
2,4-Dichlorophenol		ND		6.9	36
2,4-Dimethylphenol		ND		6.2	36
2,4-Dinitrophenol		ND		5.3	36
2,4-Dinitrotoluene		ND		5.1	36
2,6-Dinitrotoluene		ND		4.5	36
2-Chloronaphthalene		ND		5.5	36
2-Chlorophenol		ND		3.5	36
2-Methylnaphthalene		ND		27	36
2-Methylphenol		ND J	F	5.1	36
2-Nitroaniline		ND		23	180
2-Nitrophenol		ND		4.2	36
3 & 4 Methylphenol		ND J	F	6.8	36
3,3'-Dichlorobenzidine		ND		26	72
3-Nitroaniline		ND		10	180
4,6-Dinitro-2-methylphenol		ND		9.2	180
4-Bromophenyl phenyl ether		ND		7.5	36
4-Chloro-3-methylphenol		ND		9.9	72
4-Chloroaniline		ND		15	72
4-Chlorophenyl phenyl ether		ND		5.7	36
4-Nitroaniline		ND		9.6	180
4-Nitrophenol		ND		7.0	180
Acenaphthene		ND		5.3	36
Acenaphthylene		ND		6.3	36
Acetophenone		7.3 JB	JB F	3.9	36
Aniline		ND J	F	19	36
Anthracene		ND		11	36
Atrazine		ND		11	36
Azobenzene		ND		4.5	36
Benzaldehyde		ND		11	36
Benzo[a]anthracene		ND		6.9	36
Benzo[a]pyrene		ND		6.6	36
Benzo[b]fluoranthene		ND		8.2	36
Benzo[g,h,i]perylene		ND		7.0	36
Benzo[k]fluoranthene		ND		9.9	36
Benzoic acid		ND J	F	15	180

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Client: Olin Corporation

Job Number: 360-24223-2
Sdg Number: OCRI-03A

Client Sample ID: **OC-SB-419-17/19-XXX**

Lab Sample ID: 360-24223-5
Client Matrix: Solid
% Moisture: 7.8

Date Sampled: 08/19/2009 1640
Date Received: 08/20/2009 1800

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48659		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48259		Lab File ID:	B10099.D
Dilution:	1.0			Initial Weight/Volume:	30.24 g
Date Analyzed:	09/07/2009 2033			Final Weight/Volume:	1.0 mL
Date Prepared:	08/27/2009 1206			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		2.2	36
Benzyl alcohol		ND		8.3	72
Bis(2-chloroethoxy)methane		ND		6.4	36
Bis(2-chloroethyl)ether		ND		8.7	36
Bis(2-ethylhexyl) phthalate		ND	J	11	36
Butyl benzyl phthalate		ND		7.8	36
Caprolactam		ND		11	36
Carbazole		ND		36	36
Chrysene		ND		7.7	36
Dibenz(a,h)anthracene		ND		7.2	36
Dibenzofuran		ND		21	36
Diethyl phthalate		ND		5.1	36
Dimethyl phthalate		ND		5.3	36
Di-n-butyl phthalate		ND		11	36
Di-n-octyl phthalate		ND		10	36
Diphenyl oxide		ND		11	36
Fluoranthene		ND		23	36
Fluorene		ND		14	36
Hexachlorobenzene		ND		8.5	36
Hexachlorobutadiene		ND		7.1	36
Hexachlorocyclopentadiene		ND		9.8	72
Hexachloroethane		ND		6.8	36
Indeno[1,2,3-cd]pyrene		ND		11	36
Isophorone		ND		7.7	36
Naphthalene		ND		80	86
Nitrobenzene		ND		4.9	36
N-Nitrosodimethylamine		ND		4.2	36
N-Nitrosodi-n-propylamine		ND	J	4.1	36
N-Nitrosodiphenylamine		ND		7.2	36
Pentachlorophenol		ND		7.4	36
Phenanthrene		ND		41	43
Phenol		ND		4.5	36
Pyrene		ND		9.5	36

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	44		30 - 130
2-Fluorobiphenyl	50		30 - 130
2-Fluorophenol	65		30 - 130
Nitrobenzene-d5	51		30 - 130
Phenol-d5	65		30 - 130
Terphenyl-d14	53		30 - 130

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Client: Olin Corporation

Job Number: 360-24223-2
Sdg Number: OCRI-03A

Client Sample ID: **OC-SB-419-17/19-XXX**

Lab Sample ID: 360-24223-5
Client Matrix: Solid % Moisture: 7.8

Date Sampled: 08/19/2009 1640
Date Received: 08/20/2009 1800

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48659		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48259		Lab File ID:	B10099.D
Dilution:	1.0			Initial Weight/Volume:	30.24 g
Date Analyzed:	09/07/2009 2033			Final Weight/Volume:	1.0 mL
Date Prepared:	08/27/2009 1206			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 3

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
128-37-0	Butylated Hydroxytoluene	10.69	42	T J N
3910-35-8	1H-Indene, 2,3-dihydro-1,1,3-trimethyl-3	11.64	37	T J N
	Unknown	17.77	59	T J

Client: Olin Corporation

Job Number: 360-24223-2
Sdg Number: OCRI-03A

Client Sample ID: **OC-SB-426-13/15-XXX**

Lab Sample ID: 360-24223-8
Client Matrix: Solid
% Moisture: 13.8

Date Sampled: 08/19/2009 1435
Date Received: 08/20/2009 1800

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48659		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48259		Lab File ID:	B10101.D
Dilution:	1.0			Initial Weight/Volume:	30.20 g
Date Analyzed:	09/07/2009 2142			Final Weight/Volume:	1.0 mL
Date Prepared:	08/27/2009 1206			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		12	38
1,2,4,5-Tetrachlorobenzene		ND		2.6	38
1,2,4-Trichlorobenzene		ND		7.5	38
1,2-Dichlorobenzene		ND		4.2	38
1,3-Dichlorobenzene		ND		11	38
1,4-Dichlorobenzene		ND		6.9	38
1-Methylnaphthalene		ND		2.3	38
2,2'-oxybis[1-chloropropane]		ND		3.9	38
2,3,4,6-Tetrachlorophenol		ND		2.3	38
2,4,5-Trichlorophenol		ND		4.3	38
2,4,6-Trichlorophenol		ND		8.1	38
2,4-Dichlorophenol		ND		7.4	38
2,4-Dimethylphenol		ND		6.7	38
2,4-Dinitrophenol		ND		5.6	38
2,4-Dinitrotoluene		ND		5.4	38
2,6-Dinitrotoluene		ND		4.9	38
2-Chloronaphthalene		ND		5.9	38
2-Chlorophenol		ND		3.7	38
2-Methylnaphthalene		ND		29	38
2-Methylphenol		ND J	✓	5.5	38
2-Nitroaniline		ND		25	190
2-Nitrophenol		ND		4.5	38
3 & 4 Methylphenol		ND J	✓	7.3	38
3,3'-Dichlorobenzidine		ND		28	77
3-Nitroaniline		ND		11	190
4,6-Dinitro-2-methylphenol		ND		9.8	190
4-Bromophenyl phenyl ether		ND		8.0	38
4-Chloro-3-methylphenol		ND		11	77
4-Chloroaniline		ND		16	77
4-Chlorophenyl phenyl ether		ND		6.1	38
4-Nitroaniline		ND		10	190
4-Nitrophenol		ND		7.5	190
Acenaphthene		ND		5.6	38
Acenaphthylene		ND		6.8	38
Acetophenone		ND J	✓	4.2	38
Aniline		ND J	✓	20	38
Anthracene		ND		12	38
Atrazine		ND		12	38
Azobenzene		ND		4.8	38
Benzaldehyde		ND		12	38
Benzo[a]anthracene		ND		7.4	38
Benzo[a]pyrene		ND		7.0	38
Benzo[b]fluoranthene		ND		8.8	38
Benzo[g,h,i]perylene		ND		7.5	38
Benzo[k]fluoranthene		ND		11	38
Benzoic acid		ND J	✓	17	190

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Client: Olin Corporation

Job Number: 360-24223-2
Sdg Number: OCRI-03A

Client Sample ID: **OC-SB-426-13/15-XXX**

Lab Sample ID: 360-24223-8
Client Matrix: Solid

% Moisture: 13.8

Date Sampled: 08/19/2009 1435
Date Received: 08/20/2009 1800

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48659		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48259		Lab File ID:	B10101.D
Dilution:	1.0			Initial Weight/Volume:	30.20 g
Date Analyzed:	09/07/2009 2142			Final Weight/Volume:	1.0 mL
Date Prepared:	08/27/2009 1206			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		2.3	38
Benzyl alcohol		ND		8.9	77
Bis(2-chloroethoxy)methane		ND		6.9	38
Bis(2-chloroethyl)ether		ND		9.3	38
Bis(2-ethylhexyl) phthalate		ND	J	12	38
Butyl benzyl phthalate		ND		8.4	38
Caprolactam		ND		12	38
Carbazole		ND		38	38
Chrysene		ND		8.3	38
Dibenz(a,h)anthracene		ND		7.8	38
Dibenzofuran		ND		22	38
Diethyl phthalate		ND		5.4	38
Dimethyl phthalate		ND		5.7	38
Di-n-butyl phthalate		ND		12	38
Di-n-octyl phthalate		ND		11	38
Diphenyl oxide		ND		12	38
Fluoranthene		ND		24	38
Fluorene		ND		15	38
Hexachlorobenzene		ND		9.1	38
Hexachlorobutadiene		ND		7.7	38
Hexachlorocyclopentadiene		ND		10	77
Hexachloroethane		ND		7.3	38
Indeno[1,2,3-cd]pyrene		ND		12	38
Isophorone		ND		8.2	38
Naphthalene		ND		85	92
Nitrobenzene		ND		5.2	38
N-Nitrosodimethylamine		ND		4.5	38
N-Nitrosodi-n-propylamine		ND	J	4.3	38
N-Nitrosodiphenylamine		ND		7.7	38
Pentachlorophenol		ND		7.9	38
Phenanthrene		ND		44	46
Phenol		ND		4.8	38
Pyrene		ND		10	38

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	67		30 - 130
2-Fluorobiphenyl	68		30 - 130
2-Fluorophenol	77		30 - 130
Nitrobenzene-d5	64		30 - 130
Phenol-d5	80		30 - 130
Terphenyl-d14	66		30 - 130

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Client: Olin Corporation

Job Number: 360-24223-2
Sdg Number: OCRI-03A

Client Sample ID: **OC-SB-426-13/15-XXX**

Lab Sample ID: 360-24223-8
Client Matrix: Solid % Moisture: 13.8

Date Sampled: 08/19/2009 1435
Date Received: 08/20/2009 1800

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48659		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48259		Lab File ID:	B10101.D
Dilution:	1.0			Initial Weight/Volume:	30.20 g
Date Analyzed:	09/07/2009 2142			Final Weight/Volume:	1.0 mL
Date Prepared:	08/27/2009 1206			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 0

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Tentatively Identified Compound		None	

Client: Olin Corporation

Job Number: 360-24223-2
Sdg Number: OCRI-03A

Client Sample ID: **OC-SB-436-13/15-XXX**

Lab Sample ID: 360-24223-14
Client Matrix: Solid % Moisture: 4.6

Date Sampled: 08/20/2009 1325
Date Received: 08/20/2009 1800

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48659		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48259		Lab File ID:	B10106.D
Dilution:	1.0			Initial Weight/Volume:	30.51 g
Date Analyzed:	09/08/2009 0033			Final Weight/Volume:	1.0 mL
Date Prepared:	08/27/2009 1206			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		10	34
1,2,4,5-Tetrachlorobenzene		ND		2.3	34
1,2,4-Trichlorobenzene		ND		6.7	34
1,2-Dichlorobenzene		ND		3.7	34
1,3-Dichlorobenzene		ND		10	34
1,4-Dichlorobenzene		ND		6.2	34
1-Methylnaphthalene		ND		2.1	34
2,2'-oxybis[1-chloropropane]		ND		3.5	34
2,3,4,6-Tetrachlorophenol		ND		2.1	34
2,4,5-Trichlorophenol		ND		3.9	34
2,4,6-Trichlorophenol		ND		7.2	34
2,4-Dichlorophenol		ND		6.6	34
2,4-Dimethylphenol		ND		6.0	34
2,4-Dinitrophenol		ND		5.0	34
2,4-Dinitrotoluene		ND		4.8	34
2,6-Dinitrotoluene		ND		4.3	34
2-Chloronaphthalene		ND		5.3	34
2-Chlorophenol		ND		3.3	34
2-Methylnaphthalene		ND		26	34
2-Methylphenol		ND J	✓	4.9	34
2-Nitroaniline		ND		22	170
2-Nitrophenol		ND		4.0	34
3 & 4 Methylphenol		ND J	✓	6.5	34
3,3'-Dichlorobenzidine		ND		25	69
3-Nitroaniline		ND		9.8	170
4,6-Dinitro-2-methylphenol		ND		8.8	170
4-Bromophenyl phenyl ether		ND		7.1	34
4-Chloro-3-methylphenol		ND		9.5	69
4-Chloroaniline		ND		14	69
4-Chlorophenyl phenyl ether		ND		5.5	34
4-Nitroaniline		ND		9.2	170
4-Nitrophenol		ND		6.7	170
Acenaphthene		ND		5.0	34
Acenaphthylene		ND		6.1	34
Acetophenone		ND J	✓	3.7	34
Aniline		ND J	✓	18	34
Anthracene		ND		11	34
Atrazine		ND		10	34
Azobenzene		ND		4.3	34
Benzaldehyde		ND		10	34
Benzo[a]anthracene		ND		6.6	34
Benzo[a]pyrene		ND		6.3	34
Benzo[b]fluoranthene		ND		7.9	34
Benzo[g,h,i]perylene		ND		6.7	34
Benzo[k]fluoranthene		ND		9.5	34
Benzoic acid		ND J	✓	15	170

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Client: Olin Corporation

Job Number: 360-24223-2
Sdg Number: OCRI-03A

Client Sample ID: **OC-SB-436-13/15-XXX**

Lab Sample ID: 360-24223-14
Client Matrix: Solid % Moisture: 4.6

Date Sampled: 08/20/2009 1325
Date Received: 08/20/2009 1800

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48659		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48259		Lab File ID:	B10106.D
Dilution:	1.0			Initial Weight/Volume:	30.51 g
Date Analyzed:	09/08/2009 0033			Final Weight/Volume:	1.0 mL
Date Prepared:	08/27/2009 1206			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		2.1	34
Benzyl alcohol		ND		7.9	69
Bis(2-chloroethoxy)methane		ND		6.2	34
Bis(2-chloroethyl)ether		ND		8.3	34
Bis(2-ethylhexyl) phthalate		ND	J	11	34
Butyl benzyl phthalate		ND		7.5	34
Caprolactam		ND		10	34
Carbazole		ND		34	34
Chrysene		ND		7.4	34
Dibenz(a,h)anthracene		ND		6.9	34
Dibenzofuran		ND		20	34
Diethyl phthalate		ND		4.8	34
Dimethyl phthalate		ND		5.1	34
Di-n-butyl phthalate		ND		10	34
Di-n-octyl phthalate		ND		9.7	34
Diphenyl oxide		ND		10	34
Fluoranthene		ND		22	34
Fluorene		ND		13	34
Hexachlorobenzene		ND		8.2	34
Hexachlorobutadiene		ND		6.8	34
Hexachlorocyclopentadiene		ND		9.4	69
Hexachloroethane		ND		6.6	34
Indeno[1,2,3-cd]pyrene		ND		10	34
Isophorone		ND		7.4	34
Naphthalene		ND		76	82
Nitrobenzene		ND		4.7	34
N-Nitrosodimethylamine		ND		4.0	34
N-Nitrosodi-n-propylamine		ND	J	3.9	34
N-Nitrosodiphenylamine		ND		6.9	34
Pentachlorophenol		ND		7.1	34
Phenanthrene		ND		40	41
Phenol		ND		4.3	34
Pyrene		ND		9.1	34

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	50		30 - 130
2-Fluorobiphenyl	61		30 - 130
2-Fluorophenol	70		30 - 130
Nitrobenzene-d5	59		30 - 130
Phenol-d5	69		30 - 130
Terphenyl-d14	68		30 - 130

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Client: Olin Corporation

Job Number: 360-24223-2
Sdg Number: OCRI-03A

Client Sample ID: **OC-SB-436-13/15-XXX**

Lab Sample ID: 360-24223-14
Client Matrix: Solid % Moisture: 4.6

Date Sampled: 08/20/2009 1325
Date Received: 08/20/2009 1800

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48659		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48259		Lab File ID:	B10106.D
Dilution:	1.0			Initial Weight/Volume:	30.51 g
Date Analyzed:	09/08/2009 0033			Final Weight/Volume:	1.0 mL
Date Prepared:	08/27/2009 1206			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 5

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Unknown	9.58	38	T J
	Unknown	11.87	29	T J
	Unknown	12.33	71	T J
301-2-0	9-Octadecenamide, (Z)-	14.36	72	T J N
112-84-5	Erucylamide	16.78	120	T J N

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Westfield Job No.: 360-24223-1

SDG No.: OCRI-03

Instrument ID: Inst. B Start Date: 09/07/2009 10:21

Analysis Batch Number: 48658 End Date: 09/07/2009 16:00

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 360-48658/1	02	09/07/2009 10:21	1	B10081.D	Rtx-5ms SIL with guard column 0.25(um)
STD5 360-48658/2 ICIS		09/07/2009 10:55	1	B10082.D	Rtx-5ms SIL with guard column 0.25(um)
STD01 360-48658/3 IC		09/07/2009 11:28	1	B10083.D	Rtx-5ms SIL with guard column 0.25(um)
STD025 360-48658/4 IC		09/07/2009 12:02	1	B10084.D	Rtx-5ms SIL with guard column 0.25(um)
STD05 360-48658/5 IC		09/07/2009 12:36	1	B10085.D	Rtx-5ms SIL with guard column 0.25(um)
STD1 360-48658/6 IC		09/07/2009 13:10	1	B10086.D	Rtx-5ms SIL with guard column 0.25(um)
STD25 360-48658/7 IC		09/07/2009 13:44	1	B10087.D	Rtx-5ms SIL with guard column 0.25(um)
STD8 360-48658/8 IC		09/07/2009 14:18	1	B10088.D	Rtx-5ms SIL with guard column 0.25(um)
STD10 360-48658/9 IC		09/07/2009 14:52	1	B10089.D	Rtx-5ms SIL with guard column 0.25(um)
STD20 360-48658/10 IC		09/07/2009 15:26	1	B10090.D	Rtx-5ms SIL with guard column 0.25(um)
ICV 360-48658/11		09/07/2009 16:00	1		Rtx-5ms SIL with guard column 0.25(um)

IC in criteria

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Westfield Job No.: 360-24223-1

SDG No.: OCRI-03

Instrument ID: Inst. B Start Date: 09/07/2009 16:34

Analysis Batch Number: 48659 End Date: 09/08/2009 02:16

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 360-48659/1	OK	09/07/2009 16:34	1	B10092.D	Rtx-5ms SIL with guard column 0.25(um)
CCV 360-48659/2 CCVIS	benzidine 20 65	09/07/2009 17:08	1	B10093.D	Rtx-5ms SIL with guard column 0.25(um)
MB 360-48259/1-A	*	09/07/2009 17:42	1	B10094.D	Rtx-5ms SIL with guard column 0.25(um)
LCS 360-48259/2-A		09/07/2009 18:16	1	B10095.D	Rtx-5ms SIL with guard column 0.25(um)
LCSD 360-48259/3-A		09/07/2009 18:51	1	B10096.D	Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ 360-24223-2	OC-SB-415-16/18-XXX	09/07/2009 19:25	1	B10097.D	Rtx-5ms SIL with guard column 0.25(um)
360-24223-3	OC-SB-415-5.0/7.0-XXX	09/07/2009 19:59	1	B10098.D	Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ 360-24223-5	OC-SB-419-17/19-XXX	09/07/2009 20:33	1	99	Rtx-5ms SIL with guard column 0.25(um)
360-24223-6	OC-SB-419-3.0/5.0-XXX	09/07/2009 21:07	1	B10100.D	Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ 360-24223-8	OC-SB-426-13/15-XXX	09/07/2009 21:42	1	101	Rtx-5ms SIL with guard column 0.25(um)
360-24223-9	OC-SB-426-5.0/7.0-XXX	09/07/2009 22:16	1	B10102.D	Rtx-5ms SIL with guard column 0.25(um)
360-24223-10	OC-SB-426-5.0/7.0-DUP	09/07/2009 22:50	1	B10103.D	Rtx-5ms SIL with guard column 0.25(um)
360-24223-11	OC-SB-431-0.0/1.0-XXX	09/07/2009 23:24	1	B10104.D	Rtx-5ms SIL with guard column 0.25(um)
360-24223-12	OC-SB-431-7.0/9.0-XXX	09/07/2009 23:59	1	B10105.D	Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ 360-24223-14	OC-SB-436-13/15-XXX	09/08/2009 00:33	1	106	Rtx-5ms SIL with guard column 0.25(um)
360-24223-15	OC-SB-436-6.0/8.0-XXX	09/08/2009 01:07	1	B10107.D	Rtx-5ms SIL with guard column 0.25(um)
360-24223-9 MS	OC-SB-426-5.0/7.0-XXX MS	09/08/2009 01:41	1	B10108.D	Rtx-5ms SIL with guard column 0.25(um)
360-24223-9 MSD	OC-SB-426-5.0/7.0-XXX MSD	09/08/2009 02:16	1	B10109.D	Rtx-5ms SIL with guard column 0.25(um)

-N bis(2-ethylhexyl) phthalate 104 ug/kg

LCS/LCSD %R RPD

aniline 35/38

benzoic acid 24/27

bis(2-chloroethyl)eth 37 45

2-methylphenol 43

3+4 methylphenol 34

acetophenone 40

n-nitrosodi-n-propylamine 44

8270C LL

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Westfield Job No.: 360-24223-1

SDG No.: OCRI-03

Instrument ID: Inst. B Start Date: 09/09/2009 23:05

Analysis Batch Number: 48751 End Date: 09/10/2009 10:21

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 360-48751/1	OK	09/09/2009 23:05	1	B10151.D	Rtx-5ms SIL with guard column 0.25(um)
CCV 360-48751/2 CCVIS	OK	09/09/2009 23:39	1	B10152.D	Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/10/2009 00:13	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/10/2009 00:47	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/10/2009 01:21	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/10/2009 01:55	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/10/2009 02:28	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/10/2009 03:02	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/10/2009 03:36	10		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/10/2009 04:10	5		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/10/2009 04:43	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/10/2009 05:17	5		Rtx-5ms SIL with guard column 0.25(um)
360-24223-1	OC-SB-415-0.0/1.0-XXX	09/10/2009 05:51	1	B10163.D	Rtx-5ms SIL with guard column 0.25(um)
360-24223-4	OC-SB-419-0.0/1.0-XXX	09/10/2009 06:25	1	B10164.D	Rtx-5ms SIL with guard column 0.25(um)
360-24223-13	OC-SB-436-0.0/1.0-XXX	09/10/2009 06:58	1	B10165.D	Rtx-5ms SIL with guard column 0.25(um)
360-24223-7	OC-SB-426-0.0/1.0-XXX	09/10/2009 07:32	2	B10166.D	Rtx-5ms SIL with guard column 0.25(um)
360-24223-7 DL	OC-SB-426-0.0/1.0-XXX DL	09/10/2009 08:06	20	B10167.D	Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/10/2009 08:40	10		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/10/2009 09:13	10		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/10/2009 09:47	10		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/10/2009 10:21	2		Rtx-5ms SIL with guard column 0.25(um)

MS/MSD 2 2

1,2-DCB 34

1,3-DCB 31/28

2,2'-oxybis[1-chloropropane] 37/34

2,4-dinitrophenol 24/25

acetophenone 39/35

aniline 29/26

bis(2-chloroethyl)ether 29/29

8270C LL

hexachlorocyclopentadiene 21/24

hexachloroethane 31

n-nitrosodi-n-propylamine 34/32

Benzyl alcohol 25

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Westfield Job No.: 360-24223-1

SDG No.: OCRI-03

Instrument ID: Inst. J Start Date: 09/01/2009 11:55

Analysis Batch Number: 48434 End Date: 09/01/2009 17:25

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 360-48434/1 OK		09/01/2009 11:55	1	J02774.D	Rtx-5ms SIL with guard column 0.25(um)
STD5 360-48434/2 ICIS		09/01/2009 12:25	1	J02775.D	Rtx-5ms SIL with guard column 0.25(um)
STD01 360-48434/3 IC		09/01/2009 12:55	1	J02776.D	Rtx-5ms SIL with guard column 0.25(um)
STD025 360-48434/4 IC		09/01/2009 13:25	1	J02777.D	Rtx-5ms SIL with guard column 0.25(um)
STD05 360-48434/5 IC		09/01/2009 13:55	1	J02778.D	Rtx-5ms SIL with guard column 0.25(um)
STD1 360-48434/6 IC		09/01/2009 14:25	1	J02779.D	Rtx-5ms SIL with guard column 0.25(um)
STD25 360-48434/7 IC		09/01/2009 14:55	1	J02780.D	Rtx-5ms SIL with guard column 0.25(um)
STD8 360-48434/8 IC		09/01/2009 15:25	1	J02781.D	Rtx-5ms SIL with guard column 0.25(um)
STD10 360-48434/9 IC		09/01/2009 15:55	1	J02782.D	Rtx-5ms SIL with guard column 0.25(um)
STD20 360-48434/10 IC		09/01/2009 16:25	1	J02783.D	Rtx-5ms SIL with guard column 0.25(um)
ICV 360-48434/11		09/01/2009 16:55	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/01/2009 17:25	1		Rtx-5ms SIL with guard column 0.25(um)

NDMA only

ICAL OK

8270C LL

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Westfield Job No.: 360-24223-1

SDG No.: OCRI-03

Instrument ID: Inst. J Start Date: 09/02/2009 05:23

Analysis Batch Number: 48456 End Date: 09/02/2009 20:40

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 360-48456/1 Ok		09/02/2009 05:23	1	J02809.D	Rtx-5ms SIL with guard column 0.25(um)
CCV 360-48456/2 CCVIS ok		09/02/2009 05:52	1	J02810.D	Rtx-5ms SIL with guard column 0.25(um)
MB 360-48381/1-A ok		09/02/2009 06:22	1	J02811.D	Rtx-5ms SIL with guard column 0.25(um)
LCS 360-48381/2-A OK		09/02/2009 06:52	1	J02812.D	Rtx-5ms SIL with guard column 0.25(um)
LCSD 360-48381/3-A OK		09/02/2009 07:22	1	J02813.D	Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/02/2009 07:51	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/02/2009 08:21	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/02/2009 08:51	1		Rtx-5ms SIL with guard column 0.25(um)
360-24223-4	OC-SB-419-0.0/1.0-XXX	09/02/2009 09:21	1	J02817.D	Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/02/2009 09:51	1		Rtx-5ms SIL with guard column 0.25(um)
360-24223-6	OC-SB-419-3.0/5.0-XXX	09/02/2009 10:21	1	J02819.D	Rtx-5ms SIL with guard column 0.25(um)
360-24223-7	OC-SB-426-0.0/1.0-XXX	09/02/2009 10:51	5	J02820.D	Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/02/2009 11:21	1		Rtx-5ms SIL with guard column 0.25(um)
360-24223-9	OC-SB-426-5.0/7.0-XXX	09/02/2009 11:51	1	J02822.D	Rtx-5ms SIL with guard column 0.25(um)
360-24223-9 MS OK	OC-SB-426-5.0/7.0-XXX MS	09/02/2009 12:21	1	J02823.D	Rtx-5ms SIL with guard column 0.25(um)
360-24223-9 MSD OK	OC-SB-426-5.0/7.0-XXX MSD	09/02/2009 12:51	1	J02824.D	Rtx-5ms SIL with guard column 0.25(um)
360-24223-10	OC-SB-426-5.0/7.0-DUP	09/02/2009 13:21	1	J02825.D	Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/02/2009 13:51	5		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/02/2009 14:21	5		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/02/2009 14:51	5		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/02/2009 15:21	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/02/2009 15:52	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/02/2009 16:22	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/02/2009 20:10	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/02/2009 20:40	1		Rtx-5ms SIL with guard column 0.25(um)

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Westfield Job No.: 360-24223-1

SDG No.: OCRI-03

Lab File ID: J02774.D DFTPP Injection Date: 09/01/2009

Instrument ID: Inst. J DFTPP Injection Time: 11:55

Analysis Batch No.: 48434

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	30.0 - 60.0 % of mass 198	32.2	
68	Less than 2.0 % of mass 69	0.0	(0.0)1
69	Mass 69 relative abundance	36.5	
70	Less than 2.0 % of mass 69	0.2	(0.4)1
127	40.0 - 60.0 % of mass 198	47.1	
197	Less than 1.0 % of mass 198	0.0	
198	Base Peak, 100 % relative abundance	100.0	
199	5.0- 9.0 % of mass 198	7.0	
275	10.0 - 30.0 % of mass 198	29.9	
365	Greater than 1.0 % of mass 198	3.8	
441	Present but less than mass 443	12.1	
442	Greater than 40.0 % of mass 198	81.2	
443	17.0 - 23.0 % of mass 442	15.4	(18.9)2

1-Value is % mass 69 2-Value is % mass 442 ✓

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STD5 360-48434/2	J02775.D	09/01/2009	12:25
	STD01 360-48434/3	J02776.D	09/01/2009	12:55
	STD025 360-48434/4	J02777.D	09/01/2009	13:25
	STD05 360-48434/5	J02778.D	09/01/2009	13:55
	STD1 360-48434/6	J02779.D	09/01/2009	14:25
	STD25 360-48434/7	J02780.D	09/01/2009	14:55
	STD8 360-48434/8	J02781.D	09/01/2009	15:25
	STD10 360-48434/9	J02782.D	09/01/2009	15:55
	STD20 360-48434/10	J02783.D	09/01/2009	16:25

1/21/10

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Westfield Job No.: 360-24223-1 Analy Batch No.: 48434

SDG No.: OCRI-03

Instrument ID: Inst. J GC Column: Rtx-5ms ID: 0.25(um) Heated Purge: (Y/N) N

Calibration Start Date: 09/01/2009 12:25 Calibration End Date: 09/01/2009 16:25 Calibration ID: 4195

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
N-Nitrosodiphenylamine	+++++ +++++	+++++	+++++	+++++	+++++	Ave		0.0239						15.0			
Naphthalene	+++++ +++++	+++++	+++++	+++++	+++++	Ave		0.3692						15.0			
Nitrobenzene	+++++ +++++	+++++	+++++	+++++	+++++	Ave		0.0426						15.0			
Pentachloronitrobenzene	+++++ +++++	+++++	+++++	+++++	+++++	Ave		0.0671						15.0			
Pentachlorophenol	+++++ +++++	+++++	+++++	+++++	+++++	Ave		0.0855						15.0			
Phenanthrene	+++++ +++++	+++++	+++++	+++++	+++++	Ave		0.8492						15.0			
Phenol	+++++ +++++	+++++	+++++	+++++	+++++	Ave		0						15.0			
Pyrene	+++++ +++++	+++++	+++++	+++++	+++++	Ave		1.0407						15.0			
Pyridine	+++++ +++++	+++++	+++++	+++++	+++++	Ave		0.0002						15.0			
N-Nitrosodimethylamine	0.2554 0.2794	0.1911 0.2893	0.2512 0.2595	0.2658 0.2855	0.2784	Ave		0.2617				11.0		15.0			
2-Fluorophenol	0.5942 0.6573	0.3923 0.6819	0.5352 0.6220	0.5976 0.6655	0.6590	Ave		0.6006				15.0		15.0			
Phenol-d5	0.7352 0.8435	0.5687 0.8403	0.7318 0.7577	0.8072 0.7936	0.8276	Ave		0.7673				11.0		15.0			
Nitrobenzene-d5	0.2506 0.2912	0.2648 0.2278	0.2679 0.2143	0.2836 0.1685	0.2916	Qua	0.0250	0.2650	-0.005						0.9990		0.9900
2-Fluorobiphenyl	1.2127 1.3758	1.4919 1.1950	1.3970 1.1646	1.3893 1.0126	1.3221	Ave		1.2845				12.0		15.0			
2,4,6-Tribromophenol	0.0784 0.0812	0.0224 0.0829	0.0424 0.0848	0.0557 0.0806	0.0689	Lin2	-0.006	0.0789							0.9900		0.9900
Terphenyl-d14	0.7535 0.8462	0.8952 0.7367	0.8659 0.7356	0.8938 0.6781	0.8586	Ave		0.8071				10.0		15.0			

rc 1/21/10

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Westfield Job No.: 360-24223-1

SDG No.: OCRI-03

Lab Sample ID: CCV 360-48456/2 Calibration Date: 09/02/2009 05:52

Instrument ID: Inst. J Calib Start Date: 08/31/2009 23:25

GC Column: Rtx-5ms ID: 0.25(um) Calib End Date: 09/01/2009 10:24

Lab File ID: J02810.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Lin2		0.0002			5000	-100.0*	30.0
2-Methylphenol	Lin2		0.5931			5000	-100.0*	30.0
Benzyl alcohol	Lin2		0.1832			5000	-100.0*	30.0
Benzaldehyde	Lin2		0.0001			5000	-100.0*	30.0
2,4-Dimethylphenol	None		0.2076			5000	-100.0*	30.0
Acetophenone	Lin2		0.0165			5000	-100.0*	30.0
Nitrobenzene	None		0.0636			5000	-100.0*	30.0
Bis(2-chloroethoxy)methane	None		0.2867			5000	-100.0*	30.0
Bis(2-chloroethyl)ether	Lin2		0.7371			5000	-100.0*	30.0
Benzoic acid	None		0.0058			5000	-100.0*	30.0
2-Chlorophenol	Lin2		0.0197			5000	-100.0*	30.0
1,2,4-Trichlorobenzene	None		0.2224			5000	-100.0*	30.0
1,3-Dichlorobenzene	Lin2		0.0238			5000	-100.0*	30.0
1,4-Dichlorobenzene	Ave	0.0012	0.0238			5000	1850.0*	20.0
2,2'-oxybis[1-chloropropane]	Lin2		0.0090			5000	-100.0*	30.0
Alpha-Terpineol	None		0.1653			5000	-100.0*	30.0
Hexachloroethane	Lin2		0.0013			5000	-100.0*	30.0
Naphthalene	None		0.7254			5000	-100.0*	30.0
4-Chloroaniline	None		0.3007			5000	-100.0*	30.0
2,4-Dichlorophenol	None		0.1861			5000	-100.0*	20.0
Hexachlorobutadiene	None		0.1138			5000	-100.0*	20.0
N-Nitrosodi-n-propylamine	Ave	0.0116	0.0004*	0.0500		5000	-96.9*	30.0
3 & 4 Methylphenol	Lin2		0.0001			5000	-100.0*	30.0
Phenol	Ave	0.0299	0.0003			5000	-99.1*	20.0
Aniline	Lin2		0.0002			5000	-100.0*	30.0
1,2-Dichlorobenzene	Lin2		0.0007			5000	-100.0*	30.0
4-Chloro-3-methylphenol	None		0.1948			5000	-100.0*	20.0
2-Methylnaphthalene	None		0.4590			5000	-100.0*	30.0
Caprolactam	None		0.0016			5000	-100.0*	30.0
2,4,6-Trichlorophenol	None		0.2638			5000	-100.0*	20.0
2,4,5-Trichlorophenol	None		0.2859			5000	-100.0*	30.0
2-Chloronaphthalene	None		1.143			5000	-100.0*	30.0
1-Methylnaphthalene	None		0.1101			5000	-100.0*	30.0
2-Nitroaniline	None		0.3023			5000	-100.0*	30.0
Dimethyl phthalate	None		1.241			5000	-100.0*	30.0
2,6-Dinitrotoluene	None		0.2578			5000	-100.0*	30.0
Isophorone	None		0.0002			5000	-100.0*	30.0
1,1'-Biphenyl	None		0.0002			5000	-100.0*	30.0
2-Nitrophenol	None		0.0001			5000	-100.0*	20.0
Acenaphthylene	None		1.684			5000	-100.0*	30.0
3-Nitroaniline	None		0.3301			5000	-100.0*	30.0

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24223-1

SDG No.: OCRI-03

Matrix: Solid Level: Low Lab File ID: J02812.D

Lab ID: LCS 360-48381/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
N-Nitrosodimethylamine	100	53.4	53	40-140	

cc 1,1

(2)

1/21/10

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24223-1

SDG No.: OCRI-03

Matrix: Solid Level: Low Lab File ID: J02813.D

Lab ID: LCSD 360-48381/3-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCSD CONCENTRATION (ug/Kg)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
N-Nitrosodimethylamine	100	56.2	56	5	30	40-140	

cc'd

1/21/10

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24223-1

SDG No.: OCRI-03

Matrix: Solid Level: Low Lab File ID: J02823.D

Lab ID: 360-24223-9 MS Client ID: OC-SB-426-5.0/7.0-XXX MS

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	QC LIMITS REC	#
N-Nitrosodimethylamine	116	ND	63.4	55	40-140	

rc'd 1/21/10

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24223-1

SDG No.: OCRI-03

Matrix: Solid Level: Low Lab File ID: J02824.D

Lab ID: 360-24223-9 MSD Client ID: OC-SB-426-5.0/7.0-XXX MSD

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
N-Nitrosodimethylamine	116	68.7	59	8	30	40-140	

✓ /

rcl
(3)
1/21/10

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM II
GC/MS SEMI VOA SURROGATE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24223-1

SDG No.: OCRI-03

Matrix: Solid Level: Low

GC Column (1): Rtx-5ms ID: 0.25 (um)

Client Sample ID	Lab Sample ID	2FP #	PHL #	NBZ #	FBP #	TBP #	TPH #
OC-SB-415-0.0/1.0-XXX	360-24223-1	81	74	60	62	45	67
OC-SB-415-5.0/7.0-XXX	360-24223-3	69	70	52	61	59	59
OC-SB-419-0.0/1.0-XXX	360-24223-4	69	62	56	60	27 X	68
OC-SB-419-0.0/1.0-XXX	360-24223-4	22 X	54	58	62	24 X	98
OC-SB-419-3.0/5.0-XXX	360-24223-6	66	59	54	55	55	61
OC-SB-419-3.0/5.0-XXX	360-24223-6	62	61	59	61	49	104
OC-SB-426-0.0/1.0-XXX	360-24223-7	94	83	73	70	76	82
OC-SB-426-0.0/1.0-XXX	360-24223-7	54	41	35	66	45	95
OC-SB-426-0.0/1.0-XXX DL	360-24223-7 DL	0 D X	0 D X	0 D X	0 D X	0 D X	0 D X
OC-SB-426-5.0/7.0-XXX	360-24223-9	73	70	59	64	58	61
OC-SB-426-5.0/7.0-XXX	360-24223-9	59	57	56	58	47	91
OC-SB-426-5.0/7.0-DUP	360-24223-10	64	67	55	60	46	58
OC-SB-426-5.0/7.0-DUP	360-24223-10	59	57	57	61	51	97
OC-SB-431-0.0/1.0-XXX	360-24223-11	84	67	63	67	57	71
OC-SB-431-7.0/9.0-XXX	360-24223-12	90	77	56	65	51	62
OC-SB-436-0.0/1.0-XXX	360-24223-13	78	69	59	59	62	67
OC-SB-436-6.0/8.0-XXX	360-24223-15	94	84	59	65	53	64
	MB 360-48259/1-A	73	72	59	65	55	65
	MB 360-48381/1-A	64	64	56	65	38	87
	LCS 360-48259/2-A	53	53	87	77	67	68
	LCS 360-48381/2-A	53	55	51	63	50	94
	LCSD 360-48259/3-A	66	67	73	80	78	73
	LCSD 360-48381/3-A	54	56	54	65	54	90
OC-SB-426-5.0/7.0-XXX MS	360-24223-9 MS	38	41	56	59	51	57

	QC LIMITS
2FP = 2-Fluorophenol	30-130
PHL = Phenol-d5	30-130
NBZ = Nitrobenzene-d5	30-130
FBP = 2-Fluorobiphenyl	30-130
TBP = 2,4,6-Tribromophenol	30-130
TPH = Terphenyl-d14	30-130

Column to be used to flag recovery values

FORM II 8270C LL

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Westfield Job No.: 360-24223-1

SDG No.: OCRI-03

Instrument ID: Inst. B Start Date: 09/09/2009 16:53

Analysis Batch Number: 48761 End Date: 09/09/2009 22:32

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 360-48761/1		09/09/2009 16:53	1	B10140.D	Rtx-5ms SIL with guard column 0.25(um)
STD5 360-48761/2 ICIS		09/09/2009 17:26	1	B10141.D	Rtx-5ms SIL with guard column 0.25(um)
STD01 360-48761/3 IC		09/09/2009 18:00	1	B10142.D	Rtx-5ms SIL with guard column 0.25(um)
STD025 360-48761/4 IC		09/09/2009 18:34	1	B10143.D	Rtx-5ms SIL with guard column 0.25(um)
STD05 360-48761/5 IC		09/09/2009 19:08	1	B10144.D	Rtx-5ms SIL with guard column 0.25(um)
STD1 360-48761/6 IC		09/09/2009 19:42	1	B10145.D	Rtx-5ms SIL with guard column 0.25(um)
STD25 360-48761/7 IC		09/09/2009 20:16	1	B10146.D	Rtx-5ms SIL with guard column 0.25(um)
STD8 360-48761/8 IC		09/09/2009 20:50	1	B10147.D	Rtx-5ms SIL with guard column 0.25(um)
STD10 360-48761/9 IC		09/09/2009 21:24	1	B10148.D	Rtx-5ms SIL with guard column 0.25(um)
STD20 360-48761/10 IC		09/09/2009 21:58	1	B10149.D	Rtx-5ms SIL with guard column 0.25(um)
ICV 360-48761/11		09/09/2009 22:32	1		Rtx-5ms SIL with guard column 0.25(um)

ICAL

2,4-dinitrophenol r2 = 0.9930 n/a

Diphenylamine guard only.

8270C LL

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Westfield Job No.: 360-24223-1

SDG No.: OCRI-03

Instrument ID: Inst. B Start Date: 09/10/2009 10:55

Analysis Batch Number: 48766 End Date: 09/10/2009 15:26

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 360-48766/1 OK		09/10/2009 10:55	1	B10172.D	Rtx-5ms SIL with guard column 0.25(um)
CCV 360-48766/2 CCVIS OK		09/10/2009 11:29	1	B10173.D	Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/10/2009 12:03	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/10/2009 12:36	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/10/2009 13:10	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/10/2009 13:44	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/10/2009 14:18	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/10/2009 14:52	5		Rtx-5ms SIL with guard column 0.25(um)
360-24223-7 *	OC-SB-426-0.0/1.0-XXX	09/10/2009 15:26	2	B10180.D	Rtx-5ms SIL with guard column 0.25(um)

* Diphenylamine only.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Westfield Job No.: 360-24223-1 Analy Batch No.: 48761

SDG No.: OCRI-03

Instrument ID: Inst. B GC Column: Rtx-5ms ID: 0.25(um) Heated Purge: (Y/N) N

Calibration Start Date: 09/09/2009 17:26 Calibration End Date: 09/09/2009 21:58 Calibration ID: 4274

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD01 360-48761/3	B10142.D
Level 2	STD025 360-48761/4	B10143.D
Level 3	STD05 360-48761/5	B10144.D
Level 4	STD1 360-48761/6	B10145.D
Level 5	STD25 360-48761/7	B10146.D
Level 6	STD5 360-48761/2	B10141.D
Level 7	STD8 360-48761/8	B10147.D
Level 8	STD10 360-48761/9	B10148.D
Level 9	STD20 360-48761/10	B10149.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
1,4-Dioxane	0.4673 0.1896	0.3206 0.1712	0.2624 0.1628	0.2390 +++++	0.2086	Lin1	0.0368	0.1707							0.9930		0.9900
Pyridine	0.6176 0.4794	0.5831 0.4474	0.6011 0.4297	0.5453 +++++	0.5096	Ave		0.5267				14.0		15.0			
N-Nitrosodimethylamine	0.3562 0.3278	0.4236 0.2969	0.4054 0.2848	0.3818 +++++	0.3416	Ave		0.3522				14.0		15.0			
Benzoic acid	+++++ 0.0491	+++++ 0.1011	0.0103 0.1173	0.0139 0.1359	0.0277	Qua	-0.116	0.0926	0.0025						0.9910		0.9900
Benzaldehyde	0.3221 0.2480	0.3159 0.2287	0.3024 0.2204	0.2983 +++++	0.2825	Ave		0.2773				14.0		15.0			
Phenol	0.6698 0.6493	0.7650 0.5910	0.7667 0.5642	0.7361 +++++	0.7008	Ave		0.6804				11.0		15.0			
Aniline	0.7542 0.7838	0.7845 0.7110	0.8481 0.6721	0.8372 +++++	0.8178	Ave		0.7761				7.9		15.0			
Bis(2-chloroethyl)ether	0.6535 0.5417	0.6398 0.4683	0.6375 0.4448	0.6537 +++++	0.5860	Ave		0.5782				15.0		15.0			
2-Chlorophenol	0.6132 0.5960	0.6871 0.5255	0.6732 0.4939	0.6796 +++++	0.6337	Ave		0.6128				12.0		15.0			
1,4-Dichlorobenzene	0.8290 0.6869	0.8164 0.5987	0.8140 0.5716	0.8059 +++++	0.7307	Ave		0.7317				14.0		15.0			
1,3-Dichlorobenzene	0.8705 0.7103	0.8873 0.6179	0.8764 0.5931	0.8246 +++++	0.7603	Ave		0.7676				15.0		15.0			
Benzyl alcohol	0.3821 0.4605	0.4344 0.4189	0.4501 0.3919	0.4822 0.2899	0.4777	Ave		0.4208				14.0		15.0			
1,2-Dichlorobenzene	0.8257 0.6512	0.8275 0.5720	0.7927 0.5423	0.7653 +++++	0.7004	Qua	0.0282	0.7401	-0.020						1.0000		0.9900

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Westfield Job No.: 360-24223-1 Analy Batch No.: 48761

SDG No.: OCRI-03

Instrument ID: Inst. B GC Column: Rtx-5ms ID: 0.25(um) Heated Purge: (Y/N) N

Calibration Start Date: 09/09/2009 17:26 Calibration End Date: 09/09/2009 21:58 Calibration ID: 4274

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
2-Methylphenol	0.5143 0.5090	0.5894 0.4599	0.5743 0.4446	0.5664 +++++	0.5543	Ave		0.5265				10.0		15.0			
2,2'-oxybis[1-chloropropane]	1.0911 0.9284	1.0786 0.8153	1.1300 0.7472	1.1034 +++++	1.0378	Ave		0.9915				15.0		15.0			
3 & 4 Methylphenol	0.5217 0.5299	0.5423 0.4867	0.5916 0.4564	0.5967 +++++	0.5626	Ave		0.5360				9.1		15.0			
Acetophenone	0.8164 0.7686	0.9015 0.6799	0.9045 0.6568	0.8841 +++++	0.8334	Ave		0.8057				12.0		15.0			
N-Nitrosodi-n-propylamine	0.3965 0.3803	0.4404 0.3575	0.4539 0.3420	0.4272 +++++	0.4073	Ave		0.4006			0.0500	9.9		15.0			
2,4-Dinitrophenol	+++++ 0.0471	+++++ 0.1179	0.0040 0.1299	0.0121 0.1312	0.0293	Qua	-0.248	0.1416	0.0002		0.0500				0.9830	*	0.9900
Hexachloroethane	0.2607 0.2443	0.2997 0.2224	0.2789 0.2123	0.2784 +++++	0.2639	Ave		0.2576				12.0		15.0			
Nitrobenzene	0.2623 0.2938	0.2818 0.2898	0.2969 0.2726	0.2906 0.2507	0.2803	Ave		0.2799				5.5		15.0			
Isophorone	0.3903 0.4876	0.4277 0.4921	0.4842 0.4567	0.4918 0.3995	0.4784	Ave		0.4565				8.9		15.0			
2,4-Dimethylphenol	0.2075 0.2456	0.2277 0.2470	0.2397 0.2354	0.2374 0.2124	0.2307	Ave		0.2315				5.9		15.0			
2-Nitrophenol	0.0972 0.1528	0.1142 0.1632	0.1311 0.1606	0.1368 0.1448	0.1439	Lin2	-0.006	0.1502							0.9950		0.9900
Bis(2-chloroethoxy)methane	0.2854 0.2970	0.2981 0.2955	0.3106 0.2735	0.3098 0.2551	0.2920	Ave		0.2908				6.0		15.0			
2,4-Dichlorophenol	0.1791 0.2297	0.1925 0.2314	0.2067 0.2219	0.2080 0.2077	0.2133	Ave		0.2100				8.0		15.0			
1,2,4-Trichlorobenzene	0.2516 0.2642	0.2753 0.2618	0.2745 0.2484	0.2809 0.2250	0.2594	Ave		0.2601				6.6		15.0			
Alpha-Terpineol	0.1871 0.2301	0.1873 0.2355	0.2213 0.2201	0.2207 0.2019	0.2131	Ave		0.2130				8.2		15.0			
Naphthalene	0.8709 0.8169	0.8833 0.7645	0.8817 0.7001	0.8571 0.5218	0.8289	Ave		0.7917				15.0		15.0			
4-Chloroaniline	0.2570 0.3336	0.2908 0.3409	0.3182 0.3291	0.3277 0.2859	0.3220	Ave		0.3117				8.9		15.0			
Hexachlorobutadiene	0.1360 0.1301	0.1282 0.1300	0.1414 0.1226	0.1356 0.1154	0.1288	Ave		0.1298				5.9		15.0			
Caprolactam	0.0743 0.1138	0.0789 0.1238	0.0920 0.1192	0.1006 0.1099	0.1096	Lin2	-0.005	0.1114							0.9920		0.9900
4-Chloro-3-methylphenol	0.1794 0.2232	0.1935 0.2328	0.2120 0.2204	0.2090 0.2045	0.2134	Ave		0.2098				7.6		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Westfield Job No.: 360-24223-1 Analy Batch No.: 48761

SDG No.: OCRI-03

Instrument ID: Inst. B GC Column: Rtx-5ms ID: 0.25(um) Heated Purge: (Y/N) N

Calibration Start Date: 09/09/2009 17:26 Calibration End Date: 09/09/2009 21:58 Calibration ID: 4274

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
2-Methylnaphthalene	0.5386 0.5439	0.5303 0.5217	0.5616 0.4966	0.5535 0.4113	0.5287	Ave		0.5207				8.7		15.0			
2,3,4,6-Tetrachlorophenol	+++++ 0.2185	0.0479 0.2549	0.1236 0.2607	0.1501 0.2690	0.1888	Lin1	-0.075	0.2627							0.9950		0.9900
1-Methylnaphthalene	0.5235 0.5484	0.5670 0.5406	0.5779 0.5034	0.5591 0.4111	0.5307	Ave		0.5291				9.4		15.0			
1,2,4,5-Tetrachlorobenzene	0.2190 0.2259	0.2160 0.2290	0.2429 0.2107	0.2283 0.1899	0.2216	Ave		0.2204				6.7		15.0			
Hexachlorocyclopentadiene	0.0863 0.1770	0.0941 0.2142	0.1266 0.2319	0.1257 0.2133	0.1407	Lin	-0.072	0.2198			0.0500				0.9950		0.9900
4,6-Dinitro-2-methylphenol	+++++ 0.0596	0.0112 0.1012	0.0292 0.1151	0.0296 0.1152	0.0495	Qua	-0.077	0.1015	0.0009						0.9900		0.9900
2,4,6-Trichlorophenol	0.1951 0.3313	0.2283 0.3533	0.2604 0.3541	0.2911 0.3534	0.3087	Lin2	-0.016	0.3286							0.9910		0.9900
2,4,5-Trichlorophenol	0.2313 0.3359	0.2522 0.3743	0.2848 0.3727	0.2985 0.3792	0.3275	Lin2	-0.014	0.3448							0.9900		0.9900
1,1'-Biphenyl	1.4885 1.4940	1.4882 1.4588	1.5278 1.4003	1.4669 1.1472	1.4443	Ave		1.4351				7.9		15.0			
2-Chloronaphthalene	1.2505 1.3322	1.3030 1.3096	1.3151 1.2892	1.2992 1.0984	1.3100	Ave		1.2786				5.6		15.0			
Phenyl ether	0.3711 0.3591	0.3757 0.3592	0.3705 0.3419	0.3632 0.2953	0.3493	Ave		0.3539				6.9		15.0			
2-Nitroaniline	0.2169 0.3363	0.2320 0.3437	0.2687 0.3438	0.2864 0.3438	0.3069	Lin2	-0.013	0.3234							0.9920		0.9900
Dimethyl phthalate	1.1860 1.2937	1.2317 1.2459	1.2474 1.2191	1.2574 1.0904	1.1745	Ave		1.2162				4.9		15.0			
2,6-Dinitrotoluene	0.2084 0.3041	0.2431 0.3207	0.2676 0.3201	0.2787 0.3120	0.2930	Ave		0.2831				13.0		15.0			
Acenaphthylene	1.4036 1.7515	1.6289 1.7000	1.6414 1.6212	1.6610 1.3196	1.6878	Ave		1.6017				9.0		15.0			
Pentachlorophenol	+++++ 0.0472	0.0020 0.0828	0.0021 0.0921	0.0016 0.1016	0.0211	Lin1	-0.259	0.1142							0.9930		0.9900
3-Nitroaniline	0.2050 0.3010	0.2464 0.3227	0.2851 0.3330	0.2823 0.3266	0.2914	Ave		0.2882				14.0		15.0			
Acenaphthene	1.1187 1.1642	1.1831 1.1693	1.1619 1.1347	1.1031 0.9899	1.0956	Ave		1.1245				5.3		15.0			
4-Nitrophenol	0.0716 0.1299	0.0618 0.1571	0.0872 0.1653	0.0862 0.1640	0.1107	Lin	-0.070	0.1669			0.0500				0.9970		0.9900
Dibenzofuran	1.5166 1.5714	1.5585 1.5416	1.5342 1.4694	1.4982 1.2137	1.4514	Ave		1.4839				7.3		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Westfield Job No.: 360-24223-1 Analy Batch No.: 48761

SDG No.: OCRI-03

Instrument ID: Inst. B GC Column: Rtx-5ms ID: 0.25(um) Heated Purge: (Y/N) N

Calibration Start Date: 09/09/2009 17:26 Calibration End Date: 09/09/2009 21:58 Calibration ID: 4274

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
2,4-Dinitrotoluene	0.1677 0.3835	0.2498 0.4256	0.3168 0.4045	0.3246 0.3925	0.3570	Lin2	-0.024	0.3829							0.9930		0.9900
Diethyl phthalate	1.3678 1.2888	1.3174 1.2778	1.2644 1.2517	1.2420 1.0670	1.2388	Ave		1.2573				6.5		15.0			
4-Chlorophenyl phenyl ether	0.5914 0.5814	0.5923 0.5985	0.5687 0.5956	0.5541 0.5579	0.5656	Ave		0.5784				3.0		15.0			
Fluorene	1.1875 1.2795	1.2325 1.3103	1.2282 1.2745	1.1930 1.0601	1.2492	Ave		1.2239				6.0		15.0			
4-Nitroaniline	0.1730 0.2893	0.2085 0.3184	0.2681 0.3154	0.2518 0.3012	0.2708	Lin2	-0.013	0.2930							0.9930		0.9900
Diphenylamine	0.6184 0.6660	0.6535 0.6523	0.6427 0.6433	0.6662 0.5966	0.6811	Ave		0.6467				4.0		15.0			
N-Nitrosodiphenylamine	0.6184 0.6660	0.6535 0.6523	0.6427 0.6433	0.6662 0.5966	0.6811	Ave		0.6467				4.0		15.0			
1,2-Diphenylhydrazine	0.5377 0.7593	0.6964 0.7305	0.7269 0.7078	0.7628 0.6493	0.7661	Ave		0.7041				10.0		15.0			
Azobenzene	0.5377 0.7593	0.6964 0.7305	0.7269 0.7078	0.7628 0.6493	0.7661	Ave		0.7041				10.0		15.0			
Benzophenone	0.5392 0.6051	0.6031 0.6102	0.6010 0.5796	0.6231 0.5585	0.6001	Ave		0.5911				4.6		15.0			
4-Bromophenyl phenyl ether	0.1917 0.1833	0.1774 0.1842	0.1765 0.1897	0.1810 0.1910	0.1798	Ave		0.1838				3.1		15.0			
Atrazine	0.1396 0.1928	0.1716 0.1850	0.1660 0.1941	0.1862 0.1938	0.1924	Ave		0.1802				10.0		15.0			
Hexachlorobenzene	0.1620 0.1695	0.1770 0.1697	0.1677 0.1771	0.1697 0.1756	0.1723	Ave		0.1712				2.9		15.0			
Pentachloronitrobenzene	0.0440 0.0727	0.0572 0.0725	0.0579 0.0764	0.0639 0.0764	0.0689	Lin2	-0.003	0.0716							0.9950		0.9900
Phenanthrene	1.0601 1.0260	1.0950 0.9952	1.0666 0.9745	1.0434 0.8119	1.0492	Ave		1.0135				8.3		15.0			
Anthracene	0.8651 1.0269	0.9734 0.9975	0.9219 0.9627	0.9699 0.7962	0.9868	Ave		0.9445				7.7		15.0			
Carbazole	0.8470 0.8815	0.9404 0.8654	0.9624 0.8476	0.9315 0.7236	0.9365	Ave		0.8818				8.3		15.0			
Di-n-butyl phthalate	1.5684 1.1697	1.3104 1.0912	1.2280 1.0308	1.1943 +++++	1.2045	Ave		1.2247				13.0		15.0			
Pyrene	1.1500 1.3176	1.2154 1.1458	1.1802 1.1492	1.2670 1.1105	1.2474	Ave		1.1981				5.7		15.0			
Benzidine	0.1130 0.6819	0.2476 0.8785	0.3214 0.9399	0.4866 0.9018	0.6053	Lin	-0.409	0.9248							0.9960		0.9900

Note: The ml coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Westfield Job No.: 360-24223-1 Analy Batch No.: 48761

SDG No.: OCRI-03

Instrument ID: Inst. B GC Column: Rtx-5ms ID: 0.25(um) Heated Purge: (Y/N) N

Calibration Start Date: 09/09/2009 17:26 Calibration End Date: 09/09/2009 21:58 Calibration ID: 4274

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
Fluoranthene	0.9202 0.9922	0.9729 1.0202	1.0120 1.0303	0.9678 0.8999	0.9852	Ave		0.9779				4.5		15.0			
Butyl benzyl phthalate	0.4400 0.6381	0.4646 0.6081	0.5217 0.6264	0.5710 0.6267	0.5994	Ave		0.5662				13.0		15.0			
3,3'-Dichlorobenzidine	0.3323 0.7228	0.4639 0.7424	0.5762 0.7899	0.6207 0.7832	0.6605	Lin2	-0.044	0.7189							0.9920		0.9900
Bis(2-ethylhexyl) phthalate	0.6436 0.7572	0.5475 0.8030	0.5804 0.8329	0.6331 0.7814	0.7226	Ave		0.7002				15.0		15.0			
Benzo[a]anthracene	0.7283 0.9398	0.8327 0.9385	0.8809 0.9642	0.8771 0.9569	0.8807	Ave		0.8888				8.4		15.0			
Chrysene	0.9246 0.8895	0.8562 0.8980	0.8202 0.9077	0.8686 0.8793	0.8104	Ave		0.8727				4.4		15.0			
Di-n-octyl phthalate	0.6641 1.6743	0.7501 1.6106	0.9498 1.6939	1.1253 1.7155	1.4357	Lin1	-0.198	1.6838							0.9970		0.9900
Benzo[b]fluoranthene	1.0815 1.2604	1.0642 1.2839	1.1143 1.2411	1.1715 1.2799	1.1827	Ave		1.1866				7.2		15.0			
Benzo[k]fluoranthene	0.9449 1.2365	1.0099 1.1037	1.0933 1.2343	1.1928 1.1820	1.1187	Ave		1.1240				8.9		15.0			
Benzo[a]pyrene	0.6305 0.9484	0.7404 0.9691	0.8138 1.0005	0.8569 1.0280	0.8665	Ave		0.8727				15.0		15.0			
Indeno[1,2,3-cd]pyrene	0.5922 0.6816	0.5527 0.8506	0.6861 0.8038	0.5844 0.7672	0.6142	Lin1	-0.047	0.7746							0.9930		0.9900
Dibenz(a,h)anthracene	0.4569 0.5357	0.4891 0.6981	0.5805 0.6672	0.4835 0.6369	0.4908	Lin1	-0.039	0.6377							0.9910		0.9900
Benzo[g,h,i]perylene	0.5840 0.5405	0.5242 0.6697	0.5914 0.6422	0.5302 0.5831	0.5170	Ave		0.5758				9.3		15.0			
2-Fluorophenol	0.5006 0.4943	0.5391 0.4376	0.6029 0.4367	0.5498 +++++	0.4867	Ave		0.5060				11.0		15.0			
Phenol-d5	0.7381 0.6467	0.7308 0.5792	0.7574 0.5458	0.7167 +++++	0.6933	Ave		0.6760				12.0		15.0			
Nitrobenzene-d5	0.2621 0.2976	0.2674 0.2956	0.2958 0.2809	0.2892 0.2618	0.2830	Ave		0.2815				5.2		15.0			
2-Fluorobiphenyl	1.3603 1.3569	1.3477 1.2778	1.3316 1.2984	1.3282 1.1036	1.3098	Ave		1.3016				6.1		15.0			
2,4,6-Tribromophenol	0.0050 0.0563	0.0158 0.0692	0.0293 0.0725	0.0372 0.0795	0.0508	Lin	-0.049	0.0798							0.9940		0.9900
Terphenyl-d14	0.6919 0.8258	0.7434 0.7303	0.7188 0.7508	0.8098 0.7705	0.7706	Ave		0.7569				5.6		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Westfield Job No.: 360-24223-1

SDG No.: OCRI-03

Lab Sample ID: CCV 360-48766/2 Calibration Date: 09/10/2009 11:29

Instrument ID: Inst. B Calib Start Date: 09/09/2009 17:26

GC Column: Rtx-5ms ID: 0.25(um) Calib End Date: 09/09/2009 21:58

Lab File ID: B10173.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Lin1		0.1830		5150	5000	2.9	30.0
Pyridine	Ave	0.5267	0.4666		4430	5000	-11.4	30.0
N-Nitrosodimethylamine	Ave	0.3522	0.3168		4500	5000	-10.1	30.0
Benzaldehyde	Ave	0.2773	0.2616		4720	5000	-5.7	30.0
Phenol	Ave	0.6804	0.6229		4580	5000	-8.5	20.0
Aniline	Ave	0.7761	0.7530		4850	5000	-3.0	30.0
Bis(2-chloroethyl)ether	Ave	0.5782	0.5160		4460	5000	-10.7	30.0
2-Chlorophenol	Ave	0.6128	0.5701		4650	5000	-7.0	30.0
1,4-Dichlorobenzene	Ave	0.7317	0.6586		4500	5000	-10.0	20.0
1,3-Dichlorobenzene	Ave	0.7676	0.6866		4470	5000	-10.5	30.0
Benzyl alcohol	Ave	0.4208	0.3688		4380	5000	-12.4	30.0
1,2-Dichlorobenzene	Qua		0.6179		4760	5000	-4.8	30.0
2-Methylphenol	Ave	0.5265	0.5251		4990	5000	-0.3	30.0
2,2'-oxybis[1-chloropropane]	Ave	0.9915	0.8753		4410	5000	-11.7	30.0
3 & 4 Methylphenol	Ave	0.5360	0.5251		4900	5000	-2.0	30.0
Acetophenone	Ave	0.8057	0.7537		4680	5000	-6.4	30.0
N-Nitrosodi-n-propylamine	Ave	0.4006	0.3778	0.0500	4720	5000	-5.7	30.0
Hexachloroethane	Ave	0.2576	0.2104		4080	5000	-18.3	30.0
Nitrobenzene	Ave	0.2799	0.2642		4720	5000	-5.6	30.0
Isophorone	Ave	0.4565	0.4642		5080	5000	1.7	30.0
2,4-Dimethylphenol	Ave	0.2315	0.2114		4570	5000	-8.7	30.0
2-Nitrophenol	Lin2		0.1424		4780	5000	-4.4	20.0
Benzoic acid	Qua		0.1074		6060	5000	21.2	30.0
Bis(2-chloroethoxy)methane	Ave	0.2908	0.2777		4770	5000	-4.5	30.0
2,4-Dichlorophenol	Ave	0.2100	0.2135		5080	5000	1.6	20.0
1,2,4-Trichlorobenzene	Ave	0.2601	0.2461		4730	5000	-5.4	30.0
Alpha-Terpineol	Ave	0.2130	0.2118		4970	5000	-0.6	30.0
Naphthalene	Ave	0.7917	0.7473		4720	5000	-5.6	30.0
4-Chloroaniline	Ave	0.3117	0.3133		5030	5000	0.5	30.0
Hexachlorobutadiene	Ave	0.1298	0.1212		4670	5000	-6.6	20.0
Caprolactam	Lin2		0.1133		5120	5000	2.5	30.0
4-Chloro-3-methylphenol	Ave	0.2098	0.2094		4990	5000	-0.2	20.0
2-Methylnaphthalene	Ave	0.5207	0.5064		4860	5000	-2.8	30.0
1-Methylnaphthalene	Ave	0.5291	0.5159		4880	5000	-2.5	30.0
1,2,4,5-Tetrachlorobenzene	Ave	0.2204	0.2159		4900	5000	-2.0	30.0
Hexachlorocyclopentadiene	Lin		0.0124*	0.0500	611	5000	-87.8*	30.0
2,4,6-Trichlorophenol	Lin2		0.3291		5060	5000	1.1	20.0
2,4,5-Trichlorophenol	Lin2		0.3720		5440	5000	8.7	30.0
1,1'-Biphenyl	Ave	1.435	1.464		5100	5000	2.0	30.0
2-Chloronaphthalene	Ave	1.279	1.300		5090	5000	1.7	30.0
Phenyl ether	Ave	0.3539	0.3412		4820	5000	-3.6	30.0

OK for d-phenylamine

09/18/2009

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Westfield Job No.: 360-24223-1

SDG No.: OCRI-03

Lab Sample ID: CCV 360-48766/2 Calibration Date: 09/10/2009 11:29

Instrument ID: Inst. B Calib Start Date: 09/09/2009 17:26

GC Column: Rtx-5ms ID: 0.25(um) Calib End Date: 09/09/2009 21:58

Lab File ID: B10173.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2-Nitroaniline	Lin2		0.3408		5310	5000	6.2	30.0
Dimethyl phthalate	Ave	1.216	1.253		5150	5000	3.0	30.0
2,6-Dinitrotoluene	Ave	0.2831	0.2996		5290	5000	5.8	30.0
Acenaphthylene	Ave	1.602	1.721		5370	5000	7.4	30.0
3-Nitroaniline	Ave	0.2882	0.3315		5750	5000	15.0	30.0
Acenaphthene	Ave	1.124	1.143		5080	5000	1.6	20.0
2,4-Dinitrophenol	Qua		0.0168*	0.0500	2340	5000	-53.2*	30.0
4-Nitrophenol	Lin		0.1298	0.0500	4310	5000	-13.8	30.0
2,4-Dinitrotoluene	Lin2		0.3835		5070	5000	1.4	30.0
Dibenzofuran	Ave	1.484	1.526		5140	5000	2.9	30.0
2,3,4,6-Tetrachlorophenol	Lin1		0.2461		4970	5000	-0.6	30.0
Diethyl phthalate	Ave	1.257	1.255		4990	5000	-0.2	30.0
4-Chlorophenyl phenyl ether	Ave	0.5784	0.5777		4990	5000	-0.1	30.0
Fluorene	Ave	1.224	1.280		5230	5000	4.6	30.0
4-Nitroaniline	Lin2		0.2949		5080	5000	1.6	30.0
4,6-Dinitro-2-methylphenol	Qua		0.0269		2050	5000	-59.0*	30.0
Diphenylamine	Ave	0.6467	0.6923		5350	5000	7.1	30.0
N-Nitrosodiphenylamine	Ave	0.6467	0.6923		5350	5000	7.1	20.0
1,2-Diphenylhydrazine	Ave	0.7041	0.7616		5410	5000	8.2	30.0
Azobenzene	Ave	0.7041	0.7616		5410	5000	8.2	30.0
Benzophenone	Ave	0.5911	0.6486		5490	5000	9.7	30.0
4-Bromophenyl phenyl ether	Ave	0.1838	0.1926		5240	5000	4.8	30.0
Atrazine	Ave	0.1802	0.2000		5550	5000	11.0	30.0
Hexachlorobenzene	Ave	0.1712	0.1767		5160	5000	3.2	30.0
Pentachlorophenol	Lin1		0.0600		4890	5000	-2.2	20.0
Pentachloronitrobenzene	Lin2		0.0728		5120	5000	2.5	30.0
Phenanthrene	Ave	1.014	1.016		5010	5000	0.2	30.0
Anthracene	Ave	0.9445	1.035		5480	5000	9.5	30.0
Carbazole	Ave	0.8818	0.9354		5300	5000	6.1	30.0
Di-n-butyl phthalate	Ave	1.225	1.179		4820	5000	-3.7	30.0
Pyrene	Ave	1.198	1.453		6060	5000	21.3	30.0
Benzidine	Lin		0.7096		4280	5000	-14.4	30.0
Fluoranthene	Ave	0.9779	0.9891		5060	5000	1.1	20.0
Butyl benzyl phthalate	Ave	0.5662	0.7315		6460	5000	29.2	30.0
3,3'-Dichlorobenzidine	Lin2		0.7664		5390	5000	7.8	30.0
Bis(2-ethylhexyl) phthalate	Ave	0.7002	0.8999		6430	5000	28.5	30.0
Benzo[a]anthracene	Ave	0.8888	0.9593		5400	5000	7.9	30.0
Chrysene	Ave	0.8727	0.8863		5080	5000	1.6	30.0
Di-n-octyl phthalate	Lin1		2.467		7440	5000	48.9*	20.0
Benzo[b]fluoranthene	Ave	1.187	1.268		5340	5000	6.8	30.0
Benzo[k]fluoranthene	Ave	1.124	1.352		6010	5000	20.3	30.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Westfield Job No.: 360-24223-1

SDG No.: OCRI-03

Lab Sample ID: CCV 360-48766/2 Calibration Date: 09/10/2009 11:29

Instrument ID: Inst. B Calib Start Date: 09/09/2009 17:26

GC Column: Rtx-5ms ID: 0.25(um) Calib End Date: 09/09/2009 21:58

Lab File ID: B10173.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Benzo[a]pyrene	Ave	0.8727	0.9650		5530	5000	10.6	20.0
Dibenz(a,h)anthracene	Lin1		0.4928		3930	5000	-21.5	30.0
Indeno[1,2,3-cd]pyrene	Lin1		0.5924		3880	5000	-22.3	30.0
Benzo[g,h,i]perylene	Ave	0.5758	0.4447		3860	5000	-22.8	30.0
2-Fluorophenol	Ave	0.5060	0.4724		4670	5000	-6.6	30.0
Phenol-d5	Ave	0.6760	0.6152		4550	5000	-9.0	30.0
Nitrobenzene-d5	Ave	0.2815	0.2763		4910	5000	-1.8	30.0
2-Fluorobiphenyl	Ave	1.302	1.325		5090	5000	1.8	30.0
2,4,6-Tribromophenol	Lin		0.0720		5130	5000	2.6	30.0
Terphenyl-d14	Ave	0.7569	0.8999		5940	5000	18.9	30.0

ccd
1/21/10

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Westfield Job No.: 360-24223-1

SDG No.: OCRI-03

Lab Sample ID: CCV 360-48659/2 Calibration Date: 09/07/2009 17:08

Instrument ID: Inst. B Calib Start Date: 09/07/2009 10:55

GC Column: Rtx-5ms ID: 0.25(um) Calib End Date: 09/07/2009 15:26

Lab File ID: B10093.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2-Nitroaniline	Lin1		0.3185		4820	5000	-3.7	30.0
Dimethyl phthalate	Ave	1.194	1.235		5170	5000	3.5	30.0
2,6-Dinitrotoluene	Ave	0.2790	0.3130		5610	5000	12.2	30.0
Acenaphthylene	Ave	1.625	1.792		5510	5000	10.3	30.0
3-Nitroaniline	Ave	0.2884	0.3195		5540	5000	10.8	30.0
2,4-Dinitrophenol	Lin		0.0879	0.0500	4570	5000	-8.6	30.0
4-Nitrophenol	Lin2		0.1440	0.0500	4710	5000	-5.8	30.0
Acenaphthene	Ave	1.150	1.223		5320	5000	6.3	20.0
2,4-Dinitrotoluene	Lin1		0.3931		5050	5000	1.0	30.0
Dibenzofuran	Ave	1.501	1.591		5300	5000	6.0	30.0
2,3,4,6-Tetrachlorophenol	Lin1		0.2456		4620	5000	-7.5	30.0
Diethyl phthalate	Ave	1.214	1.300		5360	5000	7.1	30.0
4-Chlorophenyl phenyl ether	Ave	0.5927	0.6117		5160	5000	3.2	30.0
Fluorene	Ave	1.263	1.350		5340	5000	6.9	30.0
4-Nitroaniline	Ave	0.2793	0.3110		5570	5000	11.3	30.0
4,6-Dinitro-2-methylphenol	Lin		0.0868		4530	5000	-9.3	30.0
Diphenylamine	Ave	0.6577	0.7055		5360	5000	7.3	30.0
N-Nitrosodiphenylamine	Ave	0.6577	0.7055		5360	5000	7.3	20.0
1,2-Diphenylhydrazine	Ave	0.7276	0.8135		5590	5000	11.8	30.0
Azobenzene	Ave	0.7276	0.8135		5590	5000	11.8	30.0
Benzophenone	Ave	0.5990	0.6402		5340	5000	6.9	30.0
4-Bromophenyl phenyl ether	Ave	0.1914	0.1890		4940	5000	-1.3	30.0
Atrazine	Ave	0.1896	0.1889		4980	5000	-0.4	30.0
Hexachlorobenzene	Ave	0.1829	0.1828		5000	5000	0.1	30.0
Pentachlorophenol	Lin		0.0880		4470	5000	-10.6	20.0
Pentachloronitrobenzene	Ave	0.0682	0.0754		5520	5000	10.4	30.0
Phenanthrene	Ave	1.057	1.096		5190	5000	3.8	30.0
Anthracene	Ave	0.9924	1.097		5520	5000	10.5	30.0
Carbazole	Ave	0.8861	0.9446		5330	5000	6.6	30.0
Di-n-butyl phthalate	Ave	1.202	1.237		5150	5000	2.9	30.0
Fluoranthene	Ave	0.9854	1.044		5300	5000	6.0	20.0
Benzidine	Ave	0.1292	0.2136		8270	5000	65.4 *	30.0
Pyrene	Ave	1.342	1.348		5020	5000	0.5	30.0
Butyl benzyl phthalate	Ave	0.6248	0.6638		5310	5000	6.2	30.0
Bis(2-ethylhexyl) phthalate	Ave	0.7500	0.8425		5620	5000	12.3	30.0
3,3'-Dichlorobenzidine	Lin2		0.3210		5150	5000	3.0	30.0
Benzo[a]anthracene	Ave	0.9384	0.9522		5070	5000	1.5	30.0
Chrysene	Ave	0.9423	0.9514		5050	5000	1.0	30.0
Di-n-octyl phthalate	Lin1		1.830		5020	5000	0.3	20.0
Benzo[b]fluoranthene	Ave	1.304	1.352		5180	5000	3.7	30.0
Benzo[k]fluoranthene	Ave	1.205	1.229		5100	5000	2.0	30.0

FORM III
GC/MS SEMI VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24223-1

SDG No.: OCRI-03

Matrix: Solid Level: Low Lab File ID: B10108.D

Lab ID: 360-24223-9 MS Client ID: OC-SB-426-5.0/7.0-XXX MS

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	QC LIMITS REC	#
1,1'-Biphenyl	378	ND	221	58	40-140	
1,2,4,5-Tetrachlorobenzene	378	ND	227	60	40-140	
1,2,4-Trichlorobenzene	378	ND	190	50	40-140	
1,2-Dichlorobenzene	378	ND	127	34	40-140	F
1,3-Dichlorobenzene	378	ND	116	31	40-140	F
1,4-Dichlorobenzene	378	ND	164	43	40-140	
1-Methylnaphthalene	378	ND	229	61	40-140	
2,2'-oxybis[1-chloropropane]	378	ND	141	37	40-140	F
2,3,4,6-Tetrachlorophenol	378	ND	189	50	40-140	
2,4,5-Trichlorophenol	378	ND	278	73	30-130	
2,4,6-Trichlorophenol	378	ND	239	63	30-130	
2,4-Dichlorophenol	378	ND	246	65	30-130	
2,4-Dimethylphenol	378	ND	291	77	30-130	
2,4-Dinitrophenol	378	ND	89.8	24	30-130	F
2,4-Dinitrotoluene	378	ND	230	61	40-140	
2,6-Dinitrotoluene	378	ND	243	64	40-140	
2-Chloronaphthalene	378	ND	190	50	40-140	
2-Chlorophenol	378	ND	141	37	30-130	
2-Methylnaphthalene	378	ND	236	62	40-140	
2-Methylphenol	378	ND	167	44	30-130	
2-Nitroaniline	378	ND	241	64	40-140	
2-Nitrophenol	378	ND	213	56	30-130	
3 & 4 Methylphenol	378	ND	170	45	30-130	
3,3'-Dichlorobenzidine	378	ND	242	64	40-140	
3-Nitroaniline	378	ND	257	68	40-140	
4,6-Dinitro-2-methylphenol	378	ND	121 J	32	30-130	
4-Bromophenyl phenyl ether	378	ND	230	61	40-140	
4-Chloro-3-methylphenol	378	ND	287	76	30-130	
4-Chloroaniline	378	ND	202	53	40-140	
4-Chlorophenyl phenyl ether	378	ND	238	63	40-140	
4-Nitroaniline	378	ND	290	77	40-140	
4-Nitrophenol	378	ND	239	63	30-130	
Acenaphthene	378	ND	260	69	40-140	
Acenaphthylene	378	ND	241	64	40-140	
Acetophenone	378	ND	146	39	40-140	F
Aniline	378	ND	110	29	40-140	F
Anthracene	378	ND	292	77	40-140	
Atrazine	378	ND	266	70	40-140	
Azobenzene	378	ND	242	64	40-140	
Benzaldehyde	378	ND	163	43	40-140	
Benzo[a]anthracene	378	ND	303	80	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

1/21/10

FORM III
GC/MS SEMI VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24223-1

SDG No.: OCRI-03

Matrix: Solid Level: Low Lab File ID: B10108.D

Lab ID: 360-24223-9 MS Client ID: OC-SB-426-5.0/7.0-XXX MS

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	QC LIMITS REC	#
Benzo[a]pyrene	378	ND	302	80	40-140	
Benzo[b]fluoranthene	378	ND	272	72	40-140	
Benzo[g,h,i]perylene	378	ND	304	80	40-140	
Benzo[k]fluoranthene	378	ND	302	80	40-140	
Benzoic acid	378	ND	112 J	30	30-130	
Benzophenone	378	ND	241	64	40-140	
Benzyl alcohol	378	ND	232	61	30-130	
Bis(2-chloroethoxy)methane	378	ND	206	55	40-140	
Bis(2-chloroethyl)ether	378	ND	110	29	40-140	F
Bis(2-ethylhexyl) phthalate	378	13 J	300	76	40-140	
Butyl benzyl phthalate	378	ND	252	67	40-140	
Caprolactam	378	ND	233	62	40-140	
Carbazole	378	ND	285	75	40-140	
Chrysene	378	ND	283	75	40-140	
Dibenz(a,h)anthracene	378	ND	289	76	40-140	
Dibenzofuran	378	ND	231	61	40-140	
Diethyl phthalate	378	ND	254	67	40-140	
Dimethyl phthalate	378	ND	247	65	40-140	
Di-n-butyl phthalate	378	ND	271	72	40-140	
Di-n-octyl phthalate	378	ND	280	74	40-140	
Diphenyl oxide	378	ND	232	61	40-140	
Fluoranthene	378	ND	276	73	40-140	
Fluorene	378	ND	279	74	40-140	
Hexachlorobenzene	378	ND	229	61	40-140	
Hexachlorobutadiene	378	ND	195	52	40-140	
Hexachlorocyclopentadiene	378	ND	80.4	21	40-140	F
Hexachloroethane	378	ND	118	31	40-140	F
Indeno[1,2,3-cd]pyrene	378	ND	329	87	40-140	
Isophorone	378	ND	204	54	40-140	
Naphthalene	378	ND	199	53	40-140	
Nitrobenzene	378	ND	209	55	40-140	
N-Nitrosodimethylamine	378	ND	169	45	40-140	
N-Nitrosodi-n-propylamine	378	ND	137	36	40-140	F
N-Nitrosodiphenylamine	378	ND	184	49	40-140	
Pentachlorophenol	378	ND	160	42	30-130	
Phenanthrene	378	ND	280	74	40-140	
Phenol	378	ND	163	43	30-130	
Pyrene	378	ND	265	70	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

1/11/10

FORM III
GC/MS SEMI VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24223-1

SDG No.: OCRI-03

Matrix: Solid Level: Low Lab File ID: B10109.D

Lab ID: 360-24223-9 MSD Client ID: OC-SB-426-5.0/7.0-XXX MSD

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1'-Biphenyl	386	246	64	11	30	40-140	
1,2,4,5-Tetrachlorobenzene	386	258	67	13	30	40-140	
1,2,4-Trichlorobenzene	386	217	56	13	30	40-140	
1,2-Dichlorobenzene	386	176	46	32	30	40-140	F
1,3-Dichlorobenzene	386	109	28	7	30	40-140	F
1,4-Dichlorobenzene	386	204	53	22	30	40-140	
1-Methylnaphthalene	386	245	63	7	30	40-140	
2,2'-oxybis[1-chloropropane]	386	130	34	8	30	40-140	F
2,3,4,6-Tetrachlorophenol	386	200	52	6	30	40-140	
2,4,5-Trichlorophenol	386	283	73	2	30	30-130	
2,4,6-Trichlorophenol	386	278	72	15	30	30-130	
2,4-Dichlorophenol	386	290	75	16	30	30-130	
2,4-Dimethylphenol	386	327	85	12	30	30-130	
2,4-Dinitrophenol	386	95.2	25	6	30	30-130	F
2,4-Dinitrotoluene	386	257	67	11	30	40-140	
2,6-Dinitrotoluene	386	275	71	12	30	40-140	
2-Chloronaphthalene	386	214	55	12	30	40-140	
2-Chlorophenol	386	133	34	6	30	30-130	
2-Methylnaphthalene	386	249	64	5	30	40-140	
2-Methylphenol	386	169	44	1	30	30-130	
2-Nitroaniline	386	272	71	12	30	40-140	
2-Nitrophenol	386	223	58	5	30	30-130	
3 & 4 Methylphenol	386	157	41	8	30	30-130	
3,3'-Dichlorobenzidine	386	272	71	12		40-140	
3-Nitroaniline	386	295	77	14	30	40-140	
4,6-Dinitro-2-methylphenol	386	128 J	33	6	30	30-130	
4-Bromophenyl phenyl ether	386	255	66	10	30	40-140	
4-Chloro-3-methylphenol	386	312	81	8	30	30-130	
4-Chloroaniline	386	220	57	8	30	40-140	
4-Chlorophenyl phenyl ether	386	272	70	13	30	40-140	
4-Nitroaniline	386	346	90	18	30	40-140	
4-Nitrophenol	386	297	77	21	30	30-130	
Acenaphthene	386	288	75	10	30	40-140	
Acenaphthylene	386	267	69	10	30	40-140	
Acetophenone	386	136	35	7	30	40-140	F
Aniline	386	77.5	20	35	30	40-140	F
Anthracene	386	327	85	11	30	40-140	
Atrazine	386	295	76	10	30	40-140	
Azobenzene	386	261	68	8	30	40-140	
Benzaldehyde	386	154	40	5	30	40-140	
Benzo[a]anthracene	386	336	87	10	30	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

1/21/10

FORM III
GC/MS SEMI VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24223-1

SDG No.: OCRI-03

Matrix: Solid Level: Low Lab File ID: B10109.D

Lab ID: 360-24223-9 MSD Client ID: OC-SB-426-5.0/7.0-XXX MSD

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Benzo[a]pyrene	386	323	84	7	30	40-140	
Benzo[b]fluoranthene	386	281	73	3	30	40-140	
Benzo[g,h,i]perylene	386	295	76	3	30	40-140	
Benzo[k]fluoranthene	386	327	85	8	30	40-140	
Benzoic acid	386	150 J	39	29	30	30-130	
Benzophenone	386	268	70	11	30	40-140	
Benzyl alcohol	386	97.8	25	81	30	30-130	F
Bis(2-chloroethoxy)methane	386	234	61	12	30	40-140	
Bis(2-chloroethyl)ether	386	112	29	2	30	40-140	F
Bis(2-ethylhexyl) phthalate	386	325	81	8	30	40-140	
Butyl benzyl phthalate	386	274	71	8	30	40-140	
Caprolactam	386	265	69	13	30	40-140	
Carbazole	386	312	81	9	30	40-140	
Chrysene	386	316	82	11	30	40-140	
Dibenz(a,h)anthracene	386	284	73	2	30	40-140	
Dibenzofuran	386	264	68	13	30	40-140	
Diethyl phthalate	386	284	73	11	30	40-140	
Dimethyl phthalate	386	271	70	9	30	40-140	
Di-n-butyl phthalate	386	286	74	5	30	40-140	
Di-n-octyl phthalate	386	295	76	5	30	40-140	
Diphenyl oxide	386	253	66	9	30	40-140	
Fluoranthene	386	306	79	10	30	40-140	
Fluorene	386	322	84	14	30	40-140	
Hexachlorobenzene	386	262	68	13	30	40-140	
Hexachlorobutadiene	386	223	58	13	30	40-140	
Hexachlorocyclopentadiene	386	92.4	24	14	30	40-140	F
Hexachloroethane	386	165	43	33	30	40-140	F
Indeno[1,2,3-cd]pyrene	386	326	84	1	30	40-140	
Isophorone	386	219	57	7	30	40-140	
Naphthalene	386	223	58	11	30	40-140	
Nitrobenzene	386	233	60	11	30	40-140	
N-Nitrosodimethylamine	386	190	49	12	30	40-140	
N-Nitrosodi-n-propylamine	386	139	36	1	30	40-140	F
N-Nitrosodiphenylamine	386	207	54	12	30	40-140	
Pentachlorophenol	386	179	46	11	30	30-130	
Phenanthrene	386	287	74	2	30	40-140	
Phenol	386	154	40	5	30	30-130	
Pyrene	386	285	74	7	30	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

1/21/10

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24223-1

SDG No.: OCRI-03

Matrix: Solid Level: Low Lab File ID: B10095.D

Lab ID: LCS 360-48259/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
1,1'-Biphenyl	333	259	78	40-140	
1,2,4,5-Tetrachlorobenzene	333	266	80	40-140	
1,2,4-Trichlorobenzene	333	278	83	40-140	
1,2-Dichlorobenzene	333	181	54	40-140	
1,3-Dichlorobenzene	333	182	55	40-140	
1,4-Dichlorobenzene	333	174	52	40-140	
1-Methylnaphthalene	333	258	77	40-140	
2,2'-oxybis[1-chloropropane]	333	197	59	40-140	
2,3,4,6-Tetrachlorophenol	333	225	67	40-140	
2,4,5-Trichlorophenol	333	302	91	30-130	
2,4,6-Trichlorophenol	333	319	96	30-130	
2,4-Dichlorophenol	333	302	91	30-130	
2,4-Dimethylphenol	333	349	105	30-130	
2,4-Dinitrophenol	333	145	43	30-130	
2,4-Dinitrotoluene	333	273	82	40-140	
2,6-Dinitrotoluene	333	288	86	40-140	
2-Chloronaphthalene	333	223	67	40-140	
2-Chlorophenol	333	182	55	30-130	
2-Methylnaphthalene	333	281	84	40-140	
2-Methylphenol	333	175	52	30-130	
2-Nitroaniline	333	276	83	40-140	
2-Nitrophenol	333	251	75	30-130	
3 & 4 Methylphenol	333	173	52	30-130	
3,3'-Dichlorobenzidine	333	270	81	40-140	
3-Nitroaniline	333	302	91	40-140	
4,6-Dinitro-2-methylphenol	333	213	64	30-130	
4-Bromophenyl phenyl ether	333	266	80	40-140	
4-Chloro-3-methylphenol	333	321	96	30-130	
4-Chloroaniline	333	233	70	40-140	
4-Chlorophenyl phenyl ether	333	282	85	40-140	
4-Nitroaniline	333	369	111	40-140	
4-Nitrophenol	333	285	85	30-130	
Acenaphthene	333	310	93	40-140	
Acenaphthylene	333	274	82	40-140	
Acetophenone	333	152	46	40-140	
Aniline	333	117	35	40-140	*
Anthracene	333	323	97	40-140	
Atrazine	333	303	91	40-140	
Azobenzene	333	287	86	40-140	
Benzaldehyde	333	206	62	40-140	
Benzo[a]anthracene	333	338	101	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24223-1

SDG No.: OCRI-03

Matrix: Solid Level: Low Lab File ID: B10095.D

Lab ID: LCS 360-48259/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
Benzo[a]pyrene	333	319	96	40-140	
Benzo[b]fluoranthene	333	289	87	40-140	
Benzo[g,h,i]perylene	333	328	99	40-140	
Benzo[k]fluoranthene	333	320	96	40-140	
Benzoic acid	333	86.8	26	30-130	*
Benzophenone	333	287	86	40-140	
Benzyl alcohol	333	169	51	30-130	
Bis(2-chloroethoxy)methane	333	253	76	40-140	
Bis(2-chloroethyl)ether	333	125	37	40-140	*
Bis(2-ethylhexyl) phthalate	333	335	100	40-140	
Butyl benzyl phthalate	333	274	82	40-140	
Caprolactam	333	295	88	40-140	
Carbazole	333	306	92	40-140	
Chrysene	333	313	94	40-140	
Dibenz(a,h)anthracene	333	302	91	40-140	
Dibenzofuran	333	274	82	40-140	
Diethyl phthalate	333	284	85	40-140	
Dimethyl phthalate	333	279	84	40-140	
Di-n-butyl phthalate	333	284	85	40-140	
Di-n-octyl phthalate	333	264	79	40-140	
Diphenyl oxide	333	271	81	40-140	
Fluoranthene	333	312	93	40-140	
Fluorene	333	328	98	40-140	
Hexachlorobenzene	333	269	81	40-140	
Hexachlorobutadiene	333	237	71	40-140	
Hexachlorocyclopentadiene	333	255	77	40-140	
Hexachloroethane	333	165	50	40-140	
Indeno[1,2,3-cd]pyrene	333	348	104	40-140	
Isophorone	333	230	69	40-140	
Naphthalene	333	235	71	40-140	
Nitrobenzene	333	249	75	40-140	
N-Nitrosodimethylamine	333	181	54	40-140	
N-Nitrosodi-n-propylamine	333	150	45	40-140	
N-Nitrosodiphenylamine	333	212	64	40-140	
Pentachlorophenol	333	239	72	30-130	
Phenanthrene	333	312	94	40-140	
Phenol	333	206	62	30-130	
Pyrene	333	287	86	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24223-1

SDG No.: OCRI-03

Matrix: Solid Level: Low Lab File ID: B10096.D

Lab ID: LCSD 360-48259/3-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCSD CONCENTRATION (ug/Kg)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1'-Biphenyl	333	271	81	5	30	40-140	
1,2,4,5-Tetrachlorobenzene	333	270	81	1	30	40-140	
1,2,4-Trichlorobenzene	333	238	71	16	30	40-140	
1,2-Dichlorobenzene	333	227	68	23	30	40-140	
1,3-Dichlorobenzene	333	219	66	19	30	40-140	
1,4-Dichlorobenzene	333	214	64	20	30	40-140	
1-Methylnaphthalene	333	265	80	3	30	40-140	
2,2'-oxybis[1-chloropropane]	333	253	76	25	30	40-140	
2,3,4,6-Tetrachlorophenol	333	239	72	6	30	40-140	
2,4,5-Trichlorophenol	333	316	95	4	30	30-130	
2,4,6-Trichlorophenol	333	306	92	4	30	30-130	
2,4-Dichlorophenol	333	298	89	1	30	30-130	
2,4-Dimethylphenol	333	334	100	4	30	30-130	
2,4-Dinitrophenol	333	189	57	26	30	30-130	
2,4-Dinitrotoluene	333	292	88	7	30	40-140	
2,6-Dinitrotoluene	333	307	92	6	30	40-140	
2-Chloronaphthalene	333	230	69	3	30	40-140	
2-Chlorophenol	333	219	66	19	30	30-130	
2-Methylnaphthalene	333	279	84	1	30	40-140	
2-Methylphenol	333	272	82	43	30	30-130	*
2-Nitroaniline	333	287	86	4	30	40-140	
2-Nitrophenol	333	258	77	3	30	30-130	
3 & 4 Methylphenol	333	244	73	34	30	30-130	*
3,3'-Dichlorobenzidine	333	295	89	9	30	40-140	
3-Nitroaniline	333	312	93	3	30	40-140	
4,6-Dinitro-2-methylphenol	333	263	79	21	30	30-130	
4-Bromophenyl phenyl ether	333	287	86	8	30	40-140	
4-Chloro-3-methylphenol	333	312	93	3	30	30-130	
4-Chloroaniline	333	241	72	3	30	40-140	
4-Chlorophenyl phenyl ether	333	284	85	1	30	40-140	
4-Nitroaniline	333	353	106	4	30	40-140	
4-Nitrophenol	333	315	95	10	30	30-130	
Acenaphthene	333	307	92	1	30	40-140	
Acenaphthylene	333	280	84	2	30	40-140	
Acetophenone	333	229	69	40	30	40-140	*
Aniline	333	127	38	8	30	40-140	*
Anthracene	333	323	97	0	30	40-140	
Atrazine	333	326	98	7	30	40-140	
Azobenzene	333	299	90	4	30	40-140	
Benzaldehyde	333	275	83	29	30	40-140	
Benzo[a]anthracene	333	357	107	6	30	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24223-1

SDG No.: OCRI-03

Matrix: Solid Level: Low Lab File ID: B10096.D

Lab ID: LCSD 360-48259/3-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCSD CONCENTRATION (ug/Kg)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Benzo[a]pyrene	333	338	102	6	30	40-140	
Benzo[b]fluoranthene	333	300	90	4	30	40-140	
Benzo[g,h,i]perylene	333	348	105	6	30	40-140	
Benzo[k]fluoranthene	333	334	100	4	30	40-140	
Benzoic acid	333	96.8	29	11	30	30-130	*
Benzophenone	333	301	90	5	30	40-140	
Benzyl alcohol	333	209	63	21	30	30-130	
Bis(2-chloroethoxy)methane	333	265	79	5	30	40-140	
Bis(2-chloroethyl)ether	333	196	59	45	30	40-140	*
Bis(2-ethylhexyl) phthalate	333	334	100	0	30	40-140	
Butyl benzyl phthalate	333	296	89	8	30	40-140	
Caprolactam	333	288	86	2	30	40-140	
Carbazole	333	319	96	4	30	40-140	
Chrysene	333	333	100	6	30	40-140	
Dibenz(a,h)anthracene	333	325	97	7	30	40-140	
Dibenzofuran	333	281	84	2	30	40-140	
Diethyl phthalate	333	307	92	8	30	40-140	
Dimethyl phthalate	333	292	88	4	30	40-140	
Di-n-butyl phthalate	333	288	86	1	30	40-140	
Di-n-octyl phthalate	333	277	83	5	30	40-140	
Diphenyl oxide	333	268	80	1	30	40-140	
Fluoranthene	333	307	92	2	30	40-140	
Fluorene	333	335	100	2	30	40-140	
Hexachlorobenzene	333	279	84	4	30	40-140	
Hexachlorobutadiene	333	232	70	2	30	40-140	
Hexachlorocyclopentadiene	333	247	74	3	30	40-140	
Hexachloroethane	333	199	60	19	30	40-140	
Indeno[1,2,3-cd]pyrene	333	376	113	8	30	40-140	
Isophorone	333	246	74	6	30	40-140	
Naphthalene	333	243	73	3	30	40-140	
Nitrobenzene	333	264	79	6	30	40-140	
N-Nitrosodimethylamine	333	213	64	17	30	40-140	
N-Nitrosodi-n-propylamine	333	234	70	44	30	40-140	*
N-Nitrosodiphenylamine	333	228	68	7	30	40-140	
Pentachlorophenol	333	268	80	12	30	30-130	
Phenanthrene	333	297	89	5	30	40-140	
Phenol	333	275	83	29	30	30-130	
Pyrene	333	303	91	5	30	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Westfield | Job No.: 360-24223-1

SDG No.: OCRI-03

Client Sample ID: | Lab Sample ID: MB 360-48259/1-A

Matrix: Solid | Lab File ID: B10094.D

Analysis Method: 8270C LL | Date Collected:

Extract. Method: 3546 | Date Extracted: 08/27/2009 12:06

Sample wt/vol: 30.00(g) | Date Analyzed: 09/07/2009 17:42

Con. Extract Vol.: 1.0(mL) | Dilution Factor: 1

Injection Volume: 1.0(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 48659 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
98-86-2	Acetophenone	ND		33	10
62-53-3	Aniline	ND		33	10
120-12-7	Anthracene	ND		33	10
1912-24-9	Atrazine	ND		33	10
103-33-3	Azobenzene	ND		33	10
100-52-7	Benzaldehyde	ND		33	10
56-55-3	Benzo[a]anthracene	ND		33	10
50-32-8	Benzo[a]pyrene	ND		33	10
205-99-2	Benzo[b]fluoranthene	ND		33	10
191-24-2	Benzo[g,h,i]perylene	ND		33	10
207-08-9	Benzo[k]fluoranthene	ND		33	10
65-85-0	Benzoic acid	ND		170	15
119-61-9	Benzophenone	ND		33	10
100-51-6	Benzyl alcohol	ND		67	28
111-91-1	Bis(2-chloroethoxy)methane	ND		33	10
111-44-4	Bis(2-chloroethyl)ether	ND		33	10
117-81-7	Bis(2-ethylhexyl) phthalate	10.4	J	33	10
85-68-7	Butyl benzyl phthalate	ND		33	10
105-60-2	Caprolactam	ND		33	10
86-74-8	Carbazole	ND		33	10
218-01-9	Chrysene	ND		33	10
53-70-3	Dibenz(a,h)anthracene	ND		33	10
132-64-9	Dibenzofuran	ND		33	10
84-66-2	Diethyl phthalate	ND		33	10
131-11-3	Dimethyl phthalate	ND		33	10
84-74-2	Di-n-butyl phthalate	ND		33	29
117-84-0	Di-n-octyl phthalate	ND		33	17
101-84-8	Diphenyl oxide	ND		33	10
122-39-4	Diphenylamine	ND		33	2.0
206-44-0	Fluoranthene	ND		33	10
86-73-7	Fluorene	ND		33	10
118-74-1	Hexachlorobenzene	ND		33	10
87-68-3	Hexachlorobutadiene	ND		33	10
77-47-4	Hexachlorocyclopentadiene	ND		67	10

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Westfield Job No.: 360-24223-1

SDG No.: OCRI-03

Client Sample ID: OC-SB-426-0.0/1.0-XXX Lab Sample ID: 360-24223-7

Matrix: Solid Lab File ID: B10166.D

Analysis Method: 8270C LL Date Collected: 08/19/2009 14:15

Extract. Method: 3546 Date Extracted: 08/27/2009 12:06

Sample wt/vol: 30.04(g) Date Analyzed: 09/10/2009 07:32

Con. Extract Vol.: 1.0(mL) Dilution Factor: 2

Injection Volume: 1.0(uL) Level: (low/med) Low

% Moisture: 3.8 GPC Cleanup:(Y/N) N

Analysis Batch No.: 48751 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
78-59-1	Isophorone	ND		69	21
91-20-3	Naphthalene	ND		170	21
98-95-3	Nitrobenzene	ND		69	21
62-75-9	N-Nitrosodimethylamine	ND		69	21
621-64-7	N-Nitrosodi-n-propylamine	ND	*	69	21
86-30-6	N-Nitrosodiphenylamine	55	J	69	21
87-86-5	Pentachlorophenol	ND		69	21
85-01-8	Phenanthrene	ND		83	21
108-95-2	Phenol	ND		69	21
129-00-0	Pyrene	ND		69	21

CAS NO.	SURROGATE	%REC	LIMITS	Q
118-79-6	2,4,6-Tribromophenol	76	30-130	
367-12-4	2-Fluorophenol	94	30-130	
321-60-8	2-Fluorobiphenyl	70	30-130	
4165-60-0	Nitrobenzene-d5	73	30-130	
4165-62-2	Phenol-d5	83	30-130	
1718-51-0	Terphenyl-d14	82	30-130	

ccld @ 1/20/10

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Westfield | Job No.: 360-24223-1

SDG No.: OCRI-03

Client Sample ID: OC-SB-426-0.0/1.0-XXX | Lab Sample ID: 360-24223-7

Matrix: Solid | Lab File ID: B10180.D

Analysis Method: 8270C LL | Date Collected: 08/19/2009 14:15

Extract. Method: 3546 | Date Extracted: 08/27/2009 12:06

Sample wt/vol: 30.04(g) | Date Analyzed: 09/10/2009 15:26

Con. Extract Vol.: 1.0(mL) | Dilution Factor: 2

Injection Volume: 1.0(uL) | Level: (low/med) Low

% Moisture: 3.8 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 48766 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
122-39-4	Diphenylamine	6.1	J	69	4.2

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1/11/10

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Westfield | Job No.: 360-24223-1

SDG No.: OCRI-03

Client Sample ID: OC-SB-426-0.0/1.0-XXX DL2 | Lab Sample ID: 360-24223-7 DL2

Matrix: Solid | Lab File ID:

Analysis Method: 8270C LL | Date Collected: 08/19/2009 14:15

Extract. Method: 3546 | Date Extracted: 08/27/2009 12:06

Sample wt/vol: 30.04(g) | Date Analyzed: 09/10/2009 15:26

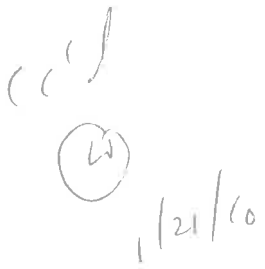
Con. Extract Vol.: 1.0(mL) | Dilution Factor: 2

Injection Volume: 1.0(uL) | Level: (low/med) Low

% Moisture: 3.8 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 48889 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
86-30-6	N-Nitrosodiphenylamine	ND		69	21



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Westfield | Job No.: 360-24223-1

SDG No.: OCRI-03

Client Sample ID: OC-SB-426-0.0/1.0-XXX | Lab Sample ID: 360-24223-7

Matrix: Solid | Lab File ID: J02820.D

Analysis Method: 8270C LL | Date Collected: 08/19/2009 14:15

Extract. Method: 3550B | Date Extracted: 08/31/2009 12:06

Sample wt/vol: 100.37(g) | Date Analyzed: 09/02/2009 10:51

Con. Extract Vol.: 2.0(mL) | Dilution Factor: 5

Injection Volume: 1.0(uL) | Level: (low/med) Low

% Moisture: 3.8 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 48456 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
62-75-9	N-Nitrosodimethylamine	ND		52	12

CAS NO.	SURROGATE	%REC	LIMITS	Q
118-79-6	2,4,6-Tribromophenol	45	30-130	
321-60-8	2-Fluorobiphenyl	66	30-130	
367-12-4	2-Fluorophenol	54	30-130	
4165-60-0	Nitrobenzene-d5	35	30-130	
4165-62-2	Phenol-d5	41	30-130	
1718-51-0	Terphenyl-d14	95	30-130	

cc'd

1/20/10

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Westfield | Job No.: 360-24223-1

SDG No.: OCRI-03

Client Sample ID: OC-SB-426-0.0/1.0-XXX DL | Lab Sample ID: 360-24223-7 DL

Matrix: Solid | Lab File ID: B10167.D

Analysis Method: 8270C LL | Date Collected: 08/19/2009 14:15

Extract. Method: 3546 | Date Extracted: 08/27/2009 12:06

Sample wt/vol: 30.04(g) | Date Analyzed: 09/10/2009 08:06

Con. Extract Vol.: 1.0(mL) | Dilution Factor: 20

Injection Volume: 1.0(uL) | Level: (low/med) Low

% Moisture: 3.8 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 48751 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
117-81-7	Bis(2-ethylhexyl) phthalate	8300	B	690	210

CAS NO.	SURROGATE	%REC	LIMITS	Q
118-79-6	2,4,6-Tribromophenol	0	30-130	D X
367-12-4	2-Fluorophenol	0	30-130	D X
321-60-8	2-Fluorobiphenyl	0	30-130	D X
4165-60-0	Nitrobenzene-d5	0	30-130	D X
4165-62-2	Phenol-d5	0	30-130	D X
1718-51-0	Terphenyl-d14	0	30-130	D X

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(2)
1/21/10

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Westfield | Job No.: 360-24223-1

SDG No.: OCRI-03

Client Sample ID: OC-SB-436-0.0/1.0-XXX | Lab Sample ID: 360-24223-13

Matrix: Solid | Lab File ID: B10165.D

Analysis Method: 8270C LL | Date Collected: 08/20/2009 13:05

Extract. Method: 3546 | Date Extracted: 08/27/2009 12:06

Sample wt/vol: 30.15(g) | Date Analyzed: 09/10/2009 06:58

Con. Extract Vol.: 1.0(mL) | Dilution Factor: 1

Injection Volume: 1.0(uL) | Level: (low/med) Low

% Moisture: 5.4 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 48751 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
98-86-2	Acetophenone	11	J *	35	11
62-53-3	Aniline	ND	*	35	11
120-12-7	Anthracene	ND		35	11
1912-24-9	Atrazine	ND		35	11
103-33-3	Azobenzene	ND		35	11
100-52-7	Benzaldehyde	ND		35	11
56-55-3	Benzo[a]anthracene	35	J	35	11
50-32-8	Benzo[a]pyrene	69		35	11
205-99-2	Benzo[b]fluoranthene	36		35	11
191-24-2	Benzo[g,h,i]perylene	23	J	35	11
207-08-9	Benzo[k]fluoranthene	38		35	11
65-85-0	Benzoic acid	ND	*	180	16
119-61-9	Benzophenone	ND		35	11
100-51-6	Benzyl alcohol	ND		70	30
111-91-1	Bis(2-chloroethoxy)methane	ND		35	11
111-44-4	Bis(2-chloroethyl)ether	ND	*	35	11
117-81-7	Bis(2-ethylhexyl) phthalate	160	B	35	11
85-68-7	Butyl benzyl phthalate	ND		35	11
105-60-2	Caprolactam	ND		35	11
86-74-8	Carbazole	ND		35	11
218-01-9	Chrysene	38		35	11
53-70-3	Dibenz(a,h)anthracene	ND		35	11
132-64-9	Dibenzofuran	ND		35	11
84-66-2	Diethyl phthalate	ND		35	11
131-11-3	Dimethyl phthalate	ND		35	11
84-74-2	Di-n-butyl phthalate	ND		35	31
117-84-0	Di-n-octyl phthalate	ND		35	18
101-84-8	Diphenyl oxide	ND		35	11
206-44-0	Fluoranthene	51		35	11
86-73-7	Fluorene	ND		35	11
118-74-1	Hexachlorobenzene	ND		35	11
87-68-3	Hexachlorobutadiene	ND		35	11
77-47-4	Hexachlorocyclopentadiene	ND		70	11
67-72-1	Hexachloroethane	ND		35	11

rcld (JJ) 9/21/09

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Westfield | Job No.: 360-24223-1

SDG No.: OCRI-03

Client Sample ID: OC-SB-436-0.0/1.0-XXX | Lab Sample ID: 360-24223-13

Matrix: Solid | Lab File ID: B10165.D

Analysis Method: 8270C LL | Date Collected: 08/20/2009 13:05

Extract. Method: 3546 | Date Extracted: 08/27/2009 12:06

Sample wt/vol: 30.15(g) | Date Analyzed: 09/10/2009 06:58

Con. Extract Vol.: 1.0(mL) | Dilution Factor: 1

Injection Volume: 1.0(uL) | Level: (low/med) Low

% Moisture: 5.4 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 48751 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
193-39-5	Indeno[1,2,3-cd]pyrene	20	J	35	11
78-59-1	Isophorone	ND		35	11
91-20-3	Naphthalene	ND		84	11
98-95-3	Nitrobenzene	ND		35	11
62-75-9	N-Nitrosodimethylamine	ND		35	11
621-64-7	N-Nitrosodi-n-propylamine	ND	*	35	11
86-30-6	N-Nitrosodiphenylamine	ND		35	11
87-86-5	Pentachlorophenol	ND		35	11
85-01-8	Phenanthrene	21	J	42	11
108-95-2	Phenol	ND		35	11
129-00-0	Pyrene	65		35	11

CAS NO.	SURROGATE	%REC	LIMITS	Q
118-79-6	2,4,6-Tribromophenol	62	30-130	
321-60-8	2-Fluorobiphenyl	59	30-130	
367-12-4	2-Fluorophenol	78	30-130	
4165-60-0	Nitrobenzene-d5	59	30-130	
4165-62-2	Phenol-d5	69	30-130	
1718-51-0	Terphenyl-d14	67	30-130	

1/21/10

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Westfield Job No.: 360-24223-2

SDG No.: OCRI-03A

Client Sample ID: OC-SB-419-17/19-XXX Lab Sample ID: 360-24223-5

Matrix: Solid Lab File ID: B10099.D

Analysis Method: 8270C LL Date Collected: 08/19/2009 16:40

Extract. Method: 3546 Date Extracted: 08/27/2009 12:06

Sample wt/vol: 30.24(g) Date Analyzed: 09/07/2009 20:33

Con. Extract Vol.: 1.0(mL) Dilution Factor: 1

Injection Volume: 1.0(uL) Level: (low/med) Low

% Moisture: 7.8 GPC Cleanup:(Y/N) N

Analysis Batch No.: 48659 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
98-86-2	Acetophenone	7.3	J *	36	3.9
62-53-3	Aniline	ND	*	36	19
120-12-7	Anthracene	ND		36	11
1912-24-9	Atrazine	ND		36	11
103-33-3	Azobenzene	ND		36	4.5
100-52-7	Benzaldehyde	ND		36	11
56-55-3	Benzo[a]anthracene	ND		36	6.9
50-32-8	Benzo[a]pyrene	ND		36	6.6
205-99-2	Benzo[b]fluoranthene	ND		36	8.2
191-24-2	Benzo[g,h,i]perylene	ND		36	7.0
207-08-9	Benzo[k]fluoranthene	ND		36	9.9
65-85-0	Benzoic acid	ND	*	180	15
119-61-9	Benzophenone	ND		36	2.2
100-51-6	Benzyl alcohol	ND		72	8.3
111-91-1	Bis(2-chloroethoxy)methane	ND		36	6.4
111-44-4	Bis(2-chloroethyl)ether	ND	*	36	8.7
117-81-7	Bis(2-ethylhexyl) phthalate	ND		36	11
85-68-7	Butyl benzyl phthalate	ND		36	7.8
105-60-2	Caprolactam	ND		36	11
86-74-8	Carbazole	ND		36	36
218-01-9	Chrysene	ND		36	7.7
53-70-3	Dibenz(a,h)anthracene	ND		36	7.2
132-64-9	Dibenzofuran	ND		36	21
84-66-2	Diethyl phthalate	ND		36	5.1
131-11-3	Dimethyl phthalate	ND		36	5.3
84-74-2	Di-n-butyl phthalate	ND		36	11
117-84-0	Di-n-octyl phthalate	ND		36	10
101-84-8	Diphenyl oxide	ND		36	11
206-44-0	Fluoranthene	ND		36	23
86-73-7	Fluorene	ND		36	14
118-74-1	Hexachlorobenzene	ND		36	8.5
87-68-3	Hexachlorobutadiene	ND		36	7.1
77-47-4	Hexachlorocyclopentadiene	ND		72	9.8
67-72-1	Hexachloroethane	ND		36	6.8

CCD 1/21/10

Cover sheet ✓

SEMIVOLATILE ORGANICS

REGION I VALIDATION CHECKLIST for
OLIN CHEMICAL SUPERFUND SITE
Criteria and Qualifications: REGION I Organics Guideline (1996)

TIER I / (II) / III (circle one)

SITE: Olin Chemical Superfund Site Project #: 6107100016.12 SDG #: OCRI-04/04A

LAB #: TAL-Westfield

Sample IDs: Attach tracking sheet and/or sample listing.

This checklist is designed to be used with USEPA Region I Validation Guidelines Part II (12/1996). During Level III validation, calculation and transcription checks are completed for instrument tuning, surrogates, target compounds, spike recoveries, calibration data, and internal standards as specified in the guideline. These checks are documented on attached validation notes.

YES NO NA	
Data completeness ☑ ☐ ☐ All data summaries, QC forms and raw data available from hard copy or electronic data package ☑ ☐ ☐ Data summaries match EDD	Contact lab if missing data. Lab to respond with 24 hours.
Holding Times and Preservation ☑ ☐ ☐ Hold times met (Waters – Extract within 7 days, analyze within 40 days. Soils – extract within 14 days, analyze within 40 days)	
Instrument Performance Check (Tune) ☑ ☐ ☐ Tune available for each 12-hour period samples were analyzed ☑ ☐ ☐ Appropriate number of significant figures reported (at least 2) ☑ ☐ ☐ Mass/Charge list (m/z) criteria met	
Initial Calibration ☑ ☐ ☐ %RSD less than or equal to 30% ☐ ☒ ☐ RRF greater than or equal to 0.05	See below.
Continuing Calibration ☑ ☐ ☐ %D less than or equal to 25% ☐ ☒ ☐ RRF greater than or equal to 0.05.	See below.
Blank Contamination ☒ ☐ ☐ Method blank contamination ☒ ☐ ☐ Equipment/Rinseate blank contamination	Evaluate all blanks for contamination. Highest contaminant level used for action level. See below.
Surrogate Recoveries	

SEMIVOLATILE ORGANICS

REGION I VALIDATION CHECKLIST for
OLIN CHEMICAL SUPERFUND SITE
Criteria and Qualifications: REGION I Organics Guideline (1996)

TIER I (II) / III (circle one)

☐ ☒ ☐ Surrogates percent recovery criteria met: Soil = (base/neutral 30%-130%, acid 30%-130%) Water = (base/neutral 30%-130%, acid 15%-110%)	See below.
Matrix Spikes and Laboratory Control Samples ☐ ☒ ☐ MS/MSD percent recovery criteria met Soil and Water = (base/neutral 40%-140%, acid 30%-130%) ☑ ☐ ☐ MS/MSD RPD criteria met (soils <50%, water <30%) ☐ ☐ ☑ LCS percent recovery criteria met soil/water (base 40%-140%, acid 30%-130%)	See below.
Field Duplicates ☑ ☐ ☐ RPD criteria met (soils <50%, water <30%)	
Internal Standard ☐ ☒ ☐ Area counts within -50 to +100 percent of calib. std. ☑ ☐ ☐ Retention Time within 30 seconds of calib. std.	See below.
Target Compounds ☑ ☐ ☐ Reviewed narrative for anomalies	
Tentatively Identified Compounds (TICs) ☐ ☑ ☐ TCL compounds reported as TICs	

Validator's Signature: _____

Date: 1/29/10

Reference:

MACTEC, Quality Assurance Project Plan for Remedial Investigation/Feasibility Study – Olin Chemical Superfund Site, Wilmington Property, 51 Eames Street, Wilmington, MA", MACTEC Engineering and Consulting. Draft .October 2008.

SAMPLE SUMMARY

Client: Olin Corporation

Job Number: 360-24244-1
Sdg Number: OCRI-04

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
360-24244-1	OC-SB-432-0.0/1.0-XXX	Solid	08/20/2009 1435	08/21/2009 1725
360-24244-2	OC-SB-432-14/16-XXX	Solid	08/20/2009 1515	08/21/2009 1725
360-24244-3	OC-SB-432-5.0/7.0-XXX	Solid	08/20/2009 1441	08/21/2009 1725
360-24244-4	OC-SB-443-0.0/1.0-XXX	Solid	08/20/2009 1635	08/21/2009 1725
360-24244-5	OC-SB-443-18/20-XXX	Solid	08/20/2009 1720	08/21/2009 1725
360-24244-6	OC-SB-443-6.0/8.0-XXX	Solid	08/20/2009 1640	08/21/2009 1725
360-24244-7	OC-SB-445-0.0/1.0-XXX	Solid	08/21/2009 0900	08/21/2009 1725
360-24244-8	OC-SB-445-25/27-XXX	Solid	08/21/2009 1015	08/21/2009 1725
360-24244-9	OC-SB-445-8.0/10-XXX	Solid	08/21/2009 0910	08/21/2009 1725
360-24244-10	OC-SB-437-0.0/1.0-XXX	Solid	08/21/2009 1230	08/21/2009 1725
360-24244-11	OC-SB-437-21/23-XXX	Solid	08/21/2009 1310	08/21/2009 1725
360-24244-12	OC-SB-437-5.0/7.0-XXX	Solid	08/21/2009 1240	08/21/2009 1725
360-24244-13TB	OC-TBK-005	Solid	08/21/2009 1435	08/21/2009 1725
360-24244-14EB	OC-EBK-003	Water	08/21/2009 0715	08/21/2009 1725

Tom Tisdell
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Client: Olin Corporation

Job Number: 360-24244-1
Sdg Number: OCRI-04

Client Sample ID: **OC-SB-432-0.0/1.0-XXX**

Lab Sample ID: 360-24244-1
Client Matrix: Solid
% Moisture: 6.6

Date Sampled: 08/20/2009 1435
Date Received: 08/21/2009 1725

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48456		Instrument ID:	Inst. J
Preparation:	3550B	Prep Batch: 360-48381		Lab File ID:	J02826.D
Dilution:	5.0			Initial Weight/Volume:	100.24 g
Date Analyzed:	09/02/2009 1351			Final Weight/Volume:	2.0 mL
Date Prepared:	08/31/2009 1206			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodimethylamine		ND		12	53

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	0	X	30 - 130
2-Fluorobiphenyl	42		30 - 130
2-Fluorophenol	15	X	30 - 130
Nitrobenzene-d5	15	X	30 - 130
Phenol-d5	28	X	30 - 130
Terphenyl-d14	36		30 - 130

Client: Olin Corporation

Job Number: 360-24244-1
Sdg Number: OCRI-04

Client Sample ID: **OC-SB-432-0.0/1.0-XXX**

Lab Sample ID: 360-24244-1
Client Matrix: Solid
% Moisture: 6.6

Date Sampled: 08/20/2009 1435
Date Received: 08/21/2009 1725

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48848		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48119		Lab File ID:	B10217.D
Dilution:	1.0			Initial Weight/Volume:	30.76 g
Date Analyzed:	09/12/2009 0559	Run Type: DL		Final Weight/Volume:	1.0 mL
Date Prepared:	08/25/2009 1123			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Diphenylamine		66		10	35

Client: Olin Corporation

Job Number: 360-24244-1
Sdg Number: OCRI-04

Client Sample ID: **OC-SB-432-0.0/1.0-XXX**

Lab Sample ID: 360-24244-1
Client Matrix: Solid % Moisture: 6.6

Date Sampled: 08/20/2009 1435
Date Received: 08/21/2009 1725

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48845		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48119		Lab File ID:	B10196.D
Dilution:	10			Initial Weight/Volume:	30.76 g
Date Analyzed:	09/11/2009 1804			Final Weight/Volume:	1.0 mL
Date Prepared:	08/25/2009 1123			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		100	350
1,2,4,5-Tetrachlorobenzene		ND		100	350
1,2,4-Trichlorobenzene		ND		100	350
1,2-Dichlorobenzene		ND		100	350
1,3-Dichlorobenzene		ND		100	350
1,4-Dichlorobenzene		ND		100	350
1-Methylnaphthalene		ND		100	350
2,2'-oxybis[1-chloropropane]		ND		100	350
2,3,4,6-Tetrachlorophenol		ND		100	350
2,4,5-Trichlorophenol		ND		100	350
2,4,6-Trichlorophenol		ND		100	350
2,4-Dichlorophenol		ND		100	350
2,4-Dimethylphenol		ND		140	350
2,4-Dinitrophenol		ND		100	350
2,4-Dinitrotoluene		ND		100	350
2,6-Dinitrotoluene		ND		100	350
2-Chloronaphthalene		ND		100	350
2-Chlorophenol		ND		100	350
2-Methylnaphthalene		ND		100	350
2-Methylphenol		ND		210	350
2-Nitroaniline		ND		100	1700
2-Nitrophenol		ND		100	350
3 & 4 Methylphenol		ND		100	350
3,3'-Dichlorobenzidine		ND		100	700
3-Nitroaniline		ND		100	1700
4,6-Dinitro-2-methylphenol		ND		100	1700
4-Bromophenyl phenyl ether		ND		100	350
4-Chloro-3-methylphenol		ND		100	700
4-Chloroaniline		ND		100	700
4-Chlorophenyl phenyl ether		ND		100	350
4-Nitroaniline		ND		100	1700
4-Nitrophenol		ND		100	1700
Acenaphthene		ND		100	350
Acenaphthylene		ND		100	350
Acetophenone		ND		100	350
Aniline		ND		100	350
Anthracene		ND		100	350
Atrazine		ND		100	350
Azobenzene		ND		100	350
Benzaldehyde		ND		100	350
Benzo[a]anthracene		ND		100	350
Benzo[a]pyrene		ND		100	350
Benzo[b]fluoranthene		ND		100	350
Benzo[g,h,i]perylene		ND		100	350
Benzo[k]fluoranthene		ND		100	350
~~Benzoic acid~~ STET		~~ND~~ R		160	1700

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Client: Olin Corporation

Job Number: 360-24244-1
Sdg Number: OCRI-04

Client Sample ID: **OC-SB-432-0.0/1.0-XXX**

Lab Sample ID: 360-24244-1
Client Matrix: Solid
% Moisture: 6.6

Date Sampled: 08/20/2009 1435
Date Received: 08/21/2009 1725

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48845		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48119		Lab File ID:	B10196.D
Dilution:	10			Initial Weight/Volume:	30.76 g
Date Analyzed:	09/11/2009 1804			Final Weight/Volume:	1.0 mL
Date Prepared:	08/25/2009 1123			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		100	350
Benzyl alcohol		ND		300	700
Bis(2-chloroethoxy)methane		ND		100	350
Bis(2-chloroethyl)ether		ND		100	350
Bis(2-ethylhexyl) phthalate		6600 EB		100	350
Butyl benzyl phthalate		ND		100	350
Caprolactam		ND		100	350
Carbazole		ND		100	350
Chrysene		ND		100	350
Dibenz(a,h)anthracene		ND		100	350
Dibenzofuran		ND		100	350
Diethyl phthalate		ND		100	350
Dimethyl phthalate		ND		100	350
Di-n-butyl phthalate		ND		310	350
Di-n-octyl phthalate		ND		180	350
Diphenyl oxide		ND		100	350
Diphenylamine		ND		100	350
Fluoranthene		ND		100	350
Fluorene		ND		100	350
Hexachlorobenzene		ND		100	350
Hexachlorobutadiene		ND		100	350
Hexachlorocyclopentadiene		ND		100	700
Hexachloroethane		ND		100	350
Indeno[1,2,3-cd]pyrene		ND		100	350
Isophorone		ND		100	350
Naphthalene		ND		100	840
Nitrobenzene		ND		100	350
N-Nitrosodimethylamine		ND		120	350
N-Nitrosodi-n-propylamine		ND		100	350
N-Nitrosodiphenylamine		ND		100	350
Pentachlorophenol		ND		100	350
Phenanthrene		ND		100	420
Phenol		260	J	100	350
Pyrene		ND		100	350

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	18	X	30 - 130
2-Fluorophenol	40		30 - 130
2-Fluorobiphenyl	35		30 - 130
Nitrobenzene-d5	38		30 - 130
Phenol-d5	44		30 - 130
Terphenyl-d14	41		30 - 130

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Client: Olin Corporation

Job Number: 360-24244-1
Sdg Number: OCRI-04

Client Sample ID: **OC-SB-432-0.0/1.0-XXX**

Lab Sample ID: 360-24244-1
Client Matrix: Solid % Moisture: 6.6

Date Sampled: 08/20/2009 1435
Date Received: 08/21/2009 1725

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48845		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48119		Lab File ID:	B10196.D
Dilution:	10			Initial Weight/Volume:	30.76 g
Date Analyzed:	09/11/2009 1804			Final Weight/Volume:	1.0 mL
Date Prepared:	08/25/2009 1123			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** **10**

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Unknown	5.92	26000	T J
	Unknown	10.73	2500	T J
	Unknown	10.84	5500	T J
	Unknown	10.90	3600	T J
	Unknown	11.04	3200	T J
	Unknown	11.53	16000	T J
	Unknown	11.56	10000	T J
	Unknown	11.58	13000	T J
	Unknown	11.62	11000	T J
	Unknown	11.72	6800	T J

Client: Olin Corporation

Job Number: 360-24244-1
Sdg Number: OCRI-04

Client Sample ID: **OC-SB-432-14/16-XXX**

Lab Sample ID: 360-24244-2
Client Matrix: Solid % Moisture: 8.7

Date Sampled: 08/20/2009 1515
Date Received: 08/21/2009 1725

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48456		Instrument ID:	Inst. J
Preparation:	3550B	Prep Batch: 360-48381		Lab File ID:	J02827.D
Dilution:	5.0			Initial Weight/Volume:	100.68 g
Date Analyzed:	09/02/2009 1421			Final Weight/Volume:	2.0 mL
Date Prepared:	08/31/2009 1206			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodimethylamine		ND		13	54

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	0	X	30 - 130
2-Fluorobiphenyl	46		30 - 130
2-Fluorophenol	33		30 - 130
Nitrobenzene-d5	8	X	30 - 130
Phenol-d5	45		30 - 130
Terphenyl-d14	173	X	30 - 130

Client: Olin Corporation

Job Number: 360-24244-1
Sdg Number: OCRI-04

Client Sample ID: **OC-SB-432-14/16-XXX**

Lab Sample ID: 360-24244-2
Client Matrix: Solid % Moisture: 8.7

Date Sampled: 08/20/2009 1515
Date Received: 08/21/2009 1725

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48845		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48119		Lab File ID:	B10197.D
Dilution:	10			Initial Weight/Volume:	30.89 g
Date Analyzed:	09/11/2009 1838			Final Weight/Volume:	1.0 mL
Date Prepared:	08/25/2009 1123			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		110	350
1,2,4,5-Tetrachlorobenzene		ND		110	350
1,2,4-Trichlorobenzene		ND		110	350
1,2-Dichlorobenzene		ND		110	350
1,3-Dichlorobenzene		ND		110	350
1,4-Dichlorobenzene		ND		110	350
1-Methylnaphthalene		ND		110	350
2,2'-oxybis[1-chloropropane]		ND		110	350
2,3,4,6-Tetrachlorophenol		ND		110	350
2,4,5-Trichlorophenol		ND		110	350
2,4,6-Trichlorophenol		ND		110	350
2,4-Dichlorophenol		ND		110	350
2,4-Dimethylphenol		ND		140	350
2,4-Dinitrophenol		ND		110	350
2,4-Dinitrotoluene		ND		110	350
2,6-Dinitrotoluene		ND		110	350
2-Chloronaphthalene		ND		110	350
2-Chlorophenol		ND		110	350
2-Methylnaphthalene		ND		110	350
2-Methylphenol		ND		210	350
2-Nitroaniline		ND		110	1800
2-Nitrophenol		ND		110	350
3 & 4 Methylphenol		ND		110	350
3,3'-Dichlorobenzidine		ND		110	710
3-Nitroaniline		ND		110	1800
4,6-Dinitro-2-methylphenol		ND		110	1800
4-Bromophenyl phenyl ether		ND		110	350
4-Chloro-3-methylphenol		ND		110	710
4-Chloroaniline		ND		110	710
4-Chlorophenyl phenyl ether		ND		110	350
4-Nitroaniline		ND		110	1800
4-Nitrophenol		ND		110	1800
Acenaphthene		ND		110	350
Acenaphthylene		ND		110	350
Acetophenone		ND		110	350
Aniline		ND		110	350
Anthracene		ND		110	350
Atrazine		ND		110	350
Azobenzene		ND		110	350
Benzaldehyde		ND		110	350
Benzo[a]anthracene		ND		110	350
Benzo[a]pyrene		ND		110	350
Benzo[b]fluoranthene		ND		110	350
Benzo[g,h,i]perylene		ND		110	350
Benzo[k]fluoranthene		ND		110	350
Benzoic acid		~~ND~~ R		160	1800

Client: Olin Corporation

Job Number: 360-24244-1
Sdg Number: OCRI-04

Client Sample ID: **OC-SB-432-14/16-XXX**

Lab Sample ID: 360-24244-2
Client Matrix: Solid % Moisture: 8.7

Date Sampled: 08/20/2009 1515
Date Received: 08/21/2009 1725

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48845		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48119		Lab File ID:	B10197.D
Dilution:	10			Initial Weight/Volume:	30.89 g
Date Analyzed:	09/11/2009 1838			Final Weight/Volume:	1.0 mL
Date Prepared:	08/25/2009 1123			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		110	350
Benzyl alcohol		ND		300	710
Bis(2-chloroethoxy)methane		ND		110	350
Bis(2-chloroethyl)ether		ND		110	350
Butyl benzyl phthalate		ND		110	350
Caprolactam		ND		110	350
Carbazole		ND		110	350
Chrysene		ND		110	350
Dibenz(a,h)anthracene		ND		110	350
Dibenzofuran		ND		110	350
Diethyl phthalate		ND		110	350
Dimethyl phthalate		ND		110	350
Di-n-butyl phthalate		ND		310	350
Di-n-octyl phthalate		ND		180	350
Diphenyl oxide		ND		110	350
Diphenylamine		ND		110	350
Fluoranthene		ND		110	350
Fluorene		ND		110	350
Hexachlorobenzene		ND		110	350
Hexachlorobutadiene		ND		110	350
Hexachlorocyclopentadiene		ND		110	710
Hexachloroethane		ND		110	350
Indeno[1,2,3-cd]pyrene		ND		110	350
Isophorone		ND		110	350
Naphthalene		ND		110	850
Nitrobenzene		ND		110	350
N-Nitrosodimethylamine		ND		130	350
N-Nitrosodi-n-propylamine		ND		110	350
N-Nitrosodiphenylamine		ND		110	350
Pentachlorophenol		ND		110	350
Phenanthrene		ND		110	430
Phenol		ND		110	350
Pyrene		ND		110	350

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	11	X	30 - 130
2-Fluorophenol	64		30 - 130
2-Fluorobiphenyl	66		30 - 130
Nitrobenzene-d5	69		30 - 130
Phenol-d5	74		30 - 130
Terphenyl-d14	76		30 - 130

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Client: Olin Corporation

Job Number: 360-24244-1
Sdg Number: OCRI-04

Client Sample ID: **OC-SB-432-14/16-XXX**

Lab Sample ID: 360-24244-2
Client Matrix: Solid % Moisture: 8.7

Date Sampled: 08/20/2009 1515
Date Received: 08/21/2009 1725

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48845		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48119		Lab File ID:	B10197.D
Dilution:	10			Initial Weight/Volume:	30.89 g
Date Analyzed:	09/11/2009 1838			Final Weight/Volume:	1.0 mL
Date Prepared:	08/25/2009 1123			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** **10**

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
31081-18-2	Nonane, 3-methyl-5-propyl-	7.57	960	T J N
16747-26-5	Hexane, 2,2,4-trimethyl-	7.70	770	T J N
4346-18-3	Butanoic acid, phenyl ester	9.95	2300	T J N
	Unknown	10.19	2700	T J
1000150-21-6	2,5-Cyclohexadiene, 1,4-diethyl-1,4-dime	10.47	18000	T J N
	Unknown	11.27	700	T J
	Unknown	11.29	1800	T J
	Unknown	11.33	4000	T J
	Unknown	11.46	1200	T J
	Unknown	15.25	18000	T J

Client: Olin Corporation

Job Number: 360-24244-1
Sdg Number: OCRI-04

Client Sample ID: **OC-SB-432-14/16-XXX**

Lab Sample ID: 360-24244-2
Client Matrix: Solid

% Moisture: 8.7

Date Sampled: 08/20/2009 1515
Date Received: 08/21/2009 1725

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48930		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48119		Lab File ID:	B10320.D
Dilution:	1000			Initial Weight/Volume:	30.89 g
Date Analyzed:	09/15/2009 1945	Run Type:	DL2	Final Weight/Volume:	1.0 mL
Date Prepared:	08/25/2009 1123			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Bis(2-ethylhexyl) phthalate		600000 EB		11000	35000

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	0	X DW	30 - 130
2-Fluorophenol	0	X DW	30 - 130
2-Fluorobiphenyl	0	X DW	30 - 130
Nitrobenzene-d5	0	X DW	30 - 130
Phenol-d5	0	X DW	30 - 130
Terphenyl-d14	0	X DW	30 - 130

W.C. 1/28/10

Client: Olin Corporation

Job Number: 360-24244-1
Sdg Number: OCRI-04

Client Sample ID: **OC-SB-432-5.0/7.0-XXX**

Lab Sample ID: 360-24244-3
Client Matrix: Solid % Moisture: 12.3

Date Sampled: 08/20/2009 1441
Date Received: 08/21/2009 1725

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48456		Instrument ID:	Inst. J
Preparation:	3550B	Prep Batch: 360-48381		Lab File ID:	J02828.D
Dilution:	5.0			Initial Weight/Volume:	100.22 g
Date Analyzed:	09/02/2009 1451			Final Weight/Volume:	5.0 mL
Date Prepared:	08/31/2009 1206			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodimethylamine		ND		33	140

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	0	X	30 - 130
2-Fluorobiphenyl	89		30 - 130
2-Fluorophenol	42		30 - 130
Nitrobenzene-d5	29	X	30 - 130
Phenol-d5	28	X	30 - 130
Terphenyl-d14	56		30 - 130

Client: Olin Corporation

Job Number: 360-24244-1
Sdg Number: OCRI-04

Client Sample ID: **OC-SB-432-5.0/7.0-XXX**

Lab Sample ID: 360-24244-3
Client Matrix: Solid % Moisture: 12.3

Date Sampled: 08/20/2009 1441
Date Received: 08/21/2009 1725

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48845		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48119		Lab File ID:	B10200.D
Dilution:	10			Initial Weight/Volume:	30.17 g
Date Analyzed:	09/11/2009 2020			Final Weight/Volume:	1.0 mL
Date Prepared:	08/25/2009 1123			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		110	380
1,2,4,5-Tetrachlorobenzene		ND		110	380
1,2,4-Trichlorobenzene		ND		110	380
1,2-Dichlorobenzene		ND		110	380
1,3-Dichlorobenzene		ND		110	380
1,4-Dichlorobenzene		ND		110	380
1-Methylnaphthalene		ND		110	380
2,2'-oxybis[1-chloropropane]		ND		110	380
2,3,4,6-Tetrachlorophenol		ND		110	380
2,4,5-Trichlorophenol		ND		110	380
2,4,6-Trichlorophenol		ND		110	380
2,4-Dichlorophenol		ND		110	380
2,4-Dimethylphenol		ND		150	380
2,4-Dinitrophenol		ND		110	380
2,4-Dinitrotoluene		ND		110	380
2,6-Dinitrotoluene		ND		110	380
2-Chloronaphthalene		ND		110	380
2-Chlorophenol		ND		110	380
2-Methylnaphthalene		ND		110	380
2-Methylphenol		ND		230	380
2-Nitroaniline		ND		110	1900
2-Nitrophenol		ND		110	380
3 & 4 Methylphenol		ND		110	380
3,3'-Dichlorobenzidine		ND		110	760
3-Nitroaniline		ND		110	1900
4,6-Dinitro-2-methylphenol		ND		110	1900
4-Bromophenyl phenyl ether		ND		110	380
4-Chloro-3-methylphenol		ND		110	760
4-Chloroaniline		ND		110	760
4-Chlorophenyl phenyl ether		ND		110	380
4-Nitroaniline		ND		110	1900
4-Nitrophenol		ND		110	1900
Acenaphthene		ND		110	380
Acenaphthylene		ND		110	380
Acetophenone		ND		110	380
Aniline		ND		110	380
Anthracene		ND		110	380
Atrazine		ND		110	380
Azobenzene		ND		110	380
Benzaldehyde		ND		110	380
Benzo[a]anthracene		ND		110	380
Benzo[a]pyrene		ND		110	380
Benzo[b]fluoranthene		ND		110	380
Benzo[g,h,i]perylene		ND		110	380
Benzo[k]fluoranthene		ND		110	380
Benzoic acid		~~ND~~ R		170	1900

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Client: Olin Corporation

Job Number: 360-24244-1
Sdg Number: OCRI-04

Client Sample ID: **OC-SB-432-5.0/7.0-XXX**

Lab Sample ID: 360-24244-3
Client Matrix: Solid % Moisture: 12.3

Date Sampled: 08/20/2009 1441
Date Received: 08/21/2009 1725

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48845		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48119		Lab File ID:	B10200.D
Dilution:	10			Initial Weight/Volume:	30.17 g
Date Analyzed:	09/11/2009 2020			Final Weight/Volume:	1.0 mL
Date Prepared:	08/25/2009 1123			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		110	380
Benzyl alcohol		ND		320	760
Bis(2-chloroethoxy)methane		ND		110	380
Bis(2-chloroethyl)ether		ND		110	380
Butyl benzyl phthalate		ND		110	380
Caprolactam		ND		110	380
Carbazole		ND		110	380
Chrysene		ND		110	380
Dibenz(a,h)anthracene		ND		110	380
Dibenzofuran		ND		110	380
Diethyl phthalate		ND		110	380
Dimethyl phthalate		ND		110	380
Di-n-butyl phthalate		ND		330	380
Di-n-octyl phthalate		ND		190	380
Diphenyl oxide		ND		110	380
Diphenylamine		ND		110	380
Fluoranthene		ND		110	380
Fluorene		ND		110	380
Hexachlorobenzene		ND		110	380
Hexachlorobutadiene		ND		110	380
Hexachlorocyclopentadiene		ND		110	760
Hexachloroethane		ND		110	380
Indeno[1,2,3-cd]pyrene		ND		110	380
Isophorone		ND		110	380
Naphthalene		ND		110	910
Nitrobenzene		ND		110	380
N-Nitrosodimethylamine		ND		130	380
N-Nitrosodi-n-propylamine		ND		110	380
N-Nitrosodiphenylamine		ND		110	380
Pentachlorophenol		ND		110	380
Phenanthrene		ND		110	450
Phenol		ND		110	380
Pyrene		ND		110	380

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	12	X	30 - 130
2-Fluorophenol	57		30 - 130
2-Fluorobiphenyl	51		30 - 130
Nitrobenzene-d5	52		30 - 130
Phenol-d5	57		30 - 130
Terphenyl-d14	49		30 - 130

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Client: Olin Corporation

Job Number: 360-24244-1
Sdg Number: OCRI-04

Client Sample ID: **OC-SB-432-5.0/7.0-XXX**

Lab Sample ID: 360-24244-3
Client Matrix: Solid % Moisture: 12.3

Date Sampled: 08/20/2009 1441
Date Received: 08/21/2009 1725

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48845		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48119		Lab File ID:	B10200.D
Dilution:	10			Initial Weight/Volume:	30.17 g
Date Analyzed:	09/11/2009 2020			Final Weight/Volume:	1.0 mL
Date Prepared:	08/25/2009 1123			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** **10**

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
17301-30-3	Undecane, 3,8-dimethyl-	7.57	410	T J N
	Unknown	7.65	390	T J
16747-26-5	Hexane, 2,2,4-trimethyl-	7.71	400	T J N
	Unknown	7.74	310	T J
	Unknown	11.39	780	T J
	Unknown	11.63	750	T J
	Unknown	11.83	290	T J
104-40-5	4-Nonylphenol	11.92	220	T J N
140-66-9	Phenol, 4-(1,1,3,3-tetramethylbutyl)-	11.94	470	T J N
140-66-9	Phenol, 4-(1,1,3,3-tetramethylbutyl)-	12.10	590	T J N

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Client: Olin Corporation

Job Number: 360-24244-1
Sdg Number: OCRI-04

Client Sample ID: **OC-SB-432-5.0/7.0-XXX**

Lab Sample ID: 360-24244-3
Client Matrix: Solid
% Moisture: 12.3

Date Sampled: 08/20/2009 1441
Date Received: 08/21/2009 1725

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48845		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48119		Lab File ID:	B10201.D
Dilution:	100			Initial Weight/Volume:	30.17 g
Date Analyzed:	09/11/2009 2055	Run Type: DL		Final Weight/Volume:	1.0 mL
Date Prepared:	08/25/2009 1123			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Bis(2-ethylhexyl) phthalate		39000 E B		1100	3800

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	0	X D	30 - 130
2-Fluorophenol	0	X D	30 - 130
2-Fluorobiphenyl	0	X D	30 - 130
Nitrobenzene-d5	0	X D	30 - 130
Phenol-d5	0	X D	30 - 130
Terphenyl-d14	0	X D	30 - 130

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Client: Olin Corporation

Job Number: 360-24244-1
Sdg Number: OCRI-04

Client Sample ID: **OC-SB-443-0.0/1.0-XXX**

Lab Sample ID: 360-24244-4
Client Matrix: Solid
% Moisture: 3.4

Date Sampled: 08/20/2009 1635
Date Received: 08/21/2009 1725

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48456		Instrument ID:	Inst. J
Preparation:	3550B	Prep Batch: 360-48381		Lab File ID:	J02829.D
Dilution:	1.0			Initial Weight/Volume:	100.17 g
Date Analyzed:	09/02/2009 1521			Final Weight/Volume:	1.0 mL
Date Prepared:	08/31/2009 1206			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodimethylamine		ND		1.2	5.2

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	31		30 - 130
2-Fluorobiphenyl	62		30 - 130
2-Fluorophenol	52		30 - 130
Nitrobenzene-d5	64		30 - 130
Phenol-d5	58		30 - 130
Terphenyl-d14	84		30 - 130

Client: Olin Corporation

Job Number: 360-24244-1
Sdg Number: OCRI-04

Client Sample ID: **OC-SB-443-0.0/1.0-XXX**

Lab Sample ID: 360-24244-4
Client Matrix: Solid % Moisture: 3.4

Date Sampled: 08/20/2009 1635
Date Received: 08/21/2009 1725

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48845		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48119		Lab File ID:	B10203.D
Dilution:	10			Initial Weight/Volume:	30.03 g
Date Analyzed:	09/11/2009 2203			Final Weight/Volume:	1.0 mL
Date Prepared:	08/25/2009 1123			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		100	340
1,2,4,5-Tetrachlorobenzene		ND		100	340
1,2,4-Trichlorobenzene		ND		100	340
1,2-Dichlorobenzene		ND		100	340
1,3-Dichlorobenzene		ND		100	340
1,4-Dichlorobenzene		ND		100	340
1-Methylnaphthalene		ND		100	340
2,2'-oxybis[1-chloropropane]		ND		100	340
2,3,4,6-Tetrachlorophenol		ND	J	100	340
2,4,5-Trichlorophenol		ND		100	340
2,4,6-Trichlorophenol		ND		100	340
2,4-Dichlorophenol		ND		100	340
2,4-Dimethylphenol		ND		140	340
2,4-Dinitrophenol		ND		100	340
2,4-Dinitrotoluene		ND		100	340
2,6-Dinitrotoluene		ND		100	340
2-Chloronaphthalene		ND		100	340
2-Chlorophenol		ND		100	340
2-Methylnaphthalene		ND		100	340
2-Methylphenol		ND		210	340
2-Nitroaniline		ND		100	1700
2-Nitrophenol		ND		100	340
3 & 4 Methylphenol		ND		100	340
3,3'-Dichlorobenzidine		ND	J	100	690
3-Nitroaniline		ND		100	1700
4,6-Dinitro-2-methylphenol		ND		100	1700
4-Bromophenyl phenyl ether		ND		100	340
4-Chloro-3-methylphenol		ND		100	690
4-Chloroaniline		ND		100	690
4-Chlorophenyl phenyl ether		ND		100	340
4-Nitroaniline		ND		100	1700
4-Nitrophenol		ND		100	1700
Acenaphthene		ND		100	340
Acenaphthylene		ND		100	340
Acetophenone		160 EB	J	100	340
Aniline		ND	J	100	340
Anthracene		ND		100	340
Atrazine		ND		100	340
Azobenzene		ND	J	100	340
Benzaldehyde		ND		100	340
Benzo[a]anthracene		ND		100	340
Benzo[a]pyrene		ND		100	340
Benzo[b]fluoranthene		ND		100	340
Benzo[g,h,i]perylene		ND		100	340
Benzo[k]fluoranthene		ND		100	340
Benzoic acid		~~ND~~ R		160	1700

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Client: Olin Corporation

Job Number: 360-24244-1
Sdg Number: OCRI-04

Client Sample ID: **OC-SB-443-0.0/1.0-XXX**

Lab Sample ID: 360-24244-4
Client Matrix: Solid % Moisture: 3.4

Date Sampled: 08/20/2009 1635
Date Received: 08/21/2009 1725

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48845		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48119		Lab File ID:	B10203.D
Dilution:	10			Initial Weight/Volume:	30.03 g
Date Analyzed:	09/11/2009 2203			Final Weight/Volume:	1.0 mL
Date Prepared:	08/25/2009 1123			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		100	340
Benzyl alcohol		ND		290	690
Bis(2-chloroethoxy)methane		ND		100	340
Bis(2-chloroethyl)ether		ND		100	340
Bis(2-ethylhexyl) phthalate		4800 EB		100	340
Butyl benzyl phthalate		ND		100	340
Caprolactam		ND		100	340
Carbazole		ND		100	340
Chrysene		ND		100	340
Dibenz(a,h)anthracene		ND		100	340
Dibenzofuran		ND		100	340
Diethyl phthalate		ND		100	340
Dimethyl phthalate		ND		100	340
Di-n-butyl phthalate		ND		300	340
Di-n-octyl phthalate		ND		170	340
Diphenyl oxide		ND		100	340
Diphenylamine		ND		100	340
Fluoranthene		ND		100	340
Fluorene		ND		100	340
Hexachlorobenzene		ND		100	340
Hexachlorobutadiene		ND		100	340
Hexachlorocyclopentadiene		ND		100	690
Hexachloroethane		ND		100	340
Indeno[1,2,3-cd]pyrene		ND		100	340
Isophorone		ND		100	340
Naphthalene		ND		100	830
Nitrobenzene		ND		100	340
N-Nitrosodimethylamine		ND		120	340
N-Nitrosodi-n-propylamine		ND		100	340
N-Nitrosodiphenylamine		ND		100	340
Pentachlorophenol		ND		100	340
Phenanthrene		ND		100	410
Phenol		ND		100	340
Pyrene		ND		100	340

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	42		30 - 130
2-Fluorophenol	55		30 - 130
2-Fluorobiphenyl	46		30 - 130
Nitrobenzene-d5	44		30 - 130
Phenol-d5	50		30 - 130
Terphenyl-d14	52		30 - 130

Client: Olin Corporation

Job Number: 360-24244-1
Sdg Number: OCRI-04

Client Sample ID: **OC-SB-443-0.0/1.0-XXX**

Lab Sample ID: 360-24244-4
Client Matrix: Solid % Moisture: 3.4

Date Sampled: 08/20/2009 1635
Date Received: 08/21/2009 1725

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48845		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48119		Lab File ID:	B10203.D
Dilution:	10			Initial Weight/Volume:	30.03 g
Date Analyzed:	09/11/2009 2203			Final Weight/Volume:	1.0 mL
Date Prepared:	08/25/2009 1123			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 10

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
615-22-5	Benzothiazole, 2-(methylthio)-	10.01	780	T J N
	Unknown	10.84	2600	T J
	Unknown	10.89	9000	T J
	Unknown	10.92	7800	T J
	Unknown	10.96	5100	T J
	Unknown	10.99	1700	T J
	Unknown	11.03	9300	T J
	Unknown	11.05	6700	T J
22768-22-5	2,4-Diphenyl-4-methyl-2(E)-pentene	11.41	990	T J N
26603-23-6	p,p''-Dioctyldiphenylamine	16.85	5400	T J N

Client: Olin Corporation

Job Number: 360-24244-1
Sdg Number: OCRI-04

Client Sample ID: **OC-SB-443-6.0/8.0-XXX**

Lab Sample ID: 360-24244-6
Client Matrix: Solid
% Moisture: 13.6

Date Sampled: 08/20/2009 1640
Date Received: 08/21/2009 1725

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48845		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48119		Lab File ID:	B10207.D
Dilution:	1.0			Initial Weight/Volume:	30.72 g
Date Analyzed:	09/12/2009 0019			Final Weight/Volume:	1.0 mL
Date Prepared:	08/25/2009 1123			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		11	38
1,2,4,5-Tetrachlorobenzene		ND		11	38
1,2,4-Trichlorobenzene		ND		11	38
1,2-Dichlorobenzene		ND		11	38
1,3-Dichlorobenzene		ND		11	38
1,4-Dichlorobenzene		ND		11	38
1-Methylnaphthalene		ND		11	38
2,2'-oxybis[1-chloropropane]		ND		11	38
2,3,4,6-Tetrachlorophenol		ND		11	38
2,4,5-Trichlorophenol		ND		11	38
2,4,6-Trichlorophenol		ND		11	38
2,4-Dichlorophenol		ND		11	38
2,4-Dimethylphenol		ND		15	38
2,4-Dinitrophenol		ND		11	38
2,4-Dinitrotoluene		ND		11	38
2,6-Dinitrotoluene		ND		11	38
2-Chloronaphthalene		ND		11	38
2-Chlorophenol		ND		11	38
2-Methylnaphthalene		ND		11	38
2-Methylphenol		ND		23	38
2-Nitroaniline		ND		11	190
2-Nitrophenol		ND		11	38
3 & 4 Methylphenol		ND		11	38
3,3'-Dichlorobenzidine		ND		11	75
3-Nitroaniline		ND		11	190
4,6-Dinitro-2-methylphenol		ND		11	190
4-Bromophenyl phenyl ether		ND		11	38
4-Chloro-3-methylphenol		ND		11	75
4-Chloroaniline		ND		11	75
4-Chlorophenyl phenyl ether		ND		11	38
4-Nitroaniline		ND		11	190
4-Nitrophenol		ND		11	190
Acenaphthene		ND		11	38
Acenaphthylene		ND		11	38
Acetophenone		ND		11	38
Aniline		ND		11	38
Anthracene		ND		11	38
Atrazine		ND		11	38
Azobenzene		ND		11	38
Benzaldehyde		ND		11	38
Benzo[a]anthracene		ND		11	38
Benzo[a]pyrene		ND		11	38
Benzo[b]fluoranthene		ND		11	38
Benzo[g,h,i]perylene		ND		11	38
Benzo[k]fluoranthene		ND		11	38
Benzoic acid		ND	R	17	190

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Client: Olin Corporation

Job Number: 360-24244-1
Sdg Number: OCRI-04

Client Sample ID: **OC-SB-443-6.0/8.0-XXX**

Lab Sample ID: 360-24244-6
Client Matrix: Solid % Moisture: 13.6

Date Sampled: 08/20/2009 1640
Date Received: 08/21/2009 1725

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48456		Instrument ID:	Inst. J
Preparation:	3550B	Prep Batch: 360-48381		Lab File ID:	J02838.D
Dilution:	1.0			Initial Weight/Volume:	100.21 g
Date Analyzed:	09/02/2009 2010			Final Weight/Volume:	1.0 mL
Date Prepared:	08/31/2009 1206			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodimethylamine		ND J		1.3	5.8

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	65		30 - 130
2-Fluorobiphenyl	62		30 - 130
2-Fluorophenol	69		30 - 130
Nitrobenzene-d5	71		30 - 130
Phenol-d5	73		30 - 130
Terphenyl-d14	79		30 - 130

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Client: Olin Corporation

Job Number: 360-24244-1
Sdg Number: OCRI-04

Client Sample ID: **OC-SB-443-6.0/8.0-XXX**

Lab Sample ID: 360-24244-6
Client Matrix: Solid % Moisture: 13.6

Date Sampled: 08/20/2009 1640
Date Received: 08/21/2009 1725

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48845		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48119		Lab File ID:	B10207.D
Dilution:	1.0			Initial Weight/Volume:	30.72 g
Date Analyzed:	09/12/2009 0019			Final Weight/Volume:	1.0 mL
Date Prepared:	08/25/2009 1123			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		11	38
Benzyl alcohol		ND		32	75
Bis(2-chloroethoxy)methane		ND		11	38
Bis(2-chloroethyl)ether		ND		11	38
Bis(2-ethylhexyl) phthalate		ND		11	38
Butyl benzyl phthalate		ND		11	38
Caprolactam		ND		11	38
Carbazole		ND		11	38
Chrysene		ND		11	38
Dibenz(a,h)anthracene		ND		11	38
Dibenzofuran		ND		11	38
Diethyl phthalate		ND		11	38
Dimethyl phthalate		ND		11	38
Di-n-butyl phthalate		ND		33	38
Di-n-octyl phthalate		ND		19	38
Diphenyl oxide		ND		11	38
Diphenylamine		ND		11	38
Fluoranthene		ND		11	38
Fluorene		ND		11	38
Hexachlorobenzene		ND		11	38
Hexachlorobutadiene		ND		11	38
Hexachlorocyclopentadiene		ND		11	75
Hexachloroethane		ND		11	38
Indeno[1,2,3-cd]pyrene		ND		11	38
Isophorone		ND		11	38
Naphthalene		ND		11	90
Nitrobenzene		ND		11	38
N-Nitrosodimethylamine		ND		13	38
N-Nitrosodi-n-propylamine		ND		11	38
N-Nitrosodiphenylamine		ND		11	38
Pentachlorophenol		ND		11	38
Phenanthrene		ND		11	45
Phenol		ND		11	38
Pyrene		ND		11	38

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	49		30 - 130
2-Fluorophenol	71		30 - 130
2-Fluorobiphenyl	56		30 - 130
Nitrobenzene-d5	56		30 - 130
Phenol-d5	68		30 - 130
Terphenyl-d14	48		30 - 130

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Client: Olin Corporation

Job Number: 360-24244-1
Sdg Number: OCRI-04

Client Sample ID: **OC-SB-443-6.0/8.0-XXX**

Lab Sample ID: 360-24244-6
Client Matrix: Solid % Moisture: 13.6

Date Sampled: 08/20/2009 1640
Date Received: 08/21/2009 1725

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48845		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48119		Lab File ID:	B10207.D
Dilution:	1.0			Initial Weight/Volume:	30.72 g
Date Analyzed:	09/12/2009 0019			Final Weight/Volume:	1.0 mL
Date Prepared:	08/25/2009 1123			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** **10**

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Unknown	10.83	89	T J
27193-28-8	Phenol, (1,1,3,3-tetramethylbutyl)-	10.87	160	T J N
	Unknown	11.03	120	T J
	Unknown	13.66	86	T J
	Unknown	13.72	95	T J
629-99-2	Pentacosane	13.90	83	T J N
	Unknown	14.31	150	T J
	Unknown	15.07	110	T J
	Unknown	15.19	170	T J
1000164-46-9	Acetonitrile, (2,7-dibromo-1-naphthyl)-	15.79	470	T J N

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Client: Olin Corporation

Job Number: 360-24244-1
Sdg Number: OCRI-04

Client Sample ID: **OC-SB-445-0.0/1.0-XXX**

Lab Sample ID: 360-24244-7
Client Matrix: Solid % Moisture: 2.0

Date Sampled: 08/21/2009 0900
Date Received: 08/21/2009 1725

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48456		Instrument ID:	Inst. J
Preparation:	3550B	Prep Batch: 360-48381		Lab File ID:	J02832.D
Dilution:	1.0			Initial Weight/Volume:	100.07 g
Date Analyzed:	09/02/2009 1622			Final Weight/Volume:	1.0 mL
Date Prepared:	08/31/2009 1206			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodimethylamine		ND		1.2	5.1

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	62		30 - 130
2-Fluorobiphenyl	63		30 - 130
2-Fluorophenol	53		30 - 130
Nitrobenzene-d5	61		30 - 130
Phenol-d5	50		30 - 130
Terphenyl-d14	89		30 - 130

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Client: Olin Corporation

Job Number: 360-24244-1
Sdg Number: OCRI-04

Client Sample ID: **OC-SB-445-0.0/1.0-XXX**

Lab Sample ID: 360-24244-7
Client Matrix: Solid % Moisture: 2.0

Date Sampled: 08/21/2009 0900
Date Received: 08/21/2009 1725

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48845		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48119		Lab File ID:	B10208.D
Dilution:	1.0			Initial Weight/Volume:	30.69 g
Date Analyzed:	09/12/2009 0053			Final Weight/Volume:	1.0 mL
Date Prepared:	08/25/2009 1123			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		10	33
1,2,4,5-Tetrachlorobenzene		ND		10	33
1,2,4-Trichlorobenzene		ND		10	33
1,2-Dichlorobenzene		ND		10	33
1,3-Dichlorobenzene		ND		10	33
1,4-Dichlorobenzene		ND		10	33
1-Methylnaphthalene		ND		10	33
2,2'-oxybis[1-chloropropane]		ND		10	33
2,3,4,6-Tetrachlorophenol		ND		10	33
2,4,5-Trichlorophenol		ND		10	33
2,4,6-Trichlorophenol		ND		10	33
2,4-Dichlorophenol		ND		10	33
2,4-Dimethylphenol		ND		13	33
2,4-Dinitrophenol		ND		10	33
2,4-Dinitrotoluene		ND		10	33
2,6-Dinitrotoluene		ND		10	33
2-Chloronaphthalene		ND		10	33
2-Chlorophenol		ND		10	33
2-Methylnaphthalene		ND		10	33
2-Methylphenol		ND		20	33
2-Nitroaniline		ND		10	170
2-Nitrophenol		ND		10	33
3 & 4 Methylphenol		ND		10	33
3,3'-Dichlorobenzidine		ND		10	66
3-Nitroaniline		ND		10	170
4,6-Dinitro-2-methylphenol		ND		10	170
4-Bromophenyl phenyl ether		ND		10	33
4-Chloro-3-methylphenol		ND		10	66
4-Chloroaniline		ND		10	66
4-Chlorophenyl phenyl ether		ND		10	33
4-Nitroaniline		ND		10	170
4-Nitrophenol		ND		10	170
Acenaphthene		ND		10	33
Acenaphthylene		ND		10	33
Acetophenone		ND		10	33
Aniline		ND		10	33
Anthracene		ND		10	33
Atrazine		ND		10	33
Azobenzene		ND		10	33
Benzaldehyde		ND		10	33
Benzo[a]anthracene		ND		10	33
Benzo[a]pyrene		ND		10	33
Benzo[b]fluoranthene		ND		10	33
Benzo[g,h,i]perylene		ND		10	33
Benzo[k]fluoranthene		ND		10	33
Benzoic acid		ND		15	170

Client: Olin Corporation

Job Number: 360-24244-1
Sdg Number: OCRI-04

Client Sample ID: **OC-SB-445-0.0/1.0-XXX**

Lab Sample ID: 360-24244-7
Client Matrix: Solid % Moisture: 2.0

Date Sampled: 08/21/2009 0900
Date Received: 08/21/2009 1725

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48845		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48119		Lab File ID:	B10208.D
Dilution:	1.0			Initial Weight/Volume:	30.69 g
Date Analyzed:	09/12/2009 0053			Final Weight/Volume:	1.0 mL
Date Prepared:	08/25/2009 1123			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		10	33
Benzyl alcohol		ND		28	66
Bis(2-chloroethoxy)methane		ND		10	33
Bis(2-chloroethyl)ether		ND		10	33
Butyl benzyl phthalate		ND		10	33
Caprolactam		ND		10	33
Carbazole		ND		10	33
Chrysene		ND		10	33
Dibenz(a,h)anthracene		ND		10	33
Dibenzofuran		ND		10	33
Diethyl phthalate		ND		10	33
Dimethyl phthalate		ND		10	33
Di-n-butyl phthalate		ND		29	33
Di-n-octyl phthalate		ND		17	33
Diphenyl oxide		ND		10	33
Diphenylamine		ND		10	33
Fluoranthene		ND		10	33
Fluorene		ND		10	33
Hexachlorobenzene		ND		10	33
Hexachlorobutadiene		ND		10	33
Hexachlorocyclopentadiene		ND		10	66
Hexachloroethane		ND		10	33
Indeno[1,2,3-cd]pyrene		ND		10	33
Isophorone		ND		10	33
Naphthalene		ND		10	80
Nitrobenzene		ND		10	33
N-Nitrosodimethylamine		ND		12	33
N-Nitrosodi-n-propylamine		ND		10	33
N-Nitrosodiphenylamine		ND		10	33
Pentachlorophenol		ND		10	33
Phenanthrene		ND		10	40
Phenol		ND		10	33
Pyrene		ND		10	33

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	57		30 - 130
2-Fluorophenol	74		30 - 130
2-Fluorobiphenyl	91		30 - 130
Nitrobenzene-d5	64		30 - 130
Phenol-d5	70		30 - 130
Terphenyl-d14	63		30 - 130

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Client: Olin Corporation

Job Number: 360-24244-1
Sdg Number: OCRI-04

Client Sample ID: **OC-SB-445-0.0/1.0-XXX**

Lab Sample ID: 360-24244-7
Client Matrix: Solid % Moisture: 2.0

Date Sampled: 08/21/2009 0900
Date Received: 08/21/2009 1725

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48845		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48119		Lab File ID:	B10208.D
Dilution:	1.0			Initial Weight/Volume:	30.69 g
Date Analyzed:	09/12/2009 0053			Final Weight/Volume:	1.0 mL
Date Prepared:	08/25/2009 1123			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 2

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Unknown	5.92	4600	T J
13127-88-3	Phenol-d6-	7.10	110	T J N

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Client: Olin Corporation

Job Number: 360-24244-1
Sdg Number: OCRI-04

Client Sample ID: **OC-SB-445-0.0/1.0-XXX**

Lab Sample ID: 360-24244-7
Client Matrix: Solid
% Moisture: 2.0

Date Sampled: 08/21/2009 0900
Date Received: 08/21/2009 1725

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48930		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48119		Lab File ID:	B10319.D
Dilution:	10			Initial Weight/Volume:	30.69 g
Date Analyzed:	09/15/2009 1911	Run Type: DL2		Final Weight/Volume:	1.0 mL
Date Prepared:	08/25/2009 1123			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Bis(2-ethylhexyl) phthalate		1700		100	330

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	24	X	30 - 130
2-Fluorophenol	32		30 - 130
2-Fluorobiphenyl	32		30 - 130
Nitrobenzene-d5	31		30 - 130
Phenol-d5	24	X	30 - 130
Terphenyl-d14	35		30 - 130

Client: Olin Corporation

Job Number: 360-24244-1
Sdg Number: OCRI-04

Client Sample ID: **OC-SB-445-8.0/10-XXX**

Lab Sample ID: 360-24244-9
Client Matrix: Solid
% Moisture: 15.1

Date Sampled: 08/21/2009 0910
Date Received: 08/21/2009 1725

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48521		Instrument ID:	Inst. J
Preparation:	3550B	Prep Batch: 360-48515		Lab File ID:	J02840.D
Dilution:	1.0			Initial Weight/Volume:	100.21 g
Date Analyzed:	09/02/2009 2111			Final Weight/Volume:	1.0 mL
Date Prepared:	09/02/2009 1439			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodimethylamine		ND		1.4	5.9

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	68		30 - 130
2-Fluorobiphenyl	58		30 - 130
2-Fluorophenol	64		30 - 130
Nitrobenzene-d5	67		30 - 130
Phenol-d5	67		30 - 130
Terphenyl-d14	74		30 - 130

Client: Olin Corporation

Job Number: 360-24244-1
Sdg Number: OCRI-04

Client Sample ID: **OC-SB-445-8.0/10-XXX**

Lab Sample ID: 360-24244-9
Client Matrix: Solid % Moisture: 15.1

Date Sampled: 08/21/2009 0910
Date Received: 08/21/2009 1725

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48845		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48119		Lab File ID:	B10211.D
Dilution:	1.0			Initial Weight/Volume:	30.32 g
Date Analyzed:	09/12/2009 0235			Final Weight/Volume:	1.0 mL
Date Prepared:	08/25/2009 1123			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		12	39
1,2,4,5-Tetrachlorobenzene		ND		12	39
1,2,4-Trichlorobenzene		ND		12	39
1,2-Dichlorobenzene		ND		12	39
1,3-Dichlorobenzene		ND		12	39
1,4-Dichlorobenzene		ND		12	39
1-Methylnaphthalene		ND		12	39
2,2'-oxybis[1-chloropropane]		ND		12	39
2,3,4,6-Tetrachlorophenol		ND		12	39
2,4,5-Trichlorophenol		ND		12	39
2,4,6-Trichlorophenol		ND		12	39
2,4-Dichlorophenol		ND		12	39
2,4-Dimethylphenol		ND		15	39
2,4-Dinitrophenol		ND		12	39
2,4-Dinitrotoluene		ND		12	39
2,6-Dinitrotoluene		ND		12	39
2-Chloronaphthalene		ND		12	39
2-Chlorophenol		ND		12	39
2-Methylnaphthalene		ND		12	39
2-Methylphenol		ND		23	39
2-Nitroaniline		ND		12	190
2-Nitrophenol		ND		12	39
3 & 4 Methylphenol		ND		12	39
3,3'-Dichlorobenzidine		ND		12	78
3-Nitroaniline		ND		12	190
4,6-Dinitro-2-methylphenol		ND		12	190
4-Bromophenyl phenyl ether		ND		12	39
4-Chloro-3-methylphenol		ND		12	78
4-Chloroaniline		ND		12	78
4-Chlorophenyl phenyl ether		ND		12	39
4-Nitroaniline		ND		12	190
4-Nitrophenol		ND		12	190
Acenaphthene		ND		12	39
Acenaphthylene		ND		12	39
Acetophenone		ND		12	39
Aniline		ND		12	39
Anthracene		ND		12	39
Atrazine		ND		12	39
Azobenzene		ND		12	39
Benzaldehyde		ND		12	39
Benzo[a]anthracene		ND		12	39
Benzo[a]pyrene		ND		12	39
Benzo[b]fluoranthene		ND		12	39
Benzo[g,h,i]perylene		ND		12	39
Benzo[k]fluoranthene		ND		12	39
Benzoic acid		~~ND~~ R2		17	190

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Client: Olin Corporation

Job Number: 360-24244-1
Sdg Number: OCRI-04

Client Sample ID: **OC-SB-445-8.0/10-XXX**

Lab Sample ID: 360-24244-9
Client Matrix: Solid
% Moisture: 15.1

Date Sampled: 08/21/2009 0910
Date Received: 08/21/2009 1725

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48845		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48119		Lab File ID:	B10211.D
Dilution:	1.0			Initial Weight/Volume:	30.32 g
Date Analyzed:	09/12/2009 0235			Final Weight/Volume:	1.0 mL
Date Prepared:	08/25/2009 1123			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		12	39
Benzyl alcohol		ND		33	78
Bis(2-chloroethoxy)methane		ND		12	39
Bis(2-chloroethyl)ether		ND		12	39
Bis(2-ethylhexyl) phthalate		ND		12	39
Butyl benzyl phthalate		ND		12	39
Caprolactam		ND		12	39
Carbazole		ND		12	39
Chrysene		ND		12	39
Dibenz(a,h)anthracene		ND		12	39
Dibenzofuran		ND		12	39
Diethyl phthalate		ND		12	39
Dimethyl phthalate		ND		12	39
Di-n-butyl phthalate		ND		34	39
Di-n-octyl phthalate		ND		20	39
Diphenyl oxide		ND		12	39
Diphenylamine		ND		12	39
Fluoranthene		ND		12	39
Fluorene		ND		12	39
Hexachlorobenzene		ND		12	39
Hexachlorobutadiene		ND		12	39
Hexachlorocyclopentadiene		ND		12	78
Hexachloroethane		ND		12	39
Indeno[1,2,3-cd]pyrene		ND		12	39
Isophorone		ND		12	39
Naphthalene		ND		12	93
Nitrobenzene		ND		12	39
N-Nitrosodimethylamine		ND		14	39
N-Nitrosodi-n-propylamine		ND		12	39
N-Nitrosodiphenylamine		ND		12	39
Pentachlorophenol		ND		12	39
Phenanthrene		ND		12	47
Phenol		ND		12	39
Pyrene		ND		12	39

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	48		30 - 130
2-Fluorophenol	72		30 - 130
2-Fluorobiphenyl	58		30 - 130
Nitrobenzene-d5	58		30 - 130
Phenol-d5	69		30 - 130
Terphenyl-d14	54		30 - 130

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Client: Olin Corporation

Job Number: 360-24244-1
Sdg Number: OCRI-04

Client Sample ID: **OC-SB-445-8.0/10-XXX**

Lab Sample ID: 360-24244-9
Client Matrix: Solid % Moisture: 15.1

Date Sampled: 08/21/2009 0910
Date Received: 08/21/2009 1725

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48845		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48119		Lab File ID:	B10211.D
Dilution:	1.0			Initial Weight/Volume:	30.32 g
Date Analyzed:	09/12/2009 0235			Final Weight/Volume:	1.0 mL
Date Prepared:	08/25/2009 1123			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 6

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Unknown	10.89	56	T J
	Unknown	12.29	26	T J
629-99-2	Pentacosane	13.89	110	T J N
630-1-3	Hexacosane	14.56	100	T J N
593-49-7	Heptacosane	15.28	88	T J N
112-95-8	Eicosane	15.81	94	T J N

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Client: Olin Corporation

Job Number: 360-24244-1
Sdg Number: OCRI-04

Client Sample ID: **OC-SB-437-0.0/1.0-XXX**

Lab Sample ID: 360-24244-10
Client Matrix: Solid
% Moisture: 6.8

Date Sampled: 08/21/2009 1230
Date Received: 08/21/2009 1725

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48521		Instrument ID:	Inst. J
Preparation:	3550B	Prep Batch: 360-48515		Lab File ID:	J02841.D
Dilution:	1.0			Initial Weight/Volume:	100.23 g
Date Analyzed:	09/02/2009 2141			Final Weight/Volume:	1.0 mL
Date Prepared:	09/02/2009 1439			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodimethylamine		ND		1.2	5.4

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	58		30 - 130
2-Fluorobiphenyl	56		30 - 130
2-Fluorophenol	56		30 - 130
Nitrobenzene-d5	61		30 - 130
Phenol-d5	62		30 - 130
Terphenyl-d14	67		30 - 130

Client: Olin Corporation

Job Number: 360-24244-1
Sdg Number: OCRI-04

Client Sample ID: **OC-SB-437-0.0/1.0-XXX**

Lab Sample ID: 360-24244-10
Client Matrix: Solid
% Moisture: 6.8

Date Sampled: 08/21/2009 1230
Date Received: 08/21/2009 1725

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48845		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48119		Lab File ID:	B10212.D
Dilution:	1.0			Initial Weight/Volume:	30.85 g
Date Analyzed:	09/12/2009 0309			Final Weight/Volume:	1.0 mL
Date Prepared:	08/25/2009 1123			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		10	35
1,2,4,5-Tetrachlorobenzene		ND		10	35
1,2,4-Trichlorobenzene		ND		10	35
1,2-Dichlorobenzene		ND		10	35
1,3-Dichlorobenzene		ND		10	35
1,4-Dichlorobenzene		ND		10	35
1-Methylnaphthalene		ND		10	35
2,2'-oxybis[1-chloropropane]		ND		10	35
2,3,4,6-Tetrachlorophenol		ND		10	35
2,4,5-Trichlorophenol		ND		10	35
2,4,6-Trichlorophenol		ND		10	35
2,4-Dichlorophenol		ND		10	35
2,4-Dimethylphenol		ND		14	35
2,4-Dinitrophenol		ND		10	35
2,4-Dinitrotoluene		ND		10	35
2,6-Dinitrotoluene		ND		10	35
2-Chloronaphthalene		ND		10	35
2-Chlorophenol		ND		10	35
2-Methylnaphthalene		ND		10	35
2-Methylphenol		ND		21	35
2-Nitroaniline		ND		10	170
2-Nitrophenol		ND		10	35
3 & 4 Methylphenol		ND		10	35
3,3'-Dichlorobenzidine		ND		10	70
3-Nitroaniline		ND		10	170
4,6-Dinitro-2-methylphenol		ND		10	170
4-Bromophenyl phenyl ether		ND		10	35
4-Chloro-3-methylphenol		ND		10	70
4-Chloroaniline		ND		10	70
4-Chlorophenyl phenyl ether		ND		10	35
4-Nitroaniline		ND		10	170
4-Nitrophenol		ND		10	170
Acenaphthene		ND		10	35
Acenaphthylene		ND		10	35
Acetophenone		ND		10	35
Aniline		ND		10	35
Anthracene		ND		10	35
Atrazine		ND		10	35
Azobenzene		ND		10	35
Benzaldehyde		ND		10	35
Benzo[a]anthracene		ND		10	35
Benzo[a]pyrene		78		10	35
Benzo[b]fluoranthene		ND		10	35
Benzo[g,h,i]perylene		ND		10	35
Benzo[k]fluoranthene		ND		10	35
Benzoic acid		~~ND~~ R		16	170

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Client: Olin Corporation

Job Number: 360-24244-1
Sdg Number: OCRI-04

Client Sample ID: **OC-SB-437-0.0/1.0-XXX**

Lab Sample ID: 360-24244-10
Client Matrix: Solid

% Moisture: 6.8

Date Sampled: 08/21/2009 1230
Date Received: 08/21/2009 1725

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48845		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48119		Lab File ID:	B10212.D
Dilution:	1.0			Initial Weight/Volume:	30.85 g
Date Analyzed:	09/12/2009 0309			Final Weight/Volume:	1.0 mL
Date Prepared:	08/25/2009 1123			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		10	35
Benzyl alcohol		ND		30	70
Bis(2-chloroethoxy)methane		ND		10	35
Bis(2-chloroethyl)ether		ND		10	35
Bis(2-ethylhexyl) phthalate		190 EB		10	35
Butyl benzyl phthalate		ND		10	35
Caprolactam		ND		10	35
Carbazole		ND		10	35
Chrysene		ND		10	35
Dibenz(a,h)anthracene		ND		10	35
Dibenzofuran		ND		10	35
Diethyl phthalate		ND		10	35
Dimethyl phthalate		ND		10	35
Di-n-butyl phthalate		ND		31	35
Di-n-octyl phthalate		ND		18	35
Diphenyl oxide		ND		10	35
Diphenylamine		ND		10	35
Fluoranthene		10	J	10	35
Fluorene		ND		10	35
Hexachlorobenzene		ND		10	35
Hexachlorobutadiene		ND		10	35
Hexachlorocyclopentadiene		ND		10	70
Hexachloroethane		ND		10	35
Indeno[1,2,3-cd]pyrene		21	J	10	35
Isophorone		ND		10	35
Naphthalene		ND		10	84
Nitrobenzene		ND		10	35
N-Nitrosodimethylamine		ND		12	35
N-Nitrosodi-n-propylamine		ND		10	35
N-Nitrosodiphenylamine		ND		10	35
Pentachlorophenol		ND		10	35
Phenanthrene		ND		10	42
Phenol		14	J	10	35
Pyrene		12	J	10	35

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	43		30 - 130
2-Fluorophenol	60		30 - 130
2-Fluorobiphenyl	51		30 - 130
Nitrobenzene-d5	51		30 - 130
Phenol-d5	58		30 - 130
Terphenyl-d14	46		30 - 130

1/28/10

Client: Olin Corporation

Job Number: 360-24244-1
Sdg Number: OCRI-04

Client Sample ID: **OC-SB-437-0.0/1.0-XXX**

Lab Sample ID: 360-24244-10
Client Matrix: Solid % Moisture: 6.8

Date Sampled: 08/21/2009 1230
Date Received: 08/21/2009 1725

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48845		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48119		Lab File ID:	B10212.D
Dilution:	1.0			Initial Weight/Volume:	30.85 g
Date Analyzed:	09/12/2009 0309			Final Weight/Volume:	1.0 mL
Date Prepared:	08/25/2009 1123			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 1

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
645-10-3	1,7-Dimethyl-4-(1-methylethyl)cyclodecan	14.00	250	T J N

Client: Olin Corporation

Job Number: 360-24244-1
Sdg Number: OCRI-04

Client Sample ID: **OC-SB-437-5.0/7.0-XXX**

Lab Sample ID: 360-24244-12
Client Matrix: Solid
% Moisture: 11.2

Date Sampled: 08/21/2009 1240
Date Received: 08/21/2009 1725

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48521		Instrument ID:	Inst. J
Preparation:	3550B	Prep Batch: 360-48515		Lab File ID:	J02843.D
Dilution:	1.0			Initial Weight/Volume:	100.20 g
Date Analyzed:	09/02/2009 2241			Final Weight/Volume:	1.0 mL
Date Prepared:	09/02/2009 1439			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodimethylamine		ND		1.3	5.6

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	61		30 - 130
2-Fluorobiphenyl	53		30 - 130
2-Fluorophenol	58		30 - 130
Nitrobenzene-d5	60		30 - 130
Phenol-d5	61		30 - 130
Terphenyl-d14	65		30 - 130

Client: Olin Corporation

Job Number: 360-24244-1
Sdg Number: OCRI-04

Client Sample ID: **OC-SB-437-5.0/7.0-XXX**

Lab Sample ID: 360-24244-12
Client Matrix: Solid
% Moisture: 11.2

Date Sampled: 08/21/2009 1240
Date Received: 08/21/2009 1725

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48845		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48119		Lab File ID:	B10214.D
Dilution:	1.0			Initial Weight/Volume:	30.14 g
Date Analyzed:	09/12/2009 0417			Final Weight/Volume:	1.0 mL
Date Prepared:	08/25/2009 1123			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		11	37
1,2,4,5-Tetrachlorobenzene		ND		11	37
1,2,4-Trichlorobenzene		ND		11	37
1,2-Dichlorobenzene		ND		11	37
1,3-Dichlorobenzene		ND		11	37
1,4-Dichlorobenzene		ND		11	37
1-Methylnaphthalene		ND		11	37
2,2'-oxybis[1-chloropropane]		ND		11	37
2,3,4,6-Tetrachlorophenol		ND		11	37
2,4,5-Trichlorophenol		ND		11	37
2,4,6-Trichlorophenol		ND		11	37
2,4-Dichlorophenol		ND		11	37
2,4-Dimethylphenol		ND		15	37
2,4-Dinitrophenol		ND		11	37
2,4-Dinitrotoluene		ND		11	37
2,6-Dinitrotoluene		ND		11	37
2-Chloronaphthalene		ND		11	37
2-Chlorophenol		ND		11	37
2-Methylnaphthalene		ND		11	37
2-Methylphenol		ND		22	37
2-Nitroaniline		ND		11	190
2-Nitrophenol		ND		11	37
3 & 4 Methylphenol		ND		11	37
3,3'-Dichlorobenzidine		ND		11	75
3-Nitroaniline		ND		11	190
4,6-Dinitro-2-methylphenol		ND		11	190
4-Bromophenyl phenyl ether		ND		11	37
4-Chloro-3-methylphenol		ND		11	75
4-Chloroaniline		ND		11	75
4-Chlorophenyl phenyl ether		ND		11	37
4-Nitroaniline		ND		11	190
4-Nitrophenol		ND		11	190
Acenaphthene		ND		11	37
Acenaphthylene		ND		11	37
Acetophenone		ND		11	37
Aniline		ND		11	37
Anthracene		ND		11	37
Atrazine		ND		11	37
Azobenzene		ND		11	37
Benzaldehyde		ND		11	37
Benzo[a]anthracene		ND		11	37
Benzo[a]pyrene		ND		11	37
Benzo[b]fluoranthene		ND		11	37
Benzo[g,h,i]perylene		ND		11	37
Benzo[k]fluoranthene		ND		11	37
Benzoic acid		~~ND~~ R		17	190

1/28/10

Client: Olin Corporation

Job Number: 360-24244-1
Sdg Number: OCRI-04

Client Sample ID: **OC-SB-437-5.0/7.0-XXX**

Lab Sample ID: 360-24244-12
Client Matrix: Solid % Moisture: 11.2

Date Sampled: 08/21/2009 1240
Date Received: 08/21/2009 1725

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48845		Instrument ID:	Inst_B
Preparation:	3546	Prep Batch: 360-48119		Lab File ID:	B10214.D
Dilution:	1.0			Initial Weight/Volume:	30.14 g
Date Analyzed:	09/12/2009 0417			Final Weight/Volume:	1.0 mL
Date Prepared:	08/25/2009 1123			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		11	37
Benzyl alcohol		ND		32	75
Bis(2-chloroethoxy)methane		ND		11	37
Bis(2-chloroethyl)ether		ND		11	37
Bis(2-ethylhexyl) phthalate		ND		11	37
Butyl benzyl phthalate		ND		11	37
Caprolactam		ND		11	37
Carbazole		ND		11	37
Chrysene		ND		11	37
Dibenz(a,h)anthracene		ND		11	37
Dibenzofuran		ND		11	37
Diethyl phthalate		ND		11	37
Dimethyl phthalate		ND		11	37
Di-n-butyl phthalate		ND		33	37
Di-n-octyl phthalate		ND		19	37
Diphenyl oxide		ND		11	37
Diphenylamine		ND		11	37
Fluoranthene		ND		11	37
Fluorene		ND		11	37
Hexachlorobenzene		ND		11	37
Hexachlorobutadiene		ND		11	37
Hexachlorocyclopentadiene		ND		11	75
Hexachloroethane		ND		11	37
Indeno[1,2,3-cd]pyrene		ND		11	37
Isophorone		ND		11	37
Naphthalene		15	J	11	90
Nitrobenzene		ND		11	37
N-Nitrosodimethylamine		ND		13	37
N-Nitrosodi-n-propylamine		ND		11	37
N-Nitrosodiphenylamine		ND		11	37
Pentachlorophenol		ND		11	37
Phenanthrene		ND		11	45
Phenol		ND		11	37
Pyrene		ND		11	37

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	44		30 - 130
2-Fluorophenol	63		30 - 130
2-Fluorobiphenyl	54		30 - 130
Nitrobenzene-d5	53		30 - 130
Phenol-d5	59		30 - 130
Terphenyl-d14	59		30 - 130

Client: Olin Corporation

Job Number: 360-24244-1
Sdg Number: OCRI-04

Client Sample ID: **OC-SB-437-5.0/7.0-XXX**

Lab Sample ID: 360-24244-12
Client Matrix: Solid % Moisture: 11.2

Date Sampled: 08/21/2009 1240
Date Received: 08/21/2009 1725

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48845		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48119		Lab File ID:	B10214.D
Dilution:	1.0			Initial Weight/Volume:	30.14 g
Date Analyzed:	09/12/2009 0417			Final Weight/Volume:	1.0 mL
Date Prepared:	08/25/2009 1123			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 2

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
629-99-2	Pentacosane	13.89	33	T J N
1000130-79-8	13-Tertadecen-1-ol acetate	14.07	34	T J N

Client: Olin Corporation

Job Number: 360-24244-1
Sdg Number: OCRI-04

Client Sample ID: **OC-EBK-003**

Lab Sample ID: 360-24244-14EB
Client Matrix: Water

Date Sampled: 08/21/2009 0715
Date Received: 08/21/2009 1725

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48209		Instrument ID:	Inst. B
Preparation:	3510C	Prep Batch: 360-48124		Lab File ID:	B9867.D
Dilution:	1.0			Initial Weight/Volume:	1000 mL
Date Analyzed:	08/28/2009 0104			Final Weight/Volume:	1.0 mL
Date Prepared:	08/25/2009 1151			Injection Volume:	1.0 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
N-Nitrosodimethylamine	ND	*	0.50	5.0

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	63		15 - 110
2-Fluorobiphenyl	60		30 - 130
2-Fluorophenol	21		15 - 110
Nitrobenzene-d5	60		30 - 130
Phenol-d5	12	X	15 - 110
Terphenyl-d14	69		30 - 130

Client: Olin Corporation

Job Number: 360-24244-1
Sdg Number: OCRI-04

Client Sample ID: **OC-EBK-003**

Lab Sample ID: 360-24244-14EB
Client Matrix: Water

Date Sampled: 08/21/2009 0715
Date Received: 08/21/2009 1725

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48209		Instrument ID:	Inst. B
Preparation:	3510C	Prep Batch: 360-48124		Lab File ID:	B9867.D
Dilution:	1.0			Initial Weight/Volume:	1000 mL
Date Analyzed:	08/28/2009 0104			Final Weight/Volume:	1.0 mL
Date Prepared:	08/25/2009 1151			Injection Volume:	1.0 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1'-Biphenyl	ND		0.50	5.0
1,2,4,5-Tetrachlorobenzene	ND		0.50	5.0
1-Methylnaphthalene	ND		0.050	5.0
2,3,4,6-Tetrachlorophenol	ND		0.50	5.0
Bis(2-chloroethyl)ether	ND		0.50	5.0
Benzyl alcohol	ND		0.50	10
2-Methylphenol	ND		0.50	5.0
N-Nitrosodi-n-propylamine	ND		0.50	5.0
Hexachloroethane	ND		0.50	3.0
3 & 4 Methylphenol	ND		0.50	5.0
2-Chlorophenol	ND		0.50	5.0
3,3'-Dichlorobenzidine	ND		0.50	5.0
Nitrobenzene	ND		0.50	5.0
Bis(2-chloroethoxy)methane	ND		0.50	5.0
Benzoic acid	3.9	J	0.50	5.0
Isophorone	ND		0.50	5.0
2,4-Dimethylphenol	ND		0.50	5.0
Aniline	ND	*	0.50	5.0
Azobenzene	ND		0.50	5.0
2,4-Dichlorophenol	ND		0.50	5.0
4-Chloroaniline	ND		0.50	5.0
2,4,6-Trichlorophenol	ND		0.50	5.0
2,4,5-Trichlorophenol	ND		0.50	5.0
Hexachlorocyclopentadiene	ND		0.50	5.0
2-Methylnaphthalene	ND		0.050	1.0
2-Nitroaniline	ND		0.50	5.0
Caprolactam	ND	*	0.50	5.0
2-Chloronaphthalene	ND		0.50	5.0
4-Chloro-3-methylphenol	ND		0.50	5.0
2,6-Dinitrotoluene	ND		0.50	5.0
2-Nitrophenol	ND		0.50	5.0
3-Nitroaniline	ND		0.50	5.0
Dimethyl phthalate	ND		0.50	5.0
2,4-Dinitrophenol	ND		0.50	5.0
Acenaphthylene	ND		0.050	0.30
2,4-Dinitrotoluene	ND		0.50	5.0
Acenaphthene	ND		0.050	1.0
Dibenzofuran	ND		0.50	5.0
4-Nitrophenol	ND	*	0.50	5.0
Fluorene	ND		0.050	1.0
4-Nitroaniline	ND		0.50	5.0
Phenol	ND	*	0.50	5.0
4-Bromophenyl phenyl ether	ND		0.50	5.0
Hexachlorobenzene	ND		0.50	1.0
Diethyl phthalate	0.78	J	0.50	5.0
4-Chlorophenyl phenyl ether	ND		0.50	5.0

Client: Olin Corporation

Job Number: 360-24244-1
Sdg Number: OCRI-04

Client Sample ID: **OC-EBK-003**

Lab Sample ID: 360-24244-14EB
Client Matrix: Water

Date Sampled: 08/21/2009 0715
Date Received: 08/21/2009 1725

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48209		Instrument ID:	Inst_B
Preparation:	3510C	Prep Batch: 360-48124		Lab File ID:	B9867.D
Dilution:	1.0			Initial Weight/Volume:	1000 mL
Date Analyzed:	08/28/2009 0104			Final Weight/Volume:	1.0 mL
Date Prepared:	08/25/2009 1151			Injection Volume:	1.0 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Pentachlorophenol	ND		0.50	1.0
N-Nitrosodiphenylamine	ND		0.50	5.0
4,6-Dinitro-2-methylphenol	ND		0.50	5.0
Phenanthrene	ND		0.085	0.20
Anthracene	ND		0.070	1.0
Di-n-butyl phthalate	1.8	J	0.60	5.0
Fluoranthene	ND		0.20	1.0
Pyrene	ND		0.19	5.0
Butyl benzyl phthalate	ND		0.50	5.0
Benzo[a]anthracene	ND		0.17	0.30
Chrysene	ND		0.17	1.0
Di-n-octyl phthalate	ND		0.73	5.0
Benzo[b]fluoranthene	ND		0.14	0.30
Benzo[k]fluoranthene	ND		0.17	0.30
Benzo[a]pyrene	ND		0.10	0.20
Indeno[1,2,3-cd]pyrene	ND		0.079	0.50
Dibenz(a,h)anthracene	ND		0.064	0.50
Benzo[g,h,i]perylene	ND		0.094	0.50
Acetophenone	ND		0.50	5.0
Bis(2-ethylhexyl) phthalate	2.2		0.50	2.0
bis (2-chloroisopropyl) ether	ND		0.50	5.0
Atrazine	ND		0.50	5.0
Benzaldehyde	ND		0.50	5.0
Carbazole	ND		0.50	5.0
Benzophenone	ND		0.50	5.0
Diphenyl oxide	ND		0.50	5.0
Diphenylamine	ND		0.50	5.0

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	63		15 - 110
2-Fluorobiphenyl	60		30 - 130
2-Fluorophenol	21		15 - 110
Nitrobenzene-d5	60		30 - 130
Phenol-d5	12	X	15 - 110
Terphenyl-d14	69		30 - 130

Client: Olin Corporation

Job Number: 360-24244-1
Sdg Number: OCRI-04

Client Sample ID: **OC-EBK-003**

Lab Sample ID: 360-24244-14EB
Client Matrix: Water

Date Sampled: 08/21/2009 0715
Date Received: 08/21/2009 1725

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48209		Instrument ID:	Inst. B
Preparation:	3510C	Prep Batch: 360-48124		Lab File ID:	B9867.D
Dilution:	1.0			Initial Weight/Volume:	1000 mL
Date Analyzed:	08/28/2009 0104			Final Weight/Volume:	1.0 mL
Date Prepared:	08/25/2009 1151			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 3

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
110-82-7	Cyclohexane	4.80	2.5	T J N
71-43-2	Benzene	4.91	3.5	T J N
104-40-5	4-Nonylphenol	12.04	2.5	T J N

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Westfield Job No.: 360-24244-1

SDG No.: OCRI-04

Sample No.: CCV 360-48456/2 Date Analyzed: 09/02/2009 05:52

Instrument ID: Inst. J GC Column: Rtx-5ms SIL with ID: 0.25(um)

Lab File ID (Standard): J02810.D Heated Purge: (Y/N) N

		DCB		NPT		ACN	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12 HOUR STD		544952	5.78	1400858	7.02	590431	8.77
UPPER LIMIT		1089904	6.28	2801716	7.52	1180862	9.27
LOWER LIMIT		272476	5.28	700429	6.52	295216	8.27
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 360-48381/1-A		344386	5.78	873864	7.02	433480	8.77
LCS 360-48381/2-A		447215	5.78	1196863	7.02	470190	8.77
LCSD 360-48381/3-A		449932	5.78	1193241	7.02	476241	8.77
360-24244-1	OC-SB-432-0.0/1.0-XXX	322289	5.78	836495	7.02	417819	8.77
360-24244-2	OC-SB-432-14/16-XXX	381205	5.79	996377	7.03	478774	8.80
360-24244-3	OC-SB-432-5.0/7.0-XXX	344742	5.79	934015	7.03	389550	8.80
360-24244-4	OC-SB-443-0.0/1.0-XXX	323218	5.78	844925	7.02	455265	8.77
360-24244-7	OC-SB-445-0.0/1.0-XXX	328383	5.78	834943	7.02	389779	8.77
360-24244-6	OC-SB-443-6.0/8.0-XXX	202674*	5.53	515368*	6.77	279844*	8.51

DCB = 1,4-Dichlorobenzene-d4
NPT = Naphthalene-d8
ACN = Acenaphthene-d10

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.50 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270C LL

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Westfield Job No.: 360-24244-1

SDG No.: OCRI-04

Sample No.: CCV 360-48456/2 Date Analyzed: 09/02/2009 05:52

Instrument ID: Inst. J GC Column: Rtx-5ms SIL with ID: 0.25(um)

Lab File ID (Standard): J02810.D Heated Purge: (Y/N) N

		PHN		CRY		PD12	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12 HOUR STD		957360	10.27	553484	12.99	225187	14.56
UPPER LIMIT		1914720	10.77	1106968	13.49	450374	15.06
LOWER LIMIT		478680	9.77	276742	12.49	112594	14.06
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 360-48381/1-A		738036	10.26	419400	13.00	206496	14.56
LCS 360-48381/2-A		786709	10.26	405763	12.99	159561	14.56
LCSD 360-48381/3-A		792313	10.26	459645	13.00	197651	14.56
360-24244-1	OC-SB-432-0.0/1.0-XXX	620088	10.28	273451*	13.02	140454	14.58
360-24244-2	OC-SB-432-14/16-XXX	337080*	10.52	22929*	13.02	225316	14.58
360-24244-3	OC-SB-432-5.0/7.0-XXX	287185*	10.60	366538	13.01	183986	14.58
360-24244-4	OC-SB-443-0.0/1.0-XXX	705622	10.32	324611	13.01	107025*	14.59
360-24244-7	OC-SB-445-0.0/1.0-XXX	506328	10.27	161874*	13.01	74414*	14.58
360-24244-6	OC-SB-443-6.0/8.0-XXX	473549*	10.00	323107	12.70	242955	14.20

PHN = Phenanthrene-d10
CRY = Chrysene-d12
PD12 = Perylene-d12

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.50 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270C LL

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Westfield Job No.: 360-24244-1

SDG No.: OCRI-04

Sample No.: CCV 360-48521/2 Date Analyzed: 09/02/2009 18:10

Instrument ID: Inst. J GC Column: Rtx-5ms SIL with ID: 0.25(um)

Lab File ID (Standard): J02834.D Heated Purge: (Y/N) N

		PHN		CRY		PD12	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12 HOUR STD		512700	10.00	374500	12.70	292910	14.20
UPPER LIMIT		1025400	10.50	749000	13.20	585820	14.70
LOWER LIMIT		256350	9.50	187250	12.20	146455	13.70
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 360-48515/1-A		557927	10.00	352544	12.70	230687	14.20
LCS 360-48515/2-A		528335	10.00	381920	12.70	281496	14.20
LCSD 360-48515/3-A		714391	10.00	524091	12.70	389220	14.20
360-24244-9	OC-SB-445-8.0/10-XXX	510367	10.00	348925	12.69	263528	14.20
360-24244-10 MS MSD	OC-SB-437-0.0/1.0-XXX	537919	10.00	391635	12.70	610072*	14.21
360-24244-12	OC-SB-437-5.0/7.0-XXX	587375	10.00	425014	12.69	347762	14.20

PHN = Phenanthrene-d10
CRY = Chrysene-d12
PD12 = Perylene-d12

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.50 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270C LL

FORM II
GC/MS SEMI VOA SURROGATE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24244-1

SDG No.: OCRI-04

Matrix: Solid Level: Low

GC Column (1): Rtx-5ms ID: 0.25 (um)

Client Sample ID	Lab Sample ID	2FP #	PHL #	NBZ #	FBP #	TBP #	TPH #
OC-SB-432-0.0/1.0-XXX	360-24244-1 10x	40	44	38	35	18 X	41
OC-SB-432-0.0/1.0-XXX	360-24244-1 1x	15 X	28 X	15 X	42	0 X	36
OC-SB-432-14/16-XXX	360-24244-2 10x	64	74	69	66	11 X	76
OC-SB-432-14/16-XXX	360-24244-2	33	45	8 X	46	0 X	173 X
OC-SB-432-5.0/7.0-XXX	360-24244-3 10x	57	57	52	51	12 X	49
OC-SB-432-5.0/7.0-XXX	360-24244-3 10x 100x	42	28 X	29 X	89	0 X	56
OC-SB-432-5.0/7.0-XXX DL	360-24244-3 DL 100x	0 X D	0 X D	0 X D	0 X D	0 X D	0 X D
OC-SB-443-0.0/1.0-XXX	360-24244-4	55	50	44	46	42	52
OC-SB-443-0.0/1.0-XXX	360-24244-4	52	58	64	62	31	84
OC-SB-443-6.0/8.0-XXX	360-24244-6	71	68	56	56	49	48
OC-SB-443-6.0/8.0-XXX	360-24244-6	69	73	71	62	65	79
OC-SB-445-0.0/1.0-XXX	360-24244-7	74	70	64	91	57	63
OC-SB-445-0.0/1.0-XXX	360-24244-7	53	50	61	63	62	89
OC-SB-445-0.0/1.0-XXX DL2	360-24244-7 DL2	32	24 X	31	32	24 X	35
OC-SB-445-8.0/10-XXX	360-24244-9	72	69	58	58	48	54
OC-SB-445-8.0/10-XXX	360-24244-9	64	67	67	58	68	74
OC-SB-437-0.0/1.0-XXX	360-24244-10	60	58	51	51	43	46
OC-SB-437-0.0/1.0-XXX	360-24244-10	56	62	61	56	58	67
OC-SB-437-5.0/7.0-XXX	360-24244-12	63	59	53	54	44	59
OC-SB-437-5.0/7.0-XXX	360-24244-12	58	61	60	53	61	65
	MB 360-48119/1-A	91	82	69	69	66	70
	MB 360-48381/1-A	64	64	56	65	38	87
	MB 360-48515/1-A	72	74	69	63	69	85
	LCS 360-48119/2-A	59	54	50	69	71	71
	LCS 360-48381/2-A	53	55	51	63	50	94

DL no problem

DL no problem

DL no problem

	QC LIMITS
2FP = 2-Fluorophenol	30-130
PHL = Phenol-d5	30-130
NBZ = Nitrobenzene-d5	30-130
FBP = 2-Fluorobiphenyl	30-130
TBP = 2,4,6-Tribromophenol	30-130
TPH = Terphenyl-d14	30-130

Column to be used to flag recovery values

FORM II 8270C LL

FORM II
GC/MS SEMI VOA SURROGATE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24244-1

SDG No.: OCRI-04

Matrix: Solid Level: Low

GC Column (1): Rtx-5ms ID: 0.25 (um)

Client Sample ID	Lab Sample ID	2FP #	FBP #	NBZ #	PHL #	TBP #	TPH #
OC-SB-432-14/16-XX X DL2	360-24244-2 DL2	0 X DW	0 X DW	0 X DW	0 X DW	0 X DW	0 X DW

	QC LIMITS
2FP = 2-Fluorophenol	30-130
FBP = 2-Fluorobiphenyl	30-130
NBZ = Nitrobenzene-d5	30-130
PHL = Phenol-d5	30-130
TBP = 2,4,6-Tribromophenol	30-130
TPH = Terphenyl-d14	30-130

Column to be used to flag recovery values

FORM II 8270C LL

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Westfield Job No.: 360-24244-1

SDG No.: OCRI-04

Instrument ID: Inst. B Start Date: 09/15/2009 14:39

Analysis Batch Number: 48930 End Date: 09/16/2009 02:03

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 360-48930/1		09/15/2009 14:39	1	B10311.D	Rtx-5ms SIL with guard column 0.25(um)
CCV 360-48930/2 CCVIS	OK	09/15/2009 15:13	1	B10312.D	Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/15/2009 15:47	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/15/2009 16:21	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/15/2009 16:55	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/15/2009 17:29	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/15/2009 18:03	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/15/2009 18:37	1		Rtx-5ms SIL with guard column 0.25(um)
360-24244-7 DL2	OC-SB-445-0.0/1.0-XXX DL2	09/15/2009 19:11	10	B10319.D	Rtx-5ms SIL with guard column 0.25(um)
360-24244-2 DL2	OC-SB-432-14/16-XXX DL2	09/15/2009 19:45	1000	B10320.D	Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/15/2009 20:19	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/15/2009 20:54	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/15/2009 21:28	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/15/2009 22:02	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/15/2009 22:37	5		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/15/2009 23:11	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/15/2009 23:45	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/16/2009 00:20	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/16/2009 00:54	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/16/2009 01:28	5		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/16/2009 02:03	1		Rtx-5ms SIL with guard column 0.25(um)

* bis (2-ethylhexyl) phthalate

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Westfield Job No.: 360-24244-1

SDG No.: OCRI-04

Instrument ID: Inst. B Start Date: 09/11/2009 10:42

Analysis Batch Number: 48839 End Date: 09/11/2009 16:22

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 360-48839/1		09/11/2009 10:42	1	B10183.D	Rtx-5ms SIL with guard column 0.25(um)
STD5 360-48839/2 ICIS		09/11/2009 11:16	1	B10184.D	Rtx-5ms SIL with guard column 0.25(um)
STD01 360-48839/3 IC		09/11/2009 11:50	1	B10185.D	Rtx-5ms SIL with guard column 0.25(um)
STD025 360-48839/4 IC		09/11/2009 12:24	1	B10186.D	Rtx-5ms SIL with guard column 0.25(um)
STD05 360-48839/5 IC		09/11/2009 12:58	1	B10187.D	Rtx-5ms SIL with guard column 0.25(um)
STD1 360-48839/6 IC		09/11/2009 13:32	1	B10188.D	Rtx-5ms SIL with guard column 0.25(um)
STD25 360-48839/7 IC		09/11/2009 14:06	1	B10189.D	Rtx-5ms SIL with guard column 0.25(um)
STD8 360-48839/8 IC		09/11/2009 14:40	1	B10190.D	Rtx-5ms SIL with guard column 0.25(um)
STD10 360-48839/9 IC		09/11/2009 15:14	1	B10191.D	Rtx-5ms SIL with guard column 0.25(um)
STD20 360-48839/10 IC		09/11/2009 15:48	1	B10192.D	Rtx-5ms SIL with guard column 0.25(um)
ICV 360-48839/11		09/11/2009 16:22	1		Rtx-5ms SIL with guard column 0.25(um)

Jcal Benzoic acid RRF = 0.0383

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Westfield Job No.: 360-24244-1 Analy Batch No.: 48839

SDG No.: OCRI-04

Instrument ID: Inst. B GC Column: Rtx-5ms ID: 0.25(um) Heated Purge: (Y/N) N

Calibration Start Date: 09/11/2009 11:16 Calibration End Date: 09/11/2009 15:48 Calibration ID: 4403

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD01 360-48839/3	B10185.D
Level 2	STD025 360-48839/4	B10186.D
Level 3	STD05 360-48839/5	B10187.D
Level 4	STD1 360-48839/6	B10188.D
Level 5	STD25 360-48839/7	B10189.D
Level 6	STD5 360-48839/2	B10184.D
Level 7	STD8 360-48839/8	B10190.D
Level 8	STD10 360-48839/9	B10191.D
Level 9	STD20 360-48839/10	B10192.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
1,4-Dioxane	0.4141 0.1954	0.3188 0.1676	0.2850 0.1633	0.2431 0.1226	0.2040	Qua	0.0389	0.1983	-0.004						0.9990		0.9900
Pyridine	0.4993 0.5065	0.5818 0.4415	0.5529 0.4344	0.5894 +++++	0.5199	Ave		0.5157				11.0		15.0			
N-Nitrosodimethylamine	0.4111 0.3373	0.3790 0.3056	0.4003 0.2936	0.3926 +++++	0.3583	Ave		0.3597				12.0		15.0			
Benzoic acid	+++++ 0.0376	+++++ 0.0648	0.0062 0.0919	0.0059 0.1333	0.0090	Qua	-0.060	0.0383	0.0049						0.9960		0.9900
2,4-Dinitrophenol	+++++ 0.0762	+++++ 0.1034	+++++ 0.1295	0.0125 0.1477	0.0411	Lin	-0.308	0.1596			0.0500				0.9900		0.9900
Benzaldehyde	0.3190 0.2654	0.3170 0.2385	0.3048 0.2185	0.3021 +++++	0.2787	Ave		0.2805				13.0		15.0			
Phenol	0.6768 0.6659	0.7351 0.5886	0.7524 0.5710	0.7727 +++++	0.6777	Ave		0.6800				11.0		15.0			
Aniline	0.7409 0.7774	0.8090 0.7105	0.8132 0.6999	0.8444 +++++	0.7879	Ave		0.7729				6.7		15.0			
Bis(2-chloroethyl)ether	0.6084 0.5280	0.6163 0.4569	0.6391 0.4271	0.6465 +++++	0.5638	Ave		0.5608				15.0		15.0			
2-Chlorophenol	0.5941 0.5933	0.6650 0.5249	0.6887 0.5043	0.6744 +++++	0.6255	Ave		0.6088				11.0		15.0			
1,4-Dichlorobenzene	0.8298 0.6919	0.8400 0.5935	0.8569 0.5707	0.8136 +++++	0.7232	Ave		0.7400				15.0		15.0			
1,3-Dichlorobenzene	0.8463 0.7103	0.8663 0.6213	0.8744 0.5998	0.8645 +++++	0.7519	Ave		0.7668				15.0		15.0			
Benzyl alcohol	0.2801 0.4654	0.4079 0.4127	0.4865 0.4008	0.4910 +++++	0.4738	Lin2	-0.017	0.4641							0.9900		0.9900

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Westfield Job No.: 360-24244-1

SDG No.: OCRI-04

Instrument ID: Inst. B Start Date: 09/11/2009 16:56

Analysis Batch Number: 48845 End Date: 09/12/2009 04:17

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 360-48845/1		09/11/2009 16:56	1	B10194.D	Rtx-5ms SIL with guard column 0.25(um)
CCV 360-48845/2 CCVIS	Benzoic acid 0.0307	09/11/2009 17:30	1	B10195.D	Rtx-5ms SIL with guard column 0.25(um)
360-24244-1	OC-SB-432-0.0/1.0-XXX	09/11/2009 18:04	10	B10196.D	Rtx-5ms SIL with guard column 0.25(um)
360-24244-2	OC-SB-432-14/16-XXX	09/11/2009 18:38	10	B10197.D	Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/11/2009 19:12	100		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/11/2009 19:47	200		Rtx-5ms SIL with guard column 0.25(um)
360-24244-3	OC-SB-432-5.0/7.0-XXX	09/11/2009 20:20	10	B10200.D	Rtx-5ms SIL with guard column 0.25(um)
360-24244-3 DL	OC-SB-432-5.0/7.0-XXX DL	09/11/2009 20:55	100	B10201.D	Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/11/2009 21:29	200		Rtx-5ms SIL with guard column 0.25(um)
360-24244-4	OC-SB-443-0.0/1.0-XXX	09/11/2009 22:03	10	B10203.D	Rtx-5ms SIL with guard column 0.25(um)
360-24244-4 MS	OC-SB-443-0.0/1.0-XXX MS	09/11/2009 22:37	10	B10204.D	Rtx-5ms SIL with guard column 0.25(um)
360-24244-4 MSD	OC-SB-443-0.0/1.0-XXX MSD	09/11/2009 23:11	10	B10205.D	Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/11/2009 23:45	1		Rtx-5ms SIL with guard column 0.25(um)
360-24244-6	OC-SB-443-6.0/8.0-XXX	09/12/2009 00:19	1	B10207.D	Rtx-5ms SIL with guard column 0.25(um)
360-24244-7	OC-SB-445-0.0/1.0-XXX	09/12/2009 00:53	1	B10208.D	Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/12/2009 01:27	10		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/12/2009 02:01	1		Rtx-5ms SIL with guard column 0.25(um)
360-24244-9	OC-SB-445-8.0/10-XXX	09/12/2009 02:35	1	B10211.D	Rtx-5ms SIL with guard column 0.25(um)
360-24244-10	OC-SB-437-0.0/1.0-XXX	09/12/2009 03:09	1	B10212.D	Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/12/2009 03:43	1		Rtx-5ms SIL with guard column 0.25(um)
360-24244-12	OC-SB-437-5.0/7.0-XXX	09/12/2009 04:17	1	B10214.D	Rtx-5ms SIL with guard column 0.25(um)

CCAL Benzoic acid RF = 0.0307

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Westfield Job No.: 360-24244-1

SDG No.: OCRI-04

Lab Sample ID: CCV 360-48845/2 Calibration Date: 09/11/2009 17:30

Instrument ID: Inst. B Calib Start Date: 09/11/2009 11:16

GC Column: Rtx-5ms ID: 0.25(um) Calib End Date: 09/11/2009 15:48

Lab File ID: B10195.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Qua		0.1943		5240	5000	4.8	30.0
Pyridine	Ave	0.5157	0.5052		4900	5000	-2.0	30.0
N-Nitrosodimethylamine	Ave	0.3597	0.3383		4700	5000	-6.0	30.0
Benzaldehyde	Ave	0.2805	0.2577		4590	5000	-8.1	30.0
Phenol	Ave	0.6800	0.6455		4750	5000	-5.1	20.0
Aniline	Ave	0.7729	0.7819		5060	5000	1.2	30.0
Bis(2-chloroethyl)ether	Ave	0.5608	0.5122		4570	5000	-8.7	30.0
2-Chlorophenol	Ave	0.6088	0.5855		4810	5000	-3.8	30.0
1,4-Dichlorobenzene	Ave	0.7400	0.6733		4550	5000	-9.0	20.0
1,3-Dichlorobenzene	Ave	0.7668	0.7002		4570	5000	-8.7	30.0
Benzyl alcohol	Lin2		0.4371		4740	5000	-5.1	30.0
1,2-Dichlorobenzene	Ave	0.7074	0.6363		4500	5000	-10.1	30.0
2-Methylphenol	Ave	0.5231	0.5073		4850	5000	-3.0	30.0
2,2'-oxybis[1-chloropropane]	Ave	1.011	0.9371		4640	5000	-7.3	30.0
3 & 4 Methylphenol	Ave	0.5473	0.5310		4850	5000	-3.0	30.0
Acetophenone	Ave	0.8119	0.7631		4700	5000	-6.0	30.0
N-Nitrosodi-n-propylamine	Ave	0.4012	0.3968	0.0500	4950	5000	-1.1	30.0
Hexachloroethane	Ave	0.2649	0.2519		4760	5000	-4.9	30.0
Nitrobenzene	Ave	0.2763	0.2438		4410	5000	-11.8	30.0
Isophorone	Ave	0.4537	0.4222		4650	5000	-7.0	30.0
2,4-Dimethylphenol	Ave	0.2251	0.1988		4420	5000	-11.7	30.0
2-Nitrophenol	Ave	0.1444	0.1345		4660	5000	-6.9	20.0
Benzoic acid	Qua		0.0308		3770	5000	-24.6	30.0
Bis(2-chloroethoxy)methane	Ave	0.2866	0.2547		4440	5000	-11.2	30.0
2,4-Dichlorophenol	Ave	0.2108	0.1955		4640	5000	-7.3	20.0
1,2,4-Trichlorobenzene	Ave	0.2594	0.2273		4380	5000	-12.4	30.0
Alpha-Terpineol	Ave	0.2182	0.1975		4530	5000	-9.5	30.0
Naphthalene	Ave	0.7890	0.6978		4420	5000	-11.6	30.0
4-Chloroaniline	Ave	0.3076	0.2914		4740	5000	-5.3	30.0
Hexachlorobutadiene	Ave	0.1289	0.1119		4340	5000	-13.2	20.0
Caprolactam	Lin1		0.1049		4510	5000	-9.9	30.0
4-Chloro-3-methylphenol	Ave	0.2080	0.1921		4620	5000	-7.7	20.0
2-Methylnaphthalene	Ave	0.5301	0.4697		4430	5000	-11.4	30.0
1-Methylnaphthalene	Ave	0.5336	0.4698		4400	5000	-12.0	30.0
1,2,4,5-Tetrachlorobenzene	Ave	0.2289	0.2003		4380	5000	-12.5	30.0
Hexachlorocyclopentadiene	Lin1		0.2028	0.0500	5380	5000	7.7	30.0
2,4,6-Trichlorophenol	Ave	0.3064	0.3412		5570	5000	11.3	20.0
2,4,5-Trichlorophenol	Ave	0.3139	0.3606		5740	5000	14.9	30.0
1,1'-Biphenyl	Ave	1.397	1.484		5310	5000	6.2	30.0
2-Chloronaphthalene	Ave	1.263	1.334		5280	5000	5.6	30.0
Phenyl ether	Ave	0.3602	0.3082		4280	5000	-14.4	30.0

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Westfield Job No.: 360-24244-1

SDG No.: OCRI-04

Lab File ID: B10183.D DFTPP Injection Date: 09/11/2009

Instrument ID: Inst. B DFTPP Injection Time: 10:42

Analysis Batch No.: 48839

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	30.0 - 60.0 % of mass 198	37.1	
68	Less than 2.0 % of mass 69	0.0	(0.0)1
69	Mass 69 relative abundance	37.6	
70	Less than 2.0 % of mass 69	0.2	(0.6)1
127	40.0 - 60.0 % of mass 198	49.1	
197	Less than 1.0 % of mass 198	0.0	
198	Base Peak, 100 % relative abundance	100.0	
199	5.0- 9.0 % of mass 198	7.1	
275	10.0 - 30.0 % of mass 198	28.2	
365	Greater than 1.0 % of mass 198	3.5	
441	Present but less than mass 443	15.2	
442	Greater than 40.0 % of mass 198	92.3	
443	17.0 - 23.0 % of mass 442	18.4	(20.0)2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STD5 360-48839/2	B10184.D	09/11/2009	11:16
	STD01 360-48839/3	B10185.D	09/11/2009	11:50
	STD025 360-48839/4	B10186.D	09/11/2009	12:24
	STD05 360-48839/5	B10187.D	09/11/2009	12:58
	STD1 360-48839/6	B10188.D	09/11/2009	13:32
	STD25 360-48839/7	B10189.D	09/11/2009	14:06
	STD8 360-48839/8	B10190.D	09/11/2009	14:40
	STD10 360-48839/9	B10191.D	09/11/2009	15:14
	STD20 360-48839/10	B10192.D	09/11/2009	15:48

Benzoic acid $\overline{RF} = 0.033$

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Westfield Job No.: 360-24244-1

SDG No.: OCRI-04

Lab File ID: B10194.D DFTPP Injection Date: 09/11/2009

Instrument ID: Inst. B DFTPP Injection Time: 16:56

Analysis Batch No.: 48845

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	30.0 - 60.0 % of mass 198	40.5	
68	Less than 2.0 % of mass 69	0.0	(0.0)1
69	Mass 69 relative abundance	39.6	
70	Less than 2.0 % of mass 69	0.2	(0.5)1
127	40.0 - 60.0 % of mass 198	50.4	
197	Less than 1.0 % of mass 198	0.0	
198	Base Peak, 100 % relative abundance	100.0	
199	5.0- 9.0 % of mass 198	7.1	
275	10.0 - 30.0 % of mass 198	26.2	
365	Greater than 1.0 % of mass 198	3.2	
441	Present but less than mass 443	13.4	
442	Greater than 40.0 % of mass 198	81.9	
443	17.0 - 23.0 % of mass 442	16.2	(19.8)2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCV 360-48845/2	B10195.D	09/11/2009	17:30
OC-SB-432-0.0/1.0-XXX	360-24244-1	B10196.D	09/11/2009	18:04
OC-SB-432-14/16-XXX	360-24244-2	B10197.D	09/11/2009	18:38
OC-SB-432-5.0/7.0-XXX	360-24244-3	B10200.D	09/11/2009	20:20
OC-SB-432-5.0/7.0-XXX DL	360-24244-3 DL	B10201.D	09/11/2009	20:55
OC-SB-443-0.0/1.0-XXX	360-24244-4	B10203.D	09/11/2009	22:03
OC-SB-443-0.0/1.0-XXX MS	360-24244-4 MS	B10204.D	09/11/2009	22:37
OC-SB-443-0.0/1.0-XXX MSD	360-24244-4 MSD	B10205.D	09/11/2009	23:11
OC-SB-443-6.0/8.0-XXX	360-24244-6	B10207.D	09/12/2009	00:19
OC-SB-445-0.0/1.0-XXX	360-24244-7	B10208.D	09/12/2009	00:53
OC-SB-445-8.0/10-XXX	360-24244-9	B10211.D	09/12/2009	02:35
OC-SB-437-0.0/1.0-XXX	360-24244-10	B10212.D	09/12/2009	03:09
OC-SB-437-5.0/7.0-XXX	360-24244-12	B10214.D	09/12/2009	04:17

CCV Benzoic acid RRF = 0.030

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Westfield Job No.: 360-24244-1

SDG No.: OCRI-04

Instrument ID: Inst. B Start Date: 09/12/2009 04:51

Analysis Batch Number: 48848 End Date: 09/12/2009 07:07

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 360-48848/1		09/12/2009 04:51	1	B10215.D	Rtx-5ms SIL with guard column 0.25(um)
CCV 360-48848/2 CCVIS	*OK	09/12/2009 05:25	1	B10216.D	Rtx-5ms SIL with guard column 0.25(um)
360-24244-1 DL	OC-SB-432-0.0/1.0-XXX DL	09/12/2009 05:59	1	B10217.D	Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/12/2009 06:33	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/12/2009 07:07	1		Rtx-5ms SIL with guard column 0.25(um)

* diphenylamine only.

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Westfield Job No.: 360-24244-1

SDG No.: OCRI-04

Lab Sample ID: CCV 360-48848/2 Calibration Date: 09/12/2009 05:25

Instrument ID: Inst. B Calib Start Date: 09/11/2009 11:16

GC Column: Rtx-5ms ID: 0.25(um) Calib End Date: 09/11/2009 15:48

Lab File ID: B10216.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Qua		0.1989		5390	5000	7.7	30.0
Pyridine	Ave	0.5157	0.4925		4770	5000	-4.5	30.0
N-Nitrosodimethylamine	Ave	0.3597	0.3426		4760	5000	-4.8	30.0
Benzaldehyde	Ave	0.2805	0.2612		4660	5000	-6.9	30.0
Phenol	Ave	0.6800	0.6164		4530	5000	-9.4	20.0
Aniline	Ave	0.7729	0.7804		5050	5000	1.0	30.0
Bis(2-chloroethyl)ether	Ave	0.5608	0.5180		4620	5000	-7.6	30.0
2-Chlorophenol	Ave	0.6088	0.5872		4820	5000	-3.5	30.0
1,4-Dichlorobenzene	Ave	0.7400	0.6787		4590	5000	-8.3	20.0
1,3-Dichlorobenzene	Ave	0.7668	0.7179		4680	5000	-6.4	30.0
Benzyl alcohol	Lin2		0.3709		4030	5000	-19.4	30.0
1,2-Dichlorobenzene	Ave	0.7074	0.6530		4620	5000	-7.7	30.0
2-Methylphenol	Ave	0.5231	0.4999		4780	5000	-4.4	30.0
2,2'-oxybis[1-chloropropane]	Ave	1.011	0.9249		4570	5000	-8.5	30.0
3 & 4 Methylphenol	Ave	0.5473	0.5167		4720	5000	-5.6	30.0
Acetophenone	Ave	0.8119	0.7696		4740	5000	-5.2	30.0
N-Nitrosodi-n-propylamine	Ave	0.4012	0.4018	0.0500	5010	5000	0.2	30.0
Hexachloroethane	Ave	0.2649	0.2355		4450	5000	-11.1	30.0
Nitrobenzene	Ave	0.2763	0.2361		4270	5000	-14.6	30.0
Isophorone	Ave	0.4537	0.4143		4570	5000	-8.7	30.0
2,4-Dimethylphenol	Ave	0.2251	0.1902		4230	5000	-15.5	30.0
2-Nitrophenol	Ave	0.1444	0.1295		4480	5000	-10.3	20.0
Benzoic acid	Qua		0.0182		2880	5000	-42.5*	30.0
Bis(2-chloroethoxy)methane	Ave	0.2866	0.2428		4240	5000	-15.3	30.0
2,4-Dichlorophenol	Ave	0.2108	0.1888		4480	5000	-10.5	20.0
1,2,4-Trichlorobenzene	Ave	0.2594	0.2178		4200	5000	-16.0	30.0
Alpha-Terpineol	Ave	0.2182	0.1917		4390	5000	-12.1	30.0
Naphthalene	Ave	0.7890	0.6832		4330	5000	-13.4	30.0
4-Chloroaniline	Ave	0.3076	0.2728		4440	5000	-11.3	30.0
Hexachlorobutadiene	Ave	0.1289	0.1069		4150	5000	-17.1	20.0
Caprolactam	Lin1		0.0997		4290	5000	-14.3	30.0
4-Chloro-3-methylphenol	Ave	0.2080	0.1878		4510	5000	-9.7	20.0
2-Methylnaphthalene	Ave	0.5301	0.4526		4270	5000	-14.6	30.0
1-Methylnaphthalene	Ave	0.5336	0.4597		4310	5000	-13.9	30.0
1,2,4,5-Tetrachlorobenzene	Ave	0.2289	0.1974		4310	5000	-13.8	30.0
Hexachlorocyclopentadiene	Lin1		0.0865	0.0500	2350	5000	-53.0*	30.0
2,4,6-Trichlorophenol	Ave	0.3064	0.3099		5060	5000	1.1	20.0
2,4,5-Trichlorophenol	Ave	0.3139	0.3535		5630	5000	12.6	30.0
1,1'-Biphenyl	Ave	1.397	1.415		5060	5000	1.3	30.0
2-Chloronaphthalene	Ave	1.263	1.283		5080	5000	1.6	30.0
Phenyl ether	Ave	0.3602	0.3155		4380	5000	-12.4	30.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Westfield Job No.: 360-24244-1

SDG No.: OCRI-04

Lab Sample ID: CCV 360-48848/2 Calibration Date: 09/12/2009 05:25

Instrument ID: Inst. B Calib Start Date: 09/11/2009 11:16

GC Column: Rtx-5ms ID: 0.25(um) Calib End Date: 09/11/2009 15:48

Lab File ID: B10216.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2-Nitroaniline	Lin2		0.3368		5390	5000	7.7	30.0
Dimethyl phthalate	Ave	1.191	1.212		5090	5000	1.8	30.0
2,6-Dinitrotoluene	Ave	0.2804	0.2960		5280	5000	5.6	30.0
Acenaphthylene	Ave	1.604	1.712		5340	5000	6.7	30.0
3-Nitroaniline	Ave	0.2719	0.3046		5600	5000	12.0	30.0
Acenaphthene	Ave	1.123	1.141		5080	5000	1.6	20.0
2,4-Dinitrophenol	Lin		0.0297*	0.0500	2860	5000	-42.8*	30.0
4-Nitrophenol	Lin1		0.1253	0.0500	4400	5000	-11.9	30.0
Dibenzofuran	Ave	1.468	1.534		5230	5000	4.5	30.0
2,4-Dinitrotoluene	Lin2		0.3928		5260	5000	5.2	30.0
2,3,4,6-Tetrachlorophenol	Lin2		0.2414		5100	5000	2.0	30.0
Diethyl phthalate	Ave	1.239	1.259		5080	5000	1.6	30.0
4-Chlorophenyl phenyl ether	Ave	0.5633	0.5834		5180	5000	3.6	30.0
Fluorene	Ave	1.224	1.273		5200	5000	4.0	30.0
4-Nitroaniline	Lin1		0.2944		5510	5000	10.1	30.0
4,6-Dinitro-2-methylphenol	Lin		0.0480		2690	5000	-46.2*	30.0
Diphenylamine	Ave	0.6385	0.6678		5230	5000	4.6	30.0
N-Nitrosodiphenylamine	Ave	0.6385	0.6678		5230	5000	4.6	20.0
1,2-Diphenylhydrazine	Ave	0.7199	0.7672		5330	5000	6.6	30.0
Azobenzene	Ave	0.7199	0.7672		5330	5000	6.6	30.0
Benzophenone	Ave	0.6052	0.6048		5000	5000	0.1	30.0
4-Bromophenyl phenyl ether	Ave	0.1855	0.1841		4960	5000	-0.8	30.0
Atrazine	Ave	0.1837	0.1969		5360	5000	7.2	30.0
Hexachlorobenzene	Ave	0.1782	0.1751		4910	5000	-1.7	30.0
Pentachlorophenol	Lin		0.0507		3230	5000	-35.4*	20.0
Pentachloronitrobenzene	Ave	0.0696	0.0737		5290	5000	5.8	30.0
Phenanthrene	Ave	1.013	1.052		5200	5000	3.9	30.0
Anthracene	Ave	0.9384	0.9848		5250	5000	4.9	30.0
Carbazole	Ave	0.7753	0.8860		5710	5000	14.3	30.0
Di-n-butyl phthalate	Qua		1.209		4980	5000	-0.4	30.0
Pyrene	Ave	1.596	1.562		4890	5000	-2.1	30.0
Benzidine	Qua		0.5786		6970	5000	39.5*	30.0
Fluoranthene	Ave	0.9411	0.9572		5090	5000	1.7	20.0
Butyl benzyl phthalate	Ave	0.8439	0.8426		4990	5000	-0.2	30.0
3,3'-Dichlorobenzidine	Lin1		0.7331		5360	5000	7.2	30.0
Bis(2-ethylhexyl) phthalate	Ave	1.125	1.127		5010	5000	0.2	30.0
Benzo[a]anthracene	Ave	0.9373	0.9660		5150	5000	3.1	30.0
Chrysene	Ave	0.8734	0.8816		5050	5000	0.9	30.0
Di-n-octyl phthalate	Qua		2.870		4750	5000	-5.0	20.0
Benzo[b]fluoranthene	Ave	1.257	1.243		4940	5000	-1.1	30.0
Benzo[k]fluoranthene	Ave	1.149	1.293		5630	5000	12.6	30.0

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Westfield Job No.: 360-24244-1

SDG No.: OCRI-04

Lab File ID: B10140.D DFTPP Injection Date: 09/09/2009

Instrument ID: Inst. B DFTPP Injection Time: 16:53

Analysis Batch No.: 48761

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	30.0 - 60.0 % of mass 198	43.7	
68	Less than 2.0 % of mass 69	0.0	(0.0)1
69	Mass 69 relative abundance	42.7	
70	Less than 2.0 % of mass 69	0.2	(0.4)1
127	40.0 - 60.0 % of mass 198	53.4	
197	Less than 1.0 % of mass 198	0.0	
198	Base Peak, 100 % relative abundance	100.0	
199	5.0- 9.0 % of mass 198	7.3	
275	10.0 - 30.0 % of mass 198	26.2	
365	Greater than 1.0 % of mass 198	3.1	
441	Present but less than mass 443	11.9	
442	Greater than 40.0 % of mass 198	73.1	
443	17.0 - 23.0 % of mass 442	14.5	(19.8)2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STD5 360-48761/2	B10141.D	09/09/2009	17:26
	STD01 360-48761/3	B10142.D	09/09/2009	18:00
	STD025 360-48761/4	B10143.D	09/09/2009	18:34
	STD05 360-48761/5	B10144.D	09/09/2009	19:08
	STD1 360-48761/6	B10145.D	09/09/2009	19:42
	STD25 360-48761/7	B10146.D	09/09/2009	20:16
	STD8 360-48761/8	B10147.D	09/09/2009	20:50
	STD10 360-48761/9	B10148.D	09/09/2009	21:24
	STD20 360-48761/10	B10149.D	09/09/2009	21:58

ICAL 2,4-DNP $r^2 = 0.9930$

MB caprolactam 13.8 ug/kg

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Westfield Job No.: 360-24244-1 Analy Batch No.: 48761

SDG No.: OCRI-04

Instrument ID: Inst. B GC Column: Rtx-5ms ID: 0.25(um) Heated Purge: (Y/N) N

Calibration Start Date: 09/09/2009 17:26 Calibration End Date: 09/09/2009 21:58 Calibration ID: 4274

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
2-Methylphenol	0.5143	0.5894	0.5743	0.5664	0.5543	Ave		0.5265				10.0		15.0			
	0.5090	0.4599	0.4446	+++++													
2,2'-oxybis[1-chloropropane]	1.0911	1.0786	1.1300	1.1034	1.0378	Ave		0.9915				15.0		15.0			
	0.9284	0.8153	0.7472	+++++													
3 & 4 Methylphenol	0.5217	0.5423	0.5916	0.5967	0.5626	Ave		0.5360				9.1		15.0			
	0.5299	0.4867	0.4564	+++++													
Acetophenone	0.8164	0.9015	0.9045	0.8841	0.8334	Ave		0.8057				12.0		15.0			
	0.7686	0.6799	0.6568	+++++													
N-Nitrosodi-n-propylamine	0.3965	0.4404	0.4539	0.4272	0.4073	Ave		0.4006			0.0500	9.9		15.0			
	0.3803	0.3575	0.3420	+++++													
2,4-Dinitrophenol	+++++	+++++	0.0040	0.0121	0.0293	Qua	-0.248	0.1416	0.0002		0.0500				0.9830	*	0.9900
	0.0471	0.1179	0.1299	0.1312													
Hexachloroethane	0.2607	0.2997	0.2789	0.2784	0.2639	Ave		0.2576				12.0		15.0			
	0.2443	0.2224	0.2123	+++++													
Nitrobenzene	0.2623	0.2818	0.2969	0.2906	0.2803	Ave		0.2799				5.5		15.0			
	0.2938	0.2898	0.2726	0.2507													
Isophorone	0.3903	0.4277	0.4842	0.4918	0.4784	Ave		0.4565				8.9		15.0			
	0.4876	0.4921	0.4567	0.3995													
2,4-Dimethylphenol	0.2075	0.2277	0.2397	0.2374	0.2307	Ave		0.2315				5.9		15.0			
	0.2456	0.2470	0.2354	0.2124													
2-Nitrophenol	0.0972	0.1142	0.1311	0.1368	0.1439	Lin2	-0.006	0.1502							0.9950		0.9900
	0.1528	0.1632	0.1606	0.1448													
Bis(2-chloroethoxy)methane	0.2854	0.2981	0.3106	0.3098	0.2920	Ave		0.2908				6.0		15.0			
	0.2970	0.2955	0.2735	0.2551													
2,4-Dichlorophenol	0.1791	0.1925	0.2067	0.2080	0.2133	Ave		0.2100				8.0		15.0			
	0.2297	0.2314	0.2219	0.2077													
1,2,4-Trichlorobenzene	0.2516	0.2753	0.2745	0.2809	0.2594	Ave		0.2601				6.6		15.0			
	0.2642	0.2618	0.2484	0.2250													
Alpha-Terpineol	0.1871	0.1873	0.2213	0.2207	0.2131	Ave		0.2130				8.2		15.0			
	0.2301	0.2355	0.2201	0.2019													
Naphthalene	0.8709	0.8833	0.8817	0.8571	0.8289	Ave		0.7917				15.0		15.0			
	0.8169	0.7645	0.7001	0.5218													
4-Chloroaniline	0.2570	0.2908	0.3182	0.3277	0.3220	Ave		0.3117				8.9		15.0			
	0.3336	0.3409	0.3291	0.2859													
Hexachlorobutadiene	0.1360	0.1282	0.1414	0.1356	0.1288	Ave		0.1298				5.9		15.0			
	0.1301	0.1300	0.1226	0.1154													
Caprolactam	0.0743	0.0789	0.0920	0.1006	0.1096	Lin2	-0.005	0.1114							0.9920		0.9900
	0.1138	0.1238	0.1192	0.1099													
4-Chloro-3-methylphenol	0.1794	0.1935	0.2120	0.2090	0.2134	Ave		0.2098				7.6		15.0			
	0.2232	0.2328	0.2204	0.2045													

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Westfield Job No.: 360-24244-1

SDG No.: OCRI-04

Lab Sample ID: CCV 360-48209/2 Calibration Date: 08/27/2009 15:25

Instrument ID: Inst. B Calib Start Date: 08/27/2009 09:11

GC Column: Rtx-5ms ID: 0.25(um) Calib End Date: 08/27/2009 13:43

Lab File ID: B9850.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Lin1		0.2483		5290	5000	5.8	30.0
N-Nitrosodimethylamine	Ave	0.3528	0.3393		4810	5000	-3.8	30.0
Pyridine	Lin1		0.5404		5100	5000	2.0	30.0
Benzaldehyde	Ave	0.7664	0.7682		5010	5000	0.2	30.0
Phenol	Ave	0.7664	0.7682		5010	5000	0.2	20.0
Aniline	Ave	0.8532	0.9288		5440	5000	8.9	30.0
Bis(2-chloroethyl)ether	Qua		0.6905		5690	5000	13.8	30.0
2-Chlorophenol	Ave	0.6177	0.6375		5160	5000	3.2	30.0
1,4-Dichlorobenzene	Lin1		0.7254		5350	5000	7.0	20.0
1,3-Dichlorobenzene	Lin1		0.7509		5350	5000	7.0	30.0
2-Methylphenol	Ave	0.3530	0.3843		5440	5000	8.9	30.0
Benzyl alcohol	Ave	0.4448	0.4756		5350	5000	6.9	30.0
1,2-Dichlorobenzene	Ave	0.7498	0.6970		4650	5000	-7.1	30.0
3 & 4 Methylphenol	Ave	0.5658	0.5841		5160	5000	3.2	30.0
2,2'-oxybis[1-chloropropane]	Lin1		1.036		5630	5000	12.6	30.0
N-Nitrosodi-n-propylamine	Ave	0.4011	0.4281	0.0500	5340	5000	6.7	30.0
Acetophenone	Ave	0.8448	0.8482		5020	5000	0.4	30.0
Hexachloroethane	Ave	0.2654	0.2660		5010	5000	0.2	30.0
Nitrobenzene	Ave	0.2699	0.3103		5750	5000	15.0	30.0
Isophorone	Ave	0.4948	0.5640		5700	5000	14.0	30.0
2,4-Dimethylphenol	Ave	0.2333	0.2496		5350	5000	7.0	30.0
2-Nitrophenol	Lin1		0.1494		5300	5000	6.0	20.0
Benzoic acid	Qua		0.0492		6000	5000	20.1	30.0
Bis(2-chloroethoxy)methane	Ave	0.3424	0.3541		5170	5000	3.4	30.0
2,4-Dichlorophenol	Lin2		0.2354		5330	5000	6.6	20.0
1,2,4-Trichlorobenzene	Ave	0.2852	0.2796		4900	5000	-2.0	30.0
Alpha-Terpineol	Ave	0.2287	0.2552		5580	5000	11.6	30.0
Naphthalene	Ave	0.9640	0.9779		5070	5000	1.4	30.0
4-Chloroaniline	Ave	0.4424	0.4645		5250	5000	5.0	30.0
Hexachlorobutadiene	Ave	0.1409	0.1360		4820	5000	-3.5	20.0
Caprolactam	Lin1		0.1255		5130	5000	2.6	30.0
4-Chloro-3-methylphenol	Lin2		0.2391		5290	5000	5.8	20.0
2-Methylnaphthalene	Ave	0.5724	0.5798		5060	5000	1.3	30.0
1-Methylnaphthalene	Ave	0.5896	0.5942		5040	5000	0.8	30.0
Hexachlorocyclopentadiene	Lin		0.1842	0.0500	4880	5000	-2.4	30.0
1,2,4,5-Tetrachlorobenzene	Ave	0.2516	0.2472		4910	5000	-1.7	30.0
2,4,6-Trichlorophenol	Lin1		0.3220		4840	5000	-3.1	20.0
2,4,5-Trichlorophenol	Lin1		0.3430		4930	5000	-1.3	30.0
1,1'-Biphenyl	Ave	1.479	1.518		5130	5000	2.6	30.0
2-Chloronaphthalene	Ave	1.363	1.332		4890	5000	-2.2	30.0
Phenyl ether	Ave	0.3972	0.3976		5010	5000	0.1	30.0

FORM III
GC/MS SEMI VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24244-1

SDG No.: OCRI-04

Matrix: Solid Level: Low Lab File ID: B10204.D

Lab ID: 360-24244-4 MS Client ID: OC-SB-443-0.0/1.0-XXX MS

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	QC LIMITS REC	#
1,1'-Biphenyl	341	ND	207 J	61	40-140	
1,2,4,5-Tetrachlorobenzene	341	ND	214 J	63	40-140	
1,2,4-Trichlorobenzene	341	ND	192 J	56	40-140	
1,2-Dichlorobenzene	341	ND	208 J	61	40-140	
1,3-Dichlorobenzene	341	ND	203 J	60	40-140	
1,4-Dichlorobenzene	341	ND	211 J	62	40-140	
1-Methylnaphthalene	341	ND	215 J	63	40-140	
2,3,4,6-Tetrachlorophenol	341	ND	105 J	31	40-140	F
2,4-Dimethylphenol	341	ND	231 J	68	30-130	
2-Chlorophenol	341	ND	209 J	61	30-130	
2,4-Dichlorophenol	341	ND	199 J	58	30-130	
2-Methylphenol	341	ND	232 J	68	30-130	
2,4,6-Trichlorophenol	341	ND	149 J	44	30-130	
2,4,5-Trichlorophenol	341	ND	195 J	57	30-130	
3 & 4 Methylphenol	341	ND	232 J	68	30-130	
3,3'-Dichlorobenzidine	341	ND	ND	24	40-140	F
2-Methylnaphthalene	341	ND	224 J	66	40-140	
2-Nitroaniline	341	ND	199 J	58	40-140	
2-Chloronaphthalene	341	ND	167 J	49	40-140	
4-Chloro-3-methylphenol	341	ND	248 J	73	30-130	
4-Chloroaniline	341	ND	137 J	40	40-140	
2,6-Dinitrotoluene	341	ND	185 J	54	40-140	
2-Nitrophenol	341	ND	173 J	51	30-130	
3-Nitroaniline	341	ND	192 J	56	40-140	
2,4-Dinitrophenol	341	ND	660	194	30-130	F
2,4-Dinitrotoluene	341	ND	198 J	58	40-140	
Acenaphthene	341	ND	238 J	70	40-140	
Acenaphthylene	341	ND	206 J	60	40-140	
4-Nitrophenol	341	ND	167 J	49	30-130	
Aniline	341	ND	ND	25	40-140	F
4-Nitroaniline	341	ND	187 J	55	40-140	
Azobenzene	341	ND	160 J	47	40-140	
4-Bromophenyl phenyl ether	341	ND	219 J	64	40-140	
4-Chlorophenyl phenyl ether	341	ND	211 J	62	40-140	
4,6-Dinitro-2-methylphenol	341	ND	292 J	86	30-130	
Benzoic acid	341	ND	463 J	136	30-130	F
Anthracene	341	ND	257 J	75	40-140	
Benzyl alcohol	341	ND	ND	69	30-130	
Bis(2-chloroethoxy)methane	341	ND	201 J	59	40-140	
Bis(2-chloroethyl)ether	341	ND	213 J	63	40-140	
Butyl benzyl phthalate	341	ND	200 J	59	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24244-1

SDG No.: OCRI-04

Matrix: Solid Level: Low Lab File ID: B10204.D

Lab ID: 360-24244-4 MS Client ID: OC-SB-443-0.0/1.0-XXX MS

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	QC LIMITS REC	#
Benzo[a]anthracene	341	ND	248 J	73	40-140	
Caprolactam	341	ND	ND	(27)	40-140	F
Chrysene	341	ND	249 J	73	40-140	
Benzo[b]fluoranthene	341	ND	209 J	61	40-140	
Benzo[k]fluoranthene	341	ND	229 J	67	40-140	
Benzo[a]pyrene	341	ND	340 J	100	40-140	
Dibenzofuran	341	ND	215 J	63	40-140	
Dibenz(a,h)anthracene	341	ND	357	105	40-140	
Diethyl phthalate	341	ND	216 J	63	40-140	
Benzo[g,h,i]perylene	341	ND	246 J	72	40-140	
Dimethyl phthalate	341	ND	234 J	69	40-140	
Acetophenone	341	160 J	346	54	40-140	
Di-n-butyl phthalate	341	ND	ND	67	40-140	
Bis(2-ethylhexyl) phthalate	341	4800	1610	(-950)	40-140	4
Di-n-octyl phthalate	341	ND	219 J	64	40-140	
Fluoranthene	341	ND	244 J	72	40-140	
Fluorene	341	ND	261 J	77	40-140	
Hexachlorobenzene	341	ND	215 J	63	40-140	
Hexachlorobutadiene	341	ND	192 J	56	40-140	
2,2'-oxybis[1-chloropropane]	341	ND	219 J	64	40-140	
Hexachlorocyclopentadiene	341	ND	ND	(25)	40-140	F
Hexachloroethane	341	ND	205 J	60	40-140	
Indeno[1,2,3-cd]pyrene	341	ND	353	104	40-140	
Isophorone	341	ND	191 J	56	40-140	
Naphthalene	341	ND	220 J	65	40-140	
Nitrobenzene	341	ND	214 J	63	40-140	
Atrazine	341	ND	233 J	68	40-140	
Benzaldehyde	341	ND	347	102	40-140	
N-Nitrosodimethylamine	341	ND	209 J	61	40-140	
Carbazole	341	ND	ND	(1)	40-140	F
N-Nitrosodi-n-propylamine	341	ND	233 J	68	40-140	
Benzophenone	341	ND	240 J	70	40-140	
N-Nitrosodiphenylamine	341	ND	174 J	51	40-140	
Diphenyl oxide	341	ND	217 J	64	40-140	
Pentachlorophenol	341	ND	339 J	99	30-130	
Phenanthrene	341	ND	261 J	77	40-140	
Phenol	341	ND	255 J	75	30-130	
Pyrene	341	ND	229 J	67	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24244-1

SDG No.: OCRI-04

Matrix: Solid Level: Low Lab File ID: B10205.D

Lab ID: 360-24244-4 MSD Client ID: OC-SB-443-0.0/1.0-XXX MSD

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1'-Biphenyl	345	216 J	63	4	30	40-140	
1,2,4,5-Tetrachlorobenzene	345	225 J	65	5	30	40-140	
1,2,4-Trichlorobenzene	345	201 J	58	4	30	40-140	
1,2-Dichlorobenzene	345	216 J	63	4	30	40-140	
1,3-Dichlorobenzene	345	206 J	60	1	30	40-140	
1,4-Dichlorobenzene	345	199 J	58	6	30	40-140	
1-Methylnaphthalene	345	218 J	63	2	30	40-140	
2,3,4,6-Tetrachlorophenol	345	ND	27	NC	30	40-140	F
2,4-Dimethylphenol	345	254 J	74	9	30	30-130	
2-Chlorophenol	345	226 J	66	8	30	30-130	
2,4-Dichlorophenol	345	212 J	61	6	30	30-130	
2-Methylphenol	345	239 J	69	3	30	30-130	
2,4,6-Trichlorophenol	345	155 J	45	4	30	30-130	
2,4,5-Trichlorophenol	345	192 J	56	1	30	30-130	
3 & 4 Methylphenol	345	252 J	73	8	30	30-130	
3,3'-Dichlorobenzidine	345	ND	28	NC		40-140	F
2-Methylnaphthalene	345	232 J	67	3	30	40-140	
2-Nitroaniline	345	209 J	61	5	30	40-140	
2-Chloronaphthalene	345	182 J	53	9	30	40-140	
4-Chloro-3-methylphenol	345	278 J	81	11	30	30-130	
4-Chloroaniline	345	175 J	51	24	30	40-140	
2,6-Dinitrotoluene	345	202 J	59	9	30	40-140	
2-Nitrophenol	345	180 J	52	4	30	30-130	
3-Nitroaniline	345	199 J	58	4	30	40-140	
2,4-Dinitrophenol	345	666	193	1	30	30-130	F
2,4-Dinitrotoluene	345	196 J	57	1	30	40-140	
Acenaphthene	345	251 J	73	5	30	40-140	
Acenaphthylene	345	225 J	65	9	30	40-140	
4-Nitrophenol	345	190 J	55	13	30	30-130	
Aniline	345	ND	30	NC	30	40-140	F
4-Nitroaniline	345	198 J	57	6	30	40-140	
Azobenzene	345	252 J	73	44	30	40-140	F
4-Bromophenyl phenyl ether	345	234 J	68	6	30	40-140	
4-Chlorophenyl phenyl ether	345	229 J	67	8	30	40-140	
4,6-Dinitro-2-methylphenol	345	302 J	88	3	30	30-130	
Benzoic acid	345	462 J	134	0	30	30-130	F
Anthracene	345	281 J	82	9	30	40-140	
Benzyl alcohol	345	ND	72	NC	30	30-130	
Bis(2-chloroethoxy)methane	345	215 J	62	6	30	40-140	
Bis(2-chloroethyl)ether	345	218 J	63	2	30	40-140	
Butyl benzyl phthalate	345	235 J	68	16	30	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24244-1

SDG No.: OCRI-04

Matrix: Solid Level: Low Lab File ID: B10205.D

Lab ID: 360-24244-4 MSD Client ID: OC-SB-443-0.0/1.0-XXX MSD

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Benzo[a]anthracene	345	265 J	77	7	30	40-140	
Caprolactam	345	ND	23	NC	30	40-140	F
Chrysene	345	260 J	75	4	30	40-140	
Benzo[b]fluoranthene	345	224 J	65	7	30	40-140	
Benzo[k]fluoranthene	345	260 J	75	13	30	40-140	
Benzo[a]pyrene	345	317 J	92	7	30	40-140	
Dibenzofuran	345	231 J	67	7	30	40-140	
Dibenz(a,h)anthracene	345	364	106	2	30	40-140	
Diethyl phthalate	345	237 J	69	9	30	40-140	
Benzo[g,h,i]perylene	345	267 J	78	8	30	40-140	
Dimethyl phthalate	345	257 J	75	10	30	40-140	
Acetophenone	345	328 J	49	5	30	40-140	
Di-n-butyl phthalate	345	ND	70	NC	30	40-140	
Bis(2-ethylhexyl) phthalate	345	3000	-533	61	30	40-140	4 F
Di-n-octyl phthalate	345	265 J	77	19	30	40-140	
Fluoranthene	345	271 J	79	11	30	40-140	
Fluorene	345	273 J	79	5	30	40-140	
Hexachlorobenzene	345	237 J	69	10	30	40-140	
Hexachlorobutadiene	345	205 J	60	7	30	40-140	
2,2'-oxybis[1-chloropropane]	345	224 J	65	3	30	40-140	
Hexachlorocyclopentadiene	345	ND	26	NC	30	40-140	F
Hexachloroethane	345	194 J	56	6	30	40-140	
Indeno[1,2,3-cd]pyrene	345	355	103	1	30	40-140	
Isophorone	345	200 J	58	5	30	40-140	
Naphthalene	345	219 J	63	1	30	40-140	
Nitrobenzene	345	215 J	62	0	30	40-140	
Atrazine	345	240 J	70	3	30	40-140	
Benzaldehyde	345	350	102	1	30	40-140	
N-Nitrosodimethylamine	345	225 J	65	7	30	40-140	
Carbazole	345	247 J	72	NC	30	40-140	
N-Nitrosodi-n-propylamine	345	240 J	70	3	30	40-140	
Benzophenone	345	244 J	71	1	30	40-140	
N-Nitrosodiphenylamine	345	187 J	54	7	30	40-140	
Diphenyl oxide	345	223 J	65	3	30	40-140	
Pentachlorophenol	345	335 J	97	1	30	30-130	
Phenanthrene	345	268 J	78	2	30	40-140	
Phenol	345	247 J	72	3	30	30-130	
Pyrene	345	250 J	72	8	30	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM IV
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Westfield Job No.: 360-24244-1

SDG No.: OCRI-04

Lab File ID: B10153.D Lab Sample ID: MB 360-48119/1-A

Matrix: Solid Date Extracted: 08/25/2009 11:23

Instrument ID: Inst. B Date Analyzed: 09/10/2009 00:13

Level: (Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 360-48119/2-A	B10154.D	09/10/2009 00:47
	LCSD 360-48119/3-A	B10155.D	09/10/2009 01:21
OC-SB-432-0.0/1.0-XXX	360-24244-1	B10196.D	09/11/2009 18:04
OC-SB-432-14/16-XXX	360-24244-2	B10197.D	09/11/2009 18:38
OC-SB-432-5.0/7.0-XXX	360-24244-3	B10200.D	09/11/2009 20:20
OC-SB-432-5.0/7.0-XXX DL	360-24244-3 DL	B10201.D	09/11/2009 20:55
OC-SB-443-0.0/1.0-XXX	360-24244-4	B10203.D	09/11/2009 22:03
OC-SB-443-0.0/1.0-XXX MS	360-24244-4 MS	B10204.D	09/11/2009 22:37
OC-SB-443-0.0/1.0-XXX MSD	360-24244-4 MSD	B10205.D	09/11/2009 23:11
OC-SB-443-6.0/8.0-XXX	360-24244-6	B10207.D	09/12/2009 00:19
OC-SB-445-0.0/1.0-XXX	360-24244-7	B10208.D	09/12/2009 00:53
OC-SB-445-8.0/10-XXX	360-24244-9	B10211.D	09/12/2009 02:35
OC-SB-437-0.0/1.0-XXX	360-24244-10	B10212.D	09/12/2009 03:09
OC-SB-437-5.0/7.0-XXX	360-24244-12	B10214.D	09/12/2009 04:17

Capro lactam AL 5x

1.3 ug/kg 69 ug/kg

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Westfield
Job No.: 360-24244-1
SDG No.: OCRI-04
Client Sample ID:
Lab Sample ID: MB 360-48119/1-A
Matrix: Solid
Lab File ID: B10153.D
Analysis Method: 8270C LL
Date Collected:
Extract. Method: 3546
Date Extracted: 08/25/2009 11:23
Sample wt/vol: 30.00(g)
Date Analyzed: 09/10/2009 00:13
Con. Extract Vol.: 1.0(mL)
Dilution Factor: 1
Injection Volume: 1.0(uL)
Level: (low/med) Low
% Moisture:
GPC Cleanup:(Y/N) N
Analysis Batch No.: 48751
Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
534-52-1	4,6-Dinitro-2-methylphenol	ND		170	10
65-85-0	Benzoic acid	ND		170	15
120-12-7	Anthracene	ND		33	10
100-51-6	Benzyl alcohol	ND		67	28
111-91-1	Bis(2-chloroethoxy)methane	ND		33	10
111-44-4	Bis(2-chloroethyl)ether	ND		33	10
85-68-7	Butyl benzyl phthalate	ND		33	10
56-55-3	Benzo[a]anthracene	ND		33	10
105-60-2	Caprolactam	13.8	J	33	10
218-01-9	Chrysene	ND		33	10
205-99-2	Benzo[b]fluoranthene	ND		33	10
207-08-9	Benzo[k]fluoranthene	ND		33	10
50-32-8	Benzo[a]pyrene	ND		33	10
132-64-9	Dibenzofuran	ND		33	10
53-70-3	Dibenz(a,h)anthracene	ND		33	10
84-66-2	Diethyl phthalate	ND		33	10
191-24-2	Benzo[g,h,i]perylene	ND		33	10
131-11-3	Dimethyl phthalate	ND		33	10
98-86-2	Acetophenone	ND		33	10
84-74-2	Di-n-butyl phthalate	ND		33	10
117-81-7	Bis(2-ethylhexyl) phthalate	ND		33	29
117-84-0	Di-n-octyl phthalate	ND		33	10
206-44-0	Fluoranthene	ND		33	17
86-73-7	Fluorene	ND		33	10
118-74-1	Hexachlorobenzene	ND		33	10
87-68-3	Hexachlorobutadiene	ND		33	10
108-60-1	2,2'-oxybis[1-chloropropane]	ND		33	10
77-47-4	Hexachlorocyclopentadiene	ND		33	10
67-72-1	Hexachloroethane	ND		67	10
193-39-5	Indeno[1,2,3-cd]pyrene	ND		33	10
78-59-1	Isophorone	ND		33	10
91-20-3	Naphthalene	ND		33	10
98-95-3	Nitrobenzene	ND		80	10
1912-24-9	Atrazine	ND		33	10

Cover sheet ✓

SEMIVOLATILE ORGANICS

REGION I VALIDATION CHECKLIST for
OLIN CHEMICAL SUPERFUND SITE
Criteria and Qualifications: REGION I Organics Guideline (1996)

TIER I / (II) III (circle one)

SITE: Olin Chemical Superfund Site Project #: 6/07/000016.12 SDG #: OCRI-05/05A

LAB #: _TAL-Westfield___

Sample IDs: Attach tracking sheet and/or sample listing.

This checklist is designed to be used with USEPA Region I Validation Guidelines Part II (12/1996). During Level III validation, calculation and transcription checks are completed for instrument tuning, surrogates, target compounds, spike recoveries, calibration data, and internal standards as specified in the guideline. These checks are documented on attached validation notes.

YES NO NA	
Data completeness ☑ ☐ ☐ All data summaries, QC forms and raw data available from hard copy or electronic data package ☑ ☐ ☐ Data summaries match EDD	Contact lab if missing data. Lab to respond with 24 hours.
Holding Times and Preservation ☑ ☐ ☐ Hold times met (Waters – Extract within 7 days, analyze within 40 days. Soils – extract within 14 days, analyze within 40 days)	
Instrument Performance Check (Tune) ☑ ☐ ☐ Tune available for each 12-hour period samples were analyzed ☑ ☐ ☐ Appropriate number of significant figures reported (at least 2) ☑ ☐ ☐ Mass/Charge list (m/z) criteria met	
Initial Calibration ☐ ☒ ☐ %RSD less than or equal to 30% ☐ ☒ ☐ RRF greater than or equal to 0.05	See below.
Continuing Calibration ☑ ☐ ☐ %D less than or equal to 25% ☐ ☒ ☐ RRF greater than or equal to 0.05.	See below.
Blank Contamination ☒ ☐ ☐ Method blank contamination ☒ ☐ ☐ Equipment/Rinseate blank contamination	Evaluate all blanks for contamination. Highest contaminant level used for action level. See below.
Surrogate Recoveries	

SEMIVOLATILE ORGANICS

REGION I VALIDATION CHECKLIST for
OLIN CHEMICAL SUPERFUND SITE
Criteria and Qualifications: REGION I Organics Guideline (1996)

TIER I / II / III (circle one)

☑ ☐ ☐ Surrogates percent recovery criteria met: Soil = (base/neutral 30%-130%, acid 30%-130%) Water = (base/neutral 30%-130%, acid 15%-110%)	
Matrix Spikes and Laboratory Control Samples ☐ ☒ ☐ MS/MSD percent recovery criteria met Soil and Water = (base/neutral 40%-140%, acid 30%-130%) ☑ ☐ ☐ MS/MSD RPD criteria met (soils <50%, water <30%) ☐ ☐ ☑ LCS percent recovery criteria met soil/water (base 40%-140%, acid 30%-130%)	See below.
Field Duplicates ☑ ☐ ☐ RPD criteria met (soils <50%, water <30%)	
Internal Standard ☐ ☒ ☐ Area counts within -50 to +100 percent of calib. std. ☑ ☐ ☐ Retention Time within 30 seconds of calib. std.	See below.
Target Compounds ☑ ☐ ☐ Reviewed narrative for anomalies	
Tentatively Identified Compounds (TICs) ☐ ☑ ☐ TCL compounds reported as TICs	

Validator's Signature: _____

Date: 2/10/10

Reference:

MACTEC, Quality Assurance Project Plan for Remedial Investigation/Feasibility Study – Olin Chemical Superfund Site, Wilmington Property, 51 Eames Street, Wilmington, MA", MACTEC Engineering and Consulting. Draft .October 2008.

SAMPLE SUMMARY

Client: Olin Corporation

Job Number: 360-24251-1
Sdg Number: OCRI-05

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
360-24251-1	OC-SB-433-0.0/1.0-XXX	Solid	08/24/2009 0815	08/24/2009 1910
360-24251-2	OC-SB-433-20/22-XXX	Solid	08/24/2009 0850	08/24/2009 1910
360-24251-3	OC-SB-433-5.0/7.0-DUP	Solid	08/24/2009 0820	08/24/2009 1910
360-24251-4	OC-SB-433-5.0/7.0-XXX	Solid	08/24/2009 0820	08/24/2009 1910
360-24251-4MS	OC-SB-433-5.0/7.0-XMS	Solid	08/24/2009 0820	08/24/2009 1910
360-24251-4MSD	OC-SB-433-5.0/7.0-MSD	Solid	08/24/2009 0820	08/24/2009 1910
360-24251-5	OC-SB-439-0.0-1.0-XXX	Solid	08/24/2009 0945	08/24/2009 1910
360-24251-6	OC-SB-439-16/18-XXX	Solid	08/24/2009 1040	08/24/2009 1910
360-24251-7	OC-SB-439-8.0/10-XXX	Solid	08/24/2009 0950	08/24/2009 1910
360-24251-8	OC-SB-440-0.0/1.0-XXX	Solid	08/24/2009 1140	08/24/2009 1910
360-24251-9	OC-SB-440-23/25-XXX	Solid	08/24/2009 1230	08/24/2009 1910
360-24251-10	OC-SB-440-6.0/8.0-XXX	Solid	08/24/2009 1150	08/24/2009 1910
360-24251-11	OC-TBK-006	Solid	08/24/2009 1430	08/24/2009 1910
360-24251-12	OC-SB-438-5.0/7.0-XXX	Solid	08/24/2009 1650	08/25/2009 1800
360-24251-13	OC-SB-441-0.0/1.0-XXX	Solid	08/24/2009 1450	08/25/2009 1800
360-24251-14	OC-SB-441-17/19-XXX	Solid	08/24/2009 1535	08/25/2009 1800
360-24251-15	OC-SB-441-8.0/10-XXX	Solid	08/24/2009 1455	08/25/2009 1800
360-24251-16	OC-SB-446-0.0/1.0-XXX	Solid	08/25/2009 0805	08/25/2009 1800
360-24251-17	OC-SB-446-15/17-XXX	Solid	08/25/2009 0900	08/25/2009 1800
360-24251-18	OC-SB-446-5.0/7.0-DUP	Solid	08/25/2009 0820	08/25/2009 1800
360-24251-19	OC-SB-446-5.0/7.0-XXX	Solid	08/25/2009 0820	08/25/2009 1800
360-24251-19MS	OC-SB-446-5.0/7.0-XMS	Solid	08/25/2009 0820	08/25/2009 1800
360-24251-19MSD	OC-SB-446-5.0/7.0-MSD	Solid	08/25/2009 0820	08/25/2009 1800
360-24251-20	OC-SB-448-0.0/1.0-XXX	Solid	08/25/2009 1005	08/25/2009 1800
360-24251-21	OC-SB-448-17/19-XXX	Solid	08/25/2009 1045	08/25/2009 1800
360-24251-22	OC-SB-448-8.0/10-XXX	Solid	08/25/2009 1030	08/25/2009 1800
360-24251-23	OC-SB-438-0.0/1.0-XXX	Solid	08/24/2009 1645	08/25/2009 1800
360-24251-24	OC-SB-438-20/22-XXX	Solid	08/24/2009 1720	08/25/2009 1800
360-24251-25	OC-TBK-007	Solid	08/25/2009 1450	08/25/2009 1800
360-24251-26	OC-EBK-004	Water	08/24/2009 1820	08/25/2009 1800

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Client: Olin Corporation

Job Number: 360-24251-1
Sdg Number: OCRI-05

Client Sample ID: **OC-SB-433-0.0/1.0-XXX**

Lab Sample ID: 360-24251-1
Client Matrix: Solid % Moisture: 7.2

Date Sampled: 08/24/2009 0815
Date Received: 08/24/2009 1910

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48930		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48462		Lab File ID:	B10329.D
Dilution:	1.0			Initial Weight/Volume:	30.47 g
Date Analyzed:	09/16/2009 0054			Final Weight/Volume:	1.0 mL
Date Prepared:	09/01/2009 1501			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		11	35
1,2,4,5-Tetrachlorobenzene		ND		11	35
1,2,4-Trichlorobenzene		ND		11	35
1,2-Dichlorobenzene		ND		11	35
1,3-Dichlorobenzene		ND		11	35
1,4-Dichlorobenzene		ND		11	35
1-Methylnaphthalene		ND		11	35
2,2'-oxybis[1-chloropropane]		ND		11	35
2,3,4,6-Tetrachlorophenol		ND		11	35
2,4,5-Trichlorophenol		ND		11	35
2,4,6-Trichlorophenol		ND		11	35
2,4-Dichlorophenol		ND		11	35
2,4-Dimethylphenol		ND		14	35
2,4-Dinitrophenol		ND	J	11	35
2,4-Dinitrotoluene		ND		11	35
2,6-Dinitrotoluene		ND		11	35
2-Chloronaphthalene		ND		11	35
2-Chlorophenol		ND		11	35
2-Methylnaphthalene		11	J	11	35
2-Methylphenol		ND		21	35
2-Nitroaniline		ND		11	180
2-Nitrophenol		ND		11	35
3 & 4 Methylphenol		ND		11	35
3,3'-Dichlorobenzidine		ND	J ✓	11	71
3-Nitroaniline		ND		11	180
4,6-Dinitro-2-methylphenol		ND		11	180
4-Bromophenyl phenyl ether		ND		11	35
4-Chloro-3-methylphenol		ND		11	71
4-Chloroaniline		ND		11	71
4-Chlorophenyl phenyl ether		ND		11	35
4-Nitroaniline		ND		11	180
4-Nitrophenol		ND		11	180
Acenaphthene		ND		11	35
Acenaphthylene		ND		11	35
Acetophenone		ND		11	35
Aniline		ND	✓	11	35
Anthracene		ND		11	35
Atrazine		ND		11	35
Azobenzene		ND		11	35
Benzaldehyde		ND	J ✓	11	35
Benzo[a]anthracene		ND		11	35
Benzo[a]pyrene		ND		11	35
Benzo[b]fluoranthene		ND		11	35
Benzo[g,h,i]perylene		ND		11	35
Benzo[k]fluoranthene		ND		11	35
Benzoic acid		~~ND~~ J R	✓	16	180

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Client: Olin Corporation

Job Number: 360-24251-1
Sdg Number: OCRI-05

Client Sample ID: **OC-SB-433-0.0/1.0-XXX**

Lab Sample ID: 360-24251-1
Client Matrix: Solid % Moisture: 7.2

Date Sampled: 08/24/2009 0815
Date Received: 08/24/2009 1910

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48930		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48462		Lab File ID:	B10329.D
Dilution:	1.0			Initial Weight/Volume:	30.47 g
Date Analyzed:	09/16/2009 0054			Final Weight/Volume:	1.0 mL
Date Prepared:	09/01/2009 1501			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		11	35
Benzyl alcohol		ND		30	71
Bis(2-chloroethoxy)methane		ND		11	35
Bis(2-chloroethyl)ether		ND		11	35
Bis(2-ethylhexyl) phthalate		470		11	35
Butyl benzyl phthalate		ND		11	35
Caprolactam		ND		11	35
Carbazole		ND		11	35
Chrysene		ND		11	35
Dibenz(a,h)anthracene		ND		11	35
Dibenzofuran		ND		11	35
Diethyl phthalate		ND		11	35
Dimethyl phthalate		ND		11	35
Di-n-butyl phthalate		ND		31	35
Di-n-octyl phthalate		ND		18	35
Diphenyl oxide		ND		11	35
Fluoranthene		ND		11	35
Fluorene		ND		11	35
Hexachlorobenzene		ND		11	35
Hexachlorobutadiene		ND		11	35
Hexachlorocyclopentadiene		ND		11	71
Hexachloroethane		ND		11	35
Indeno[1,2,3-cd]pyrene		ND		11	35
Isophorone		ND		11	35
Naphthalene		24	J	11	85
Nitrobenzene		ND		11	35
N-Nitrosodimethylamine		ND		11	35
N-Nitrosodi-n-propylamine		ND		11	35
N-Nitrosodiphenylamine		41		11	35
Pentachlorophenol		ND		11	35
Phenanthrene		11	J	11	42
Phenol		ND		11	35
Pyrene		20	J	11	35

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	66		30 - 130
2-Fluorobiphenyl	67		30 - 130
2-Fluorophenol	81		30 - 130
Nitrobenzene-d5	72		30 - 130
Phenol-d5	74		30 - 130
Terphenyl-d14	80		30 - 130

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Client: Olin Corporation

Job Number: 360-24251-1
Sdg Number: OCRI-05

Client Sample ID: **OC-SB-433-0.0/1.0-XXX**

Lab Sample ID: 360-24251-1
Client Matrix: Solid % Moisture: 7.2

Date Sampled: 08/24/2009 0815
Date Received: 08/24/2009 1910

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48930		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48462		Lab File ID:	B10329.D
Dilution:	1.0			Initial Weight/Volume:	30.47 g
Date Analyzed:	09/16/2009 0054			Final Weight/Volume:	1.0 mL
Date Prepared:	09/01/2009 1501			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 9

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
64-19-7	Acetic acid	4.56	190	T J N
	Unknown	10.24	61	T J
122-39-4	Diphenylamine	11.71	41	
1599-67-3	1-Docosene	16.06	640	T J N
	Unknown	16.81	370	T J
1599-67-3	1-Docosene	17.22	740	T J N
	Unknown	20.02	2.3	T J
	Unknown	20.62	0.32	T J
	Unknown	20.99	0.54	T J

Client: Olin Corporation

Job Number: 360-24251-1
Sdg Number: OCRI-05

Client Sample ID: **OC-SB-433-0.0/1.0-XXX**

Lab Sample ID: 360-24251-1
Client Matrix: Solid % Moisture: 7.2

Date Sampled: 08/24/2009 0815
Date Received: 08/24/2009 1910

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49141		Instrument ID:	NOEQUIP
Preparation:	3546	Prep Batch: 360-48462		Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	30.47 g
Date Analyzed:	09/16/2009 2009			Final Weight/Volume:	1.0 mL
Date Prepared:	09/01/2009 1501			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodiphenylamine		ND		11	35

Client: Olin Corporation

Job Number: 360-24251-1
Sdg Number: OCRI-05

Client Sample ID: **OC-SB-433-5.0/7.0-DUP**

Lab Sample ID: 360-24251-3
Client Matrix: Solid % Moisture: 14.2

Date Sampled: 08/24/2009 0820
Date Received: 08/24/2009 1910

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48930		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48462		Lab File ID:	B10331.D
Dilution:	1.0			Initial Weight/Volume:	30.20 g
Date Analyzed:	09/16/2009 0203			Final Weight/Volume:	1.0 mL
Date Prepared:	09/01/2009 1501			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		12	39
1,2,4,5-Tetrachlorobenzene		ND		12	39
1,2,4-Trichlorobenzene		ND		12	39
1,2-Dichlorobenzene		ND		12	39
1,3-Dichlorobenzene		ND		12	39
1,4-Dichlorobenzene		ND		12	39
1-Methylnaphthalene		ND		12	39
2,2'-oxybis[1-chloropropane]		ND		12	39
2,3,4,6-Tetrachlorophenol		ND		12	39
2,4,5-Trichlorophenol		ND		12	39
2,4,6-Trichlorophenol		ND		12	39
2,4-Dichlorophenol		ND		12	39
2,4-Dimethylphenol		ND		15	39
2,4-Dinitrophenol		ND J		12	39
2,4-Dinitrotoluene		ND		12	39
2,6-Dinitrotoluene		ND		12	39
2-Chloronaphthalene		ND		12	39
2-Chlorophenol		ND		12	39
2-Methylnaphthalene		ND		12	39
2-Methylphenol		ND		23	39
2-Nitroaniline		ND		12	190
2-Nitrophenol		ND		12	39
3 & 4 Methylphenol		ND		12	39
3,3'-Dichlorobenzidine		ND J		12	77
3-Nitroaniline		ND		12	190
4,6-Dinitro-2-methylphenol		ND		12	190
4-Bromophenyl phenyl ether		ND		12	39
4-Chloro-3-methylphenol		ND		12	77
4-Chloroaniline		ND		12	77
4-Chlorophenyl phenyl ether		ND		12	39
4-Nitroaniline		ND		12	190
4-Nitrophenol		ND		12	190
Acenaphthene		ND		12	39
Acenaphthylene		ND		12	39
Acetophenone		ND		12	39
Aniline		ND J		12	39
Anthracene		17 EB	J	12	39
Atrazine		ND		12	39
Azobenzene		ND		12	39
Benzaldehyde		ND J		12	39
Benzo[a]anthracene		20	J	12	39
Benzo[a]pyrene		27	J	12	39
Benzo[b]fluoranthene		22	J	12	39
Benzo[g,h,i]perylene		27	J	12	39
Benzo[k]fluoranthene		16	J	12	39
Benzoic acid		~~ND~~		17	190

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Client: Olin Corporation

Job Number: 360-24251-1
Sdg Number: OCRI-05

Client Sample ID: **OC-SB-433-5.0/7.0-DUP**

Lab Sample ID: 360-24251-3
Client Matrix: Solid % Moisture: 14.2

Date Sampled: 08/24/2009 0820
Date Received: 08/24/2009 1910

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48930		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48462		Lab File ID:	B10331.D
Dilution:	1.0			Initial Weight/Volume:	30.20 g
Date Analyzed:	09/16/2009 0203			Final Weight/Volume:	1.0 mL
Date Prepared:	09/01/2009 1501			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		12	39
Benzyl alcohol		ND		33	77
Bis(2-chloroethoxy)methane		ND		12	39
Bis(2-chloroethyl)ether		ND		12	39
Bis(2-ethylhexyl) phthalate		ND		12	39
Butyl benzyl phthalate		ND		12	39
Caprolactam		ND		12	39
Carbazole		ND		12	39
Chrysene		21	J	12	39
Dibenz(a,h)anthracene		ND		12	39
Dibenzofuran		ND		12	39
Diethyl phthalate		ND		12	39
Dimethyl phthalate		ND		12	39
Di-n-butyl phthalate		ND		34	39
Di-n-octyl phthalate		ND		19	39
Diphenyl oxide		ND		12	39
Fluoranthene		25	J	12	39
Fluorene		ND		12	39
Hexachlorobenzene		ND		12	39
Hexachlorobutadiene		ND		12	39
Hexachlorocyclopentadiene		ND	J	12	77
Hexachloroethane		ND		12	39
Indeno[1,2,3-cd]pyrene		22	J	12	39
Isophorone		ND		12	39
Naphthalene		ND		12	93
Nitrobenzene		ND		12	39
N-Nitrosodimethylamine		ND		12	39
N-Nitrosodi-n-propylamine		ND		12	39
N-Nitrosodiphenylamine		ND		12	39
Pentachlorophenol		ND		12	39
Phenanthrene		24	J	12	46
Phenol		ND		12	39
Pyrene		47		12	39

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	60		30 - 130
2-Fluorobiphenyl	71		30 - 130
2-Fluorophenol	82		30 - 130
Nitrobenzene-d5	75		30 - 130
Phenol-d5	71		30 - 130
Terphenyl-d14	93		30 - 130

Client: Olin Corporation

Job Number: 360-24251-1
Sdg Number: OCRI-05

Client Sample ID: **OC-SB-433-5.0/7.0-DUP**

Lab Sample ID: 360-24251-3
Client Matrix: Solid
% Moisture: 14.2

Date Sampled: 08/24/2009 0820
Date Received: 08/24/2009 1910

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48930		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48462		Lab File ID:	B10331.D
Dilution:	1.0			Initial Weight/Volume:	30.20 g
Date Analyzed:	09/16/2009 0203			Final Weight/Volume:	1.0 mL
Date Prepared:	09/01/2009 1501			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 3

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
~~110-86-1~~	~~Pyridine~~	~~6.05~~	~~7.7~~	~~J~~
1120-21-4	Undecane	8.95	160	T J N
112-40-3	Dodecane	9.53	67	T J N

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Client: Olin Corporation

Job Number: 360-24251-1
Sdg Number: OCRI-05

Client Sample ID: **OC-SB-433-5.0/7.0-XXX**

Lab Sample ID: 360-24251-4
Client Matrix: Solid % Moisture: 14.0

Date Sampled: 08/24/2009 0820
Date Received: 08/24/2009 1910

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48993		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48462		Lab File ID:	J02964.D
Dilution:	1.0			Initial Weight/Volume:	30.30 g
Date Analyzed:	09/16/2009 0120			Final Weight/Volume:	1.0 mL
Date Prepared:	09/01/2009 1501			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		12	38
1,2,4,5-Tetrachlorobenzene		ND		12	38
1,2,4-Trichlorobenzene		ND		12	38
1,2-Dichlorobenzene		ND		12	38
1,3-Dichlorobenzene		ND		12	38
1,4-Dichlorobenzene		ND		12	38
1-Methylnaphthalene		ND		12	38
2,2'-oxybis[1-chloropropane]		ND		12	38
2,3,4,6-Tetrachlorophenol		ND		12	38
2,4,5-Trichlorophenol		ND		12	38
2,4,6-Trichlorophenol		ND		12	38
2,4-Dichlorophenol		ND		12	38
2,4-Dimethylphenol		ND		15	38
2,4-Dinitrophenol		ND	J	12	38
2,4-Dinitrotoluene		ND		12	38
2,6-Dinitrotoluene		ND		12	38
2-Chloronaphthalene		ND		12	38
2-Chlorophenol		ND		12	38
2-Methylnaphthalene		ND		12	38
2-Methylphenol		ND		23	38
2-Nitroaniline		ND	J	12	190
2-Nitrophenol		ND		12	38
3 & 4 Methylphenol		ND		12	38
3,3'-Dichlorobenzidine		ND	J	12	77
3-Nitroaniline		ND		12	190
4,6-Dinitro-2-methylphenol		ND		12	190
4-Bromophenyl phenyl ether		ND		12	38
4-Chloro-3-methylphenol		ND		12	77
4-Chloroaniline		ND		12	77
4-Chlorophenyl phenyl ether		ND		12	38
4-Nitroaniline		ND		12	190
4-Nitrophenol		ND		12	190
Acenaphthene		ND		12	38
Acenaphthylene		ND		12	38
Acetophenone		ND		12	38
Aniline		ND	J	12	38
Anthracene		ND		12	38
Atrazine		ND		12	38
Azobenzene		ND		12	38
Benzaldehyde		ND		12	38
Benzo[a]anthracene		ND		12	38
Benzo[a]pyrene		ND		12	38
Benzo[b]fluoranthene		ND		12	38
Benzo[g,h,i]perylene		ND		12	38
Benzo[k]fluoranthene		ND		12	38
Benzoic acid		~~ND~~	R	17	190

9/16/09

Client: Olin Corporation

Job Number: 360-24251-1
Sdg Number: OCRI-05

Client Sample ID: **OC-SB-433-5.0/7.0-XXX**

Lab Sample ID: 360-24251-4
Client Matrix: Solid
% Moisture: 14.0

Date Sampled: 08/24/2009 0820
Date Received: 08/24/2009 1910

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48993		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48462		Lab File ID:	J02964.D
Dilution:	1.0			Initial Weight/Volume:	30.30 g
Date Analyzed:	09/16/2009 0120			Final Weight/Volume:	1.0 mL
Date Prepared:	09/01/2009 1501			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		12	38
Benzyl alcohol		ND		33	77
Bis(2-chloroethoxy)methane		ND		12	38
Bis(2-chloroethyl)ether		ND		12	38
Bis(2-ethylhexyl) phthalate		ND		12	38
Butyl benzyl phthalate		ND		12	38
Caprolactam		ND		12	38
Carbazole		ND		12	38
Chrysene		ND		12	38
Dibenz(a,h)anthracene		ND		12	38
Dibenzofuran		ND		12	38
Diethyl phthalate		ND		12	38
Dimethyl phthalate		ND		12	38
Di-n-butyl phthalate		ND		34	38
Di-n-octyl phthalate		21	J	19	38
Diphenyl oxide		ND		12	38
Fluoranthene		ND		12	38
Fluorene		ND		12	38
Hexachlorobenzene		ND		12	38
Hexachlorobutadiene		ND		12	38
Hexachlorocyclopentadiene		~~ND~~ R		12	77
Hexachloroethane		ND		12	38
Indeno[1,2,3-cd]pyrene		ND		12	38
Isophorone		ND		12	38
Naphthalene		ND		12	92
Nitrobenzene		ND		12	38
N-Nitrosodimethylamine		ND		12	38
N-Nitrosodi-n-propylamine		ND		12	38
N-Nitrosodiphenylamine		ND		12	38
Pentachlorophenol		ND		12	38
Phenanthrene		ND		12	46
Phenol		ND		12	38
Pyrene		ND		12	38

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	64		30 - 130
2-Fluorobiphenyl	66		30 - 130
2-Fluorophenol	74		30 - 130
Nitrobenzene-d5	62		30 - 130
Phenol-d5	73		30 - 130
Terphenyl-d14	73		30 - 130

Client: Olin Corporation

Job Number: 360-24251-1
Sdg Number: OCRI-05

Client Sample ID: **OC-SB-433-5.0/7.0-XXX**

Lab Sample ID: 360-24251-4
Client Matrix: Solid % Moisture: 14.0

Date Sampled: 08/24/2009 0820
Date Received: 08/24/2009 1910

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48993		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48462		Lab File ID:	J02964.D
Dilution:	1.0			Initial Weight/Volume:	30.30 g
Date Analyzed:	09/16/2009 0120			Final Weight/Volume:	1.0 mL
Date Prepared:	09/01/2009 1501			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 5

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Unknown	9.06	84	T J
	Unknown	11.01	72	T J
~~26603-23-6~~	~~p,p''-Dioctyldiphenylamine~~	~~15.43~~	~~1000~~	~~T J N~~
	Unknown	15.93	280	T J
	Unknown	16.03	140	T J

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Client: Olin Corporation

Job Number: 360-24251-1
Sdg Number: OCRI-05

Client Sample ID: **OC-SB-439-0.0-1.0-XXX**

Lab Sample ID: 360-24251-5
Client Matrix: Solid

% Moisture: 12.6

Date Sampled: 08/24/2009 0945
Date Received: 08/24/2009 1910

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48993		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48462		Lab File ID:	J02966.D
Dilution:	2.0			Initial Weight/Volume:	30.33 g
Date Analyzed:	09/16/2009 0220			Final Weight/Volume:	1.0 mL
Date Prepared:	09/01/2009 1501			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		120		23	75
1,2,4,5-Tetrachlorobenzene		ND		23	75
1,2,4-Trichlorobenzene		ND		23	75
1,2-Dichlorobenzene		ND		23	75
1,3-Dichlorobenzene		ND		23	75
1,4-Dichlorobenzene		ND		23	75
1-Methylnaphthalene		ND		23	75
2,2'-oxybis[1-chloropropane]		ND		23	75
2,3,4,6-Tetrachlorophenol		ND		23	75
2,4,5-Trichlorophenol		ND		23	75
2,4,6-Trichlorophenol		ND		23	75
2,4-Dichlorophenol		ND		23	75
2,4-Dimethylphenol		ND		30	75
2,4-Dinitrophenol		~~ND~~ J R		23	75
2,4-Dinitrotoluene		ND		23	75
2,6-Dinitrotoluene		ND		23	75
2-Chloronaphthalene		ND		23	75
2-Chlorophenol		ND		23	75
2-Methylnaphthalene		ND		23	75
2-Methylphenol		ND		45	75
2-Nitroaniline		~~ND~~ J R		23	380
2-Nitrophenol		ND		23	75
3 & 4 Methylphenol		ND		23	75
3,3'-Dichlorobenzidine		ND J		23	150
3-Nitroaniline		ND		23	380
4,6-Dinitro-2-methylphenol		ND		23	380
4-Bromophenyl phenyl ether		ND		23	75
4-Chloro-3-methylphenol		ND		23	150
4-Chloroaniline		ND		23	150
4-Chlorophenyl phenyl ether		ND		23	75
4-Nitroaniline		ND		23	380
4-Nitrophenol		ND		23	380
Acenaphthene		ND		23	75
Acenaphthylene		ND		23	75
Acetophenone		ND		23	75
Aniline		ND		23	75
Anthracene		ND		23	75
Atrazine		ND		23	75
Azobenzene		ND		23	75
Benzaldehyde		ND		23	75
Benzo[a]anthracene		ND		23	75
Benzo[a]pyrene		ND		23	75
Benzo[b]fluoranthene		ND		23	75
Benzo[g,h,i]perylene		ND		23	75
Benzo[k]fluoranthene		ND		23	75
Benzoic acid		~~ND~~ R		34	380

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Client: Olin Corporation

Job Number: 360-24251-1
Sdg Number: OCRI-05

Client Sample ID: **OC-SB-439-0.0-1.0-XXX**

Lab Sample ID: 360-24251-5
Client Matrix: Solid
% Moisture: 12.6

Date Sampled: 08/24/2009 0945
Date Received: 08/24/2009 1910

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48993		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48462		Lab File ID:	J02966.D
Dilution:	2.0			Initial Weight/Volume:	30.33 g
Date Analyzed:	09/16/2009 0220			Final Weight/Volume:	1.0 mL
Date Prepared:	09/01/2009 1501			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		23	75
Benzyl alcohol		ND		64	150
Bis(2-chloroethoxy)methane		ND		23	75
Bis(2-chloroethyl)ether		ND		23	75
Bis(2-ethylhexyl) phthalate		53	J EX	23	75
Butyl benzyl phthalate		ND		23	75
Caprolactam		ND		23	75
Carbazole		ND		23	75
Chrysene		24	J	23	75
Dibenz(a,h)anthracene		ND		23	75
Dibenzofuran		ND		23	75
Diethyl phthalate		ND		23	75
Dimethyl phthalate		ND		23	75
Di-n-butyl phthalate		ND		66	75
Di-n-octyl phthalate		ND		38	75
Diphenyl oxide		550		23	75
Fluoranthene		24	J	23	75
Fluorene		ND		23	75
Hexachlorobenzene		ND		23	75
Hexachlorobutadiene		ND		23	75
Hexachlorocyclopentadiene		ND		23	150
Hexachloroethane		ND		23	75
Indeno[1,2,3-cd]pyrene		ND		23	75
Isophorone		ND		23	75
Naphthalene		ND		23	180
Nitrobenzene		ND		23	75
N-Nitrosodimethylamine		ND		23	75
N-Nitrosodi-n-propylamine		ND		23	75
N-Nitrosodiphenylamine		ND		23	75
Pentachlorophenol		ND		23	75
Phenanthrene		ND		23	91
Phenol		ND		23	75
Pyrene		33	J	23	75

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	75		30 - 130
2-Fluorobiphenyl	75		30 - 130
2-Fluorophenol	65		30 - 130
Nitrobenzene-d5	72		30 - 130
Phenol-d5	65		30 - 130
Terphenyl-d14	92		30 - 130

Client: Olin Corporation

Job Number: 360-24251-1
Sdg Number: OCRI-05

Client Sample ID: **OC-SB-439-0.0-1.0-XXX**

Lab Sample ID: 360-24251-5
Client Matrix: Solid % Moisture: 12.6

Date Sampled: 08/24/2009 0945
Date Received: 08/24/2009 1910

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48993		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48462		Lab File ID:	J02966.D
Dilution:	2.0			Initial Weight/Volume:	30.33 g
Date Analyzed:	09/16/2009 0220			Final Weight/Volume:	1.0 mL
Date Prepared:	09/01/2009 1501			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 4

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
541-2-6	Cyclopentasiloxane, decamethyl-	7.71	21	T J N
	Unknown	9.67	28	T J
122-39-4	Diphenylamine	10.56	7.2	J
20302-14-1	9H-Fluorene, 9,9-diphenyl-	14.56	240	T J N

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Client: Olin Corporation

Job Number: 360-24251-1
Sdg Number: OCRI-05

Client Sample ID: **OC-SB-439-8.0/10-XXX**

Lab Sample ID: 360-24251-7
Client Matrix: Solid
% Moisture: 19.8

Date Sampled: 08/24/2009 0950
Date Received: 08/24/2009 1910

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48993		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48462		Lab File ID:	J02968.D
Dilution:	1.0			Initial Weight/Volume:	30.19 g
Date Analyzed:	09/16/2009 0319			Final Weight/Volume:	1.0 mL
Date Prepared:	09/01/2009 1501			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		12	41
1,2,4,5-Tetrachlorobenzene		ND		12	41
1,2,4-Trichlorobenzene		ND		12	41
1,2-Dichlorobenzene		ND		12	41
1,3-Dichlorobenzene		ND		12	41
1,4-Dichlorobenzene		ND		12	41
1-Methylnaphthalene		ND		12	41
2,2'-oxybis[1-chloropropane]		ND		12	41
2,3,4,6-Tetrachlorophenol		ND		12	41
2,4,5-Trichlorophenol		ND		12	41
2,4,6-Trichlorophenol		ND		12	41
2,4-Dichlorophenol		ND		12	41
2,4-Dimethylphenol		ND		16	41
2,4-Dinitrophenol		~~ND~~	R	12	41
2,4-Dinitrotoluene		ND		12	41
2,6-Dinitrotoluene		ND		12	41
2-Chloronaphthalene		ND		12	41
2-Chlorophenol		ND		12	41
2-Methylnaphthalene		ND		12	41
2-Methylphenol		ND		25	41
2-Nitroaniline		~~ND~~	R	12	210
2-Nitrophenol		ND		12	41
3 & 4 Methylphenol		ND		12	41
3,3'-Dichlorobenzidine		ND	J	12	83
3-Nitroaniline		ND		12	210
4,6-Dinitro-2-methylphenol		ND		12	210
4-Bromophenyl phenyl ether		ND		12	41
4-Chloro-3-methylphenol		ND		12	83
4-Chloroaniline		ND		12	83
4-Chlorophenyl phenyl ether		ND		12	41
4-Nitroaniline		ND		12	210
4-Nitrophenol		ND		12	210
Acenaphthene		ND		12	41
Acenaphthylene		ND		12	41
Acetophenone		ND		12	41
Aniline		ND		12	41
Anthracene		ND		12	41
Atrazine		ND		12	41
Azobenzene		ND		12	41
Benzaldehyde		ND		12	41
Benzo[a]anthracene		ND		12	41
Benzo[a]pyrene		ND		12	41
Benzo[b]fluoranthene		ND		12	41
Benzo[g,h,i]perylene		ND		12	41
Benzo[k]fluoranthene		ND		12	41
Benzoic acid		~~ND~~	R	19	210

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Client: Olin Corporation

Job Number: 360-24251-1
Sdg Number: OCRI-05

Client Sample ID: **OC-SB-439-8.0/10-XXX**

Lab Sample ID: 360-24251-7
Client Matrix: Solid
% Moisture: 19.8

Date Sampled: 08/24/2009 0950
Date Received: 08/24/2009 1910

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48993		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48462		Lab File ID:	J02968.D
Dilution:	1.0			Initial Weight/Volume:	30.19 g
Date Analyzed:	09/16/2009 0319			Final Weight/Volume:	1.0 mL
Date Prepared:	09/01/2009 1501			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		12	41
Benzyl alcohol		ND		35	83
Bis(2-chloroethoxy)methane		ND		12	41
Bis(2-chloroethyl)ether		ND		12	41
Bis(2-ethylhexyl) phthalate		51	E	12	41
Butyl benzyl phthalate		ND		12	41
Caprolactam		ND		12	41
Carbazole		ND		12	41
Chrysene		ND		12	41
Dibenz(a,h)anthracene		ND		12	41
Dibenzofuran		ND		12	41
Diethyl phthalate		ND		12	41
Dimethyl phthalate		ND		12	41
Di-n-butyl phthalate		ND		36	41
Di-n-octyl phthalate		ND		21	41
Diphenyl oxide		ND		12	41
Fluoranthene		ND		12	41
Fluorene		ND		12	41
Hexachlorobenzene		ND		12	41
Hexachlorobutadiene		ND		12	41
Hexachlorocyclopentadiene		ND		12	83
Hexachloroethane		ND		12	41
Indeno[1,2,3-cd]pyrene		ND		12	41
Isophorone		ND		12	41
Naphthalene		ND		12	99
Nitrobenzene		ND		12	41
N-Nitrosodimethylamine		ND		12	41
N-Nitrosodi-n-propylamine		ND		12	41
N-Nitrosodiphenylamine		ND		12	41
Pentachlorophenol		ND		12	41
Phenanthrene		ND		12	50
Phenol		ND		12	41
Pyrene		ND		12	41

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	69		30 - 130
2-Fluorobiphenyl	77		30 - 130
2-Fluorophenol	77		30 - 130
Nitrobenzene-d5	69		30 - 130
Phenol-d5	77		30 - 130
Terphenyl-d14	75		30 - 130

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Client: Olin Corporation

Job Number: 360-24251-1
Sdg Number: OCRI-05

Client Sample ID: **OC-SB-439-8.0/10-XXX**

Lab Sample ID: 360-24251-7
Client Matrix: Solid
% Moisture: 19.8

Date Sampled: 08/24/2009 0950
Date Received: 08/24/2009 1910

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48993		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48462		Lab File ID:	J02968.D
Dilution:	1.0			Initial Weight/Volume:	30.19 g
Date Analyzed:	09/16/2009 0319			Final Weight/Volume:	1.0 mL
Date Prepared:	09/01/2009 1501			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 1

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Unknown	11.14	25	T J

Client: Olin Corporation

Job Number: 360-24251-1
Sdg Number: OCRI-05

Client Sample ID: **OC-SB-440-0.0/1.0-XXX**

Lab Sample ID: 360-24251-8
Client Matrix: Solid
% Moisture: 2.6

Date Sampled: 08/24/2009 1140
Date Received: 08/24/2009 1910

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48993		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48462		Lab File ID:	J02969.D
Dilution:	1.0			Initial Weight/Volume:	30.02 g
Date Analyzed:	09/16/2009 0348			Final Weight/Volume:	1.0 mL
Date Prepared:	09/01/2009 1501			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		10	34
1,2,4,5-Tetrachlorobenzene		ND		10	34
1,2,4-Trichlorobenzene		ND		10	34
1,2-Dichlorobenzene		ND		10	34
1,3-Dichlorobenzene		ND		10	34
1,4-Dichlorobenzene		ND		10	34
1-Methylnaphthalene		ND		10	34
2,2'-oxybis[1-chloropropane]		ND		10	34
2,3,4,6-Tetrachlorophenol		ND		10	34
2,4,5-Trichlorophenol		ND		10	34
2,4,6-Trichlorophenol		ND		10	34
2,4-Dichlorophenol		ND		10	34
2,4-Dimethylphenol		ND		13	34
2,4-Dinitrophenol		~~ND~~ R		10	34
2,4-Dinitrotoluene		ND		10	34
2,6-Dinitrotoluene		ND		10	34
2-Chloronaphthalene		ND		10	34
2-Chlorophenol		ND		10	34
2-Methylnaphthalene		ND		10	34
2-Methylphenol		ND		21	34
2-Nitroaniline		~~ND~~ R		10	170
2-Nitrophenol		ND		10	34
3 & 4 Methylphenol		ND		10	34
3,3'-Dichlorobenzidine		ND J		10	68
3-Nitroaniline		ND		10	170
4,6-Dinitro-2-methylphenol		ND		10	170
4-Bromophenyl phenyl ether		ND		10	34
4-Chloro-3-methylphenol		ND		10	68
4-Chloroaniline		ND		10	68
4-Chlorophenyl phenyl ether		ND		10	34
4-Nitroaniline		ND		10	170
4-Nitrophenol		ND		10	170
Acenaphthene		ND		10	34
Acenaphthylene		ND		10	34
Acetophenone		ND		10	34
Aniline		ND		10	34
Anthracene		ND		10	34
Atrazine		ND		10	34
Azobenzene		ND		10	34
Benzaldehyde		ND		10	34
Benzo[a]anthracene		17	J	10	34
Benzo[a]pyrene		21	J	10	34
Benzo[b]fluoranthene		23	J	10	34
Benzo[g,h,i]perylene		14	J	10	34
Benzo[k]fluoranthene		11	J	10	34
Benzoic acid		~~ND~~ R		15	170

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Client: Olin Corporation

Job Number: 360-24251-1
Sdg Number: OCRI-05

Client Sample ID: OC-SB-440-0.0/1.0-XXX

Lab Sample ID: 360-24251-8
Client Matrix: Solid % Moisture: 2.6

Date Sampled: 08/24/2009 1140
Date Received: 08/24/2009 1910

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48993		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48462		Lab File ID:	J02969.D
Dilution:	1.0			Initial Weight/Volume:	30.02 g
Date Analyzed:	09/16/2009 0348			Final Weight/Volume:	1.0 mL
Date Prepared:	09/01/2009 1501			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		10	34
Benzyl alcohol		ND		29	68
Bis(2-chloroethoxy)methane		ND		10	34
Bis(2-chloroethyl)ether		ND		10	34
Bis(2-ethylhexyl) phthalate		38 EB		10	34
Butyl benzyl phthalate		ND		10	34
Caprolactam		ND		10	34
Carbazole		ND		10	34
Chrysene		16	J	10	34
Dibenz(a,h)anthracene		ND		10	34
Dibenzofuran		ND		10	34
Diethyl phthalate		ND		10	34
Dimethyl phthalate		ND		10	34
Di-n-butyl phthalate		ND		30	34
Di-n-octyl phthalate		ND		17	34
Diphenyl oxide		ND		10	34
Fluoranthene		28	J	10	34
Fluorene		ND		10	34
Hexachlorobenzene		ND		10	34
Hexachlorobutadiene		ND		10	34
Hexachlorocyclopentadiene		ND		10	68
Hexachloroethane		ND		10	34
Indeno[1,2,3-cd]pyrene		15	J	10	34
Isophorone		ND		10	34
Naphthalene		ND		10	82
Nitrobenzene		ND		10	34
N-Nitrosodimethylamine		ND		10	34
N-Nitrosodi-n-propylamine		ND		10	34
N-Nitrosodiphenylamine		ND		10	34
Pentachlorophenol		ND		10	34
Phenanthrene		12	J	10	41
Phenol		ND		10	34
Pyrene		35		10	34

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	68		30 - 130
2-Fluorobiphenyl	65		30 - 130
2-Fluorophenol	68		30 - 130
Nitrobenzene-d5	61		30 - 130
Phenol-d5	68		30 - 130
Terphenyl-d14	72		30 - 130

Client: Olin Corporation

Job Number: 360-24251-1
Sdg Number: OCRI-05

Client Sample ID: **OC-SB-440-0.0/1.0-XXX**

Lab Sample ID: 360-24251-8
Client Matrix: Solid % Moisture: 2.6

Date Sampled: 08/24/2009 1140
Date Received: 08/24/2009 1910

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48993		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48462		Lab File ID:	J02969.D
Dilution:	1.0			Initial Weight/Volume:	30.02 g
Date Analyzed:	09/16/2009 0348			Final Weight/Volume:	1.0 mL
Date Prepared:	09/01/2009 1501			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 3

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
17699-5-7	Bicyclo[3.1.1]hept-2-ene, 2,6-dimethyl-6	9.59	17	T J N
74685-33-9	3-Eicosene, (E)-	13.88	31	T J N
26603-23-6	p,p"-Dioctyldiphenylamine	15.44	250	T J N

Client: Olin Corporation

Job Number: 360-24251-1
Sdg Number: OCRI-05

Client Sample ID: **OC-SB-440-6.0/8.0-XXX**

Lab Sample ID: 360-24251-10
Client Matrix: Solid % Moisture: 9.6

Date Sampled: 08/24/2009 1150
Date Received: 08/24/2009 1910

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48993		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48462		Lab File ID:	J02970.D
Dilution:	1.0			Initial Weight/Volume:	30.87 g
Date Analyzed:	09/16/2009 0418			Final Weight/Volume:	1.0 mL
Date Prepared:	09/01/2009 1501			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		11	36
1,2,4,5-Tetrachlorobenzene		ND		11	36
1,2,4-Trichlorobenzene		ND		11	36
1,2-Dichlorobenzene		ND		11	36
1,3-Dichlorobenzene		ND		11	36
1,4-Dichlorobenzene		ND		11	36
1-Methylnaphthalene		ND		11	36
2,2'-oxybis[1-chloropropane]		ND		11	36
2,3,4,6-Tetrachlorophenol		ND		11	36
2,4,5-Trichlorophenol		ND		11	36
2,4,6-Trichlorophenol		ND		11	36
2,4-Dichlorophenol		ND		11	36
2,4-Dimethylphenol		ND		14	36
2,4-Dinitrophenol		~~ND~~	R	11	36
2,4-Dinitrotoluene		ND		11	36
2,6-Dinitrotoluene		ND		11	36
2-Chloronaphthalene		ND		11	36
2-Chlorophenol		ND		11	36
2-Methylnaphthalene		ND		11	36
2-Methylphenol		ND		22	36
2-Nitroaniline		~~ND~~	R	11	180
2-Nitrophenol		ND		11	36
3 & 4 Methylphenol		ND		11	36
3,3'-Dichlorobenzidine		ND	J	11	72
3-Nitroaniline		ND		11	180
4,6-Dinitro-2-methylphenol		ND		11	180
4-Bromophenyl phenyl ether		ND		11	36
4-Chloro-3-methylphenol		ND		11	72
4-Chloroaniline		ND		11	72
4-Chlorophenyl phenyl ether		ND		11	36
4-Nitroaniline		ND		11	180
4-Nitrophenol		ND		11	180
Acenaphthene		ND		11	36
Acenaphthylene		ND		11	36
Acetophenone		ND		11	36
Aniline		ND		11	36
Anthracene		ND		11	36
Atrazine		ND		11	36
Azobenzene		ND		11	36
Benzaldehyde		ND		11	36
Benzo[a]anthracene		ND		11	36
Benzo[a]pyrene		ND		11	36
Benzo[b]fluoranthene		ND		11	36
Benzo[g,h,i]perylene		ND		11	36
Benzo[k]fluoranthene		ND		11	36
Benzoic acid		~~ND~~	R	16	180

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Client: Olin Corporation

Job Number: 360-24251-1
Sdg Number: OCRI-05

Client Sample ID: **OC-SB-440-6.0/8.0-XXX**

Lab Sample ID: 360-24251-10
Client Matrix: Solid
% Moisture: 9.6

Date Sampled: 08/24/2009 1150
Date Received: 08/24/2009 1910

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48993		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48462		Lab File ID:	J02970.D
Dilution:	1.0			Initial Weight/Volume:	30.87 g
Date Analyzed:	09/16/2009 0418			Final Weight/Volume:	1.0 mL
Date Prepared:	09/01/2009 1501			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		11	36
Benzyl alcohol		ND		31	72
Bis(2-chloroethoxy)methane		ND		11	36
Bis(2-chloroethyl)ether		ND		11	36
Bis(2-ethylhexyl) phthalate		55 J3		11	36
Butyl benzyl phthalate		ND		11	36
Caprolactam		ND		11	36
Carbazole		ND		11	36
Chrysene		ND		11	36
Dibenz(a,h)anthracene		ND		11	36
Dibenzofuran		ND		11	36
Diethyl phthalate		ND		11	36
Dimethyl phthalate		ND		11	36
Di-n-butyl phthalate		ND		32	36
Di-n-octyl phthalate		ND		18	36
Diphenyl oxide		ND		11	36
Fluoranthene		ND		11	36
Fluorene		ND		11	36
Hexachlorobenzene		ND		11	36
Hexachlorobutadiene		ND		11	36
Hexachlorocyclopentadiene		ND		11	72
Hexachloroethane		ND		11	36
Indeno[1,2,3-cd]pyrene		ND		11	36
Isophorone		ND		11	36
Naphthalene		ND		11	86
Nitrobenzene		ND		11	36
N-Nitrosodimethylamine		ND		11	36
N-Nitrosodi-n-propylamine		ND		11	36
N-Nitrosodiphenylamine		ND		11	36
Pentachlorophenol		ND		11	36
Phenanthrene		ND		11	43
Phenol		ND		11	36
Pyrene		ND		11	36

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	71		30 - 130
2-Fluorobiphenyl	67		30 - 130
2-Fluorophenol	67		30 - 130
Nitrobenzene-d5	61		30 - 130
Phenol-d5	68		30 - 130
Terphenyl-d14	75		30 - 130

Client: Olin Corporation

Job Number: 360-24251-1
Sdg Number: OCRI-05

Client Sample ID: **OC-SB-440-6.0/8.0-XXX**

Lab Sample ID: 360-24251-10
Client Matrix: Solid % Moisture: 9.6

Date Sampled: 08/24/2009 1150
Date Received: 08/24/2009 1910

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48993		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48462		Lab File ID:	J02970.D
Dilution:	1.0			Initial Weight/Volume:	30.87 g
Date Analyzed:	09/16/2009 0418			Final Weight/Volume:	1.0 mL
Date Prepared:	09/01/2009 1501			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 2

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
295-48-7	Cyclopentadecane	13.89	88	T J N
26603-23-6	p,p''-Dioctyldiphenylamine	15.43	69	T J N

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Client: Olin Corporation

Job Number: 360-24251-1
Sdg Number: OCRI-05

Client Sample ID: **OC-SB-438-5.0/7.0-XXX**

Lab Sample ID: 360-24251-12
Client Matrix: Solid
% Moisture: 12.8

Date Sampled: 08/24/2009 1650
Date Received: 08/25/2009 1800

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48993		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48462		Lab File ID:	J02971.D
Dilution:	1.0			Initial Weight/Volume:	30.68 g
Date Analyzed:	09/16/2009 0447			Final Weight/Volume:	1.0 mL
Date Prepared:	09/01/2009 1501			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		11	37
1,2,4,5-Tetrachlorobenzene		ND		11	37
1,2,4-Trichlorobenzene		ND		11	37
1,2-Dichlorobenzene		ND		11	37
1,3-Dichlorobenzene		ND		11	37
1,4-Dichlorobenzene		ND		11	37
1-Methylnaphthalene		ND		11	37
2,2'-oxybis[1-chloropropane]		ND		11	37
2,3,4,6-Tetrachlorophenol		ND		11	37
2,4,5-Trichlorophenol		ND		11	37
2,4,6-Trichlorophenol		ND		11	37
2,4-Dichlorophenol		ND		11	37
2,4-Dimethylphenol		ND		15	37
2,4-Dinitrophenol		~~ND~~	R	11	37
2,4-Dinitrotoluene		ND		11	37
2,6-Dinitrotoluene		ND		11	37
2-Chloronaphthalene		ND		11	37
2-Chlorophenol		ND		11	37
2-Methylnaphthalene		ND		11	37
2-Methylphenol		ND		22	37
2-Nitroaniline		~~ND~~	R	11	190
2-Nitrophenol		ND		11	37
3 & 4 Methylphenol		ND		11	37
3,3'-Dichlorobenzidine		ND	J	11	75
3-Nitroaniline		ND		11	190
4,6-Dinitro-2-methylphenol		ND		11	190
4-Bromophenyl phenyl ether		ND		11	37
4-Chloro-3-methylphenol		ND		11	75
4-Chloroaniline		ND		11	75
4-Chlorophenyl phenyl ether		ND		11	37
4-Nitroaniline		ND		11	190
4-Nitrophenol		ND		11	190
Acenaphthene		ND		11	37
Acenaphthylene		ND		11	37
Acetophenone		ND		11	37
Aniline		ND		11	37
Anthracene		ND		11	37
Atrazine		ND		11	37
Azobenzene		ND		11	37
Benzaldehyde		ND		11	37
Benzo[a]anthracene		ND		11	37
Benzo[a]pyrene		ND		11	37
Benzo[b]fluoranthene		ND		11	37
Benzo[g,h,i]perylene		ND		11	37
Benzo[k]fluoranthene		ND		11	37
Benzoic acid		~~ND~~	R	17	190

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Client: Olin Corporation

Job Number: 360-24251-1
Sdg Number: OCRI-05

Client Sample ID: **OC-SB-438-5.0/7.0-XXX**

Lab Sample ID: 360-24251-12
Client Matrix: Solid % Moisture: 12.8

Date Sampled: 08/24/2009 1650
Date Received: 08/25/2009 1800

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48993		Instrument ID:	Inst_J
Preparation:	3546	Prep Batch: 360-48462		Lab File ID:	J02971.D
Dilution:	1.0			Initial Weight/Volume:	30.68 g
Date Analyzed:	09/16/2009 0447			Final Weight/Volume:	1.0 mL
Date Prepared:	09/01/2009 1501			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		11	37
Benzyl alcohol		ND		32	75
Bis(2-chloroethoxy)methane		ND		11	37
Bis(2-chloroethyl)ether		ND		11	37
Bis(2-ethylhexyl) phthalate		ND		11	37
Butyl benzyl phthalate		ND		11	37
Caprolactam		ND		11	37
Carbazole		ND		11	37
Chrysene		ND		11	37
Dibenz(a,h)anthracene		ND		11	37
Dibenzofuran		ND		11	37
Diethyl phthalate		ND		11	37
Dimethyl phthalate		ND		11	37
Di-n-butyl phthalate		ND		33	37
Di-n-octyl phthalate		ND		19	37
Diphenyl oxide		ND		11	37
Fluoranthene		ND		11	37
Fluorene		ND		11	37
Hexachlorobenzene		ND		11	37
Hexachlorobutadiene		ND		11	37
Hexachlorocyclopentadiene		ND		11	75
Hexachloroethane		ND		11	37
Indeno[1,2,3-cd]pyrene		ND		11	37
Isophorone		ND		11	37
Naphthalene		ND		11	90
Nitrobenzene		ND		11	37
N-Nitrosodimethylamine		ND		11	37
N-Nitrosodi-n-propylamine		ND		11	37
N-Nitrosodiphenylamine		ND		11	37
Pentachlorophenol		ND		11	37
Phenanthrene		ND		11	45
Phenol		ND		11	37
Pyrene		ND		11	37

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	68		30 - 130
2-Fluorobiphenyl	69		30 - 130
2-Fluorophenol	72		30 - 130
Nitrobenzene-d5	63		30 - 130
Phenol-d5	70		30 - 130
Terphenyl-d14	79		30 - 130

Client: Olin Corporation

Job Number: 360-24251-1
Sdg Number: OCRI-05

Client Sample ID: **OC-SB-438-5.0/7.0-XXX**

Lab Sample ID: 360-24251-12
Client Matrix: Solid % Moisture: 12.8

Date Sampled: 08/24/2009 1650
Date Received: 08/25/2009 1800

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48993		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48462		Lab File ID:	J02971.D
Dilution:	1.0			Initial Weight/Volume:	30.68 g
Date Analyzed:	09/16/2009 0447			Final Weight/Volume:	1.0 mL
Date Prepared:	09/01/2009 1501			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 5

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	4.80	6100	T J N
	Unknown	5.84	15	T J
5989-27-5	D-Limonene	6.98	15	T J N
19047-85-9	Phosphonic acid, dioctadecyl ester	14.58	11	T J N
7683-64-9	Squalene	14.92	39	T J N

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Client: Olin Corporation

Job Number: 360-24251-1
Sdg Number: OCRI-05

Client Sample ID: **OC-SB-441-0.0/1.0-XXX**

Lab Sample ID: 360-24251-13
Client Matrix: Solid % Moisture: 3.5

Date Sampled: 08/24/2009 1450
Date Received: 08/25/2009 1800

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48993		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48462		Lab File ID:	J02972.D
Dilution:	2.0			Initial Weight/Volume:	30.18 g
Date Analyzed:	09/16/2009 0517			Final Weight/Volume:	1.0 mL
Date Prepared:	09/01/2009 1501			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		35	J	21	69
1,2,4,5-Tetrachlorobenzene		ND		21	69
1,2,4-Trichlorobenzene		ND		21	69
1,2-Dichlorobenzene		ND		21	69
1,3-Dichlorobenzene		ND		21	69
1,4-Dichlorobenzene		ND		21	69
1-Methylnaphthalene		ND		21	69
2,2'-oxybis[1-chloropropane]		ND		21	69
2,3,4,6-Tetrachlorophenol		ND		21	69
2,4,5-Trichlorophenol		ND		21	69
2,4,6-Trichlorophenol		ND		21	69
2,4-Dichlorophenol		ND		21	69
2,4-Dimethylphenol		ND		27	69
2,4-Dinitrophenol		~~ND~~ R		21	69
2,4-Dinitrotoluene		ND		21	69
2,6-Dinitrotoluene		ND		21	69
2-Chloronaphthalene		ND		21	69
2-Chlorophenol		ND		21	69
2-Methylnaphthalene		ND		21	69
2-Methylphenol		ND		41	69
2-Nitroaniline		~~ND~~ R		21	340
2-Nitrophenol		ND		21	69
3 & 4 Methylphenol		ND		21	69
3,3'-Dichlorobenzidine		ND J		21	140
3-Nitroaniline		ND		21	340
4,6-Dinitro-2-methylphenol		ND		21	340
4-Bromophenyl phenyl ether		ND		21	69
4-Chloro-3-methylphenol		ND		21	140
4-Chloroaniline		ND		21	140
4-Chlorophenyl phenyl ether		ND		21	69
4-Nitroaniline		ND		21	340
4-Nitrophenol		ND		21	340
Acenaphthene		ND		21	69
Acenaphthylene		ND		21	69
Acetophenone		ND		21	69
Aniline		ND		21	69
Anthracene		ND		21	69
Atrazine		ND		21	69
Azobenzene		ND		21	69
Benzaldehyde		ND		21	69
Benzo[a]anthracene		57	J	21	69
Benzo[a]pyrene		67	J	21	69
Benzo[b]fluoranthene		110		21	69
Benzo[g,h,i]perylene		91		21	69
Benzo[k]fluoranthene		45	J	21	69
Benzoic acid		~~ND~~ R		31	340

Client: Olin Corporation

Job Number: 360-24251-1
Sdg Number: OCRI-05

Client Sample ID: **OC-SB-441-0.0/1.0-XXX**

Lab Sample ID: 360-24251-13
Client Matrix: Solid
% Moisture: 3.5

Date Sampled: 08/24/2009 1450
Date Received: 08/25/2009 1800

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48993		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48462		Lab File ID:	J02972.D
Dilution:	2.0			Initial Weight/Volume:	30.18 g
Date Analyzed:	09/16/2009 0517			Final Weight/Volume:	1.0 mL
Date Prepared:	09/01/2009 1501			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		21	69
Benzyl alcohol		ND		59	140
Bis(2-chloroethoxy)methane		ND		21	69
Bis(2-chloroethyl)ether		ND		21	69
Bis(2-ethylhexyl) phthalate		1300 EB		21	69
Butyl benzyl phthalate		ND		21	69
Caprolactam		ND		21	69
Carbazole		ND		21	69
Chrysene		96		21	69
Dibenz(a,h)anthracene		27	J	21	69
Dibenzofuran		ND		21	69
Diethyl phthalate		ND		21	69
Dimethyl phthalate		ND		21	69
Di-n-butyl phthalate		ND		60	69
Di-n-octyl phthalate		ND		35	69
Diphenyl oxide		140		21	69
Fluoranthene		100		21	69
Fluorene		ND		21	69
Hexachlorobenzene		ND		21	69
Hexachlorobutadiene		ND		21	69
Hexachlorocyclopentadiene		ND		21	140
Hexachloroethane		ND		21	69
Indeno[1,2,3-cd]pyrene		65	J	21	69
Isophorone		ND		21	69
Naphthalene		ND		21	160
Nitrobenzene		ND		21	69
N-Nitrosodimethylamine		ND		21	69
N-Nitrosodi-n-propylamine		ND		21	69
N-Nitrosodiphenylamine		38 EB	J	21	69
Pentachlorophenol		ND		21	69
Phenanthrene		47	J	21	82
Phenol		24	J	21	69
Pyrene		140		21	69

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	97		30 - 130
2-Fluorobiphenyl	92		30 - 130
2-Fluorophenol	102		30 - 130
Nitrobenzene-d5	85		30 - 130
Phenol-d5	88		30 - 130
Terphenyl-d14	101		30 - 130

Client: Olin Corporation

Job Number: 360-24251-1
Sdg Number: OCRI-05

Client Sample ID: **OC-SB-441-0.0/1.0-XXX**

Lab Sample ID: 360-24251-13
Client Matrix: Solid
% Moisture: 3.5

Date Sampled: 08/24/2009 1450
Date Received: 08/25/2009 1800

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48993		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48462		Lab File ID:	J02972.D
Dilution:	2.0			Initial Weight/Volume:	30.18 g
Date Analyzed:	09/16/2009 0517			Final Weight/Volume:	1.0 mL
Date Prepared:	09/01/2009 1501			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 2

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
122-39-4	Diphenylamine	10.56	38	J
	Unknown	15.67	4.9	T J

4/27/10

Client: Olin Corporation

Job Number: 360-24251-1
Sdg Number: OCRI-05

Client Sample ID: **OC-SB-441-8.0/10-XXX**

Lab Sample ID: 360-24251-15
Client Matrix: Solid
% Moisture: 11.0

Date Sampled: 08/24/2009 1455
Date Received: 08/25/2009 1800

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48993		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48462		Lab File ID:	J02974.D
Dilution:	1.0			Initial Weight/Volume:	30.47 g
Date Analyzed:	09/16/2009 0615			Final Weight/Volume:	1.0 mL
Date Prepared:	09/01/2009 1501			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		11	37
1,2,4,5-Tetrachlorobenzene		ND		11	37
1,2,4-Trichlorobenzene		ND		11	37
1,2-Dichlorobenzene		ND		11	37
1,3-Dichlorobenzene		ND		11	37
1,4-Dichlorobenzene		ND		11	37
1-Methylnaphthalene		ND		11	37
2,2'-oxybis[1-chloropropane]		ND		11	37
2,3,4,6-Tetrachlorophenol		ND		11	37
2,4,5-Trichlorophenol		ND		11	37
2,4,6-Trichlorophenol		ND		11	37
2,4-Dichlorophenol		ND		11	37
2,4-Dimethylphenol		ND		14	37
2,4-Dinitrophenol		~~ND~~	R	11	37
2,4-Dinitrotoluene		ND		11	37
2,6-Dinitrotoluene		ND		11	37
2-Chloronaphthalene		ND		11	37
2-Chlorophenol		ND		11	37
2-Methylnaphthalene		ND		11	37
2-Methylphenol		ND		22	37
2-Nitroaniline		~~ND~~	R	11	180
2-Nitrophenol		ND		11	37
3 & 4 Methylphenol		ND		11	37
3,3'-Dichlorobenzidine		ND	J	11	74
3-Nitroaniline		ND		11	180
4,6-Dinitro-2-methylphenol		ND		11	180
4-Bromophenyl phenyl ether		ND		11	37
4-Chloro-3-methylphenol		ND		11	74
4-Chloroaniline		ND		11	74
4-Chlorophenyl phenyl ether		ND		11	37
4-Nitroaniline		ND		11	180
4-Nitrophenol		ND		11	180
Acenaphthene		ND		11	37
Acenaphthylene		ND		11	37
Acetophenone		ND		11	37
Aniline		ND		11	37
Anthracene		ND		11	37
Atrazine		ND		11	37
Azobenzene		ND		11	37
Benzaldehyde		ND		11	37
Benzo[a]anthracene		ND		11	37
Benzo[a]pyrene		ND		11	37
Benzo[b]fluoranthene		ND		11	37
Benzo[g,h,i]perylene		ND		11	37
Benzo[k]fluoranthene		ND		11	37
Benzoic acid		~~ND~~	R	17	180

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Client: Olin Corporation

Job Number: 360-24251-1
Sdg Number: OCRI-05

Client Sample ID: **OC-SB-441-8.0/10-XXX**

Lab Sample ID: 360-24251-15
Client Matrix: Solid
% Moisture: 11.0

Date Sampled: 08/24/2009 1455
Date Received: 08/25/2009 1800

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48993		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48462		Lab File ID:	J02974.D
Dilution:	1.0			Initial Weight/Volume:	30.47 g
Date Analyzed:	09/16/2009 0615			Final Weight/Volume:	1.0 mL
Date Prepared:	09/01/2009 1501			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		11	37
Benzyl alcohol		ND		31	74
Bis(2-chloroethoxy)methane		ND		11	37
Bis(2-chloroethyl)ether		ND		11	37
Bis(2-ethylhexyl) phthalate		13 EB	J	11	37
Butyl benzyl phthalate		ND		11	37
Caprolactam		ND		11	37
Carbazole		ND		11	37
Chrysene		ND		11	37
Dibenz(a,h)anthracene		ND		11	37
Dibenzofuran		ND		11	37
Diethyl phthalate		ND		11	37
Dimethyl phthalate		ND		11	37
Di-n-butyl phthalate		ND		32	37
Di-n-octyl phthalate		ND		19	37
Diphenyl oxide		ND		11	37
Fluoranthene		ND		11	37
Fluorene		ND		11	37
Hexachlorobenzene		ND		11	37
Hexachlorobutadiene		ND		11	37
Hexachlorocyclopentadiene		ND		11	74
Hexachloroethane		ND		11	37
Indeno[1,2,3-cd]pyrene		ND		11	37
Isophorone		ND		11	37
Naphthalene		ND		11	88
Nitrobenzene		ND		11	37
N-Nitrosodimethylamine		ND		11	37
N-Nitrosodi-n-propylamine		ND		11	37
N-Nitrosodiphenylamine		ND		11	37
Pentachlorophenol		ND		11	37
Phenanthrene		ND		11	44
Phenol		ND		11	37
Pyrene		ND		11	37

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	68		30 - 130
2-Fluorobiphenyl	65		30 - 130
2-Fluorophenol	68		30 - 130
Nitrobenzene-d5	60		30 - 130
Phenol-d5	66		30 - 130
Terphenyl-d14	81		30 - 130

Client: Olin Corporation

Job Number: 360-24251-1
Sdg Number: OCRI-05

Client Sample ID: **OC-SB-441-8.0/10-XXX**

Lab Sample ID: 360-24251-15
Client Matrix: Solid % Moisture: 11.0

Date Sampled: 08/24/2009 1455
Date Received: 08/25/2009 1800

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48993		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48462		Lab File ID:	J02974.D
Dilution:	1.0			Initial Weight/Volume:	30.47 g
Date Analyzed:	09/16/2009 0615			Final Weight/Volume:	1.0 mL
Date Prepared:	09/01/2009 1501			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 4

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Unknown	4.81	10	T J
	Unknown	5.84	14	T J
126-33-0	Thiophene, tetrahydro-, 1,1-dioxide	8.26	7.5	T J N
~~26603-23-6~~	~~p,p''-Dioctyldiphenylamine~~	~~15.44~~	~~200~~	~~T J N~~

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Client: Olin Corporation

Job Number: 360-24251-1
Sdg Number: OCRI-05

Client Sample ID: **OC-SB-446-0.0/1.0-XXX**

Lab Sample ID: 360-24251-16
Client Matrix: Solid % Moisture: 5.1

Date Sampled: 08/25/2009 0805
Date Received: 08/25/2009 1800

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48521		Instrument ID:	Inst. J
Preparation:	3550B	Prep Batch: 360-48515		Lab File ID:	J02855.D
Dilution:	1.0			Initial Weight/Volume:	100.27 g
Date Analyzed:	09/03/2009 0443			Final Weight/Volume:	1.0 mL
Date Prepared:	09/02/2009 1439			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodimethylamine		ND		1.2	5.3

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	32		30 - 130
2-Fluorobiphenyl	49		30 - 130
2-Fluorophenol	45		30 - 130
Nitrobenzene-d5	51		30 - 130
Phenol-d5	51		30 - 130
Terphenyl-d14	58		30 - 130

Client: Olin Corporation

Job Number: 360-24251-1
Sdg Number: OCRI-05

Client Sample ID: **OC-SB-446-0.0/1.0-XXX**

Lab Sample ID: 360-24251-16
Client Matrix: Solid % Moisture: 5.1

Date Sampled: 08/25/2009 0805
Date Received: 08/25/2009 1800

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48993		Instrument ID:	Inst_J
Preparation:	3546	Prep Batch: 360-48462		Lab File ID:	J02975.D
Dilution:	1.0			Initial Weight/Volume:	30.02 g
Date Analyzed:	09/16/2009 0644			Final Weight/Volume:	1.0 mL
Date Prepared:	09/01/2009 1501			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		11	35
1,2,4,5-Tetrachlorobenzene		ND		11	35
1,2,4-Trichlorobenzene		ND		11	35
1,2-Dichlorobenzene		ND		11	35
1,3-Dichlorobenzene		ND		11	35
1,4-Dichlorobenzene		ND		11	35
1-Methylnaphthalene		ND		11	35
2,2'-oxybis[1-chloropropane]		ND		11	35
2,3,4,6-Tetrachlorophenol		ND		11	35
2,4,5-Trichlorophenol		ND		11	35
2,4,6-Trichlorophenol		ND		11	35
2,4-Dichlorophenol		ND		11	35
2,4-Dimethylphenol		ND		14	35
2,4-Dinitrophenol		~~ND~~ R		11	35
2,4-Dinitrotoluene		ND		11	35
2,6-Dinitrotoluene		ND		11	35
2-Chloronaphthalene		ND		11	35
2-Chlorophenol		ND		11	35
2-Methylnaphthalene		ND		11	35
2-Methylphenol		ND		21	35
2-Nitroaniline		~~ND~~ R		11	180
2-Nitrophenol		ND		11	35
3 & 4 Methylphenol		ND		11	35
3,3'-Dichlorobenzidine		ND J		11	70
3-Nitroaniline		ND		11	180
4,6-Dinitro-2-methylphenol		ND		11	180
4-Bromophenyl phenyl ether		ND		11	35
4-Chloro-3-methylphenol		ND		11	70
4-Chloroaniline		ND		11	70
4-Chlorophenyl phenyl ether		ND		11	35
4-Nitroaniline		ND		11	180
4-Nitrophenol		ND		11	180
Acenaphthene		ND		11	35
Acenaphthylene		ND		11	35
Acetophenone		ND		11	35
Aniline		ND		11	35
Anthracene		ND		11	35
Atrazine		ND		11	35
Azobenzene		ND		11	35
Benzaldehyde		ND		11	35
Benzo[a]anthracene		17	J	11	35
Benzo[a]pyrene		16	J	11	35
Benzo[b]fluoranthene		ND		11	35
Benzo[g,h,i]perylene		22	J	11	35
Benzo[k]fluoranthene		ND		11	35
Benzoic acid		~~ND~~ R		16	180

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Client: Olin Corporation

Job Number: 360-24251-1
Sdg Number: OCRI-05

Client Sample ID: **OC-SB-446-0.0/1.0-XXX**

Lab Sample ID: 360-24251-16
Client Matrix: Solid % Moisture: 5.1

Date Sampled: 08/25/2009 0805
Date Received: 08/25/2009 1800

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48993		Instrument ID:	Inst_J
Preparation:	3546	Prep Batch: 360-48462		Lab File ID:	J02975.D
Dilution:	1.0			Initial Weight/Volume:	30.02 g
Date Analyzed:	09/16/2009 0644			Final Weight/Volume:	1.0 mL
Date Prepared:	09/01/2009 1501			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		11	35
Benzyl alcohol		ND		30	70
Bis(2-chloroethoxy)methane		ND		11	35
Bis(2-chloroethyl)ether		ND		11	35
Bis(2-ethylhexyl) phthalate		430 EB		11	35
Butyl benzyl phthalate		ND		11	35
Caprolactam		ND		11	35
Carbazole		ND		11	35
Chrysene		22	J	11	35
Dibenz(a,h)anthracene		ND		11	35
Dibenzofuran		ND		11	35
Diethyl phthalate		ND		11	35
Dimethyl phthalate		ND		11	35
Di-n-butyl phthalate		ND		31	35
Di-n-octyl phthalate		ND		18	35
Diphenyl oxide		ND		11	35
Diphenylamine		ND		2.1	35
Fluoranthene		27	J	11	35
Fluorene		ND		11	35
Hexachlorobenzene		18	J	11	35
Hexachlorobutadiene		ND		11	35
Hexachlorocyclopentadiene		ND		11	70
Hexachloroethane		ND		11	35
Indeno[1,2,3-cd]pyrene		21	J	11	35
Isophorone		ND		11	35
Naphthalene		ND		11	84
Nitrobenzene		ND		11	35
N-Nitrosodimethylamine		ND		11	35
N-Nitrosodi-n-propylamine		ND		11	35
N-Nitrosodiphenylamine		ND		11	35
Pentachlorophenol		ND		11	35
Phenanthrene		15	J	11	42
Phenol		ND		11	35
Pyrene		36		11	35

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	57		30 - 130
2-Fluorophenol	70		30 - 130
2-Fluorobiphenyl	66		30 - 130
Nitrobenzene-d5	65		30 - 130
Phenol-d5	74		30 - 130
Terphenyl-d14	84		30 - 130

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Client: Olin Corporation

Job Number: 360-24251-1
Sdg Number: OCRI-05

Client Sample ID: **OC-SB-446-0.0/1.0-XXX**

Lab Sample ID: 360-24251-16
Client Matrix: Solid % Moisture: 5.1

Date Sampled: 08/25/2009 0805
Date Received: 08/25/2009 1800

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48993		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48462		Lab File ID:	J02975.D
Dilution:	1.0			Initial Weight/Volume:	30.02 g
Date Analyzed:	09/16/2009 0644			Final Weight/Volume:	1.0 mL
Date Prepared:	09/01/2009 1501			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 5

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
~~104-76-7~~	~~1-Hexanol, 2-ethyl-~~	~~6.96~~	~~890~~	~~T J N~~
24468-13-1	dl-2-Ethylhexyl chloroformate	14.54	880	T J N
	Unknown	15.66	11	T J
	Unknown	15.96	20	T J
	Unknown	17.21	1.6	T J

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Client: Olin Corporation

Job Number: 360-24251-1
Sdg Number: OCRI-05

Client Sample ID: **OC-SB-446-5.0/7.0-DUP**

Lab Sample ID: 360-24251-18
Client Matrix: Solid % Moisture: 18.3

Date Sampled: 08/25/2009 0820
Date Received: 08/25/2009 1800

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48521		Instrument ID:	Inst. J
Preparation:	3550B	Prep Batch: 360-48515		Lab File ID:	J02845.D
Dilution:	1.0			Initial Weight/Volume:	100.27 g
Date Analyzed:	09/02/2009 2342			Final Weight/Volume:	1.0 mL
Date Prepared:	09/02/2009 1439			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodimethylamine		ND		1.4	6.1

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	59		30 - 130
2-Fluorobiphenyl	51		30 - 130
2-Fluorophenol	55		30 - 130
Nitrobenzene-d5	55		30 - 130
Phenol-d5	57		30 - 130
Terphenyl-d14	67		30 - 130

Client: Olin Corporation

Job Number: 360-24251-1
Sdg Number: OCRI-05

Client Sample ID: **OC-SB-446-5.0/7.0-DUP**

Lab Sample ID: 360-24251-18
Client Matrix: Solid
% Moisture: 18.3

Date Sampled: 08/25/2009 0820
Date Received: 08/25/2009 1800

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48993		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48462		Lab File ID:	J02977.D
Dilution:	1.0			Initial Weight/Volume:	30.78 g
Date Analyzed:	09/16/2009 0743			Final Weight/Volume:	1.0 mL
Date Prepared:	09/01/2009 1501			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		12	40
1,2,4,5-Tetrachlorobenzene		ND		12	40
1,2,4-Trichlorobenzene		ND		12	40
1,2-Dichlorobenzene		ND		12	40
1,3-Dichlorobenzene		ND		12	40
1,4-Dichlorobenzene		ND		12	40
1-Methylnaphthalene		ND		12	40
2,2'-oxybis[1-chloropropane]		ND		12	40
2,3,4,6-Tetrachlorophenol		ND		12	40
2,4,5-Trichlorophenol		ND		12	40
2,4,6-Trichlorophenol		ND		12	40
2,4-Dichlorophenol		ND		12	40
2,4-Dimethylphenol		ND		16	40
2,4-Dinitrophenol		~~ND~~ R		12	40
2,4-Dinitrotoluene		ND		12	40
2,6-Dinitrotoluene		ND		12	40
2-Chloronaphthalene		ND		12	40
2-Chlorophenol		ND		12	40
2-Methylnaphthalene		ND		12	40
2-Methylphenol		ND		24	40
2-Nitroaniline		~~ND~~ R		12	200
2-Nitrophenol		ND		12	40
3 & 4 Methylphenol		ND		12	40
3,3'-Dichlorobenzidine		ND J		12	80
3-Nitroaniline		ND		12	200
4,6-Dinitro-2-methylphenol		ND		12	200
4-Bromophenyl phenyl ether		ND		12	40
4-Chloro-3-methylphenol		ND		12	80
4-Chloroaniline		ND		12	80
4-Chlorophenyl phenyl ether		ND		12	40
4-Nitroaniline		ND		12	200
4-Nitrophenol		~~ND~~ R		12	200
Acenaphthene		ND		12	40
Acenaphthylene		ND		12	40
Acetophenone		ND		12	40
Aniline		ND		12	40
Anthracene		ND		12	40
Atrazine		ND		12	40
Azobenzene		ND		12	40
Benzaldehyde		ND		12	40
Benzo[a]anthracene		ND		12	40
Benzo[a]pyrene		ND		12	40
Benzo[b]fluoranthene		ND		12	40
Benzo[g,h,i]perylene		ND		12	40
Benzo[k]fluoranthene		ND		12	40
Benzoic acid		~~ND~~ R		18	200

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Client: Olin Corporation

Job Number: 360-24251-1
Sdg Number: OCRI-05

Client Sample ID: **OC-SB-446-5.0/7.0-DUP**

Lab Sample ID: 360-24251-18
Client Matrix: Solid % Moisture: 18.3

Date Sampled: 08/25/2009 0820
Date Received: 08/25/2009 1800

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48993		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48462		Lab File ID:	J02977.D
Dilution:	1.0			Initial Weight/Volume:	30.78 g
Date Analyzed:	09/16/2009 0743			Final Weight/Volume:	1.0 mL
Date Prepared:	09/01/2009 1501			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		12	40
Benzyl alcohol		ND		34	80
Bis(2-chloroethoxy)methane		ND		12	40
Bis(2-chloroethyl)ether		ND		12	40
Bis(2-ethylhexyl) phthalate		29 EB	J	12	40
Butyl benzyl phthalate		ND		12	40
Caprolactam		ND		12	40
Carbazole		ND		12	40
Chrysene		ND		12	40
Dibenz(a,h)anthracene		ND		12	40
Dibenzofuran		ND		12	40
Diethyl phthalate		ND		12	40
Dimethyl phthalate		ND		12	40
Di-n-butyl phthalate		ND		35	40
Di-n-octyl phthalate		ND		20	40
Diphenyl oxide		ND		12	40
Diphenylamine		ND		2.4	40
Fluoranthene		ND		12	40
Fluorene		ND		12	40
Hexachlorobenzene		ND		12	40
Hexachlorobutadiene		ND		12	40
Hexachlorocyclopentadiene		ND		12	80
Hexachloroethane		ND		12	40
Indeno[1,2,3-cd]pyrene		ND		12	40
Isophorone		ND		12	40
Naphthalene		ND		12	95
Nitrobenzene		ND		12	40
N-Nitrosodimethylamine		ND		12	40
N-Nitrosodi-n-propylamine		ND		12	40
N-Nitrosodiphenylamine		ND		12	40
Pentachlorophenol		ND		12	40
Phenanthrene		ND		12	48
Phenol		ND		12	40
Pyrene		ND		12	40

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	61		30 - 130
2-Fluorophenol	65		30 - 130
2-Fluorobiphenyl	64		30 - 130
Nitrobenzene-d5	59		30 - 130
Phenol-d5	60		30 - 130
Terphenyl-d14	75		30 - 130

Client: Olin Corporation

Job Number: 360-24251-1
Sdg Number: OCRI-05

Client Sample ID: **OC-SB-446-5.0/7.0-DUP**

Lab Sample ID: 360-24251-18
Client Matrix: Solid % Moisture: 18.3

Date Sampled: 08/25/2009 0820
Date Received: 08/25/2009 1800

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48993		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48462		Lab File ID:	J02977.D
Dilution:	1.0			Initial Weight/Volume:	30.78 g
Date Analyzed:	09/16/2009 0743			Final Weight/Volume:	1.0 mL
Date Prepared:	09/01/2009 1501			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 5

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Unknown	10.87	12	T J
630-6-8	Hexatriacontane	13.88	38	T J N
646-31-1	Tetracosane	14.21	21	T J N
112-95-8	Eicosane	14.53	18	T J N
26603-23-6	p,p''-Dioctyldiphenylamine	15.43	190	T J N

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Client: Olin Corporation

Job Number: 360-24251-1
Sdg Number: OCRI-05

Client Sample ID: **OC-SB-446-5.0/7.0-XXX**

Lab Sample ID: 360-24251-19
Client Matrix: Solid
% Moisture: 21.4

Date Sampled: 08/25/2009 0820
Date Received: 08/25/2009 1800

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48521		Instrument ID:	Inst. J
Preparation:	3550B	Prep Batch: 360-48515		Lab File ID:	J02846.D
Dilution:	1.0			Initial Weight/Volume:	100.40 g
Date Analyzed:	09/03/2009 0012			Final Weight/Volume:	1.0 mL
Date Prepared:	09/02/2009 1439			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodimethylamine		ND		1.5	6.3

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	59		30 - 130
2-Fluorobiphenyl	48		30 - 130
2-Fluorophenol	51		30 - 130
Nitrobenzene-d5	51		30 - 130
Phenol-d5	54		30 - 130
Terphenyl-d14	61		30 - 130

Client: Olin Corporation

Job Number: 360-24251-1
Sdg Number: OCRI-05

Client Sample ID: **OC-SB-446-5.0/7.0-XXX**

Lab Sample ID: 360-24251-19
Client Matrix: Solid % Moisture: 21.4

Date Sampled: 08/25/2009 0820
Date Received: 08/25/2009 1800

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48930		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48567		Lab File ID:	B10321.D
Dilution:	1.0			Initial Weight/Volume:	30.05 g
Date Analyzed:	09/15/2009 2019			Final Weight/Volume:	1.0 mL
Date Prepared:	09/03/2009 1311			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		13	42
1,2,4,5-Tetrachlorobenzene		ND		13	42
1,2,4-Trichlorobenzene		ND		13	42
1,2-Dichlorobenzene		ND		13	42
1,3-Dichlorobenzene		ND		13	42
1,4-Dichlorobenzene		ND		13	42
1-Methylnaphthalene		ND		13	42
2,2'-oxybis[1-chloropropane]		ND		13	42
2,3,4,6-Tetrachlorophenol		ND		13	42
2,4,5-Trichlorophenol		ND		13	42
2,4,6-Trichlorophenol		ND		13	42
2,4-Dichlorophenol		ND		13	42
2,4-Dimethylphenol		ND		17	42
2,4-Dinitrophenol		ND J		13	42
2,4-Dinitrotoluene		ND		13	42
2,6-Dinitrotoluene		ND		13	42
2-Chloronaphthalene		ND		13	42
2-Chlorophenol		ND		13	42
2-Methylnaphthalene		ND		13	42
2-Methylphenol		ND		25	42
2-Nitroaniline		ND		13	210
2-Nitrophenol		ND		13	42
3 & 4 Methylphenol		ND		13	42
3,3'-Dichlorobenzidine		ND J	✓	13	85
3-Nitroaniline		ND		13	210
4,6-Dinitro-2-methylphenol		ND		13	210
4-Bromophenyl phenyl ether		ND		13	42
4-Chloro-3-methylphenol		ND		13	85
4-Chloroaniline		ND		13	85
4-Chlorophenyl phenyl ether		ND		13	42
4-Nitroaniline		ND		13	210
4-Nitrophenol		~~ND~~ R		13	210
Acenaphthene		ND		13	42
Acenaphthylene		ND		13	42
Acetophenone		ND		13	42
Aniline		ND J	✓	13	42
Anthracene		ND		13	42
Atrazine		ND		13	42
Azobenzene		ND		13	42
Benzaldehyde		ND J	✓	13	42
Benzo[a]anthracene		ND		13	42
Benzo[a]pyrene		ND		13	42
Benzo[b]fluoranthene		ND		13	42
Benzo[g,h,i]perylene		ND		13	42
Benzo[k]fluoranthene		ND		13	42
Benzoic acid		~~ND~~ R		19	210

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Client: Olin Corporation

Job Number: 360-24251-1
Sdg Number: OCRI-05

Client Sample ID: OC-SB-446-5.0/7.0-XXX

Lab Sample ID: 360-24251-19
Client Matrix: Solid % Moisture: 21.4

Date Sampled: 08/25/2009 0820
Date Received: 08/25/2009 1800

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48930		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48567		Lab File ID:	B10321.D
Dilution:	1.0			Initial Weight/Volume:	30.05 g
Date Analyzed:	09/15/2009 2019			Final Weight/Volume:	1.0 mL
Date Prepared:	09/03/2009 1311			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		13	42
Benzyl alcohol		ND		36	85
Bis(2-chloroethoxy)methane		ND		13	42
Bis(2-chloroethyl)ether		ND		13	42
Bis(2-ethylhexyl) phthalate		21 EB	J	13	42
Butyl benzyl phthalate		ND		13	42
Caprolactam		ND		13	42
Carbazole		ND		13	42
Chrysene		ND		13	42
Dibenz(a,h)anthracene		ND		13	42
Dibenzofuran		ND		13	42
Diethyl phthalate		ND		13	42
Dimethyl phthalate		ND		13	42
Di-n-butyl phthalate		ND		37	42
Di-n-octyl phthalate		ND		21	42
Diphenyl oxide		ND		13	42
Diphenylamine		ND		2.5	42
Fluoranthene		ND		13	42
Fluorene		ND		13	42
Hexachlorobenzene		ND		13	42
Hexachlorobutadiene		ND		13	42
Hexachlorocyclopentadiene		ND		13	85
Hexachloroethane		ND		13	42
Indeno[1,2,3-cd]pyrene		ND		13	42
Isophorone		ND		13	42
Naphthalene		ND		13	100
Nitrobenzene		ND		13	42
N-Nitrosodimethylamine		ND		13	42
N-Nitrosodi-n-propylamine		ND		13	42
N-Nitrosodiphenylamine		ND		13	42
Pentachlorophenol		ND		13	42
Phenanthrene		ND		13	51
Phenol		ND		13	42
Pyrene		ND		13	42

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	67		30 - 130
2-Fluorophenol	85		30 - 130
2-Fluorobiphenyl	72		30 - 130
Nitrobenzene-d5	79		30 - 130
Phenol-d5	79		30 - 130
Terphenyl-d14	87		30 - 130

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Client: Olin Corporation

Job Number: 360-24251-1
Sdg Number: OCRI-05

Client Sample ID: **OC-SB-446-5.0/7.0-XXX**

Lab Sample ID: 360-24251-19
Client Matrix: Solid % Moisture: 21.4

Date Sampled: 08/25/2009 0820
Date Received: 08/25/2009 1800

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48930		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48567		Lab File ID:	B10321.D
Dilution:	1.0			Initial Weight/Volume:	30.05 g
Date Analyzed:	09/15/2009 2019			Final Weight/Volume:	1.0 mL
Date Prepared:	09/03/2009 1311			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 5

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
638-67-5	Tricosane	14.74	73	T J N
629-99-2	Pentacosane	15.96	150	T J N
638-67-5	Tricosane	16.51	150	T J N
593-49-7	Heptacosane	17.10	130	T J N
630-2-4	Octacosane	17.74	92	T J N

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Client: Olin Corporation

Job Number: 360-24251-1
Sdg Number: OCRI-05

Client Sample ID: **OC-SB-448-0.0/1.0-XXX**

Lab Sample ID: 360-24251-20
Client Matrix: Solid
% Moisture: 5.4

Date Sampled: 08/25/2009 1005
Date Received: 08/25/2009 1800

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48521		Instrument ID:	Inst. J
Preparation:	3550B	Prep Batch: 360-48515		Lab File ID:	J02856.D
Dilution:	1.0			Initial Weight/Volume:	100.25 g
Date Analyzed:	09/03/2009 0513			Final Weight/Volume:	1.0 mL
Date Prepared:	09/02/2009 1439			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodimethylamine		ND		1.2	5.3

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	53		30 - 130
2-Fluorobiphenyl	43		30 - 130
2-Fluorophenol	41		30 - 130
Nitrobenzene-d5	46		30 - 130
Phenol-d5	45		30 - 130
Terphenyl-d14	49		30 - 130

Client: Olin Corporation

Job Number: 360-24251-1
Sdg Number: OCRI-05

Client Sample ID: **OC-SB-448-0.0/1.0-XXX**

Lab Sample ID: 360-24251-20
Client Matrix: Solid
% Moisture: 5.4

Date Sampled: 08/25/2009 1005
Date Received: 08/25/2009 1800

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48930		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48567		Lab File ID:	B10324.D
Dilution:	1.0			Initial Weight/Volume:	30.06 g
Date Analyzed:	09/15/2009 2202			Final Weight/Volume:	1.0 mL
Date Prepared:	09/03/2009 1311			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		23	J	11	35
1,2,4,5-Tetrachlorobenzene		ND		11	35
1,2,4-Trichlorobenzene		ND		11	35
1,2-Dichlorobenzene		ND		11	35
1,3-Dichlorobenzene		ND		11	35
1,4-Dichlorobenzene		ND		11	35
1-Methylnaphthalene		ND		11	35
2,2'-oxybis[1-chloropropane]		ND		11	35
2,3,4,6-Tetrachlorophenol		ND		11	35
2,4,5-Trichlorophenol		ND		11	35
2,4,6-Trichlorophenol		ND		11	35
2,4-Dichlorophenol		ND		11	35
2,4-Dimethylphenol		ND		14	35
2,4-Dinitrophenol		ND J		11	35
2,4-Dinitrotoluene		ND		11	35
2,6-Dinitrotoluene		ND		11	35
2-Chloronaphthalene		ND		11	35
2-Chlorophenol		ND		11	35
2-Methylnaphthalene		ND		11	35
2-Methylphenol		ND		21	35
2-Nitroaniline		ND		11	180
2-Nitrophenol		ND		11	35
3 & 4 Methylphenol		ND		11	35
3,3'-Dichlorobenzidine		ND J	✓	11	70
3-Nitroaniline		ND		11	180
4,6-Dinitro-2-methylphenol		ND		11	180
4-Bromophenyl phenyl ether		ND		11	35
4-Chloro-3-methylphenol		ND		11	70
4-Chloroaniline		ND		11	70
4-Chlorophenyl phenyl ether		ND		11	35
4-Nitroaniline		ND		11	180
4-Nitrophenol		ND		11	180
Acenaphthene		ND		11	35
Acenaphthylene		ND		11	35
Acetophenone		ND		11	35
Aniline		ND J	✓	11	35
Anthracene		ND		11	35
Atrazine		ND		11	35
Azobenzene		ND		11	35
Benzaldehyde		ND J	✓	11	35
Benzo[a]anthracene		ND		11	35
Benzo[a]pyrene		ND		11	35
Benzo[b]fluoranthene		ND		11	35
Benzo[g,h,i]perylene		ND		11	35
Benzo[k]fluoranthene		ND		11	35
Benzoic acid		~~ND~~ R		16	180

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Client: Olin Corporation

Job Number: 360-24251-1
Sdg Number: OCRI-05

Client Sample ID: **OC-SB-448-0.0/1.0-XXX**

Lab Sample ID: 360-24251-20
Client Matrix: Solid % Moisture: 5.4

Date Sampled: 08/25/2009 1005
Date Received: 08/25/2009 1800

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48930		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48567		Lab File ID:	B10324.D
Dilution:	1.0			Initial Weight/Volume:	30.06 g
Date Analyzed:	09/15/2009 2202			Final Weight/Volume:	1.0 mL
Date Prepared:	09/03/2009 1311			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		11	35
Benzyl alcohol		ND		30	70
Bis(2-chloroethoxy)methane		ND		11	35
Bis(2-chloroethyl)ether		ND		11	35
Butyl benzyl phthalate		ND		11	35
Caprolactam		ND		11	35
Carbazole		ND		11	35
Chrysene		ND		11	35
Dibenz(a,h)anthracene		ND		11	35
Dibenzofuran		ND		11	35
Diethyl phthalate		ND		11	35
Dimethyl phthalate		ND		11	35
Di-n-butyl phthalate		43	B	31	35
Di-n-octyl phthalate		ND		18	35
Diphenyl oxide		93		11	35
Fluoranthene		11	J	11	35
Fluorene		ND		11	35
Hexachlorobenzene		ND		11	35
Hexachlorobutadiene		ND		11	35
Hexachlorocyclopentadiene		ND		11	70
Hexachloroethane		ND		11	35
Indeno[1,2,3-cd]pyrene		ND		11	35
Isophorone		ND		11	35
Naphthalene		ND		11	84
Nitrobenzene		ND		11	35
N-Nitrosodimethylamine		ND		11	35
N-Nitrosodi-n-propylamine		ND		11	35
N-Nitrosodiphenylamine		89		11	35
Pentachlorophenol		ND		11	35
Phenanthrene		ND		11	42
Phenol		ND		11	35
Pyrene		18	J	11	35

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	59		30 - 130
2-Fluorophenol	70		30 - 130
2-Fluorobiphenyl	61		30 - 130
Nitrobenzene-d5	65		30 - 130
Phenol-d5	69		30 - 130
Terphenyl-d14	77		30 - 130

Client: Olin Corporation

Job Number: 360-24251-1
Sdg Number: OCRI-05

Client Sample ID: **OC-SB-448-0.0/1.0-XXX**

Lab Sample ID: 360-24251-20
Client Matrix: Solid % Moisture: 5.4

Date Sampled: 08/25/2009 1005
Date Received: 08/25/2009 1800

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48930		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48567		Lab File ID:	B10324.D
Dilution:	1.0			Initial Weight/Volume:	30.06 g
Date Analyzed:	09/15/2009 2202			Final Weight/Volume:	1.0 mL
Date Prepared:	09/03/2009 1311			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 3

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
~~110-86-1~~	~~Pyridine~~	~~6.07~~	~~7.0~~	~~J~~
14064-41-6	Benzene, 1-methoxy-3-(2-phenylethenyl)-,	15.05	140	T J N
55282-14-9	Docosane, 9-butyl-	15.97	85	T J N

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Client: Olin Corporation

Job Number: 360-24251-1
Sdg Number: OCRI-05

Client Sample ID: **OC-SB-448-0.0/1.0-XXX**

Lab Sample ID: 360-24251-20
Client Matrix: Solid
% Moisture: 5.4

Date Sampled: 08/25/2009 1005
Date Received: 08/25/2009 1800

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49059		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48567		Lab File ID:	J02987.D
Dilution:	1.0			Initial Weight/Volume:	30.06 g
Date Analyzed:	09/16/2009 1841	Run Type: DL2		Final Weight/Volume:	1.0 mL
Date Prepared:	09/03/2009 1311			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Diphenylamine		63		2.1	35

Client: Olin Corporation

Job Number: 360-24251-1
Sdg Number: OCRI-05

Client Sample ID: **OC-SB-448-0.0/1.0-XXX**

Lab Sample ID: 360-24251-20
Client Matrix: Solid
% Moisture: 5.4

Date Sampled: 08/25/2009 1005
Date Received: 08/25/2009 1800

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49141		Instrument ID:	NOEQUIP
Preparation:	3546	Prep Batch: 360-48567		Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	30.06 g
Date Analyzed:	09/16/2009 1841			Final Weight/Volume:	1.0 mL
Date Prepared:	09/03/2009 1311			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodiphenylamine		~~ND~~ 26 JEB		11	35

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Client: Olin Corporation

Job Number: 360-24251-1
Sdg Number: OCRI-05

Client Sample ID: **OC-SB-448-0.0/1.0-XXX**

Lab Sample ID: 360-24251-20
Client Matrix: Solid

% Moisture: 5.4

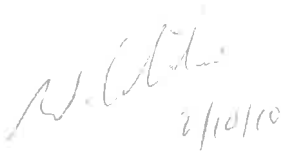
Date Sampled: 08/25/2009 1005
Date Received: 08/25/2009 1800

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49095		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48567		Lab File ID:	J02995.D
Dilution:	5.0			Initial Weight/Volume:	30.06 g
Date Analyzed:	09/17/2009 1321	Run Type: DL		Final Weight/Volume:	1.0 mL
Date Prepared:	09/03/2009 1311			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Bis(2-ethylhexyl) phthalate		690 E B		53	180

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	59		30 - 130
2-Fluorophenol	62		30 - 130
2-Fluorobiphenyl	58		30 - 130
Nitrobenzene-d5	52		30 - 130
Phenol-d5	63		30 - 130
Terphenyl-d14	65		30 - 130



Client: Olin Corporation

Job Number: 360-24251-1
Sdg Number: OCRI-05

Client Sample ID: **OC-SB-448-17/19-XXX**

Lab Sample ID: 360-24251-21
Client Matrix: Solid
% Moisture: 8.7

Date Sampled: 08/25/2009 1045
Date Received: 08/25/2009 1800

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48521		Instrument ID:	Inst. J
Preparation:	3550B	Prep Batch: 360-48515		Lab File ID:	J02849.D
Dilution:	1.0			Initial Weight/Volume:	100.55 g
Date Analyzed:	09/03/2009 0142			Final Weight/Volume:	1.0 mL
Date Prepared:	09/02/2009 1439			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodimethylamine		ND		1.3	5.4

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	60		30 - 130
2-Fluorobiphenyl	52		30 - 130
2-Fluorophenol	58		30 - 130
Nitrobenzene-d5	58		30 - 130
Phenol-d5	60		30 - 130
Terphenyl-d14	65		30 - 130

Client: Olin Corporation

Job Number: 360-24251-1
Sdg Number: OCRI-05

Client Sample ID: **OC-SB-448-17/19-XXX**

Lab Sample ID: 360-24251-21
Client Matrix: Solid
% Moisture: 8.7

Date Sampled: 08/25/2009 1045
Date Received: 08/25/2009 1800

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48930		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48567		Lab File ID:	B10326.D
Dilution:	1.0			Initial Weight/Volume:	30.06 g
Date Analyzed:	09/15/2009 2311			Final Weight/Volume:	1.0 mL
Date Prepared:	09/03/2009 1311			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		11	36
1,2,4,5-Tetrachlorobenzene		ND		11	36
1,2,4-Trichlorobenzene		ND		11	36
1,2-Dichlorobenzene		ND		11	36
1,3-Dichlorobenzene		ND		11	36
1,4-Dichlorobenzene		ND		11	36
1-Methylnaphthalene		ND		11	36
2,2'-oxybis[1-chloropropane]		ND		11	36
2,3,4,6-Tetrachlorophenol		ND		11	36
2,4,5-Trichlorophenol		ND		11	36
2,4,6-Trichlorophenol		ND		11	36
2,4-Dichlorophenol		ND		11	36
2,4-Dimethylphenol		ND		14	36
2,4-Dinitrophenol		ND J		11	36
2,4-Dinitrotoluene		ND		11	36
2,6-Dinitrotoluene		ND		11	36
2-Chloronaphthalene		ND		11	36
2-Chlorophenol		ND		11	36
2-Methylnaphthalene		ND		11	36
2-Methylphenol		ND		22	36
2-Nitroaniline		ND		11	180
2-Nitrophenol		ND		11	36
3 & 4 Methylphenol		ND		11	36
3,3'-Dichlorobenzidine		ND J	✓	11	73
3-Nitroaniline		ND		11	180
4,6-Dinitro-2-methylphenol		ND		11	180
4-Bromophenyl phenyl ether		ND		11	36
4-Chloro-3-methylphenol		ND		11	73
4-Chloroaniline		ND		11	73
4-Chlorophenyl phenyl ether		ND		11	36
4-Nitroaniline		ND		11	180
4-Nitrophenol		ND		11	180
Acenaphthene		ND		11	36
Acenaphthylene		ND		11	36
Acetophenone		ND		11	36
Aniline		ND J	✓	11	36
Anthracene		ND		11	36
Atrazine		ND		11	36
Azobenzene		ND		11	36
Benzaldehyde		ND J	✓	11	36
Benzo[a]anthracene		ND		11	36
Benzo[a]pyrene		ND		11	36
Benzo[b]fluoranthene		ND		11	36
Benzo[g,h,i]perylene		ND		11	36
Benzo[k]fluoranthene		ND		11	36
Benzoic acid		~~ND~~ R2		16	180

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Client: Olin Corporation

Job Number: 360-24251-1
Sdg Number: OCRI-05

Client Sample ID: **OC-SB-448-17/19-XXX**

Lab Sample ID: 360-24251-21
Client Matrix: Solid % Moisture: 8.7

Date Sampled: 08/25/2009 1045
Date Received: 08/25/2009 1800

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48930		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48567		Lab File ID:	B10326.D
Dilution:	1.0			Initial Weight/Volume:	30.06 g
Date Analyzed:	09/15/2009 2311			Final Weight/Volume:	1.0 mL
Date Prepared:	09/03/2009 1311			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		11	36
Benzyl alcohol		ND		31	73
Bis(2-chloroethoxy)methane		ND		11	36
Bis(2-chloroethyl)ether		ND		11	36
Bis(2-ethylhexyl) phthalate		29 EB	J	11	36
Butyl benzyl phthalate		ND		11	36
Caprolactam		ND		11	36
Carbazole		ND		11	36
Chrysene		ND		11	36
Dibenz(a,h)anthracene		ND		11	36
Dibenzofuran		ND		11	36
Diethyl phthalate		ND		11	36
Dimethyl phthalate		ND		11	36
Di-n-butyl phthalate		ND		32	36
Di-n-octyl phthalate		ND		18	36
Diphenyl oxide		ND		11	36
~~Diphenylamine~~		~~9.3~~	~~J~~	~~2.2~~	~~36~~
Fluoranthene		ND		11	36
Fluorene		ND		11	36
Hexachlorobenzene		ND		11	36
Hexachlorobutadiene		ND		11	36
Hexachlorocyclopentadiene		ND		11	73
Hexachloroethane		ND		11	36
Indeno[1,2,3-cd]pyrene		ND		11	36
Isophorone		ND		11	36
Naphthalene		ND		11	87
Nitrobenzene		ND		11	36
N-Nitrosodimethylamine		ND		11	36
N-Nitrosodi-n-propylamine		ND		11	36
~~N-Nitrosodiphenylamine~~		~~ND~~		~~11~~	~~36~~
Pentachlorophenol		ND		11	36
Phenanthrene		ND		11	44
Phenol		ND		11	36
Pyrene		ND		11	36

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	78		30 - 130
2-Fluorophenol	101		30 - 130
2-Fluorobiphenyl	85		30 - 130
Nitrobenzene-d5	92		30 - 130
Phenol-d5	95		30 - 130
Terphenyl-d14	105		30 - 130

Client: Olin Corporation

Job Number: 360-24251-1
Sdg Number: OCRI-05

Client Sample ID: **OC-SB-448-17/19-XXX**

Lab Sample ID: 360-24251-21
Client Matrix: Solid % Moisture: 8.7

Date Sampled: 08/25/2009 1045
Date Received: 08/25/2009 1800

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48930		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48567		Lab File ID:	B10326.D
Dilution:	1.0			Initial Weight/Volume:	30.06 g
Date Analyzed:	09/15/2009 2311			Final Weight/Volume:	1.0 mL
Date Prepared:	09/03/2009 1311			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 3

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
110-86-1	Pyridine	6.06	7.3	J
59242-27-2	Furan, 2,5-dihydro-2,5-dimethyl-	6.71	20	T J N
	Unknown	17.11	48	T J

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Client: Olin Corporation

Job Number: 360-24251-1
Sdg Number: OCRI-05

Client Sample ID: **OC-SB-448-17/19-XXX**

Lab Sample ID: 360-24251-21
Client Matrix: Solid
% Moisture: 8.7

Date Sampled: 08/25/2009 1045
Date Received: 08/25/2009 1800

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49059		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48567		Lab File ID:	J02988.D
Dilution:	1.0			Initial Weight/Volume:	30.06 g
Date Analyzed:	09/16/2009 1910	Run Type: DL		Final Weight/Volume:	1.0 mL
Date Prepared:	09/03/2009 1311			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Diphenylamine		7.6	J	2.2	36

Client: Olin Corporation

Job Number: 360-24251-1
Sdg Number: OCRI-05

Client Sample ID: **OC-SB-448-8.0/10-XXX**

Lab Sample ID: 360-24251-22
Client Matrix: Solid
% Moisture: 11.6

Date Sampled: 08/25/2009 1030
Date Received: 08/25/2009 1800

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48930		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48567		Lab File ID:	B10327.D
Dilution:	1.0			Initial Weight/Volume:	30.15 g
Date Analyzed:	09/15/2009 2345			Final Weight/Volume:	1.0 mL
Date Prepared:	09/03/2009 1311			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		110		11	38
1,2,4,5-Tetrachlorobenzene		ND		11	38
1,2,4-Trichlorobenzene		ND		11	38
1,2-Dichlorobenzene		ND		11	38
1,3-Dichlorobenzene		ND		11	38
1,4-Dichlorobenzene		ND		11	38
1-Methylnaphthalene		ND		11	38
2,2'-oxybis[1-chloropropane]		ND		11	38
2,3,4,6-Tetrachlorophenol		ND		11	38
2,4,5-Trichlorophenol		ND		11	38
2,4,6-Trichlorophenol		ND		11	38
2,4-Dichlorophenol		ND		11	38
2,4-Dimethylphenol		ND		15	38
2,4-Dinitrophenol		ND J		11	38
2,4-Dinitrotoluene		ND		11	38
2,6-Dinitrotoluene		ND		11	38
2-Chloronaphthalene		ND		11	38
2-Chlorophenol		ND		11	38
2-Methylnaphthalene		ND		11	38
2-Methylphenol		ND		23	38
2-Nitroaniline		ND		11	190
2-Nitrophenol		ND		11	38
3 & 4 Methylphenol		ND		11	38
3,3'-Dichlorobenzidine		ND J		11	75
3-Nitroaniline		ND		11	190
4,6-Dinitro-2-methylphenol		ND		11	190
4-Bromophenyl phenyl ether		ND		11	38
4-Chloro-3-methylphenol		ND		11	75
4-Chloroaniline		ND		11	75
4-Chlorophenyl phenyl ether		ND		11	38
4-Nitroaniline		ND		11	190
4-Nitrophenol		ND		11	190
Acenaphthene		ND		11	38
Acenaphthylene		ND		11	38
Acetophenone		ND		11	38
Aniline		ND J		11	38
Anthracene		12 EB	J	11	38
Atrazine		ND		11	38
Azobenzene		ND		11	38
Benzaldehyde		ND J		11	38
Benzo[a]anthracene		ND		11	38
Benzo[a]pyrene		ND		11	38
Benzo[b]fluoranthene		ND		11	38
Benzo[g,h,i]perylene		ND		11	38
Benzo[k]fluoranthene		ND		11	38
Benzoic acid		~~ND~~ R		17	190

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Client: Olin Corporation

Job Number: 360-24251-1
Sdg Number: OCRI-05

Client Sample ID: **OC-SB-448-8.0/10-XXX**

Lab Sample ID: 360-24251-22
Client Matrix: Solid
% Moisture: 11.6

Date Sampled: 08/25/2009 1030
Date Received: 08/25/2009 1800

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48930		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48567		Lab File ID:	B10327.D
Dilution:	1.0			Initial Weight/Volume:	30.15 g
Date Analyzed:	09/15/2009 2345			Final Weight/Volume:	1.0 mL
Date Prepared:	09/03/2009 1311			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		11	38
Benzyl alcohol		ND		32	75
Bis(2-chloroethoxy)methane		ND		11	38
Bis(2-chloroethyl)ether		ND		11	38
Bis(2-ethylhexyl) phthalate		44	EB	11	38
Butyl benzyl phthalate		ND		11	38
Caprolactam		ND		11	38
Carbazole		ND		11	38
Chrysene		ND		11	38
Dibenz(a,h)anthracene		ND		11	38
Dibenzofuran		ND		11	38
Diethyl phthalate		ND		11	38
Dimethyl phthalate		ND		11	38
Di-n-butyl phthalate		ND		33	38
Di-n-octyl phthalate		ND		19	38
Diphenyl oxide		130		11	38
Fluoranthene		15	J	11	38
Fluorene		ND		11	38
Hexachlorobenzene		ND		11	38
Hexachlorobutadiene		ND		11	38
Hexachlorocyclopentadiene		ND		11	75
Hexachloroethane		ND		11	38
Indeno[1,2,3-cd]pyrene		ND		11	38
Isophorone		ND		11	38
Naphthalene		ND		11	90
Nitrobenzene		ND		11	38
N-Nitrosodimethylamine		ND		11	38
N-Nitrosodi-n-propylamine		ND		11	38
N-Nitrosodiphenylamine		57		11	38
Pentachlorophenol		ND		11	38
Phenanthrene		32	J	11	45
Phenol		ND		11	38
Pyrene		28	J	11	38

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	69		30 - 130
2-Fluorophenol	95		30 - 130
2-Fluorobiphenyl	80		30 - 130
Nitrobenzene-d5	87		30 - 130
Phenol-d5	93		30 - 130
Terphenyl-d14	98		30 - 130

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Client: Olin Corporation

Job Number: 360-24251-1
Sdg Number: OCRI-05

Client Sample ID: **OC-SB-448-8.0/10-XXX**

Lab Sample ID: 360-24251-22
Client Matrix: Solid % Moisture: 11.6

Date Sampled: 08/25/2009 1030
Date Received: 08/25/2009 1800

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48930		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48567		Lab File ID:	B10327.D
Dilution:	1.0			Initial Weight/Volume:	30.15 g
Date Analyzed:	09/15/2009 2345			Final Weight/Volume:	1.0 mL
Date Prepared:	09/03/2009 1311			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 2

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
~~110-86-1~~	~~Pyridine~~	~~6.05~~	~~7.5~~	~~J~~
	Unknown	19.34	330	T J

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Client: Olin Corporation

Job Number: 360-24251-1
Sdg Number: OCRI-05

Client Sample ID: **OC-SB-448-8.0/10-XXX**

Lab Sample ID: 360-24251-22
Client Matrix: Solid
% Moisture: 11.6

Date Sampled: 08/25/2009 1030
Date Received: 08/25/2009 1800

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49059		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48567		Lab File ID:	J02989.D
Dilution:	1.0			Initial Weight/Volume:	30.15 g
Date Analyzed:	09/16/2009 1940	Run Type: DL		Final Weight/Volume:	1.0 mL
Date Prepared:	09/03/2009 1311			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Diphenylamine		47		2.3	38

Client: Olin Corporation

Job Number: 360-24251-1
Sdg Number: OCRI-05

Client Sample ID: **OC-SB-448-8.0/10-XXX**

Lab Sample ID: 360-24251-22
Client Matrix: Solid
% Moisture: 11.6

Date Sampled: 08/25/2009 1030
Date Received: 08/25/2009 1800

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49141		Instrument ID:	NOEQUIP
Preparation:	3546	Prep Batch: 360-48567		Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	30.15 g
Date Analyzed:	09/16/2009 1940			Final Weight/Volume:	1.0 mL
Date Prepared:	09/03/2009 1311			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodiphenylamine		ND		11	38

Client: Olin Corporation

Job Number: 360-24251-1
Sdg Number: OCRI-05

Client Sample ID: **OC-SB-448-8.0/10-XXX**

Lab Sample ID: 360-24251-22
Client Matrix: Solid
% Moisture: 11.6

Date Sampled: 08/25/2009 1030
Date Received: 08/25/2009 1800

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48521		Instrument ID:	Inst. J
Preparation:	3550B	Prep Batch: 360-48515		Lab File ID:	J02850.D
Dilution:	1.0			Initial Weight/Volume:	100.13 g
Date Analyzed:	09/03/2009 0212			Final Weight/Volume:	1.0 mL
Date Prepared:	09/02/2009 1439			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodimethylamine		ND		1.3	5.6

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	61		30 - 130
2-Fluorobiphenyl	49		30 - 130
2-Fluorophenol	52		30 - 130
Nitrobenzene-d5	52		30 - 130
Phenol-d5	55		30 - 130
Terphenyl-d14	68		30 - 130

Client: Olin Corporation

Job Number: 360-24251-1
Sdg Number: OCRI-05

Client Sample ID: **OC-SB-438-0.0/1.0-XXX**

Lab Sample ID: 360-24251-23
Client Matrix: Solid
% Moisture: 5.6

Date Sampled: 08/24/2009 1645
Date Received: 08/25/2009 1800

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48930		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48567		Lab File ID:	B10328.D
Dilution:	1.0			Initial Weight/Volume:	30.22 g
Date Analyzed:	09/16/2009 0020			Final Weight/Volume:	1.0 mL
Date Prepared:	09/03/2009 1311			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		11	35
1,2,4,5-Tetrachlorobenzene		ND		11	35
1,2,4-Trichlorobenzene		ND		11	35
1,2-Dichlorobenzene		ND		11	35
1,3-Dichlorobenzene		ND		11	35
1,4-Dichlorobenzene		ND		11	35
1-Methylnaphthalene		ND		11	35
2,2'-oxybis[1-chloropropane]		ND		11	35
2,3,4,6-Tetrachlorophenol		ND		11	35
2,4,5-Trichlorophenol		ND		11	35
2,4,6-Trichlorophenol		ND		11	35
2,4-Dichlorophenol		ND		11	35
2,4-Dimethylphenol		ND		14	35
2,4-Dinitrophenol		ND J		11	35
2,4-Dinitrotoluene		ND		11	35
2,6-Dinitrotoluene		ND		11	35
2-Chloronaphthalene		ND		11	35
2-Chlorophenol		ND		11	35
2-Methylnaphthalene		ND		11	35
2-Methylphenol		ND		21	35
2-Nitroaniline		ND		11	180
2-Nitrophenol		ND		11	35
3 & 4 Methylphenol		ND		11	35
3,3'-Dichlorobenzidine		ND J		11	70
3-Nitroaniline		ND		11	180
4,6-Dinitro-2-methylphenol		ND		11	180
4-Bromophenyl phenyl ether		ND		11	35
4-Chloro-3-methylphenol		ND		11	70
4-Chloroaniline		ND		11	70
4-Chlorophenyl phenyl ether		ND		11	35
4-Nitroaniline		ND		11	180
4-Nitrophenol		ND		11	180
Acenaphthene		ND		11	35
Acenaphthylene		ND		11	35
Acetophenone		16 EB	J	11	35
Aniline		ND J		11	35
Anthracene		ND		11	35
Atrazine		ND		11	35
Azobenzene		ND		11	35
Benzaldehyde		ND J		11	35
Benzo[a]anthracene		ND		11	35
Benzo[a]pyrene		ND		11	35
Benzo[b]fluoranthene		ND		11	35
Benzo[g,h,i]perylene		ND		11	35
Benzo[k]fluoranthene		ND		11	35
Benzoic acid		~~ND~~ R		16	180

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Client: Olin Corporation

Job Number: 360-24251-1
Sdg Number: OCRI-05

Client Sample ID: OC-SB-438-0.0/1.0-XXX

Lab Sample ID: 360-24251-23
Client Matrix: Solid
% Moisture: 5.6

Date Sampled: 08/24/2009 1645
Date Received: 08/25/2009 1800

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48930		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48567		Lab File ID:	B10328.D
Dilution:	1.0			Initial Weight/Volume:	30.22 g
Date Analyzed:	09/16/2009 0020			Final Weight/Volume:	1.0 mL
Date Prepared:	09/03/2009 1311			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		11	35
Benzyl alcohol		ND		30	70
Bis(2-chloroethoxy)methane		ND		11	35
Bis(2-chloroethyl)ether		ND		11	35
Bis(2-ethylhexyl) phthalate		28 EB	J	11	35
Butyl benzyl phthalate		ND		11	35
Caprolactam		ND		11	35
Carbazole		ND		11	35
Chrysene		ND		11	35
Dibenz(a,h)anthracene		ND		11	35
Dibenzofuran		ND		11	35
Diethyl phthalate		ND		11	35
Dimethyl phthalate		ND		11	35
Di-n-butyl phthalate		ND		31	35
Di-n-octyl phthalate		ND		18	35
Diphenyl oxide		ND		11	35
Fluoranthene		ND		11	35
Fluorene		ND		11	35
Hexachlorobenzene		ND		11	35
Hexachlorobutadiene		ND		11	35
Hexachlorocyclopentadiene		ND		11	70
Hexachloroethane		ND		11	35
Indeno[1,2,3-cd]pyrene		ND		11	35
Isophorone		ND		11	35
Naphthalene		ND		11	84
Nitrobenzene		ND		11	35
N-Nitrosodimethylamine		ND		11	35
N-Nitrosodi-n-propylamine		ND		11	35
N-Nitrosodiphenylamine		ND		11	35
Pentachlorophenol		ND		11	35
Phenanthrene		ND		11	42
Phenol		ND		11	35
Pyrene		ND		11	35

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	69		30 - 130
2-Fluorobiphenyl	71		30 - 130
2-Fluorophenol	83		30 - 130
Nitrobenzene-d5	76		30 - 130
Phenol-d5	78		30 - 130
Terphenyl-d14	95		30 - 130

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Client: Olin Corporation

Job Number: 360-24251-1
Sdg Number: OCRI-05

Client Sample ID: **OC-SB-438-0.0/1.0-XXX**

Lab Sample ID: 360-24251-23
Client Matrix: Solid % Moisture: 5.6

Date Sampled: 08/24/2009 1645
Date Received: 08/25/2009 1800

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48930		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48567		Lab File ID:	B10328.D
Dilution:	1.0			Initial Weight/Volume:	30.22 g
Date Analyzed:	09/16/2009 0020			Final Weight/Volume:	1.0 mL
Date Prepared:	09/03/2009 1311			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 7

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
110-86-1	Pyridine	6.11	7.0	J
98-83-9	.alpha.-Methylstyrene	8.27	21	T J N
128-37-0	Butylated Hydroxytoluene	11.10	72	T J N
	Unknown	11.95	140	T J
3910-35-8	1H-Indene, 2,3-dihydro-1,1,3-trimethyl-3	12.09	92	T J N
112-39-0	Hexadecanoic acid, methyl ester	12.72	49	T J N
112-61-8	Octadecanoic acid, methyl ester	13.67	59	T J N

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Client: Olin Corporation

Job Number: 360-24251-1
Sdg Number: OCRI-05

Client Sample ID: **OC-EBK-004**

Lab Sample ID: 360-24251-26
Client Matrix: Water

Date Sampled: 08/24/2009 1820
Date Received: 08/25/2009 1800

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48893		Instrument ID:	Inst. B
Preparation:	3510C	Prep Batch: 360-48399		Lab File ID:	B10289.D
Dilution:	1.0			Initial Weight/Volume:	1000 mL
Date Analyzed:	09/14/2009 1701			Final Weight/Volume:	1.0 mL
Date Prepared:	08/31/2009 1538			Injection Volume:	1.0 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
N-Nitrosodimethylamine	ND	*	0.50	5.0

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	75		15 - 110
2-Fluorobiphenyl	70		30 - 130
2-Fluorophenol	20		15 - 110
Nitrobenzene-d5	74		30 - 130
Phenol-d5	11	X	15 - 110
Terphenyl-d14	81		30 - 130

Client: Olin Corporation

Job Number: 360-24251-1
Sdg Number: OCRI-05

Client Sample ID: **OC-EBK-004**

Lab Sample ID: 360-24251-26
Client Matrix: Water

Date Sampled: 08/24/2009 1820
Date Received: 08/25/2009 1800

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48893		Instrument ID:	Inst. B
Preparation:	3510C	Prep Batch: 360-48399		Lab File ID:	B10289.D
Dilution:	1.0			Initial Weight/Volume:	1000 mL
Date Analyzed:	09/14/2009 1701			Final Weight/Volume:	1.0 mL
Date Prepared:	08/31/2009 1538			Injection Volume:	1.0 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1'-Biphenyl	ND		0.50	5.0
1,2,4,5-Tetrachlorobenzene	ND		0.50	5.0
1-Methylnaphthalene	ND		0.50	5.0
2,3,4,6-Tetrachlorophenol	ND		0.50	5.0
Bis(2-chloroethyl)ether	ND		0.50	5.0
Benzyl alcohol	ND		0.50	10
2-Methylphenol	ND		0.50	5.0
N-Nitrosodi-n-propylamine	ND		0.50	5.0
Hexachloroethane	ND		0.50	3.0
3 & 4 Methylphenol	ND		0.50	5.0
2-Chlorophenol	ND		0.50	5.0
3,3'-Dichlorobenzidine	ND	*	0.50	5.0
Nitrobenzene	ND		0.50	5.0
Bis(2-chloroethoxy)methane	ND		0.50	5.0
Benzoic acid	ND	*	0.50	5.0
Isophorone	ND		0.50	5.0
2,4-Dimethylphenol	ND		0.50	5.0
Aniline	ND	*	0.50	5.0
Azobenzene	ND		0.50	5.0
2,4-Dichlorophenol	ND		0.50	5.0
4-Chloroaniline	ND		0.50	5.0
2,4,6-Trichlorophenol	ND		0.50	5.0
2,4,5-Trichlorophenol	ND		0.50	5.0
Hexachlorocyclopentadiene	ND		0.050	5.0
2-Methylnaphthalene	ND		0.050	1.0
2-Nitroaniline	ND		0.50	5.0
Caprolactam	ND	*	0.50	5.0
2-Chloronaphthalene	ND		0.50	5.0
4-Chloro-3-methylphenol	ND		0.50	5.0
2,6-Dinitrotoluene	ND		0.50	5.0
2-Nitrophenol	ND		0.50	5.0
3-Nitroaniline	ND		0.50	5.0
Dimethyl phthalate	ND		0.50	5.0
2,4-Dinitrophenol	ND		0.50	5.0
Acenaphthylene	ND		0.050	0.30
2,4-Dinitrotoluene	ND		0.50	5.0
Acenaphthene	ND		0.050	1.0
Dibenzofuran	ND		0.50	5.0
4-Nitrophenol	ND	*	0.50	5.0
Fluorene	ND		0.050	1.0
4-Nitroaniline	ND		0.50	5.0
Phenol	ND	*	0.50	5.0
4-Bromophenyl phenyl ether	ND		0.50	5.0
Hexachlorobenzene	ND		0.50	1.0
Diethyl phthalate	ND		0.50	5.0
4-Chlorophenyl phenyl ether	ND		0.50	5.0

Client: Olin Corporation

Job Number: 360-24251-1
Sdg Number: OCRI-05

Client Sample ID: **OC-EBK-004**

Lab Sample ID: 360-24251-26
Client Matrix: Water

Date Sampled: 08/24/2009 1820
Date Received: 08/25/2009 1800

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48893		Instrument ID:	Inst. B
Preparation:	3510C	Prep Batch: 360-48399		Lab File ID:	B10289.D
Dilution:	1.0			Initial Weight/Volume:	1000 mL
Date Analyzed:	09/14/2009 1701			Final Weight/Volume:	1.0 mL
Date Prepared:	08/31/2009 1538			Injection Volume:	1.0 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Pentachlorophenol	ND		0.50	1.0
N-Nitrosodiphenylamine	ND		0.50	5.0
4,6-Dinitro-2-methylphenol	ND		0.50	5.0
Phenanthrene	ND		0.085	0.20
Anthracene	ND		0.070	1.0
Di-n-butyl phthalate	1.8	J B	0.60	5.0
Fluoranthene	ND		0.20	1.0
Pyrene	ND		0.19	5.0
Butyl benzyl phthalate	0.63	J	0.50	5.0
Benzo[a]anthracene	ND		0.17	0.30
Chrysene	ND		0.17	1.0
Di-n-octyl phthalate	ND		0.73	5.0
Benzo[b]fluoranthene	ND		0.14	0.30
Benzo[k]fluoranthene	ND		0.17	0.30
Benzo[a]pyrene	ND		0.10	0.20
Indeno[1,2,3-cd]pyrene	ND		0.079	0.50
Dibenz(a,h)anthracene	ND	*	0.064	0.50
Benzo[g,h,i]perylene	ND	*	0.094	0.50
Acetophenone	ND		0.50	5.0
Bis(2-ethylhexyl) phthalate	0.58	J	0.50	2.0
bis (2-chloroisopropyl) ether	ND		0.50	5.0
Atrazine	ND		0.50	5.0
Benzaldehyde	ND	*	0.50	5.0
Carbazole	ND		0.50	5.0
Benzophenone	ND		0.50	5.0
Diphenyl oxide	ND		0.50	5.0
Diphenylamine	ND		0.50	5.0

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	75		15 - 110
2-Fluorobiphenyl	70		30 - 130
2-Fluorophenol	20		15 - 110
Nitrobenzene-d5	74		30 - 130
Phenol-d5	11	X	15 - 110
Terphenyl-d14	81		30 - 130

Client: Olin Corporation

Job Number: 360-24251-1
Sdg Number: OCRI-05

Client Sample ID: **OC-EBK-004**

Lab Sample ID: 360-24251-26
Client Matrix: Water

Date Sampled: 08/24/2009 1820
Date Received: 08/25/2009 1800

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48893		Instrument ID:	Inst. B
Preparation:	3510C	Prep Batch: 360-48399		Lab File ID:	B10289.D
Dilution:	1.0			Initial Weight/Volume:	1000 mL
Date Analyzed:	09/14/2009 1701			Final Weight/Volume:	1.0 mL
Date Prepared:	08/31/2009 1538			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 7

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
	Unknown	4.82	1.5	T J
110-86-1	Pyridine	6.01	0.20	J *
127-18-4	Tetrachloroethylene	6.77	0.88	T J N
	Unknown	11.03	15	T J
96-76-4	Phenol, 2,4-bis(1,1-dimethylethyl)-	11.09	0.92	T J N
	Unknown	11.92	7.9	T J
	Unknown	12.77	2.3	T J

SAMPLE SUMMARY

Client: Olin Corporation

Job Number: 360-24251-2
Sdg Number: OCRI-05A

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
360-24251-2	OC-SB-433-20/22-XXX	Solid	08/24/2009 0850	08/24/2009 1910
360-24251-6	OC-SB-439-16/18-XXX	Solid	08/24/2009 1040	08/24/2009 1910
360-24251-9	OC-SB-440-23/25-XXX	Solid	08/24/2009 1230	08/24/2009 1910
360-24251-14	OC-SB-441-17/19-XXX	Solid	08/24/2009 1535	08/25/2009 1800
360-24251-17	OC-SB-446-15/17-XXX	Solid	08/25/2009 0900	08/25/2009 1800
360-24251-24	OC-SB-438-20/22-XXX	Solid	08/24/2009 1720	08/25/2009 1800

Form F's
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Client: Olin Corporation

Job Number: 360-24251-2
Sdg Number: OCRI-05A

Client Sample ID: **OC-SB-433-20/22-XXX**

Lab Sample ID: 360-24251-2
Client Matrix: Solid
% Moisture: 7.2

Date Sampled: 08/24/2009 0850
Date Received: 08/24/2009 1910

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49847		Instrument ID:	Inst_J
Preparation:	3546	Prep Batch: 360-48462		Lab File ID:	J03310.D
Dilution:	1.0			Initial Weight/Volume:	30.20 g
Date Analyzed:	10/04/2009 1920			Final Weight/Volume:	1.0 mL
Date Prepared:	09/01/2009 1501			Injection Volume:	

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		11	36
1,2,4,5-Tetrachlorobenzene		ND		2.4	36
1,2,4-Trichlorobenzene		ND		6.9	36
1,2-Dichlorobenzene		ND		3.9	36
1,3-Dichlorobenzene		ND		10	36
1,4-Dichlorobenzene		ND		6.4	36
1-Methylnaphthalene		ND		2.1	36
2,2'-oxybis[1-chloropropane]		ND		3.6	36
2,3,4,6-Tetrachlorophenol		ND		2.1	36
2,4,5-Trichlorophenol		ND		4.0	36
2,4,6-Trichlorophenol		ND		7.5	36
2,4-Dichlorophenol		ND		6.9	36
2,4-Dimethylphenol		ND		6.2	36
2,4-Dinitrophenol		ND J		5.2	36
2,4-Dinitrotoluene		ND		5.0	36
2,6-Dinitrotoluene		ND		4.5	36
2-Chloronaphthalene		ND		5.5	36
2-Chlorophenol		ND		3.5	36
2-Methylnaphthalene		ND		27	36
2-Methylphenol		ND		5.1	36
2-Nitroaniline		ND		23	180
2-Nitrophenol		ND		4.1	36
3 & 4 Methylphenol		ND		6.8	36
3,3'-Dichlorobenzidine		ND J	✓	26	71
3-Nitroaniline		ND		10	180
4,6-Dinitro-2-methylphenol		ND		9.1	180
4-Bromophenyl phenyl ether		ND		7.4	36
4-Chloro-3-methylphenol		ND		9.8	71
4-Chloroaniline		ND		14	71
4-Chlorophenyl phenyl ether		ND		5.7	36
4-Nitroaniline		ND		9.5	180
4-Nitrophenol		ND		6.9	180
Acenaphthene		ND		5.2	36
Acenaphthylene		ND		6.3	36
Acetophenone		ND		3.9	36
Aniline		ND	✓	19	36
Anthracene		ND		11	36
Atrazine		ND		11	36
Azobenzene		ND		4.4	36
Benzaldehyde		ND	✓	11	36
Benzo[a]anthracene		ND		6.8	36
Benzo[a]pyrene		ND		6.5	36
Benzo[b]fluoranthene		ND		8.2	36
Benzo[g,h,i]perylene		ND		6.9	36
Benzo[k]fluoranthene		ND		9.9	36
Benzoic acid		~~ND~~ R	✓	15	180

2/1/2010

Client: Olin Corporation

Job Number: 360-24251-2
Sdg Number: OCRI-05A

Client Sample ID: **OC-SB-433-20/22-XXX**

Lab Sample ID: 360-24251-2
Client Matrix: Solid % Moisture: 7.2

Date Sampled: 08/24/2009 0850
Date Received: 08/24/2009 1910

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49847		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48462		Lab File ID:	J03310.D
Dilution:	1.0			Initial Weight/Volume:	30.20 g
Date Analyzed:	10/04/2009 1920			Final Weight/Volume:	1.0 mL
Date Prepared:	09/01/2009 1501			Injection Volume:	

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		2.1	36
Benzyl alcohol		ND		8.2	71
Bis(2-chloroethoxy)methane		ND		6.4	36
Bis(2-chloroethyl)ether		ND		8.7	36
Bis(2-ethylhexyl) phthalate		44	EB	11	36
Butyl benzyl phthalate		ND		7.8	36
Caprolactam		ND		11	36
Carbazole		ND		36	36
Chrysene		ND		7.7	36
Dibenz(a,h)anthracene		ND		7.2	36
Dibenzofuran		ND		21	36
Diethyl phthalate		ND		5.0	36
Dimethyl phthalate		ND		5.2	36
Di-n-butyl phthalate		ND		11	36
Di-n-octyl phthalate		ND		10	36
Diphenyl oxide		ND		11	36
Fluoranthene		ND		23	36
Fluorene		ND		14	36
Hexachlorobenzene		ND		8.5	36
Hexachlorobutadiene		ND		7.1	36
Hexachlorocyclopentadiene		ND		9.7	71
Hexachloroethane		ND		6.8	36
Indeno[1,2,3-cd]pyrene		ND		11	36
Isophorone		ND		7.6	36
Naphthalene		ND		79	86
Nitrobenzene		ND		4.9	36
N-Nitrosodimethylamine		ND		4.1	36
N-Nitrosodi-n-propylamine		ND		4.0	36
N-Nitrosodiphenylamine		ND		7.1	36
Pentachlorophenol		ND		7.4	36
Phenanthrene		ND		41	43
Phenol		ND		4.5	36
Pyrene		ND		9.5	36

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	69		30 - 130
2-Fluorobiphenyl	60		30 - 130
2-Fluorophenol	73		30 - 130
Nitrobenzene-d5	81		30 - 130
Phenol-d5	74		30 - 130
Terphenyl-d14	93		30 - 130

Client: Olin Corporation

Job Number: 360-24251-2
Sdg Number: OCRI-05A

Client Sample ID: **OC-SB-433-20/22-XXX**

Lab Sample ID: 360-24251-2
Client Matrix: Solid % Moisture: 7.2

Date Sampled: 08/24/2009 0850
Date Received: 08/24/2009 1910

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49847		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48462		Lab File ID:	J03310.D
Dilution:	1.0			Initial Weight/Volume:	30.20 g
Date Analyzed:	10/04/2009 1920			Final Weight/Volume:	1.0 mL
Date Prepared:	09/01/2009 1501			Injection Volume:	

Tentatively Identified Compounds **Number TIC's Found:** 9

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
141-79-7	3-Penten-2-one, 4-methyl-	4.76	14	T J N
541-2-6	Cyclopentasiloxane, decamethyl-	8.22	13	T J N
99-98-9	1,4-Benzenediamine, N,N-dimethyl-	9.65	19	T J N
25154-52-3	Phenol, nonyl-	11.43	25	T J N
10544-50-0	Cyclic octaatomic sulfur	13.10	16	T J N
13287-24-6	Nonadecane, 9-methyl-	13.91	13	T J N
593-45-3	Octadecane	14.25	18	T J N
13475-76-8	Docosane, 11-butyl-	14.58	14	T J N
26603-23-6	p,p''-Dioctyldiphenylamine	15.93	140	T J N

Client: Olin Corporation

Job Number: 360-24251-2
Sdg Number: OCRI-05A

Client Sample ID: **OC-SB-440-23/25-XXX**

Lab Sample ID: 360-24251-9
Client Matrix: Solid % Moisture: 8.7

Date Sampled: 08/24/2009 1230
Date Received: 08/24/2009 1910

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49847		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48462		Lab File ID:	J03312.D
Dilution:	1.0			Initial Weight/Volume:	30.34 g
Date Analyzed:	10/04/2009 2026			Final Weight/Volume:	1.0 mL
Date Prepared:	09/01/2009 1501			Injection Volume:	

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		44		11	36
1,2,4,5-Tetrachlorobenzene		ND		2.4	36
1,2,4-Trichlorobenzene		ND		7.0	36
1,2-Dichlorobenzene		ND		3.9	36
1,3-Dichlorobenzene		ND		10	36
1,4-Dichlorobenzene		ND		6.5	36
1-Methylnaphthalene		ND		2.2	36
2,2'-oxybis[1-chloropropane]		ND		3.6	36
2,3,4,6-Tetrachlorophenol		ND		2.2	36
2,4,5-Trichlorophenol		ND		4.1	36
2,4,6-Trichlorophenol		ND		7.6	36
2,4-Dichlorophenol		ND		6.9	36
2,4-Dimethylphenol		ND		6.3	36
2,4-Dinitrophenol		ND J		5.3	36
2,4-Dinitrotoluene		ND		5.1	36
2,6-Dinitrotoluene		ND		4.6	36
2-Chloronaphthalene		ND		5.5	36
2-Chlorophenol		ND		3.5	36
2-Methylnaphthalene		ND		28	36
2-Methylphenol		ND		5.2	36
2-Nitroaniline		ND		23	180
2-Nitrophenol		ND		4.2	36
3 & 4 Methylphenol		ND		6.9	36
3,3'-Dichlorobenzidine		ND J		26	72
3-Nitroaniline		ND		10	180
4,6-Dinitro-2-methylphenol		ND		9.2	180
4-Bromophenyl phenyl ether		ND		7.5	36
4-Chloro-3-methylphenol		ND		10	72
4-Chloroaniline		ND		15	72
4-Chlorophenyl phenyl ether		ND		5.7	36
4-Nitroaniline		ND		9.6	180
4-Nitrophenol		ND		7.0	180
Acenaphthene		ND		5.3	36
Acenaphthylene		ND		6.4	36
Acetophenone		ND		3.9	36
Aniline		ND		19	36
Anthracene		ND		11	36
Atrazine		ND		11	36
Azobenzene		ND		4.5	36
Benzaldehyde		ND		11	36
Benzo[a]anthracene		ND		6.9	36
Benzo[a]pyrene		ND		6.6	36
Benzo[b]fluoranthene		ND		8.3	36
Benzo[g,h,i]perylene		ND		7.0	36
Benzo[k]fluoranthene		ND		10	36
Benzoic acid		~~ND~~ R		16	180

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Client: Olin Corporation

Job Number: 360-24251-2
Sdg Number: OCRI-05A

Client Sample ID: **OC-SB-440-23/25-XXX**

Lab Sample ID: 360-24251-9
Client Matrix: Solid % Moisture: 8.7

Date Sampled: 08/24/2009 1230
Date Received: 08/24/2009 1910

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49847		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48462		Lab File ID:	J03312.D
Dilution:	1.0			Initial Weight/Volume:	30.34 g
Date Analyzed:	10/04/2009 2026			Final Weight/Volume:	1.0 mL
Date Prepared:	09/01/2009 1501			Injection Volume:	

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		2.2	36
Benzyl alcohol		ND		8.3	72
Bis(2-chloroethoxy)methane		ND		6.5	36
Bis(2-chloroethyl)ether		ND		8.8	36
Bis(2-ethylhexyl) phthalate		23	JEB	11	36
Butyl benzyl phthalate		ND		7.9	36
Caprolactam		ND		11	36
Carbazole		ND		36	36
Chrysene		ND		7.8	36
Dibenz(a,h)anthracene		ND		7.3	36
Dibenzofuran		ND		21	36
Diethyl phthalate		ND		5.1	36
Dimethyl phthalate		ND		5.3	36
Di-n-butyl phthalate		ND		11	36
Di-n-octyl phthalate		ND		10	36
Diphenyl oxide		130		11	36
Fluoranthene		ND		23	36
Fluorene		ND		14	36
Hexachlorobenzene		ND		8.6	36
Hexachlorobutadiene		ND		7.2	36
Hexachlorocyclopentadiene		ND		9.9	72
Hexachloroethane		ND		6.9	36
Indeno[1,2,3-cd]pyrene		ND		11	36
Isophorone		ND		7.7	36
Naphthalene		ND		80	87
Nitrobenzene		ND		4.9	36
N-Nitrosodimethylamine		ND		4.2	36
N-Nitrosodi-n-propylamine		ND		4.1	36
N-Nitrosodiphenylamine		ND		7.2	36
Pentachlorophenol		ND		7.5	36
Phenanthrene		ND		42	43
Phenol		29	J	4.5	36
Pyrene		ND		9.6	36

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	64		30 - 130
2-Fluorobiphenyl	67		30 - 130
2-Fluorophenol	75		30 - 130
Nitrobenzene-d5	78		30 - 130
Phenol-d5	76		30 - 130
Terphenyl-d14	86		30 - 130

Client: Olin Corporation

Job Number: 360-24251-2
Sdg Number: OCRI-05A

Client Sample ID: OC-SB-440-23/25-XXX

Lab Sample ID: 360-24251-9
Client Matrix: Solid % Moisture: 8.7

Date Sampled: 08/24/2009 1230
Date Received: 08/24/2009 1910

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49847		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48462		Lab File ID:	J03312.D
Dilution:	1.0			Initial Weight/Volume:	30.34 g
Date Analyzed:	10/04/2009 2026			Final Weight/Volume:	1.0 mL
Date Prepared:	09/01/2009 1501			Injection Volume:	

Tentatively Identified Compounds Number TIC's Found: 8

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
763-93-9	3-Hexen-2-one	4.76	15	T J N
5989-27-5	D-Limonene	7.44	8.1	T J N
630-6-8	Hexatriacontane	13.23	16	T J N
593-49-7	Heptacosane	13.57	21	T J N
629-97-0	Docosane	13.92	24	T J N
13287-24-6	Nonadecane, 9-methyl-	14.25	26	T J N
593-45-3	Octadecane	14.58	26	T J N
593-45-3	Octadecane	14.91	18	T J N

Client: Olin Corporation

Job Number: 360-24251-2
Sdg Number: OCRI-05A

Client Sample ID: **OC-SB-441-17/19-XXX**

Lab Sample ID: 360-24251-14
Client Matrix: Solid % Moisture: 6.8

Date Sampled: 08/24/2009 1535
Date Received: 08/25/2009 1800

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49847		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48462		Lab File ID:	J03313.D
Dilution:	1.0			Initial Weight/Volume:	30.06 g
Date Analyzed:	10/04/2009 2059			Final Weight/Volume:	1.0 mL
Date Prepared:	09/01/2009 1501			Injection Volume:	

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		11	36
1,2,4,5-Tetrachlorobenzene		ND		2.4	36
1,2,4-Trichlorobenzene		ND		6.9	36
1,2-Dichlorobenzene		ND		3.9	36
1,3-Dichlorobenzene		ND		10	36
1,4-Dichlorobenzene		ND		6.4	36
1-Methylnaphthalene		ND		2.1	36
2,2'-oxybis[1-chloropropane]		ND		3.6	36
2,3,4,6-Tetrachlorophenol		ND		2.1	36
2,4,5-Trichlorophenol		ND		4.0	36
2,4,6-Trichlorophenol		ND		7.5	36
2,4-Dichlorophenol		ND		6.9	36
2,4-Dimethylphenol		ND		6.2	36
2,4-Dinitrophenol		ND J		5.2	36
2,4-Dinitrotoluene		ND		5.0	36
2,6-Dinitrotoluene		ND		4.5	36
2-Chloronaphthalene		ND		5.5	36
2-Chlorophenol		ND		3.5	36
2-Methylnaphthalene		ND		27	36
2-Methylphenol		ND		5.1	36
2-Nitroaniline		ND		23	180
2-Nitrophenol		ND		4.1	36
3 & 4 Methylphenol		ND		6.8	36
3,3'-Dichlorobenzidine		ND J		26	71
3-Nitroaniline		ND		10	180
4,6-Dinitro-2-methylphenol		ND		9.1	180
4-Bromophenyl phenyl ether		ND		7.4	36
4-Chloro-3-methylphenol		ND		9.9	71
4-Chloroaniline		ND		14	71
4-Chlorophenyl phenyl ether		ND		5.7	36
4-Nitroaniline		ND		9.5	180
4-Nitrophenol		ND		6.9	180
Acenaphthene		ND		5.2	36
Acenaphthylene		ND		6.3	36
Acetophenone		ND		3.9	36
Aniline		ND		19	36
Anthracene		ND		11	36
Atrazine		ND		11	36
Azobenzene		ND		4.4	36
Benzaldehyde		ND		11	36
Benzo[a]anthracene		ND		6.8	36
Benzo[a]pyrene		ND		6.5	36
Benzo[b]fluoranthene		ND		8.2	36
Benzo[g,h,i]perylene		ND J		6.9	36
Benzo[k]fluoranthene		ND		9.9	36
Benzoic acid		~~ND~~ R		15	180

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Client: Olin Corporation

Job Number: 360-24251-2
Sdg Number: OCRI-05A

Client Sample ID: **OC-SB-441-17/19-XXX**

Lab Sample ID: 360-24251-14
Client Matrix: Solid % Moisture: 6.8

Date Sampled: 08/24/2009 1535
Date Received: 08/25/2009 1800

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49847		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48462		Lab File ID:	J03313.D
Dilution:	1.0			Initial Weight/Volume:	30.06 g
Date Analyzed:	10/04/2009 2059			Final Weight/Volume:	1.0 mL
Date Prepared:	09/01/2009 1501			Injection Volume:	

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		2.1	36
Benzyl alcohol		ND		8.2	71
Bis(2-chloroethoxy)methane		ND		6.4	36
Bis(2-chloroethyl)ether		ND		8.7	36
Bis(2-ethylhexyl) phthalate		25	J B	11	36
Butyl benzyl phthalate		ND		7.8	36
Caprolactam		ND		11	36
Carbazole		ND		36	36
Chrysene		ND		7.7	36
Dibenz(a,h)anthracene		ND	J	7.2	36
Dibenzofuran		ND		21	36
Diethyl phthalate		ND		5.0	36
Dimethyl phthalate		ND		5.2	36
Di-n-butyl phthalate		ND		11	36
Di-n-octyl phthalate		ND		10	36
Diphenyl oxide		140		11	36
Fluoranthene		ND		23	36
Fluorene		ND		14	36
Hexachlorobenzene		ND		8.5	36
Hexachlorobutadiene		ND		7.1	36
Hexachlorocyclopentadiene		ND		9.7	71
Hexachloroethane		ND		6.8	36
Indeno[1,2,3-cd]pyrene		ND	J	11	36
Isophorone		ND		7.6	36
Naphthalene		ND		79	86
Nitrobenzene		ND		4.9	36
N-Nitrosodimethylamine		ND		4.1	36
N-Nitrosodi-n-propylamine		ND		4.0	36
N-Nitrosodiphenylamine		ND		7.1	36
Pentachlorophenol		ND		7.4	36
Phenanthrene		ND		41	43
Phenol		ND		4.5	36
Pyrene		ND		9.5	36

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	64		30 - 130
2-Fluorobiphenyl	64		30 - 130
2-Fluorophenol	103		30 - 130
Nitrobenzene-d5	78		30 - 130
Phenol-d5	83		30 - 130
Terphenyl-d14	79		30 - 130

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Client: Olin Corporation

Job Number: 360-24251-2
Sdg Number: OCRI-05A

Client Sample ID: **OC-SB-441-17/19-XXX**

Lab Sample ID: 360-24251-14
Client Matrix: Solid % Moisture: 6.8

Date Sampled: 08/24/2009 1535
Date Received: 08/25/2009 1800

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49847		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48462		Lab File ID:	J03313.D
Dilution:	1.0			Initial Weight/Volume:	30.06 g
Date Analyzed:	10/04/2009 2059			Final Weight/Volume:	1.0 mL
Date Prepared:	09/01/2009 1501			Injection Volume:	

Tentatively Identified Compounds **Number TIC's Found:** 3

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
141-79-7	3-Penten-2-one, 4-methyl-	4.75	17	T J N
~~95-16-9~~	~~Benzothiazole~~	~~8.92~~	~~7.6~~	~~T J N~~ Q
~~149-30-4~~	~~2-Mercaptobenzothiazole~~	~~12.57~~	~~12~~	~~T J N~~

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Client: Olin Corporation

Job Number: 360-24251-2
Sdg Number: OCRI-05A

Client Sample ID: **OC-SB-446-15/17-XXX**

Lab Sample ID: 360-24251-17
Client Matrix: Solid % Moisture: 9.4

Date Sampled: 08/25/2009 0900
Date Received: 08/25/2009 1800

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49847		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48462		Lab File ID:	J03314.D
Dilution:	1.0			Initial Weight/Volume:	30.89 g
Date Analyzed:	10/04/2009 2131			Final Weight/Volume:	1.0 mL
Date Prepared:	09/01/2009 1501			Injection Volume:	

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		32	J	11	36
1,2,4,5-Tetrachlorobenzene		ND		2.4	36
1,2,4-Trichlorobenzene		ND		6.9	36
1,2-Dichlorobenzene		ND		3.9	36
1,3-Dichlorobenzene		ND		10	36
1,4-Dichlorobenzene		ND		6.4	36
1-Methylnaphthalene		ND		2.1	36
2,2'-oxybis[1-chloropropane]		ND		3.6	36
2,3,4,6-Tetrachlorophenol		ND		2.1	36
2,4,5-Trichlorophenol		ND		4.0	36
2,4,6-Trichlorophenol		ND		7.5	36
2,4-Dichlorophenol		ND		6.9	36
2,4-Dimethylphenol		ND		6.2	36
2,4-Dinitrophenol		ND J		5.2	36
2,4-Dinitrotoluene		ND		5.0	36
2,6-Dinitrotoluene		ND		4.5	36
2-Chloronaphthalene		ND		5.5	36
2-Chlorophenol		ND		3.5	36
2-Methylnaphthalene		ND		27	36
2-Methylphenol		ND		5.1	36
2-Nitroaniline		ND		23	180
2-Nitrophenol		ND		4.1	36
3 & 4 Methylphenol		ND		6.8	36
3,3'-Dichlorobenzidine		ND J		26	71
3-Nitroaniline		ND		10	180
4,6-Dinitro-2-methylphenol		ND		9.1	180
4-Bromophenyl phenyl ether		ND		7.4	36
4-Chloro-3-methylphenol		ND		9.9	71
4-Chloroaniline		ND		14	71
4-Chlorophenyl phenyl ether		ND		5.7	36
4-Nitroaniline		ND		9.5	180
4-Nitrophenol		ND		7.0	180
Acenaphthene		ND		5.2	36
Acenaphthylene		ND		6.3	36
Acetophenone		ND		3.9	36
Aniline		ND		19	36
Anthracene		ND		11	36
Atrazine		ND		11	36
Azobenzene		ND		4.4	36
Benzaldehyde		ND		11	36
Benzo[a]anthracene		ND		6.8	36
Benzo[a]pyrene		ND		6.5	36
Benzo[b]fluoranthene		ND		8.2	36
Benzo[g,h,i]perylene		ND J		6.9	36
Benzo[k]fluoranthene		ND		9.9	36
Benzoic acid		~~ND~~ R		15	180

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Client: Olin Corporation

Job Number: 360-24251-2
Sdg Number: OCRI-05A

Client Sample ID: **OC-SB-446-15/17-XXX**

Lab Sample ID: 360-24251-17
Client Matrix: Solid
% Moisture: 9.4

Date Sampled: 08/25/2009 0900
Date Received: 08/25/2009 1800

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49847		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48462		Lab File ID:	J03314.D
Dilution:	1.0			Initial Weight/Volume:	30.89 g
Date Analyzed:	10/04/2009 2131			Final Weight/Volume:	1.0 mL
Date Prepared:	09/01/2009 1501			Injection Volume:	

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		2.1	36
Benzyl alcohol		ND		8.2	71
Bis(2-chloroethoxy)methane		ND		6.4	36
Bis(2-chloroethyl)ether		ND		8.7	36
Bis(2-ethylhexyl) phthalate		24	JEB	11	36
Butyl benzyl phthalate		ND		7.8	36
Caprolactam		ND		11	36
Carbazole		ND		36	36
Chrysene		ND		7.7	36
Dibenz(a,h)anthracene		ND	J	7.2	36
Dibenzofuran		ND		21	36
Diethyl phthalate		ND		5.0	36
Dimethyl phthalate		ND		5.2	36
Di-n-butyl phthalate		ND		11	36
Di-n-octyl phthalate		ND		10	36
Diphenyl oxide		130		11	36
Fluoranthene		ND		23	36
Fluorene		ND		14	36
Hexachlorobenzene		ND		8.5	36
Hexachlorobutadiene		ND		7.1	36
Hexachlorocyclopentadiene		ND		9.7	71
Hexachloroethane		ND		6.8	36
Indeno[1,2,3-cd]pyrene		ND	J	11	36
Isophorone		ND		7.6	36
Naphthalene		ND		79	86
Nitrobenzene		ND		4.9	36
N-Nitrosodimethylamine		ND		4.1	36
N-Nitrosodi-n-propylamine		ND		4.0	36
N-Nitrosodiphenylamine		ND		7.1	36
Pentachlorophenol		ND		7.4	36
Phenanthrene		ND		41	43
Phenol		13	J	4.5	36
Pyrene		ND		9.5	36

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	56		30 - 130
2-Fluorobiphenyl	58		30 - 130
2-Fluorophenol	72		30 - 130
Nitrobenzene-d5	70		30 - 130
Phenol-d5	63		30 - 130
Terphenyl-d14	75		30 - 130

Client: Olin Corporation

Job Number: 360-24251-2
Sdg Number: OCRI-05A

Client Sample ID: **OC-SB-446-15/17-XXX**

Lab Sample ID: 360-24251-17
Client Matrix: Solid % Moisture: 9.4

Date Sampled: 08/25/2009 0900
Date Received: 08/25/2009 1800

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49847		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48462		Lab File ID:	J03314.D
Dilution:	1.0			Initial Weight/Volume:	30.89 g
Date Analyzed:	10/04/2009 2131			Final Weight/Volume:	1.0 mL
Date Prepared:	09/01/2009 1501			Injection Volume:	

Tentatively Identified Compounds **Number TIC's Found:** 10

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
763-93-9	3-Hexen-2-one	4.76	12	T J N
627-70-3	2-Propanone, (1-methylethylidene)hydrazo	5.55	74	T J N
138-86-3	Limonene	7.45	7.8	T J N
629-94-7	Heneicosane	12.86	7.6	T J N
629-94-7	Heneicosane	13.23	11	T J N
14167-59-0	Tetratriacontane	13.58	14	T J N
112-95-8	Eicosane	13.92	20	T J N
7098-22-8	Tetratetracontane	14.25	20	T J N
630-6-8	Hexatriacontane	14.58	18	T J N
3892-0-0	Pentadecane, 2,6,10-trimethyl-	14.91	15	T J N

Client: Olin Corporation

Job Number: 360-24251-2
Sdg Number: OCRI-05A

Client Sample ID: **OC-SB-438-20/22-XXX**

Lab Sample ID: 360-24251-24
Client Matrix: Solid % Moisture: 8.2

Date Sampled: 08/24/2009 1720
Date Received: 08/25/2009 1800

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49847		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48567		Lab File ID:	J03315.D
Dilution:	1.0			Initial Weight/Volume:	30.81 g
Date Analyzed:	10/04/2009 2204			Final Weight/Volume:	1.0 mL
Date Prepared:	09/03/2009 1311			Injection Volume:	

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		11	35
1,2,4,5-Tetrachlorobenzene		ND		2.4	35
1,2,4-Trichlorobenzene		ND		6.9	35
1,2-Dichlorobenzene		ND		3.8	35
1,3-Dichlorobenzene		ND		10	35
1,4-Dichlorobenzene		ND		6.4	35
1-Methylnaphthalene		ND		2.1	35
2,2'-oxybis[1-chloropropane]		ND		3.6	35
2,3,4,6-Tetrachlorophenol		ND		2.1	35
2,4,5-Trichlorophenol		ND		4.0	35
2,4,6-Trichlorophenol		ND		7.4	35
2,4-Dichlorophenol		ND		6.8	35
2,4-Dimethylphenol		ND		6.2	35
2,4-Dinitrophenol		ND J		5.2	35
2,4-Dinitrotoluene		ND		5.0	35
2,6-Dinitrotoluene		ND		4.5	35
2-Chloronaphthalene		ND		5.4	35
2-Chlorophenol		ND		3.4	35
2-Methylnaphthalene		ND		27	35
2-Methylphenol		ND		5.0	35
2-Nitroaniline		ND		23	180
2-Nitrophenol		ND		4.1	35
3 & 4 Methylphenol		ND		6.7	35
3,3'-Dichlorobenzidine		ND J	✓	26	71
3-Nitroaniline		ND		10	180
4,6-Dinitro-2-methylphenol		ND		9.0	180
4-Bromophenyl phenyl ether		ND		7.4	35
4-Chloro-3-methylphenol		ND		9.8	71
4-Chloroaniline		ND		14	71
4-Chlorophenyl phenyl ether		ND		5.6	35
4-Nitroaniline		ND		9.4	180
4-Nitrophenol		ND		6.9	180
Acenaphthene		ND		5.2	35
Acenaphthylene		ND		6.2	35
Acetophenone		ND		3.8	35
Aniline		ND J	✓	18	35
Anthracene		ND		11	35
Atrazine		ND		11	35
Azobenzene		ND		4.4	35
Benzaldehyde		ND	✓	11	35
Benzo[a]anthracene		ND		6.8	35
Benzo[a]pyrene		ND		6.5	35
Benzo[b]fluoranthene		ND		8.1	35
Benzo[g,h,i]perylene		ND J		6.9	35
Benzo[k]fluoranthene		ND		9.8	35
Benzoic acid		ND		15	180

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Client: Olin Corporation

Job Number: 360-24251-2
Sdg Number: OCRI-05A

Client Sample ID: **OC-SB-438-20/22-XXX**

Lab Sample ID: 360-24251-24
Client Matrix: Solid % Moisture: 8.2

Date Sampled: 08/24/2009 1720
Date Received: 08/25/2009 1800

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49847		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48567		Lab File ID:	J03315.D
Dilution:	1.0			Initial Weight/Volume:	30.81 g
Date Analyzed:	10/04/2009 2204			Final Weight/Volume:	1.0 mL
Date Prepared:	09/03/2009 1311			Injection Volume:	

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		2.1	35
Benzyl alcohol		ND		8.2	71
Bis(2-chloroethoxy)methane		ND		6.4	35
Bis(2-chloroethyl)ether		ND		8.6	35
Bis(2-ethylhexyl) phthalate		21	J EB	11	35
Butyl benzyl phthalate		ND		7.7	35
Caprolactam		ND		11	35
Carbazole		ND		35	35
Chrysene		ND		7.6	35
Dibenz(a,h)anthracene		ND	J	7.1	35
Dibenzofuran		ND		20	35
Diethyl phthalate		ND		5.0	35
Dimethyl phthalate		ND		5.2	35
Di-n-butyl phthalate		ND		11	35
Di-n-octyl phthalate		ND		10	35
Diphenyl oxide		ND		11	35
Fluoranthene		ND		22	35
Fluorene		ND		14	35
Hexachlorobenzene		ND		8.4	35
Hexachlorobutadiene		ND		7.0	35
Hexachlorocyclopentadiene		ND		9.7	71
Hexachloroethane		ND		6.7	35
Indeno[1,2,3-cd]pyrene		ND	J	11	35
Isophorone		ND		7.6	35
Naphthalene		ND		78	85
Nitrobenzene		ND		4.8	35
N-Nitrosodimethylamine		ND		4.1	35
N-Nitrosodi-n-propylamine		ND		4.0	35
N-Nitrosodiphenylamine		ND		7.1	35
Pentachlorophenol		ND		7.3	35
Phenanthrene		ND		41	42
Phenol		ND		4.4	35
Pyrene		ND		9.4	35

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	66		30 - 130
2-Fluorobiphenyl	65		30 - 130
2-Fluorophenol	76		30 - 130
Nitrobenzene-d5	78		30 - 130
Phenol-d5	75		30 - 130
Terphenyl-d14	68		30 - 130

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Client: Olin Corporation

Job Number: 360-24251-2
Sdg Number: OCRI-05A

Client Sample ID: **OC-SB-438-20/22-XXX**

Lab Sample ID: 360-24251-24
Client Matrix: Solid % Moisture: 8.2

Date Sampled: 08/24/2009 1720
Date Received: 08/25/2009 1800

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49847		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48567		Lab File ID:	J03315.D
Dilution:	1.0			Initial Weight/Volume:	30.81 g
Date Analyzed:	10/04/2009 2204			Final Weight/Volume:	1.0 mL
Date Prepared:	09/03/2009 1311			Injection Volume:	

Tentatively Identified Compounds **Number TIC's Found:** 7

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
763-93-9	3-Hexen-2-one	4.76	12	T J N
~~593-49-7~~	~~Heptacosane~~	~~13.23~~	~~10~~	~~T J N~~
~~593-49-7~~	~~Heptacosane~~	~~13.56~~	~~16~~	~~T J N~~
638-68-6	Triacontane	13.91	19	T J N
629-99-2	Pentacosane	14.25	21	T J N
~~593-45-3~~	~~Octadecane~~	~~14.58~~	~~19~~	~~T J N~~
~~593-45-3~~	~~Octadecane~~	~~14.91~~	~~15~~	~~T J N~~

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FORM IV
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Westfield Job No.: 360-24251-1

SDG No.: OCRI-05

Lab File ID: B10313.D Lab Sample ID: MB 360-48567/1-A

Matrix: Solid Date Extracted: 09/03/2009 13:11

Instrument ID: Inst. B Date Analyzed: 09/15/2009 15:47

Level: (Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 360-48567/2-A	B10314.D	09/15/2009 16:21
	LCSD 360-48567/3-A	B10315.D	09/15/2009 16:55
OC-SB-446-5.0/7.0-XXX	360-24251-19 *	B10321.D	09/15/2009 20:19
OC-SB-446-5.0/7.0-XXX MS	360-24251-19 MS	B10322.D	09/15/2009 20:54
OC-SB-446-5.0/7.0-XXX MSD	360-24251-19 MSD	B10323.D	09/15/2009 21:28
OC-SB-448-0.0/1.0-XXX	360-24251-20	B10324.D	09/15/2009 22:02
OC-SB-448-17/19-XXX	360-24251-21	B10326.D	09/15/2009 23:11
OC-SB-448-8.0/10-XXX	360-24251-22	B10327.D	09/15/2009 23:45
OC-SB-438-0.0/1.0-XXX	360-24251-23	B10328.D	09/16/2009 00:20
OC-SB-448-0.0/1.0-XXX DL2	360-24251-20 DL2	J02987.D	09/16/2009 18:41
OC-SB-448-0.0/1.0-XXX	360-24251-20		09/16/2009 18:41
OC-SB-448-17/19-XXX DL	360-24251-21 DL	J02988.D	09/16/2009 19:10
OC-SB-448-8.0/10-XXX DL	360-24251-22 DL	J02989.D	09/16/2009 19:40
OC-SB-448-8.0/10-XXX	360-24251-22		09/16/2009 19:40
OC-SB-448-0.0/1.0-XXX DL	360-24251-20 DL	J02995.D	09/17/2009 13:21

MB 360-48567

Benzoic Acid 31.5

Di-n-butyl phthalate 107

Hexadecane

Unk (12.07)

Octadecane

LCS 360-48567

3,3'-DCBz 32/32

Aniline 32/29

Benzaldehyde 282/294

LCSD 360-48567*

	RF	%D
Benzaldehyde	—	36
benzoic acid	0.023	-49
2,4-DNP	—	-26

FORM IV 8270C LL

FORM III
GC/MS SEMI VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24251-1

SDG No.: OCRI-05

Matrix: Solid Level: Low Lab File ID: B10322.D

Lab ID: 360-24251-19 MS Client ID: OC-SB-446-5.0/7.0-XXX MS

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	QC LIMITS REC	#	
1,1'-Biphenyl	415	ND	322	77	40-140		
1,2,4,5-Tetrachlorobenzene	415	ND	257	62	40-140		
1,2,4-Trichlorobenzene	415	ND	230	55	40-140		
1,2-Dichlorobenzene	415	ND	246	59	40-140		
1,3-Dichlorobenzene	415	ND	233	56	40-140		
1,4-Dichlorobenzene	415	ND	231	56	40-140		
1-Methylnaphthalene	415	ND	260	63	40-140		
2,2'-oxybis[1-chloropropane]	415	ND	264	63	40-140		
2,3,4,6-Tetrachlorophenol	415	ND	276	66	40-140		
2,4,5-Trichlorophenol	415	ND	216	52	30-130		RPD = 24
2,4,6-Trichlorophenol	415	ND	327	79	30-130		
2,4-Dichlorophenol	415	ND	287	69	30-130		
2,4-Dimethylphenol	415	ND	311	75	30-130		
2,4-Dinitrophenol	415	ND	182	44	30-130		
2,4-Dinitrotoluene	415	ND	292	70	40-140		
2,6-Dinitrotoluene	415	ND	310	75	40-140		
2-Chloronaphthalene	415	ND	253	61	40-140		
2-Chlorophenol	415	ND	262	63	30-130		
2-Methylnaphthalene	415	ND	265	64	40-140		
2-Methylphenol	415	ND	328	79	30-130		
2-Nitroaniline	415	ND	298	72	40-140		
2-Nitrophenol	415	ND	293	71	30-130		
3 & 4 Methylphenol	415	ND	284	68	30-130		
3,3'-Dichlorobenzidine	415	ND	86.5	21	40-140	F	23
3-Nitroaniline	415	ND	291	70	40-140		
4,6-Dinitro-2-methylphenol	415	ND	248	60	30-130		
4-Bromophenyl phenyl ether	415	ND	318	77	40-140		
4-Chloro-3-methylphenol	415	ND	304	73	30-130		
4-Chloroaniline	415	ND	191	46	40-140		
4-Chlorophenyl phenyl ether	415	ND	325	78	40-140		
4-Nitroaniline	415	ND	323	78	40-140		
4-Nitrophenol	415	ND	13.5 J	3	30-130	F	13
Acenaphthene	415	ND	350	84	40-140		
Acenaphthylene	415	ND	322	77	40-140		
Acetophenone	415	ND	270	65	40-140		
Aniline	415	ND	265	64	40-140		
Anthracene	415	ND	392	94	40-140		
Atrazine	415	ND	383	92	40-140		
Azobenzene	415	ND	341	82	40-140		
Benzaldehyde	415	ND	1110	268	40-140	F	264
Benzo[a]anthracene	415	ND	387	93	40-140		

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

Benzyl alcohol 29/25

FORM III
GC/MS SEMI VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24251-1

SDG No.: OCRI-05

Matrix: Solid Level: Low Lab File ID: B10322.D

Lab ID: 360-24251-19 MS Client ID: OC-SB-446-5.0/7.0-XXX MS

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	QC LIMITS REC	#
Benzo[a]pyrene	415	ND	361	87	40-140	
Benzo[b]fluoranthene	415	ND	359	86	40-140	
Benzo[g,h,i]perylene	415	ND	392	94	40-140	
Benzo[k]fluoranthene	415	ND	392	94	40-140	
Benzoic acid	415	ND	149 J	36	30-130	
Benzophenone	415	ND	352	85	40-140	
Benzyl alcohol	415	ND	122	29	30-130	F
Bis(2-chloroethoxy)methane	415	ND	254	61	40-140	
Bis(2-chloroethyl)ether	415	ND	239	57	40-140	
Bis(2-ethylhexyl) phthalate	415	21 J	356	81	40-140	
Butyl benzyl phthalate	415	ND	352	85	40-140	
Caprolactam	415	ND	323	78	40-140	
Carbazole	415	ND	364	88	40-140	
Chrysene	415	ND	375	90	40-140	
Dibenz(a,h)anthracene	415	ND	380	92	40-140	
Dibenzofuran	415	ND	311	75	40-140	
Diethyl phthalate	415	ND	347	83	40-140	
Dimethyl phthalate	415	ND	327	79	40-140	
Di-n-butyl phthalate	415	ND	339	82	40-140	
Di-n-octyl phthalate	415	ND	378	91	40-140	
Diphenyl oxide	415	ND	264	63	40-140	
Fluoranthene	415	ND	363	87	40-140	
Fluorene	415	ND	385	93	40-140	
Hexachlorobenzene	415	ND	323	78	40-140	
Hexachlorobutadiene	415	ND	238	57	40-140	
Hexachlorocyclopentadiene	415	ND	205	49	40-140	
Hexachloroethane	415	ND	238	57	40-140	
Indeno[1,2,3-cd]pyrene	415	ND	375	90	40-140	
Isophorone	415	ND	243	59	40-140	
Naphthalene	415	ND	238	57	40-140	
Nitrobenzene	415	ND	256	62	40-140	
N-Nitrosodimethylamine	415	ND	252	61	40-140	
N-Nitrosodi-n-propylamine	415	ND	307	74	40-140	
N-Nitrosodiphenylamine	415	ND	245	59	40-140	
Pentachlorophenol	415	ND	293	71	30-130	
Phenanthrene	415	ND	345	83	40-140	
Phenol	415	ND	286	69	30-130	
Pyrene	415	ND	378	91	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24251-1

SDG No.: OCRI-05

Matrix: Solid Level: Low Lab File ID: B10323.D

Lab ID: 360-24251-19 MSD Client ID: OC-SB-446-5.0/7.0-XXX MSD

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1'-Biphenyl	412	325	79	1	30	40-140	
1,2,4,5-Tetrachlorobenzene	412	259	63	1	30	40-140	
1,2,4-Trichlorobenzene	412	236	57	3	30	40-140	
1,2-Dichlorobenzene	412	249	60	1	30	40-140	
1,3-Dichlorobenzene	412	233	57	0	30	40-140	
1,4-Dichlorobenzene	412	234	57	2	30	40-140	
1-Methylnaphthalene	412	266	65	2	30	40-140	
2,2'-oxybis[1-chloropropane]	412	267	65	1	30	40-140	
2,3,4,6-Tetrachlorophenol	412	278	68	1	30	40-140	
2,4,5-Trichlorophenol	412	304	74	34	30	30-130	F
2,4,6-Trichlorophenol	412	323	78	1	30	30-130	
2,4-Dichlorophenol	412	291	71	1	30	30-130	
2,4-Dimethylphenol	412	330	80	6	30	30-130	
2,4-Dinitrophenol	412	171	41	6	30	30-130	
2,4-Dinitrotoluene	412	296	72	1	30	40-140	
2,6-Dinitrotoluene	412	307	75	1	30	40-140	
2-Chloronaphthalene	412	253	62	0	30	40-140	
2-Chlorophenol	412	269	65	2	30	30-130	
2-Methylnaphthalene	412	275	67	4	30	40-140	
2-Methylphenol	412	354	86	7	30	30-130	
2-Nitroaniline	412	317	77	6	30	40-140	
2-Nitrophenol	412	302	73	3	30	30-130	
3 & 4 Methylphenol	412	287	70	1	30	30-130	
3,3'-Dichlorobenzidine	412	95.3	23	10		40-140	F
3-Nitroaniline	412	300	73	3	30	40-140	
4,6-Dinitro-2-methylphenol	412	238	58	4	30	30-130	
4-Bromophenyl phenyl ether	412	317	77	0	30	40-140	
4-Chloro-3-methylphenol	412	320	78	5	30	30-130	
4-Chloroaniline	412	214	52	11	30	40-140	
4-Chlorophenyl phenyl ether	412	329	80	1	30	40-140	
4-Nitroaniline	412	330	80	2	30	40-140	
4-Nitrophenol	412	13.9 J	3	3	30	30-130	F
Acenaphthene	412	356	86	1	30	40-140	
Acenaphthylene	412	322	78	0	30	40-140	
Acetophenone	412	284	69	5	30	40-140	
Aniline	412	267	65	1	30	40-140	
Anthracene	412	396	96	1	30	40-140	
Atrazine	412	395	96	3	30	40-140	
Azobenzene	412	348	85	2	30	40-140	
Benzaldehyde	412	1080	264	3	30	40-140	F
Benzo[a]anthracene	412	395	96	2	30	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24251-1

SDG No.: OCRI-05

Matrix: Solid Level: Low Lab File ID: B10323.D

Lab ID: 360-24251-19 MSD Client ID: OC-SB-446-5.0/7.0-XXX MSD

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Benzo[a]pyrene	412	375	91	4	30	40-140	
Benzo[b]fluoranthene	412	368	89	2	30	40-140	
Benzo[g,h,i]perylene	412	399	97	2	30	40-140	
Benzo[k]fluoranthene	412	415	101	6	30	40-140	
Benzoic acid	412	144 J	35	3	30	30-130	
Benzophenone	412	352	86	0	30	40-140	
Benzyl alcohol	412	104	25	(1)	30	30-130	F
Bis(2-chloroethoxy)methane	412	259	63	2	30	40-140	
Bis(2-chloroethyl)ether	412	240	58	1	30	40-140	
Bis(2-ethylhexyl) phthalate	412	366	84	3	30	40-140	
Butyl benzyl phthalate	412	360	87	2	30	40-140	
Caprolactam	412	353	86	9	30	40-140	
Carbazole	412	377	92	4	30	40-140	
Chrysene	412	384	93	2	30	40-140	
Dibenz(a,h)anthracene	412	387	94	2	30	40-140	
Dibenzofuran	412	320	78	3	30	40-140	
Diethyl phthalate	412	350	85	1	30	40-140	
Dimethyl phthalate	412	331	80	1	30	40-140	
Di-n-butyl phthalate	412	346	84	2	30	40-140	
Di-n-octyl phthalate	412	403	98	6	30	40-140	
Diphenyl oxide	412	268	65	2	30	40-140	
Fluoranthene	412	370	90	2	30	40-140	
Fluorene	412	389	94	1	30	40-140	
Hexachlorobenzene	412	328	80	2	30	40-140	
Hexachlorobutadiene	412	243	59	2	30	40-140	
Hexachlorocyclopentadiene	412	187	45	9	30	40-140	
Hexachloroethane	412	242	59	2	30	40-140	
Indeno[1,2,3-cd]pyrene	412	387	94	3	30	40-140	
Isophorone	412	247	60	2	30	40-140	
Naphthalene	412	279	68	16	30	40-140	
Nitrobenzene	412	260	63	2	30	40-140	
N-Nitrosodimethylamine	412	257	62	2	30	40-140	
N-Nitrosodi-n-propylamine	412	312	76	2	30	40-140	
N-Nitrosodiphenylamine	412	247	60	1	30	40-140	
Pentachlorophenol	412	320	78	9	30	30-130	
Phenanthrene	412	360	87	4	30	40-140	
Phenol	412	289	70	1	30	30-130	
Pyrene	412	391	95	3	30	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Westfield Job No.: 360-24251-1

SDG No.: OCRI-05

Sample No.: CCV 360-49059/2 Date Analyzed: 09/16/2009 18:11

Instrument ID: Inst. J GC Column: Rtx-5ms SIL with ID: 0.25(um)

Lab File ID (Standard): J02986.D Heated Purge: (Y/N) N

		PHN		CRY		PD12	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12 HOUR STD		149695	11.36	92408	13.97	41677	15.38
UPPER LIMIT		299390	11.86	184816	14.47	83354	15.88
LOWER LIMIT		74848	10.86	46204	13.47	20839	14.88
LAB SAMPLE ID	CLIENT SAMPLE ID						
360-24251-20 DL2	OC-SB-448-0.0/1.0-XXX DL2	189339	11.36	141325	13.97	91546*	15.38
360-24251-21 DL	OC-SB-448-17/19-XXX DL	166161	11.35	111183	13.97	67947	15.38
360-24251-22 DL	OC-SB-448-8.0/10-XXX DL	197306	11.36	136488	13.97	91545*	15.38

220% 220%

PHN = Phenanthrene-d10
CRY = Chrysene-d12
PD12 = Perylene-d12

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.50 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270C LL

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Westfield Job No.: 360-24251-1

SDG No.: OCRI-05

Instrument ID: Inst. B Start Date: 09/15/2009 14:39

Analysis Batch Number: 48930 End Date: 09/16/2009 02:03

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 360-48930/1		09/15/2009 14:39	1	B10311.D	Rtx-5ms SIL with guard column 0.25(um)
CCV 360-48930/2 CCVIS		09/15/2009 15:13	1	B10312.D	Rtx-5ms SIL with guard column 0.25(um)
MB 360-48567/1-A		09/15/2009 15:47	1	B10313.D	Rtx-5ms SIL with guard column 0.25(um)
LCS 360-48567/2-A		09/15/2009 16:21	1	B10314.D	Rtx-5ms SIL with guard column 0.25(um)
LCSD 360-48567/3-A		09/15/2009 16:55	1	B10315.D	Rtx-5ms SIL with guard column 0.25(um)
MB 360-48462/1-A		09/15/2009 17:29	1	B10316.D	Rtx-5ms SIL with guard column 0.25(um)
LCS 360-48462/2-A		09/15/2009 18:03	1	B10317.D	Rtx-5ms SIL with guard column 0.25(um)
LCSD 360-48462/3-A		09/15/2009 18:37	1	B10318.D	Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/15/2009 19:11	10		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/15/2009 19:45	1000		Rtx-5ms SIL with guard column 0.25(um)
360-24251-19	OC-SB-446-5.0/7.0-XXX	09/15/2009 20:19	1	B10321.D	Rtx-5ms SIL with guard column 0.25(um)
360-24251-19 MS	OC-SB-446-5.0/7.0-XXX MS	09/15/2009 20:54	1	B10322.D	Rtx-5ms SIL with guard column 0.25(um)
360-24251-19 MSD	OC-SB-446-5.0/7.0-XXX MSD	09/15/2009 21:28	1	B10323.D	Rtx-5ms SIL with guard column 0.25(um)
360-24251-20	OC-SB-448-0.0/1.0-XXX	09/15/2009 22:02	1	B10324.D	Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/15/2009 22:37	5		Rtx-5ms SIL with guard column 0.25(um)
360-24251-21	OC-SB-448-17/19-XXX	09/15/2009 23:11	1	B10326.D	Rtx-5ms SIL with guard column 0.25(um)
360-24251-22	OC-SB-448-8.0/10-XXX	09/15/2009 23:45	1	B10327.D	Rtx-5ms SIL with guard column 0.25(um)
360-24251-23	OC-SB-438-0.0/1.0-XXX	09/16/2009 00:20	1	B10328.D	Rtx-5ms SIL with guard column 0.25(um)
360-24251-1	OC-SB-433-0.0/1.0-XXX	09/16/2009 00:54	1	B10329.D	Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/16/2009 01:28	5		Rtx-5ms SIL with guard column 0.25(um)
360-24251-3	OC-SB-433-5.0/7.0-DUP	09/16/2009 02:03	1	B10331.D	Rtx-5ms SIL with guard column 0.25(um)

JCAL OK

~~CCAL~~

CCAL = 360-48930

Benzaldehyde — 20 3C

benzoic acid 0.038 -49

2,4-DNP -26

8270C LL

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Westfield Job No.: 360-24251-1

SDG No.: OCRI-05

Lab Sample ID: CCV 360-48930/2 Calibration Date: 09/15/2009 15:13

Instrument ID: Inst. B Calib Start Date: 09/14/2009 08:29

GC Column: Rtx-5ms ID: 0.25(um) Calib End Date: 09/14/2009 13:02

Lab File ID: B10312.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Qua		0.2281		4880	5000	-2.4	30.0
N-Nitrosodimethylamine	Ave	0.4158	0.3914		4710	5000	-5.9	30.0
Pyridine	Lin2		0.5158		5200	5000	4.0	30.0
Phenol	Ave	0.7259	0.6847		4720	5000	-5.7	20.0
Benzaldehyde	Lin		0.1716		6820	5000	36.4*	30.0
Aniline	Qua		0.6568		4930	5000	-1.4	30.0
Bis(2-chloroethyl)ether	Ave	0.7151	0.5807		4060	5000	-18.8	30.0
2-Chlorophenol	Ave	0.6069	0.5933		4890	5000	-2.2	30.0
1,4-Dichlorobenzene	Ave	0.7450	0.6891		4620	5000	-7.5	20.0
1,3-Dichlorobenzene	Ave	0.7794	0.7139		4580	5000	-8.4	30.0
Benzyl alcohol	Qua		0.4216		5000	5000	0.1	30.0
1,2-Dichlorobenzene	Ave	0.7231	0.6747		4670	5000	-6.7	30.0
2-Methylphenol	Ave	0.5408	0.5371		4970	5000	-0.7	30.0
2,2'-oxybis[1-chloropropane]	Ave	1.140	1.023		4490	5000	-10.2	30.0
3 & 4 Methylphenol	Ave	0.5628	0.5399		4800	5000	-4.1	30.0
N-Nitrosodi-n-propylamine	Ave	0.3831	0.3944	0.0500	5150	5000	2.9	30.0
Acetophenone	Ave	0.8042	0.7755		4820	5000	-3.6	30.0
Hexachloroethane	Ave	0.2600	0.2462		4740	5000	-5.3	30.0
Nitrobenzene	Ave	0.2692	0.2634		4890	5000	-2.1	30.0
Isophorone	Ave	0.4142	0.4378		5280	5000	5.7	30.0
2,4-Dimethylphenol	Ave	0.2088	0.1941		4650	5000	-7.0	30.0
2-Nitrophenol	Lin		0.1250		5310	5000	6.3	20.0
Benzoic acid	Qua		0.0238		2580	5000	-48.5*	30.0
Bis(2-chloroethoxy)methane	Ave	0.2742	0.2545		4640	5000	-7.2	30.0
2,4-Dichlorophenol	Ave	0.1852	0.1861		5020	5000	0.5	20.0
1,2,4-Trichlorobenzene	Ave	0.2367	0.2176		4600	5000	-8.1	30.0
Alpha-Terpineol	Ave	0.1977	0.2098		5310	5000	6.1	30.0
Naphthalene	Ave	0.7969	0.7466		4680	5000	-6.3	30.0
4-Chloroaniline	Qua		0.2790		6090	5000	21.7	30.0
Hexachlorobutadiene	Ave	0.1165	0.1124		4820	5000	-3.5	20.0
Caprolactam	Lin1		0.0850		5170	5000	3.3	30.0
4-Chloro-3-methylphenol	Ave	0.1845	0.1879		5090	5000	1.8	20.0
2-Methylnaphthalene	Ave	0.4956	0.4661		4700	5000	-6.0	30.0
1-Methylnaphthalene	Ave	0.5038	0.4650		4610	5000	-7.7	30.0
Hexachlorocyclopentadiene	Lin2		0.1777	0.0500	4560	5000	-8.9	30.0
1,2,4,5-Tetrachlorobenzene	Ave	0.2029	0.1919		4730	5000	-5.4	30.0
2,4,6-Trichlorophenol	Lin2		0.3178		4990	5000	-0.2	20.0
2,4,5-Trichlorophenol	Lin2		0.3468		5010	5000	0.1	30.0
1,1'-Biphenyl	Ave	1.486	1.536		5170	5000	3.4	30.0
2-Chloronaphthalene	Ave	1.353	1.459		5390	5000	7.9	30.0
Phenyl ether	Ave	0.3372	0.3179		4710	5000	-5.7	30.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Westfield Job No.: 360-24251-1

SDG No.: OCRI-05

Lab Sample ID: CCV 360-48930/2 Calibration Date: 09/15/2009 15:13

Instrument ID: Inst. B Calib Start Date: 09/14/2009 08:29

GC Column: Rtx-5ms ID: 0.25(um) Calib End Date: 09/14/2009 13:02

Lab File ID: B10312.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Nitroaniline	Lin1		0.3894		4910	5000	-1.8	30.0
Dimethyl phthalate	Ave	1.261	1.327		5260	5000	5.2	30.0
2,6-Dinitrotoluene	Lin2		0.3161		5190	5000	3.7	30.0
Acenaphthylene	Ave	1.681	1.815		5400	5000	8.0	30.0
3-Nitroaniline	Lin1		0.2872		5050	5000	1.0	30.0
2,4-Dinitrophenol	Qua		0.0544	0.0500	3690	5000	-26.2	30.0
Acenaphthene	Ave	1.211	1.223		5050	5000	1.0	20.0
4-Nitrophenol	Lin2		0.1311	0.0500	4220	5000	-15.6	30.0
2,4-Dinitrotoluene	Lin1		0.3930		4820	5000	-3.7	30.0
Dibenzofuran	Ave	1.549	1.606		5180	5000	3.7	30.0
2,3,4,6-Tetrachlorophenol	Lin1		0.2594		4890	5000	-2.1	30.0
Diethyl phthalate	Ave	1.264	1.331		5260	5000	5.3	30.0
4-Chlorophenyl phenyl ether	Ave	0.5715	0.6002		5250	5000	5.0	30.0
Fluorene	Ave	1.276	1.358		5320	5000	6.5	30.0
2-Nitroaniline	Lin		0.2997		4510	5000	-9.8	30.0
4,6-Dinitro-2-methylphenol	Qua		0.0746		4560	5000	-8.8	30.0
Diphenylamine	Ave	0.6598	0.7046		5340	5000	6.8	30.0
N-Nitrosodiphenylamine	Ave	0.6598	0.7046		5340	5000	6.8	20.0
1,2-Diphenylhydrazine	Ave	1.240	1.318		5310	5000	6.3	30.0
Azobenzene	Ave	1.240	1.318		5310	5000	6.3	30.0
Benzophenone	Ave	0.7664	0.8060		5260	5000	5.2	30.0
4-Bromophenyl phenyl ether	Ave	0.1827	0.1873		5130	5000	2.5	30.0
Atrazine	Ave	0.1838	0.2033		5530	5000	10.6	30.0
Hexachlorobenzene	Ave	0.1681	0.1670		4970	5000	-0.7	30.0
Pentachlorophenol	Qua		0.0727		4280	5000	-14.3	20.0
Pentachloronitrobenzene	Lin2		0.0793		5190	5000	3.8	30.0
Phenanthrene	Ave	1.055	1.080		5120	5000	2.4	30.0
Anthracene	Ave	0.9833	1.066		5420	5000	8.4	30.0
Carbazole	Ave	0.8143	0.8703		5340	5000	6.9	30.0
Di-n-butyl phthalate	Ave	1.211	1.248		5150	5000	3.1	30.0
Pyrene	Ave	1.350	1.424		5270	5000	5.5	30.0
Benzidine	Ave	0.2939	0.3492		5940	5000	18.8	30.0
Fluoranthene	Ave	0.9548	0.9945		5210	5000	4.2	20.0
Butyl benzyl phthalate	Lin1		0.6605		4820	5000	-3.5	30.0
Bis(2-ethylhexyl) phthalate	Lin1		0.8021		4720	5000	-5.7	30.0
3,3'-Dichlorobenzidine	Lin1		0.5890		4420	5000	-11.6	30.0
Benzo[a]anthracene	Ave	0.8996	0.9270		5150	5000	3.0	30.0
Chrysene	Ave	0.8852	0.8779		4960	5000	-0.8	30.0
Di-n-octyl phthalate	Lin1		2.257		4920	5000	-1.6	20.0
Benzo[b]fluoranthene	Ave	1.278	1.403		5490	5000	9.8	30.0
Benzo[k]fluoranthene	Ave	1.187	1.288		5430	5000	8.5	30.0

FORM IV
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Westfield Job No.: 360-24251-1

SDG No.: OCRI-05

Lab File ID: B10316.D Lab Sample ID: MB 360-48462/1-A

Matrix: Solid Date Extracted: 09/01/2009 15:01

Instrument ID: Inst. B Date Analyzed: 09/15/2009 17:29

Level:(Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 360-48462/2-A	B10317.D	09/15/2009 18:03
	LCSD 360-48462/3-A	B10318.D	09/15/2009 18:37
OC-SB-433-5.0/7.0-XXX MSD	360-24251-4 MSD (c)	J02963.D	09/16/2009 00:51
OC-SB-433-0.0/1.0-XXX	360-24251-1 *	B10329.D	09/16/2009 00:54
OC-SB-433-5.0/7.0-XXX	360-24251-4	J02964.D	09/16/2009 01:20
OC-SB-433-5.0/7.0-XXX MS	360-24251-4 MS (c)	J02965.D	09/16/2009 01:50
OC-SB-433-5.0/7.0-DUP	360-24251-3 *	B10331.D	09/16/2009 02:03
OC-SB-439-0.0-1.0-XXX	360-24251-5	J02966.D	09/16/2009 02:20
OC-SB-439-8.0/10-XXX	360-24251-7	J02968.D	09/16/2009 03:19
OC-SB-440-0.0/1.0-XXX	360-24251-8	J02969.D	09/16/2009 03:48
OC-SB-440-6.0/8.0-XXX	360-24251-10	J02970.D	09/16/2009 04:18
OC-SB-438-5.0/7.0-XXX	360-24251-12	J02971.D	09/16/2009 04:47
OC-SB-441-0.0/1.0-XXX	360-24251-13	J02972.D	09/16/2009 05:17
OC-SB-441-8.0/10-XXX	360-24251-15	J02974.D	09/16/2009 06:15
OC-SB-446-0.0/1.0-XXX	360-24251-16 c	J02975.D	09/16/2009 06:44
OC-SB-446-5.0/7.0-DUP	360-24251-18	J02977.D	09/16/2009 07:43
OC-SB-433-0.0/1.0-XXX	360-24251-1		09/16/2009 20:09

benzoic acid R
benzaldehyde WS
2,4-DNP WS
* CCAL 360-48930

LCS 360-48462

WS { 3,3'-DCBZ 33/31
benzoic acid 22/20

All ND VFM { benzaldehyde 290/300
aniline 141

MB 360-48462
Di-n-butyl phthalate 73.3
TIC octadecane

ICAL + 48992
benzoic acid 0.0468
2,4-DNP 0.0426 0.5000
2-nitroaniline 0.0400
all ND VFM

CCAL + 360-48993
benzoic acid 0.0342
2,4-DNP 0.0328

SURR OK
MS/MSD (c)
3,3'-DCBZ 32/30
aniline 27/26
hexachlorocyclopentadiene 6/7
ND R
IS perylene-d12 2122
indeno[1,2,3-cd]pyrene
Dibenz(a,h)anthracene
benzo[g,h,i]perylene

FORM IV 8270C LL

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24251-1

SDG No.: OCRI-05

Matrix: Solid Level: Low Lab File ID: B10317.D

Lab ID: LCS 360-48462/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
1,1'-Biphenyl	333	300	90	40-140	
1,2,4,5-Tetrachlorobenzene	333	296	89	40-140	
1,2,4-Trichlorobenzene	333	268	80	40-140	
1,2-Dichlorobenzene	333	226	68	40-140	
1,3-Dichlorobenzene	333	207	62	40-140	
1,4-Dichlorobenzene	333	208	62	40-140	
1-Methylnaphthalene	333	298	89	40-140	
2,3,4,6-Tetrachlorophenol	333	254	76	40-140	
2,4-Dimethylphenol	333	376	113	30-130	
2-Chlorophenol	333	244	73	30-130	
2,4-Dichlorophenol	333	339	102	30-130	
2,4,6-Trichlorophenol	333	301	90	30-130	
2-Methylphenol	333	294	88	30-130	
2,4,5-Trichlorophenol	333	317	95	30-130	
2-Methylnaphthalene	333	303	91	40-140	
3 & 4 Methylphenol	333	263	79	30-130	
2-Nitroaniline	333	307	92	40-140	
3,3'-Dichlorobenzidine	333	109	33	40-140	*
2-Chloronaphthalene	333	236	71	40-140	
2,6-Dinitrotoluene	333	287	86	40-140	
4-Chloro-3-methylphenol	333	367	110	30-130	
2-Nitrophenol	333	353	106	30-130	
4-Chloroaniline	333	292	88	40-140	
3-Nitroaniline	333	276	83	40-140	
2,4-Dinitrophenol	333	151	45	30-130	
2,4-Dinitrotoluene	333	277	83	40-140	
Acenaphthene	333	336	101	40-140	
Acenaphthylene	333	302	91	40-140	
4-Nitrophenol	333	293	88	30-130	
Aniline	333	408	122	40-140	
4-Nitroaniline	333	306	92	40-140	
Azobenzene	333	321	96	40-140	
4-Bromophenyl phenyl ether	333	305	92	40-140	
4-Chlorophenyl phenyl ether	333	309	93	40-140	
4,6-Dinitro-2-methylphenol	333	232	69	30-130	
Benzoic acid	333	72.4 J	22	30-130	*
Anthracene	333	375	112	40-140	
Benzyl alcohol	333	254	76	30-130	
Bis(2-chloroethoxy)methane	333	295	88	40-140	
Bis(2-chloroethyl)ether	333	290	87	40-140	
Butyl benzyl phthalate	333	309	93	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24251-1

SDG No.: OCRI-05

Matrix: Solid Level: Low Lab File ID: B10317.D

Lab ID: LCS 360-48462/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
Benzo[a]anthracene	333	367	110	40-140	
Caprolactam	333	425	128	40-140	
Chrysene	333	354	106	40-140	
Benzo[b]fluoranthene	333	323	97	40-140	
Benzo[k]fluoranthene	333	348	104	40-140	
Benzo[a]pyrene	333	334	100	40-140	
Dibenzofuran	333	296	89	40-140	
Dibenz(a,h)anthracene	333	371	111	40-140	
Diethyl phthalate	333	331	99	40-140	
Benzo[g,h,i]perylene	333	379	114	40-140	
Dimethyl phthalate	333	305	92	40-140	
Acetophenone	333	246	74	40-140	
Di-n-butyl phthalate	333	398	119	40-140	
Bis(2-ethylhexyl) phthalate	333	324	97	40-140	
Di-n-octyl phthalate	333	299	90	40-140	
Fluoranthene	333	364	109	40-140	
Fluorene	333	368	110	40-140	
Hexachlorobenzene	333	310	93	40-140	
Hexachlorobutadiene	333	271	81	40-140	
2,2'-oxybis[1-chloropropane]	333	239	72	40-140	
Hexachlorocyclopentadiene	333	257	77	40-140	
Hexachloroethane	333	218	65	40-140	
Indeno[1,2,3-cd]pyrene	333	371	111	40-140	
Isophorone	333	275	83	40-140	
Naphthalene	333	271	81	40-140	
Nitrobenzene	333	294	88	40-140	
Atrazine	333	383	115	40-140	
Benzaldehyde	333	967	290	40-140	*
N-Nitrosodimethylamine	333	240	72	40-140	
Carbazole	333	357	107	40-140	
N-Nitrosodi-n-propylamine	333	283	85	40-140	
Benzophenone	333	330	99	40-140	
N-Nitrosodiphenylamine	333	227	68	40-140	
Diphenyl oxide	333	309	93	40-140	
Pentachlorophenol	333	224	67	30-130	
Phenanthrene	333	330	99	40-140	
Phenol	333	265	80	30-130	
Pyrene	333	315	95	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24251-1

SDG No.: OCRI-05

Matrix: Solid Level: Low Lab File ID: B10318.D

Lab ID: LCSD 360-48462/3-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCSD CONCENTRATION (ug/Kg)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1'-Biphenyl	333	305	91	2	30	40-140	
1,2,4,5-Tetrachlorobenzene	333	286	86	3	30	40-140	
1,2,4-Trichlorobenzene	333	255	76	5	30	40-140	
1,2-Dichlorobenzene	333	230	69	1	30	40-140	
1,3-Dichlorobenzene	333	216	65	4	30	40-140	
1,4-Dichlorobenzene	333	211	63	1	30	40-140	
1-Methylnaphthalene	333	292	88	2	30	40-140	
2,3,4,6-Tetrachlorophenol	333	259	78	2	30	40-140	
2,4-Dimethylphenol	333	369	111	2	30	30-130	
2-Chlorophenol	333	248	74	2	30	30-130	
2,4-Dichlorophenol	333	334	100	1	30	30-130	
2,4,6-Trichlorophenol	333	315	94	4	30	30-130	
2-Methylphenol	333	300	90	2	30	30-130	
2,4,5-Trichlorophenol	333	309	93	2	30	30-130	
2-Methylnaphthalene	333	294	88	3	30	40-140	
3 & 4 Methylphenol	333	274	82	4	30	30-130	
2-Nitroaniline	333	314	94	2	30	40-140	
3,3'-Dichlorobenzidine	333	115	34	5	30	40-140	*
2-Chloronaphthalene	333	239	72	2	30	40-140	
2,6-Dinitrotoluene	333	302	91	5	30	40-140	
4-Chloro-3-methylphenol	333	354	106	4	30	30-130	
2-Nitrophenol	333	342	102	3	30	30-130	
4-Chloroaniline	333	294	88	0	30	40-140	
3-Nitroaniline	333	292	88	6	30	40-140	
2,4-Dinitrophenol	333	126	38	18	30	30-130	
2,4-Dinitrotoluene	333	289	87	4	30	40-140	
Acenaphthene	333	340	102	1	30	40-140	
Acenaphthylene	333	308	92	2	30	40-140	
4-Nitrophenol	333	281	84	4	30	30-130	
Aniline	333	470	141	14	30	40-140	*
4-Nitroaniline	333	318	95	4	30	40-140	
Azobenzene	333	335	100	4	30	40-140	
4-Bromophenyl phenyl ether	333	321	96	5	30	40-140	
4-Chlorophenyl phenyl ether	333	317	95	3	30	40-140	
4,6-Dinitro-2-methylphenol	333	211	63	9	30	30-130	
Benzoic acid	333	66.5 J	20	9	30	30-130	*
Anthracene	333	388	116	3	30	40-140	
Benzyl alcohol	333	267	80	5	30	30-130	
Bis(2-chloroethoxy)methane	333	288	86	2	30	40-140	
Bis(2-chloroethyl)ether	333	302	91	4	30	40-140	
Butyl benzyl phthalate	333	315	94	2	30	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24251-1

SDG No.: OCRI-05

Matrix: Solid Level: Low Lab File ID: B10318.D

Lab ID: LCSD 360-48462/3-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCSD CONCENTRATION (ug/Kg)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Benzo[a]anthracene	333	383	115	4	30	40-140	
Caprolactam	333	404	121	5	30	40-140	
Chrysene	333	365	110	3	30	40-140	
Benzo[b]fluoranthene	333	357	107	10	30	40-140	
Benzo[k]fluoranthene	333	374	112	7	30	40-140	
Benzo[a]pyrene	333	356	107	6	30	40-140	
Dibenzofuran	333	304	91	2	30	40-140	
Dibenz(a,h)anthracene	333	398	119	7	30	40-140	
Diethyl phthalate	333	341	102	3	30	40-140	
Benzo[g,h,i]perylene	333	402	121	6	30	40-140	
Dimethyl phthalate	333	316	95	3	30	40-140	
Acetophenone	333	258	77	5	30	40-140	
Di-n-butyl phthalate	333	411	123	3	30	40-140	
Bis(2-ethylhexyl) phthalate	333	327	98	1	30	40-140	
Di-n-octyl phthalate	333	318	95	6	30	40-140	
Fluoranthene	333	378	114	4	30	40-140	
Fluorene	333	378	114	3	30	40-140	
Hexachlorobenzene	333	322	97	4	30	40-140	
Hexachlorobutadiene	333	264	79	3	30	40-140	
2,2'-oxybis[1-chloropropane]	333	248	74	4	30	40-140	
Hexachlorocyclopentadiene	333	259	78	1	30	40-140	
Hexachloroethane	333	222	67	2	30	40-140	
Indeno[1,2,3-cd]pyrene	333	394	118	6	30	40-140	
Isophorone	333	272	81	1	30	40-140	
Naphthalene	333	265	79	2	30	40-140	
Nitrobenzene	333	289	87	2	30	40-140	
Atrazine	333	394	118	3	30	40-140	
Benzaldehyde	333	1030	308	6	30	40-140	*
N-Nitrosodimethylamine	333	247	74	3	30	40-140	
Carbazole	333	371	111	4	30	40-140	
N-Nitrosodi-n-propylamine	333	291	87	3	30	40-140	
Benzophenone	333	344	103	4	30	40-140	
N-Nitrosodiphenylamine	333	238	71	4	30	40-140	
Diphenyl oxide	333	300	90	3	30	40-140	
Pentachlorophenol	333	230	69	2	30	30-130	
Phenanthrene	333	344	103	4	30	40-140	
Phenol	333	275	83	4	30	30-130	
Pyrene	333	327	98	4	30	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Westfield Job No.: 360-24251-1

SDG No.: OCRI-05

Instrument ID: Inst. J Start Date: 09/15/2009 16:58

Analysis Batch Number: 48992 End Date: 09/15/2009 23:22

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 360-48992/1		09/15/2009 16:58	1	J02947.D	Rtx-5ms SIL with guard column 0.25(um)
STD5 360-48992/2 ICIS		09/15/2009 17:27	1	J02948.D	Rtx-5ms SIL with guard column 0.25(um)
STD01 360-48992/3 IC		09/15/2009 17:57	1	J02949.D	Rtx-5ms SIL with guard column 0.25(um)
STD025 360-48992/4 IC		09/15/2009 18:26	1	J02950.D	Rtx-5ms SIL with guard column 0.25(um)
STD050 360-48992/5 IC		09/15/2009 18:55	1	J02951.D	Rtx-5ms SIL with guard column 0.25(um)
STD1 360-48992/6 IC		09/15/2009 19:25	1	J02952.D	Rtx-5ms SIL with guard column 0.25(um)
STD25 360-48992/7 IC		09/15/2009 19:54	1	J02953.D	Rtx-5ms SIL with guard column 0.25(um)
STD8 360-48992/8 IC		09/15/2009 20:24	1	J02954.D	Rtx-5ms SIL with guard column 0.25(um)
STD10 360-48992/9 IC		09/15/2009 20:53	1	J02955.D	Rtx-5ms SIL with guard column 0.25(um)
STD20 360-48992/10 IC		09/15/2009 21:23	1	J02956.D	Rtx-5ms SIL with guard column 0.25(um)
ICV 360-48992/11		09/15/2009 21:52	1		Rtx-5ms SIL with guard column 0.25(um)
MDLV 360-48992/12		09/15/2009 22:22	1		Rtx-5ms SIL with guard column 0.25(um)
MDLV 360-48992/13		09/15/2009 22:52	1		Rtx-5ms SIL with guard column 0.25(um)
MDLV 360-48992/14		09/15/2009 23:22	1		Rtx-5ms SIL with guard column 0.25(um)

RRT r²

benzoic acid 0.0469 —

2,4 - DNP 0.0496 0.9960

2 - nitroaniline 0.0460 —

8270C LL

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Westfield Job No.: 360-24251-1 Analy Batch No.: 48992

SDG No.: OCRI-05

Instrument ID: Inst. J GC Column: Rtx-5ms ID: 0.25(um) Heated Purge: (Y/N) N

Calibration Start Date: 09/15/2009 17:27 Calibration End Date: 09/15/2009 21:23 Calibration ID: 4578

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD01 360-48992/3	J02949.D
Level 2	STD025 360-48992/4	J02950.D
Level 3	STD050 360-48992/5	J02951.D
Level 4	STD1 360-48992/6	J02952.D
Level 5	STD25 360-48992/7	J02953.D
Level 6	STD5 360-48992/2	J02948.D
Level 7	STD8 360-48992/8	J02954.D
Level 8	STD10 360-48992/9	J02955.D
Level 9	STD20 360-48992/10	J02956.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
1,4-Dioxane	0.5933 0.2158	0.3435 0.2027	0.3305 0.2820	0.2815 0.2723	0.2561	Qua	0.0355	0.2148	0.0029						0.9910		0.9900
Pyridine	+++++ 0.5052	0.3703 0.5730	0.4868 0.6863	0.5394 0.6674	0.5568	Lin1	-0.096	0.6425							0.9910		0.9900
N-Nitrosodimethylamine	0.2993 0.2777	0.3452 0.2663	0.3404 0.4115	0.3360 0.3721	0.3210	Ave		0.3299				14.0		15.0			
Benzoic acid	+++++ 0.0195	+++++ 0.0519	0.0078 0.0738	0.0076 0.1529	0.0141	Qua	0.0020	-0.013 (0.046)	0.0083						0.9990		0.9900
Aniline	0.8352 0.8249	0.8488 0.7969	0.9310 1.0870	0.9416 1.0625	0.9389	Ave		0.9185				11.0		15.0			
Phenol	0.9338 0.8108	0.9433 0.7781	1.0224 1.0619	0.9945 1.0146	0.9253	Ave		0.9427				10.0		15.0			
Bis(2-chloroethyl)ether	0.7376 0.5912	0.7135 0.5508	0.7348 0.7436	0.7374 0.7267	0.6683	Ave		0.6893				10.0		15.0			
2-Chlorophenol	0.6174 0.5862	0.6396 0.5656	0.7143 0.7719	0.7089 0.7548	0.6583	Ave		0.6685				11.0		15.0			
2,4-Dinitrophenol	+++++ 0.0361	+++++ 0.0576	+++++ 0.0697	0.0094 0.0963	0.0230	Lin	-0.340	0.1104 (0.042)			0.0500				0.9860	*	0.9900
1,4-Dichlorobenzene	0.8485 0.6570	0.8324 0.6187	0.8734 0.8355	0.8207 0.7970	0.7526	Ave		0.7818				11.0		15.0			
1,3-Dichlorobenzene	0.8604 0.6763	0.8947 0.6371	0.8764 0.8588	0.8372 0.8195	0.7702	Ave		0.8034				11.0		15.0			
Benzyl alcohol	0.4531 0.4731	0.3964 0.4670	0.4893 0.6304	0.5199 0.6191	0.5216	Ave		0.5078				15.0		15.0			
1,2-Dichlorobenzene	0.8778 0.6173	0.7972 0.5819	0.8343 0.7796	0.7941 0.7363	0.7063	Ave		0.7472				13.0		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Westfield Job No.: 360-24251-1 Analy Batch No.: 48992

SDG No.: OCRI-05

Instrument ID: Inst. J GC Column: Rtx-5ms ID: 0.25(um) Heated Purge: (Y/N) N

Calibration Start Date: 09/15/2009 17:27 Calibration End Date: 09/15/2009 21:23 Calibration ID: 4578

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
2-Methylphenol	0.5251 0.5279	0.5683 0.5064	0.6180 0.6858	0.6187 0.6674	0.5923	Ave		0.5900				11.0		15.0			
2,2'-oxybis[1-chloropropane]	0.7307 0.5615	0.7283 0.5441	0.7549 0.7474	0.7164 0.7355	0.6638	Ave		0.6869				12.0		15.0			
Acetophenone	0.8083 0.7919	0.8416 0.7596	0.9342 1.0349	0.9438 1.0147	0.8908	Ave		0.8911				11.0		15.0			
Benzaldehyde	0.8083 0.7919	0.8416 0.7596	0.9342 1.0349	0.9438 1.0147	0.8908	Ave		0.8911				11.0		15.0			
N-Nitrosodi-n-propylamine	0.3968 0.4096	0.4002 0.3909	0.4545 0.5383	0.4639 0.5229	0.4490	Ave		0.4473			0.0500	12.0		15.0			
3 & 4 Methylphenol	0.5193 0.5635	0.5757 0.5336	0.6515 0.7190	0.6557 0.7085	0.6160	Ave		0.6159				12.0		15.0			
Hexachloroethane	0.3043 0.2429	0.2897 0.2312	0.2914 0.3135	0.3007 0.3106	0.2678	Ave		0.2836				10.0		15.0			
Nitrobenzene	0.2553 0.3224	0.2766 0.3382	0.3190 0.3468	0.3310 0.3309	0.3205	Ave		0.3156				9.5		15.0			
Isophorone	0.3598 0.5421	0.4183 0.5914	0.4806 0.6124	0.5113 0.5800	0.5502	Lin2	-0.023	0.5624							0.9950		0.9900
2-Nitrophenol	0.0795 0.1356	0.0924 0.1537	0.1067 0.1643	0.1215 0.1595	0.1344	Lin1	-0.015	0.1566							0.9960		0.9900
4-Nitrophenol	+++++ 0.1015	+++++ 0.1298	0.0408 0.1399	0.0571 0.1722	0.0971	Qua	-0.056	0.1089	0.0033		0.0500				0.9990		0.9900
2,4-Dimethylphenol	0.1832 0.2660	0.2210 0.2595	0.2476 0.2684	0.2425 0.2671	0.2396	Ave		0.2439				11.0		15.0			
Bis(2-chloroethoxy)methane	0.3161 0.3277	0.3157 0.3503	0.3369 0.3590	0.3436 0.3348	0.3315	Ave		0.3351				4.3		15.0			
2,4-Dichlorophenol	0.1468 0.2137	0.1659 0.2341	0.1942 0.2427	0.2036 0.2313	0.2168	Lin2	-0.009	0.2229							0.9950		0.9900
Hexachlorocyclopentadiene	+++++ 0.0952	0.0338 0.1260	0.0527 0.1419	0.0751 0.1350	0.0960	Lin	-0.078	0.1391			0.0500				0.9940		0.9900
1,2,4-Trichlorobenzene	0.2641 0.2553	0.2836 0.2647	0.2848 0.2734	0.2772 0.2504	0.2621	Ave		0.2684				4.5		15.0			
4,6-Dinitro-2-methylphenol	+++++ 0.0485	+++++ 0.0688	0.0126 0.0823	0.0259 0.0928	0.0428	Qua	-0.077	0.0703	0.0013						0.9960		0.9900
Naphthalene	0.9284 0.8727	0.9379 0.9165	0.9752 0.9327	0.9589 0.8349	0.8949	Ave		0.9169				4.7		15.0			
Alpha-Terpineol	0.1468 0.1891	0.1465 0.2081	0.1766 0.2132	0.1880 0.2017	0.1906	Ave		0.1845				13.0		15.0			
4-Chloroaniline	0.2245 0.3397	0.2911 0.3552	0.3074 0.3758	0.3264 0.3396	0.3368	Ave		0.3218				14.0		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Westfield Job No.: 360-24251-1 Analy Batch No.: 48992

SDG No.: OCRI-05

Instrument ID: Inst. J GC Column: Rtx-5ms ID: 0.25(um) Heated Purge: (Y/N) N

Calibration Start Date: 09/15/2009 17:27 Calibration End Date: 09/15/2009 21:23 Calibration ID: 4578

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
Hexachlorobutadiene	0.1299 0.1367	0.1542 0.1424	0.1513 0.1458	0.1491 0.1343	0.1395	Ave		0.1426				5.7		15.0			
Caprolactam	0.0589 0.0832	0.0422 0.0986	0.0551 0.1050	0.0584 0.1026	0.0805	Lin1	-0.012	0.0996							0.9910		0.9900
Pentachlorophenol	+++++ 0.0463	+++++ 0.0718	0.0032 0.0770	0.0167 0.0897	0.0408	Qua	-0.082	0.0704	0.0012						0.9970		0.9900
4-Chloro-3-methylphenol	0.1585 0.2470	0.1751 0.2668	0.2115 0.2737	0.2240 0.2700	0.2391	Lin2	-0.011	0.2516							0.9920		0.9900
2-Methylnaphthalene	0.5451 0.5455	0.5665 0.5686	0.5887 0.5935	0.5942 0.5428	0.5714	Ave		0.5685				3.6		15.0			
1-Methylnaphthalene	0.5603 0.5514	0.5607 0.5867	0.6026 0.5908	0.6112 0.5466	0.5826	Ave		0.5770				4.0		15.0			
1,2,4,5-Tetrachlorobenzene	0.2260 0.2179	0.2346 0.2294	0.2447 0.2335	0.2462 0.2174	0.2360	Ave		0.2318				4.4		15.0			
2,4,6-Trichlorophenol	0.1529 0.2646	0.1934 0.2954	0.2222 0.3055	0.2384 0.2999	0.2778	Lin2	-0.014	0.2787							0.9910		0.9900
2,4,5-Trichlorophenol	0.1678 0.2780	0.1815 0.3099	0.2297 0.3145	0.2516 0.3147	0.2851	Lin1	-0.026	0.3100							0.9980		0.9900
1,1'-Biphenyl	1.4623 1.2874	1.4649 1.3632	1.5528 1.3855	1.4602 1.2525	1.4184	Ave		1.4053				6.7		15.0			
2-Chloronaphthalene	1.3932 1.1655	1.3830 1.2170	1.4564 1.3928	1.4044 1.2752	1.3636	Ave		1.3390				7.3		15.0			
Phenyl ether	0.3886 0.3607	0.3877 0.3800	0.4192 0.3926	0.3934 0.3572	0.3705	Ave		0.3833				5.0		15.0			
4-Nitroaniline	0.1649 0.3187	0.2019 0.3573	0.2436 0.3728	0.2759 0.3809	0.3320	Lin1	-0.037	0.3680							0.9960		0.9900
Dimethyl phthalate	1.0906 1.1506	1.1786 1.2278	1.2868 1.2418	1.2487 1.1874	1.2401	Ave		1.2058				5.0		15.0			
2,4-Dinitrotoluene	0.1402 0.2634	0.1772 0.2824	0.2294 0.2927	0.2585 0.2862	0.2834	Lin2	-0.015	0.2766							0.9940		0.9900
2-Nitroaniline	+++++ 0.0429	0.0508 0.0424	0.0514 0.0429	0.0491 0.0403	0.0483	Ave		0.0460				9.4		15.0			
Acenaphthylene	1.3121 1.5567	1.5054 1.6525	1.6619 1.6897	1.6485 1.5420	1.6697	Ave		1.5821				7.6		15.0			
Acenaphthene	1.1585 1.0022	1.1589 1.0582	1.1647 1.0904	1.1322 1.0145	1.0943	Ave		1.0971				5.7		15.0			
Dibenzofuran	1.5515 1.3672	1.5857 1.4438	1.6047 1.4672	1.5651 1.3447	1.5398	Ave		1.4966				6.4		15.0			
2,6-Dinitrotoluene	0.1275 0.3126	0.1740 0.3459	0.2181 0.3669	0.2710 0.3580	0.3333	Lin1	-0.038	0.3542							0.9970		0.9900

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Westfield Job No.: 360-24251-1

SDG No.: OCRI-05

Lab Sample ID: CCV 360-48993/2 Calibration Date: 09/16/2009 00:21

Instrument ID: Inst. J Calib Start Date: 09/15/2009 17:27

GC Column: Rtx-5ms ID: 0.25(um) Calib End Date: 09/15/2009 21:23

Lab File ID: J02962.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Qua		0.2212		4690	5000	-6.2	30.0
Pyridine	Lin1		0.5238		4230	5000	-15.5	30.0
N-Nitrosodimethylamine	Ave	0.3299	0.3228		4890	5000	-2.2	30.0
Aniline	Ave	0.9185	0.8672		4720	5000	-5.6	30.0
Phenol	Ave	0.9427	0.8352		4430	5000	-11.4	20.0
Bis(2-chloroethyl)ether	Ave	0.6893	0.6018		4370	5000	-12.7	30.0
2-Chlorophenol	Ave	0.6685	0.6023		4500	5000	-9.9	30.0
1,4-Dichlorobenzene	Ave	0.7818	0.6728		4300	5000	-13.9	20.0
1,3-Dichlorobenzene	Ave	0.8034	0.6938		4320	5000	-13.6	30.0
Benzyl alcohol	Ave	0.5078	0.4567		4500	5000	-10.0	30.0
1,2-Dichlorobenzene	Ave	0.7472	0.6341		4240	5000	-15.1	30.0
2-Methylphenol	Ave	0.5900	0.5377		4560	5000	-8.9	30.0
2,2'-oxybis[1-chloropropane]	Ave	0.6869	0.6026		4390	5000	-12.3	30.0
Acetophenone	Ave	0.8911	0.8181		4590	5000	-8.2	30.0
Benzaldehyde	Ave	0.8911	0.8181		4590	5000	-8.2	30.0
N-Nitrosodi-n-propylamine	Ave	0.4473	0.4163	0.0500	4650	5000	-6.9	30.0
3 & 4 Methylphenol	Ave	0.6159	0.5697		4620	5000	-7.5	30.0
Hexachloroethane	Ave	0.2836	0.2412		4250	5000	-14.9	30.0
Nitrobenzene	Ave	0.3156	0.3172		5030	5000	0.5	30.0
Isophorone	Lin2		0.5614		5030	5000	0.6	30.0
2-Nitrophenol	Lin1		0.1421		4630	5000	-7.4	20.0
2,4-Dimethylphenol	Ave	0.2439	0.2554		5240	5000	4.7	30.0
Bis(2-chloroethoxy)methane	Ave	0.3351	0.3296		4920	5000	-1.6	30.0
Benzoic acid	Qua		0.0342		5380	5000	7.6	30.0
2,4-Dichlorophenol	Lin2		0.2191		4950	5000	-0.9	20.0
1,2,4-Trichlorobenzene	Ave	0.2684	0.2545		4740	5000	-5.2	30.0
Naphthalene	Ave	0.9169	0.8672		4730	5000	-5.4	30.0
Alpha-Terpineol	Ave	0.1845	0.1947		5280	5000	5.5	30.0
4-Chloroaniline	Ave	0.3218	0.3426		5320	5000	6.5	30.0
Hexachlorobutadiene	Ave	0.1426	0.1359		4770	5000	-4.7	20.0
Caprolactam	Lin1		0.0901		4640	5000	-7.2	30.0
4-Chloro-3-methylphenol	Lin2		0.2394		4800	5000	-4.0	20.0
2-Methylnaphthalene	Ave	0.5685	0.5439		4780	5000	-4.3	30.0
1-Methylnaphthalene	Ave	0.5770	0.5518		4780	5000	-4.4	30.0
Hexachlorocyclopentadiene	Lin		0.1003	0.0500	4160	5000	-16.8	30.0
1,2,4,5-Tetrachlorobenzene	Ave	0.2318	0.2204		4750	5000	-4.9	30.0
2,4,6-Trichlorophenol	Lin2		0.2633		4780	5000	-4.5	20.0
2,4,5-Trichlorophenol	Lin1		0.2797		4590	5000	-8.1	30.0
1,1'-Biphenyl	Ave	1.405	1.317		4680	5000	-6.3	30.0
2-Chloronaphthalene	Ave	1.339	1.290		4820	5000	-3.7	30.0
Phenyl ether	Ave	0.3833	0.3639		4750	5000	-5.1	30.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Westfield Job No.: 360-24251-1

SDG No.: OCRI-05

Lab Sample ID: CCV 360-48993/2 Calibration Date: 09/16/2009 00:21

Instrument ID: Inst. J Calib Start Date: 09/15/2009 17:27

GC Column: Rtx-5ms ID: 0.25(um) Calib End Date: 09/15/2009 21:23

Lab File ID: J02962.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Nitroaniline	Lin1		0.3390		4710	5000	-5.9	30.0
Dimethyl phthalate	Ave	1.206	1.192		4940	5000	-1.1	30.0
2,4-Dinitrotoluene	Lin2		0.2678		4900	5000	-2.1	30.0
Acenaphthylene	Ave	1.582	1.568		4950	5000	-0.9	30.0
Acenaphthene	Ave	1.097	1.038		4730	5000	-5.4	20.0
2,4-Dinitrophenol	Lin		0.0328*	0.0500	4570	5000	-8.7	30.0
4-Nitrophenol	Qua		0.0925	0.0500	4220	5000	-15.7	30.0
Dibenzofuran	Ave	1.497	1.402		4680	5000	-6.3	30.0
2,6-Dinitrotoluene	Lin1		0.3326		4800	5000	-3.9	30.0
2,3,4,6-Tetrachlorophenol	Lin1		0.1910		4320	5000	-13.6	30.0
Diethyl phthalate	Ave	1.234	1.194		4840	5000	-3.2	30.0
Fluorene	Ave	1.171	1.107		4730	5000	-5.4	30.0
4-Chlorophenyl phenyl ether	Ave	0.5655	0.5265		4650	5000	-6.9	30.0
3-Nitroaniline	Lin1		0.2362		4680	5000	-6.5	30.0
4,6-Dinitro-2-methylphenol	Qua		0.0503		4320	5000	-13.6	30.0
Diphenylamine	Ave	0.5876	0.5855		4980	5000	-0.4	30.0
N-Nitrosodiphenylamine	Ave	0.5876	0.5855		4980	5000	-0.4	20.0
1,2-Diphenylhydrazine	Ave	1.165	1.184		5080	5000	1.6	30.0
Azobenzene	Ave	1.165	1.184		5080	5000	1.6	30.0
Benzophenone	Ave	0.7185	0.7392		5140	5000	2.9	30.0
2-Nitroaniline	Ave	0.0460	0.0406		4420	5000	-11.7	30.0
4-Bromophenyl phenyl ether	Ave	0.1786	0.1727		4840	5000	-3.3	30.0
Hexachlorobenzene	Ave	0.1906	0.1761		4620	5000	-7.6	30.0
Atrazine	Lin2		0.1754		4850	5000	-3.1	30.0
Pentachlorophenol	Qua		0.0483		4290	5000	-14.3	20.0
Pentachloronitrobenzene	Lin1		0.0744		4510	5000	-9.7	30.0
Phenanthrene	Ave	1.017	0.9495		4670	5000	-6.7	30.0
Anthracene	Ave	0.8971	0.9023		5030	5000	0.6	30.0
Carbazole	Ave	0.7715	0.7661		4970	5000	-0.7	30.0
Di-n-butyl phthalate	Ave	1.086	1.114		5130	5000	2.6	30.0
Pyrene	Ave	1.155	1.153		4990	5000	-0.2	30.0
Benzidine	Lin		0.5116		4860	5000	-2.8	30.0
Fluoranthene	Ave	0.8987	0.8646		4810	5000	-3.8	20.0
Butyl benzyl phthalate	Lin1		0.5612		4700	5000	-6.0	30.0
3,3'-Dichlorobenzidine	Lin1		0.6044		4820	5000	-3.6	30.0
Benzo[a]anthracene	Ave	0.8540	0.8351		4890	5000	-2.2	30.0
Chrysene	Ave	0.9253	0.8341		4510	5000	-9.9	30.0
Bis(2-ethylhexyl) phthalate	Lin1		0.8216		4690	5000	-6.2	30.0
Di-n-octyl phthalate	Qua		1.515		5000	5000	0.1	20.0
Benzo[b]fluoranthene	Ave	1.142	1.046		4580	5000	-8.4	30.0
Benzo[k]fluoranthene	Ave	1.097	1.066		4860	5000	-2.8	30.0

FORM III
GC/MS SEMI VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24251-1

SDG No.: OCRI-05

Matrix: Solid Level: Low Lab File ID: J02965.D

Lab ID: 360-24251-4 MS Client ID: OC-SB-433-5.0/7.0-XXX MS

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	QC LIMITS REC	#
1,1'-Biphenyl	381	ND	255	67	40-140	
1,2,4,5-Tetrachlorobenzene	381	ND	235	62	40-140	
1,2,4-Trichlorobenzene	381	ND	216	57	40-140	
1,2-Dichlorobenzene	381	ND	185	49	40-140	
1,3-Dichlorobenzene	381	ND	181	47	40-140	
1,4-Dichlorobenzene	381	ND	178	47	40-140	
1-Methylnaphthalene	381	ND	246	65	40-140	
2,2'-oxybis[1-chloropropane]	381	ND	211	55	40-140	
2,3,4,6-Tetrachlorophenol	381	ND	252	66	40-140	
2,4,5-Trichlorophenol	381	ND	273	72	30-130	
2,4,6-Trichlorophenol	381	ND	302	79	30-130	
2,4-Dichlorophenol	381	ND	266	70	30-130	
2,4-Dimethylphenol	381	ND	315	83	30-130	
2,4-Dinitrophenol	381	ND	207	54	30-130	
2,4-Dinitrotoluene	381	ND	260	68	40-140	
2,6-Dinitrotoluene	381	ND	265	69	40-140	
2-Chloronaphthalene	381	ND	192	50	40-140	
2-Chlorophenol	381	ND	217	57	30-130	
2-Methylnaphthalene	381	ND	249	65	40-140	
2-Methylphenol	381	ND	234	61	30-130	
2-Nitroaniline	381	ND	226	59	40-140	
2-Nitrophenol	381	ND	233	61	30-130	
3 & 4 Methylphenol	381	ND	244	64	30-130	
3,3'-Dichlorobenzidine	381	ND	121	(32)	40-140	F
3-Nitroaniline	381	ND	270	71	40-140	
4,6-Dinitro-2-methylphenol	381	ND	244	64	30-130	
4-Bromophenyl phenyl ether	381	ND	258	68	40-140	
4-Chloro-3-methylphenol	381	ND	272	71	30-130	
4-Chloroaniline	381	ND	228	60	40-140	
4-Chlorophenyl phenyl ether	381	ND	251	66	40-140	
4-Nitroaniline	381	ND	273	71	40-140	
4-Nitrophenol	381	ND	277	73	30-130	
Acenaphthene	381	ND	284	74	40-140	
Acenaphthylene	381	ND	266	70	40-140	
Acetophenone	381	ND	218	57	40-140	
Aniline	381	ND	103	(27)	40-140	F
Anthracene	381	ND	330	86	40-140	
Atrazine	381	ND	295	77	40-140	
Azobenzene	381	ND	272	71	40-140	
Benzaldehyde	381	ND	218	57	40-140	
Benzo[a]anthracene	381	ND	337	88	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24251-1

SDG No.: OCRI-05

Matrix: Solid Level: Low Lab File ID: J02965.D

Lab ID: 360-24251-4 MS Client ID: OC-SB-433-5.0/7.0-XXX MS

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	QC LIMITS REC	#
Benzo[a]pyrene	381	ND	303	79	40-140	
Benzo[b]fluoranthene	381	ND	278	73	40-140	
Benzo[g,h,i]perylene	381	ND	335	88	40-140	
Benzo[k]fluoranthene	381	ND	292	76	40-140	
Benzoic acid	381	ND	230	60	30-130	
Benzophenone	381	ND	287	75	40-140	
Benzyl alcohol	381	ND	213	56	30-130	
Bis(2-chloroethoxy)methane	381	ND	246	64	40-140	
Bis(2-chloroethyl)ether	381	ND	195	51	40-140	
Bis(2-ethylhexyl) phthalate	381	ND	276	72	40-140	
Butyl benzyl phthalate	381	ND	284	74	40-140	
Caprolactam	381	ND	268	70	40-140	
Carbazole	381	ND	297	78	40-140	
Chrysene	381	ND	287	75	40-140	
Dibenz(a,h)anthracene	381	ND	363	95	40-140	
Dibenzofuran	381	ND	252	66	40-140	
Diethyl phthalate	381	ND	268	70	40-140	
Dimethyl phthalate	381	ND	267	70	40-140	
Di-n-butyl phthalate	381	ND	297	78	40-140	
Di-n-octyl phthalate	381	21 J	282	69	40-140	
Diphenyl oxide	381	ND	247	65	40-140	
Fluoranthene	381	ND	320	84	40-140	
Fluorene	381	ND	305	80	40-140	
Hexachlorobenzene	381	ND	254	67	40-140	
Hexachlorobutadiene	381	ND	215	56	40-140	
Hexachlorocyclopentadiene	381	ND	24.0 J	6	40-140	F
Hexachloroethane	381	ND	176	46	40-140	
Indeno[1,2,3-cd]pyrene	381	ND	362	95	40-140	
Isophorone	381	ND	213	56	40-140	
Naphthalene	381	ND	230	60	40-140	
Nitrobenzene	381	ND	241	63	40-140	
N-Nitrosodimethylamine	381	ND	232	61	40-140	
N-Nitrosodi-n-propylamine	381	ND	232	61	40-140	
N-Nitrosodiphenylamine	381	ND	201	53	40-140	
Pentachlorophenol	381	ND	289	76	30-130	
Phenanthrene	381	ND	279	73	40-140	
Phenol	381	ND	208	55	30-130	
Pyrene	381	ND	278	73	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24251-1

SDG No.: OCRI-05

Matrix: Solid Level: Low Lab File ID: J02963.D

Lab ID: 360-24251-4 MSD Client ID: OC-SB-433-5.0/7.0-XXX MSD

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1'-Biphenyl	378	262	69	3	30	40-140	
1,2,4,5-Tetrachlorobenzene	378	239	63	1	30	40-140	
1,2,4-Trichlorobenzene	378	221	58	2	30	40-140	
1,2-Dichlorobenzene	378	186	49	0	30	40-140	
1,3-Dichlorobenzene	378	184	49	2	30	40-140	
1,4-Dichlorobenzene	378	180	48	1	30	40-140	
1-Methylnaphthalene	378	247	65	0	30	40-140	
2,2'-oxybis[1-chloropropane]	378	209	55	1	30	40-140	
2,3,4,6-Tetrachlorophenol	378	261	69	3	30	40-140	
2,4,5-Trichlorophenol	378	295	78	8	30	30-130	
2,4,6-Trichlorophenol	378	304	80	1	30	30-130	
2,4-Dichlorophenol	378	281	74	5	30	30-130	
2,4-Dimethylphenol	378	322	85	2	30	30-130	
2,4-Dinitrophenol	378	227	60	9	30	30-130	
2,4-Dinitrotoluene	378	268	71	3	30	40-140	
2,6-Dinitrotoluene	378	270	71	2	30	40-140	
2-Chloronaphthalene	378	199	53	3	30	40-140	
2-Chlorophenol	378	217	58	0	30	30-130	
2-Methylnaphthalene	378	248	66	0	30	40-140	
2-Methylphenol	378	237	63	1	30	30-130	
2-Nitroaniline	378	229	61	1	30	40-140	
2-Nitrophenol	378	239	63	2	30	30-130	
3 & 4 Methylphenol	378	246	65	1	30	30-130	
3,3'-Dichlorobenzidine	378	113	30	6		40-140	F
3-Nitroaniline	378	267	71	1	30	40-140	
4,6-Dinitro-2-methylphenol	378	288	76	16	30	30-130	
4-Bromophenyl phenyl ether	378	278	73	7	30	40-140	
4-Chloro-3-methylphenol	378	285	75	5	30	30-130	
4-Chloroaniline	378	222	59	3	30	40-140	
4-Chlorophenyl phenyl ether	378	261	69	4	30	40-140	
4-Nitroaniline	378	279	74	2	30	40-140	
4-Nitrophenol	378	293	77	6	30	30-130	
Acenaphthene	378	287	76	1	30	40-140	
Acenaphthylene	378	272	72	2	30	40-140	
Acetophenone	378	219	58	1	30	40-140	
Aniline	378	98.3	26	4	30	40-140	F
Anthracene	378	341	90	3	30	40-140	
Atrazine	378	308	82	4	30	40-140	
Azobenzene	378	294	78	8	30	40-140	
Benzaldehyde	378	219	58	1	30	40-140	
Benzo[a]anthracene	378	348	92	3	30	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24251-1

SDG No.: OCRI-05

Matrix: Solid Level: Low Lab File ID: J02963.D

Lab ID: 360-24251-4 MSD Client ID: OC-SB-433-5.0/7.0-XXX MSD

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Benzo[a]pyrene	378	325	86	7	30	40-140	
Benzo[b]fluoranthene	378	302	80	8	30	40-140	
Benzo[g,h,i]perylene	378	335	89	0	30	40-140	
Benzo[k]fluoranthene	378	319	84	9	30	40-140	
Benzoic acid	378	211	56	8	30	30-130	
Benzophenone	378	306	81	6	30	40-140	
Benzyl alcohol	378	229	61	8	30	30-130	
Bis(2-chloroethoxy)methane	378	250	66	2	30	40-140	
Bis(2-chloroethyl)ether	378	197	52	1	30	40-140	
Bis(2-ethylhexyl) phthalate	378	296	78	7	30	40-140	
Butyl benzyl phthalate	378	305	81	7	30	40-140	
Caprolactam	378	271	72	1	30	40-140	
Carbazole	378	306	81	3	30	40-140	
Chrysene	378	286	76	0	30	40-140	
Dibenz(a,h)anthracene	378	352	93	3	30	40-140	
Dibenzofuran	378	257	68	2	30	40-140	
Diethyl phthalate	378	279	74	4	30	40-140	
Dimethyl phthalate	378	276	73	4	30	40-140	
Di-n-butyl phthalate	378	320	85	7	30	40-140	
Di-n-octyl phthalate	378	324	80	14	30	40-140	
Diphenyl oxide	378	252	67	2	30	40-140	
Fluoranthene	378	334	88	4	30	40-140	
Fluorene	378	313	83	3	30	40-140	
Hexachlorobenzene	378	270	71	6	30	40-140	
Hexachlorobutadiene	378	220	58	2	30	40-140	
Hexachlorocyclopentadiene	378	25.3 J	7	5	30	40-140	F
Hexachloroethane	378	185	49	5	30	40-140	
Indeno[1,2,3-cd]pyrene	378	356	94	2	30	40-140	
Isophorone	378	216	57	1	30	40-140	
Naphthalene	378	236	62	3	30	40-140	
Nitrobenzene	378	247	65	2	30	40-140	
N-Nitrosodimethylamine	378	229	61	1	30	40-140	
N-Nitrosodi-n-propylamine	378	237	63	2	30	40-140	
N-Nitrosodiphenylamine	378	218	58	8	30	40-140	
Pentachlorophenol	378	337	89	15	30	30-130	
Phenanthrene	378	289	76	3	30	40-140	
Phenol	378	209	55	1	30	30-130	
Pyrene	378	304	80	9	30	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Westfield Job No.: 360-24251-1

SDG No.: OCRI-05

Sample No.: CCV 360-48521/2 Date Analyzed: 09/02/2009 18:10

Instrument ID: Inst. J GC Column: Rtx-5ms SIL with ID: 0.25(um)

Lab File ID (Standard): J02834.D Heated Purge: (Y/N) N

		PHN		CRY		PD12	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12 HOUR STD		512700	10.00	374500	12.70	292910	14.20
UPPER LIMIT		1025400	10.50	749000	13.20	585820	14.70
LOWER LIMIT		256350	9.50	187250	12.20	146455	13.70
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 360-48515/1-A		557927	10.00	352544	12.70	230687	14.20
LCS 360-48515/2-A		528335	10.00	381920	12.70	281496	14.20
LCSD 360-48515/3-A		714391	10.00	524091	12.70	389220	14.20
360-24251-18	OC-SB-446-5.0/7.0-DUP	494388	10.00	312077	12.69	235673	14.20
360-24251-19	OC-SB-446-5.0/7.0-XXX	584412	10.00	403443	12.69	319628	14.20
360-24251-19 MS	OC-SB-446-5.0/7.0-XXX MS	529176	10.00	409620	12.70	333229	14.20
360-24251-19 MSD	OC-SB-446-5.0/7.0-XXX MSD	561255	10.00	414459	12.70	323456	14.20
360-24251-21	OC-SB-448-17/19-XXX	600519	10.00	441605	12.69	343848	14.20
360-24251-22	OC-SB-448-8.0/10-XXX	541970	10.00	381159	12.70	339132	14.20
360-24251-16	OC-SB-446-0.0/1.0-XXX	506884	10.00	313288	12.70	731354*	14.21
360-24251-20	OC-SB-448-0.0/1.0-XXX	324951	10.00	227658	12.70	574408	14.21

2502

PHN = Phenanthrene-d10
CRY = Chrysene-d12
PD12 = Perylene-d12

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.50 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270C LL

Init. J

/ Surr OK

LCS out 1/

IS out /

/ MB 360-48462

Di-n-butyl phthalate 73.3 ic 73

/ MK 360-48547

Benzoic acid 31.5

Di-n-butyl phthalate 107

/ JCAL CRF

Benzoic Acid 0.0317 ~~0.0041~~

2,4-DNP r = 0.9970

/ CCAL RRF

Benzoic Acid 0.0148

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Westfield Job No.: 360-24251-2 Analy Batch No.: 49846

SDG No.: OCRI-05A

Instrument ID: Inst. J GC Column: Rtx-5ms ID: 0.25(um) Heated Purge: (Y/N) N

Calibration Start Date: 10/04/2009 10:34 Calibration End Date: 10/04/2009 14:57 Calibration ID: 4864

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD01 360-49846/3	J03295.D
Level 2	STD025 360-49846/4	J03296.D
Level 3	STD05 360-49846/5	J03297.D
Level 4	STD1 360-49846/6	J03298.D
Level 5	STD25 360-49846/7	J03299.D
Level 6	STD5 360-49846/2	J03294.D
Level 7	STD8 360-49846/8	J03300.D
Level 8	STD10 360-49846/9	J03301.D
Level 9	STD20 360-49846/10	J03302.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
Pyridine	+++++ 0.6779	0.5425 0.5790	0.6001 0.7084	0.6419 1.7206	0.6395	Ave		0.6562				15.0		15.0			
N-Nitrosodimethylamine	0.3923 0.3762	0.4825 0.3362	0.3751 0.4012	0.3723 0.8993	0.3736	Ave		0.3954				11.0		15.0			
Benzoic acid	+++++ 0.0061	+++++ 0.0158	+++++ 0.0408	0.0089 0.1403	0.0027	Qua	-0.011	-0.004	0.0038						0.9910		0.9900
Benzaldehyde	0.3372 0.2763	0.2959 0.2501	0.2690 0.3074	0.2958 0.7042	0.2766	Ave		0.2956				11.0		15.0			
2,4-Dinitrophenol	+++++ 0.0337	+++++ 0.0604	+++++ 0.0927	0.0085 0.2124	0.0262	Qua	-0.117	0.0667	0.0023		0.0500				0.9870	*	0.9900
4-Nitrophenol	+++++ 0.0946	+++++ 0.1253	+++++ 0.1523	0.0515 0.3056	0.0907	Lin	-0.202	0.1623			0.0500				0.9930		0.9900
Phenol	1.1303 0.9357	1.0611 0.8393	1.0037 1.0081	1.0427 2.2322	0.9999	Ave		1.0152				8.8		15.0			
Aniline	1.0623 0.9514	0.9866 0.8771	0.9714 1.0575	1.0345 2.4164	0.9910	Ave		1.0156				9.1		15.0			
Bis(2-chloroethyl)ether	0.8628 0.6554	0.8053 0.5882	0.7648 0.6969	0.7692 1.5579	0.7182	Ave		0.7378				11.0		15.0			
2-Chlorophenol	0.6571 0.6595	0.7078 0.5951	0.6904 0.7028	0.6969 1.6179	0.6918	Ave		0.6900				8.2		15.0			
1,4-Dichlorobenzene	0.9994 0.7587	1.0035 0.6641	0.9240 0.7911	0.9025 1.7624	0.7997	Ave		0.8582				13.0		15.0			
1,3-Dichlorobenzene	1.0556 0.7659	0.9761 0.6854	0.9449 0.8032	0.9200 1.8122	0.8309	Ave		0.8765				13.0		15.0			
4,6-Dinitro-2-methylphenol	+++++ 0.0613	+++++ 0.0879	+++++ 0.1122	0.0274 0.2468	0.0474	Qua	-0.125	0.0965	0.0017						0.9930		0.9900

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Westfield Job No.: 360-24251-2

SDG No.: OCRI-05A

Lab Sample ID: CCV 360-49847/13 Calibration Date: 10/04/2009 16:35

Instrument ID: Inst. J Calib Start Date: 10/04/2009 10:34

GC Column: Rtx-5ms ID: 0.25(um) Calib End Date: 10/04/2009 14:57

Lab File ID: J03305.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Pyridine	Ave	0.6562	0.6223		4740	5000	-5.2	30.0
N-Nitrosodimethylamine	Ave	0.3954	0.3648		4610	5000	-7.8	30.0
Benzaldehyde	Ave	0.2956	0.2626		4440	5000	-11.2	30.0
Phenol	Ave	1.015	0.9080		4470	5000	-10.6	20.0
Aniline	Ave	1.016	0.9535		4690	5000	-6.1	30.0
Bis(2-chloroethyl)ether	Ave	0.7378	0.6421		4350	5000	-13.0	30.0
2-Chlorophenol	Ave	0.6900	0.6382		4620	5000	-7.5	30.0
1,4-Dichlorobenzene	Ave	0.8582	0.7178		4180	5000	-16.4	20.0
1,3-Dichlorobenzene	Ave	0.8765	0.7454		4250	5000	-14.9	30.0
Benzyl alcohol	Ave	0.5917	0.5753		4860	5000	-2.8	30.0
1,2-Dichlorobenzene	Ave	0.8011	0.6847		4270	5000	-14.5	30.0
2-Methylphenol	Ave	0.6086	0.5673		4660	5000	-6.8	30.0
2,2'-oxybis[1-chloropropane]	Ave	0.7133	0.6190		4340	5000	-13.2	30.0
Acetophenone	Ave	0.9319	0.8851		4750	5000	-5.0	30.0
3 & 4 Methylphenol	Ave	0.6236	0.5987		4800	5000	-4.0	30.0
N-Nitrosodi-n-propylamine	Ave	0.5307	0.5121	0.0500	4820	5000	-3.5	30.0
Hexachloroethane	Ave	0.3383	0.3071		4540	5000	-9.2	30.0
Nitrobenzene	Ave	0.3125	0.3017		4830	5000	-3.4	30.0
Isophorone	Ave	0.4772	0.5220		5470	5000	9.4	30.0
2-Nitrophenol	Lin2		0.1221		5370	5000	7.3	20.0
2,4-Dimethylphenol	Ave	0.2653	0.2570		4840	5000	-3.1	30.0
Benzoic acid	Qua		0.0148		5340	5000	6.7	30.0
Bis(2-chloroethoxy)methane	Ave	0.3226	0.3001		4650	5000	-7.0	30.0
2,4-Dichlorophenol	Ave	0.1614	0.1841		5700	5000	14.0	20.0
1,2,4-Trichlorobenzene	Qua		0.2255		5170	5000	3.5	30.0
Alpha-Terpineol	Ave	0.1758	0.1890		5380	5000	7.5	30.0
Naphthalene	Qua		0.7640		5150	5000	3.1	30.0
4-Chloroaniline	Ave	0.2561	0.2738		5350	5000	6.9	30.0
Hexachlorobutadiene	Qua		0.1329		5350	5000	7.1	20.0
Caprolactam	Lin1		0.0632		5490	5000	9.8	30.0
4-Chloro-3-methylphenol	Ave	0.1851	0.2070		5590	5000	11.8	20.0
2-Methylnaphthalene	Ave	0.5265	0.4825		4580	5000	-8.4	30.0
1-Methylnaphthalene	Qua		0.4773		5100	5000	1.9	30.0
1,2,4,5-Tetrachlorobenzene	Qua		0.1918		5290	5000	5.8	30.0
Hexachlorocyclopentadiene	Lin		0.2354	0.0500	5240	5000	4.7	30.0
2,4,6-Trichlorophenol	Lin2		0.3159		5030	5000	0.6	20.0
2,4,5-Trichlorophenol	Lin1		0.3108		4800	5000	-4.0	30.0
1,1'-Biphenyl	Ave	1.532	1.459		4760	5000	-4.8	30.0
2-Chloronaphthalene	Ave	1.353	1.279		4730	5000	-5.5	30.0
Phenyl ether	Qua		0.3015		5240	5000	4.8	30.0
2-Nitroaniline	Lin		0.3063		4590	5000	-8.3	30.0

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Westfield Job No.: 360-24251-2

SDG No.: OCRI-05A

Sample No.: CCV 360-49847/13 Date Analyzed: 10/04/2009 16:35

Instrument ID: Inst. J GC Column: Rtx-5ms ID: 0.25(um)

Lab File ID (Standard): J03305.D Heated Purge: (Y/N) N

		PHN		CRY		PRY	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12 HOUR STD		64859	11.85	28849	14.52	14568	15.99
UPPER LIMIT		129718	12.35	57698	15.02	29136	16.49
LOWER LIMIT		32430	11.35	14425	14.02	7284	15.49
LAB SAMPLE ID	CLIENT SAMPLE ID						
360-24251-2	OC-SB-433-20/22-XXX	74603	11.85	30289	14.52	17891	15.99
360-24251-9	OC-SB-440-23/25-XXX	68312	11.85	30374	14.52	22874	15.99
360-24251-14	OC-SB-441-17/19-XXX	81693	11.85	49005	14.51	29691*	15.99
360-24251-17	OC-SB-446-15/17-XXX	83203	11.85	50709	14.51	30395*	15.99
360-24251-24	OC-SB-438-20/22-XXX	77047	11.85	54302	14.51	35869*	15.99

perylene-d12

indeno[1,2,3-cd]pyrene

dibenz(a,h)anthracene

benzo(g,h,i)perylene

PHN = Phenanthrene-d10
CRY = Chrysene-d12
PRY = Perylene-d12

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.50 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270C LL

FORM IV
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Westfield Job No.: 360-24251-2

SDG No.: OCRI-05A

Lab File ID: B10316.D Lab Sample ID: MB 360-48462/1-A

Matrix: Solid Date Extracted: 09/01/2009 15:01

Instrument ID: Inst. B Date Analyzed: 09/15/2009 17:29

Level: (Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 360-48462/2-A	B10317.D	09/15/2009 18:03
	LCSD 360-48462/3-A	B10318.D	09/15/2009 18:37
OC-SB-433-20/22-XXX	360-24251-2	J03310.D	10/04/2009 19:20
OC-SB-440-23/25-XXX	360-24251-9	J03312.D	10/04/2009 20:26
OC-SB-441-17/19-XXX	360-24251-14	J03313.D	10/04/2009 20:59
OC-SB-446-15/17-XXX	360-24251-17	J03314.D	10/04/2009 21:31

MB ug/kg GC

D. - n-butyl phthalate 73.3 733 10x dilution

TIC Octadecane

LCS

3,3' - dichlorobenzidine 33/34 WS

Aniline /141 J

benzaldehyde 290/300 J

benzoic acid 22/20 qualified under 10x/GC/MS

TIC OK

CCAL RT

Benzaldehyde 36

Benzoic acid -49 (-50.1)
RF = 0.0238

2,4-DNP -26

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Westfield
Job No.: 360-24251-2
SDG No.: OCRI-05A
Client Sample ID:
Lab Sample ID: MB 360-48462/1-A
Matrix: Solid
Lab File ID: B10316.D
Analysis Method: 8270C LL
Date Collected:
Extract. Method: 3546
Date Extracted: 09/01/2009 15:01
Sample wt/vol: 30.00(g)
Date Analyzed: 09/15/2009 17:29
Con. Extract Vol.: 1.0(mL)
Dilution Factor: 1
Injection Volume:
Level: (low/med) Low
% Moisture:
GPC Cleanup:(Y/N) N
Analysis Batch No.: 48930
Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
98-86-2	Acetophenone	ND		33	3.6
62-53-3	Aniline	ND		33	17
120-12-7	Anthracene	ND		33	11
1912-24-9	Atrazine	ND		33	10
103-33-3	Azobenzene	ND		33	4.1
100-52-7	Benzaldehyde	ND		33	10
56-55-3	Benzo[a]anthracene	ND		33	6.4
50-32-8	Benzo[a]pyrene	ND		33	6.1
205-99-2	Benzo[b]fluoranthene	ND		33	7.6
191-24-2	Benzo[g,h,i]perylene	ND		33	6.5
207-08-9	Benzo[k]fluoranthene	ND		33	9.2
65-85-0	Benzoic acid	ND		170	14
119-61-9	Benzophenone	ND		33	2.0
100-51-6	Benzyl alcohol	ND		67	7.7
111-91-1	Bis(2-chloroethoxy)methane	ND		33	6.0
111-44-4	Bis(2-chloroethyl)ether	ND		33	8.1
117-81-7	Bis(2-ethylhexyl) phthalate	ND		33	11
85-68-7	Butyl benzyl phthalate	ND		33	7.3
105-60-2	Caprolactam	ND		33	10
86-74-8	Carbazole	ND		33	33
218-01-9	Chrysene	ND		33	7.2
53-70-3	Dibenz(a,h)anthracene	ND		33	6.7
132-64-9	Dibenzofuran	ND		33	19
84-66-2	Diethyl phthalate	ND		33	4.7
131-11-3	Dimethyl phthalate	ND		33	4.9
84-74-2	Di-n-butyl phthalate	73.3		33	10
117-84-0	Di-n-octyl phthalate	ND		33	9.4
101-84-8	Diphenyl oxide	ND		33	10
206-44-0	Fluoranthene	ND		33	21
86-73-7	Fluorene	ND		33	13
118-74-1	Hexachlorobenzene	ND		33	7.9
87-68-3	Hexachlorobutadiene	ND		33	6.6
77-47-4	Hexachlorocyclopentadiene	ND		67	9.1
67-72-1	Hexachloroethane	ND		33	6.4

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24251-2

SDG No.: OCRI-05A

Matrix: Solid Level: Low Lab File ID: B10317.D

Lab ID: LCS 360-48462/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
1,1'-Biphenyl	333	300	90	40-140	
1,2,4,5-Tetrachlorobenzene	333	296	89	40-140	
1,2,4-Trichlorobenzene	333	268	80	40-140	
1,2-Dichlorobenzene	333	226	68	40-140	
1,3-Dichlorobenzene	333	207	62	40-140	
1,4-Dichlorobenzene	333	208	62	40-140	
1-Methylnaphthalene	333	298	89	40-140	
2,2'-oxybis[1-chloropropane]	333	239	72	40-140	
2,3,4,6-Tetrachlorophenol	333	254	76	40-140	
2,4,5-Trichlorophenol	333	317	95	30-130	
2,4,6-Trichlorophenol	333	301	90	30-130	
2,4-Dichlorophenol	333	339	102	30-130	
2,4-Dimethylphenol	333	376	113	30-130	
2,4-Dinitrophenol	333	151	45	30-130	
2,4-Dinitrotoluene	333	277	83	40-140	
2,6-Dinitrotoluene	333	287	86	40-140	
2-Chloronaphthalene	333	236	71	40-140	
2-Chlorophenol	333	244	73	30-130	
2-Methylnaphthalene	333	303	91	40-140	
2-Methylphenol	333	294	88	30-130	
2-Nitroaniline	333	307	92	40-140	
2-Nitrophenol	333	353	106	30-130	
3 & 4 Methylphenol	333	263	79	30-130	
3,3'-Dichlorobenzidine	333	109	33	40-140	*
3-Nitroaniline	333	276	83	40-140	
4,6-Dinitro-2-methylphenol	333	232	69	30-130	
4-Bromophenyl phenyl ether	333	305	92	40-140	
4-Chloro-3-methylphenol	333	367	110	30-130	
4-Chloroaniline	333	292	88	40-140	
4-Chlorophenyl phenyl ether	333	309	93	40-140	
4-Nitroaniline	333	306	92	40-140	
4-Nitrophenol	333	293	88	30-130	
Acenaphthene	333	336	101	40-140	
Acenaphthylene	333	302	91	40-140	
Acetophenone	333	246	74	40-140	
Aniline	333	408	122	40-140	
Anthracene	333	375	112	40-140	
Atrazine	333	383	115	40-140	
Azobenzene	333	321	96	40-140	
Benzaldehyde	333	967	290	40-140	*
Benzo[a]anthracene	333	367	110	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24251-2

SDG No.: OCRI-05A

Matrix: Solid Level: Low Lab File ID: B10317.D

Lab ID: LCS 360-48462/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
Benzo[a]pyrene	333	334	100	40-140	
Benzo[b]fluoranthene	333	323	97	40-140	
Benzo[g,h,i]perylene	333	379	114	40-140	
Benzo[k]fluoranthene	333	348	104	40-140	
Benzoic acid	333	72.4 J	22	30-130	*
Benzophenone	333	330	99	40-140	
Benzyl alcohol	333	254	76	30-130	
Bis(2-chloroethoxy)methane	333	295	88	40-140	
Bis(2-chloroethyl)ether	333	290	87	40-140	
Bis(2-ethylhexyl) phthalate	333	324	97	40-140	
Butyl benzyl phthalate	333	309	93	40-140	
Caprolactam	333	425	128	40-140	
Carbazole	333	357	107	40-140	
Chrysene	333	354	106	40-140	
Dibenz(a,h)anthracene	333	371	111	40-140	
Dibenzofuran	333	296	89	40-140	
Diethyl phthalate	333	331	99	40-140	
Dimethyl phthalate	333	305	92	40-140	
Di-n-butyl phthalate	333	398	119	40-140	
Di-n-octyl phthalate	333	299	90	40-140	
Diphenyl oxide	333	309	93	40-140	
Fluoranthene	333	364	109	40-140	
Fluorene	333	368	110	40-140	
Hexachlorobenzene	333	310	93	40-140	
Hexachlorobutadiene	333	271	81	40-140	
Hexachlorocyclopentadiene	333	257	77	40-140	
Hexachloroethane	333	218	65	40-140	
Indeno[1,2,3-cd]pyrene	333	371	111	40-140	
Isophorone	333	275	83	40-140	
Naphthalene	333	271	81	40-140	
Nitrobenzene	333	294	88	40-140	
N-Nitrosodimethylamine	333	240	72	40-140	
N-Nitrosodi-n-propylamine	333	283	85	40-140	
N-Nitrosodiphenylamine	333	227	68	40-140	
Pentachlorophenol	333	224	67	30-130	
Phenanthrene	333	330	99	40-140	
Phenol	333	265	80	30-130	
Pyrene	333	315	95	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24251-2

SDG No.: OCRI-05A

Matrix: Solid Level: Low Lab File ID: B10318.D

Lab ID: LCSD 360-48462/3-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCSD CONCENTRATION (ug/Kg)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1'-Biphenyl	333	305	91	2	30	40-140	
1,2,4,5-Tetrachlorobenzene	333	286	86	3	30	40-140	
1,2,4-Trichlorobenzene	333	255	76	5	30	40-140	
1,2-Dichlorobenzene	333	230	69	1	30	40-140	
1,3-Dichlorobenzene	333	216	65	4	30	40-140	
1,4-Dichlorobenzene	333	211	63	1	30	40-140	
1-Methylnaphthalene	333	292	88	2	30	40-140	
2,2'-oxybis[1-chloropropane]	333	248	74	4	30	40-140	
2,3,4,6-Tetrachlorophenol	333	259	78	2	30	40-140	
2,4,5-Trichlorophenol	333	309	93	2	30	30-130	
2,4,6-Trichlorophenol	333	315	94	4	30	30-130	
2,4-Dichlorophenol	333	334	100	1	30	30-130	
2,4-Dimethylphenol	333	369	111	2	30	30-130	
2,4-Dinitrophenol	333	126	38	18	30	30-130	
2,4-Dinitrotoluene	333	289	87	4	30	40-140	
2,6-Dinitrotoluene	333	302	91	5	30	40-140	
2-Chloronaphthalene	333	239	72	2	30	40-140	
2-Chlorophenol	333	248	74	2	30	30-130	
2-Methylnaphthalene	333	294	88	3	30	40-140	
2-Methylphenol	333	300	90	2	30	30-130	
2-Nitroaniline	333	314	94	2	30	40-140	
2-Nitrophenol	333	342	102	3	30	30-130	
3 & 4 Methylphenol	333	274	82	4	30	30-130	
3,3'-Dichlorobenzidine	333	115	34	5	30	40-140	*
3-Nitroaniline	333	292	88	6	30	40-140	
4,6-Dinitro-2-methylphenol	333	211	63	9	30	30-130	
4-Bromophenyl phenyl ether	333	321	96	5	30	40-140	
4-Chloro-3-methylphenol	333	354	106	4	30	30-130	
4-Chloroaniline	333	294	88	0	30	40-140	
4-Chlorophenyl phenyl ether	333	317	95	3	30	40-140	
4-Nitroaniline	333	318	95	4	30	40-140	
4-Nitrophenol	333	281	84	4	30	30-130	
Acenaphthene	333	340	102	1	30	40-140	
Acenaphthylene	333	308	92	2	30	40-140	
Acetophenone	333	258	77	5	30	40-140	
Aniline	333	470	141	14	30	40-140	*
Anthracene	333	388	116	3	30	40-140	
Atrazine	333	394	118	3	30	40-140	
Azobenzene	333	335	100	4	30	40-140	
Benzaldehyde	333	1030	308	6	30	40-140	*
Benzo[a]anthracene	333	383	115	4	30	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24251-2

SDG No.: OCRI-05A

Matrix: Solid Level: Low Lab File ID: B10318.D

Lab ID: LCSD 360-48462/3-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCSD CONCENTRATION (ug/Kg)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Benzo[a]pyrene	333	356	107	6	30	40-140	
Benzo[b]fluoranthene	333	357	107	10	30	40-140	
Benzo[g,h,i]perylene	333	402	121	6	30	40-140	
Benzo[k]fluoranthene	333	374	112	7	30	40-140	
Benzoic acid	333	66.5 J	(20)	9	30	30-130	*
Benzophenone	333	344	103	4	30	40-140	
Benzyl alcohol	333	267	80	5	30	30-130	
Bis(2-chloroethoxy)methane	333	288	86	2	30	40-140	
Bis(2-chloroethyl)ether	333	302	91	4	30	40-140	
Bis(2-ethylhexyl) phthalate	333	327	98	1	30	40-140	
Butyl benzyl phthalate	333	315	94	2	30	40-140	
Caprolactam	333	404	121	5	30	40-140	
Carbazole	333	371	111	4	30	40-140	
Chrysene	333	365	110	3	30	40-140	
Dibenz(a,h)anthracene	333	398	119	7	30	40-140	
Dibenzofuran	333	304	91	2	30	40-140	
Diethyl phthalate	333	341	102	3	30	40-140	
Dimethyl phthalate	333	316	95	3	30	40-140	
Di-n-butyl phthalate	333	411	123	3	30	40-140	
Di-n-octyl phthalate	333	318	95	6	30	40-140	
Diphenyl oxide	333	300	90	3	30	40-140	
Fluoranthene	333	378	114	4	30	40-140	
Fluorene	333	378	114	3	30	40-140	
Hexachlorobenzene	333	322	97	4	30	40-140	
Hexachlorobutadiene	333	264	79	3	30	40-140	
Hexachlorocyclopentadiene	333	259	78	1	30	40-140	
Hexachloroethane	333	222	67	2	30	40-140	
Indeno[1,2,3-cd]pyrene	333	394	118	6	30	40-140	
Isophorone	333	272	81	1	30	40-140	
Naphthalene	333	265	79	2	30	40-140	
Nitrobenzene	333	289	87	2	30	40-140	
N-Nitrosodimethylamine	333	247	74	3	30	40-140	
N-Nitrosodi-n-propylamine	333	291	87	3	30	40-140	
N-Nitrosodiphenylamine	333	238	71	4	30	40-140	
Pentachlorophenol	333	230	69	2	30	30-130	
Phenanthrene	333	344	103	4	30	40-140	
Phenol	333	275	83	4	30	30-130	
Pyrene	333	327	98	4	30	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM IV
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Westfield Job No.: 360-24251-2

SDG No.: OCRI-05A

Lab File ID: B10313.D Lab Sample ID: MB 360-48567/1-A

Matrix: Solid Date Extracted: 09/03/2009 13:11

Instrument ID: Inst. B Date Analyzed: 09/15/2009 15:47

Level: (Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 360-48567/2-A	B10314.D	09/15/2009 16:21
	LCSD 360-48567/3-A	B10315.D	09/15/2009 16:55
OC-SB-438-20/22-XXX	360-24251-24	J03315.D	10/04/2009 22:04

MB ug/kg AC

Benzoic Acid 31.5 ~~ST~~ 157.5 x5 All ND

Di-n-butylphthalate 107 1070 x10 All ND

TIC: Hexadecane

Unk 12.07

Octadecane

LCS

3,3'-DCB 32 / 32 WS

Carbazole 32 / 29 WS

benzaldehyde 222 / 294 J

FORM IV 8270C LL

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Westfield
Job No.: 360-24251-2
SDG No.: OCRI-05A
Client Sample ID:
Lab Sample ID: MB 360-48567/1-A
Matrix: Solid
Lab File ID: B10313.D
Analysis Method: 8270C LL
Date Collected:
Extract. Method: 3546
Date Extracted: 09/03/2009 13:11
Sample wt/vol: 30.00(g)
Date Analyzed: 09/15/2009 15:47
Con. Extract Vol.: 1.0(mL)
Dilution Factor: 1
Injection Volume: 1.0(uL)
Level: (low/med) Low
% Moisture:
GPC Cleanup:(Y/N) N
Analysis Batch No.: 48930
Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
98-86-2	Acetophenone	ND		33	3.6
62-53-3	Aniline	ND		33	17
120-12-7	Anthracene	ND		33	11
1912-24-9	Atrazine	ND		33	10
103-33-3	Azobenzene	ND		33	4.1
100-52-7	Benzaldehyde	ND		33	10
56-55-3	Benzo[a]anthracene	ND		33	6.4
50-32-8	Benzo[a]pyrene	ND		33	6.1
205-99-2	Benzo[b]fluoranthene	ND		33	7.6
191-24-2	Benzo[g,h,i]perylene	ND		33	6.5
207-08-9	Benzo[k]fluoranthene	ND		33	9.2
65-85-0	Benzoic acid	31.5	J	170	14
119-61-9	Benzophenone	ND		33	2.0
100-51-6	Benzyl alcohol	ND		67	7.7
111-91-1	Bis(2-chloroethoxy)methane	ND		33	6.0
111-44-4	Bis(2-chloroethyl)ether	ND		33	8.1
117-81-7	Bis(2-ethylhexyl) phthalate	ND		33	11
85-68-7	Butyl benzyl phthalate	ND		33	7.3
105-60-2	Caprolactam	ND		33	10
86-74-8	Carbazole	ND		33	33
218-01-9	Chrysene	ND		33	7.2
53-70-3	Dibenz(a,h)anthracene	ND		33	6.7
132-64-9	Dibenzofuran	ND		33	19
84-66-2	Diethyl phthalate	ND		33	4.7
131-11-3	Dimethyl phthalate	ND		33	4.9
84-74-2	Di-n-butyl phthalate	107		33	10
117-84-0	Di-n-octyl phthalate	ND		33	9.4
101-84-8	Diphenyl oxide	ND		33	10
206-44-0	Fluoranthene	ND		33	21
86-73-7	Fluorene	ND		33	13
118-74-1	Hexachlorobenzene	ND		33	7.9
87-68-3	Hexachlorobutadiene	ND		33	6.6
77-47-4	Hexachlorocyclopentadiene	ND		67	9.1
67-72-1	Hexachloroethane	ND		33	6.4

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24251-2

SDG No.: OCRI-05A

Matrix: Solid Level: Low Lab File ID: B10314.D

Lab ID: LCS 360-48567/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
1,1'-Biphenyl	333	302	91	40-140	
1,2,4,5-Tetrachlorobenzene	333	302	90	40-140	
1,2,4-Trichlorobenzene	333	272	82	40-140	
1,2-Dichlorobenzene	333	221	66	40-140	
1,3-Dichlorobenzene	333	208	62	40-140	
1,4-Dichlorobenzene	333	207	62	40-140	
1-Methylnaphthalene	333	310	93	40-140	
2,2'-oxybis[1-chloropropane]	333	230	69	40-140	
2,3,4,6-Tetrachlorophenol	333	269	81	40-140	
2,4,5-Trichlorophenol	333	316	95	30-130	
2,4,6-Trichlorophenol	333	305	92	30-130	
2,4-Dichlorophenol	333	353	106	30-130	
2,4-Dimethylphenol	333	384	115	30-130	
2,4-Dinitrophenol	333	169	51	30-130	
2,4-Dinitrotoluene	333	275	83	40-140	
2,6-Dinitrotoluene	333	288	86	40-140	
2-Chloronaphthalene	333	230	69	40-140	
2-Chlorophenol	333	237	71	30-130	
2-Methylnaphthalene	333	308	92	40-140	
2-Methylphenol	333	272	82	30-130	
2-Nitroaniline	333	301	90	40-140	
2-Nitrophenol	333	358	107	30-130	
3 & 4 Methylphenol	333	260	78	30-130	
3,3'-Dichlorobenzidine	333	106	32	40-140	*
3-Nitroaniline	333	272	82	40-140	
4,6-Dinitro-2-methylphenol	333	257	77	30-130	
4-Bromophenyl phenyl ether	333	317	95	40-140	
4-Chloro-3-methylphenol	333	375	113	30-130	
4-Chloroaniline	333	313	94	40-140	
4-Chlorophenyl phenyl ether	333	308	92	40-140	
4-Nitroaniline	333	304	91	40-140	
4-Nitrophenol	333	312	94	30-130	
Acenaphthene	333	328	98	40-140	
Acenaphthylene	333	298	89	40-140	
Acetophenone	333	244	73	40-140	
Aniline	333	108	32	40-140	*
Anthracene	333	371	111	40-140	
Atrazine	333	392	118	40-140	
Azobenzene	333	318	95	40-140	
Benzaldehyde	333	939	282	40-140	*
Benzo[a]anthracene	333	371	111	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24251-2

SDG No.: OCRI-05A

Matrix: Solid Level: Low Lab File ID: B10315.D

Lab ID: LCSD 360-48567/3-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCSD CONCENTRATION (ug/Kg)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1'-Biphenyl	333	301	90	0	30	40-140	
1,2,4,5-Tetrachlorobenzene	333	300	90	1	30	40-140	
1,2,4-Trichlorobenzene	333	274	82	1	30	40-140	
1,2-Dichlorobenzene	333	228	69	3	30	40-140	
1,3-Dichlorobenzene	333	212	64	2	30	40-140	
1,4-Dichlorobenzene	333	213	64	3	30	40-140	
1-Methylnaphthalene	333	314	94	1	30	40-140	
2,2'-oxybis[1-chloropropane]	333	236	71	3	30	40-140	
2,3,4,6-Tetrachlorophenol	333	268	80	0	30	40-140	
2,4,5-Trichlorophenol	333	319	96	1	30	30-130	
2,4,6-Trichlorophenol	333	312	93	2	30	30-130	
2,4-Dichlorophenol	333	356	107	1	30	30-130	
2,4-Dimethylphenol	333	385	115	0	30	30-130	
2,4-Dinitrophenol	333	182	54	7	30	30-130	
2,4-Dinitrotoluene	333	274	82	0	30	40-140	
2,6-Dinitrotoluene	333	294	88	2	30	40-140	
2-Chloronaphthalene	333	233	70	1	30	40-140	
2-Chlorophenol	333	244	73	3	30	30-130	
2-Methylnaphthalene	333	309	93	0	30	40-140	
2-Methylphenol	333	294	88	8	30	30-130	
2-Nitroaniline	333	304	91	1	30	40-140	
2-Nitrophenol	333	363	109	2	30	30-130	
3 & 4 Methylphenol	333	264	79	1	30	30-130	
3,3'-Dichlorobenzidine	333	107	32	1	30	40-140	*
3-Nitroaniline	333	273	82	0	30	40-140	
4,6-Dinitro-2-methylphenol	333	252	76	2	30	30-130	
4-Bromophenyl phenyl ether	333	303	91	5	30	40-140	
4-Chloro-3-methylphenol	333	376	113	0	30	30-130	
4-Chloroaniline	333	272	82	14	30	40-140	
4-Chlorophenyl phenyl ether	333	308	92	0	30	40-140	
4-Nitroaniline	333	313	94	3	30	40-140	
4-Nitrophenol	333	311	93	1	30	30-130	
Acenaphthene	333	332	99	1	30	40-140	
Acenaphthylene	333	299	90	0	30	40-140	
Acetophenone	333	248	74	2	30	40-140	
Aniline	333	97.0	29	11	30	40-140	*
Anthracene	333	370	111	0	30	40-140	
Atrazine	333	388	116	1	30	40-140	
Azobenzene	333	316	95	1	30	40-140	
Benzaldehyde	333	980	294	4	30	40-140	*
Benzo[a]anthracene	333	375	112	1	30	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

Cover sheet

SEMIVOLATILE ORGANICS

REGION I VALIDATION CHECKLIST for
OLIN CHEMICAL SUPERFUND SITE
Criteria and Qualifications: REGION I Organics Guideline (1996)

TIER I / II / III (circle one)

SITE: Olin Chemical Superfund Site Project #: 6107000616.12 SDG #: OCRI-06/06A

LAB #: TAL-Westfield

Sample IDs: Attach tracking sheet and/or sample listing.

This checklist is designed to be used with USEPA Region I Validation Guidelines Part II (12/1996). During Level III validation, calculation and transcription checks are completed for instrument tuning, surrogates, target compounds, spike recoveries, calibration data, and internal standards as specified in the guideline. These checks are documented on attached validation notes.

YES NO NA	
Data completeness ☑ ☐ ☐ All data summaries, QC forms and raw data available from hard copy or electronic data package ☐ ☐ ☐ Data summaries match EDD	Contact lab if missing data. Lab to respond with 24 hours.
Holding Times and Preservation ☑ ☐ ☐ Hold times met (Waters – Extract within 7 days, analyze within 40 days. Soils – extract within 14 days, analyze within 40 days)	
Instrument Performance Check (Tune) ☑ ☐ ☐ Tune available for each 12-hour period samples were analyzed ☑ ☐ ☐ Appropriate number of significant figures reported (at least 2) ☑ ☐ ☐ Mass/Charge list (m/z) criteria met	
Initial Calibration ☐ ☒ ☐ %RSD less than or equal to 30% ☐ ☒ ☐ RRF greater than or equal to 0.05	See below.
Continuing Calibration ☑ ☐ ☐ %D less than or equal to 25% ☐ ☒ ☐ RRF greater than or equal to 0.05.	See below.
Blank Contamination ☒ ☐ ☐ Method blank contamination ☒ ☐ ☐ Equipment/Rinseate blank contamination	Evaluate all blanks for contamination. Highest contaminant level used for action level. See below.
Surrogate Recoveries	

SEMIVOLATILE ORGANICS

REGION I VALIDATION CHECKLIST for
OLIN CHEMICAL SUPERFUND SITE
Criteria and Qualifications: REGION I Organics Guideline (1996)

TIER I / II / III (circle one)

☑ ☐ ☐ Surrogates percent recovery criteria met: Soil = (base/neutral 30%-130%, acid 30%-130%) Water = (base/neutral 30%-130%, acid 15%-110%)	
Matrix Spikes and Laboratory Control Samples ☐ ☒ ☐ MS/MSD percent recovery criteria met Soil and Water = (base/neutral 40%-140%, acid 30%-130%) ☑ ☐ ☐ MS/MSD RPD criteria met (soils <50%, water <30%) ☐ ☒ ☐ LCS percent recovery criteria met soil/water (base 40%-140%, acid 30%-130%)	See below.
Field Duplicates ☑ ☐ ☐ RPD criteria met (soils <50%, water <30%)	
Internal Standard ☐ ☒ ☐ Area counts within -50 to +100 percent of calib. std. ☑ ☐ ☐ Retention Time within 30 seconds of calib. std.	See below
Target Compounds ☑ ☐ ☐ Reviewed narrative for anomalies	
Tentatively Identified Compounds (TICs) ☐ ☑ ☐ TCL compounds reported as TICs	

Validator's Signature: _____

Date: 4/27/10

Reference:

MACTEC, Quality Assurance Project Plan for Remedial Investigation/Feasibility Study – Olin Chemical Superfund Site, Wilmington Property, 51 Eames Street, Wilmington, MA", MACTEC Engineering and Consulting. Draft .October 2008.

SAMPLE SUMMARY

Client: Olin Corporation

Job Number: 360-24309-1
Sdg Number: OCRI-06

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
360-24309-1	OC-SB-400-0.0/1.0-XXX	Solid	08/26/2009 1325	08/26/2009 1735
360-24309-2	OC-SB-400-5.0/7.0-XXX	Solid	08/26/2009 1330	08/26/2009 1735
360-24309-3	OC-SB-401-0.0/1.0-XXX	Solid	08/26/2009 1230	08/26/2009 1735
360-24309-4	OC-SB-401-7.5/9.5-XXX	Solid	08/26/2009 1245	08/26/2009 1735
360-24309-5	OC-SB-402-0.0/1.0-XXX	Solid	08/26/2009 1145	08/26/2009 1735
360-24309-6	OC-SB-402-7.5/9.5-XXX	Solid	08/26/2009 1200	08/26/2009 1735
360-24309-7	OC-SB-407-0.0/1.0-XXX	Solid	08/26/2009 1010	08/26/2009 1735
360-24309-8	OC-SB-407-26/28-XXX	Solid	08/26/2009 1125	08/26/2009 1735
360-24309-9	OC-SB-407-8.0/10.0-XXX	Solid	08/26/2009 1020	08/26/2009 1735
360-24309-10	OC-SB-408-0.0/1.0-XXX	Solid	08/26/2009 1100	08/26/2009 1735
360-24309-11	OC-SB-408-7.0/9.9-XXX	Solid	08/26/2009 1120	08/26/2009 1735
360-24309-12	OC-SB-414-0.0/1.0-XXX	Solid	08/26/2009 0840	08/26/2009 1735
360-24309-13	OC-SB-414-20/22-XXX	Solid	08/26/2009 0910	08/26/2009 1735
360-24309-14	OC-SB-414-6.0/8.0-XXX	Solid	08/26/2009 0845	08/26/2009 1735
360-24309-15	OC-SB-422-0.0/1.0-XXX	Solid	08/25/2009 1635	08/26/2009 1735
360-24309-16	OC-SB-422-13/15-XXX	Solid	08/25/2009 1710	08/26/2009 1735
360-24309-17	OC-SB-422-6.0/8.0-XXX	Solid	08/25/2009 1645	08/26/2009 1735
360-24309-18	OC-SB-429-16/18-XXX	Solid	08/25/2009 1325	08/26/2009 1735
360-24309-19	OC-SB-429-6.0/8.0-XXX	Solid	08/25/2009 1300	08/26/2009 1735
360-24309-20	OC-SB-430-0.0/1.0-XXX	Solid	08/25/2009 1450	08/26/2009 1735
360-24309-21	OC-SB-430-19/21-XXX	Solid	08/25/2009 1535	08/26/2009 1735
360-24309-22	OC-SB-430-8.0/10-DUP	Solid	08/25/2009 1500	08/26/2009 1735
360-24309-23	OC-SB-430-8.0/10-XXX	Solid	08/25/2009 1500	08/26/2009 1735
360-24309-23MS	OC-SB-430-8.0/10-XMS	Solid	08/25/2009 1500	08/26/2009 1735
360-24309-23MSD	OC-SB-430-8.0/10-MSD	Solid	08/25/2009 1500	08/26/2009 1735
360-24309-24	OC-TBK-008	Solid	08/26/2009 1500	08/26/2009 1735

Form 7's updated
3/19/10

Client: Olin Corporation

Job Number: 360-24309-1
Sdg Number: OCRI-06

Client Sample ID: **OC-SB-400-0.0/1.0-XXX**

Lab Sample ID: 360-24309-1
Client Matrix: Solid % Moisture: 3.1

Date Sampled: 08/26/2009 1325
Date Received: 08/26/2009 1735

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48993		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48567		Lab File ID:	J02978.D
Dilution:	1.0			Initial Weight/Volume:	30.37 g
Date Analyzed:	09/16/2009 0812			Final Weight/Volume:	1.0 mL
Date Prepared:	09/03/2009 1311			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		10	34
1,2,4,5-Tetrachlorobenzene		ND		10	34
1,2,4-Trichlorobenzene		ND		10	34
1,2-Dichlorobenzene		ND		10	34
1,3-Dichlorobenzene		ND		10	34
1,4-Dichlorobenzene		ND		10	34
1-Methylnaphthalene		ND		10	34
2,2'-oxybis[1-chloropropane]		ND		10	34
2,3,4,6-Tetrachlorophenol		ND		10	34
2,4,5-Trichlorophenol		ND		10	34
2,4,6-Trichlorophenol		ND		10	34
2,4-Dichlorophenol		ND		10	34
2,4-Dimethylphenol		ND		13	34
2,4-Dinitrophenol		~~ND~~ R		10	34
2,4-Dinitrotoluene		ND		10	34
2,6-Dinitrotoluene		ND		10	34
2-Chloronaphthalene		ND		10	34
2-Chlorophenol		ND		10	34
2-Methylnaphthalene		ND		10	34
2-Methylphenol		ND		20	34
2-Nitroaniline		OK (~~ND~~) R		10	170
2-Nitrophenol		ND		10	34
3 & 4 Methylphenol		ND		10	34
3,3'-Dichlorobenzidine		ND		10	68
3-Nitroaniline		ND		10	170
4,6-Dinitro-2-methylphenol		ND		10	170
4-Bromophenyl phenyl ether		ND		10	34
4-Chloro-3-methylphenol		ND		10	68
4-Chloroaniline		ND		10	68
4-Chlorophenyl phenyl ether		ND		10	34
4-Nitroaniline		ND		10	170
4-Nitrophenol		ND		10	170
Acenaphthene		ND		10	34
Acenaphthylene		ND		10	34
Acetophenone		ND		10	34
Aniline		ND		10	34
Anthracene		ND		10	34
Atrazine		ND		10	34
Azobenzene		ND		10	34
Benzaldehyde		ND		10	34
Benzo[a]anthracene		ND		10	34
Benzo[a]pyrene		ND		10	34
Benzo[b]fluoranthene		ND		10	34
Benzo[g,h,i]perylene		ND		10	34
Benzo[k]fluoranthene		ND		10	34
Benzoic acid		~~ND~~ R		15	170

wlk 4/21/10

3/19/10

Client: Olin Corporation

Job Number: 360-24309-1
Sdg Number: OCRI-06

Client Sample ID: **OC-SB-400-0.0/1.0-XXX**

Lab Sample ID: 360-24309-1
Client Matrix: Solid % Moisture: 3.1

Date Sampled: 08/26/2009 1325
Date Received: 08/26/2009 1735

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48993		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48567		Lab File ID:	J02978.D
Dilution:	1.0			Initial Weight/Volume:	30.37 g
Date Analyzed:	09/16/2009 0812			Final Weight/Volume:	1.0 mL
Date Prepared:	09/03/2009 1311			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		10	34
Benzyl alcohol		ND		29	68
Bis(2-chloroethoxy)methane		ND		10	34
Bis(2-chloroethyl)ether		ND		10	34
Bis(2-ethylhexyl) phthalate		ND		10	34
Butyl benzyl phthalate		ND		10	34
Caprolactam		ND		10	34
Carbazole		ND		10	34
Chrysene		ND		10	34
Dibenz(a,h)anthracene		ND		10	34
Dibenzofuran		ND		10	34
Diethyl phthalate		ND		10	34
Dimethyl phthalate		ND		10	34
Di-n-butyl phthalate		ND		30	34
Di-n-octyl phthalate		ND		17	34
Diphenyl oxide		ND		10	34
Fluoranthene		ND		10	34
Fluorene		ND		10	34
Hexachlorobenzene		ND		10	34
Hexachlorobutadiene		ND		10	34
Hexachlorocyclopentadiene		ND		10	68
Hexachloroethane		ND		10	34
Indeno[1,2,3-cd]pyrene		ND		10	34
Isophorone		ND		10	34
Naphthalene		ND		10	82
Nitrobenzene		ND		10	34
N-Nitrosodimethylamine		ND		10	34
N-Nitrosodi-n-propylamine		ND		10	34
N-Nitrosodiphenylamine		ND		10	34
Pentachlorophenol		~~ND~~ R2		10	34
Phenanthrene		ND		10	41
Phenol		ND		10	34
Pyrene		ND		10	34

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	80		30 - 130
2-Fluorobiphenyl	73		30 - 130
2-Fluorophenol	78		30 - 130
Nitrobenzene-d5	70		30 - 130
Phenol-d5	73		30 - 130
Terphenyl-d14	86		30 - 130

3/19/10

Client: Olin Corporation

Job Number: 360-24309-1
Sdg Number: OCRI-06

Client Sample ID: **OC-SB-400-0.0/1.0-XXX**

Lab Sample ID: 360-24309-1
Client Matrix: Solid % Moisture: 3.1

Date Sampled: 08/26/2009 1325
Date Received: 08/26/2009 1735

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48993		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48567		Lab File ID:	J02978.D
Dilution:	1.0			Initial Weight/Volume:	30.37 g
Date Analyzed:	09/16/2009 0812			Final Weight/Volume:	1.0 mL
Date Prepared:	09/03/2009 1311			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 7

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	4.82	6300	T J N
638-67-5	Tricosane	13.21	17	T J N
74685-30-6	5-Eicosene, (E)-	13.90	77	T J N
297-3-0	Cyclotetracosane	14.56	84	T J N
7683-64-9	Squalene	14.92	31	T J N
26603-23-6	p,p"-Dioctyldiphenylamine	15.43	53	T J N
559-74-0	Friedelin	17.70	47	T J N

Client: Olin Corporation

Job Number: 360-24309-1
Sdg Number: OCRI-06

Client Sample ID: **OC-SB-400-5.0/7.0-XXX**

Lab Sample ID: 360-24309-2
Client Matrix: Solid
% Moisture: 6.7

Date Sampled: 08/26/2009 1330
Date Received: 08/26/2009 1735

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48993		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48567		Lab File ID:	J02979.D
Dilution:	1.0			Initial Weight/Volume:	30.44 g
Date Analyzed:	09/16/2009 0841			Final Weight/Volume:	1.0 mL
Date Prepared:	09/03/2009 1311			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		11	35
1,2,4,5-Tetrachlorobenzene		ND		11	35
1,2,4-Trichlorobenzene		ND		11	35
1,2-Dichlorobenzene		ND		11	35
1,3-Dichlorobenzene		ND		11	35
1,4-Dichlorobenzene		ND		11	35
1-Methylnaphthalene		ND		11	35
2,2'-oxybis[1-chloropropane]		ND		11	35
2,3,4,6-Tetrachlorophenol		ND		11	35
2,4,5-Trichlorophenol		ND		11	35
2,4,6-Trichlorophenol		ND		11	35
2,4-Dichlorophenol		ND		11	35
2,4-Dimethylphenol		ND		14	35
2,4-Dinitrophenol		~~ND~~	R	11	35
2,4-Dinitrotoluene		ND		11	35
2,6-Dinitrotoluene		ND		11	35
2-Chloronaphthalene		ND		11	35
2-Chlorophenol		ND		11	35
2-Methylnaphthalene		ND		11	35
2-Methylphenol		ND		21	35
2-Nitroaniline		~~ND~~		11	180
2-Nitrophenol		ND		11	35
3 & 4 Methylphenol		ND		11	35
3,3'-Dichlorobenzidine		ND		11	70
3-Nitroaniline		ND		11	180
4,6-Dinitro-2-methylphenol		ND		11	180
4-Bromophenyl phenyl ether		ND		11	35
4-Chloro-3-methylphenol		ND		11	70
4-Chloroaniline		ND		11	70
4-Chlorophenyl phenyl ether		ND		11	35
4-Nitroaniline		ND		11	180
4-Nitrophenol		ND		11	180
Acenaphthene		ND		11	35
Acenaphthylene		ND		11	35
Acetophenone		ND		11	35
Aniline		ND		11	35
Anthracene		ND		11	35
Atrazine		ND		11	35
Azobenzene		ND		11	35
Benzaldehyde		ND		11	35
Benzo[a]anthracene		ND		11	35
Benzo[a]pyrene		ND		11	35
Benzo[b]fluoranthene		ND		11	35
Benzo[g,h,i]perylene		ND		11	35
Benzo[k]fluoranthene		ND		11	35
Benzoic acid		~~ND~~	R	16	180

dc R wdh 4/21/10

3/19/10

Client: Olin Corporation

Job Number: 360-24309-1
Sdg Number: OCRI-06

Client Sample ID: **OC-SB-400-5.0/7.0-XXX**

Lab Sample ID: 360-24309-2
Client Matrix: Solid
% Moisture: 6.7

Date Sampled: 08/26/2009 1330
Date Received: 08/26/2009 1735

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48993		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48567		Lab File ID:	J02979.D
Dilution:	1.0			Initial Weight/Volume:	30.44 g
Date Analyzed:	09/16/2009 0841			Final Weight/Volume:	1.0 mL
Date Prepared:	09/03/2009 1311			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		11	35
Benzyl alcohol		ND		30	70
Bis(2-chloroethoxy)methane		ND		11	35
Bis(2-chloroethyl)ether		ND		11	35
Bis(2-ethylhexyl) phthalate		14	JEB	11	35
Butyl benzyl phthalate		ND		11	35
Caprolactam		ND		11	35
Carbazole		ND		11	35
Chrysene		ND		11	35
Dibenz(a,h)anthracene		ND		11	35
Dibenzofuran		ND		11	35
Diethyl phthalate		ND		11	35
Dimethyl phthalate		ND		11	35
Di-n-butyl phthalate		ND		31	35
Di-n-octyl phthalate		ND		18	35
Diphenyl oxide		ND		11	35
Fluoranthene		ND		11	35
Fluorene		ND		11	35
Hexachlorobenzene		ND		11	35
Hexachlorobutadiene		ND		11	35
Hexachlorocyclopentadiene		ND		11	70
Hexachloroethane		ND		11	35
Indeno[1,2,3-cd]pyrene		ND		11	35
Isophorone		ND		11	35
Naphthalene		ND		11	84
Nitrobenzene		ND		11	35
N-Nitrosodimethylamine		ND		11	35
N-Nitrosodi-n-propylamine		ND		11	35
N-Nitrosodiphenylamine		ND		11	35
Pentachlorophenol		~~ND~~	L	11	35
Phenanthrene		ND		11	42
Phenol		ND		11	35
Pyrene		ND		11	35

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	74		30 - 130
2-Fluorobiphenyl	67		30 - 130
2-Fluorophenol	67		30 - 130
Nitrobenzene-d5	59		30 - 130
Phenol-d5	63		30 - 130
Terphenyl-d14	79		30 - 130

3/19/10

Client: Olin Corporation

Job Number: 360-24309-1
Sdg Number: OCRI-06

Client Sample ID: **OC-SB-400-5.0/7.0-XXX**

Lab Sample ID: 360-24309-2
Client Matrix: Solid % Moisture: 6.7

Date Sampled: 08/26/2009 1330
Date Received: 08/26/2009 1735

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48993		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48567		Lab File ID:	J02979.D
Dilution:	1.0			Initial Weight/Volume:	30.44 g
Date Analyzed:	09/16/2009 0841			Final Weight/Volume:	1.0 mL
Date Prepared:	09/03/2009 1311			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 5

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
13360-61-7	1-Pentadecene	13.21	83	T J N
295-65-8	Cyclohexadecane	13.88	300	T J N
297-3-0	Cyclotetracosane	14.55	440	T J N
~~6920-24-7~~	~~Hexadecane-1,2-diol~~	~~15.21~~	~~110~~	~~T J N~~
	Unknown	15.86	100	T J

4/27/10

Client: Olin Corporation

Job Number: 360-24309-1
Sdg Number: OCRI-06

Client Sample ID: **OC-SB-401-0.0/1.0-XXX**

Lab Sample ID: 360-24309-3
Client Matrix: Solid
% Moisture: 5.1

Date Sampled: 08/26/2009 1230
Date Received: 08/26/2009 1735

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48993		Instrument ID:	Inst_J
Preparation:	3546	Prep Batch: 360-48567		Lab File ID:	J02980.D
Dilution:	1.0			Initial Weight/Volume:	30.11 g
Date Analyzed:	09/16/2009 0910			Final Weight/Volume:	1.0 mL
Date Prepared:	09/03/2009 1311			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		10	35
1,2,4,5-Tetrachlorobenzene		ND		10	35
1,2,4-Trichlorobenzene		ND		10	35
1,2-Dichlorobenzene		ND		10	35
1,3-Dichlorobenzene		ND		10	35
1,4-Dichlorobenzene		ND		10	35
1-Methylnaphthalene		ND		10	35
2,2'-oxybis[1-chloropropane]		ND		10	35
2,3,4,6-Tetrachlorophenol		ND		10	35
2,4,5-Trichlorophenol		ND		10	35
2,4,6-Trichlorophenol		ND		10	35
2,4-Dichlorophenol		ND		10	35
2,4-Dimethylphenol		ND		14	35
2,4-Dinitrophenol		~~ND~~ R		10	35
2,4-Dinitrotoluene		ND		10	35
2,6-Dinitrotoluene		ND		10	35
2-Chloronaphthalene		ND		10	35
2-Chlorophenol		ND		10	35
2-Methylnaphthalene		ND		10	35
2-Methylphenol		ND		21	35
2-Nitroaniline		ND		10	170
2-Nitrophenol		ND		10	35
3 & 4 Methylphenol		ND		10	35
3,3'-Dichlorobenzidine		ND		10	70
3-Nitroaniline		ND		10	170
4,6-Dinitro-2-methylphenol		ND		10	170
4-Bromophenyl phenyl ether		ND		10	35
4-Chloro-3-methylphenol		ND		10	70
4-Chloroaniline		ND		10	70
4-Chlorophenyl phenyl ether		ND		10	35
4-Nitroaniline		ND		10	170
4-Nitrophenol		ND		10	170
Acenaphthene		ND		10	35
Acenaphthylene		ND		10	35
Acetophenone		ND		10	35
Aniline		ND		10	35
Anthracene		ND		10	35
Atrazine		ND		10	35
Azobenzene		ND		10	35
Benzaldehyde		ND		10	35
Benzo[a]anthracene		ND		10	35
Benzo[a]pyrene		ND		10	35
Benzo[b]fluoranthene		ND		10	35
Benzo[g,h,i]perylene		ND		10	35
Benzo[k]fluoranthene		ND		10	35
Benzoic acid		~~ND~~ R		16	170

Client: Olin Corporation

Job Number: 360-24309-1
Sdg Number: OCRI-06

Client Sample ID: **OC-SB-401-0.0/1.0-XXX**

Lab Sample ID: 360-24309-3
Client Matrix: Solid

% Moisture: 5.1

Date Sampled: 08/26/2009 1230
Date Received: 08/26/2009 1735

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48993		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48567		Lab File ID:	J02980.D
Dilution:	1.0			Initial Weight/Volume:	30.11 g
Date Analyzed:	09/16/2009 0910			Final Weight/Volume:	1.0 mL
Date Prepared:	09/03/2009 1311			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		10	35
Benzyl alcohol		ND		30	70
Bis(2-chloroethoxy)methane		ND		10	35
Bis(2-chloroethyl)ether		ND		10	35
Bis(2-ethylhexyl) phthalate		12	JB	10	35
Butyl benzyl phthalate		140		10	35
Caprolactam		ND		10	35
Carbazole		ND		10	35
Chrysene		ND		10	35
Dibenz(a,h)anthracene		ND		10	35
Dibenzofuran		ND		10	35
Diethyl phthalate		ND		10	35
Dimethyl phthalate		ND		10	35
Di-n-butyl phthalate		ND		31	35
Di-n-octyl phthalate		ND		18	35
Diphenyl oxide		ND		10	35
Fluoranthene		ND		10	35
Fluorene		ND		10	35
Hexachlorobenzene		ND		10	35
Hexachlorobutadiene		ND		10	35
Hexachlorocyclopentadiene		ND		10	70
Hexachloroethane		ND		10	35
Indeno[1,2,3-cd]pyrene		ND		10	35
Isophorone		ND		10	35
Naphthalene		ND		10	84
Nitrobenzene		ND		10	35
N-Nitrosodimethylamine		ND		10	35
N-Nitrosodi-n-propylamine		ND		10	35
N-Nitrosodiphenylamine		ND		10	35
Pentachlorophenol		~~ND~~ R		10	35
Phenanthrene		ND		10	42
Phenol		ND		10	35
Pyrene		ND		10	35

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	80		30 - 130
2-Fluorobiphenyl	70		30 - 130
2-Fluorophenol	74		30 - 130
Nitrobenzene-d5	66		30 - 130
Phenol-d5	67		30 - 130
Terphenyl-d14	79		30 - 130

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Client: Olin Corporation

Job Number: 360-24309-1
Sdg Number: OCRI-06

Client Sample ID: **OC-SB-401-0.0/1.0-XXX**

Lab Sample ID: 360-24309-3
Client Matrix: Solid % Moisture: 5.1

Date Sampled: 08/26/2009 1230
Date Received: 08/26/2009 1735

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48993		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48567		Lab File ID:	J02980.D
Dilution:	1.0			Initial Weight/Volume:	30.11 g
Date Analyzed:	09/16/2009 0910			Final Weight/Volume:	1.0 mL
Date Prepared:	09/03/2009 1311			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 7

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
112-88-9	1-Octadecene	13.21	71	T J N
6765-39-5	1-Heptadecene	13.88	330	T J N
297-3-0	Cyclotetracosane	14.55	560	T J N
629-96-9	1-Eicosanol	15.21	200	T J N
74685-29-3	9-Eicosene, (E)-	15.85	120	T J N
1000194-63-7	2,2,4a,6a,8a,9,12b,14a-Octamethyl-1,2,3,	16.50	210	T J N
559-74-0	Friedelin	17.70	120	T J N

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Client: Olin Corporation

Job Number: 360-24309-1
Sdg Number: OCRI-06

Client Sample ID: **OC-SB-401-7.5/9.5-XXX**

Lab Sample ID: 360-24309-4
Client Matrix: Solid
% Moisture: 8.5

Date Sampled: 08/26/2009 1245
Date Received: 08/26/2009 1735

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48993		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48567		Lab File ID:	J02981.D
Dilution:	1.0			Initial Weight/Volume:	30.81 g
Date Analyzed:	09/16/2009 0940			Final Weight/Volume:	1.0 mL
Date Prepared:	09/03/2009 1311			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		11	35
1,2,4,5-Tetrachlorobenzene		ND		11	35
1,2,4-Trichlorobenzene		ND		11	35
1,2-Dichlorobenzene		ND		11	35
1,3-Dichlorobenzene		ND		11	35
1,4-Dichlorobenzene		ND		11	35
1-Methylnaphthalene		ND		11	35
2,2'-oxybis[1-chloropropane]		ND		11	35
2,3,4,6-Tetrachlorophenol		ND		11	35
2,4,5-Trichlorophenol		ND		11	35
2,4,6-Trichlorophenol		ND		11	35
2,4-Dichlorophenol		ND		11	35
2,4-Dimethylphenol		ND		14	35
2,4-Dinitrophenol		~~ND~~ R		11	35
2,4-Dinitrotoluene		ND		11	35
2,6-Dinitrotoluene		ND		11	35
2-Chloronaphthalene		ND		11	35
2-Chlorophenol		ND		11	35
2-Methylnaphthalene		ND		11	35
2-Methylphenol		ND		21	35
2-Nitroaniline		~~ND~~ K		11	180
2-Nitrophenol		ND		11	35
3 & 4 Methylphenol		ND		11	35
3,3'-Dichlorobenzidine		ND		11	71
3-Nitroaniline		ND		11	180
4,6-Dinitro-2-methylphenol		ND		11	180
4-Bromophenyl phenyl ether		ND		11	35
4-Chloro-3-methylphenol		ND		11	71
4-Chloroaniline		ND		11	71
4-Chlorophenyl phenyl ether		ND		11	35
4-Nitroaniline		ND		11	180
4-Nitrophenol		ND		11	180
Acenaphthene		ND		11	35
Acenaphthylene		ND		11	35
Acetophenone		ND		11	35
Aniline		ND		11	35
Anthracene		ND		11	35
Atrazine		ND		11	35
Azobenzene		ND		11	35
Benzaldehyde		ND		11	35
Benzo[a]anthracene		ND		11	35
Benzo[a]pyrene		ND		11	35
Benzo[b]fluoranthene		ND		11	35
Benzo[g,h,i]perylene		ND		11	35
Benzo[k]fluoranthene		ND		11	35
Benzoic acid		~~ND~~ R		16	180

K w/ MW 4/21/10

MW 3/16/10

Client: Olin Corporation

Job Number: 360-24309-1
Sdg Number: OCRI-06

Client Sample ID: **OC-SB-401-7.5/9.5-XXX**

Lab Sample ID: 360-24309-4
Client Matrix: Solid
% Moisture: 8.5

Date Sampled: 08/26/2009 1245
Date Received: 08/26/2009 1735

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48993		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48567		Lab File ID:	J02981.D
Dilution:	1.0			Initial Weight/Volume:	30.81 g
Date Analyzed:	09/16/2009 0940			Final Weight/Volume:	1.0 mL
Date Prepared:	09/03/2009 1311			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		11	35
Benzyl alcohol		ND		30	71
Bis(2-chloroethoxy)methane		ND		11	35
Bis(2-chloroethyl)ether		ND		11	35
Bis(2-ethylhexyl) phthalate		ND		11	35
Butyl benzyl phthalate		ND		11	35
Caprolactam		ND		11	35
Carbazole		ND		11	35
Chrysene		ND		11	35
Dibenz(a,h)anthracene		ND		11	35
Dibenzofuran		ND		11	35
Diethyl phthalate		ND		11	35
Dimethyl phthalate		ND		11	35
Di-n-butyl phthalate		ND		31	35
Di-n-octyl phthalate		ND		18	35
Diphenyl oxide		ND		11	35
Fluoranthene		ND		11	35
Fluorene		ND		11	35
Hexachlorobenzene		ND		11	35
Hexachlorobutadiene		ND		11	35
Hexachlorocyclopentadiene		ND		11	71
Hexachloroethane		ND		11	35
Indeno[1,2,3-cd]pyrene		ND		11	35
Isophorone		ND		11	35
Naphthalene		ND		11	85
Nitrobenzene		ND		11	35
N-Nitrosodimethylamine		ND		11	35
N-Nitrosodi-n-propylamine		ND		11	35
N-Nitrosodiphenylamine		ND		11	35
Pentachlorophenol		~~ND~~ R		11	35
Phenanthrene		ND		11	43
Phenol		ND		11	35
Pyrene		ND		11	35

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	77		30 - 130
2-Fluorobiphenyl	76		30 - 130
2-Fluorophenol	78		30 - 130
Nitrobenzene-d5	69		30 - 130
Phenol-d5	70		30 - 130
Terphenyl-d14	88		30 - 130

Client: Olin Corporation

Job Number: 360-24309-1
Sdg Number: OCRI-06

Client Sample ID: **OC-SB-401-7.5/9.5-XXX**

Lab Sample ID: 360-24309-4
Client Matrix: Solid % Moisture: 8.5

Date Sampled: 08/26/2009 1245
Date Received: 08/26/2009 1735

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48993		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48567		Lab File ID:	J02981.D
Dilution:	1.0			Initial Weight/Volume:	30.81 g
Date Analyzed:	09/16/2009 0940			Final Weight/Volume:	1.0 mL
Date Prepared:	09/03/2009 1311			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 7

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Unknown	4.82	15	T J
	Unknown	5.84	14	T J
541-2-6	Cyclopentasiloxane, decamethyl-	7.71	11	T J N
126-33-0	Thiophene, tetrahydro-, 1,1-dioxide	8.26	7.7	T J N
4536-88-3	Benzene, (1-methyldecyl)-	10.88	9.0	T J N
7683-64-9	Squalene	14.91	34	T J N
26603-23-6	p,p''-Dioctyldiphenylamine	15.43	34	T J N

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Client: Olin Corporation

Job Number: 360-24309-1
Sdg Number: OCRI-06

Client Sample ID: **OC-SB-402-0.0/1.0-XXX**

Lab Sample ID: 360-24309-5
Client Matrix: Solid % Moisture: 4.4

Date Sampled: 08/26/2009 1145
Date Received: 08/26/2009 1735

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48521		Instrument ID:	Inst. J
Preparation:	3550B	Prep Batch: 360-48515		Lab File ID:	J02851.D
Dilution:	1.0			Initial Weight/Volume:	100.40 g
Date Analyzed:	09/03/2009 0242			Final Weight/Volume:	1.0 mL
Date Prepared:	09/02/2009 1439			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodimethylamine		ND		1.2	5.2

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	61		30 - 130
2-Fluorobiphenyl	54		30 - 130
2-Fluorophenol	56		30 - 130
Nitrobenzene-d5	60		30 - 130
Phenol-d5	60		30 - 130
Terphenyl-d14	59		30 - 130

Client: Olin Corporation

Job Number: 360-24309-1
Sdg Number: OCRI-06

Client Sample ID: **OC-SB-402-0.0/1.0-XXX**

Lab Sample ID: 360-24309-5
Client Matrix: Solid

% Moisture: 4.4

Date Sampled: 08/26/2009 1145
Date Received: 08/26/2009 1735

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48993		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48567		Lab File ID:	J02982.D
Dilution:	1.0			Initial Weight/Volume:	30.22 g
Date Analyzed:	09/16/2009 1009			Final Weight/Volume:	1.0 mL
Date Prepared:	09/03/2009 1311			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		10	35
1,2,4,5-Tetrachlorobenzene		ND		10	35
1,2,4-Trichlorobenzene		ND		10	35
1,2-Dichlorobenzene		ND		10	35
1,3-Dichlorobenzene		ND		10	35
1,4-Dichlorobenzene		ND		10	35
1-Methylnaphthalene		ND		10	35
2,2'-oxybis[1-chloropropane]		ND		10	35
2,3,4,6-Tetrachlorophenol		ND		10	35
2,4,5-Trichlorophenol		ND		10	35
2,4,6-Trichlorophenol		ND		10	35
2,4-Dichlorophenol		ND		10	35
2,4-Dimethylphenol		ND		14	35
2,4-Dinitrophenol		~~ND~~ R		10	35
2,4-Dinitrotoluene		ND		10	35
2,6-Dinitrotoluene		ND		10	35
2-Chloronaphthalene		ND		10	35
2-Chlorophenol		ND		10	35
2-Methylnaphthalene		ND		10	35
2-Methylphenol		ND		21	35
2-Nitroaniline		OK (ND) R w.dlw 4/21/10		10	170
2-Nitrophenol		ND		10	35
3 & 4 Methylphenol		ND		10	35
3,3'-Dichlorobenzidine		ND		10	69
3-Nitroaniline		ND		10	170
4,6-Dinitro-2-methylphenol		ND		10	170
4-Bromophenyl phenyl ether		ND		10	35
4-Chloro-3-methylphenol		ND		10	69
4-Chloroaniline		ND		10	69
4-Chlorophenyl phenyl ether		ND		10	35
4-Nitroaniline		ND		10	170
4-Nitrophenol		ND		10	170
Acenaphthene		ND		10	35
Acenaphthylene		ND		10	35
Acetophenone		ND		10	35
Aniline		ND		10	35
Anthracene		ND		10	35
Atrazine		ND		10	35
Azobenzene		ND		10	35
Benzaldehyde		ND		10	35
Benzo[a]anthracene		ND		10	35
Benzo[a]pyrene		ND		10	35
Benzo[b]fluoranthene		ND		10	35
Benzo[g,h,i]perylene		ND		10	35
Benzo[k]fluoranthene		ND		10	35
Benzoic acid		~~ND~~ R		16	170

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Client: Olin Corporation

Job Number: 360-24309-1
Sdg Number: OCRI-06

Client Sample ID: **OC-SB-402-0.0/1.0-XXX**

Lab Sample ID: 360-24309-5
Client Matrix: Solid % Moisture: 4.4

Date Sampled: 08/26/2009 1145
Date Received: 08/26/2009 1735

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48993		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48567		Lab File ID:	J02982.D
Dilution:	1.0			Initial Weight/Volume:	30.22 g
Date Analyzed:	09/16/2009 1009			Final Weight/Volume:	1.0 mL
Date Prepared:	09/03/2009 1311			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		10	35
Benzyl alcohol		ND		29	69
Bis(2-chloroethoxy)methane		ND		10	35
Bis(2-chloroethyl)ether		ND		10	35
Bis(2-ethylhexyl) phthalate		130	EB	10	35
Butyl benzyl phthalate		360		10	35
Caprolactam		ND		10	35
Carbazole		ND		10	35
Chrysene		ND		10	35
Dibenz(a,h)anthracene		ND		10	35
Dibenzofuran		ND		10	35
Diethyl phthalate		ND		10	35
Dimethyl phthalate		ND		10	35
Di-n-butyl phthalate		ND		30	35
Di-n-octyl phthalate		ND		17	35
Diphenyl oxide		ND		10	35
Diphenylamine		ND		2.1	35
Fluoranthene		11	J	10	35
Fluorene		ND		10	35
Hexachlorobenzene		ND		10	35
Hexachlorobutadiene		ND		10	35
Hexachlorocyclopentadiene		ND		10	69
Hexachloroethane		ND		10	35
Indeno[1,2,3-cd]pyrene		ND		10	35
Isophorone		ND		10	35
Naphthalene		ND		10	83
Nitrobenzene		ND		10	35
N-Nitrosodimethylamine		ND		10	35
N-Nitrosodi-n-propylamine		ND		10	35
N-Nitrosodiphenylamine		ND		10	35
Pentachlorophenol		ND	R	10	35
Phenanthrene		ND		10	42
Phenol		ND		10	35
Pyrene		14	J	10	35

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	81		30 - 130
2-Fluorophenol	75		30 - 130
2-Fluorobiphenyl	73		30 - 130
Nitrobenzene-d5	69		30 - 130
Phenol-d5	71		30 - 130
Terphenyl-d14	85		30 - 130

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Client: Olin Corporation

Job Number: 360-24309-1
Sdg Number: OCRI-06

Client Sample ID: **OC-SB-402-0.0/1.0-XXX**

Lab Sample ID: 360-24309-5
Client Matrix: Solid % Moisture: 4.4

Date Sampled: 08/26/2009 1145
Date Received: 08/26/2009 1735

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48993		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48567		Lab File ID:	J02982.D
Dilution:	1.0			Initial Weight/Volume:	30.22 g
Date Analyzed:	09/16/2009 1009			Final Weight/Volume:	1.0 mL
Date Prepared:	09/03/2009 1311			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 7

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
~~112-95-8~~	~~Eicosane~~	13.21	61	T J N
1000130-97-9	E-15-Heptadecenal	13.89	270	T J N
297-3-0	Cyclotetracosane	14.55	460	T J N
297-3-0	Cyclotetracosane	15.22	180	T J N
1000131-18-9	Z-14-Nonacosane	15.85	130	T J N
14021-23-9	D-Friedoolean-14-ene, 3-methoxy-, (3.bet	16.41	170	T J N
56588-25-1	D:A-Friedoolean-6-ene	16.49	130	T J N

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Client: Olin Corporation

Job Number: 360-24309-1
Sdg Number: OCRI-06

Client Sample ID: **OC-SB-402-7.5/9.5-XXX**

Lab Sample ID: 360-24309-6
Client Matrix: Solid % Moisture: 10.2

Date Sampled: 08/26/2009 1200
Date Received: 08/26/2009 1735

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48521		Instrument ID:	Inst. J
Preparation:	3550B	Prep Batch: 360-48515		Lab File ID:	J02852.D
Dilution:	1.0			Initial Weight/Volume:	100.55 g
Date Analyzed:	09/03/2009 0312			Final Weight/Volume:	1.0 mL
Date Prepared:	09/02/2009 1439			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodimethylamine		ND		1.3	5.5

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	60		30 - 130
2-Fluorobiphenyl	51		30 - 130
2-Fluorophenol	56		30 - 130
Nitrobenzene-d5	56		30 - 130
Phenol-d5	59		30 - 130
Terphenyl-d14	64		30 - 130

Client: Olin Corporation

Job Number: 360-24309-1
Sdg Number: OCRI-06

Client Sample ID: **OC-SB-402-7.5/9.5-XXX**

Lab Sample ID: 360-24309-6
Client Matrix: Solid
% Moisture: 10.2

Date Sampled: 08/26/2009 1200
Date Received: 08/26/2009 1735

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49095		Instrument ID:	Inst_J
Preparation:	3546	Prep Batch: 360-48567		Lab File ID:	J02996.D
Dilution:	1.0			Initial Weight/Volume:	30.57 g
Date Analyzed:	09/17/2009 1350			Final Weight/Volume:	1.0 mL
Date Prepared:	09/03/2009 1311			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		11	36
1,2,4,5-Tetrachlorobenzene		ND		11	36
1,2,4-Trichlorobenzene		ND		11	36
1,2-Dichlorobenzene		ND		11	36
1,3-Dichlorobenzene		ND		11	36
1,4-Dichlorobenzene		ND		11	36
1-Methylnaphthalene		ND		11	36
2,2'-oxybis[1-chloropropane]		ND		11	36
2,3,4,6-Tetrachlorophenol		ND		11	36
2,4,5-Trichlorophenol		ND		11	36
2,4,6-Trichlorophenol		ND		11	36
2,4-Dichlorophenol		ND		11	36
2,4-Dimethylphenol		ND		14	36
2,4-Dinitrophenol		~~ND~~ R		11	36
2,4-Dinitrotoluene		ND		11	36
2,6-Dinitrotoluene		ND		11	36
2-Chloronaphthalene		ND		11	36
2-Chlorophenol		ND		11	36
2-Methylnaphthalene		ND		11	36
2-Methylphenol		ND		22	36
2-Nitroaniline		~~ND~~ R		11	180
2-Nitrophenol		ND		11	36
3 & 4 Methylphenol		ND		11	36
3,3'-Dichlorobenzidine		ND		11	73
3-Nitroaniline		ND		11	180
4,6-Dinitro-2-methylphenol		ND		11	180
4-Bromophenyl phenyl ether		ND		11	36
4-Chloro-3-methylphenol		ND		11	73
4-Chloroaniline		ND		11	73
4-Chlorophenyl phenyl ether		ND		11	36
4-Nitroaniline		ND		11	180
4-Nitrophenol		ND		11	180
Acenaphthene		ND		11	36
Acenaphthylene		ND		11	36
Acetophenone		ND		11	36
Aniline		ND		11	36
Anthracene		ND		11	36
Atrazine		ND		11	36
Azobenzene		ND		11	36
Benzaldehyde		ND		11	36
Benzo[a]anthracene		ND		11	36
Benzo[a]pyrene		ND		11	36
Benzo[b]fluoranthene		ND		11	36
Benzo[g,h,i]perylene		ND		11	36
Benzo[k]fluoranthene		ND		11	36
Benzoic acid		~~ND~~ R		16	180

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Client: Olin Corporation

Job Number: 360-24309-1
Sdg Number: OCRI-06

Client Sample ID: **OC-SB-402-7.5/9.5-XXX**

Lab Sample ID: 360-24309-6
Client Matrix: Solid % Moisture: 10.2

Date Sampled: 08/26/2009 1200
Date Received: 08/26/2009 1735

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49095		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48567		Lab File ID:	J02996.D
Dilution:	1.0			Initial Weight/Volume:	30.57 g
Date Analyzed:	09/17/2009 1350			Final Weight/Volume:	1.0 mL
Date Prepared:	09/03/2009 1311			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		11	36
Benzyl alcohol		ND		31	73
Bis(2-chloroethoxy)methane		ND		11	36
Bis(2-chloroethyl)ether		ND		11	36
Bis(2-ethylhexyl) phthalate		51 GB		11	36
Butyl benzyl phthalate		53		11	36
Caprolactam		ND		11	36
Carbazole		ND		11	36
Chrysene		ND		11	36
Dibenz(a,h)anthracene		ND		11	36
Dibenzofuran		ND		11	36
Diethyl phthalate		ND		11	36
Dimethyl phthalate		ND		11	36
Di-n-butyl phthalate		ND		32	36
Di-n-octyl phthalate		ND		18	36
Diphenyl oxide		ND		11	36
Diphenylamine		ND		2.2	36
Fluoranthene		ND		11	36
Fluorene		ND		11	36
Hexachlorobenzene		ND		11	36
Hexachlorobutadiene		ND		11	36
Hexachlorocyclopentadiene		ND		11	73
Hexachloroethane		ND		11	36
Indeno[1,2,3-cd]pyrene		ND		11	36
Isophorone		ND		11	36
Naphthalene		ND		11	87
Nitrobenzene		ND		11	36
N-Nitrosodimethylamine		ND		11	36
N-Nitrosodi-n-propylamine		ND		11	36
N-Nitrosodiphenylamine		ND		11	36
Pentachlorophenol		ND		11	36
Phenanthrene		15	J	11	44
Phenol		ND		11	36
Pyrene		15	J	11	36

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	80		30 - 130
2-Fluorophenol	79		30 - 130
2-Fluorobiphenyl	68		30 - 130
Nitrobenzene-d5	67		30 - 130
Phenol-d5	77		30 - 130
Terphenyl-d14	77		30 - 130

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Client: Olin Corporation

Job Number: 360-24309-1
Sdg Number: OCRI-06

Client Sample ID: **OC-SB-402-7.5/9.5-XXX**

Lab Sample ID: 360-24309-6
Client Matrix: Solid % Moisture: 10.2

Date Sampled: 08/26/2009 1200
Date Received: 08/26/2009 1735

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49095		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48567		Lab File ID:	J02996.D
Dilution:	1.0			Initial Weight/Volume:	30.57 g
Date Analyzed:	09/17/2009 1350			Final Weight/Volume:	1.0 mL
Date Prepared:	09/03/2009 1311			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 4

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
1000130-97-9	E-15-Heptadecenal	13.63	68	T J N
297-3-0	Cyclotetracosane	14.28	96	T J N
7683-64-9	Squalene	14.65	65	T J N
	Unknown	14.91	38	T J

Client: Olin Corporation

Job Number: 360-24309-1
Sdg Number: OCRI-06

Client Sample ID: **OC-SB-407-0.0/1.0-XXX**

Lab Sample ID: 360-24309-7
Client Matrix: Solid
% Moisture: 9.4

Date Sampled: 08/26/2009 1010
Date Received: 08/26/2009 1735

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48521		Instrument ID:	Inst. J
Preparation:	3550B	Prep Batch: 360-48515		Lab File ID:	J02860.D
Dilution:	1.0			Initial Weight/Volume:	100.52 g
Date Analyzed:	09/05/2009 1025			Final Weight/Volume:	1.0 mL
Date Prepared:	09/02/2009 1439			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodimethylamine		ND		1.3	5.5

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	60		30 - 130
2-Fluorobiphenyl	46		30 - 130
2-Fluorophenol	41		30 - 130
Nitrobenzene-d5	52		30 - 130
Phenol-d5	44		30 - 130
Terphenyl-d14	58		30 - 130

Client: Olin Corporation

Job Number: 360-24309-1
Sdg Number: OCRI-06

Client Sample ID: **OC-SB-407-0.0/1.0-XXX**

Lab Sample ID: 360-24309-7
Client Matrix: Solid
% Moisture: 9.4

Date Sampled: 08/26/2009 1010
Date Received: 08/26/2009 1735

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49059		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48567		Lab File ID:	J02991.D
Dilution:	1.0			Initial Weight/Volume:	30.80 g
Date Analyzed:	09/16/2009 2039	Run Type: DL		Final Weight/Volume:	1.0 mL
Date Prepared:	09/03/2009 1311			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Diphenylamine		2.3	J	2.2	36

Client: Olin Corporation

Job Number: 360-24309-1
Sdg Number: OCRI-06

Client Sample ID: **OC-SB-407-0.0/1.0-XXX**

Lab Sample ID: 360-24309-7
Client Matrix: Solid % Moisture: 9.4

Date Sampled: 08/26/2009 1010
Date Received: 08/26/2009 1735

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49141		Instrument ID:	NOEQUIP
Preparation:	3546	Prep Batch: 360-48567		Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	30.80 g
Date Analyzed:	09/16/2009 2039			Final Weight/Volume:	1.0 mL
Date Prepared:	09/03/2009 1311			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodiphenylamine		ND		11	36

Client: Olin Corporation

Job Number: 360-24309-1
Sdg Number: OCRI-06

Client Sample ID: **OC-SB-407-0.0/1.0-XXX**

Lab Sample ID: 360-24309-7
Client Matrix: Solid
% Moisture: 9.4

Date Sampled: 08/26/2009 1010
Date Received: 08/26/2009 1735

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49266		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48567		Lab File ID:	B10474.D
Dilution:	1.0			Initial Weight/Volume:	30.80 g
Date Analyzed:	09/21/2009 2309	Run Type: RA		Final Weight/Volume:	1.0 mL
Date Prepared:	09/03/2009 1311			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		11	36
1,2,4,5-Tetrachlorobenzene		ND		11	36
1,2,4-Trichlorobenzene		ND		11	36
1,2-Dichlorobenzene		ND		11	36
1,3-Dichlorobenzene		ND		11	36
1,4-Dichlorobenzene		ND		11	36
1-Methylnaphthalene		ND		11	36
2,2'-oxybis[1-chloropropane]		ND		11	36
2,3,4,6-Tetrachlorophenol		ND		11	36
2,4,5-Trichlorophenol		ND		11	36
2,4,6-Trichlorophenol		ND		11	36
2,4-Dichlorophenol		ND		11	36
2,4-Dimethylphenol		ND		14	36
2,4-Dinitrophenol		~~ND~~ R		11	36
2,4-Dinitrotoluene		ND		11	36
2,6-Dinitrotoluene		ND		11	36
2-Chloronaphthalene		ND		11	36
2-Chlorophenol		ND		11	36
2-Methylnaphthalene		ND		11	36
2-Methylphenol		ND		22	36
2-Nitroaniline		~~ND~~		11	180
2-Nitrophenol		ND		11	36
3 & 4 Methylphenol		ND		11	36
3,3'-Dichlorobenzidine		ND		11	72
3-Nitroaniline		ND		11	180
4,6-Dinitro-2-methylphenol		ND		11	180
4-Bromophenyl phenyl ether		ND		11	36
4-Chloro-3-methylphenol		ND		11	72
4-Chloroaniline		ND		11	72
4-Chlorophenyl phenyl ether		ND		11	36
4-Nitroaniline		ND		11	180
4-Nitrophenol		ND		11	180
Acenaphthene		ND		11	36
Acenaphthylene		ND		11	36
Acetophenone		43 EB		11	36
Aniline		ND		11	36
Anthracene		ND		11	36
Atrazine		ND		11	36
Azobenzene		ND		11	36
Benzaldehyde		ND		11	36
Benzo[a]anthracene		18	J	11	36
Benzo[a]pyrene		ND		11	36
Benzo[b]fluoranthene		ND		11	36
Benzo[g,h,i]perylene		ND		11	36
Benzo[k]fluoranthene		ND		11	36
Benzoic acid		200 JEB		16	180

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Client: Olin Corporation

Job Number: 360-24309-1
Sdg Number: OCRI-06

Client Sample ID: **OC-SB-407-0.0/1.0-XXX**

Lab Sample ID: 360-24309-7
Client Matrix: Solid % Moisture: 9.4

Date Sampled: 08/26/2009 1010
Date Received: 08/26/2009 1735

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49266		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48567		Lab File ID:	B10474.D
Dilution:	1.0			Initial Weight/Volume:	30.80 g
Date Analyzed:	09/21/2009 2309	Run Type: RA		Final Weight/Volume:	1.0 mL
Date Prepared:	09/03/2009 1311			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		11	36
Benzyl alcohol		ND		31	72
Bis(2-chloroethoxy)methane		ND		11	36
Bis(2-chloroethyl)ether		ND		11	36
Bis(2-ethylhexyl) phthalate		72	EB	11	36
Butyl benzyl phthalate		ND		11	36
Caprolactam		ND		11	36
Carbazole		ND		11	36
Chrysene		21	J	11	36
Dibenz(a,h)anthracene		ND		11	36
Dibenzofuran		ND		11	36
Diethyl phthalate		ND		11	36
Dimethyl phthalate		ND		11	36
Di-n-butyl phthalate		ND		32	36
Di-n-octyl phthalate		ND		18	36
Diphenyl oxide		ND		11	36
Fluoranthene		39		11	36
Fluorene		ND		11	36
Hexachlorobenzene		ND		11	36
Hexachlorobutadiene		ND		11	36
Hexachlorocyclopentadiene		ND		11	72
Hexachloroethane		ND		11	36
Indeno[1,2,3-cd]pyrene		ND		11	36
Isophorone		ND		11	36
Naphthalene		ND		11	86
Nitrobenzene		ND		11	36
N-Nitrosodimethylamine		ND		11	36
N-Nitrosodi-n-propylamine		ND		11	36
Pentachlorophenol		ND		11	36
Phenanthrene		32	J	11	43
Phenol		ND		11	36
Pyrene		30	J	11	36

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	34		30 - 130
2-Fluorophenol	38		30 - 130
2-Fluorobiphenyl	32		30 - 130
Nitrobenzene-d5	36		30 - 130
Phenol-d5	39		30 - 130
Terphenyl-d14	32		30 - 130

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Client: Olin Corporation

Job Number: 360-24309-1
Sdg Number: OCRI-06

Client Sample ID: **OC-SB-407-0.0/1.0-XXX**

Lab Sample ID: 360-24309-7
Client Matrix: Solid % Moisture: 9.4

Date Sampled: 08/26/2009 1010
Date Received: 08/26/2009 1735

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49266		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48567		Lab File ID:	B10474.D
Dilution:	1.0			Initial Weight/Volume:	30.80 g
Date Analyzed:	09/21/2009 2309	Run Type: RA		Final Weight/Volume:	1.0 mL
Date Prepared:	09/03/2009 1311			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 4

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
77899-3-7	1-Heneicosyl formate	15.02	1100	T J N
	Unknown	16.17	3700	T J
	Unknown	16.71	14	T J
	Unknown	17.30	17	T J

Client: Olin Corporation

Job Number: 360-24309-1
Sdg Number: OCRI-06

Client Sample ID: **OC-SB-407-8.0/10.0-XXX**

Lab Sample ID: 360-24309-9
Client Matrix: Solid
% Moisture: 18.0

Date Sampled: 08/26/2009 1020
Date Received: 08/26/2009 1735

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48521		Instrument ID:	Inst. J
Preparation:	3550B	Prep Batch: 360-48515		Lab File ID:	J02854.D
Dilution:	1.0			Initial Weight/Volume:	100.25 g
Date Analyzed:	09/03/2009 0413			Final Weight/Volume:	1.0 mL
Date Prepared:	09/02/2009 1439			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodimethylamine		ND		1.4	6.1

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	59		30 - 130
2-Fluorobiphenyl	53		30 - 130
2-Fluorophenol	56		30 - 130
Nitrobenzene-d5	58		30 - 130
Phenol-d5	60		30 - 130
Terphenyl-d14	63		30 - 130

Client: Olin Corporation

Job Number: 360-24309-1
Sdg Number: OCRI-06

Client Sample ID: **OC-SB-407-8.0/10.0-XXX**

Lab Sample ID: 360-24309-9
Client Matrix: Solid % Moisture: 18.0

Date Sampled: 08/26/2009 1020
Date Received: 08/26/2009 1735

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49095		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48567		Lab File ID:	J02999.D
Dilution:	1.0			Initial Weight/Volume:	30.36 g
Date Analyzed:	09/17/2009 1518			Final Weight/Volume:	1.0 mL
Date Prepared:	09/03/2009 1311			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		12	40
1,2,4,5-Tetrachlorobenzene		ND		12	40
1,2,4-Trichlorobenzene		ND		12	40
1,2-Dichlorobenzene		ND		12	40
1,3-Dichlorobenzene		ND		12	40
1,4-Dichlorobenzene		ND		12	40
1-Methylnaphthalene		ND		12	40
2,2'-oxybis[1-chloropropane]		ND		12	40
2,3,4,6-Tetrachlorophenol		ND		12	40
2,4,5-Trichlorophenol		ND		12	40
2,4,6-Trichlorophenol		ND		12	40
2,4-Dichlorophenol		ND		12	40
2,4-Dimethylphenol		ND		16	40
2,4-Dinitrophenol		ND		12	40
2,4-Dinitrotoluene		ND		12	40
2,6-Dinitrotoluene		ND		12	40
2-Chloronaphthalene		ND		12	40
2-Chlorophenol		ND		12	40
2-Methylnaphthalene		ND		12	40
2-Methylphenol		ND		24	40
2-Nitroaniline		ND		12	200
2-Nitrophenol		ND		12	40
3 & 4 Methylphenol		ND		12	40
3,3'-Dichlorobenzidine		ND		12	80
3-Nitroaniline		ND		12	200
4,6-Dinitro-2-methylphenol		ND		12	200
4-Bromophenyl phenyl ether		ND		12	40
4-Chloro-3-methylphenol		ND		12	80
4-Chloroaniline		ND		12	80
4-Chlorophenyl phenyl ether		ND		12	40
4-Nitroaniline		ND		12	200
4-Nitrophenol		ND		12	200
Acenaphthene		ND		12	40
Acenaphthylene		ND		12	40
Acetophenone		ND		12	40
Aniline		ND		12	40
Anthracene		ND		12	40
Atrazine		ND		12	40
Azobenzene		ND		12	40
Benzaldehyde		ND		12	40
Benzo[a]anthracene		ND		12	40
Benzo[a]pyrene		ND		12	40
Benzo[b]fluoranthene		ND		12	40
Benzo[g,h,i]perylene		ND		12	40
Benzo[k]fluoranthene		ND		12	40
Benzoic acid		98	J EB	18	200

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Client: Olin Corporation

Job Number: 360-24309-1
Sdg Number: OCRI-06

Client Sample ID: **OC-SB-407-8.0/10.0-XXX**

Lab Sample ID: 360-24309-9
Client Matrix: Solid
% Moisture: 18.0

Date Sampled: 08/26/2009 1020
Date Received: 08/26/2009 1735

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49095		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48567		Lab File ID:	J02999.D
Dilution:	1.0			Initial Weight/Volume:	30.36 g
Date Analyzed:	09/17/2009 1518			Final Weight/Volume:	1.0 mL
Date Prepared:	09/03/2009 1311			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		12	40
Benzyl alcohol		ND		34	80
Bis(2-chloroethoxy)methane		ND		12	40
Bis(2-chloroethyl)ether		ND		12	40
Bis(2-ethylhexyl) phthalate		ND		12	40
Butyl benzyl phthalate		ND		12	40
Caprolactam		ND		12	40
Carbazole		ND		12	40
Chrysene		ND		12	40
Dibenz(a,h)anthracene		ND		12	40
Dibenzofuran		ND		12	40
Diethyl phthalate		ND		12	40
Dimethyl phthalate		ND		12	40
Di-n-butyl phthalate		ND		35	40
Di-n-octyl phthalate		ND		20	40
Diphenyl oxide		ND		12	40
Diphenylamine		ND		2.4	40
Fluoranthene		ND		12	40
Fluorene		ND		12	40
Hexachlorobenzene		ND		12	40
Hexachlorobutadiene		ND		12	40
Hexachlorocyclopentadiene		ND		12	80
Hexachloroethane		ND		12	40
Indeno[1,2,3-cd]pyrene		ND		12	40
Isophorone		ND		12	40
Naphthalene		ND		12	96
Nitrobenzene		ND		12	40
N-Nitrosodimethylamine		ND		12	40
N-Nitrosodi-n-propylamine		ND		12	40
N-Nitrosodiphenylamine		ND		12	40
Pentachlorophenol		ND		12	40
Phenanthrene		16	J	12	48
Phenol		ND		12	40
Pyrene		20	J	12	40

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	91		30 - 130
2-Fluorophenol	86		30 - 130
2-Fluorobiphenyl	73		30 - 130
Nitrobenzene-d5	79		30 - 130
Phenol-d5	84		30 - 130
Terphenyl-d14	85		30 - 130

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Client: Olin Corporation

Job Number: 360-24309-1
Sdg Number: OCRI-06

Client Sample ID: **OC-SB-407-8.0/10.0-XXX**

Lab Sample ID: 360-24309-9
Client Matrix: Solid % Moisture: 18.0

Date Sampled: 08/26/2009 1020
Date Received: 08/26/2009 1735

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49095		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48567		Lab File ID:	J02999.D
Dilution:	1.0			Initial Weight/Volume:	30.36 g
Date Analyzed:	09/17/2009 1518			Final Weight/Volume:	1.0 mL
Date Prepared:	09/03/2009 1311			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 8

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
~~638-67-5~~	~~Tricosane~~	~~12.98~~	~~32~~	~~T J N~~
62016-79-9	Heptacosane, 1-chloro-	13.64	94	T J N
629-78-7	Heptadecane	14.28	95	T J N
629-66-3	2-Nonadecanone	14.33	57	T J N
7796-19-2	2-Heptacosanone	14.97	190	T J N
1000214-20-5	Stigmastan-6,22-dien, 3,5-dedihydro-	16.11	63	T J N
83-47-6	.gamma.-Sitosterol	16.30	79	T J N
	Unknown	16.53	330	T J

Client: Olin Corporation

Job Number: 360-24309-1
Sdg Number: OCRI-06

Client Sample ID: **OC-SB-408-0.0/1.0-XXX**

Lab Sample ID: 360-24309-10
Client Matrix: Solid % Moisture: 11.5

Date Sampled: 08/26/2009 1100
Date Received: 08/26/2009 1735

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49095		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48567		Lab File ID:	J03000.D
Dilution:	1.0			Initial Weight/Volume:	30.14 g
Date Analyzed:	09/17/2009 1547			Final Weight/Volume:	1.0 mL
Date Prepared:	09/03/2009 1311			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		11	37
1,2,4,5-Tetrachlorobenzene		ND		11	37
1,2,4-Trichlorobenzene		ND		11	37
1,2-Dichlorobenzene		ND		11	37
1,3-Dichlorobenzene		ND		11	37
1,4-Dichlorobenzene		ND		11	37
1-Methylnaphthalene		ND		11	37
2,2'-oxybis[1-chloropropane]		ND		11	37
2,3,4,6-Tetrachlorophenol		ND		11	37
2,4,5-Trichlorophenol		ND		11	37
2,4,6-Trichlorophenol		ND		11	37
2,4-Dichlorophenol		ND		11	37
2,4-Dimethylphenol		ND		15	37
2,4-Dinitrophenol		ND		11	37
2,4-Dinitrotoluene		ND		11	37
2,6-Dinitrotoluene		ND		11	37
2-Chloronaphthalene		ND		11	37
2-Chlorophenol		ND		11	37
2-Methylnaphthalene		ND		11	37
2-Methylphenol		ND		22	37
2-Nitroaniline		ND		11	190
2-Nitrophenol		ND		11	37
3 & 4 Methylphenol		ND		11	37
3,3'-Dichlorobenzidine		ND	J	11	75
3-Nitroaniline		ND		11	190
4,6-Dinitro-2-methylphenol		ND		11	190
4-Bromophenyl phenyl ether		ND		11	37
4-Chloro-3-methylphenol		ND		11	75
4-Chloroaniline		ND		11	75
4-Chlorophenyl phenyl ether		ND		11	37
4-Nitroaniline		ND		11	190
4-Nitrophenol		ND		11	190
Acenaphthene		ND		11	37
Acenaphthylene		ND		11	37
Acetophenone		ND		11	37
Aniline		ND	J	11	37
Anthracene		ND		11	37
Atrazine		ND		11	37
Azobenzene		ND		11	37
Benzaldehyde		ND		11	37
Benzo[a]anthracene		11	J	11	37
Benzo[a]pyrene		15	J	11	37
Benzo[b]fluoranthene		20	J	11	37
Benzo[g,h,i]perylene		ND		11	37
Benzo[k]fluoranthene		ND		11	37
Benzoic acid		140	J	17	190

Client: Olin Corporation

Job Number: 360-24309-1
Sdg Number: OCRI-06

Client Sample ID: **OC-SB-408-0.0/1.0-XXX**

Lab Sample ID: 360-24309-10
Client Matrix: Solid
% Moisture: 11.5

Date Sampled: 08/26/2009 1100
Date Received: 08/26/2009 1735

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49095		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48567		Lab File ID:	J03000.D
Dilution:	1.0			Initial Weight/Volume:	30.14 g
Date Analyzed:	09/17/2009 1547			Final Weight/Volume:	1.0 mL
Date Prepared:	09/03/2009 1311			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		11	37
Benzyl alcohol		ND		32	75
Bis(2-chloroethoxy)methane		ND		11	37
Bis(2-chloroethyl)ether		ND		11	37
Bis(2-ethylhexyl) phthalate		11	JB D	11	37
Butyl benzyl phthalate		ND		11	37
Caprolactam		ND		11	37
Carbazole		ND		11	37
Chrysene		16	J	11	37
Dibenz(a,h)anthracene		ND		11	37
Dibenzofuran		ND		11	37
Diethyl phthalate		ND		11	37
Dimethyl phthalate		ND		11	37
Di-n-butyl phthalate		ND		33	37
Di-n-octyl phthalate		ND		19	37
Diphenyl oxide		ND		11	37
Fluoranthene		20	J	11	37
Fluorene		ND		11	37
Hexachlorobenzene		ND		11	37
Hexachlorobutadiene		ND		11	37
Hexachlorocyclopentadiene		ND		11	75
Hexachloroethane		ND		11	37
Indeno[1,2,3-cd]pyrene		ND		11	37
Isophorone		ND		11	37
Naphthalene		ND		11	90
Nitrobenzene		ND		11	37
N-Nitrosodimethylamine		ND		11	37
N-Nitrosodi-n-propylamine		ND		11	37
N-Nitrosodiphenylamine		ND		11	37
Pentachlorophenol		ND		11	37
Phenanthrene		12	J	11	45
Phenol		ND		11	37
Pyrene		25	J	11	37

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	86		30 - 130
2-Fluorobiphenyl	72		30 - 130
2-Fluorophenol	76		30 - 130
Nitrobenzene-d5	69		30 - 130
Phenol-d5	78		30 - 130
Terphenyl-d14	84		30 - 130

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Client: Olin Corporation

Job Number: 360-24309-1
Sdg Number: OCRI-06

Client Sample ID: **OC-SB-408-0.0/1.0-XXX**

Lab Sample ID: 360-24309-10
Client Matrix: Solid % Moisture: 11.5

Date Sampled: 08/26/2009 1100
Date Received: 08/26/2009 1735

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49095		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48567		Lab File ID:	J03000.D
Dilution:	1.0			Initial Weight/Volume:	30.14 g
Date Analyzed:	09/17/2009 1547			Final Weight/Volume:	1.0 mL
Date Prepared:	09/03/2009 1311			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 8

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
112-88-9	1-Octadecene	12.95	91	T J N
18435-45-5	1-Nonadecene	13.63	690	T J N
1599-67-3	1-Docosene	14.28	1300	T J N
6920-24-7	Hexadecane-1,2-diol	14.61	300	T J N
297-3-0	Cyclotetracosane	14.93	700	T J N
67860-4-2	Oxirane, heptadecyl-	15.35	140	T J N
1678-31-5	a"-Neogammacer-22(29)-en-3-ol, (3.beta.,	16.65	130	T J N
559-74-0	Friedelin	17.20	150	T J N

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Client: Olin Corporation

Job Number: 360-24309-1
Sdg Number: OCRI-06

Client Sample ID: **OC-SB-408-7.0/9.9-XXX**

Lab Sample ID: 360-24309-11
Client Matrix: Solid
% Moisture: 13.1

Date Sampled: 08/26/2009 1120
Date Received: 08/26/2009 1735

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49095		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48567		Lab File ID:	J03001.D
Dilution:	1.0			Initial Weight/Volume:	30.08 g
Date Analyzed:	09/17/2009 1616			Final Weight/Volume:	1.0 mL
Date Prepared:	09/03/2009 1311			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		11	38
1,2,4,5-Tetrachlorobenzene		ND		11	38
1,2,4-Trichlorobenzene		ND		11	38
1,2-Dichlorobenzene		ND		11	38
1,3-Dichlorobenzene		ND		11	38
1,4-Dichlorobenzene		ND		11	38
1-Methylnaphthalene		ND		11	38
2,2'-oxybis[1-chloropropane]		ND		11	38
2,3,4,6-Tetrachlorophenol		ND		11	38
2,4,5-Trichlorophenol		ND		11	38
2,4,6-Trichlorophenol		ND		11	38
2,4-Dichlorophenol		ND		11	38
2,4-Dimethylphenol		~~ND~~		15	38
2,4-Dinitrophenol		~~ND~~		11	38
2,4-Dinitrotoluene		ND		11	38
2,6-Dinitrotoluene		ND		11	38
2-Chloronaphthalene		ND		11	38
2-Chlorophenol		ND		11	38
2-Methylnaphthalene		ND		11	38
2-Methylphenol		ND		23	38
2-Nitroaniline		~~ND~~		11	190
2-Nitrophenol		ND		11	38
3 & 4 Methylphenol		ND		11	38
3,3'-Dichlorobenzidine		ND	J	11	77
3-Nitroaniline		ND		11	190
4,6-Dinitro-2-methylphenol		ND		11	190
4-Bromophenyl phenyl ether		ND		11	38
4-Chloro-3-methylphenol		ND		11	77
4-Chloroaniline		ND		11	77
4-Chlorophenyl phenyl ether		ND		11	38
4-Nitroaniline		ND		11	190
4-Nitrophenol		ND		11	190
Acenaphthene		ND		11	38
Acenaphthylene		ND		11	38
Acetophenone		ND		11	38
Aniline		ND	J	11	38
Anthracene		ND		11	38
Atrazine		ND		11	38
Azobenzene		ND		11	38
Benzaldehyde		ND		11	38
Benzo[a]anthracene		ND		11	38
Benzo[a]pyrene		ND		11	38
Benzo[b]fluoranthene		ND		11	38
Benzo[g,h,i]perylene		ND		11	38
Benzo[k]fluoranthene		ND		11	38
Benzoic acid		~~ND~~	R	17	190

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Client: Olin Corporation

Job Number: 360-24309-1
Sdg Number: OCRI-06

Client Sample ID: **OC-SB-408-7.0/9.9-XXX**

Lab Sample ID: 360-24309-11
Client Matrix: Solid % Moisture: 13.1

Date Sampled: 08/26/2009 1120
Date Received: 08/26/2009 1735

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49095		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48567		Lab File ID:	J03001.D
Dilution:	1.0			Initial Weight/Volume:	30.08 g
Date Analyzed:	09/17/2009 1616			Final Weight/Volume:	1.0 mL
Date Prepared:	09/03/2009 1311			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		11	38
Benzyl alcohol		ND		33	77
Bis(2-chloroethoxy)methane		ND		11	38
Bis(2-chloroethyl)ether		ND		11	38
Bis(2-ethylhexyl) phthalate		12	J	11	38
Butyl benzyl phthalate		ND		11	38
Caprolactam		ND		11	38
Carbazole		ND		11	38
Chrysene		ND		11	38
Dibenz(a,h)anthracene		ND		11	38
Dibenzofuran		ND		11	38
Diethyl phthalate		ND		11	38
Dimethyl phthalate		ND		11	38
Di-n-butyl phthalate		ND		34	38
Di-n-octyl phthalate		ND		19	38
Diphenyl oxide		ND		11	38
Fluoranthene		ND		11	38
Fluorene		ND		11	38
Hexachlorobenzene		ND		11	38
Hexachlorobutadiene		ND		11	38
Hexachlorocyclopentadiene		ND		11	77
Hexachloroethane		ND		11	38
Indeno[1,2,3-cd]pyrene		ND		11	38
Isophorone		ND		11	38
Naphthalene		ND		11	92
Nitrobenzene		ND		11	38
N-Nitrosodimethylamine		ND		11	38
N-Nitrosodi-n-propylamine		ND		11	38
N-Nitrosodiphenylamine		ND		11	38
Pentachlorophenol		ND		11	38
Phenanthrene		ND		11	46
Phenol		ND		11	38
Pyrene		ND		11	38

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	85		30 - 130
2-Fluorobiphenyl	70		30 - 130
2-Fluorophenol	80		30 - 130
Nitrobenzene-d5	69		30 - 130
Phenol-d5	77		30 - 130
Terphenyl-d14	86		30 - 130

Client: Olin Corporation

Job Number: 360-24309-1
Sdg Number: OCRI-06

Client Sample ID: **OC-SB-408-7.0/9.9-XXX**

Lab Sample ID: 360-24309-11
Client Matrix: Solid % Moisture: 13.1

Date Sampled: 08/26/2009 1120
Date Received: 08/26/2009 1735

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49095		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48567		Lab File ID:	J03001.D
Dilution:	1.0			Initial Weight/Volume:	30.08 g
Date Analyzed:	09/17/2009 1616			Final Weight/Volume:	1.0 mL
Date Prepared:	09/03/2009 1311			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 6

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
128-37-0	Butylated Hydroxytoluene	9.70	30	T J N
~~3910-35-8~~	~~1H-Indene, 2,3-dihydro-1,1,3-trimethyl-3~~	~~10.74~~	~~38~~	~~T J N~~
~~22768-22-5~~	~~2,4-Diphenyl-4-methyl-2(E)-pentene~~	~~11.24~~	~~29~~	~~T J N~~
112-61-8	Octadecanoic acid, methyl ester	12.35	27	T J N
295-65-8	Cyclohexadecane	13.64	41	T J N
	Unknown	14.91	55	T J

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Client: Olin Corporation

Job Number: 360-24309-1
Sdg Number: OCRI-06

Client Sample ID: **OC-SB-414-0.0/1.0-XXX**

Lab Sample ID: 360-24309-12
Client Matrix: Solid % Moisture: 4.1

Date Sampled: 08/26/2009 0840
Date Received: 08/26/2009 1735

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49098		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48691		Lab File ID:	B10376.D
Dilution:	1.0			Initial Weight/Volume:	30.06 g
Date Analyzed:	09/17/2009 2130			Final Weight/Volume:	1.0 mL
Date Prepared:	09/08/2009 1206			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		10	35
1,2,4,5-Tetrachlorobenzene		ND		10	35
1,2,4-Trichlorobenzene		ND		10	35
1,2-Dichlorobenzene		ND		10	35
1,3-Dichlorobenzene		ND		10	35
1,4-Dichlorobenzene		ND		10	35
1-Methylnaphthalene		ND		10	35
2,2'-oxybis[1-chloropropane]		ND		10	35
2,3,4,6-Tetrachlorophenol		ND		10	35
2,4,5-Trichlorophenol		ND		10	35
2,4,6-Trichlorophenol		ND		10	35
2,4-Dichlorophenol		ND		10	35
2,4-Dimethylphenol		ND		14	35
2,4-Dinitrophenol		~~ND~~		10	35
2,4-Dinitrotoluene		ND		10	35
2,6-Dinitrotoluene		ND		10	35
2-Chloronaphthalene		ND		10	35
2-Chlorophenol		ND		10	35
2-Methylnaphthalene		ND		10	35
2-Methylphenol		ND		21	35
2-Nitroaniline		~~ND~~		10	170
2-Nitrophenol		ND		10	35
3 & 4 Methylphenol		ND		10	35
3,3'-Dichlorobenzidine		ND		10	69
3-Nitroaniline		ND		10	170
4,6-Dinitro-2-methylphenol		ND		10	170
4-Bromophenyl phenyl ether		ND		10	35
4-Chloro-3-methylphenol		ND		10	69
4-Chloroaniline		ND		10	69
4-Chlorophenyl phenyl ether		ND		10	35
4-Nitroaniline		ND		10	170
4-Nitrophenol		ND		10	170
Acenaphthene		ND		10	35
Acenaphthylene		ND		10	35
Acetophenone		ND		10	35
Aniline		ND		10	35
Anthracene		ND		10	35
Atrazine		ND		10	35
Azobenzene		ND		10	35
Benzaldehyde		ND		10	35
Benzo[a]anthracene		ND		10	35
Benzo[a]pyrene		ND		10	35
Benzo[b]fluoranthene		ND		10	35
Benzo[g,h,i]perylene		ND		10	35
Benzo[k]fluoranthene		ND		10	35
Benzoic acid		~~52~~	J B	16	170

Client: Olin Corporation

Job Number: 360-24309-1
Sdg Number: OCRI-06

Client Sample ID: **OC-SB-414-0.0/1.0-XXX**

Lab Sample ID: 360-24309-12
Client Matrix: Solid % Moisture: 4.1

Date Sampled: 08/26/2009 0840
Date Received: 08/26/2009 1735

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49098		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48691		Lab File ID:	B10376.D
Dilution:	1.0			Initial Weight/Volume:	30.06 g
Date Analyzed:	09/17/2009 2130			Final Weight/Volume:	1.0 mL
Date Prepared:	09/08/2009 1206			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		10	35
Benzyl alcohol		ND		30	69
Bis(2-chloroethoxy)methane		ND		10	35
Bis(2-chloroethyl)ether		ND		10	35
Bis(2-ethylhexyl) phthalate		ND		10	35
Butyl benzyl phthalate		ND		10	35
Caprolactam		ND		10	35
Carbazole		ND		10	35
Chrysene		ND		10	35
Dibenz(a,h)anthracene		ND		10	35
Dibenzofuran		ND		10	35
Diethyl phthalate		ND		10	35
Dimethyl phthalate		ND		10	35
Di-n-butyl phthalate		ND		30	35
Di-n-octyl phthalate		ND		17	35
Diphenyl oxide		ND		10	35
Fluoranthene		ND		10	35
Fluorene		ND		10	35
Hexachlorobenzene		ND		10	35
Hexachlorobutadiene		ND		10	35
Hexachlorocyclopentadiene		ND		10	69
Hexachloroethane		ND		10	35
Indeno[1,2,3-cd]pyrene		ND		10	35
Isophorone		ND		10	35
Naphthalene		ND		10	83
Nitrobenzene		ND		10	35
N-Nitrosodimethylamine		ND		10	35
N-Nitrosodi-n-propylamine		ND		10	35
N-Nitrosodiphenylamine		ND		10	35
Pentachlorophenol		ND		10	35
Phenanthrene		ND		10	42
Phenol		ND		10	35
Pyrene		ND		10	35

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	63		30 - 130
2-Fluorobiphenyl	60		30 - 130
2-Fluorophenol	65		30 - 130
Nitrobenzene-d5	64		30 - 130
Phenol-d5	63		30 - 130
Terphenyl-d14	67		30 - 130

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Client: Olin Corporation

Job Number: 360-24309-1
Sdg Number: OCRI-06

Client Sample ID: **OC-SB-414-0.0/1.0-XXX**

Lab Sample ID: 360-24309-12
Client Matrix: Solid % Moisture: 4.1

Date Sampled: 08/26/2009 0840
Date Received: 08/26/2009 1735

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49098		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48691		Lab File ID:	B10376.D
Dilution:	1.0			Initial Weight/Volume:	30.06 g
Date Analyzed:	09/17/2009 2130			Final Weight/Volume:	1.0 mL
Date Prepared:	09/08/2009 1206			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 7

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Unknown	11.64	44	T J
3452-7-1	1-Eicosene	15.66	77	T J N
~~593-49-7~~	~~Heptacosane~~	~~16.61~~	~~47~~	~~T J N~~
1599-67-3	1-Docosene	16.76	180	T J N
~~112-95-8~~	~~Eicosane~~	~~17.19~~	~~48~~	~~T J N~~
~~7683-64-9~~	~~Squalene~~	~~17.35~~	~~90~~	~~T J N~~
14021-23-9	D-Friedoolean-14-ene, 3-methoxy-, (3.bet	21.75	300	T J N

4/27/10

Client: Olin Corporation

Job Number: 360-24309-1
Sdg Number: OCRI-06

Client Sample ID: **OC-SB-414-6.0/8.0-XXX**

Lab Sample ID: 360-24309-14
Client Matrix: Solid
% Moisture: 10.4

Date Sampled: 08/26/2009 0845
Date Received: 08/26/2009 1735

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49098		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48691		Lab File ID:	B10378.D
Dilution:	1.0			Initial Weight/Volume:	30.05 g
Date Analyzed:	09/17/2009 2238			Final Weight/Volume:	1.0 mL
Date Prepared:	09/08/2009 1206			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		11	37
1,2,4,5-Tetrachlorobenzene		ND		11	37
1,2,4-Trichlorobenzene		ND		11	37
1,2-Dichlorobenzene		ND		11	37
1,3-Dichlorobenzene		ND		11	37
1,4-Dichlorobenzene		ND		11	37
1-Methylnaphthalene		ND		11	37
2,2'-oxybis[1-chloropropane]		ND		11	37
2,3,4,6-Tetrachlorophenol		ND		11	37
2,4,5-Trichlorophenol		ND		11	37
2,4,6-Trichlorophenol		ND		11	37
2,4-Dichlorophenol		ND		11	37
2,4-Dimethylphenol		ND		15	37
2,4-Dinitrophenol		ND J		11	37
2,4-Dinitrotoluene		ND		11	37
2,6-Dinitrotoluene		ND		11	37
2-Chloronaphthalene		ND		11	37
2-Chlorophenol		ND		11	37
2-Methylnaphthalene		ND		11	37
2-Methylphenol		ND		22	37
2-Nitroaniline		ND		11	190
2-Nitrophenol		ND		11	37
3 & 4 Methylphenol		ND		11	37
3,3'-Dichlorobenzidine		ND J		11	74
3-Nitroaniline		ND		11	190
4,6-Dinitro-2-methylphenol		ND		11	190
4-Bromophenyl phenyl ether		ND		11	37
4-Chloro-3-methylphenol		ND		11	74
4-Chloroaniline		ND		11	74
4-Chlorophenyl phenyl ether		ND		11	37
4-Nitroaniline		ND		11	190
4-Nitrophenol		ND J		11	190
Acenaphthene		15	J	11	37
Acenaphthylene		ND		11	37
Acetophenone		ND		11	37
Aniline		ND J		11	37
Anthracene		29 J	J	11	37
Atrazine		ND		11	37
Azobenzene		ND		11	37
Benzaldehyde		ND		11	37
Benzo[a]anthracene		88		11	37
Benzo[a]pyrene		74		11	37
Benzo[b]fluoranthene		110		11	37
Benzo[g,h,i]perylene		49		11	37
Benzo[k]fluoranthene		35	J	11	37
Benzoic acid		~~83~~	~~J B~~	17	190

Client: Olin Corporation

Job Number: 360-24309-1
Sdg Number: OCRI-06

Client Sample ID: **OC-SB-414-6.0/8.0-XXX**

Lab Sample ID: 360-24309-14
Client Matrix: Solid
% Moisture: 10.4

Date Sampled: 08/26/2009 0845
Date Received: 08/26/2009 1735

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49098		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48691		Lab File ID:	B10378.D
Dilution:	1.0			Initial Weight/Volume:	30.05 g
Date Analyzed:	09/17/2009 2238			Final Weight/Volume:	1.0 mL
Date Prepared:	09/08/2009 1206			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		11	37
Benzyl alcohol		ND		32	74
Bis(2-chloroethoxy)methane		ND		11	37
Bis(2-chloroethyl)ether		ND		11	37
Bis(2-ethylhexyl) phthalate		78	B	11	37
Butyl benzyl phthalate		ND		11	37
Caprolactam		ND		11	37
Carbazole		17	J	11	37
Chrysene		89		11	37
Dibenz(a,h)anthracene		ND		11	37
Dibenzofuran		ND		11	37
Diethyl phthalate		ND		11	37
Dimethyl phthalate		ND		11	37
Di-n-butyl phthalate		ND		33	37
Di-n-octyl phthalate		ND		19	37
Diphenyl oxide		ND		11	37
Fluoranthene		200		11	37
Fluorene		12	J	11	37
Hexachlorobenzene		ND		11	37
Hexachlorobutadiene		ND		11	37
Hexachlorocyclopentadiene		ND		11	74
Hexachloroethane		ND		11	37
Indeno[1,2,3-cd]pyrene		47		11	37
Isophorone		ND		11	37
Naphthalene		ND		11	89
Nitrobenzene		ND		11	37
N-Nitrosodimethylamine		ND		11	37
N-Nitrosodi-n-propylamine		ND		11	37
N-Nitrosodiphenylamine		ND		11	37
Pentachlorophenol		ND		11	37
Phenanthrene		120		11	45
Phenol		ND		11	37
Pyrene		140		11	37

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	64		30 - 130
2-Fluorobiphenyl	63		30 - 130
2-Fluorophenol	73		30 - 130
Nitrobenzene-d5	65		30 - 130
Phenol-d5	70		30 - 130
Terphenyl-d14	63		30 - 130

Client: Olin Corporation

Job Number: 360-24309-1
Sdg Number: OCRI-06

Client Sample ID: **OC-SB-414-6.0/8.0-XXX**

Lab Sample ID: 360-24309-14
Client Matrix: Solid % Moisture: 10.4

Date Sampled: 08/26/2009 0845
Date Received: 08/26/2009 1735

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49098		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48691		Lab File ID:	B10378.D
Dilution:	1.0			Initial Weight/Volume:	30.05 g
Date Analyzed:	09/17/2009 2238			Final Weight/Volume:	1.0 mL
Date Prepared:	09/08/2009 1206			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 4

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
18435-45-5	1-Nonadecene	15.60	76	T J N
1599-67-3	1-Docosene	16.67	260	T J N
75207-54-4	2-Pentacosanone	18.00	190	T J N
638-67-5	Tricosane	19.39	160	T J N

4/27/10

Client: Olin Corporation

Job Number: 360-24309-1
Sdg Number: OCRI-06

Client Sample ID: **OC-SB-422-0.0/1.0-XXX**

Lab Sample ID: 360-24309-15
Client Matrix: Solid % Moisture: 4.6

Date Sampled: 08/25/2009 1635
Date Received: 08/26/2009 1735

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48521		Instrument ID:	Inst. J
Preparation:	3550B	Prep Batch: 360-48515		Lab File ID:	J02862.D
Dilution:	1.0			Initial Weight/Volume:	100.06 g
Date Analyzed:	09/05/2009 1347			Final Weight/Volume:	1.0 mL
Date Prepared:	09/02/2009 1439			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodimethylamine		ND		1.2	5.2

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	63		30 - 130
2-Fluorobiphenyl	50		30 - 130
2-Fluorophenol	55		30 - 130
Nitrobenzene-d5	58		30 - 130
Phenol-d5	57		30 - 130
Terphenyl-d14	62		30 - 130

Client: Olin Corporation

Job Number: 360-24309-1
Sdg Number: OCRI-06

Client Sample ID: **OC-SB-422-0.0/1.0-XXX**

Lab Sample ID: 360-24309-15
Client Matrix: Solid % Moisture: 4.6

Date Sampled: 08/25/2009 1635
Date Received: 08/26/2009 1735

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49098		Instrument ID:	Inst_B
Preparation:	3546	Prep Batch: 360-48691		Lab File ID:	B10379.D
Dilution:	1.0			Initial Weight/Volume:	30.60 g
Date Analyzed:	09/17/2009 2312			Final Weight/Volume:	1.0 mL
Date Prepared:	09/08/2009 1206			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		10	34
1,2,4,5-Tetrachlorobenzene		ND		10	34
1,2,4-Trichlorobenzene		ND		10	34
1,2-Dichlorobenzene		ND		10	34
1,3-Dichlorobenzene		ND		10	34
1,4-Dichlorobenzene		ND		10	34
1-Methylnaphthalene		ND		10	34
2,2'-oxybis[1-chloropropane]		ND		10	34
2,3,4,6-Tetrachlorophenol		ND		10	34
2,4,5-Trichlorophenol		ND		10	34
2,4,6-Trichlorophenol		ND		10	34
2,4-Dichlorophenol		ND		10	34
2,4-Dimethylphenol		ND		13	34
2,4-Dinitrophenol		ND	J	10	34
2,4-Dinitrotoluene		ND		10	34
2,6-Dinitrotoluene		ND		10	34
2-Chloronaphthalene		ND		10	34
2-Chlorophenol		ND		10	34
2-Methylnaphthalene		ND		10	34
2-Methylphenol		ND		21	34
2-Nitroaniline		~~ND~~	~~J~~	10	170
2-Nitrophenol		ND		10	34
3 & 4 Methylphenol		ND		10	34
3,3'-Dichlorobenzidine		ND	J	10	69
3-Nitroaniline		ND		10	170
4,6-Dinitro-2-methylphenol		ND		10	170
4-Bromophenyl phenyl ether		ND		10	34
4-Chloro-3-methylphenol		ND		10	69
4-Chloroaniline		ND		10	69
4-Chlorophenyl phenyl ether		ND		10	34
4-Nitroaniline		ND		10	170
4-Nitrophenol		ND	J	10	170
Acenaphthene		ND		10	34
Acenaphthylene		ND		10	34
Acetophenone		ND		10	34
Aniline		ND	J	10	34
Anthracene		ND		10	34
Atrazine		ND		10	34
Azobenzene		ND		10	34
Benzaldehyde		ND		10	34
Benzo[a]anthracene		ND		10	34
Benzo[a]pyrene		ND		10	34
Benzo[b]fluoranthene		ND		10	34
Benzo[g,h,i]perylene		ND		10	34
Benzo[k]fluoranthene		ND		10	34
Benzoic acid		~~50~~	~~J B~~	15	170

W Clarke 4/21/10

W Clarke 3/19/10

Client: Olin Corporation

Job Number: 360-24309-1
Sdg Number: OCRI-06

Client Sample ID: **OC-SB-422-0.0/1.0-XXX**

Lab Sample ID: 360-24309-15
Client Matrix: Solid % Moisture: 4.6

Date Sampled: 08/25/2009 1635
Date Received: 08/26/2009 1735

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49098		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48691		Lab File ID:	B10379.D
Dilution:	1.0			Initial Weight/Volume:	30.60 g
Date Analyzed:	09/17/2009 2312			Final Weight/Volume:	1.0 mL
Date Prepared:	09/08/2009 1206			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		10	34
Benzyl alcohol		ND		29	69
Bis(2-chloroethoxy)methane		ND		10	34
Bis(2-chloroethyl)ether		ND		10	34
Bis(2-ethylhexyl) phthalate		48		10	34
Butyl benzyl phthalate		ND		10	34
Caprolactam		ND		10	34
Carbazole		ND		10	34
Chrysene		ND		10	34
Dibenz(a,h)anthracene		ND		10	34
Dibenzofuran		ND		10	34
Diethyl phthalate		ND		10	34
Dimethyl phthalate		ND		10	34
Di-n-butyl phthalate		ND		30	34
Di-n-octyl phthalate		ND		17	34
Diphenyl oxide		ND		10	34
Diphenylamine		ND		2.1	34
Fluoranthene		11	J	10	34
Fluorene		ND		10	34
Hexachlorobenzene		ND		10	34
Hexachlorobutadiene		ND		10	34
Hexachlorocyclopentadiene		ND		10	69
Hexachloroethane		ND		10	34
Indeno[1,2,3-cd]pyrene		ND		10	34
Isophorone		ND		10	34
Naphthalene		ND		10	82
Nitrobenzene		ND		10	34
N-Nitrosodimethylamine		ND		10	34
N-Nitrosodi-n-propylamine		ND		10	34
N-Nitrosodiphenylamine		ND		10	34
Pentachlorophenol		ND		10	34
Phenanthrene		ND		10	41
Phenol		ND		10	34
Pyrene		ND		10	34

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	69		30 - 130
2-Fluorophenol	70		30 - 130
2-Fluorobiphenyl	64		30 - 130
Nitrobenzene-d5	70		30 - 130
Phenol-d5	65		30 - 130
Terphenyl-d14	71		30 - 130

Client: Olin Corporation

Job Number: 360-24309-1
Sdg Number: OCRI-06

Client Sample ID: **OC-SB-422-0.0/1.0-XXX**

Lab Sample ID: 360-24309-15
Client Matrix: Solid % Moisture: 4.6

Date Sampled: 08/25/2009 1635
Date Received: 08/26/2009 1735

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49098		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48691		Lab File ID:	B10379.D
Dilution:	1.0			Initial Weight/Volume:	30.60 g
Date Analyzed:	09/17/2009 2312			Final Weight/Volume:	1.0 mL
Date Prepared:	09/08/2009 1206			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 5

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
57-10-3	n-Hexadecanoic acid	12.51	52	T J N
1599-67-3	1-Docosene	15.61	37	T J N
6624-79-9	1-Dotriacontanol	16.69	67	T J N
112-84-5	Erucylamide	17.18	130	T J N
7683-64-9	Squalene	17.35	56	T J N

4/27/10

Client: Olin Corporation

Job Number: 360-24309-1
Sdg Number: OCRI-06

Client Sample ID: **OC-SB-422-6.0/8.0-XXX**

Lab Sample ID: 360-24309-17
Client Matrix: Solid % Moisture: 13.3

Date Sampled: 08/25/2009 1645
Date Received: 08/26/2009 1735

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48651		Instrument ID:	Inst. J
Preparation:	3550B	Prep Batch: 360-48653		Lab File ID:	J02868.D
Dilution:	1.0			Initial Weight/Volume:	100.33 g
Date Analyzed:	09/06/2009 1241			Final Weight/Volume:	1 mL
Date Prepared:	09/06/2009 0900			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodimethylamine		ND		1.3	5.7

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	87		30 - 130
2-Fluorobiphenyl	76		30 - 130
2-Fluorophenol	79		30 - 130
Nitrobenzene-d5	88		30 - 130
Phenol-d5	81		30 - 130
Terphenyl-d14	97		30 - 130

Client: Olin Corporation

Job Number: 360-24309-1
Sdg Number: OCRI-06

Client Sample ID: **OC-SB-422-6.0/8.0-XXX**

Lab Sample ID: 360-24309-17
Client Matrix: Solid % Moisture: 13.3

Date Sampled: 08/25/2009 1645
Date Received: 08/26/2009 1735

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49098		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48691		Lab File ID:	B10381.D
Dilution:	1.0			Initial Weight/Volume:	30.57 g
Date Analyzed:	09/18/2009 0019			Final Weight/Volume:	1.0 mL
Date Prepared:	09/08/2009 1206			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		11	38
1,2,4,5-Tetrachlorobenzene		ND		11	38
1,2,4-Trichlorobenzene		ND		11	38
1,2-Dichlorobenzene		ND		11	38
1,3-Dichlorobenzene		ND		11	38
1,4-Dichlorobenzene		ND		11	38
1-Methylnaphthalene		ND		11	38
2,2'-oxybis[1-chloropropane]		ND		11	38
2,3,4,6-Tetrachlorophenol		ND		11	38
2,4,5-Trichlorophenol		ND		11	38
2,4,6-Trichlorophenol		ND		11	38
2,4-Dichlorophenol		ND		11	38
2,4-Dimethylphenol		ND		15	38
2,4-Dinitrophenol		ND	J	11	38
2,4-Dinitrotoluene		ND		11	38
2,6-Dinitrotoluene		ND		11	38
2-Chloronaphthalene		ND		11	38
2-Chlorophenol		ND		11	38
2-Methylnaphthalene		ND		11	38
2-Methylphenol		ND		23	38
2-Nitroaniline		~~ND~~ K		11	190
2-Nitrophenol		ND		11	38
3 & 4 Methylphenol		ND		11	38
3,3'-Dichlorobenzidine		ND	J	11	75
3-Nitroaniline		ND		11	190
4,6-Dinitro-2-methylphenol		ND		11	190
4-Bromophenyl phenyl ether		ND		11	38
4-Chloro-3-methylphenol		ND		11	75
4-Chloroaniline		ND		11	75
4-Chlorophenyl phenyl ether		ND		11	38
4-Nitroaniline		ND		11	190
4-Nitrophenol		ND	J	11	190
Acenaphthene		ND		11	38
Acenaphthylene		ND		11	38
Acetophenone		ND		11	38
Aniline		ND	J	11	38
Anthracene		ND		11	38
Atrazine		ND		11	38
Azobenzene		ND		11	38
Benzaldehyde		ND		11	38
Benzo[a]anthracene		ND		11	38
Benzo[a]pyrene		ND		11	38
Benzo[b]fluoranthene		ND		11	38
Benzo[g,h,i]perylene		ND		11	38
Benzo[k]fluoranthene		ND		11	38
Benzoic acid		R ~~44~~	JB	17	190

OK ~~ND~~ K wcl 4/21/10

3/19/10

Client: Olin Corporation

Job Number: 360-24309-1
Sdg Number: OCRI-06

Client Sample ID: OC-SB-422-6.0/8.0-XXX

Lab Sample ID: 360-24309-17
Client Matrix: Solid % Moisture: 13.3

Date Sampled: 08/25/2009 1645
Date Received: 08/26/2009 1735

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49098		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48691		Lab File ID:	B10381.D
Dilution:	1.0			Initial Weight/Volume:	30.57 g
Date Analyzed:	09/18/2009 0019			Final Weight/Volume:	1.0 mL
Date Prepared:	09/08/2009 1206			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		11	38
Benzyl alcohol		ND		32	75
Bis(2-chloroethoxy)methane		ND		11	38
Bis(2-chloroethyl)ether		ND		11	38
Bis(2-ethylhexyl) phthalate		ND		11	38
Butyl benzyl phthalate		ND		11	38
Caprolactam		ND		11	38
Carbazole		ND		11	38
Chrysene		ND		11	38
Dibenz(a,h)anthracene		ND		11	38
Dibenzofuran		ND		11	38
Diethyl phthalate		ND		11	38
Dimethyl phthalate		ND		11	38
Di-n-butyl phthalate		ND		33	38
Di-n-octyl phthalate		ND		19	38
Diphenyl oxide		ND		11	38
Diphenylamine		ND		2.3	38
Fluoranthene		ND		11	38
Fluorene		ND		11	38
Hexachlorobenzene		ND		11	38
Hexachlorobutadiene		ND		11	38
Hexachlorocyclopentadiene		ND		11	75
Hexachloroethane		ND		11	38
Indeno[1,2,3-cd]pyrene		ND		11	38
Isophorone		ND		11	38
Naphthalene		ND		11	91
Nitrobenzene		ND		11	38
N-Nitrosodimethylamine		ND		11	38
N-Nitrosodi-n-propylamine		ND		11	38
N-Nitrosodiphenylamine		ND		11	38
Pentachlorophenol		ND		11	38
Phenanthrene		ND		11	45
Phenol		ND		11	38
Pyrene		ND		11	38

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	68		30 - 130
2-Fluorophenol	75		30 - 130
2-Fluorobiphenyl	67		30 - 130
Nitrobenzene-d5	69		30 - 130
Phenol-d5	70		30 - 130
Terphenyl-d14	76		30 - 130

Client: Olin Corporation

Job Number: 360-24309-1
Sdg Number: OCRI-06

Client Sample ID: **OC-SB-422-6.0/8.0-XXX**

Lab Sample ID: 360-24309-17
Client Matrix: Solid % Moisture: 13.3

Date Sampled: 08/25/2009 1645
Date Received: 08/26/2009 1735

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49098		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48691		Lab File ID:	B10381.D
Dilution:	1.0			Initial Weight/Volume:	30.57 g
Date Analyzed:	09/18/2009 0019			Final Weight/Volume:	1.0 mL
Date Prepared:	09/08/2009 1206			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 6

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
615-22-5	Benzothiazole, 2-(methylthio)-	11.41	35	T J N
112-92-5	1-Octadecanol	15.59	180	T J N
593-49-7	Heptacosane	16.61	50	T J N
1599-67-3	1-Docosene	16.67	160	T J N
7683-64-9	Squalene	17.35	86	T J N
1000194-63-7	2,2,4a,6a,8a,9,12b,14a-Octamethyl-1,2,3,	22.05	76	T J N

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Client: Olin Corporation

Job Number: 360-24309-1
Sdg Number: OCRI-06

Client Sample ID: **OC-SB-429-6.0/8.0-XXX**

Lab Sample ID: 360-24309-19
Client Matrix: Solid
% Moisture: 12.4

Date Sampled: 08/25/2009 1300
Date Received: 08/26/2009 1735

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49098		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48691		Lab File ID:	B10383.D
Dilution:	1.0			Initial Weight/Volume:	30.24 g
Date Analyzed:	09/18/2009 0127			Final Weight/Volume:	1.0 mL
Date Prepared:	09/08/2009 1206			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		11	38
1,2,4,5-Tetrachlorobenzene		ND		11	38
1,2,4-Trichlorobenzene		ND		11	38
1,2-Dichlorobenzene		ND		11	38
1,3-Dichlorobenzene		ND		11	38
1,4-Dichlorobenzene		ND		11	38
1-Methylnaphthalene		ND		11	38
2,2'-oxybis[1-chloropropane]		ND		11	38
2,3,4,6-Tetrachlorophenol		ND		11	38
2,4,5-Trichlorophenol		ND		11	38
2,4,6-Trichlorophenol		ND		11	38
2,4-Dichlorophenol		ND		11	38
2,4-Dimethylphenol		ND		15	38
2,4-Dinitrophenol		ND J		11	38
2,4-Dinitrotoluene		ND		11	38
2,6-Dinitrotoluene		ND		11	38
2-Chloronaphthalene		ND		11	38
2-Chlorophenol		ND		11	38
2-Methylnaphthalene		ND		11	38
2-Methylphenol		ND		23	38
2-Nitroaniline		~~ND~~		11	190
2-Nitrophenol		ND		11	38
3 & 4 Methylphenol		ND		11	38
3,3'-Dichlorobenzidine		ND J		11	76
3-Nitroaniline		ND		11	190
4,6-Dinitro-2-methylphenol		ND		11	190
4-Bromophenyl phenyl ether		ND		11	38
4-Chloro-3-methylphenol		ND		11	76
4-Chloroaniline		ND		11	76
4-Chlorophenyl phenyl ether		ND		11	38
4-Nitroaniline		ND		11	190
4-Nitrophenol		ND J		11	190
Acenaphthene		ND		11	38
Acenaphthylene		ND		11	38
Acetophenone		ND		11	38
Aniline		ND J		11	38
Anthracene		ND		11	38
Atrazine		ND		11	38
Azobenzene		ND		11	38
Benzaldehyde		ND		11	38
Benzo[a]anthracene		20	J	11	38
Benzo[a]pyrene		19	J	11	38
Benzo[b]fluoranthene		34	J	11	38
Benzo[g,h,i]perylene		ND		11	38
Benzo[k]fluoranthene		13	J	11	38
Benzoic acid		~~ND~~ R		17	190

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Client: Olin Corporation

Job Number: 360-24309-1
Sdg Number: OCRI-06

Client Sample ID: **OC-SB-429-6.0/8.0-XXX**

Lab Sample ID: 360-24309-19
Client Matrix: Solid % Moisture: 12.4

Date Sampled: 08/25/2009 1300
Date Received: 08/26/2009 1735

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49098		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48691		Lab File ID:	B10383.D
Dilution:	1.0			Initial Weight/Volume:	30.24 g
Date Analyzed:	09/18/2009 0127			Final Weight/Volume:	1.0 mL
Date Prepared:	09/08/2009 1206			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		11	38
Benzyl alcohol		ND		32	76
Bis(2-chloroethoxy)methane		ND		11	38
Bis(2-chloroethyl)ether		ND		11	38
Bis(2-ethylhexyl) phthalate		170	B	11	38
Butyl benzyl phthalate		ND		11	38
Caprolactam		ND		11	38
Carbazole		ND		11	38
Chrysene		29	J	11	38
Dibenz(a,h)anthracene		ND		11	38
Dibenzofuran		ND		11	38
Diethyl phthalate		ND		11	38
Dimethyl phthalate		ND		11	38
Di-n-butyl phthalate		ND		33	38
Di-n-octyl phthalate		ND		19	38
Diphenyl oxide		ND		11	38
Fluoranthene		49		11	38
Fluorene		ND		11	38
Hexachlorobenzene		ND		11	38
Hexachlorobutadiene		ND		11	38
Hexachlorocyclopentadiene		ND		11	76
Hexachloroethane		ND		11	38
Indeno[1,2,3-cd]pyrene		13	J	11	38
Isophorone		ND		11	38
Naphthalene		ND		11	91
Nitrobenzene		ND		11	38
N-Nitrosodimethylamine		ND		11	38
N-Nitrosodi-n-propylamine		ND		11	38
N-Nitrosodiphenylamine		ND		11	38
Pentachlorophenol		ND		11	38
Phenanthrene		17	J	11	45
Phenol		ND		11	38
Pyrene		47		11	38

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	62		30 - 130
2-Fluorobiphenyl	61		30 - 130
2-Fluorophenol	69		30 - 130
Nitrobenzene-d5	62		30 - 130
Phenol-d5	62		30 - 130
Terphenyl-d14	70		30 - 130

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Client: Olin Corporation

Job Number: 360-24309-1
Sdg Number: OCRI-06

Client Sample ID: **OC-SB-429-6.0/8.0-XXX**

Lab Sample ID: 360-24309-19
Client Matrix: Solid % Moisture: 12.4

Date Sampled: 08/25/2009 1300
Date Received: 08/26/2009 1735

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49098		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48691		Lab File ID:	B10383.D
Dilution:	1.0			Initial Weight/Volume:	30.24 g
Date Analyzed:	09/18/2009 0127			Final Weight/Volume:	1.0 mL
Date Prepared:	09/08/2009 1206			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 8

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
1599-67-3	1-Docosene	15.58	290	T J N
638-67-5	Tricosane	16.61	200	T J N
61142-24-3	Cyclohexane, 1,2,4,5-tetraethyl-, (1.alp	17.28	180	T J N
6920-24-7	Hexadecane-1,2-diol	17.93	300	T J N
630-4-6	Hentriacontane	19.40	220	T J N
7796-19-2	2-Heptacosanone	19.64	130	T J N
7683-64-9	Squalene	22.06	270	T J N
	Unknown	23.00	140	T J

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Client: Olin Corporation

Job Number: 360-24309-1
Sdg Number: OCRI-06

Client Sample ID: **OC-SB-430-0.0/1.0-XXX**

Lab Sample ID: 360-24309-20
Client Matrix: Solid % Moisture: 3.3

Date Sampled: 08/25/2009 1450
Date Received: 08/26/2009 1735

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48651		Instrument ID:	Inst. J
Preparation:	3550B	Prep Batch: 360-48653		Lab File ID:	J02869.D
Dilution:	1.0			Initial Weight/Volume:	100.56 g
Date Analyzed:	09/06/2009 1311			Final Weight/Volume:	1 mL
Date Prepared:	09/06/2009 0900			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodimethylamine		ND		1.2	5.1

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	82		30 - 130
2-Fluorobiphenyl	69		30 - 130
2-Fluorophenol	72		30 - 130
Nitrobenzene-d5	77		30 - 130
Phenol-d5	75		30 - 130
Terphenyl-d14	98		30 - 130

Client: Olin Corporation

Job Number: 360-24309-1
Sdg Number: OCRI-06

Client Sample ID: **OC-SB-430-0.0/1.0-XXX**

Lab Sample ID: 360-24309-20
Client Matrix: Solid
% Moisture: 3.3

Date Sampled: 08/25/2009 1450
Date Received: 08/26/2009 1735

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49098		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48691		Lab File ID:	B10384.D
Dilution:	1.0			Initial Weight/Volume:	30.66 g
Date Analyzed:	09/18/2009 0201			Final Weight/Volume:	1.0 mL
Date Prepared:	09/08/2009 1206			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		10	34
1,2,4,5-Tetrachlorobenzene		ND		10	34
1,2,4-Trichlorobenzene		ND		10	34
1,2-Dichlorobenzene		ND		10	34
1,3-Dichlorobenzene		ND		10	34
1,4-Dichlorobenzene		ND		10	34
1-Methylnaphthalene		ND		10	34
2,2'-oxybis[1-chloropropane]		ND		10	34
2,3,4,6-Tetrachlorophenol		ND		10	34
2,4,5-Trichlorophenol		ND		10	34
2,4,6-Trichlorophenol		ND		10	34
2,4-Dichlorophenol		ND		10	34
2,4-Dimethylphenol		ND		13	34
2,4-Dinitrophenol		ND	J	10	34
2,4-Dinitrotoluene		ND		10	34
2,6-Dinitrotoluene		ND		10	34
2-Chloronaphthalene		ND		10	34
2-Chlorophenol		ND		10	34
2-Methylnaphthalene		ND		10	34
2-Methylphenol		ND		20	34
2-Nitroaniline		~~ND~~		10	170
2-Nitrophenol		ND		10	34
3 & 4 Methylphenol		ND		10	34
3,3'-Dichlorobenzidine		ND	J	10	67
3-Nitroaniline		ND		10	170
4,6-Dinitro-2-methylphenol		ND		10	170
4-Bromophenyl phenyl ether		ND		10	34
4-Chloro-3-methylphenol		ND		10	67
4-Chloroaniline		ND		10	67
4-Chlorophenyl phenyl ether		ND		10	34
4-Nitroaniline		ND		10	170
4-Nitrophenol		ND	J	10	170
Acenaphthene		ND		10	34
Acenaphthylene		ND		10	34
Acetophenone		ND		10	34
Aniline		ND	J	10	34
Anthracene		ND		10	34
Atrazine		ND		10	34
Azobenzene		ND		10	34
Benzaldehyde		ND		10	34
Benzo[a]anthracene		ND		10	34
Benzo[a]pyrene		ND	J	10	34
Benzo[b]fluoranthene		ND	J	10	34
Benzo[g,h,i]perylene		ND	J	10	34
Benzo[k]fluoranthene		ND	J	10	34
Benzoic acid		~~ND~~	R	15	170

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Client: Olin Corporation

Job Number: 360-24309-1
Sdg Number: OCRI-06

Client Sample ID: **OC-SB-430-0.0/1.0-XXX**

Lab Sample ID: 360-24309-20
Client Matrix: Solid

% Moisture: 3.3

Date Sampled: 08/25/2009 1450
Date Received: 08/26/2009 1735

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49098		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48691		Lab File ID:	B10384.D
Dilution:	1.0			Initial Weight/Volume:	30.66 g
Date Analyzed:	09/18/2009 0201			Final Weight/Volume:	1.0 mL
Date Prepared:	09/08/2009 1206			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		10	34
Benzyl alcohol		ND		29	67
Bis(2-chloroethoxy)methane		ND		10	34
Bis(2-chloroethyl)ether		ND J		10	34
Bis(2-ethylhexyl) phthalate		18	J EB	10	34
Butyl benzyl phthalate		ND		10	34
Caprolactam		ND		10	34
Carbazole		ND		10	34
Chrysene		ND		10	34
Dibenz(a,h)anthracene		ND J		10	34
Dibenzofuran		ND		10	34
Diethyl phthalate		ND		10	34
Dimethyl phthalate		ND		10	34
Di-n-butyl phthalate		ND		30	34
Di-n-octyl phthalate		ND J		17	34
Diphenyl oxide		ND		10	34
Diphenylamine		ND		2.0	34
Fluoranthene		ND		10	34
Fluorene		ND		10	34
Hexachlorobenzene		ND		10	34
Hexachlorobutadiene		ND		10	34
Hexachlorocyclopentadiene		ND J		10	67
Hexachloroethane		ND		10	34
Indeno[1,2,3-cd]pyrene		ND J		10	34
Isophorone		ND		10	34
Naphthalene		ND		10	81
Nitrobenzene		ND		10	34
N-Nitrosodimethylamine		ND		10	34
N-Nitrosodi-n-propylamine		ND		10	34
N-Nitrosodiphenylamine		ND		10	34
Pentachlorophenol		ND		10	34
Phenanthrene		ND		10	40
Phenol		ND		10	34
Pyrene		ND		10	34

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	66		30 - 130
2-Fluorophenol	76		30 - 130
2-Fluorobiphenyl	65		30 - 130
Nitrobenzene-d5	69		30 - 130
Phenol-d5	67		30 - 130
Terphenyl-d14	86		30 - 130

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Client: Olin Corporation

Job Number: 360-24309-1
Sdg Number: OCRI-06

Client Sample ID: **OC-SB-430-0.0/1.0-XXX**

Lab Sample ID: 360-24309-20
Client Matrix: Solid % Moisture: 3.3

Date Sampled: 08/25/2009 1450
Date Received: 08/26/2009 1735

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49098		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48691		Lab File ID:	B10384.D
Dilution:	1.0			Initial Weight/Volume:	30.66 g
Date Analyzed:	09/18/2009 0201			Final Weight/Volume:	1.0 mL
Date Prepared:	09/08/2009 1206			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 7

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
18172-67-3	Bicyclo[3.1.1]heptane, 6,6-dimethyl-2-me	8.01	56	T J N
128-37-0	Butylated Hydroxytoluene	10.81	32	T J N
	Unknown	11.64	59	T J
~~3910-35-8~~	~~1H-Indene, 2,3-dihydro-1,1,3-trimethyl-3~~	~~11.77~~	~~38~~	~~T J N~~
55320-6-4	Heneicosane, 11-decyl-	17.19	48	T J N
~~7683-64-9~~	~~Squalene~~	~~17.35~~	~~87~~	~~T J N~~
1000140-7-7	1,4-Dimethyl-8-isopropylidenetricyclo[5.	21.75	96	T J N

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Client: Olin Corporation

Job Number: 360-24309-1
Sdg Number: OCRI-06

Client Sample ID: **OC-SB-430-8.0/10-DUP**

Lab Sample ID: 360-24309-22
Client Matrix: Solid
% Moisture: 7.8

Date Sampled: 08/25/2009 1500
Date Received: 08/26/2009 1735

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48651		Instrument ID:	Inst. J
Preparation:	3550B	Prep Batch: 360-48653		Lab File ID:	J02871.D
Dilution:	1.0			Initial Weight/Volume:	100.36 g
Date Analyzed:	09/06/2009 1411			Final Weight/Volume:	1 mL
Date Prepared:	09/06/2009 0900			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodimethylamine		ND		1.3	5.4

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	95		30 - 130
2-Fluorobiphenyl	80		30 - 130
2-Fluorophenol	84		30 - 130
Nitrobenzene-d5	95		30 - 130
Phenol-d5	87		30 - 130
Terphenyl-d14	101		30 - 130

Client: Olin Corporation

Job Number: 360-24309-1
Sdg Number: OCRI-06

Client Sample ID: **OC-SB-430-8.0/10-DUP**

Lab Sample ID: 360-24309-22
Client Matrix: Solid
% Moisture: 7.8

Date Sampled: 08/25/2009 1500
Date Received: 08/26/2009 1735

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49098		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48691		Lab File ID:	B10386.D
Dilution:	1.0			Initial Weight/Volume:	30.80 g
Date Analyzed:	09/18/2009 0308			Final Weight/Volume:	1.0 mL
Date Prepared:	09/08/2009 1206			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		11	35
1,2,4,5-Tetrachlorobenzene		ND		11	35
1,2,4-Trichlorobenzene		ND		11	35
1,2-Dichlorobenzene		ND		11	35
1,3-Dichlorobenzene		ND		11	35
1,4-Dichlorobenzene		ND		11	35
1-Methylnaphthalene		ND		11	35
2,2'-oxybis[1-chloropropane]		ND		11	35
2,3,4,6-Tetrachlorophenol		ND		11	35
2,4,5-Trichlorophenol		ND		11	35
2,4,6-Trichlorophenol		ND		11	35
2,4-Dichlorophenol		ND		11	35
2,4-Dimethylphenol		ND		14	35
2,4-Dinitrophenol		ND	J	11	35
2,4-Dinitrotoluene		ND		11	35
2,6-Dinitrotoluene		ND		11	35
2-Chloronaphthalene		ND		11	35
2-Chlorophenol		ND		11	35
2-Methylnaphthalene		ND		11	35
2-Methylphenol		ND		21	35
2-Nitroaniline		~~ND~~	~~X~~	11	180
2-Nitrophenol		ND		11	35
3 & 4 Methylphenol		ND		11	35
3,3'-Dichlorobenzidine		ND	J	11	70
3-Nitroaniline		ND		11	180
4,6-Dinitro-2-methylphenol		ND		11	180
4-Bromophenyl phenyl ether		ND		11	35
4-Chloro-3-methylphenol		ND		11	70
4-Chloroaniline		ND		11	70
4-Chlorophenyl phenyl ether		ND		11	35
4-Nitroaniline		ND		11	180
4-Nitrophenol		ND	J	11	180
Acenaphthene		ND		11	35
Acenaphthylene		ND		11	35
Acetophenone		ND		11	35
Aniline		ND	J	11	35
Anthracene		ND		11	35
Atrazine		ND		11	35
Azobenzene		ND		11	35
Benzaldehyde		ND		11	35
Benzo[a]anthracene		ND		11	35
Benzo[a]pyrene		ND	J	11	35
Benzo[b]fluoranthene		ND	J	11	35
Benzo[g,h,i]perylene		ND	J	11	35
Benzo[k]fluoranthene		ND	J	11	35
Benzoic acid		~~ND~~	~~R~~	16	180

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Client: Olin Corporation

Job Number: 360-24309-1
Sdg Number: OCRI-06

Client Sample ID: **OC-SB-430-8.0/10-DUP**

Lab Sample ID: 360-24309-22
Client Matrix: Solid
% Moisture: 7.8

Date Sampled: 08/25/2009 1500
Date Received: 08/26/2009 1735

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49098		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48691		Lab File ID:	B10386.D
Dilution:	1.0			Initial Weight/Volume:	30.80 g
Date Analyzed:	09/18/2009 0308			Final Weight/Volume:	1.0 mL
Date Prepared:	09/08/2009 1206			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		11	35
Benzyl alcohol		ND		30	70
Bis(2-chloroethoxy)methane		ND		11	35
Bis(2-chloroethyl)ether		ND J		11	35
Bis(2-ethylhexyl) phthalate		13	J B	11	35
Butyl benzyl phthalate		ND		11	35
Caprolactam		ND		11	35
Carbazole		ND		11	35
Chrysene		ND		11	35
Dibenz(a,h)anthracene		ND J		11	35
Dibenzofuran		ND		11	35
Diethyl phthalate		ND		11	35
Dimethyl phthalate		ND		11	35
Di-n-butyl phthalate		ND		31	35
Di-n-octyl phthalate		ND J		18	35
Diphenyl oxide		ND		11	35
Diphenylamine		ND		2.1	35
Fluoranthene		ND		11	35
Fluorene		ND		11	35
Hexachlorobenzene		ND		11	35
Hexachlorobutadiene		ND		11	35
Hexachlorocyclopentadiene		ND J		11	70
Hexachloroethane		ND		11	35
Indeno[1,2,3-cd]pyrene		ND J		11	35
Isophorone		ND		11	35
Naphthalene		ND		11	85
Nitrobenzene		ND		11	35
~~N-Nitrosodimethylamine~~		ND		11	35
N-Nitrosodi-n-propylamine		ND		11	35
N-Nitrosodiphenylamine		ND		11	35
Pentachlorophenol		ND		11	35
Phenanthrene		ND		11	42
Phenol		ND		11	35
Pyrene		ND		11	35

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	60		30 - 130
2-Fluorophenol	70		30 - 130
2-Fluorobiphenyl	59		30 - 130
Nitrobenzene-d5	61		30 - 130
Phenol-d5	65		30 - 130
Terphenyl-d14	73		30 - 130

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Client: Olin Corporation

Job Number: 360-24309-1
Sdg Number: OCRI-06

Client Sample ID: **OC-SB-430-8.0/10-DUP**

Lab Sample ID: 360-24309-22
Client Matrix: Solid % Moisture: 7.8

Date Sampled: 08/25/2009 1500
Date Received: 08/26/2009 1735

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49098		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48691		Lab File ID:	B10386.D
Dilution:	1.0			Initial Weight/Volume:	30.80 g
Date Analyzed:	09/18/2009 0308			Final Weight/Volume:	1.0 mL
Date Prepared:	09/08/2009 1206			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 8

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Unknown	6.85	2900	T J
128-37-0	Butylated Hydroxytoluene	10.81	35	T J N
	Unknown	11.64	70	T J
3910-35-8	1H-Indene, 2,3-dihydro-1,1,3-trimethyl-3	11.77	46	T J N
1599-67-3	1-Docosene	15.59	76	T J N
593-49-7	Heptacosane	16.61	56	T J N
1599-67-3	1-Docosene	16.68	54	T J N
629-78-7	Heptadecane	17.18	100	T J N

Client: Olin Corporation

Job Number: 360-24309-1
Sdg Number: OCRI-06

Client Sample ID: **OC-SB-430-8.0/10-XXX**

Lab Sample ID: 360-24309-23
Client Matrix: Solid
% Moisture: 5.8

Date Sampled: 08/25/2009 1500
Date Received: 08/26/2009 1735

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48651		Instrument ID:	Inst. J
Preparation:	3550B	Prep Batch: 360-48653		Lab File ID:	J02872.D
Dilution:	1.0			Initial Weight/Volume:	100.12 g
Date Analyzed:	09/06/2009 1441			Final Weight/Volume:	1 mL
Date Prepared:	09/06/2009 0900			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodimethylamine		ND		1.2	5.3

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	94		30 - 130
2-Fluorobiphenyl	78		30 - 130
2-Fluorophenol	82		30 - 130
Nitrobenzene-d5	88		30 - 130
Phenol-d5	87		30 - 130
Terphenyl-d14	119		30 - 130

Client: Olin Corporation

Job Number: 360-24309-1
Sdg Number: OCRI-06

Client Sample ID: **OC-SB-430-8.0/10-XXX**

Lab Sample ID: 360-24309-23
Client Matrix: Solid % Moisture: 5.8

Date Sampled: 08/25/2009 1500
Date Received: 08/26/2009 1735

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49098		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48691		Lab File ID:	B10387.D
Dilution:	1.0			Initial Weight/Volume:	30.25 g
Date Analyzed:	09/18/2009 0342			Final Weight/Volume:	1.0 mL
Date Prepared:	09/08/2009 1206			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		11	35
1,2,4,5-Tetrachlorobenzene		ND		11	35
1,2,4-Trichlorobenzene		ND		11	35
1,2-Dichlorobenzene		ND		11	35
1,3-Dichlorobenzene		ND		11	35
1,4-Dichlorobenzene		ND		11	35
1-Methylnaphthalene		ND		11	35
2,2'-oxybis[1-chloropropane]		ND		11	35
2,3,4,6-Tetrachlorophenol		ND		11	35
2,4,5-Trichlorophenol		ND		11	35
2,4,6-Trichlorophenol		ND		11	35
2,4-Dichlorophenol		ND		11	35
2,4-Dimethylphenol		ND		14	35
2,4-Dinitrophenol		ND J		11	35
2,4-Dinitrotoluene		ND		11	35
2,6-Dinitrotoluene		ND		11	35
2-Chloronaphthalene		ND		11	35
2-Chlorophenol		ND		11	35
2-Methylnaphthalene		ND		11	35
2-Methylphenol		~~ND~~		21	35
2-Nitroaniline		~~ND~~		11	180
2-Nitrophenol		ND		11	35
3 & 4 Methylphenol		ND		11	35
3,3'-Dichlorobenzidine		ND J		11	70
3-Nitroaniline		ND		11	180
4,6-Dinitro-2-methylphenol		ND		11	180
4-Bromophenyl phenyl ether		ND		11	35
4-Chloro-3-methylphenol		ND		11	70
4-Chloroaniline		ND		11	70
4-Chlorophenyl phenyl ether		ND		11	35
4-Nitroaniline		ND		11	180
4-Nitrophenol		ND J		11	180
Acenaphthene		ND		11	35
Acenaphthylene		ND		11	35
Acetophenone		ND		11	35
Aniline		ND J		11	35
Anthracene		ND		11	35
Atrazine		ND		11	35
Azobenzene		ND		11	35
Benzaldehyde		ND		11	35
Benzo[a]anthracene		ND J		11	35
Benzo[a]pyrene		ND J		11	35
Benzo[b]fluoranthene		ND J		11	35
Benzo[g,h,i]perylene		ND J		11	35
Benzo[k]fluoranthene		ND J		11	35
Benzoic acid		~~ND~~		16	180

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Client: Olin Corporation

Job Number: 360-24309-1
Sdg Number: OCRI-06

Client Sample ID: **OC-SB-430-8.0/10-XXX**

Lab Sample ID: 360-24309-23
Client Matrix: Solid % Moisture: 5.8

Date Sampled: 08/25/2009 1500
Date Received: 08/26/2009 1735

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49098		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48691		Lab File ID:	B10387.D
Dilution:	1.0			Initial Weight/Volume:	30.25 g
Date Analyzed:	09/18/2009 0342			Final Weight/Volume:	1.0 mL
Date Prepared:	09/08/2009 1206			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		11	35
Benzyl alcohol		ND		30	70
Bis(2-chloroethoxy)methane		ND		11	35
Bis(2-chloroethyl)ether		ND J	✓	11	35
Bis(2-ethylhexyl) phthalate		22	JEB	11	35
Butyl benzyl phthalate		ND J		11	35
Caprolactam		ND		11	35
Carbazole		ND		11	35
Chrysene		ND J		11	35
Dibenz(a,h)anthracene		ND J		11	35
Dibenzofuran		ND		11	35
Diethyl phthalate		ND		11	35
Dimethyl phthalate		ND		11	35
Di-n-butyl phthalate		ND		31	35
Di-n-octyl phthalate		ND J		18	35
Diphenyl oxide		ND		11	35
Diphenylamine		ND		2.1	35
Fluoranthene		ND		11	35
Fluorene		ND		11	35
Hexachlorobenzene		ND		11	35
Hexachlorobutadiene		ND		11	35
Hexachlorocyclopentadiene		ND		11	70
Hexachloroethane		ND		11	35
Indeno[1,2,3-cd]pyrene		ND J		11	35
Isophorone		ND		11	35
Naphthalene		ND		11	84
Nitrobenzene		ND		11	35
N-Nitrosodimethylamine		ND		11	35
N-Nitrosodi-n-propylamine		ND		11	35
N-Nitrosodiphenylamine		ND		11	35
Pentachlorophenol		ND		11	35
Phenanthrene		ND		11	42
Phenol		ND		11	35
Pyrene		ND J		11	35

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	58		30 - 130
2-Fluorophenol	70		30 - 130
2-Fluorobiphenyl	61		30 - 130
Nitrobenzene-d5	64		30 - 130
Phenol-d5	60		30 - 130
Terphenyl-d14	71		30 - 130

Client: Olin Corporation

Job Number: 360-24309-1
Sdg Number: OCRI-06

Client Sample ID: **OC-SB-430-8.0/10-XXX**

Lab Sample ID: 360-24309-23
Client Matrix: Solid % Moisture: 5.8

Date Sampled: 08/25/2009 1500
Date Received: 08/26/2009 1735

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49098		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48691		Lab File ID:	B10387.D
Dilution:	1.0			Initial Weight/Volume:	30.25 g
Date Analyzed:	09/18/2009 0342			Final Weight/Volume:	1.0 mL
Date Prepared:	09/08/2009 1206			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** **6**

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
14739-72-1	Heneicosane, 11-pentyl-	15.54	27	T J N
6971-40-0	17-Pentatriacontene	15.59	32	T J N
~~593-49-7~~	~~Heptacosane~~	~~16.61~~	~~30~~	~~T J N~~
1599-67-3	1-Docosene	16.69	28	T J N
301-2-0	9-Octadecenamide, (Z)-	17.18	58	T J N
111-2-4	2,6,10,14,18,22-Tetracosahexaene, 2,6,10	17.35	140	T J N

SAMPLE SUMMARY

Client: Olin Corporation

Job Number: 360-24309-2
Sdg Number: OCRI-06A

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
360-24309-8	OC-SB-407-26/28-XXX	Solid	08/26/2009 1125	08/26/2009 1735
360-24309-13	OC-SB-414-20/22-XXX	Solid	08/26/2009 0910	08/26/2009 1735
360-24309-16	OC-SB-422-13/15-XXX	Solid	08/25/2009 1710	08/26/2009 1735
360-24309-18	OC-SB-429-16/18-XXX	Solid	08/25/2009 1325	08/26/2009 1735
360-24309-21	OC-SB-430-19/21-XXX	Solid	08/25/2009 1535	08/26/2009 1735

Form 1's updated
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Client: Olin Corporation

Job Number: 360-24309-2
Sdg Number: OCRI-06A

Client Sample ID: OC-SB-407-26/28-XXX

Lab Sample ID: 360-24309-8
Client Matrix: Solid % Moisture: 9.0

Date Sampled: 08/26/2009 1125
Date Received: 08/26/2009 1735

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49095		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48567		Lab File ID:	J02998.D
Dilution:	1.0			Initial Weight/Volume:	30.10 g
Date Analyzed:	09/17/2009 1448			Final Weight/Volume:	1.0 mL
Date Prepared:	09/03/2009 1311			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		11	37
1,2,4,5-Tetrachlorobenzene		ND		2.5	37
1,2,4-Trichlorobenzene		ND		7.1	37
1,2-Dichlorobenzene		ND		4.0	37
1,3-Dichlorobenzene		ND		11	37
1,4-Dichlorobenzene		ND		6.6	37
1-Methylnaphthalene		ND		2.2	37
2,2'-oxybis[1-chloropropane]		ND		3.7	37
2,3,4,6-Tetrachlorophenol		ND		2.2	37
2,4,5-Trichlorophenol		ND		4.1	37
2,4,6-Trichlorophenol		ND		7.7	37
2,4-Dichlorophenol		ND		7.0	37
2,4-Dimethylphenol		ND		6.4	37
2,4-Dinitrophenol		ND		5.4	37
2,4-Dinitrotoluene		ND		5.2	37
2,6-Dinitrotoluene		ND		4.6	37
2-Chloronaphthalene		ND		5.6	37
2-Chlorophenol		ND		3.6	37
2-Methylnaphthalene		ND		28	37
2-Methylphenol		ND		5.2	37
2-Nitroaniline		ND		24	180
2-Nitrophenol		ND		4.2	37
3 & 4 Methylphenol		ND		6.9	37
3,3'-Dichlorobenzidine		ND J	✓	27	73
3-Nitroaniline		ND		10	180
4,6-Dinitro-2-methylphenol		ND		9.3	180
4-Bromophenyl phenyl ether		ND		7.6	37
4-Chloro-3-methylphenol		ND		10	73
4-Chloroaniline		ND		15	73
4-Chlorophenyl phenyl ether		ND		5.8	37
4-Nitroaniline		ND		9.7	180
4-Nitrophenol		ND		7.1	180
Acenaphthene		ND		5.4	37
Acenaphthylene		ND		6.5	37
Acetophenone		ND		3.9	37
Aniline		ND J	✓	19	37
Anthracene		ND		12	37
Atrazine		ND		11	37
Azobenzene		ND		4.5	37
Benzaldehyde		ND	✓	11	37
Benzo[a]anthracene		9.1	J	7.0	37
Benzo[a]pyrene		13	J	6.7	37
Benzo[b]fluoranthene		10	J	8.4	37
Benzo[g,h,i]perylene		7.2	J	7.1	37
Benzo[k]fluoranthene		ND		10	37
Benzoic acid		ND		16	180

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Client: Olin Corporation

Job Number: 360-24309-2
Sdg Number: OCRI-06A

Client Sample ID: **OC-SB-407-26/28-XXX**

Lab Sample ID: 360-24309-8
Client Matrix: Solid % Moisture: 9.0

Date Sampled: 08/26/2009 1125
Date Received: 08/26/2009 1735

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49095		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48567		Lab File ID:	J02998.D
Dilution:	1.0			Initial Weight/Volume:	30.10 g
Date Analyzed:	09/17/2009 1448			Final Weight/Volume:	1.0 mL
Date Prepared:	09/03/2009 1311			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		2.2	37
Benzyl alcohol		ND		8.4	73
Bis(2-chloroethoxy)methane		ND		6.6	37
Bis(2-chloroethyl)ether		ND		8.9	37
Bis(2-ethylhexyl) phthalate		ND		12	37
Butyl benzyl phthalate		ND		8.0	37
Caprolactam		ND		11	37
Carbazole		ND		36	37
Chrysene		8.9	J	7.9	37
Dibenz(a,h)anthracene		ND		7.4	37
Dibenzofuran		ND		21	37
Diethyl phthalate		ND		5.2	37
Dimethyl phthalate		ND		5.4	37
Di-n-butyl phthalate		ND		11	37
Di-n-octyl phthalate		ND		10	37
Diphenyl oxide		ND		11	37
Fluoranthene		ND		23	37
Fluorene		ND		14	37
Hexachlorobenzene		ND		8.7	37
Hexachlorobutadiene		ND		7.3	37
Hexachlorocyclopentadiene		ND		10	73
Hexachloroethane		ND		7.0	37
Indeno[1,2,3-cd]pyrene		ND		11	37
Isophorone		ND		7.8	37
Naphthalene		ND		81	88
Nitrobenzene		ND		5.0	37
N-Nitrosodimethylamine		ND		4.2	37
N-Nitrosodi-n-propylamine		ND		4.1	37
N-Nitrosodiphenylamine		ND		7.3	37
Pentachlorophenol		ND		7.6	37
Phenanthrene		ND		42	44
Phenol		ND		4.6	37
Pyrene		20	J	9.7	37

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	84		30 - 130
2-Fluorobiphenyl	72		30 - 130
2-Fluorophenol	82		30 - 130
Nitrobenzene-d5	69		30 - 130
Phenol-d5	81		30 - 130
Terphenyl-d14	86		30 - 130

Client: Olin Corporation

Job Number: 360-24309-2
Sdg Number: OCRI-06A

Client Sample ID: **OC-SB-407-26/28-XXX**

Lab Sample ID: 360-24309-8
Client Matrix: Solid % Moisture: 9.0

Date Sampled: 08/26/2009 1125
Date Received: 08/26/2009 1735

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49095		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48567		Lab File ID:	J02998.D
Dilution:	1.0			Initial Weight/Volume:	30.10 g
Date Analyzed:	09/17/2009 1448			Final Weight/Volume:	1.0 mL
Date Prepared:	09/03/2009 1311			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 5

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Unknown	5.56	17	T J
4536-88-3	Benzene, (1-methyldecyl)-	10.65	12	T J N
112-95-8	Eicosane	14.28	33	T J N
1000108-92-4	Farnesol isomer a	14.65	31	T J N
26603-23-6	p,p''-Dioctyldiphenylamine	15.15	68	T J N

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Client: Olin Corporation

Job Number: 360-24309-2
Sdg Number: OCRI-06A

Client Sample ID: **OC-SB-414-20/22-XXX**

Lab Sample ID: 360-24309-13
Client Matrix: Solid % Moisture: 7.7

Date Sampled: 08/26/2009 0910
Date Received: 08/26/2009 1735

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49098		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48691		Lab File ID:	B10377.D
Dilution:	1.0			Initial Weight/Volume:	30.05 g
Date Analyzed:	09/17/2009 2204			Final Weight/Volume:	1.0 mL
Date Prepared:	09/08/2009 1206			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		11	36
1,2,4,5-Tetrachlorobenzene		ND		2.4	36
1,2,4-Trichlorobenzene		ND		7.0	36
1,2-Dichlorobenzene		ND		3.9	36
1,3-Dichlorobenzene		ND		10	36
1,4-Dichlorobenzene		ND		6.5	36
1-Methylnaphthalene		ND		2.2	36
2,2'-oxybis[1-chloropropane]		ND		3.6	36
2,3,4,6-Tetrachlorophenol		ND		2.2	36
2,4,5-Trichlorophenol		ND		4.1	36
2,4,6-Trichlorophenol		ND		7.6	36
2,4-Dichlorophenol		ND		6.9	36
2,4-Dimethylphenol		ND		6.3	36
2,4-Dinitrophenol		ND		5.3	36
2,4-Dinitrotoluene		ND		5.1	36
2,6-Dinitrotoluene		ND		4.6	36
2-Chloronaphthalene		ND		5.5	36
2-Chlorophenol		ND		3.5	36
2-Methylnaphthalene		ND		28	36
2-Methylphenol		ND		5.2	36
2-Nitroaniline		ND		23	180
2-Nitrophenol		ND		4.2	36
3 & 4 Methylphenol		ND		6.8	36
3,3'-Dichlorobenzidine		ND	J	26	72
3-Nitroaniline		ND		10	180
4,6-Dinitro-2-methylphenol		ND		9.2	180
4-Bromophenyl phenyl ether		ND		7.5	36
4-Chloro-3-methylphenol		ND		10	72
4-Chloroaniline		ND		15	72
4-Chlorophenyl phenyl ether		ND		5.7	36
4-Nitroaniline		ND		9.6	180
4-Nitrophenol		ND	J	7.0	180
Acenaphthene		ND		5.3	36
Acenaphthylene		ND		6.4	36
Acetophenone		9.0	JEB	3.9	36
Aniline		ND	J	19	36
Anthracene		ND		11	36
Atrazine		ND		11	36
Azobenzene		ND		4.5	36
Benzaldehyde		ND		11	36
Benzo[a]anthracene		ND		6.9	36
Benzo[a]pyrene		ND		6.6	36
Benzo[b]fluoranthene		ND		8.3	36
Benzo[g,h,i]perylene		ND		7.0	36
Benzo[k]fluoranthene		ND		10	36
Benzoic acid		ND		16	180

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Client: Olin Corporation

Job Number: 360-24309-2
Sdg Number: OCRI-06A

Client Sample ID: **OC-SB-414-20/22-XXX**

Lab Sample ID: 360-24309-13
Client Matrix: Solid % Moisture: 7.7

Date Sampled: 08/26/2009 0910
Date Received: 08/26/2009 1735

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49098		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48691		Lab File ID:	B10377.D
Dilution:	1.0			Initial Weight/Volume:	30.05 g
Date Analyzed:	09/17/2009 2204			Final Weight/Volume:	1.0 mL
Date Prepared:	09/08/2009 1206			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		2.2	36
Benzyl alcohol		ND		8.3	72
Bis(2-chloroethoxy)methane		ND		6.5	36
Bis(2-chloroethyl)ether		ND		8.8	36
Bis(2-ethylhexyl) phthalate		ND		11	36
Butyl benzyl phthalate		ND		7.9	36
Caprolactam		ND		11	36
Carbazole		ND		36	36
Chrysene		ND		7.8	36
Dibenz(a,h)anthracene		ND		7.3	36
Dibenzofuran		ND		21	36
Diethyl phthalate		ND		5.1	36
Dimethyl phthalate		ND		5.3	36
Di-n-butyl phthalate		ND		11	36
Di-n-octyl phthalate		ND		10	36
Diphenyl oxide		ND		11	36
Fluoranthene		ND		23	36
Fluorene		ND		14	36
Hexachlorobenzene		ND		8.6	36
Hexachlorobutadiene		ND		7.2	36
Hexachlorocyclopentadiene		ND		9.8	72
Hexachloroethane		ND		6.9	36
Indeno[1,2,3-cd]pyrene		ND		11	36
Isophorone		ND		7.7	36
Naphthalene		ND		80	87
Nitrobenzene		ND		4.9	36
N-Nitrosodimethylamine		ND		4.2	36
N-Nitrosodi-n-propylamine		ND		4.1	36
N-Nitrosodiphenylamine		ND		7.2	36
Pentachlorophenol		ND		7.5	36
Phenanthrene		ND		42	43
Phenol		ND		4.5	36
Pyrene		ND		9.6	36

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	66		30 - 130
2-Fluorobiphenyl	66		30 - 130
2-Fluorophenol	73		30 - 130
Nitrobenzene-d5	65		30 - 130
Phenol-d5	72		30 - 130
Terphenyl-d14	76		30 - 130

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Client: Olin Corporation

Job Number: 360-24309-2
Sdg Number: OCRI-06A

Client Sample ID: **OC-SB-414-20/22-XXX**

Lab Sample ID: 360-24309-13
Client Matrix: Solid % Moisture: 7.7

Date Sampled: 08/26/2009 0910
Date Received: 08/26/2009 1735

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49098		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48691		Lab File ID:	B10377.D
Dilution:	1.0			Initial Weight/Volume:	30.05 g
Date Analyzed:	09/17/2009 2204			Final Weight/Volume:	1.0 mL
Date Prepared:	09/08/2009 1206			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 6

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
128-37-0	Butylated Hydroxytoluene	10.81	44	T J N
3910-35-8	1H-Indene, 2,3-dihydro-1,1,3-trimethyl-3	11.77	48	T J N
22768-22-5	2,4-Diphenyl-4-methyl-2(E)-pentene	12.20	37	T J N
112-61-8	Octadecanoic acid, methyl ester	13.24	34	T J N
593-49-7	Heptacosane	16.61	56	T J N
14739-72-1	Heneicosane, 11-pentyl-	17.19	51	T J N

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Client: Olin Corporation

Job Number: 360-24309-2
Sdg Number: OCRI-06A

Client Sample ID: **OC-SB-422-13/15-XXX**

Lab Sample ID: 360-24309-16
Client Matrix: Solid
% Moisture: 14.8

Date Sampled: 08/25/2009 1710
Date Received: 08/26/2009 1735

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49098		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48691		Lab File ID:	B10380.D
Dilution:	1.0			Initial Weight/Volume:	30.55 g
Date Analyzed:	09/17/2009 2346			Final Weight/Volume:	1.0 mL
Date Prepared:	09/08/2009 1206			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		12	38
1,2,4,5-Tetrachlorobenzene		ND		2.6	38
1,2,4-Trichlorobenzene		ND		7.5	38
1,2-Dichlorobenzene		ND		4.2	38
1,3-Dichlorobenzene		ND		11	38
1,4-Dichlorobenzene		ND		6.9	38
1-Methylnaphthalene		ND		2.3	38
2,2'-oxybis[1-chloropropane]		ND		3.9	38
2,3,4,6-Tetrachlorophenol		ND		2.3	38
2,4,5-Trichlorophenol		ND		4.3	38
2,4,6-Trichlorophenol		ND		8.1	38
2,4-Dichlorophenol		ND		7.4	38
2,4-Dimethylphenol		ND		6.7	38
2,4-Dinitrophenol		ND		5.6	38
2,4-Dinitrotoluene		ND		5.4	38
2,6-Dinitrotoluene		ND		4.9	38
2-Chloronaphthalene		ND		5.9	38
2-Chlorophenol		ND		3.7	38
2-Methylnaphthalene		ND		29	38
2-Methylphenol		ND		5.5	38
2-Nitroaniline		ND		25	190
2-Nitrophenol		ND		4.4	38
3 & 4 Methylphenol		ND		7.3	38
3,3'-Dichlorobenzidine		ND J	✓	28	77
3-Nitroaniline		ND		11	190
4,6-Dinitro-2-methylphenol		ND		9.8	190
4-Bromophenyl phenyl ether		ND		8.0	38
4-Chloro-3-methylphenol		ND		11	77
4-Chloroaniline		ND		16	77
4-Chlorophenyl phenyl ether		ND		6.1	38
4-Nitroaniline		ND		10	190
4-Nitrophenol		ND J		7.5	190
Acenaphthene		ND		5.6	38
Acenaphthylene		ND		6.8	38
Acetophenone		4.9	JEB	4.2	38
Aniline		ND J	✓	20	38
Anthracene		ND		12	38
Atrazine		ND		12	38
Azobenzene		ND		4.8	38
Benzaldehyde		ND	✓	12	38
Benzo[a]anthracene		ND		7.4	38
Benzo[a]pyrene		ND		7.0	38
Benzo[b]fluoranthene		ND		8.8	38
Benzo[g,h,i]perylene		ND		7.5	38
Benzo[k]fluoranthene		ND		11	38
Benzoic acid		ND		17	190

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Client: Olin Corporation

Job Number: 360-24309-2
Sdg Number: OCRI-06A

Client Sample ID: **OC-SB-422-13/15-XXX**

Lab Sample ID: 360-24309-16
Client Matrix: Solid % Moisture: 14.8

Date Sampled: 08/25/2009 1710
Date Received: 08/26/2009 1735

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49098		Instrument ID:	Inst_B
Preparation:	3546	Prep Batch: 360-48691		Lab File ID:	B10380.D
Dilution:	1.0			Initial Weight/Volume:	30.55 g
Date Analyzed:	09/17/2009 2346			Final Weight/Volume:	1.0 mL
Date Prepared:	09/08/2009 1206			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		2.3	38
Benzyl alcohol		ND		8.9	77
Bis(2-chloroethoxy)methane		ND		6.9	38
Bis(2-chloroethyl)ether		ND J		9.3	38
Bis(2-ethylhexyl) phthalate		ND		12	38
Butyl benzyl phthalate		ND		8.4	38
Caprolactam		ND		12	38
Carbazole		ND		38	38
Chrysene		ND		8.3	38
Dibenz(a,h)anthracene		ND		7.8	38
Dibenzofuran		ND		22	38
Diethyl phthalate		ND		5.4	38
Dimethyl phthalate		ND		5.6	38
Di-n-butyl phthalate		ND		12	38
Di-n-octyl phthalate		ND		11	38
Diphenyl oxide		ND		12	38
Fluoranthene		ND		24	38
Fluorene		ND		15	38
Hexachlorobenzene		ND		9.1	38
Hexachlorobutadiene		ND		7.7	38
Hexachlorocyclopentadiene		ND		10	77
Hexachloroethane		ND		7.3	38
Indeno[1,2,3-cd]pyrene		ND		12	38
Isophorone		ND		8.2	38
Naphthalene		ND		85	92
Nitrobenzene		ND		5.2	38
N-Nitrosodimethylamine		ND		4.5	38
N-Nitrosodi-n-propylamine		ND		4.3	38
N-Nitrosodiphenylamine		ND		7.7	38
Pentachlorophenol		ND		7.9	38
Phenanthrene		ND		44	46
Phenol		ND		4.8	38
Pyrene		ND		10	38

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	63		30 - 130
2-Fluorobiphenyl	70		30 - 130
2-Fluorophenol	80		30 - 130
Nitrobenzene-d5	73		30 - 130
Phenol-d5	73		30 - 130
Terphenyl-d14	73		30 - 130

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Client: Olin Corporation

Job Number: 360-24309-2
Sdg Number: OCRI-06A

Client Sample ID: **OC-SB-422-13/15-XXX**

Lab Sample ID: 360-24309-16
Client Matrix: Solid % Moisture: 14.8

Date Sampled: 08/25/2009 1710
Date Received: 08/26/2009 1735

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49098		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48691		Lab File ID:	B10380.D
Dilution:	1.0			Initial Weight/Volume:	30.55 g
Date Analyzed:	09/17/2009 2346			Final Weight/Volume:	1.0 mL
Date Prepared:	09/08/2009 1206			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 7

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
128-37-0	Butylated Hydroxytoluene	10.81	25	T J N
615-22-5	Benzothiazole, 2-(methylthio)-	11.41	40	T J N
	Unknown	11.64	45	T J
3910-35-8	1H-Indene, 2,3-dihydro-1,1,3-trimethyl-3	11.77	33	T J N
22768-22-5	2,4-Diphenyl-4-methyl-2(E)-pentene	12.20	24	T J N
5129-61-3	Heptadecanoic acid, 16-methyl-, methyl e	13.24	22	T J N
7683-64-9	Squalene	17.35	99	T J N

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Client: Olin Corporation

Job Number: 360-24309-2
Sdg Number: OCRI-06A

Client Sample ID: **OC-SB-429-16/18-XXX**

Lab Sample ID: 360-24309-18
Client Matrix: Solid % Moisture: 6.5

Date Sampled: 08/25/2009 1325
Date Received: 08/26/2009 1735

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49098		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48691		Lab File ID:	B10382.D
Dilution:	1.0			Initial Weight/Volume:	30.13 g
Date Analyzed:	09/18/2009 0053			Final Weight/Volume:	1.0 mL
Date Prepared:	09/08/2009 1206			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		11	36
1,2,4,5-Tetrachlorobenzene		ND		2.4	36
1,2,4-Trichlorobenzene		ND		6.9	36
1,2-Dichlorobenzene		ND		3.8	36
1,3-Dichlorobenzene		ND		10	36
1,4-Dichlorobenzene		ND		6.4	36
1-Methylnaphthalene		ND		2.1	36
2,2'-oxybis[1-chloropropane]		ND		3.6	36
2,3,4,6-Tetrachlorophenol		ND		2.1	36
2,4,5-Trichlorophenol		ND		4.0	36
2,4,6-Trichlorophenol		ND		7.4	36
2,4-Dichlorophenol		ND		6.8	36
2,4-Dimethylphenol		ND		6.2	36
2,4-Dinitrophenol		ND		5.2	36
2,4-Dinitrotoluene		ND		5.0	36
2,6-Dinitrotoluene		ND		4.5	36
2-Chloronaphthalene		ND		5.5	36
2-Chlorophenol		ND		3.5	36
2-Methylnaphthalene		ND		27	36
2-Methylphenol		ND		5.1	36
2-Nitroaniline		ND		23	180
2-Nitrophenol		ND		4.1	36
3 & 4 Methylphenol		ND		6.7	36
3,3'-Dichlorobenzidine		ND J	✓	26	71
3-Nitroaniline		ND		10	180
4,6-Dinitro-2-methylphenol		ND		9.1	180
4-Bromophenyl phenyl ether		ND		7.4	36
4-Chloro-3-methylphenol		ND		9.8	71
4-Chloroaniline		ND		14	71
4-Chlorophenyl phenyl ether		ND		5.6	36
4-Nitroaniline		ND		9.5	180
4-Nitrophenol		ND J		6.9	180
Acenaphthene		ND		5.2	36
Acenaphthylene		ND		6.3	36
Acetophenone		ND		3.8	36
Aniline		ND J	✓	18	36
Anthracene		ND		11	36
Atrazine		ND		11	36
Azobenzene		ND		4.4	36
Benzaldehyde		ND	✓	11	36
Benzo[a]anthracene		ND		6.8	36
Benzo[a]pyrene		ND		6.5	36
Benzo[b]fluoranthene		ND		8.1	36
Benzo[g,h,i]perylene		ND		6.9	36
Benzo[k]fluoranthene		ND		9.8	36
Benzoic acid		ND		15	180

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Client: Olin Corporation

Job Number: 360-24309-2
Sdg Number: OCRI-06A

Client Sample ID: **OC-SB-429-16/18-XXX**

Lab Sample ID: 360-24309-18
Client Matrix: Solid

% Moisture: 6.5

Date Sampled: 08/25/2009 1325
Date Received: 08/26/2009 1735

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49098		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48691		Lab File ID:	B10382.D
Dilution:	1.0			Initial Weight/Volume:	30.13 g
Date Analyzed:	09/18/2009 0053			Final Weight/Volume:	1.0 mL
Date Prepared:	09/08/2009 1206			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		2.1	36
Benzyl alcohol		ND		8.2	71
Bis(2-chloroethoxy)methane		ND		6.4	36
Bis(2-chloroethyl)ether		ND		8.6	36
Bis(2-ethylhexyl) phthalate		27	J B	11	36
Butyl benzyl phthalate		ND		7.8	36
Caprolactam		ND		11	36
Carbazole		ND		35	36
Chrysene		ND		7.7	36
Dibenz(a,h)anthracene		ND		7.2	36
Dibenzofuran		ND		21	36
Diethyl phthalate		ND		5.0	36
Dimethyl phthalate		ND		5.2	36
Di-n-butyl phthalate		ND		11	36
Di-n-octyl phthalate		ND		10	36
Diphenyl oxide		ND		11	36
Fluoranthene		ND		22	36
Fluorene		ND		14	36
Hexachlorobenzene		ND		8.4	36
Hexachlorobutadiene		ND		7.1	36
Hexachlorocyclopentadiene		ND		9.7	71
Hexachloroethane		ND		6.8	36
Indeno[1,2,3-cd]pyrene		ND		11	36
Isophorone		ND		7.6	36
Naphthalene		ND		79	85
Nitrobenzene		ND		4.8	36
N-Nitrosodimethylamine		ND		4.1	36
N-Nitrosodi-n-propylamine		ND		4.0	36
N-Nitrosodiphenylamine		ND		7.1	36
Pentachlorophenol		ND		7.3	36
Phenanthrene		ND		41	43
Phenol		ND		4.4	36
Pyrene		ND		9.4	36

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	60		30 - 130
2-Fluorobiphenyl	61		30 - 130
2-Fluorophenol	70		30 - 130
Nitrobenzene-d5	65		30 - 130
Phenol-d5	63		30 - 130
Terphenyl-d14	79		30 - 130

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Client: Olin Corporation

Job Number: 360-24309-2
Sdg Number: OCRI-06A

Client Sample ID: **OC-SB-429-16/18-XXX**

Lab Sample ID: 360-24309-18
Client Matrix: Solid % Moisture: 6.5

Date Sampled: 08/25/2009 1325
Date Received: 08/26/2009 1735

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49098		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48691		Lab File ID:	B10382.D
Dilution:	1.0			Initial Weight/Volume:	30.13 g
Date Analyzed:	09/18/2009 0053			Final Weight/Volume:	1.0 mL
Date Prepared:	09/08/2009 1206			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 7

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
1560-88-9	Octadecane, 2-methyl-	14.89	49	T J N
629-99-2	Pentacosane	15.54	79	T J N
593-49-7	Heptacosane	16.07	75	T J N
112-95-8	Eicosane	16.61	100	T J N
629-78-7	Heptadecane	17.18	120	T J N
7683-64-9	Squalene	17.35	270	T J N
638-67-5	Tricosane	17.83	83	T J N

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Client: Olin Corporation

Job Number: 360-24309-2
Sdg Number: OCRI-06A

Client Sample ID: **OC-SB-430-19/21-XXX**

Lab Sample ID: 360-24309-21
Client Matrix: Solid % Moisture: 4.7

Date Sampled: 08/25/2009 1535
Date Received: 08/26/2009 1735

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49098		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48691		Lab File ID:	B10385.D
Dilution:	1.0			Initial Weight/Volume:	30.57 g
Date Analyzed:	09/18/2009 0234			Final Weight/Volume:	1.0 mL
Date Prepared:	09/08/2009 1206			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		10	34
1,2,4,5-Tetrachlorobenzene		ND		2.3	34
1,2,4-Trichlorobenzene		ND		6.7	34
1,2-Dichlorobenzene		ND		3.7	34
1,3-Dichlorobenzene		ND		9.9	34
1,4-Dichlorobenzene		ND		6.2	34
1-Methylnaphthalene		ND		2.1	34
2,2'-oxybis[1-chloropropane]		ND		3.5	34
2,3,4,6-Tetrachlorophenol		ND		2.1	34
2,4,5-Trichlorophenol		ND		3.9	34
2,4,6-Trichlorophenol		ND		7.2	34
2,4-Dichlorophenol		ND		6.6	34
2,4-Dimethylphenol		ND		6.0	34
2,4-Dinitrophenol		ND		5.0	34
2,4-Dinitrotoluene		ND		4.8	34
2,6-Dinitrotoluene		ND		4.3	34
2-Chloronaphthalene		ND		5.3	34
2-Chlorophenol		ND		3.3	34
2-Methylnaphthalene		ND		26	34
2-Methylphenol		ND		4.9	34
2-Nitroaniline		ND		22	170
2-Nitrophenol		ND		4.0	34
3 & 4 Methylphenol		ND		6.5	34
3,3'-Dichlorobenzidine		ND		25	69
3-Nitroaniline		ND		9.8	170
4,6-Dinitro-2-methylphenol		ND		8.8	170
4-Bromophenyl phenyl ether		ND		7.1	34
4-Chloro-3-methylphenol		ND		9.5	69
4-Chloroaniline		ND		14	69
4-Chlorophenyl phenyl ether		ND		5.5	34
4-Nitroaniline		ND		9.2	170
4-Nitrophenol		ND		6.7	170
Acenaphthene		ND		5.0	34
Acenaphthylene		ND		6.1	34
Acetophenone		ND		3.7	34
Aniline		ND		18	34
Anthracene		ND		11	34
Atrazine		ND		10	34
Azobenzene		ND		4.3	34
Benzaldehyde		ND		10	34
Benzo[a]anthracene		ND		6.6	34
Benzo[a]pyrene		ND		6.3	34
Benzo[b]fluoranthene		ND		7.9	34
Benzo[g,h,i]perylene		ND		6.7	34
Benzo[k]fluoranthene		ND		9.5	34
Benzoic acid		ND		15	170

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Client: Olin Corporation

Job Number: 360-24309-2
Sdg Number: OCRI-06A

Client Sample ID: **OC-SB-430-19/21-XXX**

Lab Sample ID: 360-24309-21
Client Matrix: Solid

% Moisture: 4.7

Date Sampled: 08/25/2009 1535
Date Received: 08/26/2009 1735

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49098		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48691		Lab File ID:	B10385.D
Dilution:	1.0			Initial Weight/Volume:	30.57 g
Date Analyzed:	09/18/2009 0234			Final Weight/Volume:	1.0 mL
Date Prepared:	09/08/2009 1206			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		2.1	34
Benzyl alcohol		ND		7.9	69
Bis(2-chloroethoxy)methane		ND		6.2	34
Bis(2-chloroethyl)ether		ND		8.3	34
Bis(2-ethylhexyl) phthalate		17	J B	11	34
Butyl benzyl phthalate		ND		7.5	34
Caprolactam		ND		10	34
Carbazole		ND		34	34
Chrysene		ND		7.4	34
Dibenz(a,h)anthracene		ND		6.9	34
Dibenzofuran		ND		20	34
Diethyl phthalate		ND		4.8	34
Dimethyl phthalate		ND		5.0	34
Di-n-butyl phthalate		ND		10	34
Di-n-octyl phthalate		ND		9.7	34
Diphenyl oxide		ND		10	34
Fluoranthene		ND		22	34
Fluorene		ND		13	34
Hexachlorobenzene		ND		8.1	34
Hexachlorobutadiene		ND		6.8	34
Hexachlorocyclopentadiene		ND		9.4	69
Hexachloroethane		ND		6.5	34
Indeno[1,2,3-cd]pyrene		ND		10	34
Isophorone		ND		7.4	34
Naphthalene		ND		76	82
Nitrobenzene		ND		4.7	34
N-Nitrosodimethylamine		ND		4.0	34
N-Nitrosodi-n-propylamine		ND		3.9	34
N-Nitrosodiphenylamine		ND		6.9	34
Pentachlorophenol		ND		7.1	34
Phenanthrene		ND		40	41
Phenol		ND		4.3	34
Pyrene		ND		9.1	34

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	56		30 - 130
2-Fluorobiphenyl	65		30 - 130
2-Fluorophenol	76		30 - 130
Nitrobenzene-d5	67		30 - 130
Phenol-d5	69		30 - 130
Terphenyl-d14	77		30 - 130

Client: Olin Corporation

Job Number: 360-24309-2
Sdg Number: OCRI-06A

Client Sample ID: **OC-SB-430-19/21-XXX**

Lab Sample ID: 360-24309-21
Client Matrix: Solid % Moisture: 4.7

Date Sampled: 08/25/2009 1535
Date Received: 08/26/2009 1735

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49098		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48691		Lab File ID:	B10385.D
Dilution:	1.0			Initial Weight/Volume:	30.57 g
Date Analyzed:	09/18/2009 0234			Final Weight/Volume:	1.0 mL
Date Prepared:	09/08/2009 1206			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 6

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
1928-30-9	Tricosane, 2-methyl-	14.89	22	T J N
629-99-2	Pentacosane	15.54	38	T J N
630-1-3	Hexacosane	16.07	35	T J N
62016-79-9	Heptacosane, 1-chloro-	16.61	54	T J N
112-84-5	Erucylamide	17.18	180	T J N
7683-64-9	Squalene	17.35	220	T J N

FORM IV
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Westfield Job No.: 360-24309-1

SDG No.: OCRI-06

Lab File ID: B10373.D Lab Sample ID: MB 360-48691/1-A

Matrix: Solid Date Extracted: 09/08/2009 12:06

Instrument ID: Inst. B Date Analyzed: 09/17/2009 19:48

Level: (Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 360-48691/2-A	B10374.D	09/17/2009 20:22
	LCSD 360-48691/3-A	B10375.D	09/17/2009 20:56
OC-SB-414-0.0/1.0-XXX	360-24309-12	B10376.D	09/17/2009 21:30
OC-SB-414-6.0/8.0-XXX	360-24309-14	B10378.D	09/17/2009 22:38
OC-SB-422-0.0/1.0-XXX	360-24309-15	B10379.D	09/17/2009 23:12
OC-SB-422-6.0/8.0-XXX	360-24309-17	B10381.D	09/18/2009 00:19
OC-SB-429-6.0/8.0-XXX	360-24309-19	B10383.D	09/18/2009 01:27
OC-SB-430-0.0/1.0-XXX	360-24309-20	B10384.D	09/18/2009 02:01
OC-SB-430-8.0/10-DUP	360-24309-22	B10386.D	09/18/2009 03:08
OC-SB-430-8.0/10-XXX	360-24309-23	B10387.D	09/18/2009 03:42
OC-SB-430-8.0/10-XMS MS	360-24309-23MS	B10388.D	09/18/2009 04:15
OC-SB-430-8.0/10-MSD MSD	360-24309-23MSD	B10389.D	09/18/2009 04:49

LCS 360-48691 DONE

3,3'-DCB 32/31

Aniline 31/32

benzaldehyde 142

bis(2-chloroethyl)eth 37 ~~RPD 40~~

MS 360-48691 DONE

Benzoic acid 71.7

di-n-butyl-phthalate 77

TIC unk (11.771)

Octa decane

48567

Surr ac Done

MS/MSD Form III not complete

83399

377

377

(48567)

48691 ✓

48515 ✓

48653

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24309-1

SDG No.: OCRI-06

Matrix: Solid Level: Low Lab File ID: B10374.D

Lab ID: LCS 360-48691/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
1,1'-Biphenyl	333	276	83	40-140	
1,2,4,5-Tetrachlorobenzene	333	272	81	40-140	
1,2,4-Trichlorobenzene	333	251	75	40-140	
1,2-Dichlorobenzene	333	205	62	40-140	
1,3-Dichlorobenzene	333	197	59	40-140	
1,4-Dichlorobenzene	333	194	58	40-140	
1-Methylnaphthalene	333	283	85	40-140	
2,2'-oxybis[1-chloropropane]	333	208	62	40-140	
2,3,4,6-Tetrachlorophenol	333	246	74	40-140	
2,4,5-Trichlorophenol	333	314	94	30-130	
2,4,6-Trichlorophenol	333	309	93	30-130	
2,4-Dichlorophenol	333	317	95	30-130	
2,4-Dimethylphenol	333	373	112	30-130	
2,4-Dinitrophenol	333	223	67	30-130	
2,4-Dinitrotoluene	333	264	79	40-140	
2,6-Dinitrotoluene	333	288	86	40-140	
2-Chloronaphthalene	333	211	63	40-140	
2-Chlorophenol	333	223	67	30-130	
2-Methylnaphthalene	333	279	84	40-140	
2-Methylphenol	333	251	75	30-130	
2-Nitroaniline	333	290	87	40-140	
2-Nitrophenol	333	303	91	30-130	
3 & 4 Methylphenol	333	249	75	30-130	
3,3'-Dichlorobenzidine	333	108	32	40-140	*
3-Nitroaniline	333	260	78	40-140	
4,6-Dinitro-2-methylphenol	333	308	92	30-130	
4-Bromophenyl phenyl ether	333	298	89	40-140	
4-Chloro-3-methylphenol	333	344	103	30-130	
4-Chloroaniline	333	259	78	40-140	
4-Chlorophenyl phenyl ether	333	285	85	40-140	
4-Nitroaniline	333	300	90	40-140	
4-Nitrophenol	333	309	93	30-130	
Acenaphthene	333	316	95	40-140	
Acenaphthylene	333	273	82	40-140	
Acetophenone	333	222	67	40-140	
Aniline	333	102	31	40-140	*
Anthracene	333	338	101	40-140	
Atrazine	333	370	111	40-140	
Azobenzene	333	295	88	40-140	
Benzaldehyde	333	474	142	40-140	*
Benzo[a]anthracene	333	350	105	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24309-1

SDG No.: OCRI-06

Matrix: Solid Level: Low Lab File ID: B10374.D

Lab ID: LCS 360-48691/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
Benzo[a]pyrene	333	314	94	40-140	
Benzo[b]fluoranthene	333	329	99	40-140	
Benzo[g,h,i]perylene	333	297	89	40-140	
Benzo[k]fluoranthene	333	349	105	40-140	
Benzoic acid	333	203	61	30-130	
Benzophenone	333	309	93	40-140	
Benzyl alcohol	333	236	71	30-130	
Bis(2-chloroethoxy)methane	333	270	81	40-140	
Bis(2-chloroethyl)ether	333	124	37	40-140	*
Bis(2-ethylhexyl) phthalate	333	316	95	40-140	
Butyl benzyl phthalate	333	313	94	40-140	
Caprolactam	333	357	107	40-140	
Carbazole	333	333	100	40-140	
Chrysene	333	335	101	40-140	
Dibenz(a,h)anthracene	333	282	85	40-140	
Dibenzofuran	333	277	83	40-140	
Diethyl phthalate	333	290	87	40-140	
Dimethyl phthalate	333	278	83	40-140	
Di-n-butyl phthalate	333	346	104	40-140	
Di-n-octyl phthalate	333	285	86	40-140	
Diphenyl oxide	333	288	86	40-140	
Fluoranthene	333	312	94	40-140	
Fluorene	333	337	101	40-140	
Hexachlorobenzene	333	302	91	40-140	
Hexachlorobutadiene	333	260	78	40-140	
Hexachlorocyclopentadiene	333	261	78	40-140	
Hexachloroethane	333	205	61	40-140	
Indeno[1,2,3-cd]pyrene	333	329	99	40-140	
Isophorone	333	247	74	40-140	
Naphthalene	333	322	96	40-140	
Nitrobenzene	333	267	80	40-140	
N-Nitrosodimethylamine	333	212	64	40-140	
N-Nitrosodi-n-propylamine	333	230	69	40-140	
N-Nitrosodiphenylamine	333	216	65	40-140	
Pentachlorophenol	333	302	91	30-130	
Phenanthrene	333	305	91	40-140	
Phenol	333	236	71	30-130	
Pyrene	333	310	93	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24309-1

SDG No.: OCRI-06

Matrix: Solid Level: Low Lab File ID: B10375.D

Lab ID: LCSD 360-48691/3-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCSD CONCENTRATION (ug/Kg)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1'-Biphenyl	333	264	79	4	30	40-140	
1,2,4,5-Tetrachlorobenzene	333	258	77	5	30	40-140	
1,2,4-Trichlorobenzene	333	241	72	4	30	40-140	
1,2-Dichlorobenzene	333	214	64	4	30	40-140	
1,3-Dichlorobenzene	333	203	61	3	30	40-140	
1,4-Dichlorobenzene	333	200	60	3	30	40-140	
1-Methylnaphthalene	333	258	77	9	30	40-140	
2,2'-oxybis[1-chloropropane]	333	215	64	3	30	40-140	
2,3,4,6-Tetrachlorophenol	333	233	70	5	30	40-140	
2,4,5-Trichlorophenol	333	310	93	1	30	30-130	
2,4,6-Trichlorophenol	333	301	90	2	30	30-130	
2,4-Dichlorophenol	333	307	92	3	30	30-130	
2,4-Dimethylphenol	333	352	106	6	30	30-130	
2,4-Dinitrophenol	333	210	63	6	30	30-130	
2,4-Dinitrotoluene	333	258	77	2	30	40-140	
2,6-Dinitrotoluene	333	285	85	1	30	40-140	
2-Chloronaphthalene	333	214	64	2	30	40-140	
2-Chlorophenol	333	228	68	2	30	30-130	
2-Methylnaphthalene	333	271	81	3	30	40-140	
2-Methylphenol	333	249	75	0	30	30-130	
2-Nitroaniline	333	292	87	0	30	40-140	
2-Nitrophenol	333	295	89	2	30	30-130	
3 & 4 Methylphenol	333	251	75	1	30	30-130	
3,3'-Dichlorobenzidine	333	103	31	5	30	40-140	*
3-Nitroaniline	333	249	75	4	30	40-140	
4,6-Dinitro-2-methylphenol	333	300	90	3	30	30-130	
4-Bromophenyl phenyl ether	333	290	87	3	30	40-140	
4-Chloro-3-methylphenol	333	329	99	5	30	30-130	
4-Chloroaniline	333	248	74	4	30	40-140	
4-Chlorophenyl phenyl ether	333	284	85	0	30	40-140	
4-Nitroaniline	333	298	90	1	30	40-140	
4-Nitrophenol	333	304	91	2	30	30-130	
Acenaphthene	333	318	95	1	30	40-140	
Acenaphthylene	333	279	84	2	30	40-140	
Acetophenone	333	227	68	2	30	40-140	
Aniline	333	107	32	4	30	40-140	*
Anthracene	333	331	99	2	30	40-140	
Atrazine	333	330	99	12	30	40-140	
Azobenzene	333	281	84	5	30	40-140	
Benzaldehyde	333	453	136	5	30	40-140	
Benzo[a]anthracene	333	333	100	5	30	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24309-1

SDG No.: OCRI-06

Matrix: Solid Level: Low Lab File ID: B10375.D

Lab ID: LCSD 360-48691/3-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCSD CONCENTRATION (ug/Kg)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Benzo[a]pyrene	333	292	88	7	30	40-140	
Benzo[b]fluoranthene	333	302	91	9	30	40-140	
Benzo[g,h,i]perylene	333	304	91	2	30	40-140	
Benzo[k]fluoranthene	333	327	98	7	30	40-140	
Benzoic acid	333	222	67	9	30	30-130	
Benzophenone	333	285	85	8	30	40-140	
Benzyl alcohol	333	236	71	0	30	30-130	
Bis(2-chloroethoxy)methane	333	259	78	4	30	40-140	
Bis(2-chloroethyl)ether	333	205	62	50	30	40-140	*
Bis(2-ethylhexyl) phthalate	333	303	91	4	30	40-140	
Butyl benzyl phthalate	333	297	89	5	30	40-140	
Caprolactam	333	316	95	12	30	40-140	
Carbazole	333	323	97	3	30	40-140	
Chrysene	333	320	96	4	30	40-140	
Dibenz(a,h)anthracene	333	293	88	4	30	40-140	
Dibenzofuran	333	276	83	0	30	40-140	
Diethyl phthalate	333	287	86	1	30	40-140	
Dimethyl phthalate	333	275	82	1	30	40-140	
Di-n-butyl phthalate	333	340	102	2	30	40-140	
Di-n-octyl phthalate	333	260	78	9	30	40-140	
Diphenyl oxide	333	263	79	9	30	40-140	
Fluoranthene	333	300	90	4	30	40-140	
Fluorene	333	334	100	1	30	40-140	
Hexachlorobenzene	333	291	87	4	30	40-140	
Hexachlorobutadiene	333	250	75	4	30	40-140	
Hexachlorocyclopentadiene	333	258	77	1	30	40-140	
Hexachloroethane	333	213	64	4	30	40-140	
Indeno[1,2,3-cd]pyrene	333	337	101	2	30	40-140	
Isophorone	333	235	71	5	30	40-140	
Naphthalene	333	307	92	5	30	40-140	
Nitrobenzene	333	259	78	3	30	40-140	
N-Nitrosodimethylamine	333	220	66	4	30	40-140	
N-Nitrosodi-n-propylamine	333	237	71	3	30	40-140	
N-Nitrosodiphenylamine	333	209	63	3	30	40-140	
Pentachlorophenol	333	292	87	3	30	30-130	
Phenanthrene	333	298	89	2	30	40-140	
Phenol	333	238	71	1	30	30-130	
Pyrene	333	296	89	5	30	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Westfield | Job No.: 360-24309-1

SDG No.: OCRI-06

Client Sample ID: | Lab Sample ID: MB 360-48691/1-A

Matrix: Solid | Lab File ID: B10373.D

Analysis Method: 8270C LL | Date Collected:

Extract. Method: 3546 | Date Extracted: 09/08/2009 12:06

Sample wt/vol: 30.00(g) | Date Analyzed: 09/17/2009 19:48

Con. Extract Vol.: 1.0(mL) | Dilution Factor: 1

Injection Volume: 1.0(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 49098 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
98-86-2	Acetophenone	ND		33	10
62-53-3	Aniline	ND		33	10
120-12-7	Anthracene	ND		33	10
1912-24-9	Atrazine	ND		33	10
103-33-3	Azobenzene	ND		33	10
100-52-7	Benzaldehyde	ND		33	10
56-55-3	Benzo[a]anthracene	ND		33	10
50-32-8	Benzo[a]pyrene	ND		33	10
205-99-2	Benzo[b]fluoranthene	ND		33	10
191-24-2	Benzo[g,h,i]perylene	ND		33	10
207-08-9	Benzo[k]fluoranthene	ND		33	10
65-85-0	Benzoic acid	71.7	J	170	15
119-61-9	Benzophenone	ND		33	10
100-51-6	Benzyl alcohol	ND		67	28
111-91-1	Bis(2-chloroethoxy)methane	ND		33	10
111-44-4	Bis(2-chloroethyl)ether	ND		33	10
117-81-7	Bis(2-ethylhexyl) phthalate	ND		33	10
85-68-7	Butyl benzyl phthalate	ND		33	10
105-60-2	Caprolactam	ND		33	10
86-74-8	Carbazole	ND		33	10
218-01-9	Chrysene	ND		33	10
53-70-3	Dibenz(a,h)anthracene	ND		33	10
132-64-9	Dibenzofuran	ND		33	10
84-66-2	Diethyl phthalate	ND		33	10
131-11-3	Dimethyl phthalate	ND		33	10
84-74-2	Di-n-butyl phthalate	77.0		33	29
117-84-0	Di-n-octyl phthalate	ND		33	17
101-84-8	Diphenyl oxide	ND		33	10
122-39-4	Diphenylamine	ND		33	2.0
206-44-0	Fluoranthene	ND		33	10
86-73-7	Fluorene	ND		33	10
118-74-1	Hexachlorobenzene	ND		33	10
87-68-3	Hexachlorobutadiene	ND		33	10
77-47-4	Hexachlorocyclopentadiene	ND		67	10

FORM IV
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Westfield Job No.: 360-24309-2

SDG No.: OCRI-06A

Lab File ID: B10313.D Lab Sample ID: MB 360-48567/1-A

Matrix: Solid Date Extracted: 09/03/2009 13:11

Instrument ID: Inst. B Date Analyzed: 09/15/2009 15:47

Level: (Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 360-48567/2-A	B10314.D	09/15/2009 16:21
	LCSD 360-48567/3-A	B10315.D	09/15/2009 16:55
~~OC-SB-407-26/28-XXX~~	360-24309-8	J02998.D	~~09/17/2009 14:48~~
" " 408 - 0.4/1.0 - XXX	" " -10	J03000.D	09/17/2009 15:47
" " 408 - 7.0/9.4 - XXX	" " -11	J03001.D	09/17/2009 16:16

/LCS

3,3'-DCB 32/32

Aniline 32/29

benzaldehyde 282/294

/MB

Benzoic Acid 31.5 ug/L AC 157.5 5+

Di-n-butylphthalate 107 1070 ug/L 10+

TIC

Hexadecane

Octadecane

Unk 12.07

3/18/10

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24309-2

SDG No.: OCRI-06A

Matrix: Solid Level: Low Lab File ID: B10314.D

Lab ID: LCS 360-48567/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
1,1'-Biphenyl	333	302	91	40-140	
1,2,4,5-Tetrachlorobenzene	333	302	90	40-140	
1,2,4-Trichlorobenzene	333	272	82	40-140	
1,2-Dichlorobenzene	333	221	66	40-140	
1,3-Dichlorobenzene	333	208	62	40-140	
1,4-Dichlorobenzene	333	207	62	40-140	
1-Methylnaphthalene	333	310	93	40-140	
2,2'-oxybis[1-chloropropane]	333	230	69	40-140	
2,3,4,6-Tetrachlorophenol	333	269	81	40-140	
2,4,5-Trichlorophenol	333	316	95	30-130	
2,4,6-Trichlorophenol	333	305	92	30-130	
2,4-Dichlorophenol	333	353	106	30-130	
2,4-Dimethylphenol	333	384	115	30-130	
2,4-Dinitrophenol	333	169	51	30-130	
2,4-Dinitrotoluene	333	275	83	40-140	
2,6-Dinitrotoluene	333	288	86	40-140	
2-Chloronaphthalene	333	230	69	40-140	
2-Chlorophenol	333	237	71	30-130	
2-Methylnaphthalene	333	308	92	40-140	
2-Methylphenol	333	272	82	30-130	
2-Nitroaniline	333	301	90	40-140	
2-Nitrophenol	333	358	107	30-130	
3 & 4 Methylphenol	333	260	78	30-130	
3,3'-Dichlorobenzidine	333	106	32	40-140	*
3-Nitroaniline	333	272	82	40-140	
4,6-Dinitro-2-methylphenol	333	257	77	30-130	
4-Bromophenyl phenyl ether	333	317	95	40-140	
4-Chloro-3-methylphenol	333	375	113	30-130	
4-Chloroaniline	333	313	94	40-140	
4-Chlorophenyl phenyl ether	333	308	92	40-140	
4-Nitroaniline	333	304	91	40-140	
4-Nitrophenol	333	312	94	30-130	
Acenaphthene	333	328	98	40-140	
Acenaphthylene	333	298	89	40-140	
Acetophenone	333	244	73	40-140	
Aniline	333	108	32	40-140	*
Anthracene	333	371	111	40-140	
Atrazine	333	392	118	40-140	
Azobenzene	333	318	95	40-140	
Benzaldehyde	333	939	282	40-140	*
Benzo[a]anthracene	333	371	111	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24309-2

SDG No.: OCRI-06A

Matrix: Solid Level: Low Lab File ID: B10315.D

Lab ID: LCSD 360-48567/3-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCSD CONCENTRATION (ug/Kg)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1'-Biphenyl	333	301	90	0	30	40-140	
1,2,4,5-Tetrachlorobenzene	333	300	90	1	30	40-140	
1,2,4-Trichlorobenzene	333	274	82	1	30	40-140	
1,2-Dichlorobenzene	333	228	69	3	30	40-140	
1,3-Dichlorobenzene	333	212	64	2	30	40-140	
1,4-Dichlorobenzene	333	213	64	3	30	40-140	
1-Methylnaphthalene	333	314	94	1	30	40-140	
2,2'-oxybis[1-chloropropane]	333	236	71	3	30	40-140	
2,3,4,6-Tetrachlorophenol	333	268	80	0	30	40-140	
2,4,5-Trichlorophenol	333	319	96	1	30	30-130	
2,4,6-Trichlorophenol	333	312	93	2	30	30-130	
2,4-Dichlorophenol	333	356	107	1	30	30-130	
2,4-Dimethylphenol	333	385	115	0	30	30-130	
2,4-Dinitrophenol	333	182	54	7	30	30-130	
2,4-Dinitrotoluene	333	274	82	0	30	40-140	
2,6-Dinitrotoluene	333	294	88	2	30	40-140	
2-Chloronaphthalene	333	233	70	1	30	40-140	
2-Chlorophenol	333	244	73	3	30	30-130	
2-Methylnaphthalene	333	309	93	0	30	40-140	
2-Methylphenol	333	294	88	8	30	30-130	
2-Nitroaniline	333	304	91	1	30	40-140	
2-Nitrophenol	333	363	109	2	30	30-130	
3 & 4 Methylphenol	333	264	79	1	30	30-130	
3,3'-Dichlorobenzidine	333	107	32	1	30	40-140	*
3-Nitroaniline	333	273	82	0	30	40-140	
4,6-Dinitro-2-methylphenol	333	252	76	2	30	30-130	
4-Bromophenyl phenyl ether	333	303	91	5	30	40-140	
4-Chloro-3-methylphenol	333	376	113	0	30	30-130	
4-Chloroaniline	333	272	82	14	30	40-140	
4-Chlorophenyl phenyl ether	333	308	92	0	30	40-140	
4-Nitroaniline	333	313	94	3	30	40-140	
4-Nitrophenol	333	311	93	1	30	30-130	
Acenaphthene	333	332	99	1	30	40-140	
Acenaphthylene	333	299	90	0	30	40-140	
Acetophenone	333	248	74	2	30	40-140	
Aniline	333	97.0	29	11	30	40-140	*
Anthracene	333	370	111	0	30	40-140	
Atrazine	333	388	116	1	30	40-140	
Azobenzene	333	316	95	1	30	40-140	
Benzaldehyde	333	980	294	4	30	40-140	*
Benzo[a]anthracene	333	375	112	1	30	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Westfield | Job No.: 360-24309-2

SDG No.: OCRI-06A

Client Sample ID: | Lab Sample ID: MB 360-48567/1-A

Matrix: Solid | Lab File ID: B10313.D

Analysis Method: 8270C LL | Date Collected:

Extract. Method: 3546 | Date Extracted: 09/03/2009 13:11

Sample wt/vol: 30.00(g) | Date Analyzed: 09/15/2009 15:47

Con. Extract Vol.: 1.0(mL) | Dilution Factor: 1

Injection Volume: 1.0(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 48930 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
98-86-2	Acetophenone	ND		33	3.6
62-53-3	Aniline	ND		33	17
120-12-7	Anthracene	ND		33	11
1912-24-9	Atrazine	ND		33	10
103-33-3	Azobenzene	ND		33	4.1
100-52-7	Benzaldehyde	ND		33	10
56-55-3	Benzo[a]anthracene	ND		33	6.4
50-32-8	Benzo[a]pyrene	ND		33	6.1
205-99-2	Benzo[b]fluoranthene	ND		33	7.6
191-24-2	Benzo[g,h,i]perylene	ND		33	6.5
207-08-9	Benzo[k]fluoranthene	ND		33	9.2
65-85-0	Benzoic acid	31.5	J	170	14
119-61-9	Benzophenone	ND		33	2.0
100-51-6	Benzyl alcohol	ND		67	7.7
111-91-1	Bis(2-chloroethoxy)methane	ND		33	6.0
111-44-4	Bis(2-chloroethyl)ether	ND		33	8.1
117-81-7	Bis(2-ethylhexyl) phthalate	ND		33	11
85-68-7	Butyl benzyl phthalate	ND		33	7.3
105-60-2	Caprolactam	ND		33	10
86-74-8	Carbazole	ND		33	33
218-01-9	Chrysene	ND		33	7.2
53-70-3	Dibenz(a,h)anthracene	ND		33	6.7
132-64-9	Dibenzofuran	ND		33	19
84-66-2	Diethyl phthalate	ND		33	4.7
131-11-3	Dimethyl phthalate	ND		33	4.9
84-74-2	Di-n-butyl phthalate	107		33	10
117-84-0	Di-n-octyl phthalate	ND		33	9.4
101-84-8	Diphenyl oxide	ND		33	10
206-44-0	Fluoranthene	ND		33	21
86-73-7	Fluorene	ND		33	13
118-74-1	Hexachlorobenzene	ND		33	7.9
87-68-3	Hexachlorobutadiene	ND		33	6.6
77-47-4	Hexachlorocyclopentadiene	ND		67	9.1
67-72-1	Hexachloroethane	ND		33	6.4

Organic Prep Worksheet

Batch Number: 360-48567
Method: 3546
Analyst: Bilodeau, Brian R

Date Open: Sep 03 2009 1:11PM
Batch End:

Lab ID	Client ID	Method Chain	Basis	Initial weight/volume of sample	Final weight/volume of sample	ABN SURR_00010	OlinLCSextras_00001	OP-abnms_00063
MB~360-48567/1		3546, 8270C LL		30.00 g	1.0 mL	50 uL		
LCS~360-48567/2		3546, 8270C LL		30.00 g	1.0 mL	50 uL	.100 mL	100 uL
LCSD~360-48567/3		3546, 8270C LL		30.00 g	1.0 mL	50 uL	.100 mL	100 uL
360-24251-A-19	OC-SB-446-5.0/7.0-XXX		T	30.05 g	1.0 mL	50 uL		
360-24251-A-19~MS	OC-SB-446-5.0/7.0-XMS		T	30.62 g	1.0 mL	50 uL	.100 mL	100 uL
360-24251-A-19~MSD	OC-SB-446-5.0/7.0-MSD		T	30.89 g	1.0 mL	50 uL	.100 mL	100 uL
360-24251-A-20	OC-SB-448-0.0/1.0-XXX		T	30.06 g	1.0 mL	50 uL		
360-24251-A-21	OC-SB-448-17/19-XXX		T	30.06 g	1.0 mL	50 uL		
360-24251-A-22	OC-SB-448-8.0/10-XXX		T	30.15 g	1.0 mL	50 uL		
360-24251-A-23	OC-SB-438-0.0/1.0-XXX		T	30.22 g	1.0 mL	50 uL		
360-24251-A-24	OC-SB-438-20/22-XXX		T	30.81 g	1.0 mL	50 uL		
360-24309-A-1	OC-SB-400-0.0/1.0-XXX	3546, 8270C LL	T	30.37 g	1.0 mL	50 uL		
360-24309-A-2	OC-SB-400-5.0/7.0-XXX	3546, 8270C LL	T	30.44 g	1.0 mL	50 uL		
360-24309-A-3	OC-SB-401-0.0/1.0-XXX	3546, 8270C LL	T	30.11 g	1.0 mL	50 uL		
360-24309-A-4	OC-SB-401-7.5/9.5-XXX	3546, 8270C LL	T	30.81 g	1.0 mL	50 uL		
360-24309-B-5	OC-SB-402-0.0/1.0-XXX	3546, 8270C LL	T	30.22 g	1.0 mL	50 uL		
360-24309-A-6	OC-SB-402-7.5/9.5-XXX	3546, 8270C LL	T	30.57 g	1.0 mL	50 uL		
360-24309-A-7	OC-SB-407-0.0/1.0-XXX	3546, 8270C LL	T	30.80 g	1.0 mL	50 uL		
360-24309-A-8	OC-SB-407-26/28-XXX		T	30.10 g	1.0 mL	50 uL		
360-24309-A-9	OC-SB-407-8.0/10.0-XXX	3546, 8270C LL	T	30.36 g	1.0 mL	50 uL		
360-24309-A-10	OC-SB-408-0.0/1.0-XXX	3546, 8270C LL	T	30.14 g	1.0 mL	50 uL		
360-24309-A-11	OC-SB-408-7.0/9.9-XXX	3546, 8270C LL	T	30.08 g	1.0 mL	50 uL		

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Westfield Job No.: 360-24309-1

SDG No.: OCRI-06

Instrument ID: Inst. B Start Date: 09/21/2009 22:07

Analysis Batch Number: 49266 End Date: 09/22/2009 09:59

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 360-49266/15		09/21/2009 22:07	1	B10452.D	Rtx-5ms SIL with guard column 0.25(um)
CCV 360-49266/16 CCVIS		09/21/2009 22:38	1	B10453.D	Rtx-5ms SIL with guard column 0.25(um)
360-24309-7 RA	OC-SB-407-0.0/1.0-XXX RA	09/21/2009 23:09	1	B10474.D	Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/21/2009 23:40	100		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/22/2009 00:11	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/22/2009 00:42	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/22/2009 01:13	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/22/2009 01:44	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/22/2009 02:15	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/22/2009 02:46	10		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/22/2009 03:17	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/22/2009 03:48	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/22/2009 04:19	10		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/22/2009 04:50	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/22/2009 05:21	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/22/2009 05:52	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/22/2009 06:23	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/22/2009 06:54	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/22/2009 07:25	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/22/2009 07:56	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/22/2009 08:27	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/22/2009 08:58	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/22/2009 09:29	10		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/22/2009 09:59	1		Rtx-5ms SIL with guard column 0.25(um)

CCAL 49266 Trend dl

Benzidine 2D = 29.9 Not applicable

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Westfield Job No.: 360-24309-1

SDG No.: OCRI-06

Lab Sample ID: CCV 360-49266/16 Calibration Date: 09/21/2009 22:38

Instrument ID: Inst. B Calib Start Date: 09/21/2009 15:24

GC Column: Rtx-5ms ID: 0.25(um) Calib End Date: 09/21/2009 19:31

Lab File ID: B10453.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Nitroaniline	Lin1		0.3855		4940	5000	-1.2	30.0
Dimethyl phthalate	Ave	1.239	1.267		5110	5000	2.3	30.0
2,6-Dinitrotoluene	Ave	0.2754	0.2918		5300	5000	6.0	30.0
Acenaphthylene	Ave	1.670	1.797		5380	5000	7.6	30.0
3-Nitroaniline	Lin1		0.2962		4910	5000	-1.9	30.0
2,4-Dinitrophenol	Qua		0.0952	0.0500	5410	5000	8.2	30.0
4-Nitrophenol	Lin1		0.1739	0.0500	4920	5000	-1.6	30.0
Acenaphthene	Ave	1.174	1.229		5230	5000	4.7	20.0
2,4-Dinitrotoluene	Lin1		0.3775		4770	5000	-4.7	30.0
Dibenzofuran	Ave	1.528	1.572		5150	5000	2.9	30.0
2,3,4,6-Tetrachlorophenol	Lin1		0.2510		4830	5000	-3.4	30.0
Diethyl phthalate	Ave	1.263	1.320		5220	5000	4.5	30.0
4-Chlorophenyl phenyl ether	Ave	0.5664	0.5786		5110	5000	2.2	30.0
2-Nitroaniline	Lin1		0.3462		4910	5000	-1.9	30.0
Fluorene	Ave	1.285	1.372		5340	5000	6.8	30.0
4,6-Dinitro-2-methylphenol	Lin		0.0990		4970	5000	-0.7	30.0
Diphenylamine	Ave	0.6519	0.6794		5210	5000	4.2	30.0
N-Nitrosodiphenylamine	Ave	0.6519	0.6794		5210	5000	4.2	20.0
1,2-Diphenylhydrazine	Ave	1.190	1.279		5370	5000	7.5	30.0
Azobenzene	Ave	1.190	1.279		5370	5000	7.5	30.0
Benzophenone	Ave	0.7148	0.7700		5390	5000	7.7	30.0
4-Bromophenyl phenyl ether	Ave	0.1833	0.1843		5030	5000	0.5	30.0
Atrazine	Lin1		0.2170		4990	5000	-0.1	30.0
Hexachlorobenzene	Ave	0.1770	0.1767		4990	5000	-0.2	30.0
Pentachlorophenol	Lin		0.0875		4830	5000	-3.5	20.0
Pentachloronitrobenzene	Lin1		0.0817		4700	5000	-6.0	30.0
Phenanthrene	Ave	1.036	1.050		5070	5000	1.4	30.0
Anthracene	Ave	0.9691	1.042		5380	5000	7.5	30.0
Carbazole	Ave	0.8190	0.8898		5430	5000	8.6	30.0
Di-n-butyl phthalate	Ave	1.221	1.233		5050	5000	1.0	30.0
Fluoranthene	Ave	0.8954	0.9516		5310	5000	6.3	20.0
Benzidine	Qua		0.2435		6500	5000	29.9	30.0
Pyrene	Ave	1.624	1.507		4640	5000	-7.2	30.0
Butyl benzyl phthalate	Ave	0.6741	0.7119		5280	5000	5.6	30.0
Bis(2-ethylhexyl) phthalate	Lin1		0.9378		4850	5000	-2.9	30.0
3,3'-Dichlorobenzidine	Lin1		0.3046		5070	5000	1.4	30.0
Benzo[a]anthracene	Ave	0.8840	0.9251		5230	5000	4.6	30.0
Chrysene	Ave	0.8662	0.8624		4980	5000	-0.4	30.0
Di-n-octyl phthalate	Lin1		2.149		4460	5000	-10.9	20.0
Benzo[b]fluoranthene	Ave	1.232	1.205		4890	5000	-2.2	30.0
Benzo[k]fluoranthene	Ave	1.130	1.111		4920	5000	-1.7	30.0

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Westfield Job No.: 360-24309-1

SDG No.: OCRI-06

Instrument ID: Inst. B Start Date: 09/17/2009 18:40

Analysis Batch Number: 49098 End Date: 09/18/2009 06:30

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 360-49098/1		09/17/2009 18:40	1	B10371.D	Rtx-5ms SIL with guard column 0.25(um)
CCV 360-49098/2 CCVIS		09/17/2009 19:14	1	B10372.D	Rtx-5ms SIL with guard column 0.25(um)
MB 360-48691/1-A		09/17/2009 19:48	1	B10373.D	Rtx-5ms SIL with guard column 0.25(um)
LCS 360-48691/2-A		09/17/2009 20:22	1	B10374.D	Rtx-5ms SIL with guard column 0.25(um)
LCSD 360-48691/3-A		09/17/2009 20:56	1	B10375.D	Rtx-5ms SIL with guard column 0.25(um)
360-24309-12	OC-SB-414-0.0/1.0-XXX	09/17/2009 21:30	1	B10376.D	Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/17/2009 22:04	1		Rtx-5ms SIL with guard column 0.25(um)
360-24309-14	OC-SB-414-6.0/8.0-XXX	09/17/2009 22:38	1	B10378.D	Rtx-5ms SIL with guard column 0.25(um)
360-24309-15	OC-SB-422-0.0/1.0-XXX	09/17/2009 23:12	1	B10379.D	Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/17/2009 23:46	1		Rtx-5ms SIL with guard column 0.25(um)
360-24309-17	OC-SB-422-6.0/8.0-XXX	09/18/2009 00:19	1	B10381.D	Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/18/2009 00:53	1		Rtx-5ms SIL with guard column 0.25(um)
360-24309-19	OC-SB-429-6.0/8.0-XXX	09/18/2009 01:27	1	B10383.D	Rtx-5ms SIL with guard column 0.25(um)
360-24309-20	OC-SB-430-0.0/1.0-XXX	09/18/2009 02:01	1	B10384.D	Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/18/2009 02:34	1		Rtx-5ms SIL with guard column 0.25(um)
360-24309-22	OC-SB-430-8.0/10-DUP	09/18/2009 03:08	1	B10386.D	Rtx-5ms SIL with guard column 0.25(um)
360-24309-23	OC-SB-430-8.0/10-XXX	09/18/2009 03:42	1	B10387.D	Rtx-5ms SIL with guard column 0.25(um)
360-24309-23MS	OC-SB-430-8.0/10-XMS MS	09/18/2009 04:15	1	B10388.D	Rtx-5ms SIL with guard column 0.25(um)
360-24309-23MSD	OC-SB-430-8.0/10-MSD MSD	09/18/2009 04:49	1	B10389.D	Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/18/2009 05:23	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/18/2009 05:56	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/18/2009 06:30	10		Rtx-5ms SIL with guard column 0.25(um)

CCAL 49098

Tune Oil

4-nitrophenol 20 = 2%

Written

Dwl

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Westfield Job No.: 360-24309-1

SDG No.: OCRI-06

Lab Sample ID: CCV 360-49098/2 Calibration Date: 09/17/2009 19:14

Instrument ID: Inst. B Calib Start Date: 09/17/2009 13:00

GC Column: Rtx-5ms ID: 0.25(um) Calib End Date: 09/17/2009 17:32

Lab File ID: B10372.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Nitroaniline	Lin2		0.3683		4860	5000	-2.7	30.0
Dimethyl phthalate	Ave	1.252	1.194		4770	5000	-4.6	30.0
2,6-Dinitrotoluene	Ave	0.2850	0.2922		5130	5000	2.5	30.0
Acenaphthylene	Ave	1.619	1.647		5090	5000	1.7	30.0
3-Nitroaniline	Lin1		0.2718		4560	5000	-8.9	30.0
2,4-Dinitrophenol	Qua		0.0806	0.0500	5210	5000	4.2	30.0
4-Nitrophenol	Lin1		0.1226	0.0500	3600	5000	-28.0	30.0
Acenaphthene	Ave	1.160	1.117		4810	5000	-3.7	20.0
2,4-Dinitrotoluene	Lin1		0.3599		4480	5000	-10.4	30.0
Dibenzofuran	Ave	1.479	1.459		4930	5000	-1.3	30.0
2,3,4,6-Tetrachlorophenol	Lin1		0.2215		4210	5000	-15.8	30.0
Diethyl phthalate	Ave	1.264	1.223		4840	5000	-3.2	30.0
4-Chlorophenyl phenyl ether	Ave	0.5686	0.5426		4770	5000	-4.6	30.0
2-Nitroaniline	Lin		0.2990		4500	5000	-10.0	30.0
Fluorene	Ave	1.254	1.259		5020	5000	0.4	30.0
4,6-Dinitro-2-methylphenol	Qua		0.0801		5280	5000	5.7	30.0
Diphenylamine	Ave	0.6403	0.6235		4870	5000	-2.6	30.0
N-Nitrosodiphenylamine	Ave	0.6403	0.6235		4870	5000	-2.6	20.0
1,2-Diphenylhydrazine	Ave	1.161	1.165		5020	5000	0.4	30.0
Azobenzene	Ave	1.161	1.165		5020	5000	0.4	30.0
Benzophenone	Ave	0.7281	0.7077		4860	5000	-2.8	30.0
4-Bromophenyl phenyl ether	Ave	0.1774	0.1699		4790	5000	-4.2	30.0
Atrazine	Ave	0.1820	0.1821		5000	5000	0.1	30.0
Hexachlorobenzene	Ave	0.1666	0.1533		4600	5000	-8.0	30.0
Pentachlorophenol	Qua		0.0680		4210	5000	-15.8	20.0
Pentachloronitrobenzene	Lin1		0.0730		4290	5000	-14.1	30.0
Phenanthrene	Ave	1.019	0.9653		4730	5000	-5.3	30.0
Anthracene	Ave	0.9544	0.9490		4970	5000	-0.6	30.0
Carbazole	Ave	0.7793	0.7253		4650	5000	-6.9	30.0
Di-n-butyl phthalate	Ave	1.222	1.142		4670	5000	-6.6	30.0
Fluoranthene	Ave	0.9200	0.8822		4790	5000	-4.1	20.0
Benzidine	Lin		0.5482		5580	5000	11.7	30.0
Pyrene	Ave	1.328	1.257		4730	5000	-5.4	30.0
Butyl benzyl phthalate	Ave	0.6084	0.6134		5040	5000	0.8	30.0
Bis(2-ethylhexyl) phthalate	Ave	0.8794	0.8515		4840	5000	-3.2	30.0
3,3'-Dichlorobenzidine	Lin1		0.5640		4420	5000	-11.6	30.0
Benzo[a]anthracene	Ave	0.8743	0.8464		4840	5000	-3.2	30.0
Chrysene	Ave	0.8521	0.7929		4650	5000	-6.9	30.0
Di-n-octyl phthalate	Lin1		2.210		4710	5000	-5.9	20.0
Benzo[b]fluoranthene	Ave	1.145	1.155		5040	5000	0.8	30.0
Benzo[k]fluoranthene	Ave	1.064	1.037		4880	5000	-2.5	30.0

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Westfield Job No.: 360-24309-1

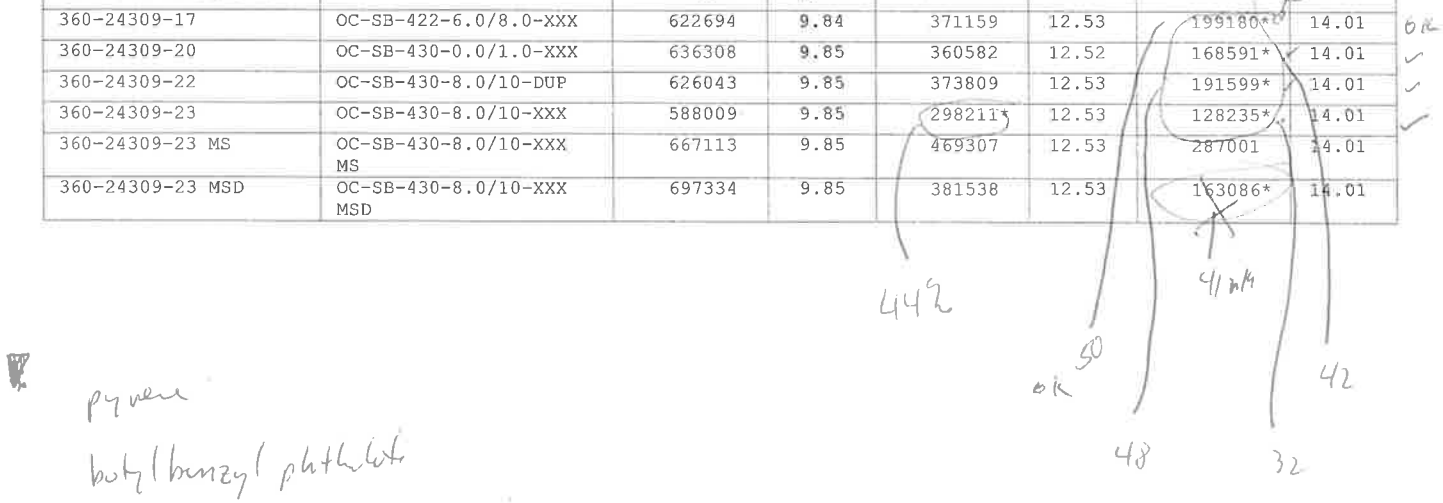
SDG No.: OCRI-06

Sample No.: CCV 360-48651/2 Date Analyzed: 09/06/2009 10:35

Instrument ID: Inst. J GC Column: Rtx-5ms SIL with ID: 0.25(um)

Lab File ID (Standard): J02864.D Heated Purge: (Y/N) N

		PHN		CRY		PD12	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12 HOUR STD		854360	9.85	674427	12.53	401338	14.01
UPPER LIMIT		1708720	10.35	1348854	13.03	802676	14.51
LOWER LIMIT		427180	9.35	337214	12.03	200669	13.51
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 360-48653/1-A		703744	9.85	472339	12.53	202148	14.01
LCS 360-48653/2-A		696849	9.85	421318	12.53	169399*	14.00
LCSD 360-48653/3-A		691135	9.85	510482	12.53	269211	14.01
360-24309-17	OC-SB-422-6.0/8.0-XXX	622694	9.84	371159	12.53	199180*	14.01
360-24309-20	OC-SB-430-0.0/1.0-XXX	636308	9.85	360582	12.52	168591*	14.01
360-24309-22	OC-SB-430-8.0/10-DUP	626043	9.85	373809	12.53	191599*	14.01
360-24309-23	OC-SB-430-8.0/10-XXX	588009	9.85	298211	12.53	128235*	14.01
360-24309-23 MS	OC-SB-430-8.0/10-XXX MS	667113	9.85	469307	12.53	287001	14.01
360-24309-23 MSD	OC-SB-430-8.0/10-XXX MSD	697334	9.85	381538	12.53	163086*	14.01



pyrene
butylbenzylphthalate
bis(2-ethylhexyl)phthalate
3,3'-DCB
benzo(a)anthracene
chrysene

PHN = Phenanthrene-d10
CRY = Chrysene-d12
PD12 = Perylene-d12

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.50 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270C LL

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Westfield Job No.: 360-24309-1

SDG No.: OCRI-06

Sample No.: CCV 360-48521/29 Date Analyzed: 09/05/2009 09:20

Instrument ID: Inst. J GC Column: Rtx-5ms SIL with ID: 0.25(um)

Lab File ID (Standard): J02859.D Heated Purge: (Y/N) N

		PHN		CRY		ⓓ PD12	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12 HOUR STD		680623	9.85	452467	12.53	272433	14.01
UPPER LIMIT		1361246	10.35	904934	13.03	544866	14.51
LOWER LIMIT		340312	9.35	226234	12.03	136217	13.51
LAB SAMPLE ID	CLIENT SAMPLE ID						
360-24309-7	OC-SB-407-0.0/1.0-XXX	660076	9.85	381171	12.53	626127*	14.02
360-24309-15	OC-SB-422-0.0/1.0-XXX	780286	9.85	475021	12.53	296948	14.01

23020

ⓓ di-n-octyl-phthalate
benzo(b)fluoranthene
benzo(k)fluoranthene
benzo(a)pyrene
indeno(1,2,3-cd)pyrene
dibenz(a,h)anthrene
benzo(g,h,i)perylene

PHN = Phenanthrene-d10
CRY = Chrysene-d12
PD12 = Perylene-d12

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.50 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270C LL

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Westfield Job No.: 360-24309-1

SDG No.: OCRI-06

Instrument ID: Inst. J Start Date: 09/17/2009 11:47

Analysis Batch Number: 49095 End Date: 09/17/2009 17:44

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 360-49095/1		09/17/2009 11:47	1	J02993.D	Rtx-5ms SIL with guard column 0.25(um)
CCV 360-49095/2 CCVIS		09/17/2009 12:17	1	J02994.D	Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/17/2009 13:21	5		Rtx-5ms SIL with guard column 0.25(um)
360-24309-6	OC-SB-402-7.5/9.5-XXX	09/17/2009 13:50	1	J02996.D	Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/17/2009 14:19	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/17/2009 14:48	1		Rtx-5ms SIL with guard column 0.25(um)
360-24309-9	OC-SB-407-8.0/10.0-XXX	09/17/2009 15:18	1	J02999.D	Rtx-5ms SIL with guard column 0.25(um)
360-24309-10	OC-SB-408-0.0/1.0-XXX	09/17/2009 15:47	1	J03000.D	Rtx-5ms SIL with guard column 0.25(um)
360-24309-11	OC-SB-408-7.0/9.9-XXX	09/17/2009 16:16	1	J03001.D	Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/17/2009 16:45	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/17/2009 17:14	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/17/2009 17:44	1		Rtx-5ms SIL with guard column 0.25(um)

CCAL

Benzoic acid 0.0279

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Westfield Job No.: 360-24309-1

SDG No.: OCRI-06

Lab Sample ID: CCV 360-49095/2 Calibration Date: 09/17/2009 12:17

Instrument ID: Inst. J Calib Start Date: 09/15/2009 17:27

GC Column: Rtx-5ms ID: 0.25(um) Calib End Date: 09/15/2009 21:23

Lab File ID: J02994.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Qua		0.2293		4860	5000	-2.8	30.0
N-Nitrosodimethylamine	Ave	0.3299	0.3103		4700	5000	-6.0	30.0
Pyridine	Lin1		0.5429		4370	5000	-12.5	30.0
Aniline	Ave	0.9185	0.8594		4680	5000	-6.4	30.0
Phenol	Ave	0.9427	0.7803		4140	5000	-17.2	20.0
Bis(2-chloroethyl)ether	Ave	0.6893	0.5902		4280	5000	-14.4	30.0
2-Chlorophenol	Ave	0.6685	0.6169		4610	5000	-7.7	30.0
1,4-Dichlorobenzene	Ave	0.7818	0.6671		4270	5000	-14.7	20.0
1,3-Dichlorobenzene	Ave	0.8034	0.6850		4260	5000	-14.7	30.0
1,2-Dichlorobenzene	Ave	0.7472	0.6202		4150	5000	-17.0	30.0
Benzyl alcohol	Ave	0.5078	0.5263		5180	5000	3.7	30.0
2-Methylphenol	Ave	0.5900	0.5435		4610	5000	-7.9	30.0
2,2'-oxybis[1-chloropropane]	Ave	0.6869	0.6033		4390	5000	-12.2	30.0
Acetophenone	Ave	0.8911	0.8448		4740	5000	-5.2	30.0
Benzaldehyde	Ave	0.8911	0.8448		4740	5000	-5.2	30.0
N-Nitrosodi-n-propylamine	Ave	0.4473	0.4433	0.0500	4960	5000	-0.9	30.0
3 & 4 Methylphenol	Ave	0.6159	0.5701		4630	5000	-7.4	30.0
Hexachloroethane	Ave	0.2836	0.2637		4650	5000	-7.0	30.0
Nitrobenzene	Ave	0.3156	0.3190		5050	5000	1.1	30.0
Isophorone	Lin2		0.5545		4970	5000	-0.6	30.0
2-Nitrophenol	Lin1		0.1469		4780	5000	-4.3	20.0
2,4-Dimethylphenol	Ave	0.2439	0.2581		5290	5000	5.8	30.0
Benzoic acid	Qua		0.0279		4940	5000	-1.1	30.0
Bis(2-chloroethoxy)methane	Ave	0.3351	0.3223		4810	5000	-3.8	30.0
2,4-Dichlorophenol	Lin2		0.2142		4840	5000	-3.1	20.0
1,2,4-Trichlorobenzene	Ave	0.2684	0.2443		4550	5000	-9.0	30.0
Naphthalene	Ave	0.9169	0.8435		4600	5000	-8.0	30.0
Alpha-Terpineol	Ave	0.1845	0.1928		5220	5000	4.5	30.0
4-Chloroaniline	Ave	0.3218	0.3404		5290	5000	5.8	30.0
Hexachlorobutadiene	Ave	0.1426	0.1341		4700	5000	-5.9	20.0
Caprolactam	Lin1		0.0922		4750	5000	-5.1	30.0
4-Chloro-3-methylphenol	Lin2		0.2560		5130	5000	2.6	20.0
2-Methylnaphthalene	Ave	0.5685	0.5341		4700	5000	-6.0	30.0
1-Methylnaphthalene	Ave	0.5770	0.5374		4660	5000	-6.9	30.0
Hexachlorocyclopentadiene	Lin		0.1289	0.0500	5190	5000	3.8	30.0
1,2,4,5-Tetrachlorobenzene	Ave	0.2318	0.2109		4550	5000	-9.0	30.0
2,4,6-Trichlorophenol	Lin2		0.2815		5100	5000	2.0	20.0
2,4,5-Trichlorophenol	Lin1		0.2839		4660	5000	-6.8	30.0
1,1'-Biphenyl	Ave	1.405	1.287		4580	5000	-8.4	30.0
2-Chloronaphthalene	Ave	1.339	1.287		4800	5000	-3.9	30.0
Phenyl ether	Ave	0.3833	0.3477		4540	5000	-9.3	30.0

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Westfield Job No.: 360-24309-1

SDG No.: OCRI-06

Instrument ID: Inst. J Start Date: 09/15/2009 16:58

Analysis Batch Number: 48992 End Date: 09/15/2009 23:22

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 360-48992/1		09/15/2009 16:58	1	J02947.D	Rtx-5ms SIL with guard column 0.25(um)
STD5 360-48992/2 ICIS		09/15/2009 17:27	1	J02948.D	Rtx-5ms SIL with guard column 0.25(um)
STD01 360-48992/3 IC		09/15/2009 17:57	1	J02949.D	Rtx-5ms SIL with guard column 0.25(um)
STD025 360-48992/4 IC		09/15/2009 18:26	1	J02950.D	Rtx-5ms SIL with guard column 0.25(um)
STD050 360-48992/5 IC		09/15/2009 18:55	1	J02951.D	Rtx-5ms SIL with guard column 0.25(um)
STD1 360-48992/6 IC		09/15/2009 19:25	1	J02952.D	Rtx-5ms SIL with guard column 0.25(um)
STD25 360-48992/7 IC		09/15/2009 19:54	1	J02953.D	Rtx-5ms SIL with guard column 0.25(um)
STD8 360-48992/8 IC		09/15/2009 20:24	1	J02954.D	Rtx-5ms SIL with guard column 0.25(um)
STD10 360-48992/9 IC		09/15/2009 20:53	1	J02955.D	Rtx-5ms SIL with guard column 0.25(um)
STD20 360-48992/10 IC		09/15/2009 21:23	1	J02956.D	Rtx-5ms SIL with guard column 0.25(um)
ICV 360-48992/11		09/15/2009 21:52	1		Rtx-5ms SIL with guard column 0.25(um)
MDLV 360-48992/12		09/15/2009 22:22	1		Rtx-5ms SIL with guard column 0.25(um)
MDLV 360-48992/13		09/15/2009 22:52	1		Rtx-5ms SIL with guard column 0.25(um)
MDLV 360-48992/14		09/15/2009 23:22	1		Rtx-5ms SIL with guard column 0.25(um)

ICAL 48992

RF

DONE

Benzoic acid 0.0468

2,4-DNP $r^2 = 0.9860$

Samples -6
-9
-10
-11
-1
-2
-3
-4
-5
-7
-15

8270C LL

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Westfield Job No.: 360-24309-1 Analy Batch No.: 48992

SDG No.: OCRI-06

Instrument ID: Inst. J GC Column: Rtx-5ms ID: 0.25(um) Heated Purge: (Y/N) N

Calibration Start Date: 09/15/2009 17:27 Calibration End Date: 09/15/2009 21:23 Calibration ID: 4578

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD01 360-48992/3	J02949.D
Level 2	STD025 360-48992/4	J02950.D
Level 3	STD050 360-48992/5	J02951.D
Level 4	STD1 360-48992/6	J02952.D
Level 5	STD25 360-48992/7	J02953.D
Level 6	STD5 360-48992/2	J02948.D
Level 7	STD8 360-48992/8	J02954.D
Level 8	STD10 360-48992/9	J02955.D
Level 9	STD20 360-48992/10	J02956.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
1,4-Dioxane	0.5933 0.2158	0.3435 0.2027	0.3305 0.2820	0.2815 0.2723	0.2561	Qua	0.0355	0.2148	0.0029						0.9910		0.9900
Pyridine	+++++ 0.5052	0.3703 0.5730	0.4868 0.6863	0.5394 0.6674	0.5568	Lin1	-0.096	0.6425							0.9910		0.9900
N-Nitrosodimethylamine	0.2993 0.2777	0.3452 0.2663	0.3404 0.4115	0.3360 0.3721	0.3210	Ave		0.3299				14.0		15.0			
Benzoic acid	+++++ 0.0195	+++++ 0.0519	0.0078 0.0738	0.0076 0.1529	0.0141	Qua	0.0020	-0.013	0.0083						0.9990		0.9900
Aniline	0.8352 0.8249	0.8488 0.7969	0.9310 1.0870	0.9416 1.0625	0.9389	Ave		0.9185				11.0		15.0			
Phenol	0.9338 0.8108	0.9433 0.7781	1.0224 1.0619	0.9945 1.0146	0.9253	Ave		0.9427				10.0		15.0			
Bis(2-chloroethyl)ether	0.7376 0.5912	0.7135 0.5508	0.7348 0.7436	0.7374 0.7267	0.6683	Ave		0.6893				10.0		15.0			
2-Chlorophenol	0.6174 0.5862	0.6396 0.5656	0.7143 0.7719	0.7089 0.7548	0.6583	Ave		0.6685				11.0		15.0			
2,4-Dinitrophenol	+++++ 0.0361	+++++ 0.0576	+++++ 0.0697	0.0094 0.0963	0.0230	Lin	-0.340	0.1104			0.0500				0.9860	*	0.9900
1,4-Dichlorobenzene	0.8485 0.6570	0.8324 0.6187	0.8734 0.8355	0.8207 0.7970	0.7526	Ave		0.7818				11.0		15.0			
1,3-Dichlorobenzene	0.8604 0.6763	0.8947 0.6371	0.8764 0.8588	0.8372 0.8195	0.7702	Ave		0.8034				11.0		15.0			
Benzyl alcohol	0.4531 0.4731	0.3964 0.4670	0.4893 0.6304	0.5199 0.6191	0.5216	Ave		0.5078				15.0		15.0			
1,2-Dichlorobenzene	0.8778 0.6173	0.7972 0.5819	0.8343 0.7796	0.7941 0.7363	0.7063	Ave		0.7472				13.0		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Westfield Job No.: 360-24309-1

SDG No.: OCRI-06

Instrument ID: Inst. J Start Date: 09/15/2009 23:51

Analysis Batch Number: 48993 End Date: 09/16/2009 10:09

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 360-48993/1		09/15/2009 23:51	1	J02961.D	Rtx-5ms SIL with guard column 0.25(um)
CCV 360-48993/2 CCVIS		09/16/2009 00:21	1	J02962.D	Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/16/2009 00:51	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/16/2009 01:20	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/16/2009 01:50	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/16/2009 02:20	2		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/16/2009 02:49	5		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/16/2009 03:19	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/16/2009 03:48	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/16/2009 04:18	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/16/2009 04:47	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/16/2009 05:17	2		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/16/2009 05:46	5		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/16/2009 06:15	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/16/2009 06:44	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/16/2009 07:14	5		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/16/2009 07:43	1		Rtx-5ms SIL with guard column 0.25(um)
360-24309-1	OC-SB-400-0.0/1.0-XXX	09/16/2009 08:12	1	J02978.D	Rtx-5ms SIL with guard column 0.25(um)
360-24309-2	OC-SB-400-5.0/7.0-XXX	09/16/2009 08:41	1	J02979.D	Rtx-5ms SIL with guard column 0.25(um)
360-24309-3	OC-SB-401-0.0/1.0-XXX	09/16/2009 09:10	1	J02980.D	Rtx-5ms SIL with guard column 0.25(um)
360-24309-4	OC-SB-401-7.5/9.5-XXX	09/16/2009 09:40	1	J02981.D	Rtx-5ms SIL with guard column 0.25(um)
360-24309-5	OC-SB-402-0.0/1.0-XXX	09/16/2009 10:09	1	J02982.D	Rtx-5ms SIL with guard column 0.25(um)

Done

Carbazole 9ai/

RF = 0.0342

2,4-DNP RF = 0.0324

Pentachlorophenol RF = 0.0483

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Westfield Job No.: 360-24309-1

SDG No.: OCRI-06

Lab Sample ID: CCV 360-48993/2 Calibration Date: 09/16/2009 00:21

Instrument ID: Inst. J Calib Start Date: 09/15/2009 17:27

GC Column: Rtx-5ms ID: 0.25(um) Calib End Date: 09/15/2009 21:23

Lab File ID: J02962.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Qua		0.2212		4690	5000	-6.2	30.0
Pyridine	Lin1		0.5238		4230	5000	-15.5	30.0
N-Nitrosodimethylamine	Ave	0.3299	0.3228		4890	5000	-2.2	30.0
Aniline	Ave	0.9185	0.8672		4720	5000	-5.6	30.0
Phenol	Ave	0.9427	0.8352		4430	5000	-11.4	20.0
Bis(2-chloroethyl)ether	Ave	0.6893	0.6018		4370	5000	-12.7	30.0
2-Chlorophenol	Ave	0.6685	0.6023		4500	5000	-9.9	30.0
1,4-Dichlorobenzene	Ave	0.7818	0.6728		4300	5000	-13.9	20.0
1,3-Dichlorobenzene	Ave	0.8034	0.6938		4320	5000	-13.6	30.0
Benzyl alcohol	Ave	0.5078	0.4567		4500	5000	-10.0	30.0
1,2-Dichlorobenzene	Ave	0.7472	0.6341		4240	5000	-15.1	30.0
2-Methylphenol	Ave	0.5900	0.5377		4560	5000	-8.9	30.0
2,2'-oxybis[1-chloropropane]	Ave	0.6869	0.6026		4390	5000	-12.3	30.0
Acetophenone	Ave	0.8911	0.8181		4590	5000	-8.2	30.0
Benzaldehyde	Ave	0.8911	0.8181		4590	5000	-8.2	30.0
N-Nitrosodi-n-propylamine	Ave	0.4473	0.4163	0.0500	4650	5000	-6.9	30.0
3 & 4 Methylphenol	Ave	0.6159	0.5697		4620	5000	-7.5	30.0
Hexachloroethane	Ave	0.2836	0.2412		4250	5000	-14.9	30.0
Nitrobenzene	Ave	0.3156	0.3172		5030	5000	0.5	30.0
Isophorone	Lin2		0.5614		5030	5000	0.6	30.0
2-Nitrophenol	Lin1		0.1421		4630	5000	-7.4	20.0
2,4-Dimethylphenol	Ave	0.2439	0.2554		5240	5000	4.7	30.0
Bis(2-chloroethoxy)methane	Ave	0.3351	0.3296		4920	5000	-1.6	30.0
Benzoic acid	Qua		0.0342		5380	5000	7.6	30.0
2,4-Dichlorophenol	Lin2		0.2191		4950	5000	-0.9	20.0
1,2,4-Trichlorobenzene	Ave	0.2684	0.2545		4740	5000	-5.2	30.0
Naphthalene	Ave	0.9169	0.8672		4730	5000	-5.4	30.0
Alpha-Terpineol	Ave	0.1845	0.1947		5280	5000	5.5	30.0
4-Chloroaniline	Ave	0.3218	0.3426		5320	5000	6.5	30.0
Hexachlorobutadiene	Ave	0.1426	0.1359		4770	5000	-4.7	20.0
Caprolactam	Lin1		0.0901		4640	5000	-7.2	30.0
4-Chloro-3-methylphenol	Lin2		0.2394		4800	5000	-4.0	20.0
2-Methylnaphthalene	Ave	0.5685	0.5439		4780	5000	-4.3	30.0
1-Methylnaphthalene	Ave	0.5770	0.5518		4780	5000	-4.4	30.0
Hexachlorocyclopentadiene	Lin		0.1003	0.0500	4160	5000	-16.8	30.0
1,2,4,5-Tetrachlorobenzene	Ave	0.2318	0.2204		4750	5000	-4.9	30.0
2,4,6-Trichlorophenol	Lin2		0.2633		4780	5000	-4.5	20.0
2,4,5-Trichlorophenol	Lin1		0.2797		4590	5000	-8.1	30.0
1,1'-Biphenyl	Ave	1.405	1.317		4680	5000	-6.3	30.0
2-Chloronaphthalene	Ave	1.339	1.290		4820	5000	-3.7	30.0
Phenyl ether	Ave	0.3833	0.3639		4750	5000	-5.1	30.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Westfield Job No.: 360-24309-1

SDG No.: OCRI-06

Lab Sample ID: CCV 360-48993/2 Calibration Date: 09/16/2009 00:21

Instrument ID: Inst. J Calib Start Date: 09/15/2009 17:27

GC Column: Rtx-5ms ID: 0.25(um) Calib End Date: 09/15/2009 21:23

Lab File ID: J02962.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Nitroaniline	Lin1		0.3390		4710	5000	-5.9	30.0
Dimethyl phthalate	Ave	1.206	1.192		4940	5000	-1.1	30.0
2,4-Dinitrotoluene	Lin2		0.2678		4900	5000	-2.1	30.0
Acenaphthylene	Ave	1.582	1.568		4950	5000	-0.9	30.0
Acenaphthene	Ave	1.097	1.038		4730	5000	-5.4	20.0
2,4-Dinitrophenol	Lin		0.0328*	0.0500	4570	5000	-8.7	30.0
4-Nitrophenol	Qua		0.0925	0.0500	4220	5000	-15.7	30.0
Dibenzofuran	Ave	1.497	1.402		4680	5000	-6.3	30.0
2,6-Dinitrotoluene	Lin1		0.3326		4800	5000	-3.9	30.0
2,3,4,6-Tetrachlorophenol	Lin1		0.1910		4320	5000	-13.6	30.0
Diethyl phthalate	Ave	1.234	1.194		4840	5000	-3.2	30.0
Fluorene	Ave	1.171	1.107		4730	5000	-5.4	30.0
4-Chlorophenyl phenyl ether	Ave	0.5655	0.5265		4650	5000	-6.9	30.0
3-Nitroaniline	Lin1		0.2362		4680	5000	-6.5	30.0
4,6-Dinitro-2-methylphenol	Qua		0.0503		4320	5000	-13.6	30.0
Diphenylamine	Ave	0.5876	0.5855		4980	5000	-0.4	30.0
N-Nitrosodiphenylamine	Ave	0.5876	0.5855		4980	5000	-0.4	20.0
1,2-Diphenylhydrazine	Ave	1.165	1.184		5080	5000	1.6	30.0
Azobenzene	Ave	1.165	1.184		5080	5000	1.6	30.0
Benzophenone	Ave	0.7185	0.7392		5140	5000	2.9	30.0
2-Nitroaniline	Ave	0.0460	0.0406		4420	5000	-11.7	30.0
4-Bromophenyl phenyl ether	Ave	0.1786	0.1727		4840	5000	-3.3	30.0
Hexachlorobenzene	Ave	0.1906	0.1761		4620	5000	-7.6	30.0
Atrazine	Lin2		0.1754		4850	5000	-3.1	30.0
Pentachlorophenol	Qua		0.0483		4290	5000	-14.3	20.0
Pentachloronitrobenzene	Lin1		0.0744		4510	5000	-9.7	30.0
Phenanthrene	Ave	1.017	0.9495		4670	5000	-6.7	30.0
Anthracene	Ave	0.8971	0.9023		5030	5000	0.6	30.0
Carbazole	Ave	0.7715	0.7661		4970	5000	-0.7	30.0
Di-n-butyl phthalate	Ave	1.086	1.114		5130	5000	2.6	30.0
Pyrene	Ave	1.155	1.153		4990	5000	-0.2	30.0
Benzidine	Lin		0.5116		4860	5000	-2.8	30.0
Fluoranthene	Ave	0.8987	0.8646		4810	5000	-3.8	20.0
Butyl benzyl phthalate	Lin1		0.5612		4700	5000	-6.0	30.0
3,3'-Dichlorobenzidine	Lin1		0.6044		4820	5000	-3.6	30.0
Benzo[a]anthracene	Ave	0.8540	0.8351		4890	5000	-2.2	30.0
Chrysene	Ave	0.9253	0.8341		4510	5000	-9.9	30.0
Bis(2-ethylhexyl) phthalate	Lin1		0.8216		4690	5000	-6.2	30.0
Di-n-octyl phthalate	Qua		1.515		5000	5000	0.1	20.0
Benzo[b]fluoranthene	Ave	1.142	1.046		4580	5000	-8.4	30.0
Benzo[k]fluoranthene	Ave	1.097	1.066		4860	5000	-2.8	30.0

FORM III
GC/MS SEMI VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24309-1

SDG No.: OCRI-06

Matrix: Solid Level: Low Lab File ID: B10388.D

Lab ID: 360-24309-23 MS Client ID: OC-SB-430-8.0/10-XXX MS

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	QC LIMITS REC	#
1,1'-Biphenyl	346	ND	227	66	40-140	
1,2,4,5-Tetrachlorobenzene	346	ND	190	55	40-140	
1,2,4-Trichlorobenzene	346	ND	168	49	40-140	
1,2-Dichlorobenzene	346	ND	173	50	40-140	
1,3-Dichlorobenzene	346	ND	167	48	40-140	
1,4-Dichlorobenzene	346	ND	164	47	40-140	
1-Methylnaphthalene	346	ND	197	57	40-140	
2,2'-oxybis[1-chloropropane]	346	ND	184	53	40-140	
2,3,4,6-Tetrachlorophenol	346	ND	191	55	40-140	
2,4,5-Trichlorophenol	346	ND	259	75	30-130	
2,4,6-Trichlorophenol	346	ND	244	71	30-130	
2,4-Dichlorophenol	346	ND	220	64	30-130	
2,4-Dimethylphenol	346	ND	249	72	30-130	
2,4-Dinitrophenol	346	ND	94.0	27	30-130	F
2,4-Dinitrotoluene	346	ND	207	60	40-140	
2,6-Dinitrotoluene	346	ND	228	66	40-140	
2-Chloronaphthalene	346	ND	175	50	40-140	
2-Chlorophenol	346	ND	198	57	30-130	
2-Methylnaphthalene	346	ND	196	57	40-140	
2-Methylphenol	346	ND	208	60	30-130	
2-Nitroaniline	346	ND	230	66	40-140	
2-Nitrophenol	346	ND	193	56	30-130	
3 & 4 Methylphenol	346	ND	211	61	30-130	
3,3'-Dichlorobenzidine	346	ND	73.7	21	40-140	F
3-Nitroaniline	346	ND	206	60	40-140	
4,6-Dinitro-2-methylphenol	346	ND	143 J	41	30-130	
4-Bromophenyl phenyl ether	346	ND	237	68	40-140	
4-Chloro-3-methylphenol	346	ND	236	68	30-130	
4-Chloroaniline	346	ND	177	51	40-140	
4-Chlorophenyl phenyl ether	346	ND	236	68	40-140	
4-Nitroaniline	346	ND	241	70	40-140	
4-Nitrophenol	346	ND	222	64	30-130	
Acenaphthene	346	ND	258	74	40-140	
Acenaphthylene	346	ND	232	67	40-140	
Acetophenone	346	ND	195	56	40-140	
Aniline	346	ND	84.3	24	40-140	F
Anthracene	346	ND	282	82	40-140	
Atrazine	346	ND	286	83	40-140	
Azobenzene	346	ND	246	71	40-140	
Benzaldehyde	346	ND	386	112	40-140	
Benzo[a]anthracene	346	ND	276	80	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24309-1

SDG No.: OCRI-06

Matrix: Solid Level: Low Lab File ID: B10388.D

Lab ID: 360-24309-23 MS Client ID: OC-SB-430-8.0/10-XXX MS

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	QC LIMITS REC	#
Benzo[a]pyrene	346	ND	247	71	40-140	
Benzo[b]fluoranthene	346	ND	260	75	40-140	
Benzo[g,h,i]perylene	346	ND	278	80	40-140	
Benzo[k]fluoranthene	346	ND	269	78	40-140	
Benzoic acid	346	ND	104 J	30	30-130	
Benzophenone	346	ND	254	73	40-140	
Benzyl alcohol	346	ND	181	52	30-130	
Bis(2-chloroethoxy)methane	346	ND	183	53	40-140	
Bis(2-chloroethyl)ether	346	ND	181	52	40-140	
Bis(2-ethylhexyl) phthalate	346	22 J	270	71	40-140	
Butyl benzyl phthalate	346	ND	271	78	40-140	
Caprolactam	346	ND	181	52	40-140	
Carbazole	346	ND	271	78	40-140	
Chrysene	346	ND	262	76	40-140	
Dibenz(a,h)anthracene	346	ND	287	83	40-140	
Dibenzofuran	346	ND	232	67	40-140	
Diethyl phthalate	346	ND	245	71	40-140	
Dimethyl phthalate	346	ND	228	66	40-140	
Di-n-butyl phthalate	346	ND	230	67	40-140	
Di-n-octyl phthalate	346	ND	269	78	40-140	
Diphenyl oxide	346	ND	200	58	40-140	
Fluoranthene	346	ND	242	70	40-140	
Fluorene	346	ND	282	81	40-140	
Hexachlorobenzene	346	ND	242	70	40-140	
Hexachlorobutadiene	346	ND	171	49	40-140	
Hexachlorocyclopentadiene	346	ND	81.6	24	40-140	F
Hexachloroethane	346	ND	151	44	40-140	
Indeno[1,2,3-cd]pyrene	346	ND	315	91	40-140	
Isophorone	346	ND	154	45	40-140	
Naphthalene	346	ND	214	62	40-140	
Nitrobenzene	346	ND	178	51	40-140	
N-Nitrosodimethylamine	346	ND	186	54	40-140	
N-Nitrosodi-n-propylamine	346	ND	204	59	40-140	
N-Nitrosodiphenylamine	346	ND	175	51	40-140	
Pentachlorophenol	346	ND	181	52	30-130	
Phenanthrene	346	ND	256	74	40-140	
Phenol	346	ND	201	58	30-130	
Pyrene	346	ND	279	81	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24309-1

SDG No.: OCRI-06

Matrix: Solid Level: Low Lab File ID: B10389.D

Lab ID: 360-24309-23 MSD Client ID: OC-SB-430-8.0/10-XXX MSD

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1'-Biphenyl	349	261	75	14	30	40-140	
1,2,4,5-Tetrachlorobenzene	349	247	71	26	30	40-140	
1,2,4-Trichlorobenzene	349	221	63	27	30	40-140	
1,2-Dichlorobenzene	349	189	54	9	30	40-140	
1,3-Dichlorobenzene	349	184	53	10	30	40-140	
1,4-Dichlorobenzene	349	181	52	10	30	40-140	
1-Methylnaphthalene	349	265	76	29	30	40-140	
2,2'-oxybis[1-chloropropane]	349	200	57	9	30	40-140	
2,3,4,6-Tetrachlorophenol	349	226	65	16	30	40-140	
2,4,5-Trichlorophenol	349	297	85	14	30	30-130	
2,4,6-Trichlorophenol	349	270	77	10	30	30-130	
2,4-Dichlorophenol	349	288	82	27	30	30-130	
2,4-Dimethylphenol	349	320	92	25	30	30-130	
2,4-Dinitrophenol	349	109	31	15	30	30-130	
2,4-Dinitrotoluene	349	233	67	12	30	40-140	
2,6-Dinitrotoluene	349	253	72	10	30	40-140	
2-Chloronaphthalene	349	199	57	13	30	40-140	
2-Chlorophenol	349	216	62	9	30	30-130	
2-Methylnaphthalene	349	259	74	28	30	40-140	
2-Methylphenol	349	236	68	12	30	30-130	
2-Nitroaniline	349	256	73	11	30	40-140	
2-Nitrophenol	349	261	75	30	30	30-130	
3 & 4 Methylphenol	349	232	66	10	30	30-130	
3,3'-Dichlorobenzidine	349	81.0	23	10	30	40-140	F
3-Nitroaniline	349	231	66	11	30	40-140	
4,6-Dinitro-2-methylphenol	349	161 J	46	12	30	30-130	
4-Bromophenyl phenyl ether	349	260	75	9	30	40-140	
4-Chloro-3-methylphenol	349	312	89	28	30	30-130	
4-Chloroaniline	349	231	66	26	30	40-140	
4-Chlorophenyl phenyl ether	349	263	75	11	30	40-140	
4-Nitroaniline	349	266	76	10	30	40-140	
4-Nitrophenol	349	236	68	6	30	30-130	
Acenaphthene	349	288	82	11	30	40-140	
Acenaphthylene	349	256	73	10	30	40-140	
Acetophenone	349	216	62	10	30	40-140	
Aniline	349	93.1	27	10	30	40-140	F
Anthracene	349	307	88	8	30	40-140	
Atrazine	349	322	92	12	30	40-140	
Azobenzene	349	273	78	10	30	40-140	
Benzaldehyde	349	436	125	12	30	40-140	
Benzo[a]anthracene	349	311	89	12	30	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24309-1

SDG No.: OCRI-06

Matrix: Solid Level: Low Lab File ID: B10389.D

Lab ID: 360-24309-23 MSD Client ID: OC-SB-430-8.0/10-XXX MSD

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Benzo[a]pyrene	349	270	77	9	30	40-140	
Benzo[b]fluoranthene	349	282	81	8	30	40-140	
Benzo[g,h,i]perylene	349	279	80	0	30	40-140	
Benzo[k]fluoranthene	349	313	90	15	30	40-140	
Benzoic acid	349	111 J	32	6	30	30-130	
Benzophenone	349	287	82	12	30	40-140	
Benzyl alcohol	349	200	57	10	30	30-130	
Bis(2-chloroethoxy)methane	349	237	68	26	30	40-140	
Bis(2-chloroethyl)ether	349	193	55	6	30	40-140	
Bis(2-ethylhexyl) phthalate	349	311	83	14	30	40-140	
Butyl benzyl phthalate	349	313	90	14	30	40-140	
Caprolactam	349	237	68	27	30	40-140	
Carbazole	349	299	86	10	30	40-140	
Chrysene	349	296	85	12	30	40-140	
Dibenz(a,h)anthracene	349	295	84	3	30	40-140	
Dibenzofuran	349	255	73	10	30	40-140	
Diethyl phthalate	349	270	77	10	30	40-140	
Dimethyl phthalate	349	254	73	10	30	40-140	
Di-n-butyl phthalate	349	253	72	9	30	40-140	
Di-n-octyl phthalate	349	308	88	13	30	40-140	
Diphenyl oxide	349	268	77	29	30	40-140	
Fluoranthene	349	295	84	20	30	40-140	
Fluorene	349	309	89	9	30	40-140	
Hexachlorobenzene	349	271	78	12	30	40-140	
Hexachlorobutadiene	349	223	64	27	30	40-140	
Hexachlorocyclopentadiene	349	107	31	27	30	40-140	F
Hexachloroethane	349	168	48	11	30	40-140	
Indeno[1,2,3-cd]pyrene	349	323	92	2	30	40-140	
Isophorone	349	205	59	28	30	40-140	
Naphthalene	349	285	82	28	30	40-140	
Nitrobenzene	349	235	67	28	30	40-140	
N-Nitrosodimethylamine	349	199	57	7	30	40-140	
N-Nitrosodi-n-propylamine	349	225	65	10	30	40-140	
N-Nitrosodiphenylamine	349	198	57	12	30	40-140	
Pentachlorophenol	349	215	61	17	30	30-130	
Phenanthrene	349	276	79	8	30	40-140	
Phenol	349	216	62	7	30	30-130	
Pyrene	349	294	84	5	30	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM IV
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Westfield Job No.: 360-24309-2

SDG No.: OCRI-06A

Lab File ID: B10313.D Lab Sample ID: MB 360-48567/1-A

Matrix: Solid Date Extracted: 09/03/2009 13:11

Instrument ID: Inst. B Date Analyzed: 09/15/2009 15:47

Level: (Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 360-48567/2-A	B10314.D	09/15/2009 16:21
	LCSD 360-48567/3-A	B10315.D	09/15/2009 16:55
OC-SB-407-26/28-XXX	360-24309-8	J02998.D	09/17/2009 14:48

LCS

3,3'-DCB 32/32

Aniline 32/29

Benzaldehyde 282/294

MB AL

Benzoic Acid 31.5 ug/g 157.1 5+

Di-n-butylphthalate 107 1070 ug/g 10+

TIC

Hexadecane

Octadecane

Unk 12.07

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24309-2

SDG No.: OCRI-06A

Matrix: Solid Level: Low Lab File ID: B10314.D

Lab ID: LCS 360-48567/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
1,1'-Biphenyl	333	302	91	40-140	
1,2,4,5-Tetrachlorobenzene	333	302	90	40-140	
1,2,4-Trichlorobenzene	333	272	82	40-140	
1,2-Dichlorobenzene	333	221	66	40-140	
1,3-Dichlorobenzene	333	208	62	40-140	
1,4-Dichlorobenzene	333	207	62	40-140	
1-Methylnaphthalene	333	310	93	40-140	
2,2'-oxybis[1-chloropropane]	333	230	69	40-140	
2,3,4,6-Tetrachlorophenol	333	269	81	40-140	
2,4,5-Trichlorophenol	333	316	95	30-130	
2,4,6-Trichlorophenol	333	305	92	30-130	
2,4-Dichlorophenol	333	353	106	30-130	
2,4-Dimethylphenol	333	384	115	30-130	
2,4-Dinitrophenol	333	169	51	30-130	
2,4-Dinitrotoluene	333	275	83	40-140	
2,6-Dinitrotoluene	333	288	86	40-140	
2-Chloronaphthalene	333	230	69	40-140	
2-Chlorophenol	333	237	71	30-130	
2-Methylnaphthalene	333	308	92	40-140	
2-Methylphenol	333	272	82	30-130	
2-Nitroaniline	333	301	90	40-140	
2-Nitrophenol	333	358	107	30-130	
3 & 4 Methylphenol	333	260	78	30-130	
3,3'-Dichlorobenzidine	333	106	32	40-140	*
3-Nitroaniline	333	272	82	40-140	
4,6-Dinitro-2-methylphenol	333	257	77	30-130	
4-Bromophenyl phenyl ether	333	317	95	40-140	
4-Chloro-3-methylphenol	333	375	113	30-130	
4-Chloroaniline	333	313	94	40-140	
4-Chlorophenyl phenyl ether	333	308	92	40-140	
4-Nitroaniline	333	304	91	40-140	
4-Nitrophenol	333	312	94	30-130	
Acenaphthene	333	328	98	40-140	
Acenaphthylene	333	298	89	40-140	
Acetophenone	333	244	73	40-140	
Aniline	333	108	32	40-140	*
Anthracene	333	371	111	40-140	
Atrazine	333	392	118	40-140	
Azobenzene	333	318	95	40-140	
Benzaldehyde	333	939	282	40-140	*
Benzo[a]anthracene	333	371	111	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24309-2

SDG No.: OCRI-06A

Matrix: Solid Level: Low Lab File ID: B10315.D

Lab ID: LCSD 360-48567/3-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCSD CONCENTRATION (ug/Kg)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1'-Biphenyl	333	301	90	0	30	40-140	
1,2,4,5-Tetrachlorobenzene	333	300	90	1	30	40-140	
1,2,4-Trichlorobenzene	333	274	82	1	30	40-140	
1,2-Dichlorobenzene	333	228	69	3	30	40-140	
1,3-Dichlorobenzene	333	212	64	2	30	40-140	
1,4-Dichlorobenzene	333	213	64	3	30	40-140	
1-Methylnaphthalene	333	314	94	1	30	40-140	
2,2'-oxybis[1-chloropropane]	333	236	71	3	30	40-140	
2,3,4,6-Tetrachlorophenol	333	268	80	0	30	40-140	
2,4,5-Trichlorophenol	333	319	96	1	30	30-130	
2,4,6-Trichlorophenol	333	312	93	2	30	30-130	
2,4-Dichlorophenol	333	356	107	1	30	30-130	
2,4-Dimethylphenol	333	385	115	0	30	30-130	
2,4-Dinitrophenol	333	182	54	7	30	30-130	
2,4-Dinitrotoluene	333	274	82	0	30	40-140	
2,6-Dinitrotoluene	333	294	88	2	30	40-140	
2-Chloronaphthalene	333	233	70	1	30	40-140	
2-Chlorophenol	333	244	73	3	30	30-130	
2-Methylnaphthalene	333	309	93	0	30	40-140	
2-Methylphenol	333	294	88	8	30	30-130	
2-Nitroaniline	333	304	91	1	30	40-140	
2-Nitrophenol	333	363	109	2	30	30-130	
3 & 4 Methylphenol	333	264	79	1	30	30-130	
3,3'-Dichlorobenzidine	333	107	32	1	30	40-140	*
3-Nitroaniline	333	273	82	0	30	40-140	
4,6-Dinitro-2-methylphenol	333	252	76	2	30	30-130	
4-Bromophenyl phenyl ether	333	303	91	5	30	40-140	
4-Chloro-3-methylphenol	333	376	113	0	30	30-130	
4-Chloroaniline	333	272	82	14	30	40-140	
4-Chlorophenyl phenyl ether	333	308	92	0	30	40-140	
4-Nitroaniline	333	313	94	3	30	40-140	
4-Nitrophenol	333	311	93	1	30	30-130	
Acenaphthene	333	332	99	1	30	40-140	
Acenaphthylene	333	299	90	0	30	40-140	
Acetophenone	333	248	74	2	30	40-140	
Aniline	333	97.0	29	11	30	40-140	*
Anthracene	333	370	111	0	30	40-140	
Atrazine	333	388	116	1	30	40-140	
Azobenzene	333	316	95	1	30	40-140	
Benzaldehyde	333	980	294	4	30	40-140	*
Benzo[a]anthracene	333	375	112	1	30	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Westfield
Job No.: 360-24309-2
SDG No.: OCRI-06A
Client Sample ID:
Lab Sample ID: MB 360-48567/1-A
Matrix: Solid
Lab File ID: B10313.D
Analysis Method: 8270C LL
Date Collected:
Extract. Method: 3546
Date Extracted: 09/03/2009 13:11
Sample wt/vol: 30.00(g)
Date Analyzed: 09/15/2009 15:47
Con. Extract Vol.: 1.0(mL)
Dilution Factor: 1
Injection Volume: 1.0(uL)
Level: (low/med) Low
% Moisture:
GPC Cleanup:(Y/N) N
Analysis Batch No.: 48930
Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
98-86-2	Acetophenone	ND		33	3.6
62-53-3	Aniline	ND		33	17
120-12-7	Anthracene	ND		33	11
1912-24-9	Atrazine	ND		33	10
103-33-3	Azobenzene	ND		33	4.1
100-52-7	Benzaldehyde	ND		33	10
56-55-3	Benzo[a]anthracene	ND		33	6.4
50-32-8	Benzo[a]pyrene	ND		33	6.1
205-99-2	Benzo[b]fluoranthene	ND		33	7.6
191-24-2	Benzo[g,h,i]perylene	ND		33	6.5
207-08-9	Benzo[k]fluoranthene	ND		33	9.2
65-85-0	Benzoic acid	31.5	J	170	14
119-61-9	Benzophenone	ND		33	2.0
100-51-6	Benzyl alcohol	ND		67	7.7
111-91-1	Bis(2-chloroethoxy)methane	ND		33	6.0
111-44-4	Bis(2-chloroethyl)ether	ND		33	8.1
117-81-7	Bis(2-ethylhexyl) phthalate	ND		33	11
85-68-7	Butyl benzyl phthalate	ND		33	7.3
105-60-2	Caprolactam	ND		33	10
86-74-8	Carbazole	ND		33	33
218-01-9	Chrysene	ND		33	7.2
53-70-3	Dibenz(a,h)anthracene	ND		33	6.7
132-64-9	Dibenzofuran	ND		33	19
84-66-2	Diethyl phthalate	ND		33	4.7
131-11-3	Dimethyl phthalate	ND		33	4.9
84-74-2	Di-n-butyl phthalate	107		33	10
117-84-0	Di-n-octyl phthalate	ND		33	9.4
101-84-8	Diphenyl oxide	ND		33	10
206-44-0	Fluoranthene	ND		33	21
86-73-7	Fluorene	ND		33	13
118-74-1	Hexachlorobenzene	ND		33	7.9
87-68-3	Hexachlorobutadiene	ND		33	6.6
77-47-4	Hexachlorocyclopentadiene	ND		67	9.1
67-72-1	Hexachloroethane	ND		33	6.4

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Westfield Job No.: 360-24309-2

SDG No.: 0CRI-06A

Instrument ID: Inst. B Start Date: 09/17/2009 18:40

Analysis Batch Number: 49098 End Date: 09/18/2009 06:30

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 360-49098/1		09/17/2009 18:40	1	B10371.D	Rtx-5ms 0.25(um)
CCV 360-49098/2 CCVIS		09/17/2009 19:14	1	B10372.D	Rtx-5ms 0.25(um)
MB 360-48691/1-A		09/17/2009 19:48	1	B10373.D	Rtx-5ms 0.25(um)
LCS 360-48691/2-A		09/17/2009 20:22	1	B10374.D	Rtx-5ms 0.25(um)
LCSD 360-48691/3-A		09/17/2009 20:56	1	B10375.D	Rtx-5ms 0.25(um)
ZZZZZ		09/17/2009 21:30	1		Rtx-5ms 0.25(um)
360-24309-13	OC-SB-414-20/22-XXX	09/17/2009 22:04	1	B10377.D	Rtx-5ms 0.25(um)
ZZZZZ		09/17/2009 22:38	1		Rtx-5ms 0.25(um)
ZZZZZ		09/17/2009 23:12	1		Rtx-5ms 0.25(um)
360-24309-16	OC-SB-422-13/15-XXX	09/17/2009 23:46	1	B10380.D	Rtx-5ms 0.25(um)
ZZZZZ		09/18/2009 00:19	1		Rtx-5ms 0.25(um)
360-24309-18	OC-SB-429-16/18-XXX	09/18/2009 00:53	1	B10382.D	Rtx-5ms 0.25(um)
ZZZZZ		09/18/2009 01:27	1		Rtx-5ms 0.25(um)
ZZZZZ		09/18/2009 02:01	1		Rtx-5ms 0.25(um)
360-24309-21	OC-SB-430-19/21-XXX	09/18/2009 02:34	1	B10385.D	Rtx-5ms 0.25(um)
ZZZZZ		09/18/2009 03:08	1		Rtx-5ms 0.25(um)
ZZZZZ		09/18/2009 03:42	1		Rtx-5ms 0.25(um)
ZZZZZ		09/18/2009 04:15	1		Rtx-5ms 0.25(um)
ZZZZZ		09/18/2009 04:49	1		Rtx-5ms 0.25(um)
ZZZZZ		09/18/2009 05:23	1		Rtx-5ms 0.25(um)
ZZZZZ		09/18/2009 05:56	1		Rtx-5ms 0.25(um)
ZZZZZ		09/18/2009 06:30	10		Rtx-5ms 0.25(um)

ICAL OK

CCAL

4-nitrophenol

2nd D

-28

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Westfield Job No.: 360-24309-2 Analy Batch No.: 49097

SDG No.: OCRI-06A

Instrument ID: Inst. B GC Column: Rtx-5ms ID: 0.25(um) Heated Purge: (Y/N) N

Calibration Start Date: 09/17/2009 13:00 Calibration End Date: 09/17/2009 17:32 Calibration ID: 4606

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD01 360-49097/3	B10362.D
Level 2	STD025 360-49097/4	B10363.D
Level 3	STD05 360-49097/5	B10364.D
Level 4	STD1 360-49097/6	B10365.D
Level 5	STD25 360-49097/7	B10366.D
Level 6	STD5 360-49097/2	B10361.D
Level 7	STD8 360-49097/8	B10367.D
Level 8	STD10 360-49097/9	B10368.D
Level 9	STD20 360-49097/10	B10369.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
Pyridine	+++++ 0.5092	0.4476 0.4513	0.4988 0.4721	0.4957 0.5657	0.5697	Ave		0.5013				9.3		15.0			
1,4-Dioxane	0.4759 0.2062	0.3664 0.1895	0.3118 0.1894	0.2563 0.2123	0.2426	Lin1	0.0358	0.2011							0.9940		0.9900
N-Nitrosodimethylamine	0.4880 0.3594	0.4631 0.3502	0.4740 0.3265	0.4443 0.3842	0.4146	Ave		0.4116				14.0		15.0			
Benzoic acid	+++++ 0.0429	+++++ 0.1053	0.0154 0.1120	0.0459 0.1919	0.0375	Qua	-0.030	0.0344	0.0080						0.9980		0.9900
Benzaldehyde	0.3491 0.2377	0.2967 0.2077	0.2561 0.1747	0.2800 0.2089	0.2570	Lin	0.0445	0.2013							0.9900		0.9900
Phenol	0.7829 0.6499	0.7444 0.6220	0.7798 0.5957	0.7577 0.7232	0.7232	Ave		0.7088				9.8		15.0			
Aniline	0.1722 0.6990	0.2551 0.6788	0.3976 0.6703	0.6688 0.8237	0.7019	Lin1	-0.096	0.7533							0.9900		0.9900
Bis(2-chloroethyl)ether	0.6340 0.5432	0.6604 0.5137	0.7119 0.4707	0.6502 0.5679	0.6063	Ave		0.5954				13.0		15.0			
2-Chlorophenol	0.6125 0.5540	0.6440 0.5258	0.6406 0.5048	0.6325 0.6052	0.6189	Ave		0.5931				8.7		15.0			
1,4-Dichlorobenzene	0.8005 0.6463	0.8277 0.6142	0.8384 0.5965	0.7921 0.6957	0.7316	Ave		0.7270				13.0		15.0			
1,3-Dichlorobenzene	0.8296 0.6641	0.8829 0.6379	0.8886 0.6158	0.8264 0.7132	0.7531	Ave		0.7568				14.0		15.0			
Benzyl alcohol	0.1374 0.4351	0.2419 0.4184	0.2921 0.3954	0.4028 0.4998	0.4409	Lin1	-0.047	0.4567							0.9900		0.9900
1,2-Dichlorobenzene	0.8275 0.6203	0.7954 0.5877	0.7851 0.5669	0.7432 0.6685	0.6950	Ave		0.6988				14.0		15.0			

Note: The ml coefficient is the same as Ave RRF for an Ave curve type.

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Westfield Job No.: 360-24309-2

SDG No.: OCRI-06A

Lab Sample ID: CCV 360-49098/2 Calibration Date: 09/17/2009 19:14

Instrument ID: Inst. B Calib Start Date: 09/17/2009 13:00

GC Column: Rtx-5ms ID: 0.25(um) Calib End Date: 09/17/2009 17:32

Lab File ID: B10372.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Nitroaniline	Lin2		0.3683		4860	5000	-2.7	30.0
Dimethyl phthalate	Ave	1.252	1.194		4770	5000	-4.6	30.0
2,6-Dinitrotoluene	Ave	0.2850	0.2922		5130	5000	2.5	30.0
Acenaphthylene	Ave	1.619	1.647		5090	5000	1.7	30.0
3-Nitroaniline	Lin1		0.2718		4560	5000	-8.9	30.0
2,4-Dinitrophenol	Qua		0.0806	0.0500	5210	5000	4.2	30.0
4-Nitrophenol	Lin1		0.1226	0.0500	3600	5000	-28.0	30.0
Acenaphthene	Ave	1.160	1.117		4810	5000	-3.7	20.0
2,4-Dinitrotoluene	Lin1		0.3599		4480	5000	-10.4	30.0
Dibenzofuran	Ave	1.479	1.459		4930	5000	-1.3	30.0
2,3,4,6-Tetrachlorophenol	Lin1		0.2215		4210	5000	-15.8	30.0
Diethyl phthalate	Ave	1.264	1.223		4840	5000	-3.2	30.0
4-Chlorophenyl phenyl ether	Ave	0.5686	0.5426		4770	5000	-4.6	30.0
2-Nitroaniline	Lin		0.2990		4500	5000	-10.0	30.0
Fluorene	Ave	1.254	1.259		5020	5000	0.4	30.0
4,6-Dinitro-2-methylphenol	Qua		0.0801		5280	5000	5.7	30.0
Diphenylamine	Ave	0.6403	0.6235		4870	5000	-2.6	30.0
N-Nitrosodiphenylamine	Ave	0.6403	0.6235		4870	5000	-2.6	20.0
1,2-Diphenylhydrazine	Ave	1.161	1.165		5020	5000	0.4	30.0
Azobenzene	Ave	1.161	1.165		5020	5000	0.4	30.0
Benzophenone	Ave	0.7281	0.7077		4860	5000	-2.8	30.0
4-Bromophenyl phenyl ether	Ave	0.1774	0.1699		4790	5000	-4.2	30.0
Atrazine	Ave	0.1820	0.1821		5000	5000	0.1	30.0
Hexachlorobenzene	Ave	0.1666	0.1533		4600	5000	-8.0	30.0
Pentachlorophenol	Qua		0.0680		4210	5000	-15.8	20.0
Pentachloronitrobenzene	Lin1		0.0730		4290	5000	-14.1	30.0
Phenanthrene	Ave	1.019	0.9653		4730	5000	-5.3	30.0
Anthracene	Ave	0.9544	0.9490		4970	5000	-0.6	30.0
Carbazole	Ave	0.7793	0.7253		4650	5000	-6.9	30.0
Di-n-butyl phthalate	Ave	1.222	1.142		4670	5000	-6.6	30.0
Fluoranthene	Ave	0.9200	0.8822		4790	5000	-4.1	20.0
Benzidine	Lin		0.5482		5580	5000	11.7	30.0
Pyrene	Ave	1.328	1.257		4730	5000	-5.4	30.0
Butyl benzyl phthalate	Ave	0.6084	0.6134		5040	5000	0.8	30.0
Bis(2-ethylhexyl) phthalate	Ave	0.8794	0.8515		4840	5000	-3.2	30.0
3,3'-Dichlorobenzidine	Lin1		0.5640		4420	5000	-11.6	30.0
Benzo[a]anthracene	Ave	0.8743	0.8464		4840	5000	-3.2	30.0
Chrysene	Ave	0.8521	0.7929		4650	5000	-6.9	30.0
Di-n-octyl phthalate	Lin1		2.210		4710	5000	-5.9	20.0
Benzo[b]fluoranthene	Ave	1.145	1.155		5040	5000	0.8	30.0
Benzo[k]fluoranthene	Ave	1.064	1.037		4880	5000	-2.5	30.0

FORM IV
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Westfield Job No.: 360-24309-2

SDG No.: OCRI-06A

Lab File ID: B10373.D Lab Sample ID: MB 360-48691/1-A

Matrix: Solid Date Extracted: 09/08/2009 12:06

Instrument ID: Inst. B Date Analyzed: 09/17/2009 19:48

Level: (Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 360-48691/2-A	B10374.D	09/17/2009 20:22
	LCSD 360-48691/3-A	B10375.D	09/17/2009 20:56
OC-SB-414-20/22-XXX	360-24309-13	B10377.D	09/17/2009 22:04
OC-SB-422-13/15-XXX	360-24309-16	B10380.D	09/17/2009 23:46
OC-SB-429-16/18-XXX	360-24309-18	B10382.D	09/18/2009 00:53
OC-SB-430-19/21-XXX	360-24309-21	B10385.D	09/18/2009 02:34

LCS

3,3'-DCB 32 / 31

Aniline 31 / 32

Benzaldehyde 142 /

bis(2-chloroethyl)eth 37 1 RPD 50

MB

Benzoic Acid 71.7 358.5 51

Di-n-butylphthalate 77 770 10

TIC Octadecane

FORM IV 8270C LL

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24309-2

SDG No.: OCRI-06A

Matrix: Solid Level: Low Lab File ID: B10374.D

Lab ID: LCS 360-48691/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
1,1'-Biphenyl	333	276	83	40-140	
1,2,4,5-Tetrachlorobenzene	333	272	81	40-140	
1,2,4-Trichlorobenzene	333	251	75	40-140	
1,2-Dichlorobenzene	333	205	62	40-140	
1,3-Dichlorobenzene	333	197	59	40-140	
1,4-Dichlorobenzene	333	194	58	40-140	
1-Methylnaphthalene	333	283	85	40-140	
2,2'-oxybis[1-chloropropane]	333	208	62	40-140	
2,3,4,6-Tetrachlorophenol	333	246	74	40-140	
2,4,5-Trichlorophenol	333	314	94	30-130	
2,4,6-Trichlorophenol	333	309	93	30-130	
2,4-Dichlorophenol	333	317	95	30-130	
2,4-Dimethylphenol	333	373	112	30-130	
2,4-Dinitrophenol	333	223	67	30-130	
2,4-Dinitrotoluene	333	264	79	40-140	
2,6-Dinitrotoluene	333	288	86	40-140	
2-Chloronaphthalene	333	211	63	40-140	
2-Chlorophenol	333	223	67	30-130	
2-Methylnaphthalene	333	279	84	40-140	
2-Methylphenol	333	251	75	30-130	
2-Nitroaniline	333	290	87	40-140	
2-Nitrophenol	333	303	91	30-130	
3 & 4 Methylphenol	333	249	75	30-130	
3,3'-Dichlorobenzidine	333	108	32	40-140	*
3-Nitroaniline	333	260	78	40-140	
4,6-Dinitro-2-methylphenol	333	308	92	30-130	
4-Bromophenyl phenyl ether	333	298	89	40-140	
4-Chloro-3-methylphenol	333	344	103	30-130	
4-Chloroaniline	333	259	78	40-140	
4-Chlorophenyl phenyl ether	333	285	85	40-140	
4-Nitroaniline	333	300	90	40-140	
4-Nitrophenol	333	309	93	30-130	
Acenaphthene	333	316	95	40-140	
Acenaphthylene	333	273	82	40-140	
Acetophenone	333	222	67	40-140	
Aniline	333	102	31	40-140	*
Anthracene	333	338	101	40-140	
Atrazine	333	370	111	40-140	
Azobenzene	333	295	88	40-140	
Benzaldehyde	333	474	142	40-140	*
Benzo[a]anthracene	333	350	105	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24309-2

SDG No.: OCRI-06A

Matrix: Solid Level: Low Lab File ID: B10374.D

Lab ID: LCS 360-48691/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
Benzo[a]pyrene	333	314	94	40-140	
Benzo[b]fluoranthene	333	329	99	40-140	
Benzo[g,h,i]perylene	333	297	89	40-140	
Benzo[k]fluoranthene	333	349	105	40-140	
Benzoic acid	333	203	61	30-130	
Benzophenone	333	309	93	40-140	
Benzyl alcohol	333	236	71	30-130	
Bis(2-chloroethoxy)methane	333	270	81	40-140	
Bis(2-chloroethyl)ether	333	124	37	40-140	*
Bis(2-ethylhexyl) phthalate	333	316	95	40-140	
Butyl benzyl phthalate	333	313	94	40-140	
Caprolactam	333	357	107	40-140	
Carbazole	333	333	100	40-140	
Chrysene	333	335	101	40-140	
Dibenz(a,h)anthracene	333	282	85	40-140	
Dibenzofuran	333	277	83	40-140	
Diethyl phthalate	333	290	87	40-140	
Dimethyl phthalate	333	278	83	40-140	
Di-n-butyl phthalate	333	346	104	40-140	
Di-n-octyl phthalate	333	285	86	40-140	
Diphenyl oxide	333	288	86	40-140	
Fluoranthene	333	312	94	40-140	
Fluorene	333	337	101	40-140	
Hexachlorobenzene	333	302	91	40-140	
Hexachlorobutadiene	333	260	78	40-140	
Hexachlorocyclopentadiene	333	261	78	40-140	
Hexachloroethane	333	205	61	40-140	
Indeno[1,2,3-cd]pyrene	333	329	99	40-140	
Isophorone	333	247	74	40-140	
Naphthalene	333	322	96	40-140	
Nitrobenzene	333	267	80	40-140	
N-Nitrosodimethylamine	333	212	64	40-140	
N-Nitrosodi-n-propylamine	333	230	69	40-140	
N-Nitrosodiphenylamine	333	216	65	40-140	
Pentachlorophenol	333	302	91	30-130	
Phenanthrene	333	305	91	40-140	
Phenol	333	236	71	30-130	
Pyrene	333	310	93	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24309-2

SDG No.: OCRI-06A

Matrix: Solid Level: Low Lab File ID: B10375.D

Lab ID: LCSD 360-48691/3-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCSD CONCENTRATION (ug/Kg)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1'-Biphenyl	333	264	79	4	30	40-140	
1,2,4,5-Tetrachlorobenzene	333	258	77	5	30	40-140	
1,2,4-Trichlorobenzene	333	241	72	4	30	40-140	
1,2-Dichlorobenzene	333	214	64	4	30	40-140	
1,3-Dichlorobenzene	333	203	61	3	30	40-140	
1,4-Dichlorobenzene	333	200	60	3	30	40-140	
1-Methylnaphthalene	333	258	77	9	30	40-140	
2,2'-oxybis[1-chloropropane]	333	215	64	3	30	40-140	
2,3,4,6-Tetrachlorophenol	333	233	70	5	30	40-140	
2,4,5-Trichlorophenol	333	310	93	1	30	30-130	
2,4,6-Trichlorophenol	333	301	90	2	30	30-130	
2,4-Dichlorophenol	333	307	92	3	30	30-130	
2,4-Dimethylphenol	333	352	106	6	30	30-130	
2,4-Dinitrophenol	333	210	63	6	30	30-130	
2,4-Dinitrotoluene	333	258	77	2	30	40-140	
2,6-Dinitrotoluene	333	285	85	1	30	40-140	
2-Chloronaphthalene	333	214	64	2	30	40-140	
2-Chlorophenol	333	228	68	2	30	30-130	
2-Methylnaphthalene	333	271	81	3	30	40-140	
2-Methylphenol	333	249	75	0	30	30-130	
2-Nitroaniline	333	292	87	0	30	40-140	
2-Nitrophenol	333	295	89	2	30	30-130	
3 & 4 Methylphenol	333	251	75	1	30	30-130	
3,3'-Dichlorobenzidine	333	103	31	5	30	40-140	*
3-Nitroaniline	333	249	75	4	30	40-140	
4,6-Dinitro-2-methylphenol	333	300	90	3	30	30-130	
4-Bromophenyl phenyl ether	333	290	87	3	30	40-140	
4-Chloro-3-methylphenol	333	329	99	5	30	30-130	
4-Chloroaniline	333	248	74	4	30	40-140	
4-Chlorophenyl phenyl ether	333	284	85	0	30	40-140	
4-Nitroaniline	333	298	90	1	30	40-140	
4-Nitrophenol	333	304	91	2	30	30-130	
Acenaphthene	333	318	95	1	30	40-140	
Acenaphthylene	333	279	84	2	30	40-140	
Acetophenone	333	227	68	2	30	40-140	
Aniline	333	107	32	4	30	40-140	*
Anthracene	333	331	99	2	30	40-140	
Atrazine	333	330	99	12	30	40-140	
Azobenzene	333	281	84	5	30	40-140	
Benzaldehyde	333	453	136	5	30	40-140	
Benzo[a]anthracene	333	333	100	5	30	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24309-2

SDG No.: OCRI-06A

Matrix: Solid Level: Low Lab File ID: B10375.D

Lab ID: LCSD 360-48691/3-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCSD CONCENTRATION (ug/Kg)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Benzo[a]pyrene	333	292	88	7	30	40-140	
Benzo[b]fluoranthene	333	302	91	9	30	40-140	
Benzo[g,h,i]perylene	333	304	91	2	30	40-140	
Benzo[k]fluoranthene	333	327	98	7	30	40-140	
Benzoic acid	333	222	67	9	30	30-130	
Benzophenone	333	285	85	8	30	40-140	
Benzyl alcohol	333	236	71	0	30	30-130	
Bis(2-chloroethoxy)methane	333	259	78	4	30	40-140	
Bis(2-chloroethyl)ether	333	205	62	50	30	40-140	*
Bis(2-ethylhexyl) phthalate	333	303	91	4	30	40-140	
Butyl benzyl phthalate	333	297	89	5	30	40-140	
Caprolactam	333	316	95	12	30	40-140	
Carbazole	333	323	97	3	30	40-140	
Chrysene	333	320	96	4	30	40-140	
Dibenz(a,h)anthracene	333	293	88	4	30	40-140	
Dibenzofuran	333	276	83	0	30	40-140	
Diethyl phthalate	333	287	86	1	30	40-140	
Dimethyl phthalate	333	275	82	1	30	40-140	
Di-n-butyl phthalate	333	340	102	2	30	40-140	
Di-n-octyl phthalate	333	260	78	9	30	40-140	
Diphenyl oxide	333	263	79	9	30	40-140	
Fluoranthene	333	300	90	4	30	40-140	
Fluorene	333	334	100	1	30	40-140	
Hexachlorobenzene	333	291	87	4	30	40-140	
Hexachlorobutadiene	333	250	75	4	30	40-140	
Hexachlorocyclopentadiene	333	258	77	1	30	40-140	
Hexachloroethane	333	213	64	4	30	40-140	
Indeno[1,2,3-cd]pyrene	333	337	101	2	30	40-140	
Isophorone	333	235	71	5	30	40-140	
Naphthalene	333	307	92	5	30	40-140	
Nitrobenzene	333	259	78	3	30	40-140	
N-Nitrosodimethylamine	333	220	66	4	30	40-140	
N-Nitrosodi-n-propylamine	333	237	71	3	30	40-140	
N-Nitrosodiphenylamine	333	209	63	3	30	40-140	
Pentachlorophenol	333	292	87	3	30	30-130	
Phenanthrene	333	298	89	2	30	40-140	
Phenol	333	238	71	1	30	30-130	
Pyrene	333	296	89	5	30	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Westfield | Job No.: 360-24309-2

SDG No.: OCRI-06A

Client Sample ID: | Lab Sample ID: MB 360-48691/1-A

Matrix: Solid | Lab File ID: B10373.D

Analysis Method: 8270C LL | Date Collected:

Extract. Method: 3546 | Date Extracted: 09/08/2009 12:06

Sample wt/vol: 30.00(g) | Date Analyzed: 09/17/2009 19:48

Con. Extract Vol.: 1.0(mL) | Dilution Factor: 1

Injection Volume: 1.0(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 49098 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
98-86-2	Acetophenone	ND		33	3.6
62-53-3	Aniline	ND		33	17
120-12-7	Anthracene	ND		33	11
1912-24-9	Atrazine	ND		33	10
103-33-3	Azobenzene	ND		33	4.1
100-52-7	Benzaldehyde	ND		33	10
56-55-3	Benzo[a]anthracene	ND		33	6.4
50-32-8	Benzo[a]pyrene	ND		33	6.1
205-99-2	Benzo[b]fluoranthene	ND		33	7.6
191-24-2	Benzo[g,h,i]perylene	ND		33	6.5
207-08-9	Benzo[k]fluoranthene	ND		33	9.2
65-85-0	Benzoic acid	71.7	J	170	14
119-61-9	Benzophenone	ND		33	2.0
100-51-6	Benzyl alcohol	ND		67	7.7
111-91-1	Bis(2-chloroethoxy)methane	ND		33	6.0
111-44-4	Bis(2-chloroethyl)ether	ND		33	8.1
117-81-7	Bis(2-ethylhexyl) phthalate	ND		33	11
85-68-7	Butyl benzyl phthalate	ND		33	7.3
105-60-2	Caprolactam	ND		33	10
86-74-8	Carbazole	ND		33	33
218-01-9	Chrysene	ND		33	7.2
53-70-3	Dibenz(a,h)anthracene	ND		33	6.7
132-64-9	Dibenzofuran	ND		33	19
84-66-2	Diethyl phthalate	ND		33	4.7
131-11-3	Dimethyl phthalate	ND		33	4.9
84-74-2	Di-n-butyl phthalate	77.0		33	10
117-84-0	Di-n-octyl phthalate	ND		33	9.4
101-84-8	Diphenyl oxide	ND		33	10
206-44-0	Fluoranthene	ND		33	21
86-73-7	Fluorene	ND		33	13
118-74-1	Hexachlorobenzene	ND		33	7.9
87-68-3	Hexachlorobutadiene	ND		33	6.6
77-47-4	Hexachlorocyclopentadiene	ND		67	9.1
67-72-1	Hexachloroethane	ND		33	6.4

Cover sheet

SEMIVOLATILE ORGANICS

REGION I VALIDATION CHECKLIST for
OLIN CHEMICAL SUPERFUND SITE
Criteria and Qualifications: REGION I Organics Guideline (1996)

TIER I / (II) / III (circle one)

SITE: Olin Chemical Superfund Site Project #: 6/07/00016.12 SDG #: OCRI-07/07A

LAB #: TAL-Westfield

Sample IDs: Attach tracking sheet and/or sample listing.

This checklist is designed to be used with USEPA Region I Validation Guidelines Part II (12/1996). During Level III validation, calculation and transcription checks are completed for instrument tuning, surrogates, target compounds, spike recoveries, calibration data, and internal standards as specified in the guideline. These checks are documented on attached validation notes.

YES NO NA	
Data completeness ☑ ☐ ☐ All data summaries, QC forms and raw data available from hard copy or electronic data package ☑ ☐ ☐ Data summaries match EDD	Contact lab if missing data. Lab to respond with 24 hours.
Holding Times and Preservation ☑ ☐ ☐ Hold times met (Waters – Extract within 7 days, analyze within 40 days. Soils – extract within 14 days, analyze within 40 days)	
Instrument Performance Check (Tune) ☑ ☐ ☐ Tune available for each 12-hour period samples were analyzed ☑ ☐ ☐ Appropriate number of significant figures reported (at least 2) ☑ ☐ ☐ Mass/Charge list (m/z) criteria met	
Initial Calibration ☐ ☒ ☐ %RSD less than or equal to 30% ☐ ☒ ☐ RRF greater than or equal to 0.05	See below.
Continuing Calibration ☑ ☐ ☐ %D less than or equal to 25% ☐ ☒ ☐ RRF greater than or equal to 0.05.	See below.
Blank Contamination ☒ ☐ ☐ Method blank contamination ☒ ☐ ☐ Equipment/Rinseate blank contamination	Evaluate all blanks for contamination. Highest contaminant level used for action level. See below.
Surrogate Recoveries	

SEMIVOLATILE ORGANICS

REGION I VALIDATION CHECKLIST for
OLIN CHEMICAL SUPERFUND SITE
Criteria and Qualifications: REGION I Organics Guideline (1996)

TIER I / (II) / III (circle one)

☑ ☐ ☐ Surrogates percent recovery criteria met: Soil = (base/neutral 30%-130%, acid 30%-130%) Water = (base/neutral 30%-130%, acid 15%-110%)	
Matrix Spikes and Laboratory Control Samples ☐ ☒ ☐ MS/MSD percent recovery criteria met Soil and Water = (base/neutral 40%-140%, acid 30%-130%) ☑ ☐ ☐ MS/MSD RPD criteria met (soils <50%, water <30%) ☐ ☒ ☐ LCS percent recovery criteria met soil/water (base 40%-140%, acid 30%-130%)	See below.
Field Duplicates ☑ ☐ ☐ RPD criteria met (soils <50%, water <30%)	
Internal Standard ☐ ☒ ☐ Area counts within -50 to +100 percent of calib. std. ☑ ☐ ☐ Retention Time within 30 seconds of calib. std.	See below.
Target Compounds ☑ ☐ ☐ Reviewed narrative for anomalies	
Tentatively Identified Compounds (TICs) ☐ ☑ ☐ TCL compounds reported as TICs	

Validator's Signature: _____

Date: 2/15/10

Reference:

MACTEC, Quality Assurance Project Plan for Remedial Investigation/Feasibility Study – Olin Chemical Superfund Site, Wilmington Property, 51 Eames Street, Wilmington, MA", MACTEC Engineering and Consulting. Draft .October 2008.

SAMPLE SUMMARY

Client: Olin Corporation

Job Number: 360-24327-1
Sdg Number: OCRI-07

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
360-24327-1	OC-SB-403-0.0/1.0-XXX	Solid	08/26/2009 1325	08/27/2009 1710
360-24327-2	OC-SB-403-13/15-XXX	Solid	08/26/2009 1340	08/27/2009 1710
360-24327-3	OC-SB-403-6.0/8.0-XXX	Solid	08/26/2009 1330	08/27/2009 1710
360-24327-4	OC-SB-404-13/15-XXX	Solid	08/26/2009 1540	08/27/2009 1710
360-24327-5	OC-SB-404-5.0/7.0-XXX	Solid	08/26/2009 1520	08/27/2009 1710
360-24327-6	OC-SB-409-0.0/1.0-XXX	Solid	08/26/2009 1650	08/27/2009 1710
360-24327-7	OC-SB-409-15/17-XXX	Solid	08/26/2009 1715	08/27/2009 1710
360-24327-8	OC-SB-409-6.0/8.0-XXX	Solid	08/26/2009 1705	08/27/2009 1710
360-24327-9	OC-SB-410-0.0/1.0-XXX	Solid	08/27/2009 1010	08/27/2009 1710
360-24327-10	OC-SB-410-17/19-XXX	Solid	08/27/2009 1115	08/27/2009 1710
360-24327-11	OC-SB-410-6.0/8.0-DUP	Solid	08/27/2009 1015	08/27/2009 1710
360-24327-12	OC-SB-410-6.0/8.0-XXX	Solid	08/27/2009 1015	08/27/2009 1710
360-24327-12MS	OC-SB-410-6.0/8.0-XMS	Solid	08/27/2009 1015	08/27/2009 1710
360-24327-12MSD	OC-SB-410-6.0/8.0-MSD	Solid	08/27/2009 1015	08/27/2009 1710
360-24327-13	OC-SB-411-0.0/1.0-XXX	Solid	08/27/2009 1020	08/27/2009 1710
360-24327-14	OC-SB-411-4.7/6.7-XXX	Solid	08/27/2009 1035	08/27/2009 1710
360-24327-15	OC-SB-418-0.0/1.0-XXX	Solid	08/27/2009 0825	08/27/2009 1710
360-24327-16	OC-SB-418-15/17-XXX	Solid	08/27/2009 0900	08/27/2009 1710
360-24327-17	OC-SB-418-8/10-XXX	Solid	08/27/2009 0835	08/27/2009 1710
360-24327-18	OC-TBK-009	Solid	08/27/2009 1440	08/27/2009 1710
360-24327-19	OC-EBK-005	Water	08/27/2009 0800	08/27/2009 1710

Form 1's edited

2/11/13

Client: Olin Corporation

Job Number: 360-24327-1
Sdg Number: OCRI-07

Client Sample ID: **OC-SB-403-0.0/1.0-XXX**

Lab Sample ID: 360-24327-1
Client Matrix: Solid % Moisture: 6.3

Date Sampled: 08/26/2009 1325
Date Received: 08/27/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48651		Instrument ID:	Inst. J
Preparation:	3550B	Prep Batch: 360-48653		Lab File ID:	J02875.D
Dilution:	1.0			Initial Weight/Volume:	100.18 g
Date Analyzed:	09/06/2009 1611			Final Weight/Volume:	1 mL
Date Prepared:	09/06/2009 0900			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodimethylamine		ND		1.2	5.3

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	28	X	30 - 130
2-Fluorobiphenyl	75		30 - 130
2-Fluorophenol	71		30 - 130
Nitrobenzene-d5	85		30 - 130
Phenol-d5	81		30 - 130
Terphenyl-d14	105		30 - 130

Client: Olin Corporation

Job Number: 360-24327-1
Sdg Number: OCRI-07

Client Sample ID: **OC-SB-403-0.0/1.0-XXX**

Lab Sample ID: 360-24327-1
Client Matrix: Solid % Moisture: 6.3

Date Sampled: 08/26/2009 1325
Date Received: 08/27/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49098		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48691		Lab File ID:	B10390.D
Dilution:	1.0			Initial Weight/Volume:	30.34 g
Date Analyzed:	09/18/2009 0523			Final Weight/Volume:	1.0 mL
Date Prepared:	09/08/2009 1206			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		11	35
1,2,4,5-Tetrachlorobenzene		ND		11	35
1,2,4-Trichlorobenzene		ND		11	35
1,2-Dichlorobenzene		ND		11	35
1,3-Dichlorobenzene		ND		11	35
1,4-Dichlorobenzene		ND		11	35
1-Methylnaphthalene		ND		11	35
2,2'-oxybis[1-chloropropane]		ND		11	35
2,3,4,6-Tetrachlorophenol		ND		11	35
2,4,5-Trichlorophenol		ND		11	35
2,4,6-Trichlorophenol		ND		11	35
2,4-Dichlorophenol		ND		11	35
2,4-Dimethylphenol		ND		14	35
2,4-Dinitrophenol		ND		11	35
2,4-Dinitrotoluene		ND		11	35
2,6-Dinitrotoluene		ND		11	35
2-Chloronaphthalene		ND		11	35
2-Chlorophenol		ND		11	35
2-Methylnaphthalene		ND		11	35
2-Methylphenol		ND		21	35
2-Nitroaniline		ND		11	180
2-Nitrophenol		ND		11	35
3 & 4 Methylphenol		ND		11	35
3,3'-Dichlorobenzidine		ND		11	70
3-Nitroaniline		ND		11	180
4,6-Dinitro-2-methylphenol		ND		11	180
4-Bromophenyl phenyl ether		ND		11	35
4-Chloro-3-methylphenol		ND		11	70
4-Chloroaniline		ND		11	70
4-Chlorophenyl phenyl ether		ND		11	35
4-Nitroaniline		ND		11	180
4-Nitrophenol		ND		11	180
Acenaphthene		ND		11	35
Acenaphthylene		ND		11	35
Acetophenone		ND		11	35
Aniline		ND		11	35
Anthracene		ND		11	35
Atrazine		ND		11	35
Azobenzene		ND		11	35
Benzaldehyde		ND		11	35
Benzo[a]anthracene		ND		11	35
Benzo[a]pyrene		ND		11	35
Benzo[b]fluoranthene		ND		11	35
Benzo[g,h,i]perylene		ND		11	35
Benzo[k]fluoranthene		ND		11	35
Benzoic acid		ND		16	180

2/10/10

Client: Olin Corporation

Job Number: 360-24327-1
Sdg Number: OCRI-07

Client Sample ID: **OC-SB-403-0.0/1.0-XXX**

Lab Sample ID: 360-24327-1
Client Matrix: Solid % Moisture: 6.3

Date Sampled: 08/26/2009 1325
Date Received: 08/27/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49098		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48691		Lab File ID:	B10390.D
Dilution:	1.0			Initial Weight/Volume:	30.34 g
Date Analyzed:	09/18/2009 0523			Final Weight/Volume:	1.0 mL
Date Prepared:	09/08/2009 1206			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		11	35
Benzyl alcohol		ND		30	70
Bis(2-chloroethoxy)methane		ND		11	35
Bis(2-chloroethyl)ether		ND		11	35
Bis(2-ethylhexyl) phthalate		100	EB	11	35
Butyl benzyl phthalate		ND		11	35
Caprolactam		ND		11	35
Carbazole		ND		11	35
Chrysene		ND	J	11	35
Dibenz(a,h)anthracene		ND	J	11	35
Dibenzofuran		ND		11	35
Diethyl phthalate		ND		11	35
Dimethyl phthalate		ND		11	35
Di-n-butyl phthalate		ND		31	35
Di-n-octyl phthalate		ND	J	18	35
Diphenyl oxide		ND		11	35
Diphenylamine		ND		11	35
Fluoranthene		ND		11	35
Fluorene		ND		11	35
Hexachlorobenzene		ND		11	35
Hexachlorobutadiene		ND		11	35
Hexachlorocyclopentadiene		ND		11	70
Hexachloroethane		ND		11	35
Indeno[1,2,3-cd]pyrene		ND	J	11	35
Isophorone		ND		11	35
Naphthalene		ND		11	84
Nitrobenzene		ND		11	35
N-Nitrosodimethylamine		ND		11	35
N-Nitrosodi-n-propylamine		ND		11	35
N-Nitrosodiphenylamine		ND		11	35
Pentachlorophenol		ND		11	35
Phenanthrene		ND		11	42
Phenol		ND		11	35
Pyrene		ND		11	35

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	33		30 - 130
2-Fluorophenol	67		30 - 130
2-Fluorobiphenyl	65		30 - 130
Nitrobenzene-d5	69		30 - 130
Phenol-d5	61		30 - 130
Terphenyl-d14	78		30 - 130

Client: Olin Corporation

Job Number: 360-24327-1
Sdg Number: OCRI-07

Client Sample ID: **OC-SB-403-0.0/1.0-XXX**

Lab Sample ID: 360-24327-1
Client Matrix: Solid % Moisture: 6.3

Date Sampled: 08/26/2009 1325
Date Received: 08/27/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49098		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48691		Lab File ID:	B10390.D
Dilution:	1.0			Initial Weight/Volume:	30.34 g
Date Analyzed:	09/18/2009 0523			Final Weight/Volume:	1.0 mL
Date Prepared:	09/08/2009 1206			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 5

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Unknown	13.35	40	T J
629-99-2	Pentacosane	15.54	60	T J N
1599-67-3	1-Docosene	16.68	120	T J N
7683-64-9	Squalene	17.35	260	T J N
14021-23-9	D-Friedoolean-14-ene, 3-methoxy-, (3.bet	21.75	97	T J N

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Client: Olin Corporation

Job Number: 360-24327-1
Sdg Number: OCRI-07

Client Sample ID: **OC-SB-403-6.0/8.0-XXX**

Lab Sample ID: 360-24327-3
Client Matrix: Solid % Moisture: 38.2

Date Sampled: 08/26/2009 1330
Date Received: 08/27/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48651		Instrument ID:	Inst_J
Preparation:	3550B	Prep Batch: 360-48653		Lab File ID:	J02879.D
Dilution:	10			Initial Weight/Volume:	100.10 g
Date Analyzed:	09/06/2009 1811			Final Weight/Volume:	2 mL
Date Prepared:	09/06/2009 0900			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodimethylamine		ND		37	160

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	70		30 - 130
2-Fluorobiphenyl	58		30 - 130
2-Fluorophenol	49		30 - 130
Nitrobenzene-d5	20	X	30 - 130
Phenol-d5	51		30 - 130
Terphenyl-d14	83		30 - 130

Client: Olin Corporation

Job Number: 360-24327-1
Sdg Number: OCRI-07

Client Sample ID: **OC-SB-403-6.0/8.0-XXX**

Lab Sample ID: 360-24327-3
Client Matrix: Solid % Moisture: 38.2

Date Sampled: 08/26/2009 1330
Date Received: 08/27/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49098		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48691		Lab File ID:	B10392.D
Dilution:	10			Initial Weight/Volume:	30.02 g
Date Analyzed:	09/18/2009 0630			Final Weight/Volume:	1.0 mL
Date Prepared:	09/08/2009 1206			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		160	540
1,2,4,5-Tetrachlorobenzene		ND		160	540
1,2,4-Trichlorobenzene		ND		160	540
1,2-Dichlorobenzene		ND		160	540
1,3-Dichlorobenzene		ND		160	540
1,4-Dichlorobenzene		ND		160	540
1-Methylnaphthalene		ND		160	540
2,2'-oxybis[1-chloropropane]		ND		160	540
2,3,4,6-Tetrachlorophenol		ND		160	540
2,4,5-Trichlorophenol		ND		160	540
2,4,6-Trichlorophenol		ND		160	540
2,4-Dichlorophenol		ND		160	540
2,4-Dimethylphenol		ND		210	540
2,4-Dinitrophenol		ND		160	540
2,4-Dinitrotoluene		ND		160	540
2,6-Dinitrotoluene		ND		160	540
2-Chloronaphthalene		ND		160	540
2-Chlorophenol		ND		160	540
2-Methylnaphthalene		ND		160	540
2-Methylphenol		ND		320	540
2-Nitroaniline		ND		160	2700
2-Nitrophenol		ND		160	540
3 & 4 Methylphenol		ND		160	540
3,3'-Dichlorobenzidine		ND		160	1100
3-Nitroaniline		ND		160	2700
4,6-Dinitro-2-methylphenol		ND		160	2700
4-Bromophenyl phenyl ether		ND		160	540
4-Chloro-3-methylphenol		ND		160	1100
4-Chloroaniline		ND		160	1100
4-Chlorophenyl phenyl ether		ND		160	540
4-Nitroaniline		ND		160	2700
4-Nitrophenol		ND		160	2700
Acenaphthene		ND		160	540
Acenaphthylene		ND		160	540
Acetophenone		170	J	160	540
Aniline		ND		160	540
Anthracene		ND		160	540
Atrazine		ND		160	540
Azobenzene		ND		160	540
Benzaldehyde		ND		160	540
Benzo[a]anthracene		ND		160	540
Benzo[a]pyrene		ND		160	540
Benzo[b]fluoranthene		ND		160	540
Benzo[g,h,i]perylene		ND		160	540
Benzo[k]fluoranthene		ND		160	540
Benzoic acid		ND		240	2700

Client: Olin Corporation

Job Number: 360-24327-1
Sdg Number: OCRI-07

Client Sample ID: **OC-SB-403-6.0/8.0-XXX**

Lab Sample ID: 360-24327-3
Client Matrix: Solid % Moisture: 38.2

Date Sampled: 08/26/2009 1330
Date Received: 08/27/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49098		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48691		Lab File ID:	B10392.D
Dilution:	10			Initial Weight/Volume:	30.02 g
Date Analyzed:	09/18/2009 0630			Final Weight/Volume:	1.0 mL
Date Prepared:	09/08/2009 1206			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		160	540
Benzyl alcohol		ND		460	1100
Bis(2-chloroethoxy)methane		ND		160	540
Bis(2-chloroethyl)ether		ND		160	540
Bis(2-ethylhexyl) phthalate		ND		160	540
Butyl benzyl phthalate		ND		160	540
Caprolactam		ND		160	540
Carbazole		ND		160	540
Chrysene		ND	J	160	540
Dibenz(a,h)anthracene		ND	J	160	540
Dibenzofuran		ND		160	540
Diethyl phthalate		ND		160	540
Dimethyl phthalate		ND		160	540
Di-n-butyl phthalate		ND		470	540
Di-n-octyl phthalate		ND	J	270	540
Diphenyl oxide		ND		160	540
Diphenylamine		ND		160	540
Fluoranthene		ND		160	540
Fluorene		ND		160	540
Hexachlorobenzene		ND		160	540
Hexachlorobutadiene		ND		160	540
Hexachlorocyclopentadiene		ND		160	1100
Hexachloroethane		ND		160	540
Indeno[1,2,3-cd]pyrene		ND	J	160	540
Isophorone		ND		160	540
Naphthalene		ND		160	1300
Nitrobenzene		ND		160	540
N-Nitrosodimethylamine		ND		160	540
N-Nitrosodi-n-propylamine		ND		160	540
N-Nitrosodiphenylamine		ND		160	540
Pentachlorophenol		ND		160	540
Phenanthrene		ND		160	650
Phenol		ND		160	540
Pyrene		ND		160	540

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	42		30 - 130
2-Fluorophenol	35		30 - 130
2-Fluorobiphenyl	41		30 - 130
Nitrobenzene-d5	49		30 - 130
Phenol-d5	27	X	30 - 130
Terphenyl-d14	42		30 - 130

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Client: Olin Corporation

Job Number: 360-24327-1
Sdg Number: OCRI-07

Client Sample ID: **OC-SB-403-6.0/8.0-XXX**

Lab Sample ID: 360-24327-3
Client Matrix: Solid % Moisture: 38.2

Date Sampled: 08/26/2009 1330
Date Received: 08/27/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49098		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48691		Lab File ID:	B10392.D
Dilution:	10			Initial Weight/Volume:	30.02 g
Date Analyzed:	09/18/2009 0630			Final Weight/Volume:	1.0 mL
Date Prepared:	09/08/2009 1206			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 10

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
1000111-58-0	2,4-Diphenyl-4-methyl-1(E)-pentene	12.08	1000	T J N
112-88-9	1-Octadecene	14.27	2700	T J N
1000155-85-3	Cyclohexadecane, 1,2-diethyl-	15.61	4600	T J N
593-49-7	Heptacosane	16.61	3500	T J N
1000131-9-4	Z-12-Pentacosene	16.69	6300	T J N
53057-53-7	1,21-Docosadiene	17.48	2500	T J N
630-1-3	Hexacosane	17.85	4800	T J N
56554-87-1	16-Octadecenal	18.96	2500	T J N
14739-72-1	Heneicosane, 11-pentyl-	19.40	5100	T J N
75207-54-4	2-Pentacosanone	19.64	4800	T J N

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Client: Olin Corporation

Job Number: 360-24327-1
Sdg Number: OCRI-07

Client Sample ID: **OC-SB-404-5.0/7.0-XXX**

Lab Sample ID: 360-24327-5
Client Matrix: Solid
% Moisture: 14.6

Date Sampled: 08/26/2009 1520
Date Received: 08/27/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48651		Instrument ID:	Inst. J
Preparation:	3550B	Prep Batch: 360-48653		Lab File ID:	J02878.D
Dilution:	1.0			Initial Weight/Volume:	100.25 g
Date Analyzed:	09/06/2009 1741			Final Weight/Volume:	1 mL
Date Prepared:	09/06/2009 0900			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodimethylamine		ND		1.4	5.8

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	87		30 - 130
2-Fluorobiphenyl	76		30 - 130
2-Fluorophenol	77		30 - 130
Nitrobenzene-d5	85		30 - 130
Phenol-d5	80		30 - 130
Terphenyl-d14	113		30 - 130

Client: Olin Corporation

Job Number: 360-24327-1
Sdg Number: OCRI-07

Client Sample ID: **OC-SB-404-5.0/7.0-XXX**

Lab Sample ID: 360-24327-5
Client Matrix: Solid % Moisture: 14.6

Date Sampled: 08/26/2009 1520
Date Received: 08/27/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49095		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48691		Lab File ID:	J03003.D
Dilution:	1.0			Initial Weight/Volume:	30.45 g
Date Analyzed:	09/17/2009 1714			Final Weight/Volume:	1.0 mL
Date Prepared:	09/08/2009 1206			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		12	38
1,2,4,5-Tetrachlorobenzene		ND		12	38
1,2,4-Trichlorobenzene		ND		12	38
1,2-Dichlorobenzene		ND		12	38
1,3-Dichlorobenzene		ND		12	38
1,4-Dichlorobenzene		ND		12	38
1-Methylnaphthalene		ND		12	38
2,2'-oxybis[1-chloropropane]		ND		12	38
2,3,4,6-Tetrachlorophenol		ND		12	38
2,4,5-Trichlorophenol		ND		12	38
2,4,6-Trichlorophenol		ND		12	38
2,4-Dichlorophenol		ND		12	38
2,4-Dimethylphenol		ND		15	38
2,4-Dinitrophenol		ND		12	38
2,4-Dinitrotoluene		ND		12	38
2,6-Dinitrotoluene		ND		12	38
2-Chloronaphthalene		ND		12	38
2-Chlorophenol		ND		12	38
2-Methylnaphthalene		ND		12	38
2-Methylphenol		ND		23	38
2-Nitroaniline		~~ND~~ K		12	190
2-Nitrophenol		ND		12	38
3 & 4 Methylphenol		ND		12	38
3,3'-Dichlorobenzidine		ND		12	77
3-Nitroaniline		ND		12	190
4,6-Dinitro-2-methylphenol		ND		12	190
4-Bromophenyl phenyl ether		ND		12	38
4-Chloro-3-methylphenol		ND		12	77
4-Chloroaniline		ND		12	77
4-Chlorophenyl phenyl ether		ND		12	38
4-Nitroaniline		ND		12	190
4-Nitrophenol		ND		12	190
Acenaphthene		ND		12	38
Acenaphthylene		ND		12	38
Acetophenone		ND		12	38
Aniline		ND		12	38
Anthracene		ND		12	38
Atrazine		ND		12	38
Azobenzene		ND		12	38
Benzaldehyde		ND		12	38
Benzo[a]anthracene		ND		12	38
Benzo[a]pyrene		ND		12	38
Benzo[b]fluoranthene		ND		12	38
Benzo[g,h,i]perylene		ND		12	38
Benzo[k]fluoranthene		ND		12	38
Benzoic acid		~~ND~~ R		17	190

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Client: Olin Corporation

Job Number: 360-24327-1
Sdg Number: OCRI-07

Client Sample ID: **OC-SB-404-5.0/7.0-XXX**

Lab Sample ID: 360-24327-5
Client Matrix: Solid
% Moisture: 14.6

Date Sampled: 08/26/2009 1520
Date Received: 08/27/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49095		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48691		Lab File ID:	J03003.D
Dilution:	1.0			Initial Weight/Volume:	30.45 g
Date Analyzed:	09/17/2009 1714			Final Weight/Volume:	1.0 mL
Date Prepared:	09/08/2009 1206			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		12	38
Benzyl alcohol		ND		33	77
Bis(2-chloroethoxy)methane		ND		12	38
Bis(2-chloroethyl)ether		ND		12	38
Bis(2-ethylhexyl) phthalate		13 23	J	12	38
Butyl benzyl phthalate		ND		12	38
Caprolactam		ND		12	38
Carbazole		ND		12	38
Chrysene		ND J		12	38
Dibenz(a,h)anthracene		ND J		12	38
Dibenzofuran		ND		12	38
Diethyl phthalate		ND		12	38
Dimethyl phthalate		ND		12	38
Di-n-butyl phthalate		ND		34	38
Di-n-octyl phthalate		ND J		19	38
Diphenyl oxide		ND		12	38
Diphenylamine		ND		12	38
Fluoranthene		ND		12	38
Fluorene		ND		12	38
Hexachlorobenzene		ND		12	38
Hexachlorobutadiene		ND		12	38
Hexachlorocyclopentadiene		ND		12	77
Hexachloroethane		ND		12	38
Indeno[1,2,3-cd]pyrene		ND J		12	38
Isophorone		ND		12	38
Naphthalene		ND		12	92
Nitrobenzene		ND		12	38
N-Nitrosodimethylamine		ND		12	38
N-Nitrosodi-n-propylamine		ND		12	38
N-Nitrosodiphenylamine		ND		12	38
Pentachlorophenol		ND		12	38
Phenanthrene		ND		12	46
Phenol		ND		12	38
Pyrene		ND		12	38

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	68		30 - 130
2-Fluorophenol	69		30 - 130
2-Fluorobiphenyl	59		30 - 130
Nitrobenzene-d5	61		30 - 130
Phenol-d5	67		30 - 130
Terphenyl-d14	71		30 - 130

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Client: Olin Corporation

Job Number: 360-24327-1
Sdg Number: OCRI-07

Client Sample ID: **OC-SB-404-5.0/7.0-XXX**

Lab Sample ID: 360-24327-5
Client Matrix: Solid
% Moisture: 14.6

Date Sampled: 08/26/2009 1520
Date Received: 08/27/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49095		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48691		Lab File ID:	J03003.D
Dilution:	1.0			Initial Weight/Volume:	30.45 g
Date Analyzed:	09/17/2009 1714			Final Weight/Volume:	1.0 mL
Date Prepared:	09/08/2009 1206			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 6

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Unknown	5.56	15	T J
84-15-1	o-Terphenyl	11.50	18	T J N
629-50-5	Tridecane	12.23	14	T J N
2136-70-1	Ethanol, 2-(tetradecyloxy)-	13.64	26	T J N
7683-64-9	Squalene	14.65	1000	T J N
1000210-38-4	17-(1,5-Dimethylhexyl)-10,13-dimethyl-2,	15.72	51	T J N

Client: Olin Corporation

Job Number: 360-24327-1
Sdg Number: OCRI-07

Client Sample ID: **OC-SB-409-0.0/1.0-XXX**

Lab Sample ID: 360-24327-6
Client Matrix: Solid
% Moisture: 4.2

Date Sampled: 08/26/2009 1650
Date Received: 08/27/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48817		Instrument ID:	Inst. J
Preparation:	3550B	Prep Batch: 360-48744		Lab File ID:	J02914.D
Dilution:	1.0			Initial Weight/Volume:	100.26 g
Date Analyzed:	09/11/2009 0822			Final Weight/Volume:	1.0 mL
Date Prepared:	09/09/2009 1112			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodimethylamine		ND		1.2	5.2

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	65		30 - 130
2-Fluorobiphenyl	69		30 - 130
2-Fluorophenol	66		30 - 130
Nitrobenzene-d5	62		30 - 130
Phenol-d5	68		30 - 130
Terphenyl-d14	66		30 - 130

Client: Olin Corporation

Job Number: 360-24327-1
Sdg Number: OCRI-07

Client Sample ID: **OC-SB-409-0.0/1.0-XXX**

Lab Sample ID: 360-24327-6
Client Matrix: Solid % Moisture: 4.2

Date Sampled: 08/26/2009 1650
Date Received: 08/27/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49095		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48691		Lab File ID:	J03004.D
Dilution:	1.0			Initial Weight/Volume:	30.58 g
Date Analyzed:	09/17/2009 1744			Final Weight/Volume:	1.0 mL
Date Prepared:	09/08/2009 1206			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		10	34
1,2,4,5-Tetrachlorobenzene		ND		10	34
1,2,4-Trichlorobenzene		ND		10	34
1,2-Dichlorobenzene		ND		10	34
1,3-Dichlorobenzene		ND		10	34
1,4-Dichlorobenzene		ND		10	34
1-Methylnaphthalene		ND		10	34
2,2'-oxybis[1-chloropropane]		ND		10	34
2,3,4,6-Tetrachlorophenol		ND		10	34
2,4,5-Trichlorophenol		ND		10	34
2,4,6-Trichlorophenol		ND		10	34
2,4-Dichlorophenol		ND		10	34
2,4-Dimethylphenol		ND		13	34
2,4-Dinitrophenol		ND		10	34
2,4-Dinitrotoluene		ND		10	34
2,6-Dinitrotoluene		ND		10	34
2-Chloronaphthalene		ND		10	34
2-Chlorophenol		ND		10	34
2-Methylnaphthalene		ND		10	34
2-Methylphenol		ND		20	34
2-Nitroaniline		ND		10	170
2-Nitrophenol		ND		10	34
3 & 4 Methylphenol		ND		10	34
3,3'-Dichlorobenzidine		ND		10	68
3-Nitroaniline		ND		10	170
4,6-Dinitro-2-methylphenol		ND		10	170
4-Bromophenyl phenyl ether		ND		10	34
4-Chloro-3-methylphenol		ND		10	68
4-Chloroaniline		ND		10	68
4-Chlorophenyl phenyl ether		ND		10	34
4-Nitroaniline		ND		10	170
4-Nitrophenol		ND		10	170
Acenaphthene		ND		10	34
Acenaphthylene		ND		10	34
Acetophenone		ND		10	34
Aniline		ND		10	34
Anthracene		ND		10	34
Atrazine		ND		10	34
Azobenzene		ND		10	34
Benzaldehyde		ND		10	34
Benzo[a]anthracene		ND		10	34
Benzo[a]pyrene		12	J	10	34
Benzo[b]fluoranthene		ND		10	34
Benzo[g,h,i]perylene		ND		10	34
Benzo[k]fluoranthene		ND		10	34
Benzoic acid		80	J	15	170

Client: Olin Corporation

Job Number: 360-24327-1
Sdg Number: OCRI-07

Client Sample ID: **OC-SB-409-0.0/1.0-XXX**

Lab Sample ID: 360-24327-6
Client Matrix: Solid % Moisture: 4.2

Date Sampled: 08/26/2009 1650
Date Received: 08/27/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49095		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48691		Lab File ID:	J03004.D
Dilution:	1.0			Initial Weight/Volume:	30.58 g
Date Analyzed:	09/17/2009 1744			Final Weight/Volume:	1.0 mL
Date Prepared:	09/08/2009 1206			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		10	34
Benzyl alcohol		ND		29	68
Bis(2-chloroethoxy)methane		ND		10	34
Bis(2-chloroethyl)ether		ND		10	34
Bis(2-ethylhexyl) phthalate		110	EB	10	34
Butyl benzyl phthalate		ND		10	34
Caprolactam		ND		10	34
Carbazole		ND		10	34
Chrysene		ND		10	34
Dibenz(a,h)anthracene		ND		10	34
Dibenzofuran		ND		10	34
Diethyl phthalate		ND		10	34
Dimethyl phthalate		ND		10	34
Di-n-butyl phthalate		ND		30	34
Di-n-octyl phthalate		ND		17	34
Diphenyl oxide		ND		10	34
Diphenylamine		ND		10	34
Fluoranthene		ND		10	34
Fluorene		ND		10	34
Hexachlorobenzene		ND		10	34
Hexachlorobutadiene		ND		10	34
Hexachlorocyclopentadiene		ND		10	68
Hexachloroethane		ND		10	34
Indeno[1,2,3-cd]pyrene		ND		10	34
Isophorone		ND		10	34
Naphthalene		ND		10	82
Nitrobenzene		ND		10	34
N-Nitrosodimethylamine		ND		10	34
N-Nitrosodi-n-propylamine		ND		10	34
N-Nitrosodiphenylamine		ND		10	34
Pentachlorophenol		ND		10	34
Phenanthrene		ND		10	41
Phenol		ND		10	34
Pyrene		ND		10	34

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	75		30 - 130
2-Fluorophenol	73		30 - 130
2-Fluorobiphenyl	67		30 - 130
Nitrobenzene-d5	65		30 - 130
Phenol-d5	74		30 - 130
Terphenyl-d14	73		30 - 130

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Client: Olin Corporation

Job Number: 360-24327-1
Sdg Number: OCRI-07

Client Sample ID: **OC-SB-409-0.0/1.0-XXX**

Lab Sample ID: 360-24327-6
Client Matrix: Solid % Moisture: 4.2

Date Sampled: 08/26/2009 1650
Date Received: 08/27/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49095		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48691		Lab File ID:	J03004.D
Dilution:	1.0			Initial Weight/Volume:	30.58 g
Date Analyzed:	09/17/2009 1744			Final Weight/Volume:	1.0 mL
Date Prepared:	09/08/2009 1206			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 5

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Unknown	10.64	17	T J
74685-30-6	5-Eicosene, (E)-	13.64	130	T J N
297-3-0	Cyclotetracosane	14.29	160	T J N
7683-64-9	Squalene	14.66	650	T J N
18435-45-5	1-Nonadecene	14.93	140	T J N

Client: Olin Corporation

Job Number: 360-24327-1
Sdg Number: OCRI-07

Client Sample ID: **OC-SB-409-6.0/8.0-XXX**

Lab Sample ID: 360-24327-8
Client Matrix: Solid % Moisture: 21.3

Date Sampled: 08/26/2009 1705
Date Received: 08/27/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48817		Instrument ID:	Inst. J
Preparation:	3550B	Prep Batch: 360-48744		Lab File ID:	J02901.D
Dilution:	1.0			Initial Weight/Volume:	100.77 g
Date Analyzed:	09/11/2009 0154			Final Weight/Volume:	1.0 mL
Date Prepared:	09/09/2009 1112			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodimethylamine		ND		1.5	6.3

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	78		30 - 130
2-Fluorobiphenyl	52		30 - 130
2-Fluorophenol	49		30 - 130
Nitrobenzene-d5	48		30 - 130
Phenol-d5	55		30 - 130
Terphenyl-d14	58		30 - 130

Client: Olin Corporation

Job Number: 360-24327-1
Sdg Number: OCRI-07

Client Sample ID: **OC-SB-409-6.0/8.0-XXX**

Lab Sample ID: 360-24327-8
Client Matrix: Solid
% Moisture: 21.3

Date Sampled: 08/26/2009 1705
Date Received: 08/27/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49174		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48703		Lab File ID:	J03012.D
Dilution:	1.0			Initial Weight/Volume:	30.23 g
Date Analyzed:	09/18/2009 1641			Final Weight/Volume:	1.0 mL
Date Prepared:	09/08/2009 1452			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		13	42
1,2,4,5-Tetrachlorobenzene		ND		13	42
1,2,4-Trichlorobenzene		ND		13	42
1,2-Dichlorobenzene		ND		13	42
1,3-Dichlorobenzene		ND		13	42
1,4-Dichlorobenzene		ND		13	42
1-Methylnaphthalene		ND		13	42
2,2'-oxybis[1-chloropropane]		ND		13	42
2,3,4,6-Tetrachlorophenol		ND		13	42
2,4,5-Trichlorophenol		ND		13	42
2,4,6-Trichlorophenol		ND		13	42
2,4-Dichlorophenol		ND		13	42
2,4-Dimethylphenol		ND		17	42
2,4-Dinitrophenol		~~ND~~	R	13	42
2,4-Dinitrotoluene		ND		13	42
2,6-Dinitrotoluene		ND		13	42
2-Chloronaphthalene		ND		13	42
2-Chlorophenol		ND		13	42
2-Methylnaphthalene		ND		13	42
2-Methylphenol		ND		25	42
2-Nitroaniline		~~ND~~	R	13	210
2-Nitrophenol		ND		13	42
3 & 4 Methylphenol		ND		13	42
3,3'-Dichlorobenzidine		ND	J	13	84
3-Nitroaniline		ND		13	210
4,6-Dinitro-2-methylphenol		~~ND~~	R	13	210
4-Bromophenyl phenyl ether		ND		13	42
4-Chloro-3-methylphenol		ND		13	84
4-Chloroaniline		ND		13	84
4-Chlorophenyl phenyl ether		ND		13	42
4-Nitroaniline		ND		13	210
4-Nitrophenol		ND	J	13	210
Acenaphthene		ND		13	42
Acenaphthylene		ND		13	42
Acetophenone		ND		13	42
Aniline		ND	J	13	42
Anthracene		ND		13	42
Atrazine		ND		13	42
Azobenzene		ND		13	42
Benzaldehyde		ND		13	42
Benzo[a]anthracene		ND		13	42
Benzo[a]pyrene		ND		13	42
Benzo[b]fluoranthene		ND		13	42
Benzo[g,h,i]perylene		ND		13	42
Benzo[k]fluoranthene		ND		13	42
Benzoic acid		~~ND~~	R	19	210

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Client: Olin Corporation

Job Number: 360-24327-1
Sdg Number: OCRI-07

Client Sample ID: **OC-SB-409-6.0/8.0-XXX**

Lab Sample ID: 360-24327-8
Client Matrix: Solid % Moisture: 21.3

Date Sampled: 08/26/2009 1705
Date Received: 08/27/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49174		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48703		Lab File ID:	J03012.D
Dilution:	1.0			Initial Weight/Volume:	30.23 g
Date Analyzed:	09/18/2009 1641			Final Weight/Volume:	1.0 mL
Date Prepared:	09/08/2009 1452			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		13	42
Benzyl alcohol		ND		36	84
Bis(2-chloroethoxy)methane		ND		13	42
Bis(2-chloroethyl)ether		ND		13	42
Bis(2-ethylhexyl) phthalate		ND		13	42
Butyl benzyl phthalate		ND		13	42
Caprolactam		ND		13	42
Carbazole		ND		13	42
Chrysene		ND		13	42
Dibenz(a,h)anthracene		ND	J	13	42
Dibenzofuran		ND		13	42
Diethyl phthalate		ND		13	42
Dimethyl phthalate		ND		13	42
Di-n-butyl phthalate		ND		37	42
Di-n-octyl phthalate		ND		21	42
Diphenyl oxide		ND		13	42
Diphenylamine		ND		13	42
Fluoranthene		ND		13	42
Fluorene		ND		13	42
Hexachlorobenzene		ND		13	42
Hexachlorobutadiene		ND		13	42
Hexachlorocyclopentadiene		ND		13	84
Hexachloroethane		ND		13	42
Indeno[1,2,3-cd]pyrene		ND		13	42
Isophorone		ND		13	42
Naphthalene		ND		13	100
Nitrobenzene		ND		13	42
N-Nitrosodimethylamine		ND		13	42
N-Nitrosodi-n-propylamine		ND		13	42
N-Nitrosodiphenylamine		ND		13	42
Pentachlorophenol		ND		13	42
Phenanthrene		ND		13	50
Phenol		ND		13	42
Pyrene		ND		13	42

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	74		30 - 130
2-Fluorophenol	71		30 - 130
2-Fluorobiphenyl	62		30 - 130
Nitrobenzene-d5	62		30 - 130
Phenol-d5	71		30 - 130
Terphenyl-d14	73		30 - 130

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Client: Olin Corporation

Job Number: 360-24327-1
Sdg Number: OCRI-07

Client Sample ID: **OC-SB-409-6.0/8.0-XXX**

Lab Sample ID: 360-24327-8
Client Matrix: Solid
% Moisture: 21.3

Date Sampled: 08/26/2009 1705
Date Received: 08/27/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49174		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48703		Lab File ID:	J03012.D
Dilution:	1.0			Initial Weight/Volume:	30.23 g
Date Analyzed:	09/18/2009 1641			Final Weight/Volume:	1.0 mL
Date Prepared:	09/08/2009 1452			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 4

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Unknown	9.72	84	T J
3910-35-8	1H-Indene, 2,3-dihydro-1,1,3-trimethyl-3	10.57	25	T J N
	Unknown	10.75	20	T J
	Unknown	14.70	38	T J

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Client: Olin Corporation

Job Number: 360-24327-1
Sdg Number: OCRI-07

Client Sample ID: **OC-SB-410-0.0/1.0-XXX**

Lab Sample ID: 360-24327-9
Client Matrix: Solid
% Moisture: 10.1

Date Sampled: 08/27/2009 1010
Date Received: 08/27/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48817		Instrument ID:	Inst. J
Preparation:	3550B	Prep Batch: 360-48744		Lab File ID:	J02912.D
Dilution:	10			Initial Weight/Volume:	100.01 g
Date Analyzed:	09/11/2009 0722			Final Weight/Volume:	1.0 mL
Date Prepared:	09/09/2009 1112			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodimethylamine		ND		13	56

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	80		30 - 130
2-Fluorobiphenyl	76		30 - 130
2-Fluorophenol	68		30 - 130
Nitrobenzene-d5	70		30 - 130
Phenol-d5	73		30 - 130
Terphenyl-d14	116		30 - 130

Client: Olin Corporation

Job Number: 360-24327-1
Sdg Number: OCRI-07

Client Sample ID: **OC-SB-410-0.0/1.0-XXX**

Lab Sample ID: 360-24327-9
Client Matrix: Solid % Moisture: 10.1

Date Sampled: 08/27/2009 1010
Date Received: 08/27/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49174		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48703		Lab File ID:	J03013.D
Dilution:	10			Initial Weight/Volume:	30.72 g
Date Analyzed:	09/18/2009 1708			Final Weight/Volume:	1.0 mL
Date Prepared:	09/08/2009 1452			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		110	360
1,2,4,5-Tetrachlorobenzene		ND		110	360
1,2,4-Trichlorobenzene		ND		110	360
1,2-Dichlorobenzene		ND		110	360
1,3-Dichlorobenzene		ND		110	360
1,4-Dichlorobenzene		ND		110	360
1-Methylnaphthalene		ND		110	360
2,2'-oxybis[1-chloropropane]		ND		110	360
2,3,4,6-Tetrachlorophenol		ND		110	360
2,4,5-Trichlorophenol		ND		110	360
2,4,6-Trichlorophenol		ND		110	360
2,4-Dichlorophenol		ND		110	360
2,4-Dimethylphenol		ND		140	360
2,4-Dinitrophenol		~~ND~~ R		110	360
2,4-Dinitrotoluene		ND		110	360
2,6-Dinitrotoluene		ND		110	360
2-Chloronaphthalene		ND		110	360
2-Chlorophenol		ND		110	360
2-Methylnaphthalene		ND		110	360
2-Methylphenol		ND		220	360
2-Nitroaniline		~~ND~~ R		110	1800
2-Nitrophenol		ND		110	360
3 & 4 Methylphenol		ND		110	360
3,3'-Dichlorobenzidine		ND J		110	720
3-Nitroaniline		ND		110	1800
4,6-Dinitro-2-methylphenol		~~ND~~ R		110	1800
4-Bromophenyl phenyl ether		ND		110	360
4-Chloro-3-methylphenol		ND		110	720
4-Chloroaniline		ND		110	720
4-Chlorophenyl phenyl ether		ND		110	360
4-Nitroaniline		ND		110	1800
4-Nitrophenol		ND J		110	1800
Acenaphthene		1200		110	360
Acenaphthylene		ND		110	360
Acetophenone		120 GB	J	110	360
Aniline		ND J		110	360
Anthracene		5300 EV		110	360
Atrazine		ND		110	360
Azobenzene		ND		110	360
Benzaldehyde		ND		110	360
Benzoic acid		ND		160	1800
Benzophenone		ND		110	360
Benzyl alcohol		ND		310	720
Bis(2-chloroethoxy)methane		ND		110	360
Bis(2-chloroethyl)ether		ND		110	360
Bis(2-ethylhexyl) phthalate		~~360~~ R		110	360

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Client: Olin Corporation

Job Number: 360-24327-1
Sdg Number: OCRI-07

Client Sample ID: **OC-SB-410-0.0/1.0-XXX**

Lab Sample ID: 360-24327-9
Client Matrix: Solid % Moisture: 10.1

Date Sampled: 08/27/2009 1010
Date Received: 08/27/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49174		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48703		Lab File ID:	J03013.D
Dilution:	10			Initial Weight/Volume:	30.72 g
Date Analyzed:	09/18/2009 1708			Final Weight/Volume:	1.0 mL
Date Prepared:	09/08/2009 1452			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Butyl benzyl phthalate		ND		110	360
Caprolactam		ND		110	360
Carbazole		2100		110	360
Dibenz(a,h)anthracene		4800	J	110	360
Dibenzofuran		430		110	360
Diethyl phthalate		ND		110	360
Dimethyl phthalate		ND		110	360
Di-n-butyl phthalate		ND		320	360
Di-n-octyl phthalate		ND		180	360
Diphenyl oxide		ND		110	360
Diphenylamine		ND		110	360
Fluorene		1400		110	360
Hexachlorobenzene		ND		110	360
Hexachlorobutadiene		ND		110	360
Hexachlorocyclopentadiene		ND		110	720
Hexachloroethane		ND		110	360
Isophorone		ND		110	360
Naphthalene		ND		110	870
Nitrobenzene		ND		110	360
N-Nitrosodimethylamine		ND		110	360
N-Nitrosodi-n-propylamine		ND		110	360
N-Nitrosodiphenylamine		ND		110	360
Pentachlorophenol		ND		110	360
Phenol		ND		110	360

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	72		30 - 130
2-Fluorophenol	73		30 - 130
2-Fluorobiphenyl	78		30 - 130
Nitrobenzene-d5	70		30 - 130
Phenol-d5	77		30 - 130
Terphenyl-d14	100		30 - 130

Client: Olin Corporation

Job Number: 360-24327-1
Sdg Number: OCRI-07

Client Sample ID: **OC-SB-410-0.0/1.0-XXX**

Lab Sample ID: 360-24327-9
Client Matrix: Solid % Moisture: 10.1

Date Sampled: 08/27/2009 1010
Date Received: 08/27/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49174		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48703		Lab File ID:	J03013.D
Dilution:	10			Initial Weight/Volume:	30.72 g
Date Analyzed:	09/18/2009 1708			Final Weight/Volume:	1.0 mL
Date Prepared:	09/08/2009 1452			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 9

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
203-64-5	4H-Cyclopenta[def]phenanthrene	11.52	2800	T J N
243-17-4	11H-Benzo[b]fluorene	12.66	400	T J N
238-84-6	11H-Benzo[a]fluorene	12.73	260	T J N
64401-21-4	Pyrene, 1,3-dimethyl-	13.08	160	T J N
82-5-3	7H-Benz[de]anthracen-7-one	13.15	180	T J N
243-46-9	Benzo[b]naphtho[2,3-d]thiophene	13.26	170	T J N
3351-28-8	Chrysene, 1-methyl-	13.89	140	T J N
205-99-2	Benz[e]acephenanthrylene	14.77	2300	T J N
239-85-0	13H-Dibenzo[a,h]fluorene	15.03	1400	T J N

Client: Olin Corporation

Job Number: 360-24327-1
Sdg Number: OCRI-07

Client Sample ID: **OC-SB-410-0.0/1.0-XXX**

Lab Sample ID: 360-24327-9
Client Matrix: Solid % Moisture: 10.1

Date Sampled: 08/27/2009 1010
Date Received: 08/27/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49174		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48703		Lab File ID:	J03014.D
Dilution:	50			Initial Weight/Volume:	30.72 g
Date Analyzed:	09/18/2009 1735	Run Type: DL		Final Weight/Volume:	1.0 mL
Date Prepared:	09/08/2009 1452			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzo[a]anthracene		28000		540	1800
Benzo[a]pyrene		19000		540	1800
Benzo[b]fluoranthene		23000		540	1800
Benzo[g,h,i]perylene		9300		540	1800
Benzo[k]fluoranthene		12000		540	1800
Chrysene		26000		540	1800
Indeno[1,2,3-cd]pyrene		10000		540	1800
Phenanthrene		15000		540	2200
Pyrene		29000		540	1800

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	0	X D	30 - 130
2-Fluorophenol	0	X D	30 - 130
2-Fluorobiphenyl	0	X D	30 - 130
Nitrobenzene-d5	0	X D	30 - 130
Phenol-d5	0	X D	30 - 130
Terphenyl-d14	0	X D	30 - 130

Client: Olin Corporation

Job Number: 360-24327-1
Sdg Number: OCRI-07

Client Sample ID: **OC-SB-410-0.0/1.0-XXX**

Lab Sample ID: 360-24327-9
Client Matrix: Solid % Moisture: 10.1

Date Sampled: 08/27/2009 1010
Date Received: 08/27/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49174		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48703		Lab File ID:	J03014.D
Dilution:	50			Initial Weight/Volume:	30.72 g
Date Analyzed:	09/18/2009 1735	Run Type: DL		Final Weight/Volume:	1.0 mL
Date Prepared:	09/08/2009 1452			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** **0**

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Tentatively Identified Compound		None	

Client: Olin Corporation

Job Number: 360-24327-1
Sdg Number: OCRI-07

Client Sample ID: **OC-SB-410-0.0/1.0-XXX**

Lab Sample ID: 360-24327-9
Client Matrix: Solid
% Moisture: 10.1

Date Sampled: 08/27/2009 1010
Date Received: 08/27/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49266		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48703		Lab File ID:	B10475.D
Dilution:	100			Initial Weight/Volume:	30.72 g
Date Analyzed:	09/21/2009 2340	Run Type: DL2		Final Weight/Volume:	1.0 mL
Date Prepared:	09/08/2009 1452			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Fluoranthene		42000		1100	3600

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	0	X D	30 - 130
2-Fluorophenol	0	X D	30 - 130
2-Fluorobiphenyl	0	X D	30 - 130
Nitrobenzene-d5	0	X D	30 - 130
Phenol-d5	0	X D	30 - 130
Terphenyl-d14	0	X D	30 - 130

Client: Olin Corporation

Job Number: 360-24327-1
Sdg Number: OCRI-07

Client Sample ID: **OC-SB-410-6.0/8.0-DUP**

Lab Sample ID: 360-24327-11
Client Matrix: Solid
% Moisture: 24.1

Date Sampled: 08/27/2009 1015
Date Received: 08/27/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48817		Instrument ID:	Inst_J
Preparation:	3550B	Prep Batch: 360-48744		Lab File ID:	J02903.D
Dilution:	1.0			Initial Weight/Volume:	100.30 g
Date Analyzed:	09/11/2009 0254			Final Weight/Volume:	1.0 mL
Date Prepared:	09/09/2009 1112			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodimethylamine		ND		1.5	6.6

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	64		30 - 130
2-Fluorobiphenyl	56		30 - 130
2-Fluorophenol	55		30 - 130
Nitrobenzene-d5	55		30 - 130
Phenol-d5	62		30 - 130
Terphenyl-d14	57		30 - 130

Client: Olin Corporation

Job Number: 360-24327-1
Sdg Number: OCRI-07

Client Sample ID: **OC-SB-410-6.0/8.0-DUP**

Lab Sample ID: 360-24327-11
Client Matrix: Solid % Moisture: 24.1

Date Sampled: 08/27/2009 1015
Date Received: 08/27/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49174		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48703		Lab File ID:	J03016.D
Dilution:	1.0			Initial Weight/Volume:	30.35 g
Date Analyzed:	09/18/2009 1829			Final Weight/Volume:	1.0 mL
Date Prepared:	09/08/2009 1452			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		13	43
1,2,4,5-Tetrachlorobenzene		ND		13	43
1,2,4-Trichlorobenzene		ND		13	43
1,2-Dichlorobenzene		ND		13	43
1,3-Dichlorobenzene		ND		13	43
1,4-Dichlorobenzene		ND		13	43
1-Methylnaphthalene		ND		13	43
2,2'-oxybis[1-chloropropane]		ND		13	43
2,3,4,6-Tetrachlorophenol		ND		13	43
2,4,5-Trichlorophenol		ND		13	43
2,4,6-Trichlorophenol		ND		13	43
2,4-Dichlorophenol		ND		13	43
2,4-Dimethylphenol		ND		17	43
2,4-Dinitrophenol		~~ND~~ R		13	43
2,4-Dinitrotoluene		ND		13	43
2,6-Dinitrotoluene		ND		13	43
2-Chloronaphthalene		ND		13	43
2-Chlorophenol		ND		13	43
2-Methylnaphthalene		ND		13	43
2-Methylphenol		ND		26	43
2-Nitroaniline		~~ND~~ R		13	220
2-Nitrophenol		ND		13	43
3 & 4 Methylphenol		ND		13	43
3,3'-Dichlorobenzidine		ND J		13	87
3-Nitroaniline		ND		13	220
4,6-Dinitro-2-methylphenol		~~ND~~ R		13	220
4-Bromophenyl phenyl ether		ND		13	43
4-Chloro-3-methylphenol		ND		13	87
4-Chloroaniline		ND		13	87
4-Chlorophenyl phenyl ether		ND		13	43
4-Nitroaniline		ND		13	220
4-Nitrophenol		ND J		13	220
Acenaphthene		ND		13	43
Acenaphthylene		ND		13	43
Acetophenone		ND		13	43
Aniline		ND J		13	43
Anthracene		ND		13	43
Atrazine		ND		13	43
Azobenzene		ND		13	43
Benzaldehyde		ND		13	43
Benzo[a]anthracene		20	J	13	43
Benzo[a]pyrene		23	J	13	43
Benzo[b]fluoranthene		23	J	13	43
Benzo[g,h,i]perylene		ND		13	43
Benzo[k]fluoranthene		ND		13	43
Benzoic acid		~~ND~~ R		20	220

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Client: Olin Corporation

Job Number: 360-24327-1
Sdg Number: OCRI-07

Client Sample ID: **OC-SB-410-6.0/8.0-DUP**

Lab Sample ID: 360-24327-11
Client Matrix: Solid
% Moisture: 24.1

Date Sampled: 08/27/2009 1015
Date Received: 08/27/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49174		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48703		Lab File ID:	J03016.D
Dilution:	1.0			Initial Weight/Volume:	30.35 g
Date Analyzed:	09/18/2009 1829			Final Weight/Volume:	1.0 mL
Date Prepared:	09/08/2009 1452			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		13	43
Benzyl alcohol		ND		37	87
Bis(2-chloroethoxy)methane		ND		13	43
Bis(2-chloroethyl)ether		ND		13	43
Bis(2-ethylhexyl) phthalate		ND		13	43
Butyl benzyl phthalate		ND		13	43
Caprolactam		ND		13	43
Carbazole		ND		13	43
Chrysene		20	J	13	43
Dibenz(a,h)anthracene		ND		13	43
Dibenzofuran		ND		13	43
Diethyl phthalate		ND		13	43
Dimethyl phthalate		ND		13	43
Di-n-butyl phthalate		ND		38	43
Di-n-octyl phthalate		ND		22	43
Diphenyl oxide		ND		13	43
Diphenylamine		ND		13	43
Fluoranthene		27	J	13	43
Fluorene		ND		13	43
Hexachlorobenzene		ND		13	43
Hexachlorobutadiene		ND		13	43
Hexachlorocyclopentadiene		ND		13	87
Hexachloroethane		ND		13	43
Indeno[1,2,3-cd]pyrene		ND		13	43
Isophorone		ND		13	43
Naphthalene		ND		13	100
Nitrobenzene		ND		13	43
N-Nitrosodimethylamine		ND		13	43
N-Nitrosodi-n-propylamine		ND		13	43
N-Nitrosodiphenylamine		ND		13	43
Pentachlorophenol		ND		13	43
Phenanthrene		ND		13	52
Phenol		ND		13	43
Pyrene		21	J	13	43

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	72		30 - 130
2-Fluorophenol	74		30 - 130
2-Fluorobiphenyl	65		30 - 130
Nitrobenzene-d5	67		30 - 130
Phenol-d5	74		30 - 130
Terphenyl-d14	68		30 - 130

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Client: Olin Corporation

Job Number: 360-24327-1
Sdg Number: OCRI-07

Client Sample ID: **OC-SB-410-6.0/8.0-DUP**

Lab Sample ID: 360-24327-11
Client Matrix: Solid % Moisture: 24.1

Date Sampled: 08/27/2009 1015
Date Received: 08/27/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49174		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48703		Lab File ID:	J03016.D
Dilution:	1.0			Initial Weight/Volume:	30.35 g
Date Analyzed:	09/18/2009 1829			Final Weight/Volume:	1.0 mL
Date Prepared:	09/08/2009 1452			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 4

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
615-22-5	Benzothiazole, 2-(methylthio)-	10.10	33	T J N
3910-35-8	1H-Indene, 2,3-dihydro-1,1,3-trimethyl-3	10.57	22	T J N
10544-50-0	Cyclic octaatomic sulfur	12.12	20	T J N
111-2-4	2,6,10,14,18,22-Tetracosahexaene, 2,6,10	14.47	64	T J N

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Client: Olin Corporation

Job Number: 360-24327-1
Sdg Number: OCRI-07

Client Sample ID: **OC-SB-410-6.0/8.0-XXX**

Lab Sample ID: 360-24327-12
Client Matrix: Solid % Moisture: 23.4

Date Sampled: 08/27/2009 1015
Date Received: 08/27/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48817		Instrument ID:	Inst. J
Preparation:	3550B	Prep Batch: 360-48744		Lab File ID:	J02898.D
Dilution:	1.0			Initial Weight/Volume:	100.47 g
Date Analyzed:	09/11/2009 0024			Final Weight/Volume:	1.0 mL
Date Prepared:	09/09/2009 1112			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodimethylamine		ND		1.5	6.5

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	79		30 - 130
2-Fluorobiphenyl	65		30 - 130
2-Fluorophenol	66		30 - 130
Nitrobenzene-d5	65		30 - 130
Phenol-d5	74		30 - 130
Terphenyl-d14	66		30 - 130

Client: Olin Corporation

Job Number: 360-24327-1
Sdg Number: OCRI-07

Client Sample ID: **OC-SB-410-6.0/8.0-XXX**

Lab Sample ID: 360-24327-12
Client Matrix: Solid % Moisture: 23.4

Date Sampled: 08/27/2009 1015
Date Received: 08/27/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49174		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48703		Lab File ID:	J03017.D
Dilution:	1.0			Initial Weight/Volume:	30.74 g
Date Analyzed:	09/18/2009 1856			Final Weight/Volume:	1.0 mL
Date Prepared:	09/08/2009 1452			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		13	42
1,2,4,5-Tetrachlorobenzene		ND		13	42
1,2,4-Trichlorobenzene		ND		13	42
1,2-Dichlorobenzene		ND		13	42
1,3-Dichlorobenzene		ND		13	42
1,4-Dichlorobenzene		ND		13	42
1-Methylnaphthalene		ND		13	42
2,2'-oxybis[1-chloropropane]		ND		13	42
2,3,4,6-Tetrachlorophenol		ND		13	42
2,4,5-Trichlorophenol		ND		13	42
2,4,6-Trichlorophenol		ND		13	42
2,4-Dichlorophenol		ND		13	42
2,4-Dimethylphenol		ND		17	42
2,4-Dinitrophenol		~~ND~~ R		13	42
2,4-Dinitrotoluene		ND		13	42
2,6-Dinitrotoluene		ND		13	42
2-Chloronaphthalene		ND		13	42
2-Chlorophenol		ND		13	42
2-Methylnaphthalene		ND		13	42
2-Methylphenol		ND		25	42
2-Nitroaniline		~~ND~~ R		13	210
2-Nitrophenol		ND		13	42
3 & 4 Methylphenol		ND		13	42
3,3'-Dichlorobenzidine		ND J	✓	13	85
3-Nitroaniline		ND		13	210
4,6-Dinitro-2-methylphenol		~~ND~~ R		13	210
4-Bromophenyl phenyl ether		ND		13	42
4-Chloro-3-methylphenol		ND		13	85
4-Chloroaniline		ND		13	85
4-Chlorophenyl phenyl ether		ND		13	42
4-Nitroaniline		ND		13	210
4-Nitrophenol		ND J		13	210
Acenaphthene		ND		13	42
Acenaphthylene		ND		13	42
Acetophenone		ND		13	42
Aniline		ND J	✓	13	42
Anthracene		ND		13	42
Atrazine		ND		13	42
Azobenzene		ND		13	42
Benzaldehyde		ND		13	42
Benzo[a]anthracene		25	J	13	42
Benzo[a]pyrene		25	J	13	42
Benzo[b]fluoranthene		29	J	13	42
Benzo[g,h,i]perylene		ND		13	42
Benzo[k]fluoranthene		ND		13	42
Benzoic acid		~~ND~~ R		19	210

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Client: Olin Corporation

Job Number: 360-24327-1
Sdg Number: OCRI-07

Client Sample ID: **OC-SB-410-6.0/8.0-XXX**

Lab Sample ID: 360-24327-12
Client Matrix: Solid % Moisture: 23.4

Date Sampled: 08/27/2009 1015
Date Received: 08/27/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49174		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48703		Lab File ID:	J03017.D
Dilution:	1.0			Initial Weight/Volume:	30.74 g
Date Analyzed:	09/18/2009 1856			Final Weight/Volume:	1.0 mL
Date Prepared:	09/08/2009 1452			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		13	42
Benzyl alcohol		ND		36	85
Bis(2-chloroethoxy)methane		ND		13	42
Bis(2-chloroethyl)ether		ND		13	42
Bis(2-ethylhexyl) phthalate		ND		13	42
Butyl benzyl phthalate		ND		13	42
Caprolactam		ND		13	42
Carbazole		ND		13	42
Chrysene		23	J	13	42
Dibenz(a,h)anthracene		ND J		13	42
Dibenzofuran		ND		13	42
Diethyl phthalate		ND		13	42
Dimethyl phthalate		ND		13	42
Di-n-butyl phthalate		ND		37	42
Di-n-octyl phthalate		ND		21	42
Diphenyl oxide		ND		13	42
Diphenylamine		ND		13	42
Fluoranthene		41	J	13	42
Fluorene		ND		13	42
Hexachlorobenzene		ND		13	42
Hexachlorobutadiene		ND		13	42
Hexachlorocyclopentadiene		ND		13	85
Hexachloroethane		ND		13	42
Indeno[1,2,3-cd]pyrene		13	J	13	42
Isophorone		ND		13	42
Naphthalene		ND		13	100
Nitrobenzene		ND		13	42
N-Nitrosodimethylamine		ND		13	42
N-Nitrosodi-n-propylamine		ND		13	42
N-Nitrosodiphenylamine		ND		13	42
Pentachlorophenol		ND		13	42
Phenanthrene		17	J	13	51
Phenol		ND		13	42
Pyrene		29	J	13	42

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	73		30 - 130
2-Fluorophenol	79		30 - 130
2-Fluorobiphenyl	67		30 - 130
Nitrobenzene-d5	68		30 - 130
Phenol-d5	78		30 - 130
Terphenyl-d14	64		30 - 130

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Client: Olin Corporation

Job Number: 360-24327-1
Sdg Number: OCRI-07

Client Sample ID: **OC-SB-410-6.0/8.0-XXX**

Lab Sample ID: 360-24327-12
Client Matrix: Solid % Moisture: 23.4

Date Sampled: 08/27/2009 1015
Date Received: 08/27/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49174		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48703		Lab File ID:	J03017.D
Dilution:	1.0			Initial Weight/Volume:	30.74 g
Date Analyzed:	09/18/2009 1856			Final Weight/Volume:	1.0 mL
Date Prepared:	09/08/2009 1452			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 4

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
615-22-5	Benzothiazole, 2-(methylthio)-	10.10	29	T J N
3910-35-8	1H-Indene, 2,3-dihydro-1,1,3-trimethyl-3	10.57	19	T J N
10544-50-0	Cyclic octaatomic sulfur	12.12	20	T J N
7683-64-9	Squalene	14.47	40	T J N

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Client: Olin Corporation

Job Number: 360-24327-1
Sdg Number: OCRI-07

Client Sample ID: **OC-SB-411-0.0/1.0-XXX**

Lab Sample ID: 360-24327-13
Client Matrix: Solid % Moisture: 6.7

Date Sampled: 08/27/2009 1020
Date Received: 08/27/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48817		Instrument ID:	Inst. J
Preparation:	3550B	Prep Batch: 360-48744		Lab File ID:	J02907.D
Dilution:	1.0			Initial Weight/Volume:	100.31 g
Date Analyzed:	09/11/2009 0453			Final Weight/Volume:	1.0 mL
Date Prepared:	09/09/2009 1112			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodimethylamine		ND		1.2	5.3

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	82		30 - 130
2-Fluorobiphenyl	65		30 - 130
2-Fluorophenol	61		30 - 130
Nitrobenzene-d5	63		30 - 130
Phenol-d5	71		30 - 130
Terphenyl-d14	73		30 - 130

Client: Olin Corporation

Job Number: 360-24327-1
Sdg Number: OCRI-07

Client Sample ID: **OC-SB-411-0.0/1.0-XXX**

Lab Sample ID: 360-24327-13
Client Matrix: Solid % Moisture: 6.7

Date Sampled: 08/27/2009 1020
Date Received: 08/27/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method: 8270C LL
Preparation: 3546
Dilution: 1.0
Date Analyzed: 09/18/2009 2018
Date Prepared: 09/08/2009 1452

Analysis Batch: 360-49174
Prep Batch: 360-48703

Instrument ID: Inst. J
Lab File ID: J03020.D
Initial Weight/Volume: 30.08 g
Final Weight/Volume: 1.0 mL
Injection Volume: 1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		11	36
1,2,4,5-Tetrachlorobenzene		ND		11	36
1,2,4-Trichlorobenzene		ND		11	36
1,2-Dichlorobenzene		ND		11	36
1,3-Dichlorobenzene		ND		11	36
1,4-Dichlorobenzene		ND		11	36
1-Methylnaphthalene		ND		11	36
2,2'-oxybis[1-chloropropane]		ND		11	36
2,3,4,6-Tetrachlorophenol		ND		11	36
2,4,5-Trichlorophenol		ND		11	36
2,4,6-Trichlorophenol		ND		11	36
2,4-Dichlorophenol		ND		11	36
2,4-Dimethylphenol		ND		14	36
2,4-Dinitrophenol		~~ND~~ R		11	36
2,4-Dinitrotoluene		ND		11	36
2,6-Dinitrotoluene		ND		11	36
2-Chloronaphthalene		ND		11	36
2-Chlorophenol		ND		11	36
2-Methylnaphthalene		ND		11	36
2-Methylphenol		ND		21	36
2-Nitroaniline		~~ND~~ R		11	180
2-Nitrophenol		ND		11	36
3 & 4 Methylphenol		ND		11	36
3,3'-Dichlorobenzidine		ND J	✓	11	71
3-Nitroaniline		ND		11	180
4,6-Dinitro-2-methylphenol		~~ND~~ R		11	180
4-Bromophenyl phenyl ether		ND		11	36
4-Chloro-3-methylphenol		ND		11	71
4-Chloroaniline		ND		11	71
4-Chlorophenyl phenyl ether		ND		11	36
4-Nitroaniline		ND		11	180
4-Nitrophenol		ND J		11	180
Acenaphthene		ND		11	36
Acenaphthylene		ND		11	36
Acetophenone		ND		11	36
Aniline		ND J	✓	11	36
Anthracene		ND		11	36
Atrazine		ND		11	36
Azobenzene		ND		11	36
Benzaldehyde		ND		11	36
Benzo[a]anthracene		ND		11	36
Benzo[a]pyrene		11	J	11	36
Benzo[b]fluoranthene		ND		11	36
Benzo[g,h,i]perylene		ND		11	36
Benzo[k]fluoranthene		ND		11	36
Benzoic acid		~~110~~ R	~~J B~~	16	180

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Client: Olin Corporation

Job Number: 360-24327-1
Sdg Number: OCRI-07

Client Sample ID: **OC-SB-411-0.0/1.0-XXX**

Lab Sample ID: 360-24327-13
Client Matrix: Solid
% Moisture: 6.7

Date Sampled: 08/27/2009 1020
Date Received: 08/27/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49174		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48703		Lab File ID:	J03020.D
Dilution:	1.0			Initial Weight/Volume:	30.08 g
Date Analyzed:	09/18/2009 2018			Final Weight/Volume:	1.0 mL
Date Prepared:	09/08/2009 1452			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		11	36
Benzyl alcohol		ND		30	71
Bis(2-chloroethoxy)methane		ND		11	36
Bis(2-chloroethyl)ether		ND		11	36
Bis(2-ethylhexyl) phthalate		330	EB	11	36
Butyl benzyl phthalate		ND		11	36
Caprolactam		ND		11	36
Carbazole		ND		11	36
Chrysene		ND		11	36
Dibenz(a,h)anthracene		ND	J	11	36
Dibenzofuran		ND		11	36
Diethyl phthalate		ND		11	36
Dimethyl phthalate		ND		11	36
Di-n-butyl phthalate		ND		31	36
Di-n-octyl phthalate		ND		18	36
Diphenyl oxide		ND		11	36
Diphenylamine		ND		11	36
Fluoranthene		ND		11	36
Fluorene		ND		11	36
Hexachlorobenzene		ND		11	36
Hexachlorobutadiene		ND		11	36
Hexachlorocyclopentadiene		ND		11	71
Hexachloroethane		ND		11	36
Indeno[1,2,3-cd]pyrene		ND		11	36
Isophorone		ND		11	36
Naphthalene		ND		11	86
Nitrobenzene		ND		11	36
N-Nitrosodimethylamine		ND		11	36
N-Nitrosodi-n-propylamine		ND		11	36
N-Nitrosodiphenylamine		ND		11	36
Pentachlorophenol		ND		11	36
Phenanthrene		ND		11	43
Phenol		ND		11	36
Pyrene		ND		11	36

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	65		30 - 130
2-Fluorophenol	64		30 - 130
2-Fluorobiphenyl	54		30 - 130
Nitrobenzene-d5	56		30 - 130
Phenol-d5	64		30 - 130
Terphenyl-d14	55		30 - 130

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Client: Olin Corporation

Job Number: 360-24327-1
Sdg Number: OCRI-07

Client Sample ID: **OC-SB-411-0.0/1.0-XXX**

Lab Sample ID: 360-24327-13
Client Matrix: Solid % Moisture: 6.7

Date Sampled: 08/27/2009 1020
Date Received: 08/27/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49174		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48703		Lab File ID:	J03020.D
Dilution:	1.0			Initial Weight/Volume:	30.08 g
Date Analyzed:	09/18/2009 2018			Final Weight/Volume:	1.0 mL
Date Prepared:	09/08/2009 1452			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 8

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
3187-58-4	Benzoic acid, 2,4-dihydroxy-6-methyl-, m	10.28	130	T J N
295-65-8	Cyclohexadecane	12.81	18	T J N
297-3-0	Cyclotetracosane	14.12	150	T J N
6920-24-7	Hexadecane-1,2-diol	14.45	120	T J N
7390-81-0	Oxirane, hexadecyl-	15.17	42	T J N
630-2-4	Octacosane	15.33	53	T J N
	Unknown	15.37	73	T J
	Unknown	16.09	350	T J

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Client: Olin Corporation

Job Number: 360-24327-1
Sdg Number: OCRI-07

Client Sample ID: **OC-SB-411-4.7/6.7-XXX**

Lab Sample ID: 360-24327-14
Client Matrix: Solid % Moisture: 5.2

Date Sampled: 08/27/2009 1035
Date Received: 08/27/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48817		Instrument ID:	Inst. J
Preparation:	3550B	Prep Batch: 360-48744		Lab File ID:	J02904.D
Dilution:	1.0			Initial Weight/Volume:	100.28 g
Date Analyzed:	09/11/2009 0324			Final Weight/Volume:	1.0 mL
Date Prepared:	09/09/2009 1112			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodimethylamine		ND		1.2	5.3

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	78		30 - 130
2-Fluorobiphenyl	68		30 - 130
2-Fluorophenol	64		30 - 130
Nitrobenzene-d5	68		30 - 130
Phenol-d5	74		30 - 130
Terphenyl-d14	71		30 - 130

Client: Olin Corporation

Job Number: 360-24327-1
Sdg Number: OCRI-07

Client Sample ID: **OC-SB-411-4.7/6.7-XXX**

Lab Sample ID: 360-24327-14
Client Matrix: Solid
% Moisture: 5.2

Date Sampled: 08/27/2009 1035
Date Received: 08/27/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49174		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48703		Lab File ID:	J03021.D
Dilution:	1.0			Initial Weight/Volume:	30.85 g
Date Analyzed:	09/18/2009 2045			Final Weight/Volume:	1.0 mL
Date Prepared:	09/08/2009 1452			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		10	34
1,2,4,5-Tetrachlorobenzene		ND		10	34
1,2,4-Trichlorobenzene		ND		10	34
1,2-Dichlorobenzene		ND		10	34
1,3-Dichlorobenzene		ND		10	34
1,4-Dichlorobenzene		ND		10	34
1-Methylnaphthalene		ND		10	34
2,2'-oxybis[1-chloropropane]		ND		10	34
2,3,4,6-Tetrachlorophenol		ND		10	34
2,4,5-Trichlorophenol		ND		10	34
2,4,6-Trichlorophenol		ND		10	34
2,4-Dichlorophenol		ND		10	34
2,4-Dimethylphenol		ND		13	34
2,4-Dinitrophenol		~~ND~~	R	10	34
2,4-Dinitrotoluene		ND		10	34
2,6-Dinitrotoluene		ND		10	34
2-Chloronaphthalene		ND		10	34
2-Chlorophenol		ND		10	34
2-Methylnaphthalene		ND		10	34
2-Methylphenol		ND		21	34
2-Nitroaniline		~~ND~~	R	10	170
2-Nitrophenol		ND		10	34
3 & 4 Methylphenol		ND		10	34
3,3'-Dichlorobenzidine		ND	J	10	68
3-Nitroaniline		~~ND~~		10	170
4,6-Dinitro-2-methylphenol		~~ND~~	R	10	170
4-Bromophenyl phenyl ether		ND		10	34
4-Chloro-3-methylphenol		ND		10	68
4-Chloroaniline		ND		10	68
4-Chlorophenyl phenyl ether		ND		10	34
4-Nitroaniline		ND		10	170
4-Nitrophenol		ND		10	170
Acenaphthene		ND		10	34
Acenaphthylene		ND		10	34
Acetophenone		ND		10	34
Aniline		ND	J	10	34
Anthracene		ND		10	34
Atrazine		ND		10	34
Azobenzene		ND		10	34
Benzaldehyde		ND		10	34
Benzo[a]anthracene		ND		10	34
Benzo[a]pyrene		ND		10	34
Benzo[b]fluoranthene		ND		10	34
Benzo[g,h,i]perylene		ND		10	34
Benzo[k]fluoranthene		ND		10	34
Benzoic acid		~~ND~~	R	15	170

Client: Olin Corporation

Job Number: 360-24327-1
Sdg Number: OCRI-07

Client Sample ID: **OC-SB-411-4.7/6.7-XXX**

Lab Sample ID: 360-24327-14
Client Matrix: Solid % Moisture: 5.2

Date Sampled: 08/27/2009 1035
Date Received: 08/27/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49174		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48703		Lab File ID:	J03021.D
Dilution:	1.0			Initial Weight/Volume:	30.85 g
Date Analyzed:	09/18/2009 2045			Final Weight/Volume:	1.0 mL
Date Prepared:	09/08/2009 1452			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		10	34
Benzyl alcohol		ND		29	68
Bis(2-chloroethoxy)methane		ND		10	34
Bis(2-chloroethyl)ether		ND		10	34
Bis(2-ethylhexyl) phthalate		670	B3	10	34
Butyl benzyl phthalate		ND		10	34
Caprolactam		ND		10	34
Carbazole		ND		10	34
Chrysene		ND		10	34
Dibenz(a,h)anthracene		ND	J	10	34
Dibenzofuran		ND		10	34
Diethyl phthalate		ND		10	34
Dimethyl phthalate		ND		10	34
Di-n-butyl phthalate		ND		30	34
Di-n-octyl phthalate		ND		17	34
Diphenyl oxide		ND		10	34
Diphenylamine		ND		10	34
Fluoranthene		ND		10	34
Fluorene		ND		10	34
Hexachlorobenzene		ND		10	34
Hexachlorobutadiene		ND		10	34
Hexachlorocyclopentadiene		ND		10	68
Hexachloroethane		ND		10	34
Indeno[1,2,3-cd]pyrene		ND		10	34
Isophorone		ND		10	34
Naphthalene		ND		10	82
Nitrobenzene		ND		10	34
N-Nitrosodimethylamine		ND		10	34
N-Nitrosodi-n-propylamine		ND		10	34
N-Nitrosodiphenylamine		ND		10	34
Pentachlorophenol		ND		10	34
Phenanthrene		ND		10	41
Phenol		ND		10	34
Pyrene		ND		10	34

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	67		30 - 130
2-Fluorophenol	69		30 - 130
2-Fluorobiphenyl	55		30 - 130
Nitrobenzene-d5	61		30 - 130
Phenol-d5	69		30 - 130
Terphenyl-d14	57		30 - 130

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Client: Olin Corporation

Job Number: 360-24327-1
Sdg Number: OCRI-07

Client Sample ID: **OC-SB-411-4.7/6.7-XXX**

Lab Sample ID: 360-24327-14
Client Matrix: Solid % Moisture: 5.2

Date Sampled: 08/27/2009 1035
Date Received: 08/27/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49174		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48703		Lab File ID:	J03021.D
Dilution:	1.0			Initial Weight/Volume:	30.85 g
Date Analyzed:	09/18/2009 2045			Final Weight/Volume:	1.0 mL
Date Prepared:	09/08/2009 1452			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 3

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
77899-3-7	1-Heneicosyl formate	13.48	58	T J N
1599-67-3	1-Docosene	14.12	170	T J N
1000140-7-7	1,4-Dimethyl-8-isopropylidenetricyclo[5.	16.20	120	T J N

Client: Olin Corporation

Job Number: 360-24327-1
Sdg Number: OCRI-07

Client Sample ID: **OC-SB-418-0.0/1.0-XXX**

Lab Sample ID: 360-24327-15
Client Matrix: Solid % Moisture: 7.8

Date Sampled: 08/27/2009 0825
Date Received: 08/27/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49174		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48703		Lab File ID:	J03022.D
Dilution:	1.0			Initial Weight/Volume:	30.34 g
Date Analyzed:	09/18/2009 2113			Final Weight/Volume:	1.0 mL
Date Prepared:	09/08/2009 1452			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		11	36
1,2,4,5-Tetrachlorobenzene		ND		11	36
1,2,4-Trichlorobenzene		ND		11	36
1,2-Dichlorobenzene		ND		11	36
1,3-Dichlorobenzene		ND		11	36
1,4-Dichlorobenzene		ND		11	36
1-Methylnaphthalene		ND		11	36
2,2'-oxybis[1-chloropropane]		ND		11	36
2,3,4,6-Tetrachlorophenol		ND		11	36
2,4,5-Trichlorophenol		ND		11	36
2,4,6-Trichlorophenol		ND		11	36
2,4-Dichlorophenol		ND		11	36
2,4-Dimethylphenol		ND		14	36
2,4-Dinitrophenol		~~ND~~ R		11	36
2,4-Dinitrotoluene		ND		11	36
2,6-Dinitrotoluene		ND		11	36
2-Chloronaphthalene		ND		11	36
2-Chlorophenol		ND		11	36
2-Methylnaphthalene		ND		11	36
2-Methylphenol		ND		21	36
2-Nitroaniline		~~ND~~ R		11	180
2-Nitrophenol		ND		11	36
3 & 4 Methylphenol		ND		11	36
3,3'-Dichlorobenzidine		ND J		11	72
3-Nitroaniline		ND		11	180
4,6-Dinitro-2-methylphenol		~~ND~~ R		11	180
4-Bromophenyl phenyl ether		ND		11	36
4-Chloro-3-methylphenol		ND		11	72
4-Chloroaniline		ND		11	72
4-Chlorophenyl phenyl ether		ND		11	36
4-Nitroaniline		ND		11	180
4-Nitrophenol		ND J		11	180
Acenaphthene		ND		11	36
Acenaphthylene		ND		11	36
Acetophenone		ND		11	36
Aniline		ND J		11	36
Anthracene		ND		11	36
Atrazine		ND		11	36
Azobenzene		ND		11	36
Benzaldehyde		ND		11	36
Benzo[a]anthracene		35	J	11	36
Benzo[a]pyrene		41		11	36
Benzo[b]fluoranthene		40		11	36
Benzo[g,h,i]perylene		36		11	36
Benzo[k]fluoranthene		23	J	11	36
Benzoic acid		~~82~~ R	~~J B~~	16	180

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Client: Olin Corporation

Job Number: 360-24327-1
Sdg Number: OCRI-07

Client Sample ID: **OC-SB-418-0.0/1.0-XXX**

Lab Sample ID: 360-24327-15
Client Matrix: Solid % Moisture: 7.8

Date Sampled: 08/27/2009 0825
Date Received: 08/27/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49174		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48703		Lab File ID:	J03022.D
Dilution:	1.0			Initial Weight/Volume:	30.34 g
Date Analyzed:	09/18/2009 2113			Final Weight/Volume:	1.0 mL
Date Prepared:	09/08/2009 1452			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		11	36
Benzyl alcohol		ND		30	72
Bis(2-chloroethoxy)methane		ND		11	36
Bis(2-chloroethyl)ether		ND		11	36
Bis(2-ethylhexyl) phthalate		270	EB	11	36
Butyl benzyl phthalate		ND		11	36
Caprolactam		ND		11	36
Carbazole		ND		11	36
Chrysene		30	J	11	36
Dibenz(a,h)anthracene		15	J	11	36
Dibenzofuran		ND		11	36
Diethyl phthalate		ND		11	36
Dimethyl phthalate		ND		11	36
Di-n-butyl phthalate		ND		31	36
Di-n-octyl phthalate		ND		18	36
Diphenyl oxide		ND		11	36
Fluoranthene		52		11	36
Fluorene		ND		11	36
Hexachlorobenzene		ND		11	36
Hexachlorobutadiene		ND		11	36
Hexachlorocyclopentadiene		ND		11	72
Hexachloroethane		ND		11	36
Indeno[1,2,3-cd]pyrene		25	J	11	36
Isophorone		ND		11	36
Naphthalene		ND		11	86
Nitrobenzene		ND		11	36
N-Nitrosodimethylamine		ND		11	36
N-Nitrosodi-n-propylamine		ND		11	36
N-Nitrosodiphenylamine		ND		11	36
Pentachlorophenol		ND		11	36
Phenanthrene		15	J	11	43
Phenol		ND		11	36
Pyrene		48		11	36

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	77		30 - 130
2-Fluorobiphenyl	68		30 - 130
2-Fluorophenol	79		30 - 130
Nitrobenzene-d5	70		30 - 130
Phenol-d5	78		30 - 130
Terphenyl-d14	69		30 - 130

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Client: Olin Corporation

Job Number: 360-24327-1
Sdg Number: OCRI-07

Client Sample ID: **OC-SB-418-0.0/1.0-XXX**

Lab Sample ID: 360-24327-15
Client Matrix: Solid % Moisture: 7.8

Date Sampled: 08/27/2009 0825
Date Received: 08/27/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49174		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48703		Lab File ID:	J03022.D
Dilution:	1.0			Initial Weight/Volume:	30.34 g
Date Analyzed:	09/18/2009 2113			Final Weight/Volume:	1.0 mL
Date Prepared:	09/08/2009 1452			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 2

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
297-3-0	Cyclotetracosane	14.12	49	T J N
26603-23-6	p,p"-Dioctyldiphenylamine	14.96	200	T J N

Client: Olin Corporation

Job Number: 360-24327-1
Sdg Number: OCRI-07

Client Sample ID: **OC-SB-418-8/10-XXX**

Lab Sample ID: 360-24327-17
Client Matrix: Solid
% Moisture: 9.1

Date Sampled: 08/27/2009 0835
Date Received: 08/27/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49174		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48703		Lab File ID:	J03024.D
Dilution:	1.0			Initial Weight/Volume:	30.33 g
Date Analyzed:	09/18/2009 2207			Final Weight/Volume:	1.0 mL
Date Prepared:	09/08/2009 1452			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		11	36
1,2,4,5-Tetrachlorobenzene		ND		11	36
1,2,4-Trichlorobenzene		ND		11	36
1,2-Dichlorobenzene		ND		11	36
1,3-Dichlorobenzene		ND		11	36
1,4-Dichlorobenzene		ND		11	36
1-Methylnaphthalene		ND		11	36
2,2'-oxybis[1-chloropropane]		ND		11	36
2,3,4,6-Tetrachlorophenol		ND		11	36
2,4,5-Trichlorophenol		ND		11	36
2,4,6-Trichlorophenol		ND		11	36
2,4-Dichlorophenol		ND		11	36
2,4-Dimethylphenol		ND		14	36
2,4-Dinitrophenol		~~ND~~ R		11	36
2,4-Dinitrotoluene		ND		11	36
2,6-Dinitrotoluene		ND		11	36
2-Chloronaphthalene		ND		11	36
2-Chlorophenol		ND		11	36
2-Methylnaphthalene		ND		11	36
2-Methylphenol		ND		22	36
2-Nitroaniline		~~ND~~ R		11	180
2-Nitrophenol		ND		11	36
3 & 4 Methylphenol		ND		11	36
3,3'-Dichlorobenzidine		ND J	✓	11	73
3-Nitroaniline		ND		11	180
4,6-Dinitro-2-methylphenol		~~ND~~ R		11	180
4-Bromophenyl phenyl ether		ND		11	36
4-Chloro-3-methylphenol		ND		11	73
4-Chloroaniline		ND		11	73
4-Chlorophenyl phenyl ether		ND		11	36
4-Nitroaniline		ND		11	180
4-Nitrophenol		ND J		11	180
Acenaphthene		ND		11	36
Acenaphthylene		ND		11	36
Acetophenone		ND		11	36
Aniline		ND J	✓	11	36
Anthracene		ND		11	36
Atrazine		ND		11	36
Azobenzene		ND		11	36
Benzaldehyde		ND		11	36
Benzo[a]anthracene		ND		11	36
Benzo[a]pyrene		ND		11	36
Benzo[b]fluoranthene		ND		11	36
Benzo[g,h,i]perylene		ND		11	36
Benzo[k]fluoranthene		ND		11	36
Benzoic acid		~~ND~~ R		16	180

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Client: Olin Corporation

Job Number: 360-24327-1
Sdg Number: OCRI-07

Client Sample ID: OC-SB-418-8/10-XXX

Lab Sample ID: 360-24327-17
Client Matrix: Solid % Moisture: 9.1

Date Sampled: 08/27/2009 0835
Date Received: 08/27/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49174		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48703		Lab File ID:	J03024.D
Dilution:	1.0			Initial Weight/Volume:	30.33 g
Date Analyzed:	09/18/2009 2207			Final Weight/Volume:	1.0 mL
Date Prepared:	09/08/2009 1452			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		11	36
Benzyl alcohol		ND		31	73
Bis(2-chloroethoxy)methane		ND		11	36
Bis(2-chloroethyl)ether		ND		11	36
Bis(2-ethylhexyl) phthalate		ND		11	36
Butyl benzyl phthalate		ND		11	36
Caprolactam		ND		11	36
Carbazole		ND		11	36
Chrysene		ND		11	36
Dibenz(a,h)anthracene		ND	J	11	36
Dibenzofuran		ND		11	36
Diethyl phthalate		ND		11	36
Dimethyl phthalate		ND		11	36
Di-n-butyl phthalate		ND		32	36
Di-n-octyl phthalate		ND		18	36
Diphenyl oxide		ND		11	36
Fluoranthene		ND		11	36
Fluorene		ND		11	36
Hexachlorobenzene		ND		11	36
Hexachlorobutadiene		ND		11	36
Hexachlorocyclopentadiene		ND		11	73
Hexachloroethane		ND		11	36
Indeno[1,2,3-cd]pyrene		ND		11	36
Isophorone		ND		11	36
Naphthalene		ND		11	87
Nitrobenzene		ND		11	36
N-Nitrosodimethylamine		ND		11	36
N-Nitrosodi-n-propylamine		ND		11	36
N-Nitrosodiphenylamine		ND		11	36
Pentachlorophenol		ND		11	36
Phenanthrene		ND		11	44
Phenol		ND		11	36
Pyrene		ND		11	36

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	70		30 - 130
2-Fluorobiphenyl	62		30 - 130
2-Fluorophenol	72		30 - 130
Nitrobenzene-d5	64		30 - 130
Phenol-d5	70		30 - 130
Terphenyl-d14	64		30 - 130

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Client: Olin Corporation

Job Number: 360-24327-1
Sdg Number: OCRI-07

Client Sample ID: **OC-SB-418-8/10-XXX**

Lab Sample ID: 360-24327-17
Client Matrix: Solid % Moisture: 9.1

Date Sampled: 08/27/2009 0835
Date Received: 08/27/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49174		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48703		Lab File ID:	J03024.D
Dilution:	1.0			Initial Weight/Volume:	30.33 g
Date Analyzed:	09/18/2009 2207			Final Weight/Volume:	1.0 mL
Date Prepared:	09/08/2009 1452			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 4

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
615-22-5	Benzothiazole, 2-(methylthio)-	10.10	30	T J N
3910-35-8	1H-Indene, 2,3-dihydro-1,1,3-trimethyl-3	10.57	19	T J N
22768-22-5	2,4-Diphenyl-4-methyl-2(E)-pentene	11.07	14	T J N
10544-50-0	Cyclic octaatomic sulfur	12.12	21	T J N

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Client: Olin Corporation

Job Number: 360-24327-1
Sdg Number: OCRI-07

Client Sample ID: **OC-EBK-005**

Lab Sample ID: 360-24327-19
Client Matrix: Water

Date Sampled: 08/27/2009 0800
Date Received: 08/27/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48893		Instrument ID:	Inst. B
Preparation:	3510C	Prep Batch: 360-48399		Lab File ID:	B10291.D
Dilution:	1.0			Initial Weight/Volume:	1000 mL
Date Analyzed:	09/14/2009 1809			Final Weight/Volume:	1.0 mL
Date Prepared:	08/31/2009 1538			Injection Volume:	1.0 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
N-Nitrosodimethylamine	ND	*	0.50	5.0

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	75		15 - 110
2-Fluorobiphenyl	70		30 - 130
2-Fluorophenol	21		15 - 110
Nitrobenzene-d5	74		30 - 130
Phenol-d5	11	X	15 - 110
Terphenyl-d14	79		30 - 130

Client: Olin Corporation

Job Number: 360-24327-1
Sdg Number: OCRI-07

Client Sample ID: **OC-EBK-005**

Lab Sample ID: 360-24327-19
Client Matrix: Water

Date Sampled: 08/27/2009 0800
Date Received: 08/27/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48893		Instrument ID:	Inst. B
Preparation:	3510C	Prep Batch: 360-48399		Lab File ID:	B10291.D
Dilution:	1.0			Initial Weight/Volume:	1000 mL
Date Analyzed:	09/14/2009 1809			Final Weight/Volume:	1.0 mL
Date Prepared:	08/31/2009 1538			Injection Volume:	1.0 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1'-Biphenyl	ND		0.50	5.0
1,2,4,5-Tetrachlorobenzene	ND		0.50	5.0
1-Methylnaphthalene	ND		0.50	5.0
2,3,4,6-Tetrachlorophenol	ND		0.50	5.0
Bis(2-chloroethyl)ether	ND		0.50	5.0
Benzyl alcohol	ND		0.50	10
2-Methylphenol	ND		0.50	5.0
N-Nitrosodi-n-propylamine	ND		0.50	5.0
Hexachloroethane	ND		0.50	3.0
3 & 4 Methylphenol	ND		0.50	5.0
2-Chlorophenol	ND		0.50	5.0
3,3'-Dichlorobenzidine	ND	*	0.50	5.0
Nitrobenzene	ND		0.50	5.0
Bis(2-chloroethoxy)methane	ND		0.50	5.0
Benzoic acid	ND	*	0.50	5.0
Isophorone	ND		0.50	5.0
2,4-Dimethylphenol	ND		0.50	5.0
Aniline	ND	*	0.50	5.0
Azobenzene	ND		0.50	5.0
2,4-Dichlorophenol	ND		0.50	5.0
4-Chloroaniline	ND		0.50	5.0
2,4,6-Trichlorophenol	ND		0.50	5.0
2,4,5-Trichlorophenol	ND		0.50	5.0
Hexachlorocyclopentadiene	ND		0.050	5.0
2-Methylnaphthalene	ND		0.050	1.0
2-Nitroaniline	ND		0.50	5.0
Caprolactam	ND	*	0.50	5.0
2-Chloronaphthalene	ND		0.50	5.0
4-Chloro-3-methylphenol	ND		0.50	5.0
2,6-Dinitrotoluene	ND		0.50	5.0
2-Nitrophenol	ND		0.50	5.0
3-Nitroaniline	ND		0.50	5.0
Dimethyl phthalate	ND		0.50	5.0
2,4-Dinitrophenol	ND		0.50	5.0
Acenaphthylene	ND		0.050	0.30
2,4-Dinitrotoluene	ND		0.50	5.0
Acenaphthene	ND		0.050	1.0
Dibenzofuran	ND		0.50	5.0
4-Nitrophenol	ND	*	0.50	5.0
Fluorene	ND		0.050	1.0
4-Nitroaniline	ND		0.50	5.0
Phenol	ND	*	0.50	5.0
4-Bromophenyl phenyl ether	ND		0.50	5.0
Hexachlorobenzene	ND		0.50	1.0
Diethyl phthalate	0.66	J	0.50	5.0
4-Chlorophenyl phenyl ether	ND		0.50	5.0

Client: Olin Corporation

Job Number: 360-24327-1
Sdg Number: OCRI-07

Client Sample ID: **OC-EBK-005**

Lab Sample ID: 360-24327-19
Client Matrix: Water

Date Sampled: 08/27/2009 0800
Date Received: 08/27/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48893		Instrument ID:	Inst. B
Preparation:	3510C	Prep Batch: 360-48399		Lab File ID:	B10291.D
Dilution:	1.0			Initial Weight/Volume:	1000 mL
Date Analyzed:	09/14/2009 1809			Final Weight/Volume:	1.0 mL
Date Prepared:	08/31/2009 1538			Injection Volume:	1.0 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Pentachlorophenol	ND		0.50	1.0
N-Nitrosodiphenylamine	ND		0.50	5.0
4,6-Dinitro-2-methylphenol	ND		0.50	5.0
Phenanthrene	ND		0.085	0.20
Anthracene	ND		0.070	1.0
Di-n-butyl phthalate	1.3	J B	0.60	5.0
Fluoranthene	ND		0.20	1.0
Pyrene	ND		0.19	5.0
Butyl benzyl phthalate	ND		0.50	5.0
Benzo[a]anthracene	ND		0.17	0.30
Chrysene	ND		0.17	1.0
Di-n-octyl phthalate	ND		0.73	5.0
Benzo[b]fluoranthene	ND		0.14	0.30
Benzo[k]fluoranthene	ND		0.17	0.30
Benzo[a]pyrene	ND		0.10	0.20
Indeno[1,2,3-cd]pyrene	ND		0.079	0.50
Dibenz(a,h)anthracene	ND	*	0.064	0.50
Benzo[g,h,i]perylene	ND	*	0.094	0.50
Acetophenone	ND		0.50	5.0
Bis(2-ethylhexyl) phthalate	ND		0.50	2.0
bis (2-chloroisopropyl) ether	ND		0.50	5.0
Atrazine	ND		0.50	5.0
Benzaldehyde	ND	*	0.50	5.0
Carbazole	ND		0.50	5.0
Benzophenone	ND		0.50	5.0
Diphenyl oxide	ND		0.50	5.0
Diphenylamine	ND		0.50	5.0

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	75		15 - 110
2-Fluorobiphenyl	70		30 - 130
2-Fluorophenol	21		15 - 110
Nitrobenzene-d5	74		30 - 130
Phenol-d5	11	X	15 - 110
Terphenyl-d14	79		30 - 130

Client: Olin Corporation

Job Number: 360-24327-1
Sdg Number: OCRI-07

Client Sample ID: **OC-EBK-005**

Lab Sample ID: 360-24327-19
Client Matrix: Water

Date Sampled: 08/27/2009 0800
Date Received: 08/27/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48893		Instrument ID:	Inst. B
Preparation:	3510C	Prep Batch: 360-48399		Lab File ID:	B10291.D
Dilution:	1.0			Initial Weight/Volume:	1000 mL
Date Analyzed:	09/14/2009 1809			Final Weight/Volume:	1.0 mL
Date Prepared:	08/31/2009 1538			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 6

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
110-86-1	Pyridine	6.06	0.20	J *
127-18-4	Tetrachloroethylene	6.77	3.2	T J N
	Unknown	11.03	3.1	T J
52253-93-7	Homomenthyl salicylate	12.70	1.1	T J N
52253-93-7	Homomenthyl salicylate	12.78	9.3	T J N
131-57-7	Oxybenzone	13.53	6.7	T J N

SAMPLE SUMMARY

Client: Olin Corporation

Job Number: 360-24327-2
Sdg Number: OCRI-07A

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
360-24327-2	OC-SB-403-13/15-XXX	Solid	08/26/2009 1340	08/27/2009 1710
360-24327-4	OC-SB-404-13/15-XXX	Solid	08/26/2009 1540	08/27/2009 1710
360-24327-7	OC-SB-409-15/17-XXX	Solid	08/26/2009 1715	08/27/2009 1710
360-24327-10	OC-SB-410-17/19-XXX	Solid	08/27/2009 1115	08/27/2009 1710
360-24327-16	OC-SB-418-15/17-XXX	Solid	08/27/2009 0900	08/27/2009 1710

Form 1's updated:
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Client: Olin Corporation

Job Number: 360-24327-2
Sdg Number: OCRI-07A

Client Sample ID: **OC-SB-403-13/15-XXX**

Lab Sample ID: 360-24327-2
Client Matrix: Solid
% Moisture: 20.3

Date Sampled: 08/26/2009 1340
Date Received: 08/27/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49098		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48691		Lab File ID:	B10391.D
Dilution:	1.0			Initial Weight/Volume:	30.05 g
Date Analyzed:	09/18/2009 0556			Final Weight/Volume:	1.0 mL
Date Prepared:	09/08/2009 1206			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		13	42
1,2,4,5-Tetrachlorobenzene		ND		2.8	42
1,2,4-Trichlorobenzene		ND		8.1	42
1,2-Dichlorobenzene		ND		4.5	42
1,3-Dichlorobenzene		ND		12	42
1,4-Dichlorobenzene		ND		7.5	42
1-Methylnaphthalene		ND		2.5	42
2,2'-oxybis[1-chloropropane]		ND		4.2	42
2,3,4,6-Tetrachlorophenol		ND		2.5	42
2,4,5-Trichlorophenol		ND		4.7	42
2,4,6-Trichlorophenol		ND		8.8	42
2,4-Dichlorophenol		ND		8.0	42
2,4-Dimethylphenol		ND		7.3	42
2,4-Dinitrophenol		ND		6.1	42
2,4-Dinitrotoluene		ND		5.9	42
2,6-Dinitrotoluene		ND		5.3	42
2-Chloronaphthalene		ND		6.4	42
2-Chlorophenol		ND		4.1	42
2-Methylnaphthalene		ND		32	42
2-Methylphenol		ND		6.0	42
2-Nitroaniline		ND		27	210
2-Nitrophenol		ND		4.8	42
3 & 4 Methylphenol		ND		7.9	42
3,3'-Dichlorobenzidine		ND	J	30	84
3-Nitroaniline		ND		12	210
4,6-Dinitro-2-methylphenol		ND		11	210
4-Bromophenyl phenyl ether		ND		8.7	42
4-Chloro-3-methylphenol		ND		12	84
4-Chloroaniline		ND		17	84
4-Chlorophenyl phenyl ether		ND		6.6	42
4-Nitroaniline		ND		11	210
4-Nitrophenol		ND		8.1	210
Acenaphthene		ND		6.1	42
Acenaphthylene		ND		7.4	42
Acetophenone		ND		4.5	42
Aniline		ND	J	22	42
Anthracene		ND		13	42
Atrazine		ND		13	42
Azobenzene		ND		5.2	42
Benzaldehyde		ND		13	42
Benzo[a]anthracene		ND		8.0	42
Benzo[a]pyrene		ND		7.6	42
Benzo[b]fluoranthene		ND		9.6	42
Benzo[g,h,i]perylene		ND		8.1	42
Benzo[k]fluoranthene		ND		12	42
Benzoic acid		ND		18	210

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Client: Olin Corporation

Job Number: 360-24327-2
Sdg Number: OCRI-07A

Client Sample ID: **OC-SB-403-13/15-XXX**

Lab Sample ID: 360-24327-2
Client Matrix: Solid
% Moisture: 20.3

Date Sampled: 08/26/2009 1340
Date Received: 08/27/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49098		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48691		Lab File ID:	B10391.D
Dilution:	1.0			Initial Weight/Volume:	30.05 g
Date Analyzed:	09/18/2009 0556			Final Weight/Volume:	1.0 mL
Date Prepared:	09/08/2009 1206			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		2.5	42
Benzyl alcohol		ND		9.6	84
Bis(2-chloroethoxy)methane		ND		7.5	42
Bis(2-chloroethyl)ether		ND	J	10	42
Bis(2-ethylhexyl) phthalate		ND		13	42
Butyl benzyl phthalate		ND		9.1	42
Caprolactam		ND		13	42
Carbazole		ND		42	42
Chrysene		ND		9.0	42
Dibenz(a,h)anthracene		ND		8.4	42
Dibenzofuran		ND		24	42
Diethyl phthalate		ND		5.9	42
Dimethyl phthalate		ND		6.1	42
Di-n-butyl phthalate		ND		13	42
Di-n-octyl phthalate		ND		12	42
Diphenyl oxide		ND		13	42
Fluoranthene		ND		26	42
Fluorene		ND		16	42
Hexachlorobenzene		ND		9.9	42
Hexachlorobutadiene		ND		8.3	42
Hexachlorocyclopentadiene		ND		11	84
Hexachloroethane		ND		8.0	42
Indeno[1,2,3-cd]pyrene		ND		13	42
Isophorone		ND		8.9	42
Naphthalene		ND		93	100
Nitrobenzene		ND		5.7	42
N-Nitrosodimethylamine		ND		4.8	42
N-Nitrosodi-n-propylamine		ND		4.7	42
N-Nitrosodiphenylamine		ND		8.4	42
Pentachlorophenol		ND		8.6	42
Phenanthrene		ND		48	50
Phenol		ND		5.2	42
Pyrene		ND		11	42

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	52		30 - 130
2-Fluorobiphenyl	63		30 - 130
2-Fluorophenol	72		30 - 130
Nitrobenzene-d5	66		30 - 130
Phenol-d5	60		30 - 130
Terphenyl-d14	82		30 - 130

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Client: Olin Corporation

Job Number: 360-24327-2
Sdg Number: OCRI-07A

Client Sample ID: **OC-SB-403-13/15-XXX**

Lab Sample ID: 360-24327-2
Client Matrix: Solid % Moisture: 20.3

Date Sampled: 08/26/2009 1340
Date Received: 08/27/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49098		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48691		Lab File ID:	B10391.D
Dilution:	1.0			Initial Weight/Volume:	30.05 g
Date Analyzed:	09/18/2009 0556			Final Weight/Volume:	1.0 mL
Date Prepared:	09/08/2009 1206			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 7

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
630-1-3	Hexacosane	14.90	45	T J N
7225-66-3	Tridecane, 7-hexyl-	15.54	66	T J N
638-67-5	Tricosane	16.07	69	T J N
593-49-7	Heptacosane	16.61	66	T J N
630-2-4	Octacosane	17.19	55	T J N
7683-64-9	Squalene	17.35	400	T J N
54833-48-6	Heptadecane, 2,6,10,15-tetramethyl-	17.84	59	T J N

Client: Olin Corporation

Job Number: 360-24327-2
Sdg Number: OCRI-07A

Client Sample ID: **OC-SB-404-13/15-XXX**

Lab Sample ID: 360-24327-4
Client Matrix: Solid
% Moisture: 6.5

Date Sampled: 08/26/2009 1540
Date Received: 08/27/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49095		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48691		Lab File ID:	J03002.D
Dilution:	1.0			Initial Weight/Volume:	30.25 g
Date Analyzed:	09/17/2009 1645			Final Weight/Volume:	1.0 mL
Date Prepared:	09/08/2009 1206			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		11	35
1,2,4,5-Tetrachlorobenzene		ND		2.4	35
1,2,4-Trichlorobenzene		ND		6.9	35
1,2-Dichlorobenzene		ND		3.8	35
1,3-Dichlorobenzene		ND		10	35
1,4-Dichlorobenzene		ND		6.4	35
1-Methylnaphthalene		ND		2.1	35
2,2'-oxybis[1-chloropropane]		ND		3.6	35
2,3,4,6-Tetrachlorophenol		ND		2.1	35
2,4,5-Trichlorophenol		ND		4.0	35
2,4,6-Trichlorophenol		ND		7.4	35
2,4-Dichlorophenol		ND		6.8	35
2,4-Dimethylphenol		ND		6.2	35
2,4-Dinitrophenol		~~ND~~ R		5.2	35
2,4-Dinitrotoluene		ND		5.0	35
2,6-Dinitrotoluene		ND		4.5	35
2-Chloronaphthalene		ND		5.4	35
2-Chlorophenol		ND		3.4	35
2-Methylnaphthalene		ND		27	35
2-Methylphenol		ND		5.0	35
2-Nitroaniline		~~ND~~ R		23	180
2-Nitrophenol		ND		4.1	35
3 & 4 Methylphenol		ND		6.7	35
3,3'-Dichlorobenzidine		ND J	✓	26	71
3-Nitroaniline		ND		10	180
4,6-Dinitro-2-methylphenol		ND		9.0	180
4-Bromophenyl phenyl ether		ND		7.4	35
4-Chloro-3-methylphenol		ND		9.8	71
4-Chloroaniline		ND		14	71
4-Chlorophenyl phenyl ether		ND		5.6	35
4-Nitroaniline		ND		9.4	180
4-Nitrophenol		ND		6.9	180
Acenaphthene		ND		5.2	35
Acenaphthylene		ND		6.2	35
Acetophenone		ND		3.8	35
Aniline		ND J	✓	18	35
Anthracene		ND		11	35
Atrazine		ND		11	35
Azobenzene		ND		4.4	35
Benzaldehyde		ND	✓	11	35
Benzo[a]anthracene		ND		6.8	35
Benzo[a]pyrene		ND		6.5	35
Benzo[b]fluoranthene		ND		8.1	35
Benzo[g,h,i]perylene		ND		6.9	35
Benzo[k]fluoranthene		ND		9.8	35
Benzoic acid		~~ND~~ R		15	180

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Client: Olin Corporation

Job Number: 360-24327-2
Sdg Number: OCRI-07A

Client Sample ID: **OC-SB-404-13/15-XXX**

Lab Sample ID: 360-24327-4
Client Matrix: Solid % Moisture: 6.5

Date Sampled: 08/26/2009 1540
Date Received: 08/27/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49095		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48691		Lab File ID:	J03002.D
Dilution:	1.0			Initial Weight/Volume:	30.25 g
Date Analyzed:	09/17/2009 1645			Final Weight/Volume:	1.0 mL
Date Prepared:	09/08/2009 1206			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		2.1	35
Benzyl alcohol		ND		8.2	71
Bis(2-chloroethoxy)methane		ND		6.4	35
Bis(2-chloroethyl)ether		ND		8.6	35
Bis(2-ethylhexyl) phthalate		ND		11	35
Butyl benzyl phthalate		ND		7.7	35
Caprolactam		ND		11	35
Carbazole		ND		35	35
Chrysene		ND		7.6	35
Dibenz(a,h)anthracene		ND		7.1	35
Dibenzofuran		ND		20	35
Diethyl phthalate		ND		5.0	35
Dimethyl phthalate		ND		5.2	35
Di-n-butyl phthalate		ND		11	35
Di-n-octyl phthalate		ND		10	35
Diphenyl oxide		ND		11	35
Fluoranthene		ND		22	35
Fluorene		ND		14	35
Hexachlorobenzene		ND		8.4	35
Hexachlorobutadiene		ND		7.0	35
Hexachlorocyclopentadiene		ND		9.7	71
Hexachloroethane		ND		6.7	35
Indeno[1,2,3-cd]pyrene		ND		11	35
Isophorone		ND		7.6	35
Naphthalene		ND		78	85
Nitrobenzene		ND		4.8	35
N-Nitrosodimethylamine		ND		4.1	35
N-Nitrosodi-n-propylamine		ND		4.0	35
N-Nitrosodiphenylamine		ND		7.1	35
Pentachlorophenol		ND		7.3	35
Phenanthrene		ND		41	42
Phenol		ND		4.4	35
Pyrene		ND		9.4	35

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	77		30 - 130
2-Fluorobiphenyl	68		30 - 130
2-Fluorophenol	77		30 - 130
Nitrobenzene-d5	67		30 - 130
Phenol-d5	74		30 - 130
Terphenyl-d14	87		30 - 130

Client: Olin Corporation

Job Number: 360-24327-2
Sdg Number: OCRI-07A

Client Sample ID: **OC-SB-404-13/15-XXX**

Lab Sample ID: 360-24327-4
Client Matrix: Solid % Moisture: 6.5

Date Sampled: 08/26/2009 1540
Date Received: 08/27/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49095		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48691		Lab File ID:	J03002.D
Dilution:	1.0			Initial Weight/Volume:	30.25 g
Date Analyzed:	09/17/2009 1645			Final Weight/Volume:	1.0 mL
Date Prepared:	09/08/2009 1206			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 5

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Unknown	5.56	15	T J
615-22-5	Benzothiazole, 2-(methylthio)-	10.28	18	T J N
3910-35-8	1H-Indene, 2,3-dihydro-1,1,3-trimethyl-3	10.74	14	T J N
74685-33-9	3-Eicosene, (E)-	13.64	25	T J N
111-2-4	2,6,10,14,18,22-Tetracosahexaene, 2,6,10	14.65	430	T J N

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Client: Olin Corporation

Job Number: 360-24327-2
Sdg Number: OCRI-07A

Client Sample ID: **OC-SB-409-15/17-XXX**

Lab Sample ID: 360-24327-7
Client Matrix: Solid
% Moisture: 11.5

Date Sampled: 08/26/2009 1715
Date Received: 08/27/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49174		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48703		Lab File ID:	J03011.D
Dilution:	1.0			Initial Weight/Volume:	30.38 g
Date Analyzed:	09/18/2009 1614			Final Weight/Volume:	1.0 mL
Date Prepared:	09/08/2009 1452			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		11	37
1,2,4,5-Tetrachlorobenzene		ND		2.5	37
1,2,4-Trichlorobenzene		ND		7.2	37
1,2-Dichlorobenzene		ND		4.0	37
1,3-Dichlorobenzene		ND		11	37
1,4-Dichlorobenzene		ND		6.7	37
1-Methylnaphthalene		ND		2.2	37
2,2'-oxybis[1-chloropropane]		ND		3.8	37
2,3,4,6-Tetrachlorophenol		ND		2.2	37
2,4,5-Trichlorophenol		ND		4.2	37
2,4,6-Trichlorophenol		ND		7.8	37
2,4-Dichlorophenol		ND		7.2	37
2,4-Dimethylphenol		ND		6.5	37
2,4-Dinitrophenol		~~ND~~	R	5.5	37
2,4-Dinitrotoluene		ND		5.2	37
2,6-Dinitrotoluene		ND		4.7	37
2-Chloronaphthalene		ND		5.7	37
2-Chlorophenol		ND		3.6	37
2-Methylnaphthalene		ND		28	37
2-Methylphenol		ND		5.3	37
2-Nitroaniline		~~ND~~	R	24	190
2-Nitrophenol		ND		4.3	37
3 & 4 Methylphenol		ND		7.1	37
3,3'-Dichlorobenzidine		ND	J	27	74
3-Nitroaniline		ND		11	190
4,6-Dinitro-2-methylphenol		ND	J	9.5	190
4-Bromophenyl phenyl ether		ND		7.7	37
4-Chloro-3-methylphenol		ND		10	74
4-Chloroaniline		ND		15	74
4-Chlorophenyl phenyl ether		ND		5.9	37
4-Nitroaniline		ND		9.9	190
4-Nitrophenol		ND	J	7.2	190
Acenaphthene		ND		5.5	37
Acenaphthylene		ND		6.6	37
Acetophenone		5.6	JEB	4.0	37
Aniline		ND	J	19	37
Anthracene		ND		12	37
Atrazine		ND		11	37
Azobenzene		ND		4.6	37
Benzaldehyde		ND		11	37
Benzo[a]anthracene		ND		7.1	37
Benzo[a]pyrene		ND		6.8	37
Benzo[b]fluoranthene		ND		8.5	37
Benzo[g,h,i]perylene		ND		7.2	37
Benzo[k]fluoranthene		ND		10	37
Benzoic acid		~~ND~~	R	16	190

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Client: Olin Corporation

Job Number: 360-24327-2
Sdg Number: OCRI-07A

Client Sample ID: **OC-SB-409-15/17-XXX**

Lab Sample ID: 360-24327-7
Client Matrix: Solid
% Moisture: 11.5

Date Sampled: 08/26/2009 1715
Date Received: 08/27/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49174		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48703		Lab File ID:	J03011.D
Dilution:	1.0			Initial Weight/Volume:	30.38 g
Date Analyzed:	09/18/2009 1614			Final Weight/Volume:	1.0 mL
Date Prepared:	09/08/2009 1452			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		2.2	37
Benzyl alcohol		ND		8.6	74
Bis(2-chloroethoxy)methane		ND		6.7	37
Bis(2-chloroethyl)ether		ND		9.0	37
Bis(2-ethylhexyl) phthalate		ND		12	37
Butyl benzyl phthalate		ND		8.1	37
Caprolactam		ND		11	37
Carbazole		ND		37	37
Chrysene		ND		8.0	37
Dibenz(a,h)anthracene		ND	J	7.5	37
Dibenzofuran		ND		22	37
Diethyl phthalate		ND		5.2	37
Dimethyl phthalate		ND		5.5	37
Di-n-butyl phthalate		15	J B	11	37
Di-n-octyl phthalate		20	J	11	37
Diphenyl oxide		ND		11	37
Fluoranthene		ND		24	37
Fluorene		ND		14	37
Hexachlorobenzene		ND		8.8	37
Hexachlorobutadiene		ND		7.4	37
Hexachlorocyclopentadiene		ND		10	74
Hexachloroethane		ND		7.1	37
Indeno[1,2,3-cd]pyrene		ND		11	37
Isophorone		ND		8.0	37
Naphthalene		ND		83	89
Nitrobenzene		ND		5.1	37
N-Nitrosodimethylamine		ND		4.3	37
N-Nitrosodi-n-propylamine		ND		4.2	37
N-Nitrosodiphenylamine		ND		7.4	37
Pentachlorophenol		ND		7.7	37
Phenanthrene		ND		43	45
Phenol		ND		4.7	37
Pyrene		ND		9.9	37

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	66		30 - 130
2-Fluorobiphenyl	59		30 - 130
2-Fluorophenol	69		30 - 130
Nitrobenzene-d5	59		30 - 130
Phenol-d5	69		30 - 130
Terphenyl-d14	65		30 - 130

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Client: Olin Corporation

Job Number: 360-24327-2
Sdg Number: OCRI-07A

Client Sample ID: **OC-SB-409-15/17-XXX**

Lab Sample ID: 360-24327-7
Client Matrix: Solid % Moisture: 11.5

Date Sampled: 08/26/2009 1715
Date Received: 08/27/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49174		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48703		Lab File ID:	J03011.D
Dilution:	1.0			Initial Weight/Volume:	30.38 g
Date Analyzed:	09/18/2009 1614			Final Weight/Volume:	1.0 mL
Date Prepared:	09/08/2009 1452			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 5

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
128-37-0	Butylated Hydroxytoluene	9.54	23	T J N
3910-35-8	1H-Indene, 2,3-dihydro-1,1,3-trimethyl-3	10.57	26	T J N
22768-22-5	2,4-Diphenyl-4-methyl-2(E)-pentene	11.07	21	T J N
10544-50-0	Cyclic octaatomic sulfur	12.12	52	T J N
112-61-8	Octadecanoic acid, methyl ester	12.19	18	T J N

Client: Olin Corporation

Job Number: 360-24327-2
Sdg Number: OCRI-07A

Client Sample ID: OC-SB-410-17/19-XXX

Lab Sample ID: 360-24327-10
Client Matrix: Solid
% Moisture: 8.2

Date Sampled: 08/27/2009 1115
Date Received: 08/27/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49174		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48703		Lab File ID:	J03015.D
Dilution:	1.0			Initial Weight/Volume:	30.35 g
Date Analyzed:	09/18/2009 1802			Final Weight/Volume:	1.0 mL
Date Prepared:	09/08/2009 1452			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		11	36
1,2,4,5-Tetrachlorobenzene		ND		2.4	36
1,2,4-Trichlorobenzene		ND		7.0	36
1,2-Dichlorobenzene		ND		3.9	36
1,3-Dichlorobenzene		ND		10	36
1,4-Dichlorobenzene		ND		6.5	36
1-Methylnaphthalene		ND		2.2	36
2,2'-oxybis[1-chloropropane]		ND		3.6	36
2,3,4,6-Tetrachlorophenol		ND		2.2	36
2,4,5-Trichlorophenol		ND		4.1	36
2,4,6-Trichlorophenol		ND		7.5	36
2,4-Dichlorophenol		ND		6.9	36
2,4-Dimethylphenol		ND		6.2	36
2,4-Dinitrophenol		ND R		5.3	36
2,4-Dinitrotoluene		ND		5.1	36
2,6-Dinitrotoluene		ND		4.5	36
2-Chloronaphthalene		ND		5.5	36
2-Chlorophenol		ND		3.5	36
2-Methylnaphthalene		ND		27	36
2-Methylphenol		ND		5.1	36
2-Nitroaniline		ND R		23	180
2-Nitrophenol		ND		4.2	36
3 & 4 Methylphenol		ND		6.8	36
3,3'-Dichlorobenzidine		ND J		26	72
3-Nitroaniline		ND		10	180
4,6-Dinitro-2-methylphenol		ND J		9.2	180
4-Bromophenyl phenyl ether		ND		7.5	36
4-Chloro-3-methylphenol		ND		9.9	72
4-Chloroaniline		ND		15	72
4-Chlorophenyl phenyl ether		ND		5.7	36
4-Nitroaniline		ND		9.6	180
4-Nitrophenol		ND J		7.0	180
Acenaphthene		ND		5.3	36
Acenaphthylene		ND		6.3	36
Acetophenone		ND		3.9	36
Aniline		ND J		19	36
Anthracene		ND		11	36
Atrazine		ND		11	36
Azobenzene		ND		4.5	36
Benzaldehyde		ND		11	36
Benzo[a]anthracene		9.0	J	6.9	36
Benzo[a]pyrene		12	J	6.6	36
Benzo[b]fluoranthene		12	J	8.2	36
Benzo[g,h,i]perylene		ND		7.0	36
Benzo[k]fluoranthene		ND		10	36
Benzoic acid		ND R		15	180

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Client: Olin Corporation

Job Number: 360-24327-2
Sdg Number: OCRI-07A

Client Sample ID: **OC-SB-410-17/19-XXX**

Lab Sample ID: 360-24327-10
Client Matrix: Solid
% Moisture: 8.2

Date Sampled: 08/27/2009 1115
Date Received: 08/27/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49174		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48703		Lab File ID:	J03015.D
Dilution:	1.0			Initial Weight/Volume:	30.35 g
Date Analyzed:	09/18/2009 1802			Final Weight/Volume:	1.0 mL
Date Prepared:	09/08/2009 1452			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		2.2	36
Benzyl alcohol		ND		8.3	72
Bis(2-chloroethoxy)methane		ND		6.5	36
Bis(2-chloroethyl)ether		ND		8.7	36
Bis(2-ethylhexyl) phthalate		ND		11	36
Butyl benzyl phthalate		ND		7.8	36
Caprolactam		ND		11	36
Carbazole		ND		36	36
Chrysene		8.1	J	7.7	36
Dibenz(a,h)anthracene		ND	J	7.2	36
Dibenzofuran		ND		21	36
Diethyl phthalate		ND		5.1	36
Dimethyl phthalate		ND		5.3	36
Di-n-butyl phthalate		3.6U 16	J B	11	36
Di-n-octyl phthalate		ND		10	36
Diphenyl oxide		ND		11	36
Fluoranthene		ND		23	36
Fluorene		ND		14	36
Hexachlorobenzene		ND		8.5	36
Hexachlorobutadiene		ND		7.2	36
Hexachlorocyclopentadiene		ND		9.8	72
Hexachloroethane		ND		6.9	36
Indeno[1,2,3-cd]pyrene		ND		11	36
Isophorone		ND		7.7	36
Naphthalene		ND		80	86
Nitrobenzene		ND		4.9	36
N-Nitrosodimethylamine		ND		4.2	36
N-Nitrosodi-n-propylamine		ND		4.1	36
N-Nitrosodiphenylamine		ND		7.2	36
Pentachlorophenol		ND		7.4	36
Phenanthrene		ND		41	43
Phenol		ND		4.5	36
Pyrene		ND		9.5	36

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	63		30 - 130
2-Fluorobiphenyl	61		30 - 130
2-Fluorophenol	71		30 - 130
Nitrobenzene-d5	62		30 - 130
Phenol-d5	70		30 - 130
Terphenyl-d14	60		30 - 130

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Client: Olin Corporation

Job Number: 360-24327-2
Sdg Number: OCRI-07A

Client Sample ID: **OC-SB-410-17/19-XXX**

Lab Sample ID: 360-24327-10
Client Matrix: Solid % Moisture: 8.2

Date Sampled: 08/27/2009 1115
Date Received: 08/27/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49174		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48703		Lab File ID:	J03015.D
Dilution:	1.0			Initial Weight/Volume:	30.35 g
Date Analyzed:	09/18/2009 1802			Final Weight/Volume:	1.0 mL
Date Prepared:	09/08/2009 1452			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 2

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
5989-27-5	D-Limonene	6.57	19	T J N
3910-35-8	1H-Indene, 2,3-dihydro-1,1,3-trimethyl-3	10.57	14	T J N e

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Client: Olin Corporation

Job Number: 360-24327-2
Sdg Number: OCRI-07A

Client Sample ID: **OC-SB-418-15/17-XXX**

Lab Sample ID: 360-24327-16
Client Matrix: Solid % Moisture: 9.9

Date Sampled: 08/27/2009 0900
Date Received: 08/27/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49174		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48703		Lab File ID:	J03023.D
Dilution:	1.0			Initial Weight/Volume:	30.04 g
Date Analyzed:	09/18/2009 2140			Final Weight/Volume:	1.0 mL
Date Prepared:	09/08/2009 1452			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		11	37
1,2,4,5-Tetrachlorobenzene		ND		2.5	37
1,2,4-Trichlorobenzene		ND		7.2	37
1,2-Dichlorobenzene		ND		4.0	37
1,3-Dichlorobenzene		ND		11	37
1,4-Dichlorobenzene		ND		6.7	37
1-Methylnaphthalene		ND		2.2	37
2,2'-oxybis[1-chloropropane]		ND		3.7	37
2,3,4,6-Tetrachlorophenol		ND		2.2	37
2,4,5-Trichlorophenol		ND		4.2	37
2,4,6-Trichlorophenol		ND		7.7	37
2,4-Dichlorophenol		ND		7.1	37
2,4-Dimethylphenol		ND		6.4	37
2,4-Dinitrophenol		~~ND~~ J	R	5.4	37
2,4-Dinitrotoluene		ND		5.2	37
2,6-Dinitrotoluene		ND		4.7	37
2-Chloronaphthalene		ND		5.7	37
2-Chlorophenol		ND		3.6	37
2-Methylnaphthalene		ND		28	37
2-Methylphenol		ND		5.3	37
2-Nitroaniline		~~ND~~	R	24	180
2-Nitrophenol		ND		4.3	37
3 & 4 Methylphenol		ND		7.0	37
3,3'-Dichlorobenzidine		ND	J	27	74
3-Nitroaniline		ND		11	180
4,6-Dinitro-2-methylphenol		ND	J	9.4	180
4-Bromophenyl phenyl ether		ND		7.7	37
4-Chloro-3-methylphenol		ND		10	74
4-Chloroaniline		ND		15	74
4-Chlorophenyl phenyl ether		ND		5.9	37
4-Nitroaniline		ND		9.8	180
4-Nitrophenol		ND	J	7.2	180
Acenaphthene		ND		5.4	37
Acenaphthylene		ND		6.5	37
Acetophenone		ND		4.0	37
Aniline		ND	J	19	37
Anthracene		ND		12	37
Atrazine		ND		11	37
Azobenzene		ND		4.6	37
Benzaldehyde		ND		11	37
Benzo[a]anthracene		ND		7.1	37
Benzo[a]pyrene		ND		6.8	37
Benzo[b]fluoranthene		ND		8.5	37
Benzo[g,h,i]perylene		ND		7.2	37
Benzo[k]fluoranthene		ND		10	37
Benzoic acid		~~ND~~	R	16	180

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Client: Olin Corporation

Job Number: 360-24327-2
Sdg Number: OCRI-07A

Client Sample ID: OC-SB-418-15/17-XXX

Lab Sample ID: 360-24327-16
Client Matrix: Solid
% Moisture: 9.9

Date Sampled: 08/27/2009 0900
Date Received: 08/27/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49174		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48703		Lab File ID:	J03023.D
Dilution:	1.0			Initial Weight/Volume:	30.04 g
Date Analyzed:	09/18/2009 2140			Final Weight/Volume:	1.0 mL
Date Prepared:	09/08/2009 1452			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		2.2	37
Benzyl alcohol		ND		8.5	74
Bis(2-chloroethoxy)methane		ND		6.6	37
Bis(2-chloroethyl)ether		ND		9.0	37
Bis(2-ethylhexyl) phthalate		ND		12	37
Butyl benzyl phthalate		ND		8.1	37
Caprolactam		ND		11	37
Carbazole		ND		37	37
Chrysene		ND		8.0	37
Dibenz(a,h)anthracene		ND	J	7.5	37
Dibenzofuran		ND		21	37
Diethyl phthalate		ND		5.2	37
Dimethyl phthalate		ND		5.4	37
Di-n-butyl phthalate		ND		11	37
Di-n-octyl phthalate		ND		10	37
Diphenyl oxide		ND		11	37
Fluoranthene		ND		23	37
Fluorene		ND		14	37
Hexachlorobenzene		ND		8.8	37
Hexachlorobutadiene		ND		7.4	37
Hexachlorocyclopentadiene		ND		10	74
Hexachloroethane		ND		7.0	37
Indeno[1,2,3-cd]pyrene		ND		11	37
Isophorone		ND		7.9	37
Naphthalene		ND		82	89
Nitrobenzene		ND		5.0	37
N-Nitrosodimethylamine		ND		4.3	37
N-Nitrosodi-n-propylamine		ND		4.2	37
N-Nitrosodiphenylamine		ND		7.4	37
Pentachlorophenol		ND		7.6	37
Phenanthrene		ND		43	44
Phenol		ND		4.6	37
Pyrene		ND		9.8	37

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	62		30 - 130
2-Fluorobiphenyl	61		30 - 130
2-Fluorophenol	64		30 - 130
Nitrobenzene-d5	58		30 - 130
Phenol-d5	64		30 - 130
Terphenyl-d14	60		30 - 130

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Client: Olin Corporation

Job Number: 360-24327-2
Sdg Number: OCRI-07A

Client Sample ID: OC-SB-418-15/17-XXX

Lab Sample ID: 360-24327-16
Client Matrix: Solid % Moisture: 9.9

Date Sampled: 08/27/2009 0900
Date Received: 08/27/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49174		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48703		Lab File ID:	J03023.D
Dilution:	1.0			Initial Weight/Volume:	30.04 g
Date Analyzed:	09/18/2009 2140			Final Weight/Volume:	1.0 mL
Date Prepared:	09/08/2009 1452			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 6

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Unknown	5.34	16	T J
128-37-0	Butylated Hydroxytoluene	9.54	12	T J N
615-22-5	Benzothiazole, 2-(methylthio)-	10.10	22	T J N
	Unknown	10.47	17	T J
3910-35-8	1H-Indene, 2,3-dihydro-1,1,3-trimethyl-3	10.57	14	T J N
22768-22-5	2,4-Diphenyl-4-methyl-2(E)-pentene	11.07	11	T J N

FORM IV
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Westfield Job No.: 360-24327-1

SDG No.: OCRI-07

Lab File ID: J03008.D Lab Sample ID: MB 360-48703/1-A

Matrix: Solid Date Extracted: 09/08/2009 14:52

Instrument ID: Inst. J Date Analyzed: 09/18/2009 14:53

Level:(Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID		LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
		LCS 360-48703/2-A	J03009.D	09/18/2009 15:20
		LCSD 360-48703/3-A	J03010.D	09/18/2009 15:47
OC-SB-409-6.0/8.0-XXX	a	360-24327-8	J03012.D	09/18/2009 16:41
OC-SB-410-0.0/1.0-XXX	b	360-24327-9	J03013.D	09/18/2009 17:08
OC-SB-410-0.0/1.0-XXX DL	c	360-24327-9 DL	J03014.D	09/18/2009 17:35
OC-SB-410-6.0/8.0-DUP	e	360-24327-11	J03016.D	09/18/2009 18:29
OC-SB-410-6.0/8.0-XXX	f	360-24327-12	J03017.D	09/18/2009 18:56
OC-SB-410-6.0/8.0-XXX MS	g	360-24327-12 MS	J03018.D	09/18/2009 19:23
OC-SB-410-6.0/8.0-XXX MSD	h	360-24327-12 MSD	J03019.D	09/18/2009 19:51
OC-SB-411-0.0/1.0-XXX	i	360-24327-13	J03020.D	09/18/2009 20:18
OC-SB-411-4.7/6.7-XXX	j	360-24327-14	J03021.D	09/18/2009 20:45
OC-SB-418-0.0/1.0-XXX	k	360-24327-15	J03022.D	09/18/2009 21:13
OC-SB-418-8/10-XXX	l	360-24327-17	J03024.D	09/18/2009 22:07
OC-SB-410-0.0/1.0-XXX DL2		360-24327-9 DL2	B10475.D	09/21/2009 23:40

MB 4 of 3

Benzoic acid 77

Di-n-butyl phthalate 97.6

TIC

ethanol, 2-phenoxy-

unknown (10.63)

octadecane

unk (13.45)

LCS 4 of 3

3,3'-DCB 32 / 30

aniline 26 / 32

MS/MSD

3,3'-DCB 27 / 31

aniline 23 / 24

CCAL

Benzoic acid RF 0.0166

4-nitrophenol %D = 31

2,4-DNP RF 0.0372

4,6-dinitro-2-methylphenol %D = 27

2-nitroaniline RF = 0.0149

dibenz(a,h)anthracene %D = 26

Tune ok

Organic Prep Worksheet

Batch Number: 360-48703
Method: 3546
Analyst: Bilodeau, Brian R

Date Open: Sep 08 2009 2:52PM
Batch End:

Lab ID	Client ID	Method Chain	Basis	Initial weight/volume of sample	Final weight/volume of sample	ABN SURR_00010	OlinLCSextras_00001	OP-abnms_00063
MB~360-48703/1		3546, 8270C LL		30.00 g	1.0 mL	50 uL		
LCS~360-48703/2		3546, 8270C LL		30.00 g	1.0 mL	50 uL	.100 mL	100 uL
LCSD~360-48703/3		3546, 8270C LL		30.00 g	1.0 mL	50 uL	.100 mL	100 uL
360-24327-A-7	OC-SB-409-15/17-XXX		T	30.38 g	1.0 mL	50 uL		
360-24327-A-8	OC-SB-409-6.0/8.0-XX X	3546, 8270C LL	T	30.23 g	1.0 mL	50 uL		
360-24327-A-9	OC-SB-410-0.0/1.0-XX X	3546, 8270C LL	T	30.72 g	1.0 mL	50 uL		
360-24327-A-10	OC-SB-410-17/19-XXX		T	30.35 g	1.0 mL	50 uL		
360-24327-A-11	OC-SB-410-6.0/8.0-DU P	3546, 8270C LL	T	30.35 g	1.0 mL	50 uL		
360-24327-A-12	OC-SB-410-6.0/8.0-XX X	3546, 8270C LL	T	30.74 g	1.0 mL	50 uL		
360-24327-A-12~MS	OC-SB-410-6.0/8.0-XM S	3546, 8270C LL	T	30.64 g	1.0 mL	50 uL	.100 mL	100 uL
360-24327-A-12~MS D	OC-SB-410-6.0/8.0-MS D	3546, 8270C LL	T	30.26 g	1.0 mL	50 uL	.100 mL	100 uL
360-24327-A-13	OC-SB-411-0.0/1.0-XX X	3546, 8270C LL	T	30.08 g	1.0 mL	50 uL		
360-24327-A-14	OC-SB-411-4.7/6.7-XX X	3546, 8270C LL	T	30.85 g	1.0 mL	50 uL		
360-24327-A-15	OC-SB-418-0.0/1.0-XX X	3546, 8270C LL	T	30.34 g	1.0 mL	50 uL		
360-24327-A-16	OC-SB-418-15/17-XXX		T	30.04 g	1.0 mL	50 uL		
360-24327-A-17	OC-SB-418-8/10-XXX	3546, 8270C LL	T	30.33 g	1.0 mL	50 uL		
360-24343-A-1	OC-SB-444-0.0/1.0-XX X		T	30.61 g	1.0 mL	50 uL		
360-24343-A-2	OC-SB-444-12/14-XXX		T	30.80 g	1.0 mL	50 uL		
360-24343-A-3	OC-SB-444-5.0/7.0-XX X		T	30.68 g	1.0 mL	50 uL		
360-24343-A-4	OC-SB-449-0.0/1.0-XX X		T	30.56 g	1.0 mL	50 uL		
360-24343-A-5	OC-SB-449-11/13-XXX		T	30.06 g	1.0 mL	50 uL		
360-24343-A-6	OC-SB-449-6.0/8.0-XX X		T	30.03 g	1.0 mL	50 uL		
360-24343-A-7	OC-SB-451-0.0/1.0-XX X		T	30.48 g	1.0 mL	50 uL		

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Westfield | Job No.: 360-24327-1

SDG No.: OCRI-07

Client Sample ID: | Lab Sample ID: MB 360-48703/1-A

Matrix: Solid | Lab File ID: J03008.D

Analysis Method: 8270C LL | Date Collected:

Extract. Method: 3546 | Date Extracted: 09/08/2009 14:52

Sample wt/vol: 30.00(g) | Date Analyzed: 09/18/2009 14:53

Con. Extract Vol.: 1.0(mL) | Dilution Factor: 1

Injection Volume: 1.0(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 49174 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
534-52-1	4,6-Dinitro-2-methylphenol	ND		170	10
65-85-0	Benzoic acid	77.0	J	170	15
120-12-7	Anthracene	ND		33	10
100-51-6	Benzyl alcohol	ND		67	28
111-91-1	Bis(2-chloroethoxy)methane	ND		33	10
111-44-4	Bis(2-chloroethyl)ether	ND		33	10
85-68-7	Butyl benzyl phthalate	ND		33	10
56-55-3	Benzo[a]anthracene	ND		33	10
105-60-2	Caprolactam	ND		33	10
218-01-9	Chrysene	ND		33	10
205-99-2	Benzo[b]fluoranthene	ND		33	10
207-08-9	Benzo[k]fluoranthene	ND		33	10
50-32-8	Benzo[a]pyrene	ND		33	10
132-64-9	Dibenzofuran	ND		33	10
53-70-3	Dibenz(a,h)anthracene	ND		33	10
84-66-2	Diethyl phthalate	ND		33	10
191-24-2	Benzo[g,h,i]perylene	ND		33	10
131-11-3	Dimethyl phthalate	ND		33	10
98-86-2	Acetophenone	ND		33	10
84-74-2	Di-n-butyl phthalate	97.6		33	29
117-81-7	Bis(2-ethylhexyl) phthalate	ND		33	10
117-84-0	Di-n-octyl phthalate	ND		33	17
206-44-0	Fluoranthene	ND		33	10
86-73-7	Fluorene	ND		33	10
118-74-1	Hexachlorobenzene	ND		33	10
87-68-3	Hexachlorobutadiene	ND		33	10
108-60-1	2,2'-oxybis[1-chloropropane]	ND		33	10
77-47-4	Hexachlorocyclopentadiene	ND		67	10
67-72-1	Hexachloroethane	ND		33	10
193-39-5	Indeno[1,2,3-cd]pyrene	ND		33	10
78-59-1	Isophorone	ND		33	10
91-20-3	Naphthalene	ND		80	10
98-95-3	Nitrobenzene	ND		33	10
1912-24-9	Atrazine	ND		33	10

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24327-1

SDG No.: OCRI-07

Matrix: Solid Level: Low Lab File ID: J03009.D

Lab ID: LCS 360-48703/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
1,1'-Biphenyl	333	218	65	40-140	
1,2,4,5-Tetrachlorobenzene	333	204	61	40-140	
1,2,4-Trichlorobenzene	333	185	55	40-140	
1,2-Dichlorobenzene	333	166	50	40-140	
1,3-Dichlorobenzene	333	162	49	40-140	
1,4-Dichlorobenzene	333	162	49	40-140	
1-Methylnaphthalene	333	209	63	40-140	
2,3,4,6-Tetrachlorophenol	333	214	64	40-140	
2,4-Dimethylphenol	333	283	85	30-130	
2-Chlorophenol	333	190	57	30-130	
2,4-Dichlorophenol	333	232	70	30-130	
2,4,6-Trichlorophenol	333	252	76	30-130	
2-Methylphenol	333	204	61	30-130	
2,4,5-Trichlorophenol	333	249	75	30-130	
2-Methylnaphthalene	333	211	63	40-140	
3 & 4 Methylphenol	333	212	64	30-130	
2-Nitroaniline	333	216	65	40-140	
3,3'-Dichlorobenzidine	333	107	32	40-140	*
2-Chloronaphthalene	333	167	50	40-140	
2,6-Dinitrotoluene	333	230	69	40-140	
4-Chloro-3-methylphenol	333	250	75	30-130	
2-Nitrophenol	333	199	60	30-130	
4-Chloroaniline	333	208	62	40-140	
3-Nitroaniline	333	256	77	40-140	
2,4-Dinitrophenol	333	170	51	30-130	
2,4-Dinitrotoluene	333	222	67	40-140	
Acenaphthene	333	242	73	40-140	
Acenaphthylene	333	228	68	40-140	
4-Nitrophenol	333	304	91	30-130	
Aniline	333	86.7	26	40-140	*
4-Nitroaniline	333	229	69	40-140	
Azobenzene	333	239	72	40-140	
4-Bromophenyl phenyl ether	333	223	67	40-140	
4-Chlorophenyl phenyl ether	333	220	66	40-140	
4,6-Dinitro-2-methylphenol	333	181	54	30-130	
Benzoic acid	333	157 J	47	30-130	
Anthracene	333	273	82	40-140	
Benzyl alcohol	333	233	70	30-130	
Bis(2-chloroethoxy)methane	333	208	62	40-140	
Bis(2-chloroethyl)ether	333	171	51	40-140	
Butyl benzyl phthalate	333	238	71	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24327-1

SDG No.: OCRI-07

Matrix: Solid Level: Low Lab File ID: J03010.D

Lab ID: LCSD 360-48703/3-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCSD CONCENTRATION (ug/Kg)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1'-Biphenyl	333	217	65	0	30	40-140	
1,2,4,5-Tetrachlorobenzene	333	210	63	3	30	40-140	
1,2,4-Trichlorobenzene	333	191	57	3	30	40-140	
1,2-Dichlorobenzene	333	167	50	1	30	40-140	
1,3-Dichlorobenzene	333	166	50	3	30	40-140	
1,4-Dichlorobenzene	333	165	50	2	30	40-140	
1-Methylnaphthalene	333	212	63	1	30	40-140	
2,3,4,6-Tetrachlorophenol	333	220	66	3	30	40-140	
2,4-Dimethylphenol	333	292	88	3	30	30-130	
2-Chlorophenol	333	194	58	2	30	30-130	
2,4-Dichlorophenol	333	241	72	4	30	30-130	
2,4,6-Trichlorophenol	333	270	81	7	30	30-130	
2-Methylphenol	333	206	62	1	30	30-130	
2,4,5-Trichlorophenol	333	249	75	0	30	30-130	
2-Methylnaphthalene	333	218	65	3	30	40-140	
3 & 4 Methylphenol	333	215	64	1	30	30-130	
2-Nitroaniline	333	227	68	5	30	40-140	
3,3'-Dichlorobenzidine	333	110	33	3	30	40-140	*
2-Chloronaphthalene	333	170	51	2	30	40-140	
2,6-Dinitrotoluene	333	241	72	5	30	40-140	
4-Chloro-3-methylphenol	333	266	80	7	30	30-130	
2-Nitrophenol	333	210	63	5	30	30-130	
4-Chloroaniline	333	219	66	5	30	40-140	
3-Nitroaniline	333	261	78	2	30	40-140	
2,4-Dinitrophenol	333	162	49	4	30	30-130	
2,4-Dinitrotoluene	333	232	69	4	30	40-140	
Acenaphthene	333	252	75	4	30	40-140	
Acenaphthylene	333	237	71	4	30	40-140	
4-Nitrophenol	333	328	98	8	30	30-130	
Aniline	333	88.6	27	2	30	40-140	*
4-Nitroaniline	333	243	73	6	30	40-140	
Azobenzene	333	244	73	2	30	40-140	
4-Bromophenyl phenyl ether	333	230	69	3	30	40-140	
4-Chlorophenyl phenyl ether	333	229	69	4	30	40-140	
4,6-Dinitro-2-methylphenol	333	179	54	1	30	30-130	
Benzoic acid	333	154 J	46	2	30	30-130	
Anthracene	333	281	84	3	30	40-140	
Benzyl alcohol	333	239	72	2	30	30-130	
Bis(2-chloroethoxy)methane	333	217	65	4	30	40-140	
Bis(2-chloroethyl)ether	333	174	52	2	30	40-140	
Butyl benzyl phthalate	333	242	73	2	30	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24327-1

SDG No.: OCRI-07

Matrix: Solid Level: Low Lab File ID: J03018.D

Lab ID: 360-24327-12 MS Client ID: OC-SB-410-6.0/8.0-XXX MS

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	QC LIMITS REC	#
1,1'-Biphenyl	426	ND	248	58	40-140	
1,2,4,5-Tetrachlorobenzene	426	ND	245	58	40-140	
1,2,4-Trichlorobenzene	426	ND	222	52	40-140	
1,2-Dichlorobenzene	426	ND	198	46	40-140	
1,3-Dichlorobenzene	426	ND	195	46	40-140	
1,4-Dichlorobenzene	426	ND	194	46	40-140	
1-Methylnaphthalene	426	ND	240	56	40-140	
2,2'-oxybis[1-chloropropane]	426	ND	216	51	40-140	
2,3,4,6-Tetrachlorophenol	426	ND	267	63	40-140	
2,4,5-Trichlorophenol	426	ND	300	71	30-130	
2,4,6-Trichlorophenol	426	ND	306	72	30-130	
2,4-Dichlorophenol	426	ND	277	65	30-130	
2,4-Dimethylphenol	426	ND	338	79	30-130	
2,4-Dinitrophenol	426	ND	300	70	30-130	
2,4-Dinitrotoluene	426	ND	268	63	40-140	
2,6-Dinitrotoluene	426	ND	285	67	40-140	
2-Chloronaphthalene	426	ND	200	47	40-140	
2-Chlorophenol	426	ND	229	54	30-130	
2-Methylnaphthalene	426	ND	249	58	40-140	
2-Methylphenol	426	ND	247	58	30-130	
2-Nitroaniline	426	ND	255	60	40-140	
2-Nitrophenol	426	ND	252	59	30-130	
3 & 4 Methylphenol	426	ND	257	60	30-130	
3,3'-Dichlorobenzidine	426	ND	115	27	40-140	F
3-Nitroaniline	426	ND	292	69	40-140	
4,6-Dinitro-2-methylphenol	426	ND	306	72	30-130	
4-Bromophenyl phenyl ether	426	ND	264	62	40-140	
4-Chloro-3-methylphenol	426	ND	299	70	30-130	
4-Chloroaniline	426	ND	232	55	40-140	
4-Chlorophenyl phenyl ether	426	ND	262	62	40-140	
4-Nitroaniline	426	ND	289	68	40-140	
4-Nitrophenol	426	ND	364	85	30-130	
Acenaphthene	426	ND	292	69	40-140	
Acenaphthylene	426	ND	274	64	40-140	
Acetophenone	426	ND	242	57	40-140	
Aniline	426	ND	97.6	23	40-140	F
Anthracene	426	ND	329	77	40-140	
Atrazine	426	ND	293	69	40-140	
Azobenzene	426	ND	286	67	40-140	
Benzaldehyde	426	ND	242	57	40-140	
Benzo[a]anthracene	426	25 J	332	72	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24327-1

SDG No.: OCRI-07

Matrix: Solid Level: Low Lab File ID: J03019.D

Lab ID: 360-24327-12 MSD Client ID: OC-SB-410-6.0/8.0-XXX MSD

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1'-Biphenyl	431	282	65	13	30	40-140	
1,2,4,5-Tetrachlorobenzene	431	263	61	7	30	40-140	
1,2,4-Trichlorobenzene	431	240	56	8	30	40-140	
1,2-Dichlorobenzene	431	215	50	8	30	40-140	
1,3-Dichlorobenzene	431	213	49	9	30	40-140	
1,4-Dichlorobenzene	431	210	49	8	30	40-140	
1-Methylnaphthalene	431	269	62	11	30	40-140	
2,2'-oxybis[1-chloropropane]	431	232	54	7	30	40-140	
2,3,4,6-Tetrachlorophenol	431	312	72	16	30	40-140	
2,4,5-Trichlorophenol	431	329	76	9	30	30-130	
2,4,6-Trichlorophenol	431	346	80	12	30	30-130	
2,4-Dichlorophenol	431	303	70	9	30	30-130	
2,4-Dimethylphenol	431	368	85	8	30	30-130	
2,4-Dinitrophenol	431	335	78	11	30	30-130	
2,4-Dinitrotoluene	431	302	70	12	30	40-140	
2,6-Dinitrotoluene	431	318	74	11	30	40-140	
2-Chloronaphthalene	431	216	50	7	30	40-140	
2-Chlorophenol	431	247	57	8	30	30-130	
2-Methylnaphthalene	431	271	63	9	30	40-140	
2-Methylphenol	431	260	60	5	30	30-130	
2-Nitroaniline	431	282	65	10	30	40-140	
2-Nitrophenol	431	276	64	9	30	30-130	
3 & 4 Methylphenol	431	272	63	6	30	30-130	
3,3'-Dichlorobenzidine	431	133	31	14		40-140	F
3-Nitroaniline	431	343	80	16	30	40-140	
4,6-Dinitro-2-methylphenol	431	350	81	13	30	30-130	
4-Bromophenyl phenyl ether	431	289	67	9	30	40-140	
4-Chloro-3-methylphenol	431	328	76	9	30	30-130	
4-Chloroaniline	431	254	59	9	30	40-140	
4-Chlorophenyl phenyl ether	431	285	66	8	30	40-140	
4-Nitroaniline	431	320	74	10	30	40-140	
4-Nitrophenol	431	441	102	19	30	30-130	
Acenaphthene	431	317	74	8	30	40-140	
Acenaphthylene	431	298	69	8	30	40-140	
Acetophenone	431	250	58	4	30	40-140	
Aniline	431	103	24	5	30	40-140	F
Anthracene	431	366	85	10	30	40-140	
Atrazine	431	340	79	15	30	40-140	
Azobenzene	431	322	75	12	30	40-140	
Benzaldehyde	431	250	58	4	30	40-140	
Benzo[a]anthracene	431	401	87	19	30	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM IV
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Westfield Job No.: 360-24327-1

SDG No.: OCRI-07

Lab File ID: B10373.D Lab Sample ID: MB 360-48691/1-A

Matrix: Solid Date Extracted: 09/08/2009 12:06

Instrument ID: Inst. B Date Analyzed: 09/17/2009 19:48

Level: (Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
OC-SB-404-5.0/7.0-XXX	360-24327-5	J03003.D	09/17/2009 17:14
OC-SB-409-0.0/1.0-XXX	360-24327-6	J03004.D	09/17/2009 17:44
OC-SB-403-0.0/1.0-XXX	360-24327-1	B10390.D	09/18/2009 05:23
OC-SB-403-6.0/8.0-XXX	360-24327-3	B10392.D	09/18/2009 06:30

MB 48691

Tune ok

Benzoic acid

Di-n-butylphthalate

TIC unknown (11.77)

Octadecane

~~Reject low~~

• ICAL OK

• CCAL OK

~~Recalculate 20%~~

• CCAL

Benzoic acid RF = 0.0279

2-nitroaniline RF = 0.0107

Organic Prep Worksheet

Batch Number: 360-48691
Method: 3546
Analyst: Bilodeau, Brian R

Date Open: Sep 08 2009 12:06PM
Batch End:

Lab ID	Client ID	Method Chain	Basis	Initial weight/volume of sample	Final weight/volume of sample	ABN SURR_00010	OlinLCSextras_00001	OP-abnms_00063
MB~360-48691/1		3546, 8270C LL		30.00 g	1.0 mL	50 uL		
LCS~360-48691/2				30.00 g	1.0 mL	50 uL	.100 mL	100 uL
LCSD~360-48691/3				30.00 g	1.0 mL	50 uL	.100 mL	100 uL
360-24309-A-12	OC-SB-414-0.0/1.0-XXX		T	30.06 g	1.0 mL	50 uL		
360-24309-A-13	OC-SB-414-20/22-XXX		T	30.05 g	1.0 mL	50 uL		
360-24309-A-14	OC-SB-414-6.0/8.0-XXX		T	30.05 g	1.0 mL	50 uL		
360-24309-A-15	OC-SB-422-0.0/1.0-XXX		T	30.60 g	1.0 mL	50 uL		
360-24309-A-16	OC-SB-422-13/15-XXX		T	30.55 g	1.0 mL	50 uL		
360-24309-A-17	OC-SB-422-6.0/8.0-XXX		T	30.57 g	1.0 mL	50 uL		
360-24309-A-18	OC-SB-429-16/18-XXX		T	30.13 g	1.0 mL	50 uL		
360-24309-A-19	OC-SB-429-6.0/8.0-XXX		T	30.24 g	1.0 mL	50 uL		
360-24309-A-20	OC-SB-430-0.0/1.0-XXX		T	30.66 g	1.0 mL	50 uL		
360-24309-A-21	OC-SB-430-19/21-XXX		T	30.57 g	1.0 mL	50 uL		
360-24309-A-22	OC-SB-430-8.0/10-DUP		T	30.80 g	1.0 mL	50 uL		
360-24309-A-23	OC-SB-430-8.0/10-XXX		T	30.25 g	1.0 mL	50 uL		
360-24309-A-23~MS	OC-SB-430-8.0/10-XMS		T	30.68 g	1.0 mL	50 uL	.100 mL	100 uL
360-24309-A-23~MSD	OC-SB-430-8.0/10-MSD		T	30.41 g	1.0 mL	50 uL	.100 mL	100 uL
360-24327-A-1	OC-SB-403-0.0/1.0-XXX	3546, 8270C LL	T	30.34 g	1.0 mL	50 uL		
360-24327-A-2	OC-SB-403-13/15-XXX		T	30.05 g	1.0 mL	50 uL		
360-24327-A-3	OC-SB-403-6.0/8.0-XXX	3546, 8270C LL	T	30.02 g	1.0 mL	50 uL		
360-24327-A-4	OC-SB-404-13/15-XXX		T	30.25 g	1.0 mL	50 uL		
360-24327-A-5	OC-SB-404-5.0/7.0-XXX	3546, 8270C LL	T	30.45 g	1.0 mL	50 uL		
360-24327-A-6	OC-SB-409-0.0/1.0-XXX	3546, 8270C LL	T	30.58 g	1.0 mL	50 uL		

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Westfield | Job No.: 360-24327-1

SDG No.: OCRI-07

Client Sample ID: | Lab Sample ID: MB 360-48691/1-A

Matrix: Solid | Lab File ID: B10373.D

Analysis Method: 8270C LL | Date Collected:

Extract. Method: 3546 | Date Extracted: 09/08/2009 12:06

Sample wt/vol: 30.00(g) | Date Analyzed: 09/17/2009 19:48

Con. Extract Vol.: 1.0(mL) | Dilution Factor: 1

Injection Volume: 1.0(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 49098 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
534-52-1	4,6-Dinitro-2-methylphenol	ND		170	10
65-85-0	Benzoic acid	71.7	J	170	15
120-12-7	Anthracene	ND		33	10
100-51-6	Benzyl alcohol	ND		67	28
111-91-1	Bis(2-chloroethoxy)methane	ND		33	10
111-44-4	Bis(2-chloroethyl)ether	ND		33	10
85-68-7	Butyl benzyl phthalate	ND		33	10
56-55-3	Benzo[a]anthracene	ND		33	10
105-60-2	Caprolactam	ND		33	10
218-01-9	Chrysene	ND		33	10
205-99-2	Benzo[b]fluoranthene	ND		33	10
207-08-9	Benzo[k]fluoranthene	ND		33	10
50-32-8	Benzo[a]pyrene	ND		33	10
132-64-9	Dibenzofuran	ND		33	10
53-70-3	Dibenz(a,h)anthracene	ND		33	10
84-66-2	Diethyl phthalate	ND		33	10
191-24-2	Benzo[g,h,i]perylene	ND		33	10
131-11-3	Dimethyl phthalate	ND		33	10
98-86-2	Acetophenone	ND		33	10
84-74-2	Di-n-butyl phthalate	77.0		33	29
117-81-7	Bis(2-ethylhexyl) phthalate	ND		33	10
117-84-0	Di-n-octyl phthalate	ND		33	17
206-44-0	Fluoranthene	ND		33	10
86-73-7	Fluorene	ND		33	10
118-74-1	Hexachlorobenzene	ND		33	10
87-68-3	Hexachlorobutadiene	ND		33	10
108-60-1	2,2'-oxybis[1-chloropropane]	ND		33	10
77-47-4	Hexachlorocyclopentadiene	ND		67	10
67-72-1	Hexachloroethane	ND		33	10
193-39-5	Indeno[1,2,3-cd]pyrene	ND		33	10
78-59-1	Isophorone	ND		33	10
91-20-3	Naphthalene	ND		80	10
98-95-3	Nitrobenzene	ND		33	10
1912-24-9	Atrazine	ND		33	10

FORM IV
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Westfield Job No.: 360-24327-1

SDG No.: OCRI-07

Lab File ID: B10286.D Lab Sample ID: MB 360-48399/1-A

Matrix: Water Date Extracted: 08/31/2009 15:38

Instrument ID: Inst. B Date Analyzed: 09/14/2009 15:18

Level:(Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 360-48399/2-A	B10287.D	09/14/2009 15:52
	LCSD 360-48399/3-A	B10288.D	09/14/2009 16:27
OC-EBK-005	360-24327-19	B10291.D	09/14/2009 18:09

Blank no actions

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Westfield | Job No.: 360-24327-1

SDG No.: OCRI-07

Client Sample ID: | Lab Sample ID: MB 360-48399/1-A

Matrix: Water | Lab File ID: B10286.D

Analysis Method: 8270C LL | Date Collected:

Extract. Method: 3510C | Date Extracted: 08/31/2009 15:38

Sample wt/vol: 1000(mL) | Date Analyzed: 09/14/2009 15:18

Con. Extract Vol.: 1.0(mL) | Dilution Factor: 1

Injection Volume: 1.0(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 48893 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
111-91-1	Bis(2-chloroethoxy)methane	ND		5.0	0.50
111-44-4	Bis(2-chloroethyl)ether	ND		5.0	0.50
85-68-7	Butyl benzyl phthalate	ND		5.0	0.50
56-55-3	Benzo[a]anthracene	ND		0.30	0.17
105-60-2	Caprolactam	ND		5.0	0.50
218-01-9	Chrysene	ND		1.0	0.17
205-99-2	Benzo[b]fluoranthene	ND		0.30	0.14
207-08-9	Benzo[k]fluoranthene	ND		0.30	0.17
50-32-8	Benzo[a]pyrene	ND		0.20	0.10
132-64-9	Dibenzofuran	ND		5.0	0.50
53-70-3	Dibenz(a,h)anthracene	ND		0.50	0.064
84-66-2	Diethyl phthalate	ND		5.0	0.50
191-24-2	Benzo[g,h,i]perylene	ND		0.50	0.094
131-11-3	Dimethyl phthalate	ND		5.0	0.50
98-86-2	Acetophenone	ND		5.0	0.50
84-74-2	Di-n-butyl phthalate	0.900	J	5.0	0.60
117-81-7	Bis(2-ethylhexyl) phthalate	ND		2.0	0.50
117-84-0	Di-n-octyl phthalate	ND		5.0	0.73
206-44-0	Fluoranthene	ND		1.0	0.20
86-73-7	Fluorene	ND		1.0	0.050
118-74-1	Hexachlorobenzene	ND		1.0	0.50
108-60-1	bis (2-chloroisopropyl) ether	ND		5.0	0.50
77-47-4	Hexachlorocyclopentadiene	ND		5.0	0.050
67-72-1	Hexachloroethane	ND		3.0	0.50
193-39-5	Indeno[1,2,3-cd]pyrene	ND		0.50	0.079
78-59-1	Isophorone	ND		5.0	0.50
98-95-3	Nitrobenzene	ND		5.0	0.50
1912-24-9	Atrazine	ND		5.0	0.50
100-52-7	Benzaldehyde	ND		5.0	0.50
62-75-9	N-Nitrosodimethylamine	ND		5.0	0.040
86-74-8	Carbazole	ND		5.0	0.50
621-64-7	N-Nitrosodi-n-propylamine	ND		5.0	0.50
119-61-9	Benzophenone	ND		5.0	0.50
86-30-6	N-Nitrosodiphenylamine	ND		5.0	0.50

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24327-1

SDG No.: OCRI-07

Matrix: Water Level: Low Lab File ID: B10287.D

Lab ID: LCS 360-48399/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1'-Biphenyl	10.0	8.90	89	40-140	
1,2,4,5-Tetrachlorobenzene	10.0	8.10	81	40-140	
1-Methylnaphthalene	10.0	8.70	87	40-140	
2,3,4,6-Tetrachlorophenol	10.0	7.80	78	40-140	
2,4-Dimethylphenol	10.0	9.19	92	30-130	
2-Chlorophenol	10.0	5.71	57	40-130	
2,4-Dichlorophenol	10.0	9.40	94	30-130	
2,4,6-Trichlorophenol	10.0	9.13	91	30-130	
2-Methylphenol	10.0	4.63 J	46	30-130	
2,4,5-Trichlorophenol	10.0	9.04	90	30-130	
2-Methylnaphthalene	10.0	8.37	84	40-140	
3 & 4 Methylphenol	10.0	3.70 J	37	30-130	
2-Nitroaniline	10.0	7.98	80	40-140	
3,3'-Dichlorobenzidine	10.0	3.41 J	34	40-140	*
2-Chloronaphthalene	10.0	6.73	67	40-140	
2,6-Dinitrotoluene	10.0	8.74	87	40-140	
4-Chloro-3-methylphenol	10.0	8.37	84	30-130	
2-Nitrophenol	10.0	10.5	105	30-130	
4-Chloroaniline	10.0	12.0	120	40-140	
3-Nitroaniline	10.0	8.35	84	40-140	
2,4-Dinitrophenol	10.0	9.28	93	30-130	
2,4-Dinitrotoluene	10.0	8.33	83	40-140	
Acenaphthene	10.0	9.62	96	40-140	
Acenaphthylene	10.0	8.86	89	40-140	
4-Nitrophenol	10.0	2.07 J	21	30-130	*
Aniline	10.0	2.47 J	25	40-140	*
4-Nitroaniline	10.0	8.94	89	40-140	
Azobenzene	10.0	9.04	90	40-140	
4-Bromophenyl phenyl ether	10.0	8.71	87	40-140	
4-Chlorophenyl phenyl ether	10.0	8.96	90	40-140	
4,6-Dinitro-2-methylphenol	10.0	9.67	97	30-130	
Benzoic acid	10.0	2.06 J	21	30-130	*
Anthracene	10.0	10.7	107	40-140	
Benzyl alcohol	10.0	5.12 J	51	30-130	
Bis(2-chloroethoxy)methane	10.0	8.69	87	40-140	
Bis(2-chloroethyl)ether	10.0	6.58	66	40-140	
Butyl benzyl phthalate	10.0	8.48	85	40-140	
Benzo[a]anthracene	10.0	10.8	108	40-140	
Caprolactam	10.0	2.18 J	22	40-140	*
Chrysene	10.0	10.3	103	40-140	
Benzo[b]fluoranthene	10.0	9.65	96	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24327-1

SDG No.: OCRI-07

Matrix: Water Level: Low Lab File ID: B10287.D

Lab ID: LCS 360-48399/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Benzo[k]fluoranthene	10.0	10.4	104	40-140	
Benzo[a]pyrene	10.0	9.97	100	40-140	
Dibenzofuran	10.0	8.59	86	40-140	
Dibenz(a,h)anthracene	10.0	11.9	119	40-140	
Diethyl phthalate	10.0	9.48	95	40-140	
Benzo[g,h,i]perylene	10.0	11.9	119	40-140	
Dimethyl phthalate	10.0	9.06	91	40-140	
Acetophenone	10.0	7.96	80	40-140	
Di-n-butyl phthalate	10.0	9.79	98	40-140	
Bis(2-ethylhexyl) phthalate	10.0	8.95	90	40-140	
Di-n-octyl phthalate	10.0	7.72	77	40-140	
Fluoranthene	10.0	10.4	104	40-140	
Fluorene	10.0	10.7	107	40-140	
Hexachlorobenzene	10.0	8.88	89	40-140	
bis (2-chloroisopropyl) ether	10.0	7.04	70	40-140	
Hexachlorocyclopentadiene	10.0	8.35	84	40-140	
Hexachloroethane	10.0	6.39	64	40-140	
Indeno[1,2,3-cd]pyrene	10.0	11.7	117	40-140	
Isophorone	10.0	8.37	84	40-140	
Nitrobenzene	10.0	8.76	88	40-140	
Atrazine	10.0	10.6	106	40-140	
Benzaldehyde	10.0	30.7	307	40-140	*
N-Nitrosodimethylamine	10.0	2.79 J	28	40-140	*
Carbazole	10.0	9.81	98	40-140	
N-Nitrosodi-n-propylamine	10.0	8.75	88	40-140	
Benzophenone	10.0	9.42	94	40-140	
N-Nitrosodiphenylamine	10.0	6.71	67	40-140	
Diphenyl oxide	10.0	8.86	89	40-140	
Pentachlorophenol	10.0	8.16	82	30-130	
Phenanthrene	10.0	9.59	96	40-140	
Phenol	10.0	1.35 J	13	30-130	*
Pyrene	10.0	8.77	88	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24327-1

SDG No.: OCRI-07

Matrix: Water Level: Low Lab File ID: B10288.D

Lab ID: LCSD 360-48399/3-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1'-Biphenyl	10.0	8.56	86	4	20	40-140	
1,2,4,5-Tetrachlorobenzene	10.0	8.03	80	1	20	40-140	
1-Methylnaphthalene	10.0	8.77	88	1	20	40-140	
2,3,4,6-Tetrachlorophenol	10.0	7.55	75	3	20	40-140	
2,4-Dimethylphenol	10.0	9.26	93	1	20	30-130	
2-Chlorophenol	10.0	5.64	56	1	20	40-130	
2,4-Dichlorophenol	10.0	9.39	94	0	20	30-130	
2,4,6-Trichlorophenol	10.0	8.84	88	3	20	30-130	
2-Methylphenol	10.0	4.67 J	47	1	20	30-130	
2,4,5-Trichlorophenol	10.0	8.52	85	6	20	30-130	
2-Methylnaphthalene	10.0	8.39	84	0	20	40-140	
3 & 4 Methylphenol	10.0	3.68 J	37	0	20	30-130	
2-Nitroaniline	10.0	7.84	78	2	20	40-140	
3,3'-Dichlorobenzidine	10.0	3.19 J	(32)	7	20	40-140	*
2-Chloronaphthalene	10.0	6.43	64	5	20	40-140	
2,6-Dinitrotoluene	10.0	8.39	84	4	20	40-140	
4-Chloro-3-methylphenol	10.0	8.64	86	3	20	30-130	
2-Nitrophenol	10.0	10.5	105	0	20	30-130	
4-Chloroaniline	10.0	11.4	114	5	20	40-140	
3-Nitroaniline	10.0	7.93	79	5	20	40-140	
2,4-Dinitrophenol	10.0	8.77	88	6	20	30-130	
2,4-Dinitrotoluene	10.0	8.09	81	3	20	40-140	
Acenaphthene	10.0	9.22	92	4	20	40-140	
Acenaphthylene	10.0	8.41	84	5	20	40-140	
4-Nitrophenol	10.0	1.88 J	(19)	10	20	30-130	*
Aniline	10.0	2.52 J	(25)	2	20	40-140	*
4-Nitroaniline	10.0	8.57	86	4	20	40-140	
Azobenzene	10.0	8.90	89	2	20	40-140	
4-Bromophenyl phenyl ether	10.0	8.60	86	1	20	40-140	
4-Chlorophenyl phenyl ether	10.0	8.66	87	3	20	40-140	
4,6-Dinitro-2-methylphenol	10.0	9.34	93	3	20	30-130	
Benzoic acid	10.0	1.65 J	(17)	22	20	30-130	*
Anthracene	10.0	10.4	104	3	20	40-140	
Benzyl alcohol	10.0	5.14 J	51	1	20	30-130	
Bis(2-chloroethoxy)methane	10.0	8.77	88	1	20	40-140	
Bis(2-chloroethyl)ether	10.0	6.25	63	5	20	40-140	
Butyl benzyl phthalate	10.0	8.68	87	2	20	40-140	
Benzo[a]anthracene	10.0	10.4	104	4	20	40-140	
Caprolactam	10.0	2.33 J	(23)	7	20	40-140	*
Chrysene	10.0	9.98	100	4	20	40-140	
Benzo[b]fluoranthene	10.0	9.77	98	1	20	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24327-1

SDG No.: OCRI-07

Matrix: Water Level: Low Lab File ID: B10288.D

Lab ID: LCSD 360-48399/3-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Benzo[k]fluoranthene	10.0	10.5	105	1	20	40-140	
Benzo[a]pyrene	10.0	9.82	98	1	20	40-140	
Dibenzofuran	10.0	8.27	83	4	20	40-140	
Dibenz(a,h)anthracene	10.0	9.54	95	22	20	40-140	*
Diethyl phthalate	10.0	9.17	92	3	20	40-140	
Benzo[g,h,i]perylene	10.0	9.62	96	21	20	40-140	*
Dimethyl phthalate	10.0	8.69	87	4	20	40-140	
Acetophenone	10.0	7.73	77	3	20	40-140	
Di-n-butyl phthalate	10.0	9.66	97	1	20	40-140	
Bis(2-ethylhexyl) phthalate	10.0	8.87	89	1	20	40-140	
Di-n-octyl phthalate	10.0	8.50	85	10	20	40-140	
Fluoranthene	10.0	9.99	100	4	20	40-140	
Fluorene	10.0	10.2	102	5	20	40-140	
Hexachlorobenzene	10.0	8.61	86	3	20	40-140	
bis (2-chloroisopropyl) ether	10.0	6.91	69	2	20	40-140	
Hexachlorocyclopentadiene	10.0	7.52	75	10	20	40-140	
Hexachloroethane	10.0	6.14	61	4	20	40-140	
Indeno[1,2,3-cd]pyrene	10.0	9.63	96	19	20	40-140	
Isophorone	10.0	8.41	84	1	20	40-140	
Nitrobenzene	10.0	8.78	88	0	20	40-140	
Atrazine	10.0	10.6	106	0	20	40-140	
Benzaldehyde	10.0	30.2	302	1	20	40-140	*
N-Nitrosodimethylamine	10.0	2.73 J	27	2	20	40-140	*
Carbazole	10.0	9.48	95	3	20	40-140	
N-Nitrosodi-n-propylamine	10.0	8.45	84	4	20	40-140	
Benzophenone	10.0	9.33	93	1	20	40-140	
N-Nitrosodiphenylamine	10.0	6.63	66	1	20	40-140	
Diphenyl oxide	10.0	9.00	90	2	20	40-140	
Pentachlorophenol	10.0	8.12	81	0	20	30-130	
Phenanthrene	10.0	9.39	94	2	20	40-140	
Phenol	10.0	1.39 J	14	3	20	30-130	*
Pyrene	10.0	9.05	90	3	20	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Westfield Job No.: 360-24327-1

SDG No.: OCRI-07

Lab Sample ID: CCV 360-48893/2 Calibration Date: 09/14/2009 14:44

Instrument ID: Inst. B Calib Start Date: 09/14/2009 08:29

GC Column: Rtx-5ms ID: 0.25(um) Calib End Date: 09/14/2009 13:02

Lab File ID: B10285.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Nitroaniline	Lin1		0.3854		4860	5000	-2.8	30.0
Dimethyl phthalate	Ave	1.261	1.288		5110	5000	2.2	30.0
2,6-Dinitrotoluene	Lin2		0.3097		5080	5000	1.6	30.0
Acenaphthylene	Ave	1.681	1.771		5270	5000	5.4	30.0
3-Nitroaniline	Lin1		0.2865		5040	5000	0.8	30.0
2,4-Dinitrophenol	Qua		0.0949	0.0500	5420	5000	8.5	30.0
4-Nitrophenol	Lin2		0.1386	0.0500	4450	5000	-11.1	30.0
Acenaphthene	Ave	1.211	1.210		5000	5000	0.1	20.0
2,4-Dinitrotoluene	Lin1		0.3919		4800	5000	-4.0	30.0
Dibenzofuran	Ave	1.549	1.558		5030	5000	0.6	30.0
2,3,4,6-Tetrachlorophenol	Lin1		0.2584		4880	5000	-2.5	30.0
Diethyl phthalate	Ave	1.264	1.300		5140	5000	2.9	30.0
4-Chlorophenyl phenyl ether	Ave	0.5715	0.5822		5090	5000	1.9	30.0
Fluorene	Ave	1.276	1.343		5260	5000	5.3	30.0
2-Nitroaniline	Lin		0.3303		4910	5000	-1.9	30.0
4,6-Dinitro-2-methylphenol	Qua		0.0930		5410	5000	8.2	30.0
Diphenylamine	Ave	0.6598	0.6808		5160	5000	3.2	30.0
N-Nitrosodiphenylamine	Ave	0.6598	0.6808		5160	5000	3.2	20.0
1,2-Diphenylhydrazine	Ave	1.240	1.290		5200	5000	4.0	30.0
Azobenzene	Ave	1.240	1.290		5200	5000	4.0	30.0
Benzophenone	Ave	0.7664	0.7805		5090	5000	1.8	30.0
4-Bromophenyl phenyl ether	Ave	0.1827	0.1830		5010	5000	0.2	30.0
Atrazine	Ave	0.1838	0.1958		5330	5000	6.5	30.0
Hexachlorobenzene	Ave	0.1681	0.1666		4960	5000	-0.9	30.0
Pentachlorophenol	Qua		0.0834		4820	5000	-3.7	20.0
Pentachloronitrobenzene	Lin2		0.0781		5110	5000	2.2	30.0
Phenanthrene	Ave	1.055	1.056		5010	5000	0.1	30.0
Anthracene	Ave	0.9833	1.030		5240	5000	4.7	30.0
Carbazole	Ave	0.8143	0.8358		5130	5000	2.6	30.0
Di-n-butyl phthalate	Ave	1.211	1.225		5060	5000	1.2	30.0
Pyrene	Ave	1.350	1.354		5010	5000	0.3	30.0
Benzidine	Ave	0.2939	0.4354		7410	5000	48.1*	30.0
Fluoranthene	Ave	0.9548	0.9978		5220	5000	4.5	20.0
Butyl benzyl phthalate	Lin1		0.6515		4760	5000	-4.8	30.0
Bis(2-ethylhexyl) phthalate	Lin1		0.8166		4800	5000	-4.0	30.0
3,3'-Dichlorobenzidine	Lin1		0.6235		4670	5000	-6.6	30.0
Benzo[a]anthracene	Ave	0.8996	0.9306		5170	5000	3.4	30.0
Chrysene	Ave	0.8852	0.8841		4990	5000	-0.1	30.0
Di-n-octyl phthalate	Lin1		2.051		4480	5000	-10.3	20.0
Benzo[b]fluoranthene	Ave	1.278	1.297		5070	5000	1.5	30.0
Benzo[k]fluoranthene	Ave	1.187	1.264		5320	5000	6.5	30.0

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Westfield Job No.: 360-24327-1

SDG No.: OCRI-07

Instrument ID: Inst. B Start Date: 09/17/2009 18:40

Analysis Batch Number: 49098 End Date: 09/18/2009 06:30

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 360-49098/1		09/17/2009 18:40	1	B10371.D	Rtx-5ms SIL with guard column 0.25(um)
CCV 360-49098/2 CCVIS		09/17/2009 19:14	1		Rtx-5ms SIL with guard column 0.25(um)
MB 360-48691/1-A		09/17/2009 19:48	1	B10373.D	Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/17/2009 20:22	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/17/2009 20:56	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/17/2009 21:30	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/17/2009 22:04	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/17/2009 22:38	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/17/2009 23:12	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/17/2009 23:46	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/18/2009 00:19	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/18/2009 00:53	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/18/2009 01:27	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/18/2009 02:01	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/18/2009 02:34	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/18/2009 03:08	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/18/2009 03:42	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/18/2009 04:15	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/18/2009 04:49	1		Rtx-5ms SIL with guard column 0.25(um)
360-24327-1	OC-SB-403-0.0/1.0-XXX	09/18/2009 05:23	1	B10390.D	Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/18/2009 05:56	1		Rtx-5ms SIL with guard column 0.25(um)
360-24327-3	OC-SB-403-6.0/8.0-XXX	09/18/2009 06:30	10	B10392.D	Rtx-5ms SIL with guard column 0.25(um)

CCAL Benzidine RPD = 30

8270C LL

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Westfield Job No.: 360-24327-1

SDG No.: OCRI-07

Lab Sample ID: CCV 360-49266/16 Calibration Date: 09/21/2009 22:38

Instrument ID: Inst. B Calib Start Date: 09/21/2009 15:24

GC Column: Rtx-5ms ID: 0.25(um) Calib End Date: 09/21/2009 19:31

Lab File ID: B10453.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Nitroaniline	Lin1		0.3855		4940	5000	-1.2	30.0
Dimethyl phthalate	Ave	1.239	1.267		5110	5000	2.3	30.0
2,6-Dinitrotoluene	Ave	0.2754	0.2918		5300	5000	6.0	30.0
Acenaphthylene	Ave	1.670	1.797		5380	5000	7.6	30.0
3-Nitroaniline	Lin1		0.2962		4910	5000	-1.9	30.0
2,4-Dinitrophenol	Qua		0.0952	0.0500	5410	5000	8.2	30.0
4-Nitrophenol	Lin1		0.1739	0.0500	4920	5000	-1.6	30.0
Acenaphthene	Ave	1.174	1.229		5230	5000	4.7	20.0
2,4-Dinitrotoluene	Lin1		0.3775		4770	5000	-4.7	30.0
Dibenzofuran	Ave	1.528	1.572		5150	5000	2.9	30.0
2,3,4,6-Tetrachlorophenol	Lin1		0.2510		4830	5000	-3.4	30.0
Diethyl phthalate	Ave	1.263	1.320		5220	5000	4.5	30.0
4-Chlorophenyl phenyl ether	Ave	0.5664	0.5786		5110	5000	2.2	30.0
2-Nitroaniline	Lin1		0.3462		4910	5000	-1.9	30.0
Fluorene	Ave	1.285	1.372		5340	5000	6.8	30.0
4,6-Dinitro-2-methylphenol	Lin		0.0990		4970	5000	-0.7	30.0
Diphenylamine	Ave	0.6519	0.6794		5210	5000	4.2	30.0
N-Nitrosodiphenylamine	Ave	0.6519	0.6794		5210	5000	4.2	20.0
1,2-Diphenylhydrazine	Ave	1.190	1.279		5370	5000	7.5	30.0
Azobenzene	Ave	1.190	1.279		5370	5000	7.5	30.0
Benzophenone	Ave	0.7148	0.7700		5390	5000	7.7	30.0
4-Bromophenyl phenyl ether	Ave	0.1833	0.1843		5030	5000	0.5	30.0
Atrazine	Lin1		0.2170		4990	5000	-0.1	30.0
Hexachlorobenzene	Ave	0.1770	0.1767		4990	5000	-0.2	30.0
Pentachlorophenol	Lin		0.0875		4830	5000	-3.5	20.0
Pentachloronitrobenzene	Lin1		0.0817		4700	5000	-6.0	30.0
Phenanthrene	Ave	1.036	1.050		5070	5000	1.4	30.0
Anthracene	Ave	0.9691	1.042		5380	5000	7.5	30.0
Carbazole	Ave	0.8190	0.8898		5430	5000	8.6	30.0
Di-n-butyl phthalate	Ave	1.221	1.233		5050	5000	1.0	30.0
Fluoranthene	Ave	0.8954	0.9516		5310	5000	6.3	20.0
Benzidine	Qua		0.2435		6500	5000	29.9	30.0
Pyrene	Ave	1.624	1.507		4640	5000	-7.2	30.0
Butyl benzyl phthalate	Ave	0.6741	0.7119		5280	5000	5.6	30.0
Bis(2-ethylhexyl) phthalate	Lin1		0.9378		4850	5000	-2.9	30.0
3,3'-Dichlorobenzidine	Lin1		0.3046		5070	5000	1.4	30.0
Benzo[a]anthracene	Ave	0.8840	0.9251		5230	5000	4.6	30.0
Chrysene	Ave	0.8662	0.8624		4980	5000	-0.4	30.0
Di-n-octyl phthalate	Lin1		2.149		4460	5000	-10.9	20.0
Benzo[b]fluoranthene	Ave	1.232	1.205		4890	5000	-2.2	30.0
Benzo[k]fluoranthene	Ave	1.130	1.111		4920	5000	-1.7	30.0

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Westfield Job No.: 360-24327-1

SDG No.: OCRI-07

Instrument ID: Inst. J Start Date: 09/17/2009 11:47

Analysis Batch Number: 49095 End Date: 09/17/2009 17:44

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 360-49095/1		09/17/2009 11:47	1	J02993.D	Rtx-5ms SIL with guard column 0.25(um)
CCV 360-49095/2 CCVIS		09/17/2009 12:17	1	J02994.D	Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/17/2009 13:21	5		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/17/2009 13:50	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/17/2009 14:19	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/17/2009 14:48	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/17/2009 15:18	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/17/2009 15:47	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/17/2009 16:16	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/17/2009 16:45	1		Rtx-5ms SIL with guard column 0.25(um)
360-24327-5	OC-SB-404-5.0/7.0-XXX	09/17/2009 17:14	1	J03003.D	Rtx-5ms SIL with guard column 0.25(um)
360-24327-6	OC-SB-409-0.0/1.0-XXX	09/17/2009 17:44	1	J03004.D	Rtx-5ms SIL with guard column 0.25(um)

CCAL

Benzoic acid RF = 0.0279

2-nitroaniline RF = 0.0407

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Westfield Job No.: 360-24327-1

SDG No.: OCRI-07

Lab Sample ID: CCV 360-49095/2 Calibration Date: 09/17/2009 12:17

Instrument ID: Inst. J Calib Start Date: 09/15/2009 17:27

GC Column: Rtx-5ms ID: 0.25(um) Calib End Date: 09/15/2009 21:23

Lab File ID: J02994.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Qua		0.2293		4860	5000	-2.8	30.0
N-Nitrosodimethylamine	Ave	0.3299	0.3103		4700	5000	-6.0	30.0
Pyridine	Lin1		0.5429		4370	5000	-12.5	30.0
Aniline	Ave	0.9185	0.8594		4680	5000	-6.4	30.0
Phenol	Ave	0.9427	0.7803		4140	5000	-17.2	20.0
Bis(2-chloroethyl)ether	Ave	0.6893	0.5902		4280	5000	-14.4	30.0
2-Chlorophenol	Ave	0.6685	0.6169		4610	5000	-7.7	30.0
1,4-Dichlorobenzene	Ave	0.7818	0.6671		4270	5000	-14.7	20.0
1,3-Dichlorobenzene	Ave	0.8034	0.6850		4260	5000	-14.7	30.0
1,2-Dichlorobenzene	Ave	0.7472	0.6202		4150	5000	-17.0	30.0
Benzyl alcohol	Ave	0.5078	0.5263		5180	5000	3.7	30.0
2-Methylphenol	Ave	0.5900	0.5435		4610	5000	-7.9	30.0
2,2'-oxybis[1-chloropropane]	Ave	0.6869	0.6033		4390	5000	-12.2	30.0
Acetophenone	Ave	0.8911	0.8448		4740	5000	-5.2	30.0
Benzaldehyde	Ave	0.8911	0.8448		4740	5000	-5.2	30.0
N-Nitrosodi-n-propylamine	Ave	0.4473	0.4433	0.0500	4960	5000	-0.9	30.0
3 & 4 Methylphenol	Ave	0.6159	0.5701		4630	5000	-7.4	30.0
Hexachloroethane	Ave	0.2836	0.2637		4650	5000	-7.0	30.0
Nitrobenzene	Ave	0.3156	0.3190		5050	5000	1.1	30.0
Isophorone	Lin2		0.5545		4970	5000	-0.6	30.0
2-Nitrophenol	Lin1		0.1469		4780	5000	-4.3	20.0
2,4-Dimethylphenol	Ave	0.2439	0.2581		5290	5000	5.8	30.0
Benzoic acid	Qua		0.0279		4940	5000	-1.1	30.0
Bis(2-chloroethoxy)methane	Ave	0.3351	0.3223		4810	5000	-3.8	30.0
2,4-Dichlorophenol	Lin2		0.2142		4840	5000	-3.1	20.0
1,2,4-Trichlorobenzene	Ave	0.2684	0.2443		4550	5000	-9.0	30.0
Naphthalene	Ave	0.9169	0.8435		4600	5000	-8.0	30.0
Alpha-Terpineol	Ave	0.1845	0.1928		5220	5000	4.5	30.0
4-Chloroaniline	Ave	0.3218	0.3404		5290	5000	5.8	30.0
Hexachlorobutadiene	Ave	0.1426	0.1341		4700	5000	-5.9	20.0
Caprolactam	Lin1		0.0922		4750	5000	-5.1	30.0
4-Chloro-3-methylphenol	Lin2		0.2560		5130	5000	2.6	20.0
2-Methylnaphthalene	Ave	0.5685	0.5341		4700	5000	-6.0	30.0
1-Methylnaphthalene	Ave	0.5770	0.5374		4660	5000	-6.9	30.0
Hexachlorocyclopentadiene	Lin		0.1289	0.0500	5190	5000	3.8	30.0
1,2,4,5-Tetrachlorobenzene	Ave	0.2318	0.2109		4550	5000	-9.0	30.0
2,4,6-Trichlorophenol	Lin2		0.2815		5100	5000	2.0	20.0
2,4,5-Trichlorophenol	Lin1		0.2839		4660	5000	-6.8	30.0
1,1'-Biphenyl	Ave	1.405	1.287		4580	5000	-8.4	30.0
2-Chloronaphthalene	Ave	1.339	1.287		4800	5000	-3.9	30.0
Phenyl ether	Ave	0.3833	0.3477		4540	5000	-9.3	30.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Westfield Job No.: 360-24327-1

SDG No.: OCRI-07

Lab Sample ID: CCV 360-49095/2 Calibration Date: 09/17/2009 12:17

Instrument ID: Inst. J Calib Start Date: 09/15/2009 17:27

GC Column: Rtx-5ms ID: 0.25(um) Calib End Date: 09/15/2009 21:23

Lab File ID: J02994.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Nitroaniline	Lin1		0.3389		4710	5000	-5.9	30.0
Dimethyl phthalate	Ave	1.206	1.183		4900	5000	-1.9	30.0
2,4-Dinitrotoluene	Lin2		0.2743		5010	5000	0.3	30.0
Acenaphthylene	Ave	1.582	1.577		4990	5000	-0.3	30.0
Acenaphthene	Ave	1.097	1.024		4670	5000	-6.7	20.0
2,4-Dinitrophenol	Lin		0.0536	0.0500	5510	5000	10.2	30.0
4-Nitrophenol	Qua		0.1412	0.0500	5920	5000	18.5	30.0
Dibenzofuran	Ave	1.497	1.355		4530	5000	-9.5	30.0
2,6-Dinitrotoluene	Lin1		0.3320		4790	5000	-4.1	30.0
2,3,4,6-Tetrachlorophenol	Lin1		0.2027		4580	5000	-8.4	30.0
Diethyl phthalate	Ave	1.234	1.208		4890	5000	-2.1	30.0
Fluorene	Ave	1.171	1.121		4780	5000	-4.3	30.0
4-Chlorophenyl phenyl ether	Ave	0.5655	0.5135		4540	5000	-9.2	30.0
3-Nitroaniline	Lin1		0.2164		4300	5000	-14.1	30.0
4,6-Dinitro-2-methylphenol	Qua		0.0676		5360	5000	7.1	30.0
Diphenylamine	Ave	0.5876	0.5972		5080	5000	1.6	30.0
N-Nitrosodiphenylamine	Ave	0.5876	0.5972		5080	5000	1.6	20.0
1,2-Diphenylhydrazine	Ave	1.165	1.246		5350	5000	7.0	30.0
Azobenzene	Ave	1.165	1.246		5350	5000	7.0	30.0
Benzophenone	Ave	0.7185	0.7541		5250	5000	5.0	30.0
2-Nitroaniline	Ave	0.0460	0.0407		4420	5000	-11.6	30.0
4-Bromophenyl phenyl ether	Ave	0.1786	0.1789		5010	5000	0.1	30.0
Hexachlorobenzene	Ave	0.1906	0.1879		4930	5000	-1.4	30.0
Atrazine	Lin2		0.1846		5100	5000	2.0	30.0
Pentachlorophenol	Qua		0.0642		5260	5000	5.1	20.0
Pentachloronitrobenzene	Lin1		0.0846		5120	5000	2.3	30.0
Phenanthrene	Ave	1.017	0.9315		4580	5000	-8.4	30.0
Anthracene	Ave	0.8971	0.9047		5040	5000	0.8	30.0
Carbazole	Ave	0.7715	0.7683		4980	5000	-0.4	30.0
Di-n-butyl phthalate	Ave	1.086	1.223		5630	5000	12.6	30.0
Pyrene	Ave	1.155	1.116		4830	5000	-3.4	30.0
Benzidine	Lin		0.5718		5330	5000	6.7	30.0
Fluoranthene	Ave	0.8987	0.8771		4880	5000	-2.4	20.0
Butyl benzyl phthalate	Lin1		0.6375		5330	5000	6.5	30.0
3,3'-Dichlorobenzidine	Lin1		0.6205		4940	5000	-1.1	30.0
Benzo[a]anthracene	Ave	0.8540	0.8703		5100	5000	1.9	30.0
Chrysene	Ave	0.9253	0.8487		4590	5000	-8.3	30.0
Bis(2-ethylhexyl) phthalate	Lin1		0.8858		5050	5000	1.0	30.0
Di-n-octyl phthalate	Qua		1.758		5660	5000	13.2	20.0
Benzo[b]fluoranthene	Ave	1.142	1.120		4900	5000	-1.9	30.0
Benzo[k]fluoranthene	Ave	1.097	1.018		4640	5000	-7.3	30.0

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Westfield Job No.: 360-24327-1

SDG No.: OCRI-07

Instrument ID: Inst. J Start Date: 09/18/2009 13:59

Analysis Batch Number: 49174 End Date: 09/19/2009 01:44

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 360-49174/1		09/18/2009 13:59	1	J03006.D	Rtx-5ms SIL with guard column 0.25(um)
CCV 360-49174/2 CCVIS		09/18/2009 14:26	1	J03007.D	Rtx-5ms SIL with guard column 0.25(um)
MB 360-48703/1-A		09/18/2009 14:53	1	J03008.D	Rtx-5ms SIL with guard column 0.25(um)
LCS 360-48703/2-A		09/18/2009 15:20	1	J03009.D	Rtx-5ms SIL with guard column 0.25(um)
LCSD 360-48703/3-A		09/18/2009 15:47	1	J03010.D	Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/18/2009 16:14	1		Rtx-5ms SIL with guard column 0.25(um)
360-24327-8	OC-SB-409-6.0/8.0-XXX	09/18/2009 16:41	1	J03012.D	Rtx-5ms SIL with guard column 0.25(um)
360-24327-9	OC-SB-410-0.0/1.0-XXX	09/18/2009 17:08	10	J03013.D	Rtx-5ms SIL with guard column 0.25(um)
360-24327-9 DL	OC-SB-410-0.0/1.0-XXX DL	09/18/2009 17:35	50	J03014.D	Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/18/2009 18:02	1		Rtx-5ms SIL with guard column 0.25(um)
360-24327-11	OC-SB-410-6.0/8.0-DUP	09/18/2009 18:29	1	J03016.D	Rtx-5ms SIL with guard column 0.25(um)
360-24327-12	OC-SB-410-6.0/8.0-XXX	09/18/2009 18:56	1	J03017.D	Rtx-5ms SIL with guard column 0.25(um)
360-24327-12 MS	OC-SB-410-6.0/8.0-XXX MS	09/18/2009 19:23	1	J03018.D	Rtx-5ms SIL with guard column 0.25(um)
360-24327-12 MSD	OC-SB-410-6.0/8.0-XXX MSD	09/18/2009 19:51	1	J03019.D	Rtx-5ms SIL with guard column 0.25(um)
360-24327-13	OC-SB-411-0.0/1.0-XXX	09/18/2009 20:18	1	J03020.D	Rtx-5ms SIL with guard column 0.25(um)
360-24327-14	OC-SB-411-4.7/6.7-XXX	09/18/2009 20:45	1	J03021.D	Rtx-5ms SIL with guard column 0.25(um)
360-24327-15	OC-SB-418-0.0/1.0-XXX	09/18/2009 21:13	1	J03022.D	Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/18/2009 21:40	1		Rtx-5ms SIL with guard column 0.25(um)
360-24327-17	OC-SB-418-8/10-XXX	09/18/2009 22:07	1	J03024.D	Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/18/2009 22:34	10		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/18/2009 23:02	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/18/2009 23:29	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/18/2009 23:56	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/19/2009 00:23	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/19/2009 00:50	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/19/2009 01:17	10		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/19/2009 01:44	1		Rtx-5ms SIL with guard column 0.25(um)

CCAL

Benzoic acid RF = 0.0166

4-nitrophenol %D = 31

2,4-DNP RF = 0.0372

4,6-dinitro-2-methylphenol %D = 27

2-nitroaniline RF = 0.0449

dibenz(a,h)anthracene %D = 26

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Westfield Job No.: 360-24327-1

SDG No.: OCRI-07

Lab Sample ID: CCV 360-49174/2 Calibration Date: 09/18/2009 14:26

Instrument ID: Inst. J Calib Start Date: 09/15/2009 17:27

GC Column: Rtx-5ms ID: 0.25(um) Calib End Date: 09/15/2009 21:23

Lab File ID: J03007.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Qua		0.2220		4710	5000	-5.9	30.0
Pyridine	Lin1		0.5240		4230	5000	-15.5	30.0
N-Nitrosodimethylamine	Ave	0.3299	0.2847		4310	5000	-13.7	30.0
Aniline	Ave	0.9185	0.8124		4420	5000	-11.6	30.0
Phenol	Ave	0.9427	0.7740		4100	5000	-17.9	20.0
Bis(2-chloroethyl)ether	Ave	0.6893	0.5757		4180	5000	-16.5	30.0
2-Chlorophenol	Ave	0.6685	0.5931		4440	5000	-11.3	30.0
1,4-Dichlorobenzene	Ave	0.7818	0.6573		4200	5000	-15.9	20.0
1,3-Dichlorobenzene	Ave	0.8034	0.6770		4210	5000	-15.7	30.0
1,2-Dichlorobenzene	Ave	0.7472	0.6110		4090	5000	-18.2	30.0
Benzyl alcohol	Ave	0.5078	0.5161		5080	5000	1.6	30.0
2-Methylphenol	Ave	0.5900	0.5320		4510	5000	-9.8	30.0
2,2'-oxybis[1-chloropropane]	Ave	0.6869	0.5865		4270	5000	-14.6	30.0
Acetophenone	Ave	0.8911	0.8083		4540	5000	-9.3	30.0
Benzaldehyde	Ave	0.8911	0.8083		4540	5000	-9.3	30.0
N-Nitrosodi-n-propylamine	Ave	0.4473	0.4136	0.0500	4620	5000	-7.5	30.0
3 & 4 Methylphenol	Ave	0.6159	0.5708		4630	5000	-7.3	30.0
Hexachloroethane	Ave	0.2836	0.2500		4410	5000	-11.8	30.0
Nitrobenzene	Ave	0.3156	0.3141		4980	5000	-0.5	30.0
Isophorone	Lin2		0.5273		4730	5000	-5.4	30.0
2-Nitrophenol	Lin1		0.1268		4140	5000	-17.2	20.0
2,4-Dimethylphenol	Ave	0.2439	0.2608		5350	5000	6.9	30.0
Benzoic acid	Qua		0.0166		4020	5000	-19.5	30.0
Bis(2-chloroethoxy)methane	Ave	0.3351	0.3153		4710	5000	-5.9	30.0
2,4-Dichlorophenol	Lin2		0.2104		4760	5000	-4.8	20.0
1,2,4-Trichlorobenzene	Ave	0.2684	0.2423		4510	5000	-9.7	30.0
Naphthalene	Ave	0.9169	0.8377		4570	5000	-8.6	30.0
Alpha-Terpineol	Ave	0.1845	0.1850		5010	5000	0.3	30.0
4-Chloroaniline	Ave	0.3218	0.3355		5210	5000	4.3	30.0
Hexachlorobutadiene	Ave	0.1426	0.1316		4620	5000	-7.7	20.0
Caprolactam	Lin1		0.0881		4540	5000	-9.2	30.0
4-Chloro-3-methylphenol	Lin2		0.2510		5030	5000	0.6	20.0
2-Methylnaphthalene	Ave	0.5685	0.5319		4680	5000	-6.4	30.0
1-Methylnaphthalene	Ave	0.5770	0.5304		4600	5000	-8.1	30.0
Hexachlorocyclopentadiene	Lin		0.1272	0.0500	5130	5000	2.6	30.0
1,2,4,5-Tetrachlorobenzene	Ave	0.2318	0.2105		4540	5000	-9.2	30.0
2,4,6-Trichlorophenol	Lin2		0.2764		5010	5000	0.2	20.0
2,4,5-Trichlorophenol	Lin1		0.2879		4720	5000	-5.5	30.0
1,1'-Biphenyl	Ave	1.405	1.268		4510	5000	-9.8	30.0
2-Chloronaphthalene	Ave	1.339	1.247		4660	5000	-6.8	30.0
Phenyl ether	Ave	0.3833	0.3440		4490	5000	-10.3	30.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Westfield Job No.: 360-24327-1

SDG No.: OCRI-07

Lab Sample ID: CCV 360-49174/2 Calibration Date: 09/18/2009 14:26

Instrument ID: Inst. J Calib Start Date: 09/15/2009 17:27

GC Column: Rtx-5ms ID: 0.25(um) Calib End Date: 09/15/2009 21:23

Lab File ID: J03007.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Nitroaniline	Lin1		0.3313		4600	5000	-8.0	30.0
Dimethyl phthalate	Ave	1.206	1.167		4840	5000	-3.2	30.0
2,4-Dinitrotoluene	Lin2		0.2604		4760	5000	-4.7	30.0
Acenaphthylene	Ave	1.582	1.562		4940	5000	-1.3	30.0
Acenaphthene	Ave	1.097	1.011		4610	5000	-7.9	20.0
2,4-Dinitrophenol	Lin		0.0372*	0.0500	4760	5000	-4.7	30.0
4-Nitrophenol	Qua		0.1593	0.0500	6520	5000	30.5*	30.0
Dibenzofuran	Ave	1.497	1.406		4700	5000	-6.1	30.0
2,6-Dinitrotoluene	Lin1		0.3326		4800	5000	-4.0	30.0
2,3,4,6-Tetrachlorophenol	Lin1		0.2046		4620	5000	-7.6	30.0
Diethyl phthalate	Ave	1.234	1.190		4820	5000	-3.6	30.0
Fluorene	Ave	1.171	1.131		4830	5000	-3.5	30.0
4-Chlorophenyl phenyl ether	Ave	0.5655	0.5224		4620	5000	-7.6	30.0
3-Nitroaniline	Lin1		0.2345		4640	5000	-7.1	30.0
4,6-Dinitro-2-methylphenol	Qua		0.0399		3680	5000	-26.5	30.0
Diphenylamine	Ave	0.5876	0.5688		4840	5000	-3.2	30.0
N-Nitrosodiphenylamine	Ave	0.5876	0.5688		4840	5000	-3.2	20.0
1,2-Diphenylhydrazine	Ave	1.165	1.197		5140	5000	2.8	30.0
Azobenzene	Ave	1.165	1.197		5140	5000	2.8	30.0
Benzophenone	Ave	0.7185	0.7110		4950	5000	-1.0	30.0
2-Nitroaniline	Ave	0.0460	0.0449		4880	5000	-2.4	30.0
4-Bromophenyl phenyl ether	Ave	0.1786	0.1704		4770	5000	-4.6	30.0
Hexachlorobenzene	Ave	0.1906	0.1782		4670	5000	-6.5	30.0
Atrazine	Lin2		0.1658		4580	5000	-8.3	30.0
Pentachlorophenol	Qua		0.0557		4740	5000	-5.2	20.0
Pentachloronitrobenzene	Lin1		0.0797		4830	5000	-3.4	30.0
Phenanthrene	Ave	1.017	0.9009		4430	5000	-11.4	30.0
Anthracene	Ave	0.8971	0.8730		4870	5000	-2.7	30.0
Carbazole	Ave	0.7715	0.7619		4940	5000	-1.2	30.0
Di-n-butyl phthalate	Ave	1.086	1.095		5040	5000	0.8	30.0
Fluoranthene	Ave	0.8987	0.8197		4560	5000	-8.8	20.0
Benzidine	Lin		0.5453		5120	5000	2.5	30.0
Pyrene	Ave	1.155	1.103		4770	5000	-4.5	30.0
Butyl benzyl phthalate	Lin1		0.5625		4710	5000	-5.8	30.0
3,3'-Dichlorobenzidine	Lin1		0.6186		4930	5000	-1.4	30.0
Benzo[a]anthracene	Ave	0.8540	0.8074		4730	5000	-5.5	30.0
Chrysene	Ave	0.9253	0.7711		4170	5000	-16.7	30.0
Bis(2-ethylhexyl) phthalate	Lin1		0.7674		4390	5000	-12.3	30.0
Di-n-octyl phthalate	Qua		1.506		4980	5000	-0.4	20.0
Benzo[b]fluoranthene	Ave	1.142	1.066		4670	5000	-6.6	30.0
Benzo[k]fluoranthene	Ave	1.097	1.012		4610	5000	-7.8	30.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Westfield Job No.: 360-24327-1

SDG No.: OCRI-07

Lab Sample ID: CCV 360-49174/2 Calibration Date: 09/18/2009 14:26

Instrument ID: Inst. J Calib Start Date: 09/15/2009 17:27

GC Column: Rtx-5ms ID: 0.25(um) Calib End Date: 09/15/2009 21:23

Lab File ID: J03007.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Benzo[a]pyrene	Lin1		0.7970		4620	5000	-7.5	20.0
Indeno[1,2,3-cd]pyrene	Lin1		0.8174		6160	5000	23.1	30.0
Dibenz(a,h)anthracene	Lin1		0.6635		6300	5000	26.0	30.0
Benzo[g,h,i]perylene	Ave	0.5986	0.7082		5920	5000	18.3	30.0
2-Fluorophenol	Ave	0.6265	0.5326		4250	5000	-15.0	30.0
Phenol-d5	Ave	0.7745	0.6958		4490	5000	-10.2	30.0
Nitrobenzene-d5	Ave	0.3070	0.3033		4940	5000	-1.2	30.0
2-Fluorobiphenyl	Ave	1.270	1.152		4530	5000	-9.3	30.0
2,4,6-Tribromophenol	Lin1		0.0779		4860	5000	-2.8	30.0
Terphenyl-d14	Ave	0.7644	0.6918		4520	5000	-9.5	30.0

FORM IV
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Westfield Job No.: 360-24327-1

SDG No.: OCRI-07

Lab File ID: J02865.D Lab Sample ID: MB 360-48653/1-A

Matrix: Solid Date Extracted: 09/06/2009 09:00

Instrument ID: Inst. J Date Analyzed: 09/06/2009 11:12

Level: (Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 360-48653/2-A	J02866.D	09/06/2009 11:41
	LCSD 360-48653/3-A	J02867.D	09/06/2009 12:11
OC-SB-403-0.0/1.0-XXX	360-24327-1	J02875.D	09/06/2009 16:11
OC-SB-404-5.0/7.0-XXX	360-24327-5	J02878.D	09/06/2009 17:41
OC-SB-403-6.0/8.0-XXX	360-24327-3	J02879.D	09/06/2009 18:11

MB OK
LCS OK

MA only

Tune OK

IS OUT LOW

Organic Prep Worksheet

Batch Number: 360-48653
Method: 3550B
Analyst: Rachtan, Karolina

Date Open: Sep 06 2009 9:00AM
Batch End:

Lab ID	Client ID	Method Chain	Basis	Initial weight/volume of sample	Final weight/volume of sample	ABN SURR_00010	OP-abnms_00063
MB~360-48653/1		3550B, 8270C LL		100.00 g	1 mL	50 uL	
LCS~360-48653/2		3550B, 8270C LL		100.00 g	1 mL	50 uL	100 uL
LCSD~360-48653/3		3550B, 8270C LL		100.00 g	1 mL	50 uL	100 uL
360-24309-A-17	OC-SB-422-6.0/8.0-XXX		T	100.33 g	1 mL	50 uL	
360-24309-A-20	OC-SB-430-0.0/1.0-XXX		T	100.56 g	1 mL	50 uL	
360-24309-A-21	OC-SB-430-19/21-XXX		T	100.54 g	1 mL	50 uL	
360-24309-A-22	OC-SB-430-8.0/10-DUP		T	100.36 g	1 mL	50 uL	
360-24309-A-23	OC-SB-430-8.0/10-XXX		T	100.12 g	1 mL	50 uL	
360-24309-A-23~MS	OC-SB-430-8.0/10-XMS		T	100.80 g	1 mL	50 uL	100 uL
360-24309-A-23~MSD	OC-SB-430-8.0/10-MSD		T	100.14 g	1 mL	50 uL	100 uL
360-24327-A-1	OC-SB-403-0.0/1.0-XXX	3550B, 8270C LL	T	100.18 g	1 mL	50 uL	
360-24327-A-2	OC-SB-403-13/15-XXX		T	100.31 g	1 mL	50 uL	
360-24327-A-3	OC-SB-403-6.0/8.0-XXX	3550B, 8270C LL	T	100.10 g	2 mL	50 uL	
360-24327-A-4	OC-SB-404-13/15-XXX		T	100.51 g	1 mL	50 uL	
360-24327-A-5	OC-SB-404-5.0/7.0-XXX	3550B, 8270C LL	T	100.25 g	1 mL	50 uL	

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Westfield Job No.: 360-24327-1

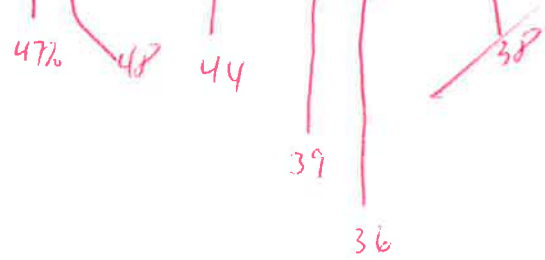
SDG No.: OCRI-07

Sample No.: CCV 360-48651/2 Date Analyzed: 09/06/2009 10:35

Instrument ID: Inst. J GC Column: Rtx-5ms SIL with ID: 0.25(um)

Lab File ID (Standard): J02864.D Heated Purge: (Y/N) N

		PHN		CRY		PRY	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12 HOUR STD		854360	9.85	674427	12.53	401338	14.01
UPPER LIMIT		1708720	10.35	1348854	13.03	802676	14.51
LOWER LIMIT		427180	9.35	337214	12.03	200669	13.51
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 360-48653/1-A		703744	9.85	472339	12.53	202148	14.01
LCS 360-48653/2-A		696849	9.85	421318	12.53	169399*	14.00
LCSD 360-48653/3-A		691135	9.85	510482	12.53	269211	14.01
360-24327-1	OC-SB-403-0.0/1.0-XXX	577975	9.85	317803*	12.53	155256*	14.01
360-24327-5	OC-SB-404-5.0/7.0-XXX	594865	9.85	324481*	12.53	153194*	14.01
360-24327-3	OC-SB-403-6.0/8.0-XXX	624471	9.85	300037*	12.52	143427*	14.01



PHN = Phenanthrene-d10
CRY = Chrysene-d12
PRY = Perylene-d12

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.50 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270C LL

FORM IV
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Westfield Job No.: 360-24327-1

SDG No.: OCRI-07

Lab File ID: J02895.D Lab Sample ID: MB 360-48744/1-A

Matrix: Solid Date Extracted: 09/09/2009 11:12

Instrument ID: Inst. J Date Analyzed: 09/10/2009 22:55

Level:(Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 360-48744/2-A	J02896.D	09/10/2009 23:25
	LCSD 360-48744/3-A	J02897.D	09/10/2009 23:54
OC-SB-410-6.0/8.0-XXX	360-24327-12	J02898.D	09/11/2009 00:24
OC-SB-410-6.0/8.0-XXX MS	360-24327-12 MS	J02899.D	09/11/2009 00:54
OC-SB-410-6.0/8.0-XXX MSD	360-24327-12 MSD	J02900.D	09/11/2009 01:24
OC-SB-409-6.0/8.0-XXX	360-24327-8	J02901.D	09/11/2009 01:54
OC-SB-410-6.0/8.0-DUP	360-24327-11	J02903.D	09/11/2009 02:54
OC-SB-411-4.7/6.7-XXX	360-24327-14	J02904.D	09/11/2009 03:24
OC-SB-411-0.0/1.0-XXX	360-24327-13	J02907.D	09/11/2009 04:53
OC-SB-410-0.0/1.0-XXX	360-24327-9	J02912.D	09/11/2009 07:22
OC-SB-409-0.0/1.0-XXX	360-24327-6	J02914.D	09/11/2009 08:22

Organic Prep Worksheet

Batch Number: 360-48744
Method: 3550B
Analyst: Bilodeau, Brian R

Date Open: Sep 09 2009 11:12AM
Batch End:

Lab ID	Client ID	Method Chain	Basis	Initial weight/volume of sample	Final weight/volume of sample	ABN SURR_00010	OP-abnms_00063
MB~360-48744/1		3550B, 8270C LL		100.00 g	1.0 mL	50 uL	
LCS~360-48744/2		3550B, 8270C LL		100.00 g	1.0 mL	50 uL	100 uL
LCSD~360-48744/3		3550B, 8270C LL		100.00 g	1.0 mL	50 uL	100 uL
360-24327-A-12	OC-SB-410-6.0/8.0-XXX	3550B, 8270C LL	T	100.47 g	1.0 mL	50 uL	
360-24327-A-12~MS	OC-SB-410-6.0/8.0-XMS	3550B, 8270C LL	T	100.49 g	1.0 mL	50 uL	100 uL
360-24327-A-12~MSD	OC-SB-410-6.0/8.0-MSD	3550B, 8270C LL	T	100.54 g	1.0 mL	50 uL	100 uL
360-24343-A-1	OC-SB-444-0.0/1.0-XXX		T	100.05 g	2.0 mL	50 uL	
360-24343-A-2	OC-SB-444-12/14-XXX		T	100.75 g	1.0 mL	50 uL	
360-24343-A-3	OC-SB-444-5.0/7.0-XXX		T	100.64 g	1.0 mL	50 uL	
360-24343-A-4	OC-SB-449-0.0/1.0-XXX		T	100.30 g	1.0 mL	50 uL	
360-24343-A-7	OC-SB-451-0.0/1.0-XXX		T	100.68 g	1.0 mL	50 uL	
360-24343-A-8	OC-SB-451-18/20-XXX		T	100.23 g	1.0 mL	50 uL	
360-24343-A-9	OC-SB-451-2.5/4.5-DUP		T	100.45 g	1.0 mL	50 uL	
360-24365-A-1	OC-SB-442-0.0/1.0-XXX		T	100.53 g	2.0 mL	50 uL	
360-24365-A-2	OC-SB-442-20/22-XXX		T	100.55 g	1.0 mL	50 uL	
360-24327-A-6	OC-SB-409-0.0/1.0-XXX	3550B, 8270C LL	T	100.26 g	1.0 mL	50 uL	
360-24327-A-7	OC-SB-409-15/17-XXX		T	100.36 g	1.0 mL	50 uL	
360-24327-A-8	OC-SB-409-6.0/8.0-XXX	3550B, 8270C LL	T	100.77 g	1.0 mL	50 uL	
360-24327-A-9	OC-SB-410-0.0/1.0-XXX	3550B, 8270C LL	T	100.01 g	1.0 mL	50 uL	
360-24327-A-10	OC-SB-410-17/19-XXX		T	100.35 g	1.0 mL	50 uL	
360-24327-A-11	OC-SB-410-6.0/8.0-DUP	3550B, 8270C LL	T	100.30 g	1.0 mL	50 uL	
360-24327-A-13	OC-SB-411-0.0/1.0-XXX	3550B, 8270C LL	T	100.31 g	1.0 mL	50 uL	
360-24327-A-14	OC-SB-411-4.7/6.7-XXX	3550B, 8270C LL	T	100.28 g	1.0 mL	50 uL	

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Westfield Job No.: 360-24327-1

SDG No.: OCRI-07

Sample No.: CCV 360-48817/2 Date Analyzed: 09/10/2009 22:25

Instrument ID: Inst. J GC Column: Rtx-5ms SIL with ID: 0.25(um)

Lab File ID (Standard): J02894.D Heated Purge: (Y/N) N

		DCB		NPT		ANT	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12 HOUR STD		228585	5.13	475178	6.36	242102	8.08
UPPER LIMIT		457170	5.63	950356	6.86	484204	8.58
LOWER LIMIT		114293	4.63	237589	5.86	121051	7.58
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 360-48744/1-A		186013	5.13	459615	6.35	233527	8.08
LCS 360-48744/2-A		198671	5.13	414100	6.36	211005	8.08
LCSD 360-48744/3-A		174822	5.13	344668	6.36	174851	8.08
360-24327-12	OC-SB-410-6.0/8.0-XXX	191297	5.13	479500	6.36	238328	8.08
360-24327-12 MS	OC-SB-410-6.0/8.0-XXX MS	211587	5.13	436302	6.36	223907	8.08
360-24327-12 MSD	OC-SB-410-6.0/8.0-XXX MSD	269200	5.13	567298	6.35	279866	8.09
360-24327-8	OC-SB-409-6.0/8.0-XXX	218765	5.13	550084	6.35	278472	8.08
360-24327-11	OC-SB-410-6.0/8.0-DUP	202879	5.13	508196	6.36	253034	8.08
360-24327-14	OC-SB-411-4.7/6.7-XXX	134273	5.13	341340	6.35	177460	8.08
360-24327-13	OC-SB-411-0.0/1.0-XXX	137984	5.13	346020	6.35	175835	8.09
360-24327-9	OC-SB-410-0.0/1.0-XXX	187631	5.13	459437	6.36	244779	8.08
360-24327-6	OC-SB-409-0.0/1.0-XXX	58614*	5.12	147959*	6.36	75220*	8.09

26%

31%

DCB = 1,4-Dichlorobenzene-d4
NPT = Naphthalene-d8
ANT = Acenaphthene-d10

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.50 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270C LL

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Westfield Job No.: 360-24327-1

SDG No.: OCRI-07

Sample No.: CCV 360-48817/2 Date Analyzed: 09/10/2009 22:25

Instrument ID: Inst. J GC Column: Rtx-5ms SIL with ID: 0.25(um)

Lab File ID (Standard): J02894.D Heated Purge: (Y/N) N

		PHN		CRY		PRY	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12 HOUR STD		398603	9.55	279567	12.20	220462	13.65
UPPER LIMIT		797206	10.05	559134	12.70	440924	14.15
LOWER LIMIT		199302	9.05	139784	11.70	110231	13.15
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 360-48744/1-A		392466	9.55	289273	12.20	233980	13.65
LCS 360-48744/2-A		358031	9.56	270216	12.20	239830	13.65
LCSD 360-48744/3-A		297474	9.55	206262	12.20	155759	13.65
360-24327-12	OC-SB-410-6.0/8.0-XXX	404707	9.55	332604	12.20	297630	13.65
360-24327-12 MS	OC-SB-410-6.0/8.0-XXX MS	382004	9.55	280474	12.20	253540	13.65
360-24327-12 MSD	OC-SB-410-6.0/8.0-XXX MSD	485038	9.56	375360	12.21	353269	13.65
360-24327-8	OC-SB-409-6.0/8.0-XXX	460985	9.55	413338	12.21	342470	13.66
360-24327-11	OC-SB-410-6.0/8.0-DUP	433109	9.55	370209	12.20	342672	13.65
360-24327-14	OC-SB-411-4.7/6.7-XXX	299408	9.55	219900	12.20	177888	13.65
360-24327-13	OC-SB-411-0.0/1.0-XXX	294850	9.55	206207	12.20	151157	13.66
360-24327-9	OC-SB-410-0.0/1.0-XXX	406968	9.56	289257	12.24	265189	13.68
360-24327-6	OC-SB-409-0.0/1.0-XXX	127382*	9.56	98248*	12.20	78460*	13.66

PHN = Phenanthrene-d10
CRY = Chrysene-d12
PRY = Perylene-d12

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.50 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270C LL

FORM II
GC/MS SEMI VOA SURROGATE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24327-1

SDG No.: OCRI-07

Matrix: Solid Level: Low

GC Column (1): Rtx-5ms ID: 0.25 (um)

Client Sample ID	Lab Sample ID	2FP #	PHL #	NBZ #	FBP #	TBP #	TPH #
OC-SB-403-0.0/1.0-XXX	360-24327-1	67	61	69	65	33	78
OC-SB-403-0.0/1.0-XXX	360-24327-1	71	81	85	75	28 X	105
OC-SB-403-6.0/8.0-XXX	360-24327-3	35	27 X	49	41	42	42
OC-SB-403-6.0/8.0-XXX	360-24327-3	49	51	20 X	58	70	83
OC-SB-404-5.0/7.0-XXX	360-24327-5	77	80	85	76	87	113
OC-SB-404-5.0/7.0-XXX	360-24327-5	69	67	61	59	68	71
OC-SB-409-0.0/1.0-XXX	360-24327-6	66	68	62	69	65	66
OC-SB-409-0.0/1.0-XXX	360-24327-6	73	74	65	67	75	73
OC-SB-409-6.0/8.0-XXX	360-24327-8	49	55	48	52	78	58
OC-SB-409-6.0/8.0-XXX	360-24327-8	71	71	62	62	74	73
OC-SB-410-0.0/1.0-XXX	360-24327-9	68	73	70	76	80	116
OC-SB-410-0.0/1.0-XXX	360-24327-9	73	77	70	78	72	100
OC-SB-410-0.0/1.0-XXX DL	360-24327-9 DL	0 X D	0 X D	0 X D	0 X D	0 X D	0 X D
OC-SB-410-0.0/1.0-XXX DL2	360-24327-9 DL2	0 X D	0 X D	0 X D	0 X D	0 X D	0 X D
OC-SB-410-6.0/8.0-DUP	360-24327-11	55	62	55	56	64	57
OC-SB-410-6.0/8.0-DUP	360-24327-11	74	74	67	65	72	68
OC-SB-410-6.0/8.0-XXX	360-24327-12	66	74	65	65	79	66
OC-SB-410-6.0/8.0-XXX	360-24327-12	79	78	68	67	73	64
OC-SB-411-0.0/1.0-XXX	360-24327-13	61	71	63	65	82	73
OC-SB-411-0.0/1.0-XXX	360-24327-13	64	64	56	54	65	55
OC-SB-411-4.7/6.7-XXX	360-24327-14	64	74	68	68	78	71
OC-SB-411-4.7/6.7-XXX	360-24327-14	69	69	61	55	67	57
OC-SB-418-0.0/1.0-XXX	360-24327-15	79	78	70	68	77	69
OC-SB-418-8/10-XXX	360-24327-17	72	70	64	62	70	64

No reason
No reason
No reason

	QC LIMITS
2FP = 2-Fluorophenol	30-130
PHL = Phenol-d5	30-130
NBZ = Nitrobenzene-d5	30-130
FBP = 2-Fluorobiphenyl	30-130
TBP = 2,4,6-Tribromophenol	30-130
TPH = Terphenyl-d14	30-130

Column to be used to flag recovery values

FORM II 8270C LL

FORM IV
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Westfield Job No.: 360-24327-2

SDG No.: OCRI-07A

Lab File ID: J03008.D Lab Sample ID: MB 360-48703/1-A

Matrix: Solid Date Extracted: 09/08/2009 14:52

Instrument ID: Inst. J Date Analyzed: 09/18/2009 14:53

Level:(Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 360-48703/2-A	J03009.D	09/18/2009 15:20
	LCSD 360-48703/3-A	J03010.D	09/18/2009 15:47
OC-SB-409-15/17-XXX	360-24327-7	J03011.D	09/18/2009 16:14
OC-SB-410-17/19-XXX	360-24327-10	J03015.D	09/18/2009 18:02
OC-SB-418-15/17-XXX	360-24327-16	J03023.D	09/18/2009 21:40

Surr OK
2 s OK

LCS

3,3'-DCB 32/33

Aniline 26/27

MB (360-48703)

Benzoic Acid 77

Di-n-butyl-phthalate 97.6

3PS 5+

97.6 10+

TIC 2-phenoxy-ethanol

unk (10.63)

Octadecane

unk (13.45)

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24327-2

SDG No.: OCRI-07A

Matrix: Solid Level: Low Lab File ID: J03009.D

Lab ID: LCS 360-48703/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
1,1'-Biphenyl	333	218	65	40-140	
1,2,4,5-Tetrachlorobenzene	333	204	61	40-140	
1,2,4-Trichlorobenzene	333	185	55	40-140	
1,2-Dichlorobenzene	333	166	50	40-140	
1,3-Dichlorobenzene	333	162	49	40-140	
1,4-Dichlorobenzene	333	162	49	40-140	
1-Methylnaphthalene	333	209	63	40-140	
2,2'-oxybis[1-chloropropane]	333	179	54	40-140	
2,3,4,6-Tetrachlorophenol	333	214	64	40-140	
2,4,5-Trichlorophenol	333	249	75	30-130	
2,4,6-Trichlorophenol	333	252	76	30-130	
2,4-Dichlorophenol	333	232	70	30-130	
2,4-Dimethylphenol	333	283	85	30-130	
2,4-Dinitrophenol	333	170	51	30-130	
2,4-Dinitrotoluene	333	222	67	40-140	
2,6-Dinitrotoluene	333	230	69	40-140	
2-Chloronaphthalene	333	167	50	40-140	
2-Chlorophenol	333	190	57	30-130	
2-Methylnaphthalene	333	211	63	40-140	
2-Methylphenol	333	204	61	30-130	
2-Nitroaniline	333	216	65	40-140	
2-Nitrophenol	333	199	60	30-130	
3 & 4 Methylphenol	333	212	64	30-130	
3,3'-Dichlorobenzidine	333	107	32	40-140	*
3-Nitroaniline	333	256	77	40-140	
4,6-Dinitro-2-methylphenol	333	181	54	30-130	
4-Bromophenyl phenyl ether	333	223	67	40-140	
4-Chloro-3-methylphenol	333	250	75	30-130	
4-Chloroaniline	333	208	62	40-140	
4-Chlorophenyl phenyl ether	333	220	66	40-140	
4-Nitroaniline	333	229	69	40-140	
4-Nitrophenol	333	304	91	30-130	
Acenaphthene	333	242	73	40-140	
Acenaphthylene	333	228	68	40-140	
Acetophenone	333	195	59	40-140	
Aniline	333	86.7	26	40-140	*
Anthracene	333	273	82	40-140	
Atrazine	333	253	76	40-140	
Azobenzene	333	239	72	40-140	
Benzaldehyde	333	195	59	40-140	
Benzo[a]anthracene	333	273	82	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24327-2

SDG No.: OCRI-07A

Matrix: Solid Level: Low Lab File ID: J03010.D

Lab ID: LCSD 360-48703/3-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCSD CONCENTRATION (ug/Kg)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1'-Biphenyl	333	217	65	0	30	40-140	
1,2,4,5-Tetrachlorobenzene	333	210	63	3	30	40-140	
1,2,4-Trichlorobenzene	333	191	57	3	30	40-140	
1,2-Dichlorobenzene	333	167	50	1	30	40-140	
1,3-Dichlorobenzene	333	166	50	3	30	40-140	
1,4-Dichlorobenzene	333	165	50	2	30	40-140	
1-Methylnaphthalene	333	212	63	1	30	40-140	
2,2'-oxybis[1-chloropropane]	333	183	55	2	30	40-140	
2,3,4,6-Tetrachlorophenol	333	220	66	3	30	40-140	
2,4,5-Trichlorophenol	333	249	75	0	30	30-130	
2,4,6-Trichlorophenol	333	270	81	7	30	30-130	
2,4-Dichlorophenol	333	241	72	4	30	30-130	
2,4-Dimethylphenol	333	292	88	3	30	30-130	
2,4-Dinitrophenol	333	162	49	4	30	30-130	
2,4-Dinitrotoluene	333	232	69	4	30	40-140	
2,6-Dinitrotoluene	333	241	72	5	30	40-140	
2-Chloronaphthalene	333	170	51	2	30	40-140	
2-Chlorophenol	333	194	58	2	30	30-130	
2-Methylnaphthalene	333	218	65	3	30	40-140	
2-Methylphenol	333	206	62	1	30	30-130	
2-Nitroaniline	333	227	68	5	30	40-140	
2-Nitrophenol	333	210	63	5	30	30-130	
3 & 4 Methylphenol	333	215	64	1	30	30-130	
3,3'-Dichlorobenzidine	333	110	33	3	30	40-140	*
3-Nitroaniline	333	261	78	2	30	40-140	
4,6-Dinitro-2-methylphenol	333	179	54	1	30	30-130	
4-Bromophenyl phenyl ether	333	230	69	3	30	40-140	
4-Chloro-3-methylphenol	333	266	80	7	30	30-130	
4-Chloroaniline	333	219	66	5	30	40-140	
4-Chlorophenyl phenyl ether	333	229	69	4	30	40-140	
4-Nitroaniline	333	243	73	6	30	40-140	
4-Nitrophenol	333	328	98	8	30	30-130	
Acenaphthene	333	252	75	4	30	40-140	
Acenaphthylene	333	237	71	4	30	40-140	
Acetophenone	333	196	59	1	30	40-140	
Aniline	333	88.6	27	2	30	40-140	*
Anthracene	333	281	84	3	30	40-140	
Atrazine	333	257	77	2	30	40-140	
Azobenzene	333	244	73	2	30	40-140	
Benzaldehyde	333	196	59	1	30	40-140	
Benzo[a]anthracene	333	290	87	6	30	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Westfield | Job No.: 360-24327-2

SDG No.: OCRI-07A

Client Sample ID: | Lab Sample ID: MB 360-48703/1-A

Matrix: Solid | Lab File ID: J03008.D

Analysis Method: 8270C LL | Date Collected:

Extract. Method: 3546 | Date Extracted: 09/08/2009 14:52

Sample wt/vol: 30.00(g) | Date Analyzed: 09/18/2009 14:53

Con. Extract Vol.: 1.0(mL) | Dilution Factor: 1

Injection Volume: 1.0(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 49174 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
98-86-2	Acetophenone	ND		33	3.6
62-53-3	Aniline	ND		33	17
120-12-7	Anthracene	ND		33	11
1912-24-9	Atrazine	ND		33	10
103-33-3	Azobenzene	ND		33	4.1
100-52-7	Benzaldehyde	ND		33	10
56-55-3	Benzo[a]anthracene	ND		33	6.4
50-32-8	Benzo[a]pyrene	ND		33	6.1
205-99-2	Benzo[b]fluoranthene	ND		33	7.6
191-24-2	Benzo[g,h,i]perylene	ND		33	6.5
207-08-9	Benzo[k]fluoranthene	ND		33	9.2
65-85-0	Benzoic acid	77.0	J	170	14
119-61-9	Benzophenone	ND		33	2.0
100-51-6	Benzyl alcohol	ND		67	7.7
111-91-1	Bis(2-chloroethoxy)methane	ND		33	6.0
111-44-4	Bis(2-chloroethyl)ether	ND		33	8.1
117-81-7	Bis(2-ethylhexyl) phthalate	ND		33	11
85-68-7	Butyl benzyl phthalate	ND		33	7.3
105-60-2	Caprolactam	ND		33	10
86-74-8	Carbazole	ND		33	33
218-01-9	Chrysene	ND		33	7.2
53-70-3	Dibenz(a,h)anthracene	ND		33	6.7
132-64-9	Dibenzofuran	ND		33	19
84-66-2	Diethyl phthalate	ND		33	4.7
131-11-3	Dimethyl phthalate	ND		33	4.9
84-74-2	Di-n-butyl phthalate	97.6		33	10
117-84-0	Di-n-octyl phthalate	ND		33	9.4
101-84-8	Diphenyl oxide	ND		33	10
206-44-0	Fluoranthene	ND		33	21
86-73-7	Fluorene	ND		33	13
118-74-1	Hexachlorobenzene	ND		33	7.9
87-68-3	Hexachlorobutadiene	ND		33	6.6
77-47-4	Hexachlorocyclopentadiene	ND		67	9.1
67-72-1	Hexachloroethane	ND		33	6.4

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Westfield | Job No.: 360-24327-2

SDG No.: OCRI-07A

Client Sample ID: | Lab Sample ID: MB 360-48703/1-A

Matrix: Solid | Lab File ID: J03008.D

Analysis Method: 8270C LL | Date Collected:

Extract. Method: 3546 | Date Extracted: 09/08/2009 14:52

Sample wt/vol: 30.00(g) | Date Analyzed: 09/18/2009 14:53

Con. Extract Vol.: 1.0(mL) | Dilution Factor: 1

Injection Volume: 1.0(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 49174 | Units: ug/Kg

Number TICs Found: 4 | TIC Result Total: 676.5

CAS NO.	COMPOUND NAME	RT	RESULT	Q
122-99-6	Ethanol, 2-phenoxy-	7.94	214	T J N
	Unknown	10.63	193	T J
593-45-3	Octadecane	10.89	36.5	T J N
	Unknown	13.45	233	T J

FORM IV
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Westfield Job No.: 360-24327-2

SDG No.: OCRI-07A

Lab File ID: B10373.D Lab Sample ID: MB 360-48691/1-A

Matrix: Solid Date Extracted: 09/08/2009 12:06

Instrument ID: Inst. B Date Analyzed: 09/17/2009 19:48

Level: (Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
OC-SB-404-13/15-XXX	360-24327-4	J03002.D	09/17/2009 16:45
	LCS 360-48691/2-A	B10374.D	09/17/2009 20:22
	LCSD 360-48691/3-A	B10375.D	09/17/2009 20:56
OC-SB-403-13/15-XXX	360-24327-2	B10391.D	09/18/2009 05:56

MS
3,3'-DCB 32/31
Aniline 31/32
Benzaldehyde 142
bis(2-chloroethyl)ether 37/ RPD 50

Surr OK
IS OK

MB (360-48691)
Benzoic acid 717 352.5 5*
Di-n-butylphthalate 770 770 10*
TIC unknown (11.77)
Octadecane

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24327-2

SDG No.: OCRI-07A

Matrix: Solid Level: Low Lab File ID: B10374.D

Lab ID: LCS 360-48691/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
1,1'-Biphenyl	333	276	83	40-140	
1,2,4,5-Tetrachlorobenzene	333	272	81	40-140	
1,2,4-Trichlorobenzene	333	251	75	40-140	
1,2-Dichlorobenzene	333	205	62	40-140	
1,3-Dichlorobenzene	333	197	59	40-140	
1,4-Dichlorobenzene	333	194	58	40-140	
1-Methylnaphthalene	333	283	85	40-140	
2,2'-oxybis[1-chloropropane]	333	208	62	40-140	
2,3,4,6-Tetrachlorophenol	333	246	74	40-140	
2,4,5-Trichlorophenol	333	314	94	30-130	
2,4,6-Trichlorophenol	333	309	93	30-130	
2,4-Dichlorophenol	333	317	95	30-130	
2,4-Dimethylphenol	333	373	112	30-130	
2,4-Dinitrophenol	333	223	67	30-130	
2,4-Dinitrotoluene	333	264	79	40-140	
2,6-Dinitrotoluene	333	288	86	40-140	
2-Chloronaphthalene	333	211	63	40-140	
2-Chlorophenol	333	223	67	30-130	
2-Methylnaphthalene	333	279	84	40-140	
2-Methylphenol	333	251	75	30-130	
2-Nitroaniline	333	290	87	40-140	
2-Nitrophenol	333	303	91	30-130	
3 & 4 Methylphenol	333	249	75	30-130	
3,3'-Dichlorobenzidine	333	108	32	40-140	*
3-Nitroaniline	333	260	78	40-140	
4,6-Dinitro-2-methylphenol	333	308	92	30-130	
4-Bromophenyl phenyl ether	333	298	89	40-140	
4-Chloro-3-methylphenol	333	344	103	30-130	
4-Chloroaniline	333	259	78	40-140	
4-Chlorophenyl phenyl ether	333	285	85	40-140	
4-Nitroaniline	333	300	90	40-140	
4-Nitrophenol	333	309	93	30-130	
Acenaphthene	333	316	95	40-140	
Acenaphthylene	333	273	82	40-140	
Acetophenone	333	222	67	40-140	
Aniline	333	102	31	40-140	*
Anthracene	333	338	101	40-140	
Atrazine	333	370	111	40-140	
Azobenzene	333	295	88	40-140	
Benzaldehyde	333	474	142	40-140	*
Benzo[a]anthracene	333	350	105	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24327-2

SDG No.: OCRI-07A

Matrix: Solid Level: Low Lab File ID: B10374.D

Lab ID: LCS 360-48691/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
Benzo[a]pyrene	333	314	94	40-140	
Benzo[b]fluoranthene	333	329	99	40-140	
Benzo[g,h,i]perylene	333	297	89	40-140	
Benzo[k]fluoranthene	333	349	105	40-140	
Benzoic acid	333	203	61	30-130	
Benzophenone	333	309	93	40-140	
Benzyl alcohol	333	236	71	30-130	
Bis(2-chloroethoxy)methane	333	270	81	40-140	
Bis(2-chloroethyl)ether	333	124	37	40-140	*
Bis(2-ethylhexyl) phthalate	333	316	95	40-140	
Butyl benzyl phthalate	333	313	94	40-140	
Caprolactam	333	357	107	40-140	
Carbazole	333	333	100	40-140	
Chrysene	333	335	101	40-140	
Dibenz(a,h)anthracene	333	282	85	40-140	
Dibenzofuran	333	277	83	40-140	
Diethyl phthalate	333	290	87	40-140	
Dimethyl phthalate	333	278	83	40-140	
Di-n-butyl phthalate	333	346	104	40-140	
Di-n-octyl phthalate	333	285	86	40-140	
Diphenyl oxide	333	288	86	40-140	
Fluoranthene	333	312	94	40-140	
Fluorene	333	337	101	40-140	
Hexachlorobenzene	333	302	91	40-140	
Hexachlorobutadiene	333	260	78	40-140	
Hexachlorocyclopentadiene	333	261	78	40-140	
Hexachloroethane	333	205	61	40-140	
Indeno[1,2,3-cd]pyrene	333	329	99	40-140	
Isophorone	333	247	74	40-140	
Naphthalene	333	322	96	40-140	
Nitrobenzene	333	267	80	40-140	
N-Nitrosodimethylamine	333	212	64	40-140	
N-Nitrosodi-n-propylamine	333	230	69	40-140	
N-Nitrosodiphenylamine	333	216	65	40-140	
Pentachlorophenol	333	302	91	30-130	
Phenanthrene	333	305	91	40-140	
Phenol	333	236	71	30-130	
Pyrene	333	310	93	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24327-2

SDG No.: OCRI-07A

Matrix: Solid Level: Low Lab File ID: B10375.D

Lab ID: LCSD 360-48691/3-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCSD CONCENTRATION (ug/Kg)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1'-Biphenyl	333	264	79	4	30	40-140	
1,2,4,5-Tetrachlorobenzene	333	258	77	5	30	40-140	
1,2,4-Trichlorobenzene	333	241	72	4	30	40-140	
1,2-Dichlorobenzene	333	214	64	4	30	40-140	
1,3-Dichlorobenzene	333	203	61	3	30	40-140	
1,4-Dichlorobenzene	333	200	60	3	30	40-140	
1-Methylnaphthalene	333	258	77	9	30	40-140	
2,2'-oxybis[1-chloropropane]	333	215	64	3	30	40-140	
2,3,4,6-Tetrachlorophenol	333	233	70	5	30	40-140	
2,4,5-Trichlorophenol	333	310	93	1	30	30-130	
2,4,6-Trichlorophenol	333	301	90	2	30	30-130	
2,4-Dichlorophenol	333	307	92	3	30	30-130	
2,4-Dimethylphenol	333	352	106	6	30	30-130	
2,4-Dinitrophenol	333	210	63	6	30	30-130	
2,4-Dinitrotoluene	333	258	77	2	30	40-140	
2,6-Dinitrotoluene	333	285	85	1	30	40-140	
2-Chloronaphthalene	333	214	64	2	30	40-140	
2-Chlorophenol	333	228	68	2	30	30-130	
2-Methylnaphthalene	333	271	81	3	30	40-140	
2-Methylphenol	333	249	75	0	30	30-130	
2-Nitroaniline	333	292	87	0	30	40-140	
2-Nitrophenol	333	295	89	2	30	30-130	
3 & 4 Methylphenol	333	251	75	1	30	30-130	
3,3'-Dichlorobenzidine	333	103	31	5	30	40-140	*
3-Nitroaniline	333	249	75	4	30	40-140	
4,6-Dinitro-2-methylphenol	333	300	90	3	30	30-130	
4-Bromophenyl phenyl ether	333	290	87	3	30	40-140	
4-Chloro-3-methylphenol	333	329	99	5	30	30-130	
4-Chloroaniline	333	248	74	4	30	40-140	
4-Chlorophenyl phenyl ether	333	284	85	0	30	40-140	
4-Nitroaniline	333	298	90	1	30	40-140	
4-Nitrophenol	333	304	91	2	30	30-130	
Acenaphthene	333	318	95	1	30	40-140	
Acenaphthylene	333	279	84	2	30	40-140	
Acetophenone	333	227	68	2	30	40-140	
Aniline	333	107	32	4	30	40-140	*
Anthracene	333	331	99	2	30	40-140	
Atrazine	333	330	99	12	30	40-140	
Azobenzene	333	281	84	5	30	40-140	
Benzaldehyde	333	453	136	5	30	40-140	
Benzo[a]anthracene	333	333	100	5	30	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24327-2

SDG No.: OCRI-07A

Matrix: Solid Level: Low Lab File ID: B10375.D

Lab ID: LCSD 360-48691/3-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCSD CONCENTRATION (ug/Kg)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Benzo[a]pyrene	333	292	88	7	30	40-140	
Benzo[b]fluoranthene	333	302	91	9	30	40-140	
Benzo[g,h,i]perylene	333	304	91	2	30	40-140	
Benzo[k]fluoranthene	333	327	98	7	30	40-140	
Benzoic acid	333	222	67	9	30	30-130	
Benzophenone	333	285	85	8	30	40-140	
Benzyl alcohol	333	236	71	0	30	30-130	
Bis(2-chloroethoxy)methane	333	259	78	4	30	40-140	
Bis(2-chloroethyl)ether	333	205	62	50	30	40-140	*
Bis(2-ethylhexyl) phthalate	333	303	91	4	30	40-140	
Butyl benzyl phthalate	333	297	89	5	30	40-140	
Caprolactam	333	316	95	12	30	40-140	
Carbazole	333	323	97	3	30	40-140	
Chrysene	333	320	96	4	30	40-140	
Dibenz(a,h)anthracene	333	293	88	4	30	40-140	
Dibenzofuran	333	276	83	0	30	40-140	
Diethyl phthalate	333	287	86	1	30	40-140	
Dimethyl phthalate	333	275	82	1	30	40-140	
Di-n-butyl phthalate	333	340	102	2	30	40-140	
Di-n-octyl phthalate	333	260	78	9	30	40-140	
Diphenyl oxide	333	263	79	9	30	40-140	
Fluoranthene	333	300	90	4	30	40-140	
Fluorene	333	334	100	1	30	40-140	
Hexachlorobenzene	333	291	87	4	30	40-140	
Hexachlorobutadiene	333	250	75	4	30	40-140	
Hexachlorocyclopentadiene	333	258	77	1	30	40-140	
Hexachloroethane	333	213	64	4	30	40-140	
Indeno[1,2,3-cd]pyrene	333	337	101	2	30	40-140	
Isophorone	333	235	71	5	30	40-140	
Naphthalene	333	307	92	5	30	40-140	
Nitrobenzene	333	259	78	3	30	40-140	
N-Nitrosodimethylamine	333	220	66	4	30	40-140	
N-Nitrosodi-n-propylamine	333	237	71	3	30	40-140	
N-Nitrosodiphenylamine	333	209	63	3	30	40-140	
Pentachlorophenol	333	292	87	3	30	30-130	
Phenanthrene	333	298	89	2	30	40-140	
Phenol	333	238	71	1	30	30-130	
Pyrene	333	296	89	5	30	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Westfield | Job No.: 360-24327-2

SDG No.: OCRI-07A

Client Sample ID: | Lab Sample ID: MB 360-48691/1-A

Matrix: Solid | Lab File ID: B10373.D

Analysis Method: 8270C LL | Date Collected:

Extract. Method: 3546 | Date Extracted: 09/08/2009 12:06

Sample wt/vol: 30.00(g) | Date Analyzed: 09/17/2009 19:48

Con. Extract Vol.: 1.0(mL) | Dilution Factor: 1

Injection Volume: 1.0(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 49098 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
98-86-2	Acetophenone	ND		33	3.6
62-53-3	Aniline	ND		33	17
120-12-7	Anthracene	ND		33	11
1912-24-9	Atrazine	ND		33	10
103-33-3	Azobenzene	ND		33	4.1
100-52-7	Benzaldehyde	ND		33	10
56-55-3	Benzo[a]anthracene	ND		33	6.4
50-32-8	Benzo[a]pyrene	ND		33	6.1
205-99-2	Benzo[b]fluoranthene	ND		33	7.6
191-24-2	Benzo[g,h,i]perylene	ND		33	6.5
207-08-9	Benzo[k]fluoranthene	ND		33	9.2
65-85-0	Benzoic acid	71.7	J	170	14
119-61-9	Benzophenone	ND		33	2.0
100-51-6	Benzyl alcohol	ND		67	7.7
111-91-1	Bis(2-chloroethoxy)methane	ND		33	6.0
111-44-4	Bis(2-chloroethyl)ether	ND		33	8.1
117-81-7	Bis(2-ethylhexyl) phthalate	ND		33	11
85-68-7	Butyl benzyl phthalate	ND		33	7.3
105-60-2	Caprolactam	ND		33	10
86-74-8	Carbazole	ND		33	33
218-01-9	Chrysene	ND		33	7.2
53-70-3	Dibenz(a,h)anthracene	ND		33	6.7
132-64-9	Dibenzofuran	ND		33	19
84-66-2	Diethyl phthalate	ND		33	4.7
131-11-3	Dimethyl phthalate	ND		33	4.9
84-74-2	Di-n-butyl phthalate	77.0		33	10
117-84-0	Di-n-octyl phthalate	ND		33	9.4
101-84-8	Diphenyl oxide	ND		33	10
206-44-0	Fluoranthene	ND		33	21
86-73-7	Fluorene	ND		33	13
118-74-1	Hexachlorobenzene	ND		33	7.9
87-68-3	Hexachlorobutadiene	ND		33	6.6
77-47-4	Hexachlorocyclopentadiene	ND		67	9.1
67-72-1	Hexachloroethane	ND		33	6.4

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Westfield | Job No.: 360-24327-2

SDG No.: OCRI-07A

Client Sample ID: | Lab Sample ID: MB 360-48691/1-A

Matrix: Solid | Lab File ID: B10373.D

Analysis Method: 8270C LL | Date Collected:

Extract. Method: 3546 | Date Extracted: 09/08/2009 12:06

Sample wt/vol: 30.00(g) | Date Analyzed: 09/17/2009 19:48

Con. Extract Vol.: 1.0(mL) | Dilution Factor: 1

Injection Volume: 1.0(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 49098 | Units: ug/Kg

Number TICs Found: 2 | TIC Result Total: 216.4

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Unknown	11.77	168	T J
593-45-3	Octadecane	11.90	48.4	T J N

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Westfield Job No.: 360-24327-2

SDG No.: OCRI-07A

Instrument ID: Inst. B Start Date: 09/17/2009 18:40

Analysis Batch Number: 49098 End Date: 09/18/2009 06:30

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 360-49098/1		09/17/2009 18:40	1	B10371.D	Rtx-5ms 0.25(um)
CCV 360-49098/2 CCVIS		09/17/2009 19:14	1	B10372.D	Rtx-5ms 0.25(um)
MB 360-48691/1-A		09/17/2009 19:48	1	B10373.D	Rtx-5ms 0.25(um)
LCS 360-48691/2-A		09/17/2009 20:22	1	B10374.D	Rtx-5ms 0.25(um)
LCSD 360-48691/3-A		09/17/2009 20:56	1	B10375.D	Rtx-5ms 0.25(um)
ZZZZZ		09/17/2009 21:30	1		Rtx-5ms 0.25(um)
ZZZZZ		09/17/2009 22:04	1		Rtx-5ms 0.25(um)
ZZZZZ		09/17/2009 22:38	1		Rtx-5ms 0.25(um)
ZZZZZ		09/17/2009 23:12	1		Rtx-5ms 0.25(um)
ZZZZZ		09/17/2009 23:46	1		Rtx-5ms 0.25(um)
ZZZZZ		09/18/2009 00:19	1		Rtx-5ms 0.25(um)
ZZZZZ		09/18/2009 00:53	1		Rtx-5ms 0.25(um)
ZZZZZ		09/18/2009 01:27	1		Rtx-5ms 0.25(um)
ZZZZZ		09/18/2009 02:01	1		Rtx-5ms 0.25(um)
ZZZZZ		09/18/2009 02:34	1		Rtx-5ms 0.25(um)
ZZZZZ		09/18/2009 03:08	1		Rtx-5ms 0.25(um)
ZZZZZ		09/18/2009 03:42	1		Rtx-5ms 0.25(um)
ZZZZZ		09/18/2009 04:15	1		Rtx-5ms 0.25(um)
ZZZZZ		09/18/2009 04:49	1		Rtx-5ms 0.25(um)
ZZZZZ		09/18/2009 05:23	1		Rtx-5ms 0.25(um)
360-24327-2	OC-SB-403-13/15-XXX	09/18/2009 05:56	1	B10391.D	Rtx-5ms 0.25(um)
ZZZZZ		09/18/2009 06:30	10		Rtx-5ms 0.25(um)

ICAL OK

CCAL

4-nitrophenol %D -29

8270C LL

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Westfield Job No.: 360-24327-2

SDG No.: OCRI-07A

Instrument ID: Inst. J Start Date: 09/18/2009 13:59

Analysis Batch Number: 49174 End Date: 09/19/2009 01:44

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 360-49174/1		09/18/2009 13:59	1	J03006.D	Rtx-5ms 0.25(um)
CCV 360-49174/2 CCVIS		09/18/2009 14:26	1	J03007.D	Rtx-5ms 0.25(um)
MB 360-48703/1-A		09/18/2009 14:53	1	J03008.D	Rtx-5ms 0.25(um)
LCS 360-48703/2-A		09/18/2009 15:20	1	J03009.D	Rtx-5ms 0.25(um)
LCSD 360-48703/3-A		09/18/2009 15:47	1	J03010.D	Rtx-5ms 0.25(um)
360-24327-7	OC-SB-409-15/17-XXX	09/18/2009 16:14	1	J03011.D	Rtx-5ms 0.25(um)
ZZZZZ		09/18/2009 16:41	1		Rtx-5ms 0.25(um)
ZZZZZ		09/18/2009 17:08	10		Rtx-5ms 0.25(um)
ZZZZZ		09/18/2009 17:35	50		Rtx-5ms 0.25(um)
360-24327-10	OC-SB-410-17/19-XXX	09/18/2009 18:02	1	J03015.D	Rtx-5ms 0.25(um)
ZZZZZ		09/18/2009 18:29	1		Rtx-5ms 0.25(um)
ZZZZZ		09/18/2009 18:56	1		Rtx-5ms 0.25(um)
ZZZZZ		09/18/2009 19:23	1		Rtx-5ms 0.25(um)
ZZZZZ		09/18/2009 19:51	1		Rtx-5ms 0.25(um)
ZZZZZ		09/18/2009 20:18	1		Rtx-5ms 0.25(um)
ZZZZZ		09/18/2009 20:45	1		Rtx-5ms 0.25(um)
ZZZZZ		09/18/2009 21:13	1		Rtx-5ms 0.25(um)
360-24327-16	OC-SB-418-15/17-XXX	09/18/2009 21:40	1	J03023.D	Rtx-5ms 0.25(um)
ZZZZZ		09/18/2009 22:07	1		Rtx-5ms 0.25(um)
ZZZZZ		09/18/2009 22:34	10		Rtx-5ms 0.25(um)
ZZZZZ		09/18/2009 23:02	1		Rtx-5ms 0.25(um)
ZZZZZ		09/18/2009 23:29	1		Rtx-5ms 0.25(um)
ZZZZZ		09/18/2009 23:56	1		Rtx-5ms 0.25(um)
ZZZZZ		09/19/2009 00:23	1		Rtx-5ms 0.25(um)
ZZZZZ		09/19/2009 00:50	1		Rtx-5ms 0.25(um)
ZZZZZ		09/19/2009 01:17	10		Rtx-5ms 0.25(um)
ZZZZZ		09/19/2009 01:44	1		Rtx-5ms 0.25(um)

IC 12 OK

CCAL	RF	%D
benzoic acid	0.0166	
2,4-DNP	0.0372	30.5
4-nitrophenol		
4,6-dinitro-2-methylphenol		26.5
2-nitroaniline	0.0449	
3,3'-dichlorobenzidine		26

8270C LL

Benzo(a,h)anthracene

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Westfield Job No.: 360-24327-2

SDG No.: OCRI-07A

Lab Sample ID: CCV 360-49174/2 Calibration Date: 09/18/2009 14:26

Instrument ID: Inst. J Calib Start Date: 09/15/2009 17:27

GC Column: Rtx-5ms ID: 0.25(um) Calib End Date: 09/15/2009 21:23

Lab File ID: J03007.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Qua		0.2220		4710	5000	-5.9	30.0
Pyridine	Lin1		0.5240		4230	5000	-15.5	30.0
N-Nitrosodimethylamine	Ave	0.3299	0.2847		4310	5000	-13.7	30.0
Aniline	Ave	0.9185	0.8124		4420	5000	-11.6	30.0
Phenol	Ave	0.9427	0.7740		4100	5000	-17.9	20.0
Bis(2-chloroethyl)ether	Ave	0.6893	0.5757		4180	5000	-16.5	30.0
2-Chlorophenol	Ave	0.6685	0.5931		4440	5000	-11.3	30.0
1,4-Dichlorobenzene	Ave	0.7818	0.6573		4200	5000	-15.9	20.0
1,3-Dichlorobenzene	Ave	0.8034	0.6770		4210	5000	-15.7	30.0
1,2-Dichlorobenzene	Ave	0.7472	0.6110		4090	5000	-18.2	30.0
Benzyl alcohol	Ave	0.5078	0.5161		5080	5000	1.6	30.0
2-Methylphenol	Ave	0.5900	0.5320		4510	5000	-9.8	30.0
2,2'-oxybis[1-chloropropane]	Ave	0.6869	0.5865		4270	5000	-14.6	30.0
Acetophenone	Ave	0.8911	0.8083		4540	5000	-9.3	30.0
Benzaldehyde	Ave	0.8911	0.8083		4540	5000	-9.3	30.0
N-Nitrosodi-n-propylamine	Ave	0.4473	0.4136	0.0500	4620	5000	-7.5	30.0
3 & 4 Methylphenol	Ave	0.6159	0.5708		4630	5000	-7.3	30.0
Hexachloroethane	Ave	0.2836	0.2500		4410	5000	-11.8	30.0
Nitrobenzene	Ave	0.3156	0.3141		4980	5000	-0.5	30.0
Isophorone	Lin2		0.5273		4730	5000	-5.4	30.0
2-Nitrophenol	Lin1		0.1268		4140	5000	-17.2	20.0
2,4-Dimethylphenol	Ave	0.2439	0.2608		5350	5000	6.9	30.0
Benzoic acid	Qua		0.0166		4020	5000	-19.5	30.0
Bis(2-chloroethoxy)methane	Ave	0.3351	0.3153		4710	5000	-5.9	30.0
2,4-Dichlorophenol	Lin2		0.2104		4760	5000	-4.8	20.0
1,2,4-Trichlorobenzene	Ave	0.2684	0.2423		4510	5000	-9.7	30.0
Naphthalene	Ave	0.9169	0.8377		4570	5000	-8.6	30.0
Alpha-Terpineol	Ave	0.1845	0.1850		5010	5000	0.3	30.0
4-Chloroaniline	Ave	0.3218	0.3355		5210	5000	4.3	30.0
Hexachlorobutadiene	Ave	0.1426	0.1316		4620	5000	-7.7	20.0
Caprolactam	Lin1		0.0881		4540	5000	-9.2	30.0
4-Chloro-3-methylphenol	Lin2		0.2510		5030	5000	0.6	20.0
2-Methylnaphthalene	Ave	0.5685	0.5319		4680	5000	-6.4	30.0
1-Methylnaphthalene	Ave	0.5770	0.5304		4600	5000	-8.1	30.0
Hexachlorocyclopentadiene	Lin		0.1272	0.0500	5130	5000	2.6	30.0
1,2,4,5-Tetrachlorobenzene	Ave	0.2318	0.2105		4540	5000	-9.2	30.0
2,4,6-Trichlorophenol	Lin2		0.2764		5010	5000	0.2	20.0
2,4,5-Trichlorophenol	Lin1		0.2879		4720	5000	-5.5	30.0
1,1'-Biphenyl	Ave	1.405	1.268		4510	5000	-9.8	30.0
2-Chloronaphthalene	Ave	1.339	1.247		4660	5000	-6.8	30.0
Phenyl ether	Ave	0.3833	0.3440		4490	5000	-10.3	30.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Westfield Job No.: 360-24327-2

SDG No.: OCRI-07A

Lab Sample ID: CCV 360-49174/2 Calibration Date: 09/18/2009 14:26

Instrument ID: Inst. J Calib Start Date: 09/15/2009 17:27

GC Column: Rtx-5ms ID: 0.25(um) Calib End Date: 09/15/2009 21:23

Lab File ID: J03007.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Nitroaniline	Lin1		0.3313		4600	5000	-8.0	30.0
Dimethyl phthalate	Ave	1.206	1.167		4840	5000	-3.2	30.0
2,4-Dinitrotoluene	Lin2		0.2604		4760	5000	-4.7	30.0
Acenaphthylene	Ave	1.582	1.562		4940	5000	-1.3	30.0
Acenaphthene	Ave	1.097	1.011		4610	5000	-7.9	20.0
2,4-Dinitrophenol	Lin		0.0372*	0.0500	4760	5000	-4.7	30.0
4-Nitrophenol	Qua		0.1593	0.0500	6520	5000	30.5*	30.0
Dibenzofuran	Ave	1.497	1.406		4700	5000	-6.1	30.0
2,6-Dinitrotoluene	Lin1		0.3326		4800	5000	-4.0	30.0
2,3,4,6-Tetrachlorophenol	Lin1		0.2046		4620	5000	-7.6	30.0
Diethyl phthalate	Ave	1.234	1.190		4820	5000	-3.6	30.0
Fluorene	Ave	1.171	1.131		4830	5000	-3.5	30.0
4-Chlorophenyl phenyl ether	Ave	0.5655	0.5224		4620	5000	-7.6	30.0
3-Nitroaniline	Lin1		0.2345		4640	5000	-7.1	30.0
4,6-Dinitro-2-methylphenol	Qua		0.0399		3680	5000	-26.5	30.0
Diphenylamine	Ave	0.5876	0.5688		4840	5000	-3.2	30.0
N-Nitrosodiphenylamine	Ave	0.5876	0.5688		4840	5000	-3.2	20.0
1,2-Diphenylhydrazine	Ave	1.165	1.197		5140	5000	2.8	30.0
Azobenzene	Ave	1.165	1.197		5140	5000	2.8	30.0
Benzophenone	Ave	0.7185	0.7110		4950	5000	-1.0	30.0
2-Nitroaniline	Ave	0.0460	0.0449		4880	5000	-2.4	30.0
4-Bromophenyl phenyl ether	Ave	0.1786	0.1704		4770	5000	-4.6	30.0
Hexachlorobenzene	Ave	0.1906	0.1782		4670	5000	-6.5	30.0
Atrazine	Lin2		0.1658		4580	5000	-8.3	30.0
Pentachlorophenol	Qua		0.0557		4740	5000	-5.2	20.0
Pentachloronitrobenzene	Lin1		0.0797		4830	5000	-3.4	30.0
Phenanthrene	Ave	1.017	0.9009		4430	5000	-11.4	30.0
Anthracene	Ave	0.8971	0.8730		4870	5000	-2.7	30.0
Carbazole	Ave	0.7715	0.7619		4940	5000	-1.2	30.0
Di-n-butyl phthalate	Ave	1.086	1.095		5040	5000	0.8	30.0
Fluoranthene	Ave	0.8987	0.8197		4560	5000	-8.8	20.0
Benzidine	Lin		0.5453		5120	5000	2.5	30.0
Pyrene	Ave	1.155	1.103		4770	5000	-4.5	30.0
Butyl benzyl phthalate	Lin1		0.5625		4710	5000	-5.8	30.0
3,3'-Dichlorobenzidine	Lin1		0.6186		4930	5000	-1.4	30.0
Benzo[a]anthracene	Ave	0.8540	0.8074		4730	5000	-5.5	30.0
Chrysene	Ave	0.9253	0.7711		4170	5000	-16.7	30.0
Bis(2-ethylhexyl) phthalate	Lin1		0.7674		4390	5000	-12.3	30.0
Di-n-octyl phthalate	Qua		1.506		4980	5000	-0.4	20.0
Benzo[b]fluoranthene	Ave	1.142	1.066		4670	5000	-6.6	30.0
Benzo[k]fluoranthene	Ave	1.097	1.012		4610	5000	-7.8	30.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Westfield Job No.: 360-24327-2

SDG No.: OCRI-07A

Lab Sample ID: CCV 360-49174/2 Calibration Date: 09/18/2009 14:26

Instrument ID: Inst. J Calib Start Date: 09/15/2009 17:27

GC Column: Rtx-5ms ID: 0.25(um) Calib End Date: 09/15/2009 21:23

Lab File ID: J03007.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Benzo[a]pyrene	Lin1		0.7970		4620	5000	-7.5	20.0
Indeno[1,2,3-cd]pyrene	Lin1		0.8174		6160	5000	23.1	30.0
Dibenz(a,h)anthracene	Lin1		0.6635		6300	5000	26.0	30.0
Benzo[g,h,i]perylene	Ave	0.5986	0.7082		5920	5000	18.3	30.0
2-Fluorophenol	Ave	0.6265	0.5326		4250	5000	-15.0	30.0
Phenol-d5	Ave	0.7745	0.6958		4490	5000	-10.2	30.0
Nitrobenzene-d5	Ave	0.3070	0.3033		4940	5000	-1.2	30.0
2-Fluorobiphenyl	Ave	1.270	1.152		4530	5000	-9.3	30.0
2,4,6-Tribromophenol	Lin1		0.0779		4860	5000	-2.8	30.0
Terphenyl-d14	Ave	0.7644	0.6918		4520	5000	-9.5	30.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Westfield Job No.: 360-24327-2

SDG No.: OCRI-07A

Lab Sample ID: CCV 360-49098/2 Calibration Date: 09/17/2009 19:14

Instrument ID: Inst. B Calib Start Date: 09/17/2009 13:00

GC Column: Rtx-5ms ID: 0.25(um) Calib End Date: 09/17/2009 17:32

Lab File ID: B10372.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Nitroaniline	Lin2		0.3683		4860	5000	-2.7	30.0
Dimethyl phthalate	Ave	1.252	1.194		4770	5000	-4.6	30.0
2,6-Dinitrotoluene	Ave	0.2850	0.2922		5130	5000	2.5	30.0
Acenaphthylene	Ave	1.619	1.647		5090	5000	1.7	30.0
3-Nitroaniline	Lin1		0.2718		4560	5000	-8.9	30.0
2,4-Dinitrophenol	Qua		0.0806	0.0500	5210	5000	4.2	30.0
4-Nitrophenol	Lin1		0.1226	0.0500	3600	5000	-28.0	30.0
Acenaphthene	Ave	1.160	1.117		4810	5000	-3.7	20.0
2,4-Dinitrotoluene	Lin1		0.3599		4480	5000	-10.4	30.0
Dibenzofuran	Ave	1.479	1.459		4930	5000	-1.3	30.0
2,3,4,6-Tetrachlorophenol	Lin1		0.2215		4210	5000	-15.8	30.0
Diethyl phthalate	Ave	1.264	1.223		4840	5000	-3.2	30.0
4-Chlorophenyl phenyl ether	Ave	0.5686	0.5426		4770	5000	-4.6	30.0
2-Nitroaniline	Lin		0.2990		4500	5000	-10.0	30.0
Fluorene	Ave	1.254	1.259		5020	5000	0.4	30.0
4,6-Dinitro-2-methylphenol	Qua		0.0801		5280	5000	5.7	30.0
Diphenylamine	Ave	0.6403	0.6235		4870	5000	-2.6	30.0
N-Nitrosodiphenylamine	Ave	0.6403	0.6235		4870	5000	-2.6	20.0
1,2-Diphenylhydrazine	Ave	1.161	1.165		5020	5000	0.4	30.0
Azobenzene	Ave	1.161	1.165		5020	5000	0.4	30.0
Benzophenone	Ave	0.7281	0.7077		4860	5000	-2.8	30.0
4-Bromophenyl phenyl ether	Ave	0.1774	0.1699		4790	5000	-4.2	30.0
Atrazine	Ave	0.1820	0.1821		5000	5000	0.1	30.0
Hexachlorobenzene	Ave	0.1666	0.1533		4600	5000	-8.0	30.0
Pentachlorophenol	Qua		0.0680		4210	5000	-15.8	20.0
Pentachloronitrobenzene	Lin1		0.0730		4290	5000	-14.1	30.0
Phenanthrene	Ave	1.019	0.9653		4730	5000	-5.3	30.0
Anthracene	Ave	0.9544	0.9490		4970	5000	-0.6	30.0
Carbazole	Ave	0.7793	0.7253		4650	5000	-6.9	30.0
Di-n-butyl phthalate	Ave	1.222	1.142		4670	5000	-6.6	30.0
Fluoranthene	Ave	0.9200	0.8822		4790	5000	-4.1	20.0
Benzidine	Lin		0.5482		5580	5000	11.7	30.0
Pyrene	Ave	1.328	1.257		4730	5000	-5.4	30.0
Butyl benzyl phthalate	Ave	0.6084	0.6134		5040	5000	0.8	30.0
Bis(2-ethylhexyl) phthalate	Ave	0.8794	0.8515		4840	5000	-3.2	30.0
3,3'-Dichlorobenzidine	Lin1		0.5640		4420	5000	-11.6	30.0
Benzo[a]anthracene	Ave	0.8743	0.8464		4840	5000	-3.2	30.0
Chrysene	Ave	0.8521	0.7929		4650	5000	-6.9	30.0
Di-n-octyl phthalate	Lin1		2.210		4710	5000	-5.9	20.0
Benzo[b]fluoranthene	Ave	1.145	1.155		5040	5000	0.8	30.0
Benzo[k]fluoranthene	Ave	1.064	1.037		4880	5000	-2.5	30.0

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Westfield Job No.: 360-24327-2

SDG No.: OCRI-07A

Instrument ID: Inst. J Start Date: 09/17/2009 11:47

Analysis Batch Number: 49095 End Date: 09/17/2009 17:44

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 360-49095/1		09/17/2009 11:47	1	J02993.D	Rtx-5ms 0.25(um)
CCV 360-49095/2 CCVIS		09/17/2009 12:17	1	J02994.D	Rtx-5ms 0.25(um)
ZZZZZ		09/17/2009 13:21	5		Rtx-5ms 0.25(um)
ZZZZZ		09/17/2009 13:50	1		Rtx-5ms 0.25(um)
ZZZZZ		09/17/2009 14:19	1		Rtx-5ms 0.25(um)
ZZZZZ		09/17/2009 14:48	1		Rtx-5ms 0.25(um)
ZZZZZ		09/17/2009 15:18	1		Rtx-5ms 0.25(um)
ZZZZZ		09/17/2009 15:47	1		Rtx-5ms 0.25(um)
ZZZZZ		09/17/2009 16:16	1		Rtx-5ms 0.25(um)
360-24327-4	OC-SB-404-13/15-XXX	09/17/2009 16:45	1	J03002.D	Rtx-5ms 0.25(um)
ZZZZZ		09/17/2009 17:14	1		Rtx-5ms 0.25(um)
ZZZZZ		09/17/2009 17:44	1		Rtx-5ms 0.25(um)

ICAL RRF RSD %D

benzoic acid 0.0160

2,4-DNP 0.0426 0.5260

2-nitroaniline 0.046

CCAL RRF %D

benzoic acid 0.0279

2-nitroaniline 0.0407

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Westfield Job No.: 360-24327-2 Analy Batch No.: 48992

SDG No.: OCRI-07A

Instrument ID: Inst. J GC Column: Rtx-5ms ID: 0.25(um) Heated Purge: (Y/N) N

Calibration Start Date: 09/15/2009 17:27 Calibration End Date: 09/15/2009 21:23 Calibration ID: 4578

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD01 360-48992/3	J02949.D
Level 2	STD025 360-48992/4	J02950.D
Level 3	STD050 360-48992/5	J02951.D
Level 4	STD1 360-48992/6	J02952.D
Level 5	STD25 360-48992/7	J02953.D
Level 6	STD5 360-48992/2	J02948.D
Level 7	STD8 360-48992/8	J02954.D
Level 8	STD10 360-48992/9	J02955.D
Level 9	STD20 360-48992/10	J02956.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
1,4-Dioxane	0.5933 0.2158	0.3435 0.2027	0.3305 0.2820	0.2815 0.2723	0.2561	Qua	0.0355	0.2148	0.0029						0.9910		0.9900
Pyridine	+++++ 0.5052	0.3703 0.5730	0.4868 0.6863	0.5394 0.6674	0.5568	Linl	-0.096	0.6425							0.9910		0.9900
N-Nitrosodimethylamine	0.2993 0.2777	0.3452 0.2663	0.3404 0.4115	0.3360 0.3721	0.3210	Ave		0.3299				14.0		15.0			
Benzoic acid	+++++ 0.0195	+++++ 0.0519	0.0078 0.0738	0.0076 0.1529	0.0141	Qua	0.0020	-0.013 0.0461	0.0083						0.9990		0.9900
Aniline	0.8352 0.8249	0.8488 0.7969	0.9310 1.0870	0.9416 1.0625	0.9389	Ave		0.9185				11.0		15.0			
Phenol	0.9338 0.8108	0.9433 0.7781	1.0224 1.0619	0.9945 1.0146	0.9253	Ave		0.9427				10.0		15.0			
Bis(2-chloroethyl)ether	0.7376 0.5912	0.7135 0.5508	0.7348 0.7436	0.7374 0.7267	0.6683	Ave		0.6893				10.0		15.0			
2-Chlorophenol	0.6174 0.5862	0.6396 0.5656	0.7143 0.7719	0.7089 0.7548	0.6583	Ave		0.6685				11.0		15.0			
2,4-Dinitrophenol	+++++ 0.0361	+++++ 0.0576	+++++ 0.0697	0.0094 0.0963	0.0230	Lin	-0.340	0.1104 0.0462			0.0500				0.9860	*	0.9900
1,4-Dichlorobenzene	0.8485 0.6570	0.8324 0.6187	0.8734 0.8355	0.8207 0.7970	0.7526	Ave		0.7818				11.0		15.0			
1,3-Dichlorobenzene	0.8604 0.6763	0.8947 0.6371	0.8764 0.8588	0.8372 0.8195	0.7702	Ave		0.8034				11.0		15.0			
Benzyl alcohol	0.4531 0.4731	0.3964 0.4670	0.4893 0.6304	0.5199 0.6191	0.5216	Ave		0.5078				15.0		15.0			
1,2-Dichlorobenzene	0.8778 0.6173	0.7972 0.5819	0.8343 0.7796	0.7941 0.7363	0.7063	Ave		0.7472				13.0		15.0			

2 - nitroaniline 0.046

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Westfield Job No.: 360-24327-2 Analy Batch No.: 48992

SDG No.: OCRI-07A

Instrument ID: Inst. J GC Column: Rtx-5ms ID: 0.25(um) Heated Purge: (Y/N) N

Calibration Start Date: 09/15/2009 17:27 Calibration End Date: 09/15/2009 21:23 Calibration ID: 4578

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
Hexachlorobutadiene	0.1299 0.1367	0.1542 0.1424	0.1513 0.1458	0.1491 0.1343	0.1395	Ave		0.1426				5.7		15.0			
Caprolactam	0.0589 0.0832	0.0422 0.0986	0.0551 0.1050	0.0584 0.1026	0.0805	Lin1	-0.012	0.0996							0.9910		0.9900
Pentachlorophenol	+++++ 0.0463	+++++ 0.0718	0.0032 0.0770	0.0167 0.0897	0.0408	Qua	-0.082	0.0704	0.0012						0.9970		0.9900
4-Chloro-3-methylphenol	0.1585 0.2470	0.1751 0.2668	0.2115 0.2737	0.2240 0.2700	0.2391	Lin2	-0.011	0.2516							0.9920		0.9900
2-Methylnaphthalene	0.5451 0.5455	0.5665 0.5686	0.5887 0.5935	0.5942 0.5428	0.5714	Ave		0.5685				3.6		15.0			
1-Methylnaphthalene	0.5603 0.5514	0.5607 0.5867	0.6026 0.5908	0.6112 0.5466	0.5826	Ave		0.5770				4.0		15.0			
1,2,4,5-Tetrachlorobenzene	0.2260 0.2179	0.2346 0.2294	0.2447 0.2335	0.2462 0.2174	0.2360	Ave		0.2318				4.4		15.0			
2,4,6-Trichlorophenol	0.1529 0.2646	0.1934 0.2954	0.2222 0.3055	0.2384 0.2999	0.2778	Lin2	-0.014	0.2787							0.9910		0.9900
2,4,5-Trichlorophenol	0.1678 0.2780	0.1815 0.3099	0.2297 0.3145	0.2516 0.3147	0.2851	Lin1	-0.026	0.3100							0.9980		0.9900
1,1'-Biphenyl	1.4623 1.2874	1.4649 1.3632	1.5528 1.3855	1.4602 1.2525	1.4184	Ave		1.4053				6.7		15.0			
2-Chloronaphthalene	1.3932 1.1655	1.3830 1.2170	1.4564 1.3928	1.4044 1.2752	1.3636	Ave		1.3390				7.3		15.0			
Phenyl ether	0.3886 0.3607	0.3877 0.3800	0.4192 0.3926	0.3934 0.3572	0.3705	Ave		0.3833				5.0		15.0			
4-Nitroaniline	0.1649 0.3187	0.2019 0.3573	0.2436 0.3728	0.2759 0.3809	0.3320	Lin1	-0.037	0.3680							0.9960		0.9900
Dimethyl phthalate	1.0906 1.1506	1.1786 1.2278	1.2868 1.2418	1.2487 1.1874	1.2401	Ave		1.2058				5.0		15.0			
2,4-Dinitrotoluene	0.1402 0.2634	0.1772 0.2824	0.2294 0.2927	0.2585 0.2862	0.2834	Lin2	-0.015	0.2766							0.9940		0.9900
2-Nitroaniline	+++++ 0.0429	0.0508 0.0424	0.0514 0.0429	0.0491 0.0403	0.0483	Ave		0.0460				9.4		15.0			
Acenaphthylene	1.3121 1.5567	1.5054 1.6525	1.6619 1.6897	1.6485 1.5420	1.6697	Ave		1.5821				7.6		15.0			
Acenaphthene	1.1585 1.0022	1.1589 1.0582	1.1647 1.0904	1.1322 1.0145	1.0943	Ave		1.0971				5.7		15.0			
Dibenzofuran	1.5515 1.3672	1.5857 1.4438	1.6047 1.4672	1.5651 1.3447	1.5398	Ave		1.4966				6.4		15.0			
2,6-Dinitrotoluene	0.1275 0.3126	0.1740 0.3459	0.2181 0.3669	0.2710 0.3580	0.3333	Lin1	-0.038	0.3542							0.9970		0.9900

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Westfield Job No.: 360-24327-2

SDG No.: OCRI-07A

Lab Sample ID: CCV 360-49095/2 Calibration Date: 09/17/2009 12:17

Instrument ID: Inst. J Calib Start Date: 09/15/2009 17:27

GC Column: Rtx-5ms ID: 0.25(um) Calib End Date: 09/15/2009 21:23

Lab File ID: J02994.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Qua		0.2293		4860	5000	-2.8	30.0
N-Nitrosodimethylamine	Ave	0.3299	0.3103		4700	5000	-6.0	30.0
Pyridine	Lin1		0.5429		4370	5000	-12.5	30.0
Aniline	Ave	0.9185	0.8594		4680	5000	-6.4	30.0
Phenol	Ave	0.9427	0.7803		4140	5000	-17.2	20.0
Bis(2-chloroethyl)ether	Ave	0.6893	0.5902		4280	5000	-14.4	30.0
2-Chlorophenol	Ave	0.6685	0.6169		4610	5000	-7.7	30.0
1,4-Dichlorobenzene	Ave	0.7818	0.6671		4270	5000	-14.7	20.0
1,3-Dichlorobenzene	Ave	0.8034	0.6850		4260	5000	-14.7	30.0
1,2-Dichlorobenzene	Ave	0.7472	0.6202		4150	5000	-17.0	30.0
Benzyl alcohol	Ave	0.5078	0.5263		5180	5000	3.7	30.0
2-Methylphenol	Ave	0.5900	0.5435		4610	5000	-7.9	30.0
2,2'-oxybis[1-chloropropane]	Ave	0.6869	0.6033		4390	5000	-12.2	30.0
Acetophenone	Ave	0.8911	0.8448		4740	5000	-5.2	30.0
Benzaldehyde	Ave	0.8911	0.8448		4740	5000	-5.2	30.0
N-Nitrosodi-n-propylamine	Ave	0.4473	0.4433	0.0500	4960	5000	-0.9	30.0
3 & 4 Methylphenol	Ave	0.6159	0.5701		4630	5000	-7.4	30.0
Hexachloroethane	Ave	0.2836	0.2637		4650	5000	-7.0	30.0
Nitrobenzene	Ave	0.3156	0.3190		5050	5000	1.1	30.0
Isophorone	Lin2		0.5545		4970	5000	-0.6	30.0
2-Nitrophenol	Lin1		0.1469		4780	5000	-4.3	20.0
2,4-Dimethylphenol	Ave	0.2439	0.2581		5290	5000	5.8	30.0
Benzoic acid	Qua		0.0279		4940	5000	-1.1	30.0
Bis(2-chloroethoxy)methane	Ave	0.3351	0.3223		4810	5000	-3.8	30.0
2,4-Dichlorophenol	Lin2		0.2142		4840	5000	-3.1	20.0
1,2,4-Trichlorobenzene	Ave	0.2684	0.2443		4550	5000	-9.0	30.0
Naphthalene	Ave	0.9169	0.8435		4600	5000	-8.0	30.0
Alpha-Terpineol	Ave	0.1845	0.1928		5220	5000	4.5	30.0
4-Chloroaniline	Ave	0.3218	0.3404		5290	5000	5.8	30.0
Hexachlorobutadiene	Ave	0.1426	0.1341		4700	5000	-5.9	20.0
Caprolactam	Lin1		0.0922		4750	5000	-5.1	30.0
4-Chloro-3-methylphenol	Lin2		0.2560		5130	5000	2.6	20.0
2-Methylnaphthalene	Ave	0.5685	0.5341		4700	5000	-6.0	30.0
1-Methylnaphthalene	Ave	0.5770	0.5374		4660	5000	-6.9	30.0
Hexachlorocyclopentadiene	Lin		0.1289	0.0500	5190	5000	3.8	30.0
1,2,4,5-Tetrachlorobenzene	Ave	0.2318	0.2109		4550	5000	-9.0	30.0
2,4,6-Trichlorophenol	Lin2		0.2815		5100	5000	2.0	20.0
2,4,5-Trichlorophenol	Lin1		0.2839		4660	5000	-6.8	30.0
1,1'-Biphenyl	Ave	1.405	1.287		4580	5000	-8.4	30.0
2-Chloronaphthalene	Ave	1.339	1.287		4800	5000	-3.9	30.0
Phenyl ether	Ave	0.3833	0.3477		4540	5000	-9.3	30.0

2-nitroaniline 0.2407

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Westfield Job No.: 360-24327-2

SDG No.: OCRI-07A

Lab Sample ID: CCV 360-49095/2 Calibration Date: 09/17/2009 12:17

Instrument ID: Inst. J Calib Start Date: 09/15/2009 17:27

GC Column: Rtx-5ms ID: 0.25(um) Calib End Date: 09/15/2009 21:23

Lab File ID: J02994.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Nitroaniline	Lin1		0.3389		4710	5000	-5.9	30.0
Dimethyl phthalate	Ave	1.206	1.183		4900	5000	-1.9	30.0
2,4-Dinitrotoluene	Lin2		0.2743		5010	5000	0.3	30.0
Acenaphthylene	Ave	1.582	1.577		4990	5000	-0.3	30.0
Acenaphthene	Ave	1.097	1.024		4670	5000	-6.7	20.0
2,4-Dinitrophenol	Lin		0.0536	0.0500	5510	5000	10.2	30.0
4-Nitrophenol	Qua		0.1412	0.0500	5920	5000	18.5	30.0
Dibenzofuran	Ave	1.497	1.355		4530	5000	-9.5	30.0
2,6-Dinitrotoluene	Lin1		0.3320		4790	5000	-4.1	30.0
2,3,4,6-Tetrachlorophenol	Lin1		0.2027		4580	5000	-8.4	30.0
Diethyl phthalate	Ave	1.234	1.208		4890	5000	-2.1	30.0
Fluorene	Ave	1.171	1.121		4780	5000	-4.3	30.0
4-Chlorophenyl phenyl ether	Ave	0.5655	0.5135		4540	5000	-9.2	30.0
3-Nitroaniline	Lin1		0.2164		4300	5000	-14.1	30.0
4,6-Dinitro-2-methylphenol	Qua		0.0676		5360	5000	7.1	30.0
Diphenylamine	Ave	0.5876	0.5972		5080	5000	1.6	30.0
N-Nitrosodiphenylamine	Ave	0.5876	0.5972		5080	5000	1.6	20.0
1,2-Diphenylhydrazine	Ave	1.165	1.246		5350	5000	7.0	30.0
Azobenzene	Ave	1.165	1.246		5350	5000	7.0	30.0
Benzophenone	Ave	0.7185	0.7541		5250	5000	5.0	30.0
2-Nitroaniline	Ave	0.0460	0.0407		4420	5000	-11.6	30.0
4-Bromophenyl phenyl ether	Ave	0.1786	0.1789		5010	5000	0.1	30.0
Hexachlorobenzene	Ave	0.1906	0.1879		4930	5000	-1.4	30.0
Atrazine	Lin2		0.1846		5100	5000	2.0	30.0
Pentachlorophenol	Qua		0.0642		5260	5000	5.1	20.0
Pentachloronitrobenzene	Lin1		0.0846		5120	5000	2.3	30.0
Phenanthrene	Ave	1.017	0.9315		4580	5000	-8.4	30.0
Anthracene	Ave	0.8971	0.9047		5040	5000	0.8	30.0
Carbazole	Ave	0.7715	0.7683		4980	5000	-0.4	30.0
Di-n-butyl phthalate	Ave	1.086	1.223		5630	5000	12.6	30.0
Pyrene	Ave	1.155	1.116		4830	5000	-3.4	30.0
Benzidine	Lin		0.5718		5330	5000	6.7	30.0
Fluoranthene	Ave	0.8987	0.8771		4880	5000	-2.4	20.0
Butyl benzyl phthalate	Lin1		0.6375		5330	5000	6.5	30.0
3,3'-Dichlorobenzidine	Lin1		0.6205		4940	5000	-1.1	30.0
Benzo[a]anthracene	Ave	0.8540	0.8703		5100	5000	1.9	30.0
Chrysene	Ave	0.9253	0.8487		4590	5000	-8.3	30.0
Bis(2-ethylhexyl) phthalate	Lin1		0.8858		5050	5000	1.0	30.0
Di-n-octyl phthalate	Qua		1.758		5660	5000	13.2	20.0
Benzo[b]fluoranthene	Ave	1.142	1.120		4900	5000	-1.9	30.0
Benzo[k]fluoranthene	Ave	1.097	1.018		4640	5000	-7.3	30.0

Cover sheet

SEMIVOLATILE ORGANICS

REGION I VALIDATION CHECKLIST for
OLIN CHEMICAL SUPERFUND SITE
Criteria and Qualifications: REGION I Organics Guideline (1996)

TIER I (II) III (circle one)

SITE: Olin Chemical Superfund Site Project #: 6107000/6.12 SDG #: OCRI-08/08A

LAB #: TAL-Westfield

Sample IDs: Attach tracking sheet and/or sample listing.

This checklist is designed to be used with USEPA Region I Validation Guidelines Part II (12/1996). During Level III validation, calculation and transcription checks are completed for instrument tuning, surrogates, target compounds, spike recoveries, calibration data, and internal standards as specified in the guideline. These checks are documented on attached validation notes.

YES NO NA	
Data completeness ☑ ☐ ☐ All data summaries, QC forms and raw data available from hard copy or electronic data package ☑ ☐ ☐ Data summaries match EDD	Contact lab if missing data. Lab to respond with 24 hours.
Holding Times and Preservation ☑ ☐ ☐ Hold times met (Waters – Extract within 7 days, analyze within 40 days. Soils – extract within 14 days, analyze within 40 days)	
Instrument Performance Check (Tune) ☑ ☐ ☐ Tune available for each 12-hour period samples were analyzed ☑ ☐ ☐ Appropriate number of significant figures reported (at least 2) ☑ ☐ ☐ Mass/Charge list (m/z) criteria met	
Initial Calibration ☐ ☒ ☐ %RSD less than or equal to 30% ☐ ☒ ☐ RRF greater than or equal to 0.05	See below.
Continuing Calibration ☑ ☐ ☐ %D less than or equal to 25% ☐ ☒ ☐ RRF greater than or equal to 0.05.	See below.
Blank Contamination ☒ ☐ ☐ Method blank contamination ☒ ☐ ☐ Equipment/Rinseate blank contamination	Evaluate all blanks for contamination. Highest contaminant level used for action level. See below.
Surrogate Recoveries	

SEMIVOLATILE ORGANICS

REGION I VALIDATION CHECKLIST for
OLIN CHEMICAL SUPERFUND SITE
Criteria and Qualifications: REGION I Organics Guideline (1996)

TIER I / (II) / III (circle one)

☑ ☐ ☐ Surrogates percent recovery criteria met: Soil = (base/neutral 30%-130%, acid 30%-130%) Water = (base/neutral 30%-130%, acid 15%-110%)	
Matrix Spikes and Laboratory Control Samples ☐ ☒ ☐ MS/MSD percent recovery criteria met Soil and Water = (base/neutral 40%-140%, acid 30%-130%) ☑ ☐ ☐ MS/MSD RPD criteria met (soils <50%, water <30%) ☐ ☒ ☐ LCS percent recovery criteria met soil/water (base 40%-140%, acid 30%-130%)	See below.
Field Duplicates ☑ ☐ ☐ RPD criteria met (soils <50%, water <30%)	
Internal Standard ☑ ☐ ☐ Area counts within -50 to +100 percent of calib. std. ☑ ☐ ☐ Retention Time within 30 seconds of calib. std.	
Target Compounds ☑ ☐ ☐ Reviewed narrative for anomalies	
Tentatively Identified Compounds (TICs) ☐ ☑ ☐ TCL compounds reported as TICs	

Validator's Signature: _____

Date: 2/17/10

Reference:

MACTEC, Quality Assurance Project Plan for Remedial Investigation/Feasibility Study – Olin Chemical Superfund Site, Wilmington Property, 51 Eames Street, Wilmington, MA", MACTEC Engineering and Consulting. Draft .October 2008.

SAMPLE SUMMARY

Client: Olin Corporation

Job Number: 360-24343-1
Sdg Number: OCRI-08

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
360-24343-1	OC-SB-444-0.0/1.0-XXX	Solid	08/27/2009 1320	08/28/2009 1710
360-24343-2	OC-SB-444-12/14-XXX	Solid	08/27/2009 1400	08/28/2009 1710
360-24343-3	OC-SB-444-5.0/7.0-XXX	Solid	08/27/2009 1330	08/28/2009 1710
360-24343-4	OC-SB-449-0.0/1.0-XXX	Solid	08/27/2009 1515	08/28/2009 1710
360-24343-5	OC-SB-449-11/13-XXX	Solid	08/27/2009 1600	08/28/2009 1710
360-24343-6	OC-SB-449-6.0/8.0-XXX	Solid	08/27/2009 1520	08/28/2009 1710
360-24343-7	OC-SB-451-0.0/1.0-XXX	Solid	08/28/2009 1120	08/28/2009 1710
360-24343-8	OC-SB-451-18/20-XXX	Solid	08/28/2009 1250	08/28/2009 1710
360-24343-9	OC-SB-451-2.5/4.5-DUP	Solid	08/28/2009 1140	08/28/2009 1710
360-24343-10	OC-SB-451-2.5/4.5-XXX	Solid	08/28/2009 1140	08/28/2009 1710
360-24343-10MS	OC-SB-451-2.5/4.5-XMS	Solid	08/28/2009 1140	08/28/2009 1710
360-24343-10MSD	OC-SB-451-2.5/4.5-MSD	Solid	08/28/2009 1140	08/28/2009 1710
360-24343-11	OC-SB-454-0.0/1.0-XXX	Solid	08/27/2009 1710	08/28/2009 1710
360-24343-12	OC-SB-454-18/20-XXX	Solid	08/27/2009 1745	08/28/2009 1710
360-24343-13	OC-SB-454-6.0/8.0-XXX	Solid	08/27/2009 1715	08/28/2009 1710
360-24343-14	OC-SB-455-0.0/1.0-XXX	Solid	08/28/2009 0830	08/28/2009 1710
360-24343-15	OC-SB-455-28/30-XXX	Solid	08/28/2009 0930	08/28/2009 1710
360-24343-16	OC-SB-455-6.0/8.0-DUP	Solid	08/28/2009 0840	08/28/2009 1710
360-24343-17	OC-SB-455-6.0/8.0-XXX	Solid	08/28/2009 0840	08/28/2009 1710
360-24343-17MS	OC-SB-455-6.0/8.0-XMS	Solid	08/28/2009 0840	08/28/2009 1710
360-24343-17MSD	OC-SB-455-6.0/8.0-MSD	Solid	08/28/2009 0840	08/28/2009 1710
360-24343-18	OC-SB-449-11/13-XXX	Solid	08/27/2009 1600	08/28/2009 1710
360-24343-19	OC-SB-449-6.0/8.0-XXX	Solid	08/27/2009 1520	08/28/2009 1710
360-24343-21	OC-SB-454-6.0/8.0-XXX	Solid	08/27/2009 1715	08/28/2009 1710
360-24343-22	OC-TBK-010	Solid	08/28/2009 1430	08/28/2009 1710

Form 1's edited

2/17/10

Client: Olin Corporation

Job Number: 360-24343-1
Sdg Number: OCRI-08

Client Sample ID: **OC-SB-444-0.0/1.0-XXX**

Lab Sample ID: 360-24343-1
Client Matrix: Solid % Moisture: 4.7

Date Sampled: 08/27/2009 1320
Date Received: 08/28/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48817		Instrument ID:	Inst_J
Preparation:	3550B	Prep Batch: 360-48744		Lab File ID:	J02910.D
Dilution:	10			Initial Weight/Volume:	100.05 g
Date Analyzed:	09/11/2009 0622			Final Weight/Volume:	2.0 mL
Date Prepared:	09/09/2009 1112			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodimethylamine		ND		24	100

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	79		30 - 130
2-Fluorobiphenyl	74		30 - 130
2-Fluorophenol	61		30 - 130
Nitrobenzene-d5	63		30 - 130
Phenol-d5	71		30 - 130
Terphenyl-d14	61		30 - 130

Client: Olin Corporation

Job Number: 360-24343-1
Sdg Number: OCRI-08

Client Sample ID: **OC-SB-444-0.0/1.0-XXX**

Lab Sample ID: 360-24343-1
Client Matrix: Solid % Moisture: 4.7

Date Sampled: 08/27/2009 1320
Date Received: 08/28/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49174		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48703		Lab File ID:	J03025.D
Dilution:	10			Initial Weight/Volume:	30.61 g
Date Analyzed:	09/18/2009 2234			Final Weight/Volume:	1.0 mL
Date Prepared:	09/08/2009 1452			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		100	340
1,2,4,5-Tetrachlorobenzene		ND		100	340
1,2,4-Trichlorobenzene		ND		100	340
1,2-Dichlorobenzene		ND		100	340
1,3-Dichlorobenzene		ND		100	340
1,4-Dichlorobenzene		ND		100	340
1-Methylnaphthalene		ND		100	340
2,2'-oxybis[1-chloropropane]		ND		100	340
2,3,4,6-Tetrachlorophenol		ND		100	340
2,4,5-Trichlorophenol		ND		100	340
2,4,6-Trichlorophenol		ND		100	340
2,4-Dichlorophenol		ND		100	340
2,4-Dimethylphenol		ND		130	340
2,4-Dinitrophenol		~~ND~~ R		100	340
2,4-Dinitrotoluene		ND		100	340
2,6-Dinitrotoluene		ND		100	340
2-Chloronaphthalene		ND		100	340
2-Chlorophenol		ND		100	340
2-Methylnaphthalene		ND		100	340
2-Methylphenol		ND		210	340
2-Nitroaniline		~~ND~~ R		100	1700
2-Nitrophenol		ND		100	340
3 & 4 Methylphenol		ND		100	340
3,3'-Dichlorobenzidine		ND J	✓	100	690
3-Nitroaniline		ND		100	1700
4,6-Dinitro-2-methylphenol		~~ND~~ R		100	1700
4-Bromophenyl phenyl ether		ND		100	340
4-Chloro-3-methylphenol		ND		100	690
4-Chloroaniline		ND		100	690
4-Chlorophenyl phenyl ether		ND		100	340
4-Nitroaniline		ND		100	1700
4-Nitrophenol		ND J		100	1700
Acenaphthene		ND		100	340
Acenaphthylene		ND		100	340
Acetophenone		ND		100	340
Aniline		ND J	✓	100	340
Anthracene		ND		100	340
Atrazine		ND		100	340
Azobenzene		ND		100	340
Benzaldehyde		ND		100	340
Benzo[a]anthracene		ND		100	340
Benzo[a]pyrene		ND		100	340
Benzo[b]fluoranthene		ND		100	340
Benzo[g,h,i]perylene		ND		100	340
Benzo[k]fluoranthene		ND		100	340
Benzoic acid		~~ND~~ R		150	1700

2/17/10

Client: Olin Corporation

Job Number: 360-24343-1
Sdg Number: OCRI-08

Client Sample ID: **OC-SB-444-0.0/1.0-XXX**

Lab Sample ID: 360-24343-1
Client Matrix: Solid % Moisture: 4.7

Date Sampled: 08/27/2009 1320
Date Received: 08/28/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49174		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48703		Lab File ID:	J03025.D
Dilution:	10			Initial Weight/Volume:	30.61 g
Date Analyzed:	09/18/2009 2234			Final Weight/Volume:	1.0 mL
Date Prepared:	09/08/2009 1452			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		100	340
Benzyl alcohol		ND		290	690
Bis(2-chloroethoxy)methane		ND		100	340
Bis(2-chloroethyl)ether		ND		100	340
Bis(2-ethylhexyl) phthalate		4300 EB		100	340
Butyl benzyl phthalate		ND		100	340
Caprolactam		ND		100	340
Carbazole		ND		100	340
Chrysene		ND		100	340
Dibenz(a,h)anthracene		ND J		100	340
Dibenzofuran		ND		100	340
Diethyl phthalate		ND		100	340
Dimethyl phthalate		ND		100	340
Di-n-butyl phthalate		ND		300	340
Di-n-octyl phthalate		ND		170	340
Diphenyl oxide		ND		100	340
Diphenylamine		ND		100	340
Fluoranthene		ND		100	340
Fluorene		ND		100	340
Hexachlorobenzene		ND		100	340
Hexachlorobutadiene		ND		100	340
Hexachlorocyclopentadiene		ND		100	690
Hexachloroethane		ND		100	340
Indeno[1,2,3-cd]pyrene		ND		100	340
Isophorone		ND		100	340
Naphthalene		ND		100	820
Nitrobenzene		ND		100	340
~~N-Nitrosodimethylamine~~		ND		100	340
N-Nitrosodi-n-propylamine		ND		100	340
N-Nitrosodiphenylamine		ND		100	340
Pentachlorophenol		ND		100	340
Phenanthrene		ND		100	410
Phenol		ND		100	340
Pyrene		ND		100	340

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	82		30 - 130
2-Fluorophenol	85		30 - 130
2-Fluorobiphenyl	74		30 - 130
Nitrobenzene-d5	73		30 - 130
Phenol-d5	81		30 - 130
Terphenyl-d14	81		30 - 130

2/19/10

Client: Olin Corporation

Job Number: 360-24343-1
Sdg Number: OCRI-08

Client Sample ID: **OC-SB-444-0.0/1.0-XXX**

Lab Sample ID: 360-24343-1
Client Matrix: Solid % Moisture: 4.7

Date Sampled: 08/27/2009 1320
Date Received: 08/28/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49174		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48703		Lab File ID:	J03025.D
Dilution:	10			Initial Weight/Volume:	30.61 g
Date Analyzed:	09/18/2009 2234			Final Weight/Volume:	1.0 mL
Date Prepared:	09/08/2009 1452			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 6

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
~~3910-35-8~~	~~1H-Indene, 2,3-dihydro-1,1,3-trimethyl-3-~~	~~10.57~~	~~490~~	~~T J N~~
629-94-7	Heneicosane	13.79	490	T J N
7225-64-1	Heptadecane, 9-octyl-	14.11	580	T J N
~~26603-23-6~~	~~p,p''-Dioctyldiphenylamine~~	~~15.01~~	~~42000~~	~~T J N~~
74298-93-4	1,1''-Biphenyl, 2,3'',4,5''-tetrachloro-4''-	15.18	1800	T J N
	Unknown	15.36	280	T J

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Client: Olin Corporation

Job Number: 360-24343-1
Sdg Number: OCRI-08

Client Sample ID: **OC-SB-444-5.0/7.0-XXX**

Lab Sample ID: 360-24343-3
Client Matrix: Solid % Moisture: 11.3

Date Sampled: 08/27/2009 1330
Date Received: 08/28/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48817		Instrument ID:	Inst. J
Preparation:	3550B	Prep Batch: 360-48744		Lab File ID:	J02905.D
Dilution:	1.0			Initial Weight/Volume:	100.64 g
Date Analyzed:	09/11/2009 0354			Final Weight/Volume:	1.0 mL
Date Prepared:	09/09/2009 1112			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodimethylamine		ND		1.3	5.6

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	67		30 - 130
2-Fluorobiphenyl	57		30 - 130
2-Fluorophenol	57		30 - 130
Nitrobenzene-d5	56		30 - 130
Phenol-d5	63		30 - 130
Terphenyl-d14	61		30 - 130

Client: Olin Corporation

Job Number: 360-24343-1
Sdg Number: OCRI-08

Client Sample ID: **OC-SB-444-5.0/7.0-XXX**

Lab Sample ID: 360-24343-3
Client Matrix: Solid % Moisture: 11.3

Date Sampled: 08/27/2009 1330
Date Received: 08/28/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49174		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48703		Lab File ID:	J03027.D
Dilution:	1.0			Initial Weight/Volume:	30.68 g
Date Analyzed:	09/18/2009 2329			Final Weight/Volume:	1.0 mL
Date Prepared:	09/08/2009 1452			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		11	37
1,2,4,5-Tetrachlorobenzene		ND		11	37
1,2,4-Trichlorobenzene		ND		11	37
1,2-Dichlorobenzene		ND		11	37
1,3-Dichlorobenzene		ND		11	37
1,4-Dichlorobenzene		ND		11	37
1-Methylnaphthalene		ND		11	37
2,2'-oxybis[1-chloropropane]		ND		11	37
2,3,4,6-Tetrachlorophenol		ND		11	37
2,4,5-Trichlorophenol		ND		11	37
2,4,6-Trichlorophenol		ND		11	37
2,4-Dichlorophenol		ND		11	37
2,4-Dimethylphenol		ND		14	37
2,4-Dinitrophenol		~~ND~~ J R		11	37
2,4-Dinitrotoluene		ND		11	37
2,6-Dinitrotoluene		ND		11	37
2-Chloronaphthalene		ND		11	37
2-Chlorophenol		ND		11	37
2-Methylnaphthalene		ND		11	37
2-Methylphenol		ND		22	37
2-Nitroaniline		~~ND~~ R		11	180
2-Nitrophenol		ND		11	37
3 & 4 Methylphenol		ND		11	37
3,3'-Dichlorobenzidine		ND J		11	74
3-Nitroaniline		ND		11	180
4,6-Dinitro-2-methylphenol		~~ND~~ R		11	180
4-Bromophenyl phenyl ether		ND		11	37
4-Chloro-3-methylphenol		ND		11	74
4-Chloroaniline		ND		11	74
4-Chlorophenyl phenyl ether		ND		11	37
4-Nitroaniline		ND		11	180
4-Nitrophenol		ND J		11	180
Acenaphthene		ND		11	37
Acenaphthylene		ND		11	37
Acetophenone		ND		11	37
Aniline		ND J		11	37
Anthracene		ND		11	37
Atrazine		ND		11	37
Azobenzene		ND		11	37
Benzaldehyde		ND		11	37
Benzo[a]anthracene		ND		11	37
Benzo[a]pyrene		ND		11	37
Benzo[b]fluoranthene		ND		11	37
Benzo[g,h,i]perylene		ND		11	37
Benzo[k]fluoranthene		ND		11	37
Benzoic acid		~~ND~~ R		17	180

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Client: Olin Corporation

Job Number: 360-24343-1
Sdg Number: OCRI-08

Client Sample ID: OC-SB-444-5.0/7.0-XXX

Lab Sample ID: 360-24343-3
Client Matrix: Solid

% Moisture: 11.3

Date Sampled: 08/27/2009 1330
Date Received: 08/28/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49174		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48703		Lab File ID:	J03027.D
Dilution:	1.0			Initial Weight/Volume:	30.68 g
Date Analyzed:	09/18/2009 2329			Final Weight/Volume:	1.0 mL
Date Prepared:	09/08/2009 1452			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		11	37
Benzyl alcohol		ND		31	74
Bis(2-chloroethoxy)methane		ND		11	37
Bis(2-chloroethyl)ether		ND		11	37
Bis(2-ethylhexyl) phthalate		ND		11	37
Butyl benzyl phthalate		ND		11	37
Caprolactam		ND		11	37
Carbazole		ND		11	37
Chrysene		ND		11	37
Dibenz(a,h)anthracene		ND	J	11	37
Dibenzofuran		ND		11	37
Diethyl phthalate		ND		11	37
Dimethyl phthalate		ND		11	37
Di-n-butyl phthalate		ND		32	37
Di-n-octyl phthalate		ND		19	37
Diphenyl oxide		ND		11	37
Diphenylamine		ND		11	37
Fluoranthene		ND		11	37
Fluorene		ND		11	37
Hexachlorobenzene		ND		11	37
Hexachlorobutadiene		ND		11	37
Hexachlorocyclopentadiene		ND		11	74
Hexachloroethane		ND		11	37
Indeno[1,2,3-cd]pyrene		ND		11	37
Isophorone		ND		11	37
Naphthalene		ND		11	88
Nitrobenzene		ND		11	37
N-Nitrosodimethylamine		ND		11	37
N-Nitrosodi-n-propylamine		ND		11	37
N-Nitrosodiphenylamine		ND		11	37
Pentachlorophenol		ND		11	37
Phenanthrene		ND		11	44
Phenol		ND		11	37
Pyrene		ND		11	37

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	64		30 - 130
2-Fluorophenol	70		30 - 130
2-Fluorobiphenyl	54		30 - 130
Nitrobenzene-d5	74		30 - 130
Phenol-d5	69		30 - 130
Terphenyl-d14	60		30 - 130

Client: Olin Corporation

Job Number: 360-24343-1
Sdg Number: OCRI-08

Client Sample ID: **OC-SB-444-5.0/7.0-XXX**

Lab Sample ID: 360-24343-3
Client Matrix: Solid

% Moisture: 11.3

Date Sampled: 08/27/2009 1330
Date Received: 08/28/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49174		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48703		Lab File ID:	J03027.D
Dilution:	1.0			Initial Weight/Volume:	30.68 g
Date Analyzed:	09/18/2009 2329			Final Weight/Volume:	1.0 mL
Date Prepared:	09/08/2009 1452			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 6

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
321-60-8	1,1"-Biphenyl, 2-fluoro-	8.82	27	T J N
615-22-5	Benzothiazole, 2-(methylthio)-	10.10	23	T J N
	Unknown	10.75	20	T J
3386-33-2	Octadecane, 1-chloro-	12.06	16	T J N
10544-50-0	Cyclic octaatomic sulfur	12.13	64	T J N
26603-23-6	p,p"-Dioctyldiphenylamine	14.95	96	T J N

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Client: Olin Corporation

Job Number: 360-24343-1
Sdg Number: OCRI-08

Client Sample ID: **OC-SB-449-0.0/1.0-XXX**

Lab Sample ID: 360-24343-4
Client Matrix: Solid % Moisture: 7.7

Date Sampled: 08/27/2009 1515
Date Received: 08/28/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48817		Instrument ID:	Inst. J
Preparation:	3550B	Prep Batch: 360-48744		Lab File ID:	J02906.D
Dilution:	1.0			Initial Weight/Volume:	100.30 g
Date Analyzed:	09/11/2009 0423			Final Weight/Volume:	1.0 mL
Date Prepared:	09/09/2009 1112			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodimethylamine		ND		1.3	5.4

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	68		30 - 130
2-Fluorobiphenyl	63		30 - 130
2-Fluorophenol	61		30 - 130
Nitrobenzene-d5	60		30 - 130
Phenol-d5	68		30 - 130
Terphenyl-d14	60		30 - 130

Client: Olin Corporation

Job Number: 360-24343-1
Sdg Number: OCRI-08

Client Sample ID: **OC-SB-449-0.0/1.0-XXX**

Lab Sample ID: 360-24343-4
Client Matrix: Solid
% Moisture: 7.7

Date Sampled: 08/27/2009 1515
Date Received: 08/28/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49174		Instrument ID:	Inst_J
Preparation:	3546	Prep Batch: 360-48703		Lab File ID:	J03028.D
Dilution:	1.0			Initial Weight/Volume:	30.56 g
Date Analyzed:	09/18/2009 2356			Final Weight/Volume:	1.0 mL
Date Prepared:	09/08/2009 1452			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		11	35
1,2,4,5-Tetrachlorobenzene		ND		11	35
1,2,4-Trichlorobenzene		ND		11	35
1,2-Dichlorobenzene		ND		11	35
1,3-Dichlorobenzene		ND		11	35
1,4-Dichlorobenzene		ND		11	35
1-Methylnaphthalene		ND		11	35
2,2'-oxybis[1-chloropropane]		ND		11	35
2,3,4,6-Tetrachlorophenol		ND		11	35
2,4,5-Trichlorophenol		ND		11	35
2,4,6-Trichlorophenol		ND		11	35
2,4-Dichlorophenol		ND		11	35
2,4-Dimethylphenol		ND		14	35
2,4-Dinitrophenol		~~ND~~ R		11	35
2,4-Dinitrotoluene		ND		11	35
2,6-Dinitrotoluene		ND		11	35
2-Chloronaphthalene		ND		11	35
2-Chlorophenol		ND		11	35
2-Methylnaphthalene		ND		11	35
2-Methylphenol		ND		21	35
2-Nitroaniline		~~ND~~ R		11	180
2-Nitrophenol		ND		11	35
3 & 4 Methylphenol		ND		11	35
3,3'-Dichlorobenzidine		ND J	✓	11	71
3-Nitroaniline		ND		11	180
4,6-Dinitro-2-methylphenol		~~ND~~ R		11	180
4-Bromophenyl phenyl ether		ND		11	35
4-Chloro-3-methylphenol		ND		11	71
4-Chloroaniline		ND		11	71
4-Chlorophenyl phenyl ether		ND		11	35
4-Nitroaniline		ND		11	180
4-Nitrophenol		~~ND~~ UJ		11	180
Acenaphthene		ND		11	35
Acenaphthylene		ND		11	35
Acetophenone		ND		11	35
Aniline		ND J	✓	11	35
Anthracene		ND		11	35
Atrazine		ND		11	35
Azobenzene		ND		11	35
Benzaldehyde		ND		11	35
Benzo[a]anthracene		ND		11	35
Benzo[a]pyrene		ND		11	35
Benzo[b]fluoranthene		ND		11	35
Benzo[g,h,i]perylene		ND		11	35
Benzo[k]fluoranthene		ND		11	35
Benzoic acid		R ~~85 18CC4~~ ~~JB4S~~		16	180

Client: Olin Corporation

Job Number: 360-24343-1
Sdg Number: OCRI-08

Client Sample ID: **OC-SB-449-0.0/1.0-XXX**

Lab Sample ID: 360-24343-4
Client Matrix: Solid % Moisture: 7.7

Date Sampled: 08/27/2009 1515
Date Received: 08/28/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49174		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48703		Lab File ID:	J03028.D
Dilution:	1.0			Initial Weight/Volume:	30.56 g
Date Analyzed:	09/18/2009 2356			Final Weight/Volume:	1.0 mL
Date Prepared:	09/08/2009 1452			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		11	35
Benzyl alcohol		ND		30	71
Bis(2-chloroethoxy)methane		ND		11	35
Bis(2-chloroethyl)ether		ND		11	35
Bis(2-ethylhexyl) phthalate		22 EVB	J	11	35
Butyl benzyl phthalate		ND		11	35
Caprolactam		ND		11	35
Carbazole		ND		11	35
Chrysene		ND		11	35
Dibenz(a,h)anthracene		ND J		11	35
Dibenzofuran		ND		11	35
Diethyl phthalate		ND		11	35
Dimethyl phthalate		ND		11	35
Di-n-butyl phthalate		ND		31	35
Di-n-octyl phthalate		ND		18	35
Diphenyl oxide		ND		11	35
Diphenylamine		ND		11	35
Fluoranthene		ND		11	35
Fluorene		ND		11	35
Hexachlorobenzene		ND		11	35
Hexachlorobutadiene		ND		11	35
Hexachlorocyclopentadiene		ND		11	71
Hexachloroethane		ND		11	35
Indeno[1,2,3-cd]pyrene		ND		11	35
Isophorone		ND		11	35
Naphthalene		ND		11	85
Nitrobenzene		ND		11	35
~~N-Nitrosodimethylamine~~		~~ND~~		~~11~~	~~35~~
N-Nitrosodi-n-propylamine		ND		11	35
N-Nitrosodiphenylamine		ND		11	35
Pentachlorophenol		ND		11	35
Phenanthrene		ND		11	43
Phenol		ND		11	35
Pyrene		ND		11	35

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	69		30 - 130
2-Fluorophenol	70		30 - 130
2-Fluorobiphenyl	59		30 - 130
Nitrobenzene-d5	61		30 - 130
Phenol-d5	68		30 - 130
Terphenyl-d14	60		30 - 130

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Client: Olin Corporation

Job Number: 360-24343-1
Sdg Number: OCRI-08

Client Sample ID: **OC-SB-449-0.0/1.0-XXX**

Lab Sample ID: 360-24343-4
Client Matrix: Solid % Moisture: 7.7

Date Sampled: 08/27/2009 1515
Date Received: 08/28/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49174		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48703		Lab File ID:	J03028.D
Dilution:	1.0			Initial Weight/Volume:	30.56 g
Date Analyzed:	09/18/2009 2356			Final Weight/Volume:	1.0 mL
Date Prepared:	09/08/2009 1452			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 8

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
112-88-9	1-Octadecene	12.82	9.9	T J N
57289-7-3	Isoheptadecanol	13.82	7.3	T J N
297-3-0	Cyclotetracosane	14.12	110	T J N
7683-64-9	Squalene	14.47	270	T J N
297-3-0	Cyclotetracosane	14.77	340	T J N
14021-23-9	D-Friedoolean-14-ene, 3-methoxy-, (3.bet	15.87	380	T J N
	Unknown	16.03	110	T J
1059-14-9	Taraxasterol	16.42	180	T J N

Client: Olin Corporation

Job Number: 360-24343-1
Sdg Number: OCRI-08

Client Sample ID: **OC-SB-449-6.0/8.0-XXX**

Lab Sample ID: 360-24343-6
Client Matrix: Solid % Moisture: 15.9

Date Sampled: 08/27/2009 1520
Date Received: 08/28/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49174		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48703		Lab File ID:	J03030.D
Dilution:	1.0			Initial Weight/Volume:	30.03 g
Date Analyzed:	09/19/2009 0050			Final Weight/Volume:	1.0 mL
Date Prepared:	09/08/2009 1452			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		12	40
1,2,4,5-Tetrachlorobenzene		ND		12	40
1,2,4-Trichlorobenzene		ND		12	40
1,2-Dichlorobenzene		ND		12	40
1,3-Dichlorobenzene		ND		12	40
1,4-Dichlorobenzene		ND		12	40
1-Methylnaphthalene		ND		12	40
2,2'-oxybis[1-chloropropane]		ND		12	40
2,3,4,6-Tetrachlorophenol		ND		12	40
2,4,5-Trichlorophenol		ND		12	40
2,4,6-Trichlorophenol		ND		12	40
2,4-Dichlorophenol		ND		12	40
2,4-Dimethylphenol		ND		16	40
2,4-Dinitrophenol		~~ND~~ R		12	40
2,4-Dinitrotoluene		ND		12	40
2,6-Dinitrotoluene		ND		12	40
2-Chloronaphthalene		ND		12	40
2-Chlorophenol		ND		12	40
2-Methylnaphthalene		ND		12	40
2-Methylphenol		ND		24	40
2-Nitroaniline		~~ND~~ R		12	200
2-Nitrophenol		ND		12	40
3 & 4 Methylphenol		ND		12	40
3,3'-Dichlorobenzidine		ND J	✓	12	79
3-Nitroaniline		ND		12	200
4,6-Dinitro-2-methylphenol		~~ND~~ R		12	200
4-Bromophenyl phenyl ether		ND		12	40
4-Chloro-3-methylphenol		ND		12	79
4-Chloroaniline		ND		12	79
4-Chlorophenyl phenyl ether		ND		12	40
4-Nitroaniline		ND		12	200
4-Nitrophenol		ND J		12	200
Acenaphthene		ND		12	40
Acenaphthylene		ND		12	40
Acetophenone		ND		12	40
Aniline		ND J	✓	12	40
Anthracene		ND		12	40
Atrazine		ND		12	40
Azobenzene		ND		12	40
Benzaldehyde		ND		12	40
Benzo[a]anthracene		ND		12	40
Benzo[a]pyrene		ND		12	40
Benzo[b]fluoranthene		ND		12	40
Benzo[g,h,i]perylene		ND		12	40
Benzo[k]fluoranthene		ND		12	40
Benzoic acid		~~ND~~ R		18	200

R. Coelio 9/17/09

Client: Olin Corporation

Job Number: 360-24343-1
Sdg Number: OCRI-08

Client Sample ID: **OC-SB-449-6.0/8.0-XXX**

Lab Sample ID: 360-24343-6
Client Matrix: Solid
% Moisture: 15.9

Date Sampled: 08/27/2009 1520
Date Received: 08/28/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49174		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48703		Lab File ID:	J03030.D
Dilution:	1.0			Initial Weight/Volume:	30.03 g
Date Analyzed:	09/19/2009 0050			Final Weight/Volume:	1.0 mL
Date Prepared:	09/08/2009 1452			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		12	40
Benzyl alcohol		ND		34	79
Bis(2-chloroethoxy)methane		ND		12	40
Bis(2-chloroethyl)ether		ND		12	40
Bis(2-ethylhexyl) phthalate		39 EB	J	12	40
Butyl benzyl phthalate		ND		12	40
Caprolactam		ND		12	40
Carbazole		ND		12	40
Chrysene		ND		12	40
Dibenz(a,h)anthracene		ND J		12	40
Dibenzofuran		ND		12	40
Diethyl phthalate		ND		12	40
Dimethyl phthalate		ND		12	40
Di-n-butyl phthalate		ND		35	40
Di-n-octyl phthalate		ND		20	40
Diphenyl oxide		ND		12	40
Fluoranthene		ND		12	40
Fluorene		ND		12	40
Hexachlorobenzene		ND		12	40
Hexachlorobutadiene		ND		12	40
Hexachlorocyclopentadiene		ND		12	79
Hexachloroethane		ND		12	40
Indeno[1,2,3-cd]pyrene		ND		12	40
Isophorone		ND		12	40
Naphthalene		ND		12	95
Nitrobenzene		ND		12	40
N-Nitrosodimethylamine		ND		12	40
N-Nitrosodi-n-propylamine		ND		12	40
N-Nitrosodiphenylamine		13 EB	J	12	40
Pentachlorophenol		ND		12	40
Phenanthrene		ND		12	48
Phenol		ND		12	40
Pyrene		ND		12	40

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	72		30 - 130
2-Fluorobiphenyl	64		30 - 130
2-Fluorophenol	71		30 - 130
Nitrobenzene-d5	66		30 - 130
Phenol-d5	70		30 - 130
Terphenyl-d14	68		30 - 130

Client: Olin Corporation

Job Number: 360-24343-1
Sdg Number: OCRI-08

Client Sample ID: **OC-SB-449-6.0/8.0-XXX**

Lab Sample ID: 360-24343-6
Client Matrix: Solid % Moisture: 15.9

Date Sampled: 08/27/2009 1520
Date Received: 08/28/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49174		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48703		Lab File ID:	J03030.D
Dilution:	1.0			Initial Weight/Volume:	30.03 g
Date Analyzed:	09/19/2009 0050			Final Weight/Volume:	1.0 mL
Date Prepared:	09/08/2009 1452			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 5

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Unknown	8.67	86	T J
615-22-5	Benzothiazole, 2-(methylthio)-	10.10	38	T J N
122-39-4	Diphenylamine	10.15	13	J
3910-35-8	1H-Indene, 2,3-dihydro-1,1,3-trimethyl-3	10.57	31	T J N
26603-23-6	p,p''-Dioctyldiphenylamine	14.95	330	T J N

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Client: Olin Corporation

Job Number: 360-24343-1
Sdg Number: OCRI-08

Client Sample ID: **OC-SB-451-0.0/1.0-XXX**

Lab Sample ID: 360-24343-7
Client Matrix: Solid % Moisture: 3.2

Date Sampled: 08/28/2009 1120
Date Received: 08/28/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48817		Instrument ID:	Inst. J
Preparation:	3550B	Prep Batch: 360-48744		Lab File ID:	J02913.D
Dilution:	1.0			Initial Weight/Volume:	100.68 g
Date Analyzed:	09/11/2009 0752			Final Weight/Volume:	1.0 mL
Date Prepared:	09/09/2009 1112			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodimethylamine		ND		1.2	5.1

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	82		30 - 130
2-Fluorobiphenyl	76		30 - 130
2-Fluorophenol	66		30 - 130
Nitrobenzene-d5	70		30 - 130
Phenol-d5	74		30 - 130
Terphenyl-d14	98		30 - 130

Client: Olin Corporation

Job Number: 360-24343-1
Sdg Number: OCRI-08

Client Sample ID: **OC-SB-451-0.0/1.0-XXX**

Lab Sample ID: 360-24343-7
Client Matrix: Solid % Moisture: 3.2

Date Sampled: 08/28/2009 1120
Date Received: 08/28/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49174		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48703		Lab File ID:	J03031.D
Dilution:	10			Initial Weight/Volume:	30.48 g
Date Analyzed:	09/19/2009 0117			Final Weight/Volume:	1.0 mL
Date Prepared:	09/08/2009 1452			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		100	340
1,2,4,5-Tetrachlorobenzene		ND		100	340
1,2,4-Trichlorobenzene		ND		100	340
1,2-Dichlorobenzene		ND		100	340
1,3-Dichlorobenzene		ND		100	340
1,4-Dichlorobenzene		ND		100	340
1-Methylnaphthalene		ND		100	340
2,2'-oxybis[1-chloropropane]		ND		100	340
2,3,4,6-Tetrachlorophenol		ND		100	340
2,4,5-Trichlorophenol		ND		100	340
2,4,6-Trichlorophenol		ND		100	340
2,4-Dichlorophenol		ND		100	340
2,4-Dimethylphenol		ND		130	340
2,4-Dinitrophenol		~~ND~~ R		100	340
2,4-Dinitrotoluene		ND		100	340
2,6-Dinitrotoluene		ND		100	340
2-Chloronaphthalene		ND		100	340
2-Chlorophenol		ND		100	340
2-Methylnaphthalene		ND		100	340
2-Methylphenol		ND		200	340
2-Nitroaniline		~~ND~~ R		100	1700
2-Nitrophenol		ND		100	340
3 & 4 Methylphenol		ND		100	340
3,3'-Dichlorobenzidine		ND J		100	680
3-Nitroaniline		ND		100	1700
4,6-Dinitro-2-methylphenol		~~ND~~ R		100	1700
4-Bromophenyl phenyl ether		ND		100	340
4-Chloro-3-methylphenol		ND		100	680
4-Chloroaniline		ND		100	680
4-Chlorophenyl phenyl ether		ND		100	340
4-Nitroaniline		ND		100	1700
4-Nitrophenol		ND J		100	1700
Acenaphthene		160	J	100	340
Acenaphthylene		ND		100	340
Acetophenone		ND		100	340
Aniline		~~ND~~ J		100	340
Anthracene		480 EB		100	340
Atrazine		ND		100	340
Azobenzene		ND		100	340
Benzaldehyde		ND		100	340
Benzo[a]anthracene		1500		100	340
Benzo[a]pyrene		1300		100	340
Benzo[b]fluoranthene		1500		100	340
Benzo[g,h,i]perylene		830		100	340
Benzo[k]fluoranthene		870		100	340
Benzoic acid		~~ND~~ R		150	1700

Client: Olin Corporation

Job Number: 360-24343-1
Sdg Number: OCRI-08

Client Sample ID: OC-SB-451-0.0/1.0-XXX

Lab Sample ID: 360-24343-7
Client Matrix: Solid % Moisture: 3.2

Date Sampled: 08/28/2009 1120
Date Received: 08/28/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49174		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48703		Lab File ID:	J03031.D
Dilution:	10			Initial Weight/Volume:	30.48 g
Date Analyzed:	09/19/2009 0117			Final Weight/Volume:	1.0 mL
Date Prepared:	09/08/2009 1452			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		100	340
Benzyl alcohol		ND		290	680
Bis(2-chloroethoxy)methane		ND		100	340
Bis(2-chloroethyl)ether		ND		100	340
Bis(2-ethylhexyl) phthalate		200 EXB	J	100	340
Butyl benzyl phthalate		ND		100	340
Caprolactam		ND		100	340
Carbazole		240	J	100	340
Chrysene		1300		100	340
Dibenz(a,h)anthracene		290	J	100	340
Dibenzofuran		ND		100	340
Diethyl phthalate		ND		100	340
Dimethyl phthalate		ND		100	340
Di-n-butyl phthalate		ND		300	340
Di-n-octyl phthalate		ND		170	340
Diphenyl oxide		230	J	100	340
Diphenylamine		ND		100	340
Fluoranthene		3300		100	340
Fluorene		150	J	100	340
Hexachlorobenzene		ND		100	340
Hexachlorobutadiene		ND		100	340
Hexachlorocyclopentadiene		ND		100	680
Hexachloroethane		ND		100	340
Indeno[1,2,3-cd]pyrene		850		100	340
Isophorone		ND		100	340
Naphthalene		ND		100	810
Nitrobenzene		ND		100	340
N-Nitrosodimethylamine		ND		100	340
N-Nitrosodi-n-propylamine		ND		100	340
N-Nitrosodiphenylamine		ND		100	340
Pentachlorophenol		ND		100	340
Phenanthrene		1800		100	410
Phenol		ND		100	340
Pyrene		2800		100	340

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	74		30 - 130
2-Fluorophenol	69		30 - 130
2-Fluorobiphenyl	70		30 - 130
Nitrobenzene-d5	66		30 - 130
Phenol-d5	71		30 - 130
Terphenyl-d14	74		30 - 130

Client: Olin Corporation

Job Number: 360-24343-1
Sdg Number: OCRI-08

Client Sample ID: OC-SB-451-0.0/1.0-XXX

Lab Sample ID: 360-24343-7
Client Matrix: Solid % Moisture: 3.2

Date Sampled: 08/28/2009 1120
Date Received: 08/28/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49174		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48703		Lab File ID:	J03031.D
Dilution:	10			Initial Weight/Volume:	30.48 g
Date Analyzed:	09/19/2009 0117			Final Weight/Volume:	1.0 mL
Date Prepared:	09/08/2009 1452			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 4

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
238-84-6	11H-Benzo[a]fluorene	12.65	180	T J N
~~593-45-3~~	~~Octadecane~~	~~14.72~~	~~660~~	~~T J N~~
205-82-3	Benzo[j]fluoranthene	14.75	840	T J N
~~26603-23-6~~	~~p,p"-Dioctyldiphenylamine~~	~~14.95~~	~~2800~~	~~T J N~~

2/19/10

Client: Olin Corporation

Job Number: 360-24343-1
Sdg Number: OCRI-08

Client Sample ID: **OC-SB-451-2.5/4.5-DUP**

Lab Sample ID: 360-24343-9
Client Matrix: Solid
% Moisture: 5.6

Date Sampled: 08/28/2009 1140
Date Received: 08/28/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48817		Instrument ID:	Inst. J
Preparation:	3550B	Prep Batch: 360-48744		Lab File ID:	J02911.D
Dilution:	10			Initial Weight/Volume:	100.45 g
Date Analyzed:	09/11/2009 0652			Final Weight/Volume:	1.0 mL
Date Prepared:	09/09/2009 1112			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodimethylamine		ND		12	53

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	60		30 - 130
2-Fluorobiphenyl	76		30 - 130
2-Fluorophenol	69		30 - 130
Nitrobenzene-d5	67		30 - 130
Phenol-d5	70		30 - 130
Terphenyl-d14	65		30 - 130

Client: Olin Corporation

Job Number: 360-24343-1
Sdg Number: OCRI-08

Client Sample ID: OC-SB-451-2.5/4.5-DUP

Lab Sample ID: 360-24343-9
Client Matrix: Solid
% Moisture: 5.6

Date Sampled: 08/28/2009 1140
Date Received: 08/28/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49187		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48742		Lab File ID:	B10417.D
Dilution:	1.0			Initial Weight/Volume:	30.15 g
Date Analyzed:	09/19/2009 0058			Final Weight/Volume:	1.0 mL
Date Prepared:	09/09/2009 0958			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		11	35
1,2,4,5-Tetrachlorobenzene		ND		11	35
1,2,4-Trichlorobenzene		ND		11	35
1,2-Dichlorobenzene		ND		11	35
1,3-Dichlorobenzene		ND		11	35
1,4-Dichlorobenzene		ND		11	35
1-Methylnaphthalene		ND		11	35
2,2'-oxybis[1-chloropropane]		ND		11	35
2,3,4,6-Tetrachlorophenol		ND		11	35
2,4,5-Trichlorophenol		ND		11	35
2,4,6-Trichlorophenol		ND		11	35
2,4-Dichlorophenol		ND		11	35
2,4-Dimethylphenol		ND		14	35
2,4-Dinitrophenol		ND		11	35
2,4-Dinitrotoluene		ND		11	35
2,6-Dinitrotoluene		ND		11	35
2-Chloronaphthalene		ND		11	35
2-Chlorophenol		ND		11	35
2-Methylnaphthalene		ND		11	35
2-Methylphenol		ND		21	35
2-Nitroaniline		ND		11	180
2-Nitrophenol		ND		11	35
3 & 4 Methylphenol		ND		11	35
3,3'-Dichlorobenzidine		ND	*	11	70
3-Nitroaniline		ND		11	180
4,6-Dinitro-2-methylphenol		ND		11	180
4-Bromophenyl phenyl ether		ND		11	35
4-Chloro-3-methylphenol		ND		11	70
4-Chloroaniline		ND		11	70
4-Chlorophenyl phenyl ether		ND		11	35
4-Nitroaniline		ND		11	180
4-Nitrophenol		ND		11	180
Acenaphthene		ND		11	35
Acenaphthylene		ND		11	35
Acetophenone		ND		11	35
Aniline		ND	*	11	35
Anthracene		ND		11	35
Atrazine		ND		11	35
Azobenzene		ND		11	35
Benzaldehyde		ND		11	35
Benzo[a]anthracene		ND		11	35
Benzo[a]pyrene		ND		11	35
Benzo[b]fluoranthene		ND		11	35
Benzo[g,h,i]perylene		ND		11	35
Benzo[k]fluoranthene		ND		11	35
Benzoic acid		~~54~~ 1904	~~JB*~~	16	180

Client: Olin Corporation

Job Number: 360-24343-1
Sdg Number: OCRI-08

Client Sample ID: OC-SB-451-2.5/4.5-DUP

Lab Sample ID: 360-24343-9
Client Matrix: Solid
% Moisture: 5.6

Date Sampled: 08/28/2009 1140
Date Received: 08/28/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49187		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48742		Lab File ID:	B10417.D
Dilution:	1.0			Initial Weight/Volume:	30.15 g
Date Analyzed:	09/19/2009 0058			Final Weight/Volume:	1.0 mL
Date Prepared:	09/09/2009 0958			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		11	35
Benzyl alcohol		ND		30	70
Bis(2-chloroethoxy)methane		ND		11	35
Bis(2-chloroethyl)ether		ND		11	35
Bis(2-ethylhexyl) phthalate		150		11	35
Butyl benzyl phthalate		ND		11	35
Caprolactam		ND		11	35
Carbazole		ND		11	35
Chrysene		11	J	11	35
Dibenz(a,h)anthracene		ND		11	35
Dibenzofuran		ND		11	35
Diethyl phthalate		ND		11	35
Dimethyl phthalate		ND		11	35
Di-n-butyl phthalate		ND		31	35
Di-n-octyl phthalate		ND		18	35
Diphenyl oxide		ND		11	35
Diphenylamine		ND		11	35
Fluoranthene		19	J	11	35
Fluorene		ND		11	35
Hexachlorobenzene		ND		11	35
Hexachlorobutadiene		ND		11	35
Hexachlorocyclopentadiene		ND		11	70
Hexachloroethane		ND		11	35
Indeno[1,2,3-cd]pyrene		13	J	11	35
Isophorone		ND		11	35
Naphthalene		ND		11	84
Nitrobenzene		ND		11	35
N-Nitrosodimethylamine		ND		11	35
N-Nitrosodi-n-propylamine		ND		11	35
N-Nitrosodiphenylamine		ND		11	35
Pentachlorophenol		ND		11	35
Phenanthrene		11	J	11	42
Phenol		ND		11	35
Pyrene		23	J	11	35

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	55		30 - 130
2-Fluorophenol	61		30 - 130
2-Fluorobiphenyl	55		30 - 130
Nitrobenzene-d5	55		30 - 130
Phenol-d5	61		30 - 130
Terphenyl-d14	72		30 - 130

Client: Olin Corporation

Job Number: 360-24343-1
Sdg Number: OCRI-08

Client Sample ID: **OC-SB-451-2.5/4.5-DUP**

Lab Sample ID: 360-24343-9
Client Matrix: Solid
% Moisture: 5.6

Date Sampled: 08/28/2009 1140
Date Received: 08/28/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49187		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48742		Lab File ID:	B10417.D
Dilution:	1.0			Initial Weight/Volume:	30.15 g
Date Analyzed:	09/19/2009 0058			Final Weight/Volume:	1.0 mL
Date Prepared:	09/09/2009 0958			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 2

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Unknown	16.52	110	T J
	Unknown	22.17	6.1	T J

Client: Olin Corporation

Job Number: 360-24343-1
Sdg Number: OCRI-08

Client Sample ID: **OC-SB-451-2.5/4.5-XXX**

Lab Sample ID: 360-24343-10
Client Matrix: Solid
% Moisture: 4.9

Date Sampled: 08/28/2009 1140
Date Received: 08/28/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48876		Instrument ID:	Inst. J
Preparation:	3550B	Prep Batch: 360-48800		Lab File ID:	J02934.D
Dilution:	1.0			Initial Weight/Volume:	100.39 g
Date Analyzed:	09/12/2009 2021			Final Weight/Volume:	1.0 mL
Date Prepared:	09/10/2009 1211			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodimethylamine		ND		1.2	5.2

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	74		30 - 130
2-Fluorobiphenyl	60		30 - 130
2-Fluorophenol	57		30 - 130
Nitrobenzene-d5	60		30 - 130
Phenol-d5	64		30 - 130
Terphenyl-d14	74		30 - 130

Client: Olin Corporation

Job Number: 360-24343-1
Sdg Number: OCRI-08

Client Sample ID: **OC-SB-451-2.5/4.5-XXX**

Lab Sample ID: 360-24343-10
Client Matrix: Solid
% Moisture: 4.9

Date Sampled: 08/28/2009 1140
Date Received: 08/28/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49187		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48742		Lab File ID:	B10418.D
Dilution:	1.0			Initial Weight/Volume:	30.76 g
Date Analyzed:	09/19/2009 0130			Final Weight/Volume:	1.0 mL
Date Prepared:	09/09/2009 0958			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		10	34
1,2,4,5-Tetrachlorobenzene		ND		10	34
1,2,4-Trichlorobenzene		ND		10	34
1,2-Dichlorobenzene		ND		10	34
1,3-Dichlorobenzene		ND		10	34
1,4-Dichlorobenzene		ND		10	34
1-Methylnaphthalene		ND		10	34
2,2'-oxybis[1-chloropropane]		ND		10	34
2,3,4,6-Tetrachlorophenol		ND		10	34
2,4,5-Trichlorophenol		ND		10	34
2,4,6-Trichlorophenol		ND		10	34
2,4-Dichlorophenol		ND		10	34
2,4-Dimethylphenol		ND		13	34
2,4-Dinitrophenol		ND		10	34
2,4-Dinitrotoluene		ND		10	34
2,6-Dinitrotoluene		ND		10	34
2-Chloronaphthalene		ND		10	34
2-Chlorophenol		ND		10	34
2-Methylnaphthalene		ND		10	34
2-Methylphenol		ND		21	34
2-Nitroaniline		ND		10	170
2-Nitrophenol		ND		10	34
3 & 4 Methylphenol		ND		10	34
3,3'-Dichlorobenzidine		ND J	✓	10	68
3-Nitroaniline		ND		10	170
4,6-Dinitro-2-methylphenol		ND		10	170
4-Bromophenyl phenyl ether		ND		10	34
4-Chloro-3-methylphenol		ND		10	68
4-Chloroaniline		ND J		10	68
4-Chlorophenyl phenyl ether		ND		10	34
4-Nitroaniline		ND		10	170
4-Nitrophenol		ND		10	170
Acenaphthene		ND		10	34
Acenaphthylene		ND		10	34
Acetophenone		ND		10	34
Aniline		ND J	✓	10	34
Anthracene		ND		10	34
Atrazine		ND		10	34
Azobenzene		ND		10	34
Benzaldehyde		ND		10	34
Benzo[a]anthracene		ND		10	34
Benzo[a]pyrene		ND J		10	34
Benzo[b]fluoranthene		ND J		10	34
Benzo[g,h,i]perylene		ND J		10	34
Benzo[k]fluoranthene		ND J		10	34
Benzoic acid		~~4T~~ 170 U	~~JB~~	15	170

4/19/10

Client: Olin Corporation

Job Number: 360-24343-1
Sdg Number: OCRI-08

Client Sample ID: **OC-SB-451-2.5/4.5-XXX**

Lab Sample ID: 360-24343-10
Client Matrix: Solid
% Moisture: 4.9

Date Sampled: 08/28/2009 1140
Date Received: 08/28/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49187		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48742		Lab File ID:	B10418.D
Dilution:	1.0			Initial Weight/Volume:	30.76 g
Date Analyzed:	09/19/2009 0130			Final Weight/Volume:	1.0 mL
Date Prepared:	09/09/2009 0958			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		10	34
Benzyl alcohol		ND		29	68
Bis(2-chloroethoxy)methane		ND		10	34
Bis(2-chloroethyl)ether		ND		10	34
Bis(2-ethylhexyl) phthalate		150	EVS	10	34
Butyl benzyl phthalate		ND		10	34
Caprolactam		ND		10	34
Carbazole		ND		10	34
Chrysene		12	J	10	34
Dibenz(a,h)anthracene		ND	J	10	34
Dibenzofuran		ND		10	34
Diethyl phthalate		ND		10	34
Dimethyl phthalate		ND		10	34
Di-n-butyl phthalate		ND		30	34
Di-n-octyl phthalate		ND	J	17	34
Diphenyl oxide		ND		10	34
Diphenylamine		ND		10	34
Fluoranthene		15	J	10	34
Fluorene		ND		10	34
Hexachlorobenzene		ND		10	34
Hexachlorobutadiene		ND		10	34
Hexachlorocyclopentadiene		ND		10	68
Hexachloroethane		ND		10	34
Indeno[1,2,3-cd]pyrene		12	J	10	34
Isophorone		ND		10	34
Naphthalene		ND		10	82
Nitrobenzene		ND		10	34
N-Nitrosodimethylamine		ND	*	10	34
N-Nitrosodi-n-propylamine		ND		10	34
N-Nitrosodiphenylamine		ND		10	34
Pentachlorophenol		ND		10	34
Phenanthrene		ND		10	41
Phenol		ND		10	34
Pyrene		27	J	10	34

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	62		30 - 130
2-Fluorophenol	65		30 - 130
2-Fluorobiphenyl	58		30 - 130
Nitrobenzene-d5	60		30 - 130
Phenol-d5	63		30 - 130
Terphenyl-d14	76		30 - 130

Client: Olin Corporation

Job Number: 360-24343-1
Sdg Number: OCRI-08

Client Sample ID: **OC-SB-451-2.5/4.5-XXX**

Lab Sample ID: 360-24343-10
Client Matrix: Solid
% Moisture: 4.9

Date Sampled: 08/28/2009 1140
Date Received: 08/28/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49187		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48742		Lab File ID:	B10418.D
Dilution:	1.0			Initial Weight/Volume:	30.76 g
Date Analyzed:	09/19/2009 0130			Final Weight/Volume:	1.0 mL
Date Prepared:	09/09/2009 0958			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 2

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
1000131-9-4	Z-12-Pentacosene	16.52	210	T J N
	Unknown	20.00	1.7	T J

Client: Olin Corporation

Job Number: 360-24343-1
Sdg Number: OCRI-08

Client Sample ID: **OC-SB-454-0.0/1.0-XXX**

Lab Sample ID: 360-24343-11
Client Matrix: Solid % Moisture: 3.9

Date Sampled: 08/27/2009 1710
Date Received: 08/28/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49187		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48742		Lab File ID:	B10421.D
Dilution:	1.0			Initial Weight/Volume:	30.26 g
Date Analyzed:	09/19/2009 0303			Final Weight/Volume:	1.0 mL
Date Prepared:	09/09/2009 0958			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		10	34
1,2,4,5-Tetrachlorobenzene		ND		10	34
1,2,4-Trichlorobenzene		ND		10	34
1,2-Dichlorobenzene		ND		10	34
1,3-Dichlorobenzene		ND		10	34
1,4-Dichlorobenzene		ND		10	34
1-Methylnaphthalene		ND		10	34
2,2'-oxybis[1-chloropropane]		ND		10	34
2,3,4,6-Tetrachlorophenol		ND		10	34
2,4,5-Trichlorophenol		ND		10	34
2,4,6-Trichlorophenol		ND		10	34
2,4-Dichlorophenol		ND		10	34
2,4-Dimethylphenol		ND		14	34
2,4-Dinitrophenol		ND		10	34
2,4-Dinitrotoluene		ND		10	34
2,6-Dinitrotoluene		ND		10	34
2-Chloronaphthalene		ND		10	34
2-Chlorophenol		ND		10	34
2-Methylnaphthalene		ND		10	34
2-Methylphenol		ND		21	34
2-Nitroaniline		ND		10	170
2-Nitrophenol		ND		10	34
3 & 4 Methylphenol		ND		10	34
3,3'-Dichlorobenzidine		ND	J	10	69
3-Nitroaniline		ND		10	170
4,6-Dinitro-2-methylphenol		ND		10	170
4-Bromophenyl phenyl ether		ND		10	34
4-Chloro-3-methylphenol		ND		10	69
4-Chloroaniline		ND		10	69
4-Chlorophenyl phenyl ether		ND		10	34
4-Nitroaniline		ND		10	170
4-Nitrophenol		ND		10	170
Acenaphthene		ND		10	34
Acenaphthylene		ND		10	34
Acetophenone		ND		10	34
Aniline		ND	J	10	34
Anthracene		ND		10	34
Atrazine		ND		10	34
Azobenzene		ND		10	34
Benzaldehyde		ND		10	34
Benzo[a]anthracene		ND		10	34
Benzo[a]pyrene		ND		10	34
Benzo[b]fluoranthene		ND		10	34
Benzo[g,h,i]perylene		ND		10	34
Benzo[k]fluoranthene		ND		10	34
Benzoic acid		ND	J	15	170

9/17/09

Client: Olin Corporation

Job Number: 360-24343-1
Sdg Number: OCRI-08

Client Sample ID: **OC-SB-454-0.0/1.0-XXX**

Lab Sample ID: 360-24343-11
Client Matrix: Solid % Moisture: 3.9

Date Sampled: 08/27/2009 1710
Date Received: 08/28/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49187		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48742		Lab File ID:	B10421.D
Dilution:	1.0			Initial Weight/Volume:	30.26 g
Date Analyzed:	09/19/2009 0303			Final Weight/Volume:	1.0 mL
Date Prepared:	09/09/2009 0958			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		10	34
Benzyl alcohol		ND		29	69
Bis(2-chloroethoxy)methane		ND		10	34
Bis(2-chloroethyl)ether		ND		10	34
Bis(2-ethylhexyl) phthalate		ND		10	34
Butyl benzyl phthalate		ND		10	34
Caprolactam		ND		10	34
Carbazole		ND		10	34
Chrysene		ND		10	34
Dibenz(a,h)anthracene		ND		10	34
Dibenzofuran		ND		10	34
Diethyl phthalate		ND		10	34
Dimethyl phthalate		ND		10	34
Di-n-butyl phthalate		ND		30	34
Di-n-octyl phthalate		ND		17	34
Diphenyl oxide		ND		10	34
Fluoranthene		ND		10	34
Fluorene		ND		10	34
Hexachlorobenzene		ND		10	34
Hexachlorobutadiene		ND		10	34
Hexachlorocyclopentadiene		ND		10	69
Hexachloroethane		ND		10	34
Indeno[1,2,3-cd]pyrene		ND		10	34
Isophorone		ND		10	34
Naphthalene		ND		10	82
Nitrobenzene		ND		10	34
N-Nitrosodimethylamine		ND		10	34
N-Nitrosodi-n-propylamine		ND		10	34
N-Nitrosodiphenylamine		ND		10	34
Pentachlorophenol		ND		10	34
Phenanthrene		ND		10	41
Phenol		ND		10	34
Pyrene		ND		10	34

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	61		30 - 130
2-Fluorobiphenyl	58		30 - 130
2-Fluorophenol	66		30 - 130
Nitrobenzene-d5	60		30 - 130
Phenol-d5	63		30 - 130
Terphenyl-d14	76		30 - 130

Client: Olin Corporation

Job Number: 360-24343-1
Sdg Number: OCRI-08

Client Sample ID: **OC-SB-454-0.0/1.0-XXX**

Lab Sample ID: 360-24343-11
Client Matrix: Solid % Moisture: 3.9

Date Sampled: 08/27/2009 1710
Date Received: 08/28/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49187		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48742		Lab File ID:	B10421.D
Dilution:	1.0			Initial Weight/Volume:	30.26 g
Date Analyzed:	09/19/2009 0303			Final Weight/Volume:	1.0 mL
Date Prepared:	09/09/2009 0958			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 5

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Unknown	6.37	7.1	T J
	Unknown	6.69	11	T J
	Unknown	7.30	19	T J
	Unknown	8.20	6.7	T J
541-2-6	Cyclopentasiloxane, decamethyl-	8.67	9.5	T J N

Client: Olin Corporation

Job Number: 360-24343-1
Sdg Number: OCRI-08

Client Sample ID: **OC-SB-454-6.0/8.0-XXX**

Lab Sample ID: 360-24343-13
Client Matrix: Solid
% Moisture: 15.0

Date Sampled: 08/27/2009 1715
Date Received: 08/28/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49187		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48742		Lab File ID:	B10423.D
Dilution:	1.0			Initial Weight/Volume:	30.47 g
Date Analyzed:	09/19/2009 0405			Final Weight/Volume:	1.0 mL
Date Prepared:	09/09/2009 0958			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		12	39
1,2,4,5-Tetrachlorobenzene		ND		12	39
1,2,4-Trichlorobenzene		ND		12	39
1,2-Dichlorobenzene		ND		12	39
1,3-Dichlorobenzene		ND		12	39
1,4-Dichlorobenzene		ND		12	39
1-Methylnaphthalene		ND		12	39
2,2'-oxybis[1-chloropropane]		ND		12	39
2,3,4,6-Tetrachlorophenol		ND		12	39
2,4,5-Trichlorophenol		ND		12	39
2,4,6-Trichlorophenol		ND		12	39
2,4-Dichlorophenol		ND		12	39
2,4-Dimethylphenol		ND		15	39
2,4-Dinitrophenol		ND		12	39
2,4-Dinitrotoluene		ND		12	39
2,6-Dinitrotoluene		ND		12	39
2-Chloronaphthalene		ND		12	39
2-Chlorophenol		ND		12	39
2-Methylnaphthalene		ND		12	39
2-Methylphenol		ND		23	39
2-Nitroaniline		ND		12	190
2-Nitrophenol		ND		12	39
3 & 4 Methylphenol		ND		12	39
3,3'-Dichlorobenzidine		ND	J	12	77
3-Nitroaniline		ND		12	190
4,6-Dinitro-2-methylphenol		ND		12	190
4-Bromophenyl phenyl ether		ND		12	39
4-Chloro-3-methylphenol		ND		12	77
4-Chloroaniline		ND		12	77
4-Chlorophenyl phenyl ether		ND		12	39
4-Nitroaniline		ND		12	190
4-Nitrophenol		ND		12	190
Acenaphthene		ND		12	39
Acenaphthylene		ND		12	39
Acetophenone		ND		12	39
Aniline		ND	J	12	39
Anthracene		ND		12	39
Atrazine		ND		12	39
Azobenzene		ND		12	39
Benzaldehyde		ND		12	39
Benzo[a]anthracene		ND		12	39
Benzo[a]pyrene		ND		12	39
Benzo[b]fluoranthene		ND		12	39
Benzo[g,h,i]perylene		ND		12	39
Benzo[k]fluoranthene		ND		12	39
Benzoic acid		ND	J	17	190

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Client: Olin Corporation

Job Number: 360-24343-1
Sdg Number: OCRI-08

Client Sample ID: OC-SB-454-6.0/8.0-XXX

Lab Sample ID: 360-24343-13
Client Matrix: Solid
% Moisture: 15.0

Date Sampled: 08/27/2009 1715
Date Received: 08/28/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49187		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48742		Lab File ID:	B10423.D
Dilution:	1.0			Initial Weight/Volume:	30.47 g
Date Analyzed:	09/19/2009 0405			Final Weight/Volume:	1.0 mL
Date Prepared:	09/09/2009 0958			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		12	39
Benzyl alcohol		ND		33	77
Bis(2-chloroethoxy)methane		ND		12	39
Bis(2-chloroethyl)ether		ND		12	39
Bis(2-ethylhexyl) phthalate		ND		12	39
Butyl benzyl phthalate		ND		12	39
Caprolactam		ND		12	39
Carbazole		ND		12	39
Chrysene		ND		12	39
Dibenz(a,h)anthracene		ND		12	39
Dibenzofuran		ND		12	39
Diethyl phthalate		ND		12	39
Dimethyl phthalate		ND		12	39
Di-n-butyl phthalate		ND		34	39
Di-n-octyl phthalate		ND		19	39
Diphenyl oxide		ND		12	39
Fluoranthene		ND		12	39
Fluorene		ND		12	39
Hexachlorobenzene		ND		12	39
Hexachlorobutadiene		ND		12	39
Hexachlorocyclopentadiene		ND		12	77
Hexachloroethane		ND		12	39
Indeno[1,2,3-cd]pyrene		ND		12	39
Isophorone		ND		12	39
Naphthalene		ND		12	93
Nitrobenzene		ND		12	39
N-Nitrosodimethylamine		ND		12	39
N-Nitrosodi-n-propylamine		ND		12	39
N-Nitrosodiphenylamine		ND		12	39
Pentachlorophenol		ND		12	39
Phenanthrene		ND		12	46
Phenol		ND		12	39
Pyrene		ND		12	39

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	56		30 - 130
2-Fluorobiphenyl	55		30 - 130
2-Fluorophenol	64		30 - 130
Nitrobenzene-d5	59		30 - 130
Phenol-d5	59		30 - 130
Terphenyl-d14	71		30 - 130

Client: Olin Corporation

Job Number: 360-24343-1
Sdg Number: OCRI-08

Client Sample ID: **OC-SB-454-6.0/8.0-XXX**

Lab Sample ID: 360-24343-13
Client Matrix: Solid % Moisture: 15.0

Date Sampled: 08/27/2009 1715
Date Received: 08/28/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49187		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48742		Lab File ID:	B10423.D
Dilution:	1.0			Initial Weight/Volume:	30.47 g
Date Analyzed:	09/19/2009 0405			Final Weight/Volume:	1.0 mL
Date Prepared:	09/09/2009 0958			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 5

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
59242-27-2	Furan, 2,5-dihydro-2,5-dimethyl-	6.09	15	T J N
	Unknown	7.30	15	T J
606-28-0	Benzoic acid, 2-benzoyl-, methyl ester	12.46	9.2	T J N
1000140-7-4	1R,3Z,9s-4,8,11,11-Tetramethylbicyclo[7.	13.06	140	T J N
301-2-0	9-Octadecenamide, (Z)-	16.95	14	T J N

Client: Olin Corporation

Job Number: 360-24343-1
Sdg Number: OCRI-08

Client Sample ID: **OC-SB-455-6.0/8.0-DUP**

Lab Sample ID: 360-24343-16
Client Matrix: Solid
% Moisture: 24.2

Date Sampled: 08/28/2009 0840
Date Received: 08/28/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49187		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48742		Lab File ID:	B10425.D
Dilution:	1.0			Initial Weight/Volume:	30.94 g
Date Analyzed:	09/19/2009 0506			Final Weight/Volume:	1.0 mL
Date Prepared:	09/09/2009 0958			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		13	43
1,2,4,5-Tetrachlorobenzene		ND		13	43
1,2,4-Trichlorobenzene		ND		13	43
1,2-Dichlorobenzene		ND		13	43
1,3-Dichlorobenzene		ND		13	43
1,4-Dichlorobenzene		ND		13	43
1-Methylnaphthalene		ND		13	43
2,2'-oxybis[1-chloropropane]		ND		13	43
2,3,4,6-Tetrachlorophenol		ND		13	43
2,4,5-Trichlorophenol		ND		13	43
2,4,6-Trichlorophenol		ND		13	43
2,4-Dichlorophenol		ND		13	43
2,4-Dimethylphenol		ND		17	43
2,4-Dinitrophenol		ND		13	43
2,4-Dinitrotoluene		ND		13	43
2,6-Dinitrotoluene		ND		13	43
2-Chloronaphthalene		ND		13	43
2-Chlorophenol		ND		13	43
2-Methylnaphthalene		ND		13	43
2-Methylphenol		ND		26	43
2-Nitroaniline		ND		13	210
2-Nitrophenol		ND		13	43
3 & 4 Methylphenol		ND		13	43
3,3'-Dichlorobenzidine		ND		13	85
3-Nitroaniline		ND		13	210
4,6-Dinitro-2-methylphenol		ND		13	210
4-Bromophenyl phenyl ether		ND		13	43
4-Chloro-3-methylphenol		ND		13	85
4-Chloroaniline		ND		13	85
4-Chlorophenyl phenyl ether		ND		13	43
4-Nitroaniline		ND		13	210
4-Nitrophenol		ND		13	210
Acenaphthene		ND		13	43
Acenaphthylene		ND		13	43
Acetophenone		ND		13	43
Aniline		ND		13	43
Anthracene		ND		13	43
Atrazine		ND		13	43
Azobenzene		ND		13	43
Benzaldehyde		ND		13	43
Benzo[a]anthracene		ND		13	43
Benzo[a]pyrene		ND		13	43
Benzo[b]fluoranthene		ND		13	43
Benzo[g,h,i]perylene		ND		13	43
Benzo[k]fluoranthene		ND		13	43
Benzoic acid		ND		19	210

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Client: Olin Corporation

Job Number: 360-24343-1
Sdg Number: OCRI-08

Client Sample ID: **OC-SB-455-6.0/8.0-DUP**

Lab Sample ID: 360-24343-16
Client Matrix: Solid % Moisture: 24.2

Date Sampled: 08/28/2009 0840
Date Received: 08/28/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49187		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48742		Lab File ID:	B10425.D
Dilution:	1.0			Initial Weight/Volume:	30.94 g
Date Analyzed:	09/19/2009 0506			Final Weight/Volume:	1.0 mL
Date Prepared:	09/09/2009 0958			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		13	43
Benzyl alcohol		ND		36	85
Bis(2-chloroethoxy)methane		ND		13	43
Bis(2-chloroethyl)ether		ND		13	43
Bis(2-ethylhexyl) phthalate		ND		13	43
Butyl benzyl phthalate		ND		13	43
Caprolactam		ND		13	43
Carbazole		ND		13	43
Chrysene		ND		13	43
Dibenz(a,h)anthracene		ND		13	43
Dibenzofuran		ND		13	43
Diethyl phthalate		ND		13	43
Dimethyl phthalate		ND		13	43
Di-n-butyl phthalate		ND		37	43
Di-n-octyl phthalate		ND		21	43
Diphenyl oxide		ND		13	43
Fluoranthene		ND		13	43
Fluorene		ND		13	43
Hexachlorobenzene		ND		13	43
Hexachlorobutadiene		ND		13	43
Hexachlorocyclopentadiene		ND		13	85
Hexachloroethane		ND		13	43
Indeno[1,2,3-cd]pyrene		ND		13	43
Isophorone		ND		13	43
Naphthalene		ND		13	100
Nitrobenzene		ND		13	43
N-Nitrosodimethylamine		ND		13	43
N-Nitrosodi-n-propylamine		ND		13	43
N-Nitrosodiphenylamine		ND		13	43
Pentachlorophenol		ND		13	43
Phenanthrene		ND		13	51
Phenol		ND		13	43
Pyrene		ND		13	43

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	74		30 - 130
2-Fluorobiphenyl	64		30 - 130
2-Fluorophenol	73		30 - 130
Nitrobenzene-d5	68		30 - 130
Phenol-d5	70		30 - 130
Terphenyl-d14	76		30 - 130

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Client: Olin Corporation

Job Number: 360-24343-1
Sdg Number: OCRI-08

Client Sample ID: **OC-SB-455-6.0/8.0-DUP**

Lab Sample ID: 360-24343-16
Client Matrix: Solid % Moisture: 24.2

Date Sampled: 08/28/2009 0840
Date Received: 08/28/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49187		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48742		Lab File ID:	B10425.D
Dilution:	1.0			Initial Weight/Volume:	30.94 g
Date Analyzed:	09/19/2009 0506			Final Weight/Volume:	1.0 mL
Date Prepared:	09/09/2009 0958			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 6

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
27323-29-1	Methylcarbazole	12.67	24	T J N
638-67-5	Tricosane	13.98	48	T J N
629-96-9	1-Eicosanol	14.07	120	T J N
1000155-85-3	Cyclohexadecane, 1,2-diethyl-	15.40	820	T J N
1599-67-3	1-Docosene	16.48	1300	T J N
1000194-63-7	2,2,4a,6a,8a,9,12b,14a-Octamethyl-1,2,3,	21.56	120	T J N

Client: Olin Corporation

Job Number: 360-24343-1
Sdg Number: OCRI-08

Client Sample ID: **OC-SB-455-6.0/8.0-XXX**

Lab Sample ID: 360-24343-17
Client Matrix: Solid % Moisture: 24.2

Date Sampled: 08/28/2009 0840
Date Received: 08/28/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49187		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48742		Lab File ID:	B10426.D
Dilution:	1.0			Initial Weight/Volume:	30.50 g
Date Analyzed:	09/19/2009 0537			Final Weight/Volume:	1.0 mL
Date Prepared:	09/09/2009 0958			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		13	43
1,2,4,5-Tetrachlorobenzene		ND		13	43
1,2,4-Trichlorobenzene		ND		13	43
1,2-Dichlorobenzene		ND		13	43
1,3-Dichlorobenzene		ND		13	43
1,4-Dichlorobenzene		ND		13	43
1-Methylnaphthalene		ND		13	43
2,2'-oxybis[1-chloropropane]		ND		13	43
2,3,4,6-Tetrachlorophenol		ND		13	43
2,4,5-Trichlorophenol		ND		13	43
2,4,6-Trichlorophenol		ND		13	43
2,4-Dichlorophenol		ND		13	43
2,4-Dimethylphenol		ND		17	43
2,4-Dinitrophenol		ND		13	43
2,4-Dinitrotoluene		ND		13	43
2,6-Dinitrotoluene		ND		13	43
2-Chloronaphthalene		ND		13	43
2-Chlorophenol		ND		13	43
2-Methylnaphthalene		ND		13	43
2-Methylphenol		ND		26	43
2-Nitroaniline		ND		13	220
2-Nitrophenol		ND		13	43
3 & 4 Methylphenol		ND		13	43
3,3'-Dichlorobenzidine		ND		13	87
3-Nitroaniline		ND		13	220
4,6-Dinitro-2-methylphenol		ND		13	220
4-Bromophenyl phenyl ether		ND		13	43
4-Chloro-3-methylphenol		ND		13	87
4-Chloroaniline		ND		13	87
4-Chlorophenyl phenyl ether		ND		13	43
4-Nitroaniline		ND		13	220
4-Nitrophenol		ND		13	220
Acenaphthene		ND		13	43
Acenaphthylene		ND		13	43
Acetophenone		ND		13	43
Aniline		ND		13	43
Anthracene		ND		13	43
Atrazine		ND		13	43
Azobenzene		ND		13	43
Benzaldehyde		ND		13	43
Benzo[a]anthracene		ND		13	43
Benzo[a]pyrene		ND		13	43
Benzo[b]fluoranthene		ND		13	43
Benzo[g,h,i]perylene		ND		13	43
Benzo[k]fluoranthene		ND		13	43
Benzoic acid		ND		19	220

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Client: Olin Corporation

Job Number: 360-24343-1
Sdg Number: OCRI-08

Client Sample ID: **OC-SB-455-6.0/8.0-XXX**

Lab Sample ID: 360-24343-17
Client Matrix: Solid
% Moisture: 24.2

Date Sampled: 08/28/2009 0840
Date Received: 08/28/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49187		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48742		Lab File ID:	B10426.D
Dilution:	1.0			Initial Weight/Volume:	30.50 g
Date Analyzed:	09/19/2009 0537			Final Weight/Volume:	1.0 mL
Date Prepared:	09/09/2009 0958			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		13	43
Benzyl alcohol		ND		37	87
Bis(2-chloroethoxy)methane		ND		13	43
Bis(2-chloroethyl)ether		ND		13	43
Bis(2-ethylhexyl) phthalate		ND		13	43
Butyl benzyl phthalate		ND		13	43
Caprolactam		ND		13	43
Carbazole		ND		13	43
Chrysene		ND		13	43
Dibenz(a,h)anthracene		ND		13	43
Dibenzofuran		ND		13	43
Diethyl phthalate		ND		13	43
Dimethyl phthalate		ND		13	43
Di-n-butyl phthalate		ND		38	43
Di-n-octyl phthalate		ND		22	43
Diphenyl oxide		ND		13	43
Fluoranthene		ND		13	43
Fluorene		ND		13	43
Hexachlorobenzene		ND		13	43
Hexachlorobutadiene		ND		13	43
Hexachlorocyclopentadiene		ND		13	87
Hexachloroethane		ND		13	43
Indeno[1,2,3-cd]pyrene		ND		13	43
Isophorone		ND		13	43
Naphthalene		ND		13	100
Nitrobenzene		ND		13	43
N-Nitrosodimethylamine		ND		13	43
N-Nitrosodi-n-propylamine		ND		13	43
N-Nitrosodiphenylamine		ND		13	43
Pentachlorophenol		ND		13	43
Phenanthrene		ND		13	52
Phenol		ND		13	43
Pyrene		ND		13	43

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	69		30 - 130
2-Fluorobiphenyl	63		30 - 130
2-Fluorophenol	69		30 - 130
Nitrobenzene-d5	68		30 - 130
Phenol-d5	64		30 - 130
Terphenyl-d14	74		30 - 130

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Client: Olin Corporation

Job Number: 360-24343-1
Sdg Number: OCRI-08

Client Sample ID: OC-SB-455-6.0/8.0-XXX

Lab Sample ID: 360-24343-17
Client Matrix: Solid
% Moisture: 24.2

Date Sampled: 08/28/2009 0840
Date Received: 08/28/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49187		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48742		Lab File ID:	B10426.D
Dilution:	1.0			Initial Weight/Volume:	30.50 g
Date Analyzed:	09/19/2009 0537			Final Weight/Volume:	1.0 mL
Date Prepared:	09/09/2009 0958			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 5

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
~~638-67-5~~	~~Tricosane~~	~~13.98~~	~~46~~	~~T J N~~
1599-67-3	1-Docosene	14.06	110	T J N
1599-67-3	1-Docosene	15.39	740	T J N
1599-67-3	1-Docosene	16.48	1200	T J N
559-74-0	Friedelin	16.83	1000	T J N

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SAMPLE SUMMARY

Client: Olin Corporation

Job Number: 360-24343-2
Sdg Number: OCRI-08A

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
360-24343-2	OC-SB-444-12/14-XXX	Solid	08/27/2009 1400	08/28/2009 1710
360-24343-5	OC-SB-449-11/13-XXX	Solid	08/27/2009 1600	08/28/2009 1710
360-24343-8	OC-SB-451-18/20-XXX	Solid	08/28/2009 1250	08/28/2009 1710
360-24343-12	OC-SB-454-18/20-XXX	Solid	08/27/2009 1745	08/28/2009 1710
360-24343-15	OC-SB-455-28/30-XXX	Solid	08/28/2009 0930	08/28/2009 1710
360-24343-20	OC-SB-454-18/20-XXX	Solid	08/27/2009 1745	08/28/2009 1710

Form I: updated

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Client: Olin Corporation

Job Number: 360-24343-2
Sdg Number: OCRI-08A

Client Sample ID: **OC-SB-444-12/14-XXX**

Lab Sample ID: 360-24343-2
Client Matrix: Solid
% Moisture: 7.5

Date Sampled: 08/27/2009 1400
Date Received: 08/28/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49174		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48703		Lab File ID:	J03026.D
Dilution:	1.0			Initial Weight/Volume:	30.80 g
Date Analyzed:	09/18/2009 2302			Final Weight/Volume:	1.0 mL
Date Prepared:	09/08/2009 1452			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		11	35
1,2,4,5-Tetrachlorobenzene		ND		2.4	35
1,2,4-Trichlorobenzene		ND		6.8	35
1,2-Dichlorobenzene		ND		3.8	35
1,3-Dichlorobenzene		ND		10	35
1,4-Dichlorobenzene		ND		6.3	35
1-Methylnaphthalene		ND		2.1	35
2,2'-oxybis[1-chloropropane]		ND		3.5	35
2,3,4,6-Tetrachlorophenol		ND		2.1	35
2,4,5-Trichlorophenol		ND		4.0	35
2,4,6-Trichlorophenol		ND		7.4	35
2,4-Dichlorophenol		ND		6.8	35
2,4-Dimethylphenol		ND		6.1	35
2,4-Dinitrophenol		~~ND~~	R	5.2	35
2,4-Dinitrotoluene		ND		5.0	35
2,6-Dinitrotoluene		ND		4.4	35
2-Chloronaphthalene		ND		5.4	35
2-Chlorophenol		ND		3.4	35
2-Methylnaphthalene		ND		27	35
2-Methylphenol		ND		5.0	35
2-Nitroaniline		~~ND~~	R	23	180
2-Nitrophenol		ND		4.1	35
3 & 4 Methylphenol		ND		6.7	35
3,3'-Dichlorobenzidine		ND	J	26	70
3-Nitroaniline		ND		10	180
4,6-Dinitro-2-methylphenol		~~ND~~	R	9.0	180
4-Bromophenyl phenyl ether		ND		7.3	35
4-Chloro-3-methylphenol		ND		9.7	70
4-Chloroaniline		ND		14	70
4-Chlorophenyl phenyl ether		ND		5.6	35
4-Nitroaniline		ND		9.4	180
4-Nitrophenol		ND	J	6.8	180
Acenaphthene		ND		5.2	35
Acenaphthylene		ND		6.2	35
Acetophenone		4.1	JEB	3.8	35
Aniline		ND	J	18	35
Anthracene		ND		11	35
Atrazine		ND		11	35
Azobenzene		ND		4.4	35
Benzaldehyde		ND		11	35
Benzo[a]anthracene		ND		6.7	35
Benzo[a]pyrene		ND		6.4	35
Benzo[b]fluoranthene		ND		8.0	35
Benzo[g,h,i]perylene		ND		6.8	35
Benzo[k]fluoranthene		ND		9.7	35
Benzoic acid		~~ND~~	R	15	180

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Client: Olin Corporation

Job Number: 360-24343-2
Sdg Number: OCRI-08A

Client Sample ID: **OC-SB-444-12/14-XXX**

Lab Sample ID: 360-24343-2
Client Matrix: Solid % Moisture: 7.5

Date Sampled: 08/27/2009 1400
Date Received: 08/28/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49174		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48703		Lab File ID:	J03026.D
Dilution:	1.0			Initial Weight/Volume:	30.80 g
Date Analyzed:	09/18/2009 2302			Final Weight/Volume:	1.0 mL
Date Prepared:	09/08/2009 1452			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		2.1	35
Benzyl alcohol		ND		8.1	70
Bis(2-chloroethoxy)methane		ND		6.3	35
Bis(2-chloroethyl)ether		ND		8.5	35
Bis(2-ethylhexyl) phthalate		ND		11	35
Butyl benzyl phthalate		ND		7.7	35
Caprolactam		ND		11	35
Carbazole		ND		35	35
Chrysene		ND		7.6	35
Dibenz(a,h)anthracene		ND	J	7.1	35
Dibenzofuran		ND		20	35
Diethyl phthalate		ND		5.0	35
Dimethyl phthalate		ND		5.2	35
Di-n-butyl phthalate		ND		11	35
Di-n-octyl phthalate		ND		9.9	35
Diphenyl oxide		ND		11	35
Fluoranthene		ND		22	35
Fluorene		ND		13	35
Hexachlorobenzene		ND		8.3	35
Hexachlorobutadiene		ND		7.0	35
Hexachlorocyclopentadiene		ND		9.6	70
Hexachloroethane		ND		6.7	35
Indeno[1,2,3-cd]pyrene		ND		11	35
Isophorone		ND		7.5	35
Naphthalene		ND		78	84
Nitrobenzene		ND		4.8	35
N-Nitrosodimethylamine		ND		4.1	35
N-Nitrosodi-n-propylamine		ND		4.0	35
N-Nitrosodiphenylamine		26	J&B	7.0	35
Pentachlorophenol		ND		7.3	35
Phenanthrene		ND		40	42
Phenol		ND		4.4	35
Pyrene		ND		9.3	35

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	75		30 - 130
2-Fluorobiphenyl	60		30 - 130
2-Fluorophenol	71		30 - 130
Nitrobenzene-d5	64		30 - 130
Phenol-d5	69		30 - 130
Terphenyl-d14	65		30 - 130

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Client: Olin Corporation

Job Number: 360-24343-2
Sdg Number: OCRI-08A

Client Sample ID: **OC-SB-444-12/14-XXX**

Lab Sample ID: 360-24343-2
Client Matrix: Solid % Moisture: 7.5

Date Sampled: 08/27/2009 1400
Date Received: 08/28/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49174		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48703		Lab File ID:	J03026.D
Dilution:	1.0			Initial Weight/Volume:	30.80 g
Date Analyzed:	09/18/2009 2302			Final Weight/Volume:	1.0 mL
Date Prepared:	09/08/2009 1452			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 7

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
110-20-3	Hydrazinecarboxamide, 2-(1-methylethylid	8.36	29	T J N
	Unknown	9.40	37	T J
292-46-6	Lenthionine	10.33	30	T J N
	Unknown	10.75	88	T J
10544-50-0	Cyclic octaatomic sulfur	12.12	180	T J N
7683-64-9	Squalene	14.47	64	T J N
26603-23-6	p,p"-Dioctyldiphenylamine	14.95	100	T J N

Client: Olin Corporation

Job Number: 360-24343-2
Sdg Number: OCRI-08A

Client Sample ID: **OC-SB-449-11/13-XXX**

Lab Sample ID: 360-24343-5
Client Matrix: Solid
% Moisture: 10.9

Date Sampled: 08/27/2009 1600
Date Received: 08/28/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49174		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48703		Lab File ID:	J03029.D
Dilution:	1.0			Initial Weight/Volume:	30.06 g
Date Analyzed:	09/19/2009 0023			Final Weight/Volume:	1.0 mL
Date Prepared:	09/08/2009 1452			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		11	37
1,2,4,5-Tetrachlorobenzene		ND		2.5	37
1,2,4-Trichlorobenzene		ND		7.3	37
1,2-Dichlorobenzene		ND		4.0	37
1,3-Dichlorobenzene		ND		11	37
1,4-Dichlorobenzene		ND		6.7	37
1-Methylnaphthalene		ND		2.2	37
2,2'-oxybis[1-chloropropane]		ND		3.8	37
2,3,4,6-Tetrachlorophenol		ND		2.2	37
2,4,5-Trichlorophenol		ND		4.2	37
2,4,6-Trichlorophenol		ND		7.8	37
2,4-Dichlorophenol		ND		7.2	37
2,4-Dimethylphenol		ND		6.5	37
2,4-Dinitrophenol		~~ND~~ R		5.5	37
2,4-Dinitrotoluene		ND		5.3	37
2,6-Dinitrotoluene		ND		4.7	37
2-Chloronaphthalene		ND		5.7	37
2-Chlorophenol		ND		3.6	37
2-Methylnaphthalene		ND		28	37
2-Methylphenol		15	J	5.3	37
2-Nitroaniline		~~ND~~ R		24	190
2-Nitrophenol		ND		4.3	37
3 & 4 Methylphenol		ND		7.1	37
3,3'-Dichlorobenzidine		ND J		27	75
3-Nitroaniline		ND		11	190
4,6-Dinitro-2-methylphenol		~~ND~~ R		9.5	190
4-Bromophenyl phenyl ether		ND		7.8	37
4-Chloro-3-methylphenol		ND		10	75
4-Chloroaniline		ND		15	75
4-Chlorophenyl phenyl ether		ND		5.9	37
4-Nitroaniline		ND		10	190
4-Nitrophenol		ND J		7.3	190
Acenaphthene		ND		5.5	37
Acenaphthylene		ND		6.6	37
Acetophenone		4.4	J ER	4.0	37
Aniline		ND J		19	37
Anthracene		ND		12	37
Atrazine		ND		11	37
Azobenzene		ND		4.6	37
Benzaldehyde		ND		11	37
Benzo[a]anthracene		ND		7.2	37
Benzo[a]pyrene		ND		6.8	37
Benzo[b]fluoranthene		ND		8.6	37
Benzo[g,h,i]perylene		ND		7.3	37
Benzo[k]fluoranthene		ND		10	37
Benzoic acid		~~ND~~ R		16	190

Client: Olin Corporation

Job Number: 360-24343-2
Sdg Number: OCRI-08A

Client Sample ID: **OC-SB-449-11/13-XXX**

Lab Sample ID: 360-24343-5
Client Matrix: Solid
% Moisture: 10.9

Date Sampled: 08/27/2009 1600
Date Received: 08/28/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49174		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48703		Lab File ID:	J03029.D
Dilution:	1.0			Initial Weight/Volume:	30.06 g
Date Analyzed:	09/19/2009 0023			Final Weight/Volume:	1.0 mL
Date Prepared:	09/08/2009 1452			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		2.2	37
Benzyl alcohol		ND		8.6	75
Bis(2-chloroethoxy)methane		ND		6.7	37
Bis(2-chloroethyl)ether		ND		9.1	37
Bis(2-ethylhexyl) phthalate		ND		12	37
Butyl benzyl phthalate		ND		8.2	37
Caprolactam		ND		11	37
Carbazole		ND		37	37
Chrysene		ND		8.1	37
Dibenz(a,h)anthracene		ND	J	7.5	37
Dibenzofuran		ND		22	37
Diethyl phthalate		ND		5.3	37
Dimethyl phthalate		ND		5.5	37
Di-n-butyl phthalate		ND		11	37
Di-n-octyl phthalate		ND		11	37
Diphenyl oxide		ND		11	37
Fluoranthene		ND		24	37
Fluorene		ND		14	37
Hexachlorobenzene		ND		8.9	37
Hexachlorobutadiene		ND		7.4	37
Hexachlorocyclopentadiene		ND		10	75
Hexachloroethane		ND		7.1	37
Indeno[1,2,3-cd]pyrene		ND		11	37
Isophorone		ND		8.0	37
Naphthalene		ND		83	90
Nitrobenzene		ND		5.1	37
N-Nitrosodimethylamine		ND		4.3	37
N-Nitrosodi-n-propylamine		ND		4.2	37
N-Nitrosodiphenylamine		ND		7.5	37
Pentachlorophenol		ND		7.7	37
Phenanthrene		ND		43	45
Phenol		ND		4.7	37
Pyrene		ND		9.9	37

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	69		30 - 130
2-Fluorobiphenyl	58		30 - 130
2-Fluorophenol	68		30 - 130
Nitrobenzene-d5	61		30 - 130
Phenol-d5	66		30 - 130
Terphenyl-d14	64		30 - 130

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Client: Olin Corporation

Job Number: 360-24343-2
Sdg Number: OCRI-08A

Client Sample ID: **OC-SB-449-11/13-XXX**

Lab Sample ID: 360-24343-5
Client Matrix: Solid % Moisture: 10.9

Date Sampled: 08/27/2009 1600
Date Received: 08/28/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49174		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48703		Lab File ID:	J03029.D
Dilution:	1.0			Initial Weight/Volume:	30.06 g
Date Analyzed:	09/19/2009 0023			Final Weight/Volume:	1.0 mL
Date Prepared:	09/08/2009 1452			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 4

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
104-76-7	1-Hexanol, 2-ethyl-	6.56	690	T J N
~~112-88-9~~	~~1-Octadecene~~	10.86	40	~~T J N~~
7683-64-9	Squalene	14.47	130	T J N
26603-23-6	p,p''-Dioctyldiphenylamine	14.95	110	T J N

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Client: Olin Corporation

Job Number: 360-24343-2
Sdg Number: OCRI-08A

Client Sample ID: **OC-SB-451-18/20-XXX**

Lab Sample ID: 360-24343-8
Client Matrix: Solid

% Moisture: 10.3

Date Sampled: 08/28/2009 1250
Date Received: 08/28/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49187		Instrument ID:	Inst_B
Preparation:	3546	Prep Batch: 360-48742		Lab File ID:	B10416.D
Dilution:	1.0			Initial Weight/Volume:	30.10 g
Date Analyzed:	09/19/2009 0027			Final Weight/Volume:	1.0 mL
Date Prepared:	09/09/2009 0958			Injection Volume:	

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		32	J	11	37
1,2,4,5-Tetrachlorobenzene		ND		2.5	37
1,2,4-Trichlorobenzene		ND		7.2	37
1,2-Dichlorobenzene		ND		4.0	37
1,3-Dichlorobenzene		ND		11	37
1,4-Dichlorobenzene		ND		6.7	37
1-Methylnaphthalene		ND		2.2	37
2,2'-oxybis[1-chloropropane]		ND		3.7	37
2,3,4,6-Tetrachlorophenol		ND		2.2	37
2,4,5-Trichlorophenol		ND		4.2	37
2,4,6-Trichlorophenol		ND		7.8	37
2,4-Dichlorophenol		ND		7.1	37
2,4-Dimethylphenol		ND		6.4	37
2,4-Dinitrophenol		ND		5.4	37
2,4-Dinitrotoluene		ND		5.2	37
2,6-Dinitrotoluene		ND		4.7	37
2-Chloronaphthalene		ND		5.7	37
2-Chlorophenol		ND		3.6	37
2-Methylnaphthalene		ND		28	37
2-Methylphenol		ND		5.3	37
2-Nitroaniline		ND		24	190
2-Nitrophenol		ND		4.3	37
3 & 4 Methylphenol		ND		7.0	37
3,3'-Dichlorobenzidine		ND	J	27	74
3-Nitroaniline		ND		11	190
4,6-Dinitro-2-methylphenol		ND		9.5	190
4-Bromophenyl phenyl ether		ND		7.7	37
4-Chloro-3-methylphenol		ND		10	74
4-Chloroaniline		ND		15	74
4-Chlorophenyl phenyl ether		ND		5.9	37
4-Nitroaniline		ND		9.9	190
4-Nitrophenol		ND		7.2	190
Acenaphthene		ND		5.4	37
Acenaphthylene		ND		6.5	37
Acetophenone		ND		4.0	37
Aniline		ND	J	19	37
Anthracene		ND		12	37
Atrazine		ND		11	37
Azobenzene		ND		4.6	37
Benzaldehyde		ND		11	37
Benzo[a]anthracene		ND		7.1	37
Benzo[a]pyrene		ND		6.8	37
Benzo[b]fluoranthene		ND		8.5	37
Benzo[g,h,i]perylene		ND		7.2	37
Benzo[k]fluoranthene		ND		10	37
Benzoic acid		ND	J	16	190

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Client: Olin Corporation

Job Number: 360-24343-2
Sdg Number: OCRI-08A

Client Sample ID: **OC-SB-451-18/20-XXX**

Lab Sample ID: 360-24343-8
Client Matrix: Solid

% Moisture: 10.3

Date Sampled: 08/28/2009 1250
Date Received: 08/28/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49187		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48742		Lab File ID:	B10416.D
Dilution:	1.0			Initial Weight/Volume:	30.10 g
Date Analyzed:	09/19/2009 0027			Final Weight/Volume:	1.0 mL
Date Prepared:	09/09/2009 0958			Injection Volume:	

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		2.2	37
Benzyl alcohol		ND		8.5	74
Bis(2-chloroethoxy)methane		ND		6.7	37
Bis(2-chloroethyl)ether		ND		9.0	37
Bis(2-ethylhexyl) phthalate		ND		12	37
Butyl benzyl phthalate		ND		8.1	37
Caprolactam		ND		11	37
Carbazole		ND		37	37
Chrysene		ND		8.0	37
Dibenz(a,h)anthracene		ND		7.5	37
Dibenzofuran		ND		21	37
Diethyl phthalate		ND		5.2	37
Dimethyl phthalate		ND		5.4	37
Di-n-butyl phthalate		ND		11	37
Di-n-octyl phthalate		ND		10	37
Diphenyl oxide		94		11	37
Fluoranthene		ND		23	37
Fluorene		ND		14	37
Hexachlorobenzene		ND		8.8	37
Hexachlorobutadiene		ND		7.4	37
Hexachlorocyclopentadiene		ND		10	74
Hexachloroethane		ND		7.1	37
Indeno[1,2,3-cd]pyrene		ND		11	37
Isophorone		ND		7.9	37
Naphthalene		ND		82	89
Nitrobenzene		ND		5.0	37
N-Nitrosodimethylamine		ND		4.3	37
N-Nitrosodi-n-propylamine		ND		4.2	37
N-Nitrosodiphenylamine		ND		7.4	37
Pentachlorophenol		ND		7.7	37
Phenanthrene		ND		43	44
Phenol		ND		4.6	37
Pyrene		ND		9.8	37

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	68		30 - 130
2-Fluorobiphenyl	65		30 - 130
2-Fluorophenol	76		30 - 130
Nitrobenzene-d5	68		30 - 130
Phenol-d5	74		30 - 130
Terphenyl-d14	73		30 - 130

Client: Olin Corporation

Job Number: 360-24343-2
Sdg Number: OCRI-08A

Client Sample ID: **OC-SB-451-18/20-XXX**

Lab Sample ID: 360-24343-8
Client Matrix: Solid % Moisture: 10.3

Date Sampled: 08/28/2009 1250
Date Received: 08/28/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49187		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48742		Lab File ID:	B10416.D
Dilution:	1.0			Initial Weight/Volume:	30.10 g
Date Analyzed:	09/19/2009 0027			Final Weight/Volume:	1.0 mL
Date Prepared:	09/09/2009 0958			Injection Volume:	

Tentatively Identified Compounds **Number TIC's Found:** 4

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
10574-37-5	2-Pentene, 2,3-dimethyl-	6.10	20	T J N
	Unknown	7.29	17	T J
99-98-9	1,4-Benzenediamine, N,N-dimethyl-	10.07	36	T J N
112-84-5	Erucylamide	16.94	23	T J N

Client: Olin Corporation

Job Number: 360-24343-2
Sdg Number: OCRI-08A

Client Sample ID: **OC-SB-454-18/20-XXX**

Lab Sample ID: 360-24343-12
Client Matrix: Solid % Moisture: 5.8

Date Sampled: 08/27/2009 1745
Date Received: 08/28/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49187		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48742		Lab File ID:	B10422.D
Dilution:	1.0			Initial Weight/Volume:	30.15 g
Date Analyzed:	09/19/2009 0334			Final Weight/Volume:	1.0 mL
Date Prepared:	09/09/2009 0958			Injection Volume:	

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		11	35
1,2,4,5-Tetrachlorobenzene		ND		2.4	35
1,2,4-Trichlorobenzene		ND		6.8	35
1,2-Dichlorobenzene		ND		3.8	35
1,3-Dichlorobenzene		ND		10	35
1,4-Dichlorobenzene		ND		6.3	35
1-Methylnaphthalene		ND		2.1	35
2,2'-oxybis[1-chloropropane]		ND		3.5	35
2,3,4,6-Tetrachlorophenol		ND		2.1	35
2,4,5-Trichlorophenol		ND		4.0	35
2,4,6-Trichlorophenol		ND		7.4	35
2,4-Dichlorophenol		ND		6.8	35
2,4-Dimethylphenol		ND		6.1	35
2,4-Dinitrophenol		ND		5.2	35
2,4-Dinitrotoluene		ND		5.0	35
2,6-Dinitrotoluene		ND		4.5	35
2-Chloronaphthalene		ND		5.4	35
2-Chlorophenol		ND		3.4	35
2-Methylnaphthalene		ND		27	35
2-Methylphenol		ND		5.0	35
2-Nitroaniline		ND		23	180
2-Nitrophenol		ND		4.1	35
3 & 4 Methylphenol		ND		6.7	35
3,3'-Dichlorobenzidine		ND J		26	70
3-Nitroaniline		ND		10	180
4,6-Dinitro-2-methylphenol		ND		9.0	180
4-Bromophenyl phenyl ether		ND		7.3	35
4-Chloro-3-methylphenol		ND		9.7	70
4-Chloroaniline		ND		14	70
4-Chlorophenyl phenyl ether		ND		5.6	35
4-Nitroaniline		ND		9.4	180
4-Nitrophenol		ND		6.9	180
Acenaphthene		ND		5.2	35
Acenaphthylene		ND		6.2	35
Acetophenone		ND		3.8	35
Aniline		ND J		18	35
Anthracene		ND		11	35
Atrazine		ND		11	35
Azobenzene		ND		4.4	35
Benzaldehyde		ND		11	35
Benzo[a]anthracene		ND		6.7	35
Benzo[a]pyrene		ND		6.4	35
Benzo[b]fluoranthene		ND		8.1	35
Benzo[g,h,i]perylene		ND		6.8	35
Benzo[k]fluoranthene		ND		9.8	35
Benzoic acid		ND J		15	180

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Client: Olin Corporation

Job Number: 360-24343-2
Sdg Number: OCRI-08A

Client Sample ID: **OC-SB-454-18/20-XXX**

Lab Sample ID: 360-24343-12
Client Matrix: Solid % Moisture: 5.8

Date Sampled: 08/27/2009 1745
Date Received: 08/28/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49187		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48742		Lab File ID:	B10422.D
Dilution:	1.0			Initial Weight/Volume:	30.15 g
Date Analyzed:	09/19/2009 0334			Final Weight/Volume:	1.0 mL
Date Prepared:	09/09/2009 0958			Injection Volume:	

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		2.1	35
Benzyl alcohol		ND		8.1	70
Bis(2-chloroethoxy)methane		ND		6.3	35
Bis(2-chloroethyl)ether		ND		8.6	35
Bis(2-ethylhexyl) phthalate		ND		11	35
Butyl benzyl phthalate		ND		7.7	35
Caprolactam		ND		11	35
Carbazole		ND		35	35
Chrysene		ND		7.6	35
Dibenz(a,h)anthracene		ND		7.1	35
Dibenzofuran		ND		20	35
Diethyl phthalate		ND		5.0	35
Dimethyl phthalate		ND		5.2	35
Di-n-butyl phthalate		ND		11	35
Di-n-octyl phthalate		ND		10	35
Diphenyl oxide		ND		11	35
Fluoranthene		ND		22	35
Fluorene		ND		14	35
Hexachlorobenzene		ND		8.4	35
Hexachlorobutadiene		ND		7.0	35
Hexachlorocyclopentadiene		ND		9.6	70
Hexachloroethane		ND		6.7	35
Indeno[1,2,3-cd]pyrene		ND		11	35
Isophorone		ND		7.5	35
Naphthalene		ND		78	84
Nitrobenzene		ND		4.8	35
N-Nitrosodimethylamine		ND		4.1	35
N-Nitrosodi-n-propylamine		ND		4.0	35
N-Nitrosodiphenylamine		ND		7.0	35
Pentachlorophenol		ND		7.3	35
Phenanthrene		ND		41	42
Phenol		ND		4.4	35
Pyrene		ND		9.3	35

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	61		30 - 130
2-Fluorobiphenyl	59		30 - 130
2-Fluorophenol	69		30 - 130
Nitrobenzene-d5	63		30 - 130
Phenol-d5	66		30 - 130
Terphenyl-d14	79		30 - 130

Client: Olin Corporation

Job Number: 360-24343-2
Sdg Number: OCRI-08A

Client Sample ID: **OC-SB-454-18/20-XXX**

Lab Sample ID: 360-24343-12
Client Matrix: Solid % Moisture: 5.8

Date Sampled: 08/27/2009 1745
Date Received: 08/28/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49187		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48742		Lab File ID:	B10422.D
Dilution:	1.0			Initial Weight/Volume:	30.15 g
Date Analyzed:	09/19/2009 0334			Final Weight/Volume:	1.0 mL
Date Prepared:	09/09/2009 0958			Injection Volume:	

Tentatively Identified Compounds **Number TIC's Found:** 3

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
59242-27-2	Furan, 2,5-dihydro-2,5-dimethyl-	6.10	13	T J N
	Unknown	6.37	7.7	T J
	Unknown	7.30	19	T J

Client: Olin Corporation

Job Number: 360-24343-2
Sdg Number: OCRI-08A

Client Sample ID: **OC-SB-455-28/30-XXX**

Lab Sample ID: 360-24343-15
Client Matrix: Solid % Moisture: 7.8

Date Sampled: 08/28/2009 0930
Date Received: 08/28/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49187		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48742		Lab File ID:	B10424.D
Dilution:	1.0			Initial Weight/Volume:	30.66 g
Date Analyzed:	09/19/2009 0436			Final Weight/Volume:	1.0 mL
Date Prepared:	09/09/2009 0958			Injection Volume:	

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		11	35
1,2,4,5-Tetrachlorobenzene		ND		2.4	35
1,2,4-Trichlorobenzene		ND		6.9	35
1,2-Dichlorobenzene		ND		3.8	35
1,3-Dichlorobenzene		ND		10	35
1,4-Dichlorobenzene		ND		6.4	35
1-Methylnaphthalene		ND		2.1	35
2,2'-oxybis[1-chloropropane]		ND		3.6	35
2,3,4,6-Tetrachlorophenol		ND		2.1	35
2,4,5-Trichlorophenol		ND		4.0	35
2,4,6-Trichlorophenol		ND		7.4	35
2,4-Dichlorophenol		ND		6.8	35
2,4-Dimethylphenol		ND		6.2	35
2,4-Dinitrophenol		ND		5.2	35
2,4-Dinitrotoluene		ND		5.0	35
2,6-Dinitrotoluene		ND		4.5	35
2-Chloronaphthalene		ND		5.4	35
2-Chlorophenol		ND		3.5	35
2-Methylnaphthalene		ND		27	35
2-Methylphenol		ND		5.1	35
2-Nitroaniline		ND		23	180
2-Nitrophenol		ND		4.1	35
3 & 4 Methylphenol		ND		6.7	35
3,3'-Dichlorobenzidine		ND	J	26	71
3-Nitroaniline		ND		10	180
4,6-Dinitro-2-methylphenol		ND		9.0	180
4-Bromophenyl phenyl ether		ND		7.4	35
4-Chloro-3-methylphenol		ND		9.8	71
4-Chloroaniline		ND		14	71
4-Chlorophenyl phenyl ether		ND		5.6	35
4-Nitroaniline		ND		9.4	180
4-Nitrophenol		ND		6.9	180
Acenaphthene		ND		5.2	35
Acenaphthylene		ND		6.3	35
Acetophenone		ND		3.8	35
Aniline		ND	J	18	35
Anthracene		ND		11	35
Atrazine		ND		11	35
Azobenzene		ND		4.4	35
Benzaldehyde		ND		11	35
Benzo[a]anthracene		ND		6.8	35
Benzo[a]pyrene		ND		6.5	35
Benzo[b]fluoranthene		ND		8.1	35
Benzo[g,h,i]perylene		ND		6.9	35
Benzo[k]fluoranthene		ND		9.8	35
Benzoic acid		ND	J	15	180

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Client: Olin Corporation

Job Number: 360-24343-2
Sdg Number: OCRI-08A

Client Sample ID: **OC-SB-455-28/30-XXX**

Lab Sample ID: 360-24343-15
Client Matrix: Solid % Moisture: 7.8

Date Sampled: 08/28/2009 0930
Date Received: 08/28/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49187		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48742		Lab File ID:	B10424.D
Dilution:	1.0			Initial Weight/Volume:	30.66 g
Date Analyzed:	09/19/2009 0436			Final Weight/Volume:	1.0 mL
Date Prepared:	09/09/2009 0958			Injection Volume:	

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		2.1	35
Benzyl alcohol		ND		8.2	71
Bis(2-chloroethoxy)methane		ND		6.4	35
Bis(2-chloroethyl)ether		ND		8.6	35
Bis(2-ethylhexyl) phthalate		ND		11	35
Butyl benzyl phthalate		ND		7.7	35
Caprolactam		ND		11	35
Carbazole		ND		35	35
Chrysene		ND		7.6	35
Dibenz(a,h)anthracene		ND		7.1	35
Dibenzofuran		ND		20	35
Diethyl phthalate		ND		5.0	35
Dimethyl phthalate		ND		5.2	35
Di-n-butyl phthalate		ND		11	35
Di-n-octyl phthalate		ND		10	35
Diphenyl oxide		ND		11	35
Fluoranthene		ND		22	35
Fluorene		ND		14	35
Hexachlorobenzene		ND		8.4	35
Hexachlorobutadiene		ND		7.0	35
Hexachlorocyclopentadiene		ND		9.7	71
Hexachloroethane		ND		6.8	35
Indeno[1,2,3-cd]pyrene		ND		11	35
Isophorone		ND		7.6	35
Naphthalene		ND		78	85
Nitrobenzene		ND		4.8	35
N-Nitrosodimethylamine		ND		4.1	35
N-Nitrosodi-n-propylamine		ND		4.0	35
N-Nitrosodiphenylamine		ND		7.1	35
Pentachlorophenol		ND		7.3	35
Phenanthrene		ND		41	42
Phenol		ND		4.4	35
Pyrene		ND		9.4	35

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	59		30 - 130
2-Fluorobiphenyl	60		30 - 130
2-Fluorophenol	69		30 - 130
Nitrobenzene-d5	63		30 - 130
Phenol-d5	65		30 - 130
Terphenyl-d14	72		30 - 130

Client: Olin Corporation

Job Number: 360-24343-2
Sdg Number: OCRI-08A

Client Sample ID: **OC-SB-455-28/30-XXX**

Lab Sample ID: 360-24343-15
Client Matrix: Solid % Moisture: 7.8

Date Sampled: 08/28/2009 0930
Date Received: 08/28/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49187		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48742		Lab File ID:	B10424.D
Dilution:	1.0			Initial Weight/Volume:	30.66 g
Date Analyzed:	09/19/2009 0436			Final Weight/Volume:	1.0 mL
Date Prepared:	09/09/2009 0958			Injection Volume:	

Tentatively Identified Compounds **Number TIC's Found:** 6

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
59242-27-2	Furan, 2,5-dihydro-2,5-dimethyl-	6.10	15	T J N
	Unknown	7.29	12	T J
596-85-0	1-Naphthalenepropanol, .alpha.-ethenylde	13.06	230	T J N
	Unknown	14.27	14	T J
1235-74-1	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	14.63	21	T J N
301-2-0	9-Octadecenamide, (Z)-	16.95	19	T J N

FORM IV
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Westfield Job No.: 360-24343-1

SDG No.: OCRI-08

Lab File ID: J03008.D Lab Sample ID: MB 360-48703/1-A

Matrix: Solid Date Extracted: 09/08/2009 14:52

Instrument ID: Inst. J Date Analyzed: 09/18/2009 14:53

Level:(Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 360-48703/2-A	J03009.D	09/18/2009 15:20
	LCSD 360-48703/3-A	J03010.D	09/18/2009 15:47
OC-SB-444-0.0/1.0-XXX	360-24343-1	J03025.D	09/18/2009 22:34
OC-SB-444-5.0/7.0-XXX	360-24343-3	J03027.D	09/18/2009 23:29
OC-SB-449-0.0/1.0-XXX	360-24343-4	J03028.D	09/18/2009 23:56
OC-SB-449-6.0/8.0-XXX	360-24343-6	J03030.D	09/19/2009 00:50
OC-SB-451-0.0/1.0-XXX	360-24343-7 *	J03031.D	09/19/2009 01:17

LCS 48703

3,3'-DCB 32/33

Aniline 26/27

* IS out see attached

MB 48703

Benzoic acid 77

Di-n-butyl-phthalate 97.6

TIC

Ethanol, 2-phenoxy-

unk (10.63)

octadecane

unk (13.45)

ICAL out see attached

CCAL out see attached

Organic Prep Worksheet

Batch Number: 360-48703
Method: 3546
Analyst: Bilodeau, Brian R

Date Open: Sep 08 2009 2:52PM
Batch End:

Lab ID	Client ID	Method Chain	Basis	Initial weight/volume of sample	Final weight/volume of sample	ABN SURR_00010	OlinLCSextras_00001	OP-abnms_00063
MB~360-48703/1		3546, 8270C LL		30.00 g	1.0 mL	50 uL		
LCS~360-48703/2		3546, 8270C LL		30.00 g	1.0 mL	50 uL	.100 mL	100 uL
LCSD~360-48703/3		3546, 8270C LL		30.00 g	1.0 mL	50 uL	.100 mL	100 uL
360-24327-A-7	OC-SB-409-15/17-XXX		T	30.38 g	1.0 mL	50 uL		
360-24327-A-8	OC-SB-409-6.0/8.0-XXX		T	30.23 g	1.0 mL	50 uL		
360-24327-A-9	OC-SB-410-0.0/1.0-XXX		T	30.72 g	1.0 mL	50 uL		
360-24327-A-10	OC-SB-410-17/19-XXX		T	30.35 g	1.0 mL	50 uL		
360-24327-A-11	OC-SB-410-6.0/8.0-DUP		T	30.35 g	1.0 mL	50 uL		
360-24327-A-12	OC-SB-410-6.0/8.0-XXX		T	30.74 g	1.0 mL	50 uL		
360-24327-A-12~MS	OC-SB-410-6.0/8.0-XMS		T	30.64 g	1.0 mL	50 uL	.100 mL	100 uL
360-24327-A-12~MSD	OC-SB-410-6.0/8.0-MSD		T	30.26 g	1.0 mL	50 uL	.100 mL	100 uL
360-24327-A-13	OC-SB-411-0.0/1.0-XXX		T	30.08 g	1.0 mL	50 uL		
360-24327-A-14	OC-SB-411-4.7/6.7-XXX		T	30.85 g	1.0 mL	50 uL		
360-24327-A-15	OC-SB-418-0.0/1.0-XXX		T	30.34 g	1.0 mL	50 uL		
360-24327-A-16	OC-SB-418-15/17-XXX		T	30.04 g	1.0 mL	50 uL		
360-24327-A-17	OC-SB-418-8/10-XXX		T	30.33 g	1.0 mL	50 uL		
360-24343-A-1	OC-SB-444-0.0/1.0-XXX	3546, 8270C LL	T	30.61 g	1.0 mL	50 uL		
360-24343-A-2	OC-SB-444-12/14-XXX		T	30.80 g	1.0 mL	50 uL		
360-24343-A-3	OC-SB-444-5.0/7.0-XXX	3546, 8270C LL	T	30.68 g	1.0 mL	50 uL		
360-24343-A-4	OC-SB-449-0.0/1.0-XXX	3546, 8270C LL	T	30.56 g	1.0 mL	50 uL		
360-24343-A-5	OC-SB-449-11/13-XXX		T	30.06 g	1.0 mL	50 uL		
360-24343-A-6	OC-SB-449-6.0/8.0-XXX	3546, 8270C LL	T	30.03 g	1.0 mL	50 uL		
360-24343-A-7	OC-SB-451-0.0/1.0-XXX	3546, 8270C LL	T	30.48 g	1.0 mL	50 uL		

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Westfield | Job No.: 360-24343-1

SDG No.: OCRI-08

Client Sample ID: | Lab Sample ID: MB 360-48703/1-A

Matrix: Solid | Lab File ID: J03008.D

Analysis Method: 8270C LL | Date Collected:

Extract. Method: 3546 | Date Extracted: 09/08/2009 14:52

Sample wt/vol: 30.00(g) | Date Analyzed: 09/18/2009 14:53

Con. Extract Vol.: 1.0(mL) | Dilution Factor: 1

Injection Volume: 1.0(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 49174 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
98-86-2	Acetophenone	ND		33	10
62-53-3	Aniline	ND		33	10
120-12-7	Anthracene	ND		33	10
1912-24-9	Atrazine	ND		33	10
103-33-3	Azobenzene	ND		33	10
100-52-7	Benzaldehyde	ND		33	10
56-55-3	Benzo[a]anthracene	ND		33	10
50-32-8	Benzo[a]pyrene	ND		33	10
205-99-2	Benzo[b]fluoranthene	ND		33	10
191-24-2	Benzo[g,h,i]perylene	ND		33	10
207-08-9	Benzo[k]fluoranthene	ND		33	10
65-85-0	Benzoic acid	77.0	J	170	15
119-61-9	Benzophenone	ND		33	10
100-51-6	Benzyl alcohol	ND		67	28
111-91-1	Bis(2-chloroethoxy)methane	ND		33	10
111-44-4	Bis(2-chloroethyl)ether	ND		33	10
117-81-7	Bis(2-ethylhexyl) phthalate	ND		33	10
85-68-7	Butyl benzyl phthalate	ND		33	10
105-60-2	Caprolactam	ND		33	10
86-74-8	Carbazole	ND		33	10
218-01-9	Chrysene	ND		33	10
53-70-3	Dibenz(a,h)anthracene	ND		33	10
132-64-9	Dibenzofuran	ND		33	10
84-66-2	Diethyl phthalate	ND		33	10
131-11-3	Dimethyl phthalate	ND		33	10
84-74-2	Di-n-butyl phthalate	97.6		33	29
117-84-0	Di-n-octyl phthalate	ND		33	17
101-84-8	Diphenyl oxide	ND		33	10
122-39-4	Diphenylamine	ND		33	10
206-44-0	Fluoranthene	ND		33	10
86-73-7	Fluorene	ND		33	10
118-74-1	Hexachlorobenzene	ND		33	10
87-68-3	Hexachlorobutadiene	ND		33	10
77-47-4	Hexachlorocyclopentadiene	ND		67	10

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24343-1

SDG No.: OCRI-08

Matrix: Solid Level: Low Lab File ID: J03009.D

Lab ID: LCS 360-48703/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
1,1'-Biphenyl	333	218	65	40-140	
1,2,4,5-Tetrachlorobenzene	333	204	61	40-140	
1,2,4-Trichlorobenzene	333	185	55	40-140	
1,2-Dichlorobenzene	333	166	50	40-140	
1,3-Dichlorobenzene	333	162	49	40-140	
1,4-Dichlorobenzene	333	162	49	40-140	
1-Methylnaphthalene	333	209	63	40-140	
2,2'-oxybis[1-chloropropane]	333	179	54	40-140	
2,3,4,6-Tetrachlorophenol	333	214	64	40-140	
2,4,5-Trichlorophenol	333	249	75	30-130	
2,4,6-Trichlorophenol	333	252	76	30-130	
2,4-Dichlorophenol	333	232	70	30-130	
2,4-Dimethylphenol	333	283	85	30-130	
2,4-Dinitrophenol	333	170	51	30-130	
2,4-Dinitrotoluene	333	222	67	40-140	
2,6-Dinitrotoluene	333	230	69	40-140	
2-Chloronaphthalene	333	167	50	40-140	
2-Chlorophenol	333	190	57	30-130	
2-Methylnaphthalene	333	211	63	40-140	
2-Methylphenol	333	204	61	30-130	
2-Nitroaniline	333	216	65	40-140	
2-Nitrophenol	333	199	60	30-130	
3 & 4 Methylphenol	333	212	64	30-130	
3,3'-Dichlorobenzidine	333	107	32	40-140	*
3-Nitroaniline	333	256	77	40-140	
4,6-Dinitro-2-methylphenol	333	181	54	30-130	
4-Bromophenyl phenyl ether	333	223	67	40-140	
4-Chloro-3-methylphenol	333	250	75	30-130	
4-Chloroaniline	333	208	62	40-140	
4-Chlorophenyl phenyl ether	333	220	66	40-140	
4-Nitroaniline	333	229	69	40-140	
4-Nitrophenol	333	304	91	30-130	
Acenaphthene	333	242	73	40-140	
Acenaphthylene	333	228	68	40-140	
Acetophenone	333	195	59	40-140	
Aniline	333	86.7	26	40-140	*
Anthracene	333	273	82	40-140	
Atrazine	333	253	76	40-140	
Azobenzene	333	239	72	40-140	
Benzaldehyde	333	195	59	40-140	
Benzo[a]anthracene	333	273	82	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24343-1

SDG No.: OCRI-08

Matrix: Solid Level: Low Lab File ID: J03010.D

Lab ID: LCSD 360-48703/3-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCSD CONCENTRATION (ug/Kg)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1'-Biphenyl	333	217	65	0	30	40-140	
1,2,4,5-Tetrachlorobenzene	333	210	63	3	30	40-140	
1,2,4-Trichlorobenzene	333	191	57	3	30	40-140	
1,2-Dichlorobenzene	333	167	50	1	30	40-140	
1,3-Dichlorobenzene	333	166	50	3	30	40-140	
1,4-Dichlorobenzene	333	165	50	2	30	40-140	
1-Methylnaphthalene	333	212	63	1	30	40-140	
2,2'-oxybis[1-chloropropane]	333	183	55	2	30	40-140	
2,3,4,6-Tetrachlorophenol	333	220	66	3	30	40-140	
2,4,5-Trichlorophenol	333	249	75	0	30	30-130	
2,4,6-Trichlorophenol	333	270	81	7	30	30-130	
2,4-Dichlorophenol	333	241	72	4	30	30-130	
2,4-Dimethylphenol	333	292	88	3	30	30-130	
2,4-Dinitrophenol	333	162	49	4	30	30-130	
2,4-Dinitrotoluene	333	232	69	4	30	40-140	
2,6-Dinitrotoluene	333	241	72	5	30	40-140	
2-Chloronaphthalene	333	170	51	2	30	40-140	
2-Chlorophenol	333	194	58	2	30	30-130	
2-Methylnaphthalene	333	218	65	3	30	40-140	
2-Methylphenol	333	206	62	1	30	30-130	
2-Nitroaniline	333	227	68	5	30	40-140	
2-Nitrophenol	333	210	63	5	30	30-130	
3 & 4 Methylphenol	333	215	64	1	30	30-130	
3,3'-Dichlorobenzidine	333	110	33	3	30	40-140	*
3-Nitroaniline	333	261	78	2	30	40-140	
4,6-Dinitro-2-methylphenol	333	179	54	1	30	30-130	
4-Bromophenyl phenyl ether	333	230	69	3	30	40-140	
4-Chloro-3-methylphenol	333	266	80	7	30	30-130	
4-Chloroaniline	333	219	66	5	30	40-140	
4-Chlorophenyl phenyl ether	333	229	69	4	30	40-140	
4-Nitroaniline	333	243	73	6	30	40-140	
4-Nitrophenol	333	328	98	8	30	30-130	
Acenaphthene	333	252	75	4	30	40-140	
Acenaphthylene	333	237	71	4	30	40-140	
Acetophenone	333	196	59	1	30	40-140	
Aniline	333	88.6	27	2	30	40-140	*
Anthracene	333	281	84	3	30	40-140	
Atrazine	333	257	77	2	30	40-140	
Azobenzene	333	244	73	2	30	40-140	
Benzaldehyde	333	196	59	1	30	40-140	
Benzo[a]anthracene	333	290	87	6	30	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Westfield Job No.: 360-24343-1

SDG No.: OCRI-08

Sample No.: CCV 360-48817/2 Date Analyzed: 09/10/2009 22:25

Instrument ID: Inst. J GC Column: Rtx-5ms SIL with ID: 0.25(um)

Lab File ID (Standard): J02894.D Heated Purge: (Y/N) N

		DCB		NPT		ANT	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12 HOUR STD		228585	5.13	475178	6.36	242102	8.08
UPPER LIMIT		457170	5.63	950356	6.86	484204	8.58
LOWER LIMIT		114293	4.63	237589	5.86	121051	7.58
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 360-48744/1-A		186013	5.13	459615	6.35	233527	8.08
LCS 360-48744/2-A		198671	5.13	414100	6.36	211005	8.08
LCSD 360-48744/3-A		174822	5.13	344668	6.36	174851	8.08
360-24343-3	OC-SB-444-5.0/7.0-XXX	179702	5.13	455483	6.35	225139	8.08
360-24343-4	OC-SB-449-0.0/1.0-XXX	138784	5.13	353677	6.35	176508	8.08
360-24343-1	OC-SB-444-0.0/1.0-XXX	169675	5.13	415284	6.36	218828	8.08
360-24343-9	OC-SB-451-2.5/4.5-DUP	133813	5.13	331587	6.35	171853	8.08
360-24343-7	OC-SB-451-0.0/1.0-XXX	88003*#	5.12	218132*#	6.35	111423*#	8.09

DCB = 1,4-Dichlorobenzene-d4
NPT = Naphthalene-d8
ANT = Acenaphthene-d10

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.50 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270C LL

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Westfield Job No.: 360-24343-1

SDG No.: OCRI-08

Sample No.: CCV 360-48817/2 Date Analyzed: 09/10/2009 22:25

Instrument ID: Inst. J GC Column: Rtx-5ms SIL with ID: 0.25(um)

Lab File ID (Standard): J02894.D Heated Purge: (Y/N) N

		PHN		CRY		PRY	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12 HOUR STD		398603	9.55	279567	12.20	220462	13.65
UPPER LIMIT		797206	10.05	559134	12.70	440924	14.15
LOWER LIMIT		199302	9.05	139784	11.70	110231	13.15
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 360-48744/1-A		392466	9.55	289273	12.20	233980	13.65
LCS 360-48744/2-A		358031	9.56	270216	12.20	239830	13.65
LCSD 360-48744/3-A		297474	9.55	206262	12.20	155759	13.65
360-24343-3	OC-SB-444-5.0/7.0-XXX	384244	9.55	304593	12.20	258332	13.65
360-24343-4	OC-SB-449-0.0/1.0-XXX	302366	9.55	228950	12.20	179341	13.65
360-24343-1	OC-SB-444-0.0/1.0-XXX	357715	9.55	254083	12.20	203595	13.66
360-24343-9	OC-SB-451-2.5/4.5-DUP	294888	9.56	212195	12.20	139234	13.65
360-24343-7	OC-SB-451-0.0/1.0-XXX	184803*	9.56	102924*	12.22	82986*	13.67

PHN = Phenanthrene-d10
CRY = Chrysene-d12
PRY = Perylene-d12

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.50 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270C LL

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Westfield Job No.: 360-24343-1

SDG No.: OCRI-08

Instrument ID: Inst. J Start Date: 09/18/2009 13:59

Analysis Batch Number: 49174 End Date: 09/19/2009 01:44

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 360-49174/1		09/18/2009 13:59	1	J03006.D	Rtx-5ms SIL with guard column 0.25(um)
CCV 360-49174/2 CCVIS		09/18/2009 14:26	1	J03007.D	Rtx-5ms SIL with guard column 0.25(um)
MB 360-48703/1-A		09/18/2009 14:53	1	J03008.D	Rtx-5ms SIL with guard column 0.25(um)
LCS 360-48703/2-A		09/18/2009 15:20	1	J03009.D	Rtx-5ms SIL with guard column 0.25(um)
LCSD 360-48703/3-A		09/18/2009 15:47	1	J03010.D	Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/18/2009 16:14	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/18/2009 16:41	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/18/2009 17:08	10		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/18/2009 17:35	50		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/18/2009 18:02	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/18/2009 18:29	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/18/2009 18:56	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/18/2009 19:23	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/18/2009 19:51	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/18/2009 20:18	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/18/2009 20:45	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/18/2009 21:13	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/18/2009 21:40	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/18/2009 22:07	1		Rtx-5ms SIL with guard column 0.25(um)
360-24343-1	OC-SB-444-0.0/1.0-XXX	09/18/2009 22:34	10	J03025.D	Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/18/2009 23:02	1		Rtx-5ms SIL with guard column 0.25(um)
360-24343-3	OC-SB-444-5.0/7.0-XXX	09/18/2009 23:29	1	J03027.D	Rtx-5ms SIL with guard column 0.25(um)
360-24343-4	OC-SB-449-0.0/1.0-XXX	09/18/2009 23:56	1	J03028.D	Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/19/2009 00:23	1		Rtx-5ms SIL with guard column 0.25(um)
360-24343-6	OC-SB-449-6.0/8.0-XXX	09/19/2009 00:50	1	J03030.D	Rtx-5ms SIL with guard column 0.25(um)
360-24343-7	OC-SB-451-0.0/1.0-XXX	09/19/2009 01:17	10	J03031.D	Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/19/2009 01:44	1		Rtx-5ms SIL with guard column 0.25(um)

ICAL BAD recalc

benzoic acid 0.046P

2,4-DNP 0.048

8270C LL

2-nitroaniline 0.460

CCAC

Benzoic acid RF = 0.0166

2,4-dinitrophenol RF 0.0372

4-nitrophenol %D = 31 / RF=0.0394

4,6-dinitro-2-methylphenol %D = 27

2-nitroaniline RF=0.0449

dibenz(a,h)anthracene 20%D

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Westfield Job No.: 360-24343-1

SDG No.: OCRI-08

Lab Sample ID: CCV 360-49174/2 Calibration Date: 09/18/2009 14:26

Instrument ID: Inst. J Calib Start Date: 09/15/2009 17:27

GC Column: Rtx-5ms ID: 0.25(um) Calib End Date: 09/15/2009 21:23

Lab File ID: J03007.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Qua		0.2220		4710	5000	-5.9	30.0
Pyridine	Lin1		0.5240		4230	5000	-15.5	30.0
N-Nitrosodimethylamine	Ave	0.3299	0.2847		4310	5000	-13.7	30.0
Aniline	Ave	0.9185	0.8124		4420	5000	-11.6	30.0
Phenol	Ave	0.9427	0.7740		4100	5000	-17.9	20.0
Bis(2-chloroethyl)ether	Ave	0.6893	0.5757		4180	5000	-16.5	30.0
2-Chlorophenol	Ave	0.6685	0.5931		4440	5000	-11.3	30.0
1,4-Dichlorobenzene	Ave	0.7818	0.6573		4200	5000	-15.9	20.0
1,3-Dichlorobenzene	Ave	0.8034	0.6770		4210	5000	-15.7	30.0
1,2-Dichlorobenzene	Ave	0.7472	0.6110		4090	5000	-18.2	30.0
Benzyl alcohol	Ave	0.5078	0.5161		5080	5000	1.6	30.0
2-Methylphenol	Ave	0.5900	0.5320		4510	5000	-9.8	30.0
2,2'-oxybis[1-chloropropane]	Ave	0.6869	0.5865		4270	5000	-14.6	30.0
Acetophenone	Ave	0.8911	0.8083		4540	5000	-9.3	30.0
Benzaldehyde	Ave	0.8911	0.8083		4540	5000	-9.3	30.0
N-Nitrosodi-n-propylamine	Ave	0.4473	0.4136	0.0500	4620	5000	-7.5	30.0
3 & 4 Methylphenol	Ave	0.6159	0.5708		4630	5000	-7.3	30.0
Hexachloroethane	Ave	0.2836	0.2500		4410	5000	-11.8	30.0
Nitrobenzene	Ave	0.3156	0.3141		4980	5000	-0.5	30.0
Isophorone	Lin2		0.5273		4730	5000	-5.4	30.0
2-Nitrophenol	Lin1		0.1268		4140	5000	-17.2	20.0
2,4-Dimethylphenol	Ave	0.2439	0.2608		5350	5000	6.9	30.0
Benzoic acid	Qua		0.0166		4020	5000	-19.5	30.0
Bis(2-chloroethoxy)methane	Ave	0.3351	0.3153		4710	5000	-5.9	30.0
2,4-Dichlorophenol	Lin2		0.2104		4760	5000	-4.8	20.0
1,2,4-Trichlorobenzene	Ave	0.2684	0.2423		4510	5000	-9.7	30.0
Naphthalene	Ave	0.9169	0.8377		4570	5000	-8.6	30.0
Alpha-Terpineol	Ave	0.1845	0.1850		5010	5000	0.3	30.0
4-Chloroaniline	Ave	0.3218	0.3355		5210	5000	4.3	30.0
Hexachlorobutadiene	Ave	0.1426	0.1316		4620	5000	-7.7	20.0
Caprolactam	Lin1		0.0881		4540	5000	-9.2	30.0
4-Chloro-3-methylphenol	Lin2		0.2510		5030	5000	0.6	20.0
2-Methylnaphthalene	Ave	0.5685	0.5319		4680	5000	-6.4	30.0
1-Methylnaphthalene	Ave	0.5770	0.5304		4600	5000	-8.1	30.0
Hexachlorocyclopentadiene	Lin		0.1272	0.0500	5130	5000	2.6	30.0
1,2,4,5-Tetrachlorobenzene	Ave	0.2318	0.2105		4540	5000	-9.2	30.0
2,4,6-Trichlorophenol	Lin2		0.2764		5010	5000	0.2	20.0
2,4,5-Trichlorophenol	Lin1		0.2879		4720	5000	-5.5	30.0
1,1'-Biphenyl	Ave	1.405	1.268		4510	5000	-9.8	30.0
2-Chloronaphthalene	Ave	1.339	1.247		4660	5000	-6.8	30.0
Phenyl ether	Ave	0.3833	0.3440		4490	5000	-10.3	30.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Westfield Job No.: 360-24343-1

SDG No.: OCRI-08

Lab Sample ID: CCV 360-49174/2 Calibration Date: 09/18/2009 14:26

Instrument ID: Inst. J Calib Start Date: 09/15/2009 17:27

GC Column: Rtx-5ms ID: 0.25(um) Calib End Date: 09/15/2009 21:23

Lab File ID: J03007.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Nitroaniline	Lin1		0.3313		4600	5000	-8.0	30.0
Dimethyl phthalate	Ave	1.206	1.167		4840	5000	-3.2	30.0
2,4-Dinitrotoluene	Lin2		0.2604		4760	5000	-4.7	30.0
Acenaphthylene	Ave	1.582	1.562		4940	5000	-1.3	30.0
Acenaphthene	Ave	1.097	1.011		4610	5000	-7.9	20.0
2,4-Dinitrophenol	Lin		0.0372*	0.0500	4760	5000	-4.7	30.0
4-Nitrophenol	Qua		0.1593	0.0500	6520	5000	30.5*	30.0
Dibenzofuran	Ave	1.497	1.406		4700	5000	-6.1	30.0
2,6-Dinitrotoluene	Lin1		0.3326		4800	5000	-4.0	30.0
2,3,4,6-Tetrachlorophenol	Lin1		0.2046		4620	5000	-7.6	30.0
Diethyl phthalate	Ave	1.234	1.190		4820	5000	-3.6	30.0
Fluorene	Ave	1.171	1.131		4830	5000	-3.5	30.0
4-Chlorophenyl phenyl ether	Ave	0.5655	0.5224		4620	5000	-7.6	30.0
3-Nitroaniline	Lin1		0.2345		4640	5000	-7.1	30.0
4,6-Dinitro-2-methylphenol	Qua		0.0399		3680	5000	-26.5	30.0
Diphenylamine	Ave	0.5876	0.5688		4840	5000	-3.2	30.0
N-Nitrosodiphenylamine	Ave	0.5876	0.5688		4840	5000	-3.2	20.0
1,2-Diphenylhydrazine	Ave	1.165	1.197		5140	5000	2.8	30.0
Azobenzene	Ave	1.165	1.197		5140	5000	2.8	30.0
Benzophenone	Ave	0.7185	0.7110		4950	5000	-1.0	30.0
2-Nitroaniline	Ave	0.0460	0.0449		4880	5000	-2.4	30.0
4-Bromophenyl phenyl ether	Ave	0.1786	0.1704		4770	5000	-4.6	30.0
Hexachlorobenzene	Ave	0.1906	0.1782		4670	5000	-6.5	30.0
Atrazine	Lin2		0.1658		4580	5000	-8.3	30.0
Pentachlorophenol	Qua		0.0557		4740	5000	-5.2	20.0
Pentachloronitrobenzene	Lin1		0.0797		4830	5000	-3.4	30.0
Phenanthrene	Ave	1.017	0.9009		4430	5000	-11.4	30.0
Anthracene	Ave	0.8971	0.8730		4870	5000	-2.7	30.0
Carbazole	Ave	0.7715	0.7619		4940	5000	-1.2	30.0
Di-n-butyl phthalate	Ave	1.086	1.095		5040	5000	0.8	30.0
Fluoranthene	Ave	0.8987	0.8197		4560	5000	-8.8	20.0
Benzidine	Lin		0.5453		5120	5000	2.5	30.0
Pyrene	Ave	1.155	1.103		4770	5000	-4.5	30.0
Butyl benzyl phthalate	Lin1		0.5625		4710	5000	-5.8	30.0
3,3'-Dichlorobenzidine	Lin1		0.6186		4930	5000	-1.4	30.0
Benzo[a]anthracene	Ave	0.8540	0.8074		4730	5000	-5.5	30.0
Chrysene	Ave	0.9253	0.7711		4170	5000	-16.7	30.0
Bis(2-ethylhexyl) phthalate	Lin1		0.7674		4390	5000	-12.3	30.0
Di-n-octyl phthalate	Qua		1.506		4980	5000	-0.4	20.0
Benzo[b]fluoranthene	Ave	1.142	1.066		4670	5000	-6.6	30.0
Benzo[k]fluoranthene	Ave	1.097	1.012		4610	5000	-7.8	30.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Westfield Job No.: 360-24343-1

SDG No.: OCRI-08

Lab Sample ID: CCV 360-49174/2 Calibration Date: 09/18/2009 14:26

Instrument ID: Inst. J Calib Start Date: 09/15/2009 17:27

GC Column: Rtx-5ms ID: 0.25(um) Calib End Date: 09/15/2009 21:23

Lab File ID: J03007.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Benzo[a]pyrene	Lin1		0.7970		4620	5000	-7.5	20.0
Indeno[1,2,3-cd]pyrene	Lin1		0.8174		6160	5000	23.1	30.0
Dibenz(a,h)anthracene	Lin1		0.6635		6300	5000	26.0	30.0
Benzo[g,h,i]perylene	Ave	0.5986	0.7082		5920	5000	18.3	30.0
2-Fluorophenol	Ave	0.6265	0.5326		4250	5000	-15.0	30.0
Phenol-d5	Ave	0.7745	0.6958		4490	5000	-10.2	30.0
Nitrobenzene-d5	Ave	0.3070	0.3033		4940	5000	-1.2	30.0
2-Fluorobiphenyl	Ave	1.270	1.152		4530	5000	-9.3	30.0
2,4,6-Tribromophenol	Lin1		0.0779		4860	5000	-2.8	30.0
Terphenyl-d14	Ave	0.7644	0.6918		4520	5000	-9.5	30.0

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Westfield Job No.: 360-24343-1

SDG No.: OCRI-08

Instrument ID: Inst. J Start Date: 09/15/2009 16:58

Analysis Batch Number: 48992 End Date: 09/15/2009 23:22

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 360-48992/1		09/15/2009 16:58	1	J02947.D	Rtx-5ms SIL with guard column 0.25(um)
STD5 360-48992/2 ICIS		09/15/2009 17:27	1	J02948.D	Rtx-5ms SIL with guard column 0.25(um)
STD01 360-48992/3 IC		09/15/2009 17:57	1	J02949.D	Rtx-5ms SIL with guard column 0.25(um)
STD025 360-48992/4 IC		09/15/2009 18:26	1	J02950.D	Rtx-5ms SIL with guard column 0.25(um)
STD050 360-48992/5 IC		09/15/2009 18:55	1	J02951.D	Rtx-5ms SIL with guard column 0.25(um)
STD1 360-48992/6 IC		09/15/2009 19:25	1	J02952.D	Rtx-5ms SIL with guard column 0.25(um)
STD25 360-48992/7 IC		09/15/2009 19:54	1	J02953.D	Rtx-5ms SIL with guard column 0.25(um)
STD8 360-48992/8 IC		09/15/2009 20:24	1	J02954.D	Rtx-5ms SIL with guard column 0.25(um)
STD10 360-48992/9 IC		09/15/2009 20:53	1	J02955.D	Rtx-5ms SIL with guard column 0.25(um)
STD20 360-48992/10 IC		09/15/2009 21:23	1	J02956.D	Rtx-5ms SIL with guard column 0.25(um)
ICV 360-48992/11		09/15/2009 21:52	1		Rtx-5ms SIL with guard column 0.25(um)
MDLV 360-48992/12		09/15/2009 22:22	1		Rtx-5ms SIL with guard column 0.25(um)
MDLV 360-48992/13		09/15/2009 22:52	1		Rtx-5ms SIL with guard column 0.25(um)
MDLV 360-48992/14		09/15/2009 23:22	1		Rtx-5ms SIL with guard column 0.25(um)

IOAL

2,4-DNP r^2 = 0.9910 0.9960

benzoic acid RF < 10.05

2-nitroaniline RRF = 0.0460

8270C LL

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Westfield Job No.: 360-24343-1 Analy Batch No.: 48992

SDG No.: OCRI-08

Instrument ID: Inst. J GC Column: Rtx-5ms ID: 0.25(um) Heated Purge: (Y/N) N

Calibration Start Date: 09/15/2009 17:27 Calibration End Date: 09/15/2009 21:23 Calibration ID: 4578

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD01 360-48992/3	J02949.D
Level 2	STD025 360-48992/4	J02950.D
Level 3	STD050 360-48992/5	J02951.D
Level 4	STD1 360-48992/6	J02952.D
Level 5	STD25 360-48992/7	J02953.D
Level 6	STD5 360-48992/2	J02948.D
Level 7	STD8 360-48992/8	J02954.D
Level 8	STD10 360-48992/9	J02955.D
Level 9	STD20 360-48992/10	J02956.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
1,4-Dioxane	0.5933 0.2158	0.3435 0.2027	0.3305 0.2820	0.2815 0.2723	0.2561	Qua	0.0355	0.2148	0.0029						0.9910		0.9900
Pyridine	+++++ 0.5052	0.3703 0.5730	0.4868 0.6863	0.5394 0.6674	0.5568	Lin1	-0.096	0.6425							0.9910		0.9900
N-Nitrosodimethylamine	0.2993 0.2777	0.3452 0.2663	0.3404 0.4115	0.3360 0.3721	0.3210	Ave		0.3299				14.0		15.0			
Benzoic acid	+++++ 0.0195	+++++ 0.0519	0.0078 0.0738	0.0076 0.1529	0.0141	Qua	0.0020	-0.013	0.0083						0.9990		0.9900
Aniline	0.8352 0.8249	0.8488 0.7969	0.9310 1.0870	0.9416 1.0625	0.9389	Ave		0.9185				11.0		15.0			
Phenol	0.9338 0.8108	0.9433 0.7781	1.0224 1.0619	0.9945 1.0146	0.9253	Ave		0.9427				10.0		15.0			
Bis(2-chloroethyl)ether	0.7376 0.5912	0.7135 0.5508	0.7348 0.7436	0.7374 0.7267	0.6683	Ave		0.6893				10.0		15.0			
2-Chlorophenol	0.6174 0.5862	0.6396 0.5656	0.7143 0.7719	0.7089 0.7548	0.6583	Ave		0.6685				11.0		15.0			
2,4-Dinitrophenol	+++++ 0.0361	+++++ 0.0576	+++++ 0.0697	0.0094 0.0963	0.0230	Lin	-0.340	0.1104			0.0500				0.9860	*	0.9900
1,4-Dichlorobenzene	0.8485 0.6570	0.8324 0.6187	0.8734 0.8355	0.8207 0.7970	0.7526	Ave		0.7818				11.0		15.0			
1,3-Dichlorobenzene	0.8604 0.6763	0.8947 0.6371	0.8764 0.8588	0.8372 0.8195	0.7702	Ave		0.8034				11.0		15.0			
Benzyl alcohol	0.4531 0.4731	0.3964 0.4670	0.4893 0.6304	0.5199 0.6191	0.5216	Ave		0.5078				15.0		15.0			
1,2-Dichlorobenzene	0.8778 0.6173	0.7972 0.5819	0.8343 0.7796	0.7941 0.7363	0.7063	Ave		0.7472				13.0		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Westfield Job No.: 360-24343-1 Analy Batch No.: 48992

SDG No.: OCRI-08

Instrument ID: Inst. J GC Column: Rtx-5ms ID: 0.25(um) Heated Purge: (Y/N) N

Calibration Start Date: 09/15/2009 17:27 Calibration End Date: 09/15/2009 21:23 Calibration ID: 4578

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
Hexachlorobutadiene	0.1299 0.1367	0.1542 0.1424	0.1513 0.1458	0.1491 0.1343	0.1395	Ave		0.1426				5.7		15.0			
Caprolactam	0.0589 0.0832	0.0422 0.0986	0.0551 0.1050	0.0584 0.1026	0.0805	Lin1	-0.012	0.0996							0.9910		0.9900
Pentachlorophenol	+++++ 0.0463	+++++ 0.0718	0.0032 0.0770	0.0167 0.0897	0.0408	Qua	-0.082	0.0704	0.0012						0.9970		0.9900
4-Chloro-3-methylphenol	0.1585 0.2470	0.1751 0.2668	0.2115 0.2737	0.2240 0.2700	0.2391	Lin2	-0.011	0.2516							0.9920		0.9900
2-Methylnaphthalene	0.5451 0.5455	0.5665 0.5686	0.5887 0.5935	0.5942 0.5428	0.5714	Ave		0.5685				3.6		15.0			
1-Methylnaphthalene	0.5603 0.5514	0.5607 0.5867	0.6026 0.5908	0.6112 0.5466	0.5826	Ave		0.5770				4.0		15.0			
1,2,4,5-Tetrachlorobenzene	0.2260 0.2179	0.2346 0.2294	0.2447 0.2335	0.2462 0.2174	0.2360	Ave		0.2318				4.4		15.0			
2,4,6-Trichlorophenol	0.1529 0.2646	0.1934 0.2954	0.2222 0.3055	0.2384 0.2999	0.2778	Lin2	-0.014	0.2787							0.9910		0.9900
2,4,5-Trichlorophenol	0.1678 0.2780	0.1815 0.3099	0.2297 0.3145	0.2516 0.3147	0.2851	Lin1	-0.026	0.3100							0.9980		0.9900
1,1'-Biphenyl	1.4623 1.2874	1.4649 1.3632	1.5528 1.3855	1.4602 1.2525	1.4184	Ave		1.4053				6.7		15.0			
2-Chloronaphthalene	1.3932 1.1655	1.3830 1.2170	1.4564 1.3928	1.4044 1.2752	1.3636	Ave		1.3390				7.3		15.0			
Phenyl ether	0.3886 0.3607	0.3877 0.3800	0.4192 0.3926	0.3934 0.3572	0.3705	Ave		0.3833				5.0		15.0			
4-Nitroaniline	0.1649 0.3187	0.2019 0.3573	0.2436 0.3728	0.2759 0.3809	0.3320	Lin1	-0.037	0.3680							0.9960		0.9900
Dimethyl phthalate	1.0906 1.1506	1.1786 1.2278	1.2868 1.2418	1.2487 1.1874	1.2401	Ave		1.2058				5.0		15.0			
2,4-Dinitrotoluene	0.1402 0.2634	0.1772 0.2824	0.2294 0.2927	0.2585 0.2862	0.2834	Lin2	-0.015	0.2766							0.9940		0.9900
2-Nitroaniline	+++++ 0.0429	0.0508 0.0424	0.0514 0.0429	0.0491 0.0403	0.0483	Ave		0.0460				9.4		15.0			
Acenaphthylene	1.3121 1.5567	1.5054 1.6525	1.6619 1.6897	1.6485 1.5420	1.6697	Ave		1.5821				7.6		15.0			
Acenaphthene	1.1585 1.0022	1.1589 1.0582	1.1647 1.0904	1.1322 1.0145	1.0943	Ave		1.0971				5.7		15.0			
Dibenzofuran	1.5515 1.3672	1.5857 1.4438	1.6047 1.4672	1.5651 1.3447	1.5398	Ave		1.4966				6.4		15.0			
2,6-Dinitrotoluene	0.1275 0.3126	0.1740 0.3459	0.2181 0.3669	0.2710 0.3580	0.3333	Lin1	-0.038	0.3542							0.9970		0.9900

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM IV
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Westfield Job No.: 360-24343-1

SDG No.: OCRI-08

Lab File ID: B10411.D Lab Sample ID: MB 360-48742/1-A

Matrix: Solid Date Extracted: 09/09/2009 09:58

Instrument ID: Inst. B Date Analyzed: 09/18/2009 21:51

Level:(Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 360-48742/2-A	B10412.D	09/18/2009 22:22
	LCSD 360-48742/3-A	B10413.D	09/18/2009 22:54
OC-SB-451-2.5/4.5-DUP	360-24343-9	B10417.D	09/19/2009 00:58
OC-SB-451-2.5/4.5-XXX	360-24343-10	B10418.D	09/19/2009 01:30
OC-SB-451-2.5/4.5-XXX MS	360-24343-10 MS	B10419.D	09/19/2009 02:01
OC-SB-451-2.5/4.5-XXX MSD	360-24343-10 MSD	B10420.D	09/19/2009 02:32
OC-SB-454-0.0/1.0-XXX	360-24343-11	B10421.D	09/19/2009 03:03
OC-SB-454-6.0/8.0-XXX	360-24343-13	B10423.D	09/19/2009 04:05
OC-SB-455-6.0/8.0-DUP	360-24343-16	B10425.D	09/19/2009 05:06
OC-SB-455-6.0/8.0-XXX	360-24343-17	B10426.D	09/19/2009 05:37
OC-SB-455-6.0/8.0-XXX MS	360-24343-17 MS	B10427.D	09/19/2009 06:08
OC-SB-455-6.0/8.0-XXX MSD	360-24343-17 MSD	B10428.D	09/19/2009 06:39

LCS
3,3'-DCB 32/33
Aniline 27/25
benzoic acid 25

MS/MSD NOT USED
see attached

TCAL CK

CCAL CK

MB 48742
Benzoic Acid 5U
Di-n-butyl phthalate PB.9

TIC Benzaldehyde, 3-hydroxy-4-methoxy-
Dodecanoic acid, methyl ester
benzothiazole, 2-(methylthio)-
Octadecane
7,9-di-tert-butyl-1-oxaspiro(4,5)deca-6
eicosane.

Organic Prep Worksheet

Batch Number: 360-48742
Method: 3546
Analyst: LaPlante, Carrie A

Date Open: Sep 09 2009 9:58AM
Batch End:

Lab ID	Client ID	Method Chain	Basis	Initial weight/volume of sample	Final weight/volume of sample	ABN SURR_00010	OlinLCSextras_00001	OP-abnms_00063
MB~360-48742/1		3546, 8270C LL		30.00 g	1.0 mL	50 uL		
LCS~360-48742/2		3546, 8270C LL		30.00 g	1.0 mL	50 uL	.100 mL	100 uL
LCSD~360-48742/3		3546, 8270C LL		30.00 g	1.0 mL	50 uL	.100 mL	100 uL
360-24343-A-8	OC-SB-451-18/20-XXX		T	30.10 g	1.0 mL	50 uL		
360-24343-A-9	OC-SB-451-2.5/4.5-DUP	3546, 8270C LL	T	30.15 g	1.0 mL	50 uL		
360-24343-A-10	OC-SB-451-2.5/4.5-XXX	3546, 8270C LL	T	30.76 g	1.0 mL	50 uL		
360-24343-A-10~MS	OC-SB-451-2.5/4.5-XMS	3546, 8270C LL	T	30.45 g	1.0 mL	50 uL	.100 mL	100 uL
360-24343-A-10~MSD	OC-SB-451-2.5/4.5-MSD	3546, 8270C LL	T	30.12 g	1.0 mL	50 uL	.100 mL	100 uL
360-24343-A-11	OC-SB-454-0.0/1.0-XXX	3546, 8270C LL	T	30.26 g	1.0 mL	50 uL		
360-24343-A-12	OC-SB-454-18/20-XXX		T	30.15 g	1.0 mL	50 uL		
360-24343-A-13	OC-SB-454-6.0/8.0-XXX	3546, 8270C LL	T	30.47 g	1.0 mL	50 uL		
360-24343-A-15	OC-SB-455-28/30-XXX		T	30.66 g	1.0 mL	50 uL		
360-24343-A-16	OC-SB-455-6.0/8.0-DUP	3546, 8270C LL	T	30.94 g	1.0 mL	50 uL		
360-24343-A-17	OC-SB-455-6.0/8.0-XXX	3546, 8270C LL	T	30.50 g	1.0 mL	50 uL		
360-24343-A-17~MS	OC-SB-455-6.0/8.0-XMS	3546, 8270C LL	T	30.11 g	1.0 mL	50 uL	.100 mL	100 uL
360-24343-A-17~MSD	OC-SB-455-6.0/8.0-MSD	3546, 8270C LL	T	30.26 g	1.0 mL	50 uL	.100 mL	100 uL
360-24365-A-1	OC-SB-442-0.0/1.0-XXX		T	30.36 g	1.0 mL	50 uL		
360-24365-A-2	OC-SB-442-20/22-XXX		T	30.20 g	1.0 mL	50 uL		
360-24365-A-3	OC-SB-442-8.0/10-DUP		T	30.60 g	1.0 mL	50 uL		
360-24365-A-5	OC-SB-447-0.0/1.0-XXX		T	30.12 g	1.0 mL	50 uL		
360-24365-A-6	OC-SB-447-18/20-XXX		T	30.09 g	1.0 mL	50 uL		
360-24365-A-7	OC-SB-447-3.0/5.0-XXX		T	30.11 g	1.0 mL	50 uL		
360-24365-A-8	OC-SB-452-0.0/1.0-XXX		T	30.13 g	1.0 mL	50 uL		

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24343-1

SDG No.: OCRI-08

Matrix: Solid Level: Low Lab File ID: B10412.D

Lab ID: LCS 360-48742/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
1,1'-Biphenyl	333	275	82	40-140	
1,2,4,5-Tetrachlorobenzene	333	220	66	40-140	
1,2,4-Trichlorobenzene	333	228	68	40-140	
1,2-Dichlorobenzene	333	208	62	40-140	
1,3-Dichlorobenzene	333	200	60	40-140	
1,4-Dichlorobenzene	333	201	60	40-140	
1-Methylnaphthalene	333	222	67	40-140	
2,2'-oxybis[1-chloropropane]	333	212	64	40-140	
2,3,4,6-Tetrachlorophenol	333	249	75	40-140	
2,4,5-Trichlorophenol	333	317	95	30-130	
2,4,6-Trichlorophenol	333	317	95	30-130	
2,4-Dichlorophenol	333	267	80	30-130	
2,4-Dimethylphenol	333	286	86	30-130	
2,4-Dinitrophenol	333	151	45	30-130	
2,4-Dinitrotoluene	333	270	81	40-140	
2,6-Dinitrotoluene	333	288	86	40-140	
2-Chloronaphthalene	333	222	66	40-140	
2-Chlorophenol	333	224	67	30-130	
2-Methylnaphthalene	333	225	68	40-140	
2-Methylphenol	333	234	70	30-130	
2-Nitroaniline	333	298	90	40-140	
2-Nitrophenol	333	267	80	30-130	
3 & 4 Methylphenol	333	245	73	30-130	
3,3'-Dichlorobenzidine	333	106	32	40-140	*
3-Nitroaniline	333	296	89	40-140	
4,6-Dinitro-2-methylphenol	333	239	72	30-130	
4-Bromophenyl phenyl ether	333	291	87	40-140	
4-Chloro-3-methylphenol	333	285	86	30-130	
4-Chloroaniline	333	234	70	40-140	
4-Chlorophenyl phenyl ether	333	286	86	40-140	
4-Nitroaniline	333	288	86	40-140	
4-Nitrophenol	333	314	94	30-130	
Acenaphthene	333	318	95	40-140	
Acenaphthylene	333	281	84	40-140	
Acetophenone	333	222	67	40-140	
Aniline	333	89.0	27	40-140	*
Anthracene	333	330	99	40-140	
Atrazine	333	347	104	40-140	
Azobenzene	333	285	86	40-140	
Benzaldehyde	333	326	98	40-140	
Benzo[a]anthracene	333	341	102	40-140	

Calculations are performed before rounding

benzoic acid 27

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24343-1

SDG No.: OCRI-08

Matrix: Solid Level: Low Lab File ID: B10413.D

Lab ID: LCSD 360-48742/3-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCSD CONCENTRATION (ug/Kg)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1'-Biphenyl	333	275	83	0	30	40-140	
1,2,4,5-Tetrachlorobenzene	333	225	68	2	30	40-140	
1,2,4-Trichlorobenzene	333	231	69	1	30	40-140	
1,2-Dichlorobenzene	333	207	62	1	30	40-140	
1,3-Dichlorobenzene	333	202	61	1	30	40-140	
1,4-Dichlorobenzene	333	200	60	0	30	40-140	
1-Methylnaphthalene	333	225	67	1	30	40-140	
2,2'-oxybis[1-chloropropane]	333	214	64	1	30	40-140	
2,3,4,6-Tetrachlorophenol	333	241	72	3	30	40-140	
2,4,5-Trichlorophenol	333	318	96	0	30	30-130	
2,4,6-Trichlorophenol	333	309	93	2	30	30-130	
2,4-Dichlorophenol	333	275	83	3	30	30-130	
2,4-Dimethylphenol	333	287	86	1	30	30-130	
2,4-Dinitrophenol	333	137	41	9	30	30-130	
2,4-Dinitrotoluene	333	265	79	2	30	40-140	
2,6-Dinitrotoluene	333	286	86	1	30	40-140	
2-Chloronaphthalene	333	221	66	0	30	40-140	
2-Chlorophenol	333	227	68	1	30	30-130	
2-Methylnaphthalene	333	228	68	1	30	40-140	
2-Methylphenol	333	243	73	4	30	30-130	
2-Nitroaniline	333	290	87	3	30	40-140	
2-Nitrophenol	333	270	81	1	30	30-130	
3 & 4 Methylphenol	333	244	73	0	30	30-130	
3,3'-Dichlorobenzidine	333	109	33	3	30	40-140	*
3-Nitroaniline	333	295	89	0	30	40-140	
4,6-Dinitro-2-methylphenol	333	221	66	8	30	30-130	
4-Bromophenyl phenyl ether	333	294	88	1	30	40-140	
4-Chloro-3-methylphenol	333	289	87	1	30	30-130	
4-Chloroaniline	333	243	73	4	30	40-140	
4-Chlorophenyl phenyl ether	333	287	86	0	30	40-140	
4-Nitroaniline	333	287	86	0	30	40-140	
4-Nitrophenol	333	314	94	0	30	30-130	
Acenaphthene	333	317	95	0	30	40-140	
Acenaphthylene	333	282	84	0	30	40-140	
Acetophenone	333	223	67	0	30	40-140	
Aniline	333	94.1	28	6	30	40-140	*
Anthracene	333	337	101	2	30	40-140	
Atrazine	333	346	104	0	30	40-140	
Azobenzene	333	287	86	0	30	40-140	
Benzaldehyde	333	321	96	2	30	40-140	
Benzo[a]anthracene	333	343	103	1	30	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24343-1

SDG No.: OCRI-08

Matrix: Solid Level: Low Lab File ID: B10413.D

Lab ID: LCSD 360-48742/3-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCSD CONCENTRATION (ug/Kg)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Benzo[a]pyrene	333	329	99	1	30	40-140	
Benzo[b]fluoranthene	333	314	94	1	30	40-140	
Benzo[g,h,i]perylene	333	357	107	6	30	40-140	
Benzo[k]fluoranthene	333	345	103	2	30	40-140	
Benzoic acid	333	82.8 J	25	20	30	30-130	*
Benzophenone	333	299	90	0	30	40-140	
Benzyl alcohol	333	269	81	2	30	30-130	
Bis(2-chloroethoxy)methane	333	220	66	2	30	40-140	
Bis(2-chloroethyl)ether	333	204	61	1	30	40-140	
Bis(2-ethylhexyl) phthalate	333	319	96	1	30	40-140	
Butyl benzyl phthalate	333	312	94	1	30	40-140	
Caprolactam	333	305	91	2	30	40-140	
Carbazole	333	309	93	1	30	40-140	
Chrysene	333	330	99	1	30	40-140	
Dibenz(a,h)anthracene	333	351	105	6	30	40-140	
Dibenzofuran	333	276	83	0	30	40-140	
Diethyl phthalate	333	289	87	0	30	40-140	
Dimethyl phthalate	333	278	83	0	30	40-140	
Di-n-butyl phthalate	333	362	108	3	30	40-140	
Di-n-octyl phthalate	333	268	80	1	30	40-140	
Diphenyl oxide	333	228	68	0	30	40-140	
Fluoranthene	333	305	91	0	30	40-140	
Fluorene	333	332	100	0	30	40-140	
Hexachlorobenzene	333	297	89	1	30	40-140	
Hexachlorobutadiene	333	208	62	0	30	40-140	
Hexachlorocyclopentadiene	333	262	78	0	30	40-140	
Hexachloroethane	333	212	64	1	30	40-140	
Indeno[1,2,3-cd]pyrene	333	328	99	6	30	40-140	
Isophorone	333	204	61	2	30	40-140	
Naphthalene	333	242	73	3	30	40-140	
Nitrobenzene	333	220	66	2	30	40-140	
N-Nitrosodimethylamine	333	235	70	0	30	40-140	
N-Nitrosodi-n-propylamine	333	244	73	0	30	40-140	
N-Nitrosodiphenylamine	333	210	63	1	30	40-140	
Pentachlorophenol	333	239	72	2	30	30-130	
Phenanthrene	333	303	91	1	30	40-140	
Phenol	333	240	72	0	30	30-130	
Pyrene	333	310	93	0	30	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Westfield | Job No.: 360-24343-1

SDG No.: OCRI-08

Client Sample ID: | Lab Sample ID: MB 360-48742/1-A

Matrix: Solid | Lab File ID: B10411.D

Analysis Method: 8270C LL | Date Collected:

Extract. Method: 3546 | Date Extracted: 09/09/2009 09:58

Sample wt/vol: 30.00(g) | Date Analyzed: 09/18/2009 21:51

Con. Extract Vol.: 1.0(mL) | Dilution Factor: 1

Injection Volume: 1.0(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup: (Y/N) N

Analysis Batch No.: 49189 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
98-86-2	Acetophenone	ND		33	10
62-53-3	Aniline	ND		33	10
120-12-7	Anthracene	ND		33	10
1912-24-9	Atrazine	ND		33	10
103-33-3	Azobenzene	ND		33	10
100-52-7	Benzaldehyde	ND		33	10
56-55-3	Benzo[a]anthracene	ND		33	10
50-32-8	Benzo[a]pyrene	ND		33	10
205-99-2	Benzo[b]fluoranthene	ND		33	10
191-24-2	Benzo[g,h,i]perylene	ND		33	10
207-08-9	Benzo[k]fluoranthene	ND		33	10
65-85-0	Benzoic acid	54.0	J	170	15
119-61-9	Benzophenone	ND		33	10
100-51-6	Benzyl alcohol	ND		67	28
111-91-1	Bis(2-chloroethoxy)methane	ND		33	10
111-44-4	Bis(2-chloroethyl)ether	ND		33	10
117-81-7	Bis(2-ethylhexyl) phthalate	ND		33	10
85-68-7	Butyl benzyl phthalate	ND		33	10
105-60-2	Caprolactam	ND		33	10
86-74-8	Carbazole	ND		33	10
218-01-9	Chrysene	ND		33	10
53-70-3	Dibenz(a,h)anthracene	ND		33	10
132-64-9	Dibenzofuran	ND		33	10
84-66-2	Diethyl phthalate	ND		33	10
131-11-3	Dimethyl phthalate	ND		33	10
84-74-2	Di-n-butyl phthalate	86.9		33	29
117-84-0	Di-n-octyl phthalate	ND		33	17
101-84-8	Diphenyl oxide	ND		33	10
122-39-4	Diphenylamine	ND		33	10
206-44-0	Fluoranthene	ND		33	10
86-73-7	Fluorene	ND		33	10
118-74-1	Hexachlorobenzene	ND		33	10
87-68-3	Hexachlorobutadiene	ND		33	10
77-47-4	Hexachlorocyclopentadiene	ND		67	10

FORM III
GC/MS SEMI VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24343-1

SDG No.: OCRI-08

Matrix: Solid Level: Low Lab File ID: B10427.D

Lab ID: 360-24343-17 MS Client ID: OC-SB-455-6.0/8.0-XXX MS

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	QC LIMITS REC	#
1,1'-Biphenyl	438	ND	344	79	40-140	
1,2,4,5-Tetrachlorobenzene	438	ND	271	62	40-140	
1,2,4-Trichlorobenzene	438	ND	276	63	40-140	
1,2-Dichlorobenzene	438	ND	252	58	40-140	
1,3-Dichlorobenzene	438	ND	245	56	40-140	
1,4-Dichlorobenzene	438	ND	246	56	40-140	
1-Methylnaphthalene	438	ND	288	66	40-140	
2,2'-oxybis[1-chloropropane]	438	ND	265	60	40-140	
2,3,4,6-Tetrachlorophenol	438	ND	322	73	40-140	
2,4,5-Trichlorophenol	438	ND	410	94	30-130	
2,4,6-Trichlorophenol	438	ND	388	88	30-130	
2,4-Dichlorophenol	438	ND	343	78	30-130	
2,4-Dimethylphenol	438	ND	377	86	30-130	
2,4-Dinitrophenol	438	ND	150	34	30-130	
2,4-Dinitrotoluene	438	ND	309	71	40-140	
2,6-Dinitrotoluene	438	ND	337	77	40-140	
2-Chloronaphthalene	438	ND	275	63	40-140	
2-Chlorophenol	438	ND	278	63	30-130	
2-Methylnaphthalene	438	ND	286	65	40-140	
2-Methylphenol	438	ND	305	70	30-130	
2-Nitroaniline	438	ND	232	53	40-140	
2-Nitrophenol	438	ND	323	74	30-130	
3 & 4 Methylphenol	438	ND	302	69	30-130	
3,3'-Dichlorobenzidine	438	ND	19.8 J	5	40-140	F
3-Nitroaniline	438	ND	227	52	40-140	
4,6-Dinitro-2-methylphenol	438	ND	207 J	47	30-130	
4-Bromophenyl phenyl ether	438	ND	337	77	40-140	
4-Chloro-3-methylphenol	438	ND	365	83	30-130	
4-Chloroaniline	438	ND	87.1 J	20	40-140	F
4-Chlorophenyl phenyl ether	438	ND	339	77	40-140	
4-Nitroaniline	438	ND	348	79	40-140	
4-Nitrophenol	438	ND	360	82	30-130	
Acenaphthene	438	ND	382	87	40-140	
Acenaphthylene	438	ND	347	79	40-140	
Acetophenone	438	ND	280	64	40-140	
Aniline	438	ND	39.2 J	9	40-140	F
Anthracene	438	ND	398	91	40-140	
Atrazine	438	ND	366	84	40-140	
Azobenzene	438	ND	365	83	40-140	
Benzaldehyde	438	ND	398	91	40-140	
Benzo[a]anthracene	438	ND	392	89	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24343-1

SDG No.: OCRI-08

Matrix: Solid Level: Low Lab File ID: B10427.D

Lab ID: 360-24343-17 MS Client ID: OC-SB-455-6.0/8.0-XXX MS

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	QC LIMITS REC	#
Benzo[a]pyrene	438	ND	352	80	40-140	
Benzo[b]fluoranthene	438	ND	345	79	40-140	
Benzo[g,h,i]perylene	438	ND	439	100	40-140	
Benzo[k]fluoranthene	438	ND	348	79	40-140	
Benzoic acid	438	ND	176 J	40	30-130	
Benzophenone	438	ND	384	88	40-140	
Benzyl alcohol	438	ND	320	73	30-130	
Bis(2-chloroethoxy)methane	438	ND	272	62	40-140	
Bis(2-chloroethyl)ether	438	ND	278	63	40-140	
Bis(2-ethylhexyl) phthalate	438	ND	461	105	40-140	
Butyl benzyl phthalate	438	ND	442	101	40-140	
Caprolactam	438	ND	270	62	40-140	
Carbazole	438	ND	351	80	40-140	
Chrysene	438	ND	382	87	40-140	
Dibenz(a,h)anthracene	438	ND	487	111	40-140	
Dibenzofuran	438	ND	334	76	40-140	
Diethyl phthalate	438	ND	356	81	40-140	
Dimethyl phthalate	438	ND	346	79	40-140	
Di-n-butyl phthalate	438	ND	344	78	40-140	
Di-n-octyl phthalate	438	ND	359	82	40-140	
Diphenyl oxide	438	ND	284	65	40-140	
Fluoranthene	438	ND	302	69	40-140	
Fluorene	438	ND	393	90	40-140	
Hexachlorobenzene	438	ND	346	79	40-140	
Hexachlorobutadiene	438	ND	251	57	40-140	
Hexachlorocyclopentadiene	438	ND	128	29	40-140	F
Hexachloroethane	438	ND	218	50	40-140	
Indeno[1,2,3-cd]pyrene	438	ND	426	97	40-140	
Isophorone	438	ND	245	56	40-140	
Naphthalene	438	ND	291	66	40-140	
Nitrobenzene	438	ND	268	61	40-140	
N-Nitrosodimethylamine	438	ND	259	59	40-140	
N-Nitrosodi-n-propylamine	438	ND	313	71	40-140	
N-Nitrosodiphenylamine	438	ND	264	60	40-140	
Pentachlorophenol	438	ND	390	89	30-130	
Phenanthrene	438	ND	365	83	40-140	
Phenol	438	ND	294	67	30-130	
Pyrene	438	ND	450	103	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24343-1

SDG No.: OCRI-08

Matrix: Solid Level: Low Lab File ID: B10428.D

Lab ID: 360-24343-17 MSD Client ID: OC-SB-455-6.0/8.0-XXX MSD

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1'-Biphenyl	436	28.4 J	7	170	30	40-140	F
1,2,4,5-Tetrachlorobenzene	436	31.5 J	7	158	30	40-140	F
1,2,4-Trichlorobenzene	436	26.9 J	6	165	30	40-140	F
1,2-Dichlorobenzene	436	26.0 J	6	163	30	40-140	F
1,3-Dichlorobenzene	436	25.0 J	6	163	30	40-140	F
1,4-Dichlorobenzene	436	25.2 J	6	163	30	40-140	F
1-Methylnaphthalene	436	32.1 J	7	160	30	40-140	F
2,2'-oxybis[1-chloropropane]	436	26.8 J	6	163	30	40-140	F
2,3,4,6-Tetrachlorophenol	436	30.0 J	7	166	30	40-140	F
2,4,5-Trichlorophenol	436	35.8 J	8	168	30	30-130	F
2,4,6-Trichlorophenol	436	31.4 J	7	170	30	30-130	F
2,4-Dichlorophenol	436	37.8 J	9	160	30	30-130	F
2,4-Dimethylphenol	436	39.3 J	9	162	30	30-130	F
2,4-Dinitrophenol	436	49.5	11	101	30	30-130	F
2,4-Dinitrotoluene	436	27.8 J	6	167	30	40-140	F
2,6-Dinitrotoluene	436	26.9 J	6	170	30	40-140	F
2-Chloronaphthalene	436	22.6 J	5	170	30	40-140	F
2-Chlorophenol	436	27.9 J	6	164	30	30-130	F
2-Methylnaphthalene	436	33.3 J	8	158	30	40-140	F
2-Methylphenol	436	29.5 J	7	165	30	30-130	F
2-Nitroaniline	436	29.5 J	7	155	30	40-140	F
2-Nitrophenol	436	27.1 J	6	169	30	30-130	F
3 & 4 Methylphenol	436	28.5 J	7	165	30	30-130	F
3,3'-Dichlorobenzidine	436	ND	0	NC	30	40-140	F
3-Nitroaniline	436	29.5 J	7	154	30	40-140	F
4,6-Dinitro-2-methylphenol	436	22.3 J	5	161	30	30-130	F
4-Bromophenyl phenyl ether	436	27.9 J	6	169	30	40-140	F
4-Chloro-3-methylphenol	436	46.0 J	11	155	30	30-130	F
4-Chloroaniline	436	19.0 J	4	129	30	40-140	F
4-Chlorophenyl phenyl ether	436	28.6 J	7	169	30	40-140	F
4-Nitroaniline	436	33.4 J	8	165	30	40-140	F
4-Nitrophenol	436	17.1 J	4	182	30	30-130	F
Acenaphthene	436	32.6 J	7	169	30	40-140	F
Acenaphthylene	436	30.5 J	7	168	30	40-140	F
Acetophenone	436	29.8 J	7	161	30	40-140	F
Aniline	436	ND	0	NC	30	40-140	F
Anthracene	436	37.2 J	9	166	30	40-140	F
Atrazine	436	37.4 J	9	163	30	40-140	F
Azobenzene	436	30.8 J	7	169	30	40-140	F
Benzaldehyde	436	42.2 J	10	162	30	40-140	F
Benzo[a]anthracene	436	38.9 J	9	164	30	40-140	F

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24343-1

SDG No.: OCRI-08

Matrix: Solid Level: Low Lab File ID: B10428.D

Lab ID: 360-24343-17 MSD Client ID: OC-SB-455-6.0/8.0-XXX MSD

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Benzo[a]pyrene	436	38.0 J	9	161	30	40-140	F
Benzo[b]fluoranthene	436	34.2 J	8	164	30	40-140	F
Benzo[g,h,i]perylene	436	34.7 J	8	171	30	40-140	F
Benzo[k]fluoranthene	436	39.3 J	9	159	30	40-140	F
Benzoic acid	436	42.8 J	10	122	30	30-130	F
Benzophenone	436	31.0 J	7	170	30	40-140	F
Benzyl alcohol	436	ND	0	NC	30	30-130	F
Bis(2-chloroethoxy)methane	436	29.1 J	7	161	30	40-140	F
Bis(2-chloroethyl)ether	436	26.9 J	6	165	30	40-140	F
Bis(2-ethylhexyl) phthalate	436	43.8	10	165	30	40-140	F
Butyl benzyl phthalate	436	42.2 J	10	165	30	40-140	F
Caprolactam	436	35.8 J	8	153	30	40-140	F
Carbazole	436	35.9 J	8	163	30	40-140	F
Chrysene	436	36.9 J	8	165	30	40-140	F
Dibenz(a,h)anthracene	436	41.4 J	9	169	30	40-140	F
Dibenzofuran	436	29.3 J	7	168	30	40-140	F
Diethyl phthalate	436	32.9 J	8	166	30	40-140	F
Dimethyl phthalate	436	31.1 J	7	167	30	40-140	F
Di-n-butyl phthalate	436	ND	0	NC	30	40-140	F
Di-n-octyl phthalate	436	ND	0	NC	30	40-140	F
Diphenyl oxide	436	32.8 J	8	159	30	40-140	F
Fluoranthene	436	32.8 J	8	161	30	40-140	F
Fluorene	436	34.2 J	8	168	30	40-140	F
Hexachlorobenzene	436	28.4 J	7	170	30	40-140	F
Hexachlorobutadiene	436	26.9 J	6	161	30	40-140	F
Hexachlorocyclopentadiene	436	ND	0	NC	30	40-140	F
Hexachloroethane	436	19.5 J	4	167	30	40-140	F
Indeno[1,2,3-cd]pyrene	436	42.2 J	10	164	30	40-140	F
Isophorone	436	27.2 J	6	160	30	40-140	F
Naphthalene	436	27.0 J	6	166	30	40-140	F
Nitrobenzene	436	27.5 J	6	163	30	40-140	F
N-Nitrosodimethylamine	436	28.2 J	6	161	30	40-140	F
N-Nitrosodi-n-propylamine	436	29.4 J	7	166	30	40-140	F
N-Nitrosodiphenylamine	436	23.3 J	5	168	30	40-140	F
Pentachlorophenol	436	50.5	12	154	30	30-130	F
Phenanthrene	436	35.3 J	8	165	30	40-140	F
Phenol	436	27.0 J	6	166	30	30-130	F
Pyrene	436	41.5 J	10	166	30	40-140	F

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24343-1

SDG No.: OCRI-08

Matrix: Solid Level: Low Lab File ID: B10420.D

Lab ID: 360-24343-10 MSD Client ID: OC-SB-451-2.5/4.5-XXX MSD

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Benzo[a]pyrene	349	81.2	23	69	30	40-140	F
Benzo[b]fluoranthene	349	78.6	23	70	30	40-140	F
Benzo[g,h,i]perylene	349	95.0	27	60	30	40-140	F
Benzo[k]fluoranthene	349	78.7	23	73	30	40-140	F
Benzoic acid	349	320	80	0	30	30-130	
Benzophenone	349	290	83	11	30	40-140	
Benzyl alcohol	349	255	73	7	30	30-130	
Bis(2-chloroethoxy)methane	349	204	59	6	30	40-140	
Bis(2-chloroethyl)ether	349	201	58	13	30	40-140	
Bis(2-ethylhexyl) phthalate	349	502	102	8	30	40-140	
Butyl benzyl phthalate	349	346	99	9	30	40-140	
Caprolactam	349	241	69	7	30	40-140	
Carbazole	349	270	77	11	30	40-140	
Chrysene	349	302	83	9	30	40-140	
Dibenz(a,h)anthracene	349	107	31	59	30	40-140	F
Dibenzofuran	349	254	73	9	30	40-140	
Diethyl phthalate	349	268	77	10	30	40-140	
Dimethyl phthalate	349	263	75	10	30	40-140	
Di-n-butyl phthalate	349	258	74	9	30	40-140	
Di-n-octyl phthalate	349	103	29	62	30	40-140	F
Diphenyl oxide	349	218	62	8	30	40-140	
Fluoranthene	349	240	64	5	30	40-140	
Fluorene	349	304	87	8	30	40-140	
Hexachlorobenzene	349	271	78	12	30	40-140	
Hexachlorobutadiene	349	190	54	6	30	40-140	
Hexachlorocyclopentadiene	349	148	42	8	30	40-140	
Hexachloroethane	349	174	50	5	30	40-140	
Indeno[1,2,3-cd]pyrene	349	91.9	23	61	30	40-140	F
Isophorone	349	186	53	5	30	40-140	
Naphthalene	349	218	62	9	30	40-140	
Nitrobenzene	349	201	58	7	30	40-140	
N-Nitrosodimethylamine	349	208	59	6	30	40-140	
N-Nitrosodi-n-propylamine	349	236	67	10	30	40-140	
N-Nitrosodiphenylamine	349	204	58	13	30	40-140	
Pentachlorophenol	349	284	81	9	30	30-130	
Phenanthrene	349	290	83	10	30	40-140	
Phenol	349	224	64	5	30	30-130	
Pyrene	349	376	100	7	30	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24343-1

SDG No.: OCRI-08

Matrix: Solid Level: Low Lab File ID: B10419.D

Lab ID: 360-24343-10 MS Client ID: OC-SB-451-2.5/4.5-XXX MS

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	QC LIMITS REC	#
1,1'-Biphenyl	345	ND	237	69	40-140	
1,2,4,5-Tetrachlorobenzene	345	ND	197	57	40-140	
1,2,4-Trichlorobenzene	345	ND	193	56	40-140	
1,2-Dichlorobenzene	345	ND	171	50	40-140	
1,3-Dichlorobenzene	345	ND	167	48	40-140	
1,4-Dichlorobenzene	345	ND	164	48	40-140	
1-Methylnaphthalene	345	ND	202	58	40-140	
2,2'-oxybis[1-chloropropane]	345	ND	184	53	40-140	
2,3,4,6-Tetrachlorophenol	345	ND	225	65	40-140	
2,4,5-Trichlorophenol	345	ND	270	78	30-130	
2,4,6-Trichlorophenol	345	ND	269	78	30-130	
2,4-Dichlorophenol	345	ND	241	70	30-130	
2,4-Dimethylphenol	345	ND	265	77	30-130	
2,4-Dinitrophenol	345	ND	146	42	30-130	
2,4-Dinitrotoluene	345	ND	219	63	40-140	
2,6-Dinitrotoluene	345	ND	239	69	40-140	
2-Chloronaphthalene	345	ND	191	55	40-140	
2-Chlorophenol	345	ND	198	57	30-130	
2-Methylnaphthalene	345	ND	202	58	40-140	
2-Methylphenol	345	ND	221	64	30-130	
2-Nitroaniline	345	ND	185	54	40-140	
2-Nitrophenol	345	ND	219	63	30-130	
3 & 4 Methylphenol	345	ND	222	64	30-130	
3,3'-Dichlorobenzidine	345	ND	19.8 J	6	40-140	F
3-Nitroaniline	345	ND	198	57	40-140	
4,6-Dinitro-2-methylphenol	345	ND	166 J	48	30-130	
4-Bromophenyl phenyl ether	345	ND	233	67	40-140	
4-Chloro-3-methylphenol	345	ND	258	75	30-130	
4-Chloroaniline	345	ND	88.9	26	40-140	F
4-Chlorophenyl phenyl ether	345	ND	242	70	40-140	
4-Nitroaniline	345	ND	241	70	40-140	
4-Nitrophenol	345	ND	261	76	30-130	
Acenaphthene	345	ND	272	79	40-140	
Acenaphthylene	345	ND	243	70	40-140	
Acetophenone	345	ND	192	56	40-140	
Aniline	345	ND	57.1	17	40-140	F
Anthracene	345	ND	276	80	40-140	
Atrazine	345	ND	263	76	40-140	
Azobenzene	345	ND	251	73	40-140	
Benzaldehyde	345	ND	274	79	40-140	
Benzo[a]anthracene	345	ND	287	83	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24343-1

SDG No.: OCRI-08

Matrix: Solid Level: Low Lab File ID: B10419.D

Lab ID: 360-24343-10 MS Client ID: OC-SB-451-2.5/4.5-XXX MS

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	QC LIMITS REC	#
Benzo[a]pyrene	345	ND	167	48	40-140	
Benzo[b]fluoranthene	345	ND	163	47	40-140	
Benzo[g,h,i]perylene	345	ND	177	51	40-140	
Benzo[k]fluoranthene	345	ND	169	49	40-140	
Benzoic acid	345	41 J	321	81	30-130	
Benzophenone	345	ND	259	75	40-140	
Benzyl alcohol	345	ND	239	69	30-130	
Bis(2-chloroethoxy)methane	345	ND	192	56	40-140	
Bis(2-chloroethyl)ether	345	ND	177	51	40-140	
Bis(2-ethylhexyl) phthalate	345	150	462	91	40-140	
Butyl benzyl phthalate	345	ND	318	92	40-140	
Caprolactam	345	ND	258	75	40-140	
Carbazole	345	ND	243	70	40-140	
Chrysene	345	12 J	275	76	40-140	
Dibenz(a,h)anthracene	345	ND	197	57	40-140	
Dibenzofuran	345	ND	233	67	40-140	
Diethyl phthalate	345	ND	242	70	40-140	
Dimethyl phthalate	345	ND	238	69	40-140	
Di-n-butyl phthalate	345	ND	236	68	40-140	
Di-n-octyl phthalate	345	ND	195	56	40-140	
Diphenyl oxide	345	ND	202	58	40-140	
Fluoranthene	345	15 J	228	62	40-140	
Fluorene	345	ND	281	81	40-140	
Hexachlorobenzene	345	ND	240	70	40-140	
Hexachlorobutadiene	345	ND	178	52	40-140	
Hexachlorocyclopentadiene	345	ND	136	39	40-140	F
Hexachloroethane	345	ND	165	48	40-140	
Indeno[1,2,3-cd]pyrene	345	12 J	173	46	40-140	
Isophorone	345	ND	176	51	40-140	
Naphthalene	345	ND	200	58	40-140	
Nitrobenzene	345	ND	187	54	40-140	
N-Nitrosodimethylamine	345	ND	196	57	40-140	
N-Nitrosodi-n-propylamine	345	ND	214	62	40-140	
N-Nitrosodiphenylamine	345	ND	180	52	40-140	
Pentachlorophenol	345	ND	260	75	30-130	
Phenanthrene	345	ND	261	76	40-140	
Phenol	345	ND	212	62	30-130	
Pyrene	345	27 J	350	94	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24343-1

SDG No.: OCRI-08

Matrix: Solid Level: Low Lab File ID: B10420.D

Lab ID: 360-24343-10 MSD Client ID: OC-SB-451-2.5/4.5-XXX MSD

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1'-Biphenyl	349	258	74	9	30	40-140	
1,2,4,5-Tetrachlorobenzene	349	212	61	8	30	40-140	
1,2,4-Trichlorobenzene	349	208	60	8	30	40-140	
1,2-Dichlorobenzene	349	184	53	7	30	40-140	
1,3-Dichlorobenzene	349	179	51	7	30	40-140	
1,4-Dichlorobenzene	349	178	51	8	30	40-140	
1-Methylnaphthalene	349	216	62	7	30	40-140	
2,2'-oxybis[1-chloropropane]	349	197	56	7	30	40-140	
2,3,4,6-Tetrachlorophenol	349	244	70	8	30	40-140	
2,4,5-Trichlorophenol	349	302	86	11	30	30-130	
2,4,6-Trichlorophenol	349	305	87	12	30	30-130	
2,4-Dichlorophenol	349	261	75	8	30	30-130	
2,4-Dimethylphenol	349	284	81	7	30	30-130	
2,4-Dinitrophenol	349	181	52	21	30	30-130	
2,4-Dinitrotoluene	349	239	68	9	30	40-140	
2,6-Dinitrotoluene	349	264	76	10	30	40-140	
2-Chloronaphthalene	349	209	60	9	30	40-140	
2-Chlorophenol	349	213	61	7	30	30-130	
2-Methylnaphthalene	349	218	62	8	30	40-140	
2-Methylphenol	349	231	66	4	30	30-130	
2-Nitroaniline	349	206	59	11	30	40-140	
2-Nitrophenol	349	244	70	11	30	30-130	
3 & 4 Methylphenol	349	234	67	5	30	30-130	
3,3'-Dichlorobenzidine	349	28.6 J	8	36	30	40-140	F
3-Nitroaniline	349	219	63	10	30	40-140	
4,6-Dinitro-2-methylphenol	349	200	57	19	30	30-130	
4-Bromophenyl phenyl ether	349	267	76	13	30	40-140	
4-Chloro-3-methylphenol	349	279	80	8	30	30-130	
4-Chloroaniline	349	108	31	20	30	40-140	F
4-Chlorophenyl phenyl ether	349	262	75	8	30	40-140	
4-Nitroaniline	349	267	76	10	30	40-140	
4-Nitrophenol	349	282	81	8	30	30-130	
Acenaphthene	349	293	84	8	30	40-140	
Acenaphthylene	349	264	76	8	30	40-140	
Acetophenone	349	210	60	9	30	40-140	
Aniline	349	57.6	16	1	30	40-140	F
Anthracene	349	309	89	11	30	40-140	
Atrazine	349	288	83	9	30	40-140	
Azobenzene	349	282	81	12	30	40-140	
Benzaldehyde	349	286	82	4	30	40-140	
Benzo[a]anthracene	349	321	92	11	30	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM IV
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Westfield Job No.: 360-24343-2

SDG No.: OCRI-08A

Lab File ID: B10411.D Lab Sample ID: MB 360-48742/1-A

Matrix: Solid Date Extracted: 09/09/2009 09:58

Instrument ID: Inst. B Date Analyzed: 09/18/2009 21:51

Level:(Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 360-48742/2-A	B10412.D	09/18/2009 22:22
	LCSD 360-48742/3-A	B10413.D	09/18/2009 22:54
OC-SB-451-18/20-XXX	360-24343-8	B10416.D	09/19/2009 00:27
OC-SB-454-18/20-XXX	360-24343-12	B10422.D	09/19/2009 03:34
OC-SB-455-28/30-XXX	360-24343-15	B10424.D	09/19/2009 04:36

Sim ok
tune ok
Is ok

LCS

3,3'-dichlorobenzidine 32/33

aniline 27/29

benzoic acid 25

MB

Benzoic acid 54 270

Di-n-butyl phthalate 86.9 869

TIC

Benzaldehyde, 3-hydroxy-4-methoxy

Dodecanoic acid, methyl ester

Benzothiole, 2-(methylthio)-

Octadecane
7,9-di-tert butyl-1-oxaspiro (4,5) decan-6

eicosane

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24343-2

SDG No.: OCRI-08A

Matrix: Solid Level: Low Lab File ID: B10412.D

Lab ID: LCS 360-48742/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
1,1'-Biphenyl	333	275	82	40-140	
1,2,4,5-Tetrachlorobenzene	333	220	66	40-140	
1,2,4-Trichlorobenzene	333	228	68	40-140	
1,2-Dichlorobenzene	333	208	62	40-140	
1,3-Dichlorobenzene	333	200	60	40-140	
1,4-Dichlorobenzene	333	201	60	40-140	
1-Methylnaphthalene	333	222	67	40-140	
2,2'-oxybis[1-chloropropane]	333	212	64	40-140	
2,3,4,6-Tetrachlorophenol	333	249	75	40-140	
2,4,5-Trichlorophenol	333	317	95	30-130	
2,4,6-Trichlorophenol	333	317	95	30-130	
2,4-Dichlorophenol	333	267	80	30-130	
2,4-Dimethylphenol	333	286	86	30-130	
2,4-Dinitrophenol	333	151	45	30-130	
2,4-Dinitrotoluene	333	270	81	40-140	
2,6-Dinitrotoluene	333	288	86	40-140	
2-Chloronaphthalene	333	222	66	40-140	
2-Chlorophenol	333	224	67	30-130	
2-Methylnaphthalene	333	225	68	40-140	
2-Methylphenol	333	234	70	30-130	
2-Nitroaniline	333	298	90	40-140	
2-Nitrophenol	333	267	80	30-130	
3 & 4 Methylphenol	333	245	73	30-130	
3,3'-Dichlorobenzidine	333	106	32	40-140	*
3-Nitroaniline	333	296	89	40-140	
4,6-Dinitro-2-methylphenol	333	239	72	30-130	
4-Bromophenyl phenyl ether	333	291	87	40-140	
4-Chloro-3-methylphenol	333	285	86	30-130	
4-Chloroaniline	333	234	70	40-140	
4-Chlorophenyl phenyl ether	333	286	86	40-140	
4-Nitroaniline	333	288	86	40-140	
4-Nitrophenol	333	314	94	30-130	
Acenaphthene	333	318	95	40-140	
Acenaphthylene	333	281	84	40-140	
Acetophenone	333	222	67	40-140	
Aniline	333	89.0	27	40-140	*
Anthracene	333	330	99	40-140	
Atrazine	333	347	104	40-140	
Azobenzene	333	285	86	40-140	
Benzaldehyde	333	326	98	40-140	
Benzo[a]anthracene	333	341	102	40-140	

Calculations are performed before rounding

benzoic acid 25%

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24343-2

SDG No.: OCRI-08A

Matrix: Solid Level: Low Lab File ID: B10413.D

Lab ID: LCSD 360-48742/3-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCSD CONCENTRATION (ug/Kg)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1'-Biphenyl	333	275	83	0	30	40-140	
1,2,4,5-Tetrachlorobenzene	333	225	68	2	30	40-140	
1,2,4-Trichlorobenzene	333	231	69	1	30	40-140	
1,2-Dichlorobenzene	333	207	62	1	30	40-140	
1,3-Dichlorobenzene	333	202	61	1	30	40-140	
1,4-Dichlorobenzene	333	200	60	0	30	40-140	
1-Methylnaphthalene	333	225	67	1	30	40-140	
2,2'-oxybis[1-chloropropane]	333	214	64	1	30	40-140	
2,3,4,6-Tetrachlorophenol	333	241	72	3	30	40-140	
2,4,5-Trichlorophenol	333	318	96	0	30	30-130	
2,4,6-Trichlorophenol	333	309	93	2	30	30-130	
2,4-Dichlorophenol	333	275	83	3	30	30-130	
2,4-Dimethylphenol	333	287	86	1	30	30-130	
2,4-Dinitrophenol	333	137	41	9	30	30-130	
2,4-Dinitrotoluene	333	265	79	2	30	40-140	
2,6-Dinitrotoluene	333	286	86	1	30	40-140	
2-Chloronaphthalene	333	221	66	0	30	40-140	
2-Chlorophenol	333	227	68	1	30	30-130	
2-Methylnaphthalene	333	228	68	1	30	40-140	
2-Methylphenol	333	243	73	4	30	30-130	
2-Nitroaniline	333	290	87	3	30	40-140	
2-Nitrophenol	333	270	81	1	30	30-130	
3 & 4 Methylphenol	333	244	73	0	30	30-130	
3,3'-Dichlorobenzidine	333	109	33	3	30	40-140	*
3-Nitroaniline	333	295	89	0	30	40-140	
4,6-Dinitro-2-methylphenol	333	221	66	8	30	30-130	
4-Bromophenyl phenyl ether	333	294	88	1	30	40-140	
4-Chloro-3-methylphenol	333	289	87	1	30	30-130	
4-Chloroaniline	333	243	73	4	30	40-140	
4-Chlorophenyl phenyl ether	333	287	86	0	30	40-140	
4-Nitroaniline	333	287	86	0	30	40-140	
4-Nitrophenol	333	314	94	0	30	30-130	
Acenaphthene	333	317	95	0	30	40-140	
Acenaphthylene	333	282	84	0	30	40-140	
Acetophenone	333	223	67	0	30	40-140	
Aniline	333	94.1	28	6	30	40-140	*
Anthracene	333	337	101	2	30	40-140	
Atrazine	333	346	104	0	30	40-140	
Azobenzene	333	287	86	0	30	40-140	
Benzaldehyde	333	321	96	2	30	40-140	
Benzo[a]anthracene	333	343	103	1	30	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24343-2

SDG No.: OCRI-08A

Matrix: Solid Level: Low Lab File ID: B10413.D

Lab ID: LCSD 360-48742/3-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCSD CONCENTRATION (ug/Kg)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Benzo[a]pyrene	333	329	99	1	30	40-140	
Benzo[b]fluoranthene	333	314	94	1	30	40-140	
Benzo[g,h,i]perylene	333	357	107	6	30	40-140	
Benzo[k]fluoranthene	333	345	103	2	30	40-140	
Benzoic acid	333	82.8 J	25	20	30	30-130	*
Benzophenone	333	299	90	0	30	40-140	
Benzyl alcohol	333	269	81	2	30	30-130	
Bis(2-chloroethoxy)methane	333	220	66	2	30	40-140	
Bis(2-chloroethyl)ether	333	204	61	1	30	40-140	
Bis(2-ethylhexyl) phthalate	333	319	96	1	30	40-140	
Butyl benzyl phthalate	333	312	94	1	30	40-140	
Caprolactam	333	305	91	2	30	40-140	
Carbazole	333	309	93	1	30	40-140	
Chrysene	333	330	99	1	30	40-140	
Dibenz(a,h)anthracene	333	351	105	6	30	40-140	
Dibenzofuran	333	276	83	0	30	40-140	
Diethyl phthalate	333	289	87	0	30	40-140	
Dimethyl phthalate	333	278	83	0	30	40-140	
Di-n-butyl phthalate	333	362	108	3	30	40-140	
Di-n-octyl phthalate	333	268	80	1	30	40-140	
Diphenyl oxide	333	228	68	0	30	40-140	
Fluoranthene	333	305	91	0	30	40-140	
Fluorene	333	332	100	0	30	40-140	
Hexachlorobenzene	333	297	89	1	30	40-140	
Hexachlorobutadiene	333	208	62	0	30	40-140	
Hexachlorocyclopentadiene	333	262	78	0	30	40-140	
Hexachloroethane	333	212	64	1	30	40-140	
Indeno[1,2,3-cd]pyrene	333	328	99	6	30	40-140	
Isophorone	333	204	61	2	30	40-140	
Naphthalene	333	242	73	3	30	40-140	
Nitrobenzene	333	220	66	2	30	40-140	
N-Nitrosodimethylamine	333	235	70	0	30	40-140	
N-Nitrosodi-n-propylamine	333	244	73	0	30	40-140	
N-Nitrosodiphenylamine	333	210	63	1	30	40-140	
Pentachlorophenol	333	239	72	2	30	30-130	
Phenanthrene	333	303	91	1	30	40-140	
Phenol	333	240	72	0	30	30-130	
Pyrene	333	310	93	0	30	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Westfield | Job No.: 360-24343-2

SDG No.: OCRI-08A

Client Sample ID: | Lab Sample ID: MB 360-48742/1-A

Matrix: Solid | Lab File ID: B10411.D

Analysis Method: 8270C LL | Date Collected:

Extract. Method: 3546 | Date Extracted: 09/09/2009 09:58

Sample wt/vol: 30.00(g) | Date Analyzed: 09/18/2009 21:51

Con. Extract Vol.: 1.0(mL) | Dilution Factor: 1

Injection Volume: | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 49189 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
98-86-2	Acetophenone	ND		33	3.6
62-53-3	Aniline	ND		33	17
120-12-7	Anthracene	ND		33	11
1912-24-9	Atrazine	ND		33	10
103-33-3	Azobenzene	ND		33	4.1
100-52-7	Benzaldehyde	ND		33	10
56-55-3	Benzo[a]anthracene	ND		33	6.4
50-32-8	Benzo[a]pyrene	ND		33	6.1
205-99-2	Benzo[b]fluoranthene	ND		33	7.6
191-24-2	Benzo[g,h,i]perylene	ND		33	6.5
207-08-9	Benzo[k]fluoranthene	ND		33	9.2
65-85-0	Benzoic acid	54.0	J	170	14
119-61-9	Benzophenone	ND		33	2.0
100-51-6	Benzyl alcohol	ND		67	7.7
111-91-1	Bis(2-chloroethoxy)methane	ND		33	6.0
111-44-4	Bis(2-chloroethyl)ether	ND		33	8.1
117-81-7	Bis(2-ethylhexyl) phthalate	ND		33	11
85-68-7	Butyl benzyl phthalate	ND		33	7.3
105-60-2	Caprolactam	ND		33	10
86-74-8	Carbazole	ND		33	33
218-01-9	Chrysene	ND		33	7.2
53-70-3	Dibenz(a,h)anthracene	ND		33	6.7
132-64-9	Dibenzofuran	ND		33	19
84-66-2	Diethyl phthalate	ND		33	4.7
131-11-3	Dimethyl phthalate	ND		33	4.9
84-74-2	Di-n-butyl phthalate	86.9		33	10
117-84-0	Di-n-octyl phthalate	ND		33	9.4
101-84-8	Diphenyl oxide	ND		33	10
206-44-0	Fluoranthene	ND		33	21
86-73-7	Fluorene	ND		33	13
118-74-1	Hexachlorobenzene	ND		33	7.9
87-68-3	Hexachlorobutadiene	ND		33	6.6
77-47-4	Hexachlorocyclopentadiene	ND		67	9.1
67-72-1	Hexachloroethane	ND		33	6.4

FORM IV
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Westfield Job No.: 360-24343-2

SDG No.: OCRI-08A

Lab File ID: J03008.D Lab Sample ID: MB 360-48703/1-A

Matrix: Solid Date Extracted: 09/08/2009 14:52

Instrument ID: Inst. J Date Analyzed: 09/18/2009 14:53

Level:(Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 360-48703/2-A	J03009.D	09/18/2009 15:20
	LCSD 360-48703/3-A	J03010.D	09/18/2009 15:47
OC-SB-444-12/14-XXX	360-24343-2	J03026.D	09/18/2009 23:02
OC-SB-449-11/13-XXX	360-24343-5	J03029.D	09/19/2009 00:23

LCS

3,3'-DCB 32/33

Chrysene 24/27

Semi OK

Tune OK

IS OK

MB

Benzoic acid 77.0 30-5

Di-n-butyl phthalate 97.6 97

TIC 2-phenoxy ethanol

Unk 10.63

Octadecane

Unk 13.45

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24343-2

SDG No.: OCRI-08A

Matrix: Solid Level: Low Lab File ID: J03009.D

Lab ID: LCS 360-48703/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#	
1,1'-Biphenyl	333	218	65	40-140		
1,2,4,5-Tetrachlorobenzene	333	204	61	40-140		
1,2,4-Trichlorobenzene	333	185	55	40-140		
1,2-Dichlorobenzene	333	166	50	40-140		
1,3-Dichlorobenzene	333	162	49	40-140		
1,4-Dichlorobenzene	333	162	49	40-140		
1-Methylnaphthalene	333	209	63	40-140		
2,2'-oxybis[1-chloropropane]	333	179	54	40-140		
2,3,4,6-Tetrachlorophenol	333	214	64	40-140		
2,4,5-Trichlorophenol	333	249	75	30-130		
2,4,6-Trichlorophenol	333	252	76	30-130		
2,4-Dichlorophenol	333	232	70	30-130		
2,4-Dimethylphenol	333	283	85	30-130		
2,4-Dinitrophenol	333	170	51	30-130		
2,4-Dinitrotoluene	333	222	67	40-140		
2,6-Dinitrotoluene	333	230	69	40-140		
2-Chloronaphthalene	333	167	50	40-140		
2-Chlorophenol	333	190	57	30-130		
2-Methylnaphthalene	333	211	63	40-140		
2-Methylphenol	333	204	61	30-130		
2-Nitroaniline	333	216	65	40-140		
2-Nitrophenol	333	199	60	30-130		
3 & 4 Methylphenol	333	212	64	30-130		
3,3'-Dichlorobenzidine	333	107	32	40-140	*	32/33
3-Nitroaniline	333	256	77	40-140		
4,6-Dinitro-2-methylphenol	333	181	54	30-130		
4-Bromophenyl phenyl ether	333	223	67	40-140		
4-Chloro-3-methylphenol	333	250	75	30-130		
4-Chloroaniline	333	208	62	40-140		
4-Chlorophenyl phenyl ether	333	220	66	40-140		
4-Nitroaniline	333	229	69	40-140		
4-Nitrophenol	333	304	91	30-130		
Acenaphthene	333	242	73	40-140		
Acenaphthylene	333	228	68	40-140		
Acetophenone	333	195	59	40-140		
Aniline	333	86.7	26	40-140	*	26/27
Anthracene	333	273	82	40-140		
Atrazine	333	253	76	40-140		
Azobenzene	333	239	72	40-140		
Benzaldehyde	333	195	59	40-140		
Benzo[a]anthracene	333	273	82	40-140		

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24343-2

SDG No.: OCRI-08A

Matrix: Solid Level: Low Lab File ID: J03010.D

Lab ID: LCSD 360-48703/3-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCSD CONCENTRATION (ug/Kg)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1'-Biphenyl	333	217	65	0	30	40-140	
1,2,4,5-Tetrachlorobenzene	333	210	63	3	30	40-140	
1,2,4-Trichlorobenzene	333	191	57	3	30	40-140	
1,2-Dichlorobenzene	333	167	50	1	30	40-140	
1,3-Dichlorobenzene	333	166	50	3	30	40-140	
1,4-Dichlorobenzene	333	165	50	2	30	40-140	
1-Methylnaphthalene	333	212	63	1	30	40-140	
2,2'-oxybis[1-chloropropane]	333	183	55	2	30	40-140	
2,3,4,6-Tetrachlorophenol	333	220	66	3	30	40-140	
2,4,5-Trichlorophenol	333	249	75	0	30	30-130	
2,4,6-Trichlorophenol	333	270	81	7	30	30-130	
2,4-Dichlorophenol	333	241	72	4	30	30-130	
2,4-Dimethylphenol	333	292	88	3	30	30-130	
2,4-Dinitrophenol	333	162	49	4	30	30-130	
2,4-Dinitrotoluene	333	232	69	4	30	40-140	
2,6-Dinitrotoluene	333	241	72	5	30	40-140	
2-Chloronaphthalene	333	170	51	2	30	40-140	
2-Chlorophenol	333	194	58	2	30	30-130	
2-Methylnaphthalene	333	218	65	3	30	40-140	
2-Methylphenol	333	206	62	1	30	30-130	
2-Nitroaniline	333	227	68	5	30	40-140	
2-Nitrophenol	333	210	63	5	30	30-130	
3 & 4 Methylphenol	333	215	64	1	30	30-130	
3,3'-Dichlorobenzidine	333	110	33	3	30	40-140	*
3-Nitroaniline	333	261	78	2	30	40-140	
4,6-Dinitro-2-methylphenol	333	179	54	1	30	30-130	
4-Bromophenyl phenyl ether	333	230	69	3	30	40-140	
4-Chloro-3-methylphenol	333	266	80	7	30	30-130	
4-Chloroaniline	333	219	66	5	30	40-140	
4-Chlorophenyl phenyl ether	333	229	69	4	30	40-140	
4-Nitroaniline	333	243	73	6	30	40-140	
4-Nitrophenol	333	328	98	8	30	30-130	
Acenaphthene	333	252	75	4	30	40-140	
Acenaphthylene	333	237	71	4	30	40-140	
Acetophenone	333	196	59	1	30	40-140	
Aniline	333	88.6	27	2	30	40-140	*
Anthracene	333	281	84	3	30	40-140	
Atrazine	333	257	77	2	30	40-140	
Azobenzene	333	244	73	2	30	40-140	
Benzaldehyde	333	196	59	1	30	40-140	
Benzo[a]anthracene	333	290	87	6	30	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Westfield | Job No.: 360-24343-2

SDG No.: OCRI-08A

Client Sample ID: | Lab Sample ID: MB 360-48703/1-A

Matrix: Solid | Lab File ID: J03008.D

Analysis Method: 8270C LL | Date Collected:

Extract. Method: 3546 | Date Extracted: 09/08/2009 14:52

Sample wt/vol: 30.00(g) | Date Analyzed: 09/18/2009 14:53

Con. Extract Vol.: 1.0(mL) | Dilution Factor: 1

Injection Volume: 1.0(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 49174 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
98-86-2	Acetophenone	ND		33	3.6
62-53-3	Aniline	ND		33	17
120-12-7	Anthracene	ND		33	11
1912-24-9	Atrazine	ND		33	10
103-33-3	Azobenzene	ND		33	4.1
100-52-7	Benzaldehyde	ND		33	10
56-55-3	Benzo[a]anthracene	ND		33	6.4
50-32-8	Benzo[a]pyrene	ND		33	6.1
205-99-2	Benzo[b]fluoranthene	ND		33	7.6
191-24-2	Benzo[g,h,i]perylene	ND		33	6.5
207-08-9	Benzo[k]fluoranthene	ND		33	9.2
65-85-0	Benzoic acid	77.0	J	170	14
119-61-9	Benzophenone	ND		33	2.0
100-51-6	Benzyl alcohol	ND		67	7.7
111-91-1	Bis(2-chloroethoxy)methane	ND		33	6.0
111-44-4	Bis(2-chloroethyl)ether	ND		33	8.1
117-81-7	Bis(2-ethylhexyl) phthalate	ND		33	11
85-68-7	Butyl benzyl phthalate	ND		33	7.3
105-60-2	Caprolactam	ND		33	10
86-74-8	Carbazole	ND		33	33
218-01-9	Chrysene	ND		33	7.2
53-70-3	Dibenz(a,h)anthracene	ND		33	6.7
132-64-9	Dibenzofuran	ND		33	19
84-66-2	Diethyl phthalate	ND		33	4.7
131-11-3	Dimethyl phthalate	ND		33	4.9
84-74-2	Di-n-butyl phthalate	97.6		33	10
117-84-0	Di-n-octyl phthalate	ND		33	9.4
101-84-8	Diphenyl oxide	ND		33	10
206-44-0	Fluoranthene	ND		33	21
86-73-7	Fluorene	ND		33	13
118-74-1	Hexachlorobenzene	ND		33	7.9
87-68-3	Hexachlorobutadiene	ND		33	6.6
77-47-4	Hexachlorocyclopentadiene	ND		67	9.1
67-72-1	Hexachloroethane	ND		33	6.4

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Westfield Job No.: 360-24343-2

SDG No.: OCRI-08A

Instrument ID: Inst. J Start Date: 09/18/2009 13:59

Analysis Batch Number: 49174 End Date: 09/19/2009 01:44

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 360-49174/1		09/18/2009 13:59	1	J03006.D	Rtx-5ms 0.25(um)
CCV 360-49174/2 CCVIS		09/18/2009 14:26	1	J03007.D	Rtx-5ms 0.25(um)
MB 360-48703/1-A		09/18/2009 14:53	1	J03008.D	Rtx-5ms 0.25(um)
LCS 360-48703/2-A		09/18/2009 15:20	1	J03009.D	Rtx-5ms 0.25(um)
LCSD 360-48703/3-A		09/18/2009 15:47	1	J03010.D	Rtx-5ms 0.25(um)
ZZZZZ		09/18/2009 16:14	1		Rtx-5ms 0.25(um)
ZZZZZ		09/18/2009 16:41	1		Rtx-5ms 0.25(um)
ZZZZZ		09/18/2009 17:08	10		Rtx-5ms 0.25(um)
ZZZZZ		09/18/2009 17:35	50		Rtx-5ms 0.25(um)
ZZZZZ		09/18/2009 18:02	1		Rtx-5ms 0.25(um)
ZZZZZ		09/18/2009 18:29	1		Rtx-5ms 0.25(um)
ZZZZZ		09/18/2009 18:56	1		Rtx-5ms 0.25(um)
ZZZZZ		09/18/2009 19:23	1		Rtx-5ms 0.25(um)
ZZZZZ		09/18/2009 19:51	1		Rtx-5ms 0.25(um)
ZZZZZ		09/18/2009 20:18	1		Rtx-5ms 0.25(um)
ZZZZZ		09/18/2009 20:45	1		Rtx-5ms 0.25(um)
ZZZZZ		09/18/2009 21:13	1		Rtx-5ms 0.25(um)
ZZZZZ		09/18/2009 21:40	1		Rtx-5ms 0.25(um)
ZZZZZ		09/18/2009 22:07	1		Rtx-5ms 0.25(um)
ZZZZZ		09/18/2009 22:34	10		Rtx-5ms 0.25(um)
360-24343-2	OC-SB-444-12/14-XXX	09/18/2009 23:02	1	J03026.D	Rtx-5ms 0.25(um)
ZZZZZ		09/18/2009 23:29	1		Rtx-5ms 0.25(um)
ZZZZZ		09/18/2009 23:56	1		Rtx-5ms 0.25(um)
360-24343-5	OC-SB-449-11/13-XXX	09/19/2009 00:23	1	J03029.D	Rtx-5ms 0.25(um)
ZZZZZ		09/19/2009 00:50	1		Rtx-5ms 0.25(um)
ZZZZZ		09/19/2009 01:17	10		Rtx-5ms 0.25(um)
ZZZZZ		09/19/2009 01:44	1		Rtx-5ms 0.25(um)

ICAL

Benzoic acid RRF 0.0463

2,4-DNP RRF 0.0062 r² = 0.9960

2-nitroaniline RRF = 0.0460

CCAL

Benzoic acid RF = 0.0166

2-nitroaniline RF = 0.0449

8270C LL 4-nitrophenol %D = 30.5

Di-benz(a,h)anthracene %D = 26

2,4-DNP RF = 0.0372

4,6-dinitro-2-methyl phenol %D = -20.5 RF = 0.0319

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Westfield Job No.: 360-24343-2 Analy Batch No.: 48992

SDG No.: OCRI-08A

Instrument ID: Inst. J GC Column: Rtx-5ms ID: 0.25(um) Heated Purge: (Y/N) N

Calibration Start Date: 09/15/2009 17:27 Calibration End Date: 09/15/2009 21:23 Calibration ID: 4578

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD01 360-48992/3	J02949.D
Level 2	STD025 360-48992/4	J02950.D
Level 3	STD050 360-48992/5	J02951.D
Level 4	STD1 360-48992/6	J02952.D
Level 5	STD25 360-48992/7	J02953.D
Level 6	STD5 360-48992/2	J02948.D
Level 7	STD8 360-48992/8	J02954.D
Level 8	STD10 360-48992/9	J02955.D
Level 9	STD20 360-48992/10	J02956.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
1,4-Dioxane	0.5933 0.2158	0.3435 0.2027	0.3305 0.2820	0.2815 0.2723	0.2561	Qua	0.0355	0.2148	0.0029						0.9910		0.9900
Pyridine	+++++ 0.5052	0.3703 0.5730	0.4868 0.6863	0.5394 0.6674	0.5568	Lin1	-0.096	0.6425							0.9910		0.9900
N-Nitrosodimethylamine	0.2993 0.2777	0.3452 0.2663	0.3404 0.4115	0.3360 0.3721	0.3210	Ave		0.3299				14.0		15.0			
Benzoic acid	+++++ 0.0195	+++++ 0.0519	0.0078 0.0738	0.0076 0.1529	0.0141	Qua	0.0020	-0.013	0.0083						0.9990		0.9900
Aniline	0.8352 0.8249	0.8488 0.7969	0.9310 1.0870	0.9416 1.0625	0.9389	Ave		0.9185				11.0		15.0			
Phenol	0.9338 0.8108	0.9433 0.7781	1.0224 1.0619	0.9945 1.0146	0.9253	Ave		0.9427				10.0		15.0			
Bis(2-chloroethyl)ether	0.7376 0.5912	0.7135 0.5508	0.7348 0.7436	0.7374 0.7267	0.6683	Ave		0.6893				10.0		15.0			
2-Chlorophenol	0.6174 0.5862	0.6396 0.5656	0.7143 0.7719	0.7089 0.7548	0.6583	Ave		0.6685				11.0		15.0			
2,4-Dinitrophenol	+++++ 0.0361	+++++ 0.0576	+++++ 0.0697	0.0094 0.0963	0.0230	Lin	-0.340	0.1104			0.0500				0.9860	*	0.9900
1,4-Dichlorobenzene	0.8485 0.6570	0.8324 0.6187	0.8734 0.8355	0.8207 0.7970	0.7526	Ave		0.7818				11.0		15.0			
1,3-Dichlorobenzene	0.8604 0.6763	0.8947 0.6371	0.8764 0.8588	0.8372 0.8195	0.7702	Ave		0.8034				11.0		15.0			
Benzyl alcohol	0.4531 0.4731	0.3964 0.4670	0.4893 0.6304	0.5199 0.6191	0.5216	Ave		0.5078				15.0		15.0			
1,2-Dichlorobenzene	0.8778 0.6173	0.7972 0.5819	0.8343 0.7796	0.7941 0.7363	0.7063	Ave		0.7472				13.0		15.0			

2-nitroaniline RRF 0.0460

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Westfield Job No.: 360-24343-2 Analy Batch No.: 48992

SDG No.: OCRI-08A

Instrument ID: Inst. J GC Column: Rtx-5ms ID: 0.25(um) Heated Purge: (Y/N) N

Calibration Start Date: 09/15/2009 17:27 Calibration End Date: 09/15/2009 21:23 Calibration ID: 4578

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
Hexachlorobutadiene	0.1299 0.1367	0.1542 0.1424	0.1513 0.1458	0.1491 0.1343	0.1395	Ave		0.1426				5.7		15.0			
Caprolactam	0.0589 0.0832	0.0422 0.0986	0.0551 0.1050	0.0584 0.1026	0.0805	Lin1	-0.012	0.0996							0.9910		0.9900
Pentachlorophenol	+++++ 0.0463	+++++ 0.0718	0.0032 0.0770	0.0167 0.0897	0.0408	Qua	-0.082	0.0704	0.0012						0.9970		0.9900
4-Chloro-3-methylphenol	0.1585 0.2470	0.1751 0.2668	0.2115 0.2737	0.2240 0.2700	0.2391	Lin2	-0.011	0.2516							0.9920		0.9900
2-Methylnaphthalene	0.5451 0.5455	0.5665 0.5686	0.5887 0.5935	0.5942 0.5428	0.5714	Ave		0.5685				3.6		15.0			
1-Methylnaphthalene	0.5603 0.5514	0.5607 0.5867	0.6026 0.5908	0.6112 0.5466	0.5826	Ave		0.5770				4.0		15.0			
1,2,4,5-Tetrachlorobenzene	0.2260 0.2179	0.2346 0.2294	0.2447 0.2335	0.2462 0.2174	0.2360	Ave		0.2318				4.4		15.0			
2,4,6-Trichlorophenol	0.1529 0.2646	0.1934 0.2954	0.2222 0.3055	0.2384 0.2999	0.2778	Lin2	-0.014	0.2787							0.9910		0.9900
2,4,5-Trichlorophenol	0.1678 0.2780	0.1815 0.3099	0.2297 0.3145	0.2516 0.3147	0.2851	Lin1	-0.026	0.3100							0.9980		0.9900
1,1'-Biphenyl	1.4623 1.2874	1.4649 1.3632	1.5528 1.3855	1.4602 1.2525	1.4184	Ave		1.4053				6.7		15.0			
2-Chloronaphthalene	1.3932 1.1655	1.3830 1.2170	1.4564 1.3928	1.4044 1.2752	1.3636	Ave		1.3390				7.3		15.0			
Phenyl ether	0.3886 0.3607	0.3877 0.3800	0.4192 0.3926	0.3934 0.3572	0.3705	Ave		0.3833				5.0		15.0			
4-Nitroaniline	0.1649 0.3187	0.2019 0.3573	0.2436 0.3728	0.2759 0.3809	0.3320	Lin1	-0.037	0.3680							0.9960		0.9900
Dimethyl phthalate	1.0906 1.1506	1.1786 1.2278	1.2868 1.2418	1.2487 1.1874	1.2401	Ave		1.2058				5.0		15.0			
2,4-Dinitrotoluene	0.1402 0.2634	0.1772 0.2824	0.2294 0.2927	0.2585 0.2862	0.2834	Lin2	-0.015	0.2766							0.9940		0.9900
2-Nitroaniline	+++++ 0.0429	0.0508 0.0424	0.0514 0.0429	0.0491 0.0403	0.0483	Ave		0.0460				9.4		15.0			
Acenaphthylene	1.3121 1.5567	1.5054 1.6525	1.6619 1.6897	1.6485 1.5420	1.6697	Ave		1.5821				7.6		15.0			
Acenaphthene	1.1585 1.0022	1.1589 1.0582	1.1647 1.0904	1.1322 1.0145	1.0943	Ave		1.0971				5.7		15.0			
Dibenzofuran	1.5515 1.3672	1.5857 1.4438	1.6047 1.4672	1.5651 1.3447	1.5398	Ave		1.4966				6.4		15.0			
2,6-Dinitrotoluene	0.1275 0.3126	0.1740 0.3459	0.2181 0.3669	0.2710 0.3580	0.3333	Lin1	-0.038	0.3542							0.9970		0.9900

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Westfield Job No.: 360-24343-2

SDG No.: OCRI-08A

Lab Sample ID: CCV 360-49174/2 Calibration Date: 09/18/2009 14:26

Instrument ID: Inst. J Calib Start Date: 09/15/2009 17:27

GC Column: Rtx-5ms ID: 0.25(um) Calib End Date: 09/15/2009 21:23

Lab File ID: J03007.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Qua		0.2220		4710	5000	-5.9	30.0
Pyridine	Lin1		0.5240		4230	5000	-15.5	30.0
N-Nitrosodimethylamine	Ave	0.3299	0.2847		4310	5000	-13.7	30.0
Aniline	Ave	0.9185	0.8124		4420	5000	-11.6	30.0
Phenol	Ave	0.9427	0.7740		4100	5000	-17.9	20.0
Bis(2-chloroethyl)ether	Ave	0.6893	0.5757		4180	5000	-16.5	30.0
2-Chlorophenol	Ave	0.6685	0.5931		4440	5000	-11.3	30.0
1,4-Dichlorobenzene	Ave	0.7818	0.6573		4200	5000	-15.9	20.0
1,3-Dichlorobenzene	Ave	0.8034	0.6770		4210	5000	-15.7	30.0
1,2-Dichlorobenzene	Ave	0.7472	0.6110		4090	5000	-18.2	30.0
Benzyl alcohol	Ave	0.5078	0.5161		5080	5000	1.6	30.0
2-Methylphenol	Ave	0.5900	0.5320		4510	5000	-9.8	30.0
2,2'-oxybis[1-chloropropane]	Ave	0.6869	0.5865		4270	5000	-14.6	30.0
Acetophenone	Ave	0.8911	0.8083		4540	5000	-9.3	30.0
Benzaldehyde	Ave	0.8911	0.8083		4540	5000	-9.3	30.0
N-Nitrosodi-n-propylamine	Ave	0.4473	0.4136	0.0500	4620	5000	-7.5	30.0
3 & 4 Methylphenol	Ave	0.6159	0.5708		4630	5000	-7.3	30.0
Hexachloroethane	Ave	0.2836	0.2500		4410	5000	-11.8	30.0
Nitrobenzene	Ave	0.3156	0.3141		4980	5000	-0.5	30.0
Isophorone	Lin2		0.5273		4730	5000	-5.4	30.0
2-Nitrophenol	Lin1		0.1268		4140	5000	-17.2	20.0
2,4-Dimethylphenol	Ave	0.2439	0.2608		5350	5000	6.9	30.0
Benzoic acid	Qua		0.0166		4020	5000	-19.5	30.0
Bis(2-chloroethoxy)methane	Ave	0.3351	0.3153		4710	5000	-5.9	30.0
2,4-Dichlorophenol	Lin2		0.2104		4760	5000	-4.8	20.0
1,2,4-Trichlorobenzene	Ave	0.2684	0.2423		4510	5000	-9.7	30.0
Naphthalene	Ave	0.9169	0.8377		4570	5000	-8.6	30.0
Alpha-Terpineol	Ave	0.1845	0.1850		5010	5000	0.3	30.0
4-Chloroaniline	Ave	0.3218	0.3355		5210	5000	4.3	30.0
Hexachlorobutadiene	Ave	0.1426	0.1316		4620	5000	-7.7	20.0
Caprolactam	Lin1		0.0881		4540	5000	-9.2	30.0
4-Chloro-3-methylphenol	Lin2		0.2510		5030	5000	0.6	20.0
2-Methylnaphthalene	Ave	0.5685	0.5319		4680	5000	-6.4	30.0
1-Methylnaphthalene	Ave	0.5770	0.5304		4600	5000	-8.1	30.0
Hexachlorocyclopentadiene	Lin		0.1272	0.0500	5130	5000	2.6	30.0
1,2,4,5-Tetrachlorobenzene	Ave	0.2318	0.2105		4540	5000	-9.2	30.0
2,4,6-Trichlorophenol	Lin2		0.2764		5010	5000	0.2	20.0
2,4,5-Trichlorophenol	Lin1		0.2879		4720	5000	-5.5	30.0
1,1'-Biphenyl	Ave	1.405	1.268		4510	5000	-9.8	30.0
2-Chloronaphthalene	Ave	1.339	1.247		4660	5000	-6.8	30.0
Phenyl ether	Ave	0.3833	0.3440		4490	5000	-10.3	30.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Westfield Job No.: 360-24343-2

SDG No.: OCRI-08A

Lab Sample ID: CCV 360-49174/2 Calibration Date: 09/18/2009 14:26

Instrument ID: Inst. J Calib Start Date: 09/15/2009 17:27

GC Column: Rtx-5ms ID: 0.25(um) Calib End Date: 09/15/2009 21:23

Lab File ID: J03007.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Nitroaniline	Lin1		0.3313		4600	5000	-8.0	30.0
Dimethyl phthalate	Ave	1.206	1.167		4840	5000	-3.2	30.0
2,4-Dinitrotoluene	Lin2		0.2604		4760	5000	-4.7	30.0
Acenaphthylene	Ave	1.582	1.562		4940	5000	-1.3	30.0
Acenaphthene	Ave	1.097	1.011		4610	5000	-7.9	20.0
2,4-Dinitrophenol	Lin		0.0372*	0.0500	4760	5000	-4.7	30.0
4-Nitrophenol	Qua		0.1593	0.0500	6520	5000	30.5*	30.0
Dibenzofuran	Ave	1.497	1.406		4700	5000	-6.1	30.0
2,6-Dinitrotoluene	Lin1		0.3326		4800	5000	-4.0	30.0
2,3,4,6-Tetrachlorophenol	Lin1		0.2046		4620	5000	-7.6	30.0
Diethyl phthalate	Ave	1.234	1.190		4820	5000	-3.6	30.0
Fluorene	Ave	1.171	1.131		4830	5000	-3.5	30.0
4-Chlorophenyl phenyl ether	Ave	0.5655	0.5224		4620	5000	-7.6	30.0
3-Nitroaniline	Lin1		0.2345		4640	5000	-7.1	30.0
4,6-Dinitro-2-methylphenol	Qua		0.0399		3680	5000	-26.5	30.0
Diphenylamine	Ave	0.5876	0.5688		4840	5000	-3.2	30.0
N-Nitrosodiphenylamine	Ave	0.5876	0.5688		4840	5000	-3.2	20.0
1,2-Diphenylhydrazine	Ave	1.165	1.197		5140	5000	2.8	30.0
Azobenzene	Ave	1.165	1.197		5140	5000	2.8	30.0
Benzophenone	Ave	0.7185	0.7110		4950	5000	-1.0	30.0
2-Nitroaniline	Ave	0.0460	0.0449		4880	5000	-2.4	30.0
4-Bromophenyl phenyl ether	Ave	0.1786	0.1704		4770	5000	-4.6	30.0
Hexachlorobenzene	Ave	0.1906	0.1782		4670	5000	-6.5	30.0
Atrazine	Lin2		0.1658		4580	5000	-8.3	30.0
Pentachlorophenol	Qua		0.0557		4740	5000	-5.2	20.0
Pentachloronitrobenzene	Lin1		0.0797		4830	5000	-3.4	30.0
Phenanthrene	Ave	1.017	0.9009		4430	5000	-11.4	30.0
Anthracene	Ave	0.8971	0.8730		4870	5000	-2.7	30.0
Carbazole	Ave	0.7715	0.7619		4940	5000	-1.2	30.0
Di-n-butyl phthalate	Ave	1.086	1.095		5040	5000	0.8	30.0
Fluoranthene	Ave	0.8987	0.8197		4560	5000	-8.8	20.0
Benzidine	Lin		0.5453		5120	5000	2.5	30.0
Pyrene	Ave	1.155	1.103		4770	5000	-4.5	30.0
Butyl benzyl phthalate	Lin1		0.5625		4710	5000	-5.8	30.0
3,3'-Dichlorobenzidine	Lin1		0.6186		4930	5000	-1.4	30.0
Benzo[a]anthracene	Ave	0.8540	0.8074		4730	5000	-5.5	30.0
Chrysene	Ave	0.9253	0.7711		4170	5000	-16.7	30.0
Bis(2-ethylhexyl) phthalate	Lin1		0.7674		4390	5000	-12.3	30.0
Di-n-octyl phthalate	Qua		1.506		4980	5000	-0.4	20.0
Benzo[b]fluoranthene	Ave	1.142	1.066		4670	5000	-6.6	30.0
Benzo[k]fluoranthene	Ave	1.097	1.012		4610	5000	-7.8	30.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Westfield Job No.: 360-24343-2

SDG No.: OCRI-08A

Lab Sample ID: CCV 360-49174/2 Calibration Date: 09/18/2009 14:26

Instrument ID: Inst. J Calib Start Date: 09/15/2009 17:27

GC Column: Rtx-5ms ID: 0.25(um) Calib End Date: 09/15/2009 21:23

Lab File ID: J03007.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Benzo[a]pyrene	Lin1		0.7970		4620	5000	-7.5	20.0
Indeno[1,2,3-cd]pyrene	Lin1		0.8174		6160	5000	23.1	30.0
Dibenz(a,h)anthracene	Lin1		0.6635		6300	5000	26.0	30.0
Benzo[g,h,i]perylene	Ave	0.5986	0.7082		5920	5000	18.3	30.0
2-Fluorophenol	Ave	0.6265	0.5326		4250	5000	-15.0	30.0
Phenol-d5	Ave	0.7745	0.6958		4490	5000	-10.2	30.0
Nitrobenzene-d5	Ave	0.3070	0.3033		4940	5000	-1.2	30.0
2-Fluorobiphenyl	Ave	1.270	1.152		4530	5000	-9.3	30.0
2,4,6-Tribromophenol	Lin1		0.0779		4860	5000	-2.8	30.0
Terphenyl-d14	Ave	0.7644	0.6918		4520	5000	-9.5	30.0

Corrected

SEMIVOLATILE ORGANICS

REGION I VALIDATION CHECKLIST for
OLIN CHEMICAL SUPERFUND SITE
Criteria and Qualifications: REGION I Organics Guideline (1996)

TIER I / (II) / III (circle one)

SITE: Olin Chemical Superfund Site Project #: 6107/000/6.12 SDG #: OCRI-09/09A

LAB #: TAL-Westfield

Sample IDs: Attach tracking sheet and/or sample listing.

This checklist is designed to be used with USEPA Region I Validation Guidelines Part II (12/1996). During Level III validation, calculation and transcription checks are completed for instrument tuning, surrogates, target compounds, spike recoveries, calibration data, and internal standards as specified in the guideline. These checks are documented on attached validation notes.

YES NO NA	
Data completeness ☑ ☐ ☐ All data summaries, QC forms and raw data available from hard copy or electronic data package ☑ ☐ ☐ Data summaries match EDD	Contact lab if missing data. Lab to respond with 24 hours.
Holding Times and Preservation ☑ ☐ ☐ Hold times met (Waters – Extract within 7 days, analyze within 40 days. Soils – extract within 14 days, analyze within 40 days)	
Instrument Performance Check (Tune) ☑ ☐ ☐ Tune available for each 12-hour period samples were analyzed ☑ ☐ ☐ Appropriate number of significant figures reported (at least 2) ☑ ☐ ☐ Mass/Charge list (m/z) criteria met	
Initial Calibration ☐ ☒ ☐ %RSD less than or equal to 30% ☐ ☒ ☐ RRF greater than or equal to 0.05	See below.
Continuing Calibration ☑ ☐ ☐ %D less than or equal to 25% ☐ ☒ ☐ RRF greater than or equal to 0.05.	See below.
Blank Contamination ☒ ☐ ☐ Method blank contamination ☒ ☐ ☐ Equipment/Rinseate blank contamination	Evaluate all blanks for contamination. Highest contaminant level used for action level. See below.

SEMIVOLATILE ORGANICS

REGION I VALIDATION CHECKLIST for
OLIN CHEMICAL SUPERFUND SITE
Criteria and Qualifications: REGION I Organics Guideline (1996)

TIER I (II) III (circle one)

Surrogate Recoveries ☐ ☒ ☐ Surrogates percent recovery criteria met: Soil = (base/neutral 30%-130%, acid 30%-130%) Water = (base/neutral 30%-130%, acid 15%-110%)	See below.
Matrix Spikes and Laboratory Control Samples ☐ ☒ ☐ MS/MSD percent recovery criteria met Soil and Water = (base/neutral 40%-140%, acid 30%-130%) ☑ ☐ ☐ MS/MSD RPD criteria met (soils <50%, water <30%) ☐ ☒ ☐ LCS percent recovery criteria met soil/water (base 40%-140%, acid 30%-130%)	See below.
Field Duplicates ☑ ☐ ☐ RPD criteria met (soils <50%, water <30%)	
Internal Standard ☐ ☒ ☐ Area counts within -50 to +100 percent of calib. std. ☑ ☐ ☐ Retention Time within 30 seconds of calib. std.	See below.
Target Compounds ☑ ☐ ☐ Reviewed narrative for anomalies	
Tentatively Identified Compounds (TICs) ☐ ☑ ☐ TCL compounds reported as TICs	

Validator's Signature: _____

Date: 3/15/10

Reference:

MACTEC, Quality Assurance Project Plan for Remedial Investigation/Feasibility Study – Olin Chemical Superfund Site, Wilmington Property, 51 Eames Street, Wilmington, MA", MACTEC Engineering and Consulting. Draft .October 2008.

SAMPLE SUMMARY

Client: Olin Corporation

Job Number: 360-24365-1
Sdg Number: OCRI-09

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
360-24365-1	OC-SB-442-0.0/1.0-XXX	Solid	08/31/2009 1200	08/31/2009 1745
360-24365-2	OC-SB-442-20/22-XXX	Solid	08/31/2009 1320	08/31/2009 1745
360-24365-3	OC-SB-442-8.0/10-DUP	Solid	08/31/2009 1210	08/31/2009 1745
360-24365-4	OC-SB-442-8.0/10-XXX	Solid	08/31/2009 1210	08/31/2009 1745
360-24365-4MS	OC-SB-442-8.0/10-XMS	Solid	08/31/2009 1210	08/31/2009 1745
360-24365-4MSD	OC-SB-442-8.0/10-MSD	Solid	08/31/2009 1210	08/31/2009 1745
360-24365-5	OC-SB-447-0.0/1.0-XXX	Solid	08/31/2009 0810	08/31/2009 1745
360-24365-6	OC-SB-447-18/20-XXX	Solid	08/31/2009 0905	08/31/2009 1745
360-24365-7	OC-SB-447-3.0/5.0-XXX	Solid	08/31/2009 0825	08/31/2009 1745
360-24365-8	OC-SB-452-0.0/1.0-XXX	Solid	08/31/2009 1030	08/31/2009 1745
360-24365-9	OC-SB-452-13/15-XXX	Solid	08/31/2009 1100	08/31/2009 1745
360-24365-10	OC-SB-452-5.0/7.0-XXX	Solid	08/31/2009 1045	08/31/2009 1745
360-24365-11	OC-TBK-011	Solid	08/31/2009 1420	08/31/2009 1745
360-24365-12EB	OC-EBK-006	Water	08/31/2009 1415	08/31/2009 1745
360-24365-13	OC-SB-458-0.0/1.0-XXX	Solid	08/31/2009 1530	09/01/2009 1715
360-24365-14	OC-SB-458-22/24-XXX	Solid	08/31/2009 1630	09/01/2009 1715
360-24365-15	OC-SB-458-5.0/7.0-XXX	Solid	08/31/2009 1545	09/01/2009 1715
360-24365-16	OC-SB-460-0.0/1.0-XXX	Solid	09/01/2009 0840	09/01/2009 1715
360-24365-17	OC-SB-460-30/32-XXX	Solid	09/01/2009 1040	09/01/2009 1715
360-24365-18	OC-SB-460-5.5/7.5-XXX	Solid	09/01/2009 0850	09/01/2009 1715
360-24365-19	OC-PE-MS00149-METALS	Solid	09/01/2009 1000	09/01/2009 1715
360-24365-20	OC-PE-SS1039-SVOC	Solid	09/01/2009 1005	09/01/2009 1715
360-24365-21	OC-PE-TT2488-PCB	Solid	09/01/2009 1010	09/01/2009 1715
360-24365-22	OC-SB-PE-VS0355-VOC	Solid	09/01/2009 1015	09/01/2009 1715

Form I's validated
3/15/10

Client: Olin Corporation

Job Number: 360-24365-1
Sdg Number: OCRI-09

Client Sample ID: **OC-SB-442-0.0/1.0-XXX**

Lab Sample ID: 360-24365-1
Client Matrix: Solid % Moisture: 6.4

Date Sampled: 08/31/2009 1200
Date Received: 08/31/2009 1745

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48817		Instrument ID:	Inst. J
Preparation:	3550B	Prep Batch: 360-48744		Lab File ID:	J02909.D
Dilution:	10			Initial Weight/Volume:	100.53 g
Date Analyzed:	09/11/2009 0553			Final Weight/Volume:	2.0 mL
Date Prepared:	09/09/2009 1112			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodimethylamine		ND		25	110

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	0	X	30 - 130
2-Fluorobiphenyl	64		30 - 130
2-Fluorophenol	52		30 - 130
Nitrobenzene-d5	62		30 - 130
Phenol-d5	61		30 - 130
Terphenyl-d14	0	X	30 - 130

Client: Olin Corporation

Job Number: 360-24365-1
Sdg Number: OCRI-09

Client Sample ID: **OC-SB-442-0.0/1.0-XXX**

Lab Sample ID: 360-24365-1
Client Matrix: Solid
% Moisture: 6.4

Date Sampled: 08/31/2009 1200
Date Received: 08/31/2009 1745

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49187		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48742		Lab File ID:	B10429.D
Dilution:	10			Initial Weight/Volume:	30.36 g
Date Analyzed:	09/19/2009 0710			Final Weight/Volume:	1.0 mL
Date Prepared:	09/09/2009 0958			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		110	350
1,2,4,5-Tetrachlorobenzene		ND		110	350
1,2,4-Trichlorobenzene		ND		110	350
1,2-Dichlorobenzene		ND		110	350
1,3-Dichlorobenzene		ND		110	350
1,4-Dichlorobenzene		ND		110	350
1-Methylnaphthalene		ND		110	350
2,2'-oxybis[1-chloropropane]		ND		110	350
2,3,4,6-Tetrachlorophenol		ND		110	350
2,4,5-Trichlorophenol		ND		110	350
2,4,6-Trichlorophenol		ND		110	350
2,4-Dichlorophenol		ND		110	350
2,4-Dimethylphenol		ND		140	350
2,4-Dinitrophenol		ND		110	350
2,4-Dinitrotoluene		ND		110	350
2,6-Dinitrotoluene		ND		110	350
2-Chloronaphthalene		ND		110	350
2-Chlorophenol		ND		110	350
2-Methylnaphthalene		ND		110	350
2-Methylphenol		ND		210	350
2-Nitroaniline		ND		110	1800
2-Nitrophenol		ND		110	350
3 & 4 Methylphenol		ND		110	350
3,3'-Dichlorobenzidine		ND J	✓	110	700
3-Nitroaniline		ND		110	1800
4,6-Dinitro-2-methylphenol		ND		110	1800
4-Bromophenyl phenyl ether		ND		110	350
4-Chloro-3-methylphenol		ND		110	700
4-Chloroaniline		ND		110	700
4-Chlorophenyl phenyl ether		ND		110	350
4-Nitroaniline		ND		110	1800
4-Nitrophenol		ND		110	1800
Acenaphthene		ND		110	350
Acenaphthylene		ND		110	350
Acetophenone		ND		110	350
Aniline		ND J	✓	110	350
Anthracene		ND		110	350
Atrazine		ND		110	350
Azobenzene		ND		110	350
Benzaldehyde		ND		110	350
Benzo[a]anthracene		ND		110	350
Benzo[a]pyrene		ND		110	350
Benzo[b]fluoranthene		ND		110	350
Benzo[g,h,i]perylene		ND		110	350
Benzo[k]fluoranthene		ND		110	350
Benzoic acid		1800 J ~~650~~	J B	160	1800

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Client: Olin Corporation

Job Number: 360-24365-1
Sdg Number: OCRI-09

Client Sample ID: **OC-SB-442-0.0/1.0-XXX**

Lab Sample ID: 360-24365-1
Client Matrix: Solid % Moisture: 6.4

Date Sampled: 08/31/2009 1200
Date Received: 08/31/2009 1745

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49187		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48742		Lab File ID:	B10429.D
Dilution:	10			Initial Weight/Volume:	30.36 g
Date Analyzed:	09/19/2009 0710			Final Weight/Volume:	1.0 mL
Date Prepared:	09/09/2009 0958			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		110	350
Benzyl alcohol		ND		300	700
Bis(2-chloroethoxy)methane		ND		110	350
Bis(2-chloroethyl)ether		ND		110	350
Bis(2-ethylhexyl) phthalate		2100		110	350
Butyl benzyl phthalate		ND		110	350
Caprolactam		ND		110	350
Carbazole		ND		110	350
Chrysene		ND		110	350
Dibenz(a,h)anthracene		ND		110	350
Dibenzofuran		ND		110	350
Diethyl phthalate		ND		110	350
Dimethyl phthalate		ND		110	350
Di-n-butyl phthalate		ND		310	350
Di-n-octyl phthalate		ND		180	350
Diphenyl oxide		190	J	110	350
Fluoranthene		ND		110	350
Fluorene		ND		110	350
Hexachlorobenzene		ND		110	350
Hexachlorobutadiene		ND		110	350
Hexachlorocyclopentadiene		ND		110	700
Hexachloroethane		ND		110	350
Indeno[1,2,3-cd]pyrene		ND		110	350
Isophorone		ND		110	350
Naphthalene		ND		110	840
Nitrobenzene		ND		110	350
~~N-Nitrosodimethylamine~~		~~ND~~		~~120~~	~~350~~
N-Nitrosodi-n-propylamine		ND		110	350
~~N-Nitrosodiphenylamine~~		~~510~~		~~110~~	~~350~~
Pentachlorophenol		ND		110	350
Phenanthrene		ND		110	420
Phenol		ND		110	350
Pyrene		ND		110	350

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	80		30 - 130
2-Fluorophenol	82		30 - 130
2-Fluorobiphenyl	76		30 - 130
Nitrobenzene-d5	75		30 - 130
Phenol-d5	66		30 - 130
Terphenyl-d14	87		30 - 130

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Client: Olin Corporation

Job Number: 360-24365-1
Sdg Number: OCRI-09

Client Sample ID: **OC-SB-442-0.0/1.0-XXX**

Lab Sample ID: 360-24365-1
Client Matrix: Solid % Moisture: 6.4

Date Sampled: 08/31/2009 1200
Date Received: 08/31/2009 1745

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49187		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48742		Lab File ID:	B10429.D
Dilution:	10			Initial Weight/Volume:	30.36 g
Date Analyzed:	09/19/2009 0710			Final Weight/Volume:	1.0 mL
Date Prepared:	09/09/2009 0958			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 8

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
107-39-1	1-Pentene, 2,4,4-trimethyl-	4.76	450	T J N
	Unknown	9.87	160	T J
	Unknown	9.92	530	T J
	Unknown	10.29	200	T J
	Unknown	10.53	230	T J
	Unknown	10.63	280	T J
128-37-0	Butylated Hydroxytoluene	10.68	340	T J N
	Unknown	18.97	6300	T J

Client: Olin Corporation

Job Number: 360-24365-1
Sdg Number: OCRI-09

Client Sample ID: OC-SB-442-0.0/1.0-XXX

Lab Sample ID: 360-24365-1
Client Matrix: Solid % Moisture: 6.4

Date Sampled: 08/31/2009 1200
Date Received: 08/31/2009 1745

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49444		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48742		Lab File ID:	B10540.D
Dilution:	10			Initial Weight/Volume:	30.36 g
Date Analyzed:	09/24/2009 0905			Final Weight/Volume:	1.0 mL
Date Prepared:	09/09/2009 0958			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Diphenylamine		260	J	110	350

Client: Olin Corporation

Job Number: 360-24365-1
Sdg Number: OCRI-09

Client Sample ID: **OC-SB-442-0.0/1.0-XXX**

Lab Sample ID: 360-24365-1
Client Matrix: Solid % Moisture: 6.4

Date Sampled: 08/31/2009 1200
Date Received: 08/31/2009 1745

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49490		Instrument ID:	NOEQUIP
Preparation:	3546	Prep Batch: 360-48742		Lab File ID:	N/A
Dilution:	10			Initial Weight/Volume:	30.36 g
Date Analyzed:	09/24/2009 0905			Final Weight/Volume:	1.0 mL
Date Prepared:	09/09/2009 0958			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodiphenylamine		250	J	110	350

Client: Olin Corporation

Job Number: 360-24365-1
Sdg Number: OCRI-09

Client Sample ID: **OC-SB-442-8.0/10-DUP**

Lab Sample ID: 360-24365-3
Client Matrix: Solid
% Moisture: 12.1

Date Sampled: 08/31/2009 1210
Date Received: 08/31/2009 1745

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48876		Instrument ID:	Inst. J
Preparation:	3550B	Prep Batch: 360-48800		Lab File ID:	J02920.D
Dilution:	1.0			Initial Weight/Volume:	100.52 g
Date Analyzed:	09/12/2009 1317			Final Weight/Volume:	1.0 mL
Date Prepared:	09/10/2009 1211			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodimethylamine		ND		1.3	5.7

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	65		30 - 130
2-Fluorobiphenyl	50		30 - 130
2-Fluorophenol	51		30 - 130
Nitrobenzene-d5	50		30 - 130
Phenol-d5	57		30 - 130
Terphenyl-d14	68		30 - 130

Client: Olin Corporation

Job Number: 360-24365-1
Sdg Number: OCRI-09

Client Sample ID: OC-SB-442-8.0/10-DUP

Lab Sample ID: 360-24365-3
Client Matrix: Solid
% Moisture: 12.1

Date Sampled: 08/31/2009 1210
Date Received: 08/31/2009 1745

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49187		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48742		Lab File ID:	B10431.D
Dilution:	1.0			Initial Weight/Volume:	30.60 g
Date Analyzed:	09/19/2009 0842			Final Weight/Volume:	1.0 mL
Date Prepared:	09/09/2009 0958			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		11	37
1,2,4,5-Tetrachlorobenzene		ND		11	37
1,2,4-Trichlorobenzene		ND		11	37
1,2-Dichlorobenzene		ND		11	37
1,3-Dichlorobenzene		ND		11	37
1,4-Dichlorobenzene		ND		11	37
1-Methylnaphthalene		ND		11	37
2,2'-oxybis[1-chloropropane]		ND		11	37
2,3,4,6-Tetrachlorophenol		ND		11	37
2,4,5-Trichlorophenol		ND		11	37
2,4,6-Trichlorophenol		ND		11	37
2,4-Dichlorophenol		ND		11	37
2,4-Dimethylphenol		ND		15	37
2,4-Dinitrophenol		ND		11	37
2,4-Dinitrotoluene		ND		11	37
2,6-Dinitrotoluene		ND		11	37
2-Chloronaphthalene		ND		11	37
2-Chlorophenol		ND		11	37
2-Methylnaphthalene		ND		11	37
2-Methylphenol		ND		22	37
2-Nitroaniline		ND		11	190
2-Nitrophenol		ND		11	37
3 & 4 Methylphenol		ND		11	37
3,3'-Dichlorobenzidine		ND	J	11	74
3-Nitroaniline		ND		11	190
4,6-Dinitro-2-methylphenol		ND		11	190
4-Bromophenyl phenyl ether		ND		11	37
4-Chloro-3-methylphenol		ND		11	74
4-Chloroaniline		ND		11	74
4-Chlorophenyl phenyl ether		ND		11	37
4-Nitroaniline		ND		11	190
4-Nitrophenol		ND		11	190
Acenaphthene		ND		11	37
Acenaphthylene		ND		11	37
Acetophenone		ND		11	37
Aniline		ND	J	11	37
Anthracene		ND		11	37
Atrazine		ND		11	37
Azobenzene		ND		11	37
Benzaldehyde		ND		11	37
Benzo[a]anthracene		ND		11	37
Benzo[a]pyrene		ND		11	37
Benzo[b]fluoranthene		ND		11	37
Benzo[g,h,i]perylene		ND		11	37
Benzo[k]fluoranthene		ND		11	37
Benzoic acid		ND	J	17	190

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Client: Olin Corporation

Job Number: 360-24365-1
Sdg Number: OCRI-09

Client Sample ID: **OC-SB-442-8.0/10-DUP**

Lab Sample ID: 360-24365-3
Client Matrix: Solid
% Moisture: 12.1

Date Sampled: 08/31/2009 1210
Date Received: 08/31/2009 1745

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49187		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48742		Lab File ID:	B10431.D
Dilution:	1.0			Initial Weight/Volume:	30.60 g
Date Analyzed:	09/19/2009 0842			Final Weight/Volume:	1.0 mL
Date Prepared:	09/09/2009 0958			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		11	37
Benzyl alcohol		ND		32	74
Bis(2-chloroethoxy)methane		ND		11	37
Bis(2-chloroethyl)ether		ND		11	37
Bis(2-ethylhexyl) phthalate		ND		11	37
Butyl benzyl phthalate		ND		11	37
Caprolactam		ND		11	37
Carbazole		ND		11	37
Chrysene		ND		11	37
Dibenz(a,h)anthracene		ND		11	37
Dibenzofuran		ND		11	37
Diethyl phthalate		ND		11	37
Dimethyl phthalate		ND		11	37
Di-n-butyl phthalate		ND		33	37
Di-n-octyl phthalate		ND		19	37
Diphenyl oxide		ND		11	37
Diphenylamine		ND		11	37
Fluoranthene		ND		11	37
Fluorene		ND		11	37
Hexachlorobenzene		ND		11	37
Hexachlorobutadiene		ND		11	37
Hexachlorocyclopentadiene		ND		11	74
Hexachloroethane		ND		11	37
Indeno[1,2,3-cd]pyrene		ND		11	37
Isophorone		ND		11	37
Naphthalene		ND		11	89
Nitrobenzene		ND		11	37
N-Nitrosodimethylamine		ND		13	37
N-Nitrosodi-n-propylamine		ND		11	37
N-Nitrosodiphenylamine		ND		11	37
Pentachlorophenol		ND		11	37
Phenanthrene		ND		11	45
Phenol		ND		11	37
Pyrene		ND		11	37

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	58		30 - 130
2-Fluorophenol	68		30 - 130
2-Fluorobiphenyl	65		30 - 130
Nitrobenzene-d5	69		30 - 130
Phenol-d5	60		30 - 130
Terphenyl-d14	87		30 - 130

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Client: Olin Corporation

Job Number: 360-24365-1
Sdg Number: OCRI-09

Client Sample ID: **OC-SB-442-8.0/10-DUP**

Lab Sample ID: 360-24365-3
Client Matrix: Solid % Moisture: 12.1

Date Sampled: 08/31/2009 1210
Date Received: 08/31/2009 1745

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49187		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48742		Lab File ID:	B10431.D
Dilution:	1.0			Initial Weight/Volume:	30.60 g
Date Analyzed:	09/19/2009 0842			Final Weight/Volume:	1.0 mL
Date Prepared:	09/09/2009 0958			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 7

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Unknown	6.68	5400	T J
	Unknown	7.31	12	T J
289-16-7	1,2,4-Trithiolane	8.77	11	T J N
	Unknown	9.13	25	T J
292-45-5	1,2,4,6-Tetrathiepane	11.05	9.2	T J N
~~92-87-5~~	~~Benzidine~~	~~13.43~~	~~24~~	~~J~~
301-2-0	9-Octadecenamide, (Z)-	16.96	38	T J N

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Client: Olin Corporation

Job Number: 360-24365-1
Sdg Number: OCRI-09

Client Sample ID: **OC-SB-442-8.0/10-XXX**

Lab Sample ID: 360-24365-4
Client Matrix: Solid
% Moisture: 12.7

Date Sampled: 08/31/2009 1210
Date Received: 08/31/2009 1745

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48876		Instrument ID:	Inst. J
Preparation:	3550B	Prep Batch: 360-48800		Lab File ID:	J02921.D
Dilution:	1.0			Initial Weight/Volume:	100.09 g
Date Analyzed:	09/12/2009 1347			Final Weight/Volume:	1.0 mL
Date Prepared:	09/10/2009 1211			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodimethylamine		ND		1.3	5.7

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	62		30 - 130
2-Fluorobiphenyl	49		30 - 130
2-Fluorophenol	50		30 - 130
Nitrobenzene-d5	49		30 - 130
Phenol-d5	55		30 - 130
Terphenyl-d14	64		30 - 130

Client: Olin Corporation

Job Number: 360-24365-1
Sdg Number: OCRI-09

Client Sample ID: **OC-SB-442-8.0/10-XXX**

Lab Sample ID: 360-24365-4
Client Matrix: Solid % Moisture: 12.7

Date Sampled: 08/31/2009 1210
Date Received: 08/31/2009 1745

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49266		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48854		Lab File ID:	B10454.D
Dilution:	1.0			Initial Weight/Volume:	30.19 g
Date Analyzed:	09/22/2009 0011			Final Weight/Volume:	1.0 mL
Date Prepared:	09/11/2009 1142			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		11	38
1,2,4,5-Tetrachlorobenzene		ND		11	38
1,2,4-Trichlorobenzene		ND		11	38
1,2-Dichlorobenzene		ND		11	38
1,3-Dichlorobenzene		ND		11	38
1,4-Dichlorobenzene		ND		11	38
1-Methylnaphthalene		ND		11	38
2,2'-oxybis[1-chloropropane]		ND		11	38
2,3,4,6-Tetrachlorophenol		ND		11	38
2,4,5-Trichlorophenol		ND		11	38
2,4,6-Trichlorophenol		ND		11	38
2,4-Dichlorophenol		ND		11	38
2,4-Dimethylphenol		ND		15	38
2,4-Dinitrophenol		ND		11	38
2,4-Dinitrotoluene		ND		11	38
2,6-Dinitrotoluene		ND		11	38
2-Chloronaphthalene		ND		11	38
2-Chlorophenol		ND		11	38
2-Methylnaphthalene		ND		11	38
2-Methylphenol		ND		23	38
2-Nitroaniline		ND		11	190
2-Nitrophenol		ND		11	38
3 & 4 Methylphenol		ND		11	38
3,3'-Dichlorobenzidine		ND		11	76
3-Nitroaniline		ND		11	190
4,6-Dinitro-2-methylphenol		ND		11	190
4-Bromophenyl phenyl ether		ND		11	38
4-Chloro-3-methylphenol		ND		11	76
4-Chloroaniline		ND		11	76
4-Chlorophenyl phenyl ether		ND		11	38
4-Nitroaniline		ND		11	190
4-Nitrophenol		ND		11	190
Acenaphthene		ND		11	38
Acenaphthylene		ND		11	38
Acetophenone		ND		11	38
Aniline		ND	J	11	38
Anthracene		ND		11	38
Atrazine		ND		11	38
Azobenzene		ND		11	38
Benzaldehyde		ND		11	38
Benzo[a]anthracene		ND		11	38
Benzo[a]pyrene		ND		11	38
Benzo[b]fluoranthene		ND		11	38
Benzo[g,h,i]perylene		ND		11	38
Benzo[k]fluoranthene		ND		11	38
Benzoic acid		ND	J	17	190

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Client: Olin Corporation

Job Number: 360-24365-1
Sdg Number: OCRI-09

Client Sample ID: **OC-SB-442-8.0/10-XXX**

Lab Sample ID: 360-24365-4
Client Matrix: Solid % Moisture: 12.7

Date Sampled: 08/31/2009 1210
Date Received: 08/31/2009 1745

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49266		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48854		Lab File ID:	B10454.D
Dilution:	1.0			Initial Weight/Volume:	30.19 g
Date Analyzed:	09/22/2009 0011			Final Weight/Volume:	1.0 mL
Date Prepared:	09/11/2009 1142			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		11	38
Benzyl alcohol		ND		32	76
Bis(2-chloroethoxy)methane		ND		11	38
Bis(2-chloroethyl)ether		ND		11	38
Bis(2-ethylhexyl) phthalate		13	J	11	38
Butyl benzyl phthalate		ND		11	38
Caprolactam		ND		11	38
Carbazole		ND		11	38
Chrysene		ND		11	38
Dibenz(a,h)anthracene		ND		11	38
Dibenzofuran		ND		11	38
Diethyl phthalate		ND		11	38
Dimethyl phthalate		ND		11	38
Di-n-butyl phthalate		ND		33	38
Di-n-octyl phthalate		ND		19	38
Diphenyl oxide		ND		11	38
Diphenylamine		ND		11	38
Fluoranthene		ND		11	38
Fluorene		ND		11	38
Hexachlorobenzene		ND		11	38
Hexachlorobutadiene		ND		11	38
Hexachlorocyclopentadiene		ND	J	11	76
Hexachloroethane		ND		11	38
Indeno[1,2,3-cd]pyrene		ND		11	38
Isophorone		ND		11	38
Naphthalene		ND		11	91
Nitrobenzene		ND		11	38
N-Nitrosodimethylamine		ND		13	38
N-Nitrosodi-n-propylamine		ND		11	38
N-Nitrosodiphenylamine		ND		11	38
Pentachlorophenol		ND		11	38
Phenanthrene		ND		11	46
Phenol		ND		11	38
Pyrene		ND		11	38

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	59		30 - 130
2-Fluorophenol	69		30 - 130
2-Fluorobiphenyl	54		30 - 130
Nitrobenzene-d5	65		30 - 130
Phenol-d5	68		30 - 130
Terphenyl-d14	53		30 - 130

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Client: Olin Corporation

Job Number: 360-24365-1
Sdg Number: OCRI-09

Client Sample ID: **OC-SB-442-8.0/10-XXX**

Lab Sample ID: 360-24365-4
Client Matrix: Solid % Moisture: 12.7

Date Sampled: 08/31/2009 1210
Date Received: 08/31/2009 1745

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49266		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48854		Lab File ID:	B10454.D
Dilution:	1.0			Initial Weight/Volume:	30.19 g
Date Analyzed:	09/22/2009 0011			Final Weight/Volume:	1.0 mL
Date Prepared:	09/11/2009 1142			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 9

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
128-37-0	Butylated Hydroxytoluene	10.48	12	T J N
140-66-9	Phenol, 4-(1,1,3,3-tetramethylbutyl)-	10.93	11	T J N
3910-35-8	1H-Indene, 2,3-dihydro-1,1,3-trimethyl-3	11.43	16	T J N
22768-22-5	2,4-Diphenyl-4-methyl-2(E)-pentene	11.85	11	T J N
112-61-8	Octadecanoic acid, methyl ester	12.81	13	T J N
629-97-0	Docosane	15.61	10	T J N
630-3-5	Nonacosane	16.12	11	T J N
112-84-5	Erucylamide	16.61	19	T J N
7683-64-9	Squalene	16.77	28	T J N

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Client: Olin Corporation

Job Number: 360-24365-1
Sdg Number: OCRI-09

Client Sample ID: **OC-SB-447-0.0/1.0-XXX**

Lab Sample ID: 360-24365-5
Client Matrix: Solid
% Moisture: 14.3

Date Sampled: 08/31/2009 0810
Date Received: 08/31/2009 1745

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49187		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48742		Lab File ID:	B10432.D
Dilution:	10			Initial Weight/Volume:	30.12 g
Date Analyzed:	09/19/2009 0913			Final Weight/Volume:	1.0 mL
Date Prepared:	09/09/2009 0958			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		570		120	390
1,2,4,5-Tetrachlorobenzene		ND		120	390
1,2,4-Trichlorobenzene		ND		120	390
1,2-Dichlorobenzene		ND		120	390
1,3-Dichlorobenzene		ND		120	390
1,4-Dichlorobenzene		ND		120	390
1-Methylnaphthalene		620		120	390
2,2'-oxybis[1-chloropropane]		ND		120	390
2,3,4,6-Tetrachlorophenol		ND		120	390
2,4,5-Trichlorophenol		ND		120	390
2,4,6-Trichlorophenol		ND		120	390
2,4-Dichlorophenol		ND		120	390
2,4-Dimethylphenol		ND		150	390
2,4-Dinitrophenol		ND		120	390
2,4-Dinitrotoluene		ND		120	390
2,6-Dinitrotoluene		ND		120	390
2-Chloronaphthalene		ND		120	390
2-Chlorophenol		ND		120	390
2-Methylnaphthalene		710		120	390
2-Methylphenol		ND		230	390
2-Nitroaniline		ND		120	1900
2-Nitrophenol		ND		120	390
3 & 4 Methylphenol		ND		120	390
3,3'-Dichlorobenzidine		ND J		120	780
3-Nitroaniline		ND		120	1900
4,6-Dinitro-2-methylphenol		ND		120	1900
4-Bromophenyl phenyl ether		ND		120	390
4-Chloro-3-methylphenol		ND		120	780
4-Chloroaniline		ND		120	780
4-Chlorophenyl phenyl ether		ND		120	390
4-Nitroaniline		ND		120	1900
4-Nitrophenol		ND		120	1900
Acenaphthene		4800		120	390
Acenaphthylene		210	J	120	390
Acetophenone		ND		120	390
Aniline		ND J		120	390
Atrazine		ND		120	390
Azobenzene		ND		120	390
Benzaldehyde		ND		120	390
Benzoic acid		ND		170	1900
Benzophenone		ND		120	390
Benzyl alcohol		ND		330	780
Bis(2-chloroethoxy)methane		ND		120	390
Bis(2-chloroethyl)ether		ND		120	390
Bis(2-ethylhexyl) phthalate		2000 JEB		120	390
Butyl benzyl phthalate		ND J		120	390

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Client: Olin Corporation

Job Number: 360-24365-1
Sdg Number: OCRI-09

Client Sample ID: **OC-SB-447-0.0/1.0-XXX**

Lab Sample ID: 360-24365-5
Client Matrix: Solid % Moisture: 14.3

Date Sampled: 08/31/2009 0810
Date Received: 08/31/2009 1745

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49187		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48742		Lab File ID:	B10432.D
Dilution:	10			Initial Weight/Volume:	30.12 g
Date Analyzed:	09/19/2009 0913			Final Weight/Volume:	1.0 mL
Date Prepared:	09/09/2009 0958			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Caprolactam		ND		120	390
Carbazole		5400		120	390
Dibenz(a,h)anthracene		4400 J		120	390
Dibenzofuran		1700		120	390
Diethyl phthalate		ND		120	390
Dimethyl phthalate		ND		120	390
Di-n-butyl phthalate		ND		340	390
Di-n-octyl phthalate		ND J		200	390
Diphenyl oxide		1700		120	390
Fluorene		3500		120	390
Hexachlorobenzene		ND		120	390
Hexachlorobutadiene		ND		120	390
Hexachlorocyclopentadiene		ND		120	780
Hexachloroethane		ND		120	390
Isophorone		ND		120	390
Naphthalene		960		120	930
Nitrobenzene		ND		120	390
N-Nitrosodimethylamine		ND		140	390
N-Nitrosodi-n-propylamine		ND		120	390
N-Nitrosodiphenylamine		ND		120	390
Pentachlorophenol		ND		120	390
Phenol		ND		120	390

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	81		30 - 130
2-Fluorobiphenyl	79		30 - 130
2-Fluorophenol	81		30 - 130
Nitrobenzene-d5	77		30 - 130
Phenol-d5	67		30 - 130
Terphenyl-d14	117		30 - 130

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Client: Olin Corporation

Job Number: 360-24365-1
Sdg Number: OCRI-09

Client Sample ID: **OC-SB-447-0.0/1.0-XXX**

Lab Sample ID: 360-24365-5
Client Matrix: Solid % Moisture: 14.3

Date Sampled: 08/31/2009 0810
Date Received: 08/31/2009 1745

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49187		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48742		Lab File ID:	B10432.D
Dilution:	10			Initial Weight/Volume:	30.12 g
Date Analyzed:	09/19/2009 0913			Final Weight/Volume:	1.0 mL
Date Prepared:	09/09/2009 0958			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 7

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
610-48-0	Anthracene, 1-methyl-	12.49	83	T J N
832-69-9	Phenanthrene, 1-methyl-	12.52	110	T J N
203-64-5	4H-Cyclopenta[def]phenanthrene	12.63	230	T J N
92-87-5	Benzidine	13.43	260	J
2381-21-7	Pyrene, 1-methyl-	13.95	160	T J N
243-17-4	11H-Benzo[b]fluorene	14.14	240	T J N
198-55-0	Perylene	18.14	1100	T J N

Client: Olin Corporation

Job Number: 360-24365-1
Sdg Number: OCRI-09

Client Sample ID: **OC-SB-447-0.0/1.0-XXX**

Lab Sample ID: 360-24365-5
Client Matrix: Solid

% Moisture: 14.3

Date Sampled: 08/31/2009 0810
Date Received: 08/31/2009 1745

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49187		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48742		Lab File ID:	B10433.D
Dilution:	50			Initial Weight/Volume:	30.12 g
Date Analyzed:	09/19/2009 0944	Run Type: DL		Final Weight/Volume:	1.0 mL
Date Prepared:	09/09/2009 0958			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Anthracene		9100		580	1900
Benzo[a]anthracene		28000		580	1900
Benzo[a]pyrene		21000		580	1900
Benzo[b]fluoranthene		29000		580	1900
Benzo[g,h,i]perylene		16000		580	1900
Benzo[k]fluoranthene		11000		580	1900
Chrysene		26000		580	1900
Indeno[1,2,3-cd]pyrene		14000		580	1900
Phenanthrene		35000		580	2300

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	81		30 - 130
2-Fluorobiphenyl	80		30 - 130
2-Fluorophenol	74		30 - 130
Nitrobenzene-d5	79		30 - 130
Phenol-d5	49		30 - 130
Terphenyl-d14	124		30 - 130

Client: Olin Corporation

Job Number: 360-24365-1
Sdg Number: OCRI-09

Client Sample ID: OC-SB-447-0.0/1.0-XXX

Lab Sample ID: 360-24365-5
Client Matrix: Solid

% Moisture: 14.3

Date Sampled: 08/31/2009 0810
Date Received: 08/31/2009 1745

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49187		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48742		Lab File ID:	B10433.D
Dilution:	50			Initial Weight/Volume:	30.12 g
Date Analyzed:	09/19/2009 0944	Run Type: DL		Final Weight/Volume:	1.0 mL
Date Prepared:	09/09/2009 0958			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 1

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Tentatively Identified Compound		None	
92-87-5	Benzidine	13.43	1300	J

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Client: Olin Corporation

Job Number: 360-24365-1
Sdg Number: OCRI-09

Client Sample ID: **OC-SB-447-0.0/1.0-XXX**

Lab Sample ID: 360-24365-5
Client Matrix: Solid

% Moisture: 14.3

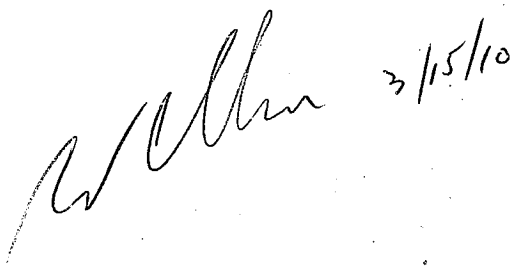
Date Sampled: 08/31/2009 0810
Date Received: 08/31/2009 1745

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49402		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48742		Lab File ID:	B10493.D
Dilution:	100			Initial Weight/Volume:	30.12 g
Date Analyzed:	09/23/2009 0022	Run Type:	DL2	Final Weight/Volume:	1.0 mL
Date Prepared:	09/09/2009 0958			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Fluoranthene		73000		1200	3900
Pyrene		ND		1200	3900

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	0	X	30 - 130
2-Fluorobiphenyl	0	X	30 - 130
2-Fluorophenol	0	X	30 - 130
Nitrobenzene-d5	0	X	30 - 130
Phenol-d5	0	X	30 - 130
Terphenyl-d14	0	X	30 - 130



Client: Olin Corporation

Job Number: 360-24365-1
Sdg Number: OCRI-09

Client Sample ID: **OC-SB-447-0.0/1.0-XXX**

Lab Sample ID: 360-24365-5
Client Matrix: Solid

% Moisture: 14.3

Date Sampled: 08/31/2009 0810
Date Received: 08/31/2009 1745

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49402		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48742		Lab File ID:	B10493.D
Dilution:	100			Initial Weight/Volume:	30.12 g
Date Analyzed:	09/23/2009 0022	Run Type: DL2		Final Weight/Volume:	1.0 mL
Date Prepared:	09/09/2009 0958			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 0

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Tentatively Identified Compound		None	

Client: Olin Corporation

Job Number: 360-24365-1
Sdg Number: OCRI-09

Client Sample ID: **OC-SB-447-3.0/5.0-XXX**

Lab Sample ID: 360-24365-7
Client Matrix: Solid

% Moisture: 11.0

Date Sampled: 08/31/2009 0825
Date Received: 08/31/2009 1745

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49402		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48742		Lab File ID:	B10492.D
Dilution:	10			Initial Weight/Volume:	30.11 g
Date Analyzed:	09/22/2009 2350			Final Weight/Volume:	1.0 mL
Date Prepared:	09/09/2009 0958			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		770	J	110	370
1,2,4,5-Tetrachlorobenzene		ND		110	370
1,2,4-Trichlorobenzene		ND		110	370
1,2-Dichlorobenzene		ND		110	370
1,3-Dichlorobenzene		ND		110	370
1,4-Dichlorobenzene		ND		110	370
1-Methylnaphthalene		ND		110	370
2,2'-oxybis[1-chloropropane]		ND		110	370
2,3,4,6-Tetrachlorophenol		ND		110	370
2,4,5-Trichlorophenol		ND		110	370
2,4,6-Trichlorophenol		ND		110	370
2,4-Dichlorophenol		ND		110	370
2,4-Dimethylphenol		ND		150	370
2,4-Dinitrophenol		ND		110	370
2,4-Dinitrotoluene		ND		110	370
2,6-Dinitrotoluene		ND		110	370
2-Chloronaphthalene		ND		110	370
2-Chlorophenol		ND		110	370
2-Methylnaphthalene		ND		110	370
2-Methylphenol		ND		220	370
2-Nitroaniline		ND		110	1900
2-Nitrophenol		ND		110	370
3 & 4 Methylphenol		130	J	110	370
3,3'-Dichlorobenzidine		ND		110	750
3-Nitroaniline		ND		110	1900
4,6-Dinitro-2-methylphenol		ND		110	1900
4-Bromophenyl phenyl ether		ND		110	370
4-Chloro-3-methylphenol		ND		110	750
4-Chloroaniline		ND		110	750
4-Chlorophenyl phenyl ether		ND		110	370
4-Nitroaniline		ND		110	1900
4-Nitrophenol		ND		110	1900
Acenaphthene		ND		110	370
Acenaphthylene		ND		110	370
Acetophenone		1500		110	370
Aniline		ND		110	370
Anthracene		ND		110	370
Atrazine		ND		110	370
Azobenzene		ND		110	370
Benzaldehyde		ND		110	370
Benzo[a]anthracene		ND		110	370
Benzo[a]pyrene		ND		110	370
Benzo[b]fluoranthene		ND		110	370
Benzo[g,h,i]perylene		ND		110	370
Benzo[k]fluoranthene		ND		110	370
Benzoic acid		ND		170	1900

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Client: Olin Corporation

Job Number: 360-24365-1
Sdg Number: OCRI-09

Client Sample ID: **OC-SB-447-3.0/5.0-XXX**

Lab Sample ID: 360-24365-7
Client Matrix: Solid

% Moisture: 11.0

Date Sampled: 08/31/2009 0825
Date Received: 08/31/2009 1745

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49402		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48742		Lab File ID:	B10492.D
Dilution:	10			Initial Weight/Volume:	30.11 g
Date Analyzed:	09/22/2009 2350			Final Weight/Volume:	1.0 mL
Date Prepared:	09/09/2009 0958			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		110	370
Benzyl alcohol		ND		320	750
Bis(2-chloroethoxy)methane		ND		110	370
Bis(2-chloroethyl)ether		ND		110	370
Bis(2-ethylhexyl) phthalate		4600		110	370
Butyl benzyl phthalate		ND		110	370
Caprolactam		ND		110	370
Carbazole		ND		110	370
Chrysene		ND		110	370
Dibenz(a,h)anthracene		ND		110	370
Dibenzofuran		ND		110	370
Diethyl phthalate		ND		110	370
Dimethyl phthalate		ND		110	370
Di-n-butyl phthalate		ND		330	370
Di-n-octyl phthalate		ND		190	370
Diphenyl oxide		3800		110	370
Fluoranthene		ND		110	370
Fluorene		ND		110	370
Hexachlorobenzene		ND		110	370
Hexachlorobutadiene		ND		110	370
Hexachlorocyclopentadiene		ND		110	750
Hexachloroethane		ND		110	370
Indeno[1,2,3-cd]pyrene		ND		110	370
Isophorone		ND		110	370
Naphthalene		ND		110	900
Nitrobenzene		ND		110	370
N-Nitrosodimethylamine		ND		130	370
N-Nitrosodi-n-propylamine		ND		110	370
N-Nitrosodiphenylamine		280	J	110	370
Pentachlorophenol		ND		110	370
Phenanthrene		ND		110	450
Phenol		1200		110	370
Pyrene		ND		110	370

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	36		30 - 130
2-Fluorobiphenyl	24	X	30 - 130
2-Fluorophenol	37		30 - 130
Nitrobenzene-d5	30		30 - 130
Phenol-d5	31		30 - 130
Terphenyl-d14	28	X	30 - 130

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Client: Olin Corporation

Job Number: 360-24365-1
Sdg Number: OCRI-09

Client Sample ID: **OC-SB-447-3.0/5.0-XXX**

Lab Sample ID: 360-24365-7
Client Matrix: Solid % Moisture: 11.0

Date Sampled: 08/31/2009 0825
Date Received: 08/31/2009 1745

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49402		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48742		Lab File ID:	B10492.D
Dilution:	10			Initial Weight/Volume:	30.11 g
Date Analyzed:	09/22/2009 2350			Final Weight/Volume:	1.0 mL
Date Prepared:	09/09/2009 0958			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** **10**

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
122-39-4	Diphenylamine	10.85	280	J
4237-44-9	Phenol, 2-(1-phenylethyl)-	11.22	9100	T J N
2467-3-0	Phenol, 2-[(4-hydroxyphenyl)methyl]-	12.26	15000	T J N
620-92-8	Phenol, 4,4"-methylenebis-	12.52	16000	T J N
92-87-5	Benzidine	12.79	530	J
1928-30-9	Tricosane, 2-methyl-	13.89	1300	T J N
593-45-3	Octadecane	14.55	1900	T J N
629-99-2	Pentacosane	15.83	2400	T J N
1000148-62-7	1-(4-Chlorophenyl)-5-[(2-piperidin-1-yl)	16.07	5200	T J N
112-95-8	Eicosane	16.32	13	T J N

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Client: Olin Corporation

Job Number: 360-24365-1
Sdg Number: OCRI-09

Client Sample ID: OC-SB-452-0.0/1.0-XXX

Lab Sample ID: 360-24365-8
Client Matrix: Solid % Moisture: 2.5

Date Sampled: 08/31/2009 1030
Date Received: 08/31/2009 1745

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48876		Instrument ID:	Inst. J
Preparation:	3550B	Prep Batch: 360-48800		Lab File ID:	J02933.D
Dilution:	1.0			Initial Weight/Volume:	100.09 g
Date Analyzed:	09/12/2009 1951			Final Weight/Volume:	1.0 mL
Date Prepared:	09/10/2009 1211			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodimethylamine		ND		1.2	5.1

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	82		30 - 130
2-Fluorobiphenyl	66		30 - 130
2-Fluorophenol	59		30 - 130
Nitrobenzene-d5	68		30 - 130
Phenol-d5	67		30 - 130
Terphenyl-d14	84		30 - 130

Client: Olin Corporation

Job Number: 360-24365-1
Sdg Number: OCRI-09

Client Sample ID: OC-SB-452-0.0/1.0-XXX

Lab Sample ID: 360-24365-8
Client Matrix: Solid

% Moisture: 2.5

Date Sampled: 08/31/2009 1030
Date Received: 08/31/2009 1745

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49402		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48742		Lab File ID:	B10491.D
Dilution:	1.0			Initial Weight/Volume:	30.13 g
Date Analyzed:	09/22/2009 2319			Final Weight/Volume:	1.0 mL
Date Prepared:	09/09/2009 0958			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		10	34
1,2,4,5-Tetrachlorobenzene		ND		10	34
1,2,4-Trichlorobenzene		ND		10	34
1,2-Dichlorobenzene		ND		10	34
1,3-Dichlorobenzene		ND		10	34
1,4-Dichlorobenzene		ND		10	34
1-Methylnaphthalene		ND		10	34
2,2'-oxybis[1-chloropropane]		ND		10	34
2,3,4,6-Tetrachlorophenol		ND		10	34
2,4,5-Trichlorophenol		ND		10	34
2,4,6-Trichlorophenol		ND		10	34
2,4-Dichlorophenol		ND		10	34
2,4-Dimethylphenol		ND		13	34
2,4-Dinitrophenol		ND		10	34
2,4-Dinitrotoluene		ND		10	34
2,6-Dinitrotoluene		ND		10	34
2-Chloronaphthalene		ND		10	34
2-Chlorophenol		ND		10	34
2-Methylnaphthalene		ND		10	34
2-Methylphenol		ND		20	34
2-Nitroaniline		ND		10	170
2-Nitrophenol		ND		10	34
3 & 4 Methylphenol		ND		10	34
3,3'-Dichlorobenzidine		ND J		10	68
3-Nitroaniline		ND		10	170
4,6-Dinitro-2-methylphenol		ND		10	170
4-Bromophenyl phenyl ether		ND		10	34
4-Chloro-3-methylphenol		ND		10	68
4-Chloroaniline		ND		10	68
4-Chlorophenyl phenyl ether		ND		10	34
4-Nitroaniline		ND		10	170
4-Nitrophenol		ND		10	170
Acenaphthene		ND		10	34
Acenaphthylene		ND		10	34
Acetophenone		23	J	10	34
Aniline		ND J		10	34
Anthracene		ND		10	34
Atrazine		ND		10	34
Azobenzene		ND		10	34
Benzaldehyde		ND		10	34
Benzo[a]anthracene		27	J	10	34
Benzo[a]pyrene		19	J	10	34
Benzo[b]fluoranthene		27	J	10	34
Benzo[g,h,i]perylene		ND		10	34
Benzo[k]fluoranthene		14	J	10	34
Benzoic acid		1704 J ~~150~~	J	15	170

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Client: Olin Corporation

Job Number: 360-24365-1
Sdg Number: OCRI-09

Client Sample ID: OC-SB-452-0.0/1.0-XXX

Lab Sample ID: 360-24365-8
Client Matrix: Solid

% Moisture: 2.5

Date Sampled: 08/31/2009 1030
Date Received: 08/31/2009 1745

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49402		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48742		Lab File ID:	B10491.D
Dilution:	1.0			Initial Weight/Volume:	30.13 g
Date Analyzed:	09/22/2009 2319			Final Weight/Volume:	1.0 mL
Date Prepared:	09/09/2009 0958			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		10	34
Benzyl alcohol		ND		29	68
Bis(2-chloroethoxy)methane		ND		10	34
Bis(2-chloroethyl)ether		ND		10	34
Bis(2-ethylhexyl) phthalate		260 JEB		10	34
Butyl benzyl phthalate		ND		10	34
Caprolactam		ND		10	34
Carbazole		ND		10	34
Chrysene		34	J	10	34
Dibenz(a,h)anthracene		ND		10	34
Dibenzofuran		ND		10	34
Diethyl phthalate		ND		10	34
Dimethyl phthalate		ND		10	34
Di-n-butyl phthalate		ND		30	34
Di-n-octyl phthalate		ND		17	34
Diphenyl oxide		11	J	10	34
Fluoranthene		56 J		10	34
Fluorene		ND		10	34
Hexachlorobenzene		ND		10	34
Hexachlorobutadiene		ND		10	34
Hexachlorocyclopentadiene		ND		10	68
Hexachloroethane		ND		10	34
Indeno[1,2,3-cd]pyrene		11	J	10	34
Isophorone		ND		10	34
Naphthalene		ND		10	82
Nitrobenzene		ND		10	34
~~N-Nitrosodimethylamine~~		~~ND~~		~~12~~	~~34~~
N-Nitrosodi-n-propylamine		ND		10	34
~~N-Nitrosodiphenylamine~~		~~63~~		~~10~~	~~34~~
Pentachlorophenol		45		10	34
Phenanthrene		25	J	10	41
Phenol		ND		10	34
Pyrene		47 J		10	34

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	41		30 - 130
2-Fluorophenol	58		30 - 130
2-Fluorobiphenyl	39		30 - 130
Nitrobenzene-d5	48		30 - 130
Phenol-d5	50		30 - 130
Terphenyl-d14	44		30 - 130

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Client: Olin Corporation

Job Number: 360-24365-1
Sdg Number: OCRI-09

Client Sample ID: **OC-SB-452-0.0/1.0-XXX**

Lab Sample ID: 360-24365-8
Client Matrix: Solid
% Moisture: 2.5

Date Sampled: 08/31/2009 1030
Date Received: 08/31/2009 1745

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49402		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48742		Lab File ID:	B10491.D
Dilution:	1.0			Initial Weight/Volume:	30.13 g
Date Analyzed:	09/22/2009 2319			Final Weight/Volume:	1.0 mL
Date Prepared:	09/09/2009 0958			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 1

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Unknown	6.17	3100	T J

Client: Olin Corporation

Job Number: 360-24365-1
Sdg Number: OCRI-09

Client Sample ID: **OC-SB-452-0.0/1.0-XXX**

Lab Sample ID: 360-24365-8
Client Matrix: Solid % Moisture: 2.5

Date Sampled: 08/31/2009 1030
Date Received: 08/31/2009 1745

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49444		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48742		Lab File ID:	B10542.D
Dilution:	1.0			Initial Weight/Volume:	30.13 g
Date Analyzed:	09/24/2009 1007			Final Weight/Volume:	1.0 mL
Date Prepared:	09/09/2009 0958			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Diphenylamine		48	J	10	34

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Client: Olin Corporation

Job Number: 360-24365-1
Sdg Number: OCRI-09

Client Sample ID: **OC-SB-452-0.0/1.0-XXX**

Lab Sample ID: 360-24365-8
Client Matrix: Solid
% Moisture: 2.5

Date Sampled: 08/31/2009 1030
Date Received: 08/31/2009 1745

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49490		Instrument ID:	NOEQUIP
Preparation:	3546	Prep Batch: 360-48742		Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	30.13 g
Date Analyzed:	09/24/2009 1007			Final Weight/Volume:	1.0 mL
Date Prepared:	09/09/2009 0958			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodiphenylamine		15	J	10	34

Client: Olin Corporation

Job Number: 360-24365-1
Sdg Number: OCRI-09

Client Sample ID: OC-SB-452-5.0/7.0-XXX

Lab Sample ID: 360-24365-10
Client Matrix: Solid
% Moisture: 17.2

Date Sampled: 08/31/2009 1045
Date Received: 08/31/2009 1745

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48876		Instrument ID:	Inst. J
Preparation:	3550B	Prep Batch: 360-48800		Lab File ID:	J02924.D
Dilution:	1.0			Initial Weight/Volume:	100.34 g
Date Analyzed:	09/12/2009 1517			Final Weight/Volume:	1.0 mL
Date Prepared:	09/10/2009 1211			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodimethylamine		ND		1.4	6.0

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	60		30 - 130
2-Fluorobiphenyl	53		30 - 130
2-Fluorophenol	54		30 - 130
Nitrobenzene-d5	53		30 - 130
Phenol-d5	58		30 - 130
Terphenyl-d14	70		30 - 130

Client: Olin Corporation

Job Number: 360-24365-1
Sdg Number: OCRI-09

Client Sample ID: **OC-SB-452-5.0/7.0-XXX**

Lab Sample ID: 360-24365-10
Client Matrix: Solid
% Moisture: 17.2

Date Sampled: 08/31/2009 1045
Date Received: 08/31/2009 1745

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49266		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48854		Lab File ID:	B10458.D
Dilution:	1.0			Initial Weight/Volume:	30.46 g
Date Analyzed:	09/22/2009 0215			Final Weight/Volume:	1.0 mL
Date Prepared:	09/11/2009 1142			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		12	40
1,2,4,5-Tetrachlorobenzene		ND		12	40
1,2,4-Trichlorobenzene		ND		12	40
1,2-Dichlorobenzene		ND		12	40
1,3-Dichlorobenzene		ND		12	40
1,4-Dichlorobenzene		ND		12	40
1-Methylnaphthalene		ND		12	40
2,2'-oxybis[1-chloropropane]		ND		12	40
2,3,4,6-Tetrachlorophenol		ND		12	40
2,4,5-Trichlorophenol		ND		12	40
2,4,6-Trichlorophenol		ND		12	40
2,4-Dichlorophenol		ND		12	40
2,4-Dimethylphenol		ND		16	40
2,4-Dinitrophenol		ND		12	40
2,4-Dinitrotoluene		ND		12	40
2,6-Dinitrotoluene		ND		12	40
2-Chloronaphthalene		ND		12	40
2-Chlorophenol		ND		12	40
2-Methylnaphthalene		ND		12	40
2-Methylphenol		ND		24	40
2-Nitroaniline		ND		12	200
2-Nitrophenol		ND		12	40
3 & 4 Methylphenol		ND		12	40
3,3'-Dichlorobenzidine		ND		12	79
3-Nitroaniline		ND		12	200
4,6-Dinitro-2-methylphenol		ND		12	200
4-Bromophenyl phenyl ether		ND		12	40
4-Chloro-3-methylphenol		ND		12	79
4-Chloroaniline		ND		12	79
4-Chlorophenyl phenyl ether		ND		12	40
4-Nitroaniline		ND		12	200
4-Nitrophenol		ND		12	200
Acenaphthene		ND		12	40
Acenaphthylene		ND		12	40
Acetophenone		ND		12	40
Aniline		ND	J	12	40
Anthracene		ND		12	40
Atrazine		ND		12	40
Azobenzene		ND		12	40
Benzaldehyde		ND		12	40
Benzo[a]anthracene		ND		12	40
Benzo[a]pyrene		ND		12	40
Benzo[b]fluoranthene		ND		12	40
Benzo[g,h,i]perylene		ND		12	40
Benzo[k]fluoranthene		ND		12	40
Benzoic acid		ND		18	200

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Client: Olin Corporation

Job Number: 360-24365-1
Sdg Number: OCRI-09

Client Sample ID: OC-SB-452-5.0/7.0-XXX

Lab Sample ID: 360-24365-10
Client Matrix: Solid
% Moisture: 17.2

Date Sampled: 08/31/2009 1045
Date Received: 08/31/2009 1745

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49266		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48854		Lab File ID:	B10458.D
Dilution:	1.0			Initial Weight/Volume:	30.46 g
Date Analyzed:	09/22/2009 0215			Final Weight/Volume:	1.0 mL
Date Prepared:	09/11/2009 1142			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		12	40
Benzyl alcohol		ND		34	79
Bis(2-chloroethoxy)methane		ND		12	40
Bis(2-chloroethyl)ether		ND		12	40
Bis(2-ethylhexyl) phthalate		ND		12	40
Butyl benzyl phthalate		ND		12	40
Caprolactam		ND		12	40
Carbazole		ND		12	40
Chrysene		ND		12	40
Dibenz(a,h)anthracene		ND		12	40
Dibenzofuran		ND		12	40
Diethyl phthalate		ND		12	40
Dimethyl phthalate		ND		12	40
Di-n-butyl phthalate		ND		35	40
Di-n-octyl phthalate		ND		20	40
Diphenyl oxide		ND		12	40
Diphenylamine		ND		12	40
Fluoranthene		ND		12	40
Fluorene		ND		12	40
Hexachlorobenzene		ND		12	40
Hexachlorobutadiene		ND		12	40
Hexachlorocyclopentadiene		ND		12	79
Hexachloroethane		ND		12	40
Indeno[1,2,3-cd]pyrene		ND		12	40
Isophorone		ND		12	40
Naphthalene		ND		12	95
Nitrobenzene		ND		12	40
N-Nitrosodimethylamine		ND		14	40
N-Nitrosodi-n-propylamine		ND		12	40
N-Nitrosodiphenylamine		ND		12	40
Pentachlorophenol		ND		12	40
Phenanthrene		ND		12	48
Phenol		ND		12	40
Pyrene		ND		12	40

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	55		30 - 130
2-Fluorophenol	67		30 - 130
2-Fluorobiphenyl	55		30 - 130
Nitrobenzene-d5	65		30 - 130
Phenol-d5	66		30 - 130
Terphenyl-d14	56		30 - 130

Client: Olin Corporation

Job Number: 360-24365-1
Sdg Number: OCRI-09

Client Sample ID: **OC-SB-452-5.0/7.0-XXX**

Lab Sample ID: 360-24365-10
Client Matrix: Solid % Moisture: 17.2

Date Sampled: 08/31/2009 1045
Date Received: 08/31/2009 1745

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49266		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48854		Lab File ID:	B10458.D
Dilution:	1.0			Initial Weight/Volume:	30.46 g
Date Analyzed:	09/22/2009 0215			Final Weight/Volume:	1.0 mL
Date Prepared:	09/11/2009 1142			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** **10**

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
98-55-5	Alpha-Terpineol	8.94	27	T J N
128-37-0	Butylated Hydroxytoluene	10.48	13	T J N
27193-28-8	Phenol, (1,1,3,3-tetramethylbutyl)-	10.93	8.7	T J N
~~3910-35-8~~	~~1H-Indene, 2,3-dihydro-1,1,3-trimethyl-3~~	~~11.43~~	~~13~~	~~T J N~~
~~22768-22-5~~	~~2,4-Diphenyl-4-methyl-2(E)-pentene~~	~~11.85~~	~~10~~	~~T J N~~
596-85-0	1-Naphthalenepropanol, .alpha.-ethenylde	12.79	13	T J N
629-92-5	Nonadecane	15.61	12	T J N
~~112-95-8~~	~~Eicosane~~	~~16.12~~	~~19~~	~~T J N~~
~~593-45-3~~	~~Octadecane~~	~~16.64~~	~~11~~	~~T J N~~
~~7683-64-9~~	~~Squalene~~	~~16.77~~	~~41~~	~~T J N~~

Client: Olin Corporation

Job Number: 360-24365-1
Sdg Number: OCRI-09

Client Sample ID: **OC-EBK-006**

Lab Sample ID: 360-24365-12EB
Client Matrix: Water

Date Sampled: 08/31/2009 1415
Date Received: 08/31/2009 1745

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48893		Instrument ID:	Inst. B
Preparation:	3510C	Prep Batch: 360-48620		Lab File ID:	B10295.D
Dilution:	1.0			Initial Weight/Volume:	1000 mL
Date Analyzed:	09/14/2009 2026			Final Weight/Volume:	1.0 mL
Date Prepared:	09/04/2009 1248			Injection Volume:	1.0 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
N-Nitrosodimethylamine	ND	*	0.50	5.0

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	72		15 - 110
2-Fluorobiphenyl	74		30 - 130
2-Fluorophenol	21		15 - 110
Nitrobenzene-d5	80		30 - 130
Phenol-d5	11	X	15 - 110
Terphenyl-d14	82		30 - 130

Client: Olin Corporation

Job Number: 360-24365-1
Sdg Number: OCRI-09

Client Sample ID: **OC-EBK-006**

Lab Sample ID: 360-24365-12EB
Client Matrix: Water

Date Sampled: 08/31/2009 1415
Date Received: 08/31/2009 1745

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48893		Instrument ID:	Inst. B
Preparation:	3510C	Prep Batch: 360-48620		Lab File ID:	B10295.D
Dilution:	1.0			Initial Weight/Volume:	1000 mL
Date Analyzed:	09/14/2009 2026			Final Weight/Volume:	1.0 mL
Date Prepared:	09/04/2009 1248			Injection Volume:	1.0 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1'-Biphenyl	ND		0.50	5.0
1,2,4,5-Tetrachlorobenzene	ND		0.50	5.0
1-Methylnaphthalene	ND		0.50	5.0
2,3,4,6-Tetrachlorophenol	ND		0.50	5.0
Bis(2-chloroethyl)ether	ND		0.50	5.0
Benzyl alcohol	ND		0.50	10
2-Methylphenol	ND		0.50	5.0
N-Nitrosodi-n-propylamine	ND		0.50	5.0
Hexachloroethane	ND		0.50	3.0
3 & 4 Methylphenol	ND		0.50	5.0
2-Chlorophenol	ND		0.50	5.0
3,3'-Dichlorobenzidine	ND	*	0.50	5.0
Nitrobenzene	ND		0.50	5.0
Bis(2-chloroethoxy)methane	ND		0.50	5.0
Benzoic acid	ND	*	0.50	5.0
Isophorone	ND		0.50	5.0
2,4-Dimethylphenol	ND		0.50	5.0
Aniline	ND	*	0.50	5.0
Azobenzene	ND		0.50	5.0
2,4-Dichlorophenol	ND		0.50	5.0
4-Chloroaniline	ND		0.50	5.0
2,4,6-Trichlorophenol	ND		0.50	5.0
2,4,5-Trichlorophenol	ND		0.50	5.0
Hexachlorocyclopentadiene	ND		0.050	5.0
2-Methylnaphthalene	ND		0.050	1.0
2-Nitroaniline	ND		0.50	5.0
Caprolactam	ND	*	0.50	5.0
2-Chloronaphthalene	ND		0.50	5.0
4-Chloro-3-methylphenol	ND		0.50	5.0
2,6-Dinitrotoluene	ND		0.50	5.0
2-Nitrophenol	ND		0.50	5.0
3-Nitroaniline	ND		0.50	5.0
Dimethyl phthalate	ND		0.50	5.0
2,4-Dinitrophenol	ND	*	0.50	5.0
Acenaphthylene	ND		0.050	0.30
2,4-Dinitrotoluene	ND		0.50	5.0
Acenaphthene	ND		0.050	1.0
Dibenzofuran	ND		0.50	5.0
4-Nitrophenol	ND	*	0.50	5.0
Fluorene	ND		0.050	1.0
4-Nitroaniline	ND		0.50	5.0
Phenol	ND	*	0.50	5.0
4-Bromophenyl phenyl ether	ND		0.50	5.0
Hexachlorobenzene	ND		0.50	1.0
Diethyl phthalate	0.54	J	0.50	5.0
4-Chlorophenyl phenyl ether	ND		0.50	5.0

Client: Olin Corporation

Job Number: 360-24365-1
Sdg Number: OCRI-09

Client Sample ID: **OC-EBK-006**

Lab Sample ID: 360-24365-12EB
Client Matrix: Water

Date Sampled: 08/31/2009 1415
Date Received: 08/31/2009 1745

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48893		Instrument ID:	Inst. B
Preparation:	3510C	Prep Batch: 360-48620		Lab File ID:	B10295.D
Dilution:	1.0			Initial Weight/Volume:	1000 mL
Date Analyzed:	09/14/2009 2026			Final Weight/Volume:	1.0 mL
Date Prepared:	09/04/2009 1248			Injection Volume:	1.0 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Pentachlorophenol	ND		0.50	1.0
N-Nitrosodiphenylamine	ND		0.50	5.0
4,6-Dinitro-2-methylphenol	ND		0.50	5.0
Phenanthrene	ND		0.085	0.20
Anthracene	ND		0.070	1.0
Di-n-butyl phthalate	1.7	J B	0.60	5.0
Fluoranthene	ND		0.20	1.0
Pyrene	ND		0.19	5.0
Butyl benzyl phthalate	0.54	J	0.50	5.0
Benzo[a]anthracene	ND		0.17	0.30
Chrysene	ND		0.17	1.0
Di-n-octyl phthalate	ND		0.73	5.0
Benzo[b]fluoranthene	ND		0.14	0.30
Benzo[k]fluoranthene	ND		0.17	0.30
Benzo[a]pyrene	ND		0.10	0.20
Indeno[1,2,3-cd]pyrene	ND		0.079	0.50
Dibenz(a,h)anthracene	ND	*	0.064	0.50
Benzo[g,h,i]perylene	ND		0.094	0.50
Acetophenone	0.52	J	0.50	5.0
Bis(2-ethylhexyl) phthalate	ND		0.50	2.0
bis (2-chloroisopropyl) ether	ND		0.50	5.0
Atrazine	ND		0.50	5.0
Benzaldehyde	ND	*	0.50	5.0
Carbazole	ND		0.50	5.0
Benzophenone	ND		0.50	5.0
Diphenyl oxide	ND		0.50	5.0
Diphenylamine	ND		0.50	5.0

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	72		15 - 110
2-Fluorobiphenyl	74		30 - 130
2-Fluorophenol	21		15 - 110
Nitrobenzene-d5	80		30 - 130
Phenol-d5	11	X	15 - 110
Terphenyl-d14	82		30 - 130

Client: Olin Corporation

Job Number: 360-24365-1
Sdg Number: OCRI-09

Client Sample ID: **OC-EBK-006**

Lab Sample ID: 360-24365-12EB
Client Matrix: Water

Date Sampled: 08/31/2009 1415
Date Received: 08/31/2009 1745

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48893		Instrument ID:	Inst. B
Preparation:	3510C	Prep Batch: 360-48620		Lab File ID:	B10295.D
Dilution:	1.0			Initial Weight/Volume:	1000 mL
Date Analyzed:	09/14/2009 2026			Final Weight/Volume:	1.0 mL
Date Prepared:	09/04/2009 1248			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 5

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
110-86-1	Pyridine	6.01	0.20	J *
	Unknown	12.76	1.6	T J
1560-88-9	Octadecane, 2-methyl-	15.97	1.6	T J N
630-1-3	Hexacosane	16.51	1.6	T J N
593-49-7	Heptacosane	17.10	1.8	T J N

Client: Olin Corporation

Job Number: 360-24365-1
Sdg Number: OCRI-09

Client Sample ID: **OC-SB-458-0.0/1.0-XXX**

Lab Sample ID: 360-24365-13
Client Matrix: Solid % Moisture: 8.3

Date Sampled: 08/31/2009 1530
Date Received: 09/01/2009 1715

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48876		Instrument ID:	Inst. J
Preparation:	3550B	Prep Batch: 360-48800		Lab File ID:	J02925.D
Dilution:	1.0			Initial Weight/Volume:	100.40 g
Date Analyzed:	09/12/2009 1548			Final Weight/Volume:	1.0 mL
Date Prepared:	09/10/2009 1211			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodimethylamine		ND		1.3	5.4

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	68		30 - 130
2-Fluorobiphenyl	54		30 - 130
2-Fluorophenol	47		30 - 130
Nitrobenzene-d5	52		30 - 130
Phenol-d5	56		30 - 130
Terphenyl-d14	71		30 - 130

Client: Olin Corporation

Job Number: 360-24365-1
Sdg Number: OCRI-09

Client Sample ID: **OC-SB-458-0.0/1.0-XXX**

Lab Sample ID: 360-24365-13
Client Matrix: Solid
% Moisture: 8.3

Date Sampled: 08/31/2009 1530
Date Received: 09/01/2009 1715

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49444		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48854		Lab File ID:	B10529.D
Dilution:	1.0			Initial Weight/Volume:	30.33 g
Date Analyzed:	09/24/2009 0318			Final Weight/Volume:	1.0 mL
Date Prepared:	09/11/2009 1142			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		11	36
1,2,4,5-Tetrachlorobenzene		ND		11	36
1,2,4-Trichlorobenzene		ND		11	36
1,2-Dichlorobenzene		ND		11	36
1,3-Dichlorobenzene		ND		11	36
1,4-Dichlorobenzene		ND		11	36
1-Methylnaphthalene		ND		11	36
2,2'-oxybis[1-chloropropane]		ND		11	36
2,3,4,6-Tetrachlorophenol		ND		11	36
2,4,5-Trichlorophenol		ND		11	36
2,4,6-Trichlorophenol		ND		11	36
2,4-Dichlorophenol		ND		11	36
2,4-Dimethylphenol		ND		14	36
2,4-Dinitrophenol		ND		11	36
2,4-Dinitrotoluene		ND		11	36
2,6-Dinitrotoluene		ND		11	36
2-Chloronaphthalene		ND		11	36
2-Chlorophenol		ND		11	36
2-Methylnaphthalene		ND		11	36
2-Methylphenol		ND		22	36
2-Nitroaniline		ND		11	180
2-Nitrophenol		ND		11	36
3 & 4 Methylphenol		ND		11	36
3,3'-Dichlorobenzidine		ND		11	72
3-Nitroaniline		ND		11	180
4,6-Dinitro-2-methylphenol		ND		11	180
4-Bromophenyl phenyl ether		ND		11	36
4-Chloro-3-methylphenol		ND		11	72
4-Chloroaniline		ND		11	72
4-Chlorophenyl phenyl ether		ND		11	36
4-Nitroaniline		ND		11	180
4-Nitrophenol		ND		11	180
Acenaphthene		ND		11	36
Acenaphthylene		ND		11	36
Acetophenone		ND		11	36
Aniline		ND	J	11	36
Anthracene		ND		11	36
Atrazine		ND		11	36
Azobenzene		ND		11	36
Benzaldehyde		21	J	11	36
Benzo[a]anthracene		ND		11	36
Benzo[a]pyrene		ND		11	36
Benzo[b]fluoranthene		ND		11	36
Benzo[g,h,i]perylene		ND		11	36
Benzo[k]fluoranthene		ND		11	36
Benzoic acid		1804 54	J	16	180

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Client: Olin Corporation

Job Number: 360-24365-1
Sdg Number: OCRI-09

Client Sample ID: **OC-SB-458-0.0/1.0-XXX**

Lab Sample ID: 360-24365-13
Client Matrix: Solid
% Moisture: 8.3

Date Sampled: 08/31/2009 1530
Date Received: 09/01/2009 1715

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49444		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48854		Lab File ID:	B10529.D
Dilution:	1.0			Initial Weight/Volume:	30.33 g
Date Analyzed:	09/24/2009 0318			Final Weight/Volume:	1.0 mL
Date Prepared:	09/11/2009 1142			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		11	36
Benzyl alcohol		ND		31	72
Bis(2-chloroethoxy)methane		ND		11	36
Bis(2-chloroethyl)ether		ND		11	36
Bis(2-ethylhexyl) phthalate		310		11	36
Butyl benzyl phthalate		ND		11	36
Caprolactam		ND		11	36
Carbazole		ND		11	36
Chrysene		14	J	11	36
Dibenz(a,h)anthracene		ND		11	36
Dibenzofuran		ND		11	36
Diethyl phthalate		ND		11	36
Dimethyl phthalate		ND		11	36
Di-n-butyl phthalate		ND		32	36
Di-n-octyl phthalate		ND		18	36
Diphenyl oxide		63		11	36
Diphenylamine		ND		11	36
Fluoranthene		20	J	11	36
Fluorene		ND		11	36
Hexachlorobenzene		ND		11	36
Hexachlorobutadiene		ND		11	36
Hexachlorocyclopentadiene		ND		11	72
Hexachloroethane		ND		11	36
Indeno[1,2,3-cd]pyrene		ND		11	36
Isophorone		ND		11	36
Naphthalene		ND		11	86
Nitrobenzene		ND		11	36
N-Nitrosodimethylamine		ND		13	36
N-Nitrosodi-n-propylamine		ND		11	36
N-Nitrosodiphenylamine		ND		11	36
Pentachlorophenol		ND		11	36
Phenanthrene		12	J	11	43
Phenol		ND		11	36
Pyrene		22	J	11	36

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	73		30 - 130
2-Fluorophenol	93		30 - 130
2-Fluorobiphenyl	70		30 - 130
Nitrobenzene-d5	83		30 - 130
Phenol-d5	76		30 - 130
Terphenyl-d14	87		30 - 130

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Client: Olin Corporation

Job Number: 360-24365-1
Sdg Number: OCRI-09

Client Sample ID: **OC-SB-458-0.0/1.0-XXX**

Lab Sample ID: 360-24365-13
Client Matrix: Solid % Moisture: 8.3

Date Sampled: 08/31/2009 1530
Date Received: 09/01/2009 1715

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49444		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48854		Lab File ID:	B10529.D
Dilution:	1.0			Initial Weight/Volume:	30.33 g
Date Analyzed:	09/24/2009 0318			Final Weight/Volume:	1.0 mL
Date Prepared:	09/11/2009 1142			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 2

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
92-87-5	Benzidine	12.53	18	J
1599-67-3	1-Docosene	15.52	2700	T J N

Client: Olin Corporation

Job Number: 360-24365-1
Sdg Number: OCRI-09

Client Sample ID: **OC-SB-458-5.0/7.0-XXX**

Lab Sample ID: 360-24365-15
Client Matrix: Solid % Moisture: 16.4

Date Sampled: 08/31/2009 1545
Date Received: 09/01/2009 1715

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48876		Instrument ID:	Inst. J
Preparation:	3550B	Prep Batch: 360-48800		Lab File ID:	J02926.D
Dilution:	1.0			Initial Weight/Volume:	100.33 g
Date Analyzed:	09/12/2009 1618			Final Weight/Volume:	1.0 mL
Date Prepared:	09/10/2009 1211			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodimethylamine		ND		1.4	6.0

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	67		30 - 130
2-Fluorobiphenyl	53		30 - 130
2-Fluorophenol	55		30 - 130
Nitrobenzene-d5	54		30 - 130
Phenol-d5	60		30 - 130
Terphenyl-d14	64		30 - 130

Client: Olin Corporation

Job Number: 360-24365-1
Sdg Number: OCRI-09

Client Sample ID: **OC-SB-458-5.0/7.0-XXX**

Lab Sample ID: 360-24365-15
Client Matrix: Solid
% Moisture: 16.4

Date Sampled: 08/31/2009 1545
Date Received: 09/01/2009 1715

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49266		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48854		Lab File ID:	B10461.D
Dilution:	1.0			Initial Weight/Volume:	30.17 g
Date Analyzed:	09/22/2009 0348			Final Weight/Volume:	1.0 mL
Date Prepared:	09/11/2009 1142			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		12	40
1,2,4,5-Tetrachlorobenzene		ND		12	40
1,2,4-Trichlorobenzene		ND		12	40
1,2-Dichlorobenzene		ND		12	40
1,3-Dichlorobenzene		ND		12	40
1,4-Dichlorobenzene		ND		12	40
1-Methylnaphthalene		ND		12	40
2,2'-oxybis[1-chloropropane]		ND		12	40
2,3,4,6-Tetrachlorophenol		ND		12	40
2,4,5-Trichlorophenol		ND		12	40
2,4,6-Trichlorophenol		ND		12	40
2,4-Dichlorophenol		ND		12	40
2,4-Dimethylphenol		ND		16	40
2,4-Dinitrophenol		ND		12	40
2,4-Dinitrotoluene		ND		12	40
2,6-Dinitrotoluene		ND		12	40
2-Chloronaphthalene		ND		12	40
2-Chlorophenol		ND		12	40
2-Methylnaphthalene		ND		12	40
2-Methylphenol		ND		24	40
2-Nitroaniline		ND		12	200
2-Nitrophenol		ND		12	40
3 & 4 Methylphenol		ND		12	40
3,3'-Dichlorobenzidine		ND		12	79
3-Nitroaniline		ND		12	200
4,6-Dinitro-2-methylphenol		ND		12	200
4-Bromophenyl phenyl ether		ND		12	40
4-Chloro-3-methylphenol		ND		12	79
4-Chloroaniline		ND		12	79
4-Chlorophenyl phenyl ether		ND		12	40
4-Nitroaniline		ND		12	200
4-Nitrophenol		ND		12	200
Acenaphthene		ND		12	40
Acenaphthylene		ND		12	40
Acetophenone		ND		12	40
Aniline		ND	J	12	40
Anthracene		ND		12	40
Atrazine		ND		12	40
Azobenzene		ND		12	40
Benzaldehyde		ND		12	40
Benzo[a]anthracene		ND		12	40
Benzo[a]pyrene		ND		12	40
Benzo[b]fluoranthene		ND		12	40
Benzo[g,h,i]perylene		ND		12	40
Benzo[k]fluoranthene		ND		12	40
Benzoic acid		ND		18	200

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Client: Olin Corporation

Job Number: 360-24365-1
Sdg Number: OCRI-09

Client Sample ID: **OC-SB-458-5.0/7.0-XXX**

Lab Sample ID: 360-24365-15
Client Matrix: Solid
% Moisture: 16.4

Date Sampled: 08/31/2009 1545
Date Received: 09/01/2009 1715

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49266		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48854		Lab File ID:	B10461.D
Dilution:	1.0			Initial Weight/Volume:	30.17 g
Date Analyzed:	09/22/2009 0348			Final Weight/Volume:	1.0 mL
Date Prepared:	09/11/2009 1142			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		12	40
Benzyl alcohol		ND		34	79
Bis(2-chloroethoxy)methane		ND		12	40
Bis(2-chloroethyl)ether		ND		12	40
Bis(2-ethylhexyl) phthalate		ND		12	40
Butyl benzyl phthalate		ND		12	40
Caprolactam		ND		12	40
Carbazole		ND		12	40
Chrysene		ND		12	40
Dibenz(a,h)anthracene		ND		12	40
Dibenzofuran		ND		12	40
Diethyl phthalate		ND		12	40
Dimethyl phthalate		ND		12	40
Di-n-butyl phthalate		ND		35	40
Di-n-octyl phthalate		ND		20	40
Diphenyl oxide		ND		12	40
Diphenylamine		ND		12	40
Fluoranthene		ND		12	40
Fluorene		ND		12	40
Hexachlorobenzene		ND		12	40
Hexachlorobutadiene		ND		12	40
Hexachlorocyclopentadiene		ND		12	79
Hexachloroethane		ND		12	40
Indeno[1,2,3-cd]pyrene		ND		12	40
Isophorone		ND		12	40
Naphthalene		ND		12	95
Nitrobenzene		ND		12	40
N-Nitrosodimethylamine		ND		14	40
N-Nitrosodi-n-propylamine		ND		12	40
N-Nitrosodiphenylamine		ND		12	40
Pentachlorophenol		ND		12	40
Phenanthrene		ND		12	48
Phenol		ND		12	40
Pyrene		ND		12	40

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	54		30 - 130
2-Fluorophenol	65		30 - 130
2-Fluorobiphenyl	54		30 - 130
Nitrobenzene-d5	63		30 - 130
Phenol-d5	65		30 - 130
Terphenyl-d14	54		30 - 130

Client: Olin Corporation

Job Number: 360-24365-1
Sdg Number: OCRI-09

Client Sample ID: **OC-SB-458-5.0/7.0-XXX**

Lab Sample ID: 360-24365-15
Client Matrix: Solid % Moisture: 16.4

Date Sampled: 08/31/2009 1545
Date Received: 09/01/2009 1715

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49266		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48854		Lab File ID:	B10461.D
Dilution:	1.0			Initial Weight/Volume:	30.17 g
Date Analyzed:	09/22/2009 0348			Final Weight/Volume:	1.0 mL
Date Prepared:	09/11/2009 1142			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** **10**

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
7212-44-4	1,6,10-Dodecatrien-3-ol, 3,7,11-trimethy	12.46	10	T J N
54833-23-7	Eicosane, 10-methyl-	12.70	9.4	T J N
596-85-0	1-Naphthalenepropanol, .alpha.-ethenylde	12.78	340	T J N
629-97-0	Docosane	13.14	9.8	T J N
112-95-8	Eicosane	13.65	22	T J N
646-31-1	Tetracosane	14.25	25	T J N
638-36-8	Hexadecane, 2,6,10,14-tetramethyl-	14.98	21	T J N
112-95-8	Eicosane	16.12	19	T J N
31035-7-1	9-Nonadecene	16.27	23	T J N
111-2-4	2,6,10,14,18,22-Tetracosahexaene, 2,6,10	16.77	65	T J N

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Client: Olin Corporation

Job Number: 360-24365-1
Sdg Number: OCRI-09

Client Sample ID: OC-SB-460-0.0/1.0-XXX

Lab Sample ID: 360-24365-16
Client Matrix: Solid

% Moisture: 8.1

Date Sampled: 09/01/2009 0840
Date Received: 09/01/2009 1715

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49444		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48854		Lab File ID:	B10530.D
Dilution:	1.0			Initial Weight/Volume:	30.25 g
Date Analyzed:	09/24/2009 0350			Final Weight/Volume:	1.0 mL
Date Prepared:	09/11/2009 1142			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		11	36
1,2,4,5-Tetrachlorobenzene		ND		11	36
1,2,4-Trichlorobenzene		ND		11	36
1,2-Dichlorobenzene		ND		11	36
1,3-Dichlorobenzene		ND		11	36
1,4-Dichlorobenzene		ND		11	36
1-Methylnaphthalene		ND		11	36
2,2'-oxybis[1-chloropropane]		ND		11	36
2,3,4,6-Tetrachlorophenol		ND		11	36
2,4,5-Trichlorophenol		ND		11	36
2,4,6-Trichlorophenol		ND		11	36
2,4-Dichlorophenol		ND		11	36
2,4-Dimethylphenol		ND		14	36
2,4-Dinitrophenol		ND		11	36
2,4-Dinitrotoluene		ND		11	36
2,6-Dinitrotoluene		ND		11	36
2-Chloronaphthalene		ND		11	36
2-Chlorophenol		ND		11	36
2-Methylnaphthalene		ND		11	36
2-Methylphenol		ND		22	36
2-Nitroaniline		ND		11	180
2-Nitrophenol		ND		11	36
3 & 4 Methylphenol		ND		11	36
3,3'-Dichlorobenzidine		ND		11	72
3-Nitroaniline		ND		11	180
4,6-Dinitro-2-methylphenol		ND		11	180
4-Bromophenyl phenyl ether		ND		11	36
4-Chloro-3-methylphenol		ND		11	72
4-Chloroaniline		ND		11	72
4-Chlorophenyl phenyl ether		ND		11	36
4-Nitroaniline		ND		11	180
4-Nitrophenol		ND		11	180
Acenaphthene		ND		11	36
Acenaphthylene		ND		11	36
Acetophenone		ND		11	36
Aniline		ND	J	11	36
Anthracene		ND		11	36
Atrazine		ND		11	36
Azobenzene		ND		11	36
Benzaldehyde		23	J	11	36
Benzo[a]anthracene		15	J	11	36
Benzo[a]pyrene		15	J	11	36
Benzo[b]fluoranthene		21	J	11	36
Benzo[g,h,i]perylene		ND		11	36
Benzo[k]fluoranthene		ND		11	36
Benzoic acid	1804	~~78~~	J	16	180

3/12/10

Client: Olin Corporation

Job Number: 360-24365-1
Sdg Number: OCRI-09

Client Sample ID: **OC-SB-460-0.0/1.0-XXX**

Lab Sample ID: 360-24365-16
Client Matrix: Solid
% Moisture: 8.1

Date Sampled: 09/01/2009 0840
Date Received: 09/01/2009 1715

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49444		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48854		Lab File ID:	B10530.D
Dilution:	1.0			Initial Weight/Volume:	30.25 g
Date Analyzed:	09/24/2009 0350			Final Weight/Volume:	1.0 mL
Date Prepared:	09/11/2009 1142			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		11	36
Benzyl alcohol		ND		31	72
Bis(2-chloroethoxy)methane		ND		11	36
Bis(2-chloroethyl)ether		ND		11	36
Bis(2-ethylhexyl) phthalate		860		11	36
Butyl benzyl phthalate		ND		11	36
Caprolactam		ND		11	36
Carbazole		ND		11	36
Chrysene		23	J	11	36
Dibenz(a,h)anthracene		ND		11	36
Dibenzofuran		ND		11	36
Diethyl phthalate		ND		11	36
Dimethyl phthalate		ND		11	36
Di-n-butyl phthalate		ND		32	36
Di-n-octyl phthalate		ND		18	36
Diphenyl oxide		ND		11	36
Fluoranthene		35	J	11	36
Fluorene		ND		11	36
Hexachlorobenzene		ND		11	36
Hexachlorobutadiene		ND		11	36
Hexachlorocyclopentadiene		ND		11	72
Hexachloroethane		ND		11	36
Indeno[1,2,3-cd]pyrene		ND		11	36
Isophorone		ND		11	36
Naphthalene		ND		11	86
Nitrobenzene		ND		11	36
N-Nitrosodimethylamine		ND		13	36
N-Nitrosodi-n-propylamine		ND		11	36
N-Nitrosodiphenylamine		ND		11	36
Pentachlorophenol		ND		11	36
Phenanthrene		22	J	11	43
Phenol		66		11	36
Pyrene		33	J	11	36

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	71		30 - 130
2-Fluorobiphenyl	64		30 - 130
2-Fluorophenol	91		30 - 130
Nitrobenzene-d5	74		30 - 130
Phenol-d5	74		30 - 130
Terphenyl-d14	78		30 - 130

Client: Olin Corporation

Job Number: 360-24365-1
Sdg Number: OCRI-09

Client Sample ID: **OC-SB-460-0.0/1.0-XXX**

Lab Sample ID: 360-24365-16
Client Matrix: Solid % Moisture: 8.1

Date Sampled: 09/01/2009 0840
Date Received: 09/01/2009 1715

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49444		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48854		Lab File ID:	B10530.D
Dilution:	1.0			Initial Weight/Volume:	30.25 g
Date Analyzed:	09/24/2009 0350			Final Weight/Volume:	1.0 mL
Date Prepared:	09/11/2009 1142			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 10

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Unknown	5.93	6000	T J
3452-7-1	1-Eicosene	14.10	1000	T J N
1599-67-3	1-Docosene	15.52	1400	T J N
21129-9-9	1,2-Tetradecanediol	16.04	960	T J N
6920-24-7	Hexadecane-1,2-diol	16.54	1800	T J N
26603-23-6	p,p''-Dioctyldiphenylamine	17.03	7300	T J N
630-4-6	Hentriacontane	17.63	340	T J N
1599-67-3	1-Docosene	17.70	570	T J N
7796-19-2	2-Heptacosanone	17.79	370	T J N
	Unknown	19.86	470	T J

4/29/10

Client: Olin Corporation

Job Number: 360-24365-1
Sdg Number: OCRI-09

Client Sample ID: **OC-SB-460-5.5/7.5-XXX**

Lab Sample ID: 360-24365-18
Client Matrix: Solid % Moisture: 19.1

Date Sampled: 09/01/2009 0850
Date Received: 09/01/2009 1715

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49266		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48854		Lab File ID:	B10464.D
Dilution:	1.0			Initial Weight/Volume:	30.36 g
Date Analyzed:	09/22/2009 0521			Final Weight/Volume:	1.0 mL
Date Prepared:	09/11/2009 1142			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		12	41
1,2,4,5-Tetrachlorobenzene		ND		12	41
1,2,4-Trichlorobenzene		ND		12	41
1,2-Dichlorobenzene		ND		12	41
1,3-Dichlorobenzene		ND		12	41
1,4-Dichlorobenzene		ND		12	41
1-Methylnaphthalene		31	J	12	41
2,2'-oxybis[1-chloropropane]		ND		12	41
2,3,4,6-Tetrachlorophenol		ND		12	41
2,4,5-Trichlorophenol		ND		12	41
2,4,6-Trichlorophenol		ND		12	41
2,4-Dichlorophenol		ND		12	41
2,4-Dimethylphenol		ND		16	41
2,4-Dinitrophenol		ND		12	41
2,4-Dinitrotoluene		ND		12	41
2,6-Dinitrotoluene		ND		12	41
2-Chloronaphthalene		ND		12	41
2-Chlorophenol		ND		12	41
2-Methylnaphthalene		49		12	41
2-Methylphenol		ND		24	41
2-Nitroaniline		ND		12	200
2-Nitrophenol		ND		12	41
3 & 4 Methylphenol		ND		12	41
3,3'-Dichlorobenzidine		ND		12	81
3-Nitroaniline		ND		12	200
4,6-Dinitro-2-methylphenol		ND		12	200
4-Bromophenyl phenyl ether		ND		12	41
4-Chloro-3-methylphenol		ND		12	81
4-Chloroaniline		ND		12	81
4-Chlorophenyl phenyl ether		ND		12	41
4-Nitroaniline		ND		12	200
4-Nitrophenol		ND		12	200
Acenaphthene		14	J	12	41
Acenaphthylene		ND		12	41
Acetophenone		ND		12	41
Aniline		ND J		12	41
Anthracene		ND		12	41
Atrazine		ND		12	41
Azobenzene		ND		12	41
Benzaldehyde		ND		12	41
Benzo[a]anthracene		ND		12	41
Benzo[a]pyrene		ND		12	41
Benzo[b]fluoranthene		ND		12	41
Benzo[g,h,i]perylene		ND		12	41
Benzo[k]fluoranthene		ND		12	41
Benzoic acid		2000 58	J	18	200

3/12/10

Client: Olin Corporation

Job Number: 360-24365-1
Sdg Number: OCRI-09

Client Sample ID: OC-SB-460-5.5/7.5-XXX

Lab Sample ID: 360-24365-18
Client Matrix: Solid
% Moisture: 19.1

Date Sampled: 09/01/2009 0850
Date Received: 09/01/2009 1715

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49266		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48854		Lab File ID:	B10464.D
Dilution:	1.0			Initial Weight/Volume:	30.36 g
Date Analyzed:	09/22/2009 0521			Final Weight/Volume:	1.0 mL
Date Prepared:	09/11/2009 1142			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		12	41
Benzyl alcohol		ND		35	81
Bis(2-chloroethoxy)methane		ND		12	41
Bis(2-chloroethyl)ether		ND		12	41
Bis(2-ethylhexyl) phthalate		19	J	12	41
Butyl benzyl phthalate		ND		12	41
Caprolactam		ND		12	41
Carbazole		ND		12	41
Chrysene		ND		12	41
Dibenz(a,h)anthracene		ND		12	41
Dibenzofuran		22	J	12	41
Diethyl phthalate		ND		12	41
Dimethyl phthalate		ND		12	41
Di-n-butyl phthalate		ND		36	41
Di-n-octyl phthalate		ND		21	41
Diphenyl oxide		ND		12	41
Fluoranthene		ND		12	41
Fluorene		16	J	12	41
Hexachlorobenzene		ND		12	41
Hexachlorobutadiene		ND		12	41
Hexachlorocyclopentadiene		ND		12	81
Hexachloroethane		ND		12	41
Indeno[1,2,3-cd]pyrene		ND		12	41
Isophorone		ND		12	41
Naphthalene		130		12	98
Nitrobenzene		ND		12	41
N-Nitrosodimethylamine		ND		14	41
N-Nitrosodi-n-propylamine		ND		12	41
N-Nitrosodiphenylamine		ND		12	41
Pentachlorophenol		ND		12	41
Phenanthrene		52		12	49
Phenol		ND		12	41
Pyrene		ND		12	41

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	63		30 - 130
2-Fluorobiphenyl	60		30 - 130
2-Fluorophenol	71		30 - 130
Nitrobenzene-d5	68		30 - 130
Phenol-d5	72		30 - 130
Terphenyl-d14	58		30 - 130

Client: Olin Corporation

Job Number: 360-24365-1
Sdg Number: OCRI-09

Client Sample ID: **OC-SB-460-5.5/7.5-XXX**

Lab Sample ID: 360-24365-18
Client Matrix: Solid % Moisture: 19.1

Date Sampled: 09/01/2009 0850
Date Received: 09/01/2009 1715

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49266		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48854		Lab File ID:	B10464.D
Dilution:	1.0			Initial Weight/Volume:	30.36 g
Date Analyzed:	09/22/2009 0521			Final Weight/Volume:	1.0 mL
Date Prepared:	09/11/2009 1142			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 10

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
~~112-95-8~~	~~Eicosane~~	~~12.70~~	~~16~~	~~T J N~~
638-67-5	Tricosane	13.65	44	T J N
630-1-3	Hexacosane	14.26	25	T J N
~~18344-37-1~~	~~Heptadecane, 2,6,10,14-tetramethyl-~~	~~14.98~~	~~32~~	~~T J N~~
112-92-5	1-Octadecanol	15.04	300	T J N
630-1-3	Hexacosane	15.61	21	T J N
~~112-95-8~~	~~Eicosane~~	~~16.12~~	~~30~~	~~T J N~~
1599-67-3	1-Docosene	16.17	520	T J N
630-3-5	Nonacosane	17.21	22	T J N
14021-23-9	D-Friedoolean-14-ene, 3-methoxy-, (3.bet	20.58	57	T J N

9/11/10

Client: Olin Corporation

Job Number: 360-24365-1
Sdg Number: OCRI-09

Client Sample ID: **OC-PE-SS1039-SVOC**

Lab Sample ID: 360-24365-20
Client Matrix: Solid
% Moisture: 0.0

Date Sampled: 09/01/2009 1005
Date Received: 09/01/2009 1715

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49444		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48854		Lab File ID:	B10524.D
Dilution:	1.0			Initial Weight/Volume:	30.29 g
Date Analyzed:	09/24/2009 0039			Final Weight/Volume:	1.0 mL
Date Prepared:	09/11/2009 1142			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		9.9	33
1,2,4-Trichlorobenzene		ND		9.9	33
1,2-Dichlorobenzene		ND		9.9	33
1,3-Dichlorobenzene		ND		9.9	33
1,4-Dichlorobenzene		ND		9.9	33
2,3,4,6-Tetrachlorophenol		ND		9.9	33
2,4,6-Trichlorophenol		ND		9.9	33
2,4-Dimethylphenol		ND		13	33
2,4-Dinitrophenol		160		9.9	33
2,4-Dinitrotoluene		310		9.9	33
2-Chloronaphthalene		600		9.9	33
2-Chlorophenol		210		9.9	33
2-Methylnaphthalene		ND		9.9	33
2-Methylphenol		ND		20	33
2-Nitroaniline		ND		9.9	170
2-Nitrophenol		ND		9.9	33
3 & 4 Methylphenol		ND		9.9	33
3,3'-Dichlorobenzidine		46	J	9.9	66
3-Nitroaniline		ND		9.9	170
4,6-Dinitro-2-methylphenol		ND		9.9	170
4-Bromophenyl phenyl ether		540		9.9	33
4-Chloro-3-methylphenol		ND		9.9	66
4-Chloroaniline		230		9.9	66
4-Chlorophenyl phenyl ether		440		9.9	33
4-Nitroaniline		ND		9.9	170
4-Nitrophenol		ND		9.9	170
Acenaphthene		27	J	9.9	33
Acenaphthylene		310		9.9	33
Acetophenone		ND		9.9	33
Aniline		ND		9.9	33
Anthracene		410		9.9	33
Atrazine		ND		9.9	33
Azobenzene		ND		9.9	33
Benzaldehyde		ND		9.9	33
Benzo[a]anthracene		610		9.9	33
Benzo[a]pyrene		ND		9.9	33
Benzo[g,h,i]perylene		ND		9.9	33
Benzo[k]fluoranthene		370		9.9	33
Benzoic acid		ND		15	170
Benzophenone		ND		9.9	33
Benzyl alcohol		ND		28	66
Bis(2-ethylhexyl) phthalate		ND		9.9	33
Caprolactam		240		9.9	33
Carbazole		500		9.9	33
Chrysene		ND		9.9	33
Dibenz(a,h)anthracene		ND		9.9	33

3/12/10

Client: Olin Corporation

Job Number: 360-24365-1
Sdg Number: OCRI-09

Client Sample ID: **OC-PE-SS1039-SVOC**

Lab Sample ID: 360-24365-20
Client Matrix: Solid
% Moisture: 0.0

Date Sampled: 09/01/2009 1005
Date Received: 09/01/2009 1715

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49444		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48854		Lab File ID:	B10524.D
Dilution:	1.0			Initial Weight/Volume:	30.29 g
Date Analyzed:	09/24/2009 0039			Final Weight/Volume:	1.0 mL
Date Prepared:	09/11/2009 1142			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Dibenzofuran		330		9.9	33
Diethyl phthalate		ND		9.9	33
Dimethyl phthalate		ND		9.9	33
Di-n-butyl phthalate		ND		29	33
Di-n-octyl phthalate		560		17	33
Diphenyl oxide		ND		9.9	33
Fluoranthene		ND		9.9	33
Hexachlorobenzene		410		9.9	33
Hexachlorobutadiene		ND		9.9	33
Indeno[1,2,3-cd]pyrene		ND		9.9	33
Naphthalene		400		9.9	79
Nitrobenzene		ND		9.9	33
N-Nitrosodimethylamine		ND		12	33
N-Nitrosodi-n-propylamine		580		9.9	33
N-Nitrosodiphenylamine		ND		9.9	33
Pentachlorophenol		450		9.9	33
Phenanthrene		ND		9.9	40
Phenol		ND		9.9	33
Pyrene		ND		9.9	33

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	64		30 - 130
2-Fluorobiphenyl	69		30 - 130
2-Fluorophenol	85		30 - 130
Nitrobenzene-d5	76		30 - 130
Phenol-d5	75		30 - 130
Terphenyl-d14	55		30 - 130

Client: Olin Corporation

Job Number: 360-24365-1
Sdg Number: OCRI-09

Client Sample ID: OC-PE-SS1039-SVOC

Lab Sample ID: 360-24365-20
Client Matrix: Solid % Moisture: 0.0

Date Sampled: 09/01/2009 1005
Date Received: 09/01/2009 1715

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49444		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48854		Lab File ID:	B10524.D
Dilution:	1.0			Initial Weight/Volume:	30.29 g
Date Analyzed:	09/24/2009 0039			Final Weight/Volume:	1.0 mL
Date Prepared:	09/11/2009 1142			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 4

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	5.95	5900	T J N
98-55-5	Alpha-Terpineol	8.52	25	J
92-87-5	Benzidine	12.53	17	J
	Unknown	15.23	53	T J

Client: Olin Corporation

Job Number: 360-24365-1
Sdg Number: OCRI-09

Client Sample ID: OC-PE-SS1039-SVOC

Lab Sample ID: 360-24365-20
Client Matrix: Solid

% Moisture: 0.0

Date Sampled: 09/01/2009 1005
Date Received: 09/01/2009 1715

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49444		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48854		Lab File ID:	B10525.D
Dilution:	5.0			Initial Weight/Volume:	30.29 g
Date Analyzed:	09/24/2009 0111	Run Type: DL		Final Weight/Volume:	1.0 mL
Date Prepared:	09/11/2009 1142			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,2,4,5-Tetrachlorobenzene		820		50	170
1-Methylnaphthalene		740		50	170
2,2'-oxybis[1-chloropropane]		1200		50	170
2,4,5-Trichlorophenol		800		50	170
2,4-Dichlorophenol		730		50	170
2,6-Dinitrotoluene		1000		50	170
Benzo[b]fluoranthene		820		50	170
Bis(2-chloroethoxy)methane		2900		50	170
Bis(2-chloroethyl)ether		1600		50	170
Butyl benzyl phthalate		1000		50	170
Fluorene		990		50	170
Hexachlorocyclopentadiene		650		50	330
Hexachloroethane		730		50	170
Isophorone		570		50	170

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	68		30 - 130
2-Fluorobiphenyl	81		30 - 130
2-Fluorophenol	125		30 - 130
Nitrobenzene-d5	80		30 - 130
Phenol-d5	83		30 - 130
Terphenyl-d14	80		30 - 130

Client: Olin Corporation

Job Number: 360-24365-1
Sdg Number: OCRI-09

Client Sample ID: **OC-PE-SS1039-SVOC**

Lab Sample ID: 360-24365-20
Client Matrix: Solid % Moisture: 0.0

Date Sampled: 09/01/2009 1005
Date Received: 09/01/2009 1715

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49444		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48854		Lab File ID:	B10525.D
Dilution:	5.0			Initial Weight/Volume:	30.29 g
Date Analyzed:	09/24/2009 0111	Run Type: DL		Final Weight/Volume:	1.0 mL
Date Prepared:	09/11/2009 1142			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 5

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	5.85	11000	T J N
695-77-2	1,3-Cyclopentadiene, 1,2,3,4-tetrachloro	8.67	40	T J N
77581-12-5	2,11-Dimethyl-2,3,4,5,6,7-hexahydro-1H-2	9.24	35	T J N
92-87-5	Benzidine	12.52	81	J
	Unknown	15.20	200	T J

SAMPLE SUMMARY

Client: Olin Corporation

Job Number: ~~360-24365-2~~
Sdg Number: OCRI-09A

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
360-24365-2	OC-SB-442-20/22-XXX	Solid	08/31/2009 1320	08/31/2009 1745
360-24365-6	OC-SB-447-18/20-XXX	Solid	08/31/2009 0905	08/31/2009 1745
360-24365-9	OC-SB-452-13/15-XXX	Solid	08/31/2009 1100	08/31/2009 1745
360-24365-14	OC-SB-458-22/24-XXX	Solid	08/31/2009 1630	09/01/2009 1715
360-24365-17	OC-SB-460-30/32-XXX	Solid	09/01/2009 1040	09/01/2009 1715

Form 1's edited
M. Collins
2/12/10

Client: Olin Corporation

Job Number: 360-24365-2
Sdg Number: OCRI-09A

Client Sample ID: **OC-SB-442-20/22-XXX**

Lab Sample ID: 360-24365-2
Client Matrix: Solid
% Moisture: 6.9

Date Sampled: 08/31/2009 1320
Date Received: 08/31/2009 1745

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49187		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48742		Lab File ID:	B10430.D
Dilution:	1.0			Initial Weight/Volume:	30.20 g
Date Analyzed:	09/19/2009 0812			Final Weight/Volume:	1.0 mL
Date Prepared:	09/09/2009 0958			Injection Volume:	

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		11	36
1,2,4,5-Tetrachlorobenzene		ND		11	36
1,2,4-Trichlorobenzene		ND		11	36
1,2-Dichlorobenzene		ND		11	36
1,3-Dichlorobenzene		ND		11	36
1,4-Dichlorobenzene		ND		11	36
1-Methylnaphthalene		ND		11	36
2,2'-oxybis[1-chloropropane]		ND		11	36
2,3,4,6-Tetrachlorophenol		ND		11	36
2,4,5-Trichlorophenol		ND		11	36
2,4,6-Trichlorophenol		ND		11	36
2,4-Dichlorophenol		ND		11	36
2,4-Dimethylphenol		ND		14	36
2,4-Dinitrophenol		ND		11	36
2,4-Dinitrotoluene		ND		11	36
2,6-Dinitrotoluene		ND		11	36
2-Chloronaphthalene		ND		11	36
2-Chlorophenol		ND		11	36
2-Methylnaphthalene		ND		11	36
2-Methylphenol		ND		21	36
2-Nitroaniline		ND		11	180
2-Nitrophenol		ND		11	36
3 & 4 Methylphenol		ND		11	36
3,3'-Dichlorobenzidine		ND J	✓	11	71
3-Nitroaniline		ND		11	180
4,6-Dinitro-2-methylphenol		ND		11	180
4-Bromophenyl phenyl ether		ND		11	36
4-Chloro-3-methylphenol		ND		11	71
4-Chloroaniline		ND		11	71
4-Chlorophenyl phenyl ether		ND		11	36
4-Nitroaniline		ND		11	180
4-Nitrophenol		ND		11	180
Acenaphthene		ND		11	36
Acenaphthylene		ND		11	36
Acetophenone		ND		11	36
Aniline		ND J	✓	11	36
Anthracene		ND		11	36
Atrazine		ND		11	36
Azobenzene		ND		11	36
Benzaldehyde		ND		11	36
Benzo[a]anthracene		ND		11	36
Benzo[a]pyrene		ND		11	36
Benzo[b]fluoranthene		ND		11	36
Benzo[g,h,i]perylene		ND		11	36
Benzo[k]fluoranthene		ND		11	36
Benzoic acid		ND J	✓	16	180

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Client: Olin Corporation

Job Number: 360-24365-2
Sdg Number: OCRI-09A

Client Sample ID: **OC-SB-442-20/22-XXX**

Lab Sample ID: 360-24365-2
Client Matrix: Solid
% Moisture: 6.9

Date Sampled: 08/31/2009 1320
Date Received: 08/31/2009 1745

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49187		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48742		Lab File ID:	B10430.D
Dilution:	1.0			Initial Weight/Volume:	30.20 g
Date Analyzed:	09/19/2009 0812			Final Weight/Volume:	1.0 mL
Date Prepared:	09/09/2009 0958			Injection Volume:	

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		11	36
Benzyl alcohol		ND		30	71
Bis(2-chloroethoxy)methane		ND		11	36
Bis(2-chloroethyl)ether		ND		11	36
Bis(2-ethylhexyl) phthalate		ND		11	36
Butyl benzyl phthalate		ND		11	36
Caprolactam		ND		11	36
Carbazole		ND		11	36
Chrysene		ND		11	36
Dibenz(a,h)anthracene		ND		11	36
Dibenzofuran		ND		11	36
Diethyl phthalate		ND		11	36
Dimethyl phthalate		ND		11	36
Di-n-butyl phthalate		ND		31	36
Di-n-octyl phthalate		ND		18	36
Diphenyl oxide		ND		11	36
Fluoranthene		ND		11	36
Fluorene		ND		11	36
Hexachlorobenzene		ND		11	36
Hexachlorobutadiene		ND		11	36
Hexachlorocyclopentadiene		ND		11	71
Hexachloroethane		ND		11	36
Indeno[1,2,3-cd]pyrene		ND		11	36
Isophorone		ND		11	36
Naphthalene		ND		11	85
Nitrobenzene		ND		11	36
N-Nitrosodimethylamine		ND		13	36
N-Nitrosodi-n-propylamine		ND		11	36
N-Nitrosodiphenylamine		ND		11	36
Pentachlorophenol		ND		11	36
Phenanthrene		ND		11	43
Phenol		ND		11	36
Pyrene		ND		11	36

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	55		30 - 130
2-Fluorobiphenyl	64		30 - 130
2-Fluorophenol	66		30 - 130
Nitrobenzene-d5	71		30 - 130
Phenol-d5	57		30 - 130
Terphenyl-d14	87		30 - 130

Client: Olin Corporation

Job Number: 360-24365-2
Sdg Number: OCRI-09A

Client Sample ID: **OC-SB-442-20/22-XXX**

Lab Sample ID: 360-24365-2
Client Matrix: Solid % Moisture: 6.9

Date Sampled: 08/31/2009 1320
Date Received: 08/31/2009 1745

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49187		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48742		Lab File ID:	B10430.D
Dilution:	1.0			Initial Weight/Volume:	30.20 g
Date Analyzed:	09/19/2009 0812			Final Weight/Volume:	1.0 mL
Date Prepared:	09/09/2009 0958			Injection Volume:	

Tentatively Identified Compounds **Number TIC's Found:** 5

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Unknown	7.30	15	T J
~~615-22-5~~	~~Benzothiazole, 2-(methylthio)~~	~~11.29~~	~~17~~	~~T J N~~
~~3910-35-8~~	~~1H-Indene, 2,3-dihydro-1,1,3-trimethyl-3~~	~~11.65~~	~~12~~	~~T J N~~
~~22768-22-5~~	~~2,4-Diphenyl-4-methyl-2(E)-pentene~~	~~12.06~~	11	T J N
630-3-5	Nonacosane	16.42	18	T J N

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Client: Olin Corporation

Job Number: 360-24365-2
Sdg Number: OCRI-09A

Client Sample ID: **OC-SB-447-18/20-XXX**

Lab Sample ID: 360-24365-6
Client Matrix: Solid
% Moisture: 9.4

Date Sampled: 08/31/2009 0905
Date Received: 08/31/2009 1745

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49847		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48742		Lab File ID:	J03317.D
Dilution:	1.0			Initial Weight/Volume:	30.09 g
Date Analyzed:	10/04/2009 2310			Final Weight/Volume:	1.0 mL
Date Prepared:	09/09/2009 0958			Injection Volume:	

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		330		11	37
1,2,4,5-Tetrachlorobenzene		ND		11	37
1,2,4-Trichlorobenzene		ND		11	37
1,2-Dichlorobenzene		ND		11	37
1,3-Dichlorobenzene		ND		11	37
1,4-Dichlorobenzene		ND		11	37
1-Methylnaphthalene		ND		11	37
2,2'-oxybis[1-chloropropane]		ND		11	37
2,3,4,6-Tetrachlorophenol		ND		11	37
2,4,5-Trichlorophenol		ND		11	37
2,4,6-Trichlorophenol		ND		11	37
2,4-Dichlorophenol		ND		11	37
2,4-Dimethylphenol		ND		14	37
2,4-Dinitrophenol		ND		11	37
2,4-Dinitrotoluene		ND		11	37
2,6-Dinitrotoluene		ND		11	37
2-Chloronaphthalene		ND		11	37
2-Chlorophenol		ND		11	37
2-Methylnaphthalene		ND		11	37
2-Methylphenol		ND		22	37
2-Nitroaniline		ND		11	180
2-Nitrophenol		ND		11	37
3 & 4 Methylphenol		ND		11	37
3,3'-Dichlorobenzidine		ND	J	11	73
3-Nitroaniline		ND		11	180
4,6-Dinitro-2-methylphenol		ND		11	180
4-Bromophenyl phenyl ether		ND		11	37
4-Chloro-3-methylphenol		ND		11	73
4-Chloroaniline		ND		11	73
4-Chlorophenyl phenyl ether		ND		11	37
4-Nitroaniline		ND		11	180
4-Nitrophenol		ND		11	180
Acenaphthene		ND		11	37
Acenaphthylene		ND		11	37
Acetophenone		ND		11	37
Aniline		ND	J	11	37
Anthracene		ND		11	37
Atrazine		ND		11	37
Azobenzene		ND		11	37
Benzaldehyde		ND		11	37
Benzo[a]anthracene		ND		11	37
Benzo[a]pyrene		ND		11	37
Benzo[b]fluoranthene		ND		11	37
Benzo[g,h,i]perylene		ND		11	37
Benzo[k]fluoranthene		ND		11	37
Benzoic acid		~~ND~~	R	16	180

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Client: Olin Corporation

Job Number: 360-24365-2
Sdg Number: OCRI-09A

Client Sample ID: **OC-SB-447-18/20-XXX**

Lab Sample ID: 360-24365-6
Client Matrix: Solid % Moisture: 9.4

Date Sampled: 08/31/2009 0905
Date Received: 08/31/2009 1745

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49847		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48742		Lab File ID:	J03317.D
Dilution:	1.0			Initial Weight/Volume:	30.09 g
Date Analyzed:	10/04/2009 2310			Final Weight/Volume:	1.0 mL
Date Prepared:	09/09/2009 0958			Injection Volume:	

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		11	37
Benzyl alcohol		ND		31	73
Bis(2-chloroethoxy)methane		ND		11	37
Bis(2-chloroethyl)ether		ND		11	37
Bis(2-ethylhexyl) phthalate		22	J	11	37
Butyl benzyl phthalate		ND		11	37
Caprolactam		ND		11	37
Carbazole		ND		11	37
Chrysene		ND		11	37
Dibenz(a,h)anthracene		ND		11	37
Dibenzofuran		ND		11	37
Diethyl phthalate		ND		11	37
Dimethyl phthalate		ND		11	37
Di-n-butyl phthalate		ND		32	37
Di-n-octyl phthalate		ND		18	37
Fluoranthene		ND		11	37
Fluorene		ND		11	37
Hexachlorobenzene		ND		11	37
Hexachlorobutadiene		ND		11	37
Hexachlorocyclopentadiene		ND		11	73
Hexachloroethane		ND		11	37
Indeno[1,2,3-cd]pyrene		ND		11	37
Isophorone		ND		11	37
Naphthalene		ND		11	88
Nitrobenzene		ND		11	37
N-Nitrosodimethylamine		ND		13	37
N-Nitrosodi-n-propylamine		ND		11	37
N-Nitrosodiphenylamine		ND		11	37
Pentachlorophenol		ND		11	37
Phenanthrene		ND		11	44
Phenol		18	J	11	37
Pyrene		ND		11	37

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	56		30 - 130
2-Fluorobiphenyl	54		30 - 130
2-Fluorophenol	70		30 - 130
Nitrobenzene-d5	69		30 - 130
Phenol-d5	57		30 - 130
Terphenyl-d14	69		30 - 130

Client: Olin Corporation

Job Number: 360-24365-2
Sdg Number: OCRI-09A

Client Sample ID: **OC-SB-447-18/20-XXX**

Lab Sample ID: 360-24365-6
Client Matrix: Solid % Moisture: 9.4

Date Sampled: 08/31/2009 0905
Date Received: 08/31/2009 1745

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49847		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48742		Lab File ID:	J03317.D
Dilution:	1.0			Initial Weight/Volume:	30.09 g
Date Analyzed:	10/04/2009 2310			Final Weight/Volume:	1.0 mL
Date Prepared:	09/09/2009 0958			Injection Volume:	

Tentatively Identified Compounds **Number TIC's Found:** 4

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
763-93-9	3-Hexen-2-one	4.75	14	T J N
138-86-3	Limonene	7.44	8.2	T J N
~~22768-22-5~~	~~2,4-Diphenyl-4-methyl-2(E)-pentene~~	11.99	~~8.1~~	~~T J N~~
~~26603-23-6~~	~~p,p''-Dioctyldiphenylamine~~	15.93	~~200~~	~~T J N~~

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Client: Olin Corporation

Job Number: 360-24365-2
Sdg Number: OCRI-09A

Client Sample ID: OC-SB-447-18/20-XXX

Lab Sample ID: 360-24365-6
Client Matrix: Solid

% Moisture: 9.4

Date Sampled: 08/31/2009 0905
Date Received: 08/31/2009 1745

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49847		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48742		Lab File ID:	J03316.D
Dilution:	10			Initial Weight/Volume:	30.09 g
Date Analyzed:	10/04/2009 2237	Run Type: DL		Final Weight/Volume:	1.0 mL
Date Prepared:	09/09/2009 0958			Injection Volume:	

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Diphenyl oxide		1100		110	370

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	69		30 - 130
2-Fluorobiphenyl	74		30 - 130
2-Fluorophenol	80		30 - 130
Nitrobenzene-d5	75		30 - 130
Phenol-d5	74		30 - 130
Terphenyl-d14	87		30 - 130

Client: Olin Corporation

Job Number: 360-24365-2
Sdg Number: OCRI-09A

Client Sample ID: OC-SB-452-13/15-XXX

Lab Sample ID: 360-24365-9
Client Matrix: Solid

% Moisture: 8.0

Date Sampled: 08/31/2009 1100
Date Received: 08/31/2009 1745

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49266		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48854		Lab File ID:	B10457.D
Dilution:	1.0			Initial Weight/Volume:	30.03 g
Date Analyzed:	09/22/2009 0144			Final Weight/Volume:	1.0 mL
Date Prepared:	09/11/2009 1142			Injection Volume:	

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		11	36
1,2,4,5-Tetrachlorobenzene		ND		11	36
1,2,4-Trichlorobenzene		ND		11	36
1,2-Dichlorobenzene		ND		11	36
1,3-Dichlorobenzene		ND		11	36
1,4-Dichlorobenzene		ND		11	36
1-Methylnaphthalene		ND		11	36
2,2'-oxybis[1-chloropropane]		ND		11	36
2,3,4,6-Tetrachlorophenol		ND		11	36
2,4,5-Trichlorophenol		ND		11	36
2,4,6-Trichlorophenol		ND		11	36
2,4-Dichlorophenol		ND		11	36
2,4-Dimethylphenol		ND		14	36
2,4-Dinitrophenol		ND		11	36
2,4-Dinitrotoluene		ND		11	36
2,6-Dinitrotoluene		ND		11	36
2-Chloronaphthalene		ND		11	36
2-Chlorophenol		ND		11	36
2-Methylnaphthalene		ND		11	36
2-Methylphenol		ND		22	36
2-Nitroaniline		ND		11	180
2-Nitrophenol		ND		11	36
3 & 4 Methylphenol		ND		11	36
3,3'-Dichlorobenzidine		ND		11	72
3-Nitroaniline		ND		11	180
4,6-Dinitro-2-methylphenol		ND		11	180
4-Bromophenyl phenyl ether		ND		11	36
4-Chloro-3-methylphenol		ND		11	72
4-Chloroaniline		ND		11	72
4-Chlorophenyl phenyl ether		ND		11	36
4-Nitroaniline		ND		11	180
4-Nitrophenol		ND		11	180
Acenaphthene		ND		11	36
Acenaphthylene		ND		11	36
Acetophenone		ND		11	36
Aniline		ND	J —	11	36
Anthracene		ND		11	36
Atrazine		ND		11	36
Azobenzene		ND		11	36
Benzaldehyde		ND		11	36
Benzo[a]anthracene		ND		11	36
Benzo[a]pyrene		ND		11	36
Benzo[b]fluoranthene		ND		11	36
Benzo[g,h,i]perylene		ND		11	36
Benzo[k]fluoranthene		ND		11	36
Benzoic acid		ND		16	180

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Client: Olin Corporation

Job Number: 360-24365-2
Sdg Number: OCRI-09A

Client Sample ID: **OC-SB-452-13/15-XXX**

Lab Sample ID: 360-24365-9
Client Matrix: Solid % Moisture: 8.0

Date Sampled: 08/31/2009 1100
Date Received: 08/31/2009 1745

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49266		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48854		Lab File ID:	B10457.D
Dilution:	1.0			Initial Weight/Volume:	30.03 g
Date Analyzed:	09/22/2009 0144			Final Weight/Volume:	1.0 mL
Date Prepared:	09/11/2009 1142			Injection Volume:	

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		11	36
Benzyl alcohol		ND		31	72
Bis(2-chloroethoxy)methane		ND		11	36
Bis(2-chloroethyl)ether		ND		11	36
Bis(2-ethylhexyl) phthalate		23	J EB	11	36
Butyl benzyl phthalate		ND		11	36
Caprolactam		ND		11	36
Carbazole		ND		11	36
Chrysene		ND		11	36
Dibenz(a,h)anthracene		ND		11	36
Dibenzofuran		ND		11	36
Diethyl phthalate		ND		11	36
Dimethyl phthalate		ND		11	36
Di-n-butyl phthalate		ND		32	36
Di-n-octyl phthalate		ND		18	36
Diphenyl oxide		ND		11	36
Fluoranthene		ND		11	36
Fluorene		ND		11	36
Hexachlorobenzene		ND		11	36
Hexachlorobutadiene		ND		11	36
Hexachlorocyclopentadiene		ND		11	72
Hexachloroethane		ND		11	36
Indeno[1,2,3-cd]pyrene		ND		11	36
Isophorone		ND		11	36
Naphthalene		ND		11	87
Nitrobenzene		ND		11	36
N-Nitrosodimethylamine		ND		13	36
N-Nitrosodi-n-propylamine		ND		11	36
N-Nitrosodiphenylamine		ND		11	36
Pentachlorophenol		ND		11	36
Phenanthrene		ND		11	43
Phenol		ND		11	36
Pyrene		ND		11	36

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	58		30 - 130
2-Fluorobiphenyl	56		30 - 130
2-Fluorophenol	68		30 - 130
Nitrobenzene-d5	64		30 - 130
Phenol-d5	69		30 - 130
Terphenyl-d14	57		30 - 130

Client: Olin Corporation

Job Number: 360-24365-2
Sdg Number: OCRI-09A

Client Sample ID: **OC-SB-452-13/15-XXX**

Lab Sample ID: 360-24365-9
Client Matrix: Solid % Moisture: 8.0

Date Sampled: 08/31/2009 1100
Date Received: 08/31/2009 1745

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49266		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48854		Lab File ID:	B10457.D
Dilution:	1.0			Initial Weight/Volume:	30.03 g
Date Analyzed:	09/22/2009 0144			Final Weight/Volume:	1.0 mL
Date Prepared:	09/11/2009 1142			Injection Volume:	

Tentatively Identified Compounds **Number TIC's Found:** 6

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
596-85-0	1-Naphthalenepropanol, .alpha.-ethenylde	12.78	35	T J N
593-45-3	Octadecane	13.65	11	T J N
629-92-5	Nonadecane	14.26	15	T J N
638-67-5	Tricosane	14.98	17	T J N
112-95-8	Eicosane	16.12	16	T J N
112-84-5	Erucylamide	16.61	65	T J N

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Client: Olin Corporation

Job Number: 360-24365-2
Sdg Number: OCRI-09A

Client Sample ID: **OC-SB-458-22/24-XXX**

Lab Sample ID: 360-24365-14
Client Matrix: Solid
% Moisture: 8.0

Date Sampled: 08/31/2009 1630
Date Received: 09/01/2009 1715

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49266		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48854		Lab File ID:	B10460.D
Dilution:	1.0			Initial Weight/Volume:	30.42 g
Date Analyzed:	09/22/2009 0317			Final Weight/Volume:	1.0 mL
Date Prepared:	09/11/2009 1142			Injection Volume:	

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		11	36
1,2,4,5-Tetrachlorobenzene		ND		11	36
1,2,4-Trichlorobenzene		ND		11	36
1,2-Dichlorobenzene		ND		11	36
1,3-Dichlorobenzene		ND		11	36
1,4-Dichlorobenzene		ND		11	36
1-Methylnaphthalene		ND		11	36
2,2'-oxybis[1-chloropropane]		ND		11	36
2,3,4,6-Tetrachlorophenol		ND		11	36
2,4,5-Trichlorophenol		ND		11	36
2,4,6-Trichlorophenol		ND		11	36
2,4-Dichlorophenol		ND		11	36
2,4-Dimethylphenol		ND		14	36
2,4-Dinitrophenol		ND		11	36
2,4-Dinitrotoluene		ND		11	36
2,6-Dinitrotoluene		ND		11	36
2-Chloronaphthalene		ND		11	36
2-Chlorophenol		ND		11	36
2-Methylnaphthalene		ND		11	36
2-Methylphenol		ND		21	36
2-Nitroaniline		ND		11	180
2-Nitrophenol		ND		11	36
3 & 4 Methylphenol		ND		11	36
3,3'-Dichlorobenzidine		ND		11	71
3-Nitroaniline		ND		11	180
4,6-Dinitro-2-methylphenol		ND		11	180
4-Bromophenyl phenyl ether		ND		11	36
4-Chloro-3-methylphenol		ND		11	71
4-Chloroaniline		ND		11	71
4-Chlorophenyl phenyl ether		ND		11	36
4-Nitroaniline		ND		11	180
4-Nitrophenol		ND		11	180
Acenaphthene		ND		11	36
Acenaphthylene		ND		11	36
Acetophenone		ND		11	36
Aniline		ND	J	11	36
Anthracene		ND		11	36
Atrazine		ND		11	36
Azobenzene		ND		11	36
Benzaldehyde		ND		11	36
Benzo[a]anthracene		ND		11	36
Benzo[a]pyrene		ND		11	36
Benzo[b]fluoranthene		ND		11	36
Benzo[g,h,i]perylene		ND		11	36
Benzo[k]fluoranthene		ND		11	36
Benzoic acid		ND		16	180

2/2/10

Client: Olin Corporation

Job Number: 360-24365-2
Sdg Number: OCRI-09A

Client Sample ID: **OC-SB-458-22/24-XXX**

Lab Sample ID: 360-24365-14
Client Matrix: Solid
% Moisture: 8.0

Date Sampled: 08/31/2009 1630
Date Received: 09/01/2009 1715

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49266		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48854		Lab File ID:	B10460.D
Dilution:	1.0			Initial Weight/Volume:	30.42 g
Date Analyzed:	09/22/2009 0317			Final Weight/Volume:	1.0 mL
Date Prepared:	09/11/2009 1142			Injection Volume:	

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		11	36
Benzyl alcohol		ND		30	71
Bis(2-chloroethoxy)methane		ND		11	36
Bis(2-chloroethyl)ether		ND		11	36
Bis(2-ethylhexyl) phthalate		ND		11	36
Butyl benzyl phthalate		ND		11	36
Caprolactam		ND		11	36
Carbazole		ND		11	36
Chrysene		ND		11	36
Dibenz(a,h)anthracene		ND		11	36
Dibenzofuran		ND		11	36
Diethyl phthalate		ND		11	36
Dimethyl phthalate		ND		11	36
Di-n-butyl phthalate		ND		31	36
Di-n-octyl phthalate		ND		18	36
Diphenyl oxide		ND		11	36
Fluoranthene		ND		11	36
Fluorene		ND		11	36
Hexachlorobenzene		ND		11	36
Hexachlorobutadiene		ND		11	36
Hexachlorocyclopentadiene		ND		11	71
Hexachloroethane		ND		11	36
Indeno[1,2,3-cd]pyrene		ND		11	36
Isophorone		ND		11	36
Naphthalene		ND		11	86
Nitrobenzene		ND		11	36
N-Nitrosodimethylamine		ND		13	36
N-Nitrosodi-n-propylamine		ND		11	36
N-Nitrosodiphenylamine		ND		11	36
Pentachlorophenol		ND		11	36
Phenanthrene		ND		11	43
Phenol		ND		11	36
Pyrene		ND		11	36

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	57		30 - 130
2-Fluorobiphenyl	53		30 - 130
2-Fluorophenol	65		30 - 130
Nitrobenzene-d5	62		30 - 130
Phenol-d5	66		30 - 130
Terphenyl-d14	56		30 - 130

Client: Olin Corporation

Job Number: 360-24365-2
Sdg Number: OCRI-09A

Client Sample ID: **OC-SB-458-22/24-XXX**

Lab Sample ID: 360-24365-14
Client Matrix: Solid % Moisture: 8.0

Date Sampled: 08/31/2009 1630
Date Received: 09/01/2009 1715

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49266		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48854		Lab File ID:	B10460.D
Dilution:	1.0			Initial Weight/Volume:	30.42 g
Date Analyzed:	09/22/2009 0317			Final Weight/Volume:	1.0 mL
Date Prepared:	09/11/2009 1142			Injection Volume:	

Tentatively Identified Compounds **Number TIC's Found:** **10**

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
128-37-0	Butylated Hydroxytoluene	10.48	24	T J N
27193-28-8	Phenol, (1,1,3,3-tetramethylbutyl)-	10.93	20	T J N
615-22-5	Benzothiazole, 2-(methylthio)-	11.07	37	T J N
3910-35-8	1H-Indene, 2,3-dihydro-1,1,3-trimethyl-3	11.43	28	T J N
22768-22-5	2,4-Diphenyl-4-methyl-2(E)-pentene	11.85	21	T J N
596-85-0	1-Naphthalenepropanol, .alpha.-ethenylde	12.79	120	T J N
629-99-2	Pentacosane	14.98	16	T J N
638-67-5	Tricosane	15.61	20	T J N
630-6-8	Hexatriacontane	16.12	23	T J N
630-3-5	Nonacosane	16.64	16	T J N

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Client: Olin Corporation

Job Number: 360-24365-2
Sdg Number: OCRI-09A

Client Sample ID: **OC-SB-460-30/32-XXX**

Lab Sample ID: 360-24365-17
Client Matrix: Solid
% Moisture: 9.6

Date Sampled: 09/01/2009 1040
Date Received: 09/01/2009 1715

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49266		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48854		Lab File ID:	B10463.D
Dilution:	1.0			Initial Weight/Volume:	30.15 g
Date Analyzed:	09/22/2009 0450			Final Weight/Volume:	1.0 mL
Date Prepared:	09/11/2009 1142			Injection Volume:	

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		11	37
1,2,4,5-Tetrachlorobenzene		ND		11	37
1,2,4-Trichlorobenzene		ND		11	37
1,2-Dichlorobenzene		ND		11	37
1,3-Dichlorobenzene		ND		11	37
1,4-Dichlorobenzene		ND		11	37
1-Methylnaphthalene		ND		11	37
2,2'-oxybis[1-chloropropane]		ND		11	37
2,3,4,6-Tetrachlorophenol		ND		11	37
2,4,5-Trichlorophenol		ND		11	37
2,4,6-Trichlorophenol		ND		11	37
2,4-Dichlorophenol		ND		11	37
2,4-Dimethylphenol		ND		14	37
2,4-Dinitrophenol		ND		11	37
2,4-Dinitrotoluene		ND		11	37
2,6-Dinitrotoluene		ND		11	37
2-Chloronaphthalene		ND		11	37
2-Chlorophenol		ND		11	37
2-Methylnaphthalene		ND		11	37
2-Methylphenol		ND		22	37
2-Nitroaniline		ND		11	180
2-Nitrophenol		ND		11	37
3 & 4 Methylphenol		ND		11	37
3,3'-Dichlorobenzidine		ND		11	73
3-Nitroaniline		ND		11	180
4,6-Dinitro-2-methylphenol		ND		11	180
4-Bromophenyl phenyl ether		ND		11	37
4-Chloro-3-methylphenol		ND		11	73
4-Chloroaniline		ND		11	73
4-Chlorophenyl phenyl ether		ND		11	37
4-Nitroaniline		ND		11	180
4-Nitrophenol		ND		11	180
Acenaphthene		ND		11	37
Acenaphthylene		ND		11	37
Acetophenone		ND		11	37
Aniline		ND	J	11	37
Anthracene		ND		11	37
Atrazine		ND		11	37
Azobenzene		ND		11	37
Benzaldehyde		ND		11	37
Benzo[a]anthracene		ND		11	37
Benzo[a]pyrene		ND		11	37
Benzo[b]fluoranthene		ND		11	37
Benzo[g,h,i]perylene		ND		11	37
Benzo[k]fluoranthene		ND		11	37
Benzoic acid		ND		17	180

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Client: Olin Corporation

Job Number: 360-24365-2
Sdg Number: OCRI-09A

Client Sample ID: OC-SB-460-30/32-XXX

Lab Sample ID: 360-24365-17
Client Matrix: Solid
% Moisture: 9.6

Date Sampled: 09/01/2009 1040
Date Received: 09/01/2009 1715

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49266		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48854		Lab File ID:	B10463.D
Dilution:	1.0			Initial Weight/Volume:	30.15 g
Date Analyzed:	09/22/2009 0450			Final Weight/Volume:	1.0 mL
Date Prepared:	09/11/2009 1142			Injection Volume:	

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		11	37
Benzyl alcohol		ND		31	73
Bis(2-chloroethoxy)methane		ND		11	37
Bis(2-chloroethyl)ether		ND		11	37
Bis(2-ethylhexyl) phthalate		22	J EB	11	37
Butyl benzyl phthalate		ND		11	37
Caprolactam		ND		11	37
Carbazole		ND		11	37
Chrysene		ND		11	37
Dibenz(a,h)anthracene		ND		11	37
Dibenzofuran		ND		11	37
Diethyl phthalate		ND		11	37
Dimethyl phthalate		ND		11	37
Di-n-butyl phthalate		ND		32	37
Di-n-octyl phthalate		ND		18	37
Diphenyl oxide		17	J	11	37
Fluoranthene		ND		11	37
Fluorene		ND		11	37
Hexachlorobenzene		ND		11	37
Hexachlorobutadiene		ND		11	37
Hexachlorocyclopentadiene		ND		11	73
Hexachloroethane		ND		11	37
Indeno[1,2,3-cd]pyrene		ND		11	37
Isophorone		ND		11	37
Naphthalene		ND		11	88
Nitrobenzene		ND		11	37
N-Nitrosodimethylamine		ND		13	37
N-Nitrosodi-n-propylamine		ND		11	37
N-Nitrosodiphenylamine		ND		11	37
Pentachlorophenol		ND		11	37
Phenanthrene		ND		11	44
Phenol		ND		11	37
Pyrene		ND		11	37

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	53		30 - 130
2-Fluorobiphenyl	56		30 - 130
2-Fluorophenol	68		30 - 130
Nitrobenzene-d5	65		30 - 130
Phenol-d5	69		30 - 130
Terphenyl-d14	62		30 - 130

2/12/10

Client: Olin Corporation

Job Number: 360-24365-2
Sdg Number: OCRI-09A

Client Sample ID: **OC-SB-460-30/32-XXX**

Lab Sample ID: 360-24365-17
Client Matrix: Solid % Moisture: 9.6

Date Sampled: 09/01/2009 1040
Date Received: 09/01/2009 1715

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49266		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48854		Lab File ID:	B10463.D
Dilution:	1.0			Initial Weight/Volume:	30.15 g
Date Analyzed:	09/22/2009 0450			Final Weight/Volume:	1.0 mL
Date Prepared:	09/11/2009 1142			Injection Volume:	

Tentatively Identified Compounds **Number TIC's Found:** 9

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
59242-27-2	Furan, 2,5-dihydro-2,5-dimethyl-	5.81	13	T J N
288-88-0	1H-1,2,4-Triazole	7.37	74	T J N
128-37-0	Butylated Hydroxytoluene	10.48	20	T J N
615-22-5	Benzothiazole, 2-(methylthio)	11.07	32	T J N
3910-35-8	1H-Indene, 2,3-dihydro-1,1,3-trimethyl-3	11.43	23	T J N
22768-22-5	2,4-Diphenyl-4-methyl-2(E)-pentene	11.85	16	T J N
112-39-0	Hexadecanoic acid, methyl ester	12.02	11	T J N
112-61-8	Octadecanoic acid, methyl ester	12.81	55	T J N
593-45-3	Octadecane	15.61	16	T J N

2/2/10

FORM IV
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Westfield Job No.: 360-24365-1

SDG No.: OCRI-09

Lab File ID: B10449.D Lab Sample ID: MB 360-48854/1-A

Matrix: Solid Date Extracted: 09/11/2009 11:42

Instrument ID: Inst. B Date Analyzed: 09/21/2009 20:33

Level:(Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 360-48854/2-A	B10450.D	09/21/2009 21:05
	LCSD 360-48854/3-A	B10451.D	09/21/2009 21:36
OC-SB-442-8.0/10-XXX	360-24365-4 *	B10454.D	09/22/2009 00:11
OC-SB-442-8.0/10-XXX MS	360-24365-4 MS *	B10455.D	09/22/2009 00:42
OC-SB-442-8.0/10-XXX MSD	360-24365-4 MSD *	B10456.D	09/22/2009 01:13
OC-SB-452-5.0/7.0-XXX	360-24365-10 *	B10458.D	09/22/2009 02:15
OC-SB-458-5.0/7.0-XXX	360-24365-15 *	B10461.D	09/22/2009 03:48
OC-SB-460-5.5/7.5-XXX	360-24365-18 *	B10464.D	09/22/2009 05:21
OC-PE-SS1039-SVOC	360-24365-20 A	B10524.D	09/24/2009 00:39
OC-PE-SS1039-SVOC DL	360-24365-20 DL A	B10525.D	09/24/2009 01:11
OC-SB-458-0.0/1.0-XXX	360-24365-13 A	B10529.D	09/24/2009 03:18
OC-SB-460-0.0/1.0-XXX	360-24365-16 A	B10530.D	09/24/2009 03:50

MB
benzoic acid 70.4

LCS
aniline 27/26

A * ~~MS/MSD~~ ICAL/CCAL OK

TICs
unk (7.06)
vanillin
benzothiazole, 2-(methylthio)-
octadecane
eicosane
heptadecane, 2,4,10,15-tetramethyl
heptacosane
squalene.

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Westfield | Job No.: 360-24365-1

SDG No.: OCRI-09

Client Sample ID: | Lab Sample ID: MB 360-48854/1-A

Matrix: Solid | Lab File ID: B10449.D

Analysis Method: 8270C LL | Date Collected:

Extract. Method: 3546 | Date Extracted: 09/11/2009 11:42

Sample wt/vol: 30.00(g) | Date Analyzed: 09/21/2009 20:33

Con. Extract Vol.: 1.0(mL) | Dilution Factor: 1

Injection Volume: 1.0(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 49265 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
534-52-1	4,6-Dinitro-2-methylphenol	ND		170	10
65-85-0	Benzoic acid	70.4	J	170	15
120-12-7	Anthracene	ND		33	10
100-51-6	Benzyl alcohol	ND		67	28
111-91-1	Bis(2-chloroethoxy)methane	ND		33	10
111-44-4	Bis(2-chloroethyl)ether	ND		33	10
85-68-7	Butyl benzyl phthalate	ND		33	10
56-55-3	Benzo[a]anthracene	ND		33	10
105-60-2	Caprolactam	ND		33	10
218-01-9	Chrysene	ND		33	10
205-99-2	Benzo[b]fluoranthene	ND		33	10
207-08-9	Benzo[k]fluoranthene	ND		33	10
50-32-8	Benzo[a]pyrene	ND		33	10
132-64-9	Dibenzofuran	ND		33	10
53-70-3	Dibenz(a,h)anthracene	ND		33	10
84-66-2	Diethyl phthalate	ND		33	10
191-24-2	Benzo[g,h,i]perylene	ND		33	10
131-11-3	Dimethyl phthalate	ND		33	10
98-86-2	Acetophenone	ND		33	10
84-74-2	Di-n-butyl phthalate	ND		33	29
117-81-7	Bis(2-ethylhexyl) phthalate	ND		33	10
117-84-0	Di-n-octyl phthalate	ND		33	17
206-44-0	Fluoranthene	ND		33	10
86-73-7	Fluorene	ND		33	10
118-74-1	Hexachlorobenzene	ND		33	10
87-68-3	Hexachlorobutadiene	ND		33	10
108-60-1	2,2'-oxybis[1-chloropropane]	ND		33	10
77-47-4	Hexachlorocyclopentadiene	ND		67	10
67-72-1	Hexachloroethane	ND		33	10
193-39-5	Indeno[1,2,3-cd]pyrene	ND		33	10
78-59-1	Isophorone	ND		33	10
91-20-3	Naphthalene	ND		80	10
98-95-3	Nitrobenzene	ND		33	10
1912-24-9	Atrazine	ND		33	10

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24365-1

SDG No.: OCRI-09

Matrix: Solid Level: Low Lab File ID: B10450.D

Lab ID: LCS 360-48854/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
1,1'-Biphenyl	333	263	79	40-140	
1,2,4,5-Tetrachlorobenzene	333	218	65	40-140	
1,2,4-Trichlorobenzene	333	222	67	40-140	
1,2-Dichlorobenzene	333	230	69	40-140	
1,3-Dichlorobenzene	333	190	57	40-140	
1,4-Dichlorobenzene	333	190	57	40-140	
1-Methylnaphthalene	333	218	65	40-140	
2,3,4,6-Tetrachlorophenol	333	228	68	40-140	
2,4-Dimethylphenol	333	241	72	30-130	
2-Chlorophenol	333	223	67	30-130	
2,4-Dichlorophenol	333	240	72	30-130	
2,4,6-Trichlorophenol	333	250	75	30-130	
2-Methylphenol	333	240	72	30-130	
2,4,5-Trichlorophenol	333	264	79	30-130	
2-Methylnaphthalene	333	209	63	40-140	
3 & 4 Methylphenol	333	249	75	30-130	
2-Nitroaniline	333	268	80	40-140	
3,3'-Dichlorobenzidine	333	242	73	40-140	
2-Chloronaphthalene	333	199	60	40-140	
2,6-Dinitrotoluene	333	268	81	40-140	
4-Chloro-3-methylphenol	333	274	82	30-130	
2-Nitrophenol	333	250	75	30-130	
4-Chloroaniline	333	171	51	40-140	
3-Nitroaniline	333	247	74	40-140	
2,4-Dinitrophenol	333	192	58	30-130	
2,4-Dinitrotoluene	333	246	74	40-140	
Acenaphthene	333	294	88	40-140	
Acenaphthylene	333	251	75	40-140	
4-Nitrophenol	333	281	84	30-130	
Aniline	333	91.1	27	40-140	*
4-Nitroaniline	333	263	79	40-140	
Azobenzene	333	264	79	40-140	
4-Bromophenyl phenyl ether	333	263	79	40-140	
4-Chlorophenyl phenyl ether	333	262	79	40-140	
4,6-Dinitro-2-methylphenol	333	232	70	30-130	
Benzoic acid	333	118 J	35	30-130	
Anthracene	333	310	93	40-140	
Benzyl alcohol	333	256	77	30-130	
Bis(2-chloroethoxy)methane	333	208	62	40-140	
Bis(2-chloroethyl)ether	333	201	60	40-140	
Butyl benzyl phthalate	333	259	78	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24365-1

SDG No.: OCRI-09

Matrix: Solid Level: Low Lab File ID: B10451.D

Lab ID: LCSD 360-48854/3-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCSD CONCENTRATION (ug/Kg)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1'-Biphenyl	333	249	75	5	30	40-140	
1,2,4,5-Tetrachlorobenzene	333	208	63	5	30	40-140	
1,2,4-Trichlorobenzene	333	208	63	6	30	40-140	
1,2-Dichlorobenzene	333	212	64	8	30	40-140	
1,3-Dichlorobenzene	333	177	53	7	30	40-140	
1,4-Dichlorobenzene	333	176	53	8	30	40-140	
1-Methylnaphthalene	333	205	62	6	30	40-140	
2,3,4,6-Tetrachlorophenol	333	221	66	3	30	40-140	
2,4-Dimethylphenol	333	235	70	2	30	30-130	
2-Chlorophenol	333	214	64	4	30	30-130	
2,4-Dichlorophenol	333	231	69	4	30	30-130	
2,4,6-Trichlorophenol	333	241	72	4	30	30-130	
2-Methylphenol	333	224	67	7	30	30-130	
2,4,5-Trichlorophenol	333	255	76	3	30	30-130	
2-Methylnaphthalene	333	200	60	5	30	40-140	
3 & 4 Methylphenol	333	237	71	5	30	30-130	
2-Nitroaniline	333	252	76	6	30	40-140	
3,3'-Dichlorobenzidine	333	236	71	3	30	40-140	
2-Chloronaphthalene	333	194	58	3	30	40-140	
2,6-Dinitrotoluene	333	262	79	2	30	40-140	
4-Chloro-3-methylphenol	333	268	80	2	30	30-130	
2-Nitrophenol	333	241	72	4	30	30-130	
4-Chloroaniline	333	170	51	1	30	40-140	
3-Nitroaniline	333	240	72	3	30	40-140	
2,4-Dinitrophenol	333	199	60	4	30	30-130	
2,4-Dinitrotoluene	333	238	71	3	30	40-140	
Acenaphthene	333	281	84	4	30	40-140	
Acenaphthylene	333	243	73	3	30	40-140	
4-Nitrophenol	333	277	83	2	30	30-130	
Aniline	333	88.2	26	3	30	40-140	*
4-Nitroaniline	333	254	76	3	30	40-140	
Azobenzene	333	249	75	6	30	40-140	
4-Bromophenyl phenyl ether	333	250	75	5	30	40-140	
4-Chlorophenyl phenyl ether	333	253	76	4	30	40-140	
4,6-Dinitro-2-methylphenol	333	225	67	3	30	30-130	
Benzoic acid	333	118 J	35	0	30	30-130	
Anthracene	333	294	88	5	30	40-140	
Benzyl alcohol	333	243	73	5	30	30-130	
Bis(2-chloroethoxy)methane	333	200	60	4	30	40-140	
Bis(2-chloroethyl)ether	333	188	56	7	30	40-140	
Butyl benzyl phthalate	333	258	77	1	30	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24365-1

SDG No.: OCRI-09

Matrix: Solid Level: Low Lab File ID: B10455.D

Lab ID: 360-24365-4 MS Client ID: OC-SB-442-8.0/10-XXX MS

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	QC LIMITS REC	#
1,1'-Biphenyl	377	ND	244	65	40-140	
1,2,4,5-Tetrachlorobenzene	377	ND	212	56	40-140	
1,2,4-Trichlorobenzene	377	ND	210	56	40-140	
1,2-Dichlorobenzene	377	ND	221	59	40-140	
1,3-Dichlorobenzene	377	ND	182	48	40-140	
1,4-Dichlorobenzene	377	ND	180	48	40-140	
1-Methylnaphthalene	377	ND	209	55	40-140	
2,2'-oxybis[1-chloropropane]	377	ND	203	54	40-140	
2,3,4,6-Tetrachlorophenol	377	ND	217	58	40-140	
2,4,5-Trichlorophenol	377	ND	250	66	30-130	
2,4,6-Trichlorophenol	377	ND	251	67	30-130	
2,4-Dichlorophenol	377	ND	243	65	30-130	
2,4-Dimethylphenol	377	ND	239	63	30-130	
2,4-Dinitrophenol	377	ND	209	55	30-130	
2,4-Dinitrotoluene	377	ND	231	61	40-140	
2,6-Dinitrotoluene	377	ND	255	68	40-140	
2-Chloronaphthalene	377	ND	193	51	40-140	
2-Chlorophenol	377	ND	220	58	30-130	
2-Methylnaphthalene	377	ND	207	55	40-140	
2-Methylphenol	377	ND	243	65	30-130	
2-Nitroaniline	377	ND	243	64	40-140	
2-Nitrophenol	377	ND	246	65	30-130	
3 & 4 Methylphenol	377	ND	244	65	30-130	
3,3'-Dichlorobenzidine	377	ND	217	58	40-140	
3-Nitroaniline	377	ND	233	62	40-140	
4,6-Dinitro-2-methylphenol	377	ND	197	52	30-130	
4-Bromophenyl phenyl ether	377	ND	232	62	40-140	
4-Chloro-3-methylphenol	377	ND	275	73	30-130	
4-Chloroaniline	377	ND	166	44	40-140	
4-Chlorophenyl phenyl ether	377	ND	249	66	40-140	
4-Nitroaniline	377	ND	245	65	40-140	
4-Nitrophenol	377	ND	272	72	30-130	
Acenaphthene	377	ND	277	74	40-140	
Acenaphthylene	377	ND	243	65	40-140	
Acetophenone	377	ND	233	62	40-140	
Aniline	377	ND	85.5	23	40-140	F
Anthracene	377	ND	284	75	40-140	
Atrazine	377	ND	245	65	40-140	
Azobenzene	377	ND	242	64	40-140	
Benzaldehyde	377	ND	240	64	40-140	
Benzo[a]anthracene	377	ND	292	78	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24365-1

SDG No.: OCRI-09

Matrix: Solid Level: Low Lab File ID: B10455.D

Lab ID: 360-24365-4 MS Client ID: OC-SB-442-8.0/10-XXX MS

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	QC LIMITS REC	#
Benzo[a]pyrene	377	ND	305	81	40-140	
Benzo[b]fluoranthene	377	ND	244	65	40-140	
Benzo[g,h,i]perylene	377	ND	287	76	40-140	
Benzo[k]fluoranthene	377	ND	271	72	40-140	
Benzoic acid	377	ND	279	74 J	30-130	
Benzophenone	377	ND	257	68	40-140	
Benzyl alcohol	377	ND	254	67	30-130	
Bis(2-chloroethoxy)methane	377	ND	207	55	40-140	
Bis(2-chloroethyl)ether	377	ND	201	53	40-140	
Bis(2-ethylhexyl) phthalate	377	13 J	249	63	40-140	
Butyl benzyl phthalate	377	ND	249	66	40-140	
Caprolactam	377	ND	245	65	40-140	
Carbazole	377	ND	270	72	40-140	
Chrysene	377	ND	275	73	40-140	
Dibenz(a,h)anthracene	377	ND	320	85	40-140	
Dibenzofuran	377	ND	239	63	40-140	
Diethyl phthalate	377	ND	257	68	40-140	
Dimethyl phthalate	377	ND	245	65	40-140	
Di-n-butyl phthalate	377	ND	245	65	40-140	
Di-n-octyl phthalate	377	ND	222	59	40-140	
Diphenyl oxide	377	ND	219	58	40-140	
Fluoranthene	377	ND	266	71	40-140	
Fluorene	377	ND	295	78	40-140	
Hexachlorobenzene	377	ND	235	62	40-140	
Hexachlorobutadiene	377	ND	187	50	40-140	
Hexachlorocyclopentadiene	377	ND	108	29	40-140	F
Hexachloroethane	377	ND	181	48	40-140	
Indeno[1,2,3-cd]pyrene	377	ND	313	83	40-140	
Isophorone	377	ND	192	51	40-140	
Naphthalene	377	ND	241	64	40-140	
Nitrobenzene	377	ND	206	55	40-140	
N-Nitrosodimethylamine	377	ND	214	57	40-140	
N-Nitrosodi-n-propylamine	377	ND	241	64	40-140	
N-Nitrosodiphenylamine	377	ND	182	48	40-140	
Pentachlorophenol	377	ND	238	63	30-130	
Phenanthrene	377	ND	264	70	40-140	
Phenol	377	ND	231	61	30-130	
Pyrene	377	ND	233	62	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24365-1

SDG No.: OCRI-09

Matrix: Solid Level: Low Lab File ID: B10456.D

Lab ID: 360-24365-4 MSD Client ID: OC-SB-442-8.0/10-XXX MSD

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1'-Biphenyl	378	246	65	1	30	40-140	
1,2,4,5-Tetrachlorobenzene	378	212	56	0	30	40-140	
1,2,4-Trichlorobenzene	378	211	56	1	30	40-140	
1,2-Dichlorobenzene	378	220	58	0	30	40-140	
1,3-Dichlorobenzene	378	182	48	0	30	40-140	
1,4-Dichlorobenzene	378	179	47	1	30	40-140	
1-Methylnaphthalene	378	209	55	0	30	40-140	
2,2'-oxybis[1-chloropropane]	378	203	54	0	30	40-140	
2,3,4,6-Tetrachlorophenol	378	208	55	4	30	40-140	
2,4,5-Trichlorophenol	378	243	64	3	30	30-130	
2,4,6-Trichlorophenol	378	251	66	0	30	30-130	
2,4-Dichlorophenol	378	239	63	2	30	30-130	
2,4-Dimethylphenol	378	239	63	0	30	30-130	
2,4-Dinitrophenol	378	176	47	17	30	30-130	
2,4-Dinitrotoluene	378	230	61	1	30	40-140	
2,6-Dinitrotoluene	378	251	66	1	30	40-140	
2-Chloronaphthalene	378	192	51	0	30	40-140	
2-Chlorophenol	378	219	58	1	30	30-130	
2-Methylnaphthalene	378	204	54	1	30	40-140	
2-Methylphenol	378	236	62	3	30	30-130	
2-Nitroaniline	378	242	64	0	30	40-140	
2-Nitrophenol	378	242	64	2	30	30-130	
3 & 4 Methylphenol	378	242	64	1	30	30-130	
3,3'-Dichlorobenzidine	378	207	55	5	30	40-140	
3-Nitroaniline	378	227	60	3	30	40-140	
4,6-Dinitro-2-methylphenol	378	178 J	47	10	30	30-130	
4-Bromophenyl phenyl ether	378	239	63	3	30	40-140	
4-Chloro-3-methylphenol	378	274	72	1	30	30-130	
4-Chloroaniline	378	154	41	7	30	40-140	
4-Chlorophenyl phenyl ether	378	250	66	1	30	40-140	
4-Nitroaniline	378	248	66	1	30	40-140	
4-Nitrophenol	378	258	68	5	30	30-130	
Acenaphthene	378	279	74	1	30	40-140	
Acenaphthylene	378	244	65	0	30	40-140	
Acetophenone	378	229	61	2	30	40-140	
Aniline	378	86.6	23	1	30	40-140	F
Anthracene	378	297	79	4	30	40-140	
Atrazine	378	254	67	4	30	40-140	
Azobenzene	378	250	66	3	30	40-140	
Benzaldehyde	378	239	63	1	30	40-140	
Benzo[a]anthracene	378	292	77	0	30	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24365-1

SDG No.: OCRI-09

Matrix: Solid Level: Low Lab File ID: B10456.D

Lab ID: 360-24365-4 MSD Client ID: OC-SB-442-8.0/10-XXX MSD

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Benzo[a]pyrene	378	306	81	0	30	40-140	
Benzo[b]fluoranthene	378	258	68	5	30	40-140	
Benzo[g,h,i]perylene	378	264	70	8	30	40-140	
Benzo[k]fluoranthene	378	270	71	1	30	40-140	
Benzoic acid	378	90.3 J	24	102	30	30-130	F
Benzophenone	378	265	70	3	30	40-140	
Benzyl alcohol	378	241	64	5	30	30-130	
Bis(2-chloroethoxy)methane	378	205	54	1	30	40-140	
Bis(2-chloroethyl)ether	378	196	52	3	30	40-140	
Bis(2-ethylhexyl) phthalate	378	247	62	1	30	40-140	
Butyl benzyl phthalate	378	253	67	2	30	40-140	
Caprolactam	378	250	66	2	30	40-140	
Carbazole	378	276	73	2	30	40-140	
Chrysene	378	274	73	0	30	40-140	
Dibenz(a,h)anthracene	378	291	77	9	30	40-140	
Dibenzofuran	378	241	64	1	30	40-140	
Diethyl phthalate	378	257	68	0	30	40-140	
Dimethyl phthalate	378	247	65	0	30	40-140	
Di-n-butyl phthalate	378	253	67	3	30	40-140	
Di-n-octyl phthalate	378	238	63	7	30	40-140	
Diphenyl oxide	378	221	59	1	30	40-140	
Fluoranthene	378	270	71	1	30	40-140	
Fluorene	378	296	78	0	30	40-140	
Hexachlorobenzene	378	239	63	2	30	40-140	
Hexachlorobutadiene	378	185	49	1	30	40-140	
Hexachlorocyclopentadiene	378	87.6	23	21	30	40-140	F
Hexachloroethane	378	179	47	1	30	40-140	
Indeno[1,2,3-cd]pyrene	378	289	76	8	30	40-140	
Isophorone	378	194	51	1	30	40-140	
Naphthalene	378	240	64	0	30	40-140	
Nitrobenzene	378	206	54	0	30	40-140	
N-Nitrosodimethylamine	378	212	56	1	30	40-140	
N-Nitrosodi-n-propylamine	378	237	63	1	30	40-140	
N-Nitrosodiphenylamine	378	186	49	3	30	40-140	
Pentachlorophenol	378	226	60	5	30	30-130	
Phenanthrene	378	270	71	2	30	40-140	
Phenol	378	227	60	2	30	30-130	
Pyrene	378	243	64	4	30	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Westfield Job No.: 360-24365-1

SDG No.: OCRI-09

Sample No.: CCV 360-49402/16 Date Analyzed: 09/22/2009 22:48

Instrument ID: Inst. B GC Column: Rtx-5ms SIL with ID: 0.25(um)

Lab File ID (Standard): B10490.D Heated Purge: (Y/N) N

		PHN		CRY		PRY	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12 HOUR STD		709335	11.59	528340	15.00	399717	17.38
UPPER LIMIT		1418670	12.09	1056680	15.50	799434	17.88
LOWER LIMIT		354668	11.09	264170	14.50	199859	16.88
LAB SAMPLE ID	CLIENT SAMPLE ID						
360-24365-8	OC-SB-452-0.0/1.0-XXX	1546485*	11.59	1088522*	15.03	1013175*	17.43
360-24365-7	OC-SB-447-3.0/5.0-XXX	778749	11.59	536581	15.01	403986	17.42
360-24365-5 DL2	OC-SB-447-0.0/1.0-XXX DL2	620846	11.59	378077	15.00	226965	17.39

210%

202%

273%

PHN = Phenanthrene-d10
CRY = Chrysene-d12
PRY = Perylene-d12

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.50 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270C LL

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Westfield Job No.: 360-24365-1

SDG No.: OCRI-09

Sample No.: CCV 360-49187/2 Date Analyzed: 09/18/2009 23:56

Instrument ID: Inst. B GC Column: Rtx-5ms SIL with ID: 0.25(um)

Lab File ID (Standard): B10415.D Heated Purge: (Y/N) N

		PHN		CRY		PRY	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12 HOUR STD		1135519	12.02	953955	15.74	554284	18.31
UPPER LIMIT		2271038	12.52	1907910	16.24	1108568	18.81
LOWER LIMIT		567760	11.52	476978	15.24	277142	17.81
LAB SAMPLE ID	CLIENT SAMPLE ID						
360-24365-1	OC-SB-442-0.0/1.0-XXX	932409	12.03	544090	15.78	771599	18.35
360-24365-3	OC-SB-442-8.0/10-DUP	1177465	12.03	605973	15.75	380664*	18.34
360-24365-5	OC-SB-447-0.0/1.0-XXX	880119	12.04	399109*	15.77	236413*	18.36
360-24365-5 DL	OC-SB-447-0.0/1.0-XXX DL	801803	12.03	369791*	15.76	226643*	18.35

42% 39% 43% 41%

PHN = Phenanthrene-d10
CRY = Chrysene-d12
PRY = Perylene-d12

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.50 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270C LL

FORM IV
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Westfield Job No.: 360-24365-1

SDG No.: OCRI-09

Lab File ID: B10411.D Lab Sample ID: MB 360-48742/1-A

Matrix: Solid Date Extracted: 09/09/2009 09:58

Instrument ID: Inst. B Date Analyzed: 09/18/2009 21:51

Level: (Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 360-48742/2-A	B10412.D	09/18/2009 22:22
	LCSD 360-48742/3-A	B10413.D	09/18/2009 22:54
OC-SB-442-0.0/1.0-XXX	360-24365-1	B10429.D	09/19/2009 07:10
OC-SB-442-8.0/10-DUP	360-24365-3	B10431.D	09/19/2009 08:42
OC-SB-447-0.0/1.0-XXX	360-24365-5	B10432.D	09/19/2009 09:13
OC-SB-447-0.0/1.0-XXX DL	360-24365-5 DL	B10433.D	09/19/2009 09:44
OC-SB-452-0.0/1.0-XXX	360-24365-8	B10491.D	09/22/2009 23:19
OC-SB-447-3.0/5.0-XXX	360-24365-7	B10492.D	09/22/2009 23:50
OC-SB-447-0.0/1.0-XXX DL2	360-24365-5 DL2	B10493.D	09/23/2009 00:22
OC-SB-442-0.0/1.0-XXX	360-24365-1	B10540.D	09/24/2009 09:05
OC-SB-442-0.0/1.0-XXX	360-24365-1		09/24/2009 09:05
OC-SB-452-0.0/1.0-XXX	360-24365-8	B10542.D	09/24/2009 10:07
OC-SB-452-0.0/1.0-XXX	360-24365-8		09/24/2009 10:07

MB
benzoic acid 54
di-n-butyl phthalate 96.9

TICs
benzaldehyde, 3-hydroxy-4-methoxy
dodecanoic acid, methyl ester
benzo thiazole, 2 (methylthio)-
octadecane
7,9-di-tert-butyl-1-oxaspiro (4,5) deca-6
eicosane

LCS
3,3'-DCB 32/33
aniline 27/29
benzoic acid 25

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Westfield | Job No.: 360-24365-1

SDG No.: OCRI-09

Client Sample ID: | Lab Sample ID: MB 360-48742/1-A

Matrix: Solid | Lab File ID: B10411.D

Analysis Method: 8270C LL | Date Collected:

Extract. Method: 3546 | Date Extracted: 09/09/2009 09:58

Sample wt/vol: 30.00(g) | Date Analyzed: 09/18/2009 21:51

Con. Extract Vol.: 1.0(mL) | Dilution Factor: 1

Injection Volume: 1.0(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 49189 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
534-52-1	4,6-Dinitro-2-methylphenol	ND		170	10
65-85-0	Benzoic acid	54.0	J	170	15
120-12-7	Anthracene	ND		33	10
100-51-6	Benzyl alcohol	ND		67	28
111-91-1	Bis(2-chloroethoxy)methane	ND		33	10
111-44-4	Bis(2-chloroethyl)ether	ND		33	10
85-68-7	Butyl benzyl phthalate	ND		33	10
56-55-3	Benzo[a]anthracene	ND		33	10
105-60-2	Caprolactam	ND		33	10
218-01-9	Chrysene	ND		33	10
205-99-2	Benzo[b]fluoranthene	ND		33	10
207-08-9	Benzo[k]fluoranthene	ND		33	10
50-32-8	Benzo[a]pyrene	ND		33	10
132-64-9	Dibenzofuran	ND		33	10
53-70-3	Dibenz(a,h)anthracene	ND		33	10
84-66-2	Diethyl phthalate	ND		33	10
191-24-2	Benzo[g,h,i]perylene	ND		33	10
131-11-3	Dimethyl phthalate	ND		33	10
98-86-2	Acetophenone	ND		33	10
84-74-2	Di-n-butyl phthalate	86.9		33	29
117-81-7	Bis(2-ethylhexyl) phthalate	ND		33	10
117-84-0	Di-n-octyl phthalate	ND		33	17
206-44-0	Fluoranthene	ND		33	10
86-73-7	Fluorene	ND		33	10
118-74-1	Hexachlorobenzene	ND		33	10
87-68-3	Hexachlorobutadiene	ND		33	10
108-60-1	2,2'-oxybis[1-chloropropane]	ND		33	10
77-47-4	Hexachlorocyclopentadiene	ND		67	10
67-72-1	Hexachloroethane	ND		33	10
193-39-5	Indeno[1,2,3-cd]pyrene	ND		33	10
78-59-1	Isophorone	ND		33	10
91-20-3	Naphthalene	ND		80	10
98-95-3	Nitrobenzene	ND		33	10
1912-24-9	Atrazine	ND		33	10

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24365-1

SDG No.: OCRI-09

Matrix: Solid Level: Low Lab File ID: B10412.D

Lab ID: LCS 360-48742/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
1,1'-Biphenyl	333	275	82	40-140	
1,2,4,5-Tetrachlorobenzene	333	220	66	40-140	
1,2,4-Trichlorobenzene	333	228	68	40-140	
1,2-Dichlorobenzene	333	208	62	40-140	
1,3-Dichlorobenzene	333	200	60	40-140	
1,4-Dichlorobenzene	333	201	60	40-140	
1-Methylnaphthalene	333	222	67	40-140	
2,3,4,6-Tetrachlorophenol	333	249	75	40-140	
2,4-Dimethylphenol	333	286	86	30-130	
2-Chlorophenol	333	224	67	30-130	
2,4-Dichlorophenol	333	267	80	30-130	
2,4,6-Trichlorophenol	333	317	95	30-130	
2-Methylphenol	333	234	70	30-130	
2,4,5-Trichlorophenol	333	317	95	30-130	
2-Methylnaphthalene	333	225	68	40-140	
3 & 4 Methylphenol	333	245	73	30-130	
2-Nitroaniline	333	298	90	40-140	
3,3'-Dichlorobenzidine	333	106	32	40-140	*
2-Chloronaphthalene	333	222	66	40-140	
2,6-Dinitrotoluene	333	288	86	40-140	
4-Chloro-3-methylphenol	333	285	86	30-130	
2-Nitrophenol	333	267	80	30-130	
4-Chloroaniline	333	234	70	40-140	
3-Nitroaniline	333	296	89	40-140	
2,4-Dinitrophenol	333	151	45	30-130	
2,4-Dinitrotoluene	333	270	81	40-140	
Acenaphthene	333	318	95	40-140	
Acenaphthylene	333	281	84	40-140	
4-Nitrophenol	333	314	94	30-130	
Aniline	333	89.0	27	40-140	*
4-Nitroaniline	333	288	86	40-140	
Azobenzene	333	285	86	40-140	
4-Bromophenyl phenyl ether	333	291	87	40-140	
4-Chlorophenyl phenyl ether	333	286	86	40-140	
4,6-Dinitro-2-methylphenol	333	239	72	30-130	
Benzoic acid	333	102 J	30	30-130	
Anthracene	333	330	99	40-140	
Benzyl alcohol	333	264	79	30-130	
Bis(2-chloroethoxy)methane	333	216	65	40-140	
Bis(2-chloroethyl)ether	333	207	62	40-140	
Butyl benzyl phthalate	333	315	95	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24365-1

SDG No.: OCRI-09

Matrix: Solid Level: Low Lab File ID: B10413.D

Lab ID: LCSD 360-48742/3-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCSD CONCENTRATION (ug/Kg)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1'-Biphenyl	333	275	83	0	30	40-140	
1,2,4,5-Tetrachlorobenzene	333	225	68	2	30	40-140	
1,2,4-Trichlorobenzene	333	231	69	1	30	40-140	
1,2-Dichlorobenzene	333	207	62	1	30	40-140	
1,3-Dichlorobenzene	333	202	61	1	30	40-140	
1,4-Dichlorobenzene	333	200	60	0	30	40-140	
1-Methylnaphthalene	333	225	67	1	30	40-140	
2,3,4,6-Tetrachlorophenol	333	241	72	3	30	40-140	
2,4-Dimethylphenol	333	287	86	1	30	30-130	
2-Chlorophenol	333	227	68	1	30	30-130	
2,4-Dichlorophenol	333	275	83	3	30	30-130	
2,4,6-Trichlorophenol	333	309	93	2	30	30-130	
2-Methylphenol	333	243	73	4	30	30-130	
2,4,5-Trichlorophenol	333	318	96	0	30	30-130	
2-Methylnaphthalene	333	228	68	1	30	40-140	
3 & 4 Methylphenol	333	244	73	0	30	30-130	
2-Nitroaniline	333	290	87	3	30	40-140	
3,3'-Dichlorobenzidine	333	109	33	3	30	40-140	*
2-Chloronaphthalene	333	221	66	0	30	40-140	
2,6-Dinitrotoluene	333	286	86	1	30	40-140	
4-Chloro-3-methylphenol	333	289	87	1	30	30-130	
2-Nitrophenol	333	270	81	1	30	30-130	
4-Chloroaniline	333	243	73	4	30	40-140	
3-Nitroaniline	333	295	89	0	30	40-140	
2,4-Dinitrophenol	333	137	41	9	30	30-130	
2,4-Dinitrotoluene	333	265	79	2	30	40-140	
Acenaphthene	333	317	95	0	30	40-140	
Acenaphthylene	333	282	84	0	30	40-140	
4-Nitrophenol	333	314	94	0	30	30-130	
Aniline	333	94.1	28	6	30	40-140	*
4-Nitroaniline	333	287	86	0	30	40-140	
Azobenzene	333	287	86	0	30	40-140	
4-Bromophenyl phenyl ether	333	294	88	1	30	40-140	
4-Chlorophenyl phenyl ether	333	287	86	0	30	40-140	
4,6-Dinitro-2-methylphenol	333	221	66	8	30	30-130	
Benzoic acid	333	82.8 J	25	20	30	30-130	*
Anthracene	333	337	101	2	30	40-140	
Benzyl alcohol	333	269	81	2	30	30-130	
Bis(2-chloroethoxy)methane	333	220	66	2	30	40-140	
Bis(2-chloroethyl)ether	333	204	61	1	30	40-140	
Butyl benzyl phthalate	333	312	94	1	30	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM II
GC/MS SEMI VOA SURROGATE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24365-1

SDG No.: OCRI-09

Matrix: Solid Level: Low

GC Column (1): Rtx-5ms ID: 0.25 (um)

Client Sample ID	Lab Sample ID	2FP #	PHL #	NBZ #	FBP #	TBP #	TPH #
OC-SB-442-0.0/1.0-XXX	360-24365-1	82	66	75	76	80	87
OC-SB-442-0.0/1.0-XXX	360-24365-1	52	61	62	64	0 X	0 X
OC-SB-442-8.0/10-DUP	360-24365-3	68	60	69	65	58	87
OC-SB-442-8.0/10-DUP	360-24365-3	51	57	50	50	65	68
OC-SB-442-8.0/10-XXX	360-24365-4	69	68	65	54	59	53
OC-SB-442-8.0/10-XXX	360-24365-4	50	55	49	49	62	64
OC-SB-447-0.0/1.0-XXX	360-24365-5	81	67	77	79	81	117
OC-SB-447-0.0/1.0-XXX DL	360-24365-5 DL	74	49	79	80	81	124
OC-SB-447-0.0/1.0-XXX DL2	360-24365-5 DL2	0 X	0 X	0 X	0 X	0 X	0 X
OC-SB-447-3.0/5.0-XXX	360-24365-7	37	31	30	24 X	36	28 X
OC-SB-452-0.0/1.0-XXX	360-24365-8	58	50	48	39	41	44
OC-SB-452-0.0/1.0-XXX	360-24365-8	59	67	68	66	82	84
OC-SB-452-5.0/7.0-XXX	360-24365-10	67	66	65	55	55	56
OC-SB-452-5.0/7.0-XXX	360-24365-10	54	58	53	53	60	70
OC-SB-458-0.0/1.0-XXX	360-24365-13	93	76	83	70	73	87
OC-SB-458-0.0/1.0-XXX	360-24365-13	47	56	52	54	68	71
OC-SB-458-5.0/7.0-XXX	360-24365-15	65	65	63	54	54	54
OC-SB-458-5.0/7.0-XXX	360-24365-15	55	60	54	53	67	64
OC-SB-460-0.0/1.0-XXX	360-24365-16	91	74	74	64	71	78
OC-SB-460-5.5/7.5-XXX	360-24365-18	71	72	68	60	63	58
OC-PE-SS1039-SVOC	360-24365-20	85	75	76	69	64	55
OC-PE-SS1039-SVOC DL	360-24365-20 DL	125	83	80	81	68	80
	MB 360-48742/1-A	84	83	76	72	77	82
	MB 360-48744/1-A	69	76	55	70	74	74
	MB 360-48800/1-A	72	78	68	72	79	90

	QC LIMITS
2FP = 2-Fluorophenol	30-130
PHL = Phenol-d5	30-130
NBZ = Nitrobenzene-d5	30-130
FBP = 2-Fluorobiphenyl	30-130
TBP = 2,4,6-Tribromophenol	30-130
TPH = Terphenyl-d14	30-130

Column to be used to flag recovery values

FORM II 8270C LL

FORM IV
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Westfield Job No.: 360-24365-2

SDG No.: OCRI-09A

Lab File ID: B10411.D Lab Sample ID: MB 360-48742/1-A

Matrix: Solid Date Extracted: 09/09/2009 09:58

Instrument ID: Inst. B Date Analyzed: 09/18/2009 21:51

Level: (Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 360-48742/2-A	B10412.D	09/18/2009 22:22
	LCSD 360-48742/3-A	B10413.D	09/18/2009 22:54
OC-SB-442-20/22-XXX	360-24365-2	B10430.D	09/19/2009 08:12
OC-SB-447-18/20-XXX DL	360-24365-6 DL	J03316.D	10/04/2009 22:37
OC-SB-447-18/20-XXX	360-24365-6	J03317.D	10/04/2009 23:10

LCS
3,3'-DCB 32/33
aniline 27/29
benzoic acid 25
> US ✓

Scan OK
Tune OK
~~ICAL/CCAL for -2 OK~~
CCAL OC-2

IS
perylene-d12 213% Recov OC-SB-447-18/20-XXX (-6)
all ND

MB-48742
Benzoic acid 54.0 ug/kg All ND
di-n-butyl phthalate 26.9 ug/kg All ND

TIC Benzaldehyde, 3-hydroxy-4-methoxy
dodecanoic acid, methyl ester
benzothiazole, 2-(methylthio)-
octadecane
7,9-Di-tert-butyl-1-oxaspiro(4,5)deca-6
eicosane

ICAL for -2 ✓
Benzoic acid RSD 57.

ICAL -6/-6 D2 ✓
Benzoic acid 0.0357% R
2,4-DNP 0.0870 R2

CCAL -6/-6 D2 R
benzoic acid RF 0.0148
~~benzidine~~ 26-28.9
~~10/27/2009~~

3,3'-DCB 32/33
aniline 27/29
benzoic acid 25

FORM III

GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24365-2

SDG No.: OCRI-09A

Matrix: Solid Level: Low Lab File ID: B10412.D

Lab ID: LCS 360-48742/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
3,3'-Dichlorobenzidine	333	106	32	40-140	*
3,3'-Dichlorobenzidine	333	106	32	40-140	*
3-Nitroaniline	333	296	89	40-140	
3-Nitroaniline	333	296	89	40-140	
4,6-Dinitro-2-methylphenol	333	239	72	30-130	
4,6-Dinitro-2-methylphenol	333	239	72	30-130	
4-Bromophenyl phenyl ether	333	291	87	40-140	
4-Bromophenyl phenyl ether	333	291	87	40-140	
4-Chloro-3-methylphenol	333	285	86	30-130	
4-Chloro-3-methylphenol	333	285	86	30-130	
4-Chloroaniline	333	238	72	40-140	
4-Chloroaniline	333	234	70	40-140	
4-Chlorophenyl phenyl ether	333	286	86	40-140	
4-Chlorophenyl phenyl ether	333	286	86	40-140	
4-Nitroaniline	333	288	86	40-140	
4-Nitroaniline	333	288	86	40-140	
4-Nitrophenol	333	314	94	30-130	
4-Nitrophenol	333	314	94	30-130	
Acenaphthene	333	318	95	40-140	
Acenaphthene	333	318	95	40-140	
Acenaphthylene	333	281	84	40-140	
Acenaphthylene	333	281	84	40-140	
Acetophenone	333	222	67	40-140	
Acetophenone	333	222	67	40-140	
Aniline	333	100	30	40-140	*
Aniline	333	89.0	27	40-140	*
Anthracene	333	330	99	40-140	
Anthracene	333	330	99	40-140	
Atrazine	333	347	104	40-140	
Azobenzene	333	285	86	40-140	
Benzaldehyde	333	326	98	40-140	
Benzo[a]anthracene	333	341	102	40-140	
Benzo[a]anthracene	333	341	102	40-140	
Benzo[a]pyrene	333	324	97	40-140	
Benzo[a]pyrene	333	324	97	40-140	
Benzo[b]fluoranthene	333	312	94	40-140	
Benzo[b]fluoranthene	333	312	94	40-140	
Benzo[g,h,i]perylene	333	336	101	40-140	
Benzo[g,h,i]perylene	333	336	101	40-140	
Benzo[k]fluoranthene	333	339	102	40-140	
Benzo[k]fluoranthene	333	339	102	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24365-2

SDG No.: OCRI-09A

Matrix: Solid Level: Low Lab File ID: B10413.D

Lab ID: LCSD 360-48742/3-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCSD CONCENTRATION (ug/Kg)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
3,3'-Dichlorobenzidine	333	109	33	3	30	40-140	*
3,3'-Dichlorobenzidine	333	109	33	3	30	40-140	*
3-Nitroaniline	333	295	89	0	30	40-140	
3-Nitroaniline	333	295	89	0	30	40-140	
4,6-Dinitro-2-methylphenol	333	221	66	8	30	30-130	
4,6-Dinitro-2-methylphenol	333	221	66	8	30	30-130	
4-Bromophenyl phenyl ether	333	294	88	1	30	40-140	
4-Bromophenyl phenyl ether	333	294	88	1	30	40-140	
4-Chloro-3-methylphenol	333	289	87	1	30	30-130	
4-Chloro-3-methylphenol	333	289	87	1	30	30-130	
4-Chloroaniline	333	247	74	3	30	40-140	
4-Chloroaniline	333	243	73	4	30	40-140	
4-Chlorophenyl phenyl ether	333	287	86	0	30	40-140	
4-Chlorophenyl phenyl ether	333	287	86	0	30	40-140	
4-Nitroaniline	333	287	86	0	30	40-140	
4-Nitroaniline	333	287	86	0	30	40-140	
4-Nitrophenol	333	314	94	0	30	30-130	
4-Nitrophenol	333	314	94	0	30	30-130	
Acenaphthene	333	317	95	0	30	40-140	
Acenaphthene	333	317	95	0	30	40-140	
Acenaphthylene	333	282	84	0	30	40-140	
Acenaphthylene	333	282	84	0	30	40-140	
Acetophenone	333	223	67	0	30	40-140	
Acetophenone	333	223	67	0	30	40-140	
Aniline	333	106	32	6	30	40-140	*
Aniline	333	94.1	28	6	30	40-140	*
Anthracene	333	337	101	2	30	40-140	
Anthracene	333	337	101	2	30	40-140	
Atrazine	333	346	104	0	30	40-140	
Azobenzene	333	287	86	0	30	40-140	
Benzaldehyde	333	321	96	2	30	40-140	
Benzo[a]anthracene	333	343	103	1	30	40-140	
Benzo[a]anthracene	333	343	103	1	30	40-140	
Benzo[a]pyrene	333	329	99	1	30	40-140	
Benzo[a]pyrene	333	329	99	1	30	40-140	
Benzo[b]fluoranthene	333	314	94	1	30	40-140	
Benzo[b]fluoranthene	333	314	94	1	30	40-140	
Benzo[g,h,i]perylene	333	357	107	6	30	40-140	
Benzo[g,h,i]perylene	333	357	107	6	30	40-140	
Benzo[k]fluoranthene	333	345	103	2	30	40-140	
Benzo[k]fluoranthene	333	345	103	2	30	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24365-2

SDG No.: OCRI-09A

Matrix: Solid Level: Low Lab File ID: B10413.D

Lab ID: LCSD 360-48742/3-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCSD CONCENTRATION (ug/Kg)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Benzoic acid	333	82.8 J	25	20	30	30-130	*
Benzoic acid	333	82.8 J	25	20	30	30-130	*
Benzophenone	333	299	90	0	30	40-140	
Benzyl alcohol	333	269	81	2	30	30-130	
Benzyl alcohol	333	269	81	2	30	30-130	
Bis(2-chloroethoxy)methane	333	255	76	3	30	40-140	
Bis(2-chloroethoxy)methane	333	220	66	2	30	40-140	
Bis(2-chloroethyl)ether	333	204	61	1	30	40-140	
Bis(2-chloroethyl)ether	333	204	61	1	30	40-140	
Bis(2-ethylhexyl) phthalate	333	319	96	1	30	40-140	
Bis(2-ethylhexyl) phthalate	333	319	96	1	30	40-140	
Butyl benzyl phthalate	333	312	94	1	30	40-140	
Butyl benzyl phthalate	333	312	94	1	30	40-140	
Caprolactam	333	305	91	2	30	40-140	
Carbazole	333	309	93	1	30	40-140	
Carbazole	333	309	93	1	30	40-140	
Chrysene	333	330	99	1	30	40-140	
Chrysene	333	330	99	1	30	40-140	
Dibenz(a,h)anthracene	333	351	105	6	30	40-140	
Dibenz(a,h)anthracene	333	351	105	6	30	40-140	
Dibenzofuran	333	276	83	0	30	40-140	
Dibenzofuran	333	276	83	0	30	40-140	
Diethyl phthalate	333	289	87	0	30	40-140	
Diethyl phthalate	333	289	87	0	30	40-140	
Dimethyl phthalate	333	278	83	0	30	40-140	
Dimethyl phthalate	333	278	83	0	30	40-140	
Di-n-butyl phthalate	333	362	108	3	30	40-140	
Di-n-butyl phthalate	333	362	108	3	30	40-140	
Di-n-octyl phthalate	333	265	79	1	30	40-140	
Di-n-octyl phthalate	333	268	80	1	30	40-140	
Diphenyl oxide	333	228	68	0	30	40-140	
Fluoranthene	333	305	91	0	30	40-140	
Fluoranthene	333	305	91	0	30	40-140	
Fluorene	333	332	100	0	30	40-140	
Fluorene	333	332	100	0	30	40-140	
Hexachlorobenzene	333	297	89	1	30	40-140	
Hexachlorobenzene	333	297	89	1	30	40-140	
Hexachlorobutadiene	333	228	68	1	30	40-140	
Hexachlorobutadiene	333	208	62	0	30	40-140	
Hexachlorocyclopentadiene	333	262	78	0	30	40-140	
Hexachlorocyclopentadiene	333	262	78	0	30	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM VIII

GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Westfield Job No.: 360-24365-2

SDG No.: OCRI-09A

Sample No.: CCV 360-49847/13 Date Analyzed: 10/04/2009 16:35

Instrument ID: Inst. J GC Column: Rtx-5ms ID: 0.25(um)

Lab File ID (Standard): J03305.D Heated Purge: (Y/N) N

		PHN		CRY		PRY	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12 HOUR STD		64859	11.85	28849	14.52	14568	15.99
UPPER LIMIT		129718	12.35	57698	15.02	29136	16.49
LOWER LIMIT		32430	11.35	14425	14.02	7284	15.49
LAB SAMPLE ID	CLIENT SAMPLE ID						
360-24365-6 DL	OC-SB-447-18/20-XXX DL	65720	11.85	31812	14.51	22772	15.99
360-24365-6	OC-SB-447-18/20-XXX	96014	11.85	54275	14.52	31100*	15.99

2138

PHN = Phenanthrene-d10
CRY = Chrysene-d12
PRY = Perylene-d12

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.50 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270C LL

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Westfield | Job No.: 360-24365-2
SDG No.: OCRI-09A
Client Sample ID: | Lab Sample ID: MB 360-48742/1-A
Matrix: Solid | Lab File ID: B10411.D
Analysis Method: 8270C LL | Date Collected:
Extract. Method: 3546 | Date Extracted: 09/09/2009 09:58
Sample wt/vol: 30.00(g) | Date Analyzed: 09/18/2009 21:51
Con. Extract Vol.: 1.0(mL) | Dilution Factor: 1
Injection Volume: | Level: (low/med) Low
% Moisture: | GPC Cleanup:(Y/N) N
Analysis Batch No.: 49189 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
120-12-7	Anthracene	ND		33	10
1912-24-9	Atrazine	ND		33	10
103-33-3	Azobenzene	ND		33	10
100-52-7	Benzaldehyde	ND		33	10
56-55-3	Benzo[a]anthracene	ND		33	10
56-55-3	Benzo[a]anthracene	ND		33	10
50-32-8	Benzo[a]pyrene	ND		33	10
50-32-8	Benzo[a]pyrene	ND		33	10
205-99-2	Benzo[b]fluoranthene	ND		33	10
205-99-2	Benzo[b]fluoranthene	ND		33	10
191-24-2	Benzo[g,h,i]perylene	ND		33	10
191-24-2	Benzo[g,h,i]perylene	ND		33	10
207-08-9	Benzo[k]fluoranthene	ND		33	10
207-08-9	Benzo[k]fluoranthene	ND		33	10
65-85-0	Benzoic acid	44.0	J	170	15
65-85-0	Benzoic acid	54.0	J	170	15
119-61-9	Benzophenone	ND		33	10
100-51-6	Benzyl alcohol	ND		67	28
100-51-6	Benzyl alcohol	ND		67	28
111-91-1	Bis(2-chloroethoxy)methane	ND		33	10
111-91-1	Bis(2-chloroethoxy)methane	ND		33	10
111-44-4	Bis(2-chloroethyl)ether	ND		33	10
111-44-4	Bis(2-chloroethyl)ether	ND		33	10
117-81-7	Bis(2-ethylhexyl) phthalate	ND		33	10
117-81-7	Bis(2-ethylhexyl) phthalate	ND		33	10
85-68-7	Butyl benzyl phthalate	ND		33	10
85-68-7	Butyl benzyl phthalate	ND		33	10
105-60-2	Caprolactam	ND		33	10
86-74-8	Carbazole	ND		33	10
86-74-8	Carbazole	ND		33	10
218-01-9	Chrysene	ND		33	10
218-01-9	Chrysene	ND		33	10
53-70-3	Dibenz(a,h)anthracene	ND		33	10
53-70-3	Dibenz(a,h)anthracene	ND		33	10

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Westfield | Job No.: 360-24365-2

SDG No.: OCRI-09A

Client Sample ID: | Lab Sample ID: MB 360-48742/1-A

Matrix: Solid | Lab File ID: B10411.D

Analysis Method: 8270C LL | Date Collected:

Extract. Method: 3546 | Date Extracted: 09/09/2009 09:58

Sample wt/vol: 30.00(g) | Date Analyzed: 09/18/2009 21:51

Con. Extract Vol.: 1.0(mL) | Dilution Factor: 1

Injection Volume: | Level: (low/med) Low

% Moisture: | GPC Cleanup: (Y/N) N

Analysis Batch No.: 49189 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
132-64-9	Dibenzofuran	ND		33	10
132-64-9	Dibenzofuran	ND		33	10
84-66-2	Diethyl phthalate	ND		33	10
84-66-2	Diethyl phthalate	ND		33	10
131-11-3	Dimethyl phthalate	ND		33	10
131-11-3	Dimethyl phthalate	ND		33	10
84-74-2	Di-n-butyl phthalate	86.9		33	29
84-74-2	Di-n-butyl phthalate	86.9		33	29
117-84-0	Di-n-octyl phthalate	ND		33	17
117-84-0	Di-n-octyl phthalate	ND		33	17
101-84-8	Diphenyl oxide	ND		33	10
206-44-0	Fluoranthene	ND		33	10
206-44-0	Fluoranthene	ND		33	10
86-73-7	Fluorene	ND		33	10
86-73-7	Fluorene	ND		33	10
118-74-1	Hexachlorobenzene	ND		33	10
118-74-1	Hexachlorobenzene	ND		33	10
87-68-3	Hexachlorobutadiene	ND		33	10
87-68-3	Hexachlorobutadiene	ND		33	10
77-47-4	Hexachlorocyclopentadiene	ND		67	10
77-47-4	Hexachlorocyclopentadiene	ND		67	10
67-72-1	Hexachloroethane	ND		33	10
67-72-1	Hexachloroethane	ND		33	10
193-39-5	Indeno[1,2,3-cd]pyrene	ND		33	10
193-39-5	Indeno[1,2,3-cd]pyrene	ND		33	10
78-59-1	Isophorone	ND		33	10
78-59-1	Isophorone	ND		33	10
91-20-3	Naphthalene	ND		80	10
91-20-3	Naphthalene	ND		80	10
98-95-3	Nitrobenzene	ND		33	10
98-95-3	Nitrobenzene	ND		33	10
62-75-9	N-Nitrosodimethylamine	ND		33	12
62-75-9	N-Nitrosodimethylamine	ND		33	12
621-64-7	N-Nitrosodi-n-propylamine	ND		33	10

GC/MS SEMI VOA ANALYSIS RUN LOG

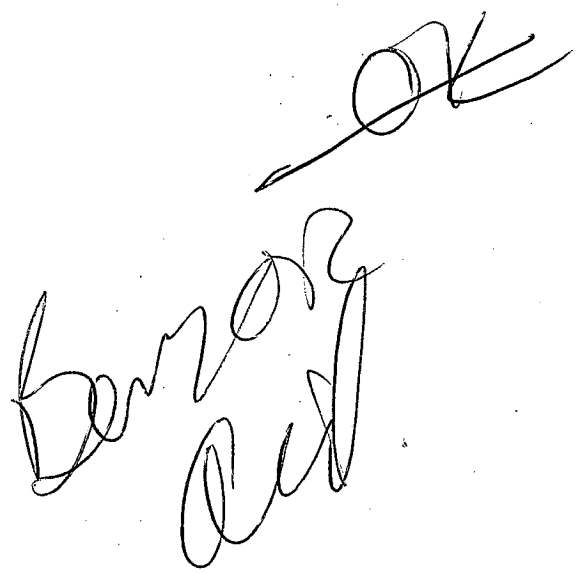
Lab Name: TestAmerica Westfield Job No.: 360-24365-2

SDG No.: OCRI-09A

Instrument ID: Inst. B Start Date: 09/18/2009 16:08

Analysis Batch Number: 49189 End Date: 09/18/2009 22:54

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 360-49189/1		09/18/2009 16:08	1	B10400.D	Rtx-5ms 0.25(um)
STD5 360-49189/2 ICIS		09/18/2009 16:39	1	B10401.D	Rtx-5ms 0.25(um)
STD01 360-49189/3 IC		09/18/2009 17:10	1	B10402.D	Rtx-5ms 0.25(um)
STD025 360-49189/4 IC		09/18/2009 17:41	1	B10403.D	Rtx-5ms 0.25(um)
STD05 360-49189/5 IC		09/18/2009 18:12	1	B10404.D	Rtx-5ms 0.25(um)
STD1 360-49189/6 IC		09/18/2009 18:44	1	B10405.D	Rtx-5ms 0.25(um)
STD25 360-49189/7 IC		09/18/2009 19:15	1	B10406.D	Rtx-5ms 0.25(um)
STD8 360-49189/8 IC		09/18/2009 19:46	1	B10407.D	Rtx-5ms 0.25(um)
STD10 360-49189/9 IC		09/18/2009 20:17	1	B10408.D	Rtx-5ms 0.25(um)
STD20 360-49189/10 IC		09/18/2009 20:49	1	B10409.D	Rtx-5ms 0.25(um)
ICV 360-49189/11		09/18/2009 21:20	1		Rtx-5ms 0.25(um)
MB 360-48742/1-A		09/18/2009 21:51	1	B10411.D	Rtx-5ms 0.25(um)
LCS 360-48742/2-A		09/18/2009 22:22	1	B10412.D	Rtx-5ms 0.25(um)
LCSD 360-48742/3-A		09/18/2009 22:54	1	B10413.D	Rtx-5ms 0.25(um)



FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Westfield Job No.: 360-24365-2 Analy Batch No.: 49189

SDG No.: OCRI-09A

Instrument ID: Inst. B GC Column: Rtx-5ms ID: 0.25(um) Heated Purge: (Y/N) N

Calibration Start Date: 09/18/2009 16:39 Calibration End Date: 09/18/2009 20:49 Calibration ID: 4654

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD01 360-49189/3	B10402.D
Level 2	STD025 360-49189/4	B10403.D
Level 3	STD05 360-49189/5	B10404.D
Level 4	STD1 360-49189/6	B10405.D
Level 5	STD25 360-49189/7	B10406.D
Level 6	STD5 360-49189/2	B10401.D
Level 7	STD8 360-49189/8	B10407.D
Level 8	STD10 360-49189/9	B10408.D
Level 9	STD20 360-49189/10	B10409.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
Pyridine	+++++ 0.4411	0.5622 0.4228	0.4844 0.3940	0.3817 0.5656	0.4783	Ave		0.4663				15.0					
N-Nitrosodimethylamine	0.4273 0.3476	0.3816 0.3283	0.4264 0.3176	0.3877 0.4375	0.3488	Ave		0.3781				12.0					
Benzoic acid	+++++ 0.0770	+++++ 0.0754	0.0195 0.0976	0.0252 0.0912	0.0308	Ave		0.0571				57.0					
Benzyl alcohol	+++++ 0.4218	0.0863 0.3965	0.2365 0.3873	0.3224 0.5583	0.3874	Qua	0.0661	0.2723	0.0140						0.9970		
Phenol	0.6262 0.6306	0.6977 0.6186	0.7297 0.5950	0.7406 0.8371	0.6188	Ave		0.6771				12.0					
Aniline	0.5278 0.7294	0.6687 0.6964	0.7670 0.6710	0.8175 0.9387	0.7050	Qua	0.2056	0.4834	0.0220						0.9980		
Bis(2-chloroethyl)ether	0.6726 0.4990	0.6167 0.4810	0.6485 0.4668	0.6184 0.6529	0.5037	Ave		0.5733				15.0					
2-Chlorophenol	0.6242 0.5406	0.6197 0.5196	0.6184 0.5018	0.6445 0.7095	0.5412	Ave		0.5910				12.0					
1,4-Dichlorobenzene	0.8112 0.6384	0.7977 0.6166	0.8202 0.5988	0.8059 0.8252	0.6334	Ave		0.7275				14.0					
1,3-Dichlorobenzene	0.8160 0.6696	0.8371 0.6456	0.8517 0.6211	0.8342 0.8533	0.6703	Ave		0.7554				13.0					
1,2-Dichlorobenzene	0.7780 0.6061	0.8089 0.5868	0.7935 0.5650	0.7385 0.7860	0.6074	Ave		0.6967				15.0					
2-Methylphenol	0.5490 0.5000	0.6087 0.4844	0.5654 0.4617	0.6338 0.6664	0.4994	Ave		0.5521				13.0					
2,4-Dinitrophenol	+++++ 0.1071	+++++ 0.1040	0.0256 0.1231	0.0385 0.1359	0.0488	Lin	-0.160	0.1406							0.9930		

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Westfield Job No.: 360-24365-2 Analy Batch No.: 49189

SDG No.: OCRI-09A

Instrument ID: Inst. B GC Column: Rtx-5ms ID: 0.25(um) Heated Purge: (Y/N) N

Calibration Start Date: 09/18/2009 16:39 Calibration End Date: 09/18/2009 20:49 Calibration ID: 4655

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD01 360-49189/3	B10402.D
Level 2	STD025 360-49189/4	B10403.D
Level 3	STD05 360-49189/5	B10404.D
Level 4	STD1 360-49189/6	B10405.D
Level 5	STD25 360-49189/7	B10406.D
Level 6	STD5 360-49189/2	B10401.D
Level 7	STD8 360-49189/8	B10407.D
Level 8	STD10 360-49189/9	B10408.D
Level 9	STD20 360-49189/10	B10409.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
Pyridine	+++++ 0.4411	0.5622 0.4228	0.4844 0.3940	0.3817 0.5656	0.4783	Ave		0.4663				15.0		15.0			
1,4-Dioxane	0.4764 0.1909	0.3023 0.1731	0.2676 0.1589	0.2427 0.2418	0.1839	Qua	0.1034	0.1017	0.0067						0.9950		0.9900
N-Nitrosodimethylamine	0.4273 0.3476	0.3816 0.3283	0.4264 0.3176	0.3877 0.4375	0.3488	Ave		0.3781				12.0		15.0			
Benzoic acid	+++++ 0.0770	+++++ 0.0754	0.0195 0.0976	0.0252 0.0912	0.0308	Ave		0.0571				57.0	*	15.0			
Benzyl alcohol	+++++ 0.4218	0.0863 0.3965	0.2365 0.3873	0.3224 0.5583	0.3874	Qua	0.0661	0.2723	0.0140						0.9970		0.9900
Benzaldehyde	0.3122 0.2691	0.2942 0.2540	0.3051 0.2436	0.3132 0.3187	0.2726	Ave		0.2870				9.7		15.0			
Phenol	0.6262 0.6306	0.6977 0.6186	0.7297 0.5950	0.7406 0.8371	0.6188	Ave		0.6771				12.0		15.0			
Aniline	0.5278 0.7294	0.6687 0.6964	0.7670 0.6710	0.8175 +++++	0.7050	Ave		0.6979				12.0		15.0			
Bis(2-chloroethyl)ether	0.6726 0.4990	0.6167 0.4810	0.6485 0.4668	0.6184 0.6529	0.5037	Ave		0.5733				15.0		15.0			
2-Chlorophenol	0.6242 0.5406	0.6197 0.5196	0.6184 0.5018	0.6445 0.7095	0.5412	Ave		0.5910				12.0		15.0			
1,4-Dichlorobenzene	0.8112 0.6384	0.7977 0.6166	0.8202 0.5988	0.8059 0.8252	0.6334	Ave		0.7275				14.0		15.0			
1,3-Dichlorobenzene	0.8160 0.6696	0.8371 0.6456	0.8517 0.6211	0.8342 0.8533	0.6703	Ave		0.7554				13.0		15.0			
1,2-Dichlorobenzene	0.7780 0.6061	0.8089 0.5868	0.7935 0.5650	0.7385 0.7860	0.6074	Ave		0.6967				15.0		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Westfield Job No.: 360-24365-2

SDG No.: OCRI-09A

Instrument ID: Inst. J Start Date: 10/04/2009 16:02

Analysis Batch Number: 49847 End Date: 10/04/2009 23:10

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 360-49847/12		10/04/2009 16:02	1	J03304.D	Rtx-5ms 0.25(um)
CCV 360-49847/13 CCVIS		10/04/2009 16:35	1	J03305.D	Rtx-5ms 0.25(um)
ZZZZZ		10/04/2009 17:08	1		Rtx-5ms 0.25(um)
ZZZZZ		10/04/2009 17:41	1		Rtx-5ms 0.25(um)
ZZZZZ		10/04/2009 18:14	10		Rtx-5ms 0.25(um)
ZZZZZ		10/04/2009 18:47	1		Rtx-5ms 0.25(um)
ZZZZZ		10/04/2009 19:20	1		Rtx-5ms 0.25(um)
ZZZZZ		10/04/2009 19:53	1		Rtx-5ms 0.25(um)
ZZZZZ		10/04/2009 20:26	1		Rtx-5ms 0.25(um)
ZZZZZ		10/04/2009 20:59	1		Rtx-5ms 0.25(um)
ZZZZZ		10/04/2009 21:31	1		Rtx-5ms 0.25(um)
ZZZZZ		10/04/2009 22:04	1		Rtx-5ms 0.25(um)
360-24365-6 DL	OC-SB-447-18/20-XXX DL	10/04/2009 22:37	10	J03316.D	Rtx-5ms 0.25(um)
360-24365-6	OC-SB-447-18/20-XXX	10/04/2009 23:10	1	J03317.D	Rtx-5ms 0.25(um)

CCAL

	RF
Benzoic acid	0.0148
benzidine	%D −28.9

ICAL

	RRF
Benzoic acid	0.03576
2,4-DNP	0.9870 r²

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Westfield Job No.: 360-24365-2

SDG No.: OCRI-09A

Lab Sample ID: CCV 360-49847/13 Calibration Date: 10/04/2009 16:35

Instrument ID: Inst. J Calib Start Date: 10/04/2009 10:34

GC Column: Rtx-5ms ID: 0.25(um) Calib End Date: 10/04/2009 14:57

Lab File ID: J03305.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Pyridine	Ave	0.6562	0.6223		4740	5000	-5.2	30.0
N-Nitrosodimethylamine	Ave	0.3954	0.3648		4610	5000	-7.8	30.0
Benzaldehyde	Ave	0.2956	0.2626		4440	5000	-11.2	30.0
Phenol	Ave	1.015	0.9080		4470	5000	-10.6	20.0
Aniline	Ave	1.016	0.9535		4690	5000	-6.1	30.0
Bis(2-chloroethyl)ether	Ave	0.7378	0.6421		4350	5000	-13.0	30.0
2-Chlorophenol	Ave	0.6900	0.6382		4620	5000	-7.5	30.0
1,4-Dichlorobenzene	Ave	0.8582	0.7178		4180	5000	-16.4	20.0
1,3-Dichlorobenzene	Ave	0.8765	0.7454		4250	5000	-14.9	30.0
Benzyl alcohol	Ave	0.5917	0.5753		4860	5000	-2.8	30.0
1,2-Dichlorobenzene	Ave	0.8011	0.6847		4270	5000	-14.5	30.0
2-Methylphenol	Ave	0.6086	0.5673		4660	5000	-6.8	30.0
2,2'-oxybis[1-chloropropane]	Ave	0.7133	0.6190		4340	5000	-13.2	30.0
Acetophenone	Ave	0.9319	0.8851		4750	5000	-5.0	30.0
3 & 4 Methylphenol	Ave	0.6236	0.5987		4800	5000	-4.0	30.0
N-Nitrosodi-n-propylamine	Ave	0.5307	0.5121	0.0500	4820	5000	-3.5	30.0
Hexachloroethane	Ave	0.3383	0.3071		4540	5000	-9.2	30.0
Nitrobenzene	Ave	0.3125	0.3017		4830	5000	-3.4	30.0
Isophorone	Ave	0.4772	0.5220		5470	5000	9.4	30.0
2-Nitrophenol	Lin2		0.1221		5370	5000	7.3	20.0
2,4-Dimethylphenol	Ave	0.2653	0.2570		4840	5000	-3.1	30.0
Benzoic acid	Qua		0.0148		5340	5000	6.7	30.0
Bis(2-chloroethoxy)methane	Ave	0.3226	0.3001		4650	5000	-7.0	30.0
2,4-Dichlorophenol	Ave	0.1614	0.1841		5700	5000	14.0	20.0
1,2,4-Trichlorobenzene	Qua		0.2255		5170	5000	3.5	30.0
Alpha-Terpineol	Ave	0.1758	0.1890		5380	5000	7.5	30.0
Naphthalene	Qua		0.7640		5150	5000	3.1	30.0
4-Chloroaniline	Ave	0.2561	0.2738		5350	5000	6.9	30.0
Hexachlorobutadiene	Qua		0.1329		5350	5000	7.1	20.0
Caprolactam	Lin1		0.0632		5490	5000	9.8	30.0
4-Chloro-3-methylphenol	Ave	0.1851	0.2070		5590	5000	11.8	20.0
2-Methylnaphthalene	Ave	0.5265	0.4825		4580	5000	-8.4	30.0
1-Methylnaphthalene	Qua		0.4773		5100	5000	1.9	30.0
1,2,4,5-Tetrachlorobenzene	Qua		0.1918		5290	5000	5.8	30.0
Hexachlorocyclopentadiene	Lin		0.2354	0.0500	5240	5000	4.7	30.0
2,4,6-Trichlorophenol	Lin2		0.3159		5030	5000	0.6	20.0
2,4,5-Trichlorophenol	Lin1		0.3108		4800	5000	-4.0	30.0
1,1'-Biphenyl	Ave	1.532	1.459		4760	5000	-4.8	30.0
2-Chloronaphthalene	Ave	1.353	1.279		4730	5000	-5.5	30.0
Phenyl ether	Qua		0.3015		5240	5000	4.8	30.0
2-Nitroaniline	Lin		0.3063		4590	5000	-8.3	30.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Westfield Job No.: 360-24365-2

SDG No.: OCRI-09A

Lab Sample ID: CCV 360-49847/13 Calibration Date: 10/04/2009 16:35

Instrument ID: Inst. J Calib Start Date: 10/04/2009 10:34

GC Column: Rtx-5ms ID: 0.25(um) Calib End Date: 10/04/2009 14:57

Lab File ID: J03305.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dimethyl phthalate	Ave	1.295	1.348		5200	5000	4.1	30.0
2,6-Dinitrotoluene	Lin1		0.2869		4830	5000	-3.5	30.0
Acenaphthylene	Ave	1.673	1.796		5370	5000	7.3	30.0
3-Nitroaniline	Lin1		0.2114		4710	5000	-5.8	30.0
Acenaphthene	Ave	1.201	1.145		4760	5000	-4.7	20.0
2,4-Dinitrophenol	Qua		0.0545	0.0500	4980	5000	-0.3	30.0
4-Nitrophenol	Lin		0.1174	0.0500	4860	5000	-2.7	30.0
Dibenzofuran	Ave	1.467	1.456		4960	5000	-0.7	30.0
2,4-Dinitrotoluene	Lin1		0.3245		4810	5000	-3.8	30.0
2,3,4,6-Tetrachlorophenol	Lin1		0.2206		4810	5000	-3.8	30.0
Diethyl phthalate	Ave	1.306	1.379		5280	5000	5.6	30.0
4-Chlorophenyl phenyl ether	Ave	0.5713	0.5703		4990	5000	-0.2	30.0
Fluorene	Ave	1.139	1.176		5160	5000	3.2	30.0
4-Nitroaniline	Lin1		0.1279		4590	5000	-8.3	30.0
4,6-Dinitro-2-methylphenol	Qua		0.0847		5210	5000	4.1	30.0
Diphenylamine	Ave	0.7272	0.7280		5010	5000	0.1	30.0
N-Nitrosodiphenylamine	Ave	0.7272	0.7280		5010	5000	0.1	20.0
1,2-Diphenylhydrazine	Lin2		1.087		4980	5000	-0.4	30.0
Azobenzene	Lin2		1.087		4980	5000	-0.4	30.0
Benzophenone	Lin2		0.7921		4980	5000	-0.3	30.0
4-Bromophenyl phenyl ether	Ave	0.2426	0.2334		4810	5000	-3.8	30.0
Hexachlorobenzene	Ave	0.2899	0.2576		4440	5000	-11.2	30.0
Atrazine	Lin2		0.2024		4990	5000	-0.3	30.0
Pentachlorophenol	Lin		0.0777		4740	5000	-5.2	20.0
Pentachloronitrobenzene	Lin1		0.1069		4630	5000	-7.4	30.0
Phenanthrene	Ave	1.136	1.080		4750	5000	-4.9	30.0
Anthracene	Lin2		1.002		5220	5000	4.4	30.0
Carbazole	Lin1		0.7532		4920	5000	-1.5	30.0
Di-n-butyl phthalate	Lin1		1.420		4680	5000	-6.4	30.0
Fluoranthene	Ave	0.8007	0.8479		5300	5000	5.9	20.0
Benzidine	Lin		0.0657		3550	5000	-28.9	30.0
Pyrene	Ave	1.661	1.961		5900	5000	18.0	30.0
Butyl benzyl phthalate	Lin1		0.7522		5010	5000	0.3	30.0
3,3'-Dichlorobenzidine	Lin		0.1844		4090	5000	-18.2	30.0
Benzo[a]anthracene	Lin1		0.9603		4970	5000	-0.7	30.0
Bis(2-ethylhexyl) phthalate	Lin		0.8726		4370	5000	-12.5	30.0
Chrysene	Ave	0.9948	0.9659		4850	5000	-2.9	30.0
Di-n-octyl phthalate	Qua		1.306		4970	5000	-0.5	20.0
Benzo[b]fluoranthene	Ave	1.376	1.311		4760	5000	-4.7	30.0
Benzo[k]fluoranthene	Ave	1.468	1.648		5610	5000	12.3	30.0
Benzo[a]pyrene	Lin1		0.9781		4740	5000	-5.1	20.0

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Westfield Job No.: 360-24365-2 Analy Batch No.: 49846

SDG No.: OCRI-09A

Instrument ID: Inst. J GC Column: Rtx-5ms ID: 0.25(um) Heated Purge: (Y/N) N

Calibration Start Date: 10/04/2009 10:34 Calibration End Date: 10/04/2009 14:57 Calibration ID: 4864

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD01 360-49846/3	J03295.D
Level 2	STD025 360-49846/4	J03296.D
Level 3	STD05 360-49846/5	J03297.D
Level 4	STD1 360-49846/6	J03298.D
Level 5	STD25 360-49846/7	J03299.D
Level 6	STD5 360-49846/2	J03294.D
Level 7	STD8 360-49846/8	J03300.D
Level 8	STD10 360-49846/9	J03301.D
Level 9	STD20 360-49846/10	J03302.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
Pyridine	+++++ 0.6779	0.5425 0.5790	0.6001 0.7084	0.6419 1.7206	0.6395	Ave		0.6562				15.0		15.0			
N-Nitrosodimethylamine	0.3923 0.3762	0.4825 0.3362	0.3751 0.4012	0.3723 0.8993	0.3736	Ave		0.3954				11.0		15.0			
Benzoic acid	+++++ 0.0061	+++++ 0.0158	+++++ 0.0408	0.0089 0.1403	0.0027	Qua	-0.011	-0.004 0.0037	0.0038						0.9910		0.9900
Benzaldehyde	0.3372 0.2763	0.2959 0.2501	0.2690 0.3074	0.2958 0.7042	0.2766	Ave		0.2956				11.0		15.0			
2,4-Dinitrophenol	+++++ 0.0337	+++++ 0.0604	+++++ 0.0927	0.0085 0.2124	0.0262	Qua	-0.117	0.0667	0.0023		0.0500				0.9870	*	0.9900
4-Nitrophenol	+++++ 0.0946	+++++ 0.1253	+++++ 0.1523	0.0515 0.3056	0.0907	Lin	-0.202	0.1623			0.0500				0.9930		0.9900
Phenol	1.1303 0.9357	1.0611 0.8393	1.0037 1.0081	1.0427 2.2322	0.9999	Ave		1.0152				8.8		15.0			
Aniline	1.0623 0.9514	0.9866 0.8771	0.9714 1.0575	1.0345 2.4164	0.9910	Ave		1.0156				9.1		15.0			
Bis(2-chloroethyl)ether	0.8628 0.6554	0.8053 0.5882	0.7648 0.6969	0.7692 1.5579	0.7182	Ave		0.7378				11.0		15.0			
2-Chlorophenol	0.6571 0.6595	0.7078 0.5951	0.6904 0.7028	0.6969 1.6179	0.6918	Ave		0.6900				8.2		15.0			
1,4-Dichlorobenzene	0.9994 0.7587	1.0035 0.6641	0.9240 0.7911	0.9025 1.7624	0.7997	Ave		0.8582				13.0		15.0			
1,3-Dichlorobenzene	1.0556 0.7659	0.9761 0.6854	0.9449 0.8032	0.9200 1.8122	0.8309	Ave		0.8765				13.0		15.0			
4,6-Dinitro-2-methylphenol	+++++ 0.0613	+++++ 0.0879	+++++ 0.1122	0.0274 0.2468	0.0474	Qua	-0.125	0.0965	0.0017						0.9930		0.9900

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM IV
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Westfield Job No.: 360-24365-2

SDG No.: OCRI-09A

Lab File ID: B10449.D Lab Sample ID: MB 360-48854/1-A

Matrix: Solid Date Extracted: 09/11/2009 11:42

Instrument ID: Inst. B Date Analyzed: 09/21/2009 20:33

Level: (Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 360-48854/2-A	B10450.D	09/21/2009 21:05
	LCSD 360-48854/3-A	B10451.D	09/21/2009 21:36
OC-SB-452-13/15-XXX	360-24365-9	B10457.D	09/22/2009 01:44
OC-SB-458-22/24-XXX	360-24365-14	B10460.D	09/22/2009 03:17
OC-SB-460-30/32-XXX	360-24365-17	B10463.D	09/22/2009 04:50

LCS
aniline 27/20 (CTJ)

Surr OK
Tune OK
IS OK
ICAL OK
CCAL OK

MB-360-~~48365~~ 48854
benzoic acid 70.4 all ND

TIC
unk 7.06
vanillin
benzothiazole, 2-(methylthio)-
octadecane
eicosane
heptadecane, 2,6,10,15-tetramethyl-
heptacosane
squalene

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24365-2

SDG No.: OCRI-09A

Matrix: Solid Level: Low Lab File ID: B10450.D

Lab ID: LCS 360-48854/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
1,1'-Biphenyl	333	263	79	40-140	
1,2,4,5-Tetrachlorobenzene	333	218	65	40-140	
1,2,4-Trichlorobenzene	333	222	67	40-140	
1,2-Dichlorobenzene	333	230	69	40-140	
1,3-Dichlorobenzene	333	190	57	40-140	
1,4-Dichlorobenzene	333	190	57	40-140	
1-Methylnaphthalene	333	218	65	40-140	
2,2'-oxybis[1-chloropropane]	333	208	63	40-140	
2,3,4,6-Tetrachlorophenol	333	228	68	40-140	
2,4,5-Trichlorophenol	333	264	79	30-130	
2,4,6-Trichlorophenol	333	250	75	30-130	
2,4-Dichlorophenol	333	240	72	30-130	
2,4-Dimethylphenol	333	241	72	30-130	
2,4-Dinitrophenol	333	192	58	30-130	
2,4-Dinitrotoluene	333	246	74	40-140	
2,6-Dinitrotoluene	333	268	81	40-140	
2-Chloronaphthalene	333	199	60	40-140	
2-Chlorophenol	333	223	67	30-130	
2-Methylnaphthalene	333	209	63	40-140	
2-Methylphenol	333	240	72	30-130	
2-Nitroaniline	333	268	80	40-140	
2-Nitrophenol	333	250	75	30-130	
3 & 4 Methylphenol	333	249	75	30-130	
3,3'-Dichlorobenzidine	333	242	73	40-140	
3-Nitroaniline	333	247	74	40-140	
4,6-Dinitro-2-methylphenol	333	232	70	30-130	
4-Bromophenyl phenyl ether	333	263	79	40-140	
4-Chloro-3-methylphenol	333	274	82	30-130	
4-Chloroaniline	333	171	51	40-140	
4-Chlorophenyl phenyl ether	333	262	79	40-140	
4-Nitroaniline	333	263	79	40-140	
4-Nitrophenol	333	281	84	30-130	
Acenaphthene	333	294	88	40-140	
Acenaphthylene	333	251	75	40-140	
Acetophenone	333	228	69	40-140	
Aniline	333	91.1	27	40-140	*
Anthracene	333	310	93	40-140	
Atrazine	333	282	85	40-140	
Azobenzene	333	264	79	40-140	
Benzaldehyde	333	248	75	40-140	
Benzo[a]anthracene	333	314	94	40-140	

Calculations are performed before rounding

anita 27/26

Column to be used to flag recovery and RPD values

FORM III 8270C LL

Cover sheet ✓

SEMIVOLATILE ORGANICS

REGION I VALIDATION CHECKLIST for
OLIN CHEMICAL SUPERFUND SITE
Criteria and Qualifications: REGION I Organics Guideline (1996)

TIER I (II) / III (circle one)

SITE: Olin Chemical Superfund Site Project #: 6/07/000/6.12 SDG #: OCRI-10/10A

LAB #: TAL-Westfield

Sample IDs: Attach tracking sheet and/or sample listing.

This checklist is designed to be used with USEPA Region I Validation Guidelines Part II (12/1996). During Level III validation, calculation and transcription checks are completed for instrument tuning, surrogates, target compounds, spike recoveries, calibration data, and internal standards as specified in the guideline. These checks are documented on attached validation notes.

YES NO NA	
Data completeness ☑ ☐ ☐ All data summaries, QC forms and raw data available from hard copy or electronic data package ☑ ☐ ☐ Data summaries match EDD	Contact lab if missing data. Lab to respond with 24 hours.
Holding Times and Preservation ☑ ☐ ☐ Hold times met (Waters – Extract within 7 days, analyze within 40 days. Soils – extract within 14 days, analyze within 40 days)	
Instrument Performance Check (Tune) ☑ ☐ ☐ Tune available for each 12-hour period samples were analyzed ☑ ☐ ☐ Appropriate number of significant figures reported (at least 2) ☑ ☐ ☐ Mass/Charge list (m/z) criteria met	
Initial Calibration ☐ ☒ ☐ %RSD less than or equal to 30% ☐ ☒ ☐ RRF greater than or equal to 0.05	See below.
Continuing Calibration ☑ ☐ ☐ %D less than or equal to 25% ☐ ☒ ☐ RRF greater than or equal to 0.05.	See below.
Blank Contamination ☒ ☐ ☐ Method blank contamination ☒ ☐ ☐ Equipment/Rinseate blank contamination	Evaluate all blanks for contamination. Highest contaminant level used for action level. See below.
Surrogate Recoveries	

SEMIVOLATILE ORGANICS

REGION I VALIDATION CHECKLIST for
OLIN CHEMICAL SUPERFUND SITE
Criteria and Qualifications: REGION I Organics Guideline (1996)

TIER I / (II) / III (circle one)

☑ ☐ ☐ Surrogates percent recovery criteria met: Soil = (base/neutral 30%-130%, acid 30%-130%) Water = (base/neutral 30%-130%, acid 15%-110%)	
Matrix Spikes and Laboratory Control Samples ☐ ☒ ☐ MS/MSD percent recovery criteria met Soil and Water = (base/neutral 40%-140%, acid 30%-130%) ☐ ☒ ☐ MS/MSD RPD criteria met (soils <50%, water <30%) ☐ ☒ ☐ LCS percent recovery criteria met soil/water (base 40%-140%, acid 30%-130%)	See below.
Field Duplicates ☑ ☐ ☐ RPD criteria met (soils <50%, water <30%)	
Internal Standard ☑ ☐ ☐ Area counts within -50 to +100 percent of calib. std. ☑ ☐ ☐ Retention Time within 30 seconds of calib. std.	
Target Compounds ☑ ☐ ☐ Reviewed narrative for anomalies	
Tentatively Identified Compounds (TICs) ☐ ☑ ☐ TCL compounds reported as TICs	

Validator's Signature: _____

Date: 3/4/10

Reference:

MACTEC, Quality Assurance Project Plan for Remedial Investigation/Feasibility Study – Olin Chemical Superfund Site, Wilmington Property, 51 Eames Street, Wilmington, MA", MACTEC Engineering and Consulting. Draft .October 2008.

SAMPLE SUMMARY

Client: Olin Corporation

Job Number: 360-24417-1
Sdg Number: OCRI-10

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
360-24417-1	OC-SB-463-0.0/1.0-XXX	Solid	09/01/2009 1300	09/02/2009 1710
360-24417-2	OC-SB-463-28/30-XXX	Solid	09/01/2009 1450	09/02/2009 1710
360-24417-3	OC-SB-463-6.0/8.0-XXX	Solid	09/01/2009 1310	09/02/2009 1710
360-24417-4	OC-SB-464-0.0/1.0-XXX	Solid	09/01/2009 1550	09/02/2009 1710
360-24417-5	OC-SB-464-26/28-XXX	Solid	09/01/2009 1650	09/02/2009 1710
360-24417-6	OC-SB-464-5.0/7.0-XXX	Solid	09/01/2009 1650	09/02/2009 1710
360-24417-7	OC-SB-465-0.0/1.0-XXX	Solid	09/02/2009 0735	09/02/2009 1710
360-24417-8	OC-SB-465-16/18-XXX	Solid	09/02/2009 0825	09/02/2009 1710
360-24417-9	OC-SB-465-8.0/10-DUP	Solid	09/02/2009 0745	09/02/2009 1710
360-24417-10	OC-SB-465-8.0/10-XXX	Solid	09/02/2009 0745	09/02/2009 1710
360-24417-10MS	OC-SB-465-8.0/10-XMS	Solid	09/02/2009 0745	09/02/2009 1710
360-24417-10MSD	OC-SB-465-8.0/10-MSD	Solid	09/02/2009 0745	09/02/2009 1710
360-24417-11	OC-SB-468-0.0/1.0-XXX	Solid	09/02/2009 1005	09/02/2009 1710
360-24417-12	OC-SB-468-31/33-XXX	Solid	09/02/2009 1100	09/02/2009 1710
360-24417-13	OC-SB-468-8.0/10-XXX	Solid	09/02/2009 1010	09/02/2009 1710
360-24417-14	OC-SB-471-0.0/1.0-XXX	Solid	09/02/2009 1315	09/02/2009 1710
360-24417-15	OC-SB-471-3.0/5.0-XXX	Solid	09/02/2009 1330	09/02/2009 1710
360-24417-16	OC-SB-471-26/28-XXX	Solid	09/02/2009 1430	09/02/2009 1710
360-24417-17	OC-TBK-012	Solid	09/02/2009 1450	09/02/2009 1710

Form I's updated.
3/4/10

Client: Olin Corporation

Job Number: 360-24417-1
Sdg Number: OCRI-10

Client Sample ID: OC-SB-463-0.0/1.0-XXX

Lab Sample ID: 360-24417-1
Client Matrix: Solid
% Moisture: 3.8

Date Sampled: 09/01/2009 1300
Date Received: 09/02/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49266		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48854		Lab File ID:	B10466.D
Dilution:	1.0			Initial Weight/Volume:	30.37 g
Date Analyzed:	09/22/2009 0623			Final Weight/Volume:	1.0 mL
Date Prepared:	09/11/2009 1142			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		10	34
1,2,4,5-Tetrachlorobenzene		ND		10	34
1,2,4-Trichlorobenzene		ND		10	34
1,2-Dichlorobenzene		ND		10	34
1,3-Dichlorobenzene		ND		10	34
1,4-Dichlorobenzene		ND		10	34
1-Methylnaphthalene		ND		10	34
2,2'-oxybis[1-chloropropane]		ND		10	34
2,3,4,6-Tetrachlorophenol		ND		10	34
2,4,5-Trichlorophenol		ND		10	34
2,4,6-Trichlorophenol		ND		10	34
2,4-Dichlorophenol		ND		10	34
2,4-Dimethylphenol		ND		13	34
2,4-Dinitrophenol		ND		10	34
2,4-Dinitrotoluene		ND		10	34
2,6-Dinitrotoluene		ND		10	34
2-Chloronaphthalene		ND		10	34
2-Chlorophenol		ND		10	34
2-Methylnaphthalene		ND		10	34
2-Methylphenol		ND		21	34
2-Nitroaniline		ND		10	170
2-Nitrophenol		ND		10	34
3 & 4 Methylphenol		ND		10	34
3,3'-Dichlorobenzidine		ND		10	68
3-Nitroaniline		ND		10	170
4,6-Dinitro-2-methylphenol		ND		10	170
4-Bromophenyl phenyl ether		ND		10	34
4-Chloro-3-methylphenol		ND		10	68
4-Chloroaniline		ND		10	68
4-Chlorophenyl phenyl ether		ND		10	34
4-Nitroaniline		ND		10	170
4-Nitrophenol		ND		10	170
Acenaphthene		ND		10	34
Acenaphthylene		ND		10	34
Acetophenone		ND		10	34
Aniline		ND		10	34
Anthracene		ND		10	34
Atrazine		ND		10	34
Azobenzene		ND		10	34
Benzaldehyde		ND		10	34
Benzo[a]anthracene		ND		10	34
Benzo[a]pyrene		ND		10	34
Benzo[b]fluoranthene		ND		10	34
Benzo[g,h,i]perylene		ND		10	34
Benzo[k]fluoranthene		ND		10	34
Benzoic acid		ND		15	170

3/4/10

Client: Olin Corporation

Job Number: 360-24417-1
Sdg Number: OCRI-10

Client Sample ID: OC-SB-463-0.0/1.0-XXX

Lab Sample ID: 360-24417-1
Client Matrix: Solid % Moisture: 3.8

Date Sampled: 09/01/2009 1300
Date Received: 09/02/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49266		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48854		Lab File ID:	B10466.D
Dilution:	1.0			Initial Weight/Volume:	30.37 g
Date Analyzed:	09/22/2009 0623			Final Weight/Volume:	1.0 mL
Date Prepared:	09/11/2009 1142			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		10	34
Benzyl alcohol		ND		29	68
Bis(2-chloroethoxy)methane		ND		10	34
Bis(2-chloroethyl)ether		ND		10	34
Bis(2-ethylhexyl) phthalate		50		10	34
Butyl benzyl phthalate		ND		10	34
Caprolactam		ND		10	34
Carbazole		ND		10	34
Chrysene		ND		10	34
Dibenz(a,h)anthracene		ND		10	34
Dibenzofuran		ND		10	34
Diethyl phthalate		ND		10	34
Dimethyl phthalate		ND		10	34
Di-n-butyl phthalate		ND		30	34
Di-n-octyl phthalate		ND		17	34
Diphenyl oxide		ND		10	34
Fluoranthene		ND		10	34
Fluorene		ND		10	34
Hexachlorobenzene		ND		10	34
Hexachlorobutadiene		ND		10	34
Hexachlorocyclopentadiene		ND		10	68
Hexachloroethane		ND		10	34
Indeno[1,2,3-cd]pyrene		ND		10	34
Isophorone		ND		10	34
Naphthalene		ND		10	82
Nitrobenzene		ND		10	34
N-Nitrosodimethylamine		ND		12	34
N-Nitrosodi-n-propylamine		ND		10	34
N-Nitrosodiphenylamine		ND		10	34
Pentachlorophenol		ND		10	34
Phenanthrene		ND		10	41
Phenol		ND		10	34
Pyrene		ND		10	34

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	62		30 - 130
2-Fluorobiphenyl	58		30 - 130
2-Fluorophenol	70		30 - 130
Nitrobenzene-d5	69		30 - 130
Phenol-d5	69		30 - 130
Terphenyl-d14	57		30 - 130

Client: Olin Corporation

Job Number: 360-24417-1
Sdg Number: OCRI-10

Client Sample ID: **OC-SB-463-0.0/1.0-XXX**

Lab Sample ID: 360-24417-1
Client Matrix: Solid % Moisture: 3.8

Date Sampled: 09/01/2009 1300
Date Received: 09/02/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49266		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48854		Lab File ID:	B10466.D
Dilution:	1.0			Initial Weight/Volume:	30.37 g
Date Analyzed:	09/22/2009 0623			Final Weight/Volume:	1.0 mL
Date Prepared:	09/11/2009 1142			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 1

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
1599-67-3	1-Docosene	16.20	190	T J N

Client: Olin Corporation

Job Number: 360-24417-1
Sdg Number: OCRI-10

Client Sample ID: **OC-SB-463-6.0/8.0-XXX**

Lab Sample ID: 360-24417-3
Client Matrix: Solid
% Moisture: 15.9

Date Sampled: 09/01/2009 1310
Date Received: 09/02/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49266		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48854		Lab File ID:	B10468.D
Dilution:	1.0			Initial Weight/Volume:	30.67 g
Date Analyzed:	09/22/2009 0725			Final Weight/Volume:	1.0 mL
Date Prepared:	09/11/2009 1142			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		12	39
1,2,4,5-Tetrachlorobenzene		ND		12	39
1,2,4-Trichlorobenzene		ND		12	39
1,2-Dichlorobenzene		ND		12	39
1,3-Dichlorobenzene		ND		12	39
1,4-Dichlorobenzene		ND		12	39
1-Methylnaphthalene		ND		12	39
2,2'-oxybis[1-chloropropane]		ND		12	39
2,3,4,6-Tetrachlorophenol		ND		12	39
2,4,5-Trichlorophenol		ND		12	39
2,4,6-Trichlorophenol		ND		12	39
2,4-Dichlorophenol		ND		12	39
2,4-Dimethylphenol		ND		15	39
2,4-Dinitrophenol		ND		12	39
2,4-Dinitrotoluene		ND		12	39
2,6-Dinitrotoluene		ND		12	39
2-Chloronaphthalene		ND		12	39
2-Chlorophenol		ND		12	39
2-Methylnaphthalene		ND		12	39
2-Methylphenol		ND		23	39
2-Nitroaniline		ND		12	190
2-Nitrophenol		ND		12	39
3 & 4 Methylphenol		ND		12	39
3,3'-Dichlorobenzidine		ND		12	78
3-Nitroaniline		ND		12	190
4,6-Dinitro-2-methylphenol		ND		12	190
4-Bromophenyl phenyl ether		ND		12	39
4-Chloro-3-methylphenol		ND		12	78
4-Chloroaniline		ND		12	78
4-Chlorophenyl phenyl ether		ND		12	39
4-Nitroaniline		ND		12	190
4-Nitrophenol		ND		12	190
Acenaphthene		ND		12	39
Acenaphthylene		ND		12	39
Acetophenone		ND		12	39
Aniline		ND		12	39
Anthracene		ND		12	39
Atrazine		ND		12	39
Azobenzene		ND		12	39
Benzaldehyde		ND		12	39
Benzo[a]anthracene		ND		12	39
Benzo[a]pyrene		ND		12	39
Benzo[b]fluoranthene		ND		12	39
Benzo[g,h,i]perylene		ND		12	39
Benzo[k]fluoranthene		ND		12	39
Benzoic acid		ND		17	190

3/4/10

Client: Olin Corporation

Job Number: 360-24417-1
Sdg Number: OCRI-10

Client Sample ID: **OC-SB-463-6.0/8.0-XXX**

Lab Sample ID: 360-24417-3
Client Matrix: Solid % Moisture: 15.9

Date Sampled: 09/01/2009 1310
Date Received: 09/02/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49266		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48854		Lab File ID:	B10468.D
Dilution:	1.0			Initial Weight/Volume:	30.67 g
Date Analyzed:	09/22/2009 0725			Final Weight/Volume:	1.0 mL
Date Prepared:	09/11/2009 1142			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		12	39
Benzyl alcohol		ND		33	78
Bis(2-chloroethoxy)methane		ND		12	39
Bis(2-chloroethyl)ether		ND		12	39
Bis(2-ethylhexyl) phthalate		ND		12	39
Butyl benzyl phthalate		ND		12	39
Caprolactam		ND		12	39
Carbazole		ND		12	39
Chrysene		ND		12	39
Dibenz(a,h)anthracene		ND		12	39
Dibenzofuran		ND		12	39
Diethyl phthalate		ND		12	39
Dimethyl phthalate		ND		12	39
Di-n-butyl phthalate		ND		34	39
Di-n-octyl phthalate		ND		20	39
Diphenyl oxide		85		12	39
Fluoranthene		ND		12	39
Fluorene		ND		12	39
Hexachlorobenzene		ND		12	39
Hexachlorobutadiene		ND		12	39
Hexachlorocyclopentadiene		ND		12	78
Hexachloroethane		ND		12	39
Indeno[1,2,3-cd]pyrene		ND		12	39
Isophorone		ND		12	39
Naphthalene		ND		12	93
Nitrobenzene		ND		12	39
N-Nitrosodimethylamine		ND		14	39
N-Nitrosodi-n-propylamine		ND		12	39
N-Nitrosodiphenylamine		ND		12	39
Pentachlorophenol		ND		12	39
Phenanthrene		ND		12	47
Phenol		ND		12	39
Pyrene		ND		12	39

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	54		30 - 130
2-Fluorobiphenyl	56		30 - 130
2-Fluorophenol	64		30 - 130
Nitrobenzene-d5	63		30 - 130
Phenol-d5	63		30 - 130
Terphenyl-d14	53		30 - 130

Client: Olin Corporation

Job Number: 360-24417-1
Sdg Number: OCRI-10

Client Sample ID: OC-SB-463-6.0/8.0-XXX

Lab Sample ID: 360-24417-3
Client Matrix: Solid % Moisture: 15.9

Date Sampled: 09/01/2009 1310
Date Received: 09/02/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49266		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48854		Lab File ID:	B10468.D
Dilution:	1.0			Initial Weight/Volume:	30.67 g
Date Analyzed:	09/22/2009 0725			Final Weight/Volume:	1.0 mL
Date Prepared:	09/11/2009 1142			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 10

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
128-37-0	Butylated Hydroxytoluene	10.48	25	T J N
27193-28-8	Phenol, (1,1,3,3-tetramethylbutyl)-	10.93	19	T J N
~~615-22-5~~	~~Benzothiazole, 2-(methylthio)-~~	~~11.07~~	~~41~~	~~T J N~~ e
~~3910-35-8~~	~~1H-Indene, 2,3-dihydro-1,1,3-trimethyl-3~~	~~11.43~~	~~33~~	~~T J N~~ e
~~22768-22-5~~	~~2,4-Diphenyl-4-methyl-2(E)-pentene~~	~~11.85~~	~~20~~	~~T J N~~ e
112-61-8	Octadecanoic acid, methyl ester	12.81	22	T J N
629-96-9	1-Eicosanol	15.10	28	T J N
630-3-5	Nonacosane	16.12	29	T J N
1000131-9-4	Z-12-Pentacosene	16.24	31	T J N
~~638-67-5~~	~~Tricosane~~	~~18.59~~	~~8.5~~	~~T J N~~ e

W. Clem 3/4/10

Client: Olin Corporation

Job Number: 360-24417-1
Sdg Number: OCRI-10

Client Sample ID: OC-SB-464-0.0/1.0-XXX

Lab Sample ID: 360-24417-4
Client Matrix: Solid % Moisture: 5.9

Date Sampled: 09/01/2009 1550
Date Received: 09/02/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48876		Instrument ID:	Inst. J
Preparation:	3550B	Prep Batch: 360-48800		Lab File ID:	J02927.D
Dilution:	1.0			Initial Weight/Volume:	100.65 g
Date Analyzed:	09/12/2009 1648			Final Weight/Volume:	1.0 mL
Date Prepared:	09/10/2009 1211			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodimethylamine		ND		1.2	5.3

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	75		30 - 130
2-Fluorobiphenyl	59		30 - 130
2-Fluorophenol	58		30 - 130
Nitrobenzene-d5	59		30 - 130
Phenol-d5	63		30 - 130
Terphenyl-d14	75		30 - 130

Client: Olin Corporation

Job Number: 360-24417-1
Sdg Number: OCRI-10

Client Sample ID: OC-SB-464-0.0/1.0-XXX

Lab Sample ID: 360-24417-4
Client Matrix: Solid

% Moisture: 5.9

Date Sampled: 09/01/2009 1550
Date Received: 09/02/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49266		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48854		Lab File ID:	B10469.D
Dilution:	1.0			Initial Weight/Volume:	30.48 g
Date Analyzed:	09/22/2009 0756			Final Weight/Volume:	1.0 mL
Date Prepared:	09/11/2009 1142			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		10	35
1,2,4,5-Tetrachlorobenzene		ND		10	35
1,2,4-Trichlorobenzene		ND		10	35
1,2-Dichlorobenzene		ND		10	35
1,3-Dichlorobenzene		ND		10	35
1,4-Dichlorobenzene		ND		10	35
1-Methylnaphthalene		ND		10	35
2,2'-oxybis[1-chloropropane]		ND		10	35
2,3,4,6-Tetrachlorophenol		ND		10	35
2,4,5-Trichlorophenol		ND		10	35
2,4,6-Trichlorophenol		ND		10	35
2,4-Dichlorophenol		ND		10	35
2,4-Dimethylphenol		ND		14	35
2,4-Dinitrophenol		ND		10	35
2,4-Dinitrotoluene		ND		10	35
2,6-Dinitrotoluene		ND		10	35
2-Chloronaphthalene		ND		10	35
2-Chlorophenol		ND		10	35
2-Methylnaphthalene		ND		10	35
2-Methylphenol		ND		21	35
2-Nitroaniline		ND		10	170
2-Nitrophenol		ND		10	35
3 & 4 Methylphenol		ND		10	35
3,3'-Dichlorobenzidine		ND		10	70
3-Nitroaniline		ND		10	170
4,6-Dinitro-2-methylphenol		ND		10	170
4-Bromophenyl phenyl ether		ND		10	35
4-Chloro-3-methylphenol		ND		10	70
4-Chloroaniline		ND		10	70
4-Chlorophenyl phenyl ether		ND		10	35
4-Nitroaniline		ND		10	170
4-Nitrophenol		ND		10	170
Acenaphthene		ND		10	35
Acenaphthylene		ND		10	35
Acetophenone		ND		10	35
Aniline		ND	J	10	35
Anthracene		ND		10	35
Atrazine		ND		10	35
Azobenzene		ND		10	35
Benzaldehyde		ND		10	35
Benzo[a]anthracene		ND		10	35
Benzo[a]pyrene		ND		10	35
Benzo[b]fluoranthene		ND		10	35
Benzo[g,h,i]perylene		ND		10	35
Benzo[k]fluoranthene		ND		10	35
Benzoic acid		ND		16	170

Client: Olin Corporation

Job Number: 360-24417-1
Sdg Number: OCRI-10

Client Sample ID: OC-SB-464-0.0/1.0-XXX

Lab Sample ID: 360-24417-4
Client Matrix: Solid % Moisture: 5.9

Date Sampled: 09/01/2009 1550
Date Received: 09/02/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49266		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48854		Lab File ID:	B10469.D
Dilution:	1.0			Initial Weight/Volume:	30.48 g
Date Analyzed:	09/22/2009 0756			Final Weight/Volume:	1.0 mL
Date Prepared:	09/11/2009 1142			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		10	35
Benzyl alcohol		ND		30	70
Bis(2-chloroethoxy)methane		ND		10	35
Bis(2-chloroethyl)ether		ND		10	35
Bis(2-ethylhexyl) phthalate		87		10	35
Butyl benzyl phthalate		ND		10	35
Caprolactam		ND		10	35
Carbazole		ND		10	35
Chrysene		ND		10	35
Dibenz(a,h)anthracene		ND		10	35
Dibenzofuran		ND		10	35
Diethyl phthalate		ND		10	35
Dimethyl phthalate		ND		10	35
Di-n-butyl phthalate		ND		31	35
Di-n-octyl phthalate		ND		18	35
Diphenyl oxide		ND		10	35
Diphenylamine		ND		10	35
Fluoranthene		ND		10	35
Fluorene		ND		10	35
Hexachlorobenzene		ND		10	35
Hexachlorobutadiene		ND		10	35
Hexachlorocyclopentadiene		ND		10	70
Hexachloroethane		ND		10	35
Indeno[1,2,3-cd]pyrene		ND		10	35
Isophorone		ND		10	35
Naphthalene		ND		10	84
Nitrobenzene		ND		10	35
N-Nitrosodimethylamine		ND		12	35
N-Nitrosodi-n-propylamine		ND		10	35
N-Nitrosodiphenylamine		ND		10	35
Pentachlorophenol		ND		10	35
Phenanthrene		ND		10	42
Phenol		ND		10	35
Pyrene		ND		10	35

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	61		30 - 130
2-Fluorophenol	73		30 - 130
2-Fluorobiphenyl	60		30 - 130
Nitrobenzene-d5	67		30 - 130
Phenol-d5	71		30 - 130
Terphenyl-d14	59		30 - 130

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Client: Olin Corporation

Job Number: 360-24417-1
Sdg Number: OCRI-10

Client Sample ID: **OC-SB-464-0.0/1.0-XXX**

Lab Sample ID: 360-24417-4
Client Matrix: Solid % Moisture: 5.9

Date Sampled: 09/01/2009 1550
Date Received: 09/02/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49266		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48854		Lab File ID:	B10469.D
Dilution:	1.0			Initial Weight/Volume:	30.48 g
Date Analyzed:	09/22/2009 0756			Final Weight/Volume:	1.0 mL
Date Prepared:	09/11/2009 1142			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 5

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
98-55-5	Alpha-Terpineol	8.94	29	J
~~3910-35-8~~	~~1H-Indene, 2,3-dihydro-1,1,3-trimethyl-3~~	~~11.43~~	~~35~~	~~T J N~~
~~638-67-5~~	~~Tricosane~~	~~13.65~~	~~40~~	~~T J N~~
3452-7-1	1-Eicosene	15.04	470	T J N
1599-67-3	1-Docosene	16.19	700	T J N

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Client: Olin Corporation

Job Number: 360-24417-1
Sdg Number: OCRI-10

Client Sample ID: **OC-SB-464-5.0/7.0-XXX**

Lab Sample ID: 360-24417-6
Client Matrix: Solid % Moisture: 12.2

Date Sampled: 09/01/2009 1650
Date Received: 09/02/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48876		Instrument ID:	Inst. J
Preparation:	3550B	Prep Batch: 360-48800		Lab File ID:	J02928.D
Dilution:	1.0			Initial Weight/Volume:	100.05 g
Date Analyzed:	09/12/2009 1719			Final Weight/Volume:	1.0 mL
Date Prepared:	09/10/2009 1211			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodimethylamine		ND		1.3	5.7

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	76		30 - 130
2-Fluorobiphenyl	58		30 - 130
2-Fluorophenol	53		30 - 130
Nitrobenzene-d5	55		30 - 130
Phenol-d5	61		30 - 130
Terphenyl-d14	75		30 - 130

Client: Olin Corporation

Job Number: 360-24417-1
Sdg Number: OCRI-10

Client Sample ID: OC-SB-464-5.0/7.0-XXX

Lab Sample ID: 360-24417-6
Client Matrix: Solid

% Moisture: 12.2

Date Sampled: 09/01/2009 1650
Date Received: 09/02/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49266		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48854		Lab File ID:	B10471.D
Dilution:	1.0			Initial Weight/Volume:	30.53 g
Date Analyzed:	09/22/2009 0858			Final Weight/Volume:	1.0 mL
Date Prepared:	09/11/2009 1142			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		11	37
1,2,4,5-Tetrachlorobenzene		ND		11	37
1,2,4-Trichlorobenzene		ND		11	37
1,2-Dichlorobenzene		ND		11	37
1,3-Dichlorobenzene		ND		11	37
1,4-Dichlorobenzene		ND		11	37
1-Methylnaphthalene		ND		11	37
2,2'-oxybis[1-chloropropane]		ND		11	37
2,3,4,6-Tetrachlorophenol		ND		11	37
2,4,5-Trichlorophenol		ND		11	37
2,4,6-Trichlorophenol		ND		11	37
2,4-Dichlorophenol		ND		11	37
2,4-Dimethylphenol		ND		15	37
2,4-Dinitrophenol		ND		11	37
2,4-Dinitrotoluene		ND		11	37
2,6-Dinitrotoluene		ND		11	37
2-Chloronaphthalene		ND		11	37
2-Chlorophenol		ND		11	37
2-Methylnaphthalene		ND		11	37
2-Methylphenol		ND		22	37
2-Nitroaniline		ND		11	190
2-Nitrophenol		ND		11	37
3 & 4 Methylphenol		ND		11	37
3,3'-Dichlorobenzidine		ND		11	75
3-Nitroaniline		ND		11	190
4,6-Dinitro-2-methylphenol		ND		11	190
4-Bromophenyl phenyl ether		ND		11	37
4-Chloro-3-methylphenol		ND		11	75
4-Chloroaniline		ND		11	75
4-Chlorophenyl phenyl ether		ND		11	37
4-Nitroaniline		ND		11	190
4-Nitrophenol		ND		11	190
Acenaphthene		ND		11	37
Acenaphthylene		ND		11	37
Acetophenone		ND		11	37
Aniline		ND	J	11	37
Anthracene		ND		11	37
Atrazine		ND		11	37
Azobenzene		ND		11	37
Benzaldehyde		ND		11	37
Benzo[a]anthracene		ND		11	37
Benzo[a]pyrene		ND		11	37
Benzo[b]fluoranthene		ND		11	37
Benzo[g,h,i]perylene		ND		11	37
Benzo[k]fluoranthene		ND		11	37
Benzoic acid		ND		17	190

Client: Olin Corporation

Job Number: 360-24417-1
Sdg Number: OCRI-10

Client Sample ID: **OC-SB-464-5.0/7.0-XXX**

Lab Sample ID: 360-24417-6
Client Matrix: Solid

% Moisture: 12.2

Date Sampled: 09/01/2009 1650
Date Received: 09/02/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49266		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48854		Lab File ID:	B10471.D
Dilution:	1.0			Initial Weight/Volume:	30.53 g
Date Analyzed:	09/22/2009 0858			Final Weight/Volume:	1.0 mL
Date Prepared:	09/11/2009 1142			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		11	37
Benzyl alcohol		ND		32	75
Bis(2-chloroethoxy)methane		ND		11	37
Bis(2-chloroethyl)ether		ND		11	37
Bis(2-ethylhexyl) phthalate		200		11	37
Butyl benzyl phthalate		ND		11	37
Caprolactam		ND		11	37
Carbazole		ND		11	37
Chrysene		ND		11	37
Dibenz(a,h)anthracene		ND		11	37
Dibenzofuran		ND		11	37
Diethyl phthalate		ND		11	37
Dimethyl phthalate		ND		11	37
Di-n-butyl phthalate		ND		33	37
Di-n-octyl phthalate		ND		19	37
Diphenyl oxide		ND		11	37
Diphenylamine		ND		11	37
Fluoranthene		ND		11	37
Fluorene		ND		11	37
Hexachlorobenzene		ND		11	37
Hexachlorobutadiene		ND		11	37
Hexachlorocyclopentadiene		ND		11	75
Hexachloroethane		ND		11	37
Indeno[1,2,3-cd]pyrene		ND		11	37
Isophorone		ND		11	37
Naphthalene		ND		11	90
Nitrobenzene		ND		11	37
N-Nitrosodimethylamine		ND		13	37
N-Nitrosodi-n-propylamine		ND		11	37
N-Nitrosodiphenylamine		ND		11	37
Pentachlorophenol		ND		11	37
Phenanthrene		ND		11	45
Phenol		ND		11	37
Pyrene		ND		11	37

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	55		30 - 130
2-Fluorophenol	63		30 - 130
2-Fluorobiphenyl	54		30 - 130
Nitrobenzene-d5	61		30 - 130
Phenol-d5	62		30 - 130
Terphenyl-d14	54		30 - 130

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Client: Olin Corporation

Job Number: 360-24417-1
Sdg Number: OCRI-10

Client Sample ID: **OC-SB-464-5.0/7.0-XXX**

Lab Sample ID: 360-24417-6
Client Matrix: Solid % Moisture: 12.2

Date Sampled: 09/01/2009 1650
Date Received: 09/02/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49266		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48854		Lab File ID:	B10471.D
Dilution:	1.0			Initial Weight/Volume:	30.53 g
Date Analyzed:	09/22/2009 0858			Final Weight/Volume:	1.0 mL
Date Prepared:	09/11/2009 1142			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 6

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
98-55-5	Alpha-Terpineol	8.94	26	J
~~3910-35-8~~	~~1H-Indene, 2,3-dihydro-1,1,3-trimethyl-3~~	11.43	31	T J N
112-61-8	Octadecanoic acid, methyl ester	12.81	17	T J N
3452-7-1	1-Eicosene	15.11	160	T J N
~~593-49-7~~	~~Heptacosane~~	16.12	36	T J N
1599-67-3	1-Docosene	16.22	240	T J N

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Client: Olin Corporation

Job Number: 360-24417-1
Sdg Number: OCRI-10

Client Sample ID: OC-SB-465-0.0/1.0-XXX

Lab Sample ID: 360-24417-7
Client Matrix: Solid

% Moisture: 5.0

Date Sampled: 09/02/2009 0735
Date Received: 09/02/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48876		Instrument ID:	Inst. J
Preparation:	3550B	Prep Batch: 360-48800		Lab File ID:	J02929.D
Dilution:	1.0			Initial Weight/Volume:	100.07 g
Date Analyzed:	09/12/2009 1749			Final Weight/Volume:	1.0 mL
Date Prepared:	09/10/2009 1211			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodimethylamine		ND		1.2	5.3

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	85		30 - 130
2-Fluorobiphenyl	68		30 - 130
2-Fluorophenol	69		30 - 130
Nitrobenzene-d5	69		30 - 130
Phenol-d5	76		30 - 130
Terphenyl-d14	78		30 - 130

Client: Olin Corporation

Job Number: 360-24417-1
Sdg Number: OCRI-10

Client Sample ID: **OC-SB-465-0.0/1.0-XXX**

Lab Sample ID: 360-24417-7
Client Matrix: Solid
% Moisture: 5.0

Date Sampled: 09/02/2009 0735
Date Received: 09/02/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49260		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48924		Lab File ID:	J03058.D
Dilution:	1.0			Initial Weight/Volume:	30.13 g
Date Analyzed:	09/21/2009 2330			Final Weight/Volume:	1.0 mL
Date Prepared:	09/14/2009 1300			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		10	35
1,2,4,5-Tetrachlorobenzene		ND		10	35
1,2,4-Trichlorobenzene		ND		10	35
1,2-Dichlorobenzene		ND		10	35
1,3-Dichlorobenzene		ND		10	35
1,4-Dichlorobenzene		ND		10	35
1-Methylnaphthalene		ND		10	35
2,2'-oxybis[1-chloropropane]		ND		10	35
2,3,4,6-Tetrachlorophenol		ND		10	35
2,4,5-Trichlorophenol		ND		10	35
2,4,6-Trichlorophenol		ND		10	35
2,4-Dichlorophenol		ND		10	35
2,4-Dimethylphenol		ND		14	35
2,4-Dinitrophenol		ND		10	35
2,4-Dinitrotoluene		ND		10	35
2,6-Dinitrotoluene		ND		10	35
2-Chloronaphthalene		ND		10	35
2-Chlorophenol		ND		10	35
2-Methylnaphthalene		ND		10	35
2-Methylphenol		ND		21	35
2-Nitroaniline		ND		10	170
2-Nitrophenol		ND		10	35
3 & 4 Methylphenol		ND		10	35
3,3'-Dichlorobenzidine		ND		10	70
3-Nitroaniline		ND		10	170
4,6-Dinitro-2-methylphenol		ND		10	170
4-Bromophenyl phenyl ether		ND		10	35
4-Chloro-3-methylphenol		ND		10	70
4-Chloroaniline		ND		10	70
4-Chlorophenyl phenyl ether		ND		10	35
4-Nitroaniline		ND		10	170
4-Nitrophenol		ND		10	170
Acenaphthene		ND		10	35
Acenaphthylene		ND		10	35
Acetophenone		ND		10	35
Aniline		ND	J	10	35
Anthracene		ND		10	35
Atrazine		ND		10	35
Azobenzene		ND		10	35
Benzaldehyde		ND		10	35
Benzo[a]anthracene		ND		10	35
Benzo[a]pyrene		ND		10	35
Benzo[b]fluoranthene		ND		10	35
Benzo[g,h,i]perylene		ND		10	35
Benzo[k]fluoranthene		ND		10	35
Benzoic acid		ND		16	170

Client: Olin Corporation

Job Number: 360-24417-1
Sdg Number: OCRI-10

Client Sample ID: **OC-SB-465-0.0/1.0-XXX**

Lab Sample ID: 360-24417-7
Client Matrix: Solid % Moisture: 5.0

Date Sampled: 09/02/2009 0735
Date Received: 09/02/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49260		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48924		Lab File ID:	J03058.D
Dilution:	1.0			Initial Weight/Volume:	30.13 g
Date Analyzed:	09/21/2009 2330			Final Weight/Volume:	1.0 mL
Date Prepared:	09/14/2009 1300			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		10	35
Benzyl alcohol		ND		30	70
Bis(2-chloroethoxy)methane		ND		10	35
Bis(2-chloroethyl)ether		ND		10	35
Bis(2-ethylhexyl) phthalate		110	U ~~B~~	10	35
Butyl benzyl phthalate		ND		10	35
Caprolactam		ND		10	35
Carbazole		ND		10	35
Chrysene		ND		10	35
Dibenz(a,h)anthracene		ND		10	35
Dibenzofuran		ND		10	35
Diethyl phthalate		ND		10	35
Dimethyl phthalate		ND		10	35
Di-n-butyl phthalate		ND		31	35
Di-n-octyl phthalate		ND		18	35
Diphenyl oxide		260		10	35
Diphenylamine		ND		10	35
Fluoranthene		ND		10	35
Fluorene		ND		10	35
Hexachlorobenzene		ND		10	35
Hexachlorobutadiene		ND		10	35
Hexachlorocyclopentadiene		ND		10	70
Hexachloroethane		ND		10	35
Indeno[1,2,3-cd]pyrene		ND		10	35
Isophorone		ND		10	35
Naphthalene		ND		10	84
Nitrobenzene		ND		10	35
N-Nitrosodimethylamine		ND		12	35
N-Nitrosodi-n-propylamine		ND		10	35
N-Nitrosodiphenylamine		ND		10	35
Pentachlorophenol		ND		10	35
Phenanthrene		ND		10	42
Phenol		ND		10	35
Pyrene		ND		10	35

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	64		30 - 130
2-Fluorophenol	69		30 - 130
2-Fluorobiphenyl	63		30 - 130
Nitrobenzene-d5	61		30 - 130
Phenol-d5	71		30 - 130
Terphenyl-d14	70		30 - 130

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Client: Olin Corporation

Job Number: 360-24417-1
Sdg Number: OCRI-10

Client Sample ID: **OC-SB-465-0.0/1.0-XXX**

Lab Sample ID: 360-24417-7
Client Matrix: Solid % Moisture: 5.0

Date Sampled: 09/02/2009 0735
Date Received: 09/02/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49260		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48924		Lab File ID:	J03058.D
Dilution:	1.0			Initial Weight/Volume:	30.13 g
Date Analyzed:	09/21/2009 2330			Final Weight/Volume:	1.0 mL
Date Prepared:	09/14/2009 1300			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 3

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
~~92-87-5~~	~~Benzidine~~	12.16	19	J
629-96-9	1-Eicosanol	14.00	140	T J N
~~26603-23-6~~	~~p,p"-Dioctyldiphenylamine~~	~~14.82~~	~~140~~	~~T J N~~

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Client: Olin Corporation

Job Number: 360-24417-1
Sdg Number: OCRI-10

Client Sample ID: **OC-SB-465-8.0/10-DUP**

Lab Sample ID: 360-24417-9
Client Matrix: Solid

% Moisture: 11.1

Date Sampled: 09/02/2009 0745
Date Received: 09/02/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48876		Instrument ID:	Inst. J
Preparation:	3550B	Prep Batch: 360-48800		Lab File ID:	J02931.D
Dilution:	1.0			Initial Weight/Volume:	100.33 g
Date Analyzed:	09/12/2009 1850			Final Weight/Volume:	1.0 mL
Date Prepared:	09/10/2009 1211			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodimethylamine		ND		1.3	5.6

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	76		30 - 130
2-Fluorobiphenyl	62		30 - 130
2-Fluorophenol	62		30 - 130
Nitrobenzene-d5	62		30 - 130
Phenol-d5	68		30 - 130
Terphenyl-d14	80		30 - 130

Client: Olin Corporation

Job Number: 360-24417-1
Sdg Number: OCRI-10

Client Sample ID: **OC-SB-465-8.0/10-DUP**

Lab Sample ID: 360-24417-9
Client Matrix: Solid

% Moisture: 11.1

Date Sampled: 09/02/2009 0745
Date Received: 09/02/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49260		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48924		Lab File ID:	J03060.D
Dilution:	1.0			Initial Weight/Volume:	30.15 g
Date Analyzed:	09/22/2009 0024			Final Weight/Volume:	1.0 mL
Date Prepared:	09/14/2009 1300			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND	J	11	37
1,2,4,5-Tetrachlorobenzene		ND		11	37
1,2,4-Trichlorobenzene		ND		11	37
1,2-Dichlorobenzene		ND		11	37
1,3-Dichlorobenzene		ND		11	37
1,4-Dichlorobenzene		ND		11	37
1-Methylnaphthalene		ND	J	11	37
2,2'-oxybis[1-chloropropane]		ND		11	37
2,3,4,6-Tetrachlorophenol		ND	J	11	37
2,4,5-Trichlorophenol		ND		11	37
2,4,6-Trichlorophenol		ND		11	37
2,4-Dichlorophenol		ND		11	37
2,4-Dimethylphenol		ND		15	37
2,4-Dinitrophenol		ND	J	11	37
2,4-Dinitrotoluene		ND		11	37
2,6-Dinitrotoluene		ND		11	37
2-Chloronaphthalene		ND		11	37
2-Chlorophenol		ND		11	37
2-Methylnaphthalene		ND		11	37
2-Methylphenol		ND		22	37
2-Nitroaniline		ND		11	190
2-Nitrophenol		ND		11	37
3 & 4 Methylphenol		ND		11	37
3,3'-Dichlorobenzidine		ND		11	75
3-Nitroaniline		ND		11	190
4,6-Dinitro-2-methylphenol		ND	J	11	190
4-Bromophenyl phenyl ether		ND		11	37
4-Chloro-3-methylphenol		ND		11	75
4-Chloroaniline		ND		11	75
4-Chlorophenyl phenyl ether		ND		11	37
4-Nitroaniline		ND		11	190
4-Nitrophenol		ND		11	190
Acenaphthene		ND		11	37
Acenaphthylene		ND		11	37
Acetophenone		ND		11	37
Aniline		ND	J	11	37
Anthracene		ND		11	37
Atrazine		ND	J	11	37
Azobenzene		ND		11	37
Benzaldehyde		ND		11	37
Benzo[a]anthracene		ND		11	37
Benzo[a]pyrene		ND		11	37
Benzo[b]fluoranthene		ND		11	37
Benzo[g,h,i]perylene		ND		11	37
Benzo[k]fluoranthene		ND		11	37
Benzoic acid		ND	J	17	190

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Client: Olin Corporation

Job Number: 360-24417-1
Sdg Number: OCRI-10

Client Sample ID: OC-SB-465-8.0/10-DUP

Lab Sample ID: 360-24417-9
Client Matrix: Solid
% Moisture: 11.1

Date Sampled: 09/02/2009 0745
Date Received: 09/02/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49260		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48924		Lab File ID:	J03060.D
Dilution:	1.0			Initial Weight/Volume:	30.15 g
Date Analyzed:	09/22/2009 0024			Final Weight/Volume:	1.0 mL
Date Prepared:	09/14/2009 1300			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND	J	11	37
Benzyl alcohol		ND		32	75
Bis(2-chloroethoxy)methane		ND		11	37
Bis(2-chloroethyl)ether		ND		11	37
Bis(2-ethylhexyl) phthalate		48	u	11	37
Butyl benzyl phthalate		ND		11	37
Caprolactam		ND	J	11	37
Carbazole		ND		11	37
Chrysene		ND		11	37
Dibenz(a,h)anthracene		ND		11	37
Dibenzofuran		ND		11	37
Diethyl phthalate		ND		11	37
Dimethyl phthalate		ND		11	37
Di-n-butyl phthalate		ND		33	37
Di-n-octyl phthalate		ND		19	37
Diphenyl oxide		ND	J	11	37
Diphenylamine		ND		11	37
Fluoranthene		ND		11	37
Fluorene		ND		11	37
Hexachlorobenzene		ND		11	37
Hexachlorobutadiene		ND		11	37
Hexachlorocyclopentadiene		ND	J	11	75
Hexachloroethane		ND		11	37
Indeno[1,2,3-cd]pyrene		ND		11	37
Isophorone		ND		11	37
Naphthalene		ND		11	90
Nitrobenzene		ND		11	37
N-Nitrosodimethylamine		ND		13	37
N-Nitrosodi-n-propylamine		ND		11	37
N-Nitrosodiphenylamine		ND		11	37
Pentachlorophenol		ND		11	37
Phenanthrene		ND		11	45
Phenol		ND		11	37
Pyrene		ND		11	37

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	68		30 - 130
2-Fluorophenol	72		30 - 130
2-Fluorobiphenyl	66		30 - 130
Nitrobenzene-d5	64		30 - 130
Phenol-d5	74		30 - 130
Terphenyl-d14	79		30 - 130

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Client: Olin Corporation

Job Number: 360-24417-1
Sdg Number: OCRI-10

Client Sample ID: **OC-SB-465-8.0/10-DUP**

Lab Sample ID: 360-24417-9
Client Matrix: Solid
% Moisture: 11.1

Date Sampled: 09/02/2009 0745
Date Received: 09/02/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49260		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48924		Lab File ID:	J03060.D
Dilution:	1.0			Initial Weight/Volume:	30.15 g
Date Analyzed:	09/22/2009 0024			Final Weight/Volume:	1.0 mL
Date Prepared:	09/14/2009 1300			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 3

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
138-86-3	Limonene	6.46	8.1	T J N
10544-50-0	Cyclic octaatomic sulfur	12.00	32	T J N
7683-64-9	Squalene	14.35	100	T J N

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Client: Olin Corporation

Job Number: 360-24417-1
Sdg Number: OCRI-10

Client Sample ID: **OC-SB-465-8.0/10-XXX**

Lab Sample ID: 360-24417-10
Client Matrix: Solid
% Moisture: 11.5

Date Sampled: 09/02/2009 0745
Date Received: 09/02/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49397		Instrument ID:	Inst. J
Preparation:	3550B	Prep Batch: 360-48958		Lab File ID:	J03105.D
Dilution:	1.0			Initial Weight/Volume:	100.47 g
Date Analyzed:	09/24/2009 0045			Final Weight/Volume:	1.0 mL
Date Prepared:	09/15/2009 1206			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodimethylamine		ND		1.3	5.6

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	69		30 - 130
2-Fluorobiphenyl	61		30 - 130
2-Fluorophenol	62		30 - 130
Nitrobenzene-d5	58		30 - 130
Phenol-d5	69		30 - 130
Terphenyl-d14	75		30 - 130

Client: Olin Corporation

Job Number: 360-24417-1
Sdg Number: OCRI-10

Client Sample ID: OC-SB-465-8.0/10-XXX

Lab Sample ID: 360-24417-10
Client Matrix: Solid
% Moisture: 11.5

Date Sampled: 09/02/2009 0745
Date Received: 09/02/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49260		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48924		Lab File ID:	J03055.D
Dilution:	1.0			Initial Weight/Volume:	30.01 g
Date Analyzed:	09/21/2009 2209			Final Weight/Volume:	1.0 mL
Date Prepared:	09/14/2009 1300			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND	J	11	38
1,2,4,5-Tetrachlorobenzene		ND		11	38
1,2,4-Trichlorobenzene		ND		11	38
1,2-Dichlorobenzene		ND		11	38
1,3-Dichlorobenzene		ND		11	38
1,4-Dichlorobenzene		ND		11	38
1-Methylnaphthalene		ND	J	11	38
2,2'-oxybis[1-chloropropane]		ND		11	38
2,3,4,6-Tetrachlorophenol		ND	J	11	38
2,4,5-Trichlorophenol		ND		11	38
2,4,6-Trichlorophenol		ND		11	38
2,4-Dichlorophenol		ND		11	38
2,4-Dimethylphenol		ND		15	38
2,4-Dinitrophenol		ND	J	11	38
2,4-Dinitrotoluene		ND		11	38
2,6-Dinitrotoluene		ND		11	38
2-Chloronaphthalene		ND		11	38
2-Chlorophenol		ND		11	38
2-Methylnaphthalene		ND		11	38
2-Methylphenol		ND		23	38
2-Nitroaniline		ND		11	190
2-Nitrophenol		ND		11	38
3 & 4 Methylphenol		ND		11	38
3,3'-Dichlorobenzidine		ND		11	75
3-Nitroaniline		ND		11	190
4,6-Dinitro-2-methylphenol		ND	J	11	190
4-Bromophenyl phenyl ether		ND		11	38
4-Chloro-3-methylphenol		ND		11	75
4-Chloroaniline		ND		11	75
4-Chlorophenyl phenyl ether		ND		11	38
4-Nitroaniline		ND		11	190
4-Nitrophenol		ND		11	190
Acenaphthene		ND		11	38
Acenaphthylene		ND		11	38
Acetophenone		ND		11	38
Aniline		ND	J	11	38
Anthracene		ND		11	38
Atrazine		ND	J	11	38
Azobenzene		ND		11	38
Benzaldehyde		ND		11	38
Benzo[a]anthracene		ND		11	38
Benzo[a]pyrene		ND		11	38
Benzo[b]fluoranthene		ND		11	38
Benzo[g,h,i]perylene		ND		11	38
Benzo[k]fluoranthene		ND		11	38
Benzoic acid		ND	J	17	190

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Client: Olin Corporation

Job Number: 360-24417-1
Sdg Number: OCRI-10

Client Sample ID: **OC-SB-465-8.0/10-XXX**

Lab Sample ID: 360-24417-10
Client Matrix: Solid

% Moisture: 11.5

Date Sampled: 09/02/2009 0745
Date Received: 09/02/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49260		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48924		Lab File ID:	J03055.D
Dilution:	1.0			Initial Weight/Volume:	30.01 g
Date Analyzed:	09/21/2009 2209			Final Weight/Volume:	1.0 mL
Date Prepared:	09/14/2009 1300			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND J		11	38
Benzyl alcohol		ND		32	75
Bis(2-chloroethoxy)methane		ND		11	38
Bis(2-chloroethyl)ether		ND		11	38
Bis(2-ethylhexyl) phthalate		~~28~~ 38 U	J	11	38
Butyl benzyl phthalate		ND		11	38
Caprolactam		ND J		11	38
Carbazole		ND		11	38
Chrysene		ND		11	38
Dibenz(a,h)anthracene		ND		11	38
Dibenzofuran		ND		11	38
Diethyl phthalate		ND		11	38
Dimethyl phthalate		ND		11	38
Di-n-butyl phthalate		ND		33	38
Di-n-octyl phthalate		ND		19	38
Diphenyl oxide		ND J		11	38
Diphenylamine		ND		11	38
Fluoranthene		ND		11	38
Fluorene		ND		11	38
Hexachlorobenzene		ND		11	38
Hexachlorobutadiene		ND		11	38
Hexachlorocyclopentadiene		ND J		11	75
Hexachloroethane		ND		11	38
Indeno[1,2,3-cd]pyrene		ND		11	38
Isophorone		ND		11	38
Naphthalene		ND		11	90
Nitrobenzene		ND		11	38
~~N-Nitrosodimethylamine~~		~~ND~~		~~13~~	~~38~~
N-Nitrosodi-n-propylamine		ND		11	38
N-Nitrosodiphenylamine		ND		11	38
Pentachlorophenol		ND		11	38
Phenanthrene		ND		11	45
Phenol		ND		11	38
Pyrene		ND		11	38

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	66		30 - 130
2-Fluorophenol	75		30 - 130
2-Fluorobiphenyl	69		30 - 130
Nitrobenzene-d5	66		30 - 130
Phenol-d5	79		30 - 130
Terphenyl-d14	75		30 - 130

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Client: Olin Corporation

Job Number: 360-24417-1
Sdg Number: OCRI-10

Client Sample ID: **OC-SB-465-8.0/10-XXX**

Lab Sample ID: 360-24417-10
Client Matrix: Solid

% Moisture: 11.5

Date Sampled: 09/02/2009 0745
Date Received: 09/02/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49260		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48924		Lab File ID:	J03055.D
Dilution:	1.0			Initial Weight/Volume:	30.01 g
Date Analyzed:	09/21/2009 2209			Final Weight/Volume:	1.0 mL
Date Prepared:	09/14/2009 1300			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 2

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
~~615-22-5~~	~~Benzothiazole, 2-(methylthio)-~~	~~9.99~~	~~8.2~~	~~T J N~~
~~7683-64-9~~	~~Squalene~~	~~14.35~~	~~59~~	~~T J N~~

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Client: Olin Corporation

Job Number: 360-24417-1
Sdg Number: OCRI-10

Client Sample ID: OC-SB-468-0.0/1.0-XXX

Lab Sample ID: 360-24417-11
Client Matrix: Solid

% Moisture: 13.3

Date Sampled: 09/02/2009 1005
Date Received: 09/02/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48876		Instrument ID:	Inst. J
Preparation:	3550B	Prep Batch: 360-48800		Lab File ID:	J02932.D
Dilution:	1.0			Initial Weight/Volume:	100.22 g
Date Analyzed:	09/12/2009 1920			Final Weight/Volume:	1.0 mL
Date Prepared:	09/10/2009 1211			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodimethylamine		ND		1.3	5.8

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	41		30 - 130
2-Fluorobiphenyl	54		30 - 130
2-Fluorophenol	48		30 - 130
Nitrobenzene-d5	53		30 - 130
Phenol-d5	57		30 - 130
Terphenyl-d14	65		30 - 130

Client: Olin Corporation

Job Number: 360-24417-1
Sdg Number: OCRI-10

Client Sample ID: OC-SB-468-0.0/1.0-XXX

Lab Sample ID: 360-24417-11
Client Matrix: Solid

% Moisture: 13.3

Date Sampled: 09/02/2009 1005
Date Received: 09/02/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49444		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48854		Lab File ID:	B10531.D
Dilution:	1.0			Initial Weight/Volume:	30.14 g
Date Analyzed:	09/24/2009 0422			Final Weight/Volume:	1.0 mL
Date Prepared:	09/11/2009 1142			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		11	38
1,2,4,5-Tetrachlorobenzene		ND		11	38
1,2,4-Trichlorobenzene		ND		11	38
1,2-Dichlorobenzene		ND		11	38
1,3-Dichlorobenzene		ND		11	38
1,4-Dichlorobenzene		ND		11	38
1-Methylnaphthalene		ND		11	38
2,2'-oxybis[1-chloropropane]		ND		11	38
2,3,4,6-Tetrachlorophenol		ND		11	38
2,4,5-Trichlorophenol		ND		11	38
2,4,6-Trichlorophenol		ND		11	38
2,4-Dichlorophenol		ND		11	38
2,4-Dimethylphenol		ND		15	38
2,4-Dinitrophenol		ND		11	38
2,4-Dinitrotoluene		ND		11	38
2,6-Dinitrotoluene		ND		11	38
2-Chloronaphthalene		ND		11	38
2-Chlorophenol		ND		11	38
2-Methylnaphthalene		ND		11	38
2-Methylphenol		ND		23	38
2-Nitroaniline		ND		11	190
2-Nitrophenol		ND		11	38
3 & 4 Methylphenol		ND		11	38
3,3'-Dichlorobenzidine		ND		11	77
3-Nitroaniline		ND		11	190
4,6-Dinitro-2-methylphenol		ND		11	190
4-Bromophenyl phenyl ether		ND		11	38
4-Chloro-3-methylphenol		ND		11	77
4-Chloroaniline		ND		11	77
4-Chlorophenyl phenyl ether		ND		11	38
4-Nitroaniline		ND		11	190
4-Nitrophenol		ND		11	190
Acenaphthene		ND		11	38
Acenaphthylene		ND		11	38
Acetophenone		ND		11	38
Aniline		ND	J	11	38
Anthracene		ND		11	38
Atrazine		ND		11	38
Azobenzene		ND		11	38
Benzaldehyde		ND		11	38
Benzo[a]anthracene		ND		11	38
Benzo[a]pyrene		ND		11	38
Benzo[b]fluoranthene		ND		11	38
Benzo[g,h,i]perylene		ND		11	38
Benzo[k]fluoranthene		ND		11	38
Benzoic acid		ND		17	190

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Client: Olin Corporation

Job Number: 360-24417-1
Sdg Number: OCRI-10

Client Sample ID: **OC-SB-468-0.0/1.0-XXX**

Lab Sample ID: 360-24417-11
Client Matrix: Solid

% Moisture: 13.3

Date Sampled: 09/02/2009 1005
Date Received: 09/02/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49444		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48854		Lab File ID:	B10531.D
Dilution:	1.0			Initial Weight/Volume:	30.14 g
Date Analyzed:	09/24/2009 0422			Final Weight/Volume:	1.0 mL
Date Prepared:	09/11/2009 1142			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		11	38
Benzyl alcohol		ND		33	77
Bis(2-chloroethoxy)methane		ND		11	38
Bis(2-chloroethyl)ether		ND		11	38
Bis(2-ethylhexyl) phthalate		86		11	38
Butyl benzyl phthalate		ND		11	38
Caprolactam		ND		11	38
Carbazole		ND		11	38
Chrysene		ND		11	38
Dibenz(a,h)anthracene		ND		11	38
Dibenzofuran		ND		11	38
Diethyl phthalate		ND		11	38
Dimethyl phthalate		ND		11	38
Di-n-butyl phthalate		ND		34	38
Di-n-octyl phthalate		ND		19	38
Diphenyl oxide		ND		11	38
Fluoranthene		ND		11	38
Fluorene		ND		11	38
Hexachlorobenzene		ND		11	38
Hexachlorobutadiene		ND		11	38
Hexachlorocyclopentadiene		ND		11	77
Hexachloroethane		ND		11	38
Indeno[1,2,3-cd]pyrene		ND		11	38
Isophorone		ND		11	38
Naphthalene		ND		11	92
Nitrobenzene		ND		11	38
N-Nitrosodimethylamine		ND		14	38
N-Nitrosodi-n-propylamine		ND		11	38
N-Nitrosodiphenylamine		20	J	11	38
Pentachlorophenol		32	J	11	38
Phenanthrene		ND		11	46
Phenol		ND		11	38
Pyrene		ND		11	38

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	54		30 - 130
2-Fluorophenol	80		30 - 130
2-Fluorobiphenyl	63		30 - 130
Nitrobenzene-d5	72		30 - 130
Phenol-d5	72		30 - 130
Terphenyl-d14	64		30 - 130

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Client: Olin Corporation

Job Number: 360-24417-1
Sdg Number: OCRI-10

Client Sample ID: **OC-SB-468-0.0/1.0-XXX**

Lab Sample ID: 360-24417-11
Client Matrix: Solid % Moisture: 13.3

Date Sampled: 09/02/2009 1005
Date Received: 09/02/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49444		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48854		Lab File ID:	B10531.D
Dilution:	1.0			Initial Weight/Volume:	30.14 g
Date Analyzed:	09/24/2009 0422			Final Weight/Volume:	1.0 mL
Date Prepared:	09/11/2009 1142			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** **10**

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
98-55-5	Alpha-Terpineol	8.52	49	T J N
620-92-8	Phenol, 4,4"-methylenebis-	12.24	20	T J N
~~92-87-5~~	~~Benzidine~~	~~12.52~~	~~19~~	~~J~~
112-88-9	1-Octadecene	12.99	200	T J N
295-48-7	Cyclopentadecane	13.50	38	T J N
1000155-85-3	Cyclohexadecane, 1,2-diethyl-	14.10	720	T J N
2004-39-9	1-Heptacosanol	14.84	68	T J N
1599-67-3	1-Docosene	15.51	840	T J N
297-3-0	Cyclotetracosane	16.52	190	T J N
~~26603-23-6~~	~~p,p"-Dioctyldiphenylamine~~	~~17.00~~	~~2500~~	T J N

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Client: Olin Corporation

Job Number: 360-24417-1
Sdg Number: OCRI-10

Client Sample ID: **OC-SB-468-0.0/1.0-XXX**

Lab Sample ID: 360-24417-11
Client Matrix: Solid

% Moisture: 13.3

Date Sampled: 09/02/2009 1005
Date Received: 09/02/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49639		Instrument ID:	NOEQUIP
Preparation:	3546	Prep Batch: 360-48854		Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	30.14 g
Date Analyzed:	09/29/2009 0048	Run Type: DL3		Final Weight/Volume:	1.0 mL
Date Prepared:	09/11/2009 1142			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Diphenylamine		19	J	11	38
N-Nitrosodiphenylamine		ND		11	38

Client: Olin Corporation

Job Number: 360-24417-1
Sdg Number: OCRI-10

Client Sample ID: OC-SB-468-8.0/10-XXX

Lab Sample ID: 360-24417-13
Client Matrix: Solid

% Moisture: 12.8

Date Sampled: 09/02/2009 1010
Date Received: 09/02/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49397		Instrument ID:	Inst. J
Preparation:	3550B	Prep Batch: 360-48958		Lab File ID:	J03109.D
Dilution:	1.0			Initial Weight/Volume:	100.02 g
Date Analyzed:	09/24/2009 0301			Final Weight/Volume:	1.0 mL
Date Prepared:	09/15/2009 1206			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodimethylamine		ND		1.3	5.7

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	69		30 - 130
2-Fluorobiphenyl	60		30 - 130
2-Fluorophenol	58		30 - 130
Nitrobenzene-d5	56		30 - 130
Phenol-d5	66		30 - 130
Terphenyl-d14	78		30 - 130

Client: Olin Corporation

Job Number: 360-24417-1
Sdg Number: OCRI-10

Client Sample ID: OC-SB-468-8.0/10-XXX

Lab Sample ID: 360-24417-13
Client Matrix: Solid
% Moisture: 12.8

Date Sampled: 09/02/2009 1010
Date Received: 09/02/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49260		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48924		Lab File ID:	J03061.D
Dilution:	1.0			Initial Weight/Volume:	30.70 g
Date Analyzed:	09/22/2009 0051			Final Weight/Volume:	1.0 mL
Date Prepared:	09/14/2009 1300			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		11	37
1,2,4,5-Tetrachlorobenzene		ND		11	37
1,2,4-Trichlorobenzene		ND		11	37
1,2-Dichlorobenzene		ND		11	37
1,3-Dichlorobenzene		ND		11	37
1,4-Dichlorobenzene		ND		11	37
1-Methylnaphthalene		ND		11	37
2,2'-oxybis[1-chloropropane]		ND		11	37
2,3,4,6-Tetrachlorophenol		ND		11	37
2,4,5-Trichlorophenol		ND		11	37
2,4,6-Trichlorophenol		ND		11	37
2,4-Dichlorophenol		ND		11	37
2,4-Dimethylphenol		ND		15	37
2,4-Dinitrophenol		ND		11	37
2,4-Dinitrotoluene		ND		11	37
2,6-Dinitrotoluene		ND		11	37
2-Chloronaphthalene		ND		11	37
2-Chlorophenol		ND		11	37
2-Methylnaphthalene		ND		11	37
2-Methylphenol		ND		22	37
2-Nitroaniline		ND		11	190
2-Nitrophenol		ND		11	37
3 & 4 Methylphenol		ND		11	37
3,3'-Dichlorobenzidine		ND		11	75
3-Nitroaniline		ND		11	190
4,6-Dinitro-2-methylphenol		ND		11	190
4-Bromophenyl phenyl ether		ND		11	37
4-Chloro-3-methylphenol		ND		11	75
4-Chloroaniline		ND		11	75
4-Chlorophenyl phenyl ether		ND		11	37
4-Nitroaniline		ND		11	190
4-Nitrophenol		ND		11	190
Acenaphthene		ND		11	37
Acenaphthylene		ND		11	37
Acetophenone		ND		11	37
Aniline		ND		11	37
Anthracene		ND		11	37
Atrazine		ND		11	37
Azobenzene		ND		11	37
Benzaldehyde		ND		11	37
Benzo[a]anthracene		ND		11	37
Benzo[a]pyrene		ND		11	37
Benzo[b]fluoranthene		ND		11	37
Benzo[g,h,i]perylene		ND		11	37
Benzo[k]fluoranthene		ND		11	37
Benzoic acid		ND		17	190

Client: Olin Corporation

Job Number: 360-24417-1
Sdg Number: OCRI-10

Client Sample ID: **OC-SB-468-8.0/10-XXX**

Lab Sample ID: 360-24417-13
Client Matrix: Solid

% Moisture: 12.8

Date Sampled: 09/02/2009 1010
Date Received: 09/02/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49260		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48924		Lab File ID:	J03061.D
Dilution:	1.0			Initial Weight/Volume:	30.70 g
Date Analyzed:	09/22/2009 0051			Final Weight/Volume:	1.0 mL
Date Prepared:	09/14/2009 1300			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		11	37
Benzyl alcohol		ND		32	75
Bis(2-chloroethoxy)methane		ND		11	37
Bis(2-chloroethyl)ether		ND		11	37
Bis(2-ethylhexyl) phthalate		55	U	11	37
Butyl benzyl phthalate		ND		11	37
Caprolactam		ND		11	37
Carbazole		ND		11	37
Chrysene		ND		11	37
Dibenz(a,h)anthracene		ND		11	37
Dibenzofuran		ND		11	37
Diethyl phthalate		ND		11	37
Dimethyl phthalate		ND		11	37
Di-n-butyl phthalate		ND		33	37
Di-n-octyl phthalate		ND		19	37
Diphenyl oxide		ND		11	37
Diphenylamine		ND		11	37
Fluoranthene		ND		11	37
Fluorene		ND		11	37
Hexachlorobenzene		ND		11	37
Hexachlorobutadiene		ND		11	37
Hexachlorocyclopentadiene		ND		11	75
Hexachloroethane		ND		11	37
Indeno[1,2,3-cd]pyrene		ND		11	37
Isophorone		ND		11	37
Naphthalene		ND		11	90
Nitrobenzene		ND		11	37
N-Nitrosodimethylamine		ND		13	37
N-Nitrosodi-n-propylamine		ND		11	37
N-Nitrosodiphenylamine		ND		11	37
Pentachlorophenol		ND		11	37
Phenanthrene		ND		11	45
Phenol		ND		11	37
Pyrene		ND		11	37

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	60		30 - 130
2-Fluorophenol	66		30 - 130
2-Fluorobiphenyl	62		30 - 130
Nitrobenzene-d5	58		30 - 130
Phenol-d5	68		30 - 130
Terphenyl-d14	73		30 - 130

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Client: Olin Corporation

Job Number: 360-24417-1
Sdg Number: OCRI-10

Client Sample ID: **OC-SB-468-8.0/10-XXX**

Lab Sample ID: 360-24417-13
Client Matrix: Solid

% Moisture: 12.8

Date Sampled: 09/02/2009 1010
Date Received: 09/02/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49260		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48924		Lab File ID:	J03061.D
Dilution:	1.0			Initial Weight/Volume:	30.70 g
Date Analyzed:	09/22/2009 0051			Final Weight/Volume:	1.0 mL
Date Prepared:	09/14/2009 1300			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 2

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
10544-50-0	Cyclic octaatomic sulfur	12.01	170	T J N
~~7683-64-9~~	~~Squalene~~	~~14.35~~	~~80~~	~~T J N~~

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Client: Olin Corporation

Job Number: 360-24417-1
Sdg Number: OCRI-10

Client Sample ID: **OC-SB-471-0.0/1.0-XXX**

Lab Sample ID: 360-24417-14
Client Matrix: Solid
% Moisture: 8.3

Date Sampled: 09/02/2009 1315
Date Received: 09/02/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49397		Instrument ID:	Inst. J
Preparation:	3550B	Prep Batch: 360-48958		Lab File ID:	J03110.D
Dilution:	1.0			Initial Weight/Volume:	100.21 g
Date Analyzed:	09/24/2009 0334			Final Weight/Volume:	1.0 mL
Date Prepared:	09/15/2009 1206			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodimethylamine		ND		1.3	5.4

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	77		30 - 130
2-Fluorobiphenyl	67		30 - 130
2-Fluorophenol	64		30 - 130
Nitrobenzene-d5	65		30 - 130
Phenol-d5	72		30 - 130
Terphenyl-d14	87		30 - 130

Client: Olin Corporation

Job Number: 360-24417-1
Sdg Number: OCRI-10

Client Sample ID: OC-SB-471-0.0/1.0-XXX

Lab Sample ID: 360-24417-14
Client Matrix: Solid
% Moisture: 8.3

Date Sampled: 09/02/2009 1315
Date Received: 09/02/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49444		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48924		Lab File ID:	B10532.D
Dilution:	1.0			Initial Weight/Volume:	30.75 g
Date Analyzed:	09/24/2009 0453			Final Weight/Volume:	1.0 mL
Date Prepared:	09/14/2009 1300			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		11	35
1,2,4,5-Tetrachlorobenzene		ND		11	35
1,2,4-Trichlorobenzene		ND		11	35
1,2-Dichlorobenzene		ND		11	35
1,3-Dichlorobenzene		ND		11	35
1,4-Dichlorobenzene		ND		11	35
1-Methylnaphthalene		ND		11	35
2,2'-oxybis[1-chloropropane]		ND		11	35
2,3,4,6-Tetrachlorophenol		ND		11	35
2,4,5-Trichlorophenol		ND		11	35
2,4,6-Trichlorophenol		ND		11	35
2,4-Dichlorophenol		ND		11	35
2,4-Dimethylphenol		ND		14	35
2,4-Dinitrophenol		ND		11	35
2,4-Dinitrotoluene		ND		11	35
2,6-Dinitrotoluene		ND		11	35
2-Chloronaphthalene		ND		11	35
2-Chlorophenol		ND		11	35
2-Methylnaphthalene		ND		11	35
2-Methylphenol		ND		21	35
2-Nitroaniline		ND		11	180
2-Nitrophenol		ND		11	35
3 & 4 Methylphenol		ND		11	35
3,3'-Dichlorobenzidine		ND		11	71
3-Nitroaniline		ND		11	180
4,6-Dinitro-2-methylphenol		ND		11	180
4-Bromophenyl phenyl ether		ND		11	35
4-Chloro-3-methylphenol		ND		11	71
4-Chloroaniline		ND		11	71
4-Chlorophenyl phenyl ether		ND		11	35
4-Nitroaniline		ND		11	180
4-Nitrophenol		ND		11	180
Acenaphthene		ND		11	35
Acenaphthylene		ND		11	35
Acetophenone		ND		11	35
Aniline		ND		11	35
Anthracene		ND		11	35
Atrazine		ND		11	35
Azobenzene		ND		11	35
Benzaldehyde		17	J	11	35
Benzo[a]anthracene		ND		11	35
Benzo[a]pyrene		ND		11	35
Benzo[b]fluoranthene		ND		11	35
Benzo[g,h,i]perylene		ND		11	35
Benzo[k]fluoranthene		ND		11	35
Benzoic acid		35	J	16	180

Client: Olin Corporation

Job Number: 360-24417-1
Sdg Number: OCRI-10

Client Sample ID: **OC-SB-471-0.0/1.0-XXX**

Lab Sample ID: 360-24417-14
Client Matrix: Solid % Moisture: 8.3

Date Sampled: 09/02/2009 1315
Date Received: 09/02/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49444		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48924		Lab File ID:	B10532.D
Dilution:	1.0			Initial Weight/Volume:	30.75 g
Date Analyzed:	09/24/2009 0453			Final Weight/Volume:	1.0 mL
Date Prepared:	09/14/2009 1300			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		11	35
Benzyl alcohol		ND		30	71
Bis(2-chloroethoxy)methane		ND		11	35
Bis(2-chloroethyl)ether		ND		11	35
Bis(2-ethylhexyl) phthalate		180 u		11	35
Butyl benzyl phthalate		ND		11	35
Caprolactam		ND		11	35
Carbazole		ND		11	35
Chrysene		ND		11	35
Dibenz(a,h)anthracene		ND		11	35
Dibenzofuran		ND		11	35
Diethyl phthalate		ND		11	35
Dimethyl phthalate		ND		11	35
Di-n-butyl phthalate		ND		31	35
Di-n-octyl phthalate		ND		18	35
Diphenyl oxide		ND		11	35
Diphenylamine		ND		11	35
Fluoranthene		13	J	11	35
Fluorene		ND		11	35
Hexachlorobenzene		ND		11	35
Hexachlorobutadiene		ND		11	35
Hexachlorocyclopentadiene		ND		11	71
Hexachloroethane		ND		11	35
Indeno[1,2,3-cd]pyrene		ND		11	35
Isophorone		ND		11	35
Naphthalene		ND		11	85
Nitrobenzene		ND		11	35
N-Nitrosodimethylamine		ND		13	35
N-Nitrosodi-n-propylamine		ND		11	35
N-Nitrosodiphenylamine		ND		11	35
Pentachlorophenol		ND		11	35
Phenanthrene		ND		11	43
Phenol		ND		11	35
Pyrene		11	J	11	35

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	70		30 - 130
2-Fluorophenol	87		30 - 130
2-Fluorobiphenyl	66		30 - 130
Nitrobenzene-d5	75		30 - 130
Phenol-d5	76		30 - 130
Terphenyl-d14	77		30 - 130

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Client: Olin Corporation

Job Number: 360-24417-1
Sdg Number: OCRI-10

Client Sample ID: **OC-SB-471-0.0/1.0-XXX**

Lab Sample ID: 360-24417-14
Client Matrix: Solid % Moisture: 8.3

Date Sampled: 09/02/2009 1315
Date Received: 09/02/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49444		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48924		Lab File ID:	B10532.D
Dilution:	1.0			Initial Weight/Volume:	30.75 g
Date Analyzed:	09/24/2009 0453			Final Weight/Volume:	1.0 mL
Date Prepared:	09/14/2009 1300			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 10

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
541-2-6	Cyclopentasiloxane, decamethyl-	8.08	7.5	T J N
~~121-33-5~~	~~Vanillin~~	~~9.61~~	~~9.9~~	~~T J N~~ e
25154-52-3	Phenol, nonyl-	10.93	14	T J N
1454-85-9	1-Heptadecanol	12.18	12	T J N
35599-77-0	Tridecane, 1-iodo-	12.20	14	T J N
112-88-9	1-Octadecene	12.99	49	T J N
3452-7-1	1-Eicosene	14.09	510	T J N
18835-33-1	1-Hexacosene	14.83	52	T J N
6971-40-0	17-Pentatriacontene	16.02	120	T J N
~~7683-64-9~~	~~Squalene~~	~~16.10~~	~~260~~	~~T J N~~ e

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Client: Olin Corporation

Job Number: 360-24417-1
Sdg Number: OCRI-10

Client Sample ID: OC-SB-471-3.0/5.0-XXX

Lab Sample ID: 360-24417-15
Client Matrix: Solid

% Moisture: 18.9

Date Sampled: 09/02/2009 1330
Date Received: 09/02/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49397		Instrument ID:	Inst. J
Preparation:	3550B	Prep Batch: 360-48958		Lab File ID:	J03111.D
Dilution:	1.0			Initial Weight/Volume:	100.69 g
Date Analyzed:	09/24/2009 0408			Final Weight/Volume:	1.0 mL
Date Prepared:	09/15/2009 1206			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodimethylamine		ND		1.4	6.1

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	79		30 - 130
2-Fluorobiphenyl	65		30 - 130
2-Fluorophenol	58		30 - 130
Nitrobenzene-d5	59		30 - 130
Phenol-d5	66		30 - 130
Terphenyl-d14	91		30 - 130

Client: Olin Corporation

Job Number: 360-24417-1
Sdg Number: OCRI-10

Client Sample ID: OC-SB-471-3.0/5.0-XXX

Lab Sample ID: 360-24417-15
Client Matrix: Solid
% Moisture: 18.9

Date Sampled: 09/02/2009 1330
Date Received: 09/02/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49260		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48924		Lab File ID:	J03063.D
Dilution:	1.0			Initial Weight/Volume:	30.07 g
Date Analyzed:	09/22/2009 0145			Final Weight/Volume:	1.0 mL
Date Prepared:	09/14/2009 1300			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		12	41
1,2,4,5-Tetrachlorobenzene		ND		12	41
1,2,4-Trichlorobenzene		ND		12	41
1,2-Dichlorobenzene		ND		12	41
1,3-Dichlorobenzene		ND		12	41
1,4-Dichlorobenzene		ND		12	41
1-Methylnaphthalene		ND		12	41
2,2'-oxybis[1-chloropropane]		ND		12	41
2,3,4,6-Tetrachlorophenol		ND		12	41
2,4,5-Trichlorophenol		ND		12	41
2,4,6-Trichlorophenol		ND		12	41
2,4-Dichlorophenol		ND		12	41
2,4-Dimethylphenol		ND		16	41
2,4-Dinitrophenol		ND		12	41
2,4-Dinitrotoluene		ND		12	41
2,6-Dinitrotoluene		ND		12	41
2-Chloronaphthalene		ND		12	41
2-Chlorophenol		ND		12	41
2-Methylnaphthalene		ND		12	41
2-Methylphenol		ND		25	41
2-Nitroaniline		ND		12	210
2-Nitrophenol		ND		12	41
3 & 4 Methylphenol		ND		12	41
3,3'-Dichlorobenzidine		ND		12	82
3-Nitroaniline		ND		12	210
4,6-Dinitro-2-methylphenol		ND		12	210
4-Bromophenyl phenyl ether		ND		12	41
4-Chloro-3-methylphenol		ND		12	82
4-Chloroaniline		ND		12	82
4-Chlorophenyl phenyl ether		ND		12	41
4-Nitroaniline		ND		12	210
4-Nitrophenol		ND		12	210
Acenaphthene		ND		12	41
Acenaphthylene		ND		12	41
Acetophenone		ND		12	41
Aniline		ND		12	41
Anthracene		ND		12	41
Atrazine		ND		12	41
Azobenzene		ND		12	41
Benzaldehyde		ND		12	41
Benzo[a]anthracene		ND		12	41
Benzo[a]pyrene		ND		12	41
Benzo[b]fluoranthene		ND		12	41
Benzo[g,h,i]perylene		ND		12	41
Benzo[k]fluoranthene		ND		12	41
Benzoic acid		ND		18	210

Client: Olin Corporation

Job Number: 360-24417-1
Sdg Number: OCRI-10

Client Sample ID: OC-SB-471-3.0/5.0-XXX

Lab Sample ID: 360-24417-15
Client Matrix: Solid

% Moisture: 18.9

Date Sampled: 09/02/2009 1330
Date Received: 09/02/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49260		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48924		Lab File ID:	J03063.D
Dilution:	1.0			Initial Weight/Volume:	30.07 g
Date Analyzed:	09/22/2009 0145			Final Weight/Volume:	1.0 mL
Date Prepared:	09/14/2009 1300			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		12	41
Benzyl alcohol		ND		35	82
Bis(2-chloroethoxy)methane		ND		12	41
Bis(2-chloroethyl)ether		ND		12	41
Bis(2-ethylhexyl) phthalate		290	EB	12	41
Butyl benzyl phthalate		ND		12	41
Caprolactam		ND		12	41
Carbazole		ND		12	41
Chrysene		ND		12	41
Dibenz(a,h)anthracene		ND		12	41
Dibenzofuran		ND		12	41
Diethyl phthalate		ND		12	41
Dimethyl phthalate		ND		12	41
Di-n-butyl phthalate		ND		36	41
Di-n-octyl phthalate		ND		21	41
Diphenyl oxide		ND		12	41
Diphenylamine		ND		12	41
Fluoranthene		ND		12	41
Fluorene		ND		12	41
Hexachlorobenzene		ND		12	41
Hexachlorobutadiene		ND		12	41
Hexachlorocyclopentadiene		ND		12	82
Hexachloroethane		ND		12	41
Indeno[1,2,3-cd]pyrene		ND		12	41
Isophorone		ND		12	41
Naphthalene		ND		12	98
Nitrobenzene		ND		12	41
N-Nitrosodimethylamine		ND		15	41
N-Nitrosodi-n-propylamine		ND		12	41
N-Nitrosodiphenylamine		ND		12	41
Pentachlorophenol		ND		12	41
Phenanthrene		ND		12	49
Phenol		ND		12	41
Pyrene		ND		12	41

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	68		30 - 130
2-Fluorophenol	62		30 - 130
2-Fluorobiphenyl	57		30 - 130
Nitrobenzene-d5	56		30 - 130
Phenol-d5	66		30 - 130
Terphenyl-d14	68		30 - 130

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Client: Olin Corporation

Job Number: 360-24417-1
Sdg Number: OCRI-10

Client Sample ID: **OC-SB-471-3.0/5.0-XXX**

Lab Sample ID: 360-24417-15
Client Matrix: Solid % Moisture: 18.9

Date Sampled: 09/02/2009 1330
Date Received: 09/02/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49260		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48924		Lab File ID:	J03063.D
Dilution:	1.0			Initial Weight/Volume:	30.07 g
Date Analyzed:	09/22/2009 0145			Final Weight/Volume:	1.0 mL
Date Prepared:	09/14/2009 1300			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 10

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
123-48-8	3-Heptene, 2,2,4,6,6-pentamethyl-	6.23	17	T J N
128-37-0	Butylated Hydroxytoluene	9.44	15	T J N
~~615-22-5~~	~~Benzothiazole, 2-(methylthio)-~~	~~9.99~~	~~17~~	~~T J N~~
~~3910-35-8~~	~~1H-Indene, 2,3-dihydro-1,1,3-trimethyl-3~~	~~10.46~~	~~32~~	~~T J N~~
~~22768-22-5~~	~~2,4-Diphenyl-4-methyl-2(E)-pentene~~	~~10.96~~	~~11~~	~~T J N~~
112-61-8	Octadecanoic acid, methyl ester	12.09	11	T J N
297-3-0	Cyclotetracosane	14.02	93	T J N
~~7683-64-9~~	~~Squalene~~	~~14.35~~	~~140~~	~~T J N~~
~~26603-23-6~~	~~p,p''-Dioctyldiphenylamine~~	~~14.82~~	~~910~~	~~T J N~~
83-47-6	.gamma.-Sitosterol	15.96	84	T J N

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SAMPLE SUMMARY

Client: Olin Corporation

Job Number: 360-24417-2
Sdg Number: OCRI-10A

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
360-24417-2	OC-SB-463-28/30-XXX	Solid	09/01/2009 1450	09/02/2009 1710
360-24417-5	OC-SB-464-26/28-XXX	Solid	09/01/2009 1650	09/02/2009 1710
360-24417-8	OC-SB-465-16/18-XXX	Solid	09/02/2009 0825	09/02/2009 1710
360-24417-12	OC-SB-468-31/33-XXX	Solid	09/02/2009 1100	09/02/2009 1710
360-24417-16	OC-SB-471-26/28-XXX	Solid	09/02/2009 1430	09/02/2009 1710

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Client: Olin Corporation

Job Number: 360-24417-2
Sdg Number: OCRI-10A

Client Sample ID: **OC-SB-463-28/30-XXX**

Lab Sample ID: 360-24417-2
Client Matrix: Solid
% Moisture: 9.2

Date Sampled: 09/01/2009 1450
Date Received: 09/02/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49266		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48854		Lab File ID:	B10467.D
Dilution:	1.0			Initial Weight/Volume:	30.61 g
Date Analyzed:	09/22/2009 0654			Final Weight/Volume:	1.0 mL
Date Prepared:	09/11/2009 1142			Injection Volume:	

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		11	36
1,2,4,5-Tetrachlorobenzene		ND		11	36
1,2,4-Trichlorobenzene		ND		11	36
1,2-Dichlorobenzene		ND		11	36
1,3-Dichlorobenzene		ND		11	36
1,4-Dichlorobenzene		ND		11	36
1-Methylnaphthalene		ND		11	36
2,2'-oxybis[1-chloropropane]		ND		11	36
2,3,4,6-Tetrachlorophenol		ND		11	36
2,4,5-Trichlorophenol		ND		11	36
2,4,6-Trichlorophenol		ND		11	36
2,4-Dichlorophenol		ND		11	36
2,4-Dimethylphenol		ND		14	36
2,4-Dinitrophenol		ND		11	36
2,4-Dinitrotoluene		ND		11	36
2,6-Dinitrotoluene		ND		11	36
2-Chloronaphthalene		ND		11	36
2-Chlorophenol		ND		11	36
2-Methylnaphthalene		ND		11	36
2-Methylphenol		ND		22	36
2-Nitroaniline		~~ND~~ R		11	180
2-Nitrophenol		ND		11	36
3 & 4 Methylphenol		ND		11	36
3,3'-Dichlorobenzidine		ND		11	72
3-Nitroaniline		ND		11	180
4,6-Dinitro-2-methylphenol		ND		11	180
4-Bromophenyl phenyl ether		ND		11	36
4-Chloro-3-methylphenol		ND		11	72
4-Chloroaniline		ND		11	72
4-Chlorophenyl phenyl ether		ND		11	36
4-Nitroaniline		ND		11	180
4-Nitrophenol		ND		11	180
Acenaphthene		ND		11	36
Acenaphthylene		ND		11	36
Acetophenone		ND		11	36
Aniline		ND J		11	36
Anthracene		ND		11	36
Atrazine		ND		11	36
Azobenzene		ND		11	36
Benzaldehyde		ND		11	36
Benzo[a]anthracene		ND		11	36
Benzo[a]pyrene		ND		11	36
Benzo[b]fluoranthene		ND		11	36
Benzo[g,h,i]perylene		ND		11	36
Benzo[k]fluoranthene		ND		11	36
Benzoic acid		ND J		16	180

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Client: Olin Corporation

Job Number: 360-24417-2
Sdg Number: OCRI-10A

Client Sample ID: **OC-SB-463-28/30-XXX**

Lab Sample ID: 360-24417-2
Client Matrix: Solid % Moisture: 9.2

Date Sampled: 09/01/2009 1450
Date Received: 09/02/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49266		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48854		Lab File ID:	B10467.D
Dilution:	1.0			Initial Weight/Volume:	30.61 g
Date Analyzed:	09/22/2009 0654			Final Weight/Volume:	1.0 mL
Date Prepared:	09/11/2009 1142			Injection Volume:	

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		11	36
Benzyl alcohol		ND		31	72
Bis(2-chloroethoxy)methane		ND		11	36
Bis(2-chloroethyl)ether		ND		11	36
Bis(2-ethylhexyl) phthalate		ND		11	36
Butyl benzyl phthalate		ND		11	36
Caprolactam		ND		11	36
Carbazole		ND		11	36
Chrysene		ND		11	36
Dibenz(a,h)anthracene		ND		11	36
Dibenzofuran		ND		11	36
Diethyl phthalate		ND		11	36
Dimethyl phthalate		ND		11	36
Di-n-butyl phthalate		ND		32	36
Di-n-octyl phthalate		ND		18	36
Diphenyl oxide		ND		11	36
Fluoranthene		ND		11	36
Fluorene		ND		11	36
Hexachlorobenzene		ND		11	36
Hexachlorobutadiene		ND		11	36
Hexachlorocyclopentadiene		ND		11	72
Hexachloroethane		ND		11	36
Indeno[1,2,3-cd]pyrene		ND		11	36
Isophorone		ND		11	36
Naphthalene		ND		11	86
Nitrobenzene		ND		11	36
N-Nitrosodimethylamine		ND		13	36
N-Nitrosodi-n-propylamine		ND		11	36
N-Nitrosodiphenylamine		ND		11	36
Pentachlorophenol		ND		11	36
Phenanthrene		ND		11	43
Phenol		ND		11	36
Pyrene		ND		11	36

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	52		30 - 130
2-Fluorobiphenyl	56		30 - 130
2-Fluorophenol	65		30 - 130
Nitrobenzene-d5	62		30 - 130
Phenol-d5	63		30 - 130
Terphenyl-d14	62		30 - 130

Client: Olin Corporation

Job Number: 360-24417-2
Sdg Number: OCRI-10A

Client Sample ID: **OC-SB-463-28/30-XXX**

Lab Sample ID: 360-24417-2
Client Matrix: Solid % Moisture: 9.2

Date Sampled: 09/01/2009 1450
Date Received: 09/02/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49266		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48854		Lab File ID:	B10467.D
Dilution:	1.0			Initial Weight/Volume:	30.61 g
Date Analyzed:	09/22/2009 0654			Final Weight/Volume:	1.0 mL
Date Prepared:	09/11/2009 1142			Injection Volume:	

Tentatively Identified Compounds **Number TIC's Found:** **10**

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
128-37-0	Butylated Hydroxytoluene	10.48	31	T J N
27193-28-8	Phenol, (1,1,3,3-tetramethylbutyl)-	10.93	27	T J N
3910-35-8	1H-Indene, 2,3-dihydro-1,1,3-trimethyl-3	11.43	36	T J N
112-61-8	Octadecanoic acid, methyl ester	12.81	26	T J N
630-2-4	Octacosane	14.25	15	T J N
629-78-7	Heptadecane	15.61	57	T J N
629-92-5	Nonadecane	16.12	26	T J N
629-97-0	Docosane	16.64	20	T J N
7683-64-9	Squalene	16.78	26	T J N
629-94-7	Heneicosane	17.21	17	T J N

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Client: Olin Corporation

Job Number: 360-24417-2
Sdg Number: OCRI-10A

Client Sample ID: **OC-SB-464-26/28-XXX**

Lab Sample ID: 360-24417-5
Client Matrix: Solid % Moisture: 7.5

Date Sampled: 09/01/2009 1650
Date Received: 09/02/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49266		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48854		Lab File ID:	B10470.D
Dilution:	1.0			Initial Weight/Volume:	30.03 g
Date Analyzed:	09/22/2009 0827			Final Weight/Volume:	1.0 mL
Date Prepared:	09/11/2009 1142			Injection Volume:	

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		11	36
1,2,4,5-Tetrachlorobenzene		ND		11	36
1,2,4-Trichlorobenzene		ND		11	36
1,2-Dichlorobenzene		ND		11	36
1,3-Dichlorobenzene		ND		11	36
1,4-Dichlorobenzene		ND		11	36
1-Methylnaphthalene		ND		11	36
2,2'-oxybis[1-chloropropane]		ND		11	36
2,3,4,6-Tetrachlorophenol		ND		11	36
2,4,5-Trichlorophenol		ND		11	36
2,4,6-Trichlorophenol		ND		11	36
2,4-Dichlorophenol		ND		11	36
2,4-Dimethylphenol		ND		14	36
2,4-Dinitrophenol		ND		11	36
2,4-Dinitrotoluene		ND		11	36
2,6-Dinitrotoluene		ND		11	36
2-Chloronaphthalene		ND		11	36
2-Chlorophenol		ND		11	36
2-Methylnaphthalene		ND		11	36
2-Methylphenol		ND		22	36
2-Nitroaniline		~~ND~~ R		11	180
2-Nitrophenol		ND		11	36
3 & 4 Methylphenol		ND		11	36
3,3'-Dichlorobenzidine		ND		11	72
3-Nitroaniline		ND		11	180
4,6-Dinitro-2-methylphenol		ND		11	180
4-Bromophenyl phenyl ether		ND		11	36
4-Chloro-3-methylphenol		ND		11	72
4-Chloroaniline		ND		11	72
4-Chlorophenyl phenyl ether		ND		11	36
4-Nitroaniline		ND		11	180
4-Nitrophenol		ND		11	180
Acenaphthene		ND		11	36
Acenaphthylene		ND		11	36
Acetophenone		ND		11	36
Aniline		ND J		11	36
Anthracene		ND		11	36
Atrazine		ND		11	36
Azobenzene		ND		11	36
Benzaldehyde		ND		11	36
Benzo[a]anthracene		ND		11	36
Benzo[a]pyrene		ND		11	36
Benzo[b]fluoranthene		ND		11	36
Benzo[g,h,i]perylene		ND		11	36
Benzo[k]fluoranthene		ND		11	36
Benzoic acid		ND J		16	180

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Client: Olin Corporation

Job Number: 360-24417-2
Sdg Number: OCRI-10A

Client Sample ID: OC-SB-464-26/28-XXX

Lab Sample ID: 360-24417-5
Client Matrix: Solid
% Moisture: 7.5

Date Sampled: 09/01/2009 1650
Date Received: 09/02/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49266		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48854		Lab File ID:	B10470.D
Dilution:	1.0			Initial Weight/Volume:	30.03 g
Date Analyzed:	09/22/2009 0827			Final Weight/Volume:	1.0 mL
Date Prepared:	09/11/2009 1142			Injection Volume:	

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		11	36
Benzyl alcohol		ND		31	72
Bis(2-chloroethoxy)methane		ND		11	36
Bis(2-chloroethyl)ether		ND		11	36
Bis(2-ethylhexyl) phthalate		ND		11	36
Butyl benzyl phthalate		ND		11	36
Caprolactam		ND		11	36
Carbazole		ND		11	36
Chrysene		ND		11	36
Dibenz(a,h)anthracene		ND		11	36
Dibenzofuran		ND		11	36
Diethyl phthalate		ND		11	36
Dimethyl phthalate		ND		11	36
Di-n-butyl phthalate		ND		32	36
Di-n-octyl phthalate		ND		18	36
Diphenyl oxide		ND		11	36
Fluoranthene		ND		11	36
Fluorene		ND		11	36
Hexachlorobenzene		ND		11	36
Hexachlorobutadiene		ND		11	36
Hexachlorocyclopentadiene		ND		11	72
Hexachloroethane		ND		11	36
Indeno[1,2,3-cd]pyrene		ND		11	36
Isophorone		ND		11	36
Naphthalene		ND		11	86
Nitrobenzene		ND		11	36
N-Nitrosodimethylamine		ND		13	36
N-Nitrosodi-n-propylamine		ND		11	36
N-Nitrosodiphenylamine		ND		11	36
Pentachlorophenol		ND		11	36
Phenanthrene		ND		11	43
Phenol		ND		11	36
Pyrene		ND		11	36

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	52		30 - 130
2-Fluorobiphenyl	55		30 - 130
2-Fluorophenol	68		30 - 130
Nitrobenzene-d5	64		30 - 130
Phenol-d5	68		30 - 130
Terphenyl-d14	56		30 - 130

Client: Olin Corporation

Job Number: 360-24417-2
Sdg Number: OCRI-10A

Client Sample ID: **OC-SB-464-26/28-XXX**

Lab Sample ID: 360-24417-5
Client Matrix: Solid % Moisture: 7.5

Date Sampled: 09/01/2009 1650
Date Received: 09/02/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49266		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48854		Lab File ID:	B10470.D
Dilution:	1.0			Initial Weight/Volume:	30.03 g
Date Analyzed:	09/22/2009 0827			Final Weight/Volume:	1.0 mL
Date Prepared:	09/11/2009 1142			Injection Volume:	

Tentatively Identified Compounds **Number TIC's Found:** 7

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
128-37-0	Butylated Hydroxytoluene	10.48	13	T J N
3910-35-8	1H-Indene, 2,3-dihydro-1,1,3-trimethyl-3	11.43	12	T J N
112-61-8	Octadecanoic acid, methyl ester	12.81	10	T J N
638-68-6	Triacontane	15.61	55	T J N
112-84-5	Erucylamide	16.63	190	T J N
7683-64-9	Squalene	16.78	11	T J N
112-95-8	Eicosane	17.22	13	T J N

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Client: Olin Corporation

Job Number: 360-24417-2
Sdg Number: OCRI-10A

Client Sample ID: **OC-SB-465-16/18-XXX**

Lab Sample ID: 360-24417-8
Client Matrix: Solid

% Moisture: 9.6

Date Sampled: 09/02/2009 0825
Date Received: 09/02/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49260		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48924		Lab File ID:	J03059.D
Dilution:	1.0			Initial Weight/Volume:	30.21 g
Date Analyzed:	09/21/2009 2357			Final Weight/Volume:	1.0 mL
Date Prepared:	09/14/2009 1300			Injection Volume:	

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		11	37
1,2,4,5-Tetrachlorobenzene		ND		11	37
1,2,4-Trichlorobenzene		ND		11	37
1,2-Dichlorobenzene		ND		11	37
1,3-Dichlorobenzene		ND		11	37
1,4-Dichlorobenzene		ND		11	37
1-Methylnaphthalene		ND		11	37
2,2'-oxybis[1-chloropropane]		ND		11	37
2,3,4,6-Tetrachlorophenol		ND		11	37
2,4,5-Trichlorophenol		ND		11	37
2,4,6-Trichlorophenol		ND		11	37
2,4-Dichlorophenol		ND		11	37
2,4-Dimethylphenol		ND		14	37
2,4-Dinitrophenol		ND		11	37
2,4-Dinitrotoluene		ND		11	37
2,6-Dinitrotoluene		ND		11	37
2-Chloronaphthalene		ND		11	37
2-Chlorophenol		ND		11	37
2-Methylnaphthalene		ND		11	37
2-Methylphenol		ND		22	37
2-Nitroaniline		ND		11	180
2-Nitrophenol		ND		11	37
3 & 4 Methylphenol		ND		11	37
3,3'-Dichlorobenzidine		ND		11	73
3-Nitroaniline		ND		11	180
4,6-Dinitro-2-methylphenol		ND		11	180
4-Bromophenyl phenyl ether		ND		11	37
4-Chloro-3-methylphenol		ND		11	73
4-Chloroaniline		ND		11	73
4-Chlorophenyl phenyl ether		ND		11	37
4-Nitroaniline		ND		11	180
4-Nitrophenol		ND		11	180
Acenaphthene		ND		11	37
Acenaphthylene		ND		11	37
Acetophenone		ND		11	37
Aniline		ND		11	37
Anthracene		ND		11	37
Atrazine		ND		11	37
Azobenzene		ND		11	37
Benzaldehyde		ND		11	37
Benzo[a]anthracene		ND		11	37
Benzo[a]pyrene		ND		11	37
Benzo[b]fluoranthene		ND		11	37
Benzo[g,h,i]perylene		ND		11	37
Benzo[k]fluoranthene		ND		11	37
Benzoic acid		ND		16	180

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Client: Olin Corporation

Job Number: 360-24417-2
Sdg Number: OCRI-10A

Client Sample ID: **OC-SB-465-16/18-XXX**

Lab Sample ID: 360-24417-8
Client Matrix: Solid

% Moisture: 9.6

Date Sampled: 09/02/2009 0825
Date Received: 09/02/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49260		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48924		Lab File ID:	J03059.D
Dilution:	1.0			Initial Weight/Volume:	30.21 g
Date Analyzed:	09/21/2009 2357			Final Weight/Volume:	1.0 mL
Date Prepared:	09/14/2009 1300			Injection Volume:	

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		11	37
Benzyl alcohol		ND		31	73
Bis(2-chloroethoxy)methane		ND		11	37
Bis(2-chloroethyl)ether		ND		11	37
Bis(2-ethylhexyl) phthalate		41 J		11	37
Butyl benzyl phthalate		ND		11	37
Caprolactam		ND		11	37
Carbazole		ND		11	37
Chrysene		ND		11	37
Dibenz(a,h)anthracene		ND		11	37
Dibenzofuran		ND		11	37
Diethyl phthalate		ND		11	37
Dimethyl phthalate		ND		11	37
Di-n-butyl phthalate		ND		32	37
Di-n-octyl phthalate		ND		18	37
Diphenyl oxide		ND		11	37
Fluoranthene		ND		11	37
Fluorene		ND		11	37
Hexachlorobenzene		ND		11	37
Hexachlorobutadiene		ND		11	37
Hexachlorocyclopentadiene		ND		11	73
Hexachloroethane		ND		11	37
Indeno[1,2,3-cd]pyrene		ND		11	37
Isophorone		ND		11	37
Naphthalene		ND		11	88
Nitrobenzene		ND		11	37
N-Nitrosodimethylamine		ND		13	37
N-Nitrosodi-n-propylamine		ND		11	37
N-Nitrosodiphenylamine		ND		11	37
Pentachlorophenol		ND		11	37
Phenanthrene		ND		11	44
Phenol		ND		11	37
Pyrene		ND		11	37

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	68		30 - 130
2-Fluorobiphenyl	64		30 - 130
2-Fluorophenol	71		30 - 130
Nitrobenzene-d5	63		30 - 130
Phenol-d5	72		30 - 130
Terphenyl-d14	79		30 - 130

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Client: Olin Corporation

Job Number: 360-24417-2
Sdg Number: OCRI-10A

Client Sample ID: **OC-SB-465-16/18-XXX**

Lab Sample ID: 360-24417-8
Client Matrix: Solid % Moisture: 9.6

Date Sampled: 09/02/2009 0825
Date Received: 09/02/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49260		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48924		Lab File ID:	J03059.D
Dilution:	1.0			Initial Weight/Volume:	30.21 g
Date Analyzed:	09/21/2009 2357			Final Weight/Volume:	1.0 mL
Date Prepared:	09/14/2009 1300			Injection Volume:	

Tentatively Identified Compounds **Number TIC's Found:** 1

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
10544-50-0	Cyclic octaatomic sulfur	12.00	32	T J N

Client: Olin Corporation

Job Number: 360-24417-2
Sdg Number: OCRI-10A

Client Sample ID: OC-SB-468-31/33-XXX

Lab Sample ID: 360-24417-12
Client Matrix: Solid
% Moisture: 7.4

Date Sampled: 09/02/2009 1100
Date Received: 09/02/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49266		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48854		Lab File ID:	B10473.D
Dilution:	1.0			Initial Weight/Volume:	30.28 g
Date Analyzed:	09/22/2009 0959			Final Weight/Volume:	1.0 mL
Date Prepared:	09/11/2009 1142			Injection Volume:	

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		11	36
1,2,4,5-Tetrachlorobenzene		ND		11	36
1,2,4-Trichlorobenzene		ND		11	36
1,2-Dichlorobenzene		ND		11	36
1,3-Dichlorobenzene		ND		11	36
1,4-Dichlorobenzene		ND		11	36
1-Methylnaphthalene		ND		11	36
2,2'-oxybis[1-chloropropane]		ND		11	36
2,3,4,6-Tetrachlorophenol		ND		11	36
2,4,5-Trichlorophenol		ND		11	36
2,4,6-Trichlorophenol		ND		11	36
2,4-Dichlorophenol		ND		11	36
2,4-Dimethylphenol		ND		14	36
2,4-Dinitrophenol		ND		11	36
2,4-Dinitrotoluene		ND		11	36
2,6-Dinitrotoluene		ND		11	36
2-Chloronaphthalene		ND		11	36
2-Chlorophenol		ND		11	36
2-Methylnaphthalene		ND		11	36
2-Methylphenol		ND		21	36
2-Nitroaniline		~~ND~~ R		11	180
2-Nitrophenol		ND		11	36
3 & 4 Methylphenol		ND		11	36
3,3'-Dichlorobenzidine		ND		11	71
3-Nitroaniline		ND		11	180
4,6-Dinitro-2-methylphenol		ND		11	180
4-Bromophenyl phenyl ether		ND		11	36
4-Chloro-3-methylphenol		ND		11	71
4-Chloroaniline		ND		11	71
4-Chlorophenyl phenyl ether		ND		11	36
4-Nitroaniline		ND		11	180
4-Nitrophenol		ND		11	180
Acenaphthene		ND		11	36
Acenaphthylene		ND		11	36
Acetophenone		ND		11	36
Aniline		ND J		11	36
Anthracene		ND		11	36
Atrazine		ND		11	36
Azobenzene		ND		11	36
Benzaldehyde		ND		11	36
Benzo[a]anthracene		ND		11	36
Benzo[a]pyrene		ND		11	36
Benzo[b]fluoranthene		ND		11	36
Benzo[g,h,i]perylene		ND		11	36
Benzo[k]fluoranthene		ND		11	36
Benzoic acid		ND J		16	180

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Client: Olin Corporation

Job Number: 360-24417-2
Sdg Number: OCRI-10A

Client Sample ID: **OC-SB-468-31/33-XXX**

Lab Sample ID: 360-24417-12
Client Matrix: Solid
% Moisture: 7.4

Date Sampled: 09/02/2009 1100
Date Received: 09/02/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49266		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48854		Lab File ID:	B10473.D
Dilution:	1.0			Initial Weight/Volume:	30.28 g
Date Analyzed:	09/22/2009 0959			Final Weight/Volume:	1.0 mL
Date Prepared:	09/11/2009 1142			Injection Volume:	

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		11	36
Benzyl alcohol		ND		30	71
Bis(2-chloroethoxy)methane		ND		11	36
Bis(2-chloroethyl)ether		ND		11	36
Bis(2-ethylhexyl) phthalate		ND		11	36
Butyl benzyl phthalate		ND		11	36
Caprolactam		ND		11	36
Carbazole		ND		11	36
Chrysene		ND		11	36
Dibenz(a,h)anthracene		ND		11	36
Dibenzofuran		ND		11	36
Diethyl phthalate		ND		11	36
Dimethyl phthalate		ND		11	36
Di-n-butyl phthalate		ND		31	36
Di-n-octyl phthalate		ND		18	36
Diphenyl oxide		ND		11	36
Fluoranthene		ND		11	36
Fluorene		ND		11	36
Hexachlorobenzene		ND		11	36
Hexachlorobutadiene		ND		11	36
Hexachlorocyclopentadiene		ND		11	71
Hexachloroethane		ND		11	36
Indeno[1,2,3-cd]pyrene		ND		11	36
Isophorone		ND		11	36
Naphthalene		ND		11	86
Nitrobenzene		ND		11	36
N-Nitrosodimethylamine		ND		13	36
N-Nitrosodi-n-propylamine		ND		11	36
N-Nitrosodiphenylamine		ND		11	36
Pentachlorophenol		ND		11	36
Phenanthrene		ND		11	43
Phenol		ND		11	36
Pyrene		ND		11	36

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	53		30 - 130
2-Fluorobiphenyl	61		30 - 130
2-Fluorophenol	74		30 - 130
Nitrobenzene-d5	68		30 - 130
Phenol-d5	71		30 - 130
Terphenyl-d14	68		30 - 130

Client: Olin Corporation

Job Number: 360-24417-2
Sdg Number: OCRI-10A

Client Sample ID: **OC-SB-468-31/33-XXX**

Lab Sample ID: 360-24417-12
Client Matrix: Solid % Moisture: 7.4

Date Sampled: 09/02/2009 1100
Date Received: 09/02/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49266		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48854		Lab File ID:	B10473.D
Dilution:	1.0			Initial Weight/Volume:	30.28 g
Date Analyzed:	09/22/2009 0959			Final Weight/Volume:	1.0 mL
Date Prepared:	09/11/2009 1142			Injection Volume:	

Tentatively Identified Compounds **Number TIC's Found:** **10**

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
5129-60-2	Pentadecanoic acid, 14-methyl-, methyl e	12.02	7.6	T J N
112-61-8	Octadecanoic acid, methyl ester	12.81	20	T J N
1928-30-9	Tricosane, 2-methyl-	14.25	25	T J N
638-67-5	Tricosane	14.98	33	T J N
629-97-0	Docosane	15.61	43	T J N
593-49-7	Heptacosane	16.12	48	T J N
630-2-4	Octacosane	16.64	47	T J N
7683-64-9	Squalene	16.78	19	T J N
112-95-8	Eicosane	17.22	32	T J N
112-95-8	Eicosane	18.59	14	T J N

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Client: Olin Corporation

Job Number: 360-24417-2
Sdg Number: OCRI-10A

Client Sample ID: **OC-SB-471-26/28-XXX**

Lab Sample ID: 360-24417-16
Client Matrix: Solid % Moisture: 8.0

Date Sampled: 09/02/2009 1430
Date Received: 09/02/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49260		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48924		Lab File ID:	J03064.D
Dilution:	1.0			Initial Weight/Volume:	30.38 g
Date Analyzed:	09/22/2009 0212			Final Weight/Volume:	1.0 mL
Date Prepared:	09/14/2009 1300			Injection Volume:	

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		11	36
1,2,4,5-Tetrachlorobenzene		ND		11	36
1,2,4-Trichlorobenzene		ND		11	36
1,2-Dichlorobenzene		ND		11	36
1,3-Dichlorobenzene		ND		11	36
1,4-Dichlorobenzene		ND		11	36
1-Methylnaphthalene		ND		11	36
2,2'-oxybis[1-chloropropane]		ND		11	36
2,3,4,6-Tetrachlorophenol		ND		11	36
2,4,5-Trichlorophenol		ND		11	36
2,4,6-Trichlorophenol		ND		11	36
2,4-Dichlorophenol		ND		11	36
2,4-Dimethylphenol		ND		14	36
2,4-Dinitrophenol		ND		11	36
2,4-Dinitrotoluene		ND		11	36
2,6-Dinitrotoluene		ND		11	36
2-Chloronaphthalene		ND		11	36
2-Chlorophenol		ND		11	36
2-Methylnaphthalene		ND		11	36
2-Methylphenol		ND		21	36
2-Nitroaniline		ND		11	180
2-Nitrophenol		ND		11	36
3 & 4 Methylphenol		ND		11	36
3,3'-Dichlorobenzidine		ND		11	72
3-Nitroaniline		ND		11	180
4,6-Dinitro-2-methylphenol		ND		11	180
4-Bromophenyl phenyl ether		ND		11	36
4-Chloro-3-methylphenol		ND		11	72
4-Chloroaniline		ND		11	72
4-Chlorophenyl phenyl ether		ND		11	36
4-Nitroaniline		ND		11	180
4-Nitrophenol		ND		11	180
Acenaphthene		ND		11	36
Acenaphthylene		ND		11	36
Acetophenone		ND		11	36
Aniline		ND		11	36
Anthracene		ND		11	36
Atrazine		ND		11	36
Azobenzene		ND		11	36
Benzaldehyde		ND		11	36
Benzo[a]anthracene		ND		11	36
Benzo[a]pyrene		ND		11	36
Benzo[b]fluoranthene		ND		11	36
Benzo[g,h,i]perylene		ND		11	36
Benzo[k]fluoranthene		ND		11	36
Benzoic acid		ND		16	180

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Client: Olin Corporation

Job Number: 360-24417-2
Sdg Number: OCRI-10A

Client Sample ID: OC-SB-471-26/28-XXX

Lab Sample ID: 360-24417-16
Client Matrix: Solid % Moisture: 8.0

Date Sampled: 09/02/2009 1430
Date Received: 09/02/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49260		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48924		Lab File ID:	J03064.D
Dilution:	1.0			Initial Weight/Volume:	30.38 g
Date Analyzed:	09/22/2009 0212			Final Weight/Volume:	1.0 mL
Date Prepared:	09/14/2009 1300			Injection Volume:	

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		11	36
Benzyl alcohol		ND		30	72
Bis(2-chloroethoxy)methane		ND		11	36
Bis(2-chloroethyl)ether		ND		11	36
Bis(2-ethylhexyl) phthalate		83		11	36
Butyl benzyl phthalate		ND		11	36
Caprolactam		ND		11	36
Carbazole		ND		11	36
Chrysene		ND		11	36
Dibenz(a,h)anthracene		ND		11	36
Dibenzofuran		ND		11	36
Diethyl phthalate		ND		11	36
Dimethyl phthalate		ND		11	36
Di-n-butyl phthalate		ND		31	36
Di-n-octyl phthalate		ND		18	36
Diphenyl oxide		ND		11	36
Fluoranthene		ND		11	36
Fluorene		ND		11	36
Hexachlorobenzene		ND		11	36
Hexachlorobutadiene		ND		11	36
Hexachlorocyclopentadiene		ND		11	72
Hexachloroethane		ND		11	36
Indeno[1,2,3-cd]pyrene		ND		11	36
Isophorone		ND		11	36
Naphthalene		15	J	11	86
Nitrobenzene		ND		11	36
N-Nitrosodimethylamine		ND		13	36
N-Nitrosodi-n-propylamine		ND		11	36
N-Nitrosodiphenylamine		ND		11	36
Pentachlorophenol		ND		11	36
Phenanthrene		ND		11	43
Phenol		ND		11	36
Pyrene		ND		11	36

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	65		30 - 130
2-Fluorobiphenyl	65		30 - 130
2-Fluorophenol	72		30 - 130
Nitrobenzene-d5	65		30 - 130
Phenol-d5	75		30 - 130
Terphenyl-d14	81		30 - 130

Client: Olin Corporation

Job Number: 360-24417-2
Sdg Number: OCRI-10A

Client Sample ID: **OC-SB-471-26/28-XXX**

Lab Sample ID: 360-24417-16
Client Matrix: Solid % Moisture: 8.0

Date Sampled: 09/02/2009 1430
Date Received: 09/02/2009 1710

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49260		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48924		Lab File ID:	J03064.D
Dilution:	1.0			Initial Weight/Volume:	30.38 g
Date Analyzed:	09/22/2009 0212			Final Weight/Volume:	1.0 mL
Date Prepared:	09/14/2009 1300			Injection Volume:	

Tentatively Identified Compounds **Number TIC's Found:** 4

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
141-70-8	Heptane, 2,2,6,6-tetramethyl-4-methylene	6.14	25	T J N
123-48-8	3-Heptene, 2,2,4,6,6-pentamethyl-	6.24	38	T J N
138-86-3	Limonene	6.46	8.8	T J N
7683-64-9	Squalene	14.35	180	T J N

2/6/10

FORM IV
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Westfield Job No.: 360-24417-1

SDG No.: OCRI-10

Lab File ID: J03050.D Lab Sample ID: MB 360-48924/1-A

Matrix: Solid Date Extracted: 09/14/2009 13:00

Instrument ID: Inst. J Date Analyzed: 09/21/2009 19:53

Level: (Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 360-48924/2-A	J03051.D	09/21/2009 20:20
	LCSD 360-48924/3-A	J03052.D	09/21/2009 20:47
OC-SB-465-8.0/10-XXX	360-24417-10	J03055.D	09/21/2009 22:09
OC-SB-465-8.0/10-XXX MS	360-24417-10 MS	J03056.D	09/21/2009 22:36
OC-SB-465-8.0/10-XXX MSD	360-24417-10 MSD	J03057.D	09/21/2009 23:03
OC-SB-465-0.0/1.0-XXX	360-24417-7	J03058.D	09/21/2009 23:30
OC-SB-465-8.0/10-DUP	360-24417-9	J03060.D	09/22/2009 00:24
OC-SB-468-8.0/10-XXX	360-24417-13	J03061.D	09/22/2009 00:51
OC-SB-471-3.0/5.0-XXX	360-24417-15	J03063.D	09/22/2009 01:45
OC-SB-471-0.0/1.0-XXX	360-24417-14	B10532.D	09/24/2009 04:53

LCS
Aniline 31/33

IS OK
surr ok
TUNE OK

MB
bis (2-ethylhexyl) phthalate 19.4 194
dimethyl phthalate 82.2 822

MS/MSD OUT : see attached.

TICs
vanillin
dodecanoic acid methyl ester
hexadecane
eicosane
octadecane

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24417-1

SDG No.: OCRI-10

Matrix: Solid Level: Low Lab File ID: J03051.D

Lab ID: LCS 360-48924/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
1,1'-Biphenyl	333	293	88	40-140	
1,2,4,5-Tetrachlorobenzene	333	277	83	40-140	
1,2,4-Trichlorobenzene	333	245	73	40-140	
1,2-Dichlorobenzene	333	202	60	40-140	
1,3-Dichlorobenzene	333	199	60	40-140	
1,4-Dichlorobenzene	333	201	60	40-140	
1-Methylnaphthalene	333	272	82	40-140	
2,2'-oxybis[1-chloropropane]	333	222	67	40-140	
2,3,4,6-Tetrachlorophenol	333	270	81	40-140	
2,4,5-Trichlorophenol	333	311	93	30-130	
2,4,6-Trichlorophenol	333	306	92	30-130	
2,4-Dichlorophenol	333	292	88	30-130	
2,4-Dimethylphenol	333	312	94	30-130	
2,4-Dinitrophenol	333	226	68	30-130	
2,4-Dinitrotoluene	333	292	87	40-140	
2,6-Dinitrotoluene	333	311	93	40-140	
2-Chloronaphthalene	333	206	62	40-140	
2-Chlorophenol	333	234	70	30-130	
2-Methylnaphthalene	333	269	81	40-140	
2-Methylphenol	333	254	76	30-130	
2-Nitroaniline	333	291	87	40-140	
2-Nitrophenol	333	276	83	30-130	
3 & 4 Methylphenol	333	267	80	30-130	
3,3'-Dichlorobenzidine	333	329	99	40-140	
3-Nitroaniline	333	336	101	40-140	
4,6-Dinitro-2-methylphenol	333	270	81	30-130	
4-Bromophenyl phenyl ether	333	297	89	40-140	
4-Chloro-3-methylphenol	333	306	92	30-130	
4-Chloroaniline	333	262	79	40-140	
4-Chlorophenyl phenyl ether	333	290	87	40-140	
4-Nitroaniline	333	313	94	40-140	
4-Nitrophenol	333	314	94	30-130	
Acenaphthene	333	317	95	40-140	
Acenaphthylene	333	290	87	40-140	
Acetophenone	333	254	76	40-140	
Aniline	333	103	31	40-140	*
Anthracene	333	367	110	40-140	
Atrazine	333	343	103	40-140	
Azobenzene	333	312	93	40-140	
Benzaldehyde	333	254	76	40-140	
Benzo[a]anthracene	333	363	109	40-140	

133

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24417-1

SDG No.: OCRI-10

Matrix: Solid Level: Low Lab File ID: J03052.D

Lab ID: LCSD 360-48924/3-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCSD CONCENTRATION (ug/Kg)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1'-Biphenyl	333	312	94	7	30	40-140	
1,2,4,5-Tetrachlorobenzene	333	301	90	8	30	40-140	
1,2,4-Trichlorobenzene	333	271	81	10	30	40-140	
1,2-Dichlorobenzene	333	212	64	5	30	40-140	
1,3-Dichlorobenzene	333	212	64	7	30	40-140	
1,4-Dichlorobenzene	333	214	64	6	30	40-140	
1-Methylnaphthalene	333	304	91	11	30	40-140	
2,2'-oxybis[1-chloropropane]	333	235	70	5	30	40-140	
2,3,4,6-Tetrachlorophenol	333	294	88	9	30	40-140	
2,4,5-Trichlorophenol	333	335	100	7	30	30-130	
2,4,6-Trichlorophenol	333	324	97	6	30	30-130	
2,4-Dichlorophenol	333	321	96	9	30	30-130	
2,4-Dimethylphenol	333	343	103	9	30	30-130	
2,4-Dinitrophenol	333	260	78	14	30	30-130	
2,4-Dinitrotoluene	333	304	91	4	30	40-140	
2,6-Dinitrotoluene	333	326	98	5	30	40-140	
2-Chloronaphthalene	333	216	65	5	30	40-140	
2-Chlorophenol	333	246	74	5	30	30-130	
2-Methylnaphthalene	333	289	87	7	30	40-140	
2-Methylphenol	333	268	80	5	30	30-130	
2-Nitroaniline	333	283	85	3	30	40-140	
2-Nitrophenol	333	304	91	10	30	30-130	
3 & 4 Methylphenol	333	280	84	5	30	30-130	
3,3'-Dichlorobenzidine	333	373	112	13	30	40-140	
3-Nitroaniline	333	365	110	8	30	40-140	
4,6-Dinitro-2-methylphenol	333	299	90	11	30	30-130	
4-Bromophenyl phenyl ether	333	317	95	6	30	40-140	
4-Chloro-3-methylphenol	333	334	100	9	30	30-130	
4-Chloroaniline	333	292	88	11	30	40-140	
4-Chlorophenyl phenyl ether	333	310	93	7	30	40-140	
4-Nitroaniline	333	327	98	4	30	40-140	
4-Nitrophenol	333	343	103	9	30	30-130	
Acenaphthene	333	339	102	7	30	40-140	
Acenaphthylene	333	309	93	6	30	40-140	
Acetophenone	333	271	81	6	30	40-140	
Aniline	333	109	33	6	30	40-140	*
Anthracene	333	401	120	9	30	40-140	
Atrazine	333	371	111	8	30	40-140	
Azobenzene	333	332	99	6	30	40-140	
Benzaldehyde	333	271	81	6	30	40-140	
Benzo[a]anthracene	333	406	122	11	30	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Westfield | Job No.: 360-24417-1

SDG No.: OCRI-10

Client Sample ID: | Lab Sample ID: MB 360-48924/1-A

Matrix: Solid | Lab File ID: J03050.D

Analysis Method: 8270C LL | Date Collected:

Extract. Method: 3546 | Date Extracted: 09/14/2009 13:00

Sample wt/vol: 30.00(g) | Date Analyzed: 09/21/2009 19:53

Con. Extract Vol.: 1.0(mL) | Dilution Factor: 1

Injection Volume: 1.0(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup: (Y/N) N

Analysis Batch No.: 49259 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
98-86-2	Acetophenone	ND		33	10
62-53-3	Aniline	ND		33	10
120-12-7	Anthracene	ND		33	10
1912-24-9	Atrazine	ND		33	10
103-33-3	Azobenzene	ND		33	10
100-52-7	Benzaldehyde	ND		33	10
56-55-3	Benzo[a]anthracene	ND		33	10
50-32-8	Benzo[a]pyrene	ND		33	10
205-99-2	Benzo[b]fluoranthene	ND		33	10
191-24-2	Benzo[g,h,i]perylene	ND		33	10
207-08-9	Benzo[k]fluoranthene	ND		33	10
65-85-0	Benzoic acid	ND		170	15
119-61-9	Benzophenone	ND		33	10
100-51-6	Benzyl alcohol	ND		67	28
111-91-1	Bis(2-chloroethoxy)methane	ND		33	10
111-44-4	Bis(2-chloroethyl)ether	ND		33	10
117-81-7	Bis(2-ethylhexyl) phthalate	19.4	J	33	10
85-68-7	Butyl benzyl phthalate	ND		33	10
105-60-2	Caprolactam	ND		33	10
86-74-8	Carbazole	ND		33	10
218-01-9	Chrysene	ND		33	10
53-70-3	Dibenz(a,h)anthracene	ND		33	10
132-64-9	Dibenzofuran	ND		33	10
84-66-2	Diethyl phthalate	ND		33	10
131-11-3	Dimethyl phthalate	ND		33	10
84-74-2	Di-n-butyl phthalate	82.2		33	29
117-84-0	Di-n-octyl phthalate	ND		33	17
101-84-8	Diphenyl oxide	ND		33	10
122-39-4	Diphenylamine	ND		33	10
206-44-0	Fluoranthene	ND		33	10
86-73-7	Fluorene	ND		33	10
118-74-1	Hexachlorobenzene	ND		33	10
87-68-3	Hexachlorobutadiene	ND		33	10
77-47-4	Hexachlorocyclopentadiene	ND		67	10

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Westfield | Job No.: 360-24417-1

SDG No.: OCRI-10

Client Sample ID: | Lab Sample ID: MB 360-48924/1-A

Matrix: Solid | Lab File ID: J03050.D

Analysis Method: 8270C LL | Date Collected:

Extract. Method: 3546 | Date Extracted: 09/14/2009 13:00

Sample wt/vol: 30.00(g) | Date Analyzed: 09/21/2009 19:53

Con. Extract Vol.: 1.0(mL) | Dilution Factor: 1

Injection Volume: 1.0(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup: (Y/N) N

Analysis Batch No.: 49259 | Units: ug/Kg

Number TICs Found: 5 | TIC Result Total: 73.6

CAS NO.	COMPOUND NAME	RT	RESULT	Q
121-33-5	Vanillin	8.88	13.3	T J N
111-82-0	Dodecanoic acid, methyl ester	9.51	10.8	T J N
544-76-3	Hexadecane	9.88	22.6	T J N
112-95-8	Eicosane	11.61	15.9	T J N
593-45-3	Octadecane	12.36	11.0	T J N

FORM III
GC/MS SEMI VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24417-1

SDG No.: OCRI-10

Matrix: Solid Level: Low Lab File ID: J03056.D

Lab ID: 360-24417-10 MS Client ID: OC-SB-465-8.0/10-XXX MS

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	QC LIMITS REC	#
1,1'-Biphenyl	374	ND	621	166	40-140	F
1,2,4,5-Tetrachlorobenzene	374	ND	300	80	40-140	
1,2,4-Trichlorobenzene	374	ND	263	70	40-140	
1,2-Dichlorobenzene	374	ND	215	57	40-140	
1,3-Dichlorobenzene	374	ND	214	57	40-140	
1,4-Dichlorobenzene	374	ND	217	58	40-140	
1-Methylnaphthalene	374	ND	583	156	40-140	F
2,2'-oxybis[1-chloropropane]	374	ND	238	64	40-140	
2,3,4,6-Tetrachlorophenol	374	ND	595	159	40-140	F
2,4,5-Trichlorophenol	374	ND	343	92	30-130	
2,4,6-Trichlorophenol	374	ND	342	91	30-130	
2,4-Dichlorophenol	374	ND	317	85	30-130	
2,4-Dimethylphenol	374	ND	336	90	30-130	
2,4-Dinitrophenol	374	ND	83.7	22	30-130	F
2,4-Dinitrotoluene	374	ND	319	85	40-140	
2,6-Dinitrotoluene	374	ND	332	89	40-140	
2-Chloronaphthalene	374	ND	222	59	40-140	
2-Chlorophenol	374	ND	258	69	30-130	
2-Methylnaphthalene	374	ND	292	78	40-140	
2-Methylphenol	374	ND	281	75	30-130	
2-Nitroaniline	374	ND	308	82	40-140	
2-Nitrophenol	374	ND	272	73	30-130	
3 & 4 Methylphenol	374	ND	292	78	30-130	
3,3'-Dichlorobenzidine	374	ND	366	98	40-140	
3-Nitroaniline	374	ND	387	103	40-140	
4,6-Dinitro-2-methylphenol	374	ND	118 J	32	30-130	
4-Bromophenyl phenyl ether	374	ND	313	84	40-140	
4-Chloro-3-methylphenol	374	ND	329	88	30-130	
4-Chloroaniline	374	ND	273	73	40-140	
4-Chlorophenyl phenyl ether	374	ND	317	85	40-140	
4-Nitroaniline	374	ND	341	91	40-140	
4-Nitrophenol	374	ND	332	89	30-130	
Acenaphthene	374	ND	346	93	40-140	
Acenaphthylene	374	ND	320	86	40-140	
Acetophenone	374	ND	279	74	40-140	
Aniline	374	ND	111	30	40-140	F
Anthracene	374	ND	405	108	40-140	
Atrazine	374	ND	728	194	40-140	F
Azobenzene	374	ND	277	74	40-140	
Benzaldehyde	374	ND	279	74	40-140	
Benzo[a]anthracene	374	ND	404	108	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24417-1

SDG No.: OCRI-10

Matrix: Solid Level: Low Lab File ID: J03056.D

Lab ID: 360-24417-10 MS Client ID: OC-SB-465-8.0/10-XXX MS

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	QC LIMITS REC	#
Benzo[a]pyrene	374	ND	381	102	40-140	
Benzo[b]fluoranthene	374	ND	336	90	40-140	
Benzo[g,h,i]perylene	374	ND	448	120	40-140	
Benzo[k]fluoranthene	374	ND	369	98	40-140	
Benzoic acid	374	ND	68.0 J	18	30-130	F
Benzophenone	374	ND	636	170	40-140	F
Benzyl alcohol	374	ND	242	65	30-130	
Bis(2-chloroethoxy)methane	374	ND	309	82	40-140	
Bis(2-chloroethyl)ether	374	ND	234	63	40-140	
Bis(2-ethylhexyl) phthalate	374	28 J	385	95	40-140	
Butyl benzyl phthalate	374	ND	342	92	40-140	
Caprolactam	374	ND	709	189	40-140	F
Carbazole	374	ND	372	99	40-140	
Chrysene	374	ND	382	102	40-140	
Dibenz(a,h)anthracene	374	ND	401	107	40-140	
Dibenzofuran	374	ND	305	81	40-140	
Diethyl phthalate	374	ND	353	94	40-140	
Dimethyl phthalate	374	ND	335	89	40-140	
Di-n-butyl phthalate	374	ND	342	91	40-140	
Di-n-octyl phthalate	374	ND	321	86	40-140	
Diphenyl oxide	374	ND	622	166	40-140	F
Fluoranthene	374	ND	393	105	40-140	
Fluorene	374	ND	378	101	40-140	
Hexachlorobenzene	374	ND	311	83	40-140	
Hexachlorobutadiene	374	ND	267	71	40-140	
Hexachlorocyclopentadiene	374	ND	131	35	40-140	F
Hexachloroethane	374	ND	226	60	40-140	
Indeno[1,2,3-cd]pyrene	374	ND	405	108	40-140	
Isophorone	374	ND	252	67	40-140	
Naphthalene	374	ND	278	74	40-140	
Nitrobenzene	374	ND	301	81	40-140	
N-Nitrosodimethylamine	374	ND	273	73	40-140	
N-Nitrosodi-n-propylamine	374	ND	272	73	40-140	
N-Nitrosodiphenylamine	374	ND	249	67	40-140	
Pentachlorophenol	374	ND	342	91	30-130	
Phenanthrene	374	ND	341	91	40-140	
Phenol	374	ND	270	72	30-130	
Pyrene	374	ND	367	98	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24417-1

SDG No.: OCRI-10

Matrix: Solid Level: Low Lab File ID: J03057.D

Lab ID: 360-24417-10 MSD Client ID: OC-SB-465-8.0/10-XXX MSD

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1'-Biphenyl	375	305	81	68	30	40-140	F
1,2,4,5-Tetrachlorobenzene	375	287	77	4	30	40-140	
1,2,4-Trichlorobenzene	375	260	69	1	30	40-140	
1,2-Dichlorobenzene	375	211	56	2	30	40-140	
1,3-Dichlorobenzene	375	209	56	2	30	40-140	
1,4-Dichlorobenzene	375	212	57	2	30	40-140	
1-Methylnaphthalene	375	292	78	67	30	40-140	F
2,2'-oxybis[1-chloropropane]	375	232	62	2	30	40-140	
2,3,4,6-Tetrachlorophenol	375	280	75	72	30	40-140	F
2,4,5-Trichlorophenol	375	310	83	10	30	30-130	
2,4,6-Trichlorophenol	375	318	85	7	30	30-130	
2,4-Dichlorophenol	375	304	81	4	30	30-130	
2,4-Dimethylphenol	375	325	87	3	30	30-130	
2,4-Dinitrophenol	375	68.3	18	20	30	30-130	F
2,4-Dinitrotoluene	375	298	80	7	30	40-140	
2,6-Dinitrotoluene	375	308	82	8	30	40-140	
2-Chloronaphthalene	375	209	56	6	30	40-140	
2-Chlorophenol	375	250	67	3	30	30-130	
2-Methylnaphthalene	375	276	74	6	30	40-140	
2-Methylphenol	375	274	73	3	30	30-130	
2-Nitroaniline	375	278	74	10	30	40-140	
2-Nitrophenol	375	265	71	3	30	30-130	
3 & 4 Methylphenol	375	280	75	4	30	30-130	
3,3'-Dichlorobenzidine	375	349	93	5		40-140	
3-Nitroaniline	375	343	91	12	30	40-140	
4,6-Dinitro-2-methylphenol	375	85.2 J	23	32	30	30-130	F
4-Bromophenyl phenyl ether	375	303	81	3	30	40-140	
4-Chloro-3-methylphenol	375	315	84	4	30	30-130	
4-Chloroaniline	375	273	73	0	30	40-140	
4-Chlorophenyl phenyl ether	375	296	79	7	30	40-140	
4-Nitroaniline	375	320	85	7	30	40-140	
4-Nitrophenol	375	304	81	9	30	30-130	
Acenaphthene	375	320	85	8	30	40-140	
Acenaphthylene	375	295	79	8	30	40-140	
Acetophenone	375	272	73	2	30	40-140	
Aniline	375	110	29	1	30	40-140	F
Anthracene	375	390	104	4	30	40-140	
Atrazine	375	342	91	72	30	40-140	F
Azobenzene	375	317	85	14	30	40-140	
Benzaldehyde	375	272	73	2	30	40-140	
Benzo[a]anthracene	375	382	102	6	30	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24417-1

SDG No.: OCRI-10

Matrix: Solid Level: Low Lab File ID: J03057.D

Lab ID: 360-24417-10 MSD Client ID: OC-SB-465-8.0/10-XXX MSD

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Benzo[a]pyrene	375	359	96	6	30	40-140	
Benzo[b]fluoranthene	375	349	93	4	30	40-140	
Benzo[g,h,i]perylene	375	401	107	11	30	40-140	
Benzo[k]fluoranthene	375	330	88	11	30	40-140	
Benzoic acid	375	69.3 J	18	2	30	30-130	F
Benzophenone	375	345	92	59	30	40-140	F
Benzyl alcohol	375	236	63	3	30	30-130	
Bis(2-chloroethoxy)methane	375	300	80	3	30	40-140	
Bis(2-chloroethyl)ether	375	230	61	2	30	40-140	
Bis(2-ethylhexyl) phthalate	375	371	91	4	30	40-140	
Butyl benzyl phthalate	375	322	86	6	30	40-140	
Caprolactam	375	329	88	73	30	40-140	F
Carbazole	375	346	92	7	30	40-140	
Chrysene	375	369	98	4	30	40-140	
Dibenz(a,h)anthracene	375	370	99	8	30	40-140	
Dibenzofuran	375	287	76	6	30	40-140	
Diethyl phthalate	375	328	88	7	30	40-140	
Dimethyl phthalate	375	314	84	6	30	40-140	
Di-n-butyl phthalate	375	330	88	4	30	40-140	
Di-n-octyl phthalate	375	302	81	6	30	40-140	
Diphenyl oxide	375	309	83	67	30	40-140	F
Fluoranthene	375	366	98	7	30	40-140	
Fluorene	375	355	95	6	30	40-140	
Hexachlorobenzene	375	294	79	6	30	40-140	
Hexachlorobutadiene	375	265	71	1	30	40-140	
Hexachlorocyclopentadiene	375	126	34	4	30	40-140	F
Hexachloroethane	375	223	60	1	30	40-140	
Indeno[1,2,3-cd]pyrene	375	366	98	10	30	40-140	
Isophorone	375	246	65	3	30	40-140	
Naphthalene	375	268	72	3	30	40-140	
Nitrobenzene	375	293	78	3	30	40-140	
N-Nitrosodimethylamine	375	269	72	1	30	40-140	
N-Nitrosodi-n-propylamine	375	266	71	2	30	40-140	
N-Nitrosodiphenylamine	375	239	64	4	30	40-140	
Pentachlorophenol	375	298	79	14	30	30-130	
Phenanthrene	375	327	87	4	30	40-140	
Phenol	375	258	69	5	30	30-130	
Pyrene	375	350	93	5	30	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM IV
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Westfield Job No.: 360-24417-1

SDG No.: OCRI-10

Lab File ID: J03102.D Lab Sample ID: MB 360-48958/1-A

Matrix: Solid Date Extracted: 09/15/2009 12:06

Instrument ID: Inst. J Date Analyzed: 09/23/2009 23:03

Level: (Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 360-48958/2-A	J03103.D	09/23/2009 23:37
	LCSD 360-48958/3-A	J03104.D	09/24/2009 00:11
OC-SB-465-8.0/10-XXX	360-24417-10	J03105.D	09/24/2009 00:45
OC-SB-465-8.0/10-XXX MS	360-24417-10 MS	J03106.D	09/24/2009 01:19
OC-SB-465-8.0/10-XXX MSD	360-24417-10 MSD	J03107.D	09/24/2009 01:53
OC-SB-468-8.0/10-XXX	360-24417-13	J03109.D	09/24/2009 03:01
OC-SB-471-0.0/1.0-XXX	360-24417-14	J03110.D	09/24/2009 03:34
OC-SB-471-3.0/5.0-XXX	360-24417-15	J03111.D	09/24/2009 04:08

~~SOLA only~~ NDMA only

MB ND

LCS OK

Tune OK

surr OK

IS OK

ICAL ok

ICAL

4,6-dinitro-2-methylphenol RRF = 0.044

CCAL	%D	RF
2-methylphenol	-38	—
2,4-DNP	40	—
di-n-octylphthalate	-26	—
dibenz(a,h)anthracene	31	—
benzoic acid	—	0.0426

not applicable

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Westfield Job No.: 360-24417-1

SDG No.: OCRI-10

Instrument ID: Inst. J Start Date: 09/23/2009 14:44

Analysis Batch Number: 49396 End Date: 09/23/2009 21:21

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 360-49396/1		09/23/2009 14:44	1	J03090.D	Rtx-5ms SIL with guard column 0.25(um)
STD5 360-49396/2 ICIS		09/23/2009 16:23	1	J03091.D	Rtx-5ms SIL with guard column 0.25(um)
STD01 360-49396/3 IC		09/23/2009 16:56	1	J03092.D	Rtx-5ms SIL with guard column 0.25(um)
STD025 360-49396/4 IC		09/23/2009 17:29	1	J03093.D	Rtx-5ms SIL with guard column 0.25(um)
STD05 360-49396/5 IC		09/23/2009 18:02	1	J03094.D	Rtx-5ms SIL with guard column 0.25(um)
STD1 360-49396/6 IC		09/23/2009 18:35	1	J03095.D	Rtx-5ms SIL with guard column 0.25(um)
STD25 360-49396/7 IC		09/23/2009 19:08	1	J03096.D	Rtx-5ms SIL with guard column 0.25(um)
STD8 360-49396/8 IC		09/23/2009 19:41	1	J03097.D	Rtx-5ms SIL with guard column 0.25(um)
STD10 360-49396/9 IC		09/23/2009 20:14	1	J03098.D	Rtx-5ms SIL with guard column 0.25(um)
STD20 360-49396/10 IC		09/23/2009 20:48	1	J03099.D	Rtx-5ms SIL with guard column 0.25(um)
ICV 360-49396/11		09/23/2009 21:21	1		Rtx-5ms SIL with guard column 0.25(um)

~~8270C~~ only

Ical ~~04~~

4,6-dinitro~~phenol~~ 2-methylphenol RRF = 0.014

N/A

8270C LL

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Westfield Job No.: 360-24417-1

SDG No.: OCRI-10

Instrument ID: Inst. J Start Date: 09/23/2009 21:55

Analysis Batch Number: 49397 End Date: 09/24/2009 11:19

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 360-49397/12		09/23/2009 21:55	1	J03100.D	Rtx-5ms SIL with guard column 0.25(um)
CCV 360-49397/13 CCVIS		09/23/2009 22:29	1	J03101.D	Rtx-5ms SIL with guard column 0.25(um)
MB 360-48958/1-A		09/23/2009 23:03	1	J03102.D	Rtx-5ms SIL with guard column 0.25(um)
LCS 360-48958/2-A		09/23/2009 23:37	1	J03103.D	Rtx-5ms SIL with guard column 0.25(um)
LCSD 360-48958/3-A		09/24/2009 00:11	1	J03104.D	Rtx-5ms SIL with guard column 0.25(um)
360-24417-10	OC-SB-465-8.0/10-XXX	09/24/2009 00:45	1	J03105.D	Rtx-5ms SIL with guard column 0.25(um)
360-24417-10 MS	OC-SB-465-8.0/10-XXX MS	09/24/2009 01:19	1	J03106.D	Rtx-5ms SIL with guard column 0.25(um)
360-24417-10 MSD	OC-SB-465-8.0/10-XXX MSD	09/24/2009 01:53	1	J03107.D	Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/24/2009 02:27	1		Rtx-5ms SIL with guard column 0.25(um)
360-24417-13	OC-SB-468-8.0/10-XXX	09/24/2009 03:01	1	J03109.D	Rtx-5ms SIL with guard column 0.25(um)
360-24417-14	OC-SB-471-0.0/1.0-XXX	09/24/2009 03:34	1	J03110.D	Rtx-5ms SIL with guard column 0.25(um)
360-24417-15	OC-SB-471-3.0/5.0-XXX	09/24/2009 04:08	1	J03111.D	Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/24/2009 04:42	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/24/2009 05:16	10		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/24/2009 05:49	10		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/24/2009 06:23	10		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/24/2009 06:56	10		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/24/2009 07:28	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/24/2009 08:01	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/24/2009 08:34	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/24/2009 09:07	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/24/2009 09:40	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/24/2009 10:13	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/24/2009 10:46	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/24/2009 11:19	10		Rtx-5ms SIL with guard column 0.25(um)

CCAL %D RF

2-methylphenol -38 —

benzoic acid — 0.0426

2,4-DNP 40 —

di-n-octyl phthalate -26 —

8270C LL

dibenz(a,h)anthracene 31 —

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Westfield Job No.: 360-24417-1 Analy Batch No.: 49396

SDG No.: OCRI-10

Instrument ID: Inst. J GC Column: Rtx-5ms ID: 0.25(um) Heated Purge: (Y/N) N

Calibration Start Date: 09/23/2009 16:23 Calibration End Date: 09/23/2009 20:48 Calibration ID: 4771

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
1,2-Dichlorobenzene	0.9018 0.6335	0.8485 0.6076	0.8203 0.6934	0.7861 0.7323	0.7613	Ave		0.7539				13.0		15.0			
2-Methylphenol	0.6154 0.5455	0.5680 0.5219	0.5933 0.6010	0.5991 0.6508	0.6272	Ave		0.5914				6.8		15.0			
2,2'-oxybis[1-chloropropane]	0.7426 0.5864	0.7015 0.5465	0.7138 0.6245	0.6734 0.6832	0.6630	Ave		0.6595				9.5		15.0			
3 & 4 Methylphenol	0.6215 0.5732	0.6213 0.5448	0.5973 0.6212	0.6233 0.6770	0.6482	Ave		0.6142				6.3		15.0			
N-Nitrosodi-n-propylamine	0.4516 0.4251	0.4240 0.3993	0.4289 0.4552	0.4413 0.5055	0.4683	Ave		0.4443			0.0500	6.9		15.0			
Acetophenone	0.8952 0.7772	0.9128 0.7418	0.8977 0.8500	0.8883 0.9139	0.9120	Ave		0.8654				7.4		15.0			
Hexachloroethane	0.2847 0.2509	0.2677 0.2421	0.2752 0.2710	0.2775 0.3054	0.2842	Ave		0.2732				6.9		15.0			
Nitrobenzene	0.2983 0.3151	0.2825 0.3370	0.2949 0.3311	0.3124 0.3323	0.3343	Ave		0.3153				6.3		15.0			
Isophorone	0.4506 0.5527	0.4512 0.5908	0.4564 0.5868	0.4989 0.5802	0.5661	Ave		0.5260				12.0		15.0			
2,4-Dimethylphenol	0.2572 0.2840	0.2599 0.2942	0.2474 0.2877	0.2672 0.2886	0.2937	Ave		0.2755				6.4		15.0			
2-Nitrophenol	0.0997 0.1586	0.1046 0.1710	0.1050 0.1602	0.1280 0.1663	0.1435	Lin1	-0.014	0.1644							0.9970		0.9900
4,6-Dinitro-2-methylphenol	+++++ 0.0719	+++++ 0.0508	0.0149 0.0479	0.0253 0.0764	0.0213	Qua	-0.010	0.0272 0.044	0.0025						0.9980		0.9900
Bis(2-chloroethoxy)methane	0.3507 0.3275	0.3385 0.3518	0.3301 0.3459	0.3331 0.3391	0.3535	Ave		0.3411				2.9		15.0			
2,4-Dichlorophenol	0.1808 0.2207	0.1861 0.2402	0.1940 0.2390	0.2100 0.2348	0.2355	Ave		0.2157				11.0		15.0			
1,2,4-Trichlorobenzene	0.2909 0.2558	0.2797 0.2757	0.2759 0.2701	0.2779 0.2577	0.2856	Ave		0.2744				4.2		15.0			
Alpha-Terpineol	0.1805 0.1993	0.1687 0.2152	0.1741 0.2121	0.1820 0.2130	0.2074	Ave		0.1947				9.4		15.0			
Naphthalene	0.9667 0.8538	0.9178 0.9044	0.9020 0.8950	0.9169 0.8567	0.9518	Ave		0.9072				4.1		15.0			
4-Chloroaniline	0.3184 0.3242	0.2978 0.3574	0.3114 0.3659	0.3176 0.3634	0.3572	Ave		0.3348				7.8		15.0			
Hexachlorobutadiene	0.1512 0.1373	0.1485 0.1463	0.1352 0.1469	0.1444 0.1387	0.1561	Ave		0.1449				4.7		15.0			
Caprolactam	0.0648 0.0826	0.0460 0.0884	0.0474 0.0891	0.0542 0.0932	0.0734	Lin1	-0.009	0.0895							0.9930		0.9900

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Westfield Job No.: 360-24417-1

SDG No.: OCRI-10

Lab Sample ID: CCV 360-49397/13 Calibration Date: 09/23/2009 22:29

Instrument ID: Inst. J Calib Start Date: 09/23/2009 16:23

GC Column: Rtx-5ms ID: 0.25(um) Calib End Date: 09/23/2009 20:48

Lab File ID: J03101.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Lin2		0.2352		4410	5000	-11.8	30.0
Pyridine	Ave	0.6756	0.6100		4510	5000	-9.7	30.0
N-Nitrosodimethylamine	Ave	0.3519	0.3192		4540	5000	-9.3	30.0
Benzaldehyde	Ave	0.4236	0.3814		4500	5000	-10.0	30.0
Phenol	Ave	0.8207	0.7357		4480	5000	-10.4	20.0
Aniline	Ave	0.9532	0.8963		4700	5000	-6.0	30.0
Bis(2-chloroethyl)ether	Ave	0.6855	0.5893		4300	5000	-14.0	30.0
2-Chlorophenol	Ave	0.6554	0.5990		4570	5000	-8.6	30.0
1,4-Dichlorobenzene	Ave	0.7747	0.6820		4400	5000	-12.0	20.0
1,3-Dichlorobenzene	Ave	0.8010	0.7011		4380	5000	-12.5	30.0
2-Methylphenol	Ave	0.5914	0.3683		3110	5000	-37.7*	30.0
Benzyl alcohol	Ave	0.5311	0.4778		4500	5000	-10.0	30.0
1,2-Dichlorobenzene	Ave	0.7539	0.6462		4290	5000	-14.3	30.0
2,2'-oxybis[1-chloropropane]	Ave	0.6595	0.5789		4390	5000	-12.2	30.0
3 & 4 Methylphenol	Ave	0.6142	0.5612		4570	5000	-8.6	30.0
Acetophenone	Ave	0.8654	0.7882		4550	5000	-8.9	30.0
N-Nitrosodi-n-propylamine	Ave	0.4443	0.4178	0.0500	4700	5000	-6.0	30.0
Hexachloroethane	Ave	0.2732	0.2501		4580	5000	-8.5	30.0
Nitrobenzene	Ave	0.3153	0.3221		5110	5000	2.1	30.0
Isophorone	Ave	0.5260	0.5635		5360	5000	7.1	30.0
2,4-Dimethylphenol	Ave	0.2755	0.2861		5190	5000	3.8	30.0
2-Nitrophenol	Lin1		0.1548		4790	5000	-4.2	20.0
Benzoic acid	Qua		0.0426		4020	5000	-19.6	30.0
Bis(2-chloroethoxy)methane	Ave	0.3411	0.3392		4970	5000	-0.6	30.0
2,4-Dichlorophenol	Ave	0.2157	0.2326		5390	5000	7.9	20.0
1,2,4-Trichlorobenzene	Ave	0.2744	0.2703		4930	5000	-1.5	30.0
Alpha-Terpineol	Ave	0.1947	0.2082		5350	5000	6.9	30.0
Naphthalene	Ave	0.9072	0.8953		4930	5000	-1.3	30.0
4-Chloroaniline	Ave	0.3348	0.3469		5180	5000	3.6	30.0
Hexachlorobutadiene	Ave	0.1449	0.1435		4950	5000	-1.0	20.0
Caprolactam	Lin1		0.0813		4640	5000	-7.1	30.0
4-Chloro-3-methylphenol	Ave	0.2303	0.2503		5440	5000	8.7	20.0
2-Methylnaphthalene	Ave	0.5692	0.5764		5060	5000	1.3	30.0
1-Methylnaphthalene	Ave	0.5600	0.5628		5020	5000	0.5	30.0
1,2,4,5-Tetrachlorobenzene	Ave	0.2191	0.2207		5040	5000	0.7	30.0
Hexachlorocyclopentadiene	Ave	0.1803	0.1909	0.0500	5290	5000	5.9	30.0
2,4,6-Trichlorophenol	Ave	0.2897	0.3155		5450	5000	8.9	20.0
2,4,5-Trichlorophenol	Ave	0.2975	0.3180		5340	5000	6.9	30.0
1,1'-Biphenyl	Ave	1.402	1.371		4890	5000	-2.2	30.0
2-Chloronaphthalene	Ave	1.241	1.221		4920	5000	-1.6	30.0
2-Nitroaniline	Lin1		0.3087		4860	5000	-2.7	30.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Westfield Job No.: 360-24417-1

SDG No.: OCRI-10

Lab Sample ID: CCV 360-49397/13 Calibration Date: 09/23/2009 22:29

Instrument ID: Inst. J Calib Start Date: 09/23/2009 16:23

GC Column: Rtx-5ms ID: 0.25(um) Calib End Date: 09/23/2009 20:48

Lab File ID: J03101.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dimethyl phthalate	Ave	1.207	1.240		5130	5000	2.7	30.0
2,6-Dinitrotoluene	Lin2		0.2912		5180	5000	3.5	30.0
Acenaphthylene	Ave	1.618	1.690		5220	5000	4.4	30.0
3-Nitroaniline	Lin1		0.2922		5000	5000	0.1	30.0
Acenaphthene	Ave	1.091	1.075		4930	5000	-1.5	20.0
2,4-Dinitrophenol	Qua		0.0536	0.0500	6970	5000	39.5*	30.0
4-Nitrophenol	Lin		0.1318	0.0500	4580	5000	-8.4	30.0
Dibenzofuran	Ave	1.497	1.484		4960	5000	-0.9	30.0
2,4-Dinitrotoluene	Lin1		0.3510		4980	5000	-0.5	30.0
2,3,4,6-Tetrachlorophenol	Lin1		0.2207		4680	5000	-6.4	30.0
Diethyl phthalate	Ave	1.215	1.220		5020	5000	0.4	30.0
4-Chlorophenyl phenyl ether	Ave	0.5726	0.5709		4990	5000	-0.3	30.0
Fluorene	Ave	1.178	1.210		5140	5000	2.7	30.0
4-Nitroaniline	Lin1		0.2476		5170	5000	3.3	30.0
4,6-Dinitro-2-methylphenol	Qua		0.0529		6000	5000	20.1	30.0
Diphenylamine	Ave	0.6232	0.6356		5100	5000	2.0	30.0
N-Nitrosodiphenylamine	Ave	0.6232	0.6356		5100	5000	2.0	20.0
1,2-Diphenylhydrazine	Ave	0.7457	0.7789		5220	5000	4.4	30.0
Azobenzene	Ave	0.7457	0.7789		5220	5000	4.4	30.0
4-Bromophenyl phenyl ether	Ave	0.1845	0.1840		4980	5000	-0.3	30.0
Atrazine	Ave	0.1730	0.1883		5440	5000	8.9	30.0
Hexachlorobenzene	Ave	0.1897	0.1857		4900	5000	-2.1	30.0
Pentachlorophenol	Qua		0.0714		4930	5000	-1.4	20.0
Pentachloronitrobenzene	Lin1		0.0726		4910	5000	-1.9	30.0
Phenanthrene	Ave	1.033	1.002		4850	5000	-3.0	30.0
Anthracene	Ave	0.9247	0.9737		5260	5000	5.3	30.0
Carbazole	Ave	0.8175	0.8677		5310	5000	6.1	30.0
Di-n-butyl phthalate	Ave	1.201	1.175		4890	5000	-2.1	30.0
Pyrene	Ave	1.287	1.233		4790	5000	-4.1	30.0
Benzidine	Lin1		0.2060		6080	5000	21.7	30.0
Fluoranthene	Ave	0.9580	1.008		5260	5000	5.2	20.0
Butyl benzyl phthalate	Lin1		0.6412		4610	5000	-7.9	30.0
Bis(2-ethylhexyl) phthalate	Lin1		0.7730		4420	5000	-11.7	30.0
3,3'-Dichlorobenzidine	Lin1		0.2553		5390	5000	7.8	30.0
Benzo[a]anthracene	Ave	0.8789	0.9110		5180	5000	3.6	30.0
Chrysene	Ave	0.8894	0.8506		4780	5000	-4.4	30.0
Di-n-octyl phthalate	Lin		1.628		3710	5000	-25.8*	20.0
Benzo[b]fluoranthene	Lin1		1.224		4460	5000	-10.8	30.0
Benzo[k]fluoranthene	Lin1		1.236		4800	5000	-4.1	30.0
Benzo[a]pyrene	Lin1		0.9052		4900	5000	-2.0	20.0
Dibenz(a,h)anthracene	Qua		0.6179		6560	5000	31.2*	30.0

FORM IV
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Westfield Job No.: 360-24417-1

SDG No.: OCRI-10

Lab File ID: B10449.D Lab Sample ID: MB 360-48854/1-A

Matrix: Solid Date Extracted: 09/11/2009 11:42

Instrument ID: Inst. B Date Analyzed: 09/21/2009 20:33

Level:(Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 360-48854/2-A	B10450.D	09/21/2009 21:05
	LCSD 360-48854/3-A	B10451.D	09/21/2009 21:36
OC-SB-463-0.0/1.0-XXX	360-24417-1	B10466.D	09/22/2009 06:23
OC-SB-463-6.0/8.0-XXX	360-24417-3	B10468.D	09/22/2009 07:25
OC-SB-464-0.0/1.0-XXX	360-24417-4	B10469.D	09/22/2009 07:56
OC-SB-464-5.0/7.0-XXX	360-24417-6	B10471.D	09/22/2009 08:58
OC-SB-468-0.0/1.0-XXX	360-24417-11	B10531.D	09/24/2009 04:22
OC-SB-468-0.0/1.0-XXX DL3	360-24417-11 DL3		09/29/2009 00:48

LCS
Aniline 27/26

IJ OK
TUNE OK
JUNK OK

✓ MB
Benzoic acid 70.4 ug/kg AL = 352 g/kg 5x
TICs

* ICAL / CCAL OK

■ ICAL OK / CCAL OK

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Westfield | Job No.: 360-24417-1

SDG No.: OCRI-10

Client Sample ID: | Lab Sample ID: MB 360-48854/1-A

Matrix: Solid | Lab File ID: B10449.D

Analysis Method: 8270C LL | Date Collected:

Extract. Method: 3546 | Date Extracted: 09/11/2009 11:42

Sample wt/vol: 30.00(g) | Date Analyzed: 09/21/2009 20:33

Con. Extract Vol.: 1.0(mL) | Dilution Factor: 1

Injection Volume: 1.0(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 49265 | Units: ug/Kg

Number TICs Found: 8 | TIC Result Total: 170.6

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Unknown	7.06	23.2	T J
121-33-5	Vanillin	10.03	12.5	T J N
615-22-5	Benzothiazole, 2-(methylthio)-	11.07	12.0	T J N
593-45-3	Octadecane	11.58	42.1	T J N
112-95-8	Eicosane	12.30	24.2	T J N
54833-48-6	Heptadecane, 2,6,10,15-tetramethyl-	15.61	10.5	T J N
593-49-7	Heptacosane	16.12	14.3	T J N
7683-64-9	Squalene	16.78	31.8	T J N

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24417-1

SDG No.: OCRI-10

Matrix: Solid Level: Low Lab File ID: B10450.D

Lab ID: LCS 360-48854/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
1,1'-Biphenyl	333	263	79	40-140	
1,2,4,5-Tetrachlorobenzene	333	218	65	40-140	
1,2,4-Trichlorobenzene	333	222	67	40-140	
1,2-Dichlorobenzene	333	230	69	40-140	
1,3-Dichlorobenzene	333	190	57	40-140	
1,4-Dichlorobenzene	333	190	57	40-140	
1-Methylnaphthalene	333	218	65	40-140	
2,2'-oxybis[1-chloropropane]	333	208	63	40-140	
2,3,4,6-Tetrachlorophenol	333	228	68	40-140	
2,4,5-Trichlorophenol	333	264	79	30-130	
2,4,6-Trichlorophenol	333	250	75	30-130	
2,4-Dichlorophenol	333	240	72	30-130	
2,4-Dimethylphenol	333	241	72	30-130	
2,4-Dinitrophenol	333	192	58	30-130	
2,4-Dinitrotoluene	333	246	74	40-140	
2,6-Dinitrotoluene	333	268	81	40-140	
2-Chloronaphthalene	333	199	60	40-140	
2-Chlorophenol	333	223	67	30-130	
2-Methylnaphthalene	333	209	63	40-140	
2-Methylphenol	333	240	72	30-130	
2-Nitroaniline	333	268	80	40-140	
2-Nitrophenol	333	250	75	30-130	
3 & 4 Methylphenol	333	249	75	30-130	
3,3'-Dichlorobenzidine	333	242	73	40-140	
3-Nitroaniline	333	247	74	40-140	
4,6-Dinitro-2-methylphenol	333	232	70	30-130	
4-Bromophenyl phenyl ether	333	263	79	40-140	
4-Chloro-3-methylphenol	333	274	82	30-130	
4-Chloroaniline	333	171	51	40-140	
4-Chlorophenyl phenyl ether	333	262	79	40-140	
4-Nitroaniline	333	263	79	40-140	
4-Nitrophenol	333	281	84	30-130	
Acenaphthene	333	294	88	40-140	
Acenaphthylene	333	251	75	40-140	
Acetophenone	333	228	69	40-140	
Aniline	333	91.1	27	40-140	*
Anthracene	333	310	93	40-140	
Atrazine	333	282	85	40-140	
Azobenzene	333	264	79	40-140	
Benzaldehyde	333	248	75	40-140	
Benzo[a]anthracene	333	314	94	40-140	

/26

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24417-1

SDG No.: OCRI-10

Matrix: Solid Level: Low Lab File ID: B10451.D

Lab ID: LCSD 360-48854/3-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCSD CONCENTRATION (ug/Kg)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1'-Biphenyl	333	249	75	5	30	40-140	
1,2,4,5-Tetrachlorobenzene	333	208	63	5	30	40-140	
1,2,4-Trichlorobenzene	333	208	63	6	30	40-140	
1,2-Dichlorobenzene	333	212	64	8	30	40-140	
1,3-Dichlorobenzene	333	177	53	7	30	40-140	
1,4-Dichlorobenzene	333	176	53	8	30	40-140	
1-Methylnaphthalene	333	205	62	6	30	40-140	
2,2'-oxybis[1-chloropropane]	333	195	58	7	30	40-140	
2,3,4,6-Tetrachlorophenol	333	221	66	3	30	40-140	
2,4,5-Trichlorophenol	333	255	76	3	30	30-130	
2,4,6-Trichlorophenol	333	241	72	4	30	30-130	
2,4-Dichlorophenol	333	231	69	4	30	30-130	
2,4-Dimethylphenol	333	235	70	2	30	30-130	
2,4-Dinitrophenol	333	199	60	4	30	30-130	
2,4-Dinitrotoluene	333	238	71	3	30	40-140	
2,6-Dinitrotoluene	333	262	79	2	30	40-140	
2-Chloronaphthalene	333	194	58	3	30	40-140	
2-Chlorophenol	333	214	64	4	30	30-130	
2-Methylnaphthalene	333	200	60	5	30	40-140	
2-Methylphenol	333	224	67	7	30	30-130	
2-Nitroaniline	333	252	76	6	30	40-140	
2-Nitrophenol	333	241	72	4	30	30-130	
3 & 4 Methylphenol	333	237	71	5	30	30-130	
3,3'-Dichlorobenzidine	333	236	71	3	30	40-140	
3-Nitroaniline	333	240	72	3	30	40-140	
4,6-Dinitro-2-methylphenol	333	225	67	3	30	30-130	
4-Bromophenyl phenyl ether	333	250	75	5	30	40-140	
4-Chloro-3-methylphenol	333	268	80	2	30	30-130	
4-Chloroaniline	333	170	51	1	30	40-140	
4-Chlorophenyl phenyl ether	333	253	76	4	30	40-140	
4-Nitroaniline	333	254	76	3	30	40-140	
4-Nitrophenol	333	277	83	2	30	30-130	
Acenaphthene	333	281	84	4	30	40-140	
Acenaphthylene	333	243	73	3	30	40-140	
Acetophenone	333	221	66	3	30	40-140	
Aniline	333	88.2	26	3	30	40-140	*
Anthracene	333	294	88	5	30	40-140	
Atrazine	333	271	81	4	30	40-140	
Azobenzene	333	249	75	6	30	40-140	
Benzaldehyde	333	234	70	6	30	40-140	
Benzo[a]anthracene	333	301	90	4	30	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Westfield | Job No.: 360-24417-1

SDG No.: OCRI-10

Client Sample ID: | Lab Sample ID: MB 360-48854/1-A

Matrix: Solid | Lab File ID: B10449.D

Analysis Method: 8270C LL | Date Collected:

Extract. Method: 3546 | Date Extracted: 09/11/2009 11:42

Sample wt/vol: 30.00(g) | Date Analyzed: 09/21/2009 20:33

Con. Extract Vol.: 1.0(mL) | Dilution Factor: 1

Injection Volume: 1.0(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 49265 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
98-86-2	Acetophenone	ND		33	10
62-53-3	Aniline	ND		33	10
120-12-7	Anthracene	ND		33	10
1912-24-9	Atrazine	ND		33	10
103-33-3	Azobenzene	ND		33	10
100-52-7	Benzaldehyde	ND		33	10
56-55-3	Benzo[a]anthracene	ND		33	10
50-32-8	Benzo[a]pyrene	ND		33	10
205-99-2	Benzo[b]fluoranthene	ND		33	10
191-24-2	Benzo[g,h,i]perylene	ND		33	10
207-08-9	Benzo[k]fluoranthene	ND		33	10
65-85-0	Benzoic acid	70.4	J	170	15
119-61-9	Benzophenone	ND		33	10
100-51-6	Benzyl alcohol	ND		67	28
111-91-1	Bis(2-chloroethoxy)methane	ND		33	10
111-44-4	Bis(2-chloroethyl)ether	ND		33	10
117-81-7	Bis(2-ethylhexyl) phthalate	ND		33	10
85-68-7	Butyl benzyl phthalate	ND		33	10
105-60-2	Caprolactam	ND		33	10
86-74-8	Carbazole	ND		33	10
218-01-9	Chrysene	ND		33	10
53-70-3	Dibenz(a,h)anthracene	ND		33	10
132-64-9	Dibenzofuran	ND		33	10
84-66-2	Diethyl phthalate	ND		33	10
131-11-3	Dimethyl phthalate	ND		33	10
84-74-2	Di-n-butyl phthalate	ND		33	29
117-84-0	Di-n-octyl phthalate	ND		33	17
101-84-8	Diphenyl oxide	ND		33	10
206-44-0	Fluoranthene	ND		33	10
86-73-7	Fluorene	ND		33	10
118-74-1	Hexachlorobenzene	ND		33	10
87-68-3	Hexachlorobutadiene	ND		33	10
77-47-4	Hexachlorocyclopentadiene	ND		67	10
67-72-1	Hexachloroethane	ND		33	10

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Westfield Job No.: 360-24417-1

SDG No.: OCRI-10

Lab Sample ID: CCV 360-49266/16 Calibration Date: 09/21/2009 22:38

Instrument ID: Inst. B Calib Start Date: 09/21/2009 15:24

GC Column: Rtx-5ms ID: 0.25(um) Calib End Date: 09/21/2009 19:31

Lab File ID: B10453.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Nitroaniline	Lin1		0.3855		4,940	5000	-1.2	30.0
Dimethyl phthalate	Ave	1.239	1.267		5,110	5000	2.3	30.0
2,6-Dinitrotoluene	Ave	0.2754	0.2918		5,300	5000	6.0	30.0
Acenaphthylene	Ave	1.670	1.797		5,380	5000	7.6	30.0
3-Nitroaniline	Lin1		0.2962		4,910	5000	-1.9	30.0
2,4-Dinitrophenol	Qua		0.0952	0.0500	5,410	5000	8.2	30.0
4-Nitrophenol	Lin1		0.1739	0.0500	4,920	5000	-1.6	30.0
Acenaphthene	Ave	1.174	1.229		5,230	5000	4.7	20.0
2,4-Dinitrotoluene	Lin1		0.3775		4,770	5000	-4.7	30.0
Dibenzofuran	Ave	1.528	1.572		5,150	5000	2.9	30.0
2,3,4,6-Tetrachlorophenol	Lin1		0.2510		4,830	5000	-3.4	30.0
Diethyl phthalate	Ave	1.263	1.320		5,220	5000	4.5	30.0
4-Chlorophenyl phenyl ether	Ave	0.5664	0.5786		5,110	5000	2.2	30.0
2-Nitroaniline	Lin1		0.3462		4,910	5000	-1.9	30.0
Fluorene	Ave	1.285	1.372		5,340	5000	6.8	30.0
4,6-Dinitro-2-methylphenol	Lin		0.0990		4,970	5000	-0.7	30.0
Diphenylamine	Ave	0.6519	0.6794		5,210	5000	4.2	30.0
N-Nitrosodiphenylamine	Ave	0.6519	0.6794		5,210	5000	4.2	20.0
1,2-Diphenylhydrazine	Ave	1.190	1.279		5,370	5000	7.5	30.0
Azobenzene	Ave	1.190	1.279		5,370	5000	7.5	30.0
Benzophenone	Ave	0.7148	0.7700		5,390	5000	7.7	30.0
4-Bromophenyl phenyl ether	Ave	0.1833	0.1843		5,030	5000	0.5	30.0
Atrazine	Lin1		0.2170		4,990	5000	-0.1	30.0
Hexachlorobenzene	Ave	0.1770	0.1767		4,990	5000	-0.2	30.0
Pentachlorophenol	Lin		0.0875		4,830	5000	-3.5	20.0
Pentachloronitrobenzene	Lin1		0.0817		4,700	5000	-6.0	30.0
Phenanthrene	Ave	1.036	1.050		5,070	5000	1.4	30.0
Anthracene	Ave	0.9691	1.042		5,380	5000	7.5	30.0
Carbazole	Ave	0.8190	0.8898		5,430	5000	8.6	30.0
Di-n-butyl phthalate	Ave	1.221	1.233		5,050	5000	1.0	30.0
Fluoranthene	Ave	0.8954	0.9516		5,310	5000	6.3	20.0
Benzidine	Qua		0.2435		6,500	5000	29.9	30.0
Pyrene	Ave	1.624	1.507		4,640	5000	-7.2	30.0
Butyl benzyl phthalate	Ave	0.6741	0.7119		5,280	5000	5.6	30.0
Bis(2-ethylhexyl) phthalate	Lin1		0.9378		4,850	5000	-2.9	30.0
3,3'-Dichlorobenzidine	Lin1		0.3046		5,070	5000	1.4	30.0
Benzo[a]anthracene	Ave	0.8840	0.9251		5,230	5000	4.6	30.0
Chrysene	Ave	0.8662	0.8624		4,980	5000	-0.4	30.0
Di-n-octyl phthalate	Lin1		2.149		4,460	5000	-10.9	20.0
Benzo[b]fluoranthene	Ave	1.232	1.205		4,890	5000	-2.2	30.0
Benzo[k]fluoranthene	Ave	1.130	1.111		4,920	5000	-1.7	30.0

Non tgt

non tgt

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Westfield Job No.: 360-24417-1

SDG No.: OCRI-10

Instrument ID: Inst. B Start Date: 09/21/2009 22:07

Analysis Batch Number: 49266 End Date: 09/22/2009 09:59

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 360-49266/15		09/21/2009 22:07	1	B10452.D	Rtx-5ms SIL with guard column 0.25(um)
CCV 360-49266/16 CCVIS		09/21/2009 22:38	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/21/2009 23:09	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/21/2009 23:40	100		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/22/2009 00:11	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/22/2009 00:42	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/22/2009 01:13	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/22/2009 01:44	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/22/2009 02:15	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/22/2009 02:46	10		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/22/2009 03:17	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/22/2009 03:48	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/22/2009 04:19	10		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/22/2009 04:50	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/22/2009 05:21	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/22/2009 05:52	1		Rtx-5ms SIL with guard column 0.25(um)
360-24417-1	OC-SB-463-0.0/1.0-XXX	09/22/2009 06:23	1	B10466.D	Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/22/2009 06:54	1		Rtx-5ms SIL with guard column 0.25(um)
360-24417-3	OC-SB-463-6.0/8.0-XXX	09/22/2009 07:25	1	B10468.D	Rtx-5ms SIL with guard column 0.25(um)
360-24417-4	OC-SB-464-0.0/1.0-XXX	09/22/2009 07:56	1	B10469.D	Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/22/2009 08:27	1		Rtx-5ms SIL with guard column 0.25(um)
360-24417-6	OC-SB-464-5.0/7.0-XXX	09/22/2009 08:58	1	B10471.D	Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/22/2009 09:29	10		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/22/2009 09:59	1		Rtx-5ms SIL with guard column 0.25(um)

CCAL OK

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

March 3, 2010

Wolfgang D. Calicchio
Project Environmental Scientist
MACTEC Engineering and Consulting, Inc.
511 Congress Street
PO Box 7050
Portland, Maine 04112-7050
Salutation:

Mr. Calicchio,

Attached you will find the Continuing Calibration Verification information for Job # 360-24417-1, SDG OCRI-10, that was listed on page 1393 but mistakenly omitted from the original data package. The CCV in question was 360-49266/16 analyzed on 9/21/09 @22:38.

We apologize for this error and if you should need additional information please do not hesitate to contact Becky Mason or myself.

We appreciate your business and look forward to continuing our work with your company.

Sincerely,

Christine Furcinite-Reynolds

Christine Furcinite-Reynolds
QA Manager
TestAmerica Westfield

Chris.reynolds@testamericainc.com
413-572-4000 ext. 124

Report Date: 22-Sep-2009 11:04:42 Chrom Revision: 1.1 20-Sep-2009 21:03:36

TestAmerica Laboratories
Target Compound Quantitation Report

Data File:	\\wessvr06\chromdata\INSTB.i\20090922-1.b\B10453.D		
Lims ID:	ccv	Client ID:	
Inject. Date:	21-Sep-2009 22:38:30	Dil. Factor:	1.0000
Sample Type:	CCVIS, Cal Verification ISTD Check		
Sample ID:	ccv		
Operator:	MZ	Instrument ID:	Inst. B
Vol. Injected:	1.0000	ALS Bottle#:	16
Lims Batch ID:	49266	Lims Sample ID:	16
Sublist:	chrom-8270B*sub15		
Detector:	MS SCAN		
Method:	\\wessvr06\chromdata\INSTB.i\20090922-1.b\8270B.m		
Last Update:	22-Sep-2009 11:04:42	Calib Date:	21-Sep-2009 19:31:30
Quant Method:	Internal Standard	Quant By:	Initial Calibration
Last ICal File:	\\wessvr06\chromdata\INSTB.i\20090922-1.b\B10447.D		
Limit Group:	SMS - 8270LL SVOA Calibration		
Integrator:	RTE		
Process Host:	WES1001		
Reviewed By:	sullivanp	Date:	22-Sep-2009 11:04:42

WARNING: Sample Limit Group Activation Date Newer Than Method Date
Please re-read the Limit Groups into the Method
Sample Activation Date: 01-Jan-2049 00:00:00
Method Activation Date: 10-Dec-2008 14:06:04

Compound	Sig	RT	EXP RT	DLT RT	Response	Amount ug/mL	Flags
* 1 1,4-Dichlorobenzene-d4	150	7.903	7.900	0.003	638341	2.00	
* 2 Naphthalene-d8	136	9.034	9.030	0.004	1600370	2.00	
* 3 Acenaphthene-d10	164	10.534	10.535	-0.001	616436	2.00	
* 4 Phenanthrene-d10	188	11.803	11.800	0.003	1029860	2.00	
* 5 Chrysene-d12	240	15.400	15.397	0.003	673112	2.00	
* 6 Perylene-d12	264	17.838	17.840	-0.002	402663	2.00	
$ 7 2-Fluorophenol	112	6.634	6.630	0.004	845230	4.70	
$ 8 Phenol-d5	99	7.524	7.520	0.004	1032136	4.99	
$ 9 Nitrobenzene-d5	82	8.394	8.390	0.004	989335	4.82	
$ 10 2-Fluorobiphenyl	172	9.928	9.924	0.004	2041194	5.01	
$ 11 2,4,6-Tribromophenol	330	11.202	11.204	-0.002	174690	4.68	
$ 12 Terphenyl-d14	244	13.424	13.425	-0.001	1513263	4.72	
14 1,4-Dioxane	88	4.355	4.351	0.004	286046	5.90	
15 N-Nitrosodimethylamine	42	4.932	4.928	0.004	577330	4.64	
16 Pyridine	79	4.965	4.967	-0.002	745022	5.22	
17 Benzaldehyde	105	7.504	7.506	-0.002	569560	4.82	
18 Phenol	94	7.538	7.534	0.004	1045276	4.79	
19 Aniline	93	7.596	7.597	-0.001	1275404	4.83	
20 Bis(2-chloroethyl)ether	93	7.634	7.635	-0.001	832418	4.58	
21 2-Chlorophenol	128	7.711	7.708	0.003	897298	4.78	
22 1,4-Dichlorobenzene	146	7.855	7.852	0.003	1079875	4.56	
23 1,3-Dichlorobenzene	146	7.918	7.919	-0.001	1126066	4.54	
24 Benzyl alcohol	79	8.004	8.001	0.003	675775	5.09	
25 1,2-Dichlorobenzene	146	8.062	8.059	0.003	1033622	5.33	
26 2-Methylphenol	108	8.086	8.083	0.003	821481	4.92	
27 2,2'-oxybis[1-chloropropane]	45	8.115	8.116	-0.001	1480324	4.47	
28 3 & 4 Methylphenol	108	8.216	8.212	0.004	841054	4.81	

Report Date: 22-Sep-2009 11:04:42 Chrom Revision: 1.1 20-Sep-2009 21:03:36
Data File: \\wessvr06\chromdata\INSTB.i\20090922-1.b\B10453.D

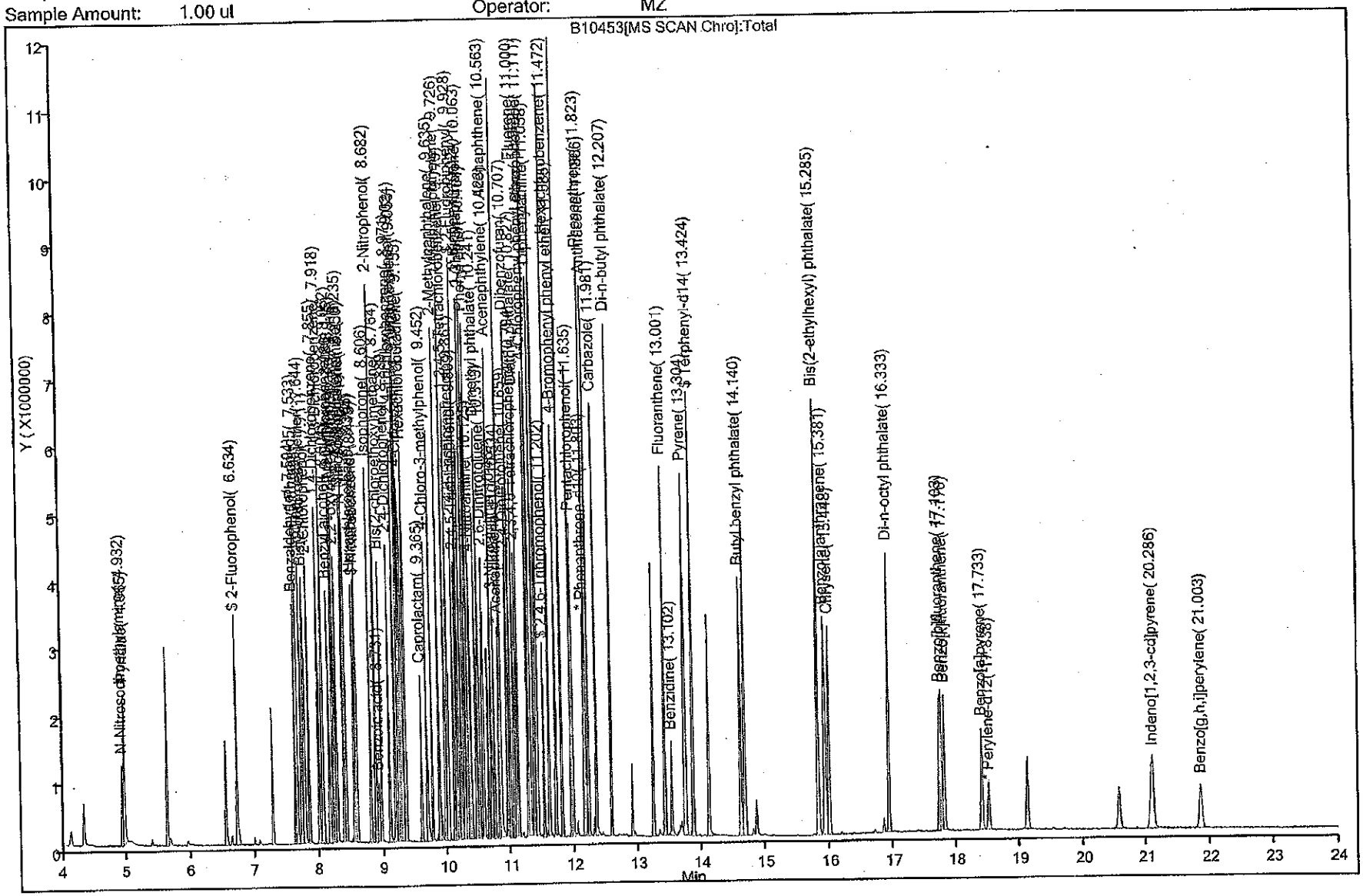
Compound	Sig	RT	EXP RT	DLT RT	Response	Amount ug/mL	Flags
29 N-Nitrosodi-n-propylamine	70	8.235	8.232	0.003	637198	5.14	
30 Acetophenone	105	8.250	8.246	0.004	1180753	4.78	
31 Hexachloroethane	117	8.365	8.366	-0.001	399180	4.81	
32 Nitrobenzene	77	8.413	8.410	0.003	966423	4.77	
33 Isophorone	82	8.606	8.607	-0.001	1651266	5.07	
35 2,4-Dimethylphenol	107	8.682	8.679	0.003	932210	4.96	
34 2-Nitrophenol	139	8.687	8.689	-0.002	529498	5.56	
36 Benzoic acid	105	8.731	8.713	0.018	236962	4.65	
37 Bis(2-chloroethoxy)methane	93	8.764	8.765	-0.001	941304	4.60	
38 2,4-Dichlorophenol	162	8.889	8.891	-0.002	738962	4.87	
39 1,2,4-Trichlorobenzene	180	8.971	8.972	-0.001	847244	5.09	
40 Alpha-Terpineol	59	9.019	9.020	-0.001	831636	4.98	
41 Naphthalene	128	9.053	9.049	0.004	2836364	5.58	
42 4-Chloroaniline	127	9.072	9.068	0.004	1186802	4.75	
43 Hexachlorobutadiene	225	9.135	9.136	-0.002	434580	4.56	
44 Caprolactam	55	9.365	9.352	0.013	391306	5.82	
45 4-Chloro-3-methylphenol	107	9.452	9.448	0.004	745476	5.26	
46 2-Methylnaphthalene	142	9.635	9.636	-0.001	1868201	4.60	
47 1-Methylnaphthalene	142	9.726	9.727	-0.001	1820688	4.59	
48 Hexachlorocyclopentadiene	237	9.764	9.766	-0.002	358559	4.86	
49 1,2,4,5-Tetrachlorobenzene	216	9.779	9.780	-0.001	732841	4.56	
50 2,4,6-Trichlorophenol	196	9.861	9.862	-0.001	487962	4.69	
51 2,4,5-Trichlorophenol	196	9.899	9.896	0.003	530741	4.86	
52 1,1'-Biphenyl	154	10.024	10.021	0.003	2184253	5.05	
53 2-Chloronaphthalene	162	10.063	10.059	0.004	1990628	4.94	
54 Phenyl ether	170	10.101	10.102	-0.001	1185756	4.59	
68 4-Nitroaniline	138	10.125	10.122	0.003	594056	4.94	
56 Dimethyl phthalate	163	10.241	10.237	0.004	1952775	5.11	
57 2,6-Dinitrotoluene	165	10.313	10.309	0.004	449734	5.30	
58 Acenaphthylene	152	10.423	10.420	0.003	2769110	5.38	
59 3-Nitroaniline	138	10.467	10.463	0.004	456475	4.91	
60 2,4-Dinitrophenol	184	10.553	10.550	0.003	146771	5.41	
61 Acenaphthene	153	10.563	10.564	-0.001	1894451	5.23	
62 4-Nitrophenol	109	10.563	10.559	0.004	267963	4.92	
63 2,4-Dinitrotoluene	165	10.659	10.655	0.004	581705	4.77	
64 Dibenzofuran	168	10.707	10.703	0.004	2423269	5.15	
65 2,3,4,6-Tetrachlorophenol	232	10.794	10.795	-0.001	386802	4.83	
66 Diethyl phthalate	149	10.827	10.824	0.003	2033953	5.22	
67 4-Chlorophenyl phenyl ether	204	10.967	10.963	0.004	891718	5.11	
55 2-Nitroaniline	65	10.986	10.982	0.004	533467	4.91	
69 Fluorene	166	11.000	10.997	0.003	2114679	5.34	
70 4,6-Dinitro-2-methylphenol	198	11.005	11.002	0.003	254863	4.97	
71 Diphenylamine	169	11.058	11.059	-0.001	1749116	5.21	
72 N-Nitrosodiphenylamine	169	11.058	11.059	-0.001	1749116	5.21	
74 Azobenzene	77	11.101	11.103	-0.002	3292418	5.37	
73 1,2-Diphenylhydrazine	77	11.101	11.103	-0.002	3292418	5.37	
13 Benzophenone	105	11.111	11.112	-0.001	1982345	5.39	
75 4-Bromophenyl phenyl ether	248	11.385	11.386	-0.001	474457	5.03	
77 Atrazine	200	11.472	11.468	0.004	558736	4.99	
76 Hexachlorobenzene	284	11.472	11.473	-0.001	454876	4.99	
78 Pentachlorophenol	266	11.625	11.629	-0.004	225309	4.83	
79 Pentachloronitrobenzene	237	11.635	11.636	-0.001	210331	4.70	

Report Date: 22-Sep-2009 11:04:42 Chrom Revision: 1.1 20-Sep-2009 21:03:36
Data File: \\wessvr06\chromdata\INSTB.i\20090922-1.b\B10453.D

Compound	Sig	RT	EXP RT	DLT RT	Response	Amount ug/mL	Flags
80 Phenanthrene	178	11.823	11.824	-0.001	2702555	5.07	
81 Anthracene	178	11.866	11.867	-0.001	2682422	5.38	
83 Carbazole	167	11.981	11.983	-0.002	2291008	5.43	
84 Di-n-butyl phthalate	149	12.207	12.204	0.003	3173960	5.05	
87 Fluoranthene	202	13.001	13.002	-0.001	2450078	5.31	
86 Benzidine	184	13.102	13.115	-0.013	626950	6.50	
85 Pyrene	202	13.304	13.305	-0.001	2535767	4.64	
89 Butyl benzyl phthalate	149	14.140	14.142	-0.002	1198008	5.28	
92 Bis(2-ethylhexyl) phthalate	149	15.285	15.281	0.004	1578088	4.85	
91 3,3'-Dichlorobenzidine	252	15.290	15.286	0.004	512580	5.07	
93 Benzo[a]anthracene	228	15.381	15.378	0.003	1556723	5.23	
94 Chrysene	228	15.448	15.445	0.003	1451204	4.98	
95 Di-n-octyl phthalate	149	16.333	16.335	-0.002	2163369	4.46	
97 Benzo[b]fluoranthene	252	17.122	17.123	-0.001	1213382	4.89	
98 Benzo[k]fluoranthene	252	17.170	17.166	0.004	1118646	4.92	
99 Benzo[a]pyrene	252	17.733	17.734	-0.001	917424	5.42	
100 Indeno[1,2,3-cd]pyrene	276	20.272	20.268	0.004	725165	5.34	
101 Dibenz(a,h)anthracene	278	20.296	20.302	-0.006	612189	5.48	
102 Benzo[g,h,i]perylene	276	21.003	20.999	0.004	597534	5.09	

Report Date: 22-Sep-2009 11:04:43
Chrom Revision: 1.1 20-Sep-2009 21:03:36

Data File: \\wessvr06\chromdata\INSTB.i\20090922-1.b\B10453.D
Inj Date: 21-Sep-2009 22:38:30
Limit Group: SMS - 8270LL SVOA Calibration
Lims Batch ID: 49266
Lims Sample ID: 16
Client ID:
Instrument: Inst. B
Sample Info: ccv
Sample Amount: 1.00 ul
Operator: MZ



FORM IV
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Westfield Job No.: 360-24417-2

SDG No.: OCRI-10A

Lab File ID: B10449.D Lab Sample ID: MB 360-48854/1-A

Matrix: Solid Date Extracted: 09/11/2009 11:42

Instrument ID: Inst. B Date Analyzed: 09/21/2009 20:33

Level: (Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 360-48854/2-A	B10450.D	09/21/2009 21:05
	LCSD 360-48854/3-A	B10451.D	09/21/2009 21:36
OC-SB-463-28/30-XXX	360-24417-2	B10467.D	09/22/2009 06:54
OC-SB-464-26/28-XXX	360-24417-5	B10470.D	09/22/2009 08:27
OC-SB-468-31/33-XXX	360-24417-12	B10473.D	09/22/2009 09:59

LCS
anilne 27/26

Surr OK
Time OK
3S OK
ICAL OK

MB
benzoic acid 70.4 352 5X
TIC ank 7.06
vanillin
benzothiazole, 2-(methylthio)-
octadecane
eicosane
heptadecane, 2,6,10,15-tetramethyl-
heptacosane
squalene

ICAL
benzoic acid 0.9990
2-nitroaniline 0.0468

CCAL
2-nitroaniline 0.0454

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24417-2

SDG No.: OCRI-10A

Matrix: Solid Level: Low Lab File ID: B10450.D

Lab ID: LCS 360-48854/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
1,1'-Biphenyl	333	263	79	40-140	
1,2,4,5-Tetrachlorobenzene	333	218	65	40-140	
1,2,4-Trichlorobenzene	333	222	67	40-140	
1,2-Dichlorobenzene	333	230	69	40-140	
1,3-Dichlorobenzene	333	190	57	40-140	
1,4-Dichlorobenzene	333	190	57	40-140	
1-Methylnaphthalene	333	218	65	40-140	
2,2'-oxybis[1-chloropropane]	333	208	63	40-140	
2,3,4,6-Tetrachlorophenol	333	228	68	40-140	
2,4,5-Trichlorophenol	333	264	79	30-130	
2,4,6-Trichlorophenol	333	250	75	30-130	
2,4-Dichlorophenol	333	240	72	30-130	
2,4-Dimethylphenol	333	241	72	30-130	
2,4-Dinitrophenol	333	192	58	30-130	
2,4-Dinitrotoluene	333	246	74	40-140	
2,6-Dinitrotoluene	333	268	81	40-140	
2-Chloronaphthalene	333	199	60	40-140	
2-Chlorophenol	333	223	67	30-130	
2-Methylnaphthalene	333	209	63	40-140	
2-Methylphenol	333	240	72	30-130	
2-Nitroaniline	333	268	80	40-140	
2-Nitrophenol	333	250	75	30-130	
3 & 4 Methylphenol	333	249	75	30-130	
3,3'-Dichlorobenzidine	333	242	73	40-140	
3-Nitroaniline	333	247	74	40-140	
4,6-Dinitro-2-methylphenol	333	232	70	30-130	
4-Bromophenyl phenyl ether	333	263	79	40-140	
4-Chloro-3-methylphenol	333	274	82	30-130	
4-Chloroaniline	333	171	51	40-140	
4-Chlorophenyl phenyl ether	333	262	79	40-140	
4-Nitroaniline	333	263	79	40-140	
4-Nitrophenol	333	281	84	30-130	
Acenaphthene	333	294	88	40-140	
Acenaphthylene	333	251	75	40-140	
Acetophenone	333	228	69	40-140	
Aniline	333	91.1	27	40-140	*
Anthracene	333	310	93	40-140	
Atrazine	333	282	85	40-140	
Azobenzene	333	264	79	40-140	
Benzaldehyde	333	248	75	40-140	
Benzo[a]anthracene	333	314	94	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

aniline 27/36

FORM III 8270C LL

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24417-2

SDG No.: OCRI-10A

Matrix: Solid Level: Low Lab File ID: B10451.D

Lab ID: LCSD 360-48854/3-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCSD CONCENTRATION (ug/Kg)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1'-Biphenyl	333	249	75	5	30	40-140	
1,2,4,5-Tetrachlorobenzene	333	208	63	5	30	40-140	
1,2,4-Trichlorobenzene	333	208	63	6	30	40-140	
1,2-Dichlorobenzene	333	212	64	8	30	40-140	
1,3-Dichlorobenzene	333	177	53	7	30	40-140	
1,4-Dichlorobenzene	333	176	53	8	30	40-140	
1-Methylnaphthalene	333	205	62	6	30	40-140	
2,2'-oxybis[1-chloropropane]	333	195	58	7	30	40-140	
2,3,4,6-Tetrachlorophenol	333	221	66	3	30	40-140	
2,4,5-Trichlorophenol	333	255	76	3	30	30-130	
2,4,6-Trichlorophenol	333	241	72	4	30	30-130	
2,4-Dichlorophenol	333	231	69	4	30	30-130	
2,4-Dimethylphenol	333	235	70	2	30	30-130	
2,4-Dinitrophenol	333	199	60	4	30	30-130	
2,4-Dinitrotoluene	333	238	71	3	30	40-140	
2,6-Dinitrotoluene	333	262	79	2	30	40-140	
2-Chloronaphthalene	333	194	58	3	30	40-140	
2-Chlorophenol	333	214	64	4	30	30-130	
2-Methylnaphthalene	333	200	60	5	30	40-140	
2-Methylphenol	333	224	67	7	30	30-130	
2-Nitroaniline	333	252	76	6	30	40-140	
2-Nitrophenol	333	241	72	4	30	30-130	
3 & 4 Methylphenol	333	237	71	5	30	30-130	
3,3'-Dichlorobenzidine	333	236	71	3	30	40-140	
3-Nitroaniline	333	240	72	3	30	40-140	
4,6-Dinitro-2-methylphenol	333	225	67	3	30	30-130	
4-Bromophenyl phenyl ether	333	250	75	5	30	40-140	
4-Chloro-3-methylphenol	333	268	80	2	30	30-130	
4-Chloroaniline	333	170	51	1	30	40-140	
4-Chlorophenyl phenyl ether	333	253	76	4	30	40-140	
4-Nitroaniline	333	254	76	3	30	40-140	
4-Nitrophenol	333	277	83	2	30	30-130	
Acenaphthene	333	281	84	4	30	40-140	
Acenaphthylene	333	243	73	3	30	40-140	
Acetophenone	333	221	66	3	30	40-140	
Aniline	333	88.2	26	3	30	40-140	*
Anthracene	333	294	88	5	30	40-140	
Atrazine	333	271	81	4	30	40-140	
Azobenzene	333	249	75	6	30	40-140	
Benzaldehyde	333	234	70	6	30	40-140	
Benzo[a]anthracene	333	301	90	4	30	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM IV
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Westfield Job No.: 360-24417-2

SDG No.: OCRI-10A

Lab File ID: J03050.D Lab Sample ID: MB 360-48924/1-A

Matrix: Solid Date Extracted: 09/14/2009 13:00

Instrument ID: Inst. J Date Analyzed: 09/21/2009 19:53

Level: (Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 360-48924/2-A	J03051.D	09/21/2009 20:20
	LCSD 360-48924/3-A	J03052.D	09/21/2009 20:47
OC-SB-465-16/18-XXX	360-24417-8	J03059.D	09/21/2009 23:57
OC-SB-471-26/28-XXX	360-24417-16	J03064.D	09/22/2009 02:12

LCS
Fluorene 31/33

Surr OK
Tune OK
IS OK

MB 48924

bis(2-ethylhexyl) phthalate 19.4 194 10x
di-n-butyl phthalate 822 822 10x

TR
vanillin
dodecanoic acid, methyl ester
hexadecane
eicosane
octadecane

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24417-2

SDG No.: OCRI-10A

Matrix: Solid Level: Low Lab File ID: J03051.D

Lab ID: LCS 360-48924/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
1,1'-Biphenyl	333	293	88	40-140	
1,2,4,5-Tetrachlorobenzene	333	277	83	40-140	
1,2,4-Trichlorobenzene	333	245	73	40-140	
1,2-Dichlorobenzene	333	202	60	40-140	
1,3-Dichlorobenzene	333	199	60	40-140	
1,4-Dichlorobenzene	333	201	60	40-140	
1-Methylnaphthalene	333	272	82	40-140	
2,2'-oxybis[1-chloropropane]	333	222	67	40-140	
2,3,4,6-Tetrachlorophenol	333	270	81	40-140	
2,4,5-Trichlorophenol	333	311	93	30-130	
2,4,6-Trichlorophenol	333	306	92	30-130	
2,4-Dichlorophenol	333	292	88	30-130	
2,4-Dimethylphenol	333	312	94	30-130	
2,4-Dinitrophenol	333	226	68	30-130	
2,4-Dinitrotoluene	333	292	87	40-140	
2,6-Dinitrotoluene	333	311	93	40-140	
2-Chloronaphthalene	333	206	62	40-140	
2-Chlorophenol	333	234	70	30-130	
2-Methylnaphthalene	333	269	81	40-140	
2-Methylphenol	333	254	76	30-130	
2-Nitroaniline	333	291	87	40-140	
2-Nitrophenol	333	276	83	30-130	
3 & 4 Methylphenol	333	267	80	30-130	
3,3'-Dichlorobenzidine	333	329	99	40-140	
3-Nitroaniline	333	336	101	40-140	
4,6-Dinitro-2-methylphenol	333	270	81	30-130	
4-Bromophenyl phenyl ether	333	297	89	40-140	
4-Chloro-3-methylphenol	333	306	92	30-130	
4-Chloroaniline	333	262	79	40-140	
4-Chlorophenyl phenyl ether	333	290	87	40-140	
4-Nitroaniline	333	313	94	40-140	
4-Nitrophenol	333	314	94	30-130	
Acenaphthene	333	317	95	40-140	
Acenaphthylene	333	290	87	40-140	
Acetophenone	333	254	76	40-140	
Aniline	333	103	31	40-140	*
Anthracene	333	367	110	40-140	
Atrazine	333	343	103	40-140	
Azobenzene	333	312	93	40-140	
Benzaldehyde	333	254	76	40-140	
Benzo[a]anthracene	333	363	109	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24417-2

SDG No.: OCRI-10A

Matrix: Solid Level: Low Lab File ID: J03052.D

Lab ID: LCSD 360-48924/3-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCSD CONCENTRATION (ug/Kg)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1'-Biphenyl	333	312	94	7	30	40-140	
1,2,4,5-Tetrachlorobenzene	333	301	90	8	30	40-140	
1,2,4-Trichlorobenzene	333	271	81	10	30	40-140	
1,2-Dichlorobenzene	333	212	64	5	30	40-140	
1,3-Dichlorobenzene	333	212	64	7	30	40-140	
1,4-Dichlorobenzene	333	214	64	6	30	40-140	
1-Methylnaphthalene	333	304	91	11	30	40-140	
2,2'-oxybis[1-chloropropane]	333	235	70	5	30	40-140	
2,3,4,6-Tetrachlorophenol	333	294	88	9	30	40-140	
2,4,5-Trichlorophenol	333	335	100	7	30	30-130	
2,4,6-Trichlorophenol	333	324	97	6	30	30-130	
2,4-Dichlorophenol	333	321	96	9	30	30-130	
2,4-Dimethylphenol	333	343	103	9	30	30-130	
2,4-Dinitrophenol	333	260	78	14	30	30-130	
2,4-Dinitrotoluene	333	304	91	4	30	40-140	
2,6-Dinitrotoluene	333	326	98	5	30	40-140	
2-Chloronaphthalene	333	216	65	5	30	40-140	
2-Chlorophenol	333	246	74	5	30	30-130	
2-Methylnaphthalene	333	289	87	7	30	40-140	
2-Methylphenol	333	268	80	5	30	30-130	
2-Nitroaniline	333	283	85	3	30	40-140	
2-Nitrophenol	333	304	91	10	30	30-130	
3 & 4 Methylphenol	333	280	84	5	30	30-130	
3,3'-Dichlorobenzidine	333	373	112	13	30	40-140	
3-Nitroaniline	333	365	110	8	30	40-140	
4,6-Dinitro-2-methylphenol	333	299	90	11	30	30-130	
4-Bromophenyl phenyl ether	333	317	95	6	30	40-140	
4-Chloro-3-methylphenol	333	334	100	9	30	30-130	
4-Chloroaniline	333	292	88	11	30	40-140	
4-Chlorophenyl phenyl ether	333	310	93	7	30	40-140	
4-Nitroaniline	333	327	98	4	30	40-140	
4-Nitrophenol	333	343	103	9	30	30-130	
Acenaphthene	333	339	102	7	30	40-140	
Acenaphthylene	333	309	93	6	30	40-140	
Acetophenone	333	271	81	6	30	40-140	
Aniline	333	109	33	6	30	40-140	*
Anthracene	333	401	120	9	30	40-140	
Atrazine	333	371	111	8	30	40-140	
Azobenzene	333	332	99	6	30	40-140	
Benzaldehyde	333	271	81	6	30	40-140	
Benzo[a]anthracene	333	406	122	11	30	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Westfield | Job No.: 360-24417-2

SDG No.: OCRI-10A

Client Sample ID: | Lab Sample ID: MB 360-48924/1-A

Matrix: Solid | Lab File ID: J03050.D

Analysis Method: 8270C LL | Date Collected:

Extract. Method: 3546 | Date Extracted: 09/14/2009 13:00

Sample wt/vol: 30.00(g) | Date Analyzed: 09/21/2009 19:53

Con. Extract Vol.: 1.0(mL) | Dilution Factor: 1

Injection Volume: 1.0(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup: (Y/N) N

Analysis Batch No.: 49259 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
98-86-2	Acetophenone	ND		33	10
62-53-3	Aniline	ND		33	10
120-12-7	Anthracene	ND		33	10
1912-24-9	Atrazine	ND		33	10
103-33-3	Azobenzene	ND		33	10
100-52-7	Benzaldehyde	ND		33	10
56-55-3	Benzo[a]anthracene	ND		33	10
50-32-8	Benzo[a]pyrene	ND		33	10
205-99-2	Benzo[b]fluoranthene	ND		33	10
191-24-2	Benzo[g,h,i]perylene	ND		33	10
207-08-9	Benzo[k]fluoranthene	ND		33	10
65-85-0	Benzoic acid	ND		170	15
119-61-9	Benzophenone	ND		33	10
100-51-6	Benzyl alcohol	ND		67	28
111-91-1	Bis(2-chloroethoxy)methane	ND		33	10
111-44-4	Bis(2-chloroethyl)ether	ND		33	10
117-81-7	Bis(2-ethylhexyl) phthalate	19.4	J	33	10
85-68-7	Butyl benzyl phthalate	ND		33	10
105-60-2	Caprolactam	ND		33	10
86-74-8	Carbazole	ND		33	10
218-01-9	Chrysene	ND		33	10
53-70-3	Dibenz(a,h)anthracene	ND		33	10
132-64-9	Dibenzofuran	ND		33	10
84-66-2	Diethyl phthalate	ND		33	10
131-11-3	Dimethyl phthalate	ND		33	10
84-74-2	Di-n-butyl phthalate	82.2		33	29
117-84-0	Di-n-octyl phthalate	ND		33	17
101-84-8	Diphenyl oxide	ND		33	10
206-44-0	Fluoranthene	ND		33	10
86-73-7	Fluorene	ND		33	10
118-74-1	Hexachlorobenzene	ND		33	10
87-68-3	Hexachlorobutadiene	ND		33	10
77-47-4	Hexachlorocyclopentadiene	ND		67	10
67-72-1	Hexachloroethane	ND		33	10

Coversheet ✓

SEMIVOLATILE ORGANICS

REGION I VALIDATION CHECKLIST for OLIN CHEMICAL SUPERFUND SITE
Criteria and Qualifications: REGION I Organics Guideline (1996)

TIER I / (II) / III (circle one)

SITE: Olin Chemical Superfund Site Project #: 6/07/000/6/12 SDG #: OCRI-11/11A

LAB #: _TAL-Westfield___

Sample IDs: Attach tracking sheet and/or sample listing.

This checklist is designed to be used with USEPA Region I Validation Guidelines Part II (12/1996). During Level III validation, calculation and transcription checks are completed for instrument tuning, surrogates, target compounds, spike recoveries, calibration data, and internal standards as specified in the guideline. These checks are documented on attached validation notes.

YES NO NA	
Data completeness ☑ ☐ ☐ All data summaries, QC forms and raw data available from hard copy or electronic data package ☑ ☐ ☐ Data summaries match EDD	Contact lab if missing data. Lab to respond with 24 hours.
Holding Times and Preservation ☑ ☐ ☐ Hold times met (Waters – Extract within 7 days, analyze within 40 days. Soils – extract within 14 days, analyze within 40 days)	
Instrument Performance Check (Tune) ☑ ☐ ☐ Tune available for each 12-hour period samples were analyzed ☑ ☐ ☐ Appropriate number of significant figures reported (at least 2) ☑ ☐ ☐ Mass/Charge list (m/z) criteria met	
Initial Calibration ☐ ☒ ☐ %RSD less than or equal to 30% ☐ ☒ ☐ RRF greater than or equal to 0.05	See below.
Continuing Calibration ☑ ☐ ☐ %D less than or equal to 25% ☐ ☒ ☐ RRF greater than or equal to 0.05.	See below.
Blank Contamination ☒ ☐ ☐ Method blank contamination ☒ ☐ ☐ Equipment/Rinseate blank contamination	Evaluate all blanks for contamination. Highest contaminant level used for action level. See below.
Surrogate Recoveries	

SEMIVOLATILE ORGANICS

REGION I VALIDATION CHECKLIST for
OLIN CHEMICAL SUPERFUND SITE
Criteria and Qualifications: REGION I Organics Guideline (1996)

TIER I / (II) / III (circle one)

☐	☒	☐	Surrogates percent recovery criteria met: Soil = (base/neutral 30%-130%, acid 30%-130%) Water = (base/neutral 30%-130%, acid 15%-110%)	See below.
Matrix Spikes and Laboratory Control Samples				
☐	☒	☐	MS/MSD percent recovery criteria met Soil and Water = (base/neutral 40%-140%, acid 30%-130%)	See below.
☐	☒	☐	MS/MSD RPD criteria met (soils <50%, water <30%)	
☐	☒	☐	LCS percent recovery criteria met soil/water (base 40%-140%, acid 30%-130%)	
Field Duplicates				
☑	☐	☐	RPD criteria met (soils <50%, water <30%)	
Internal Standard				
☐	☒	☐	Area counts within -50 to +100 percent of calib. std.	See below.
☑	☐	☐	Retention Time within 30 seconds of calib. std.	
Target Compounds				
☑	☐	☐	Reviewed narrative for anomalies	
Tentatively Identified Compounds (TICs)				
☐	☑	☐	TCL compounds reported as TICs	

Validator's Signature: _____

Date: 3/5/10

Reference:

MACTEC, Quality Assurance Project Plan for Remedial Investigation/Feasibility Study – Olin Chemical Superfund Site, Wilmington Property, 51 Eames Street, Wilmington, MA", MACTEC Engineering and Consulting. Draft .October 2008.

SAMPLE SUMMARY

Client: Olin Corporation

Job Number: 360-24444-1
Sdg Number: OCRI-11

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
360-24444-1	OC-SB-459-6.0/8.0-DUP	Solid	09/03/2009 1130	09/03/2009 1650
360-24444-2	OC-SB-459-6.0/8.0-XXX	Solid	09/03/2009 1130	09/03/2009 1650
360-24444-2MS	OC-SB-459-6.0/8.0-XMS	Solid	09/03/2009 1130	09/03/2009 1650
360-24444-2MSD	OC-SB-459-6.0/8.0-MSD	Solid	09/03/2009 1130	09/03/2009 1650
360-24444-3	OC-SB-462-0.0/1.0-XXX	Solid	09/03/2009 0900	09/03/2009 1650
360-24444-4	OC-SB-462-31/33-XXX	Solid	09/03/2009 1015	09/03/2009 1650
360-24444-5	OC-SB-462-4.0/6.0-XXX	Solid	09/03/2009 0910	09/03/2009 1650
360-24444-6	OC-SB-467-0.0/1.0-XXX	Solid	09/02/2009 1605	09/03/2009 1650
360-24444-7	OC-SB-467-30/32-XXX	Solid	09/02/2009 1730	09/03/2009 1650
360-24444-8	OC-SB-467-6.0/8.0-DUP	Solid	09/02/2009 1625	09/03/2009 1650
360-24444-9	OC-SB-467-6.0/8.0-XXX	Solid	09/02/2009 1625	09/03/2009 1650
360-24444-9MS	OC-SB-467-6.0/8.0-XMS	Solid	09/02/2009 1625	09/03/2009 1650
360-24444-9MSD	OC-SB-467-6.0/8.0-MSD	Solid	09/02/2009 1625	09/03/2009 1650
360-24444-10	OC-TBK-013	Solid	09/03/2009 1400	09/03/2009 1650
360-24444-11	OC-SB-459-26/28-XXX	Solid	09/03/2009 1225	09/03/2009 1650
360-24444-12	OC-SB-459-0.0/1.0-XXX	Solid	09/03/2009 1110	09/03/2009 1650
360-24444-13	OC-SB-459-26/28-XXX	Solid	09/03/2009 1225	09/03/2009 1650
360-24444-14	OC-SB-459-6.0/8.0-DUP	Solid	09/03/2009 1130	09/03/2009 1650
360-24444-15	OC-SB-459-6.0/8.0-XXX	Solid	09/03/2009 1130	09/03/2009 1650
360-24444-15MS	OC-SB-459-6.0/8.0-XMS	Solid	09/03/2009 1130	09/03/2009 1650
360-24444-16	OC-EBK-007	Water	09/03/2009 0800	09/03/2009 1650

Form I's updated
3/5/10

Client: Olin Corporation

Job Number: 360-24444-1
Sdg Number: OCRI-11

Client Sample ID: OC-SB-459-6.0/8.0-DUP

Lab Sample ID: 360-24444-1
Client Matrix: Solid

% Moisture: 12.8

Date Sampled: 09/03/2009 1130
Date Received: 09/03/2009 1650

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49397		Instrument ID:	Inst. J
Preparation:	3550B	Prep Batch: 360-48958		Lab File ID:	J03113.D
Dilution:	10			Initial Weight/Volume:	100.09 g
Date Analyzed:	09/24/2009 0516			Final Weight/Volume:	1.0 mL
Date Prepared:	09/15/2009 1206			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodimethylamine		ND 5		13	57

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	0	X	30 - 130
2-Fluorobiphenyl	35		30 - 130
2-Fluorophenol	31		30 - 130
Nitrobenzene-d5	34		30 - 130
Phenol-d5	36		30 - 130
Terphenyl-d14	0	X	30 - 130

3/4/10

Client: Olin Corporation

Job Number: 360-24444-1
Sdg Number: OCRI-11

Client Sample ID: **OC-SB-459-6.0/8.0-DUP**

Lab Sample ID: 360-24444-1
Client Matrix: Solid
% Moisture: 12.8

Date Sampled: 09/03/2009 1130
Date Received: 09/03/2009 1650

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49260		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48924		Lab File ID:	J03065.D
Dilution:	10			Initial Weight/Volume:	30.21 g
Date Analyzed:	09/22/2009 0239			Final Weight/Volume:	1.0 mL
Date Prepared:	09/14/2009 1300			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		110	380
1,2,4,5-Tetrachlorobenzene		ND		110	380
1,2,4-Trichlorobenzene		ND		110	380
1,2-Dichlorobenzene		ND		110	380
1,3-Dichlorobenzene		ND		110	380
1,4-Dichlorobenzene		ND		110	380
1-Methylnaphthalene		ND		110	380
2,2'-oxybis[1-chloropropane]		ND		110	380
2,3,4,6-Tetrachlorophenol		ND		110	380
2,4,5-Trichlorophenol		ND		110	380
2,4,6-Trichlorophenol		ND		110	380
2,4-Dichlorophenol		ND		110	380
2,4-Dimethylphenol		ND		150	380
2,4-Dinitrophenol		ND		110	380
2,4-Dinitrotoluene		ND		110	380
2,6-Dinitrotoluene		ND		110	380
2-Chloronaphthalene		ND		110	380
2-Chlorophenol		ND		110	380
2-Methylnaphthalene		ND		110	380
2-Methylphenol		ND		230	380
2-Nitroaniline		~~ND~~ R		110	1900
2-Nitrophenol		ND		110	380
3 & 4 Methylphenol		ND		110	380
3,3'-Dichlorobenzidine		~~ND~~ J R		110	760
3-Nitroaniline		ND		110	1900
4,6-Dinitro-2-methylphenol		ND		110	1900
4-Bromophenyl phenyl ether		ND		110	380
4-Chloro-3-methylphenol		ND		110	760
4-Chloroaniline		ND		110	760
4-Chlorophenyl phenyl ether		ND		110	380
4-Nitroaniline		ND		110	1900
4-Nitrophenol		ND		110	1900
Acenaphthene		ND		110	380
Acenaphthylene		ND		110	380
Acetophenone		ND		110	380
Aniline		ND J	✓	110	380
Anthracene		ND		110	380
Atrazine		~~ND~~ R		110	380
Azobenzene		ND		110	380
Benzaldehyde		ND		110	380
Benzo[a]anthracene		ND J		110	380
Benzo[a]pyrene		ND		110	380
Benzo[b]fluoranthene		~~ND~~ R		110	380
Benzo[g,h,i]perylene		ND		110	380
Benzo[k]fluoranthene		~~ND~~ R		110	380
Benzoic acid		ND J		170	1900

3/4/10

Client: Olin Corporation

Job Number: 360-24444-1
Sdg Number: OCRI-11

Client Sample ID: OC-SB-459-6.0/8.0-DUP

Lab Sample ID: 360-24444-1
Client Matrix: Solid % Moisture: 12.8

Date Sampled: 09/03/2009 1130
Date Received: 09/03/2009 1650

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49260		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48924		Lab File ID:	J03065.D
Dilution:	10			Initial Weight/Volume:	30.21 g
Date Analyzed:	09/22/2009 0239			Final Weight/Volume:	1.0 mL
Date Prepared:	09/14/2009 1300			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		110	380
Benzyl alcohol		ND		320	760
Bis(2-chloroethoxy)methane		ND		110	380
Bis(2-chloroethyl)ether		ND		110	380
Butyl benzyl phthalate		ND	J	110	380
Caprolactam		ND		110	380
Carbazole		ND		110	380
Chrysene		ND	J	110	380
Dibenz(a,h)anthracene		ND		110	380
Dibenzofuran		ND		110	380
Diethyl phthalate		ND		110	380
Dimethyl phthalate		ND		110	380
Di-n-butyl phthalate		ND		330	380
Di-n-octyl phthalate		ND		190	380
Diphenyl oxide		ND		110	380
Fluoranthene		ND		110	380
Fluorene		ND		110	380
Hexachlorobenzene		ND		110	380
Hexachlorobutadiene		ND		110	380
Hexachlorocyclopentadiene		~~ND~~	R	110	760
Hexachloroethane		ND		110	380
Indeno[1,2,3-cd]pyrene		ND		110	380
Isophorone		ND		110	380
Naphthalene		ND		110	910
Nitrobenzene		ND		110	380
~~N-Nitrosodimethylamine~~		ND		130	380
N-Nitrosodi-n-propylamine		ND		110	380
N-Nitrosodiphenylamine		~~190~~ 380 u		110	380
Pentachlorophenol		ND		110	380
Phenanthrene		ND		110	460
Phenol		ND		110	380
Pyrene		ND	J	110	380

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	90		30 - 130
2-Fluorophenol	115		30 - 130
2-Fluorobiphenyl	72		30 - 130
Nitrobenzene-d5	77		30 - 130
Phenol-d5	69		30 - 130
Terphenyl-d14	84		30 - 130

3/4/10

Client: Olin Corporation

Job Number: 360-24444-1
Sdg Number: OCRI-11

Client Sample ID: **OC-SB-459-6.0/8.0-DUP**

Lab Sample ID: 360-24444-1
Client Matrix: Solid % Moisture: 12.8

Date Sampled: 09/03/2009 1130
Date Received: 09/03/2009 1650

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49260		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48924		Lab File ID:	J03065.D
Dilution:	10			Initial Weight/Volume:	30.21 g
Date Analyzed:	09/22/2009 0239			Final Weight/Volume:	1.0 mL
Date Prepared:	09/14/2009 1300			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** **2**

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
123-48-8	3-Heptene, 2,2,4,6,6-pentamethyl-	6.24	2500	T J N
140-66-9	Phenol, 4-(1,1,3,3-tetramethylbutyl)-	10.39	4700	T J N

Client: Olin Corporation

Job Number: 360-24444-1
Sdg Number: OCRI-11

Client Sample ID: **OC-SB-459-6.0/8.0-DUP**

Lab Sample ID: 360-24444-1
Client Matrix: Solid
% Moisture: 12.8

Date Sampled: 09/03/2009 1130
Date Received: 09/03/2009 1650

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49623		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48924		Lab File ID:	B10618.D
Dilution:	10			Initial Weight/Volume:	30.21 g
Date Analyzed:	09/29/2009 0212	Run Type:	DL2	Final Weight/Volume:	1.0 mL
Date Prepared:	09/14/2009 1300			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Diphenylamine		120	J	110	380

Client: Olin Corporation

Job Number: 360-24444-1
Sdg Number: OCRI-11

Client Sample ID: **OC-SB-459-6.0/8.0-DUP**

Lab Sample ID: 360-24444-1
Client Matrix: Solid
% Moisture: 12.8

Date Sampled: 09/03/2009 1130
Date Received: 09/03/2009 1650

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49623		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48924		Lab File ID:	B10618.D
Dilution:	10			Initial Weight/Volume:	30.21 g
Date Analyzed:	09/29/2009 0212	Run Type:	DL2	Final Weight/Volume:	1.0 mL
Date Prepared:	09/14/2009 1300			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** **0**

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Tentatively Identified Compound		None	

Client: Olin Corporation

Job Number: 360-24444-1
Sdg Number: OCRI-11

Client Sample ID: **OC-SB-459-6.0/8.0-DUP**

Lab Sample ID: 360-24444-1
Client Matrix: Solid
% Moisture: 12.8

Date Sampled: 09/03/2009 1130
Date Received: 09/03/2009 1650

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49639		Instrument ID:	NOEQUIP
Preparation:	3546	Prep Batch: 360-48924		Lab File ID:	N/A
Dilution:	10			Initial Weight/Volume:	30.21 g
Date Analyzed:	09/29/2009 0212	Run Type: DL3		Final Weight/Volume:	1.0 mL
Date Prepared:	09/14/2009 1300			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodiphenylamine		ND		110	380

Client: Olin Corporation

Job Number: 360-24444-1
Sdg Number: OCRI-11

Client Sample ID: **OC-SB-459-6.0/8.0-DUP**

Lab Sample ID: 360-24444-1
Client Matrix: Solid
% Moisture: 12.8

Date Sampled: 09/03/2009 1130
Date Received: 09/03/2009 1650

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49517		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48924		Lab File ID:	B10570.D
Dilution:	2000			Initial Weight/Volume:	30.21 g
Date Analyzed:	09/26/2009 0427	Run Type: DL		Final Weight/Volume:	1.0 mL
Date Prepared:	09/14/2009 1300			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Bis(2-ethylhexyl) phthalate		900000 EB		23000	76000

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	0	X D	30 - 130
2-Fluorophenol	0	X D	30 - 130
2-Fluorobiphenyl	0	X D	30 - 130
Nitrobenzene-d5	0	X D	30 - 130
Phenol-d5	0	X D	30 - 130
Terphenyl-d14	0	X D	30 - 130

3/4/10

Client: Olin Corporation

Job Number: 360-24444-1
Sdg Number: OCRI-11

Client Sample ID: **OC-SB-459-6.0/8.0-DUP**

Lab Sample ID: 360-24444-1
Client Matrix: Solid
% Moisture: 12.8

Date Sampled: 09/03/2009 1130
Date Received: 09/03/2009 1650

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49517		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48924		Lab File ID:	B10570.D
Dilution:	2000			Initial Weight/Volume:	30.21 g
Date Analyzed:	09/26/2009 0427	Run Type: DL		Final Weight/Volume:	1.0 mL
Date Prepared:	09/14/2009 1300			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 10

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Unknown	10.67	200000	T J
3910-35-8	1H-Indene, 2,3-dihydro-1,1,3-trimethyl-3	10.79	140000	T J N
638-67-5	Tricosane	13.72	200000	T J N
629-99-2	Pentacosane	14.37	240000	T J N
593-49-7	Heptacosane	15.13	270000	T J N
638-67-5	Tricosane	15.71	330000	T J N
629-99-2	Pentacosane	16.17	290000	T J N
26603-23-6	p,p"-Dioctyldiphenylamine	16.61	860000	T J N
629-94-7	Heneicosane	16.66	210000	T J N
630-6-8	Hexatriacontane	17.21	140000	T J N

Client: Olin Corporation

Job Number: 360-24444-1
Sdg Number: OCRI-11

Client Sample ID: **OC-SB-459-6.0/8.0-XXX**

Lab Sample ID: 360-24444-2
Client Matrix: Solid

% Moisture: 12.8

Date Sampled: 09/03/2009 1130
Date Received: 09/03/2009 1650

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49397		Instrument ID:	Inst. J
Preparation:	3550B	Prep Batch: 360-48958		Lab File ID:	J03114.D
Dilution:	10			Initial Weight/Volume:	100.26 g
Date Analyzed:	09/24/2009 0549			Final Weight/Volume:	1.0 mL
Date Prepared:	09/15/2009 1206			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodimethylamine		ND J		13	57

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	0	X	30 - 130
2-Fluorobiphenyl	32		30 - 130
2-Fluorophenol	26	X	30 - 130
Nitrobenzene-d5	30		30 - 130
Phenol-d5	30		30 - 130
Terphenyl-d14	0	X	30 - 130

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Client: Olin Corporation

Job Number: 360-24444-1
Sdg Number: OCRI-11

Client Sample ID: OC-SB-459-6.0/8.0-XXX

Lab Sample ID: 360-24444-2
Client Matrix: Solid
% Moisture: 12.8

Date Sampled: 09/03/2009 1130
Date Received: 09/03/2009 1650

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49260		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48924		Lab File ID:	J03066.D
Dilution:	10			Initial Weight/Volume:	30.15 g
Date Analyzed:	09/22/2009 0305			Final Weight/Volume:	1.0 mL
Date Prepared:	09/14/2009 1300			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		110	380
1,2,4,5-Tetrachlorobenzene		ND		110	380
1,2,4-Trichlorobenzene		ND		110	380
1,2-Dichlorobenzene		ND		110	380
1,3-Dichlorobenzene		ND		110	380
1,4-Dichlorobenzene		ND		110	380
1-Methylnaphthalene		ND		110	380
2,2'-oxybis[1-chloropropane]		ND		110	380
2,3,4,6-Tetrachlorophenol		ND		110	380
2,4,5-Trichlorophenol		ND		110	380
2,4,6-Trichlorophenol		ND		110	380
2,4-Dichlorophenol		ND		110	380
2,4-Dimethylphenol		ND		150	380
2,4-Dinitrophenol		ND		110	380
2,4-Dinitrotoluene		ND		110	380
2,6-Dinitrotoluene		ND		110	380
2-Chloronaphthalene		ND		110	380
2-Chlorophenol		ND		110	380
2-Methylnaphthalene		ND		110	380
2-Methylphenol		ND		230	380
2-Nitroaniline		~~ND~~	R	110	1900
2-Nitrophenol		ND		110	380
3 & 4 Methylphenol		ND		110	380
3,3'-Dichlorobenzidine		~~ND~~	R	110	760
3-Nitroaniline		ND		110	1900
4,6-Dinitro-2-methylphenol		ND		110	1900
4-Bromophenyl phenyl ether		ND		110	380
4-Chloro-3-methylphenol		ND		110	760
4-Chloroaniline		ND		110	760
4-Chlorophenyl phenyl ether		ND		110	380
4-Nitroaniline		ND		110	1900
4-Nitrophenol		ND		110	1900
Acenaphthene		ND		110	380
Acenaphthylene		ND		110	380
Acetophenone		ND		110	380
Aniline		ND	J	110	380
Anthracene		ND		110	380
Atrazine		~~ND~~	R	110	380
Azobenzene		ND		110	380
Benzaldehyde		ND		110	380
Benzo[a]anthracene		ND	J	110	380
Benzo[a]pyrene		ND		110	380
Benzo[b]fluoranthene		~~ND~~	R	110	380
Benzo[g,h,i]perylene		ND		110	380
Benzo[k]fluoranthene		~~ND~~	R	110	380
Benzoic acid		ND	J	170	1900

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Client: Olin Corporation

Job Number: 360-24444-1
Sdg Number: OCRI-11

Client Sample ID: **OC-SB-459-6.0/8.0-XXX**

Lab Sample ID: 360-24444-2
Client Matrix: Solid

% Moisture: 12.8

Date Sampled: 09/03/2009 1130
Date Received: 09/03/2009 1650

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49260		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48924		Lab File ID:	J03066.D
Dilution:	10			Initial Weight/Volume:	30.15 g
Date Analyzed:	09/22/2009 0305			Final Weight/Volume:	1.0 mL
Date Prepared:	09/14/2009 1300			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		110	380
Benzyl alcohol		ND		320	760
Bis(2-chloroethoxy)methane		ND		110	380
Bis(2-chloroethyl)ether		ND		110	380
Butyl benzyl phthalate		ND	J	110	380
Caprolactam		ND		110	380
Carbazole		ND		110	380
Chrysene		ND	J	110	380
Dibenz(a,h)anthracene		ND		110	380
Dibenzofuran		ND		110	380
Diethyl phthalate		ND		110	380
Dimethyl phthalate		ND		110	380
Di-n-butyl phthalate		ND		330	380
Di-n-octyl phthalate		ND		190	380
Diphenyl oxide		ND		110	380
Fluoranthene		ND		110	380
Fluorene		ND		110	380
Hexachlorobenzene		ND		110	380
Hexachlorobutadiene		ND		110	380
Hexachlorocyclopentadiene		ND	R	110	760
Hexachloroethane		ND		110	380
Indeno[1,2,3-cd]pyrene		ND		110	380
Isophorone		ND		110	380
Naphthalene		ND		110	910
Nitrobenzene		ND		110	380
N-Nitrosodimethylamine		ND		130	380
N-Nitrosodi-n-propylamine		ND		110	380
N-Nitrosodiphenylamine		260	J	110	380
Pentachlorophenol		ND		110	380
Phenanthrene		ND		110	460
Phenol		ND		110	380
Pyrene		ND	J	110	380

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	80		30 - 130
2-Fluorophenol	112		30 - 130
2-Fluorobiphenyl	76		30 - 130
Nitrobenzene-d5	60		30 - 130
Phenol-d5	62		30 - 130
Terphenyl-d14	80		30 - 130

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Client: Olin Corporation

Job Number: 360-24444-1
Sdg Number: OCRI-11

Client Sample ID: **OC-SB-459-6.0/8.0-XXX**

Lab Sample ID: 360-24444-2
Client Matrix: Solid % Moisture: 12.8

Date Sampled: 09/03/2009 1130
Date Received: 09/03/2009 1650

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49260		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48924		Lab File ID:	J03066.D
Dilution:	10			Initial Weight/Volume:	30.15 g
Date Analyzed:	09/22/2009 0305			Final Weight/Volume:	1.0 mL
Date Prepared:	09/14/2009 1300			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 3

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
141-70-8	Heptane, 2,2,6,6-tetramethyl-4-methylene	6.14	1700	T J N
123-48-8	3-Heptene, 2,2,4,6,6-pentamethyl-	6.24	2700	T J N
140-66-9	Phenol, 4-(1,1,3,3-tetramethylbutyl)-	10.39	6100	T J N

Client: Olin Corporation

Job Number: 360-24444-1
Sdg Number: OCRI-11

Client Sample ID: **OC-SB-459-6.0/8.0-XXX**

Lab Sample ID: 360-24444-2
Client Matrix: Solid

% Moisture: 12.8

Date Sampled: 09/03/2009 1130
Date Received: 09/03/2009 1650

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49623		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48924		Lab File ID:	B10619.D
Dilution:	10			Initial Weight/Volume:	30.15 g
Date Analyzed:	09/29/2009 0240	Run Type: DL2		Final Weight/Volume:	1.0 mL
Date Prepared:	09/14/2009 1300			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Diphenylamine		140	J	110	380

Client: Olin Corporation

Job Number: 360-24444-1
Sdg Number: OCRI-11

Client Sample ID: OC-SB-459-6.0/8.0-XXX

Lab Sample ID: 360-24444-2
Client Matrix: Solid

% Moisture: 12.8

Date Sampled: 09/03/2009 1130
Date Received: 09/03/2009 1650

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49623		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48924		Lab File ID:	B10619.D
Dilution:	10			Initial Weight/Volume:	30.15 g
Date Analyzed:	09/29/2009 0240	Run Type:	DL2	Final Weight/Volume:	1.0 mL
Date Prepared:	09/14/2009 1300			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 0

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Tentatively Identified Compound		None	

Client: Olin Corporation

Job Number: 360-24444-1
Sdg Number: OCRI-11

Client Sample ID: **OC-SB-459-6.0/8.0-XXX**

Lab Sample ID: 360-24444-2
Client Matrix: Solid

% Moisture: 12.8

Date Sampled: 09/03/2009 1130
Date Received: 09/03/2009 1650

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49639		Instrument ID:	NOEQUIP
Preparation:	3546	Prep Batch: 360-48924		Lab File ID:	N/A
Dilution:	10			Initial Weight/Volume:	30.15 g
Date Analyzed:	09/29/2009 0240	Run Type: DL3		Final Weight/Volume:	1.0 mL
Date Prepared:	09/14/2009 1300			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodiphenylamine		120	J	110	380

Client: Olin Corporation

Job Number: 360-24444-1
Sdg Number: OCRI-11

Client Sample ID: OC-SB-459-6.0/8.0-XXX

Lab Sample ID: 360-24444-2
Client Matrix: Solid

% Moisture: 12.8

Date Sampled: 09/03/2009 1130
Date Received: 09/03/2009 1650

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49444		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48924		Lab File ID:	B10528.D
Dilution:	1000			Initial Weight/Volume:	30.15 g
Date Analyzed:	09/24/2009 0247	Run Type:	DL3	Final Weight/Volume:	1.0 mL
Date Prepared:	09/14/2009 1300			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Bis(2-ethylhexyl) phthalate		720000 EB		11000	38000

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	0	X	30 - 130
2-Fluorophenol	0	X	30 - 130
2-Fluorobiphenyl	0	X	30 - 130
Nitrobenzene-d5	0	X	30 - 130
Phenol-d5	0	X	30 - 130
Terphenyl-d14	0	X	30 - 130

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Client: Olin Corporation

Job Number: 360-24444-1
Sdg Number: OCRI-11

Client Sample ID: **OC-SB-459-6.0/8.0-XXX**

Lab Sample ID: 360-24444-2
Client Matrix: Solid

% Moisture: 12.8

Date Sampled: 09/03/2009 1130
Date Received: 09/03/2009 1650

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49444		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-48924		Lab File ID:	B10528.D
Dilution:	1000			Initial Weight/Volume:	30.15 g
Date Analyzed:	09/24/2009 0247	Run Type:	DL3	Final Weight/Volume:	1.0 mL
Date Prepared:	09/14/2009 1300			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** **0**

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Tentatively Identified Compound		None	

Client: Olin Corporation

Job Number: 360-24444-1
Sdg Number: OCRI-11

Client Sample ID: OC-SB-462-0.0/1.0-XXX

Lab Sample ID: 360-24444-3
Client Matrix: Solid % Moisture: 3.7

Date Sampled: 09/03/2009 0900
Date Received: 09/03/2009 1650

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49260		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48924		Lab File ID:	J03069.D
Dilution:	1.0			Initial Weight/Volume:	30.39 g
Date Analyzed:	09/22/2009 0426			Final Weight/Volume:	1.0 mL
Date Prepared:	09/14/2009 1300			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		10	34
1,2,4,5-Tetrachlorobenzene		ND		10	34
1,2,4-Trichlorobenzene		ND		10	34
1,2-Dichlorobenzene		ND		10	34
1,3-Dichlorobenzene		ND		10	34
1,4-Dichlorobenzene		ND		10	34
1-Methylnaphthalene		ND		10	34
2,2'-oxybis[1-chloropropane]		ND		10	34
2,3,4,6-Tetrachlorophenol		ND		10	34
2,4,5-Trichlorophenol		ND		10	34
2,4,6-Trichlorophenol		ND		10	34
2,4-Dichlorophenol		ND		10	34
2,4-Dimethylphenol		ND		13	34
2,4-Dinitrophenol		ND		10	34
2,4-Dinitrotoluene		ND		10	34
2,6-Dinitrotoluene		ND		10	34
2-Chloronaphthalene		ND		10	34
2-Chlorophenol		ND		10	34
2-Methylnaphthalene		ND		10	34
2-Methylphenol		ND		21	34
2-Nitroaniline		~~ND~~ R		10	170
2-Nitrophenol		ND		10	34
3 & 4 Methylphenol		ND		10	34
3,3'-Dichlorobenzidine		ND		10	68
3-Nitroaniline		ND		10	170
4,6-Dinitro-2-methylphenol		ND		10	170
4-Bromophenyl phenyl ether		ND		10	34
4-Chloro-3-methylphenol		ND		10	68
4-Chloroaniline		ND		10	68
4-Chlorophenyl phenyl ether		ND		10	34
4-Nitroaniline		ND		10	170
4-Nitrophenol		ND		10	170
Acenaphthene		ND		10	34
Acenaphthylene		ND		10	34
Acetophenone		ND		10	34
Aniline		ND	J	10	34
Anthracene		ND		10	34
Atrazine		ND		10	34
Azobenzene		ND		10	34
Benzaldehyde		ND		10	34
Benzo[a]anthracene		ND		10	34
Benzo[a]pyrene		ND		10	34
Benzo[b]fluoranthene		ND		10	34
Benzo[g,h,i]perylene		ND		10	34
Benzo[k]fluoranthene		ND		10	34
Benzoic acid		ND	J	15	170

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Client: Olin Corporation

Job Number: 360-24444-1
Sdg Number: OCRI-11

Client Sample ID: OC-SB-462-0.0/1.0-XXX

Lab Sample ID: 360-24444-3
Client Matrix: Solid

% Moisture: 3.7

Date Sampled: 09/03/2009 0900
Date Received: 09/03/2009 1650

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49260		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48924		Lab File ID:	J03069.D
Dilution:	1.0			Initial Weight/Volume:	30.39 g
Date Analyzed:	09/22/2009 0426			Final Weight/Volume:	1.0 mL
Date Prepared:	09/14/2009 1300			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		10	34
Benzyl alcohol		ND		29	68
Bis(2-chloroethoxy)methane		ND		10	34
Bis(2-chloroethyl)ether		ND		10	34
Bis(2-ethylhexyl) phthalate		210	E	10	34
Butyl benzyl phthalate		ND		10	34
Caprolactam		ND		10	34
Carbazole		ND		10	34
Chrysene		ND		10	34
Dibenz(a,h)anthracene		ND		10	34
Dibenzofuran		ND		10	34
Diethyl phthalate		ND		10	34
Dimethyl phthalate		ND		10	34
Di-n-butyl phthalate		ND		30	34
Di-n-octyl phthalate		ND		17	34
Diphenyl oxide		ND		10	34
Fluoranthene		ND		10	34
Fluorene		ND		10	34
Hexachlorobenzene		ND		10	34
Hexachlorobutadiene		ND		10	34
Hexachlorocyclopentadiene		ND		10	68
Hexachloroethane		ND		10	34
Indeno[1,2,3-cd]pyrene		ND		10	34
Isophorone		ND		10	34
Naphthalene		ND		10	82
Nitrobenzene		ND		10	34
N-Nitrosodimethylamine		ND		12	34
N-Nitrosodi-n-propylamine		ND		10	34
N-Nitrosodiphenylamine		ND		10	34
Pentachlorophenol		ND		10	34
Phenanthrene		ND		10	41
Phenol		ND		10	34
Pyrene		ND		10	34

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	73		30 - 130
2-Fluorobiphenyl	64		30 - 130
2-Fluorophenol	68		30 - 130
Nitrobenzene-d5	62		30 - 130
Phenol-d5	66		30 - 130
Terphenyl-d14	78		30 - 130

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Client: Olin Corporation

Job Number: 360-24444-1
Sdg Number: OCRI-11

Client Sample ID: OC-SB-462-0.0/1.0-XXX

Lab Sample ID: 360-24444-3
Client Matrix: Solid % Moisture: 3.7

Date Sampled: 09/03/2009 0900
Date Received: 09/03/2009 1650

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49260		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48924		Lab File ID:	J03069.D
Dilution:	1.0			Initial Weight/Volume:	30.39 g
Date Analyzed:	09/22/2009 0426			Final Weight/Volume:	1.0 mL
Date Prepared:	09/14/2009 1300			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 9

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
541-2-6	Cyclopentasiloxane, decamethyl-	7.26	8.9	T J N
92-87-5	Benzidine	12.14	18	J
1921-70-6	Pentadecane, 2,6,10,14-tetramethyl-	13.84	10	T J N
297-3-0	Cyclotetracosane	14.01	70	T J N
7683-64-9	Squalene	14.35	60	T J N
593-45-3	Octadecane	14.61	18	T J N
1599-67-3	1-Docosene	14.65	53	T J N
26603-23-6	p,p"-Dioctyldiphenylamine	14.82	330	T J N
559-74-0	Friedelin	16.69	230	T J N

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Client: Olin Corporation

Job Number: 360-24444-1
Sdg Number: OCRI-11

Client Sample ID: OC-SB-462-4.0/6.0-XXX

Lab Sample ID: 360-24444-5
Client Matrix: Solid % Moisture: 14.0

Date Sampled: 09/03/2009 0910
Date Received: 09/03/2009 1650

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49260		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48924		Lab File ID:	J03071.D
Dilution:	10			Initial Weight/Volume:	30.04 g
Date Analyzed:	09/22/2009 0520			Final Weight/Volume:	1.0 mL
Date Prepared:	09/14/2009 1300			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		340	J	120	390
1,2,4,5-Tetrachlorobenzene		ND		120	390
1,2,4-Trichlorobenzene		ND		120	390
1,2-Dichlorobenzene		ND		120	390
1,3-Dichlorobenzene		ND		120	390
1,4-Dichlorobenzene		ND		120	390
1-Methylnaphthalene		ND		120	390
2,2'-oxybis[1-chloropropane]		ND		120	390
2,3,4,6-Tetrachlorophenol		ND		120	390
2,4,5-Trichlorophenol		ND		120	390
2,4,6-Trichlorophenol		ND		120	390
2,4-Dichlorophenol		ND		120	390
2,4-Dimethylphenol		ND		150	390
2,4-Dinitrophenol		ND		120	390
2,4-Dinitrotoluene		ND		120	390
2,6-Dinitrotoluene		ND		120	390
2-Chloronaphthalene		ND		120	390
2-Chlorophenol		ND		120	390
2-Methylnaphthalene		ND		120	390
2-Methylphenol		ND		230	390
2-Nitroaniline		~~ND~~ R		120	1900
2-Nitrophenol		ND		120	390
3 & 4 Methylphenol		ND		120	390
3,3'-Dichlorobenzidine		ND		120	770
3-Nitroaniline		ND		120	1900
4,6-Dinitro-2-methylphenol		ND		120	1900
4-Bromophenyl phenyl ether		ND		120	390
4-Chloro-3-methylphenol		ND		120	770
4-Chloroaniline		ND		120	770
4-Chlorophenyl phenyl ether		ND		120	390
4-Nitroaniline		ND		120	1900
4-Nitrophenol		ND		120	1900
Acenaphthene		ND		120	390
Acenaphthylene		ND		120	390
Acetophenone		ND		120	390
Aniline		ND J		120	390
Anthracene		ND		120	390
Atrazine		ND		120	390
Azobenzene		ND		120	390
Benzaldehyde		ND		120	390
Benzo[a]anthracene		ND		120	390
Benzo[a]pyrene		ND		120	390
Benzo[b]fluoranthene		ND		120	390
Benzo[g,h,i]perylene		ND		120	390
Benzo[k]fluoranthene		ND		120	390
Benzoic acid		ND J		170	1900

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Client: Olin Corporation

Job Number: 360-24444-1
Sdg Number: OCRI-11

Client Sample ID: **OC-SB-462-4.0/6.0-XXX**

Lab Sample ID: 360-24444-5
Client Matrix: Solid
% Moisture: 14.0

Date Sampled: 09/03/2009 0910
Date Received: 09/03/2009 1650

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49260		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48924		Lab File ID:	J03071.D
Dilution:	10			Initial Weight/Volume:	30.04 g
Date Analyzed:	09/22/2009 0520			Final Weight/Volume:	1.0 mL
Date Prepared:	09/14/2009 1300			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		120	390
Benzyl alcohol		ND		330	770
Bis(2-chloroethoxy)methane		ND		120	390
Bis(2-chloroethyl)ether		ND		120	390
Bis(2-ethylhexyl) phthalate		7200 EB		120	390
Butyl benzyl phthalate		ND		120	390
Caprolactam		ND		120	390
Carbazole		ND		120	390
Chrysene		ND		120	390
Dibenz(a,h)anthracene		ND		120	390
Dibenzofuran		ND		120	390
Diethyl phthalate		ND		120	390
Dimethyl phthalate		ND		120	390
Di-n-butyl phthalate		ND		340	390
Di-n-octyl phthalate		ND		200	390
Diphenyl oxide		1500		120	390
Fluoranthene		ND		120	390
Fluorene		ND		120	390
Hexachlorobenzene		ND		120	390
Hexachlorobutadiene		ND		120	390
Hexachlorocyclopentadiene		ND		120	770
Hexachloroethane		ND		120	390
Indeno[1,2,3-cd]pyrene		ND		120	390
Isophorone		ND		120	390
Naphthalene		ND		120	930
Nitrobenzene		ND		120	390
N-Nitrosodimethylamine		ND		140	390
N-Nitrosodi-n-propylamine		ND		120	390
N-Nitrosodiphenylamine		ND		120	390
Pentachlorophenol		ND		120	390
Phenanthrene		ND		120	460
Phenol		1500		120	390
Pyrene		ND		120	390

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	70		30 - 130
2-Fluorobiphenyl	80		30 - 130
2-Fluorophenol	114		30 - 130
Nitrobenzene-d5	64		30 - 130
Phenol-d5	69		30 - 130
Terphenyl-d14	81		30 - 130

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Client: Olin Corporation

Job Number: 360-24444-1
Sdg Number: OCRI-11

Client Sample ID: **OC-SB-462-4.0/6.0-XXX**

Lab Sample ID: 360-24444-5
Client Matrix: Solid % Moisture: 14.0

Date Sampled: 09/03/2009 0910
Date Received: 09/03/2009 1650

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49260		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48924		Lab File ID:	J03071.D
Dilution:	10			Initial Weight/Volume:	30.04 g
Date Analyzed:	09/22/2009 0520			Final Weight/Volume:	1.0 mL
Date Prepared:	09/14/2009 1300			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** **10**

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
527-84-4	Benzene, 1-methyl-2-(1-methylethyl)-	6.42	760	T J N
128-37-0	Butylated Hydroxytoluene	9.44	190	T J N
4237-44-9	Phenol, 2-(1-phenylethyl)-	10.48	1700	T J N
4237-44-9	Phenol, 2-(1-phenylethyl)-	10.85	960	T J N
2467-2-9	Phenol, 2,2"-methylenebis-	11.55	750	T J N
2467-2-9	Phenol, 2,2"-methylenebis-	11.66	5600	T J N
620-92-8	Phenol, 4,4"-methylenebis-	11.92	6800	T J N
92-87-5	Benzidine	12.16	210	J
17851-53-5	1,2-Benzenedicarboxylic acid, butyl 2-me	12.55	680	T J N
26603-23-6	p,p"-Dioctyldiphenylamine	14.88	190000	T J N

Client: Olin Corporation

Job Number: 360-24444-1
Sdg Number: OCRI-11

Client Sample ID: **OC-SB-467-6.0/8.0-DUP**

Lab Sample ID: 360-24444-8
Client Matrix: Solid % Moisture: 16.0

Date Sampled: 09/02/2009 1625
Date Received: 09/03/2009 1650

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49260		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48924		Lab File ID:	J03073.D
Dilution:	1.0			Initial Weight/Volume:	30.43 g
Date Analyzed:	09/22/2009 0613			Final Weight/Volume:	1.0 mL
Date Prepared:	09/14/2009 1300			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		12	39
1,2,4,5-Tetrachlorobenzene		ND		12	39
1,2,4-Trichlorobenzene		ND		12	39
1,2-Dichlorobenzene		ND		12	39
1,3-Dichlorobenzene		ND		12	39
1,4-Dichlorobenzene		ND		12	39
1-Methylnaphthalene		ND		12	39
2,2'-oxybis[1-chloropropane]		ND		12	39
2,3,4,6-Tetrachlorophenol		ND		12	39
2,4,5-Trichlorophenol		ND		12	39
2,4,6-Trichlorophenol		ND		12	39
2,4-Dichlorophenol		ND		12	39
2,4-Dimethylphenol		ND		15	39
2,4-Dinitrophenol		ND		12	39
2,4-Dinitrotoluene		ND		12	39
2,6-Dinitrotoluene		ND		12	39
2-Chloronaphthalene		ND		12	39
2-Chlorophenol		ND		12	39
2-Methylnaphthalene		ND		12	39
2-Methylphenol		ND		23	39
2-Nitroaniline		~~ND~~ R		12	200
2-Nitrophenol		ND		12	39
3 & 4 Methylphenol		ND		12	39
3,3'-Dichlorobenzidine		ND		12	78
3-Nitroaniline		ND		12	200
4,6-Dinitro-2-methylphenol		ND		12	200
4-Bromophenyl phenyl ether		ND		12	39
4-Chloro-3-methylphenol		ND		12	78
4-Chloroaniline		ND		12	78
4-Chlorophenyl phenyl ether		ND		12	39
4-Nitroaniline		ND		12	200
4-Nitrophenol		ND		12	200
Acenaphthene		ND		12	39
Acenaphthylene		ND		12	39
Acetophenone		ND		12	39
Aniline		ND	J	12	39
Anthracene		ND		12	39
Atrazine		ND		12	39
Azobenzene		ND		12	39
Benzaldehyde		ND		12	39
Benzo[a]anthracene		ND		12	39
Benzo[a]pyrene		ND		12	39
Benzo[b]fluoranthene		ND		12	39
Benzo[g,h,i]perylene		ND		12	39
Benzo[k]fluoranthene		ND		12	39
Benzoic acid		ND	J	18	200

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Client: Olin Corporation

Job Number: 360-24444-1
Sdg Number: OCRI-11

Client Sample ID: **OC-SB-467-6.0/8.0-DUP**

Lab Sample ID: 360-24444-8
Client Matrix: Solid
% Moisture: 16.0

Date Sampled: 09/02/2009 1625
Date Received: 09/03/2009 1650

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49260		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48924		Lab File ID:	J03073.D
Dilution:	1.0			Initial Weight/Volume:	30.43 g
Date Analyzed:	09/22/2009 0613			Final Weight/Volume:	1.0 mL
Date Prepared:	09/14/2009 1300			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		12	39
Benzyl alcohol		ND		33	78
Bis(2-chloroethoxy)methane		ND		12	39
Bis(2-chloroethyl)ether		ND		12	39
Bis(2-ethylhexyl) phthalate		430	EBJ	12	39
Butyl benzyl phthalate		ND		12	39
Caprolactam		ND		12	39
Carbazole		ND		12	39
Chrysene		ND		12	39
Dibenz(a,h)anthracene		ND		12	39
Dibenzofuran		ND		12	39
Diethyl phthalate		ND		12	39
Dimethyl phthalate		ND		12	39
Di-n-butyl phthalate		ND		34	39
Di-n-octyl phthalate		ND		20	39
Diphenyl oxide		ND		12	39
Fluoranthene		ND		12	39
Fluorene		ND		12	39
Hexachlorobenzene		ND		12	39
Hexachlorobutadiene		ND		12	39
Hexachlorocyclopentadiene		ND	J	12	78
Hexachloroethane		ND		12	39
Indeno[1,2,3-cd]pyrene		ND		12	39
Isophorone		ND		12	39
Naphthalene		ND		12	94
Nitrobenzene		ND		12	39
N-Nitrosodimethylamine		ND		14	39
N-Nitrosodi-n-propylamine		ND		12	39
N-Nitrosodiphenylamine		ND		12	39
Pentachlorophenol		ND		12	39
Phenanthrene		ND		12	47
Phenol		ND		12	39
Pyrene		ND		12	39

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	65		30 - 130
2-Fluorobiphenyl	65		30 - 130
2-Fluorophenol	66		30 - 130
Nitrobenzene-d5	60		30 - 130
Phenol-d5	62		30 - 130
Terphenyl-d14	75		30 - 130

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Client: Olin Corporation

Job Number: 360-24444-1
Sdg Number: OCRI-11

Client Sample ID: **OC-SB-467-6.0/8.0-DUP**

Lab Sample ID: 360-24444-8
Client Matrix: Solid
% Moisture: 16.0

Date Sampled: 09/02/2009 1625
Date Received: 09/03/2009 1650

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49260		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48924		Lab File ID:	J03073.D
Dilution:	1.0			Initial Weight/Volume:	30.43 g
Date Analyzed:	09/22/2009 0613			Final Weight/Volume:	1.0 mL
Date Prepared:	09/14/2009 1300			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 9

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
541-2-6	Cyclopentasiloxane, decamethyl-	7.26	10	T J N
99-98-9	1,4-Benzenediamine, N,N-dimethyl-	8.70	31	T J N
128-37-0	Butylated Hydroxytoluene	9.44	14	T J N
3910-35-8	1H-Indene, 2,3-dihydro-1,1,3-trimethyl-3	10.46	21	T J N
22768-22-5	2,4-Diphenyl-4-methyl-2(E)-pentene	10.96	11	T J N
92-87-5	Benzidine	12.14	21	J
7683-64-9	Squalene	14.35	230	T J N
26603-23-6	p,p"-Dioctyldiphenylamine	14.83	2000	T J N
559-74-0	Friedelin	16.69	21	T J N

Client: Olin Corporation

Job Number: 360-24444-1
Sdg Number: OCRI-11

Client Sample ID: OC-SB-467-6.0/8.0-XXX

Lab Sample ID: 360-24444-9
Client Matrix: Solid

% Moisture: 17.1

Date Sampled: 09/02/2009 1625
Date Received: 09/03/2009 1650

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49260		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48924		Lab File ID:	J03074.D
Dilution:	1.0			Initial Weight/Volume:	30.42 g
Date Analyzed:	09/22/2009 0640			Final Weight/Volume:	1.0 mL
Date Prepared:	09/14/2009 1300			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		12	40
1,2,4,5-Tetrachlorobenzene		ND		12	40
1,2,4-Trichlorobenzene		ND		12	40
1,2-Dichlorobenzene		ND		12	40
1,3-Dichlorobenzene		ND		12	40
1,4-Dichlorobenzene		ND		12	40
1-Methylnaphthalene		ND		12	40
2,2'-oxybis[1-chloropropane]		ND		12	40
2,3,4,6-Tetrachlorophenol		ND		12	40
2,4,5-Trichlorophenol		ND		12	40
2,4,6-Trichlorophenol		ND		12	40
2,4-Dichlorophenol		ND		12	40
2,4-Dimethylphenol		ND		16	40
2,4-Dinitrophenol		ND		12	40
2,4-Dinitrotoluene		ND		12	40
2,6-Dinitrotoluene		ND		12	40
2-Chloronaphthalene		ND		12	40
2-Chlorophenol		ND		12	40
2-Methylnaphthalene		ND		12	40
2-Methylphenol		ND		24	40
2-Nitroaniline		~~ND~~	R	12	200
2-Nitrophenol		ND		12	40
3 & 4 Methylphenol		ND		12	40
3,3'-Dichlorobenzidine		ND		12	79
3-Nitroaniline		ND		12	200
4,6-Dinitro-2-methylphenol		ND		12	200
4-Bromophenyl phenyl ether		ND		12	40
4-Chloro-3-methylphenol		ND		12	79
4-Chloroaniline		ND		12	79
4-Chlorophenyl phenyl ether		ND		12	40
4-Nitroaniline		ND		12	200
4-Nitrophenol		ND		12	200
Acenaphthene		ND		12	40
Acenaphthylene		ND		12	40
Acetophenone		ND		12	40
Aniline		ND	J	12	40
Anthracene		ND		12	40
Atrazine		ND		12	40
Azobenzene		ND		12	40
Benzaldehyde		ND		12	40
Benzo[a]anthracene		ND		12	40
Benzo[a]pyrene		ND		12	40
Benzo[b]fluoranthene		ND		12	40
Benzo[g,h,i]perylene		ND		12	40
Benzo[k]fluoranthene		ND		12	40
Benzoic acid		ND	J	18	200

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Client: Olin Corporation

Job Number: 360-24444-1
Sdg Number: OCRI-11

Client Sample ID: OC-SB-467-6.0/8.0-XXX

Lab Sample ID: 360-24444-9
Client Matrix: Solid % Moisture: 17.1

Date Sampled: 09/02/2009 1625
Date Received: 09/03/2009 1650

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49260		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48924		Lab File ID:	J03074.D
Dilution:	1.0			Initial Weight/Volume:	30.42 g
Date Analyzed:	09/22/2009 0640			Final Weight/Volume:	1.0 mL
Date Prepared:	09/14/2009 1300			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		12	40
Benzyl alcohol		ND		34	79
Bis(2-chloroethoxy)methane		ND		12	40
Bis(2-chloroethyl)ether		ND		12	40
Bis(2-ethylhexyl) phthalate		520	EBJ	12	40
Butyl benzyl phthalate		ND		12	40
Caprolactam		ND		12	40
Carbazole		ND		12	40
Chrysene		ND		12	40
Dibenz(a,h)anthracene		ND		12	40
Dibenzofuran		ND		12	40
Diethyl phthalate		ND		12	40
Dimethyl phthalate		ND		12	40
Di-n-butyl phthalate		ND		35	40
Di-n-octyl phthalate		ND		20	40
Diphenyl oxide		ND		12	40
Fluoranthene		ND		12	40
Fluorene		ND		12	40
Hexachlorobenzene		ND		12	40
Hexachlorobutadiene		ND		12	40
Hexachlorocyclopentadiene		ND	J	12	79
Hexachloroethane		ND		12	40
Indeno[1,2,3-cd]pyrene		ND		12	40
Isophorone		ND		12	40
Naphthalene		ND		12	95
Nitrobenzene		ND		12	40
N-Nitrosodimethylamine		ND		14	40
N-Nitrosodi-n-propylamine		ND		12	40
N-Nitrosodiphenylamine		ND		12	40
Pentachlorophenol		ND		12	40
Phenanthrene		ND		12	48
Phenol		ND		12	40
Pyrene		ND		12	40

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	57		30 - 130
2-Fluorobiphenyl	64		30 - 130
2-Fluorophenol	64		30 - 130
Nitrobenzene-d5	60		30 - 130
Phenol-d5	61		30 - 130
Terphenyl-d14	76		30 - 130

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Client: Olin Corporation

Job Number: 360-24444-1
Sdg Number: OCRI-11

Client Sample ID: **OC-SB-467-6.0/8.0-XXX**

Lab Sample ID: 360-24444-9
Client Matrix: Solid % Moisture: 17.1

Date Sampled: 09/02/2009 1625
Date Received: 09/03/2009 1650

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49260		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48924		Lab File ID:	J03074.D
Dilution:	1.0			Initial Weight/Volume:	30.42 g
Date Analyzed:	09/22/2009 0640			Final Weight/Volume:	1.0 mL
Date Prepared:	09/14/2009 1300			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 9

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
141-70-8	Heptane, 2,2,6,6-tetramethyl-4-methylene	6.14	15	T J N
123-48-8	3-Heptene, 2,2,4,6,6-pentamethyl-	6.24	20	T J N
541-2-6	Cyclopentasiloxane, decamethyl-	7.26	12	T J N
99-98-9	1,4-Benzenediamine, N,N-dimethyl-	8.70	19	T J N
3910-35-8	1H-Indene, 2,3-dihydro-1,1,3-trimethyl-3	10.46	21	T J N
92-87-5	Benzidine	12.07	21	J
7683-64-9	Squalene	14.35	200	T J N
26603-23-6	p,p"-Dioctyldiphenylamine	14.82	970	T J N
559-74-0	Friedelin	16.69	53	T J N

Client: Olin Corporation

Job Number: 360-24444-1
Sdg Number: OCRI-11

Client Sample ID: OC-SB-459-0.0/1.0-XXX

Lab Sample ID: 360-24444-12
Client Matrix: Solid

% Moisture: 6.1

Date Sampled: 09/03/2009 1110
Date Received: 09/03/2009 1650

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49397		Instrument ID:	Inst. J
Preparation:	3550B	Prep Batch: 360-48958		Lab File ID:	J03117.D
Dilution:	1.0			Initial Weight/Volume:	100.16 g
Date Analyzed:	09/24/2009 0728			Final Weight/Volume:	1.0 mL
Date Prepared:	09/15/2009 1206			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodimethylamine		ND		1.2	5.3

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	80		30 - 130
2-Fluorobiphenyl	70		30 - 130
2-Fluorophenol	63		30 - 130
Nitrobenzene-d5	69		30 - 130
Phenol-d5	73		30 - 130
Terphenyl-d14	91		30 - 130

Client: Olin Corporation

Job Number: 360-24444-1
Sdg Number: OCRI-11

Client Sample ID: OC-SB-459-0.0/1.0-XXX

Lab Sample ID: 360-24444-12
Client Matrix: Solid % Moisture: 6.1

Date Sampled: 09/03/2009 1110
Date Received: 09/03/2009 1650

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49402		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49016		Lab File ID:	B10498.D
Dilution:	1.0			Initial Weight/Volume:	30.83 g
Date Analyzed:	09/23/2009 0258			Final Weight/Volume:	1.0 mL
Date Prepared:	09/16/2009 1153			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		10	35
1,2,4,5-Tetrachlorobenzene		ND		10	35
1,2,4-Trichlorobenzene		ND		10	35
1,2-Dichlorobenzene		ND		10	35
1,3-Dichlorobenzene		ND		10	35
1,4-Dichlorobenzene		ND		10	35
1-Methylnaphthalene		ND		10	35
2,2'-oxybis[1-chloropropane]		ND		10	35
2,3,4,6-Tetrachlorophenol		ND		10	35
2,4,5-Trichlorophenol		ND		10	35
2,4,6-Trichlorophenol		ND		10	35
2,4-Dichlorophenol		ND		10	35
2,4-Dimethylphenol		ND		14	35
2,4-Dinitrophenol		ND		10	35
2,4-Dinitrotoluene		ND		10	35
2,6-Dinitrotoluene		ND		10	35
2-Chloronaphthalene		ND		10	35
2-Chlorophenol		ND		10	35
2-Methylnaphthalene		ND		10	35
2-Methylphenol		ND		21	35
2-Nitroaniline		ND		10	170
2-Nitrophenol		ND		10	35
3 & 4 Methylphenol		ND		10	35
3,3'-Dichlorobenzidine		ND		10	69
3-Nitroaniline		ND		10	170
4,6-Dinitro-2-methylphenol		ND		10	170
4-Bromophenyl phenyl ether		ND		10	35
4-Chloro-3-methylphenol		ND		10	69
4-Chloroaniline		ND		10	69
4-Chlorophenyl phenyl ether		ND		10	35
4-Nitroaniline		ND		10	170
4-Nitrophenol		ND		10	170
Acenaphthene		ND		10	35
Acenaphthylene		ND		10	35
Acetophenone		ND		10	35
Aniline		ND		10	35
Anthracene		ND		10	35
Atrazine		ND		10	35
Azobenzene		ND		10	35
Benzaldehyde		ND		10	35
Benzo[a]anthracene		ND		10	35
Benzo[a]pyrene		ND		10	35
Benzo[b]fluoranthene		ND		10	35
Benzo[g,h,i]perylene		ND		10	35
Benzo[k]fluoranthene		ND		10	35
Benzoic acid		ND		16	170

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Client: Olin Corporation

Job Number: 360-24444-1
Sdg Number: OCRI-11

Client Sample ID: **OC-SB-459-0.0/1.0-XXX**

Lab Sample ID: 360-24444-12
Client Matrix: Solid % Moisture: 6.1

Date Sampled: 09/03/2009 1110
Date Received: 09/03/2009 1650

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49402		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49016		Lab File ID:	B10498.D
Dilution:	1.0			Initial Weight/Volume:	30.83 g
Date Analyzed:	09/23/2009 0258			Final Weight/Volume:	1.0 mL
Date Prepared:	09/16/2009 1153			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		10	35
Benzyl alcohol		ND		29	69
Bis(2-chloroethoxy)methane		ND		10	35
Bis(2-chloroethyl)ether		ND		10	35
Butyl benzyl phthalate		ND		10	35
Caprolactam		ND		10	35
Carbazole		ND		10	35
Chrysene		ND		10	35
Dibenz(a,h)anthracene		ND		10	35
Dibenzofuran		ND		10	35
Diethyl phthalate		ND		10	35
Dimethyl phthalate		ND		10	35
Di-n-butyl phthalate		ND		30	35
Di-n-octyl phthalate		ND		17	35
Diphenyl oxide		ND		10	35
Diphenylamine		ND		10	35
Fluoranthene		ND		10	35
Fluorene		ND		10	35
Hexachlorobenzene		ND		10	35
Hexachlorobutadiene		ND		10	35
Hexachlorocyclopentadiene		ND		10	69
Hexachloroethane		ND		10	35
Indeno[1,2,3-cd]pyrene		ND		10	35
Isophorone		ND		10	35
Naphthalene		ND		10	83
Nitrobenzene		ND		10	35
N-Nitrosodimethylamine		ND		12	35
N-Nitrosodi-n-propylamine		ND		10	35
N-Nitrosodiphenylamine		ND		10	35
Pentachlorophenol		ND		10	35
Phenanthrene		ND		10	41
Phenol		ND		10	35
Pyrene		ND		10	35

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	8	X	30 - 130
2-Fluorophenol	9	X	30 - 130
2-Fluorobiphenyl	8	X	30 - 130
Nitrobenzene-d5	8	X	30 - 130
Phenol-d5	8	X	30 - 130
Terphenyl-d14	9	X	30 - 130

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Client: Olin Corporation

Job Number: 360-24444-1
Sdg Number: OCRI-11

Client Sample ID: OC-SB-459-0.0/1.0-XXX

Lab Sample ID: 360-24444-12
Client Matrix: Solid % Moisture: 6.1

Date Sampled: 09/03/2009 1110
Date Received: 09/03/2009 1650

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49402		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49016		Lab File ID:	B10498.D
Dilution:	1.0			Initial Weight/Volume:	30.83 g
Date Analyzed:	09/23/2009 0258			Final Weight/Volume:	1.0 mL
Date Prepared:	09/16/2009 1153			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 10

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
7756-94-7	1-Propene, 2-methyl-, trimer	7.59	9.5	T J N
128-37-0	Butylated Hydroxytoluene	10.27	8.5	T J N
615-22-5	Benzothiazole, 2-(methylthio)-	10.85	16	T J N
3910-35-8	1H-Indene, 2,3-dihydro-1,1,3-trimethyl-3	11.22	16	T J N
22768-22-5	2,4-Diphenyl-4-methyl-2(E)-pentene	11.63	11	T J N
112-61-8	Octadecanoic acid, methyl ester	12.55	14	T J N
92-87-5	Benzidine	12.84	21	J
629-92-5	Nonadecane	14.55	12	T J N
112-95-8	Eicosane	15.27	12	T J N
13360-61-7	1-Pentadecene	15.87	12	T J N

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Client: Olin Corporation

Job Number: 360-24444-1
Sdg Number: OCRI-11

Client Sample ID: OC-SB-459-0.0/1.0-XXX

Lab Sample ID: 360-24444-12
Client Matrix: Solid

% Moisture: 6.1

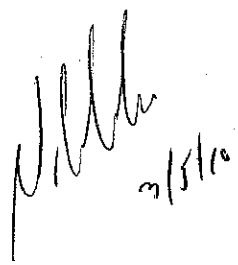
Date Sampled: 09/03/2009 1110
Date Received: 09/03/2009 1650

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49517		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49016		Lab File ID:	B10569.D
Dilution:	20			Initial Weight/Volume:	30.83 g
Date Analyzed:	09/26/2009 0359	Run Type:	DL	Final Weight/Volume:	1.0 mL
Date Prepared:	09/16/2009 1153			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Bis(2-ethylhexyl) phthalate		8300 EB J		210	690

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	0	X D	30 - 130
2-Fluorophenol	0	X D	30 - 130
2-Fluorobiphenyl	0	X D	30 - 130
Nitrobenzene-d5	0	X D	30 - 130
Phenol-d5	0	X D	30 - 130
Terphenyl-d14	0	X D	30 - 130



Client: Olin Corporation

Job Number: 360-24444-1
Sdg Number: OCRI-11

Client Sample ID: **OC-SB-459-0.0/1.0-XXX**

Lab Sample ID: 360-24444-12
Client Matrix: Solid % Moisture: 6.1

Date Sampled: 09/03/2009 1110
Date Received: 09/03/2009 1650

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49517		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49016		Lab File ID:	B10569.D
Dilution:	20			Initial Weight/Volume:	30.83 g
Date Analyzed:	09/26/2009 0359	Run Type: DL		Final Weight/Volume:	1.0 mL
Date Prepared:	09/16/2009 1153			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 1

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Unknown	12.07	130	T J

Client: Olin Corporation

Job Number: 360-24444-1
Sdg Number: OCRI-11

Client Sample ID: **OC-EBK-007**

Lab Sample ID: 360-24444-16
Client Matrix: Water

Date Sampled: 09/03/2009 0800
Date Received: 09/03/2009 1650

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48893		Instrument ID:	Inst. B
Preparation:	3510C	Prep Batch: 360-48620		Lab File ID:	B10302.D
Dilution:	1.0			Initial Weight/Volume:	990 mL
Date Analyzed:	09/15/2009 0932			Final Weight/Volume:	1.0 mL
Date Prepared:	09/04/2009 1248			Injection Volume:	1.0 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
N-Nitrosodimethylamine	ND	*	0.51	5.1

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	75		15 - 110
2-Fluorobiphenyl	75		30 - 130
2-Fluorophenol	23		15 - 110
Nitrobenzene-d5	82		30 - 130
Phenol-d5	12	X	15 - 110
Terphenyl-d14	81		30 - 130

Client: Olin Corporation

Job Number: 360-24444-1
Sdg Number: OCRI-11

Client Sample ID: **OC-EBK-007**

Lab Sample ID: 360-24444-16
Client Matrix: Water

Date Sampled: 09/03/2009 0800
Date Received: 09/03/2009 1650

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48893		Instrument ID:	Inst. B
Preparation:	3510C	Prep Batch: 360-48620		Lab File ID:	B10302.D
Dilution:	1.0			Initial Weight/Volume:	990 mL
Date Analyzed:	09/15/2009 0932			Final Weight/Volume:	1.0 mL
Date Prepared:	09/04/2009 1248			Injection Volume:	1.0 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Phenol	ND	*	0.51	5.1
Bis(2-chloroethyl)ether	ND		0.51	5.1
Benzyl alcohol	ND		0.51	10
2-Methylphenol	ND		0.51	5.1
N-Nitrosodi-n-propylamine	ND		0.51	5.1
Hexachloroethane	ND		0.51	3.0
3 & 4 Methylphenol	ND		0.51	5.1
2-Chlorophenol	ND		0.51	5.1
Nitrobenzene	ND		0.51	5.1
Bis(2-chloroethoxy)methane	ND		0.51	5.1
Benzoic acid	ND	*	0.51	5.1
Isophorone	ND		0.51	5.1
2,4-Dimethylphenol	ND		0.51	5.1
Aniline	ND	*	0.51	5.1
2,4-Dichlorophenol	ND		0.51	5.1
4-Chloroaniline	ND		0.51	5.1
2,4,6-Trichlorophenol	ND		0.51	5.1
2,4,5-Trichlorophenol	ND		0.51	5.1
Hexachlorocyclopentadiene	ND		0.51	5.1
2-Methylnaphthalene	ND		0.051	1.0
2-Nitroaniline	ND		0.51	5.1
2-Chloronaphthalene	ND		0.51	5.1
4-Chloro-3-methylphenol	ND		0.51	5.1
2,6-Dinitrotoluene	ND		0.51	5.1
2-Nitrophenol	ND		0.51	5.1
3-Nitroaniline	ND		0.51	5.1
Dimethyl phthalate	ND		0.51	5.1
2,4-Dinitrophenol	ND	*	0.51	5.1
Acenaphthylene	ND		0.051	0.30
2,4-Dinitrotoluene	ND		0.51	5.1
Acenaphthene	ND		0.051	1.0
Dibenzofuran	ND		0.51	5.1
4-Nitrophenol	ND	*	0.51	5.1
Fluorene	ND		0.051	1.0
4-Nitroaniline	ND		0.51	5.1
4-Bromophenyl phenyl ether	ND		0.51	5.1
Hexachlorobenzene	ND		0.51	1.0
Diethyl phthalate	ND		0.51	5.1
4-Chlorophenyl phenyl ether	ND		0.51	5.1
Pentachlorophenol	ND		0.51	1.0
N-Nitrosodiphenylamine	ND		0.51	5.1
4,6-Dinitro-2-methylphenol	ND		0.51	5.1
Phenanthrene	ND		0.086	0.20
Anthracene	ND		0.071	1.0
Di-n-butyl phthalate	1.8	J B	0.61	5.1
Fluoranthene	ND		0.20	1.0

Client: Olin Corporation

Job Number: 360-24444-1
Sdg Number: OCRI-11

Client Sample ID: **OC-EBK-007**

Lab Sample ID: 360-24444-16
Client Matrix: Water

Date Sampled: 09/03/2009 0800
Date Received: 09/03/2009 1650

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48893		Instrument ID:	Inst. B
Preparation:	3510C	Prep Batch: 360-48620		Lab File ID:	B10302.D
Dilution:	1.0			Initial Weight/Volume:	990 mL
Date Analyzed:	09/15/2009 0932			Final Weight/Volume:	1.0 mL
Date Prepared:	09/04/2009 1248			Injection Volume:	1.0 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Pyrene	ND		0.19	5.1
Butyl benzyl phthalate	0.68	J	0.51	5.1
Benzo[a]anthracene	ND		0.17	0.30
Chrysene	ND		0.17	1.0
3,3'-Dichlorobenzidine	ND	*	0.51	5.1
Di-n-octyl phthalate	ND		0.74	5.1
Benzo[b]fluoranthene	ND		0.15	0.30
Benzo[k]fluoranthene	ND		0.17	0.30
Benzo[a]pyrene	ND		0.10	0.20
Indeno[1,2,3-cd]pyrene	ND		0.080	0.51
Dibenz(a,h)anthracene	ND	*	0.065	0.51
Benzo[g,h,i]perylene	ND		0.095	0.51
Acetophenone	0.98	J	0.51	5.1
Azobenzene	ND		0.51	5.1
Bis(2-ethylhexyl) phthalate	ND		0.51	2.0
bis (2-chloroisopropyl) ether	ND		0.51	5.1
1-Methylnaphthalene	ND		0.051	5.1
1,1'-Biphenyl	ND		0.51	5.1
1,2,4,5-Tetrachlorobenzene	ND		0.51	5.1
2,3,4,6-Tetrachlorophenol	ND		0.51	5.1
Atrazine	ND		0.51	5.1
Benzaldehyde	ND	*	0.51	5.1
Caprolactam	ND	*	0.51	5.1
Carbazole	ND		0.51	5.1
Benzophenone	ND		0.51	5.1
Diphenyl oxide	ND		0.51	5.1

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorobiphenyl	75		30 - 130
2-Fluorophenol	23		15 - 110
Nitrobenzene-d5	82		30 - 130
Phenol-d5	12	X	15 - 110
Terphenyl-d14	81		30 - 130

Client: Olin Corporation

Job Number: 360-24444-1
Sdg Number: OCRI-11

Client Sample ID: OC-EBK-007

Lab Sample ID: 360-24444-16
Client Matrix: Water

Date Sampled: 09/03/2009 0800
Date Received: 09/03/2009 1650

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-48893		Instrument ID:	Inst. B
Preparation:	3510C	Prep Batch: 360-48620		Lab File ID:	B10302.D
Dilution:	1.0			Initial Weight/Volume:	990 mL
Date Analyzed:	09/15/2009 0932			Final Weight/Volume:	1.0 mL
Date Prepared:	09/04/2009 1248			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 3

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
615-22-5	Benzothiazole, 2-(methylthio)-	11.72	1.3	T J N
3910-35-8	1H-Indene, 2,3-dihydro-1,1,3-trimethyl-3	12.09	1.4	T J N
	Unknown	12.77	3.1	T J

SAMPLE SUMMARY

Client: Olin Corporation

Job Number: 360-24444-2
Sdg Number: OCRI-11A

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
360-24444-4	OC-SB-462-31/33-XXX	Solid	09/03/2009 1015	09/03/2009 1650
360-24444-7	OC-SB-467-30/32-XXX	Solid	09/02/2009 1730	09/03/2009 1650
360-24444-13	OC-SB-459-26/28-XXX	Solid	09/03/2009 1225	09/03/2009 1650

Form I is finalized
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Client: Olin Corporation

Job Number: 360-24444-2
Sdg Number: OCRI-11A

Client Sample ID: OC-SB-462-31/33-XXX

Lab Sample ID: 360-24444-4
Client Matrix: Solid
% Moisture: 8.4

Date Sampled: 09/03/2009 1015
Date Received: 09/03/2009 1650

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49260		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48924		Lab File ID:	J03070.D
Dilution:	1.0			Initial Weight/Volume:	30.04 g
Date Analyzed:	09/22/2009 0453			Final Weight/Volume:	1.0 mL
Date Prepared:	09/14/2009 1300			Injection Volume:	

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		11	36
1,2,4,5-Tetrachlorobenzene		ND		11	36
1,2,4-Trichlorobenzene		ND		11	36
1,2-Dichlorobenzene		ND		11	36
1,3-Dichlorobenzene		ND		11	36
1,4-Dichlorobenzene		ND		11	36
1-Methylnaphthalene		ND		11	36
2,2'-oxybis[1-chloropropane]		ND		11	36
2,3,4,6-Tetrachlorophenol		ND		11	36
2,4,5-Trichlorophenol		ND		11	36
2,4,6-Trichlorophenol		ND		11	36
2,4-Dichlorophenol		ND		11	36
2,4-Dimethylphenol		ND		14	36
2,4-Dinitrophenol		ND		11	36
2,4-Dinitrotoluene		ND		11	36
2,6-Dinitrotoluene		ND		11	36
2-Chloronaphthalene		ND		11	36
2-Chlorophenol		ND		11	36
2-Methylnaphthalene		ND		11	36
2-Methylphenol		ND		22	36
2-Nitroaniline		ND R		11	180
2-Nitrophenol		ND		11	36
3 & 4 Methylphenol		ND		11	36
3,3'-Dichlorobenzidine		ND		11	73
3-Nitroaniline		ND		11	180
4,6-Dinitro-2-methylphenol		ND		11	180
4-Bromophenyl phenyl ether		ND		11	36
4-Chloro-3-methylphenol		ND		11	73
4-Chloroaniline		ND		11	73
4-Chlorophenyl phenyl ether		ND		11	36
4-Nitroaniline		ND		11	180
4-Nitrophenol		ND		11	180
Acenaphthene		ND		11	36
Acenaphthylene		ND		11	36
Acetophenone		ND		11	36
Aniline		ND J		11	36
Anthracene		ND		11	36
Atrazine		ND		11	36
Azobenzene		ND		11	36
Benzaldehyde		ND		11	36
Benzo[a]anthracene		ND		11	36
Benzo[a]pyrene		ND		11	36
Benzo[b]fluoranthene		ND		11	36
Benzo[g,h,i]perylene		ND		11	36
Benzo[k]fluoranthene		ND		11	36
Benzoic acid		ND J		16	180

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Client: Olin Corporation

Job Number: 360-24444-2
Sdg Number: OCRI-11A

Client Sample ID: OC-SB-462-31/33-XXX

Lab Sample ID: 360-24444-4
Client Matrix: Solid

% Moisture: 8.4

Date Sampled: 09/03/2009 1015
Date Received: 09/03/2009 1650

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49260		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48924		Lab File ID:	J03070.D
Dilution:	1.0			Initial Weight/Volume:	30.04 g
Date Analyzed:	09/22/2009 0453			Final Weight/Volume:	1.0 mL
Date Prepared:	09/14/2009 1300			Injection Volume:	

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		11	36
Benzyl alcohol		ND		31	73
Bis(2-chloroethoxy)methane		ND		11	36
Bis(2-chloroethyl)ether		ND		11	36
Bis(2-ethylhexyl) phthalate		110 ~~EB~~ U		11	36
Butyl benzyl phthalate		ND		11	36
Caprolactam		ND		11	36
Carbazole		ND		11	36
Chrysene		ND		11	36
Dibenz(a,h)anthracene		ND		11	36
Dibenzofuran		ND		11	36
Diethyl phthalate		ND		11	36
Dimethyl phthalate		ND		11	36
Di-n-butyl phthalate		ND		32	36
Di-n-octyl phthalate		ND		18	36
Diphenyl oxide		ND		11	36
Fluoranthene		ND		11	36
Fluorene		ND		11	36
Hexachlorobenzene		ND		11	36
Hexachlorobutadiene		ND		11	36
Hexachlorocyclopentadiene		ND		11	73
Hexachloroethane		ND		11	36
Indeno[1,2,3-cd]pyrene		ND		11	36
Isophorone		ND		11	36
Naphthalene		ND		11	87
Nitrobenzene		ND		11	36
N-Nitrosodimethylamine		ND		13	36
N-Nitrosodi-n-propylamine		ND		11	36
N-Nitrosodiphenylamine		ND		11	36
Pentachlorophenol		ND		11	36
Phenanthrene		ND		11	44
Phenol		ND		11	36
Pyrene		ND		11	36

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	56		30 - 130
2-Fluorobiphenyl	65		30 - 130
2-Fluorophenol	70		30 - 130
Nitrobenzene-d5	66		30 - 130
Phenol-d5	66		30 - 130
Terphenyl-d14	76		30 - 130

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Client: Olin Corporation

Job Number: 360-24444-2
Sdg Number: OCRI-11A

Client Sample ID: OC-SB-462-31/33-XXX

Lab Sample ID: 360-24444-4
Client Matrix: Solid
% Moisture: 8.4

Date Sampled: 09/03/2009 1015
Date Received: 09/03/2009 1650

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49260		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48924		Lab File ID:	J03070.D
Dilution:	1.0			Initial Weight/Volume:	30.04 g
Date Analyzed:	09/22/2009 0453			Final Weight/Volume:	1.0 mL
Date Prepared:	09/14/2009 1300			Injection Volume:	

Tentatively Identified Compounds **Number TIC's Found:** 9

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
128-37-0	Butylated Hydroxytoluene	9.44	18	T J N
615-22-5	Benzothiazole, 2-(methylthio)-	9.99	24	T J N
3910-35-8	1H-Indene, 2,3-dihydro-1,1,3-trimethyl-3	10.46	18	T J N
22768-22-5	2,4-Diphenyl-4-methyl-2(E)-pentene	10.96	15	T J N
10544-50-0	Cyclic octaatomic sulfur	12.00	28	T J N
5466-77-3	2-Propenoic acid, 3-(4-methoxyphenyl)-,	12.80	65	T J N
638-36-8	Hexadecane, 2,6,10,14-tetramethyl-	13.84	38	T J N
7683-64-9	Squalene	14.35	51	T J N
26603-23-6	p,p''-Dioctyldiphenylamine	14.82	120	T J N

Client: Olin Corporation

Job Number: 360-24444-2
Sdg Number: OCRI-11A

Client Sample ID: **OC-SB-467-30/32-XXX**

Lab Sample ID: 360-24444-7
Client Matrix: Solid % Moisture: 10.8

Date Sampled: 09/02/2009 1730
Date Received: 09/03/2009 1650

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49260		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48924		Lab File ID:	J03072.D
Dilution:	1.0			Initial Weight/Volume:	30.23 g
Date Analyzed:	09/22/2009 0547			Final Weight/Volume:	1.0 mL
Date Prepared:	09/14/2009 1300			Injection Volume:	

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		11	37
1,2,4,5-Tetrachlorobenzene		ND		11	37
1,2,4-Trichlorobenzene		ND		11	37
1,2-Dichlorobenzene		ND		11	37
1,3-Dichlorobenzene		ND		11	37
1,4-Dichlorobenzene		ND		11	37
1-Methylnaphthalene		ND		11	37
2,2'-oxybis[1-chloropropane]		ND		11	37
2,3,4,6-Tetrachlorophenol		ND		11	37
2,4,5-Trichlorophenol		ND		11	37
2,4,6-Trichlorophenol		ND		11	37
2,4-Dichlorophenol		ND		11	37
2,4-Dimethylphenol		ND		15	37
2,4-Dinitrophenol		ND		11	37
2,4-Dinitrotoluene		ND		11	37
2,6-Dinitrotoluene		ND		11	37
2-Chloronaphthalene		ND		11	37
2-Chlorophenol		ND		11	37
2-Methylnaphthalene		ND		11	37
2-Methylphenol		ND		22	37
2-Nitroaniline		~~ND~~ R		11	190
2-Nitrophenol		ND		11	37
3 & 4 Methylphenol		ND		11	37
3,3'-Dichlorobenzidine		ND		11	74
3-Nitroaniline		ND		11	190
4,6-Dinitro-2-methylphenol		ND		11	190
4-Bromophenyl phenyl ether		ND		11	37
4-Chloro-3-methylphenol		ND		11	74
4-Chloroaniline		ND		11	74
4-Chlorophenyl phenyl ether		ND		11	37
4-Nitroaniline		ND		11	190
4-Nitrophenol		ND		11	190
Acenaphthene		ND		11	37
Acenaphthylene		ND		11	37
Acetophenone		ND		11	37
Aniline		ND J		11	37
Anthracene		ND		11	37
Atrazine		ND		11	37
Azobenzene		ND		11	37
Benzaldehyde		ND		11	37
Benzo[a]anthracene		ND		11	37
Benzo[a]pyrene		ND		11	37
Benzo[b]fluoranthene		ND		11	37
Benzo[g,h,i]perylene		ND		11	37
Benzo[k]fluoranthene		ND		11	37
Benzoic acid		ND J		17	190

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Client: Olin Corporation

Job Number: 360-24444-2
Sdg Number: OCRI-11A

Client Sample ID: **OC-SB-467-30/32-XXX**

Lab Sample ID: 360-24444-7
Client Matrix: Solid
% Moisture: 10.8

Date Sampled: 09/02/2009 1730
Date Received: 09/03/2009 1650

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49260		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48924		Lab File ID:	J03072.D
Dilution:	1.0			Initial Weight/Volume:	30.23 g
Date Analyzed:	09/22/2009 0547			Final Weight/Volume:	1.0 mL
Date Prepared:	09/14/2009 1300			Injection Volume:	

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		11	37
Benzyl alcohol		ND		32	74
Bis(2-chloroethoxy)methane		ND		11	37
Bis(2-chloroethyl)ether		ND		11	37
Bis(2-ethylhexyl) phthalate		75 ~~EB~~ U		11	37
Butyl benzyl phthalate		ND		11	37
Caprolactam		ND		11	37
Carbazole		ND		11	37
Chrysene		ND		11	37
Dibenz(a,h)anthracene		ND		11	37
Dibenzofuran		ND		11	37
Diethyl phthalate		ND		11	37
Dimethyl phthalate		ND		11	37
Di-n-butyl phthalate		ND		33	37
Di-n-octyl phthalate		ND		19	37
Diphenyl oxide		ND		11	37
Fluoranthene		ND		11	37
Fluorene		ND		11	37
Hexachlorobenzene		ND		11	37
Hexachlorobutadiene		ND		11	37
Hexachlorocyclopentadiene		ND		11	74
Hexachloroethane		ND		11	37
Indeno[1,2,3-cd]pyrene		ND		11	37
Isophorone		ND		11	37
Naphthalene		ND		11	89
Nitrobenzene		ND		11	37
N-Nitrosodimethylamine		ND		13	37
N-Nitrosodi-n-propylamine		ND		11	37
N-Nitrosodiphenylamine		ND		11	37
Pentachlorophenol		ND		11	37
Phenanthrene		ND		11	45
Phenol		ND		11	37
Pyrene		ND		11	37

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	66		30 - 130
2-Fluorobiphenyl	66		30 - 130
2-Fluorophenol	68		30 - 130
Nitrobenzene-d5	62		30 - 130
Phenol-d5	67		30 - 130
Terphenyl-d14	78		30 - 130

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Client: Olin Corporation

Job Number: 360-24444-2
Sdg Number: OCRI-11A

Client Sample ID: **OC-SB-467-30/32-XXX**

Lab Sample ID: 360-24444-7
Client Matrix: Solid % Moisture: 10.8

Date Sampled: 09/02/2009 1730
Date Received: 09/03/2009 1650

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49260		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-48924		Lab File ID:	J03072.D
Dilution:	1.0			Initial Weight/Volume:	30.23 g
Date Analyzed:	09/22/2009 0547			Final Weight/Volume:	1.0 mL
Date Prepared:	09/14/2009 1300			Injection Volume:	

Tentatively Identified Compounds **Number TIC's Found:** 9

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
541-2-6	Cyclopentasiloxane, decamethyl-	7.26	10	T J N
128-37-0	Butylated Hydroxytoluene	9.44	9.5	T J N
615-22-5	Benzothiazole, 2-(methylthio)-	9.99	12	T J N
3910-35-8	1H-Indene, 2,3-dihydro-1,1,3-trimethyl-3	10.46	11	T J N
22768-22-5	2,4-Diphenyl-4-methyl-2(E)-pentene	10.96	9.5	T J N
5466-77-3	2-Propenoic acid, 3-(4-methoxyphenyl)-,	12.80	85	T J N
638-36-8	Hexadecane, 2,6,10,14-tetramethyl-	13.84	51	T J N
7683-64-9	Squalene	14.35	86	T J N
26603-23-6	p,p"-Dioctyldiphenylamine	14.82	110	T J N

Client: Olin Corporation

Job Number: 360-24444-2
Sdg Number: OCRI-11A

Client Sample ID: **OC-SB-459-26/28-XXX**

Lab Sample ID: 360-24444-13
Client Matrix: Solid % Moisture: 9.7

Date Sampled: 09/03/2009 1225
Date Received: 09/03/2009 1650

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49402		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49016		Lab File ID:	B10499.D
Dilution:	1.0			Initial Weight/Volume:	30.21 g
Date Analyzed:	09/23/2009 0329			Final Weight/Volume:	1.0 mL
Date Prepared:	09/16/2009 1153			Injection Volume:	

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		11	37
1,2,4,5-Tetrachlorobenzene		ND		11	37
1,2,4-Trichlorobenzene		ND		11	37
1,2-Dichlorobenzene		ND		11	37
1,3-Dichlorobenzene		ND		11	37
1,4-Dichlorobenzene		ND		11	37
1-Methylnaphthalene		ND		11	37
2,2'-oxybis[1-chloropropane]		ND		11	37
2,3,4,6-Tetrachlorophenol		ND		11	37
2,4,5-Trichlorophenol		ND		11	37
2,4,6-Trichlorophenol		ND		11	37
2,4-Dichlorophenol		ND		11	37
2,4-Dimethylphenol		ND		14	37
2,4-Dinitrophenol		ND		11	37
2,4-Dinitrotoluene		ND		11	37
2,6-Dinitrotoluene		ND		11	37
2-Chloronaphthalene		ND		11	37
2-Chlorophenol		ND		11	37
2-Methylnaphthalene		ND		11	37
2-Methylphenol		ND		22	37
2-Nitroaniline		ND		11	180
2-Nitrophenol		ND		11	37
3 & 4 Methylphenol		ND		11	37
3,3'-Dichlorobenzidine		ND		11	73
3-Nitroaniline		ND		11	180
4,6-Dinitro-2-methylphenol		ND		11	180
4-Bromophenyl phenyl ether		ND		11	37
4-Chloro-3-methylphenol		ND		11	73
4-Chloroaniline		ND		11	73
4-Chlorophenyl phenyl ether		ND		11	37
4-Nitroaniline		ND		11	180
4-Nitrophenol		ND		11	180
Acenaphthene		ND		11	37
Acenaphthylene		ND		11	37
Acetophenone		ND		11	37
Aniline		ND		11	37
Anthracene		ND		11	37
Atrazine		ND		11	37
Azobenzene		ND		11	37
Benzaldehyde		ND		11	37
Benzo[a]anthracene		ND		11	37
Benzo[a]pyrene		ND		11	37
Benzo[b]fluoranthene		ND		11	37
Benzo[g,h,i]perylene		ND		11	37
Benzo[k]fluoranthene		ND		11	37
Benzoic acid		ND		16	180

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Client: Olin Corporation

Job Number: 360-24444-2
Sdg Number: OCRI-11A

Client Sample ID: **OC-SB-459-26/28-XXX**

Lab Sample ID: 360-24444-13
Client Matrix: Solid % Moisture: 9.7

Date Sampled: 09/03/2009 1225
Date Received: 09/03/2009 1650

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49402		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49016		Lab File ID:	B10499.D
Dilution:	1.0			Initial Weight/Volume:	30.21 g
Date Analyzed:	09/23/2009 0329			Final Weight/Volume:	1.0 mL
Date Prepared:	09/16/2009 1153			Injection Volume:	

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		11	37
Benzyl alcohol		ND		31	73
Bis(2-chloroethoxy)methane		ND		11	37
Bis(2-chloroethyl)ether		ND		11	37
Bis(2-ethylhexyl) phthalate		~~440~~ 1100	~~B~~	11	37
Butyl benzyl phthalate		ND		11	37
Caprolactam		ND		11	37
Carbazole		ND		11	37
Chrysene		ND		11	37
Dibenz(a,h)anthracene		ND		11	37
Dibenzofuran		ND		11	37
Diethyl phthalate		ND		11	37
Dimethyl phthalate		ND		11	37
Di-n-butyl phthalate		ND		32	37
Di-n-octyl phthalate		ND		18	37
Diphenyl oxide		ND		11	37
Fluoranthene		ND		11	37
Fluorene		ND		11	37
Hexachlorobenzene		ND		11	37
Hexachlorobutadiene		ND		11	37
Hexachlorocyclopentadiene		ND		11	73
Hexachloroethane		ND		11	37
Indeno[1,2,3-cd]pyrene		ND		11	37
Isophorone		ND		11	37
Naphthalene		ND		11	88
Nitrobenzene		ND		11	37
N-Nitrosodimethylamine		ND		13	37
N-Nitrosodi-n-propylamine		ND		11	37
N-Nitrosodiphenylamine		ND		11	37
Pentachlorophenol		ND		11	37
Phenanthrene		ND		11	44
Phenol		ND		11	37
Pyrene		ND		11	37

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	66		30 - 130
2-Fluorobiphenyl	65		30 - 130
2-Fluorophenol	87		30 - 130
Nitrobenzene-d5	73		30 - 130
Phenol-d5	74		30 - 130
Terphenyl-d14	75		30 - 130

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Client: Olin Corporation

Job Number: 360-24444-2
Sdg Number: OCRI-11A

Client Sample ID: **OC-SB-459-26/28-XXX**

Lab Sample ID: 360-24444-13
Client Matrix: Solid

% Moisture: 9.7

Date Sampled: 09/03/2009 1225
Date Received: 09/03/2009 1650

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49402		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49016		Lab File ID:	B10499.D
Dilution:	1.0			Initial Weight/Volume:	30.21 g
Date Analyzed:	09/23/2009 0329			Final Weight/Volume:	1.0 mL
Date Prepared:	09/16/2009 1153			Injection Volume:	

Tentatively Identified Compounds **Number TIC's Found:** 2

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
59242-27-2	Furan, 2,5-dihydro-2,5-dimethyl-	5.57	15	T J N
~~7683-64-9~~	~~Squalene~~	~~16.44~~	~~51~~	~~T J N~~

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FORM IV
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Westfield Job No.: 360-24444-1

SDG No.: OCRI-11

Lab File ID: J03102.D Lab Sample ID: MB 360-48958/1-A

Matrix: Solid Date Extracted: 09/15/2009 12:06

Instrument ID: Inst. J Date Analyzed: 09/23/2009 23:03

Level: (Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 360-48958/2-A	J03103.D	09/23/2009 23:37
	LCSD 360-48958/3-A	J03104.D	09/24/2009 00:11
OC-SB-459-6.0/8.0-DUP	360-24444-1	J03113.D	09/24/2009 05:16
OC-SB-459-6.0/8.0-XXX	360-24444-2	J03114.D	09/24/2009 05:49
OC-SB-459-6.0/8.0-XXX MS	360-24444-2 MS	J03115.D	09/24/2009 06:23
OC-SB-459-6.0/8.0-XXX MSD	360-24444-2 MSD	J03116.D	09/24/2009 06:56
OC-SB-459-0.0/1.0-XXX	360-24444-12	J03117.D	09/24/2009 07:28

MS MSD only

MB ok
LCS OK

SURR
-1 2,4,6-Tribromophenol 0%
terphenyl-d14 0%

-2 2 fluorophenol 26%
2,4,6-tribromophenol 0%
terphenyl-d14 0%

MS/MSD 28/30

Tune ok
IS OK

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Westfield Job No.: 360-24444-1

SDG No.: OCRI-11

Instrument ID: Inst. J Start Date: 09/23/2009 21:55

Analysis Batch Number: 49397 End Date: 09/24/2009 11:19

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 360-49397/12		09/23/2009 21:55	1	J03100.D	Rtx-5ms SIL with guard column 0.25(um)
CCV 360-49397/13 CCVIS		09/23/2009 22:29	1	J03101.D	Rtx-5ms SIL with guard column 0.25(um)
MB 360-48958/1-A		09/23/2009 23:03	1	J03102.D	Rtx-5ms SIL with guard column 0.25(um)
LCS 360-48958/2-A		09/23/2009 23:37	1	J03103.D	Rtx-5ms SIL with guard column 0.25(um)
LCSD 360-48958/3-A		09/24/2009 00:11	1	J03104.D	Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/24/2009 00:45	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/24/2009 01:19	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/24/2009 01:53	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/24/2009 02:27	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/24/2009 03:01	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/24/2009 03:34	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/24/2009 04:08	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/24/2009 04:42	1		Rtx-5ms SIL with guard column 0.25(um)
360-24444-1	OC-SB-459-6.0/8.0-DUP	09/24/2009 05:16	10	J03113.D	Rtx-5ms SIL with guard column 0.25(um)
360-24444-2	OC-SB-459-6.0/8.0-XXX	09/24/2009 05:49	10	J03114.D	Rtx-5ms SIL with guard column 0.25(um)
360-24444-2 MS	OC-SB-459-6.0/8.0-XXX MS	09/24/2009 06:23	10	J03115.D	Rtx-5ms SIL with guard column 0.25(um)
360-24444-2 MSD	OC-SB-459-6.0/8.0-XXX MSD	09/24/2009 06:56	10	J03116.D	Rtx-5ms SIL with guard column 0.25(um)
360-24444-12	OC-SB-459-0.0/1.0-XXX	09/24/2009 07:28	1	J03117.D	Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/24/2009 08:01	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/24/2009 08:34	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/24/2009 09:07	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/24/2009 09:40	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/24/2009 10:13	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/24/2009 10:46	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/24/2009 11:19	10		Rtx-5ms SIL with guard column 0.25(um)

CCAL

2-methylphenol %D - 38

benzoic acid RRF 0.0426

2,4-DNP %D 40

di-n-octyl phthalate %D -26

8270C LL

dibenz(a,h)anthracene %D 31

ICAL

2,4-dinitrophenol RRF = 0.0454

4,6-dinitro-2-methylphenol RRF = 0.0440

bis(2-ethylhexyl)phthalate & NDMA only

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Westfield Job No.: 360-24444-1

SDG No.: OCRI-11

Lab Sample ID: CCV 360-49397/13 Calibration Date: 09/23/2009 22:29

Instrument ID: Inst. J Calib Start Date: 09/23/2009 16:23

GC Column: Rtx-5ms ID: 0.25(um) Calib End Date: 09/23/2009 20:48

Lab File ID: J03101.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Lin2		0.2352		4410	5000	-11.8	30.0
Pyridine	Ave	0.6756	0.6100		4510	5000	-9.7	30.0
N-Nitrosodimethylamine	Ave	0.3519	0.3192		4540	5000	-9.3	30.0
Benzaldehyde	Ave	0.4236	0.3814		4500	5000	-10.0	30.0
Phenol	Ave	0.8207	0.7357		4480	5000	-10.4	20.0
Aniline	Ave	0.9532	0.8963		4700	5000	-6.0	30.0
Bis(2-chloroethyl)ether	Ave	0.6855	0.5893		4300	5000	-14.0	30.0
2-Chlorophenol	Ave	0.6554	0.5990		4570	5000	-8.6	30.0
1,4-Dichlorobenzene	Ave	0.7747	0.6820		4400	5000	-12.0	20.0
1,3-Dichlorobenzene	Ave	0.8010	0.7011		4380	5000	-12.5	30.0
2-Methylphenol	Ave	0.5914	0.3683		3110	5000	-37.7*	30.0
Benzyl alcohol	Ave	0.5311	0.4778		4500	5000	-10.0	30.0
1,2-Dichlorobenzene	Ave	0.7539	0.6462		4290	5000	-14.3	30.0
2,2'-oxybis[1-chloropropane]	Ave	0.6595	0.5789		4390	5000	-12.2	30.0
3 & 4 Methylphenol	Ave	0.6142	0.5612		4570	5000	-8.6	30.0
Acetophenone	Ave	0.8654	0.7882		4550	5000	-8.9	30.0
N-Nitrosodi-n-propylamine	Ave	0.4443	0.4178	0.0500	4700	5000	-6.0	30.0
Hexachloroethane	Ave	0.2732	0.2501		4580	5000	-8.5	30.0
Nitrobenzene	Ave	0.3153	0.3221		5110	5000	2.1	30.0
Isophorone	Ave	0.5260	0.5635		5360	5000	7.1	30.0
2,4-Dimethylphenol	Ave	0.2755	0.2861		5190	5000	3.8	30.0
2-Nitrophenol	Lin1		0.1548		4790	5000	-4.2	20.0
Benzoic acid	Qua		0.0426		4020	5000	-19.6	30.0
Bis(2-chloroethoxy)methane	Ave	0.3411	0.3392		4970	5000	-0.6	30.0
2,4-Dichlorophenol	Ave	0.2157	0.2326		5390	5000	7.9	20.0
1,2,4-Trichlorobenzene	Ave	0.2744	0.2703		4930	5000	-1.5	30.0
Alpha-Terpineol	Ave	0.1947	0.2082		5350	5000	6.9	30.0
Naphthalene	Ave	0.9072	0.8953		4930	5000	-1.3	30.0
4-Chloroaniline	Ave	0.3348	0.3469		5180	5000	3.6	30.0
Hexachlorobutadiene	Ave	0.1449	0.1435		4950	5000	-1.0	20.0
Caprolactam	Lin1		0.0813		4640	5000	-7.1	30.0
4-Chloro-3-methylphenol	Ave	0.2303	0.2503		5440	5000	8.7	20.0
2-Methylnaphthalene	Ave	0.5692	0.5764		5060	5000	1.3	30.0
1-Methylnaphthalene	Ave	0.5600	0.5628		5020	5000	0.5	30.0
1,2,4,5-Tetrachlorobenzene	Ave	0.2191	0.2207		5040	5000	0.7	30.0
Hexachlorocyclopentadiene	Ave	0.1803	0.1909	0.0500	5290	5000	5.9	30.0
2,4,6-Trichlorophenol	Ave	0.2897	0.3155		5450	5000	8.9	20.0
2,4,5-Trichlorophenol	Ave	0.2975	0.3180		5340	5000	6.9	30.0
1,1'-Biphenyl	Ave	1.402	1.371		4890	5000	-2.2	30.0
2-Chloronaphthalene	Ave	1.241	1.221		4920	5000	-1.6	30.0
2-Nitroaniline	Lin1		0.3087		4860	5000	-2.7	30.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Westfield Job No.: 360-24444-1

SDG No.: OCRI-11

Lab Sample ID: CCV 360-49397/13 Calibration Date: 09/23/2009 22:29

Instrument ID: Inst. J Calib Start Date: 09/23/2009 16:23

GC Column: Rtx-5ms ID: 0.25(um) Calib End Date: 09/23/2009 20:48

Lab File ID: J03101.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dimethyl phthalate	Ave	1.207	1.240		5130	5000	2.7	30.0
2,6-Dinitrotoluene	Lin2		0.2912		5180	5000	3.5	30.0
Acenaphthylene	Ave	1.618	1.690		5220	5000	4.4	30.0
3-Nitroaniline	Lin1		0.2922		5000	5000	0.1	30.0
Acenaphthene	Ave	1.091	1.075		4930	5000	-1.5	20.0
2,4-Dinitrophenol	Qua		0.0536	0.0500	6970	5000	39.5*	30.0
4-Nitrophenol	Lin		0.1318	0.0500	4580	5000	-8.4	30.0
Dibenzofuran	Ave	1.497	1.484		4960	5000	-0.9	30.0
2,4-Dinitrotoluene	Lin1		0.3510		4980	5000	-0.5	30.0
2,3,4,6-Tetrachlorophenol	Lin1		0.2207		4680	5000	-6.4	30.0
Diethyl phthalate	Ave	1.215	1.220		5020	5000	0.4	30.0
4-Chlorophenyl phenyl ether	Ave	0.5726	0.5709		4990	5000	-0.3	30.0
Fluorene	Ave	1.178	1.210		5140	5000	2.7	30.0
4-Nitroaniline	Lin1		0.2476		5170	5000	3.3	30.0
4,6-Dinitro-2-methylphenol	Qua		0.0529		6000	5000	20.1	30.0
Diphenylamine	Ave	0.6232	0.6356		5100	5000	2.0	30.0
N-Nitrosodiphenylamine	Ave	0.6232	0.6356		5100	5000	2.0	20.0
1,2-Diphenylhydrazine	Ave	0.7457	0.7789		5220	5000	4.4	30.0
Azobenzene	Ave	0.7457	0.7789		5220	5000	4.4	30.0
4-Bromophenyl phenyl ether	Ave	0.1845	0.1840		4980	5000	-0.3	30.0
Atrazine	Ave	0.1730	0.1883		5440	5000	8.9	30.0
Hexachlorobenzene	Ave	0.1897	0.1857		4900	5000	-2.1	30.0
Pentachlorophenol	Qua		0.0714		4930	5000	-1.4	20.0
Pentachloronitrobenzene	Lin1		0.0726		4910	5000	-1.9	30.0
Phenanthrene	Ave	1.033	1.002		4850	5000	-3.0	30.0
Anthracene	Ave	0.9247	0.9737		5260	5000	5.3	30.0
Carbazole	Ave	0.8175	0.8677		5310	5000	6.1	30.0
Di-n-butyl phthalate	Ave	1.201	1.175		4890	5000	-2.1	30.0
Pyrene	Ave	1.287	1.233		4790	5000	-4.1	30.0
Benzidine	Lin1		0.2060		6080	5000	21.7	30.0
Fluoranthene	Ave	0.9580	1.008		5260	5000	5.2	20.0
Butyl benzyl phthalate	Lin1		0.6412		4610	5000	-7.9	30.0
Bis(2-ethylhexyl) phthalate	Lin1		0.7730		4420	5000	-11.7	30.0
3,3'-Dichlorobenzidine	Lin1		0.2553		5390	5000	7.8	30.0
Benzo[a]anthracene	Ave	0.8789	0.9110		5180	5000	3.6	30.0
Chrysene	Ave	0.8894	0.8506		4780	5000	-4.4	30.0
Di-n-octyl phthalate	Lin		1.628		3710	5000	-25.8*	20.0
Benzo[b]fluoranthene	Lin1		1.224		4460	5000	-10.8	30.0
Benzo[k]fluoranthene	Lin1		1.236		4800	5000	-4.1	30.0
Benzo[a]pyrene	Lin1		0.9052		4900	5000	-2.0	20.0
Dibenz(a,h)anthracene	Qua		0.6179		6560	5000	31.2*	30.0

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Westfield Job No.: 360-24444-1 Analy Batch No.: 49396

SDG No.: OCRI-11

Instrument ID: Inst. J GC Column: Rtx-5ms ID: 0.25(um) Heated Purge: (Y/N) N

Calibration Start Date: 09/23/2009 16:23 Calibration End Date: 09/23/2009 20:48 Calibration ID: 4771

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD01 360-49396/3	J03092.D
Level 2	STD025 360-49396/4	J03093.D
Level 3	STD05 360-49396/5	J03094.D
Level 4	STD1 360-49396/6	J03095.D
Level 5	STD25 360-49396/7	J03096.D
Level 6	STD5 360-49396/2	J03091.D
Level 7	STD8 360-49396/8	J03097.D
Level 8	STD10 360-49396/9	J03098.D
Level 9	STD20 360-49396/10	J03099.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
1,4-Dioxane	0.6721 0.2368	0.4334 0.2250	0.3691 0.2546	0.3106 0.2770	0.2926	Lin2	0.0424	0.2570							0.9910		0.9900
Pyridine	0.6825 0.6289	0.6933 0.5887	0.6385 0.6790	0.7085 0.7420	0.7193	Ave		0.6756				7.2		15.0			
N-Nitrosodimethylamine	0.3777 0.3207	0.3453 0.3026	0.3641 0.3449	0.3634 0.3845	0.3637	Ave		0.3519				7.6		15.0			
Benzoic acid	+++++ 0.1077	+++++ 0.0727	0.0136 0.0586	0.0356 0.1208	0.0296	Qua	0.0102	0.0158 0.0026	0.0052						0.9950		0.9900
2,4-Dinitrophenol	+++++ 0.0639	+++++ 0.0476	+++++ 0.0467	0.0173 0.0803	0.0166	Qua	-0.014	0.0209 0.0454	0.0030	*	0.0500				0.9990		0.9900
Benzaldehyde	0.4770 0.3889	0.4220 0.3643	0.4235 0.4226	0.4283 0.4477	0.4383	Ave		0.4236				7.6		15.0			
Phenol	0.8394 0.7411	0.8378 0.7106	0.8533 0.8100	0.8645 0.8725	0.8569	Ave		0.8207				7.0		15.0			
Aniline	0.9568 0.8803	0.9553 0.8385	0.9450 0.9788	0.9512 1.0655	1.0073	Ave		0.9532				6.9		15.0			
Bis(2-chloroethyl)ether	0.7921 0.5981	0.7060 0.5753	0.7409 0.6442	0.7145 0.6887	0.7100	Ave		0.6855				10.0		15.0			
2-Chlorophenol	0.6525 0.5996	0.6720 0.5790	0.6509 0.6547	0.6763 0.7156	0.6979	Ave		0.6554				6.6		15.0			
1,4-Dichlorobenzene	0.8572 0.6654	0.8481 0.6425	0.8191 0.7355	0.8142 0.7899	0.8006	Ave		0.7747				10.0		15.0			
1,3-Dichlorobenzene	0.9153 0.6846	0.8701 0.6581	0.8524 0.7537	0.8479 0.8079	0.8191	Ave		0.8010				11.0		15.0			
Benzyl alcohol	0.5662 0.5037	0.5124 0.4793	0.4934 0.5479	0.4992 0.6194	0.5582	Ave		0.5311				8.5		15.0			

Note: The ml coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Westfield Job No.: 360-24444-1 Analy Batch No.: 49396

SDG No.: OCRI-11

Instrument ID: Inst. J GC Column: Rtx-5ms ID: 0.25(um) Heated Purge: (Y/N) N

Calibration Start Date: 09/23/2009 16:23 Calibration End Date: 09/23/2009 20:48 Calibration ID: 4771

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
1,2-Dichlorobenzene	0.9018 0.6335	0.8485 0.6076	0.8203 0.6934	0.7861 0.7323	0.7613	Ave		0.7539				13.0		15.0			
2-Methylphenol	0.6154 0.5455	0.5680 0.5219	0.5933 0.6010	0.5991 0.6508	0.6272	Ave		0.5914				6.8		15.0			
2,2'-oxybis[1-chloropropane]	0.7426 0.5864	0.7015 0.5465	0.7138 0.6245	0.6734 0.6832	0.6630	Ave		0.6595				9.5		15.0			
3 & 4 Methylphenol	0.6215 0.5732	0.6213 0.5448	0.5973 0.6212	0.6233 0.6770	0.6482	Ave		0.6142				6.3		15.0			
N-Nitrosodi-n-propylamine	0.4516 0.4251	0.4240 0.3993	0.4289 0.4552	0.4413 0.5055	0.4683	Ave		0.4443			0.0500	6.9		15.0			
Acetophenone	0.8952 0.7772	0.9128 0.7418	0.8977 0.8500	0.8883 0.9139	0.9120	Ave		0.8654				7.4		15.0			
Hexachloroethane	0.2847 0.2509	0.2677 0.2421	0.2752 0.2710	0.2775 0.3054	0.2842	Ave		0.2732				6.9		15.0			
Nitrobenzene	0.2983 0.3151	0.2825 0.3370	0.2949 0.3311	0.3124 0.3323	0.3343	Ave		0.3153				6.3		15.0			
Isophorone	0.4506 0.5527	0.4512 0.5908	0.4564 0.5868	0.4989 0.5802	0.5661	Ave		0.5260				12.0		15.0			
2,4-Dimethylphenol	0.2572 0.2840	0.2599 0.2942	0.2474 0.2877	0.2672 0.2886	0.2937	Ave		0.2755				6.4		15.0			
2-Nitrophenol	0.0997 0.1586	0.1046 0.1710	0.1050 0.1602	0.1280 0.1663	0.1435	Lin1	-0.014	0.1644							0.9970		0.9900
4,6-Dinitro-2-methylphenol	+++++ 0.0719	+++++ 0.0908	0.0149 0.0479	0.0253 0.0764	0.0213	Qua	-0.010	0.0272	0.0025						0.9980		0.9900
Bis(2-chloroethoxy)methane	0.3507 0.3275	0.3385 0.3518	0.3301 0.3459	0.3331 0.3391	0.3535	Ave		0.3411				2.9		15.0			
2,4-Dichlorophenol	0.1808 0.2207	0.1861 0.2402	0.1940 0.2390	0.2100 0.2348	0.2355	Ave		0.2157				11.0		15.0			
1,2,4-Trichlorobenzene	0.2909 0.2558	0.2797 0.2757	0.2759 0.2701	0.2779 0.2577	0.2856	Ave		0.2744				4.2		15.0			
Alpha-Terpineol	0.1805 0.1993	0.1687 0.2152	0.1741 0.2121	0.1820 0.2130	0.2074	Ave		0.1947				9.4		15.0			
Naphthalene	0.9667 0.8538	0.9178 0.9044	0.9020 0.8950	0.9169 0.8567	0.9518	Ave		0.9072				4.1		15.0			
4-Chloroaniline	0.3184 0.3242	0.2978 0.3574	0.3114 0.3659	0.3176 0.3634	0.3572	Ave		0.3348				7.8		15.0			
Hexachlorobutadiene	0.1512 0.1373	0.1485 0.1463	0.1352 0.1469	0.1444 0.1387	0.1561	Ave		0.1449				4.7		15.0			
Caprolactam	0.0648 0.0826	0.0460 0.0884	0.0474 0.0891	0.0542 0.0932	0.0734	Lin1	-0.009	0.0895							0.9930		0.9900

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM III
GC/MS SEMI VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24444-1

SDG No.: OCRI-11

Matrix: Solid Level: Low Lab File ID: J03115.D

Lab ID: 360-24444-2 MS Client ID: OC-SB-459-6.0/8.0-XXX MS

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	QC LIMITS REC	#
N-Nitrosodimethylamine	114	ND	32.0 J	28	40-140	F

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24444-1

SDG No.: OCRI-11

Matrix: Solid Level: Low Lab File ID: J03116.D

Lab ID: 360-24444-2 MSD Client ID: OC-SB-459-6.0/8.0-XXX MSD

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
N-Nitrosodimethylamine	114	34.4 J	30	7	30	40-140	F

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM IV
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Westfield Job No.: 360-24444-1

SDG No.: OCRI-11

Lab File ID: B10486.D Lab Sample ID: MB 360-49016/1-A

Matrix: Solid Date Extracted: 09/16/2009 11:53

Instrument ID: Inst. B Date Analyzed: 09/22/2009 20:43

Level:(Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 360-49016/2-A	B10487.D	09/22/2009 21:14
	LCSD 360-49016/3-A	B10488.D	09/22/2009 21:45
OC-SB-467-6.0/8.0-XXX MS	360-24444-9 MS	B10496.D	09/23/2009 01:55
OC-SB-467-6.0/8.0-XXX MSD	360-24444-9 MSD	B10497.D	09/23/2009 02:27
OC-SB-459-0.0/1.0-XXX	360-24444-12	B10498.D	09/23/2009 02:58
OC-SB-459-0.0/1.0-XXX DL	360-24444-12 DL	B10569.D	09/26/2009 03:59

MB
benzoic acid 97.4
bis(2-ethylhexyl)phthalate 102
di-n-butyl phthalate 68

TICs
benzaldehyde, 3-hydroxy-4-methoxy
dodecanoic acid, methyl ester
octadecane
eicosane
squalene

MS/MSD see attached

ICAL/CCAL OK

ICAL OK/CCAL OK

LCS
aniline 29/31
bis(2-ethylhexyl)phthalate 141/141

Surr
-12 ER 85-93 all

TUNE OK / IS OK

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Westfield | Job No.: 360-24444-1

SDG No.: OCRI-11

Client Sample ID: | Lab Sample ID: MB 360-49016/1-A

Matrix: Solid | Lab File ID: B10486.D

Analysis Method: 8270C LL | Date Collected:

Extract. Method: 3546 | Date Extracted: 09/16/2009 11:53

Sample wt/vol: 30.00(g) | Date Analyzed: 09/22/2009 20:43

Con. Extract Vol.: 1.0(mL) | Dilution Factor: 1

Injection Volume: 1.0(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 49400 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
120-82-1	1,2,4-Trichlorobenzene	ND		33	10
95-50-1	1,2-Dichlorobenzene	ND		33	10
541-73-1	1,3-Dichlorobenzene	ND		33	10
106-46-7	1,4-Dichlorobenzene	ND		33	10
105-67-9	2,4-Dimethylphenol	ND		33	13
120-83-2	2,4-Dichlorophenol	ND		33	10
88-06-2	2,4,6-Trichlorophenol	ND		33	10
95-95-4	2,4,5-Trichlorophenol	ND		33	10
95-57-8	2-Chlorophenol	ND		33	10
91-58-7	2-Chloronaphthalene	ND		33	10
91-57-6	2-Methylnaphthalene	ND		33	10
95-48-7	2-Methylphenol	ND		33	20
606-20-2	2,6-Dinitrotoluene	ND		33	10
88-74-4	2-Nitroaniline	ND		170	10
88-75-5	2-Nitrophenol	ND		33	10
15831-10-4	3 & 4 Methylphenol	ND		33	10
51-28-5	2,4-Dinitrophenol	ND		33	10
99-09-2	3-Nitroaniline	ND		170	10
121-14-2	2,4-Dinitrotoluene	ND		33	10
59-50-7	4-Chloro-3-methylphenol	ND		67	10
106-47-8	4-Chloroaniline	ND		67	10
100-01-6	4-Nitroaniline	ND		170	10
100-02-7	4-Nitrophenol	ND		170	10
101-55-3	4-Bromophenyl phenyl ether	ND		33	10
83-32-9	Acenaphthene	ND		33	10
208-96-8	Acenaphthylene	ND		33	10
7005-72-3	4-Chlorophenyl phenyl ether	ND		33	10
62-53-3	Aniline	ND		33	10
534-52-1	4,6-Dinitro-2-methylphenol	ND		170	10
120-12-7	Anthracene	ND		33	10
56-55-3	Benzo[a]anthracene	ND		33	10
65-85-0	Benzoic acid	97.4	J	170	15
91-94-1	3,3'-Dichlorobenzidine	ND		67	10
100-51-6	Benzyl alcohol	ND		67	28

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Westfield | Job No.: 360-24444-1

SDG No.: OCRI-11

Client Sample ID: | Lab Sample ID: MB 360-49016/1-A

Matrix: Solid | Lab File ID: B10486.D

Analysis Method: 8270C LL | Date Collected:

Extract. Method: 3546 | Date Extracted: 09/16/2009 11:53

Sample wt/vol: 30.00(g) | Date Analyzed: 09/22/2009 20:43

Con. Extract Vol.: 1.0(mL) | Dilution Factor: 1

Injection Volume: 1.0(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 49400 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
205-99-2	Benzo[b]fluoranthene	ND		33	10
111-91-1	Bis(2-chloroethoxy)methane	ND		33	10
207-08-9	Benzo[k]fluoranthene	ND		33	10
111-44-4	Bis(2-chloroethyl)ether	ND		33	10
50-32-8	Benzo[a]pyrene	ND		33	10
85-68-7	Butyl benzyl phthalate	ND		33	10
191-24-2	Benzo[g,h,i]perylene	ND		33	10
98-86-2	Acetophenone	ND		33	10
218-01-9	Chrysene	ND		33	10
103-33-3	Azobenzene	ND		33	10
117-81-7	Bis(2-ethylhexyl) phthalate	162		33	10
53-70-3	Dibenz(a,h)anthracene	ND		33	10
132-64-9	Dibenzofuran	ND		33	10
84-66-2	Diethyl phthalate	ND		33	10
131-11-3	Dimethyl phthalate	ND		33	10
84-74-2	Di-n-butyl phthalate	68.0		33	29
117-84-0	Di-n-octyl phthalate	ND		33	17
108-60-1	2,2'-oxybis[1-chloropropane]	ND		33	10
122-39-4	Diphenylamine	ND		33	10
206-44-0	Fluoranthene	ND		33	10
86-73-7	Fluorene	ND		33	10
118-74-1	Hexachlorobenzene	ND		33	10
87-68-3	Hexachlorobutadiene	ND		33	10
77-47-4	Hexachlorocyclopentadiene	ND		67	10
90-12-0	1-Methylnaphthalene	ND		33	10
67-72-1	Hexachloroethane	ND		33	10
92-52-4	1,1'-Biphenyl	ND		33	10
193-39-5	Indeno[1,2,3-cd]pyrene	ND		33	10
95-94-3	1,2,4,5-Tetrachlorobenzene	ND		33	10
78-59-1	Isophorone	ND		33	10
58-90-2	2,3,4,6-Tetrachlorophenol	ND		33	10
91-20-3	Naphthalene	ND		80	10
1912-24-9	Atrazine	ND		33	10
100-52-7	Benzaldehyde	ND		33	10

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24444-1

SDG No.: OCRI-11

Matrix: Solid Level: Low Lab File ID: B10487.D

Lab ID: LCS 360-49016/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
1,2,4-Trichlorobenzene	333	249	75	40-140	
1,2-Dichlorobenzene	333	244	73	40-140	
1,3-Dichlorobenzene	333	205	62	40-140	
1,4-Dichlorobenzene	333	198	59	40-140	
2,4-Dimethylphenol	333	267	80	30-130	
2,4-Dichlorophenol	333	272	82	30-130	
2,4,6-Trichlorophenol	333	303	91	30-130	
2,4,5-Trichlorophenol	333	297	89	30-130	
2-Chlorophenol	333	233	70	30-130	
2-Chloronaphthalene	333	242	73	40-140	
2-Methylnaphthalene	333	231	69	40-140	
2-Methylphenol	333	242	73	30-130	
2,6-Dinitrotoluene	333	306	92	40-140	
2-Nitroaniline	333	353	106	40-140	
2-Nitrophenol	333	289	87	30-130	
3 & 4 Methylphenol	333	258	78	30-130	
2,4-Dinitrophenol	333	238	72	30-130	
3-Nitroaniline	333	316	95	40-140	
2,4-Dinitrotoluene	333	297	89	40-140	
4-Chloro-3-methylphenol	333	287	86	30-130	
4-Chloroaniline	333	211	63	40-140	
4-Nitroaniline	333	312	94	40-140	
4-Nitrophenol	333	337	101	30-130	
4-Bromophenyl phenyl ether	333	334	100	40-140	
Acenaphthene	333	350	105	40-140	
Acenaphthylene	333	303	91	40-140	
4-Chlorophenyl phenyl ether	333	317	95	40-140	
Aniline	333	95.6	29	40-140	*
4,6-Dinitro-2-methylphenol	333	315	94	30-130	
Anthracene	333	387	116	40-140	
Benzo[a]anthracene	333	397	119	40-140	
Benzoic acid	333	171	51	30-130	
3,3'-Dichlorobenzidine	333	323	97	40-140	
Benzyl alcohol	333	268	80	30-130	
Benzo[b]fluoranthene	333	351	105	40-140	
Bis(2-chloroethoxy)methane	333	233	70	40-140	
Benzo[k]fluoranthene	333	387	116	40-140	
Bis(2-chloroethyl)ether	333	210	63	40-140	
Benzo[a]pyrene	333	413	124	40-140	
Butyl benzyl phthalate	333	319	96	40-140	
Benzo[g,h,i]perylene	333	382	115	40-140	

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Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24444-1

SDG No.: OCRI-11

Matrix: Solid Level: Low Lab File ID: B10487.D

Lab ID: LCS 360-49016/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
Acetophenone	333	233	70	40-140	
Chrysene	333	378	113	40-140	
Azobenzene	333	333	100	40-140	
Bis(2-ethylhexyl) phthalate	333	472	141	40-140	*
Dibenz(a,h)anthracene	333	425	127	40-140	
Dibenzofuran	333	305	91	40-140	
Diethyl phthalate	333	327	98	40-140	
Dimethyl phthalate	333	319	96	40-140	
Di-n-butyl phthalate	333	395	118	40-140	
Di-n-octyl phthalate	333	318	95	40-140	
2,2'-oxybis[1-chloropropane]	333	273	82	40-140	
Fluoranthene	333	357	107	40-140	
Fluorene	333	374	112	40-140	
Hexachlorobenzene	333	322	97	40-140	
Hexachlorobutadiene	333	263	79	40-140	
Hexachlorocyclopentadiene	333	231	69	40-140	
1-Methylnaphthalene	333	293	88	40-140	
Hexachloroethane	333	205	62	40-140	
1,1'-Biphenyl	333	318	95	40-140	
Indeno[1,2,3-cd]pyrene	333	421	126	40-140	
1,2,4,5-Tetrachlorobenzene	333	299	90	40-140	
Isophorone	333	213	64	40-140	
2,3,4,6-Tetrachlorophenol	333	264	79	40-140	
Naphthalene	333	274	82	40-140	
Atrazine	333	402	121	40-140	
Benzaldehyde	333	262	79	40-140	
Nitrobenzene	333	233	70	40-140	
Caprolactam	333	364	109	40-140	
Carbazole	333	357	107	40-140	
N-Nitrosodimethylamine	333	248	74	40-140	
Benzophenone	333	347	104	40-140	
N-Nitrosodi-n-propylamine	333	255	77	40-140	
Diphenyl oxide	333	258	77	40-140	
N-Nitrosodiphenylamine	333	232	70	40-140	
Pentachlorophenol	333	312	94	30-130	
Phenanthrene	333	341	102	40-140	
Phenol	333	240	72	30-130	
Pyrene	333	353	106	40-140	

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Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24444-1

SDG No.: OCRI-11

Matrix: Solid Level: Low Lab File ID: B10488.D

Lab ID: LCSD 360-49016/3-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCSD CONCENTRATION (ug/Kg)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,2,4-Trichlorobenzene	333	262	79	5	30	40-140	
1,2-Dichlorobenzene	333	261	78	7	30	40-140	
1,3-Dichlorobenzene	333	217	65	6	30	40-140	
1,4-Dichlorobenzene	333	211	63	6	30	40-140	
2,4-Dimethylphenol	333	279	84	4	30	30-130	
2,4-Dichlorophenol	333	276	83	2	30	30-130	
2,4,6-Trichlorophenol	333	314	94	3	30	30-130	
2,4,5-Trichlorophenol	333	320	96	8	30	30-130	
2-Chlorophenol	333	247	74	6	30	30-130	
2-Chloronaphthalene	333	249	75	3	30	40-140	
2-Methylnaphthalene	333	236	71	2	30	40-140	
2-Methylphenol	333	254	76	5	30	30-130	
2,6-Dinitrotoluene	333	318	95	4	30	40-140	
2-Nitroaniline	333	358	107	1	30	40-140	
2-Nitrophenol	333	301	90	4	30	30-130	
3 & 4 Methylphenol	333	273	82	6	30	30-130	
2,4-Dinitrophenol	333	254	76	6	30	30-130	
3-Nitroaniline	333	321	96	2	30	40-140	
2,4-Dinitrotoluene	333	311	93	5	30	40-140	
4-Chloro-3-methylphenol	333	291	87	2	30	30-130	
4-Chloroaniline	333	208	62	1	30	40-140	
4-Nitroaniline	333	321	96	3	30	40-140	
4-Nitrophenol	333	354	106	5	30	30-130	
4-Bromophenyl phenyl ether	333	341	102	2	30	40-140	
Acenaphthene	333	360	108	3	30	40-140	
Acenaphthylene	333	310	93	2	30	40-140	
4-Chlorophenyl phenyl ether	333	326	98	3	30	40-140	
Aniline	333	103	31	8	30	40-140	*
4,6-Dinitro-2-methylphenol	333	327	98	4	30	30-130	
Anthracene	333	400	120	3	30	40-140	
Benzo[a]anthracene	333	419	126	6	30	40-140	
Benzoic acid	333	174	52	2	30	30-130	
3,3'-Dichlorobenzidine	333	343	103	6	30	40-140	
Benzyl alcohol	333	279	84	4	30	30-130	
Benzo[b]fluoranthene	333	380	114	8	30	40-140	
Bis(2-chloroethoxy)methane	333	237	71	2	30	40-140	
Benzo[k]fluoranthene	333	407	122	5	30	40-140	
Bis(2-chloroethyl)ether	333	223	67	6	30	40-140	
Benzo[a]pyrene	333	437	131	6	30	40-140	
Butyl benzyl phthalate	333	337	101	6	30	40-140	
Benzo[g,h,i]perylene	333	402	121	5	30	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24444-1

SDG No.: OCRI-11

Matrix: Solid Level: Low Lab File ID: B10488.D

Lab ID: LCSD 360-49016/3-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCSD CONCENTRATION (ug/Kg)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Acetophenone	333	251	75	8	30	40-140	
Chrysene	333	398	120	5	30	40-140	
Azobenzene	333	338	101	2	30	40-140	
Bis(2-ethylhexyl) phthalate	333	470	141	0	30	40-140	*
Dibenz(a,h)anthracene	333	455	136	7	30	40-140	
Dibenzofuran	333	310	93	2	30	40-140	
Diethyl phthalate	333	337	101	3	30	40-140	
Dimethyl phthalate	333	330	99	3	30	40-140	
Di-n-butyl phthalate	333	410	123	4	30	40-140	
Di-n-octyl phthalate	333	335	101	5	30	40-140	
2,2'-oxybis[1-chloropropane]	333	291	87	6	30	40-140	
Fluoranthene	333	375	113	5	30	40-140	
Fluorene	333	383	115	2	30	40-140	
Hexachlorobenzene	333	336	101	4	30	40-140	
Hexachlorobutadiene	333	264	79	0	30	40-140	
Hexachlorocyclopentadiene	333	245	74	6	30	40-140	
1-Methylnaphthalene	333	286	86	2	30	40-140	
Hexachloroethane	333	220	66	7	30	40-140	
1,1'-Biphenyl	333	307	92	3	30	40-140	
Indeno[1,2,3-cd]pyrene	333	447	134	6	30	40-140	
1,2,4,5-Tetrachlorobenzene	333	306	92	2	30	40-140	
Isophorone	333	220	66	4	30	40-140	
2,3,4,6-Tetrachlorophenol	333	260	78	1	30	40-140	
Naphthalene	333	282	85	3	30	40-140	
Atrazine	333	406	122	1	30	40-140	
Benzaldehyde	333	259	78	1	30	40-140	
Nitrobenzene	333	236	71	1	30	40-140	
Caprolactam	333	357	107	2	30	40-140	
Carbazole	333	374	112	4	30	40-140	
N-Nitrosodimethylamine	333	263	79	6	30	40-140	
Benzophenone	333	347	104	0	30	40-140	
N-Nitrosodi-n-propylamine	333	269	81	5	30	40-140	
Diphenyl oxide	333	251	75	3	30	40-140	
N-Nitrosodiphenylamine	333	245	73	5	30	40-140	
Pentachlorophenol	333	328	98	5	30	30-130	
Phenanthrene	333	360	108	5	30	40-140	
Phenol	333	257	77	7	30	30-130	
Pyrene	333	368	110	4	30	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM II
GC/MS SEMI VOA SURROGATE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24444-1

SDG No.: OCRI-11

Matrix: Solid Level: Low

GC Column (1): Rtx-5ms ID: 0.25 (um)

Client Sample ID	Lab Sample ID	2FP #	PHL #	NBZ #	FBP #	TBP #	TPH #
OC-SB-459-6.0/8.0-DUP	360-24444-1	115	69	77	72	90	84
OC-SB-459-6.0/8.0-DUP	360-24444-1	31	36	34	35	0 X	0 X
OC-SB-459-6.0/8.0-DUP DL	360-24444-1 DL	0 X D	0 X D	0 X D	0 X D	0 X D	0 X D
OC-SB-459-6.0/8.0-XXX	360-24444-2	112	62	60	76	80	80
OC-SB-459-6.0/8.0-XXX	360-24444-2	26 X	30	30	32	0 X	0 X
OC-SB-459-6.0/8.0-XXX DL3	360-24444-2 DL3	0 X	0 X	0 X	0 X	0 X	0 X
OC-SB-462-0.0/1.0-XXX	360-24444-3	68	66	62	64	73	78
OC-SB-462-4.0/6.0-XXX	360-24444-5	114	69	64	80	70	81
OC-SB-467-6.0/8.0-DUP	360-24444-8	66	62	60	65	65	75
OC-SB-467-6.0/8.0-XXX	360-24444-9	64	61	60	64	57	76
OC-SB-459-0.0/1.0-XXX	360-24444-12	9 X	8 X	8 X	8 X	8 X	9 X
OC-SB-459-0.0/1.0-XXX	360-24444-12	63	73	69	70	80	91
OC-SB-459-0.0/1.0-XXX DL	360-24444-12 DL	0 X D	0 X D	0 X D	0 X D	0 X D	0 X D
	MB 360-48924/1-A	88	93	78	79	78	86
	MB 360-48958/1-A	63	69	51	64	61	82
	MB 360-49016/1-A	106	90	88	76	81	90
	LCS 360-48924/2-A	66	70	79	78	84	82
	LCS 360-48958/2-A	50	55	58	63	71	73
	LCS 360-49016/2-A	78	67	64	81	86	82
	LCSD 360-48924/3-A	68	71	84	79	90	86
	LCSD 360-48958/3-A	56	61	69	72	81	86
	LCSD 360-49016/3-A	80	70	62	80	88	83
OC-SB-459-6.0/8.0-XXX MS	360-24444-2 MS	117	73	79	71	88	75
OC-SB-459-6.0/8.0-XXX MS	360-24444-2 MS	26 X	32	32	32	0 X	0 X
OC-SB-467-6.0/8.0-XXX MS	360-24444-9 MS	71	60	57	70	77	78

	QC LIMITS
2FP = 2-Fluorophenol	30-130
PHL = Phenol-d5	30-130
NBZ = Nitrobenzene-d5	30-130
FBP = 2-Fluorobiphenyl	30-130
TBP = 2,4,6-Tribromophenol	30-130
TPH = Terphenyl-d14	30-130

Column to be used to flag recovery values

FORM II 8270C LL

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Westfield Job No.: 360-24444-1

SDG No.: OCRI-11

Instrument ID: Inst. B Start Date: 09/26/2009 03:04

Analysis Batch Number: 49517 End Date: 09/26/2009 13:38

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 360-49517/24		09/26/2009 03:04	1	B10567.D	Rtx-5ms SIL with guard column 0.25(um)
CCV 360-49517/25 CCVIS		09/26/2009 03:32	1	B10568.D	Rtx-5ms SIL with guard column 0.25(um)
360-24444-12 DL	OC-SB-459-0.0/1.0-XXX DL	09/26/2009 03:59	20	B10569.D	Rtx-5ms SIL with guard column 0.25(um)
360-24444-1 DL	OC-SB-459-6.0/8.0-DUP DL	09/26/2009 04:27	2000	B10570.D	Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/26/2009 04:54	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/26/2009 05:22	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/26/2009 05:49	10		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/26/2009 06:17	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/26/2009 06:44	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/26/2009 07:12	10		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/26/2009 07:39	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/26/2009 08:06	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/26/2009 08:34	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/26/2009 09:01	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/26/2009 09:29	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/26/2009 09:57	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/26/2009 10:24	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/26/2009 10:52	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/26/2009 11:19	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/26/2009 11:47	10		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/26/2009 12:15	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/26/2009 12:42	10		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/26/2009 13:10	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/26/2009 13:38	1		Rtx-5ms SIL with guard column 0.25(um)

ICAL Benzoic acid RRF 0.0209

CC AL OK

~~Lin 0.99 SD = 25~~

8270C LL

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Westfield Job No.: 360-24444-1

SDG No.: OCRI-11

Instrument ID: Inst. B Start Date: 09/25/2009 16:56

Analysis Batch Number: 49509 End Date: 09/25/2009 21:32

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 360-49509/1		09/25/2009 16:56	1	B10545.D	Rtx-5ms SIL with guard column 0.25(um)
STD5 360-49509/2 ICIS		09/25/2009 17:23	1	B10546.D	Rtx-5ms SIL with guard column 0.25(um)
STD01 360-49509/3 IC		09/25/2009 17:51	1	B10547.D	Rtx-5ms SIL with guard column 0.25(um)
STD025 360-49509/4 IC		09/25/2009 18:18	1	B10548.D	Rtx-5ms SIL with guard column 0.25(um)
STD05 360-49509/5 IC		09/25/2009 18:46	1	B10549.D	Rtx-5ms SIL with guard column 0.25(um)
STD1 360-49509/6 IC		09/25/2009 19:14	1	B10550.D	Rtx-5ms SIL with guard column 0.25(um)
STD25 360-49509/7 IC		09/25/2009 19:41	1	B10551.D	Rtx-5ms SIL with guard column 0.25(um)
STD8 360-49509/8 IC		09/25/2009 20:09	1	B10552.D	Rtx-5ms SIL with guard column 0.25(um)
STD10 360-49509/9 IC		09/25/2009 20:37	1	B10553.D	Rtx-5ms SIL with guard column 0.25(um)
STD20 360-49509/10 IC		09/25/2009 21:05	1	B10554.D	Rtx-5ms SIL with guard column 0.25(um)
ICV 360-49509/11		09/25/2009 21:32	1		Rtx-5ms SIL with guard column 0.25(um)

ICAL

Benzoic acid $\overline{RRF} = 0.0289$

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Westfield Job No.: 360-24444-1 Analy Batch No.: 49509

SDG No.: OCRI-11

Instrument ID: Inst. B GC Column: Rtx-5ms ID: 0.25(um) Heated Purge: (Y/N) N

Calibration Start Date: 09/25/2009 17:23 Calibration End Date: 09/25/2009 21:05 Calibration ID: 4772

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD01 360-49509/3	B10547.D
Level 2	STD025 360-49509/4	B10548.D
Level 3	STD05 360-49509/5	B10549.D
Level 4	STD1 360-49509/6	B10550.D
Level 5	STD25 360-49509/7	B10551.D
Level 6	STD5 360-49509/2	B10546.D
Level 7	STD8 360-49509/8	B10552.D
Level 8	STD10 360-49509/9	B10553.D
Level 9	STD20 360-49509/10	B10554.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
Pyridine	+++++ 0.5138	+++++ 0.4378	0.3739 0.3968	0.4530 +++++	0.4816	Ave		0.4428				12.0		15.0			
1,4-Dioxane	0.4511 0.1663	0.2966 0.1568	0.2604 0.1352	0.2223 0.1593	0.1599	Lin1	0.0361	0.1515							0.9930		0.9900
N-Nitrosodimethylamine	0.4239 0.3523	0.4098 0.3309	0.4090 0.3031	0.3956 0.4597	0.3761	Ave		0.3845				13.0		15.0			
Benzoic acid	+++++ 0.0730	+++++ 0.0885	0.0101 0.1141	0.0223 +++++	0.0615	Qua	-0.002	0.0289	0.0083						0.9950		0.9900
Benzaldehyde	0.4159 0.3382	0.3733 0.3319	0.3729 0.2923	0.3848 0.3767	0.3800	Ave		0.3629				10.0		15.0			
Phenol	0.7722 0.6378	0.7168 0.6325	0.6891 0.5653	0.7162 0.7904	0.7131	Ave		0.6926				10.0		15.0			
Aniline	0.8229 0.7577	0.8049 0.7458	0.8296 0.6671	0.8527 0.9274	0.8548	Ave		0.8070				9.3		15.0			
Bis(2-chloroethyl)ether	0.5906 0.4936	0.5846 0.4891	0.5591 0.4353	0.5630 0.6075	0.5632	Ave		0.5429				11.0		15.0			
2-Chlorophenol	0.6282 0.5579	0.6381 0.5399	0.6456 0.4865	0.6281 0.6624	0.6259	Ave		0.6014				9.8		15.0			
1,4-Dichlorobenzene	0.8095 0.6505	0.8195 0.6415	0.7780 0.5717	0.7678 0.7824	0.7476	Ave		0.7299				12.0		15.0			
1,3-Dichlorobenzene	0.8405 0.6735	0.8701 0.6668	0.7996 0.5942	0.8131 0.8208	0.7834	Ave		0.7624				12.0		15.0			
Benzyl alcohol	0.4408 0.4770	0.4654 0.4668	0.4594 0.4198	0.4952 0.5922	0.5014	Ave		0.4798				10.0		15.0			
1,2-Dichlorobenzene	0.8763 0.6194	0.8173 0.6098	0.7773 0.5392	0.7353 0.7437	0.7112	Ave		0.7144				15.0		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Westfield Job No.: 360-24444-1

SDG No.: OCRI-11

Lab Sample ID: CCV 360-49517/25 Calibration Date: 09/26/2009 03:32

Instrument ID: Inst. B Calib Start Date: 09/25/2009 17:23

GC Column: Rtx-5ms ID: 0.25(um) Calib End Date: 09/25/2009 21:05

Lab File ID: B10568.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Nitroaniline	Lin1		0.3913		4850	5000	-3.1	30.0
Dimethyl phthalate	Ave	1.209	1.262		5220	5000	4.4	30.0
2,6-Dinitrotoluene	Lin2		0.2916		5020	5000	0.3	30.0
Acenaphthylene	Ave	1.677	1.787		5330	5000	6.5	30.0
3-Nitroaniline	Lin1		0.2977		5060	5000	1.3	30.0
2,4-Dinitrophenol	Qua		0.0738	0.0500	3740	5000	-25.2	30.0
Acenaphthene	Ave	1.162	1.186		5100	5000	2.1	20.0
4-Nitrophenol	Lin1		0.1612	0.0500	4460	5000	-10.8	30.0
2,4-Dinitrotoluene	Lin1		0.3994		4920	5000	-1.5	30.0
Dibenzofuran	Ave	1.513	1.539		5080	5000	1.7	30.0
2,3,4,6-Tetrachlorophenol	Lin1		0.2469		4780	5000	-4.3	30.0
Diethyl phthalate	Ave	1.268	1.299		5120	5000	2.4	30.0
4-Chlorophenyl phenyl ether	Ave	0.5755	0.5707		4960	5000	-0.8	30.0
2-Nitroaniline	Qua		0.3210		5510	5000	10.2	30.0
Fluorene	Ave	1.248	1.320		5290	5000	5.8	30.0
4,6-Dinitro-2-methylphenol	Lin		0.0818		4130	5000	-17.4	30.0
Diphenylamine	Ave	0.6431	0.7070		5500	5000	9.9	30.0
N-Nitrosodiphenylamine	Ave	0.6431	0.7070		5500	5000	9.9	20.0
1,2-Diphenylhydrazine	Ave	1.210	1.343		5550	5000	11.0	30.0
Azobenzene	Ave	1.210	1.343		5550	5000	11.0	30.0
Benzophenone	Ave	0.7086	0.7904		5580	5000	11.5	30.0
4-Bromophenyl phenyl ether	Ave	0.1790	0.1923		5370	5000	7.5	30.0
Hexachlorobenzene	Ave	0.1708	0.1768		5180	5000	3.5	30.0
Atrazine	Ave	0.1772	0.1969		5560	5000	11.1	30.0
Pentachlorophenol	Qua		0.0828		4880	5000	-2.3	20.0
Pentachloronitrobenzene	Lin1		0.0920		4870	5000	-2.6	30.0
Phenanthrene	Ave	1.008	1.058		5250	5000	5.0	30.0
Anthracene	Ave	0.9476	1.048		5530	5000	10.6	30.0
Carbazole	Ave	0.7933	0.8638		5440	5000	8.9	30.0
Di-n-butyl phthalate	Ave	1.236	1.291		5220	5000	4.4	30.0
Fluoranthene	Ave	0.9021	0.9538		5290	5000	5.7	20.0
Benzidine	Qua		0.1724		5880	5000	17.6	30.0
Pyrene	Ave	1.309	1.298		4960	5000	-0.8	30.0
Butyl benzyl phthalate	Ave	0.5910	0.6682		5650	5000	13.1	30.0
3,3'-Dichlorobenzidine	Lin1		0.2758		5180	5000	3.7	30.0
Bis(2-ethylhexyl) phthalate	Lin1		0.9395		5060	5000	1.3	30.0
Benzo[a]anthracene	Ave	0.8872	0.9196		5180	5000	3.6	30.0
Chrysene	Ave	0.8423	0.8571		5090	5000	1.8	30.0
Di-n-octyl phthalate	Lin		1.951		4720	5000	-5.6	20.0
Benzo[b]fluoranthene	Ave	1.146	1.211		5290	5000	5.7	30.0
Benzo[k]fluoranthene	Ave	1.049	1.097		5230	5000	4.6	30.0

FORM IV
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Westfield Job No.: 360-24444-1

SDG No.: OCRI-11

Lab File ID: J03050.D Lab Sample ID: MB 360-48924/1-A

Matrix: Solid Date Extracted: 09/14/2009 13:00

Instrument ID: Inst. J Date Analyzed: 09/21/2009 19:53

Level: (Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 360-48924/2-A	J03051.D	09/21/2009 20:20
	LCSD 360-48924/3-A	J03052.D	09/21/2009 20:47
OC-SB-459-6.0/8.0-DUP	360-24444-1 Δ	J03065.D	09/22/2009 02:39
OC-SB-459-6.0/8.0-XXX	360-24444-2 Δ	J03066.D	09/22/2009 03:05
OC-SB-459-6.0/8.0-XXX MS	360-24444-2 MS	J03067.D	09/22/2009 03:32
OC-SB-459-6.0/8.0-XXX MSD	360-24444-2 MSD	J03068.D	09/22/2009 03:59
OC-SB-462-0.0/1.0-XXX	360-24444-3 Δ	J03069.D	09/22/2009 04:26
OC-SB-462-4.0/6.0-XXX	360-24444-5 Δ	J03071.D	09/22/2009 05:20
OC-SB-467-6.0/8.0-DUP	360-24444-8 Δ	J03073.D	09/22/2009 06:13
OC-SB-467-6.0/8.0-XXX	360-24444-9 Δ	J03074.D	09/22/2009 06:40
OC-SB-459-6.0/8.0-XXX DL3	360-24444-2 DL3	B10528.D	09/24/2009 02:47
OC-SB-459-6.0/8.0-DUP DL	360-24444-1 DL *	B10570.D	09/26/2009 04:27
OC-SB-459-6.0/8.0-DUP DL2	360-24444-1 DL2 *	B10618.D	09/29/2009 02:12
OC-SB-459-6.0/8.0-DUP DL3	360-24444-1 DL3		09/29/2009 02:12
OC-SB-459-6.0/8.0-XXX DL2	360-24444-2 DL2 *	B10619.D	09/29/2009 02:40
OC-SB-459-6.0/8.0-XXX DL3	360-24444-2 DL3 *		09/29/2009 02:40

MB
bis (2-ethylhexyl) phthalate 19.4 194
di-n-butyl phthalate 82.2 822

TICs:
vanillin
dodecanoic acid, methyl ester
hexadecane
eicosane
octadecane

LCS
aniline 31/33

ICAL/CCAL OK #

Δ ICAL 2-nitroaniline RRF 0.0468
benzoic acid r² = 0.9990
ICAL RF 2-nitroaniline 0.0454

IS
-1 - Chrysene-d12 39%
-2 " " 43%
-1DL2 phenanthrene-d10 203%
N/A chrysene-d12 263%
perylene-d12 242%

Surr OK

TUNE OK

MS/MSD See attached.

DONE

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Westfield | Job No.: 360-24444-1

SDG No.: OCRI-11

Client Sample ID: | Lab Sample ID: MB 360-48924/1-A

Matrix: Solid | Lab File ID: J03050.D

Analysis Method: 8270C LL | Date Collected:

Extract. Method: 3546 | Date Extracted: 09/14/2009 13:00

Sample wt/vol: 30.00(g) | Date Analyzed: 09/21/2009 19:53

Con. Extract Vol.: 1.0(mL) | Dilution Factor: 1

Injection Volume: 1.0(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 49259 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
205-99-2	Benzo[b]fluoranthene	ND		33	10
111-91-1	Bis(2-chloroethoxy)methane	ND		33	10
207-08-9	Benzo[k]fluoranthene	ND		33	10
111-44-4	Bis(2-chloroethyl)ether	ND		33	10
50-32-8	Benzo[a]pyrene	ND		33	10
85-68-7	Butyl benzyl phthalate	ND		33	10
191-24-2	Benzo[g,h,i]perylene	ND		33	10
98-86-2	Acetophenone	ND		33	10
218-01-9	Chrysene	ND		33	10
103-33-3	Azobenzene	ND		33	10
117-81-7	Bis(2-ethylhexyl) phthalate	19.4	J	33	10
53-70-3	Dibenz(a,h)anthracene	ND		33	10
132-64-9	Dibenzofuran	ND		33	10
84-66-2	Diethyl phthalate	ND		33	10
131-11-3	Dimethyl phthalate	ND		33	10
84-74-2	Di-n-butyl phthalate	82.2		33	29
117-84-0	Di-n-octyl phthalate	ND		33	17
108-60-1	2,2'-oxybis[1-chloropropane]	ND		33	10
122-39-4	Diphenylamine	ND		33	10
206-44-0	Fluoranthene	ND		33	10
86-73-7	Fluorene	ND		33	10
118-74-1	Hexachlorobenzene	ND		33	10
87-68-3	Hexachlorobutadiene	ND		33	10
77-47-4	Hexachlorocyclopentadiene	ND		67	10
90-12-0	1-Methylnaphthalene	ND		33	10
67-72-1	Hexachloroethane	ND		33	10
92-52-4	1,1'-Biphenyl	ND		33	10
193-39-5	Indeno[1,2,3-cd]pyrene	ND		33	10
95-94-3	1,2,4,5-Tetrachlorobenzene	ND		33	10
78-59-1	Isophorone	ND		33	10
58-90-2	2,3,4,6-Tetrachlorophenol	ND		33	10
91-20-3	Naphthalene	ND		80	10
1912-24-9	Atrazine	ND		33	10
100-52-7	Benzaldehyde	ND		33	10

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24444-1

SDG No.: OCRI-11

Matrix: Solid Level: Low Lab File ID: J03051.D

Lab ID: LCS 360-48924/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
1,2,4-Trichlorobenzene	333	245	73	40-140	
1,2-Dichlorobenzene	333	202	60	40-140	
1,3-Dichlorobenzene	333	199	60	40-140	
1,4-Dichlorobenzene	333	201	60	40-140	
2,4-Dimethylphenol	333	312	94	30-130	
2,4-Dichlorophenol	333	292	88	30-130	
2,4,6-Trichlorophenol	333	306	92	30-130	
2,4,5-Trichlorophenol	333	311	93	30-130	
2-Chlorophenol	333	234	70	30-130	
2-Chloronaphthalene	333	206	62	40-140	
2-Methylnaphthalene	333	269	81	40-140	
2-Methylphenol	333	254	76	30-130	
2,6-Dinitrotoluene	333	311	93	40-140	
2-Nitroaniline	333	291	87	40-140	
2-Nitrophenol	333	276	83	30-130	
3 & 4 Methylphenol	333	267	80	30-130	
2,4-Dinitrophenol	333	226	68	30-130	
3-Nitroaniline	333	336	101	40-140	
2,4-Dinitrotoluene	333	292	87	40-140	
4-Chloro-3-methylphenol	333	306	92	30-130	
4-Chloroaniline	333	262	79	40-140	
4-Nitroaniline	333	313	94	40-140	
4-Nitrophenol	333	314	94	30-130	
4-Bromophenyl phenyl ether	333	297	89	40-140	
Acenaphthene	333	317	95	40-140	
Acenaphthylene	333	290	87	40-140	
4-Chlorophenyl phenyl ether	333	290	87	40-140	
Aniline	333	103	31	40-140	*
4,6-Dinitro-2-methylphenol	333	270	81	30-130	
Anthracene	333	367	110	40-140	
Benzo[a]anthracene	333	363	109	40-140	
Benzoic acid	333	113 J	34	30-130	
3,3'-Dichlorobenzidine	333	329	99	40-140	
Benzyl alcohol	333	237	71	30-130	
Benzo[b]fluoranthene	333	322	97	40-140	
Bis(2-chloroethoxy)methane	333	282	85	40-140	
Benzo[k]fluoranthene	333	346	104	40-140	
Bis(2-chloroethyl)ether	333	216	65	40-140	
Benzo[a]pyrene	333	354	106	40-140	
Butyl benzyl phthalate	333	323	97	40-140	
Benzo[g,h,i]perylene	333	385	115	40-140	

1/33

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24444-1

SDG No.: OCRI-11

Matrix: Solid Level: Low Lab File ID: J03052.D

Lab ID: LCSD 360-48924/3-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCSD CONCENTRATION (ug/Kg)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,2,4-Trichlorobenzene	333	271	81	10	30	40-140	
1,2-Dichlorobenzene	333	212	64	5	30	40-140	
1,3-Dichlorobenzene	333	212	64	7	30	40-140	
1,4-Dichlorobenzene	333	214	64	6	30	40-140	
2,4-Dimethylphenol	333	343	103	9	30	30-130	
2,4-Dichlorophenol	333	321	96	9	30	30-130	
2,4,6-Trichlorophenol	333	324	97	6	30	30-130	
2,4,5-Trichlorophenol	333	335	100	7	30	30-130	
2-Chlorophenol	333	246	74	5	30	30-130	
2-Chloronaphthalene	333	216	65	5	30	40-140	
2-Methylnaphthalene	333	289	87	7	30	40-140	
2-Methylphenol	333	268	80	5	30	30-130	
2,6-Dinitrotoluene	333	326	98	5	30	40-140	
2-Nitroaniline	333	283	85	3	30	40-140	
2-Nitrophenol	333	304	91	10	30	30-130	
3 & 4 Methylphenol	333	280	84	5	30	30-130	
2,4-Dinitrophenol	333	260	78	14	30	30-130	
3-Nitroaniline	333	365	110	8	30	40-140	
2,4-Dinitrotoluene	333	304	91	4	30	40-140	
4-Chloro-3-methylphenol	333	334	100	9	30	30-130	
4-Chloroaniline	333	292	88	11	30	40-140	
4-Nitroaniline	333	327	98	4	30	40-140	
4-Nitrophenol	333	343	103	9	30	30-130	
4-Bromophenyl phenyl ether	333	317	95	6	30	40-140	
Acenaphthene	333	339	102	7	30	40-140	
Acenaphthylene	333	309	93	6	30	40-140	
4-Chlorophenyl phenyl ether	333	310	93	7	30	40-140	
Aniline	333	109	33	6	30	40-140	*
4,6-Dinitro-2-methylphenol	333	299	90	11	30	30-130	
Anthracene	333	401	120	9	30	40-140	
Benzo[a]anthracene	333	406	122	11	30	40-140	
Benzoic acid	333	121 J	36	7	30	30-130	
3,3'-Dichlorobenzidine	333	373	112	13	30	40-140	
Benzyl alcohol	333	253	76	7	30	30-130	
Benzo[b]fluoranthene	333	351	105	9	30	40-140	
Bis(2-chloroethoxy)methane	333	311	93	10	30	40-140	
Benzo[k]fluoranthene	333	369	111	6	30	40-140	
Bis(2-chloroethyl)ether	333	228	68	5	30	40-140	
Benzo[a]pyrene	333	375	113	6	30	40-140	
Butyl benzyl phthalate	333	342	103	6	30	40-140	
Benzo[g,h,i]perylene	333	413	124	7	30	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Westfield Job No.: 360-24444-1

SDG No.: OCRI-11

Sample No.: CCV 360-49623/13 Date Analyzed: 09/28/2009 19:11

Instrument ID: Inst. B GC Column: Rtx-5ms SIL with ID: 0.25(um)

Lab File ID (Standard): B10603.D Heated Purge: (Y/N) N

		PHN		CRY		PRY	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12 HOUR STD		744983	10.97	511019	13.72	360039	16.24
UPPER LIMIT		1489966	11.47	1022038	14.22	720078	16.74
LOWER LIMIT		372492	10.47	255510	13.22	180020	15.74
LAB SAMPLE ID	CLIENT SAMPLE ID						
360-24444-1 DL2	OC-SB-459-6.0/8.0-DUP DL2	1513877*	10.97	1342271*	13.75	871382*	16.27
360-24444-2 DL2	OC-SB-459-6.0/8.0-XXX DL2	1034677	10.97	1019386	13.74	547214	16.26

203% 263% 242%

OK

PHN = Phenanthrene-d10
CRY = Chrysene-d12
PRY = Perylene-d12

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.50 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270C LL

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Westfield Job No.: 360-24444-1

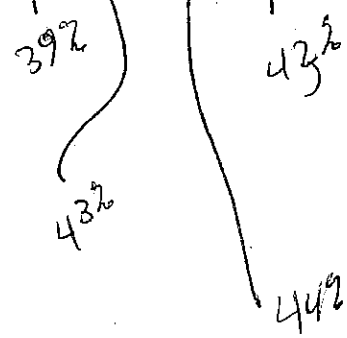
SDG No.: OCRI-11

Sample No.: CCV 360-49397/13 Date Analyzed: 09/23/2009 22:29

Instrument ID: Inst. J GC Column: Rtx-5ms SIL with ID: 0.25(um)

Lab File ID (Standard): J03101.D Heated Purge: (Y/N) N

		PHN		CRY		PRY	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12 HOUR STD		171898	13.18	133032	16.01	77671	17.91
UPPER LIMIT		343796	13.68	266064	16.51	155342	18.41
LOWER LIMIT		85949	12.68	66516	15.51	38836	17.41
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 360-48958/1-A		138626	13.18	92215	16.01	46698	17.91
LCS 360-48958/2-A		144253	13.18	105285	16.01	59442	17.91
LCSD 360-48958/3-A		146452	13.19	103740	16.01	57893	17.91
360-24444-1	OC-SB-459-6.0/8.0-DUP	137627	13.19	52112*	16.02	42165	17.93
360-24444-2	OC-SB-459-6.0/8.0-XXX	144366	13.19	56580*	16.02	44551	17.93
360-24444-2 MS	OC-SB-459-6.0/8.0-XXX MS	137914	13.19	57132*	16.02	47072	17.93
360-24444-2 MSD	OC-SB-459-6.0/8.0-XXX MSD	147856	13.19	58966*	16.02	42656	17.93
360-24444-12	OC-SB-459-0.0/1.0-XXX	167871	13.18	87063	16.01	41247	17.92



PHN = Phenanthrene-d10
CRY = Chrysene-d12
PRY = Perylene-d12

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.50 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270C LL

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Westfield Job No.: 360-24444-1

SDG No.: OCRI-11

Instrument ID: Inst. J Start Date: 09/21/2009 21:14

Analysis Batch Number: 49260 End Date: 09/22/2009 06:40

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 360-49260/15		09/21/2009 21:14	1	J03053.D	Rtx-5ms SIL with guard column 0.25(um)
CCV 360-49260/16 CCVIS		09/21/2009 21:41	1	J03054.D	Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/21/2009 22:09	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/21/2009 22:36	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/21/2009 23:03	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/21/2009 23:30	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/21/2009 23:57	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/22/2009 00:24	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/22/2009 00:51	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/22/2009 01:18	10		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/22/2009 01:45	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/22/2009 02:12	1		Rtx-5ms SIL with guard column 0.25(um)
360-24444-1	OC-SB-459-6.0/8.0-DUP	09/22/2009 02:39	10	J03065.D	Rtx-5ms SIL with guard column 0.25(um)
360-24444-2	OC-SB-459-6.0/8.0-XXX	09/22/2009 03:05	10	J03066.D	Rtx-5ms SIL with guard column 0.25(um)
360-24444-2 MS	OC-SB-459-6.0/8.0-XXX MS	09/22/2009 03:32	10	J03067.D	Rtx-5ms SIL with guard column 0.25(um)
360-24444-2 MSD	OC-SB-459-6.0/8.0-XXX MSD	09/22/2009 03:59	10	J03068.D	Rtx-5ms SIL with guard column 0.25(um)
360-24444-3	OC-SB-462-0.0/1.0-XXX	09/22/2009 04:26	1	J03069.D	Rtx-5ms SIL with guard column 0.25(um)
360-24444-5	OC-SB-462-4.0/6.0-XXX	09/22/2009 05:20	10	J03071.D	Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/22/2009 05:47	1		Rtx-5ms SIL with guard column 0.25(um)
360-24444-8	OC-SB-467-6.0/8.0-DUP	09/22/2009 06:13	1	J03073.D	Rtx-5ms SIL with guard column 0.25(um)
360-24444-9	OC-SB-467-6.0/8.0-XXX	09/22/2009 06:40	1	J03074.D	Rtx-5ms SIL with guard column 0.25(um)

CCAL

2-nitroaniline RF 0.0454

ICAL

2-nitroaniline $\overline{RRF}$ 0.0460

benzoic acid $r^2 = 0.9890$

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Westfield Job No.: 360-24444-1

SDG No.: OCRI-11

Lab Sample ID: CCV 360-49260/16 Calibration Date: 09/21/2009 21:41

Instrument ID: Inst. J Calib Start Date: 09/21/2009 15:23

GC Column: Rtx-5ms ID: 0.25(um) Calib End Date: 09/21/2009 18:59

Lab File ID: J03054.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Nitroaniline	Lin1		0.3546		5010	5000	0.1	30.0
Dimethyl phthalate	Ave	1.193	1.221		5120	5000	2.4	30.0
2,4-Dinitrotoluene	Lin1		0.2809		5080	5000	1.6	30.0
Acenaphthylene	Ave	1.595	1.678		5260	5000	5.2	30.0
Acenaphthene	Ave	1.091	1.057		4840	5000	-3.2	20.0
2,4-Dinitrophenol	Qua		0.0625	0.0500	5190	5000	3.7	30.0
4-Nitrophenol	Lin2		0.1680	0.0500	5320	5000	6.5	30.0
Dibenzofuran	Ave	1.470	1.456		4960	5000	-0.9	30.0
2,6-Dinitrotoluene	Lin1		0.3551		5130	5000	2.6	30.0
2,3,4,6-Tetrachlorophenol	Lin1		0.2320		4970	5000	-0.5	30.0
Diethyl phthalate	Ave	1.209	1.257		5190	5000	3.9	30.0
Fluorene	Ave	1.141	1.165		5100	5000	2.1	30.0
4-Chlorophenyl phenyl ether	Ave	0.5501	0.5353		4870	5000	-2.7	30.0
3-Nitroaniline	Lin1		0.2454		5440	5000	8.9	30.0
4,6-Dinitro-2-methylphenol	Lin		0.0833		4910	5000	-1.9	30.0
Diphenylamine	Ave	0.5950	0.6307		5300	5000	6.0	30.0
N-Nitrosodiphenylamine	Ave	0.5950	0.6307		5300	5000	6.0	20.0
1,2-Diphenylhydrazine	Ave	1.232	1.315		5340	5000	6.7	30.0
Azobenzene	Ave	1.232	1.315		5340	5000	6.7	30.0
Benzophenone	Ave	0.7303	0.7877		5390	5000	7.9	30.0
2-Nitroaniline	Ave	0.0468	0.0454		4850	5000	-3.0	30.0
4-Bromophenyl phenyl ether	Ave	0.1860	0.1861		5000	5000	0.0	30.0
Hexachlorobenzene	Ave	0.2078	0.1933		4650	5000	-7.0	30.0
Atrazine	Lin1		0.1896		5010	5000	0.2	30.0
Pentachlorophenol	Lin1		0.0826		4710	5000	-5.9	20.0
Pentachloronitrobenzene	Lin1		0.0855		4810	5000	-3.9	30.0
Phenanthrene	Ave	1.012	0.9960		4920	5000	-1.6	30.0
Anthracene	Ave	0.8679	0.9677		5580	5000	11.5	30.0
Carbazole	Ave	0.7502	0.8215		5480	5000	9.5	30.0
Di-n-butyl phthalate	Lin1		1.247		5050	5000	1.0	30.0
Fluoranthene	Ave	0.8040	0.8858		5510	5000	10.2	20.0
Benzidine	Qua		0.2048		6080	5000	21.6	30.0
Pyrene	Ave	1.363	1.493		5480	5000	9.5	30.0
Butyl benzyl phthalate	Lin1		0.7764		5490	5000	9.8	30.0
Benzo[a]anthracene	Lin1		0.9220		5150	5000	3.0	30.0
3,3'-Dichlorobenzidine	Lin1		0.2898		5760	5000	15.1	30.0
Chrysene	Lin2		0.8839		5070	5000	1.5	30.0
Bis(2-ethylhexyl) phthalate	Lin1		1.079		5560	5000	11.1	30.0
Di-n-octyl phthalate	Lin		2.113		5340	5000	6.8	20.0
Benzo[b]fluoranthene	Ave	1.227	1.181		4810	5000	-3.8	30.0
Benzo[k]fluoranthene	Ave	1.147	1.250		5450	5000	9.0	30.0

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Westfield Job No.: 360-24444-1

SDG No.: OCRI-11

Instrument ID: Inst. J Start Date: 09/21/2009 14:57

Analysis Batch Number: 49259 End Date: 09/21/2009 20:47

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 360-49259/1		09/21/2009 14:57	1	J03039.D	Rtx-5ms SIL with guard column 0.25(um)
STD5 360-49259/2 ICIS		09/21/2009 15:23	1	J03040.D	Rtx-5ms SIL with guard column 0.25(um)
STD01 360-49259/3 IC		09/21/2009 15:50	1	J03041.D	Rtx-5ms SIL with guard column 0.25(um)
STD025 360-49259/4 IC		09/21/2009 16:17	1	J03042.D	Rtx-5ms SIL with guard column 0.25(um)
STD05 360-49259/5 IC		09/21/2009 16:44	1	J03043.D	Rtx-5ms SIL with guard column 0.25(um)
STD1 360-49259/6 IC		09/21/2009 17:11	1	J03044.D	Rtx-5ms SIL with guard column 0.25(um)
STD25 360-49259/7 IC		09/21/2009 17:39	1	J03045.D	Rtx-5ms SIL with guard column 0.25(um)
STD8 360-49259/8 IC		09/21/2009 18:06	1	J03046.D	Rtx-5ms SIL with guard column 0.25(um)
STD10 360-49259/9 IC		09/21/2009 18:33	1	J03047.D	Rtx-5ms SIL with guard column 0.25(um)
STD20 360-49259/10 IC		09/21/2009 18:59	1	J03048.D	Rtx-5ms SIL with guard column 0.25(um)
ICV 360-49259/11		09/21/2009 19:26	1		Rtx-5ms SIL with guard column 0.25(um)
MB 360-48924/1-A		09/21/2009 19:53	1	J03050.D	Rtx-5ms SIL with guard column 0.25(um)
LCS 360-48924/2-A		09/21/2009 20:20	1	J03051.D	Rtx-5ms SIL with guard column 0.25(um)
LCSD 360-48924/3-A		09/21/2009 20:47	1	J03052.D	Rtx-5ms SIL with guard column 0.25(um)

ICAL

2-nitroaniline $\overline{RRF} = 0.0460$

benzoic acid $r^2 = 0.9990$.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Westfield Job No.: 360-24444-1 Analy Batch No.: 49259

SDG No.: OCRI-11

Instrument ID: Inst. J GC Column: Rtx-5ms ID: 0.25(um) Heated Purge: (Y/N) N

Calibration Start Date: 09/21/2009 15:23 Calibration End Date: 09/21/2009 18:59 Calibration ID: 4673

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD01 360-49259/3	J03041.D
Level 2	STD025 360-49259/4	J03042.D
Level 3	STD05 360-49259/5	J03043.D
Level 4	STD1 360-49259/6	J03044.D
Level 5	STD25 360-49259/7	J03045.D
Level 6	STD5 360-49259/2	J03040.D
Level 7	STD8 360-49259/8	J03046.D
Level 8	STD10 360-49259/9	J03047.D
Level 9	STD20 360-49259/10	J03048.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
1,4-Dioxane	0.8489 0.2155	0.4078 0.2187	0.3238 0.2342	0.2909 0.2570	0.2523	Lin1	0.0525	0.2346							0.9920		0.9900
Pyridine	+++++ 0.5069	0.4061 0.5015	0.4133 0.6051	0.7044 0.6258	0.6807	Lin	-0.174	0.6184							0.9920		0.9900
N-Nitrosodimethylamine	0.2721 0.2981	0.2831 0.2844	0.3063 0.3493	0.3542 0.3586	0.3388	Ave		0.3161				11.0		15.0			
Benzoic acid	+++++ 0.0416	+++++ 0.0760	+++++ 0.1107	0.0005 0.1262	0.0218	Qua	-0.164	0.0869 0.0623	0.0024						0.9890	*	0.9900
Aniline	0.9485 0.8476	0.8692 0.8127	0.8830 0.9753	0.9267 1.0326	0.9767	Ave		0.9192				7.7		15.0			
Phenol	0.7163 0.7478	0.7886 0.7084	0.8308 0.8337	0.8774 0.8661	0.8566	Ave		0.8029				8.1		15.0			
2-Chlorophenol	0.6424 0.5989	0.6477 0.5776	0.6563 0.6757	0.6822 0.7051	0.6990	Ave		0.6539				6.6		15.0			
Bis(2-chloroethyl)ether	0.7250 0.5884	0.6976 0.5603	0.7023 0.6492	0.7206 0.6655	0.6921	Ave		0.6668				8.7		15.0			
1,4-Dichlorobenzene	0.8100 0.6798	0.8285 0.6355	0.8240 0.7467	0.8223 0.7660	0.7908	Ave		0.7671				9.0		15.0			
2,4-Dinitrophenol	+++++ 0.0516	+++++ 0.0668	+++++ 0.0877	0.0106 0.1098	0.0344	Qua	-0.082	0.0628	0.0026		0.0500				0.9970		0.9900
1,3-Dichlorobenzene	0.9148 0.6972	0.8714 0.6518	0.8555 0.7694	0.8311 0.7922	0.8216	Ave		0.8006				10.0		15.0			
1,2-Dichlorobenzene	0.9336 0.6398	0.8336 0.5994	0.8108 0.7079	0.7749 0.7406	0.7659	Ave		0.7563				13.0		15.0			
Benzyl alcohol	0.3658 0.5008	0.4083 0.4789	0.4245 0.5867	0.4679 0.6324	0.5594	Lin	-0.271	0.6231							0.9910		0.9900

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Westfield Job No.: 360-24444-1 Analy Batch No.: 49259

SDG No.: OCRI-11

Instrument ID: Inst. J GC Column: Rtx-5ms ID: 0.25(um) Heated Purge: (Y/N) N

Calibration Start Date: 09/21/2009 15:23 Calibration End Date: 09/21/2009 18:59 Calibration ID: 4673

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
Hexachlorobutadiene	0.1435 0.1387	0.1464 0.1450	0.1447 0.1386	0.1458 0.1412	0.1516	Ave		0.1439				2.8		15.0			
2-Nitroaniline	+++++ 0.0442	+++++ 0.0481	0.0530 0.0435	0.0490 0.0405	0.0495	Ave		0.0468				9.2		15.0			
Benzidine	+++++ 0.1529	+++++ 0.1847	+++++ 0.1942	0.0718 0.2518	0.1380	Qua	-0.080	0.1493	0.0053						1.0000		0.9900
4-Chloro-3-methylphenol	0.1227 0.2389	0.1470 0.2704	0.1753 0.2648	0.2030 0.2658	0.2510	Lin1	-0.025	0.2642							0.9980		0.9900
Pentachlorophenol	+++++ 0.0731	+++++ 0.0915	0.0133 0.0921	0.0278 0.1053	0.0615	Lin1	-0.063	0.1011							0.9900		0.9900
2-Methylnaphthalene	0.5547 0.5505	0.5734 0.5884	0.5477 0.5710	0.5769 0.5564	0.6146	Ave		0.5704				3.8		15.0			
1-Methylnaphthalene	0.5429 0.5359	0.5428 0.5742	0.5547 0.5528	0.5767 0.5395	0.6049	Ave		0.5583				4.1		15.0			
Hexachlorocyclopentadiene	0.0454 0.1939	0.1030 0.2013	0.1152 0.2253	0.1535 0.2405	0.1963	Lin1	-0.031	0.2249			0.0500				0.9920		0.9900
1,2,4,5-Tetrachlorobenzene	0.2182 0.2048	0.2172 0.2219	0.2180 0.2157	0.2221 0.2181	0.2281	Ave		0.2182				2.9		15.0			
2,4,6-Trichlorophenol	0.1423 0.2618	0.1590 0.3011	0.1893 0.3005	0.2368 0.3066	0.2910	Lin1	-0.029	0.3005							0.9970		0.9900
2,4,5-Trichlorophenol	0.1202 0.2730	0.1759 0.3185	0.2030 0.3043	0.2532 0.3201	0.2991	Lin1	-0.030	0.3124							0.9970		0.9900
1,1'-Biphenyl	1.3756 1.2582	1.3871 1.3385	1.3458 1.2550	1.4012 1.2337	1.4219	Ave		1.3352				5.2		15.0			
2-Chloronaphthalene	1.3575 1.3235	1.4758 1.3812	1.3647 1.3555	1.4107 1.3029	1.5272	Ave		1.3888				5.2		15.0			
Phenyl ether	0.3535 0.3272	0.3474 0.3643	0.3633 0.3475	0.3604 0.3441	0.3660	Ave		0.3526				3.6		15.0			
4-Nitroaniline	0.1822 0.3086	0.1882 0.3687	0.2034 0.3602	0.2673 0.3698	0.3440	Lin1	-0.037	0.3615							0.9960		0.9900
Dimethyl phthalate	1.0753 1.1447	1.0942 1.2726	1.1783 1.1993	1.2530 1.1950	1.3237	Ave		1.1929				6.8		15.0			
2,4-Dinitrotoluene	0.1396 0.2560	0.1478 0.2884	0.2083 0.2778	0.2479 0.2807	0.2873	Lin1	-0.022	0.2809							0.9980		0.9900
Acenaphthylene	1.2818 1.5974	1.4441 1.7583	1.5065 1.6577	1.6761 1.6416	1.7884	Ave		1.5946				10.0		15.0			
Acenaphthene	1.1695 1.0084	1.1349 1.0742	1.0612 1.0416	1.1257 1.0379	1.1680	Ave		1.0913				5.5		15.0			
Dibenzofuran	1.5025 1.3765	1.5337 1.4682	1.4502 1.4134	1.5147 1.4044	1.5624	Ave		1.4696				4.3		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Westfield | Job No.: 360-24444-1

SDG No.: OCRI-11

Client Sample ID: | Lab Sample ID: MB 360-48620/1-A

Matrix: Water | Lab File ID: B10292.D

Analysis Method: 8270C LL | Date Collected:

Extract. Method: 3510C | Date Extracted: 09/04/2009 12:48

Sample wt/vol: 1000(mL) | Date Analyzed: 09/14/2009 18:43

Con. Extract Vol.: 1.0(mL) | Dilution Factor: 1

Injection Volume: 1.0(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup: (Y/N) N

Analysis Batch No.: 48893 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
50-32-8	Benzo[a]pyrene	ND		0.20	0.10
85-68-7	Butyl benzyl phthalate	ND		5.0	0.50
191-24-2	Benzo[g,h,i]perylene	ND		0.50	0.094
98-86-2	Acetophenone	ND		5.0	0.50
218-01-9	Chrysene	ND		1.0	0.17
103-33-3	Azobenzene	ND		5.0	0.50
117-81-7	Bis(2-ethylhexyl) phthalate	ND		2.0	0.50
53-70-3	Dibenz(a,h)anthracene	ND		0.50	0.064
132-64-9	Dibenzofuran	ND		5.0	0.50
84-66-2	Diethyl phthalate	ND		5.0	0.50
131-11-3	Dimethyl phthalate	ND		5.0	0.50
84-74-2	Di-n-butyl phthalate	1.93	J	5.0	0.60
117-84-0	Di-n-octyl phthalate	ND		5.0	0.73
108-60-1	bis (2-chloroisopropyl) ether	ND		5.0	0.50
206-44-0	Fluoranthene	ND		1.0	0.20
86-73-7	Fluorene	ND		1.0	0.050
118-74-1	Hexachlorobenzene	ND		1.0	0.50
77-47-4	Hexachlorocyclopentadiene	ND		5.0	0.50
90-12-0	1-Methylnaphthalene	ND		5.0	0.050
67-72-1	Hexachloroethane	ND		3.0	0.50
92-52-4	1,1'-Biphenyl	ND		5.0	0.50
193-39-5	Indeno[1,2,3-cd]pyrene	ND		0.50	0.079
95-94-3	1,2,4,5-Tetrachlorobenzene	ND		5.0	0.50
78-59-1	Isophorone	ND		5.0	0.50
58-90-2	2,3,4,6-Tetrachlorophenol	ND		5.0	0.50
1912-24-9	Atrazine	ND		5.0	0.50
100-52-7	Benzaldehyde	ND		5.0	0.50
98-95-3	Nitrobenzene	ND		5.0	0.50
105-60-2	Caprolactam	ND		5.0	0.50
86-74-8	Carbazole	ND		5.0	0.50
62-75-9	N-Nitrosodimethylamine	ND		5.0	0.50
119-61-9	Benzophenone	ND		5.0	0.50
621-64-7	N-Nitrosodi-n-propylamine	ND		5.0	0.50
101-84-8	Diphenyl oxide	ND		5.0	0.50

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24444-1

SDG No.: OCRI-11

Matrix: Water Level: Low Lab File ID: B10293.D

Lab ID: LCS 360-48620/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
2,4-Dimethylphenol	10.0	9.65	96	30-130	
2,4-Dichlorophenol	10.0	9.67	97	30-130	
2,4,6-Trichlorophenol	10.0	8.68	87	30-130	
2,4,5-Trichlorophenol	10.0	8.51	85	30-130	
2-Chlorophenol	10.0	5.79	58	40-130	
2-Chloronaphthalene	10.0	6.37	64	40-140	
2-Methylnaphthalene	10.0	8.52	85	40-140	
2-Methylphenol	10.0	4.78 J	48	30-130	
2,6-Dinitrotoluene	10.0	8.27	83	40-140	
2-Nitroaniline	10.0	7.39	74	40-140	
2-Nitrophenol	10.0	10.5	105	30-130	
3 & 4 Methylphenol	10.0	3.75 J	37	30-130	
2,4-Dinitrophenol	10.0	7.77	78	30-130	
3-Nitroaniline	10.0	7.79	78	40-140	
2,4-Dinitrotoluene	10.0	7.88	79	40-140	
4-Chloro-3-methylphenol	10.0	9.06	91	30-130	
4-Chloroaniline	10.0	12.1	121	40-140	
4-Nitroaniline	10.0	8.59	86	40-140	
4-Nitrophenol	10.0	1.79 J	18	30-130	*
4-Bromophenyl phenyl ether	10.0	8.59	86	40-140	
Acenaphthene	10.0	9.23	92	40-140	
Acenaphthylene	10.0	8.44	84	40-140	
4-Chlorophenyl phenyl ether	10.0	8.54	85	40-140	
Aniline	10.0	2.35 J	23	40-140	*
4,6-Dinitro-2-methylphenol	10.0	8.77	88	30-130	
Anthracene	10.0	10.4	104	40-140	
Benzo[a]anthracene	10.0	10.6	106	40-140	
Benzoic acid	10.0	1.95 J	20	30-130	*
3,3'-Dichlorobenzidine	10.0	3.12 J	31	40-140	*
Benzyl alcohol	10.0	5.45 J	55	30-130	
Benzo[b]fluoranthene	10.0	9.88	99	40-140	
Bis(2-chloroethoxy)methane	10.0	8.99	90	40-140	
Benzo[k]fluoranthene	10.0	10.6	106	40-140	
Bis(2-chloroethyl)ether	10.0	6.64	66	40-140	
Benzo[a]pyrene	10.0	9.95	100	40-140	
Butyl benzyl phthalate	10.0	9.48	95	40-140	
Benzo[g,h,i]perylene	10.0	10.2	102	40-140	
Acetophenone	10.0	7.78	78	40-140	
Chrysene	10.0	10.1	101	40-140	
Azobenzene	10.0	8.92	89	40-140	
Bis(2-ethylhexyl) phthalate	10.0	9.95	100	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24444-1

SDG No.: OCRI-11

Matrix: Water Level: Low Lab File ID: B10293.D

Lab ID: LCS 360-48620/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Dibenz(a,h)anthracene	10.0	9.70	97	40-140	
Dibenzofuran	10.0	8.15	82	40-140	
Diethyl phthalate	10.0	9.10	91	40-140	
Dimethyl phthalate	10.0	8.63	86	40-140	
Di-n-butyl phthalate	10.0	10.6	106	40-140	
Di-n-octyl phthalate	10.0	9.84	98	40-140	
bis (2-chloroisopropyl) ether	10.0	6.98	70	40-140	
Fluoranthene	10.0	9.87	99	40-140	
Fluorene	10.0	10.1	101	40-140	
Hexachlorobenzene	10.0	8.72	87	40-140	
Hexachlorocyclopentadiene	10.0	6.84	68	40-140	
1-Methylnaphthalene	10.0	8.87	89	40-140	
Hexachloroethane	10.0	6.16	62	40-140	
1,1'-Biphenyl	10.0	8.49	85	40-140	
Indeno[1,2,3-cd]pyrene	10.0	9.80	98	40-140	
1,2,4,5-Tetrachlorobenzene	10.0	8.19	82	40-140	
Isophorone	10.0	8.66	87	40-140	
2,3,4,6-Tetrachlorophenol	10.0	7.35	74	40-140	
Atrazine	10.0	10.7	107	40-140	
Benzaldehyde	10.0	31.9	319	40-140	*
Nitrobenzene	10.0	8.87	89	40-140	
Caprolactam	10.0	2.48 J	25	40-140	*
Carbazole	10.0	9.41	94	40-140	
N-Nitrosodimethylamine	10.0	2.93 J	29	40-140	*
Benzophenone	10.0	9.30	93	40-140	
N-Nitrosodi-n-propylamine	10.0	8.58	86	40-140	
Diphenyl oxide	10.0	9.12	91	40-140	
N-Nitrosodiphenylamine	10.0	6.70	67	40-140	
Pentachlorophenol	10.0	8.59	86	30-130	
Phenanthrene	10.0	9.38	94	40-140	
Phenol	10.0	1.47 J	15	30-130	*
Pyrene	10.0	9.69	97	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24444-1

SDG No.: OCRI-11

Matrix: Water Level: Low Lab File ID: B10294.D

Lab ID: LCSD 360-48620/3-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
2,4-Dimethylphenol	10.0	9.65	96	0	20	30-130	
2,4-Dichlorophenol	10.0	9.76	98	1	20	30-130	
2,4,6-Trichlorophenol	10.0	9.42	94	8	20	30-130	
2,4,5-Trichlorophenol	10.0	9.35	93	9	20	30-130	
2-Chlorophenol	10.0	5.91	59	2	20	40-130	
2-Chloronaphthalene	10.0	6.83	68	7	20	40-140	
2-Methylnaphthalene	10.0	8.62	86	1	20	40-140	
2-Methylphenol	10.0	4.93 J	49	3	20	30-130	
2,6-Dinitrotoluene	10.0	8.93	89	8	20	40-140	
2-Nitroaniline	10.0	8.79	88	17	20	40-140	
2-Nitrophenol	10.0	11.0	110	4	20	30-130	
3 & 4 Methylphenol	10.0	3.93 J	39	5	20	30-130	
2,4-Dinitrophenol	10.0	9.68	97	22	20	30-130	*
3-Nitroaniline	10.0	8.59	86	10	20	40-140	
2,4-Dinitrotoluene	10.0	8.47	85	7	20	40-140	
4-Chloro-3-methylphenol	10.0	9.13	91	1	20	30-130	
4-Chloroaniline	10.0	13.6	136	12	20	40-140	
4-Nitroaniline	10.0	9.19	92	7	20	40-140	
4-Nitrophenol	10.0	2.20 J	22	21	20	30-130	*
4-Bromophenyl phenyl ether	10.0	8.89	89	3	20	40-140	
Acenaphthene	10.0	9.90	99	7	20	40-140	
Acenaphthylene	10.0	8.93	89	6	20	40-140	
4-Chlorophenyl phenyl ether	10.0	9.18	92	7	20	40-140	
Aniline	10.0	2.42 J	24	3	20	40-140	*
4,6-Dinitro-2-methylphenol	10.0	10.3	103	16	20	30-130	
Anthracene	10.0	10.8	108	3	20	40-140	
Benzo[a]anthracene	10.0	11.1	111	4	20	40-140	
Benzoic acid	10.0	2.39 J	24	20	20	30-130	*
3,3'-Dichlorobenzidine	10.0	3.42 J	34	9	20	40-140	*
Benzyl alcohol	10.0	5.69 J	57	4	20	30-130	
Benzo[b]fluoranthene	10.0	9.78	98	1	20	40-140	
Bis(2-chloroethoxy)methane	10.0	9.04	90	1	20	40-140	
Benzo[k]fluoranthene	10.0	10.1	101	5	20	40-140	
Bis(2-chloroethyl)ether	10.0	6.61	66	0	20	40-140	
Benzo[a]pyrene	10.0	10.1	101	1	20	40-140	
Butyl benzyl phthalate	10.0	9.06	91	5	20	40-140	
Benzo[g,h,i]perylene	10.0	12.3	123	19	20	40-140	
Acetophenone	10.0	8.08	81	4	20	40-140	
Chrysene	10.0	10.5	105	3	20	40-140	
Azobenzene	10.0	9.15	92	3	20	40-140	
Bis(2-ethylhexyl) phthalate	10.0	9.56	96	4	20	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24444-1

SDG No.: OCRI-11

Matrix: Water Level: Low Lab File ID: B10294.D

Lab ID: LCSD 360-48620/3-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Dibenz(a,h)anthracene	10.0	12.1	121	22	20	40-140	*
Dibenzofuran	10.0	8.73	87	7	20	40-140	
Diethyl phthalate	10.0	9.73	97	7	20	40-140	
Dimethyl phthalate	10.0	9.18	92	6	20	40-140	
Di-n-butyl phthalate	10.0	10.6	106	0	20	40-140	
Di-n-octyl phthalate	10.0	8.21	82	18	20	40-140	
bis (2-chloroisopropyl) ether	10.0	7.07	71	1	20	40-140	
Fluoranthene	10.0	10.7	107	8	20	40-140	
Fluorene	10.0	10.9	109	8	20	40-140	
Hexachlorobenzene	10.0	8.94	89	2	20	40-140	
Hexachlorocyclopentadiene	10.0	8.21	82	18	20	40-140	
1-Methylnaphthalene	10.0	9.07	91	2	20	40-140	
Hexachloroethane	10.0	6.46	65	5	20	40-140	
1,1'-Biphenyl	10.0	9.07	91	7	20	40-140	
Indeno[1,2,3-cd]pyrene	10.0	11.9	119	19	20	40-140	
1,2,4,5-Tetrachlorobenzene	10.0	8.32	83	2	20	40-140	
Isophorone	10.0	8.75	88	1	20	40-140	
2,3,4,6-Tetrachlorophenol	10.0	8.08	81	9	20	40-140	
Atrazine	10.0	11.2	112	4	20	40-140	
Benzaldehyde	10.0	32.6	326	2	20	40-140	*
Nitrobenzene	10.0	8.96	90	1	20	40-140	
Caprolactam	10.0	2.53 J	25	2	20	40-140	*
Carbazole	10.0	9.99	100	6	20	40-140	
N-Nitrosodimethylamine	10.0	2.95 J	30	1	20	40-140	*
Benzophenone	10.0	9.69	97	4	20	40-140	
N-Nitrosodi-n-propylamine	10.0	8.81	88	3	20	40-140	
Diphenyl oxide	10.0	9.39	94	3	20	40-140	
N-Nitrosodiphenylamine	10.0	6.84	68	2	20	40-140	
Pentachlorophenol	10.0	9.72	97	12	20	30-130	
Phenanthrene	10.0	9.71	97	3	20	40-140	
Phenol	10.0	1.49 J	15	1	20	30-130	*
Pyrene	10.0	9.24	92	5	20	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Westfield Job No.: 360-24444-1

SDG No.: OCRI-11

Instrument ID: Inst. B Start Date: 09/14/2009 14:10

Analysis Batch Number: 48893 End Date: 09/15/2009 14:05

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 360-48893/1		09/14/2009 14:10	1	B10284.D	Rtx-5ms SIL with guard column 0.25(um)
CCV 360-48893/2 CCVIS		09/14/2009 14:44	1	B10285.D	Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/14/2009 15:18	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/14/2009 15:52	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/14/2009 16:27	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/14/2009 17:01	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/14/2009 17:35	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/14/2009 18:09	1		Rtx-5ms SIL with guard column 0.25(um)
MB 360-48620/1-A		09/14/2009 18:43	1	B10292.D	Rtx-5ms SIL with guard column 0.25(um)
LCS 360-48620/2-A		09/14/2009 19:17	1	B10293.D	Rtx-5ms SIL with guard column 0.25(um)
LCSD 360-48620/3-A		09/14/2009 19:51	1	B10294.D	Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/14/2009 20:26	1		Rtx-5ms SIL with guard column 0.25(um)
DFTPP 360-48893/45		09/15/2009 08:24	1	B10300.D	Rtx-5ms SIL with guard column 0.25(um)
CCV 360-48893/46 CCVIS		09/15/2009 08:58	1	B10301.D	Rtx-5ms SIL with guard column 0.25(um)
360-24444-16	OC-EBK-007	09/15/2009 09:32	1	B10302.D	Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/15/2009 10:06	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/15/2009 10:40	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/15/2009 11:14	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/15/2009 11:48	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/15/2009 12:22	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/15/2009 12:56	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/15/2009 13:31	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/15/2009 14:05	1		Rtx-5ms SIL with guard column 0.25(um)

ICAL OK

CCAL

Benzidine ED 48

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Westfield Job No.: 360-24444-1

SDG No.: OCRI-11

Lab Sample ID: CCV 360-48893/2 Calibration Date: 09/14/2009 14:44

Instrument ID: Inst. B Calib Start Date: 09/14/2009 08:29

GC Column: Rtx-5ms ID: 0.25(um) Calib End Date: 09/14/2009 13:02

Lab File ID: B10285.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Nitroaniline	Lin1		0.3854		4860	5000	-2.8	30.0
Dimethyl phthalate	Ave	1.261	1.288		5110	5000	2.2	30.0
2,6-Dinitrotoluene	Lin2		0.3097		5080	5000	1.6	30.0
Acenaphthylene	Ave	1.681	1.771		5270	5000	5.4	30.0
3-Nitroaniline	Lin1		0.2865		5040	5000	0.8	30.0
2,4-Dinitrophenol	Qua		0.0949	0.0500	5420	5000	8.5	30.0
4-Nitrophenol	Lin2		0.1386	0.0500	4450	5000	-11.1	30.0
Acenaphthene	Ave	1.211	1.210		5000	5000	0.1	20.0
2,4-Dinitrotoluene	Lin1		0.3919		4800	5000	-4.0	30.0
Dibenzofuran	Ave	1.549	1.558		5030	5000	0.6	30.0
2,3,4,6-Tetrachlorophenol	Lin1		0.2584		4880	5000	-2.5	30.0
Diethyl phthalate	Ave	1.264	1.300		5140	5000	2.9	30.0
4-Chlorophenyl phenyl ether	Ave	0.5715	0.5822		5090	5000	1.9	30.0
Fluorene	Ave	1.276	1.343		5260	5000	5.3	30.0
2-Nitroaniline	Lin		0.3303		4910	5000	-1.9	30.0
4,6-Dinitro-2-methylphenol	Qua		0.0930		5410	5000	8.2	30.0
Diphenylamine	Ave	0.6598	0.6808		5160	5000	3.2	30.0
N-Nitrosodiphenylamine	Ave	0.6598	0.6808		5160	5000	3.2	20.0
1,2-Diphenylhydrazine	Ave	1.240	1.290		5200	5000	4.0	30.0
Azobenzene	Ave	1.240	1.290		5200	5000	4.0	30.0
Benzophenone	Ave	0.7664	0.7805		5090	5000	1.8	30.0
4-Bromophenyl phenyl ether	Ave	0.1827	0.1830		5010	5000	0.2	30.0
Atrazine	Ave	0.1838	0.1958		5330	5000	6.5	30.0
Hexachlorobenzene	Ave	0.1681	0.1666		4960	5000	-0.9	30.0
Pentachlorophenol	Qua		0.0834		4820	5000	-3.7	20.0
Pentachloronitrobenzene	Lin2		0.0781		5110	5000	2.2	30.0
Phenanthrene	Ave	1.055	1.056		5010	5000	0.1	30.0
Anthracene	Ave	0.9833	1.030		5240	5000	4.7	30.0
Carbazole	Ave	0.8143	0.8358		5130	5000	2.6	30.0
Di-n-butyl phthalate	Ave	1.211	1.225		5060	5000	1.2	30.0
Pyrene	Ave	1.350	1.354		5010	5000	0.3	30.0
Benzidine	Ave	0.2939	0.4354		7410	5000	48.1*	30.0
Fluoranthene	Ave	0.9548	0.9978		5220	5000	4.5	20.0
Butyl benzyl phthalate	Lin1		0.6515		4760	5000	-4.8	30.0
Bis(2-ethylhexyl) phthalate	Lin1		0.8166		4800	5000	-4.0	30.0
3,3'-Dichlorobenzidine	Lin1		0.6235		4670	5000	-6.6	30.0
Benzo[a]anthracene	Ave	0.8996	0.9306		5170	5000	3.4	30.0
Chrysene	Ave	0.8852	0.8841		4990	5000	-0.1	30.0
Di-n-octyl phthalate	Lin1		2.051		4480	5000	-10.3	20.0
Benzo[b]fluoranthene	Ave	1.278	1.297		5070	5000	1.5	30.0
Benzo[k]fluoranthene	Ave	1.187	1.264		5320	5000	6.5	30.0

FORM III
GC/MS SEMI VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24444-1

SDG No.: OCRI-11

Matrix: Solid Level: Low Lab File ID: B10496.D

Lab ID: 360-24444-9 MS Client ID: OC-SB-467-6.0/8.0-XXX MS

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	QC LIMITS REC	#
1,1'-Biphenyl	397	ND	322	81	40-140	
1,2,4,5-Tetrachlorobenzene	397	ND	315	79	40-140	
1,2,4-Trichlorobenzene	397	ND	264	66	40-140	
1,2-Dichlorobenzene	397	ND	263	66	40-140	
1,3-Dichlorobenzene	397	ND	219	55	40-140	
1,4-Dichlorobenzene	397	ND	215	54	40-140	
1-Methylnaphthalene	397	ND	309	78	40-140	
2,2'-oxybis[1-chloropropane]	397	ND	295	74	40-140	
2,3,4,6-Tetrachlorophenol	397	ND	284	71	40-140	
2,4,5-Trichlorophenol	397	ND	327	82	30-130	
2,4,6-Trichlorophenol	397	ND	313	79	30-130	
2,4-Dichlorophenol	397	ND	287	72	30-130	
2,4-Dimethylphenol	397	ND	288	73	30-130	
2,4-Dinitrophenol	397	ND	142	36	30-130	
2,4-Dinitrotoluene	397	ND	270	68	40-140	
2,6-Dinitrotoluene	397	ND	279	70	40-140	
2-Chloronaphthalene	397	ND	255	64	40-140	
2-Chlorophenol	397	ND	254	64	30-130	
2-Methylnaphthalene	397	ND	252	64	40-140	
2-Methylphenol	397	ND	259	65	30-130	
2-Nitroaniline	397	ND	320	81	40-140	
2-Nitrophenol	397	ND	277	70	30-130	
3 & 4 Methylphenol	397	ND	272	69	30-130	
3,3'-Dichlorobenzidine	397	ND	303	76	40-140	
3-Nitroaniline	397	ND	300	76	40-140	
4,6-Dinitro-2-methylphenol	397	ND	192 J	48	30-130	
4-Bromophenyl phenyl ether	397	ND	324	82	40-140	
4-Chloro-3-methylphenol	397	ND	308	78	30-130	
4-Chloroaniline	397	ND	206	52	40-140	
4-Chlorophenyl phenyl ether	397	ND	326	82	40-140	
4-Nitroaniline	397	ND	310	78	40-140	
4-Nitrophenol	397	ND	353	89	30-130	
Acenaphthene	397	ND	359	90	40-140	
Acenaphthylene	397	ND	319	80	40-140	
Acetophenone	397	ND	251	63	40-140	
Aniline	397	ND	113	28	40-140	F
Anthracene	397	ND	403	101	40-140	
Atrazine	397	ND	332	84	40-140	
Azobenzene	397	ND	338	85	40-140	
Benzaldehyde	397	ND	268	67	40-140	
Benzo[a]anthracene	397	ND	408	103	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24444-1

SDG No.: OCRI-11

Matrix: Solid Level: Low Lab File ID: B10496.D

Lab ID: 360-24444-9 MS Client ID: OC-SB-467-6.0/8.0-XXX MS

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	QC LIMITS REC	#
Benzo[a]pyrene	397	ND	380	95	40-140	
Benzo[b]fluoranthene	397	ND	333	84	40-140	
Benzo[g,h,i]perylene	397	ND	283	71	40-140	
Benzo[k]fluoranthene	397	ND	386	97	40-140	
Benzoic acid	397	ND	262	66	30-130	
Benzophenone	397	ND	353	89	40-140	
Benzyl alcohol	397	ND	272	69	30-130	
Bis(2-chloroethoxy)methane	397	ND	245	62	40-140	
Bis(2-chloroethyl)ether	397	ND	230	58	40-140	
Bis(2-ethylhexyl) phthalate	397	520	451	19	40-140	F
Butyl benzyl phthalate	397	ND	334	84	40-140	
Caprolactam	397	ND	269	68	40-140	
Carbazole	397	ND	380	96	40-140	
Chrysene	397	ND	388	98	40-140	
Dibenz(a,h)anthracene	397	ND	365	92	40-140	
Dibenzofuran	397	ND	313	79	40-140	
Diethyl phthalate	397	ND	324	82	40-140	
Dimethyl phthalate	397	ND	318	80	40-140	
Di-n-butyl phthalate	397	ND	336	84	40-140	
Di-n-octyl phthalate	397	ND	362	91	40-140	
Diphenyl oxide	397	ND	270	68	40-140	
Fluoranthene	397	ND	355	89	40-140	
Fluorene	397	ND	383	96	40-140	
Hexachlorobenzene	397	ND	322	81	40-140	
Hexachlorobutadiene	397	ND	282	71	40-140	
Hexachlorocyclopentadiene	397	ND	102	26	40-140	F
Hexachloroethane	397	ND	197	50	40-140	
Indeno[1,2,3-cd]pyrene	397	ND	347	87	40-140	
Isophorone	397	ND	219	55	40-140	
Naphthalene	397	ND	285	72	40-140	
Nitrobenzene	397	ND	250	63	40-140	
N-Nitrosodimethylamine	397	ND	259	65	40-140	
N-Nitrosodi-n-propylamine	397	ND	268	68	40-140	
N-Nitrosodiphenylamine	397	ND	246	62	40-140	
Pentachlorophenol	397	ND	351	88	30-130	
Phenanthrene	397	ND	361	91	40-140	
Phenol	397	ND	260	65	30-130	
Pyrene	397	ND	393	99	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24444-1

SDG No.: OCRI-11

Matrix: Solid Level: Low Lab File ID: B10497.D

Lab ID: 360-24444-9 MSD Client ID: OC-SB-467-6.0/8.0-XXX MSD

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1'-Biphenyl	399	305	76	6	30	40-140	
1,2,4,5-Tetrachlorobenzene	399	299	75	5	30	40-140	
1,2,4-Trichlorobenzene	399	240	60	9	30	40-140	
1,2-Dichlorobenzene	399	246	62	7	30	40-140	
1,3-Dichlorobenzene	399	205	51	7	30	40-140	
1,4-Dichlorobenzene	399	199	50	8	30	40-140	
1-Methylnaphthalene	399	300	75	3	30	40-140	
2,2'-oxybis[1-chloropropane]	399	273	69	8	30	40-140	
2,3,4,6-Tetrachlorophenol	399	276	69	3	30	40-140	
2,4,5-Trichlorophenol	399	317	80	3	30	30-130	
2,4,6-Trichlorophenol	399	305	77	3	30	30-130	
2,4-Dichlorophenol	399	273	69	5	30	30-130	
2,4-Dimethylphenol	399	276	69	4	30	30-130	
2,4-Dinitrophenol	399	180	45	24	30	30-130	
2,4-Dinitrotoluene	399	266	67	2	30	40-140	
2,6-Dinitrotoluene	399	281	70	0	30	40-140	
2-Chloronaphthalene	399	234	59	8	30	40-140	
2-Chlorophenol	399	237	59	7	30	30-130	
2-Methylnaphthalene	399	238	60	6	30	40-140	
2-Methylphenol	399	243	61	7	30	30-130	
2-Nitroaniline	399	321	80	0	30	40-140	
2-Nitrophenol	399	264	66	5	30	30-130	
3 & 4 Methylphenol	399	258	65	5	30	30-130	
3,3'-Dichlorobenzidine	399	313	79	3		40-140	
3-Nitroaniline	399	297	74	1	30	40-140	
4,6-Dinitro-2-methylphenol	399	222	56	14	30	30-130	
4-Bromophenyl phenyl ether	399	309	78	5	30	40-140	
4-Chloro-3-methylphenol	399	301	76	2	30	30-130	
4-Chloroaniline	399	199	50	4	30	40-140	
4-Chlorophenyl phenyl ether	399	310	78	5	30	40-140	
4-Nitroaniline	399	292	73	6	30	40-140	
4-Nitrophenol	399	348	87	1	30	30-130	
Acenaphthene	399	336	84	7	30	40-140	
Acenaphthylene	399	296	74	7	30	40-140	
Acetophenone	399	234	59	7	30	40-140	
Aniline	399	104	26	8	30	40-140	F
Anthracene	399	382	96	5	30	40-140	
Atrazine	399	334	84	1	30	40-140	
Azobenzene	399	330	83	2	30	40-140	
Benzaldehyde	399	262	66	2	30	40-140	
Benzo[a]anthracene	399	396	99	3	30	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24444-1

SDG No.: OCRI-11

Matrix: Solid Level: Low Lab File ID: B10497.D

Lab ID: 360-24444-9 MSD Client ID: OC-SB-467-6.0/8.0-XXX MSD

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Benzo[a]pyrene	399	383	96	1	30	40-140	
Benzo[b]fluoranthene	399	338	85	1	30	40-140	
Benzo[g,h,i]perylene	399	305	77	8	30	40-140	
Benzo[k]fluoranthene	399	369	93	5	30	40-140	
Benzoic acid	399	109 J	27	82	30	30-130	F
Benzophenone	399	341	86	3	30	40-140	
Benzyl alcohol	399	255	64	7	30	30-130	
Bis(2-chloroethoxy)methane	399	227	57	8	30	40-140	
Bis(2-chloroethyl)ether	399	214	54	7	30	40-140	
Bis(2-ethylhexyl) phthalate	399	473	-13	5	30	40-140	F
Butyl benzyl phthalate	399	313	79	7	30	40-140	
Caprolactam	399	279	70	4	30	40-140	
Carbazole	399	371	93	3	30	40-140	
Chrysene	399	377	95	3	30	40-140	
Dibenz(a,h)anthracene	399	384	96	5	30	40-140	
Dibenzofuran	399	295	74	6	30	40-140	
Diethyl phthalate	399	315	79	3	30	40-140	
Dimethyl phthalate	399	308	77	3	30	40-140	
Di-n-butyl phthalate	399	319	80	5	30	40-140	
Di-n-octyl phthalate	399	331	83	9	30	40-140	
Diphenyl oxide	399	262	66	3	30	40-140	
Fluoranthene	399	349	87	2	30	40-140	
Fluorene	399	367	92	4	30	40-140	
Hexachlorobenzene	399	308	77	5	30	40-140	
Hexachlorobutadiene	399	257	65	9	30	40-140	
Hexachlorocyclopentadiene	399	115	29	12	30	40-140	F
Hexachloroethane	399	189	47	4	30	40-140	
Indeno[1,2,3-cd]pyrene	399	361	91	4	30	40-140	
Isophorone	399	206	52	6	30	40-140	
Naphthalene	399	257	65	10	30	40-140	
Nitrobenzene	399	233	58	7	30	40-140	
N-Nitrosodimethylamine	399	237	60	9	30	40-140	
N-Nitrosodi-n-propylamine	399	257	64	4	30	40-140	
N-Nitrosodiphenylamine	399	233	59	5	30	40-140	
Pentachlorophenol	399	355	89	1	30	30-130	
Phenanthrene	399	345	86	5	30	40-140	
Phenol	399	245	62	6	30	30-130	
Pyrene	399	364	91	8	30	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24444-1

SDG No.: OCRI-11

Matrix: Solid Level: Low Lab File ID: J03067.D

Lab ID: 360-24444-2 MS Client ID: OC-SB-459-6.0/8.0-XXX MS

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	QC LIMITS REC	#
1,1'-Biphenyl	377	ND	341 J	90	40-140	
1,2,4,5-Tetrachlorobenzene	377		329 J	87	40-140	
1,2,4-Trichlorobenzene	377		298 J	79	40-140	
1,2-Dichlorobenzene	377		294 J	78	40-140	
1,3-Dichlorobenzene	377		306 J	81	40-140	
1,4-Dichlorobenzene	377		279 J	74	40-140	
1-Methylnaphthalene	377		264 J	70	40-140	
2,2'-oxybis[1-chloropropane]	377		353 J	94	40-140	
2,3,4,6-Tetrachlorophenol	377		250 J	66	40-140	
2,4,5-Trichlorophenol	377		204 J	54	30-130	
2,4,6-Trichlorophenol	377		317 J	84	30-130	
2,4-Dichlorophenol	377		305 J	81	30-130	
2,4-Dimethylphenol	377		348 J	92	30-130	
2,4-Dinitrophenol	377		493	131	30-130	F
2,4-Dinitrotoluene	377		388	103	40-140	
2,6-Dinitrotoluene	377		320 J	85	40-140	
2-Chloronaphthalene	377		230 J	61	40-140	
2-Chlorophenol	377		318 J	84	30-130	
2-Methylnaphthalene	377		309 J	82	40-140	
2-Methylphenol	377		334 J	89	30-130	
2-Nitroaniline	377		10400	2770	40-140	F
2-Nitrophenol	377		301 J	80	30-130	
3 & 4 Methylphenol	377		332 J	88	30-130	
3,3'-Dichlorobenzidine	377		ND	0	40-140	F
3-Nitroaniline	377		5920	1570	40-140	F
4,6-Dinitro-2-methylphenol	377		415 J	110	30-130	
4-Bromophenyl phenyl ether	377		343 J	91	40-140	
4-Chloro-3-methylphenol	377		360 J	96	30-130	
4-Chloroaniline	377		272 J	72	40-140	
4-Chlorophenyl phenyl ether	377		291 J	77	40-140	
4-Nitroaniline	377		295 J	78	40-140	
4-Nitrophenol	377		431 J	114	30-130	
Acenaphthene	377		353 J	94	40-140	
Acenaphthylene	377		355 J	94	40-140	
Acetophenone	377		425	113	40-140	
Aniline	377		141 J	37	40-140	F
Anthracene	377		410	109	40-140	
Atrazine	377		370 J	98	40-140	
Azobenzene	377		331 J	88	40-140	
Benzaldehyde	377		425	113	40-140	
Benzo[a]anthracene	377		436	116	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24444-1

SDG No.: OCRI-11

Matrix: Solid Level: Low Lab File ID: J03067.D

Lab ID: 360-24444-2 MS Client ID: OC-SB-459-6.0/8.0-XXX MS

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	QC LIMITS REC	#
Benzo[a]pyrene	377	ND	386	102	40-140	
Benzo[b]fluoranthene	377		292 J	78	40-140	
Benzo[g,h,i]perylene	377		424	112	40-140	
Benzo[k]fluoranthene	377		345 J	91	40-140	
Benzoic acid	377		731 J	194	30-130	F
Benzophenone	377		346 J	92	40-140	
Benzyl alcohol	377		351 J	93	30-130	
Bis(2-chloroethoxy)methane	377		321 J	85	40-140	
Bis(2-chloroethyl)ether	377		303 J	81	40-140	
Bis(2-ethylhexyl) phthalate	377		184000	-4770	40-140	4
Butyl benzyl phthalate	377		356 J	94	40-140	
Caprolactam	377		259 J	69	40-140	
Carbazole	377		342 J	91	40-140	
Chrysene	377		372 J	99	40-140	
Dibenz(a,h)anthracene	377		433	115	40-140	
Dibenzofuran	377		317 J	84	40-140	
Diethyl phthalate	377		324 J	86	40-140	
Dimethyl phthalate	377		296 J	78	40-140	
Di-n-butyl phthalate	377		444	118	40-140	
Di-n-octyl phthalate	377		566	150	40-140	F
Diphenyl oxide	377		367 J	97	40-140	
Fluoranthene	377		363 J	96	40-140	
Fluorene	377		366 J	97	40-140	
Hexachlorobenzene	377		368 J	98	40-140	
Hexachlorobutadiene	377		309 J	82	40-140	
Hexachlorocyclopentadiene	377		ND	0	40-140	F
Hexachloroethane	377		278 J	74	40-140	
Indeno[1,2,3-cd]pyrene	377		491	130	40-140	
Isophorone	377		293 J	78	40-140	
Naphthalene	377		304 J	81	40-140	
Nitrobenzene	377		355 J	94	40-140	
N-Nitrosodimethylamine	377		327 J	87	40-140	
N-Nitrosodi-n-propylamine	377		363 J	96	40-140	
N-Nitrosodiphenylamine	377	120 J	438	47	40-140	
Pentachlorophenol	377	ND	470	125	30-130	
Phenanthrene	377		333 J	88	40-140	
Phenol	377		311 J	83	30-130	
Pyrene	377		424	113	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24444-1

SDG No.: OCRI-11

Matrix: Solid Level: Low Lab File ID: J03068.D

Lab ID: 360-24444-2 MSD Client ID: OC-SB-459-6.0/8.0-XXX MSD

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1'-Biphenyl	379	314 J	83	8	30	40-140	
1,2,4,5-Tetrachlorobenzene	379	314 J	83	5	30	40-140	
1,2,4-Trichlorobenzene	379	286 J	76	4	30	40-140	
1,2-Dichlorobenzene	379	279 J	74	5	30	40-140	
1,3-Dichlorobenzene	379	296 J	78	3	30	40-140	
1,4-Dichlorobenzene	379	267 J	71	4	30	40-140	
1-Methylnaphthalene	379	255 J	67	4	30	40-140	
2,2'-oxybis[1-chloropropane]	379	329 J	87	7	30	40-140	
2,3,4,6-Tetrachlorophenol	379	233 J	61	7	30	40-140	
2,4,5-Trichlorophenol	379	284 J	75	33	30	30-130	F
2,4,6-Trichlorophenol	379	312 J	82	2	30	30-130	
2,4-Dichlorophenol	379	290 J	77	5	30	30-130	
2,4-Dimethylphenol	379	318 J	84	9	30	30-130	
2,4-Dinitrophenol	379	504	133	2	30	30-130	F
2,4-Dinitrotoluene	379	394	104	1	30	40-140	
2,6-Dinitrotoluene	379	291 J	77	9	30	40-140	
2-Chloronaphthalene	379	223 J	59	3	30	40-140	
2-Chlorophenol	379	302 J	80	5	30	30-130	
2-Methylnaphthalene	379	303 J	80	2	30	40-140	
2-Methylphenol	379	305 J	80	9	30	30-130	
2-Nitroaniline	379	11200	2950	7	30	40-140	F
2-Nitrophenol	379	261 J	69	15	30	30-130	
3 & 4 Methylphenol	379	314 J	83	6	30	30-130	
3,3'-Dichlorobenzidine	379	124 J	33	NC		40-140	F
3-Nitroaniline	379	5560	1470	6	30	40-140	F
4,6-Dinitro-2-methylphenol	379	417 J	110	0	30	30-130	
4-Bromophenyl phenyl ether	379	308 J	81	11	30	40-140	
4-Chloro-3-methylphenol	379	369 J	98	3	30	30-130	
4-Chloroaniline	379	251 J	66	8	30	40-140	
4-Chlorophenyl phenyl ether	379	266 J	70	9	30	40-140	
4-Nitroaniline	379	269 J	71	9	30	40-140	
4-Nitrophenol	379	349 J	92	21	30	30-130	
Acenaphthene	379	328 J	87	7	30	40-140	
Acenaphthylene	379	333 J	88	6	30	40-140	
Acetophenone	379	376 J	99	12	30	40-140	
Aniline	379	147 J	39	4	30	40-140	F
Anthracene	379	399	105	3	30	40-140	
Atrazine	379	ND	0	NC	30	40-140	F
Azobenzene	379	306 J	81	8	30	40-140	
Benzaldehyde	379	376 J	99	12	30	40-140	
Benzo[a]anthracene	379	414	109	5	30	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24444-1

SDG No.: OCRI-11

Matrix: Solid Level: Low Lab File ID: J03068.D

Lab ID: 360-24444-2 MSD Client ID: OC-SB-459-6.0/8.0-XXX MSD

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Benzo[a]pyrene	379	363 J	96	6	30	40-140	
Benzo[b]fluoranthene	379	ND	0	NC	30	40-140	F
Benzo[g,h,i]perylene	379	363 J	96	15	30	40-140	
Benzo[k]fluoranthene	379	ND	0	NC	30	40-140	F
Benzoic acid	379	731 J	193	0	30	30-130	F
Benzophenone	379	344 J	91	0	30	40-140	
Benzyl alcohol	379	357 J	94	1	30	30-130	
Bis(2-chloroethoxy)methane	379	290 J	76	10	30	40-140	
Bis(2-chloroethyl)ether	379	303 J	80	0	30	40-140	
Bis(2-ethylhexyl) phthalate	379	207000	1160	11	30	40-140	4
Butyl benzyl phthalate	379	371 J	98	4	30	40-140	
Caprolactam	379	297 J	78	13	30	40-140	
Carbazole	379	331 J	87	3	30	40-140	
Chrysene	379	341 J	90	9	30	40-140	
Dibenz(a,h)anthracene	379	383	101	12	30	40-140	
Dibenzofuran	379	302 J	80	5	30	40-140	
Diethyl phthalate	379	299 J	79	8	30	40-140	
Dimethyl phthalate	379	284 J	75	4	30	40-140	
Di-n-butyl phthalate	379	403	106	10	30	40-140	
Di-n-octyl phthalate	379	564	149	0	30	40-140	F
Diphenyl oxide	379	360 J	95	2	30	40-140	
Fluoranthene	379	368 J	97	1	30	40-140	
Fluorene	379	364 J	96	1	30	40-140	
Hexachlorobenzene	379	359 J	95	2	30	40-140	
Hexachlorobutadiene	379	287 J	76	7	30	40-140	
Hexachlorocyclopentadiene	379	ND	0	NC	30	40-140	F
Hexachloroethane	379	265 J	70	5	30	40-140	
Indeno[1,2,3-cd]pyrene	379	451	119	8	30	40-140	
Isophorone	379	269 J	71	8	30	40-140	
Naphthalene	379	289 J	76	5	30	40-140	
Nitrobenzene	379	318 J	84	11	30	40-140	
N-Nitrosodimethylamine	379	313 J	83	4	30	40-140	
N-Nitrosodi-n-propylamine	379	369 J	98	2	30	40-140	
N-Nitrosodiphenylamine	379	449	50	3	30	40-140	
Pentachlorophenol	379	440	116	6	30	30-130	
Phenanthrene	379	337 J	89	1	30	40-140	
Phenol	379	288 J	76	8	30	30-130	
Pyrene	379	409	108	4	30	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM IV
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Westfield Job No.: 360-24444-2

SDG No.: OCRI-11A

Lab File ID: J03050.D Lab Sample ID: MB 360-48924/1-A

Matrix: Solid Date Extracted: 09/14/2009 13:00

Instrument ID: Inst. J Date Analyzed: 09/21/2009 19:53

Level: (Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 360-48924/2-A	J03051.D	09/21/2009 20:20
	LCSD 360-48924/3-A	J03052.D	09/21/2009 20:47
OC-SB-462-31/33-XXX	360-24444-4	J03070.D	09/22/2009 04:53
OC-SB-467-30/32-XXX	360-24444-7	J03072.D	09/22/2009 05:47

LCS
aniline 31/33

Surr ok
tune ok
IS OK

MB
bis(2-ethylhexyl)phthalate 19.4 194 10x
di-n-butyl phthalate 82.2 822 10x

TIC (RT)
vanillin (8.88)
Dodecanoic acid, methyl ester (9.51)
Hexadecane (9.88)
eicosane (11.61)
Octadecane (12.36)

ICAL
2-nitroaniline 0.0468
benzoic acid r2 = 0.9890

CCAL
2-nitroaniline 0.0457

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24444-2

SDG No.: OCRI-11A

Matrix: Solid Level: Low Lab File ID: J03051.D

Lab ID: LCS 360-48924/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
1,1'-Biphenyl	333	293	88	40-140	
1,2,4,5-Tetrachlorobenzene	333	277	83	40-140	
1,2,4-Trichlorobenzene	333	245	73	40-140	
1,2-Dichlorobenzene	333	202	60	40-140	
1,3-Dichlorobenzene	333	199	60	40-140	
1,4-Dichlorobenzene	333	201	60	40-140	
1-Methylnaphthalene	333	272	82	40-140	
2,2'-oxybis[1-chloropropane]	333	222	67	40-140	
2,3,4,6-Tetrachlorophenol	333	270	81	40-140	
2,4,5-Trichlorophenol	333	311	93	30-130	
2,4,6-Trichlorophenol	333	306	92	30-130	
2,4-Dichlorophenol	333	292	88	30-130	
2,4-Dimethylphenol	333	312	94	30-130	
2,4-Dinitrophenol	333	226	68	30-130	
2,4-Dinitrotoluene	333	292	87	40-140	
2,6-Dinitrotoluene	333	311	93	40-140	
2-Chloronaphthalene	333	206	62	40-140	
2-Chlorophenol	333	234	70	30-130	
2-Methylnaphthalene	333	269	81	40-140	
2-Methylphenol	333	254	76	30-130	
2-Nitroaniline	333	291	87	40-140	
2-Nitrophenol	333	276	83	30-130	
3 & 4 Methylphenol	333	267	80	30-130	
3,3'-Dichlorobenzidine	333	329	99	40-140	
3-Nitroaniline	333	336	101	40-140	
4,6-Dinitro-2-methylphenol	333	270	81	30-130	
4-Bromophenyl phenyl ether	333	297	89	40-140	
4-Chloro-3-methylphenol	333	306	92	30-130	
4-Chloroaniline	333	262	79	40-140	
4-Chlorophenyl phenyl ether	333	290	87	40-140	
4-Nitroaniline	333	313	94	40-140	
4-Nitrophenol	333	314	94	30-130	
Acenaphthene	333	317	95	40-140	
Acenaphthylene	333	290	87	40-140	
Acetophenone	333	254	76	40-140	
Aniline	333	103	31	40-140	*
Anthracene	333	367	110	40-140	
Atrazine	333	343	103	40-140	
Azobenzene	333	312	93	40-140	
Benzaldehyde	333	254	76	40-140	
Benzo[a]anthracene	333	363	109	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

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FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24444-2

SDG No.: OCRI-11A

Matrix: Solid Level: Low Lab File ID: J03052.D

Lab ID: LCSD 360-48924/3-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCSD CONCENTRATION (ug/Kg)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1'-Biphenyl	333	312	94	7	30	40-140	
1,2,4,5-Tetrachlorobenzene	333	301	90	8	30	40-140	
1,2,4-Trichlorobenzene	333	271	81	10	30	40-140	
1,2-Dichlorobenzene	333	212	64	5	30	40-140	
1,3-Dichlorobenzene	333	212	64	7	30	40-140	
1,4-Dichlorobenzene	333	214	64	6	30	40-140	
1-Methylnaphthalene	333	304	91	11	30	40-140	
2,2'-oxybis[1-chloropropane]	333	235	70	5	30	40-140	
2,3,4,6-Tetrachlorophenol	333	294	88	9	30	40-140	
2,4,5-Trichlorophenol	333	335	100	7	30	30-130	
2,4,6-Trichlorophenol	333	324	97	6	30	30-130	
2,4-Dichlorophenol	333	321	96	9	30	30-130	
2,4-Dimethylphenol	333	343	103	9	30	30-130	
2,4-Dinitrophenol	333	260	78	14	30	30-130	
2,4-Dinitrotoluene	333	304	91	4	30	40-140	
2,6-Dinitrotoluene	333	326	98	5	30	40-140	
2-Chloronaphthalene	333	216	65	5	30	40-140	
2-Chlorophenol	333	246	74	5	30	30-130	
2-Methylnaphthalene	333	289	87	7	30	40-140	
2-Methylphenol	333	268	80	5	30	30-130	
2-Nitroaniline	333	283	85	3	30	40-140	
2-Nitrophenol	333	304	91	10	30	30-130	
3 & 4 Methylphenol	333	280	84	5	30	30-130	
3,3'-Dichlorobenzidine	333	373	112	13	30	40-140	
3-Nitroaniline	333	365	110	8	30	40-140	
4,6-Dinitro-2-methylphenol	333	299	90	11	30	30-130	
4-Bromophenyl phenyl ether	333	317	95	6	30	40-140	
4-Chloro-3-methylphenol	333	334	100	9	30	30-130	
4-Chloroaniline	333	292	88	11	30	40-140	
4-Chlorophenyl phenyl ether	333	310	93	7	30	40-140	
4-Nitroaniline	333	327	98	4	30	40-140	
4-Nitrophenol	333	343	103	9	30	30-130	
Acenaphthene	333	339	102	7	30	40-140	
Acenaphthylene	333	309	93	6	30	40-140	
Acetophenone	333	271	81	6	30	40-140	
Aniline	333	109	33	6	30	40-140	*
Anthracene	333	401	120	9	30	40-140	
Atrazine	333	371	111	8	30	40-140	
Azobenzene	333	332	99	6	30	40-140	
Benzaldehyde	333	271	81	6	30	40-140	
Benzo[a]anthracene	333	406	122	11	30	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Westfield | Job No.: 360-24444-2

SDG No.: OCRI-11A

Client Sample ID: | Lab Sample ID: MB 360-48924/1-A

Matrix: Solid | Lab File ID: J03050.D

Analysis Method: 8270C LL | Date Collected:

Extract. Method: 3546 | Date Extracted: 09/14/2009 13:00

Sample wt/vol: 30.00(g) | Date Analyzed: 09/21/2009 19:53

Con. Extract Vol.: 1.0(mL) | Dilution Factor: 1

Injection Volume: 1.0(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 49259 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
98-86-2	Acetophenone	ND		33	10
62-53-3	Aniline	ND		33	10
120-12-7	Anthracene	ND		33	10
1912-24-9	Atrazine	ND		33	10
103-33-3	Azobenzene	ND		33	10
100-52-7	Benzaldehyde	ND		33	10
56-55-3	Benzo[a]anthracene	ND		33	10
50-32-8	Benzo[a]pyrene	ND		33	10
205-99-2	Benzo[b]fluoranthene	ND		33	10
191-24-2	Benzo[g,h,i]perylene	ND		33	10
207-08-9	Benzo[k]fluoranthene	ND		33	10
65-85-0	Benzoic acid	ND		170	15
119-61-9	Benzophenone	ND		33	10
100-51-6	Benzyl alcohol	ND		67	28
111-91-1	Bis(2-chloroethoxy)methane	ND		33	10
111-44-4	Bis(2-chloroethyl)ether	ND		33	10
117-81-7	Bis(2-ethylhexyl) phthalate	19.4	J	33	10
85-68-7	Butyl benzyl phthalate	ND		33	10
105-60-2	Caprolactam	ND		33	10
86-74-8	Carbazole	ND		33	10
218-01-9	Chrysene	ND		33	10
53-70-3	Dibenz(a,h)anthracene	ND		33	10
132-64-9	Dibenzofuran	ND		33	10
84-66-2	Diethyl phthalate	ND		33	10
131-11-3	Dimethyl phthalate	ND		33	10
84-74-2	Di-n-butyl phthalate	82.2		33	29
117-84-0	Di-n-octyl phthalate	ND		33	17
101-84-8	Diphenyl oxide	ND		33	10
206-44-0	Fluoranthene	ND		33	10
86-73-7	Fluorene	ND		33	10
118-74-1	Hexachlorobenzene	ND		33	10
87-68-3	Hexachlorobutadiene	ND		33	10
77-47-4	Hexachlorocyclopentadiene	ND		67	10
67-72-1	Hexachloroethane	ND		33	10

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Westfield Job No.: 360-24444-2 Analy Batch No.: 49259

SDG No.: OCRI-11A

Instrument ID: Inst. J GC Column: Rtx-5ms ID: 0.25(um) Heated Purge: (Y/N) N

Calibration Start Date: 09/21/2009 15:23 Calibration End Date: 09/21/2009 18:59 Calibration ID: 4673

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD01 360-49259/3	J03041.D
Level 2	STD025 360-49259/4	J03042.D
Level 3	STD05 360-49259/5	J03043.D
Level 4	STD1 360-49259/6	J03044.D
Level 5	STD25 360-49259/7	J03045.D
Level 6	STD5 360-49259/2	J03040.D
Level 7	STD8 360-49259/8	J03046.D
Level 8	STD10 360-49259/9	J03047.D
Level 9	STD20 360-49259/10	J03048.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
1,4-Dioxane	0.8489 0.2155	0.4078 0.2187	0.3238 0.2342	0.2909 0.2570	0.2523	Lin1	0.0525	0.2346							0.9920		0.9900
Pyridine	+++++ 0.5069	0.4061 0.5015	0.4133 0.6051	0.7044 0.6258	0.6807	Lin	-0.174	0.6184							0.9920		0.9900
N-Nitrosodimethylamine	0.2721 0.2981	0.2831 0.2844	0.3063 0.3493	0.3542 0.3586	0.3388	Ave		0.3161				11.0		15.0			
Benzoic acid	+++++ 0.0416	+++++ 0.0760	+++++ 0.1107	0.0005 0.1262	0.0218	Qua	-0.164	0.0869 0.0867	0.0024						0.9890	*	0.9900
Aniline	0.9485 0.8476	0.8692 0.8127	0.8830 0.9753	0.9267 1.0326	0.9767	Ave		0.9192				7.7		15.0			
Phenol	0.7163 0.7478	0.7886 0.7084	0.8308 0.8337	0.8774 0.8661	0.8566	Ave		0.8029				8.1		15.0			
2-Chlorophenol	0.6424 0.5989	0.6477 0.5776	0.6563 0.6757	0.6822 0.7051	0.6990	Ave		0.6539				6.6		15.0			
Bis(2-chloroethyl)ether	0.7250 0.5884	0.6976 0.5603	0.7023 0.6492	0.7206 0.6655	0.6921	Ave		0.6668				8.7		15.0			
1,4-Dichlorobenzene	0.8100 0.6798	0.8285 0.6355	0.8240 0.7467	0.8223 0.7660	0.7908	Ave		0.7671				9.0		15.0			
2,4-Dinitrophenol	+++++ 0.0516	+++++ 0.0668	+++++ 0.0877	0.0106 0.1098	0.0344	Qua	-0.082	0.0628	0.0026		0.0500				0.9970		0.9900
1,3-Dichlorobenzene	0.9148 0.6972	0.8714 0.6518	0.8555 0.7694	0.8311 0.7922	0.8216	Ave		0.8006				10.0		15.0			
1,2-Dichlorobenzene	0.9336 0.6398	0.8336 0.5994	0.8108 0.7079	0.7749 0.7406	0.7659	Ave		0.7563				13.0		15.0			
Benzyl alcohol	0.3658 0.5008	0.4083 0.4789	0.4245 0.5867	0.4679 0.6324	0.5594	Lin	-0.271	0.6231							0.9910		0.9900

2-nitroaniline

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Westfield Job No.: 360-24444-2 Analy Batch No.: 49259

SDG No.: OCRI-11A

Instrument ID: Inst. J GC Column: Rtx-5ms ID: 0.25(um) Heated Purge: (Y/N) N

Calibration Start Date: 09/21/2009 15:23 Calibration End Date: 09/21/2009 18:59 Calibration ID: 4673

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
Hexachlorobutadiene	0.1435 0.1387	0.1464 0.1450	0.1447 0.1386	0.1458 0.1412	0.1516	Ave		0.1439				2.8		15.0			
2-Nitroaniline	+++++ 0.0442	+++++ 0.0481	0.0530 0.0435	0.0490 0.0405	0.0495	Ave		0.0468				9.2		15.0			
Benzidine	+++++ 0.1529	+++++ 0.1847	+++++ 0.1942	0.0718 0.2518	0.1380	Qua	-0.080	0.1493	0.0053						1.0000		0.9900
4-Chloro-3-methylphenol	0.1227 0.2389	0.1470 0.2704	0.1753 0.2648	0.2030 0.2658	0.2510	Lin1	-0.025	0.2642							0.9980		0.9900
Pentachlorophenol	+++++ 0.0731	+++++ 0.0915	0.0133 0.0921	0.0278 0.1053	0.0615	Lin1	-0.063	0.1011							0.9900		0.9900
2-Methylnaphthalene	0.5547 0.5505	0.5734 0.5884	0.5477 0.5710	0.5769 0.5564	0.6146	Ave		0.5704				3.8		15.0			
1-Methylnaphthalene	0.5429 0.5359	0.5428 0.5742	0.5547 0.5528	0.5767 0.5395	0.6049	Ave		0.5583				4.1		15.0			
Hexachlorocyclopentadiene	0.0454 0.1939	0.1030 0.2013	0.1152 0.2253	0.1535 0.2405	0.1963	Lin1	-0.031	0.2249			0.0500				0.9920		0.9900
1,2,4,5-Tetrachlorobenzene	0.2182 0.2048	0.2172 0.2219	0.2180 0.2157	0.2221 0.2181	0.2281	Ave		0.2182				2.9		15.0			
2,4,6-Trichlorophenol	0.1423 0.2618	0.1590 0.3011	0.1893 0.3005	0.2368 0.3066	0.2910	Lin1	-0.029	0.3005							0.9970		0.9900
2,4,5-Trichlorophenol	0.1202 0.2730	0.1759 0.3185	0.2030 0.3043	0.2532 0.3201	0.2991	Lin1	-0.030	0.3124							0.9970		0.9900
1,1'-Biphenyl	1.3756 1.2582	1.3871 1.3385	1.3458 1.2550	1.4012 1.2337	1.4219	Ave		1.3352				5.2		15.0			
2-Chloronaphthalene	1.3575 1.3235	1.4758 1.3812	1.3647 1.3555	1.4107 1.3029	1.5272	Ave		1.3888				5.2		15.0			
Phenyl ether	0.3535 0.3272	0.3474 0.3643	0.3633 0.3475	0.3604 0.3441	0.3660	Ave		0.3526				3.6		15.0			
4-Nitroaniline	0.1822 0.3086	0.1882 0.3687	0.2034 0.3602	0.2673 0.3698	0.3440	Lin1	-0.037	0.3615							0.9960		0.9900
Dimethyl phthalate	1.0753 1.1447	1.0942 1.2726	1.1783 1.1993	1.2530 1.1950	1.3237	Ave		1.1929				6.8		15.0			
2,4-Dinitrotoluene	0.1396 0.2560	0.1478 0.2884	0.2083 0.2778	0.2479 0.2807	0.2873	Lin1	-0.022	0.2809							0.9980		0.9900
Acenaphthylene	1.2818 1.5974	1.4441 1.7583	1.5065 1.6577	1.6761 1.6416	1.7884	Ave		1.5946				10.0		15.0			
Acenaphthene	1.1695 1.0084	1.1349 1.0742	1.0612 1.0416	1.1257 1.0379	1.1680	Ave		1.0913				5.5		15.0			
Dibenzofuran	1.5025 1.3765	1.5337 1.4682	1.4502 1.4134	1.5147 1.4044	1.5624	Ave		1.4696				4.3		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Westfield Job No.: 360-24444-2

SDG No.: OCRI-11A

Lab Sample ID: CCV 360-49260/16 Calibration Date: 09/21/2009 21:41

Instrument ID: Inst. J Calib Start Date: 09/21/2009 15:23

GC Column: Rtx-5ms ID: 0.25(um) Calib End Date: 09/21/2009 18:59

Lab File ID: J03054.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Nitroaniline	Lin1		0.3546		5010	5000	0.1	30.0
Dimethyl phthalate	Ave	1.193	1.221		5120	5000	2.4	30.0
2,4-Dinitrotoluene	Lin1		0.2809		5080	5000	1.6	30.0
Acenaphthylene	Ave	1.595	1.678		5260	5000	5.2	30.0
Acenaphthene	Ave	1.091	1.057		4840	5000	-3.2	20.0
2,4-Dinitrophenol	Qua		0.0625	0.0500	5190	5000	3.7	30.0
4-Nitrophenol	Lin2		0.1680	0.0500	5320	5000	6.5	30.0
Dibenzofuran	Ave	1.470	1.456		4960	5000	-0.9	30.0
2,6-Dinitrotoluene	Lin1		0.3551		5130	5000	2.6	30.0
2,3,4,6-Tetrachlorophenol	Lin1		0.2320		4970	5000	-0.5	30.0
Diethyl phthalate	Ave	1.209	1.257		5190	5000	3.9	30.0
Fluorene	Ave	1.141	1.165		5100	5000	2.1	30.0
4-Chlorophenyl phenyl ether	Ave	0.5501	0.5353		4870	5000	-2.7	30.0
3-Nitroaniline	Lin1		0.2454		5440	5000	8.9	30.0
4,6-Dinitro-2-methylphenol	Lin		0.0833		4910	5000	-1.9	30.0
Diphenylamine	Ave	0.5950	0.6307		5300	5000	6.0	30.0
N-Nitrosodiphenylamine	Ave	0.5950	0.6307		5300	5000	6.0	20.0
1,2-Diphenylhydrazine	Ave	1.232	1.315		5340	5000	6.7	30.0
Azobenzene	Ave	1.232	1.315		5340	5000	6.7	30.0
Benzophenone	Ave	0.7303	0.7877		5390	5000	7.9	30.0
2-Nitroaniline	Ave	0.0468	0.0454		4850	5000	-3.0	30.0
4-Bromophenyl phenyl ether	Ave	0.1860	0.1861		5000	5000	0.0	30.0
Hexachlorobenzene	Ave	0.2078	0.1933		4650	5000	-7.0	30.0
Atrazine	Lin1		0.1896		5010	5000	0.2	30.0
Pentachlorophenol	Lin1		0.0826		4710	5000	-5.9	20.0
Pentachloronitrobenzene	Lin1		0.0855		4810	5000	-3.9	30.0
Phenanthrene	Ave	1.012	0.9960		4920	5000	-1.6	30.0
Anthracene	Ave	0.8679	0.9677		5580	5000	11.5	30.0
Carbazole	Ave	0.7502	0.8215		5480	5000	9.5	30.0
Di-n-butyl phthalate	Lin1		1.247		5050	5000	1.0	30.0
Fluoranthene	Ave	0.8040	0.8858		5510	5000	10.2	20.0
Benzidine	Qua		0.2048		6080	5000	21.6	30.0
Pyrene	Ave	1.363	1.493		5480	5000	9.5	30.0
Butyl benzyl phthalate	Lin1		0.7764		5490	5000	9.8	30.0
Benzo[a]anthracene	Lin1		0.9220		5150	5000	3.0	30.0
3,3'-Dichlorobenzidine	Lin1		0.2898		5760	5000	15.1	30.0
Chrysene	Lin2		0.8839		5070	5000	1.5	30.0
Bis(2-ethylhexyl) phthalate	Lin1		1.079		5560	5000	11.1	30.0
Di-n-octyl phthalate	Lin		2.113		5340	5000	6.8	20.0
Benzo[b]fluoranthene	Ave	1.227	1.181		4810	5000	-3.8	30.0
Benzo[k]fluoranthene	Ave	1.147	1.250		5450	5000	9.0	30.0

FORM IV
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Westfield Job No.: 360-24444-2

SDG No.: OCRI-11A

Lab File ID: B10486.D Lab Sample ID: MB 360-49016/1-A

Matrix: Solid Date Extracted: 09/16/2009 11:53

Instrument ID: Inst. B Date Analyzed: 09/22/2009 20:43

Level: (Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 360-49016/2-A	B10487.D	09/22/2009 21:14
	LCSD 360-49016/3-A	B10488.D	09/22/2009 21:45
OC-SB-459-26/28-XXX	360-24444-13	B10499.D	09/23/2009 03:29

LCS
aniline (29/31)
bis(2-ethylhexyl)phthalate (141/141)

surr OK
time OK
IS OK
ICAL OK
CCAL OK

MB
benzoic acid 97.4 407 5x
bis(2-ethylhexyl) phthalate 162 1620 10x
di-n-butyl phthalate 68.0 680 10x

TIC (RT)
benzaldehyde, 3-hydroxy-4-methoxy (9.83)
Dodecanoic acid, methyl ester (10.28)
octacosane (11.38)
eicosene (12.08)
squalene (16.44)

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24444-2

SDG No.: OCRI-11A

Matrix: Solid Level: Low Lab File ID: B10487.D

Lab ID: LCS 360-49016/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
1,1'-Biphenyl	333	318	95	40-140	
1,2,4,5-Tetrachlorobenzene	333	299	90	40-140	
1,2,4-Trichlorobenzene	333	249	75	40-140	
1,2-Dichlorobenzene	333	244	73	40-140	
1,3-Dichlorobenzene	333	205	62	40-140	
1,4-Dichlorobenzene	333	198	59	40-140	
1-Methylnaphthalene	333	293	88	40-140	
2,2'-oxybis[1-chloropropane]	333	273	82	40-140	
2,3,4,6-Tetrachlorophenol	333	264	79	40-140	
2,4,5-Trichlorophenol	333	297	89	30-130	
2,4,6-Trichlorophenol	333	303	91	30-130	
2,4-Dichlorophenol	333	272	82	30-130	
2,4-Dimethylphenol	333	267	80	30-130	
2,4-Dinitrophenol	333	238	72	30-130	
2,4-Dinitrotoluene	333	297	89	40-140	
2,6-Dinitrotoluene	333	306	92	40-140	
2-Chloronaphthalene	333	242	73	40-140	
2-Chlorophenol	333	233	70	30-130	
2-Methylnaphthalene	333	231	69	40-140	
2-Methylphenol	333	242	73	30-130	
2-Nitroaniline	333	353	106	40-140	
2-Nitrophenol	333	289	87	30-130	
3 & 4 Methylphenol	333	258	78	30-130	
3,3'-Dichlorobenzidine	333	323	97	40-140	
3-Nitroaniline	333	316	95	40-140	
4,6-Dinitro-2-methylphenol	333	315	94	30-130	
4-Bromophenyl phenyl ether	333	334	100	40-140	
4-Chloro-3-methylphenol	333	287	86	30-130	
4-Chloroaniline	333	211	63	40-140	
4-Chlorophenyl phenyl ether	333	317	95	40-140	
4-Nitroaniline	333	312	94	40-140	
4-Nitrophenol	333	337	101	30-130	
Acenaphthene	333	350	105	40-140	
Acenaphthylene	333	303	91	40-140	
Acetophenone	333	233	70	40-140	
Aniline	333	95.6	29	40-140	*
Anthracene	333	387	116	40-140	
Atrazine	333	402	121	40-140	
Azobenzene	333	333	100	40-140	
Benzaldehyde	333	262	79	40-140	
Benzo[a]anthracene	333	397	119	40-140	

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Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

bis-(2 ethyl hexyl) phthalate 141/141

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24444-2

SDG No.: OCRI-11A

Matrix: Solid Level: Low Lab File ID: B10487.D

Lab ID: LCS 360-49016/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
Benzo[a]pyrene	333	413	124	40-140	
Benzo[b]fluoranthene	333	351	105	40-140	
Benzo[g,h,i]perylene	333	382	115	40-140	
Benzo[k]fluoranthene	333	387	116	40-140	
Benzoic acid	333	171	51	30-130	
Benzophenone	333	347	104	40-140	
Benzyl alcohol	333	268	80	30-130	
Bis(2-chloroethoxy)methane	333	233	70	40-140	
Bis(2-chloroethyl)ether	333	210	63	40-140	
Bis(2-ethylhexyl) phthalate	333	472	141	40-140	*
Butyl benzyl phthalate	333	319	96	40-140	
Caprolactam	333	364	109	40-140	
Carbazole	333	357	107	40-140	
Chrysene	333	378	113	40-140	
Dibenz(a,h)anthracene	333	425	127	40-140	
Dibenzofuran	333	305	91	40-140	
Diethyl phthalate	333	327	98	40-140	
Dimethyl phthalate	333	319	96	40-140	
Di-n-butyl phthalate	333	395	118	40-140	
Di-n-octyl phthalate	333	318	95	40-140	
Diphenyl oxide	333	258	77	40-140	
Fluoranthene	333	357	107	40-140	
Fluorene	333	374	112	40-140	
Hexachlorobenzene	333	322	97	40-140	
Hexachlorobutadiene	333	263	79	40-140	
Hexachlorocyclopentadiene	333	231	69	40-140	
Hexachloroethane	333	205	62	40-140	
Indeno[1,2,3-cd]pyrene	333	421	126	40-140	
Isophorone	333	213	64	40-140	
Naphthalene	333	274	82	40-140	
Nitrobenzene	333	233	70	40-140	
N-Nitrosodimethylamine	333	248	74	40-140	
N-Nitrosodi-n-propylamine	333	255	77	40-140	
N-Nitrosodiphenylamine	333	232	70	40-140	
Pentachlorophenol	333	312	94	30-130	
Phenanthrene	333	341	102	40-140	
Phenol	333	240	72	30-130	
Pyrene	333	353	106	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24444-2

SDG No.: OCRI-11A

Matrix: Solid Level: Low Lab File ID: B10488.D

Lab ID: LCSD 360-49016/3-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCSD CONCENTRATION (ug/Kg)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1'-Biphenyl	333	307	92	3	30	40-140	
1,2,4,5-Tetrachlorobenzene	333	306	92	2	30	40-140	
1,2,4-Trichlorobenzene	333	262	79	5	30	40-140	
1,2-Dichlorobenzene	333	261	78	7	30	40-140	
1,3-Dichlorobenzene	333	217	65	6	30	40-140	
1,4-Dichlorobenzene	333	211	63	6	30	40-140	
1-Methylnaphthalene	333	286	86	2	30	40-140	
2,2'-oxybis[1-chloropropane]	333	291	87	6	30	40-140	
2,3,4,6-Tetrachlorophenol	333	260	78	1	30	40-140	
2,4,5-Trichlorophenol	333	320	96	8	30	30-130	
2,4,6-Trichlorophenol	333	314	94	3	30	30-130	
2,4-Dichlorophenol	333	276	83	2	30	30-130	
2,4-Dimethylphenol	333	279	84	4	30	30-130	
2,4-Dinitrophenol	333	254	76	6	30	30-130	
2,4-Dinitrotoluene	333	311	93	5	30	40-140	
2,6-Dinitrotoluene	333	318	95	4	30	40-140	
2-Chloronaphthalene	333	249	75	3	30	40-140	
2-Chlorophenol	333	247	74	6	30	30-130	
2-Methylnaphthalene	333	236	71	2	30	40-140	
2-Methylphenol	333	254	76	5	30	30-130	
2-Nitroaniline	333	358	107	1	30	40-140	
2-Nitrophenol	333	301	90	4	30	30-130	
3 & 4 Methylphenol	333	273	82	6	30	30-130	
3,3'-Dichlorobenzidine	333	343	103	6	30	40-140	
3-Nitroaniline	333	321	96	2	30	40-140	
4,6-Dinitro-2-methylphenol	333	327	98	4	30	30-130	
4-Bromophenyl phenyl ether	333	341	102	2	30	40-140	
4-Chloro-3-methylphenol	333	291	87	2	30	30-130	
4-Chloroaniline	333	208	62	1	30	40-140	
4-Chlorophenyl phenyl ether	333	326	98	3	30	40-140	
4-Nitroaniline	333	321	96	3	30	40-140	
4-Nitrophenol	333	354	106	5	30	30-130	
Acenaphthene	333	360	108	3	30	40-140	
Acenaphthylene	333	310	93	2	30	40-140	
Acetophenone	333	251	75	8	30	40-140	
Aniline	333	103	31	8	30	40-140	*
Anthracene	333	400	120	3	30	40-140	
Atrazine	333	406	122	1	30	40-140	
Azobenzene	333	338	101	2	30	40-140	
Benzaldehyde	333	259	78	1	30	40-140	
Benzo[a]anthracene	333	419	126	6	30	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24444-2

SDG No.: OCRI-11A

Matrix: Solid Level: Low Lab File ID: B10488.D

Lab ID: LCSD 360-49016/3-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCSD CONCENTRATION (ug/Kg)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Benzo[a]pyrene	333	437	131	6	30	40-140	
Benzo[b]fluoranthene	333	380	114	8	30	40-140	
Benzo[g,h,i]perylene	333	402	121	5	30	40-140	
Benzo[k]fluoranthene	333	407	122	5	30	40-140	
Benzoic acid	333	174	52	2	30	30-130	
Benzophenone	333	347	104	0	30	40-140	
Benzyl alcohol	333	279	84	4	30	30-130	
Bis(2-chloroethoxy)methane	333	237	71	2	30	40-140	
Bis(2-chloroethyl)ether	333	223	67	6	30	40-140	
Bis(2-ethylhexyl) phthalate	333	470	141	0	30	40-140	*
Butyl benzyl phthalate	333	337	101	6	30	40-140	
Caprolactam	333	357	107	2	30	40-140	
Carbazole	333	374	112	4	30	40-140	
Chrysene	333	398	120	5	30	40-140	
Dibenz(a,h)anthracene	333	455	136	7	30	40-140	
Dibenzofuran	333	310	93	2	30	40-140	
Diethyl phthalate	333	337	101	3	30	40-140	
Dimethyl phthalate	333	330	99	3	30	40-140	
Di-n-butyl phthalate	333	410	123	4	30	40-140	
Di-n-octyl phthalate	333	335	101	5	30	40-140	
Diphenyl oxide	333	251	75	3	30	40-140	
Fluoranthene	333	375	113	5	30	40-140	
Fluorene	333	383	115	2	30	40-140	
Hexachlorobenzene	333	336	101	4	30	40-140	
Hexachlorobutadiene	333	264	79	0	30	40-140	
Hexachlorocyclopentadiene	333	245	74	6	30	40-140	
Hexachloroethane	333	220	66	7	30	40-140	
Indeno[1,2,3-cd]pyrene	333	447	134	6	30	40-140	
Isophorone	333	220	66	4	30	40-140	
Naphthalene	333	282	85	3	30	40-140	
Nitrobenzene	333	236	71	1	30	40-140	
N-Nitrosodimethylamine	333	263	79	6	30	40-140	
N-Nitrosodi-n-propylamine	333	269	81	5	30	40-140	
N-Nitrosodiphenylamine	333	245	73	5	30	40-140	
Pentachlorophenol	333	328	98	5	30	30-130	
Phenanthrene	333	360	108	5	30	40-140	
Phenol	333	257	77	7	30	30-130	
Pyrene	333	368	110	4	30	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Westfield | Job No.: 360-24444-2

SDG No.: OCRI-11A

Client Sample ID: | Lab Sample ID: MB 360-49016/1-A

Matrix: Solid | Lab File ID: B10486.D

Analysis Method: 8270C LL | Date Collected:

Extract. Method: 3546 | Date Extracted: 09/16/2009 11:53

Sample wt/vol: 30.00(g) | Date Analyzed: 09/22/2009 20:43

Con. Extract Vol.: 1.0(mL) | Dilution Factor: 1

Injection Volume: 1.0(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 49400 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
98-86-2	Acetophenone	ND		33	10
62-53-3	Aniline	ND		33	10
120-12-7	Anthracene	ND		33	10
1912-24-9	Atrazine	ND		33	10
103-33-3	Azobenzene	ND		33	10
100-52-7	Benzaldehyde	ND		33	10
56-55-3	Benzo[a]anthracene	ND		33	10
50-32-8	Benzo[a]pyrene	ND		33	10
205-99-2	Benzo[b]fluoranthene	ND		33	10
191-24-2	Benzo[g,h,i]perylene	ND		33	10
207-08-9	Benzo[k]fluoranthene	ND		33	10
65-85-0	Benzoic acid	97.4	J	170	15
119-61-9	Benzophenone	ND		33	10
100-51-6	Benzyl alcohol	ND		67	28
111-91-1	Bis(2-chloroethoxy)methane	ND		33	10
111-44-4	Bis(2-chloroethyl)ether	ND		33	10
117-81-7	Bis(2-ethylhexyl) phthalate	162		33	10
85-68-7	Butyl benzyl phthalate	ND		33	10
105-60-2	Caprolactam	ND		33	10
86-74-8	Carbazole	ND		33	10
218-01-9	Chrysene	ND		33	10
53-70-3	Dibenz(a,h)anthracene	ND		33	10
132-64-9	Dibenzofuran	ND		33	10
84-66-2	Diethyl phthalate	ND		33	10
131-11-3	Dimethyl phthalate	ND		33	10
84-74-2	Di-n-butyl phthalate	68.0		33	29
117-84-0	Di-n-octyl phthalate	ND		33	17
101-84-8	Diphenyl oxide	ND		33	10
206-44-0	Fluoranthene	ND		33	10
86-73-7	Fluorene	ND		33	10
118-74-1	Hexachlorobenzene	ND		33	10
87-68-3	Hexachlorobutadiene	ND		33	10
77-47-4	Hexachlorocyclopentadiene	ND		67	10
67-72-1	Hexachloroethane	ND		33	10

Coversheet ✓

SEMIVOLATILE ORGANICS

REGION I VALIDATION CHECKLIST for OLIN CHEMICAL SUPERFUND SITE
Criteria and Qualifications: REGION I Organics Guideline (1996)

TIER I (II) III (circle one)

SITE: Olin Chemical Superfund Site Project #: 6107/0006.12 SDG #: OCRI-12/12A

LAB #: TAL-Westfield

Sample IDs: Attach tracking sheet and/or sample listing.

This checklist is designed to be used with USEPA Region I Validation Guidelines Part II (12/1996). During Level III validation, calculation and transcription checks are completed for instrument tuning, surrogates, target compounds, spike recoveries, calibration data, and internal standards as specified in the guideline. These checks are documented on attached validation notes.

YES NO NA	
Data completeness ☑ ☐ ☐ All data summaries, QC forms and raw data available from hard copy or electronic data package ☑ ☐ ☐ Data summaries match EDD	Contact lab if missing data. Lab to respond with 24 hours.
Holding Times and Preservation ☑ ☐ ☐ Hold times met (Waters – Extract within 7 days, analyze within 40 days. Soils – extract within 14 days, analyze within 40 days)	
Instrument Performance Check (Tune) ☑ ☐ ☐ Tune available for each 12-hour period samples were analyzed ☑ ☐ ☐ Appropriate number of significant figures reported (at least 2) ☑ ☐ ☐ Mass/Charge list (m/z) criteria met	
Initial Calibration ☑ ☐ ☐ %RSD less than or equal to 30% ☑ ☐ ☐ RRF greater than or equal to 0.05	
Continuing Calibration ☑ ☐ ☐ %D less than or equal to 25% ☑ ☐ ☐ RRF greater than or equal to 0.05.	
Blank Contamination ☒ ☐ ☐ Method blank contamination ☒ ☐ ☐ Equipment/Rinseate blank contamination	Evaluate all blanks for contamination. Highest contaminant level used for action level. See below.
Surrogate Recoveries	

SEMIVOLATILE ORGANICS

REGION I VALIDATION CHECKLIST for OLIN CHEMICAL SUPERFUND SITE
Criteria and Qualifications: REGION I Organics Guideline (1996)

TIER I / II / III (circle one)

☑ ☐ ☐ Surrogates percent recovery criteria met: Soil = (base/neutral 30%-130%, acid 30%-130%) Water = (base/neutral 30%-130%, acid 15%-110%)	
Matrix Spikes and Laboratory Control Samples ☐ ☐ ☑ MS/MSD percent recovery criteria met Soil and Water = (base/neutral 40%-140%, acid 30%-130%) ☐ ☐ ☑ MS/MSD RPD criteria met (soils <50%, water <30%) ☐ ☒ ☐ LCS percent recovery criteria met soil/water (base 40%-140%, acid 30%-130%)	See below.
Field Duplicates ☐ ☐ ☑ RPD criteria met (soils <50%, water <30%)	
Internal Standard ☐ ☒ ☐ Area counts within -50 to +100 percent of calib. std. ☑ ☐ ☐ Retention Time within 30 seconds of calib. std.	See below.
Target Compounds ☑ ☐ ☐ Reviewed narrative for anomalies	
Tentatively Identified Compounds (TICs) ☐ ☑ ☐ TCL compounds reported as TICs	

Validator's Signature: _____

Date: 3/2/10

Reference:

MACTEC, Quality Assurance Project Plan for Remedial Investigation/Feasibility Study – Olin Chemical Superfund Site, Wilmington Property, 51 Eames Street, Wilmington, MA", MACTEC Engineering and Consulting. Draft .October 2008.

SAMPLE SUMMARY

Client: Olin Corporation

Job Number: 360-24454-1
Sdg Number: OCRI-12

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
360-24454-1	OC-SB-461-0.0/1.0-XXX	Solid	09/03/2009 1420	09/04/2009 1605
360-24454-2	OC-SB-461-28/30-XXX	Solid	09/03/2009 1650	09/04/2009 1605
360-24454-3	OC-SB-461-5.0/7.0-XXX	Solid	09/03/2009 1430	09/04/2009 1605
360-24454-4	OC-SB-470-0.0/1.0-XXX	Solid	09/04/2009 1015	09/04/2009 1605
360-24454-5	OC-SB-470-31/33-XXX	Solid	09/04/2009 1120	09/04/2009 1605
360-24454-6	OC-SB-470-7.0/9.0-XXX	Solid	09/04/2009 1020	09/04/2009 1605
360-24454-7	OC-SB-472-0.0/1.0-XXX	Solid	09/04/2009 0745	09/04/2009 1605
360-24454-8	OC-SB-472-30/32-XXX	Solid	09/04/2009 0850	09/04/2009 1605
360-24454-9	OC-SB-472-8.0/10-XXX	Solid	09/04/2009 0755	09/04/2009 1605
360-24454-10	OC-TBK-014	Solid	09/04/2009 1130	09/04/2009 1605
360-24454-12	OC-SB-461-5.0/7.0-XXX	Solid	09/03/2009 1430	09/04/2009 1605
360-24454-13	OC-SB-470-0.0/1.0-XXX	Solid	09/04/2009 1015	09/04/2009 1605
360-24454-15	OC-SB-470-7.0/9.0-XXX	Solid	09/04/2009 1020	09/04/2009 1605
360-24454-16	OC-SB-472-30/32-XXX	Solid	09/04/2009 0850	09/04/2009 1605
360-24454-17	OC-SB-472-8.0/10-XXX	Solid	09/04/2009 0755	09/04/2009 1605
360-24454-18EB	OC-EBK-008	Water	09/08/2009 1100	09/08/2009 1630

Form I's updated

3/2/10

Client: Olin Corporation

Job Number: 360-24454-1
Sdg Number: OCRI-12

Client Sample ID: OC-SB-461-5.0/7.0-XXX

Lab Sample ID: 360-24454-3
Client Matrix: Solid
% Moisture: 14.6

Date Sampled: 09/03/2009 1430
Date Received: 09/04/2009 1605

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49402		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49016		Lab File ID:	B10501.D
Dilution:	1.0			Initial Weight/Volume:	30.69 g
Date Analyzed:	09/23/2009 0432			Final Weight/Volume:	1.0 mL
Date Prepared:	09/16/2009 1153			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		11	38
1,2,4,5-Tetrachlorobenzene		ND		11	38
1,2,4-Trichlorobenzene		ND		11	38
1,2-Dichlorobenzene		ND		11	38
1,3-Dichlorobenzene		ND		11	38
1,4-Dichlorobenzene		ND		11	38
1-Methylnaphthalene		ND		11	38
2,2'-oxybis[1-chloropropane]		ND		11	38
2,3,4,6-Tetrachlorophenol		ND		11	38
2,4,5-Trichlorophenol		ND		11	38
2,4,6-Trichlorophenol		ND		11	38
2,4-Dichlorophenol		ND		11	38
2,4-Dimethylphenol		ND		15	38
2,4-Dinitrophenol		ND		11	38
2,4-Dinitrotoluene		ND		11	38
2,6-Dinitrotoluene		ND		11	38
2-Chloronaphthalene		ND		11	38
2-Chlorophenol		ND		11	38
2-Methylnaphthalene		ND		11	38
2-Methylphenol		ND		23	38
2-Nitroaniline		ND		11	190
2-Nitrophenol		ND		11	38
3 & 4 Methylphenol		ND		11	38
3,3'-Dichlorobenzidine		ND		11	76
3-Nitroaniline		ND		11	190
4,6-Dinitro-2-methylphenol		ND		11	190
4-Bromophenyl phenyl ether		ND		11	38
4-Chloro-3-methylphenol		ND		11	76
4-Chloroaniline		ND		11	76
4-Chlorophenyl phenyl ether		ND		11	38
4-Nitroaniline		ND		11	190
4-Nitrophenol		ND		11	190
Acenaphthene		ND		11	38
Acenaphthylene		ND		11	38
Acetophenone		ND		11	38
Aniline		ND	J	11	38
Anthracene		ND		11	38
Atrazine		ND		11	38
Azobenzene		ND		11	38
Benzaldehyde		ND		11	38
Benzo[a]anthracene		ND		11	38
Benzo[a]pyrene		ND		11	38
Benzo[b]fluoranthene		ND		11	38
Benzo[g,h,i]perylene		ND		11	38
Benzo[k]fluoranthene		ND		11	38
Benzoic acid		ND		17	190

3/2/10

Client: Olin Corporation

Job Number: 360-24454-1
Sdg Number: OCRI-12

Client Sample ID: OC-SB-461-5.0/7.0-XXX

Lab Sample ID: 360-24454-3
Client Matrix: Solid

% Moisture: 14.6

Date Sampled: 09/03/2009 1430
Date Received: 09/04/2009 1605

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49402		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49016		Lab File ID:	B10501.D
Dilution:	1.0			Initial Weight/Volume:	30.69 g
Date Analyzed:	09/23/2009 0432			Final Weight/Volume:	1.0 mL
Date Prepared:	09/16/2009 1153			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		11	38
Benzyl alcohol		ND		33	76
Bis(2-chloroethoxy)methane		ND		11	38
Bis(2-chloroethyl)ether		ND		11	38
Bis(2-ethylhexyl) phthalate		140	U B	11	38
Butyl benzyl phthalate		ND		11	38
Caprolactam		ND		11	38
Carbazole		ND		11	38
Chrysene		ND		11	38
Dibenz(a,h)anthracene		ND		11	38
Dibenzofuran		ND		11	38
Diethyl phthalate		ND		11	38
Dimethyl phthalate		ND		11	38
Di-n-butyl phthalate		ND		34	38
Di-n-octyl phthalate		ND		19	38
Diphenyl oxide		ND		11	38
Fluoranthene		ND		11	38
Fluorene		ND		11	38
Hexachlorobenzene		ND		11	38
Hexachlorobutadiene		ND		11	38
Hexachlorocyclopentadiene		ND		11	76
Hexachloroethane		ND		11	38
Indeno[1,2,3-cd]pyrene		ND		11	38
Isophorone		ND		11	38
Naphthalene		ND		11	92
Nitrobenzene		ND		11	38
N-Nitrosodimethylamine		ND		14	38
N-Nitrosodi-n-propylamine		ND		11	38
N-Nitrosodiphenylamine		ND		11	38
Pentachlorophenol		ND		11	38
Phenanthrene		ND		11	46
Phenol		ND		11	38
Pyrene		ND		11	38

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	69		30 - 130
2-Fluorobiphenyl	66		30 - 130
2-Fluorophenol	86		30 - 130
Nitrobenzene-d5	72		30 - 130
Phenol-d5	70		30 - 130
Terphenyl-d14	77		30 - 130

3/2/10

Client: Olin Corporation

Job Number: 360-24454-1
Sdg Number: OCRI-12

Client Sample ID: **OC-SB-461-5.0/7.0-XXX**

Lab Sample ID: 360-24454-3
Client Matrix: Solid % Moisture: 14.6

Date Sampled: 09/03/2009 1430
Date Received: 09/04/2009 1605

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49402		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49016		Lab File ID:	B10501.D
Dilution:	1.0			Initial Weight/Volume:	30.69 g
Date Analyzed:	09/23/2009 0432			Final Weight/Volume:	1.0 mL
Date Prepared:	09/16/2009 1153			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** **10**

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
59242-27-2	Furan, 2,5-dihydro-2,5-dimethyl-	5.57	14	T J N
98-83-9	.alpha.-Methylstyrene	7.43	8.3	T J N
541-2-6	Cyclopentasiloxane, decamethyl-	8.29	9.7	T J N
128-37-0	Butylated Hydroxytoluene	10.27	8.6	T J N
3910-35-8	1H-Indene, 2,3-dihydro-1,1,3-trimethyl-3	11.22	8.0	T J N
92-87-5	Benzidine	12.81	22	J
629-96-9	1-Eicosanol	14.60	29	T J N
544-85-4	Dotriacontane	15.83	11	T J N
1000130-79-8	13-Tertadecen-1-ol acetate	15.88	21	T J N
7683-64-9	Squalene	16.44	72	T J N

3/2/10

Client: Olin Corporation

Job Number: 360-24454-1
Sdg Number: OCRI-12

Client Sample ID: **OC-SB-470-0.0/1.0-XXX**

Lab Sample ID: 360-24454-4
Client Matrix: Solid
% Moisture: 9.7

Date Sampled: 09/04/2009 1015
Date Received: 09/04/2009 1605

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49402		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49016		Lab File ID:	B10502.D
Dilution:	1.0			Initial Weight/Volume:	30.07 g
Date Analyzed:	09/23/2009 0503			Final Weight/Volume:	1.0 mL
Date Prepared:	09/16/2009 1153			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		11	37
1,2,4,5-Tetrachlorobenzene		ND		11	37
1,2,4-Trichlorobenzene		ND		11	37
1,2-Dichlorobenzene		ND		11	37
1,3-Dichlorobenzene		ND		11	37
1,4-Dichlorobenzene		ND		11	37
1-Methylnaphthalene		ND		11	37
2,2'-oxybis[1-chloropropane]		ND		11	37
2,3,4,6-Tetrachlorophenol		ND		11	37
2,4,5-Trichlorophenol		ND		11	37
2,4,6-Trichlorophenol		ND		11	37
2,4-Dichlorophenol		ND		11	37
2,4-Dimethylphenol		ND		14	37
2,4-Dinitrophenol		ND		11	37
2,4-Dinitrotoluene		ND		11	37
2,6-Dinitrotoluene		ND		11	37
2-Chloronaphthalene		ND		11	37
2-Chlorophenol		ND		11	37
2-Methylnaphthalene		ND		11	37
2-Methylphenol		ND		22	37
2-Nitroaniline		ND		11	180
2-Nitrophenol		ND		11	37
3 & 4 Methylphenol		ND		11	37
3,3'-Dichlorobenzidine		ND		11	74
3-Nitroaniline		ND		11	180
4,6-Dinitro-2-methylphenol		ND		11	180
4-Bromophenyl phenyl ether		ND		11	37
4-Chloro-3-methylphenol		ND		11	74
4-Chloroaniline		ND		11	74
4-Chlorophenyl phenyl ether		ND		11	37
4-Nitroaniline		ND		11	180
4-Nitrophenol		ND		11	180
Acenaphthene		ND		11	37
Acenaphthylene		ND		11	37
Acetophenone		ND		11	37
Aniline		ND	J	11	37
Anthracene		ND		11	37
Atrazine		ND		11	37
Azobenzene		ND		11	37
Benzaldehyde		ND		11	37
Benzo[a]anthracene		ND		11	37
Benzo[a]pyrene		ND		11	37
Benzo[b]fluoranthene		ND		11	37
Benzo[g,h,i]perylene		ND		11	37
Benzo[k]fluoranthene		ND		11	37
Benzoic acid		ND		17	180

Client: Olin Corporation

Job Number: 360-24454-1
Sdg Number: OCRI-12

Client Sample ID: **OC-SB-470-0.0/1.0-XXX**

Lab Sample ID: 360-24454-4
Client Matrix: Solid
% Moisture: 9.7

Date Sampled: 09/04/2009 1015
Date Received: 09/04/2009 1605

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49402		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49016		Lab File ID:	B10502.D
Dilution:	1.0			Initial Weight/Volume:	30.07 g
Date Analyzed:	09/23/2009 0503			Final Weight/Volume:	1.0 mL
Date Prepared:	09/16/2009 1153			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		11	37
Benzyl alcohol		ND		31	74
Bis(2-chloroethoxy)methane		ND		11	37
Bis(2-chloroethyl)ether		ND		11	37
Bis(2-ethylhexyl) phthalate		130	U B	11	37
Butyl benzyl phthalate		ND		11	37
Caprolactam		ND		11	37
Carbazole		ND		11	37
Chrysene		ND		11	37
Dibenz(a,h)anthracene		ND		11	37
Dibenzofuran		ND		11	37
Diethyl phthalate		ND		11	37
Dimethyl phthalate		ND		11	37
Di-n-butyl phthalate		ND		32	37
Di-n-octyl phthalate		ND		19	37
Diphenyl oxide		ND		11	37
Fluoranthene		ND		11	37
Fluorene		ND		11	37
Hexachlorobenzene		ND		11	37
Hexachlorobutadiene		ND		11	37
Hexachlorocyclopentadiene		ND		11	74
Hexachloroethane		ND		11	37
Indeno[1,2,3-cd]pyrene		ND		11	37
Isophorone		ND		11	37
Naphthalene		ND		11	88
Nitrobenzene		ND		11	37
N-Nitrosodimethylamine		ND		13	37
N-Nitrosodi-n-propylamine		ND		11	37
N-Nitrosodiphenylamine		ND		11	37
Pentachlorophenol		ND		11	37
Phenanthrene		ND		11	44
Phenol		ND		11	37
Pyrene		ND		11	37

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	68		30 - 130
2-Fluorobiphenyl	62		30 - 130
2-Fluorophenol	85		30 - 130
Nitrobenzene-d5	69		30 - 130
Phenol-d5	68		30 - 130
Terphenyl-d14	70		30 - 130

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Client: Olin Corporation

Job Number: 360-24454-1
Sdg Number: OCRI-12

Client Sample ID: **OC-SB-470-0.0/1.0-XXX**

Lab Sample ID: 360-24454-4
Client Matrix: Solid
% Moisture: 9.7

Date Sampled: 09/04/2009 1015
Date Received: 09/04/2009 1605

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49402		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49016		Lab File ID:	B10502.D
Dilution:	1.0			Initial Weight/Volume:	30.07 g
Date Analyzed:	09/23/2009 0503			Final Weight/Volume:	1.0 mL
Date Prepared:	09/16/2009 1153			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 5

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
92-87-5	Benzidine	12.83	22	J
1599-67-3	1-Docosene	14.58	370	T J N
1599-67-3	1-Docosene	15.86	590	T J N
7683-64-9	Squalene	16.44	11	T J N
71502-22-2	9-Hexacosene	16.93	21	T J N

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Client: Olin Corporation

Job Number: 360-24454-1
Sdg Number: OCRI-12

Client Sample ID: OC-SB-470-7.0/9.0-XXX

Lab Sample ID: 360-24454-6
Client Matrix: Solid % Moisture: 4.7

Date Sampled: 09/04/2009 1020
Date Received: 09/04/2009 1605

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49402		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49016		Lab File ID:	B10504.D
Dilution:	1.0			Initial Weight/Volume:	30.69 g
Date Analyzed:	09/23/2009 0605			Final Weight/Volume:	1.0 mL
Date Prepared:	09/16/2009 1153			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		10	34
1,2,4,5-Tetrachlorobenzene		ND		10	34
1,2,4-Trichlorobenzene		ND		10	34
1,2-Dichlorobenzene		ND		10	34
1,3-Dichlorobenzene		ND		10	34
1,4-Dichlorobenzene		ND		10	34
1-Methylnaphthalene		ND		10	34
2,2'-oxybis[1-chloropropane]		ND		10	34
2,3,4,6-Tetrachlorophenol		ND		10	34
2,4,5-Trichlorophenol		ND		10	34
2,4,6-Trichlorophenol		ND		10	34
2,4-Dichlorophenol		ND		10	34
2,4-Dimethylphenol		ND		13	34
2,4-Dinitrophenol		ND		10	34
2,4-Dinitrotoluene		ND		10	34
2,6-Dinitrotoluene		ND		10	34
2-Chloronaphthalene		ND		10	34
2-Chlorophenol		ND		10	34
2-Methylnaphthalene		ND		10	34
2-Methylphenol		ND		21	34
2-Nitroaniline		ND		10	170
2-Nitrophenol		ND		10	34
3 & 4 Methylphenol		ND		10	34
3,3'-Dichlorobenzidine		ND		10	68
3-Nitroaniline		ND		10	170
4,6-Dinitro-2-methylphenol		ND		10	170
4-Bromophenyl phenyl ether		ND		10	34
4-Chloro-3-methylphenol		ND		10	68
4-Chloroaniline		ND		10	68
4-Chlorophenyl phenyl ether		ND		10	34
4-Nitroaniline		ND		10	170
4-Nitrophenol		ND		10	170
Acenaphthene		ND		10	34
Acenaphthylene		ND		10	34
Acetophenone		ND		10	34
Aniline		ND	J	10	34
Anthracene		ND		10	34
Atrazine		ND		10	34
Azobenzene		ND		10	34
Benzaldehyde		ND		10	34
Benzo[a]anthracene		ND		10	34
Benzo[a]pyrene		ND		10	34
Benzo[b]fluoranthene		ND		10	34
Benzo[g,h,i]perylene		ND		10	34
Benzo[k]fluoranthene		ND		10	34
Benzoic acid		ND		15	170

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Client: Olin Corporation

Job Number: 360-24454-1
Sdg Number: OCRI-12

Client Sample ID: **OC-SB-470-7.0/9.0-XXX**

Lab Sample ID: 360-24454-6
Client Matrix: Solid

% Moisture: 4.7

Date Sampled: 09/04/2009 1020
Date Received: 09/04/2009 1605

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49402		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49016		Lab File ID:	B10504.D
Dilution:	1.0			Initial Weight/Volume:	30.69 g
Date Analyzed:	09/23/2009 0605			Final Weight/Volume:	1.0 mL
Date Prepared:	09/16/2009 1153			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		10	34
Benzyl alcohol		ND		29	68
Bis(2-chloroethoxy)methane		ND		10	34
Bis(2-chloroethyl)ether		ND		10	34
Bis(2-ethylhexyl) phthalate		78 J	~~B~~ *	10	34
Butyl benzyl phthalate		ND		10	34
Caprolactam		ND		10	34
Carbazole		ND		10	34
Chrysene		ND		10	34
Dibenz(a,h)anthracene		ND		10	34
Dibenzofuran		ND		10	34
Diethyl phthalate		ND		10	34
Dimethyl phthalate		ND		10	34
Di-n-butyl phthalate		ND		30	34
Di-n-octyl phthalate		ND		17	34
Diphenyl oxide		ND		10	34
Fluoranthene		ND		10	34
Fluorene		ND		10	34
Hexachlorobenzene		ND		10	34
Hexachlorobutadiene		ND		10	34
Hexachlorocyclopentadiene		ND		10	68
Hexachloroethane		ND		10	34
Indeno[1,2,3-cd]pyrene		ND		10	34
Isophorone		ND		10	34
Naphthalene		ND		10	82
Nitrobenzene		ND		10	34
N-Nitrosodimethylamine		ND		12	34
N-Nitrosodi-n-propylamine		ND		10	34
N-Nitrosodiphenylamine		ND		10	34
Pentachlorophenol		ND		10	34
Phenanthrene		ND		10	41
Phenol		ND		10	34
Pyrene		ND		10	34

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	70		30 - 130
2-Fluorobiphenyl	70		30 - 130
2-Fluorophenol	92		30 - 130
Nitrobenzene-d5	75		30 - 130
Phenol-d5	76		30 - 130
Terphenyl-d14	88		30 - 130

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Client: Olin Corporation

Job Number: 360-24454-1
Sdg Number: OCRI-12

Client Sample ID: **OC-SB-470-7.0/9.0-XXX**

Lab Sample ID: 360-24454-6
Client Matrix: Solid % Moisture: 4.7

Date Sampled: 09/04/2009 1020
Date Received: 09/04/2009 1605

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49402		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49016		Lab File ID:	B10504.D
Dilution:	1.0			Initial Weight/Volume:	30.69 g
Date Analyzed:	09/23/2009 0605			Final Weight/Volume:	1.0 mL
Date Prepared:	09/16/2009 1153			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** **10**

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
541-2-6	Cyclopentasiloxane, decamethyl-	8.29	9.7	T J N
128-37-0	Butylated Hydroxytoluene	10.28	8.5	T J N
27193-28-8	Phenol, (1,1,3,3-tetramethylbutyl)-	10.72	6.9	T J N
615-22-5	Benzothiazole, 2-(methylthio)-	10.86	14	T J N
3910-35-8	1H-Indene, 2,3-dihydro-1,1,3-trimethyl-3	11.22	10	T J N
22768-22-5	2,4-Diphenyl-4-methyl-2(E)-pentene	11.64	9.4	T J N
5129-61-3	Heptadecanoic acid, 16-methyl-, methyl e	12.55	8.5	T J N
638-68-6	Triacontane	15.83	11	T J N
629-78-7	Heptadecane	16.32	12	T J N
7683-64-9	Squalene	16.44	81	T J N

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Client: Olin Corporation

Job Number: 360-24454-1
Sdg Number: OCRI-12

Client Sample ID: **OC-SB-472-0.0/1.0-XXX**

Lab Sample ID: 360-24454-7
Client Matrix: Solid % Moisture: 7.0

Date Sampled: 09/04/2009 0745
Date Received: 09/04/2009 1605

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49397		Instrument ID:	Inst. J
Preparation:	3550B	Prep Batch: 360-48958		Lab File ID:	J03119.D
Dilution:	1.0			Initial Weight/Volume:	100.44 g
Date Analyzed:	09/24/2009 0834			Final Weight/Volume:	1.0 mL
Date Prepared:	09/15/2009 1206			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodimethylamine		ND		1.2	5.4

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	58		30 - 130
2-Fluorobiphenyl	58		30 - 130
2-Fluorophenol	50		30 - 130
Nitrobenzene-d5	49		30 - 130
Phenol-d5	58		30 - 130
Terphenyl-d14	89		30 - 130

Client: Olin Corporation

Job Number: 360-24454-1
Sdg Number: OCRI-12

Client Sample ID: OC-SB-472-0.0/1.0-XXX

Lab Sample ID: 360-24454-7
Client Matrix: Solid
% Moisture: 7.0

Date Sampled: 09/04/2009 0745
Date Received: 09/04/2009 1605

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49402		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49016		Lab File ID:	B10505.D
Dilution:	1.0			Initial Weight/Volume:	30.40 g
Date Analyzed:	09/23/2009 0636			Final Weight/Volume:	1.0 mL
Date Prepared:	09/16/2009 1153			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		11	35
1,2,4,5-Tetrachlorobenzene		ND		11	35
1,2,4-Trichlorobenzene		ND		11	35
1,2-Dichlorobenzene		ND		11	35
1,3-Dichlorobenzene		ND		11	35
1,4-Dichlorobenzene		ND		11	35
1-Methylnaphthalene		ND		11	35
2,2'-oxybis[1-chloropropane]		ND		11	35
2,3,4,6-Tetrachlorophenol		ND		11	35
2,4,5-Trichlorophenol		ND		11	35
2,4,6-Trichlorophenol		ND		11	35
2,4-Dichlorophenol		ND		11	35
2,4-Dimethylphenol		ND		14	35
2,4-Dinitrophenol		ND		11	35
2,4-Dinitrotoluene		ND		11	35
2,6-Dinitrotoluene		ND		11	35
2-Chloronaphthalene		ND		11	35
2-Chlorophenol		ND		11	35
2-Methylnaphthalene		ND		11	35
2-Methylphenol		ND		21	35
2-Nitroaniline		ND		11	180
2-Nitrophenol		ND		11	35
3 & 4 Methylphenol		ND		11	35
3,3'-Dichlorobenzidine		ND J		11	71
3-Nitroaniline		ND		11	180
4,6-Dinitro-2-methylphenol		ND		11	180
4-Bromophenyl phenyl ether		ND		11	35
4-Chloro-3-methylphenol		ND		11	71
4-Chloroaniline		ND		11	71
4-Chlorophenyl phenyl ether		ND		11	35
4-Nitroaniline		ND		11	180
4-Nitrophenol		ND		11	180
Acenaphthene		ND		11	35
Acenaphthylene		ND		11	35
Acetophenone		ND		11	35
Aniline		ND J		11	35
Anthracene		ND		11	35
Atrazine		ND		11	35
Azobenzene		ND		11	35
Benzaldehyde		ND		11	35
Benzo[a]anthracene		16 J	J	11	35
Benzo[a]pyrene		16 J	J	11	35
Benzo[b]fluoranthene		38 J		11	35
Benzo[g,h,i]perylene		15 J	J	11	35
Benzo[k]fluoranthene		13 J	J	11	35
Benzoic acid		ND		16	180

Client: Olin Corporation

Job Number: 360-24454-1
Sdg Number: OCRI-12

Client Sample ID: **OC-SB-472-0.0/1.0-XXX**

Lab Sample ID: 360-24454-7
Client Matrix: Solid % Moisture: 7.0

Date Sampled: 09/04/2009 0745
Date Received: 09/04/2009 1605

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49402		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49016		Lab File ID:	B10505.D
Dilution:	1.0			Initial Weight/Volume:	30.40 g
Date Analyzed:	09/23/2009 0636			Final Weight/Volume:	1.0 mL
Date Prepared:	09/16/2009 1153			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		11	35
Benzyl alcohol		ND		30	71
Bis(2-chloroethoxy)methane		ND		11	35
Bis(2-chloroethyl)ether		ND		11	35
Bis(2-ethylhexyl) phthalate		110 U J	B*	11	35
Butyl benzyl phthalate		ND U		11	35
Caprolactam		ND		11	35
Carbazole		ND		11	35
Chrysene		21 J	J	11	35
Dibenz(a,h)anthracene		ND J		11	35
Dibenzofuran		ND		11	35
Diethyl phthalate		ND		11	35
Dimethyl phthalate		ND		11	35
Di-n-butyl phthalate		ND		31	35
Di-n-octyl phthalate		ND J		18	35
Diphenyl oxide		ND		11	35
Diphenylamine		ND		11	35
Fluoranthene		22	J	11	35
Fluorene		ND		11	35
Hexachlorobenzene		ND		11	35
Hexachlorobutadiene		ND		11	35
Hexachlorocyclopentadiene		ND		11	71
Hexachloroethane		ND		11	35
Indeno[1,2,3-cd]pyrene		15 J	J	11	35
Isophorone		ND		11	35
Naphthalene		ND		11	85
Nitrobenzene		ND		11	35
~~N-Nitrosodimethylamine~~		~~ND~~		~~13~~	~~35~~
N-Nitrosodi-n-propylamine		ND		11	35
N-Nitrosodiphenylamine		ND		11	35
Pentachlorophenol		ND		11	35
Phenanthrene		ND		11	42
Phenol		ND		11	35
Pyrene		20	J	11	35

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	77		30 - 130
2-Fluorophenol	93		30 - 130
2-Fluorobiphenyl	70		30 - 130
Nitrobenzene-d5	76		30 - 130
Phenol-d5	76		30 - 130
Terphenyl-d14	85		30 - 130

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Client: Olin Corporation

Job Number: 360-24454-1
Sdg Number: OCRI-12

Client Sample ID: **OC-SB-472-0.0/1.0-XXX**

Lab Sample ID: 360-24454-7
Client Matrix: Solid % Moisture: 7.0

Date Sampled: 09/04/2009 0745
Date Received: 09/04/2009 1605

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49402		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49016		Lab File ID:	B10505.D
Dilution:	1.0			Initial Weight/Volume:	30.40 g
Date Analyzed:	09/23/2009 0636			Final Weight/Volume:	1.0 mL
Date Prepared:	09/16/2009 1153			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** **10**

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
92-87-5	Benzidine	12.82	21	J
1000197-59-7	Perhydrobenzo[a]cycloheptene-6,8-dicarbo	12.95	25	T J N
3452-7-1	1-Eicosene	14.65	48	T J N
630-2-4	Octacosane	15.83	20	T J N
629-96-9	1-Eicosanol	15.91	70	T J N
111-2-4	2,6,10,14,18,22-Tetracosahexaene, 2,6,10	16.44	39	T J N
53057-53-7	1,21-Docosadiene	16.55	33	T J N
629-92-5	Nonadecane	16.85	22	T J N
18435-45-5	1-Nonadecene	16.97	54	T J N
~~142-95-8~~	~~Eicosane~~	~~18.11~~	21	T J N

M. Clarke 3/2/10

Client: Olin Corporation

Job Number: 360-24454-1
Sdg Number: OCRI-12

Client Sample ID: OC-SB-472-30/32-XXX

Lab Sample ID: 360-24454-8
Client Matrix: Solid

% Moisture: 8.9

Date Sampled: 09/04/2009 0850
Date Received: 09/04/2009 1605

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49397		Instrument ID:	Inst. J
Preparation:	3550B	Prep Batch: 360-48958		Lab File ID:	J03120.D
Dilution:	1.0			Initial Weight/Volume:	100.67 g
Date Analyzed:	09/24/2009 0907			Final Weight/Volume:	1.0 mL
Date Prepared:	09/15/2009 1206			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodimethylamine		ND		1.3	5.5

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	64		30 - 130
2-Fluorobiphenyl	63		30 - 130
2-Fluorophenol	61		30 - 130
Nitrobenzene-d5	57		30 - 130
Phenol-d5	67		30 - 130
Terphenyl-d14	103		30 - 130

Client: Olin Corporation

Job Number: 360-24454-1
Sdg Number: OCRI-12

Client Sample ID: **OC-SB-472-30/32-XXX**

Lab Sample ID: 360-24454-8
Client Matrix: Solid

% Moisture: 8.9

Date Sampled: 09/04/2009 0850
Date Received: 09/04/2009 1605

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49402		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49016		Lab File ID:	B10506.D
Dilution:	1.0			Initial Weight/Volume:	30.64 g
Date Analyzed:	09/23/2009 0707			Final Weight/Volume:	1.0 mL
Date Prepared:	09/16/2009 1153			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		11	36
1,2,4,5-Tetrachlorobenzene		ND		11	36
1,2,4-Trichlorobenzene		ND		11	36
1,2-Dichlorobenzene		ND		11	36
1,3-Dichlorobenzene		ND		11	36
1,4-Dichlorobenzene		ND		11	36
1-Methylnaphthalene		ND		11	36
2,2'-oxybis[1-chloropropane]		ND		11	36
2,3,4,6-Tetrachlorophenol		ND		11	36
2,4,5-Trichlorophenol		ND		11	36
2,4,6-Trichlorophenol		ND		11	36
2,4-Dichlorophenol		ND		11	36
2,4-Dimethylphenol		ND		14	36
2,4-Dinitrophenol		ND		11	36
2,4-Dinitrotoluene		ND		11	36
2,6-Dinitrotoluene		ND		11	36
2-Chloronaphthalene		ND		11	36
2-Chlorophenol		ND		11	36
2-Methylnaphthalene		ND		11	36
2-Methylphenol		ND		22	36
2-Nitroaniline		ND		11	180
2-Nitrophenol		ND		11	36
3 & 4 Methylphenol		ND		11	36
3,3'-Dichlorobenzidine		ND		11	72
3-Nitroaniline		ND		11	180
4,6-Dinitro-2-methylphenol		ND		11	180
4-Bromophenyl phenyl ether		ND		11	36
4-Chloro-3-methylphenol		ND		11	72
4-Chloroaniline		ND		11	72
4-Chlorophenyl phenyl ether		ND		11	36
4-Nitroaniline		ND		11	180
4-Nitrophenol		ND		11	180
Acenaphthene		ND		11	36
Acenaphthylene		ND		11	36
Acetophenone		ND		11	36
Aniline		ND		11	36
Anthracene		ND		11	36
Atrazine		ND		11	36
Azobenzene		ND		11	36
Benzaldehyde		ND		11	36
Benzo[a]anthracene		ND		11	36
Benzo[a]pyrene		ND		11	36
Benzo[b]fluoranthene		ND		11	36
Benzo[g,h,i]perylene		ND		11	36
Benzo[k]fluoranthene		ND		11	36
Benzoic acid		ND		16	180

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Client: Olin Corporation

Job Number: 360-24454-1
Sdg Number: OCRI-12

Client Sample ID: OC-SB-472-30/32-XXX

Lab Sample ID: 360-24454-8
Client Matrix: Solid

% Moisture: 8.9

Date Sampled: 09/04/2009 0850
Date Received: 09/04/2009 1605

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49402		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49016		Lab File ID:	B10506.D
Dilution:	1.0			Initial Weight/Volume:	30.64 g
Date Analyzed:	09/23/2009 0707			Final Weight/Volume:	1.0 mL
Date Prepared:	09/16/2009 1153			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		11	36
Benzyl alcohol		ND		31	72
Bis(2-chloroethoxy)methane		ND		11	36
Bis(2-chloroethyl)ether		ND		11	36
Bis(2-ethylhexyl) phthalate		110 u	~~B~~	11	36
Butyl benzyl phthalate		ND		11	36
Caprolactam		ND		11	36
Carbazole		ND		11	36
Chrysene		ND		11	36
Dibenz(a,h)anthracene		ND	J	11	36
Dibenzofuran		ND		11	36
Diethyl phthalate		ND		11	36
Dimethyl phthalate		ND		11	36
Di-n-butyl phthalate		ND		32	36
Di-n-octyl phthalate		ND	J	18	36
Diphenyl oxide		ND		11	36
Diphenylamine		ND		11	36
Fluoranthene		ND		11	36
Fluorene		ND		11	36
Hexachlorobenzene		ND		11	36
Hexachlorobutadiene		ND		11	36
Hexachlorocyclopentadiene		ND		11	72
Hexachloroethane		ND		11	36
Indeno[1,2,3-cd]pyrene		ND	J	11	36
Isophorone		ND		11	36
Naphthalene		ND		11	86
Nitrobenzene		ND		11	36
~~N-Nitrosodimethylamine~~		~~ND~~		~~13~~	~~36~~ e
N-Nitrosodi-n-propylamine		ND		11	36
N-Nitrosodiphenylamine		ND		11	36
Pentachlorophenol		ND		11	36
Phenanthrene		ND		11	43
Phenol		ND		11	36
Pyrene		ND		11	36

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	62		30 - 130
2-Fluorophenol	83		30 - 130
2-Fluorobiphenyl	65		30 - 130
Nitrobenzene-d5	68		30 - 130
Phenol-d5	68		30 - 130
Terphenyl-d14	83		30 - 130

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Client: Olin Corporation

Job Number: 360-24454-1
Sdg Number: OCRI-12

Client Sample ID: **OC-SB-472-30/32-XXX**

Lab Sample ID: 360-24454-8
Client Matrix: Solid % Moisture: 8.9

Date Sampled: 09/04/2009 0850
Date Received: 09/04/2009 1605

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49402		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49016		Lab File ID:	B10506.D
Dilution:	1.0			Initial Weight/Volume:	30.64 g
Date Analyzed:	09/23/2009 0707			Final Weight/Volume:	1.0 mL
Date Prepared:	09/16/2009 1153			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 8

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
59242-27-2	Furan, 2,5-dihydro-2,5-dimethyl-	5.56	12	T J N
541-2-6	Cyclopentasiloxane, decamethyl-	8.29	8.9	T J N
92-87-5	Benzidine	12.81	21	J
629-97-0	Docosane	13.33	13	T J N
629-92-5	Nonadecane	14.54	22	T J N
112-95-8	Eicosane	15.27	21	T J N
593-45-3	Octadecane	15.83	32	T J N
7683-64-9	Squalene	16.44	49	T J N

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Client: Olin Corporation

Job Number: 360-24454-1
Sdg Number: OCRI-12

Client Sample ID: OC-SB-472-8.0/10-XXX

Lab Sample ID: 360-24454-9
Client Matrix: Solid % Moisture: 15.3

Date Sampled: 09/04/2009 0755
Date Received: 09/04/2009 1605

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49397		Instrument ID:	Inst. J
Preparation:	3550B	Prep Batch: 360-48958		Lab File ID:	J03121.D
Dilution:	1.0			Initial Weight/Volume:	100.72 g
Date Analyzed:	09/24/2009 0940			Final Weight/Volume:	1.0 mL
Date Prepared:	09/15/2009 1206			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodimethylamine		ND		1.4	5.9

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	56		30 - 130
2-Fluorobiphenyl	60		30 - 130
2-Fluorophenol	55		30 - 130
Nitrobenzene-d5	52		30 - 130
Phenol-d5	62		30 - 130
Terphenyl-d14	95		30 - 130

Client: Olin Corporation

Job Number: 360-24454-1
Sdg Number: OCRI-12

Client Sample ID: **OC-SB-472-8.0/10-XXX**

Lab Sample ID: 360-24454-9
Client Matrix: Solid
% Moisture: 15.3

Date Sampled: 09/04/2009 0755
Date Received: 09/04/2009 1605

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49402		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49016		Lab File ID:	B10507.D
Dilution:	1.0			Initial Weight/Volume:	30.52 g
Date Analyzed:	09/23/2009 0738			Final Weight/Volume:	1.0 mL
Date Prepared:	09/16/2009 1153			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		12	39
1,2,4,5-Tetrachlorobenzene		ND		12	39
1,2,4-Trichlorobenzene		ND		12	39
1,2-Dichlorobenzene		ND		12	39
1,3-Dichlorobenzene		ND		12	39
1,4-Dichlorobenzene		ND		12	39
1-Methylnaphthalene		ND		12	39
2,2'-oxybis[1-chloropropane]		ND		12	39
2,3,4,6-Tetrachlorophenol		ND		12	39
2,4,5-Trichlorophenol		ND		12	39
2,4,6-Trichlorophenol		ND		12	39
2,4-Dichlorophenol		ND		12	39
2,4-Dimethylphenol		ND		15	39
2,4-Dinitrophenol		ND		12	39
2,4-Dinitrotoluene		ND		12	39
2,6-Dinitrotoluene		ND		12	39
2-Chloronaphthalene		ND		12	39
2-Chlorophenol		ND		12	39
2-Methylnaphthalene		ND		12	39
2-Methylphenol		ND		23	39
2-Nitroaniline		ND		12	190
2-Nitrophenol		ND		12	39
3 & 4 Methylphenol		ND		12	39
3,3'-Dichlorobenzidine		ND		12	77
3-Nitroaniline		ND		12	190
4,6-Dinitro-2-methylphenol		ND		12	190
4-Bromophenyl phenyl ether		ND		12	39
4-Chloro-3-methylphenol		ND		12	77
4-Chloroaniline		ND		12	77
4-Chlorophenyl phenyl ether		ND		12	39
4-Nitroaniline		ND		12	190
4-Nitrophenol		ND		12	190
Acenaphthene		ND		12	39
Acenaphthylene		ND		12	39
Acetophenone		ND		12	39
Aniline		ND	J	12	39
Anthracene		ND		12	39
Atrazine		ND		12	39
Azobenzene		ND		12	39
Benzaldehyde		ND		12	39
Benzo[a]anthracene		ND		12	39
Benzo[a]pyrene		ND		12	39
Benzo[b]fluoranthene		ND		12	39
Benzo[g,h,i]perylene		ND		12	39
Benzo[k]fluoranthene		ND		12	39
Benzoic acid		ND		17	190

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Client: Olin Corporation

Job Number: 360-24454-1
Sdg Number: OCRI-12

Client Sample ID: OC-SB-472-8.0/10-XXX

Lab Sample ID: 360-24454-9
Client Matrix: Solid

% Moisture: 15.3

Date Sampled: 09/04/2009 0755
Date Received: 09/04/2009 1605

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49402		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49016		Lab File ID:	B10507.D
Dilution:	1.0			Initial Weight/Volume:	30.52 g
Date Analyzed:	09/23/2009 0738			Final Weight/Volume:	1.0 mL
Date Prepared:	09/16/2009 1153			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		12	39
Benzyl alcohol		ND		33	77
Bis(2-chloroethoxy)methane		ND		12	39
Bis(2-chloroethyl)ether		ND		12	39
Bis(2-ethylhexyl) phthalate		170 J	~~B~~	12	39
Butyl benzyl phthalate		ND		12	39
Caprolactam		ND		12	39
Carbazole		ND		12	39
Chrysene		ND		12	39
Dibenz(a,h)anthracene		ND		12	39
Dibenzofuran		ND		12	39
Diethyl phthalate		ND		12	39
Dimethyl phthalate		ND		12	39
Di-n-butyl phthalate		ND		34	39
Di-n-octyl phthalate		ND		19	39
Diphenyl oxide		ND		12	39
Diphenylamine		ND		12	39
Fluoranthene		ND		12	39
Fluorene		ND		12	39
Hexachlorobenzene		ND		12	39
Hexachlorobutadiene		ND		12	39
Hexachlorocyclopentadiene		ND		12	77
Hexachloroethane		ND		12	39
Indeno[1,2,3-cd]pyrene		ND		12	39
Isophorone		ND		12	39
Naphthalene		ND		12	93
Nitrobenzene		ND		12	39
~~N-Nitrosodimethylamine~~		~~ND~~		~~14~~	~~39~~
N-Nitrosodi-n-propylamine		ND		12	39
N-Nitrosodiphenylamine		ND		12	39
Pentachlorophenol		ND		12	39
Phenanthrene		ND		12	46
Phenol		ND		12	39
Pyrene		ND		12	39

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	66		30 - 130
2-Fluorophenol	83		30 - 130
2-Fluorobiphenyl	62		30 - 130
Nitrobenzene-d5	66		30 - 130
Phenol-d5	68		30 - 130
Terphenyl-d14	75		30 - 130

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Client: Olin Corporation

Job Number: 360-24454-1
Sdg Number: OCRI-12

Client Sample ID: **OC-SB-472-8.0/10-XXX**

Lab Sample ID: 360-24454-9
Client Matrix: Solid % Moisture: 15.3

Date Sampled: 09/04/2009 0755
Date Received: 09/04/2009 1605

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49402		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49016		Lab File ID:	B10507.D
Dilution:	1.0			Initial Weight/Volume:	30.52 g
Date Analyzed:	09/23/2009 0738			Final Weight/Volume:	1.0 mL
Date Prepared:	09/16/2009 1153			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 3

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
92-87-5	Benzidine	12.83	24	J
1000142-23-9	Tricyclo[4.3.3.0(1,6)]dodeca-7,11-diene-	13.51	28	T J N
111-2-4	2,6,10,14,18,22-Tetracosahexaene, 2,6,10	16.45	12	T J N

Client: Olin Corporation

Job Number: 360-24454-1
Sdg Number: OCRI-12

Client Sample ID: **OC-EBK-008**

Lab Sample ID: 360-24454-18EB
Client Matrix: Water

Date Sampled: 09/08/2009 1100
Date Received: 09/08/2009 1630

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49511		Instrument ID:	Inst. B
Preparation:	3510C	Prep Batch: 360-48980		Lab File ID:	B10561.D
Dilution:	1.0			Initial Weight/Volume:	1000 mL
Date Analyzed:	09/26/2009 0019			Final Weight/Volume:	1.0 mL
Date Prepared:	09/15/2009 1456			Injection Volume:	1.0 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
N-Nitrosodimethylamine	ND	*	0.50	5.0

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	75		15 - 110
2-Fluorobiphenyl	66		30 - 130
2-Fluorophenol	23		15 - 110
Nitrobenzene-d5	76		30 - 130
Phenol-d5	11	X	15 - 110
Terphenyl-d14	97		30 - 130

Client: Olin Corporation

Job Number: 360-24454-1
Sdg Number: OCRI-12

Client Sample ID: **OC-EBK-008**

Lab Sample ID: 360-24454-18EB
Client Matrix: Water

Date Sampled: 09/08/2009 1100
Date Received: 09/08/2009 1630

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49511		Instrument ID:	Inst. B
Preparation:	3510C	Prep Batch: 360-48980		Lab File ID:	B10561.D
Dilution:	1.0			Initial Weight/Volume:	1000 mL
Date Analyzed:	09/26/2009 0019			Final Weight/Volume:	1.0 mL
Date Prepared:	09/15/2009 1456			Injection Volume:	1.0 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1'-Biphenyl	ND		0.50	5.0
1,2,4,5-Tetrachlorobenzene	ND		0.50	5.0
1-Methylnaphthalene	ND		0.050	5.0
2,3,4,6-Tetrachlorophenol	ND		0.50	5.0
Bis(2-chloroethyl)ether	ND		0.50	5.0
Benzyl alcohol	ND		0.50	10
2-Methylphenol	ND		0.50	5.0
N-Nitrosodi-n-propylamine	ND		0.50	5.0
Hexachloroethane	ND		0.50	3.0
3 & 4 Methylphenol	ND		0.50	5.0
2-Chlorophenol	ND		0.50	5.0
3,3'-Dichlorobenzidine	ND		0.50	5.0
Nitrobenzene	ND		0.50	5.0
Bis(2-chloroethoxy)methane	ND		0.50	5.0
Benzoic acid	ND	*	0.50	5.0
Isophorone	ND		0.50	5.0
2,4-Dimethylphenol	ND		0.50	5.0
Aniline	ND	*	0.50	5.0
Azobenzene	ND		0.50	5.0
2,4-Dichlorophenol	ND		0.50	5.0
4-Chloroaniline	ND		0.50	5.0
2,4,6-Trichlorophenol	ND		0.50	5.0
2,4,5-Trichlorophenol	ND		0.50	5.0
Hexachlorocyclopentadiene	ND		0.50	5.0
2-Methylnaphthalene	ND		0.050	1.0
2-Nitroaniline	ND		0.50	5.0
Caprolactam	ND	*	0.50	5.0
2-Chloronaphthalene	ND		0.50	5.0
4-Chloro-3-methylphenol	ND		0.50	5.0
2,6-Dinitrotoluene	ND		0.50	5.0
2-Nitrophenol	ND		0.50	5.0
3-Nitroaniline	ND		0.50	5.0
Dimethyl phthalate	ND		0.50	5.0
2,4-Dinitrophenol	ND		0.50	5.0
Acenaphthylene	ND		0.050	0.30
2,4-Dinitrotoluene	ND		0.50	5.0
Acenaphthene	ND		0.050	1.0
Dibenzofuran	ND		0.50	5.0
4-Nitrophenol	ND	*	0.50	5.0
Fluorene	ND		0.050	1.0
4-Nitroaniline	ND		0.50	5.0
Phenol	ND	*	0.50	5.0
4-Bromophenyl phenyl ether	ND		0.50	5.0
Hexachlorobenzene	ND		0.50	1.0
Diethyl phthalate	ND		0.50	5.0
4-Chlorophenyl phenyl ether	ND		0.50	5.0

Client: Olin Corporation

Job Number: 360-24454-1
Sdg Number: OCRI-12

Client Sample ID: **OC-EBK-008**

Lab Sample ID: 360-24454-18EB
Client Matrix: Water

Date Sampled: 09/08/2009 1100
Date Received: 09/08/2009 1630

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49511		Instrument ID:	Inst. B
Preparation:	3510C	Prep Batch: 360-48980		Lab File ID:	B10561.D
Dilution:	1.0			Initial Weight/Volume:	1000 mL
Date Analyzed:	09/26/2009 0019			Final Weight/Volume:	1.0 mL
Date Prepared:	09/15/2009 1456			Injection Volume:	1.0 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Pentachlorophenol	ND		0.50	1.0
N-Nitrosodiphenylamine	ND		0.50	5.0
4,6-Dinitro-2-methylphenol	ND		0.50	5.0
Phenanthrene	ND		0.085	0.20
Anthracene	ND		0.070	1.0
Di-n-butyl phthalate	1.1	J B	0.60	5.0
Fluoranthene	ND		0.20	1.0
Pyrene	ND		0.19	5.0
Butyl benzyl phthalate	0.96	J	0.50	5.0
Benzo[a]anthracene	ND		0.17	0.30
Chrysene	ND		0.17	1.0
Di-n-octyl phthalate	ND		0.73	5.0
Benzo[b]fluoranthene	ND		0.14	0.30
Benzo[k]fluoranthene	ND		0.17	0.30
Benzo[a]pyrene	ND		0.10	0.20
Indeno[1,2,3-cd]pyrene	ND		0.079	0.50
Dibenz(a,h)anthracene	ND		0.064	0.50
Benzo[g,h,i]perylene	ND		0.094	0.50
Acetophenone	0.66	J	0.50	5.0
Bis(2-ethylhexyl) phthalate	1.6	J B	0.50	2.0
bis (2-chloroisopropyl) ether	ND		0.50	5.0
Atrazine	ND		0.50	5.0
Benzaldehyde	ND		0.50	5.0
Carbazole	ND		0.50	5.0
Benzophenone	ND		0.50	5.0
Diphenyl oxide	ND		0.50	5.0
Diphenylamine	ND		0.50	5.0

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	75		15 - 110
2-Fluorobiphenyl	66		30 - 130
2-Fluorophenol	23		15 - 110
Nitrobenzene-d5	76		30 - 130
Phenol-d5	11	X	15 - 110
Terphenyl-d14	97		30 - 130

Client: Olin Corporation

Job Number: 360-24454-1
Sdg Number: OCRI-12

Client Sample ID: **OC-EBK-008**

Lab Sample ID: 360-24454-18EB
Client Matrix: Water

Date Sampled: 09/08/2009 1100
Date Received: 09/08/2009 1630

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49511		Instrument ID:	Inst. B
Preparation:	3510C	Prep Batch: 360-48980		Lab File ID:	B10561.D
Dilution:	1.0			Initial Weight/Volume:	1000 mL
Date Analyzed:	09/26/2009 0019			Final Weight/Volume:	1.0 mL
Date Prepared:	09/15/2009 1456			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 10

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
96-76-4	Phenol, 2,4-bis(1,1-dimethylethyl)-	9.84	0.76	T J N
134-62-3	Diethyltoluamide	10.17	1.4	T J N
126-73-8	Tributyl phosphate	10.36	0.62	T J N
3910-35-8	1H-Indene, 2,3-dihydro-1,1,3-trimethyl-3	10.79	0.37	T J N
52253-93-7	Homomenthyl salicylate	11.41	0.49	T J N
4860-3-1	Hexadecane, 1-chloro-	11.98	0.40	T J N
92-87-5	Benzidine	12.28	0.70	J *
112-95-8	Eicosane	13.71	0.44	T J N
638-67-5	Tricosane	15.71	0.42	T J N
1000163-4-7	Docosa-2,6,10,14,18-pentaen-22-al, 2,6,1	15.81	0.45	T J N

SAMPLE SUMMARY

Client: Olin Corporation

Job Number: 360-24454-2
Sdg Number: OCRI-12A

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
360-24454-2	OC-SB-461-28/30-XXX	Solid	09/03/2009 1650	09/04/2009 1605
360-24454-5	OC-SB-470-31/33-XXX	Solid	09/04/2009 1120	09/04/2009 1605
~~360-24454-14~~	~~OC-SB-470-31/33-XXX~~	~~Solid~~	~~09/04/2009 1120~~	~~09/04/2009 1605~~

Form 1's edited.

2/4/10

Client: Olin Corporation

Job Number: 360-24454-2
Sdg Number: OCRI-12A

Client Sample ID: **OC-SB-461-28/30-XXX**

Lab Sample ID: 360-24454-2
Client Matrix: Solid
% Moisture: 6.4

Date Sampled: 09/03/2009 1650
Date Received: 09/04/2009 1605

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49402		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49016		Lab File ID:	B10500.D
Dilution:	1.0			Initial Weight/Volume:	30.18 g
Date Analyzed:	09/23/2009 0400			Final Weight/Volume:	1.0 mL
Date Prepared:	09/16/2009 1153			Injection Volume:	

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		11	35
1,2,4,5-Tetrachlorobenzene		ND		11	35
1,2,4-Trichlorobenzene		ND		11	35
1,2-Dichlorobenzene		ND		11	35
1,3-Dichlorobenzene		ND		11	35
1,4-Dichlorobenzene		ND		11	35
1-Methylnaphthalene		ND		11	35
2,2'-oxybis[1-chloropropane]		ND		11	35
2,3,4,6-Tetrachlorophenol		ND		11	35
2,4,5-Trichlorophenol		ND		11	35
2,4,6-Trichlorophenol		ND		11	35
2,4-Dichlorophenol		ND		11	35
2,4-Dimethylphenol		ND		14	35
2,4-Dinitrophenol		ND		11	35
2,4-Dinitrotoluene		ND		11	35
2,6-Dinitrotoluene		ND		11	35
2-Chloronaphthalene		ND		11	35
2-Chlorophenol		ND		11	35
2-Methylnaphthalene		ND		11	35
2-Methylphenol		ND		21	35
2-Nitroaniline		ND		11	180
2-Nitrophenol		ND		11	35
3 & 4 Methylphenol		ND		11	35
3,3'-Dichlorobenzidine		ND		11	71
3-Nitroaniline		ND		11	180
4,6-Dinitro-2-methylphenol		ND		11	180
4-Bromophenyl phenyl ether		17	J	11	35
4-Chloro-3-methylphenol		ND		11	71
4-Chloroaniline		ND		11	71
4-Chlorophenyl phenyl ether		ND		11	35
4-Nitroaniline		ND		11	180
4-Nitrophenol		ND		11	180
Acenaphthene		ND		11	35
Acenaphthylene		ND		11	35
Acetophenone		ND		11	35
Aniline		ND J	—	11	35
Anthracene		ND		11	35
Atrazine		ND		11	35
Azobenzene		ND		11	35
Benzaldehyde		ND		11	35
Benzo[a]anthracene		ND		11	35
Benzo[a]pyrene		ND		11	35
Benzo[b]fluoranthene		ND		11	35
Benzo[g,h,i]perylene		ND		11	35
Benzo[k]fluoranthene		ND		11	35
Benzoic acid		ND		16	180

2/4/10

Client: Olin Corporation

Job Number: 360-24454-2
Sdg Number: OCRI-12A

Client Sample ID: **OC-SB-461-28/30-XXX**

Lab Sample ID: 360-24454-2
Client Matrix: Solid

% Moisture: 6.4

Date Sampled: 09/03/2009 1650
Date Received: 09/04/2009 1605

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49402		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49016		Lab File ID:	B10500.D
Dilution:	1.0			Initial Weight/Volume:	30.18 g
Date Analyzed:	09/23/2009 0400			Final Weight/Volume:	1.0 mL
Date Prepared:	09/16/2009 1153			Injection Volume:	

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		11	35
Benzyl alcohol		ND		30	71
Bis(2-chloroethoxy)methane		ND		11	35
Bis(2-chloroethyl)ether		ND		11	35
Bis(2-ethylhexyl) phthalate		140	J EB ~~B~~	11	35
Butyl benzyl phthalate		ND		11	35
Caprolactam		ND		11	35
Carbazole		ND		11	35
Chrysene		ND		11	35
Dibenz(a,h)anthracene		ND		11	35
Dibenzofuran		ND		11	35
Diethyl phthalate		ND		11	35
Dimethyl phthalate		ND		11	35
Di-n-butyl phthalate		ND		31	35
Di-n-octyl phthalate		ND		18	35
Diphenyl oxide		50		11	35
Fluoranthene		ND		11	35
Fluorene		ND		11	35
Hexachlorobenzene		ND		11	35
Hexachlorobutadiene		ND		11	35
Hexachlorocyclopentadiene		ND		11	71
Hexachloroethane		ND		11	35
Indeno[1,2,3-cd]pyrene		ND		11	35
Isophorone		ND		11	35
Naphthalene		ND		11	85
Nitrobenzene		ND		11	35
N-Nitrosodimethylamine		ND		13	35
N-Nitrosodi-n-propylamine		ND		11	35
N-Nitrosodiphenylamine		ND		11	35
Pentachlorophenol		ND		11	35
Phenanthrene		ND		11	42
Phenol		ND		11	35
Pyrene		ND		11	35

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	77		30 - 130
2-Fluorobiphenyl	64		30 - 130
2-Fluorophenol	89		30 - 130
Nitrobenzene-d5	74		30 - 130
Phenol-d5	73		30 - 130
Terphenyl-d14	86		30 - 130

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Client: Olin Corporation

Job Number: 360-24454-2
Sdg Number: OCRI-12A

Client Sample ID: **OC-SB-461-28/30-XXX**

Lab Sample ID: 360-24454-2
Client Matrix: Solid % Moisture: 6.4

Date Sampled: 09/03/2009 1650
Date Received: 09/04/2009 1605

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49402		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49016		Lab File ID:	B10500.D
Dilution:	1.0			Initial Weight/Volume:	30.18 g
Date Analyzed:	09/23/2009 0400			Final Weight/Volume:	1.0 mL
Date Prepared:	09/16/2009 1153			Injection Volume:	

Tentatively Identified Compounds **Number TIC's Found:** 2

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
301-2-0	9-Octadecenamide, (Z)-	16.29	15	T J N
7683-64-9	Squalene	16.44	72	T J N

2/4/10

Client: Olin Corporation

Job Number: 360-24454-2
Sdg Number: OCRI-12A

Client Sample ID: **OC-SB-470-31/33-XXX**

Lab Sample ID: 360-24454-5
Client Matrix: Solid
% Moisture: 10.1

Date Sampled: 09/04/2009 1120
Date Received: 09/04/2009 1605

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49402		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49016		Lab File ID:	B10503.D
Dilution:	1.0			Initial Weight/Volume:	30.59 g
Date Analyzed:	09/23/2009 0534			Final Weight/Volume:	1.0 mL
Date Prepared:	09/16/2009 1153			Injection Volume:	

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		11	36
1,2,4,5-Tetrachlorobenzene		ND		11	36
1,2,4-Trichlorobenzene		ND		11	36
1,2-Dichlorobenzene		ND		11	36
1,3-Dichlorobenzene		ND		11	36
1,4-Dichlorobenzene		ND		11	36
1-Methylnaphthalene		ND		11	36
2,2'-oxybis[1-chloropropane]		ND		11	36
2,3,4,6-Tetrachlorophenol		ND		11	36
2,4,5-Trichlorophenol		ND		11	36
2,4,6-Trichlorophenol		ND		11	36
2,4-Dichlorophenol		ND		11	36
2,4-Dimethylphenol		ND		14	36
2,4-Dinitrophenol		ND		11	36
2,4-Dinitrotoluene		ND		11	36
2,6-Dinitrotoluene		ND		11	36
2-Chloronaphthalene		ND		11	36
2-Chlorophenol		ND		11	36
2-Methylnaphthalene		ND		11	36
2-Methylphenol		ND		22	36
2-Nitroaniline		ND		11	180
2-Nitrophenol		ND		11	36
3 & 4 Methylphenol		ND		11	36
3,3'-Dichlorobenzidine		ND		11	73
3-Nitroaniline		ND		11	180
4,6-Dinitro-2-methylphenol		ND		11	180
4-Bromophenyl phenyl ether		ND		11	36
4-Chloro-3-methylphenol		ND		11	73
4-Chloroaniline		ND		11	73
4-Chlorophenyl phenyl ether		ND		11	36
4-Nitroaniline		ND		11	180
4-Nitrophenol		ND		11	180
Acenaphthene		ND		11	36
Acenaphthylene		ND		11	36
Acetophenone		ND		11	36
Aniline		ND	J	11	36
Anthracene		ND		11	36
Atrazine		ND		11	36
Azobenzene		ND		11	36
Benzaldehyde		ND		11	36
Benzo[a]anthracene		ND		11	36
Benzo[a]pyrene		ND		11	36
Benzo[b]fluoranthene		ND		11	36
Benzo[g,h,i]perylene		ND		11	36
Benzo[k]fluoranthene		ND		11	36
Benzoic acid		ND		16	180

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Client: Olin Corporation

Job Number: 360-24454-2
Sdg Number: OCRI-12A

Client Sample ID: **OC-SB-470-31/33-XXX**

Lab Sample ID: 360-24454-5
Client Matrix: Solid % Moisture: 10.1

Date Sampled: 09/04/2009 1120
Date Received: 09/04/2009 1605

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49402		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49016		Lab File ID:	B10503.D
Dilution:	1.0			Initial Weight/Volume:	30.59 g
Date Analyzed:	09/23/2009 0534			Final Weight/Volume:	1.0 mL
Date Prepared:	09/16/2009 1153			Injection Volume:	

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		11	36
Benzyl alcohol		ND		31	73
Bis(2-chloroethoxy)methane		ND		11	36
Bis(2-chloroethyl)ether		ND		11	36
Bis(2-ethylhexyl) phthalate		87	J B03	11	36
Butyl benzyl phthalate		ND		11	36
Caprolactam		ND		11	36
Carbazole		ND		11	36
Chrysene		ND		11	36
Dibenz(a,h)anthracene		ND		11	36
Dibenzofuran		ND		11	36
Diethyl phthalate		ND		11	36
Dimethyl phthalate		ND		11	36
Di-n-butyl phthalate		ND		32	36
Di-n-octyl phthalate		ND		18	36
Diphenyl oxide		18	J	11	36
Fluoranthene		ND		11	36
Fluorene		ND		11	36
Hexachlorobenzene		ND		11	36
Hexachlorobutadiene		ND		11	36
Hexachlorocyclopentadiene		ND		11	73
Hexachloroethane		ND		11	36
Indeno[1,2,3-cd]pyrene		ND		11	36
Isophorone		ND		11	36
Naphthalene		ND		11	87
Nitrobenzene		ND		11	36
N-Nitrosodimethylamine		ND		13	36
N-Nitrosodi-n-propylamine		ND		11	36
N-Nitrosodiphenylamine		ND		11	36
Pentachlorophenol		ND		11	36
Phenanthrene		ND		11	44
Phenol		ND		11	36
Pyrene		ND		11	36

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	86		30 - 130
2-Fluorobiphenyl	71		30 - 130
2-Fluorophenol	94		30 - 130
Nitrobenzene-d5	78		30 - 130
Phenol-d5	77		30 - 130
Terphenyl-d14	87		30 - 130

2/4/10

Client: Olin Corporation

Job Number: 360-24454-2
Sdg Number: OCRI-12A

Client Sample ID: **OC-SB-470-31/33-XXX**

Lab Sample ID: 360-24454-5
Client Matrix: Solid % Moisture: 10.1

Date Sampled: 09/04/2009 1120
Date Received: 09/04/2009 1605

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49402		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49016		Lab File ID:	B10503.D
Dilution:	1.0			Initial Weight/Volume:	30.59 g
Date Analyzed:	09/23/2009 0534			Final Weight/Volume:	1.0 mL
Date Prepared:	09/16/2009 1153			Injection Volume:	

Tentatively Identified Compounds **Number TIC's Found:** **10**

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
59242-27-2	Furan, 2,5-dihydro-2,5-dimethyl-	5.57	15	T J N
541-2-6	Cyclopentasiloxane, decamethyl-	8.29	11	T J N
128-37-0	Butylated Hydroxytoluene	10.27	8.4	T J N
615-22-5	Benzothiazole, 2-(methylthio)-	10.85	13	T J N
3910-35-8	1H-Indene, 2,3-dihydro-1,1,3-trimethyl-3	11.22	13	T J N
90-47-1	Xanthone	11.87	26	T J N
591-18-4	Benzene, 1-bromo-3-iodo-	11.96	7.3	T J N
2050-47-7	4-Bromophenyl ether	12.38	7.5	T J N
112-61-8	Octadecanoic acid, methyl ester	12.56	10	T J N
7683-64-9	Squalene	16.44	44	T J N

N. Ellis 2/4/10

FORM IV
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Westfield | Job No.: 360-24454-1

SDG No.: OCRI-12

Lab File ID: B10486.D | Lab Sample ID: MB 360-49016/1-A

Matrix: Solid | Date Extracted: 09/16/2009 11:53

Instrument ID: Inst. B | Date Analyzed: 09/22/2009 20:43

Level: (Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 360-49016/2-A	B10487.D	09/22/2009 21:14
	LCSD 360-49016/3-A	B10488.D	09/22/2009 21:45
OC-SB-461-5.0/7.0-XXX	360-24454-3 *	B10501.D	09/23/2009 04:32
OC-SB-470-0.0/1.0-XXX	360-24454-4 *	B10502.D	09/23/2009 05:03
OC-SB-470-7.0/9.0-XXX	360-24454-6 *	B10504.D	09/23/2009 06:05
OC-SB-472-0.0/1.0-XXX	360-24454-7 *	B10505.D	09/23/2009 06:36
OC-SB-472-30/32-XXX	360-24454-8 *	B10506.D	09/23/2009 07:07
OC-SB-472-8.0/10-XXX	360-24454-9 *	B10507.D	09/23/2009 07:38

Surr ok

*ICAL OK

*CCAL OK

LCS

aniline 29/31

bis (2-ethylhexyl) phthalate 141/141

IS

-7 chrysene-d_{12} 48%

perylene-d_{12} 44%

-D perylene d_{12} 45%

Tune ok

BLANK

Benzoic acid 97.4

Di-n-butyl phthalate 68

bis (2-ethylhexyl) phthalate 102

TICs

benzaldehyde, 3-hydroxy-4-methoxy

dodecanoic acid, methyl ester

octadecane

eicosane

squalene

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Westfield Job No.: 360-24454-1

SDG No.: OCRI-12

Sample No.: CCV 360-49397/13 Date Analyzed: 09/23/2009 22:29

Instrument ID: Inst. J GC Column: Rtx-5ms ID: 0.25(um)

Lab File ID (Standard): J03101.D Heated Purge: (Y/N) N

		PHN		CRY		PRY	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12 HOUR STD		171898	13.18	133032	16.01	77671	17.91
UPPER LIMIT		343796	13.68	266064	16.51	155342	18.41
LOWER LIMIT		85949	12.68	66516	15.51	38836	17.41
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 360-48958/1-A		138626	13.18	92215	16.01	46698	17.91
LCS 360-48958/2-A		144253	13.18	105285	16.01	59442	17.91
LCSD 360-48958/3-A		146452	13.19	103740	16.01	57893	17.91
360-24454-7	OC-SB-472-0.0/1.0-XXX	140674	13.19	63248*	16.01	33865*	17.92
360-24454-8	OC-SB-472-30/32-XXX	167549	13.18	82069	16.01	38193*	17.92
360-24454-9	OC-SB-472-8.0/10-XXX	150487	13.19	70513	16.01	40529	17.92

48% 44% 45%

PHN = Phenanthrene-d10
CRY = Chrysene-d12
PRY = Perylene-d12

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.50 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270C LL

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24454-1

SDG No.: OCRI-12

Matrix: Solid Level: Low Lab File ID: B10487.D

Lab ID: LCS 360-49016/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
1,1'-Biphenyl	333	318	95	40-140	
1,2,4,5-Tetrachlorobenzene	333	299	90	40-140	
1,2,4-Trichlorobenzene	333	249	75	40-140	
1,2-Dichlorobenzene	333	244	73	40-140	
1,3-Dichlorobenzene	333	205	62	40-140	
1,4-Dichlorobenzene	333	198	59	40-140	
1-Methylnaphthalene	333	293	88	40-140	
2,3,4,6-Tetrachlorophenol	333	264	79	40-140	
2,4-Dimethylphenol	333	267	80	30-130	
2-Chlorophenol	333	233	70	30-130	
2,4-Dichlorophenol	333	272	82	30-130	
2,4,6-Trichlorophenol	333	303	91	30-130	
2-Methylphenol	333	242	73	30-130	
2,4,5-Trichlorophenol	333	297	89	30-130	
2-Methylnaphthalene	333	231	69	40-140	
3 & 4 Methylphenol	333	258	78	30-130	
2-Nitroaniline	333	353	106	40-140	
3,3'-Dichlorobenzidine	333	323	97	40-140	
2-Chloronaphthalene	333	242	73	40-140	
2,6-Dinitrotoluene	333	306	92	40-140	
4-Chloro-3-methylphenol	333	287	86	30-130	
2-Nitrophenol	333	289	87	30-130	
4-Chloroaniline	333	211	63	40-140	
3-Nitroaniline	333	316	95	40-140	
2,4-Dinitrophenol	333	238	72	30-130	
2,4-Dinitrotoluene	333	297	89	40-140	
Acenaphthene	333	350	105	40-140	
Acenaphthylene	333	303	91	40-140	
4-Nitrophenol	333	337	101	30-130	
Aniline	333	95.6	29	40-140	*
4-Nitroaniline	333	312	94	40-140	
Azobenzene	333	333	100	40-140	
4-Bromophenyl phenyl ether	333	334	100	40-140	
4-Chlorophenyl phenyl ether	333	317	95	40-140	
4,6-Dinitro-2-methylphenol	333	315	94	30-130	
Benzoic acid	333	171	51	30-130	
Anthracene	333	387	116	40-140	
Benzyl alcohol	333	268	80	30-130	
Bis(2-chloroethoxy)methane	333	233	70	40-140	
Bis(2-chloroethyl)ether	333	210	63	40-140	
Butyl benzyl phthalate	333	319	96	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24454-1

SDG No.: OCRI-12

Matrix: Solid Level: Low Lab File ID: B10487.D

Lab ID: LCS 360-49016/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
Benzo[a]anthracene	333	397	119	40-140	
Caprolactam	333	364	109	40-140	
Chrysene	333	378	113	40-140	
Benzo[b]fluoranthene	333	351	105	40-140	
Benzo[k]fluoranthene	333	387	116	40-140	
Benzo[a]pyrene	333	413	124	40-140	
Dibenzofuran	333	305	91	40-140	
Dibenz(a,h)anthracene	333	425	127	40-140	
Diethyl phthalate	333	327	98	40-140	
Benzo[g,h,i]perylene	333	382	115	40-140	
Dimethyl phthalate	333	319	96	40-140	
Acetophenone	333	233	70	40-140	
Di-n-butyl phthalate	333	395	118	40-140	
Bis(2-ethylhexyl) phthalate	333	472	141	40-140	*
Di-n-octyl phthalate	333	318	95	40-140	
Fluoranthene	333	357	107	40-140	
Fluorene	333	374	112	40-140	
Hexachlorobenzene	333	322	97	40-140	
Hexachlorobutadiene	333	263	79	40-140	
2,2'-oxybis[1-chloropropane]	333	273	82	40-140	
Hexachlorocyclopentadiene	333	231	69	40-140	
Hexachloroethane	333	205	62	40-140	
Indeno[1,2,3-cd]pyrene	333	421	126	40-140	
Isophorone	333	213	64	40-140	
Naphthalene	333	274	82	40-140	
Nitrobenzene	333	233	70	40-140	
Atrazine	333	402	121	40-140	
Benzaldehyde	333	262	79	40-140	
N-Nitrosodimethylamine	333	248	74	40-140	
Carbazole	333	357	107	40-140	
N-Nitrosodi-n-propylamine	333	255	77	40-140	
Benzophenone	333	347	104	40-140	
N-Nitrosodiphenylamine	333	232	70	40-140	
Diphenyl oxide	333	258	77	40-140	
Pentachlorophenol	333	312	94	30-130	
Phenanthrene	333	341	102	40-140	
Phenol	333	240	72	30-130	
Pyrene	333	353	106	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24454-1

SDG No.: OCRI-12

Matrix: Solid Level: Low Lab File ID: B10488.D

Lab ID: LCSD 360-49016/3-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCSD CONCENTRATION (ug/Kg)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1'-Biphenyl	333	307	92	3	30	40-140	
1,2,4,5-Tetrachlorobenzene	333	306	92	2	30	40-140	
1,2,4-Trichlorobenzene	333	262	79	5	30	40-140	
1,2-Dichlorobenzene	333	261	78	7	30	40-140	
1,3-Dichlorobenzene	333	217	65	6	30	40-140	
1,4-Dichlorobenzene	333	211	63	6	30	40-140	
1-Methylnaphthalene	333	286	86	2	30	40-140	
2,3,4,6-Tetrachlorophenol	333	260	78	1	30	40-140	
2,4-Dimethylphenol	333	279	84	4	30	30-130	
2-Chlorophenol	333	247	74	6	30	30-130	
2,4-Dichlorophenol	333	276	83	2	30	30-130	
2,4,6-Trichlorophenol	333	314	94	3	30	30-130	
2-Methylphenol	333	254	76	5	30	30-130	
2,4,5-Trichlorophenol	333	320	96	8	30	30-130	
2-Methylnaphthalene	333	236	71	2	30	40-140	
3 & 4 Methylphenol	333	273	82	6	30	30-130	
2-Nitroaniline	333	358	107	1	30	40-140	
3,3'-Dichlorobenzidine	333	343	103	6	30	40-140	
2-Chloronaphthalene	333	249	75	3	30	40-140	
2,6-Dinitrotoluene	333	318	95	4	30	40-140	
4-Chloro-3-methylphenol	333	291	87	2	30	30-130	
2-Nitrophenol	333	301	90	4	30	30-130	
4-Chloroaniline	333	208	62	1	30	40-140	
3-Nitroaniline	333	321	96	2	30	40-140	
2,4-Dinitrophenol	333	254	76	6	30	30-130	
2,4-Dinitrotoluene	333	311	93	5	30	40-140	
Acenaphthene	333	360	108	3	30	40-140	
Acenaphthylene	333	310	93	2	30	40-140	
4-Nitrophenol	333	354	106	5	30	30-130	
Aniline	333	103	31	8	30	40-140	*
4-Nitroaniline	333	321	96	3	30	40-140	
Azobenzene	333	338	101	2	30	40-140	
4-Bromophenyl phenyl ether	333	341	102	2	30	40-140	
4-Chlorophenyl phenyl ether	333	326	98	3	30	40-140	
4,6-Dinitro-2-methylphenol	333	327	98	4	30	30-130	
Benzoic acid	333	174	52	2	30	30-130	
Anthracene	333	400	120	3	30	40-140	
Benzyl alcohol	333	279	84	4	30	30-130	
Bis(2-chloroethoxy)methane	333	237	71	2	30	40-140	
Bis(2-chloroethyl)ether	333	223	67	6	30	40-140	
Butyl benzyl phthalate	333	337	101	6	30	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24454-1

SDG No.: OCRI-12

Matrix: Solid Level: Low Lab File ID: B10488.D

Lab ID: LCSD 360-49016/3-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCSD CONCENTRATION (ug/Kg)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Benzo[a]anthracene	333	419	126	6	30	40-140	
Caprolactam	333	357	107	2	30	40-140	
Chrysene	333	398	120	5	30	40-140	
Benzo[b]fluoranthene	333	380	114	8	30	40-140	
Benzo[k]fluoranthene	333	407	122	5	30	40-140	
Benzo[a]pyrene	333	437	131	6	30	40-140	
Dibenzofuran	333	310	93	2	30	40-140	
Dibenz(a,h)anthracene	333	455	136	7	30	40-140	
Diethyl phthalate	333	337	101	3	30	40-140	
Benzo[g,h,i]perylene	333	402	121	5	30	40-140	
Dimethyl phthalate	333	330	99	3	30	40-140	
Acetophenone	333	251	75	8	30	40-140	
Di-n-butyl phthalate	333	410	123	4	30	40-140	
Bis(2-ethylhexyl) phthalate	333	470	141	0	30	40-140	*
Di-n-octyl phthalate	333	335	101	5	30	40-140	
Fluoranthene	333	375	113	5	30	40-140	
Fluorene	333	383	115	2	30	40-140	
Hexachlorobenzene	333	336	101	4	30	40-140	
Hexachlorobutadiene	333	264	79	0	30	40-140	
2,2'-oxybis[1-chloropropane]	333	291	87	6	30	40-140	
Hexachlorocyclopentadiene	333	245	74	6	30	40-140	
Hexachloroethane	333	220	66	7	30	40-140	
Indeno[1,2,3-cd]pyrene	333	447	134	6	30	40-140	
Isophorone	333	220	66	4	30	40-140	
Naphthalene	333	282	85	3	30	40-140	
Nitrobenzene	333	236	71	1	30	40-140	
Atrazine	333	406	122	1	30	40-140	
Benzaldehyde	333	259	78	1	30	40-140	
N-Nitrosodimethylamine	333	263	79	6	30	40-140	
Carbazole	333	374	112	4	30	40-140	
N-Nitrosodi-n-propylamine	333	269	81	5	30	40-140	
Benzophenone	333	347	104	0	30	40-140	
N-Nitrosodiphenylamine	333	245	73	5	30	40-140	
Diphenyl oxide	333	251	75	3	30	40-140	
Pentachlorophenol	333	328	98	5	30	30-130	
Phenanthrene	333	360	108	5	30	40-140	
Phenol	333	257	77	7	30	30-130	
Pyrene	333	368	110	4	30	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Westfield | Job No.: 360-24454-1

SDG No.: OCRI-12

Client Sample ID: | Lab Sample ID: MB 360-49016/1-A

Matrix: Solid | Lab File ID: B10486.D

Analysis Method: 8270C LL | Date Collected:

Extract. Method: 3546 | Date Extracted: 09/16/2009 11:53

Sample wt/vol: 30.00(g) | Date Analyzed: 09/22/2009 20:43

Con. Extract Vol.: 1.0(mL) | Dilution Factor: 1

Injection Volume: 1.0(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup: (Y/N) N

Analysis Batch No.: 49400 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
534-52-1	4,6-Dinitro-2-methylphenol	ND		170	10
65-85-0	Benzoic acid	97.4	J	170	15
120-12-7	Anthracene	ND		33	10
100-51-6	Benzyl alcohol	ND		67	28
111-91-1	Bis(2-chloroethoxy)methane	ND		33	10
111-44-4	Bis(2-chloroethyl)ether	ND		33	10
85-68-7	Butyl benzyl phthalate	ND		33	10
56-55-3	Benzo[a]anthracene	ND		33	10
105-60-2	Caprolactam	ND		33	10
218-01-9	Chrysene	ND		33	10
205-99-2	Benzo[b]fluoranthene	ND		33	10
207-08-9	Benzo[k]fluoranthene	ND		33	10
50-32-8	Benzo[a]pyrene	ND		33	10
132-64-9	Dibenzofuran	ND		33	10
53-70-3	Dibenz(a,h)anthracene	ND		33	10
84-66-2	Diethyl phthalate	ND		33	10
191-24-2	Benzo[g,h,i]perylene	ND		33	10
131-11-3	Dimethyl phthalate	ND		33	10
98-86-2	Acetophenone	ND		33	10
84-74-2	Di-n-butyl phthalate	68.0		33	29
117-81-7	Bis(2-ethylhexyl) phthalate	162		33	10
117-84-0	Di-n-octyl phthalate	ND		33	17
206-44-0	Fluoranthene	ND		33	10
86-73-7	Fluorene	ND		33	10
118-74-1	Hexachlorobenzene	ND		33	10
87-68-3	Hexachlorobutadiene	ND		33	10
108-60-1	2,2'-oxybis[1-chloropropane]	ND		33	10
77-47-4	Hexachlorocyclopentadiene	ND		67	10
67-72-1	Hexachloroethane	ND		33	10
193-39-5	Indeno[1,2,3-cd]pyrene	ND		33	10
78-59-1	Isophorone	ND		33	10
91-20-3	Naphthalene	ND		80	10
98-95-3	Nitrobenzene	ND		33	10
1912-24-9	Atrazine	ND		33	10

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Westfield Job No.: 360-24454-2

SDG No.: OCRI-12A

Instrument ID: Inst. B Start Date: 09/22/2009 22:17

Analysis Batch Number: 49402 End Date: 09/23/2009 08:40

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 360-49402/15		09/22/2009 22:17	1	B10489.D	Rtx-5ms 0.25(um)
CCV 360-49402/16 CCVIS		09/22/2009 22:48	1	B10490.D	Rtx-5ms 0.25(um)
ZZZZZ		09/22/2009 23:19	1		Rtx-5ms 0.25(um)
ZZZZZ		09/22/2009 23:50	10		Rtx-5ms 0.25(um)
ZZZZZ		09/23/2009 00:22	100		Rtx-5ms 0.25(um)
ZZZZZ		09/23/2009 00:53	1		Rtx-5ms 0.25(um)
ZZZZZ		09/23/2009 01:55	1		Rtx-5ms 0.25(um)
ZZZZZ		09/23/2009 02:27	1		Rtx-5ms 0.25(um)
ZZZZZ		09/23/2009 02:58	1		Rtx-5ms 0.25(um)
ZZZZZ		09/23/2009 03:29	1		Rtx-5ms 0.25(um)
360-24454-2	OC-SB-461-28/30-XXX	09/23/2009 04:00	1	B10500.D	Rtx-5ms 0.25(um)
ZZZZZ		09/23/2009 04:32	1		Rtx-5ms 0.25(um)
ZZZZZ		09/23/2009 05:03	1		Rtx-5ms 0.25(um)
360-24454-5	OC-SB-470-31/33-XXX	09/23/2009 05:34	1	B10503.D	Rtx-5ms 0.25(um)
ZZZZZ		09/23/2009 06:05	1		Rtx-5ms 0.25(um)
ZZZZZ		09/23/2009 06:36	1		Rtx-5ms 0.25(um)
ZZZZZ		09/23/2009 07:07	1		Rtx-5ms 0.25(um)
ZZZZZ		09/23/2009 07:38	1		Rtx-5ms 0.25(um)
ZZZZZ		09/23/2009 08:09	1		Rtx-5ms 0.25(um)
ZZZZZ		09/23/2009 08:40	10		Rtx-5ms 0.25(um)

LCS
aniline 29/31 "3"
bis(2-ethylhexyl)phthalate 141/141

Surr OK
tune OK
IS OK

ICAL OK
CCAL OK

MB
Benzoic acid 97.4 487 5x
bis(2-ethylhexyl)phthalate 162 1620 10x
di-n-butyl phthalate 60 600 10x

TIC Benzaldehyde, 3-hydroxy-4-methoxy (9.03)
dodecanoic acid, methyl ester (10.28)
Octadecane (11.38)
Eicosane (12.08)
Squalene (16.44)

8270C LL

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24454-2

SDG No.: OCRI-12A

Matrix: Solid Level: Low Lab File ID: B10487.D

Lab ID: LCS 360-49016/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
1,1'-Biphenyl	333	318	95	40-140	
1,2,4,5-Tetrachlorobenzene	333	299	90	40-140	
1,2,4-Trichlorobenzene	333	249	75	40-140	
1,2-Dichlorobenzene	333	244	73	40-140	
1,3-Dichlorobenzene	333	205	62	40-140	
1,4-Dichlorobenzene	333	198	59	40-140	
1-Methylnaphthalene	333	293	88	40-140	
2,2'-oxybis[1-chloropropane]	333	273	82	40-140	
2,3,4,6-Tetrachlorophenol	333	264	79	40-140	
2,4,5-Trichlorophenol	333	297	89	30-130	
2,4,6-Trichlorophenol	333	303	91	30-130	
2,4-Dichlorophenol	333	272	82	30-130	
2,4-Dimethylphenol	333	267	80	30-130	
2,4-Dinitrophenol	333	238	72	30-130	
2,4-Dinitrotoluene	333	297	89	40-140	
2,6-Dinitrotoluene	333	306	92	40-140	
2-Chloronaphthalene	333	242	73	40-140	
2-Chlorophenol	333	233	70	30-130	
2-Methylnaphthalene	333	231	69	40-140	
2-Methylphenol	333	242	73	30-130	
2-Nitroaniline	333	353	106	40-140	
2-Nitrophenol	333	289	87	30-130	
3 & 4 Methylphenol	333	258	78	30-130	
3,3'-Dichlorobenzidine	333	323	97	40-140	
3-Nitroaniline	333	316	95	40-140	
4,6-Dinitro-2-methylphenol	333	315	94	30-130	
4-Bromophenyl phenyl ether	333	334	100	40-140	
4-Chloro-3-methylphenol	333	287	86	30-130	
4-Chloroaniline	333	211	63	40-140	
4-Chlorophenyl phenyl ether	333	317	95	40-140	
4-Nitroaniline	333	312	94	40-140	
4-Nitrophenol	333	337	101	30-130	
Acenaphthene	333	350	105	40-140	
Acenaphthylene	333	303	91	40-140	
Acetophenone	333	233	70	40-140	
Aniline	333	95.6	29	40-140	*
Anthracene	333	387	116	40-140	
Atrazine	333	402	121	40-140	
Azobenzene	333	333	100	40-140	
Benzaldehyde	333	262	79	40-140	
Benzo[a]anthracene	333	397	119	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24454-2

SDG No.: OCRI-12A

Matrix: Solid Level: Low Lab File ID: B10487.D

Lab ID: LCS 360-49016/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
Benzo[a]pyrene	333	413	124	40-140	
Benzo[b]fluoranthene	333	351	105	40-140	
Benzo[g,h,i]perylene	333	382	115	40-140	
Benzo[k]fluoranthene	333	387	116	40-140	
Benzoic acid	333	171	51	30-130	
Benzophenone	333	347	104	40-140	
Benzyl alcohol	333	268	80	30-130	
Bis(2-chloroethoxy)methane	333	233	70	40-140	
Bis(2-chloroethyl)ether	333	210	63	40-140	
Bis(2-ethylhexyl) phthalate	333	472	141	40-140	*
Butyl benzyl phthalate	333	319	96	40-140	
Caprolactam	333	364	109	40-140	
Carbazole	333	357	107	40-140	
Chrysene	333	378	113	40-140	
Dibenz(a,h)anthracene	333	425	127	40-140	
Dibenzofuran	333	305	91	40-140	
Diethyl phthalate	333	327	98	40-140	
Dimethyl phthalate	333	319	96	40-140	
Di-n-butyl phthalate	333	395	118	40-140	
Di-n-octyl phthalate	333	318	95	40-140	
Diphenyl oxide	333	258	77	40-140	
Fluoranthene	333	357	107	40-140	
Fluorene	333	374	112	40-140	
Hexachlorobenzene	333	322	97	40-140	
Hexachlorobutadiene	333	263	79	40-140	
Hexachlorocyclopentadiene	333	231	69	40-140	
Hexachloroethane	333	205	62	40-140	
Indeno[1,2,3-cd]pyrene	333	421	126	40-140	
Isophorone	333	213	64	40-140	
Naphthalene	333	274	82	40-140	
Nitrobenzene	333	233	70	40-140	
N-Nitrosodimethylamine	333	248	74	40-140	
N-Nitrosodi-n-propylamine	333	255	77	40-140	
N-Nitrosodiphenylamine	333	232	70	40-140	
Pentachlorophenol	333	312	94	30-130	
Phenanthrene	333	341	102	40-140	
Phenol	333	240	72	30-130	
Pyrene	333	353	106	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24454-2

SDG No.: OCRI-12A

Matrix: Solid Level: Low Lab File ID: B10488.D

Lab ID: LCSD 360-49016/3-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCSD CONCENTRATION (ug/Kg)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1'-Biphenyl	333	307	92	3	30	40-140	
1,2,4,5-Tetrachlorobenzene	333	306	92	2	30	40-140	
1,2,4-Trichlorobenzene	333	262	79	5	30	40-140	
1,2-Dichlorobenzene	333	261	78	7	30	40-140	
1,3-Dichlorobenzene	333	217	65	6	30	40-140	
1,4-Dichlorobenzene	333	211	63	6	30	40-140	
1-Methylnaphthalene	333	286	86	2	30	40-140	
2,2'-oxybis[1-chloropropane]	333	291	87	6	30	40-140	
2,3,4,6-Tetrachlorophenol	333	260	78	1	30	40-140	
2,4,5-Trichlorophenol	333	320	96	8	30	30-130	
2,4,6-Trichlorophenol	333	314	94	3	30	30-130	
2,4-Dichlorophenol	333	276	83	2	30	30-130	
2,4-Dimethylphenol	333	279	84	4	30	30-130	
2,4-Dinitrophenol	333	254	76	6	30	30-130	
2,4-Dinitrotoluene	333	311	93	5	30	40-140	
2,6-Dinitrotoluene	333	318	95	4	30	40-140	
2-Chloronaphthalene	333	249	75	3	30	40-140	
2-Chlorophenol	333	247	74	6	30	30-130	
2-Methylnaphthalene	333	236	71	2	30	40-140	
2-Methylphenol	333	254	76	5	30	30-130	
2-Nitroaniline	333	358	107	1	30	40-140	
2-Nitrophenol	333	301	90	4	30	30-130	
3 & 4 Methylphenol	333	273	82	6	30	30-130	
3,3'-Dichlorobenzidine	333	343	103	6	30	40-140	
3-Nitroaniline	333	321	96	2	30	40-140	
4,6-Dinitro-2-methylphenol	333	327	98	4	30	30-130	
4-Bromophenyl phenyl ether	333	341	102	2	30	40-140	
4-Chloro-3-methylphenol	333	291	87	2	30	30-130	
4-Chloroaniline	333	208	62	1	30	40-140	
4-Chlorophenyl phenyl ether	333	326	98	3	30	40-140	
4-Nitroaniline	333	321	96	3	30	40-140	
4-Nitrophenol	333	354	106	5	30	30-130	
Acenaphthene	333	360	108	3	30	40-140	
Acenaphthylene	333	310	93	2	30	40-140	
Acetophenone	333	251	75	8	30	40-140	
Aniline	333	103	31	8	30	40-140	*
Anthracene	333	400	120	3	30	40-140	
Atrazine	333	406	122	1	30	40-140	
Azobenzene	333	338	101	2	30	40-140	
Benzaldehyde	333	259	78	1	30	40-140	
Benzo[a]anthracene	333	419	126	6	30	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24454-2

SDG No.: OCRI-12A

Matrix: Solid Level: Low Lab File ID: B10488.D

Lab ID: LCSD 360-49016/3-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCSD CONCENTRATION (ug/Kg)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Benzo[a]pyrene	333	437	131	6	30	40-140	
Benzo[b]fluoranthene	333	380	114	8	30	40-140	
Benzo[g,h,i]perylene	333	402	121	5	30	40-140	
Benzo[k]fluoranthene	333	407	122	5	30	40-140	
Benzoic acid	333	174	52	2	30	30-130	
Benzophenone	333	347	104	0	30	40-140	
Benzyl alcohol	333	279	84	4	30	30-130	
Bis(2-chloroethoxy)methane	333	237	71	2	30	40-140	
Bis(2-chloroethyl)ether	333	223	67	6	30	40-140	
Bis(2-ethylhexyl) phthalate	333	470	141	0	30	40-140	*
Butyl benzyl phthalate	333	337	101	6	30	40-140	
Caprolactam	333	357	107	2	30	40-140	
Carbazole	333	374	112	4	30	40-140	
Chrysene	333	398	120	5	30	40-140	
Dibenz(a,h)anthracene	333	455	136	7	30	40-140	
Dibenzofuran	333	310	93	2	30	40-140	
Diethyl phthalate	333	337	101	3	30	40-140	
Dimethyl phthalate	333	330	99	3	30	40-140	
Di-n-butyl phthalate	333	410	123	4	30	40-140	
Di-n-octyl phthalate	333	335	101	5	30	40-140	
Diphenyl oxide	333	251	75	3	30	40-140	
Fluoranthene	333	375	113	5	30	40-140	
Fluorene	333	383	115	2	30	40-140	
Hexachlorobenzene	333	336	101	4	30	40-140	
Hexachlorobutadiene	333	264	79	0	30	40-140	
Hexachlorocyclopentadiene	333	245	74	6	30	40-140	
Hexachloroethane	333	220	66	7	30	40-140	
Indeno[1,2,3-cd]pyrene	333	447	134	6	30	40-140	
Isophorone	333	220	66	4	30	40-140	
Naphthalene	333	282	85	3	30	40-140	
Nitrobenzene	333	236	71	1	30	40-140	
N-Nitrosodimethylamine	333	263	79	6	30	40-140	
N-Nitrosodi-n-propylamine	333	269	81	5	30	40-140	
N-Nitrosodiphenylamine	333	245	73	5	30	40-140	
Pentachlorophenol	333	328	98	5	30	30-130	
Phenanthrene	333	360	108	5	30	40-140	
Phenol	333	257	77	7	30	30-130	
Pyrene	333	368	110	4	30	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Westfield | Job No.: 360-24454-2

SDG No.: OCRI-12A

Client Sample ID: | Lab Sample ID: MB 360-49016/1-A

Matrix: Solid | Lab File ID: B10486.D

Analysis Method: 8270C LL | Date Collected:

Extract. Method: 3546 | Date Extracted: 09/16/2009 11:53

Sample wt/vol: 30.00(g) | Date Analyzed: 09/22/2009 20:43

Con. Extract Vol.: 1.0(mL) | Dilution Factor: 1

Injection Volume: 1.0(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup: (Y/N) N

Analysis Batch No.: 49400 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
98-86-2	Acetophenone	ND		33	10
62-53-3	Aniline	ND		33	10
120-12-7	Anthracene	ND		33	10
1912-24-9	Atrazine	ND		33	10
103-33-3	Azobenzene	ND		33	10
100-52-7	Benzaldehyde	ND		33	10
56-55-3	Benzo[a]anthracene	ND		33	10
50-32-8	Benzo[a]pyrene	ND		33	10
205-99-2	Benzo[b]fluoranthene	ND		33	10
191-24-2	Benzo[g,h,i]perylene	ND		33	10
207-08-9	Benzo[k]fluoranthene	ND		33	10
65-85-0	Benzoic acid	97.4	J	170	15
119-61-9	Benzophenone	ND		33	10
100-51-6	Benzyl alcohol	ND		67	28
111-91-1	Bis(2-chloroethoxy)methane	ND		33	10
111-44-4	Bis(2-chloroethyl)ether	ND		33	10
117-81-7	Bis(2-ethylhexyl) phthalate	162		33	10
85-68-7	Butyl benzyl phthalate	ND		33	10
105-60-2	Caprolactam	ND		33	10
86-74-8	Carbazole	ND		33	10
218-01-9	Chrysene	ND		33	10
53-70-3	Dibenz(a,h)anthracene	ND		33	10
132-64-9	Dibenzofuran	ND		33	10
84-66-2	Diethyl phthalate	ND		33	10
131-11-3	Dimethyl phthalate	ND		33	10
84-74-2	Di-n-butyl phthalate	68.0		33	29
117-84-0	Di-n-octyl phthalate	ND		33	17
101-84-8	Diphenyl oxide	ND		33	10
206-44-0	Fluoranthene	ND		33	10
86-73-7	Fluorene	ND		33	10
118-74-1	Hexachlorobenzene	ND		33	10
87-68-3	Hexachlorobutadiene	ND		33	10
77-47-4	Hexachlorocyclopentadiene	ND		67	10
67-72-1	Hexachloroethane	ND		33	10

Coversheet

SEMIVOLATILE ORGANICS

REGION I VALIDATION CHECKLIST for
OLIN CHEMICAL SUPERFUND SITE
Criteria and Qualifications: REGION I Organics Guideline (1996)

TIER I / (II) III (circle one)

SITE: Olin Chemical Superfund Site Project #: 6/07/0006.12 SDG #: OCRI-13/13A

LAB #: _TAL-Westfield___

Sample IDs: Attach tracking sheet and/or sample listing.

This checklist is designed to be used with USEPA Region I Validation Guidelines Part II (12/1996). During Level III validation, calculation and transcription checks are completed for instrument tuning, surrogates, target compounds, spike recoveries, calibration data, and internal standards as specified in the guideline. These checks are documented on attached validation notes.

YES NO NA	
Data completeness ☑ ☐ ☐ All data summaries, QC forms and raw data available from hard copy or electronic data package ☑ ☐ ☐ Data summaries match EDD	Contact lab if missing data. Lab to respond with 24 hours.
Holding Times and Preservation ☑ ☐ ☐ Hold times met (Waters – Extract within 7 days, analyze within 40 days. Soils – extract within 14 days, analyze within 40 days)	
Instrument Performance Check (Tune) ☑ ☐ ☐ Tune available for each 12-hour period samples were analyzed ☑ ☐ ☐ Appropriate number of significant figures reported (at least 2) ☑ ☐ ☐ Mass/Charge list (m/z) criteria met	
Initial Calibration ☑ ☐ ☐ %RSD less than or equal to 30% ☑ ☐ ☐ RRF greater than or equal to 0.05	
Continuing Calibration ☑ ☐ ☐ %D less than or equal to 25% ☑ ☐ ☐ RRF greater than or equal to 0.05.	
Blank Contamination ☒ ☐ ☐ Method blank contamination ☒ ☐ ☐ Equipment/Rinseate blank contamination	Evaluate all blanks for contamination. Highest contaminant level used for action level. See below.
Surrogate Recoveries	

SEMIVOLATILE ORGANICS

REGION I VALIDATION CHECKLIST for
OLIN CHEMICAL SUPERFUND SITE
Criteria and Qualifications: REGION I Organics Guideline (1996)

TIER I / II / III (circle one)

☐ ☒ ☐ Surrogates percent recovery criteria met: Soil = (base/neutral 30%-130%, acid 30%-130%) Water = (base/neutral 30%-130%, acid 15%-110%)	See below.
Matrix Spikes and Laboratory Control Samples ☐ ☐ ☑ MS/MSD percent recovery criteria met Soil and Water = (base/neutral 40%-140%, acid 30%-130%) ☐ ☐ ☑ MS/MSD RPD criteria met (soils <50%, water <30%) ☐ ☒ ☐ LCS percent recovery criteria met soil/water (base 40%-140%, acid 30%-130%)	See below.
Field Duplicates ☑ ☐ ☐ RPD criteria met (soils <50%, water <30%)	
Internal Standard ☑ ☐ ☐ Area counts within -50 to +100 percent of calib. std. ☑ ☐ ☐ Retention Time within 30 seconds of calib. std.	
Target Compounds ☑ ☐ ☐ Reviewed narrative for anomalies	
Tentatively Identified Compounds (TICs) ☐ ☑ ☐ TCL compounds reported as TICs	

Validator's Signature: _____

Date: 3/3/10

Reference:

MACTEC, Quality Assurance Project Plan for Remedial Investigation/Feasibility Study – Olin Chemical Superfund Site, Wilmington Property, 51 Eames Street, Wilmington, MA", MACTEC Engineering and Consulting. Draft .October 2008.

SAMPLE SUMMARY

Client: Olin Corporation

Job Number: 360-24499-1
Sdg Number: OCRI-13

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
360-24499-1	OC-SB-466-6.0/8.0-XXX	Solid	09/08/2009 1350	09/09/2009 1810
360-24499-2	OC-SB-469-0.0/1.0-XXX	Solid	09/08/2009 1715	09/09/2009 1810
360-24499-3	OC-SB-469-28/30-XXX	Solid	09/09/2009 1040	09/09/2009 1810
360-24499-4	OC-SB-469-36/37-XXX	Solid	09/09/2009 1145	09/09/2009 1810
360-24499-5	OC-SB-469-7.0/9.0-XXX	Solid	09/09/2009 0750	09/09/2009 1810
360-24499-6	OC-SB-466-0.0/1.0-XXX	Solid	09/08/2009 1255	09/09/2009 1810
360-24499-7	OC-SB-466-30/32-XXX	Solid	09/08/2009 1550	09/09/2009 1810
360-24499-8	OC-TBK-015	Solid	09/09/2009 1400	09/09/2009 1810
360-24499-9	OC-SB-466-30/32-XXX	Solid	09/08/2009 1550	09/09/2009 1810
360-24499-10	OC-SB-466-6.0/8.0-XXX	Solid	09/08/2009 1350	09/09/2009 1810
360-24499-11	OC-SB-469-0.0/1.0-XXX	Solid	09/08/2009 1715	09/09/2009 1810
360-24499-12	OC-SB-469-28/30-XXX	Solid	09/09/2009 1040	09/09/2009 1810
360-24499-13	OC-SB-469-7.0/9.0-XXX	Solid	09/09/2009 0750	09/09/2009 1810
360-24499-14	OC-SB-417-0.0/1.0-XXX	Solid	09/10/2009 1040	09/10/2009 1820
360-24499-15	OC-SB-417-20/22-XXX	Solid	09/10/2009 1205	09/10/2009 1820
360-24499-16	OC-SB-417-8.0/10-XXX	Solid	09/10/2009 1050	09/10/2009 1820
360-24499-17	OC-SB-434-0.0/1.0-XXX	Solid	09/10/2009 0750	09/10/2009 1820
360-24499-18	OC-SB-434-15/16-XXX	Solid	09/10/2009 0935	09/10/2009 1820
360-24499-19	OC-SB-434-7.0-/9.0-XXX	Solid	09/10/2009 0815	09/10/2009 1820
360-24499-20	OC-SB-450-0.0/1.0-XXX	Solid	09/09/2009 1340	09/10/2009 1820
360-24499-21	OC-SB-450-33/35-XXX	Solid	09/09/2009 1655	09/10/2009 1820
360-24499-22	OC-SB-450-8.0/10-XXX	Solid	09/09/2009 1355	09/10/2009 1820
360-24499-23	OC-TBK-016	Solid	09/10/2009 1330	09/10/2009 1820

missing QC
MB bgp
& surr & IS LCS ER.

Form I's updated
3/3/10

Client: Olin Corporation

Job Number: 360-24499-1
Sdg Number: OCRI-13

Client Sample ID: **OC-SB-466-6.0/8.0-XXX**

Lab Sample ID: 360-24499-1
Client Matrix: Solid

% Moisture: 7.5

Date Sampled: 09/08/2009 1350
Date Received: 09/09/2009 1810

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49520		Instrument ID:	Inst. J
Preparation:	3550B	Prep Batch: 360-48958		Lab File ID:	J03156.D
Dilution:	1.0			Initial Weight/Volume:	100.45 g
Date Analyzed:	09/26/2009 1514			Final Weight/Volume:	1.0 mL
Date Prepared:	09/15/2009 1206			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodimethylamine		ND		1.2	5.4

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	81		30 - 130
2-Fluorobiphenyl	60		30 - 130
2-Fluorophenol	59		30 - 130
Nitrobenzene-d5	57		30 - 130
Phenol-d5	68		30 - 130
Terphenyl-d14	84		30 - 130

Client: Olin Corporation

Job Number: 360-24499-1
Sdg Number: OCRI-13

Client Sample ID: OC-SB-466-6.0/8.0-XXX

Lab Sample ID: 360-24499-1
Client Matrix: Solid % Moisture: 7.5

Date Sampled: 09/08/2009 1350
Date Received: 09/09/2009 1810

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49402		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49016		Lab File ID:	B10508.D
Dilution:	1.0			Initial Weight/Volume:	30.34 g
Date Analyzed:	09/23/2009 0809			Final Weight/Volume:	1.0 mL
Date Prepared:	09/16/2009 1153			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		11	36
1,2,4,5-Tetrachlorobenzene		ND		11	36
1,2,4-Trichlorobenzene		ND		11	36
1,2-Dichlorobenzene		ND		11	36
1,3-Dichlorobenzene		ND		11	36
1,4-Dichlorobenzene		ND		11	36
1-Methylnaphthalene		ND		11	36
2,2'-oxybis[1-chloropropane]		ND		11	36
2,3,4,6-Tetrachlorophenol		ND		11	36
2,4,5-Trichlorophenol		ND		11	36
2,4,6-Trichlorophenol		ND		11	36
2,4-Dichlorophenol		ND		11	36
2,4-Dimethylphenol		ND		14	36
2,4-Dinitrophenol		ND		11	36
2,4-Dinitrotoluene		ND		11	36
2,6-Dinitrotoluene		ND		11	36
2-Chloronaphthalene		ND		11	36
2-Chlorophenol		ND		11	36
2-Methylnaphthalene		ND		11	36
2-Methylphenol		ND		21	36
2-Nitroaniline		ND		11	180
2-Nitrophenol		ND		11	36
3 & 4 Methylphenol		ND		11	36
3,3'-Dichlorobenzidine		ND		11	71
3-Nitroaniline		ND		11	180
4,6-Dinitro-2-methylphenol		ND		11	180
4-Bromophenyl phenyl ether		ND		11	36
4-Chloro-3-methylphenol		ND		11	71
4-Chloroaniline		ND		11	71
4-Chlorophenyl phenyl ether		ND		11	36
4-Nitroaniline		ND		11	180
4-Nitrophenol		ND		11	180
Acenaphthene		ND		11	36
Acenaphthylene		ND		11	36
Acetophenone		ND		11	36
Aniline		ND	J	11	36
Anthracene		ND		11	36
Atrazine		ND		11	36
Azobenzene		ND		11	36
Benzaldehyde		ND		11	36
Benzo[a]anthracene		ND		11	36
Benzo[a]pyrene		ND		11	36
Benzo[b]fluoranthene		ND		11	36
Benzo[g,h,i]perylene		ND		11	36
Benzo[k]fluoranthene		ND		11	36
Benzoic acid		ND		16	180

3/3/10

Client: Olin Corporation

Job Number: 360-24499-1
Sdg Number: OCRI-13

Client Sample ID: **OC-SB-466-6.0/8.0-XXX**

Lab Sample ID: 360-24499-1
Client Matrix: Solid

% Moisture: 7.5

Date Sampled: 09/08/2009 1350
Date Received: 09/09/2009 1810

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49402		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49016		Lab File ID:	B10508.D
Dilution:	1.0			Initial Weight/Volume:	30.34 g
Date Analyzed:	09/23/2009 0809			Final Weight/Volume:	1.0 mL
Date Prepared:	09/16/2009 1153			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		11	36
Benzyl alcohol		ND		30	71
Bis(2-chloroethoxy)methane		ND		11	36
Bis(2-chloroethyl)ether		ND		11	36
Bis(2-ethylhexyl) phthalate		190	B	11	36
Butyl benzyl phthalate		ND		11	36
Caprolactam		ND		11	36
Carbazole		ND		11	36
Chrysene		ND		11	36
Dibenz(a,h)anthracene		ND		11	36
Dibenzofuran		ND		11	36
Diethyl phthalate		ND		11	36
Dimethyl phthalate		ND		11	36
Di-n-butyl phthalate		ND		31	36
Di-n-octyl phthalate		ND		18	36
Diphenyl oxide		ND		11	36
Diphenylamine		ND		11	36
Fluoranthene		ND		11	36
Fluorene		ND		11	36
Hexachlorobenzene		ND		11	36
Hexachlorobutadiene		ND		11	36
Hexachlorocyclopentadiene		ND		11	71
Hexachloroethane		ND		11	36
Indeno[1,2,3-cd]pyrene		ND		11	36
Isophorone		ND		11	36
Naphthalene		ND		11	85
Nitrobenzene		ND		11	36
N-Nitrosodimethylamine		ND		13	36
N-Nitrosodi-n-propylamine		ND		11	36
N-Nitrosodiphenylamine		ND		11	36
Pentachlorophenol		ND		11	36
Phenanthrene		ND		11	43
Phenol		ND		11	36
Pyrene		ND		11	36

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	70		30 - 130
2-Fluorophenol	87		30 - 130
2-Fluorobiphenyl	66		30 - 130
Nitrobenzene-d5	70		30 - 130
Phenol-d5	69		30 - 130
Terphenyl-d14	79		30 - 130

3/3/10

Client: Olin Corporation

Job Number: 360-24499-1
Sdg Number: OCRI-13

Client Sample ID: **OC-SB-466-6.0/8.0-XXX**

Lab Sample ID: 360-24499-1
Client Matrix: Solid % Moisture: 7.5

Date Sampled: 09/08/2009 1350
Date Received: 09/09/2009 1810

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49402		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49016		Lab File ID:	B10508.D
Dilution:	1.0			Initial Weight/Volume:	30.34 g
Date Analyzed:	09/23/2009 0809			Final Weight/Volume:	1.0 mL
Date Prepared:	09/16/2009 1153			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** **10**

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
128-37-0	Butylated Hydroxytoluene	10.28	11	T J N
~~615-22-5~~	~~Benzothiazole, 2-(methylthio)-~~	~~10.86~~	~~18~~	~~T J N~~
~~6910-35-8~~	~~1H-Indene, 2,3-dihydro-1,1,3-trimethyl-3~~	~~11.22~~	~~12~~	~~T J N~~
~~92-87-5~~	~~Benzidine~~	~~12.81~~	~~21~~	~~J~~
544-85-4	Dotriacontane	14.55	14	T J N
629-94-7	Heneicosane	15.27	13	T J N
~~593-49-7~~	~~Heptacosane~~	~~15.83~~	~~23~~	~~T J N~~
112-84-5	Erucylamide	16.29	63	T J N
111-2-4	2,6,10,14,18,22-Tetracosahexaene, 2,6,10	16.44	60	T J N
~~112-95-8~~	~~Eicosane~~	~~16.85~~	~~14~~	~~T J N~~

3/3/10

Client: Olin Corporation

Job Number: 360-24499-1
Sdg Number: OCRI-13

Client Sample ID: OC-SB-469-0.0/1.0-XXX

Lab Sample ID: 360-24499-2
Client Matrix: Solid

% Moisture: 5.2

Date Sampled: 09/08/2009 1715
Date Received: 09/09/2009 1810

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49402		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49016		Lab File ID:	B10509.D
Dilution:	10			Initial Weight/Volume:	30.36 g
Date Analyzed:	09/23/2009 0840			Final Weight/Volume:	1.0 mL
Date Prepared:	09/16/2009 1153			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		100	350
1,2,4,5-Tetrachlorobenzene		ND		100	350
1,2,4-Trichlorobenzene		ND		100	350
1,2-Dichlorobenzene		ND		100	350
1,3-Dichlorobenzene		ND		100	350
1,4-Dichlorobenzene		ND		100	350
1-Methylnaphthalene		ND		100	350
2,2'-oxybis[1-chloropropane]		ND		100	350
2,3,4,6-Tetrachlorophenol		ND		100	350
2,4,5-Trichlorophenol		ND		100	350
2,4,6-Trichlorophenol		ND		100	350
2,4-Dichlorophenol		ND		100	350
2,4-Dimethylphenol		ND		140	350
2,4-Dinitrophenol		ND		100	350
2,4-Dinitrotoluene		ND		100	350
2,6-Dinitrotoluene		ND		100	350
2-Chloronaphthalene		ND		100	350
2-Chlorophenol		ND		100	350
2-Methylnaphthalene		ND		100	350
2-Methylphenol		ND		210	350
2-Nitroaniline		ND		100	1700
2-Nitrophenol		ND		100	350
3 & 4 Methylphenol		ND		100	350
3,3'-Dichlorobenzidine		ND		100	690
3-Nitroaniline		ND		100	1700
4,6-Dinitro-2-methylphenol		ND		100	1700
4-Bromophenyl phenyl ether		ND		100	350
4-Chloro-3-methylphenol		ND		100	690
4-Chloroaniline		ND		100	690
4-Chlorophenyl phenyl ether		ND		100	350
4-Nitroaniline		ND		100	1700
4-Nitrophenol		ND		100	1700
Acenaphthene		ND		100	350
Acenaphthylene		ND		100	350
Acetophenone		ND		100	350
Aniline		ND	3	100	350
Anthracene		ND		100	350
Atrazine		ND		100	350
Azobenzene		ND		100	350
Benzaldehyde		ND		100	350
Benzo[a]anthracene		ND		100	350
Benzo[a]pyrene		ND		100	350
Benzo[b]fluoranthene		ND		100	350
Benzo[g,h,i]perylene		ND		100	350
Benzo[k]fluoranthene		ND		100	350
Benzoic acid		ND		160	1700

10/06/2009
3/3/10

Client: Olin Corporation

Job Number: 360-24499-1
Sdg Number: OCRI-13

Client Sample ID: OC-SB-469-0.0/1.0-XXX

Lab Sample ID: 360-24499-2
Client Matrix: Solid

% Moisture: 5.2

Date Sampled: 09/08/2009 1715
Date Received: 09/09/2009 1810

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49402		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49016		Lab File ID:	B10509.D
Dilution:	10			Initial Weight/Volume:	30.36 g
Date Analyzed:	09/23/2009 0840			Final Weight/Volume:	1.0 mL
Date Prepared:	09/16/2009 1153			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		100	350
Benzyl alcohol		ND		300	690
Bis(2-chloroethoxy)methane		ND		100	350
Bis(2-chloroethyl)ether		ND		100	350
Bis(2-ethylhexyl) phthalate		1700	B	100	350
Butyl benzyl phthalate		ND		100	350
Caprolactam		ND		100	350
Carbazole		ND		100	350
Chrysene		ND		100	350
Dibenz(a,h)anthracene		ND		100	350
Dibenzofuran		ND		100	350
Diethyl phthalate		ND		100	350
Dimethyl phthalate		ND		100	350
Di-n-butyl phthalate		ND		310	350
Di-n-octyl phthalate		ND		180	350
Diphenyl oxide		ND		100	350
Fluoranthene		ND		100	350
Fluorene		ND		100	350
Hexachlorobenzene		ND		100	350
Hexachlorobutadiene		ND		100	350
Hexachlorocyclopentadiene		ND		100	690
Hexachloroethane		ND		100	350
Indeno[1,2,3-cd]pyrene		ND		100	350
Isophorone		ND		100	350
Naphthalene		ND		100	830
Nitrobenzene		ND		100	350
N-Nitrosodimethylamine		ND		120	350
N-Nitrosodi-n-propylamine		ND		100	350
N-Nitrosodiphenylamine		ND		100	350
Pentachlorophenol		ND		100	350
Phenanthrene		ND		100	420
Phenol		ND		100	350
Pyrene		ND		100	350

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	60		30 - 130
2-Fluorobiphenyl	73		30 - 130
2-Fluorophenol	92		30 - 130
Nitrobenzene-d5	62		30 - 130
Phenol-d5	66		30 - 130
Terphenyl-d14	83		30 - 130

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Client: Olin Corporation

Job Number: 360-24499-1
Sdg Number: OCRI-13

Client Sample ID: OC-SB-469-0.0/1.0-XXX

Lab Sample ID: 360-24499-2
Client Matrix: Solid

% Moisture: 5.2

Date Sampled: 09/08/2009 1715
Date Received: 09/09/2009 1810

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49402		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49016		Lab File ID:	B10509.D
Dilution:	10			Initial Weight/Volume:	30.36 g
Date Analyzed:	09/23/2009 0840			Final Weight/Volume:	1.0 mL
Date Prepared:	09/16/2009 1153			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 1

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Tentatively Identified Compound		None	
92-87-5	Benzidine	12.83	210	J

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Client: Olin Corporation

Job Number: 360-24499-1
Sdg Number: OCRI-13

Client Sample ID: OC-SB-469-36/37-XXX

Lab Sample ID: 360-24499-4
Client Matrix: Solid

% Moisture: 8.0

Date Sampled: 09/09/2009 1145
Date Received: 09/09/2009 1810

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49444		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49016		Lab File ID:	B10533.D
Dilution:	1.0			Initial Weight/Volume:	30.64 g
Date Analyzed:	09/24/2009 0525			Final Weight/Volume:	1.0 mL
Date Prepared:	09/16/2009 1153			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		11	35
1,2,4,5-Tetrachlorobenzene		ND		11	35
1,2,4-Trichlorobenzene		ND		11	35
1,2-Dichlorobenzene		ND		11	35
1,3-Dichlorobenzene		ND		11	35
1,4-Dichlorobenzene		ND		11	35
1-Methylnaphthalene		ND		11	35
2,2'-oxybis[1-chloropropane]		ND		11	35
2,3,4,6-Tetrachlorophenol		ND		11	35
2,4,5-Trichlorophenol		ND		11	35
2,4,6-Trichlorophenol		ND		11	35
2,4-Dichlorophenol		ND		11	35
2,4-Dimethylphenol		ND		14	35
2,4-Dinitrophenol		ND		11	35
2,4-Dinitrotoluene		ND		11	35
2,6-Dinitrotoluene		ND		11	35
2-Chloronaphthalene		ND		11	35
2-Chlorophenol		ND		11	35
2-Methylnaphthalene		ND		11	35
2-Methylphenol		ND		21	35
2-Nitroaniline		ND		11	180
2-Nitrophenol		ND		11	35
3 & 4 Methylphenol		ND		11	35
3,3'-Dichlorobenzidine		ND		11	71
3-Nitroaniline		ND		11	180
4,6-Dinitro-2-methylphenol		ND		11	180
4-Bromophenyl phenyl ether		ND		11	35
4-Chloro-3-methylphenol		ND		11	71
4-Chloroaniline		ND		11	71
4-Chlorophenyl phenyl ether		ND		11	35
4-Nitroaniline		ND		11	180
4-Nitrophenol		ND		11	180
Acenaphthene		ND		11	35
Acenaphthylene		ND		11	35
Acetophenone		ND		11	35
Aniline		ND	J	11	35
Anthracene		ND		11	35
Atrazine		ND		11	35
Azobenzene		ND		11	35
Benzaldehyde		ND		11	35
Benzo[a]anthracene		ND		11	35
Benzo[a]pyrene		ND		11	35
Benzo[b]fluoranthene		ND		11	35
Benzo[g,h,i]perylene		ND		11	35
Benzo[k]fluoranthene		ND		11	35
Benzoic acid		ND		16	180

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Client: Olin Corporation

Job Number: 360-24499-1
Sdg Number: OCRI-13

Client Sample ID: OC-SB-469-36/37-XXX

Lab Sample ID: 360-24499-4
Client Matrix: Solid % Moisture: 8.0

Date Sampled: 09/09/2009 1145
Date Received: 09/09/2009 1810

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49444		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49016		Lab File ID:	B10533.D
Dilution:	1.0			Initial Weight/Volume:	30.64 g
Date Analyzed:	09/24/2009 0525			Final Weight/Volume:	1.0 mL
Date Prepared:	09/16/2009 1153			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		11	35
Benzyl alcohol		ND		30	71
Bis(2-chloroethoxy)methane		ND		11	35
Bis(2-chloroethyl)ether		ND		11	35
Bis(2-ethylhexyl) phthalate		160	u	11	35
Butyl benzyl phthalate		ND		11	35
Caprolactam		ND		11	35
Carbazole		ND		11	35
Chrysene		ND		11	35
Dibenz(a,h)anthracene		ND		11	35
Dibenzofuran		ND		11	35
Diethyl phthalate		ND		11	35
Dimethyl phthalate		ND		11	35
Di-n-butyl phthalate		ND		31	35
Di-n-octyl phthalate		ND		18	35
Diphenyl oxide		ND		11	35
Fluoranthene		ND		11	35
Fluorene		ND		11	35
Hexachlorobenzene		ND		11	35
Hexachlorobutadiene		ND		11	35
Hexachlorocyclopentadiene		ND		11	71
Hexachloroethane		ND		11	35
Indeno[1,2,3-cd]pyrene		ND		11	35
Isophorone		ND		11	35
Naphthalene		ND		11	85
Nitrobenzene		ND		11	35
N-Nitrosodimethylamine		ND		13	35
N-Nitrosodi-n-propylamine		ND		11	35
N-Nitrosodiphenylamine		ND		11	35
Pentachlorophenol		ND		11	35
Phenanthrene		ND		11	43
Phenol		ND		11	35
Pyrene		ND		11	35

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	70		30 - 130
2-Fluorobiphenyl	66		30 - 130
2-Fluorophenol	87		30 - 130
Nitrobenzene-d5	78		30 - 130
Phenol-d5	75		30 - 130
Terphenyl-d14	76		30 - 130

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Client: Olin Corporation

Job Number: 360-24499-1
Sdg Number: OCRI-13

Client Sample ID: **OC-SB-469-36/37-XXX**

Lab Sample ID: 360-24499-4
Client Matrix: Solid % Moisture: 8.0

Date Sampled: 09/09/2009 1145
Date Received: 09/09/2009 1810

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49444		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49016		Lab File ID:	B10533.D
Dilution:	1.0			Initial Weight/Volume:	30.64 g
Date Analyzed:	09/24/2009 0525			Final Weight/Volume:	1.0 mL
Date Prepared:	09/16/2009 1153			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** **9**

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
124-18-5	Decane	7.29	12	T J N
541-2-6	Cyclopentasiloxane, decamethyl-	8.08	8.2	T J N
98-55-5	Alpha-Terpineol	8.52	20	J
~~92-87-5~~	~~Benzidine~~	~~12.52~~	~~17~~	~~J~~
~~593-45-3~~	~~Octadecane~~	~~13.50~~	~~11~~	~~T J N~~
3386-33-2	Octadecane, 1-chloro-	14.10	23	T J N
~~593-49-7~~	~~Heptacosane~~	~~15.50~~	~~14~~	~~T J N~~
629-78-7	Heptadecane	15.99	17	T J N
111-2-4	2,6,10,14,18,22-Tetracosahexaene, 2,6,10	16.10	140	T J N

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Client: Olin Corporation

Job Number: 360-24499-1
Sdg Number: OCRI-13

Client Sample ID: **OC-SB-469-7.0/9.0-XXX**

Lab Sample ID: 360-24499-5
Client Matrix: Solid

% Moisture: 4.3

Date Sampled: 09/09/2009 0750
Date Received: 09/09/2009 1810

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49444		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49016		Lab File ID:	B10534.D
Dilution:	1.0			Initial Weight/Volume:	30.83 g
Date Analyzed:	09/24/2009 0557			Final Weight/Volume:	1.0 mL
Date Prepared:	09/16/2009 1153			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		10	34
1,2,4,5-Tetrachlorobenzene		ND		10	34
1,2,4-Trichlorobenzene		ND		10	34
1,2-Dichlorobenzene		ND		10	34
1,3-Dichlorobenzene		ND		10	34
1,4-Dichlorobenzene		ND		10	34
1-Methylnaphthalene		ND		10	34
2,2'-oxybis[1-chloropropane]		ND		10	34
2,3,4,6-Tetrachlorophenol		ND		10	34
2,4,5-Trichlorophenol		ND		10	34
2,4,6-Trichlorophenol		ND		10	34
2,4-Dichlorophenol		ND		10	34
2,4-Dimethylphenol		ND		13	34
2,4-Dinitrophenol		ND		10	34
2,4-Dinitrotoluene		ND		10	34
2,6-Dinitrotoluene		ND		10	34
2-Chloronaphthalene		ND		10	34
2-Chlorophenol		ND		10	34
2-Methylnaphthalene		ND		10	34
2-Methylphenol		ND		20	34
2-Nitroaniline		ND		10	170
2-Nitrophenol		ND		10	34
3 & 4 Methylphenol		ND		10	34
3,3'-Dichlorobenzidine		ND		10	68
3-Nitroaniline		ND		10	170
4,6-Dinitro-2-methylphenol		ND		10	170
4-Bromophenyl phenyl ether		ND		10	34
4-Chloro-3-methylphenol		ND		10	68
4-Chloroaniline		ND		10	68
4-Chlorophenyl phenyl ether		ND		10	34
4-Nitroaniline		ND		10	170
4-Nitrophenol		ND		10	170
Acenaphthene		ND		10	34
Acenaphthylene		ND		10	34
Acetophenone		ND		10	34
Aniline		ND	J	10	34
Anthracene		ND		10	34
Atrazine		ND		10	34
Azobenzene		ND		10	34
Benzaldehyde		ND		10	34
Benzo[a]anthracene		ND		10	34
Benzo[a]pyrene		ND		10	34
Benzo[b]fluoranthene		ND		10	34
Benzo[g,h,i]perylene		ND		10	34
Benzo[k]fluoranthene		ND		10	34
Benzoic acid		ND		15	170

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Client: Olin Corporation

Job Number: 360-24499-1
Sdg Number: OCRI-13

Client Sample ID: **OC-SB-469-7.0/9.0-XXX**

Lab Sample ID: 360-24499-5
Client Matrix: Solid

% Moisture: 4.3

Date Sampled: 09/09/2009 0750
Date Received: 09/09/2009 1810

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49444		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49016		Lab File ID:	B10534.D
Dilution:	1.0			Initial Weight/Volume:	30.83 g
Date Analyzed:	09/24/2009 0557			Final Weight/Volume:	1.0 mL
Date Prepared:	09/16/2009 1153			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		10	34
Benzyl alcohol		ND		29	68
Bis(2-chloroethoxy)methane		ND		10	34
Bis(2-chloroethyl)ether		ND		10	34
Bis(2-ethylhexyl) phthalate		160 U		10	34
Butyl benzyl phthalate		ND		10	34
Caprolactam		ND		10	34
Carbazole		ND		10	34
Chrysene		ND		10	34
Dibenz(a,h)anthracene		ND		10	34
Dibenzofuran		ND		10	34
Diethyl phthalate		ND		10	34
Dimethyl phthalate		ND		10	34
Di-n-butyl phthalate		ND		30	34
Di-n-octyl phthalate		ND		17	34
Diphenyl oxide		ND		10	34
Fluoranthene		ND		10	34
Fluorene		ND		10	34
Hexachlorobenzene		ND		10	34
Hexachlorobutadiene		ND		10	34
Hexachlorocyclopentadiene		ND		10	68
Hexachloroethane		ND		10	34
Indeno[1,2,3-cd]pyrene		ND		10	34
Isophorone		ND		10	34
Naphthalene		ND		10	81
Nitrobenzene		ND		10	34
N-Nitrosodimethylamine		ND		12	34
N-Nitrosodi-n-propylamine		ND		10	34
N-Nitrosodiphenylamine		ND		10	34
Pentachlorophenol		ND		10	34
Phenanthrene		ND		10	41
Phenol		ND		10	34
Pyrene		ND		10	34

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	68		30 - 130
2-Fluorobiphenyl	65		30 - 130
2-Fluorophenol	91		30 - 130
Nitrobenzene-d5	76		30 - 130
Phenol-d5	77		30 - 130
Terphenyl-d14	79		30 - 130

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Client: Olin Corporation

Job Number: 360-24499-1
Sdg Number: OCRI-13

Client Sample ID: **OC-SB-469-7.0/9.0-XXX**

Lab Sample ID: 360-24499-5
Client Matrix: Solid % Moisture: 4.3

Date Sampled: 09/09/2009 0750
Date Received: 09/09/2009 1810

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49444		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49016		Lab File ID:	B10534.D
Dilution:	1.0			Initial Weight/Volume:	30.83 g
Date Analyzed:	09/24/2009 0557			Final Weight/Volume:	1.0 mL
Date Prepared:	09/16/2009 1153			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 8

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
59242-27-2	Furan, 2,5-dihydro-2,5-dimethyl-	5.29	14	T J N
541-2-6	Cyclopentasiloxane, decamethyl-	8.08	8.3	T J N
98-55-5	Alpha-Terpineol	8.52	14	T J N
~~321-60-8~~	~~1,1"-Biphenyl, 2-fluoro-~~	~~9.47~~	~~18~~	~~T J N~~
~~92-87-5~~	~~Benzidine~~	~~12.51~~	~~17~~	~~J~~
629-78-7	Heptadecane	14.10	10	T J N
~~593-45-3~~	~~Octadecane~~	15.49	12	T J N
~~7683-64-9~~	~~Squalene~~	~~16.11~~	~~120~~	~~T J N~~

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Client: Olin Corporation

Job Number: 360-24499-1
Sdg Number: OCRI-13

Client Sample ID: OC-SB-466-0.0/1.0-XXX

Lab Sample ID: 360-24499-6
Client Matrix: Solid

% Moisture: 3.1

Date Sampled: 09/08/2009 1255
Date Received: 09/09/2009 1810

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49444		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49016		Lab File ID:	B10536.D
Dilution:	10			Initial Weight/Volume:	30.27 g
Date Analyzed:	09/24/2009 0700			Final Weight/Volume:	1.0 mL
Date Prepared:	09/16/2009 1153			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		100	340
1,2,4,5-Tetrachlorobenzene		ND		100	340
1,2,4-Trichlorobenzene		ND		100	340
1,2-Dichlorobenzene		ND		100	340
1,3-Dichlorobenzene		ND		100	340
1,4-Dichlorobenzene		ND		100	340
1-Methylnaphthalene		ND		100	340
2,2'-oxybis[1-chloropropane]		ND		100	340
2,3,4,6-Tetrachlorophenol		ND		100	340
2,4,5-Trichlorophenol		ND		100	340
2,4,6-Trichlorophenol		ND		100	340
2,4-Dichlorophenol		ND		100	340
2,4-Dimethylphenol		ND		130	340
2,4-Dinitrophenol		ND		100	340
2,4-Dinitrotoluene		ND		100	340
2,6-Dinitrotoluene		ND		100	340
2-Chloronaphthalene		ND		100	340
2-Chlorophenol		ND		100	340
2-Methylnaphthalene		ND		100	340
2-Methylphenol		ND		200	340
2-Nitroaniline		ND		100	1700
2-Nitrophenol		ND		100	340
3 & 4 Methylphenol		ND		100	340
3,3'-Dichlorobenzidine		ND		100	680
3-Nitroaniline		ND		100	1700
4,6-Dinitro-2-methylphenol		ND		100	1700
4-Bromophenyl phenyl ether		ND		100	340
4-Chloro-3-methylphenol		ND		100	680
4-Chloroaniline		ND		100	680
4-Chlorophenyl phenyl ether		ND		100	340
4-Nitroaniline		ND		100	1700
4-Nitrophenol		ND		100	1700
Acenaphthene		ND		100	340
Acenaphthylene		ND		100	340
Acetophenone		ND		100	340
Aniline		ND	J	100	340
Anthracene		ND		100	340
Atrazine		ND		100	340
Azobenzene		ND		100	340
Benzaldehyde		ND		100	340
Benzo[a]anthracene		ND		100	340
Benzo[a]pyrene		ND		100	340
Benzo[b]fluoranthene		ND		100	340
Benzo[g,h,i]perylene		ND		100	340
Benzo[k]fluoranthene		ND		100	340
Benzoic acid		ND		150	1700

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Client: Olin Corporation

Job Number: 360-24499-1
Sdg Number: OCRI-13

Client Sample ID: **OC-SB-466-0.0/1.0-XXX**

Lab Sample ID: 360-24499-6
Client Matrix: Solid

% Moisture: 3.1

Date Sampled: 09/08/2009 1255
Date Received: 09/09/2009 1810

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49444		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49016		Lab File ID:	B10536.D
Dilution:	10			Initial Weight/Volume:	30.27 g
Date Analyzed:	09/24/2009 0700			Final Weight/Volume:	1.0 mL
Date Prepared:	09/16/2009 1153			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		100	340
Benzyl alcohol		ND		290	680
Bis(2-chloroethoxy)methane		ND		100	340
Bis(2-chloroethyl)ether		ND		100	340
Bis(2-ethylhexyl) phthalate		960 u		100	340
Butyl benzyl phthalate		ND		100	340
Caprolactam		ND		100	340
Carbazole		ND		100	340
Chrysene		ND		100	340
Dibenz(a,h)anthracene		ND		100	340
Dibenzofuran		ND		100	340
Diethyl phthalate		ND		100	340
Dimethyl phthalate		ND		100	340
Di-n-butyl phthalate		ND		300	340
Di-n-octyl phthalate		ND		170	340
Diphenyl oxide		ND		100	340
Fluoranthene		ND		100	340
Fluorene		ND		100	340
Hexachlorobenzene		ND		100	340
Hexachlorobutadiene		ND		100	340
Hexachlorocyclopentadiene		ND		100	680
Hexachloroethane		ND		100	340
Indeno[1,2,3-cd]pyrene		ND		100	340
Isophorone		ND		100	340
Naphthalene		ND		100	820
Nitrobenzene		ND		100	340
N-Nitrosodimethylamine		ND		120	340
N-Nitrosodi-n-propylamine		ND		100	340
N-Nitrosodiphenylamine		ND		100	340
Pentachlorophenol		ND		100	340
Phenanthrene		ND		100	410
Phenol		ND		100	340
Pyrene		ND		100	340

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	71		30 - 130
2-Fluorobiphenyl	76		30 - 130
2-Fluorophenol	90		30 - 130
Nitrobenzene-d5	70		30 - 130
Phenol-d5	68		30 - 130
Terphenyl-d14	88		30 - 130

Client: Olin Corporation

Job Number: 360-24499-1
Sdg Number: OCRI-13

Client Sample ID: OC-SB-466-0.0/1.0-XXX

Lab Sample ID: 360-24499-6
Client Matrix: Solid

% Moisture: 3.1

Date Sampled: 09/08/2009 1255
Date Received: 09/09/2009 1810

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49444		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49016		Lab File ID:	B10536.D
Dilution:	10			Initial Weight/Volume:	30.27 g
Date Analyzed:	09/24/2009 0700			Final Weight/Volume:	1.0 mL
Date Prepared:	09/16/2009 1153			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 10

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
128-37-0	Butylated Hydroxytoluene	10.05	200	T J N
~~3910-35-8~~	~~1H-Indene, 2,3-dihydro-1,1,3-trimethyl-3-~~	~~10.99~~	~~510~~	~~T J N~~
~~22768-22-5~~	~~2,4-Diphenyl-4-methyl-2(E)-pentene~~	~~11.41~~	~~210~~	~~T J N~~
5129-60-2	Pentadecanoic acid, 14-methyl-, methyl e	11.60	89	T J N
112-61-8	Octadecanoic acid, methyl ester	12.29	230	T J N
~~92-87-5~~	~~Benzidine~~	~~12.53~~	~~170~~	~~J~~
14905-56-7	Tetradecane, 2,6,10-trimethyl-	15.50	270	T J N
~~112-95-8~~	~~Eicosane~~	16.00	~~450~~	~~T J N~~
~~593-49-7~~	~~Heptacosane~~	~~16.49~~	~~480~~	~~T J N~~
~~26603-23-6~~	~~p,p''-Dioctyldiphenylamine~~	16.99	9500	T J N

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Client: Olin Corporation

Job Number: 360-24499-1
Sdg Number: OCRI-13

Client Sample ID: OC-SB-466-30/32-XXX

Lab Sample ID: 360-24499-7
Client Matrix: Solid

% Moisture: 8.1

Date Sampled: 09/08/2009 1550
Date Received: 09/09/2009 1810

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49520		Instrument ID:	Inst. J
Preparation:	3550B	Prep Batch: 360-48958		Lab File ID:	J03157.D
Dilution:	1.0			Initial Weight/Volume:	100.26 g
Date Analyzed:	09/26/2009 1547			Final Weight/Volume:	1.0 mL
Date Prepared:	09/15/2009 1206			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodimethylamine		ND		1.3	5.4

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	73		30 - 130
2-Fluorobiphenyl	63		30 - 130
2-Fluorophenol	63		30 - 130
Nitrobenzene-d5	62		30 - 130
Phenol-d5	70		30 - 130
Terphenyl-d14	91		30 - 130

Client: Olin Corporation

Job Number: 360-24499-1
Sdg Number: OCRI-13

Client Sample ID: **OC-SB-466-30/32-XXX**

Lab Sample ID: 360-24499-7
Client Matrix: Solid
% Moisture: 8.1

Date Sampled: 09/08/2009 1550
Date Received: 09/09/2009 1810

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49444		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49016		Lab File ID:	B10537.D
Dilution:	1.0			Initial Weight/Volume:	30.14 g
Date Analyzed:	09/24/2009 0731			Final Weight/Volume:	1.0 mL
Date Prepared:	09/16/2009 1153			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		11	36
1,2,4,5-Tetrachlorobenzene		ND		11	36
1,2,4-Trichlorobenzene		ND		11	36
1,2-Dichlorobenzene		ND		11	36
1,3-Dichlorobenzene		ND		11	36
1,4-Dichlorobenzene		ND		11	36
1-Methylnaphthalene		ND		11	36
2,2'-oxybis[1-chloropropane]		ND		11	36
2,3,4,6-Tetrachlorophenol		ND		11	36
2,4,5-Trichlorophenol		ND		11	36
2,4,6-Trichlorophenol		ND		11	36
2,4-Dichlorophenol		ND		11	36
2,4-Dimethylphenol		ND		14	36
2,4-Dinitrophenol		ND		11	36
2,4-Dinitrotoluene		ND		11	36
2,6-Dinitrotoluene		ND		11	36
2-Chloronaphthalene		ND		11	36
2-Chlorophenol		ND		11	36
2-Methylnaphthalene		ND		11	36
2-Methylphenol		ND		22	36
2-Nitroaniline		ND		11	180
2-Nitrophenol		ND		11	36
3 & 4 Methylphenol		ND		11	36
3,3'-Dichlorobenzidine		ND		11	72
3-Nitroaniline		ND		11	180
4,6-Dinitro-2-methylphenol		ND		11	180
4-Bromophenyl phenyl ether		ND		11	36
4-Chloro-3-methylphenol		ND		11	72
4-Chloroaniline		ND		11	72
4-Chlorophenyl phenyl ether		ND		11	36
4-Nitroaniline		ND		11	180
4-Nitrophenol		ND		11	180
Acenaphthene		ND		11	36
Acenaphthylene		ND		11	36
Acetophenone		ND		11	36
Aniline		ND	J	11	36
Anthracene		ND		11	36
Atrazine		ND		11	36
Azobenzene		ND		11	36
Benzaldehyde		ND		11	36
Benzo[a]anthracene		ND		11	36
Benzo[a]pyrene		ND		11	36
Benzo[b]fluoranthene		ND		11	36
Benzo[g,h,i]perylene		ND		11	36
Benzo[k]fluoranthene		ND		11	36
Benzoic acid		ND		16	180

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Client: Olin Corporation

Job Number: 360-24499-1
Sdg Number: OCRI-13

Client Sample ID: OC-SB-466-30/32-XXX

Lab Sample ID: 360-24499-7
Client Matrix: Solid

% Moisture: 8.1

Date Sampled: 09/08/2009 1550
Date Received: 09/09/2009 1810

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49444		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49016		Lab File ID:	B10537.D
Dilution:	1.0			Initial Weight/Volume:	30.14 g
Date Analyzed:	09/24/2009 0731			Final Weight/Volume:	1.0 mL
Date Prepared:	09/16/2009 1153			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		11	36
Benzyl alcohol		ND		31	72
Bis(2-chloroethoxy)methane		ND		11	36
Bis(2-chloroethyl)ether		ND		11	36
Bis(2-ethylhexyl) phthalate		190	U	11	36
Butyl benzyl phthalate		ND		11	36
Caprolactam		ND		11	36
Carbazole		ND		11	36
Chrysene		ND		11	36
Dibenz(a,h)anthracene		ND		11	36
Dibenzofuran		ND		11	36
Diethyl phthalate		ND		11	36
Dimethyl phthalate		ND		11	36
Di-n-butyl phthalate		ND		32	36
Di-n-octyl phthalate		ND		18	36
Diphenyl oxide		ND		11	36
Diphenylamine		ND		11	36
Fluoranthene		ND		11	36
Fluorene		ND		11	36
Hexachlorobenzene		ND		11	36
Hexachlorobutadiene		ND		11	36
Hexachlorocyclopentadiene		ND		11	72
Hexachloroethane		ND		11	36
Indeno[1,2,3-cd]pyrene		ND		11	36
Isophorone		ND		11	36
Naphthalene		ND		11	87
Nitrobenzene		ND		11	36
N-Nitrosodimethylamine		ND		13	36
N-Nitrosodi-n-propylamine		ND		11	36
N-Nitrosodiphenylamine		ND		11	36
Pentachlorophenol		ND		11	36
Phenanthrene		ND		11	43
Phenol		ND		11	36
Pyrene		ND		11	36

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	69		30 - 130
2-Fluorophenol	90		30 - 130
2-Fluorobiphenyl	69		30 - 130
Nitrobenzene-d5	77		30 - 130
Phenol-d5	78		30 - 130
Terphenyl-d14	82		30 - 130

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Client: Olin Corporation

Job Number: 360-24499-1
Sdg Number: OCRI-13

Client Sample ID: **OC-SB-466-30/32-XXX**

Lab Sample ID: 360-24499-7
Client Matrix: Solid % Moisture: 8.1

Date Sampled: 09/08/2009 1550
Date Received: 09/09/2009 1810

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49444		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49016		Lab File ID:	B10537.D
Dilution:	1.0			Initial Weight/Volume:	30.14 g
Date Analyzed:	09/24/2009 0731			Final Weight/Volume:	1.0 mL
Date Prepared:	09/16/2009 1153			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 10

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
98-55-5	Alpha-Terpineol	8.52	20	T J
92-87-5	Benzidine	12.54	18	J
593-45-3	Octadecane	13.50	16	T J N
629-99-2	Pentacosane	14.10	28	T J N
638-67-5	Tricosane	14.83	20	T J N
112-84-5	Erucylamide	15.96	90	T J N
630-2-4	Octacosane	16.00	40	T J N
111-2-4	2,6,10,14,18,22-Tetracosahexaene, 2,6,10	16.10	160	T J N
112-95-8	Eicosane	16.48	28	T J N
593-49-7	Heptacosane	17.02	21	T J N

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Client: Olin Corporation

Job Number: 360-24499-1
Sdg Number: OCRI-13

Client Sample ID: **OC-SB-417-0.0/1.0-XXX**

Lab Sample ID: 360-24499-14
Client Matrix: Solid

% Moisture: 1.6

Date Sampled: 09/10/2009 1040
Date Received: 09/10/2009 1820

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49444		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49016		Lab File ID:	B10538.D
Dilution:	1.0			Initial Weight/Volume:	30.44 g
Date Analyzed:	09/24/2009 0802			Final Weight/Volume:	1.0 mL
Date Prepared:	09/16/2009 1153			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		10	33
1,2,4,5-Tetrachlorobenzene		ND		10	33
1,2,4-Trichlorobenzene		ND		10	33
1,2-Dichlorobenzene		ND		10	33
1,3-Dichlorobenzene		ND		10	33
1,4-Dichlorobenzene		ND		10	33
1-Methylnaphthalene		ND		10	33
2,2'-oxybis[1-chloropropane]		ND		10	33
2,3,4,6-Tetrachlorophenol		ND		10	33
2,4,5-Trichlorophenol		ND		10	33
2,4,6-Trichlorophenol		ND		10	33
2,4-Dichlorophenol		ND		10	33
2,4-Dimethylphenol		ND		13	33
2,4-Dinitrophenol		16	J	10	33
2,4-Dinitrotoluene		ND		10	33
2,6-Dinitrotoluene		ND		10	33
2-Chloronaphthalene		ND		10	33
2-Chlorophenol		ND		10	33
2-Methylnaphthalene		ND		10	33
2-Methylphenol		ND		20	33
2-Nitroaniline		ND		10	170
2-Nitrophenol		ND		10	33
3 & 4 Methylphenol		ND		10	33
3,3'-Dichlorobenzidine		ND		10	67
3-Nitroaniline		ND		10	170
4,6-Dinitro-2-methylphenol		ND		10	170
4-Bromophenyl phenyl ether		ND		10	33
4-Chloro-3-methylphenol		ND		10	67
4-Chloroaniline		ND		10	67
4-Chlorophenyl phenyl ether		ND		10	33
4-Nitroaniline		ND		10	170
4-Nitrophenol		ND		10	170
Acenaphthene		ND		10	33
Acenaphthylene		ND		10	33
Acetophenone		ND		10	33
Aniline		ND J		10	33
Anthracene		ND		10	33
Atrazine		ND		10	33
Azobenzene		ND		10	33
Benzaldehyde		ND		10	33
Benzo[a]anthracene		ND		10	33
Benzo[a]pyrene		ND		10	33
Benzo[b]fluoranthene		13	J	10	33
Benzo[g,h,i]perylene		ND		10	33
Benzo[k]fluoranthene		ND		10	33
Benzoic acid		~~25~~ 170 U	~~J~~	15	170

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Client: Olin Corporation

Job Number: 360-24499-1
Sdg Number: OCRI-13

Client Sample ID: OC-SB-417-0.0/1.0-XXX

Lab Sample ID: 360-24499-14
Client Matrix: Solid

% Moisture: 1.6

Date Sampled: 09/10/2009 1040
Date Received: 09/10/2009 1820

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49444		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49016		Lab File ID:	B10538.D
Dilution:	1.0			Initial Weight/Volume:	30.44 g
Date Analyzed:	09/24/2009 0802			Final Weight/Volume:	1.0 mL
Date Prepared:	09/16/2009 1153			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		10	33
Benzyl alcohol		ND		28	67
Bis(2-chloroethoxy)methane		ND		10	33
Bis(2-chloroethyl)ether		ND		10	33
Bis(2-ethylhexyl) phthalate		360	U	10	33
Butyl benzyl phthalate		ND		10	33
Caprolactam		ND		10	33
Carbazole		ND		10	33
Chrysene		14	J	10	33
Dibenz(a,h)anthracene		ND		10	33
Dibenzofuran		ND		10	33
Diethyl phthalate		ND		10	33
Dimethyl phthalate		ND		10	33
Di-n-butyl phthalate		ND		29	33
Di-n-octyl phthalate		ND		17	33
Diphenyl oxide		ND		10	33
Fluoranthene		20	J	10	33
Fluorene		ND		10	33
Hexachlorobenzene		ND		10	33
Hexachlorobutadiene		ND		10	33
Hexachlorocyclopentadiene		ND		10	67
Hexachloroethane		ND		10	33
Indeno[1,2,3-cd]pyrene		ND		10	33
Isophorone		ND		10	33
Naphthalene		ND		10	80
Nitrobenzene		ND		10	33
N-Nitrosodimethylamine		ND		12	33
N-Nitrosodi-n-propylamine		ND		10	33
N-Nitrosodiphenylamine		25	J	10	33
Pentachlorophenol		ND		10	33
Phenanthrene		ND		10	40
Phenol		ND		10	33
Pyrene		17	J	10	33

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	76		30 - 130
2-Fluorobiphenyl	71		30 - 130
2-Fluorophenol	93		30 - 130
Nitrobenzene-d5	82		30 - 130
Phenol-d5	80		30 - 130
Terphenyl-d14	84		30 - 130

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Client: Olin Corporation

Job Number: 360-24499-1
Sdg Number: OCRI-13

Client Sample ID: OC-SB-417-0.0/1.0-XXX

Lab Sample ID: 360-24499-14
Client Matrix: Solid % Moisture: 1.6

Date Sampled: 09/10/2009 1040
Date Received: 09/10/2009 1820

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49444		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49016		Lab File ID:	B10538.D
Dilution:	1.0			Initial Weight/Volume:	30.44 g
Date Analyzed:	09/24/2009 0802			Final Weight/Volume:	1.0 mL
Date Prepared:	09/16/2009 1153			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 10

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
98-55-5	Alpha-Terpineol	8.52	19	T J N
26560-14-5	1,3,6,10-Dodecatetraene, 3,7,11-trimethy	9.77	18	T J N
122-39-4	Diphenylamine	10.62	25	J
122-66-7	1,2-Diphenylhydrazine	10.69	37	
3910-35-8	1H-Indene, 2,3-dihydro-1,1,3-trimethyl-3	10.99	20	T J N
16587-52-3	Dibenzothiophene, 3-methyl-	11.28	43	T J N
593-49-7	Heptacosane	15.50	37	T J N
7683-64-9	Squalene	16.10	39	T J N
1599-67-3	1-Docosene	16.59	18	T J N
74298-93-4	1,1"-Biphenyl, 2,3",4,5"-tetrachloro-4"-	17.43	90	T J N

STET

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Client: Olin Corporation

Job Number: 360-24499-1
Sdg Number: OCRI-13

Client Sample ID: **OC-SB-417-8.0/10-XXX**

Lab Sample ID: 360-24499-16
Client Matrix: Solid % Moisture: 2.5

Date Sampled: 09/10/2009 1050
Date Received: 09/10/2009 1820

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49517		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49041		Lab File ID:	B10572.D
Dilution:	1.0			Initial Weight/Volume:	30.96 g
Date Analyzed:	09/26/2009 0522			Final Weight/Volume:	1.0 mL
Date Prepared:	09/16/2009 1513			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		9.9	33
1,2,4,5-Tetrachlorobenzene		ND		9.9	33
1,2,4-Trichlorobenzene		ND		9.9	33
1,2-Dichlorobenzene		ND		9.9	33
1,3-Dichlorobenzene		ND		9.9	33
1,4-Dichlorobenzene		ND		9.9	33
1-Methylnaphthalene		ND		9.9	33
2,2'-oxybis[1-chloropropane]		ND		9.9	33
2,3,4,6-Tetrachlorophenol		ND		9.9	33
2,4,5-Trichlorophenol		ND		9.9	33
2,4,6-Trichlorophenol		ND		9.9	33
2,4-Dichlorophenol		ND		9.9	33
2,4-Dimethylphenol		ND		13	33
2,4-Dinitrophenol		ND		9.9	33
2,4-Dinitrotoluene		ND		9.9	33
2,6-Dinitrotoluene		ND		9.9	33
2-Chloronaphthalene		ND		9.9	33
2-Chlorophenol		ND		9.9	33
2-Methylnaphthalene		ND		9.9	33
2-Methylphenol		ND		20	33
2-Nitroaniline		ND		9.9	170
2-Nitrophenol		ND		9.9	33
3 & 4 Methylphenol		ND		9.9	33
3,3'-Dichlorobenzidine		ND		9.9	66
3-Nitroaniline		ND		9.9	170
4,6-Dinitro-2-methylphenol		ND		9.9	170
4-Bromophenyl phenyl ether		ND		9.9	33
4-Chloro-3-methylphenol		ND		9.9	66
4-Chloroaniline		ND		9.9	66
4-Chlorophenyl phenyl ether		ND		9.9	33
4-Nitroaniline		ND		9.9	170
4-Nitrophenol		ND		9.9	170
Acenaphthene		ND		9.9	33
Acenaphthylene		ND		9.9	33
Acetophenone		ND		9.9	33
Aniline		ND	J	9.9	33
Anthracene		ND		9.9	33
Atrazine		ND		9.9	33
Azobenzene		ND		9.9	33
Benzaldehyde		ND		9.9	33
Benzo[a]anthracene		ND		9.9	33
Benzo[a]pyrene		ND		9.9	33
Benzo[b]fluoranthene		ND		9.9	33
Benzo[g,h,i]perylene		ND		9.9	33
Benzo[k]fluoranthene		ND		9.9	33
Benzoic acid		ND		15	170

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Client: Olin Corporation

Job Number: 360-24499-1
Sdg Number: OCRI-13

Client Sample ID: OC-SB-417-8.0/10-XXX

Lab Sample ID: 360-24499-16
Client Matrix: Solid

% Moisture: 2.5

Date Sampled: 09/10/2009 1050
Date Received: 09/10/2009 1820

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49517		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49041		Lab File ID:	B10572.D
Dilution:	1.0			Initial Weight/Volume:	30.96 g
Date Analyzed:	09/26/2009 0522			Final Weight/Volume:	1.0 mL
Date Prepared:	09/16/2009 1513			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		9.9	33
Benzyl alcohol		ND		28	66
Bis(2-chloroethoxy)methane		ND		9.9	33
Bis(2-chloroethyl)ether		ND		9.9	33
Bis(2-ethylhexyl) phthalate		340 U	~~B~~	9.9	33
Butyl benzyl phthalate		ND		9.9	33
Caprolactam		ND		9.9	33
Carbazole		ND		9.9	33
Chrysene		ND		9.9	33
Dibenz(a,h)anthracene		ND		9.9	33
Dibenzofuran		ND		9.9	33
Diethyl phthalate		ND		9.9	33
Dimethyl phthalate		ND		9.9	33
Di-n-butyl phthalate		ND		29	33
Di-n-octyl phthalate		ND		17	33
Diphenyl oxide		ND		9.9	33
Fluoranthene		ND		9.9	33
Fluorene		ND		9.9	33
Hexachlorobenzene		ND		9.9	33
Hexachlorobutadiene		ND		9.9	33
Hexachlorocyclopentadiene		ND		9.9	66
Hexachloroethane		ND		9.9	33
Indeno[1,2,3-cd]pyrene		ND		9.9	33
Isophorone		ND		9.9	33
Naphthalene		ND		9.9	80
Nitrobenzene		ND		9.9	33
N-Nitrosodimethylamine		ND		12	33
N-Nitrosodi-n-propylamine		ND		9.9	33
N-Nitrosodiphenylamine		ND		9.9	33
Pentachlorophenol		ND		9.9	33
Phenanthrene		ND		9.9	40
Phenol		ND		9.9	33
Pyrene		ND		9.9	33

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	11	X	30 - 130
2-Fluorobiphenyl	54		30 - 130
2-Fluorophenol	30		30 - 130
Nitrobenzene-d5	71		30 - 130
Phenol-d5	50		30 - 130
Terphenyl-d14	81		30 - 130

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Client: Olin Corporation

Job Number: 360-24499-1
Sdg Number: OCRI-13

Client Sample ID: **OC-SB-417-8.0/10-XXX**

Lab Sample ID: 360-24499-16
Client Matrix: Solid % Moisture: 2.5

Date Sampled: 09/10/2009 1050
Date Received: 09/10/2009 1820

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49517		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49041		Lab File ID:	B10572.D
Dilution:	1.0			Initial Weight/Volume:	30.96 g
Date Analyzed:	09/26/2009 0522			Final Weight/Volume:	1.0 mL
Date Prepared:	09/16/2009 1513			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 1

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Tentatively Identified Compound		None	
92-87-5	Benzidine	12.28	23	J

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Client: Olin Corporation

Job Number: 360-24499-1
Sdg Number: OCRI-13

Client Sample ID: **OC-SB-434-0.0/1.0-XXX**

Lab Sample ID: 360-24499-17
Client Matrix: Solid % Moisture: 5.7

Date Sampled: 09/10/2009 0750
Date Received: 09/10/2009 1820

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49520		Instrument ID:	Inst. J
Preparation:	3550B	Prep Batch: 360-48958		Lab File ID:	J03158.D
Dilution:	10			Initial Weight/Volume:	100.23 g
Date Analyzed:	09/26/2009 1619			Final Weight/Volume:	2.0 mL
Date Prepared:	09/15/2009 1206			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodimethylamine		ND		25	110

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	81		30 - 130
2-Fluorobiphenyl	74		30 - 130
2-Fluorophenol	66		30 - 130
Nitrobenzene-d5	78		30 - 130
Phenol-d5	69		30 - 130
Terphenyl-d14	106		30 - 130

Client: Olin Corporation

Job Number: 360-24499-1
Sdg Number: OCRI-13

Client Sample ID: **OC-SB-434-0.0/1.0-XXX**

Lab Sample ID: 360-24499-17
Client Matrix: Solid % Moisture: 5.7

Date Sampled: 09/10/2009 0750
Date Received: 09/10/2009 1820

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49517		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49041		Lab File ID:	B10573.D
Dilution:	10			Initial Weight/Volume:	30.55 g
Date Analyzed:	09/26/2009 0549			Final Weight/Volume:	1.0 mL
Date Prepared:	09/16/2009 1513			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		100	350
1,2,4,5-Tetrachlorobenzene		ND		100	350
1,2,4-Trichlorobenzene		ND		100	350
1,2-Dichlorobenzene		ND		100	350
1,3-Dichlorobenzene		ND		100	350
1,4-Dichlorobenzene		ND		100	350
1-Methylnaphthalene		ND		100	350
2,2'-oxybis[1-chloropropane]		ND		100	350
2,3,4,6-Tetrachlorophenol		ND		100	350
2,4,5-Trichlorophenol		ND		100	350
2,4,6-Trichlorophenol		ND		100	350
2,4-Dichlorophenol		ND		100	350
2,4-Dimethylphenol		ND		140	350
2,4-Dinitrophenol		ND		100	350
2,4-Dinitrotoluene		ND		100	350
2,6-Dinitrotoluene		ND		100	350
2-Chloronaphthalene		ND		100	350
2-Chlorophenol		ND		100	350
2-Methylnaphthalene		ND		100	350
2-Methylphenol		ND		210	350
2-Nitroaniline		ND		100	1700
2-Nitrophenol		ND		100	350
3 & 4 Methylphenol		ND		100	350
3,3'-Dichlorobenzidine		ND		100	690
3-Nitroaniline		ND		100	1700
4,6-Dinitro-2-methylphenol		ND		100	1700
4-Bromophenyl phenyl ether		ND		100	350
4-Chloro-3-methylphenol		ND		100	690
4-Chloroaniline		ND		100	690
4-Chlorophenyl phenyl ether		ND		100	350
4-Nitroaniline		ND		100	1700
4-Nitrophenol		ND		100	1700
Acenaphthene		ND		100	350
Acenaphthylene		ND		100	350
Acetophenone		ND		100	350
Aniline		120	J	100	350
Anthracene		ND		100	350
Atrazine		ND		100	350
Azobenzene		ND		100	350
Benzaldehyde		ND		100	350
Benzo[a]anthracene		120	J	100	350
Benzo[a]pyrene		170	J	100	350
Benzo[b]fluoranthene		240	J	100	350
Benzo[g,h,i]perylene		120	J	100	350
Benzo[k]fluoranthene		ND		100	350
Benzoic acid		ND		160	1700

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Client: Olin Corporation

Job Number: 360-24499-1
Sdg Number: OCRI-13

Client Sample ID: OC-SB-434-0.0/1.0-XXX

Lab Sample ID: 360-24499-17
Client Matrix: Solid % Moisture: 5.7

Date Sampled: 09/10/2009 0750
Date Received: 09/10/2009 1820

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49517		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49041		Lab File ID:	B10573.D
Dilution:	10			Initial Weight/Volume:	30.55 g
Date Analyzed:	09/26/2009 0549			Final Weight/Volume:	1.0 mL
Date Prepared:	09/16/2009 1513			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		100	350
Benzyl alcohol		ND		300	690
Bis(2-chloroethoxy)methane		ND		100	350
Bis(2-chloroethyl)ether		ND		100	350
Butyl benzyl phthalate		ND		100	350
Caprolactam		ND		100	350
Carbazole		ND		100	350
Chrysene		250	J	100	350
Dibenz(a,h)anthracene		ND		100	350
Dibenzofuran		ND		100	350
Diethyl phthalate		ND		100	350
Dimethyl phthalate		ND		100	350
Di-n-butyl phthalate		ND		310	350
Di-n-octyl phthalate		ND		170	350
Diphenyl oxide		ND		100	350
Fluoranthene		510		100	350
Fluorene		ND		100	350
Hexachlorobenzene		ND		100	350
Hexachlorobutadiene		ND		100	350
Hexachlorocyclopentadiene		ND		100	690
Hexachloroethane		ND		100	350
Indeno[1,2,3-cd]pyrene		140	J	100	350
Isophorone		ND		100	350
Naphthalene		ND		100	830
Nitrobenzene		ND		100	350
N-Nitrosodimethylamine		ND		120	350
N-Nitrosodi-n-propylamine		ND		100	350
Pentachlorophenol		ND		100	350
Phenanthrene		340	J	100	420
Phenol		ND		100	350
Pyrene		420		100	350

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	68		30 - 130
2-Fluorophenol	90		30 - 130
2-Fluorobiphenyl	70		30 - 130
Nitrobenzene-d5	76		30 - 130
Phenol-d5	77		30 - 130
Terphenyl-d14	79		30 - 130

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Client: Olin Corporation

Job Number: 360-24499-1
Sdg Number: OCRI-13

Client Sample ID: **OC-SB-434-0.0/1.0-XXX**

Lab Sample ID: 360-24499-17
Client Matrix: Solid

% Moisture: 5.7

Date Sampled: 09/10/2009 0750
Date Received: 09/10/2009 1820

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49517		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49041		Lab File ID:	B10573.D
Dilution:	10			Initial Weight/Volume:	30.55 g
Date Analyzed:	09/26/2009 0549			Final Weight/Volume:	1.0 mL
Date Prepared:	09/16/2009 1513			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 1

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Tentatively Identified Compound		None	
~~92-87-5~~	~~Benzidine~~	~~12.28~~	~~250~~	~~J~~

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Client: Olin Corporation

Job Number: 360-24499-1
Sdg Number: OCRI-13

Client Sample ID: OC-SB-434-0.0/1.0-XXX

Lab Sample ID: 360-24499-17
Client Matrix: Solid

% Moisture: 5.7

Date Sampled: 09/10/2009 0750
Date Received: 09/10/2009 1820

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49623		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49041		Lab File ID:	B10617.D
Dilution:	10			Initial Weight/Volume:	30.55 g
Date Analyzed:	09/29/2009 0144	Run Type: DL2		Final Weight/Volume:	1.0 mL
Date Prepared:	09/16/2009 1513			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Diphenylamine		250	J	100	350

Client: Olin Corporation

Job Number: 360-24499-1
Sdg Number: OCRI-13

Client Sample ID: **OC-SB-434-0.0/1.0-XXX**

Lab Sample ID: 360-24499-17
Client Matrix: Solid
% Moisture: 5.7

Date Sampled: 09/10/2009 0750
Date Received: 09/10/2009 1820

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49623		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49041		Lab File ID:	B10617.D
Dilution:	10			Initial Weight/Volume:	30.55 g
Date Analyzed:	09/29/2009 0144	Run Type: DL2		Final Weight/Volume:	1.0 mL
Date Prepared:	09/16/2009 1513			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** **0**

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Tentatively Identified Compound		None	

Client: Olin Corporation

Job Number: 360-24499-1
Sdg Number: OCRI-13

Client Sample ID: **OC-SB-434-0.0/1.0-XXX**

Lab Sample ID: 360-24499-17
Client Matrix: Solid

% Moisture: 5.7

Date Sampled: 09/10/2009 0750
Date Received: 09/10/2009 1820

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49639		Instrument ID:	NOEQUIP
Preparation:	3546	Prep Batch: 360-49041		Lab File ID:	N/A
Dilution:	10			Initial Weight/Volume:	30.55 g
Date Analyzed:	09/29/2009 0144	Run Type: DL3		Final Weight/Volume:	1.0 mL
Date Prepared:	09/16/2009 1513			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodiphenylamine		300	J	100	350

Client: Olin Corporation

Job Number: 360-24499-1
Sdg Number: OCRI-13

Client Sample ID: **OC-SB-434-0.0/1.0-XXX**

Lab Sample ID: 360-24499-17
Client Matrix: Solid

% Moisture: 5.7

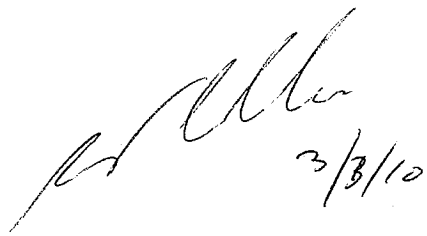
Date Sampled: 09/10/2009 0750
Date Received: 09/10/2009 1820

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49623		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49041		Lab File ID:	B10605.D
Dilution:	20			Initial Weight/Volume:	30.55 g
Date Analyzed:	09/28/2009 2007	Run Type: DL2		Final Weight/Volume:	1.0 mL
Date Prepared:	09/16/2009 1513			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Bis(2-ethylhexyl) phthalate		9100	U	210	690

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	0	X	30 - 130
2-Fluorophenol	0	X	30 - 130
2-Fluorobiphenyl	0	X	30 - 130
Nitrobenzene-d5	0	X	30 - 130
Phenol-d5	0	X	30 - 130
Terphenyl-d14	0	X	30 - 130



Client: Olin Corporation

Job Number: 360-24499-1
Sdg Number: OCRI-13

Client Sample ID: OC-SB-434-0.0/1.0-XXX

Lab Sample ID: 360-24499-17
Client Matrix: Solid

% Moisture: 5.7

Date Sampled: 09/10/2009 0750
Date Received: 09/10/2009 1820

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49623		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49041		Lab File ID:	B10605.D
Dilution:	20			Initial Weight/Volume:	30.55 g
Date Analyzed:	09/28/2009 2007	Run Type:	DL2	Final Weight/Volume:	1.0 mL
Date Prepared:	09/16/2009 1513			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 0

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Tentatively Identified Compound		None	

Client: Olin Corporation

Job Number: 360-24499-1
Sdg Number: OCRI-13

Client Sample ID: **OC-SB-434-7.0-/9.0-XXX**

Lab Sample ID: 360-24499-19
Client Matrix: Solid

% Moisture: 6.8

Date Sampled: 09/10/2009 0815
Date Received: 09/10/2009 1820

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49518		Instrument ID:	Inst. J
Preparation:	3550B	Prep Batch: 360-49155		Lab File ID:	J03131.D
Dilution:	1.0			Initial Weight/Volume:	100.56 g
Date Analyzed:	09/25/2009 2021			Final Weight/Volume:	1.0 mL
Date Prepared:	09/18/2009 1122			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodimethylamine		ND		1.2	5.3

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	76		30 - 130
2-Fluorobiphenyl	59		30 - 130
2-Fluorophenol	58		30 - 130
Nitrobenzene-d5	54		30 - 130
Phenol-d5	66		30 - 130
Terphenyl-d14	81		30 - 130

Client: Olin Corporation

Job Number: 360-24499-1
Sdg Number: OCRI-13

Client Sample ID: OC-SB-434-7.0-/9.0-XXX

Lab Sample ID: 360-24499-19
Client Matrix: Solid

% Moisture: 6.8

Date Sampled: 09/10/2009 0815
Date Received: 09/10/2009 1820

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49517		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49041		Lab File ID:	B10575.D
Dilution:	1.0			Initial Weight/Volume:	30.52 g
Date Analyzed:	09/26/2009 0644			Final Weight/Volume:	1.0 mL
Date Prepared:	09/16/2009 1513			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		11	35
1,2,4,5-Tetrachlorobenzene		ND		11	35
1,2,4-Trichlorobenzene		ND		11	35
1,2-Dichlorobenzene		ND		11	35
1,3-Dichlorobenzene		ND		11	35
1,4-Dichlorobenzene		ND		11	35
1-Methylnaphthalene		ND		11	35
2,2'-oxybis[1-chloropropane]		ND		11	35
2,3,4,6-Tetrachlorophenol		ND		11	35
2,4,5-Trichlorophenol		ND		11	35
2,4,6-Trichlorophenol		ND		11	35
2,4-Dichlorophenol		ND		11	35
2,4-Dimethylphenol		ND		14	35
2,4-Dinitrophenol		ND		11	35
2,4-Dinitrotoluene		ND		11	35
2,6-Dinitrotoluene		ND		11	35
2-Chloronaphthalene		ND		11	35
2-Chlorophenol		ND		11	35
2-Methylnaphthalene		ND		11	35
2-Methylphenol		ND		21	35
2-Nitroaniline		ND		11	180
2-Nitrophenol		ND		11	35
3 & 4 Methylphenol		ND		11	35
3,3'-Dichlorobenzidine		ND		11	70
3-Nitroaniline		ND		11	180
4,6-Dinitro-2-methylphenol		ND		11	180
4-Bromophenyl phenyl ether		ND		11	35
4-Chloro-3-methylphenol		ND		11	70
4-Chloroaniline		ND		11	70
4-Chlorophenyl phenyl ether		ND		11	35
4-Nitroaniline		ND		11	180
4-Nitrophenol		ND		11	180
Acenaphthene		ND		11	35
Acenaphthylene		ND		11	35
Acetophenone		ND		11	35
Aniline		ND	J	11	35
Anthracene		ND		11	35
Atrazine		ND		11	35
Azobenzene		ND		11	35
Benzaldehyde		ND		11	35
Benzo[a]anthracene		ND		11	35
Benzo[a]pyrene		ND		11	35
Benzo[b]fluoranthene		ND		11	35
Benzo[g,h,i]perylene		ND		11	35
Benzo[k]fluoranthene		ND		11	35
Benzoic acid		ND		16	180

Client: Olin Corporation

Job Number: 360-24499-1
Sdg Number: OCRI-13

Client Sample ID: **OC-SB-434-7.0-/9.0-XXX**

Lab Sample ID: 360-24499-19
Client Matrix: Solid
% Moisture: 6.8

Date Sampled: 09/10/2009 0815
Date Received: 09/10/2009 1820

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49517		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49041		Lab File ID:	B10575.D
Dilution:	1.0			Initial Weight/Volume:	30.52 g
Date Analyzed:	09/26/2009 0644			Final Weight/Volume:	1.0 mL
Date Prepared:	09/16/2009 1513			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		11	35
Benzyl alcohol		ND		30	70
Bis(2-chloroethoxy)methane		ND		11	35
Bis(2-chloroethyl)ether		ND		11	35
Bis(2-ethylhexyl) phthalate		380	U ~~B~~	11	35
Butyl benzyl phthalate		ND		11	35
Caprolactam		ND		11	35
Carbazole		ND		11	35
Chrysene		ND		11	35
Dibenz(a,h)anthracene		ND		11	35
Dibenzofuran		ND		11	35
Diethyl phthalate		ND		11	35
Dimethyl phthalate		ND		11	35
Di-n-butyl phthalate		ND		31	35
Di-n-octyl phthalate		ND		18	35
Diphenyl oxide		ND		11	35
Diphenylamine		ND		11	35
Fluoranthene		ND		11	35
Fluorene		ND		11	35
Hexachlorobenzene		ND		11	35
Hexachlorobutadiene		ND		11	35
Hexachlorocyclopentadiene		ND		11	70
Hexachloroethane		ND		11	35
Indeno[1,2,3-cd]pyrene		ND		11	35
Isophorone		ND		11	35
Naphthalene		ND		11	84
Nitrobenzene		ND		11	35
~~N-Nitrosodimethylamine~~		ND		12	35
N-Nitrosodi-n-propylamine		ND		11	35
N-Nitrosodiphenylamine		ND		11	35
Pentachlorophenol		ND		11	35
Phenanthrene		ND		11	42
Phenol		ND		11	35
Pyrene		ND		11	35

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	63		30 - 130
2-Fluorophenol	72		30 - 130
2-Fluorobiphenyl	60		30 - 130
Nitrobenzene-d5	63		30 - 130
Phenol-d5	68		30 - 130
Terphenyl-d14	75		30 - 130

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Client: Olin Corporation

Job Number: 360-24499-1
Sdg Number: OCRI-13

Client Sample ID: **OC-SB-434-7.0-/9.0-XXX**

Lab Sample ID: 360-24499-19
Client Matrix: Solid % Moisture: 6.8

Date Sampled: 09/10/2009 0815
Date Received: 09/10/2009 1820

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49517		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49041		Lab File ID:	B10575.D
Dilution:	1.0			Initial Weight/Volume:	30.52 g
Date Analyzed:	09/26/2009 0644			Final Weight/Volume:	1.0 mL
Date Prepared:	09/16/2009 1513			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 10

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
149-57-5	Hexanoic acid, 2-ethyl-	7.82	24	T J N
128-37-0	Butylated Hydroxytoluene	9.86	19	T J N
27193-28-8	Phenol, (1,1,3,3-tetramethylbutyl)-	10.29	13	T J N
~~3910-35-8~~	~~1H-Indene, 2,3-dihydro-1,1,3-trimethyl-3-~~	~~10.79~~	~~19~~	~~T J N~~
~~22768-22-5~~	~~2,4-Diphenyl-4-methyl-2(E)-pentene~~	~~11.20~~	~~11~~	~~T J N~~
~~112-39-0~~	~~Hexadecanoic acid, methyl ester~~	~~11.41~~	~~8.3~~	~~T J N~~
112-61-8	Octadecanoic acid, methyl ester	12.08	8.2	T J N
629-92-5	Nonadecane	13.18	14	T J N
1928-30-9	Tricosane, 2-methyl-	13.72	17	T J N
112-84-5	Erucylamide	15.66	52	T J N

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Client: Olin Corporation

Job Number: 360-24499-1
Sdg Number: OCRI-13

Client Sample ID: **OC-SB-450-0.0/1.0-XXX**

Lab Sample ID: 360-24499-20
Client Matrix: Solid % Moisture: 5.7

Date Sampled: 09/09/2009 1340
Date Received: 09/10/2009 1820

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49518		Instrument ID:	Inst. J
Preparation:	3550B	Prep Batch: 360-49155		Lab File ID:	J03132.D
Dilution:	10			Initial Weight/Volume:	100.50 g
Date Analyzed:	09/25/2009 2053			Final Weight/Volume:	1.0 mL
Date Prepared:	09/18/2009 1122			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodimethylamine		ND		12	53

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	77		30 - 130
2-Fluorobiphenyl	77		30 - 130
2-Fluorophenol	64		30 - 130
Nitrobenzene-d5	73		30 - 130
Phenol-d5	70		30 - 130
Terphenyl-d14	96		30 - 130

Client: Olin Corporation

Job Number: 360-24499-1
Sdg Number: OCRI-13

Client Sample ID: OC-SB-450-0.0/1.0-XXX

Lab Sample ID: 360-24499-20
Client Matrix: Solid

% Moisture: 5.7

Date Sampled: 09/09/2009 1340
Date Received: 09/10/2009 1820

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49517		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49041		Lab File ID:	B10576.D
Dilution:	10			Initial Weight/Volume:	30.31 g
Date Analyzed:	09/26/2009 0712			Final Weight/Volume:	1.0 mL
Date Prepared:	09/16/2009 1513			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		100	350
1,2,4,5-Tetrachlorobenzene		ND		100	350
1,2,4-Trichlorobenzene		ND		100	350
1,2-Dichlorobenzene		ND		100	350
1,3-Dichlorobenzene		ND		100	350
1,4-Dichlorobenzene		ND		100	350
1-Methylnaphthalene		ND		100	350
2,2'-oxybis[1-chloropropane]		ND		100	350
2,3,4,6-Tetrachlorophenol		ND		100	350
2,4,5-Trichlorophenol		ND		100	350
2,4,6-Trichlorophenol		ND		100	350
2,4-Dichlorophenol		ND		100	350
2,4-Dimethylphenol		ND		140	350
2,4-Dinitrophenol		ND		100	350
2,4-Dinitrotoluene		ND		100	350
2,6-Dinitrotoluene		ND		100	350
2-Chloronaphthalene		ND		100	350
2-Chlorophenol		ND		100	350
2-Methylnaphthalene		ND		100	350
2-Methylphenol		ND		210	350
2-Nitroaniline		ND		100	1700
2-Nitrophenol		ND		100	350
3 & 4 Methylphenol		ND		100	350
3,3'-Dichlorobenzidine		ND		100	700
3-Nitroaniline		ND		100	1700
4,6-Dinitro-2-methylphenol		ND		100	1700
4-Bromophenyl phenyl ether		ND		100	350
4-Chloro-3-methylphenol		ND		100	700
4-Chloroaniline		ND		100	700
4-Chlorophenyl phenyl ether		ND		100	350
4-Nitroaniline		ND		100	1700
4-Nitrophenol		ND		100	1700
Acenaphthene		ND		100	350
Acenaphthylene		ND		100	350
Acetophenone		ND		100	350
Aniline		ND J		100	350
Anthracene		230	J	100	350
Atrazine		ND		100	350
Azobenzene		ND		100	350
Benzaldehyde		ND		100	350
Benzo[a]anthracene		800		100	350
Benzo[a]pyrene		740		100	350
Benzo[b]fluoranthene		980		100	350
Benzo[g,h,i]perylene		420		100	350
Benzo[k]fluoranthene		430		100	350
Benzoic acid		ND		160	1700

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Client: Olin Corporation

Job Number: 360-24499-1
Sdg Number: OCRI-13

Client Sample ID: OC-SB-450-0.0/1.0-XXX

Lab Sample ID: 360-24499-20
Client Matrix: Solid

% Moisture: 5.7

Date Sampled: 09/09/2009 1340
Date Received: 09/10/2009 1820

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49517		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49041		Lab File ID:	B10576.D
Dilution:	10			Initial Weight/Volume:	30.31 g
Date Analyzed:	09/26/2009 0712			Final Weight/Volume:	1.0 mL
Date Prepared:	09/16/2009 1513			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		100	350
Benzyl alcohol		ND		300	700
Bis(2-chloroethoxy)methane		ND		100	350
Bis(2-chloroethyl)ether		ND		100	350
Bis(2-ethylhexyl) phthalate		480	~~B~~	100	350
Butyl benzyl phthalate		ND		100	350
Caprolactam		ND		100	350
Carbazole		110	J	100	350
Chrysene		850		100	350
Dibenz(a,h)anthracene		150	J	100	350
Dibenzofuran		ND		100	350
Diethyl phthalate		ND		100	350
Dimethyl phthalate		ND		100	350
Di-n-butyl phthalate		380	~~B~~	310	350
Di-n-octyl phthalate		ND		180	350
Diphenyl oxide		ND		100	350
Diphenylamine		ND		100	350
Fluoranthene		1700		100	350
Fluorene		ND		100	350
Hexachlorobenzene		ND		100	350
Hexachlorobutadiene		ND		100	350
Hexachlorocyclopentadiene		ND		100	700
Hexachloroethane		ND		100	350
Indeno[1,2,3-cd]pyrene		430		100	350
Isophorone		ND		100	350
Naphthalene		ND		100	840
Nitrobenzene		ND		100	350
~~N-Nitrosodimethylamine~~		ND		120	350
N-Nitrosodi-n-propylamine		ND		100	350
N-Nitrosodiphenylamine		ND		100	350
Pentachlorophenol		ND		100	350
Phenanthrene		870		100	420
Phenol		ND		100	350
Pyrene		1500		100	350

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	68		30 - 130
2-Fluorophenol	79		30 - 130
2-Fluorobiphenyl	64		30 - 130
Nitrobenzene-d5	67		30 - 130
Phenol-d5	68		30 - 130
Terphenyl-d14	77		30 - 130

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Client: Olin Corporation

Job Number: 360-24499-1
Sdg Number: OCRI-13

Client Sample ID: **OC-SB-450-0.0/1.0-XXX**

Lab Sample ID: 360-24499-20
Client Matrix: Solid % Moisture: 5.7

Date Sampled: 09/09/2009 1340
Date Received: 09/10/2009 1820

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49517		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49041		Lab File ID:	B10576.D
Dilution:	10			Initial Weight/Volume:	30.31 g
Date Analyzed:	09/26/2009 0712			Final Weight/Volume:	1.0 mL
Date Prepared:	09/16/2009 1513			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 10

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
128-37-0	Butylated Hydroxytoluene	9.85	140	T J N
~~615-22-5~~	~~Benzothiazole, 2-(methylthio)-~~	~~10.41~~	~~200~~	~~T J N~~
~~3910-35-8~~	~~1H-Indene, 2,3-dihydro-1,1,3-trimethyl-3~~	~~10.79~~	~~250~~	~~T J N~~
5129-60-2	Pentadecanoic acid, 14-methyl-, methyl e	11.41	88	T J N
203-64-5	4H-Cyclopenta[def]phenanthrene	11.66	230	T J N
84-65-1	9,10-Anthracenedione	11.82	97	T J N
~~92-87-5~~	~~Benzidine~~	~~12.27~~	~~240~~	~~J~~
605-2-7	Naphthalene, 1-phenyl-	12.38	210	T J N
13287-24-6	Nonadecane, 9-methyl-	16.18	830	T J N
198-55-0	Perylene	16.38	650	T J N

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Client: Olin Corporation

Job Number: 360-24499-1
Sdg Number: OCRI-13

Client Sample ID: **OC-SB-450-8.0/10-XXX**

Lab Sample ID: 360-24499-22
Client Matrix: Solid
% Moisture: 12.9

Date Sampled: 09/09/2009 1355
Date Received: 09/10/2009 1820

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49518		Instrument ID:	Inst. J
Preparation:	3550B	Prep Batch: 360-49155		Lab File ID:	J03133.D
Dilution:	1.0			Initial Weight/Volume:	100.50 g
Date Analyzed:	09/25/2009 2126			Final Weight/Volume:	1.0 mL
Date Prepared:	09/18/2009 1122			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodimethylamine		ND		1.3	5.7

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	78		30 - 130
2-Fluorobiphenyl	59		30 - 130
2-Fluorophenol	61		30 - 130
Nitrobenzene-d5	58		30 - 130
Phenol-d5	66		30 - 130
Terphenyl-d14	86		30 - 130

Client: Olin Corporation

Job Number: 360-24499-1
Sdg Number: OCRI-13

Client Sample ID: OC-SB-450-8.0/10-XXX

Lab Sample ID: 360-24499-22
Client Matrix: Solid
% Moisture: 12.9

Date Sampled: 09/09/2009 1355
Date Received: 09/10/2009 1820

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49517		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49041		Lab File ID:	B10578.D
Dilution:	1.0			Initial Weight/Volume:	30.28 g
Date Analyzed:	09/26/2009 0806			Final Weight/Volume:	1.0 mL
Date Prepared:	09/16/2009 1513			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		11	38
1,2,4,5-Tetrachlorobenzene		ND		11	38
1,2,4-Trichlorobenzene		ND		11	38
1,2-Dichlorobenzene		ND		11	38
1,3-Dichlorobenzene		ND		11	38
1,4-Dichlorobenzene		ND		11	38
1-Methylnaphthalene		ND		11	38
2,2'-oxybis[1-chloropropane]		ND		11	38
2,3,4,6-Tetrachlorophenol		ND		11	38
2,4,5-Trichlorophenol		ND		11	38
2,4,6-Trichlorophenol		ND		11	38
2,4-Dichlorophenol		ND		11	38
2,4-Dimethylphenol		ND		15	38
2,4-Dinitrophenol		ND		11	38
2,4-Dinitrotoluene		ND		11	38
2,6-Dinitrotoluene		ND		11	38
2-Chloronaphthalene		ND		11	38
2-Chlorophenol		ND		11	38
2-Methylnaphthalene		ND		11	38
2-Methylphenol		ND		23	38
2-Nitroaniline		ND		11	190
2-Nitrophenol		ND		11	38
3 & 4 Methylphenol		ND		11	38
3,3'-Dichlorobenzidine		ND		11	76
3-Nitroaniline		ND		11	190
4,6-Dinitro-2-methylphenol		ND		11	190
4-Bromophenyl phenyl ether		ND		11	38
4-Chloro-3-methylphenol		ND		11	76
4-Chloroaniline		ND		11	76
4-Chlorophenyl phenyl ether		ND		11	38
4-Nitroaniline		ND		11	190
4-Nitrophenol		ND		11	190
Acenaphthene		ND		11	38
Acenaphthylene		ND		11	38
Acetophenone		ND		11	38
Aniline		ND	J	11	38
Anthracene		ND		11	38
Atrazine		ND		11	38
Azobenzene		ND		11	38
Benzaldehyde		ND		11	38
Benzo[a]anthracene		ND		11	38
Benzo[a]pyrene		ND		11	38
Benzo[b]fluoranthene		ND		11	38
Benzo[g,h,i]perylene		ND		11	38
Benzo[k]fluoranthene		ND		11	38
Benzoic acid		ND		17	190

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Client: Olin Corporation

Job Number: 360-24499-1
Sdg Number: OCRI-13

Client Sample ID: OC-SB-450-8.0/10-XXX

Lab Sample ID: 360-24499-22
Client Matrix: Solid

% Moisture: 12.9

Date Sampled: 09/09/2009 1355
Date Received: 09/10/2009 1820

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49517		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49041		Lab File ID:	B10578.D
Dilution:	1.0			Initial Weight/Volume:	30.28 g
Date Analyzed:	09/26/2009 0806			Final Weight/Volume:	1.0 mL
Date Prepared:	09/16/2009 1513			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		11	38
Benzyl alcohol		ND		32	76
Bis(2-chloroethoxy)methane		ND		11	38
Bis(2-chloroethyl)ether		ND		11	38
Bis(2-ethylhexyl) phthalate		300 J	B	11	38
Butyl benzyl phthalate		ND		11	38
Caprolactam		ND		11	38
Carbazole		ND		11	38
Chrysene		ND		11	38
Dibenz(a,h)anthracene		ND		11	38
Dibenzofuran		ND		11	38
Diethyl phthalate		ND		11	38
Dimethyl phthalate		ND		11	38
Di-n-butyl phthalate		ND		33	38
Di-n-octyl phthalate		ND		19	38
Diphenyl oxide		ND		11	38
Diphenylamine		ND		11	38
Fluoranthene		ND		11	38
Fluorene		ND		11	38
Hexachlorobenzene		ND		11	38
Hexachlorobutadiene		ND		11	38
Hexachlorocyclopentadiene		ND		11	76
Hexachloroethane		ND		11	38
Indeno[1,2,3-cd]pyrene		ND		11	38
Isophorone		ND		11	38
Naphthalene		ND		11	91
Nitrobenzene		ND		11	38
N-Nitrosodimethylamine		ND		13	38
N-Nitrosodi-n-propylamine		ND		11	38
N-Nitrosodiphenylamine		ND		11	38
Pentachlorophenol		ND		11	38
Phenanthrene		ND		11	46
Phenol		ND		11	38
Pyrene		ND		11	38

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	60		30 - 130
2-Fluorophenol	78		30 - 130
2-Fluorobiphenyl	63		30 - 130
Nitrobenzene-d5	67		30 - 130
Phenol-d5	72		30 - 130
Terphenyl-d14	78		30 - 130

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Client: Olin Corporation

Job Number: 360-24499-1
Sdg Number: OCRI-13

Client Sample ID: **OC-SB-450-8.0/10-XXX**

Lab Sample ID: 360-24499-22
Client Matrix: Solid % Moisture: 12.9

Date Sampled: 09/09/2009 1355
Date Received: 09/10/2009 1820

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49517		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49041		Lab File ID:	B10578.D
Dilution:	1.0			Initial Weight/Volume:	30.28 g
Date Analyzed:	09/26/2009 0806			Final Weight/Volume:	1.0 mL
Date Prepared:	09/16/2009 1513			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 7

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
141-79-7	3-Penten-2-one, 4-methyl-	5.02	13	T J N
~~615-22-5~~	~~Benzothiazole, 2-(methylthio)-~~	~~10.41~~	~~14~~	~~T J N~~
~~3910-35-8~~	~~1H-Indene, 2,3-dihydro-1,1,3-trimethyl-3~~	~~10.78~~	~~10~~	~~T J N~~
31307-59-2	1,1"-Biphenyl, (phenylmethyl)-	11.82	9.5	T J N
~~92-87-5~~	~~Benzidine~~	~~12.28~~	~~26~~	~~J~~
18435-45-5	1-Nonadecene	13.84	22	T J N
111-2-4	2,6,10,14,18,22-Tetracosahexaene, 2,6,10	15.81	240	T J N

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SAMPLE SUMMARY

Client: Olin Corporation

Job Number: 360-24499-2
Sdg Number: OCRI-13A

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
360-24499-3	OC-SB-469-28/30-XXX	Solid	09/09/2009 1040	09/09/2009 1810
360-24499-15	OC-SB-417-20/22-XXX	Solid	09/10/2009 1205	09/10/2009 1820
360-24499-18	OC-SB-434-15/16-XXX	Solid	09/10/2009 0935	09/10/2009 1820
360-24499-21	OC-SB-450-33/35-XXX	Solid	09/09/2009 1655	09/10/2009 1820

Form I's updated
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Client: Olin Corporation

Job Number: 360-24499-2
Sdg Number: OCRI-13A

Client Sample ID: OC-SB-469-28/30-XXX

Lab Sample ID: 360-24499-3
Client Matrix: Solid % Moisture: 9.6

Date Sampled: 09/09/2009 1040
Date Received: 09/09/2009 1810

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49444		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49016		Lab File ID:	B10535.D
Dilution:	1.0			Initial Weight/Volume:	30.59 g
Date Analyzed:	09/24/2009 0628			Final Weight/Volume:	1.0 mL
Date Prepared:	09/16/2009 1153			Injection Volume:	

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		11	36
1,2,4,5-Tetrachlorobenzene		ND		11	36
1,2,4-Trichlorobenzene		ND		11	36
1,2-Dichlorobenzene		ND		11	36
1,3-Dichlorobenzene		ND		11	36
1,4-Dichlorobenzene		ND		11	36
1-Methylnaphthalene		ND		11	36
2,2'-oxybis[1-chloropropane]		ND		11	36
2,3,4,6-Tetrachlorophenol		ND		11	36
2,4,5-Trichlorophenol		ND		11	36
2,4,6-Trichlorophenol		ND		11	36
2,4-Dichlorophenol		ND		11	36
2,4-Dimethylphenol		ND		14	36
2,4-Dinitrophenol		ND		11	36
2,4-Dinitrotoluene		ND		11	36
2,6-Dinitrotoluene		ND		11	36
2-Chloronaphthalene		ND		11	36
2-Chlorophenol		ND		11	36
2-Methylnaphthalene		ND		11	36
2-Methylphenol		ND		22	36
2-Nitroaniline		ND		11	180
2-Nitrophenol		ND		11	36
3 & 4 Methylphenol		ND		11	36
3,3'-Dichlorobenzidine		ND		11	72
3-Nitroaniline		ND		11	180
4,6-Dinitro-2-methylphenol		ND		11	180
4-Bromophenyl phenyl ether		ND		11	36
4-Chloro-3-methylphenol		ND		11	72
4-Chloroaniline		ND		11	72
4-Chlorophenyl phenyl ether		ND		11	36
4-Nitroaniline		ND		11	180
4-Nitrophenol		ND		11	180
Acenaphthene		ND		11	36
Acenaphthylene		ND		11	36
Acetophenone		ND		11	36
Aniline		ND		11	36
Anthracene		ND		11	36
Atrazine		ND		11	36
Azobenzene		ND		11	36
Benzaldehyde		ND		11	36
Benzo[a]anthracene		ND		11	36
Benzo[a]pyrene		ND		11	36
Benzo[b]fluoranthene		ND		11	36
Benzo[g,h,i]perylene		ND		11	36
Benzo[k]fluoranthene		ND		11	36
Benzoic acid		ND		16	180

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Client: Olin Corporation

Job Number: 360-24499-2
Sdg Number: OCRI-13A

Client Sample ID: **OC-SB-469-28/30-XXX**

Lab Sample ID: 360-24499-3
Client Matrix: Solid

% Moisture: 9.6

Date Sampled: 09/09/2009 1040
Date Received: 09/09/2009 1810

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49444		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49016		Lab File ID:	B10535.D
Dilution:	1.0			Initial Weight/Volume:	30.59 g
Date Analyzed:	09/24/2009 0628			Final Weight/Volume:	1.0 mL
Date Prepared:	09/16/2009 1153			Injection Volume:	

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		11	36
Benzyl alcohol		ND		31	72
Bis(2-chloroethoxy)methane		ND		11	36
Bis(2-chloroethyl)ether		ND		11	36
Bis(2-ethylhexyl) phthalate		230	LL B	11	36
Butyl benzyl phthalate		ND		11	36
Caprolactam		ND		11	36
Carbazole		ND		11	36
Chrysene		ND		11	36
Dibenz(a,h)anthracene		ND		11	36
Dibenzofuran		ND		11	36
Diethyl phthalate		ND		11	36
Dimethyl phthalate		ND		11	36
Di-n-butyl phthalate		ND		32	36
Di-n-octyl phthalate		ND		18	36
Diphenyl oxide		ND		11	36
Fluoranthene		ND		11	36
Fluorene		ND		11	36
Hexachlorobenzene		ND		11	36
Hexachlorobutadiene		ND		11	36
Hexachlorocyclopentadiene		ND		11	72
Hexachloroethane		ND		11	36
Indeno[1,2,3-cd]pyrene		ND		11	36
Isophorone		ND		11	36
Naphthalene		ND		11	87
Nitrobenzene		ND		11	36
N-Nitrosodimethylamine		ND		13	36
N-Nitrosodi-n-propylamine		ND		11	36
N-Nitrosodiphenylamine		ND		11	36
Pentachlorophenol		ND		11	36
Phenanthrene		ND		11	43
Phenol		ND		11	36
Pyrene		ND		11	36

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	66		30 - 130
2-Fluorobiphenyl	68		30 - 130
2-Fluorophenol	88		30 - 130
Nitrobenzene-d5	74		30 - 130
Phenol-d5	75		30 - 130
Terphenyl-d14	76		30 - 130

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Client: Olin Corporation

Job Number: 360-24499-2
Sdg Number: OCRI-13A

Client Sample ID: **OC-SB-469-28/30-XXX**

Lab Sample ID: 360-24499-3
Client Matrix: Solid % Moisture: 9.6

Date Sampled: 09/09/2009 1040
Date Received: 09/09/2009 1810

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49444		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49016		Lab File ID:	B10535.D
Dilution:	1.0			Initial Weight/Volume:	30.59 g
Date Analyzed:	09/24/2009 0628			Final Weight/Volume:	1.0 mL
Date Prepared:	09/16/2009 1153			Injection Volume:	

Tentatively Identified Compounds **Number TIC's Found:** 8

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
104-76-7	1-Hexanol, 2-ethyl-	7.51	15	T J N
541-2-6	Cyclopentasiloxane, decamethyl-	8.08	8.5	T J N
128-37-0	Butylated Hydroxytoluene	10.05	10	T J N
140-66-9	Phenol, 4-(1,1,3,3-tetramethylbutyl)-	10.50	8.8	T J N
3910-35-8	1H-Indene, 2,3-dihydro-1,1,3-trimethyl-3	10.99	12	T J N
22768-22-5	2,4-Diphenyl-4-methyl-2(E)-pentene	11.41	7.7	T J N
112-61-8	Octadecanoic acid, methyl ester	12.30	8.9	T J N
7683-64-9	Squalene	16.10	88	T J N

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Client: Olin Corporation

Job Number: 360-24499-2
Sdg Number: OCRI-13A

Client Sample ID: **OC-SB-417-20/22-XXX**

Lab Sample ID: 360-24499-15
Client Matrix: Solid
% Moisture: 18.2

Date Sampled: 09/10/2009 1205
Date Received: 09/10/2009 1820

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49517		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49041		Lab File ID:	B10571.D
Dilution:	1.0			Initial Weight/Volume:	30.12 g
Date Analyzed:	09/26/2009 0454			Final Weight/Volume:	1.0 mL
Date Prepared:	09/16/2009 1513			Injection Volume:	

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		12	41
1,2,4,5-Tetrachlorobenzene		ND		12	41
1,2,4-Trichlorobenzene		ND		12	41
1,2-Dichlorobenzene		ND		12	41
1,3-Dichlorobenzene		ND		12	41
1,4-Dichlorobenzene		ND		12	41
1-Methylnaphthalene		ND		12	41
2,2'-oxybis[1-chloropropane]		ND		12	41
2,3,4,6-Tetrachlorophenol		ND		12	41
2,4,5-Trichlorophenol		ND		12	41
2,4,6-Trichlorophenol		ND		12	41
2,4-Dichlorophenol		ND		12	41
2,4-Dimethylphenol		ND		16	41
2,4-Dinitrophenol		ND		12	41
2,4-Dinitrotoluene		ND		12	41
2,6-Dinitrotoluene		ND		12	41
2-Chloronaphthalene		ND		12	41
2-Chlorophenol		ND		12	41
2-Methylnaphthalene		ND		12	41
2-Methylphenol		ND		24	41
2-Nitroaniline		ND		12	200
2-Nitrophenol		ND		12	41
3 & 4 Methylphenol		ND		12	41
3,3'-Dichlorobenzidine		ND		12	81
3-Nitroaniline		ND		12	200
4,6-Dinitro-2-methylphenol		ND		12	200
4-Bromophenyl phenyl ether		ND		12	41
4-Chloro-3-methylphenol		ND		12	81
4-Chloroaniline		ND		12	81
4-Chlorophenyl phenyl ether		ND		12	41
4-Nitroaniline		ND		12	200
4-Nitrophenol		ND		12	200
Acenaphthene		ND		12	41
Acenaphthylene		ND		12	41
Acetophenone		ND		12	41
Aniline		ND	J	12	41
Anthracene		ND		12	41
Atrazine		ND		12	41
Azobenzene		ND		12	41
Benzaldehyde		ND		12	41
Benzo[a]anthracene		ND		12	41
Benzo[a]pyrene		ND		12	41
Benzo[b]fluoranthene		ND		12	41
Benzo[g,h,i]perylene		ND		12	41
Benzo[k]fluoranthene		ND		12	41
Benzoic acid		ND		18	200

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Client: Olin Corporation

Job Number: 360-24499-2
Sdg Number: OCRI-13A

Client Sample ID: **OC-SB-417-20/22-XXX**

Lab Sample ID: 360-24499-15
Client Matrix: Solid % Moisture: 18.2

Date Sampled: 09/10/2009 1205
Date Received: 09/10/2009 1820

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49517		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49041		Lab File ID:	B10571.D
Dilution:	1.0			Initial Weight/Volume:	30.12 g
Date Analyzed:	09/26/2009 0454			Final Weight/Volume:	1.0 mL
Date Prepared:	09/16/2009 1513			Injection Volume:	

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		12	41
Benzyl alcohol		ND		35	81
Bis(2-chloroethoxy)methane		ND		12	41
Bis(2-chloroethyl)ether		ND		12	41
Bis(2-ethylhexyl) phthalate		390	B	12	41
Butyl benzyl phthalate		ND		12	41
Caprolactam		ND		12	41
Carbazole		ND		12	41
Chrysene		ND		12	41
Dibenz(a,h)anthracene		ND		12	41
Dibenzofuran		ND		12	41
Diethyl phthalate		ND		12	41
Dimethyl phthalate		ND		12	41
Di-n-butyl phthalate		ND		36	41
Di-n-octyl phthalate		ND		20	41
Diphenyl oxide		ND		12	41
Fluoranthene		ND		12	41
Fluorene		ND		12	41
Hexachlorobenzene		ND		12	41
Hexachlorobutadiene		ND		12	41
Hexachlorocyclopentadiene		ND		12	81
Hexachloroethane		ND		12	41
Indeno[1,2,3-cd]pyrene		ND		12	41
Isophorone		ND		12	41
Naphthalene		ND		12	97
Nitrobenzene		ND		12	41
N-Nitrosodimethylamine		ND		14	41
N-Nitrosodi-n-propylamine		ND		12	41
N-Nitrosodiphenylamine		ND		12	41
Pentachlorophenol		ND		12	41
Phenanthrene		ND		12	49
Phenol		ND		12	41
Pyrene		ND		12	41

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	69		30 - 130
2-Fluorobiphenyl	64		30 - 130
2-Fluorophenol	80		30 - 130
Nitrobenzene-d5	56		30 - 130
Phenol-d5	75		30 - 130
Terphenyl-d14	73		30 - 130

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Client: Olin Corporation

Job Number: 360-24499-2
Sdg Number: OCRI-13A

Client Sample ID: **OC-SB-417-20/22-XXX**

Lab Sample ID: 360-24499-15
Client Matrix: Solid % Moisture: 18.2

Date Sampled: 09/10/2009 1205
Date Received: 09/10/2009 1820

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49517		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49041		Lab File ID:	B10571.D
Dilution:	1.0			Initial Weight/Volume:	30.12 g
Date Analyzed:	09/26/2009 0454			Final Weight/Volume:	1.0 mL
Date Prepared:	09/16/2009 1513			Injection Volume:	

Tentatively Identified Compounds **Number TIC's Found:** 10

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
59242-27-2	Furan, 2,5-dihydro-2,5-dimethyl-	5.01	23	T J N
98-83-9	.alpha.-Methylstyrene	6.99	9.4	T J N
149-57-5	Hexanoic acid, 2-ethyl-	7.81	25	T J N
99-98-9	1,4-Benzenediamine, N,N-dimethyl-	9.23	61	T J N
1198-37-4	Quinoline, 2,4-dimethyl-	9.66	12	T J N
128-37-0	Butylated Hydroxytoluene	9.85	24	T J N
27193-28-8	Phenol, (1,1,3,3-tetramethylbutyl)-	10.29	16	T J N
~~3910-35-8~~	~~1H-Indene, 2,3-dihydro-1,1,3-trimethyl-3~~	~~10.79~~	~~27~~	~~T J N~~
~~22768-22-5~~	~~2,4-Diphenyl-4-methyl-2(E)-pentene~~	~~11.20~~	~~18~~	~~T J N~~
~~112-39-0~~	~~Hexadecanoic acid, methyl ester~~	~~11.41~~	~~12~~	~~T J N~~

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Client: Olin Corporation

Job Number: 360-24499-2
Sdg Number: OCRI-13A

Client Sample ID: **OC-SB-434-15/16-XXX**

Lab Sample ID: 360-24499-18
Client Matrix: Solid % Moisture: 13.1

Date Sampled: 09/10/2009 0935
Date Received: 09/10/2009 1820

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49517		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49041		Lab File ID:	B10574.D
Dilution:	1.0			Initial Weight/Volume:	30.20 g
Date Analyzed:	09/26/2009 0617			Final Weight/Volume:	1.0 mL
Date Prepared:	09/16/2009 1513			Injection Volume:	

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		18	J	11	38
1,2,4,5-Tetrachlorobenzene		ND		11	38
1,2,4-Trichlorobenzene		ND		11	38
1,2-Dichlorobenzene		ND		11	38
1,3-Dichlorobenzene		ND		11	38
1,4-Dichlorobenzene		ND		11	38
1-Methylnaphthalene		ND		11	38
2,2'-oxybis[1-chloropropane]		ND		11	38
2,3,4,6-Tetrachlorophenol		ND		11	38
2,4,5-Trichlorophenol		ND		11	38
2,4,6-Trichlorophenol		ND		11	38
2,4-Dichlorophenol		ND		11	38
2,4-Dimethylphenol		ND		15	38
2,4-Dinitrophenol		ND		11	38
2,4-Dinitrotoluene		ND		11	38
2,6-Dinitrotoluene		ND		11	38
2-Chloronaphthalene		ND		11	38
2-Chlorophenol		ND		11	38
2-Methylnaphthalene		ND		11	38
2-Methylphenol		ND		23	38
2-Nitroaniline		ND		11	190
2-Nitrophenol		ND		11	38
3 & 4 Methylphenol		ND		11	38
3,3'-Dichlorobenzidine		ND		11	76
3-Nitroaniline		ND		11	190
4,6-Dinitro-2-methylphenol		ND		11	190
4-Bromophenyl phenyl ether		ND		11	38
4-Chloro-3-methylphenol		ND		11	76
4-Chloroaniline		ND		11	76
4-Chlorophenyl phenyl ether		ND		11	38
4-Nitroaniline		ND		11	190
4-Nitrophenol		ND		11	190
Acenaphthene		ND		11	38
Acenaphthylene		ND		11	38
Acetophenone		ND		11	38
Aniline		ND		11	38
Anthracene		ND		11	38
Atrazine		ND		11	38
Azobenzene		ND		11	38
Benzaldehyde		ND		11	38
Benzo[a]anthracene		ND		11	38
Benzo[a]pyrene		ND		11	38
Benzo[b]fluoranthene		ND		11	38
Benzo[g,h,i]perylene		ND		11	38
Benzo[k]fluoranthene		ND		11	38
Benzoic acid		ND		17	190

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Client: Olin Corporation

Job Number: 360-24499-2
Sdg Number: OCRI-13A

Client Sample ID: **OC-SB-434-15/16-XXX**

Lab Sample ID: 360-24499-18
Client Matrix: Solid

% Moisture: 13.1

Date Sampled: 09/10/2009 0935
Date Received: 09/10/2009 1820

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49517		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49041		Lab File ID:	B10574.D
Dilution:	1.0			Initial Weight/Volume:	30.20 g
Date Analyzed:	09/26/2009 0617			Final Weight/Volume:	1.0 mL
Date Prepared:	09/16/2009 1513			Injection Volume:	

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		11	38
Benzyl alcohol		ND		32	76
Bis(2-chloroethoxy)methane		ND		11	38
Bis(2-chloroethyl)ether		ND		11	38
Bis(2-ethylhexyl) phthalate		380 U	B	11	38
Butyl benzyl phthalate		ND		11	38
Caprolactam		ND		11	38
Carbazole		ND		11	38
Chrysene		ND		11	38
Dibenz(a,h)anthracene		ND		11	38
Dibenzofuran		ND		11	38
Diethyl phthalate		ND		11	38
Dimethyl phthalate		ND		11	38
Di-n-butyl phthalate		ND		33	38
Di-n-octyl phthalate		ND		19	38
Diphenyl oxide		29	J	11	38
Fluoranthene		ND		11	38
Fluorene		ND		11	38
Hexachlorobenzene		ND		11	38
Hexachlorobutadiene		ND		11	38
Hexachlorocyclopentadiene		ND		11	76
Hexachloroethane		ND		11	38
Indeno[1,2,3-cd]pyrene		ND		11	38
Isophorone		ND		11	38
Naphthalene		ND		11	91
Nitrobenzene		ND		11	38
N-Nitrosodimethylamine		ND		13	38
N-Nitrosodi-n-propylamine		ND		11	38
N-Nitrosodiphenylamine		ND		11	38
Pentachlorophenol		ND		11	38
Phenanthrene		ND		11	46
Phenol		ND		11	38
Pyrene		ND		11	38

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	69		30 - 130
2-Fluorobiphenyl	68		30 - 130
2-Fluorophenol	88		30 - 130
Nitrobenzene-d5	62		30 - 130
Phenol-d5	82		30 - 130
Terphenyl-d14	82		30 - 130

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Client: Olin Corporation

Job Number: 360-24499-2
Sdg Number: OCRI-13A

Client Sample ID: **OC-SB-434-15/16-XXX**

Lab Sample ID: 360-24499-18
Client Matrix: Solid % Moisture: 13.1

Date Sampled: 09/10/2009 0935
Date Received: 09/10/2009 1820

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49517		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49041		Lab File ID:	B10574.D
Dilution:	1.0			Initial Weight/Volume:	30.20 g
Date Analyzed:	09/26/2009 0617			Final Weight/Volume:	1.0 mL
Date Prepared:	09/16/2009 1513			Injection Volume:	

Tentatively Identified Compounds **Number TIC's Found:** 9

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
98-83-9	.alpha.-Methylstyrene	6.99	9.1	T J N
149-57-5	Hexanoic acid, 2-ethyl-	7.82	20	T J N
99-98-9	1,4-Benzenediamine, N,N-dimethyl-	9.24	30	T J N
128-37-0	Butylated Hydroxytoluene	9.86	16	T J N
615-22-5	Benzothiazole, 2-(methylthio)-	10.41	25	T J N
112-61-8	Octadecanoic acid, methyl ester	12.08	8.2	T J N
24468-13-1	dl-2-Ethylhexyl chloroformate	13.72	19	T J N
7683-64-9	Squalene	15.81	300	T J N
26603-23-6	p,p''-Dioctyldiphenylamine	16.61	150	T J N

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Client: Olin Corporation

Job Number: 360-24499-2
Sdg Number: OCRI-13A

Client Sample ID: **OC-SB-450-33/35-XXX**

Lab Sample ID: 360-24499-21
Client Matrix: Solid
% Moisture: 9.0

Date Sampled: 09/09/2009 1655
Date Received: 09/10/2009 1820

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49517		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49041		Lab File ID:	B10577.D
Dilution:	1.0			Initial Weight/Volume:	30.68 g
Date Analyzed:	09/26/2009 0739			Final Weight/Volume:	1.0 mL
Date Prepared:	09/16/2009 1513			Injection Volume:	

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		11	36
1,2,4,5-Tetrachlorobenzene		ND		11	36
1,2,4-Trichlorobenzene		ND		11	36
1,2-Dichlorobenzene		ND		11	36
1,3-Dichlorobenzene		ND		11	36
1,4-Dichlorobenzene		ND		11	36
1-Methylnaphthalene		ND		11	36
2,2'-oxybis[1-chloropropane]		ND		11	36
2,3,4,6-Tetrachlorophenol		ND		11	36
2,4,5-Trichlorophenol		ND		11	36
2,4,6-Trichlorophenol		ND		11	36
2,4-Dichlorophenol		ND		11	36
2,4-Dimethylphenol		ND		14	36
2,4-Dinitrophenol		ND		11	36
2,4-Dinitrotoluene		ND		11	36
2,6-Dinitrotoluene		ND		11	36
2-Chloronaphthalene		ND		11	36
2-Chlorophenol		ND		11	36
2-Methylnaphthalene		ND		11	36
2-Methylphenol		ND		21	36
2-Nitroaniline		ND		11	180
2-Nitrophenol		ND		11	36
3 & 4 Methylphenol		ND		11	36
3,3'-Dichlorobenzidine		ND		11	72
3-Nitroaniline		ND		11	180
4,6-Dinitro-2-methylphenol		ND		11	180
4-Bromophenyl phenyl ether		ND		11	36
4-Chloro-3-methylphenol		ND		11	72
4-Chloroaniline		ND		11	72
4-Chlorophenyl phenyl ether		ND		11	36
4-Nitroaniline		ND		11	180
4-Nitrophenol		ND		11	180
Acenaphthene		ND		11	36
Acenaphthylene		ND		11	36
Acetophenone		ND		11	36
Aniline		ND	J	11	36
Anthracene		ND		11	36
Atrazine		ND		11	36
Azobenzene		ND		11	36
Benzaldehyde		ND		11	36
Benzo[a]anthracene		ND		11	36
Benzo[a]pyrene		ND		11	36
Benzo[b]fluoranthene		ND		11	36
Benzo[g,h,i]perylene		ND		11	36
Benzo[k]fluoranthene		ND		11	36
Benzoic acid		ND		16	180

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Client: Olin Corporation

Job Number: 360-24499-2
Sdg Number: OCRI-13A

Client Sample ID: **OC-SB-450-33/35-XXX**

Lab Sample ID: 360-24499-21
Client Matrix: Solid

% Moisture: 9.0

Date Sampled: 09/09/2009 1655
Date Received: 09/10/2009 1820

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49517		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49041		Lab File ID:	B10577.D
Dilution:	1.0			Initial Weight/Volume:	30.68 g
Date Analyzed:	09/26/2009 0739			Final Weight/Volume:	1.0 mL
Date Prepared:	09/16/2009 1513			Injection Volume:	

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		11	36
Benzyl alcohol		ND		31	72
Bis(2-chloroethoxy)methane		ND		11	36
Bis(2-chloroethyl)ether		ND	U	11	36
Bis(2-ethylhexyl) phthalate		340	B	11	36
Butyl benzyl phthalate		ND		11	36
Caprolactam		ND		11	36
Carbazole		ND		11	36
Chrysene		ND		11	36
Dibenz(a,h)anthracene		ND		11	36
Dibenzofuran		ND		11	36
Diethyl phthalate		ND		11	36
Dimethyl phthalate		ND		11	36
Di-n-butyl phthalate		ND		31	36
Di-n-octyl phthalate		ND		18	36
Diphenyl oxide		ND		11	36
Fluoranthene		ND		11	36
Fluorene		ND		11	36
Hexachlorobenzene		ND		11	36
Hexachlorobutadiene		ND		11	36
Hexachlorocyclopentadiene		ND		11	72
Hexachloroethane		ND		11	36
Indeno[1,2,3-cd]pyrene		ND		11	36
Isophorone		ND		11	36
Naphthalene		ND		11	86
Nitrobenzene		ND		11	36
N-Nitrosodimethylamine		ND		13	36
N-Nitrosodi-n-propylamine		ND		11	36
N-Nitrosodiphenylamine		ND		11	36
Pentachlorophenol		ND		11	36
Phenanthrene		ND		11	43
Phenol		ND		11	36
Pyrene		ND		11	36

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	64		30 - 130
2-Fluorobiphenyl	61		30 - 130
2-Fluorophenol	75		30 - 130
Nitrobenzene-d5	66		30 - 130
Phenol-d5	70		30 - 130
Terphenyl-d14	81		30 - 130

2/7/10

Client: Olin Corporation

Job Number: 360-24499-2
Sdg Number: OCRI-13A

Client Sample ID: **OC-SB-450-33/35-XXX**

Lab Sample ID: 360-24499-21
Client Matrix: Solid % Moisture: 9.0

Date Sampled: 09/09/2009 1655
Date Received: 09/10/2009 1820

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49517		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49041		Lab File ID:	B10577.D
Dilution:	1.0			Initial Weight/Volume:	30.68 g
Date Analyzed:	09/26/2009 0739			Final Weight/Volume:	1.0 mL
Date Prepared:	09/16/2009 1513			Injection Volume:	

Tentatively Identified Compounds **Number TIC's Found:** 9

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
128-37-0	Butylated Hydroxytoluene	9.85	17	T J N
615-22-5	Benzothiazole, 2-(methylthio)-	10.41	27	T J N
3910-35-8	1H-Indene, 2,3-dihydro-1,1,3-trimethyl-3	10.79	25	T J N
22768-22-5	2,4-Diphenyl-4-methyl-2(E)-pentene	11.20	13	T J N
54833-48-6	Heptadecane, 2,6,10,15-tetramethyl-	13.72	16	T J N
112-95-8	Eicosane	14.37	18	T J N
629-97-0	Docosane	15.70	26	T J N
7683-64-9	Squalene	15.81	240	T J N
593-49-7	Heptacosane	16.18	22	T J N

2/7/10

FORM IV
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Westfield Job No.: 360-24499-1

SDG No.: OCRI-13

Lab File ID: B10564.D Lab Sample ID: MB 360-49041/1-A

Matrix: Solid Date Extracted: 09/16/2009 15:13

Instrument ID: Inst. B Date Analyzed: 09/26/2009 01:41

Level:(Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 360-49041/2-A	B10565.D	09/26/2009 02:09
	LCSD 360-49041/3-A	B10566.D	09/26/2009 02:37
OC-SB-417-8.0/10-XXX	360-24499-16	B10572.D	09/26/2009 05:22
OC-SB-434-0.0/1.0-XXX	360-24499-17	B10573.D	09/26/2009 05:49
OC-SB-434-7.0-/9.0-XXX	360-24499-19	B10575.D	09/26/2009 06:44
OC-SB-450-0.0/1.0-XXX	360-24499-20	B10576.D	09/26/2009 07:12
OC-SB-450-8.0/10-XXX	360-24499-22	B10578.D	09/26/2009 08:06
OC-SB-434-0.0/1.0-XXX DL2	360-24499-17 DL2	B10605.D	09/28/2009 20:07
OC-SB-434-0.0/1.0-XXX DL2	360-24499-17 DL2	B10617.D	09/29/2009 01:44
OC-SB-434-0.0/1.0-XXX DL3	360-24499-17 DL3		09/29/2009 01:44

MB

benzoic acid 62.2

bis(2-ethylhexyl) phthalate 211

di-n-butyl phthalate 72.7

TICs

unk 7.59

vanillin

octadecane

eicosane

1-naphthalenepropanol, .alpha.-ethenyldi

benzoic acid, 2-propenyl este.

tricosane

squalene

LCS

aniline 27/30

bis(2-ethylhexyl)phthalate 153/150

ICAL/CCAL OK

IS OK

TUNE OK

SURR.

-16 2,4,6-Tribromophenol 112%

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Westfield | Job No.: 360-24499-1

SDG No.: OCRI-13

Client Sample ID: | Lab Sample ID: MB 360-49041/1-A

Matrix: Solid | Lab File ID: B10564.D

Analysis Method: 8270C LL | Date Collected:

Extract. Method: 3546 | Date Extracted: 09/16/2009 15:13

Sample wt/vol: 30.00(g) | Date Analyzed: 09/26/2009 01:41

Con. Extract Vol.: 1.0(mL) | Dilution Factor: 1

Injection Volume: 1.0(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup: (Y/N) N

Analysis Batch No.: 49511 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
98-86-2	Acetophenone	ND		33	10
62-53-3	Aniline	ND		33	10
120-12-7	Anthracene	ND		33	10
1912-24-9	Atrazine	ND		33	10
103-33-3	Azobenzene	ND		33	10
100-52-7	Benzaldehyde	ND		33	10
56-55-3	Benzo[a]anthracene	ND		33	10
50-32-8	Benzo[a]pyrene	ND		33	10
205-99-2	Benzo[b]fluoranthene	ND		33	10
191-24-2	Benzo[g,h,i]perylene	ND		33	10
207-08-9	Benzo[k]fluoranthene	ND		33	10
65-85-0	Benzoic acid	62.2	J	170	15
119-61-9	Benzophenone	ND		33	10
100-51-6	Benzyl alcohol	ND		67	28
111-91-1	Bis(2-chloroethoxy)methane	ND		33	10
111-44-4	Bis(2-chloroethyl)ether	ND		33	10
117-81-7	Bis(2-ethylhexyl) phthalate	211		33	10
85-68-7	Butyl benzyl phthalate	ND		33	10
105-60-2	Caprolactam	ND		33	10
86-74-8	Carbazole	ND		33	10
218-01-9	Chrysene	ND		33	10
53-70-3	Dibenz(a,h)anthracene	ND		33	10
132-64-9	Dibenzofuran	ND		33	10
84-66-2	Diethyl phthalate	ND		33	10
131-11-3	Dimethyl phthalate	ND		33	10
84-74-2	Di-n-butyl phthalate	72.7		33	29
117-84-0	Di-n-octyl phthalate	ND		33	17
101-84-8	Diphenyl oxide	ND		33	10
122-39-4	Diphenylamine	ND		33	10
206-44-0	Fluoranthene	ND		33	10
86-73-7	Fluorene	ND		33	10
118-74-1	Hexachlorobenzene	ND		33	10
87-68-3	Hexachlorobutadiene	ND		33	10
77-47-4	Hexachlorocyclopentadiene	ND		67	10

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24499-1

SDG No.: OCRI-13

Matrix: Solid Level: Low Lab File ID: B10565.D

Lab ID: LCS 360-49041/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
1,1'-Biphenyl	333	286	86	40-140	
1,2,4,5-Tetrachlorobenzene	333	221	66	40-140	
1,2,4-Trichlorobenzene	333	228	68	40-140	
1,2-Dichlorobenzene	333	195	58	40-140	
1,3-Dichlorobenzene	333	194	58	40-140	
1,4-Dichlorobenzene	333	194	58	40-140	
1-Methylnaphthalene	333	225	67	40-140	
2,2'-oxybis[1-chloropropane]	333	210	63	40-140	
2,3,4,6-Tetrachlorophenol	333	241	72	40-140	
2,4,5-Trichlorophenol	333	262	79	30-130	
2,4,6-Trichlorophenol	333	300	90	30-130	
2,4-Dichlorophenol	333	264	79	30-130	
2,4-Dimethylphenol	333	248	74	30-130	
2,4-Dinitrophenol	333	167	50	30-130	
2,4-Dinitrotoluene	333	252	76	40-140	
2,6-Dinitrotoluene	333	270	81	40-140	
2-Chloronaphthalene	333	211	63	40-140	
2-Chlorophenol	333	218	65	30-130	
2-Methylnaphthalene	333	208	63	40-140	
2-Methylphenol	333	235	71	30-130	
2-Nitroaniline	333	307	92	40-140	
2-Nitrophenol	333	257	77	30-130	
3 & 4 Methylphenol	333	249	75	30-130	
3,3'-Dichlorobenzidine	333	288	86	40-140	
3-Nitroaniline	333	269	81	40-140	
4,6-Dinitro-2-methylphenol	333	234	70	30-130	
4-Bromophenyl phenyl ether	333	288	87	40-140	
4-Chloro-3-methylphenol	333	278	84	30-130	
4-Chloroaniline	333	173	52	40-140	
4-Chlorophenyl phenyl ether	333	268	80	40-140	
4-Nitroaniline	333	273	82	40-140	
4-Nitrophenol	333	293	88	30-130	
Acenaphthene	333	299	90	40-140	
Acenaphthylene	333	264	79	40-140	
Acetophenone	333	230	69	40-140	
Aniline	333	89.9	27	40-140	*
Anthracene	333	340	102	40-140	
Atrazine	333	379	114	40-140	
Azobenzene	333	297	89	40-140	
Benzaldehyde	333	257	77	40-140	
Benzo[a]anthracene	333	360	108	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24499-1

SDG No.: OCRI-13

Matrix: Solid Level: Low Lab File ID: B10565.D

Lab ID: LCS 360-49041/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
Benzo[a]pyrene	333	325	98	40-140	
Benzo[b]fluoranthene	333	317	95	40-140	
Benzo[g,h,i]perylene	333	348	104	40-140	
Benzo[k]fluoranthene	333	343	103	40-140	
Benzoic acid	333	143 J	43	30-130	
Benzophenone	333	329	99	40-140	
Benzyl alcohol	333	244	73	30-130	
Bis(2-chloroethoxy)methane	333	212	64	40-140	
Bis(2-chloroethyl)ether	333	202	61	40-140	
Bis(2-ethylhexyl) phthalate	333	530	159	40-140	*
Butyl benzyl phthalate	333	321	96	40-140	
Caprolactam	333	299	90	40-140	
Carbazole	333	326	98	40-140	
Chrysene	333	339	102	40-140	
Dibenz(a,h)anthracene	333	345	104	40-140	
Dibenzofuran	333	262	79	40-140	
Diethyl phthalate	333	285	86	40-140	
Dimethyl phthalate	333	280	84	40-140	
Di-n-butyl phthalate	333	355	107	40-140	
Di-n-octyl phthalate	333	271	81	40-140	
Diphenyl oxide	333	240	72	40-140	
Fluoranthene	333	320	96	40-140	
Fluorene	333	327	98	40-140	
Hexachlorobenzene	333	290	87	40-140	
Hexachlorobutadiene	333	202	61	40-140	
Hexachlorocyclopentadiene	333	201	60	40-140	
Hexachloroethane	333	205	61	40-140	
Indeno[1,2,3-cd]pyrene	333	351	105	40-140	
Isophorone	333	198	59	40-140	
Naphthalene	333	204	61	40-140	
Nitrobenzene	333	211	63	40-140	
N-Nitrosodimethylamine	333	232	70	40-140	
N-Nitrosodi-n-propylamine	333	233	70	40-140	
N-Nitrosodiphenylamine	333	211	63	40-140	
Pentachlorophenol	333	271	81	30-130	
Phenanthrene	333	316	95	40-140	
Phenol	333	232	69	30-130	
Pyrene	333	307	92	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24499-1

SDG No.: OCRI-13

Matrix: Solid Level: Low Lab File ID: B10566.D

Lab ID: LCSD 360-49041/3-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCSD CONCENTRATION (ug/Kg)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1'-Biphenyl	333	297	89	4	30	40-140	
1,2,4,5-Tetrachlorobenzene	333	239	72	8	30	40-140	
1,2,4-Trichlorobenzene	333	249	75	9	30	40-140	
1,2-Dichlorobenzene	333	210	63	8	30	40-140	
1,3-Dichlorobenzene	333	208	62	7	30	40-140	
1,4-Dichlorobenzene	333	207	62	7	30	40-140	
1-Methylnaphthalene	333	228	68	2	30	40-140	
2,2'-oxybis[1-chloropropane]	333	229	69	8	30	40-140	
2,3,4,6-Tetrachlorophenol	333	255	77	5	30	40-140	
2,4,5-Trichlorophenol	333	301	90	14	30	30-130	
2,4,6-Trichlorophenol	333	331	99	10	30	30-130	
2,4-Dichlorophenol	333	294	88	11	30	30-130	
2,4-Dimethylphenol	333	272	82	9	30	30-130	
2,4-Dinitrophenol	333	197	59	17	30	30-130	
2,4-Dinitrotoluene	333	280	84	10	30	40-140	
2,6-Dinitrotoluene	333	305	91	12	30	40-140	
2-Chloronaphthalene	333	233	70	10	30	40-140	
2-Chlorophenol	333	239	72	9	30	30-130	
2-Methylnaphthalene	333	229	69	9	30	40-140	
2-Methylphenol	333	260	78	10	30	30-130	
2-Nitroaniline	333	360	108	16	30	40-140	
2-Nitrophenol	333	281	84	9	30	30-130	
3 & 4 Methylphenol	333	275	82	10	30	30-130	
3,3'-Dichlorobenzidine	333	323	97	12	30	40-140	
3-Nitroaniline	333	298	89	10	30	40-140	
4,6-Dinitro-2-methylphenol	333	264	79	12	30	30-130	
4-Bromophenyl phenyl ether	333	322	97	11	30	40-140	
4-Chloro-3-methylphenol	333	311	93	11	30	30-130	
4-Chloroaniline	333	205	62	17	30	40-140	
4-Chlorophenyl phenyl ether	333	304	91	13	30	40-140	
4-Nitroaniline	333	307	92	12	30	40-140	
4-Nitrophenol	333	340	102	15	30	30-130	
Acenaphthene	333	336	101	12	30	40-140	
Acenaphthylene	333	293	88	11	30	40-140	
Acetophenone	333	251	75	9	30	40-140	
Aniline	333	99.5	30	10	30	40-140	*
Anthracene	333	386	116	13	30	40-140	
Atrazine	333	392	118	3	30	40-140	
Azobenzene	333	327	98	10	30	40-140	
Benzaldehyde	333	257	77	0	30	40-140	
Benzo[a]anthracene	333	390	117	8	30	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24499-1

SDG No.: OCRI-13

Matrix: Solid Level: Low Lab File ID: B10566.D

Lab ID: LCSD 360-49041/3-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCSD CONCENTRATION (ug/Kg)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Benzo[a]pyrene	333	357	107	9	30	40-140	
Benzo[b]fluoranthene	333	345	104	9	30	40-140	
Benzo[g,h,i]perylene	333	390	117	12	30	40-140	
Benzo[k]fluoranthene	333	382	115	11	30	40-140	
Benzoic acid	333	158 J	47	10	30	30-130	
Benzophenone	333	344	103	4	30	40-140	
Benzyl alcohol	333	264	79	8	30	30-130	
Bis(2-chloroethoxy)methane	333	234	70	10	30	40-140	
Bis(2-chloroethyl)ether	333	219	66	8	30	40-140	
Bis(2-ethylhexyl) phthalate	333	528	158	0	30	40-140	*
Butyl benzyl phthalate	333	344	103	7	30	40-140	
Caprolactam	333	314	94	5	30	40-140	
Carbazole	333	368	110	12	30	40-140	
Chrysene	333	368	110	8	30	40-140	
Dibenz(a,h)anthracene	333	390	117	12	30	40-140	
Dibenzofuran	333	294	88	11	30	40-140	
Diethyl phthalate	333	323	97	12	30	40-140	
Dimethyl phthalate	333	317	95	13	30	40-140	
Di-n-butyl phthalate	333	390	117	9	30	40-140	
Di-n-octyl phthalate	333	285	85	5	30	40-140	
Diphenyl oxide	333	244	73	2	30	40-140	
Fluoranthene	333	361	108	12	30	40-140	
Fluorene	333	367	110	12	30	40-140	
Hexachlorobenzene	333	324	97	11	30	40-140	
Hexachlorobutadiene	333	219	66	8	30	40-140	
Hexachlorocyclopentadiene	333	225	67	11	30	40-140	
Hexachloroethane	333	219	66	7	30	40-140	
Indeno[1,2,3-cd]pyrene	333	390	117	11	30	40-140	
Isophorone	333	219	66	10	30	40-140	
Naphthalene	333	222	67	9	30	40-140	
Nitrobenzene	333	229	69	8	30	40-140	
N-Nitrosodimethylamine	333	249	75	7	30	40-140	
N-Nitrosodi-n-propylamine	333	256	77	9	30	40-140	
N-Nitrosodiphenylamine	333	238	71	12	30	40-140	
Pentachlorophenol	333	312	94	14	30	30-130	
Phenanthrene	333	353	106	11	30	40-140	
Phenol	333	251	75	8	30	30-130	
Pyrene	333	326	98	6	30	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM II
GC/MS SEMI VOA SURROGATE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24499-1

SDG No.: OCRI-13

Matrix: Solid Level: Low

GC Column (1): Rtx-5ms ID: 0.25 (um)

Client Sample ID	Lab Sample ID	2FP #	PHL #	NBZ #	FBP #	TBP #	TPH #
OC-SB-466-6.0/8.0-XXX	360-24499-1	87	69	70	66	70	79
OC-SB-466-6.0/8.0-XXX	360-24499-1	59	68	57	60	81	84
OC-SB-469-0.0/1.0-XXX	360-24499-2	92	66	62	73	60	83
OC-SB-469-36/37-XXX	360-24499-4	87	75	78	66	70	76
OC-SB-469-7.0/9.0-XXX	360-24499-5	91	77	76	65	68	79
OC-SB-466-0.0/1.0-XXX	360-24499-6	90	68	70	76	71	88
OC-SB-466-30/32-XXX	360-24499-7	90	78	77	69	69	82
OC-SB-466-30/32-XXX	360-24499-7	63	70	62	63	73	91
OC-SB-417-0.0/1.0-XXX	360-24499-14	93	80	82	71	76	84
OC-SB-417-8.0/10-XXX	360-24499-16	30	50	71	54	11 X	81
OC-SB-434-0.0/1.0-XXX	360-24499-17	90	77	76	70	68	79
OC-SB-434-0.0/1.0-XXX	360-24499-17	66	69	78	74	81	106
OC-SB-434-0.0/1.0-XXX DL2	360-24499-17 DL2	0 X	0 X	0 X	0 X	0 X	0 X
OC-SB-434-7.0-/9.0-XXX	360-24499-19	72	68	63	60	63	75
OC-SB-434-7.0-/9.0-XXX	360-24499-19	58	66	54	59	76	81
OC-SB-450-0.0/1.0-XXX	360-24499-20	79	68	67	64	68	77
OC-SB-450-0.0/1.0-XXX	360-24499-20	64	70	73	77	77	96
OC-SB-450-8.0/10-XXX	360-24499-22	78	72	67	63	60	78
OC-SB-450-8.0/10-XXX	360-24499-22	61	66	58	59	78	86
	MB 360-48958/1-A	63	69	51	64	61	82
	MB 360-49016/1-A	106	90	88	76	81	90
	MB 360-49041/1-A	94	88	79	72	77	86
	MB 360-49155/1-A	72	79	64	70	79	92
	LCS 360-48958/2-A	50	55	58	63	71	73
	LCS 360-49016/2-A	78	67	64	81	86	82

OR

	QC LIMITS
2FP = 2-Fluorophenol	30-130
PHL = Phenol-d5	30-130
NBZ = Nitrobenzene-d5	30-130
FBP = 2-Fluorobiphenyl	30-130
TBP = 2,4,6-Tribromophenol	30-130
TPH = Terphenyl-dl4	30-130

Column to be used to flag recovery values

FORM II 8270C LL

FORM IV
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Westfield Job No.: 360-24499-1

SDG No.: OCRI-13

Lab File ID: B10486.D Lab Sample ID: MB 360-49016/1-A

Matrix: Solid Date Extracted: 09/16/2009 11:53

Instrument ID: Inst. B Date Analyzed: 09/22/2009 20:43

Level: (Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 360-49016/2-A	B10487.D	09/22/2009 21:14
	LCSD 360-49016/3-A	B10488.D	09/22/2009 21:45
OC-SB-466-6.0/8.0-XXX	360-24499-1 *	B10508.D	09/23/2009 08:09
OC-SB-469-0.0/1.0-XXX	360-24499-2 *	B10509.D	09/23/2009 08:40
OC-SB-469-36/37-XXX	360-24499-4 *	B10533.D	09/24/2009 05:25
OC-SB-469-7.0/9.0-XXX	360-24499-5 *	B10534.D	09/24/2009 05:57
OC-SB-466-0.0/1.0-XXX	360-24499-6 *	B10536.D	09/24/2009 07:00
OC-SB-466-30/32-XXX	360-24499-7 *	B10537.D	09/24/2009 07:31
OC-SB-417-0.0/1.0-XXX	360-24499-14 *	B10538.D	09/24/2009 08:02

MB
benzoic acid 97.4
bis(2-ethylhexyl) phthalate 162
di-n-butyl phthalate 68

TIC
benzaldehyde, 3-hydroxy-4-methoxy
dodecanoic acid, methyl ester
octadecane
eicosane
squalene.

LCS
aniline 29/31
bis(2-ethylhexyl)phthalate 141/141

TUNE ok
IS ok
SURR ok

* ICAL/CCAL ok

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Westfield | Job No.: 360-24499-1

SDG No.: OCRI-13

Client Sample ID: | Lab Sample ID: MB 360-49016/1-A

Matrix: Solid | Lab File ID: B10486.D

Analysis Method: 8270C LL | Date Collected:

Extract. Method: 3546 | Date Extracted: 09/16/2009 11:53

Sample wt/vol: 30.00(g) | Date Analyzed: 09/22/2009 20:43

Con. Extract Vol.: 1.0(mL) | Dilution Factor: 1

Injection Volume: 1.0(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup: (Y/N) N

Analysis Batch No.: 49400 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
98-86-2	Acetophenone	ND		33	10
62-53-3	Aniline	ND		33	10
120-12-7	Anthracene	ND		33	10
1912-24-9	Atrazine	ND		33	10
103-33-3	Azobenzene	ND		33	10
100-52-7	Benzaldehyde	ND		33	10
56-55-3	Benzo[a]anthracene	ND		33	10
50-32-8	Benzo[a]pyrene	ND		33	10
205-99-2	Benzo[b]fluoranthene	ND		33	10
191-24-2	Benzo[g,h,i]perylene	ND		33	10
207-08-9	Benzo[k]fluoranthene	ND		33	10
65-85-0	Benzoic acid	97.4	J	170	15
119-61-9	Benzophenone	ND		33	10
100-51-6	Benzyl alcohol	ND		67	28
111-91-1	Bis(2-chloroethoxy)methane	ND		33	10
111-44-4	Bis(2-chloroethyl)ether	ND		33	10
117-81-7	Bis(2-ethylhexyl) phthalate	162		33	10
85-68-7	Butyl benzyl phthalate	ND		33	10
105-60-2	Caprolactam	ND		33	10
86-74-8	Carbazole	ND		33	10
218-01-9	Chrysene	ND		33	10
53-70-3	Dibenz(a,h)anthracene	ND		33	10
132-64-9	Dibenzofuran	ND		33	10
84-66-2	Diethyl phthalate	ND		33	10
131-11-3	Dimethyl phthalate	ND		33	10
84-74-2	Di-n-butyl phthalate	68.0		33	29
117-84-0	Di-n-octyl phthalate	ND		33	17
101-84-8	Diphenyl oxide	ND		33	10
122-39-4	Diphenylamine	ND		33	10
206-44-0	Fluoranthene	ND		33	10
86-73-7	Fluorene	ND		33	10
118-74-1	Hexachlorobenzene	ND		33	10
87-68-3	Hexachlorobutadiene	ND		33	10
77-47-4	Hexachlorocyclopentadiene	ND		67	10

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24499-1

SDG No.: OCRI-13

Matrix: Solid Level: Low Lab File ID: B10487.D

Lab ID: LCS 360-49016/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
1,1'-Biphenyl	333	318	95	40-140	
1,2,4,5-Tetrachlorobenzene	333	299	90	40-140	
1,2,4-Trichlorobenzene	333	249	75	40-140	
1,2-Dichlorobenzene	333	244	73	40-140	
1,3-Dichlorobenzene	333	205	62	40-140	
1,4-Dichlorobenzene	333	198	59	40-140	
1-Methylnaphthalene	333	293	88	40-140	
2,2'-oxybis[1-chloropropane]	333	273	82	40-140	
2,3,4,6-Tetrachlorophenol	333	264	79	40-140	
2,4,5-Trichlorophenol	333	297	89	30-130	
2,4,6-Trichlorophenol	333	303	91	30-130	
2,4-Dichlorophenol	333	272	82	30-130	
2,4-Dimethylphenol	333	267	80	30-130	
2,4-Dinitrophenol	333	238	72	30-130	
2,4-Dinitrotoluene	333	297	89	40-140	
2,6-Dinitrotoluene	333	306	92	40-140	
2-Chloronaphthalene	333	242	73	40-140	
2-Chlorophenol	333	233	70	30-130	
2-Methylnaphthalene	333	231	69	40-140	
2-Methylphenol	333	242	73	30-130	
2-Nitroaniline	333	353	106	40-140	
2-Nitrophenol	333	289	87	30-130	
3 & 4 Methylphenol	333	258	78	30-130	
3,3'-Dichlorobenzidine	333	323	97	40-140	
3-Nitroaniline	333	316	95	40-140	
4,6-Dinitro-2-methylphenol	333	315	94	30-130	
4-Bromophenyl phenyl ether	333	334	100	40-140	
4-Chloro-3-methylphenol	333	287	86	30-130	
4-Chloroaniline	333	211	63	40-140	
4-Chlorophenyl phenyl ether	333	317	95	40-140	
4-Nitroaniline	333	312	94	40-140	
4-Nitrophenol	333	337	101	30-130	
Acenaphthene	333	350	105	40-140	
Acenaphthylene	333	303	91	40-140	
Acetophenone	333	233	70	40-140	
Aniline	333	95.6	29	40-140	*
Anthracene	333	387	116	40-140	
Atrazine	333	402	121	40-140	
Azobenzene	333	333	100	40-140	
Benzaldehyde	333	262	79	40-140	
Benzo[a]anthracene	333	397	119	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24499-1

SDG No.: OCRI-13

Matrix: Solid Level: Low Lab File ID: B10487.D

Lab ID: LCS 360-49016/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
Benzo[a]pyrene	333	413	124	40-140	
Benzo[b]fluoranthene	333	351	105	40-140	
Benzo[g,h,i]perylene	333	382	115	40-140	
Benzo[k]fluoranthene	333	387	116	40-140	
Benzoic acid	333	171	51	30-130	
Benzophenone	333	347	104	40-140	
Benzyl alcohol	333	268	80	30-130	
Bis(2-chloroethoxy)methane	333	233	70	40-140	
Bis(2-chloroethyl)ether	333	210	63	40-140	
Bis(2-ethylhexyl) phthalate	333	472	141	40-140	*
Butyl benzyl phthalate	333	319	96	40-140	
Caprolactam	333	364	109	40-140	
Carbazole	333	357	107	40-140	
Chrysene	333	378	113	40-140	
Dibenz(a,h)anthracene	333	425	127	40-140	
Dibenzofuran	333	305	91	40-140	
Diethyl phthalate	333	327	98	40-140	
Dimethyl phthalate	333	319	96	40-140	
Di-n-butyl phthalate	333	395	118	40-140	
Di-n-octyl phthalate	333	318	95	40-140	
Diphenyl oxide	333	258	77	40-140	
Fluoranthene	333	357	107	40-140	
Fluorene	333	374	112	40-140	
Hexachlorobenzene	333	322	97	40-140	
Hexachlorobutadiene	333	263	79	40-140	
Hexachlorocyclopentadiene	333	231	69	40-140	
Hexachloroethane	333	205	62	40-140	
Indeno[1,2,3-cd]pyrene	333	421	126	40-140	
Isophorone	333	213	64	40-140	
Naphthalene	333	274	82	40-140	
Nitrobenzene	333	233	70	40-140	
N-Nitrosodimethylamine	333	248	74	40-140	
N-Nitrosodi-n-propylamine	333	255	77	40-140	
N-Nitrosodiphenylamine	333	232	70	40-140	
Pentachlorophenol	333	312	94	30-130	
Phenanthrene	333	341	102	40-140	
Phenol	333	240	72	30-130	
Pyrene	333	353	106	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24499-1

SDG No.: OCRI-13

Matrix: Solid Level: Low Lab File ID: B10488.D

Lab ID: LCSD 360-49016/3-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCSD CONCENTRATION (ug/Kg)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1'-Biphenyl	333	307	92	3	30	40-140	
1,2,4,5-Tetrachlorobenzene	333	306	92	2	30	40-140	
1,2,4-Trichlorobenzene	333	262	79	5	30	40-140	
1,2-Dichlorobenzene	333	261	78	7	30	40-140	
1,3-Dichlorobenzene	333	217	65	6	30	40-140	
1,4-Dichlorobenzene	333	211	63	6	30	40-140	
1-Methylnaphthalene	333	286	86	2	30	40-140	
2,2'-oxybis[1-chloropropane]	333	291	87	6	30	40-140	
2,3,4,6-Tetrachlorophenol	333	260	78	1	30	40-140	
2,4,5-Trichlorophenol	333	320	96	8	30	30-130	
2,4,6-Trichlorophenol	333	314	94	3	30	30-130	
2,4-Dichlorophenol	333	276	83	2	30	30-130	
2,4-Dimethylphenol	333	279	84	4	30	30-130	
2,4-Dinitrophenol	333	254	76	6	30	30-130	
2,4-Dinitrotoluene	333	311	93	5	30	40-140	
2,6-Dinitrotoluene	333	318	95	4	30	40-140	
2-Chloronaphthalene	333	249	75	3	30	40-140	
2-Chlorophenol	333	247	74	6	30	30-130	
2-Methylnaphthalene	333	236	71	2	30	40-140	
2-Methylphenol	333	254	76	5	30	30-130	
2-Nitroaniline	333	358	107	1	30	40-140	
2-Nitrophenol	333	301	90	4	30	30-130	
3 & 4 Methylphenol	333	273	82	6	30	30-130	
3,3'-Dichlorobenzidine	333	343	103	6	30	40-140	
3-Nitroaniline	333	321	96	2	30	40-140	
4,6-Dinitro-2-methylphenol	333	327	98	4	30	30-130	
4-Bromophenyl phenyl ether	333	341	102	2	30	40-140	
4-Chloro-3-methylphenol	333	291	87	2	30	30-130	
4-Chloroaniline	333	208	62	1	30	40-140	
4-Chlorophenyl phenyl ether	333	326	98	3	30	40-140	
4-Nitroaniline	333	321	96	3	30	40-140	
4-Nitrophenol	333	354	106	5	30	30-130	
Acenaphthene	333	360	108	3	30	40-140	
Acenaphthylene	333	310	93	2	30	40-140	
Acetophenone	333	251	75	8	30	40-140	
Aniline	333	103	31	8	30	40-140	*
Anthracene	333	400	120	3	30	40-140	
Atrazine	333	406	122	1	30	40-140	
Azobenzene	333	338	101	2	30	40-140	
Benzaldehyde	333	259	78	1	30	40-140	
Benzo[a]anthracene	333	419	126	6	30	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24499-1

SDG No.: OCRI-13

Matrix: Solid Level: Low Lab File ID: B10488.D

Lab ID: LCSD 360-49016/3-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCSD CONCENTRATION (ug/Kg)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Benzo[a]pyrene	333	437	131	6	30	40-140	
Benzo[b]fluoranthene	333	380	114	8	30	40-140	
Benzo[g,h,i]perylene	333	402	121	5	30	40-140	
Benzo[k]fluoranthene	333	407	122	5	30	40-140	
Benzoic acid	333	174	52	2	30	30-130	
Benzophenone	333	347	104	0	30	40-140	
Benzyl alcohol	333	279	84	4	30	30-130	
Bis(2-chloroethoxy)methane	333	237	71	2	30	40-140	
Bis(2-chloroethyl)ether	333	223	67	6	30	40-140	
Bis(2-ethylhexyl) phthalate	333	470	141	0	30	40-140	*
Butyl benzyl phthalate	333	337	101	6	30	40-140	
Caprolactam	333	357	107	2	30	40-140	
Carbazole	333	374	112	4	30	40-140	
Chrysene	333	398	120	5	30	40-140	
Dibenz(a,h)anthracene	333	455	136	7	30	40-140	
Dibenzofuran	333	310	93	2	30	40-140	
Diethyl phthalate	333	337	101	3	30	40-140	
Dimethyl phthalate	333	330	99	3	30	40-140	
Di-n-butyl phthalate	333	410	123	4	30	40-140	
Di-n-octyl phthalate	333	335	101	5	30	40-140	
Diphenyl oxide	333	251	75	3	30	40-140	
Fluoranthene	333	375	113	5	30	40-140	
Fluorene	333	383	115	2	30	40-140	
Hexachlorobenzene	333	336	101	4	30	40-140	
Hexachlorobutadiene	333	264	79	0	30	40-140	
Hexachlorocyclopentadiene	333	245	74	6	30	40-140	
Hexachloroethane	333	220	66	7	30	40-140	
Indeno[1,2,3-cd]pyrene	333	447	134	6	30	40-140	
Isophorone	333	220	66	4	30	40-140	
Naphthalene	333	282	85	3	30	40-140	
Nitrobenzene	333	236	71	1	30	40-140	
N-Nitrosodimethylamine	333	263	79	6	30	40-140	
N-Nitrosodi-n-propylamine	333	269	81	5	30	40-140	
N-Nitrosodiphenylamine	333	245	73	5	30	40-140	
Pentachlorophenol	333	328	98	5	30	30-130	
Phenanthrene	333	360	108	5	30	40-140	
Phenol	333	257	77	7	30	30-130	
Pyrene	333	368	110	4	30	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Westfield Job No.: 360-24499-1

SDG No.: OCRI-13

Instrument ID: Inst. J Start Date: 09/25/2009 17:06

Analysis Batch Number: 49518 End Date: 09/26/2009 06:36

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 360-49518/1		09/25/2009 17:06	1	J03126.D	Rtx-5ms SIL with guard column 0.25(um)
CCV 360-49518/2 CCVIS		09/25/2009 18:08	1	J03127.D	Rtx-5ms SIL with guard column 0.25(um)
MB 360-49155/1-A		09/25/2009 18:43	1	J03128.D	Rtx-5ms SIL with guard column 0.25(um)
LCS 360-49155/2-A		09/25/2009 19:15	1	J03129.D	Rtx-5ms SIL with guard column 0.25(um)
LCSD 360-49155/3-A		09/25/2009 19:48	1	J03130.D	Rtx-5ms SIL with guard column 0.25(um)
360-24499-19	OC-SB-434-7.0-/9.0-XX X	09/25/2009 20:21	1	J03131.D	Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/25/2009 20:53	1		Rtx-5ms SIL with guard column 0.25(um)
360-24499-20	OC-SB-450-0.0/1.0-XXX	09/25/2009 20:53	10	J03132.D	Rtx-5ms SIL with guard column 0.25(um)
360-24499-22	OC-SB-450-8.0/10-XXX	09/25/2009 21:26	1	J03133.D	Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/25/2009 21:59	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/25/2009 22:31	10		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/25/2009 23:04	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/25/2009 23:36	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/26/2009 00:09	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/26/2009 00:41	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/26/2009 01:14	10		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/26/2009 01:46	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/26/2009 02:18	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/26/2009 02:51	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/26/2009 03:23	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/26/2009 03:55	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/26/2009 04:28	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/26/2009 05:32	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/26/2009 06:04	1		Rtx-5ms SIL with guard column 0.25(um)
ZZZZZ		09/26/2009 06:36	1		Rtx-5ms SIL with guard column 0.25(um)

ICAL RRF

2,4-DNP 0.0454

4,6-DN-2-Mphenol 0.0440

NDMA ave

CCAL %D

Benzoic acid 77

hexachlorocyclopentadiene 32

8270C LL 2,4-DNP 75

4,6-DN-2-Mphenol 79

benzidine -48

bis(2-ethylhexyl)phthl 83

Dibenz(a,h)anthracene 84

NA

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Westfield Job No.: 360-24499-1

SDG No.: OCRI-13

Lab Sample ID: CCV 360-49518/2 Calibration Date: 09/25/2009 18:08

Instrument ID: Inst. J Calib Start Date: 09/23/2009 16:23

GC Column: Rtx-5ms ID: 0.25(um) Calib End Date: 09/23/2009 20:48

Lab File ID: J03127.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Lin2		0.2320		4350	5000	-13.0	30.0
Pyridine	Ave	0.6756	0.6033		4460	5000	-10.7	30.0
N-Nitrosodimethylamine	Ave	0.3519	0.3112		4420	5000	-11.6	30.0
Benzaldehyde	Ave	0.4236	0.3579		4220	5000	-15.5	30.0
Phenol	Ave	0.8207	0.7163		4360	5000	-12.7	20.0
Aniline	Ave	0.9532	0.8440		4430	5000	-11.5	30.0
Bis(2-chloroethyl)ether	Ave	0.6855	0.5850		4270	5000	-14.7	30.0
2-Chlorophenol	Ave	0.6554	0.5873		4480	5000	-10.4	30.0
1,4-Dichlorobenzene	Ave	0.7747	0.6649		4290	5000	-14.2	20.0
1,3-Dichlorobenzene	Ave	0.8010	0.6890		4300	5000	-14.0	30.0
Benzyl alcohol	Ave	0.5311	0.4826		4540	5000	-9.1	30.0
1,2-Dichlorobenzene	Ave	0.7539	0.6267		4160	5000	-16.9	30.0
2,2'-oxybis[1-chloropropane]	Ave	0.6595	0.5436		4120	5000	-17.6	30.0
2-Methylphenol	Ave	0.5914	0.5512		4660	5000	-6.8	30.0
3 & 4 Methylphenol	Ave	0.6142	0.5512		4490	5000	-10.3	30.0
Acetophenone	Ave	0.8654	0.7832		4520	5000	-9.5	30.0
N-Nitrosodi-n-propylamine	Ave	0.4443	0.4177	0.0500	4700	5000	-6.0	30.0
Hexachloroethane	Ave	0.2732	0.2476		4530	5000	-9.4	30.0
Nitrobenzene	Ave	0.3153	0.3142		4980	5000	-0.3	30.0
Isophorone	Ave	0.5260	0.5428		5160	5000	3.2	30.0
2,4-Dimethylphenol	Ave	0.2755	0.2879		5220	5000	4.5	30.0
2-Nitrophenol	Lin1		0.1569		4850	5000	-3.0	20.0
Benzoic acid	Qua		0.1119		8870	5000	77.3*	30.0
Bis(2-chloroethoxy)methane	Ave	0.3411	0.3259		4780	5000	-4.5	30.0
2,4-Dichlorophenol	Ave	0.2157	0.2259		5240	5000	4.7	20.0
1,2,4-Trichlorobenzene	Ave	0.2744	0.2584		4710	5000	-5.8	30.0
Alpha-Terpineol	Ave	0.1947	0.1967		5050	5000	1.0	30.0
Naphthalene	Ave	0.9072	0.8692		4790	5000	-4.2	30.0
4-Chloroaniline	Ave	0.3348	0.3102		4630	5000	-7.4	30.0
Hexachlorobutadiene	Ave	0.1449	0.1385		4780	5000	-4.4	20.0
Caprolactam	Lin1		0.0785		4490	5000	-10.2	30.0
4-Chloro-3-methylphenol	Ave	0.2303	0.2474		5370	5000	7.4	20.0
1-Methylnaphthalene	Ave	0.5600	0.5522		4930	5000	-1.4	30.0
2-Methylnaphthalene	Ave	0.5692	0.5522		4850	5000	-3.0	30.0
1,2,4,5-Tetrachlorobenzene	Ave	0.2191	0.2174		4960	5000	-0.8	30.0
Hexachlorocyclopentadiene	Ave	0.1803	0.2380	0.0500	6600	5000	32.0*	30.0
2,4,6-Trichlorophenol	Ave	0.2897	0.3072		5300	5000	6.1	20.0
2,4,5-Trichlorophenol	Ave	0.2975	0.3098		5210	5000	4.1	30.0
1,1'-Biphenyl	Ave	1.402	1.312		4680	5000	-6.4	30.0
2-Chloronaphthalene	Ave	1.241	1.174		4730	5000	-5.5	30.0
2-Nitroaniline	Lin1		0.2865		4520	5000	-9.6	30.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Westfield Job No.: 360-24499-1

SDG No.: OCRI-13

Lab Sample ID: CCV 360-49518/2 Calibration Date: 09/25/2009 18:08

Instrument ID: Inst. J Calib Start Date: 09/23/2009 16:23

GC Column: Rtx-5ms ID: 0.25(um) Calib End Date: 09/23/2009 20:48

Lab File ID: J03127.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dimethyl phthalate	Ave	1.207	1.195		4950	5000	-1.0	30.0
2,6-Dinitrotoluene	Lin2		0.2749		4890	5000	-2.3	30.0
Acenaphthylene	Ave	1.618	1.622		5010	5000	0.3	30.0
3-Nitroaniline	Lin1		0.2388		4100	5000	-17.9	30.0
Acenaphthene	Ave	1.091	1.023		4690	5000	-6.3	20.0
2,4-Dinitrophenol	Qua		0.0796	0.0500	8740	5000	74.7*	30.0
4-Nitrophenol	Lin		0.1314	0.0500	4570	5000	-8.7	30.0
Dibenzofuran	Ave	1.497	1.420		4740	5000	-5.2	30.0
2,4-Dinitrotoluene	Lin1		0.3300		4680	5000	-6.3	30.0
2,3,4,6-Tetrachlorophenol	Lin1		0.2324		4920	5000	-1.5	30.0
Diethyl phthalate	Ave	1.215	1.186		4880	5000	-2.4	30.0
4-Chlorophenyl phenyl ether	Ave	0.5726	0.5491		4790	5000	-4.1	30.0
Fluorene	Ave	1.178	1.165		4940	5000	-1.1	30.0
4-Nitroaniline	Lin1		0.1860		3900	5000	-21.9	30.0
4,6-Dinitro-2-methylphenol	Qua		0.0861		8930	5000	78.5*	30.0
Diphenylamine	Ave	0.6232	0.6381		5120	5000	2.4	30.0
N-Nitrosodiphenylamine	Ave	0.6232	0.6396		5130	5000	2.6	20.0
1,2-Diphenylhydrazine	Ave	0.7457	0.7976		5350	5000	7.0	30.0
Azobenzene	Ave	0.7457	0.7965		5340	5000	6.8	30.0
4-Bromophenyl phenyl ether	Ave	0.1845	0.1813		4910	5000	-1.7	30.0
Atrazine	Ave	0.1730	0.1891		5460	5000	9.3	30.0
Hexachlorobenzene	Ave	0.1897	0.1828		4820	5000	-3.6	30.0
Pentachlorophenol	Qua		0.0900		6050	5000	21.0*	20.0
Pentachloronitrobenzene	Lin1		0.0731		4940	5000	-1.3	30.0
Anthracene	Ave	0.9247	0.8990		4860	5000	-2.8	30.0
Phenanthrene	Ave	1.033	0.8979		4350	5000	-13.1	30.0
Carbazole	Ave	0.8175	0.7379		4510	5000	-9.7	30.0
Di-n-butyl phthalate	Ave	1.201	1.175		4890	5000	-2.2	30.0
Pyrene	Ave	1.287	1.400		5440	5000	8.8	30.0
Benzidine	Lin1		0.0804		2610	5000	-47.9*	30.0
Fluoranthene	Ave	0.9580	0.8630		4500	5000	-9.9	20.0
Butyl benzyl phthalate	Lin1		0.7575		5430	5000	8.6	30.0
Bis(2-ethylhexyl) phthalate	Lin1		1.613		9140	5000	82.9*	30.0
3,3'-Dichlorobenzidine	Lin1		0.2368		5010	5000	0.1	30.0
Benzo[a]anthracene	Ave	0.8789	0.8362		4760	5000	-4.9	30.0
Chrysene	Ave	0.8894	0.7934		4460	5000	-10.8	30.0
Di-n-octyl phthalate	Lin		2.131		4720	5000	-5.6	20.0
Benzo[b]fluoranthene	Lin1		1.254		4560	5000	-8.7	30.0
Benzo[k]fluoranthene	Lin1		1.254		4870	5000	-2.7	30.0
Benzo[a]pyrene	Lin1		0.8454		4590	5000	-8.2	20.0
Dibenz(a,h)anthracene	Qua		0.6331		6700	5000	33.9*	30.0

FORM IV
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Westfield Job No.: 360-24499-2

SDG No.: OCRI-13A

Lab File ID: B10486.D Lab Sample ID: MB 360-49016/1-A

Matrix: Solid Date Extracted: 09/16/2009 11:53

Instrument ID: Inst. B Date Analyzed: 09/22/2009 20:43

Level: (Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 360-49016/2-A	B10487.D	09/22/2009 21:14
	LCSD 360-49016/3-A	B10488.D	09/22/2009 21:45
OC-SB-469-28/30-XXX	360-24499-3	B10535.D	09/24/2009 06:28

lcs

anthra 29/31

bis(2-ethylhexyl) phthalate 141/141

Surr OK

Tune OK

IS OK

CCAL OK

ICAL OK

MB

Di-n-butyl phthalate 68 600

bis(2-ethylhexyl)phthalate 162 1620

Benzoic acid 97.1 487

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24499-2

SDG No.: OCRI-13A

Matrix: Solid Level: Low Lab File ID: B10487.D

Lab ID: LCS 360-49016/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
1,1'-Biphenyl	333	318	95	40-140	
1,2,4,5-Tetrachlorobenzene	333	299	90	40-140	
1,2,4-Trichlorobenzene	333	249	75	40-140	
1,2-Dichlorobenzene	333	244	73	40-140	
1,3-Dichlorobenzene	333	205	62	40-140	
1,4-Dichlorobenzene	333	198	59	40-140	
1-Methylnaphthalene	333	293	88	40-140	
2,2'-oxybis[1-chloropropane]	333	273	82	40-140	
2,3,4,6-Tetrachlorophenol	333	264	79	40-140	
2,4,5-Trichlorophenol	333	297	89	30-130	
2,4,6-Trichlorophenol	333	303	91	30-130	
2,4-Dichlorophenol	333	272	82	30-130	
2,4-Dimethylphenol	333	267	80	30-130	
2,4-Dinitrophenol	333	238	72	30-130	
2,4-Dinitrotoluene	333	297	89	40-140	
2,6-Dinitrotoluene	333	306	92	40-140	
2-Chloronaphthalene	333	242	73	40-140	
2-Chlorophenol	333	233	70	30-130	
2-Methylnaphthalene	333	231	69	40-140	
2-Methylphenol	333	242	73	30-130	
2-Nitroaniline	333	353	106	40-140	
2-Nitrophenol	333	289	87	30-130	
3 & 4 Methylphenol	333	258	78	30-130	
3,3'-Dichlorobenzidine	333	323	97	40-140	
3-Nitroaniline	333	316	95	40-140	
4,6-Dinitro-2-methylphenol	333	315	94	30-130	
4-Bromophenyl phenyl ether	333	334	100	40-140	
4-Chloro-3-methylphenol	333	287	86	30-130	
4-Chloroaniline	333	211	63	40-140	
4-Chlorophenyl phenyl ether	333	317	95	40-140	
4-Nitroaniline	333	312	94	40-140	
4-Nitrophenol	333	337	101	30-130	
Acenaphthene	333	350	105	40-140	
Acenaphthylene	333	303	91	40-140	
Acetophenone	333	233	70	40-140	
Aniline	333	95.6	29	40-140	*
Anthracene	333	387	116	40-140	
Atrazine	333	402	121	40-140	
Azobenzene	333	333	100	40-140	
Benzaldehyde	333	262	79	40-140	
Benzo[a]anthracene	333	397	119	40-140	

Calculations are performed before rounding aniline 27/27 3j

Column to be used to flag recovery and RPD values bis(2-ethylhexyl)phthalate 141/141

FORM III 8270C LL

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24499-2

SDG No.: OCRI-13A

Matrix: Solid Level: Low Lab File ID: B10487.D

Lab ID: LCS 360-49016/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
Benzo[a]pyrene	333	413	124	40-140	
Benzo[b]fluoranthene	333	351	105	40-140	
Benzo[g,h,i]perylene	333	382	115	40-140	
Benzo[k]fluoranthene	333	387	116	40-140	
Benzoic acid	333	171	51	30-130	
Benzophenone	333	347	104	40-140	
Benzyl alcohol	333	268	80	30-130	
Bis(2-chloroethoxy)methane	333	233	70	40-140	
Bis(2-chloroethyl)ether	333	210	63	40-140	
Bis(2-ethylhexyl) phthalate	333	472	141	40-140	*
Butyl benzyl phthalate	333	319	96	40-140	
Caprolactam	333	364	109	40-140	
Carbazole	333	357	107	40-140	
Chrysene	333	378	113	40-140	
Dibenz(a,h)anthracene	333	425	127	40-140	
Dibenzofuran	333	305	91	40-140	
Diethyl phthalate	333	327	98	40-140	
Dimethyl phthalate	333	319	96	40-140	
Di-n-butyl phthalate	333	395	118	40-140	
Di-n-octyl phthalate	333	318	95	40-140	
Diphenyl oxide	333	258	77	40-140	
Fluoranthene	333	357	107	40-140	
Fluorene	333	374	112	40-140	
Hexachlorobenzene	333	322	97	40-140	
Hexachlorobutadiene	333	263	79	40-140	
Hexachlorocyclopentadiene	333	231	69	40-140	
Hexachloroethane	333	205	62	40-140	
Indeno[1,2,3-cd]pyrene	333	421	126	40-140	
Isophorone	333	213	64	40-140	
Naphthalene	333	274	82	40-140	
Nitrobenzene	333	233	70	40-140	
N-Nitrosodimethylamine	333	248	74	40-140	
N-Nitrosodi-n-propylamine	333	255	77	40-140	
N-Nitrosodiphenylamine	333	232	70	40-140	
Pentachlorophenol	333	312	94	30-130	
Phenanthrene	333	341	102	40-140	
Phenol	333	240	72	30-130	
Pyrene	333	353	106	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24499-2

SDG No.: OCRI-13A

Matrix: Solid Level: Low Lab File ID: B10488.D

Lab ID: LCSD 360-49016/3-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCSD CONCENTRATION (ug/Kg)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1'-Biphenyl	333	307	92	3	30	40-140	
1,2,4,5-Tetrachlorobenzene	333	306	92	2	30	40-140	
1,2,4-Trichlorobenzene	333	262	79	5	30	40-140	
1,2-Dichlorobenzene	333	261	78	7	30	40-140	
1,3-Dichlorobenzene	333	217	65	6	30	40-140	
1,4-Dichlorobenzene	333	211	63	6	30	40-140	
1-Methylnaphthalene	333	286	86	2	30	40-140	
2,2'-oxybis[1-chloropropane]	333	291	87	6	30	40-140	
2,3,4,6-Tetrachlorophenol	333	260	78	1	30	40-140	
2,4,5-Trichlorophenol	333	320	96	8	30	30-130	
2,4,6-Trichlorophenol	333	314	94	3	30	30-130	
2,4-Dichlorophenol	333	276	83	2	30	30-130	
2,4-Dimethylphenol	333	279	84	4	30	30-130	
2,4-Dinitrophenol	333	254	76	6	30	30-130	
2,4-Dinitrotoluene	333	311	93	5	30	40-140	
2,6-Dinitrotoluene	333	318	95	4	30	40-140	
2-Chloronaphthalene	333	249	75	3	30	40-140	
2-Chlorophenol	333	247	74	6	30	30-130	
2-Methylnaphthalene	333	236	71	2	30	40-140	
2-Methylphenol	333	254	76	5	30	30-130	
2-Nitroaniline	333	358	107	1	30	40-140	
2-Nitrophenol	333	301	90	4	30	30-130	
3 & 4 Methylphenol	333	273	82	6	30	30-130	
3,3'-Dichlorobenzidine	333	343	103	6	30	40-140	
3-Nitroaniline	333	321	96	2	30	40-140	
4,6-Dinitro-2-methylphenol	333	327	98	4	30	30-130	
4-Bromophenyl phenyl ether	333	341	102	2	30	40-140	
4-Chloro-3-methylphenol	333	291	87	2	30	30-130	
4-Chloroaniline	333	208	62	1	30	40-140	
4-Chlorophenyl phenyl ether	333	326	98	3	30	40-140	
4-Nitroaniline	333	321	96	3	30	40-140	
4-Nitrophenol	333	354	106	5	30	30-130	
Acenaphthene	333	360	108	3	30	40-140	
Acenaphthylene	333	310	93	2	30	40-140	
Acetophenone	333	251	75	8	30	40-140	
Aniline	333	103	31	8	30	40-140	*
Anthracene	333	400	120	3	30	40-140	
Atrazine	333	406	122	1	30	40-140	
Azobenzene	333	338	101	2	30	40-140	
Benzaldehyde	333	259	78	1	30	40-140	
Benzo[a]anthracene	333	419	126	6	30	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24499-2

SDG No.: OCRI-13A

Matrix: Solid Level: Low Lab File ID: B10488.D

Lab ID: LCSD 360-49016/3-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCSD CONCENTRATION (ug/Kg)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Benzo[a]pyrene	333	437	131	6	30	40-140	
Benzo[b]fluoranthene	333	380	114	8	30	40-140	
Benzo[g,h,i]perylene	333	402	121	5	30	40-140	
Benzo[k]fluoranthene	333	407	122	5	30	40-140	
Benzoic acid	333	174	52	2	30	30-130	
Benzophenone	333	347	104	0	30	40-140	
Benzyl alcohol	333	279	84	4	30	30-130	
Bis(2-chloroethoxy)methane	333	237	71	2	30	40-140	
Bis(2-chloroethyl)ether	333	223	67	6	30	40-140	
Bis(2-ethylhexyl) phthalate	333	470	141	0	30	40-140	*
Butyl benzyl phthalate	333	337	101	6	30	40-140	
Caprolactam	333	357	107	2	30	40-140	
Carbazole	333	374	112	4	30	40-140	
Chrysene	333	398	120	5	30	40-140	
Dibenz(a,h)anthracene	333	455	136	7	30	40-140	
Dibenzofuran	333	310	93	2	30	40-140	
Diethyl phthalate	333	337	101	3	30	40-140	
Dimethyl phthalate	333	330	99	3	30	40-140	
Di-n-butyl phthalate	333	410	123	4	30	40-140	
Di-n-octyl phthalate	333	335	101	5	30	40-140	
Diphenyl oxide	333	251	75	3	30	40-140	
Fluoranthene	333	375	113	5	30	40-140	
Fluorene	333	383	115	2	30	40-140	
Hexachlorobenzene	333	336	101	4	30	40-140	
Hexachlorobutadiene	333	264	79	0	30	40-140	
Hexachlorocyclopentadiene	333	245	74	6	30	40-140	
Hexachloroethane	333	220	66	7	30	40-140	
Indeno[1,2,3-cd]pyrene	333	447	134	6	30	40-140	
Isophorone	333	220	66	4	30	40-140	
Naphthalene	333	282	85	3	30	40-140	
Nitrobenzene	333	236	71	1	30	40-140	
N-Nitrosodimethylamine	333	263	79	6	30	40-140	
N-Nitrosodi-n-propylamine	333	269	81	5	30	40-140	
N-Nitrosodiphenylamine	333	245	73	5	30	40-140	
Pentachlorophenol	333	328	98	5	30	30-130	
Phenanthrene	333	360	108	5	30	40-140	
Phenol	333	257	77	7	30	30-130	
Pyrene	333	368	110	4	30	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM IV
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Westfield Job No.: 360-24499-2

SDG No.: OCRI-13A

Lab File ID: B10564.D Lab Sample ID: MB 360-49041/1-A

Matrix: Solid Date Extracted: 09/16/2009 15:13

Instrument ID: Inst. B Date Analyzed: 09/26/2009 01:41

Level: (Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 360-49041/2-A	B10565.D	09/26/2009 02:09
	LCSD 360-49041/3-A	B10566.D	09/26/2009 02:37
OC-SB-417-20/22-XXX	360-24499-15	B10571.D	09/26/2009 04:54
OC-SB-434-15/16-XXX	360-24499-18	B10574.D	09/26/2009 06:17
OC-SB-450-33/35-XXX	360-24499-21	B10577.D	09/26/2009 07:39

Surr ok

tune ok

Is ok

CCAL ok

ICAL ok

LCS

aniline 27/30

bis(2ethylhexyl)phthalate 159/158

MB 49041

Benzoic acid 62.2 311

bis(2ethylhexyl)phthalate 211 2110

dimethyl phthalate 727 727

TIC unk (7.09)

vanillin

octacosane

eicosane

1-naphthalenepropanol, alpha.-ethenyl-de

benzoic acid, 2-propenyl ester

tricosane

squalene

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24499-2

SDG No.: OCRI-13A

Matrix: Solid Level: Low Lab File ID: B10565.D

Lab ID: LCS 360-49041/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
1,1'-Biphenyl	333	286	86	40-140	
1,2,4,5-Tetrachlorobenzene	333	221	66	40-140	
1,2,4-Trichlorobenzene	333	228	68	40-140	
1,2-Dichlorobenzene	333	195	58	40-140	
1,3-Dichlorobenzene	333	194	58	40-140	
1,4-Dichlorobenzene	333	194	58	40-140	
1-Methylnaphthalene	333	225	67	40-140	
2,2'-oxybis[1-chloropropane]	333	210	63	40-140	
2,3,4,6-Tetrachlorophenol	333	241	72	40-140	
2,4,5-Trichlorophenol	333	262	79	30-130	
2,4,6-Trichlorophenol	333	300	90	30-130	
2,4-Dichlorophenol	333	264	79	30-130	
2,4-Dimethylphenol	333	248	74	30-130	
2,4-Dinitrophenol	333	167	50	30-130	
2,4-Dinitrotoluene	333	252	76	40-140	
2,6-Dinitrotoluene	333	270	81	40-140	
2-Chloronaphthalene	333	211	63	40-140	
2-Chlorophenol	333	218	65	30-130	
2-Methylnaphthalene	333	208	63	40-140	
2-Methylphenol	333	235	71	30-130	
2-Nitroaniline	333	307	92	40-140	
2-Nitrophenol	333	257	77	30-130	
3 & 4 Methylphenol	333	249	75	30-130	
3,3'-Dichlorobenzidine	333	288	86	40-140	
3-Nitroaniline	333	269	81	40-140	
4,6-Dinitro-2-methylphenol	333	234	70	30-130	
4-Bromophenyl phenyl ether	333	288	87	40-140	
4-Chloro-3-methylphenol	333	278	84	30-130	
4-Chloroaniline	333	173	52	40-140	
4-Chlorophenyl phenyl ether	333	268	80	40-140	
4-Nitroaniline	333	273	82	40-140	
4-Nitrophenol	333	293	88	30-130	
Acenaphthene	333	299	90	40-140	
Acenaphthylene	333	264	79	40-140	
Acetophenone	333	230	69	40-140	
Aniline	333	89.9	27	40-140	*
Anthracene	333	340	102	40-140	
Atrazine	333	379	114	40-140	
Azobenzene	333	297	89	40-140	
Benzaldehyde	333	257	77	40-140	
Benzo[a]anthracene	333	360	108	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

aniline 27 / 30

bis(2-ethylhexyl) phthalate 15 / 15

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24499-2

SDG No.: OCRI-13A

Matrix: Solid Level: Low Lab File ID: B10565.D

Lab ID: LCS 360-49041/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
Benzo[a]pyrene	333	325	98	40-140	
Benzo[b]fluoranthene	333	317	95	40-140	
Benzo[g,h,i]perylene	333	348	104	40-140	
Benzo[k]fluoranthene	333	343	103	40-140	
Benzoic acid	333	143 J	43	30-130	
Benzophenone	333	329	99	40-140	
Benzyl alcohol	333	244	73	30-130	
Bis(2-chloroethoxy)methane	333	212	64	40-140	
Bis(2-chloroethyl)ether	333	202	61	40-140	
Bis(2-ethylhexyl) phthalate	333	530	159	40-140	*
Butyl benzyl phthalate	333	321	96	40-140	
Caprolactam	333	299	90	40-140	
Carbazole	333	326	98	40-140	
Chrysene	333	339	102	40-140	
Dibenz(a,h)anthracene	333	345	104	40-140	
Dibenzofuran	333	262	79	40-140	
Diethyl phthalate	333	285	86	40-140	
Dimethyl phthalate	333	280	84	40-140	
Di-n-butyl phthalate	333	355	107	40-140	
Di-n-octyl phthalate	333	271	81	40-140	
Diphenyl oxide	333	240	72	40-140	
Fluoranthene	333	320	96	40-140	
Fluorene	333	327	98	40-140	
Hexachlorobenzene	333	290	87	40-140	
Hexachlorobutadiene	333	202	61	40-140	
Hexachlorocyclopentadiene	333	201	60	40-140	
Hexachloroethane	333	205	61	40-140	
Indeno[1,2,3-cd]pyrene	333	351	105	40-140	
Isophorone	333	198	59	40-140	
Naphthalene	333	204	61	40-140	
Nitrobenzene	333	211	63	40-140	
N-Nitrosodimethylamine	333	232	70	40-140	
N-Nitrosodi-n-propylamine	333	233	70	40-140	
N-Nitrosodiphenylamine	333	211	63	40-140	
Pentachlorophenol	333	271	81	30-130	
Phenanthrene	333	316	95	40-140	
Phenol	333	232	69	30-130	
Pyrene	333	307	92	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24499-2

SDG No.: OCRI-13A

Matrix: Solid Level: Low Lab File ID: B10566.D

Lab ID: LCSD 360-49041/3-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCSD CONCENTRATION (ug/Kg)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1'-Biphenyl	333	297	89	4	30	40-140	
1,2,4,5-Tetrachlorobenzene	333	239	72	8	30	40-140	
1,2,4-Trichlorobenzene	333	249	75	9	30	40-140	
1,2-Dichlorobenzene	333	210	63	8	30	40-140	
1,3-Dichlorobenzene	333	208	62	7	30	40-140	
1,4-Dichlorobenzene	333	207	62	7	30	40-140	
1-Methylnaphthalene	333	228	68	2	30	40-140	
2,2'-oxybis[1-chloropropane]	333	229	69	8	30	40-140	
2,3,4,6-Tetrachlorophenol	333	255	77	5	30	40-140	
2,4,5-Trichlorophenol	333	301	90	14	30	30-130	
2,4,6-Trichlorophenol	333	331	99	10	30	30-130	
2,4-Dichlorophenol	333	294	88	11	30	30-130	
2,4-Dimethylphenol	333	272	82	9	30	30-130	
2,4-Dinitrophenol	333	197	59	17	30	30-130	
2,4-Dinitrotoluene	333	280	84	10	30	40-140	
2,6-Dinitrotoluene	333	305	91	12	30	40-140	
2-Chloronaphthalene	333	233	70	10	30	40-140	
2-Chlorophenol	333	239	72	9	30	30-130	
2-Methylnaphthalene	333	229	69	9	30	40-140	
2-Methylphenol	333	260	78	10	30	30-130	
2-Nitroaniline	333	360	108	16	30	40-140	
2-Nitrophenol	333	281	84	9	30	30-130	
3 & 4 Methylphenol	333	275	82	10	30	30-130	
3,3'-Dichlorobenzidine	333	323	97	12	30	40-140	
3-Nitroaniline	333	298	89	10	30	40-140	
4,6-Dinitro-2-methylphenol	333	264	79	12	30	30-130	
4-Bromophenyl phenyl ether	333	322	97	11	30	40-140	
4-Chloro-3-methylphenol	333	311	93	11	30	30-130	
4-Chloroaniline	333	205	62	17	30	40-140	
4-Chlorophenyl phenyl ether	333	304	91	13	30	40-140	
4-Nitroaniline	333	307	92	12	30	40-140	
4-Nitrophenol	333	340	102	15	30	30-130	
Acenaphthene	333	336	101	12	30	40-140	
Acenaphthylene	333	293	88	11	30	40-140	
Acetophenone	333	251	75	9	30	40-140	
Aniline	333	99.5	30	10	30	40-140	*
Anthracene	333	386	116	13	30	40-140	
Atrazine	333	392	118	3	30	40-140	
Azobenzene	333	327	98	10	30	40-140	
Benzaldehyde	333	257	77	0	30	40-140	
Benzo[a]anthracene	333	390	117	8	30	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24499-2

SDG No.: OCRI-13A

Matrix: Solid Level: Low Lab File ID: B10566.D

Lab ID: LCSD 360-49041/3-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCSD CONCENTRATION (ug/Kg)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Benzo[a]pyrene	333	357	107	9	30	40-140	
Benzo[b]fluoranthene	333	345	104	9	30	40-140	
Benzo[g,h,i]perylene	333	390	117	12	30	40-140	
Benzo[k]fluoranthene	333	382	115	11	30	40-140	
Benzoic acid	333	158 J	47	10	30	30-130	
Benzophenone	333	344	103	4	30	40-140	
Benzyl alcohol	333	264	79	8	30	30-130	
Bis(2-chloroethoxy)methane	333	234	70	10	30	40-140	
Bis(2-chloroethyl)ether	333	219	66	8	30	40-140	
Bis(2-ethylhexyl) phthalate	333	528	158	0	30	40-140	*
Butyl benzyl phthalate	333	344	103	7	30	40-140	
Caprolactam	333	314	94	5	30	40-140	
Carbazole	333	368	110	12	30	40-140	
Chrysene	333	368	110	8	30	40-140	
Dibenz(a,h)anthracene	333	390	117	12	30	40-140	
Dibenzofuran	333	294	88	11	30	40-140	
Diethyl phthalate	333	323	97	12	30	40-140	
Dimethyl phthalate	333	317	95	13	30	40-140	
Di-n-butyl phthalate	333	390	117	9	30	40-140	
Di-n-octyl phthalate	333	285	85	5	30	40-140	
Diphenyl oxide	333	244	73	2	30	40-140	
Fluoranthene	333	361	108	12	30	40-140	
Fluorene	333	367	110	12	30	40-140	
Hexachlorobenzene	333	324	97	11	30	40-140	
Hexachlorobutadiene	333	219	66	8	30	40-140	
Hexachlorocyclopentadiene	333	225	67	11	30	40-140	
Hexachloroethane	333	219	66	7	30	40-140	
Indeno[1,2,3-cd]pyrene	333	390	117	11	30	40-140	
Isophorone	333	219	66	10	30	40-140	
Naphthalene	333	222	67	9	30	40-140	
Nitrobenzene	333	229	69	8	30	40-140	
N-Nitrosodimethylamine	333	249	75	7	30	40-140	
N-Nitrosodi-n-propylamine	333	256	77	9	30	40-140	
N-Nitrosodiphenylamine	333	238	71	12	30	40-140	
Pentachlorophenol	333	312	94	14	30	30-130	
Phenanthrene	333	353	106	11	30	40-140	
Phenol	333	251	75	8	30	30-130	
Pyrene	333	326	98	6	30	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

SEMIVOLATILE ORGANICS

REGION I VALIDATION CHECKLIST for
OLIN CHEMICAL SUPERFUND SITE
Criteria and Qualifications: REGION I Organics Guideline (1996)

TIER I / (II) / III (circle one)

SITE: Olin Chemical Superfund Site Project #: 6107/0001612 SDG #: OCRI-14/14A

LAB #: TAL-Westfield

Sample IDs: Attach tracking sheet and/or sample listing.

This checklist is designed to be used with USEPA Region I Validation Guidelines Part II (12/1996). During Level III validation, calculation and transcription checks are completed for instrument tuning, surrogates, target compounds, spike recoveries, calibration data, and internal standards as specified in the guideline. These checks are documented on attached validation notes.

YES NO NA	
Data completeness ☑ ☐ ☐ All data summaries, QC forms and raw data available from hard copy or electronic data package ☑ ☐ ☐ Data summaries match EDD	Contact lab if missing data. Lab to respond with 24 hours.
Holding Times and Preservation ☑ ☐ ☐ Hold times met (Waters – Extract within 7 days, analyze within 40 days. Soils – extract within 14 days, analyze within 40 days)	
Instrument Performance Check (Tune) ☑ ☐ ☐ Tune available for each 12-hour period samples were analyzed ☑ ☐ ☐ Appropriate number of significant figures reported (at least 2) ☑ ☐ ☐ Mass/Charge list (m/z) criteria met	
Initial Calibration ☑ ☐ ☐ %RSD less than or equal to 30% ☑ ☐ ☐ RRF greater than or equal to 0.05	
Continuing Calibration ☑ ☐ ☐ %D less than or equal to 25% ☑ ☐ ☐ RRF greater than or equal to 0.05.	
Blank Contamination ☒ ☐ ☐ Method blank contamination ☒ ☐ ☐ Equipment/Rinseate blank contamination	Evaluate all blanks for contamination. Highest contaminant level used for action level. See below.

SEMIVOLATILE ORGANICS

REGION I VALIDATION CHECKLIST for
OLIN CHEMICAL SUPERFUND SITE
Criteria and Qualifications: REGION I Organics Guideline (1996)

TIER I / II / III (circle one)

Surrogate Recoveries ☐ ☒ ☐ Surrogates percent recovery criteria met: Soil = (base/neutral 30%-130%, acid 30%-130%) Water = (base/neutral 30%-130%, acid 15%-110%)	See below.
Matrix Spikes and Laboratory Control Samples ☐ ☒ ☐ MS/MSD percent recovery criteria met Soil and Water = (base/neutral 40%-140%, acid 30%-130%) ☐ ☒ ☐ MS/MSD RPD criteria met (soils <50%, water <30%) ☐ ☒ ☐ LCS percent recovery criteria met soil/water (base 40%-140%, acid 30%-130%)	See below.
Field Duplicates ☑ ☐ ☐ RPD criteria met (soils <50%, water <30%)	
Internal Standard ☐ ☒ ☐ Area counts within -50 to +100 percent of calib. std. ☑ ☐ ☐ Retention Time within 30 seconds of calib. std.	See below.
Target Compounds ☑ ☐ ☐ Reviewed narrative for anomalies	
Tentatively Identified Compounds (TICs) ☐ ☑ ☐ TCL compounds reported as TICs	

Validator's Signature: _____

Date: 3/18/10

Reference:

MACTEC, Quality Assurance Project Plan for Remedial Investigation/Feasibility Study – Olin Chemical Superfund Site, Wilmington Property, 51 Eames Street, Wilmington, MA", MACTEC Engineering and Consulting. Draft .October 2008.

SAMPLE SUMMARY

Client: Olin Corporation

Job Number: 360-24563-1
Sdg Number: OCRI-14

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
360-24563-1	OC-SB-427-0.0/1.0-XXX	Solid	09/10/2009 1340	09/11/2009 1820
360-24563-2	OC-SB-427-12/14-XXX	Solid	09/10/2009 1435	09/11/2009 1820
360-24563-3	OC-SB-427-17/19-XXX	Solid	09/10/2009 1505	09/11/2009 1820
360-24563-4	OC-SB-427-8.0/10-DUP	Solid	09/10/2009 1400	09/11/2009 1820
360-24563-5	OC-SB-427-8.0/10-XXX	Solid	09/10/2009 1400	09/11/2009 1820
360-24563-5MS	OC-SB-427-8.0/10-XMS	Solid	09/10/2009 1400	09/11/2009 1820
360-24563-5MSD	OC-SB-427-8.0/10-MSD	Solid	09/10/2009 1400	09/11/2009 1820
360-24563-6	OC-SB-428-0.0/1.0-XXX	Solid	09/10/2009 1600	09/11/2009 1820
360-24563-7	OC-SB-428-23/25-XXX	Solid	09/10/2009 1740	09/11/2009 1820
360-24563-8	OC-SB-428-8.0/10-DUP	Solid	09/10/2009 1620	09/11/2009 1820
360-24563-9	OC-SB-428-8.0/10-XXX	Solid	09/10/2009 1620	09/11/2009 1820
360-24563-9MS	OC-SB-428-8.0/10-XMS	Solid	09/10/2009 1620	09/11/2009 1820
360-24563-9MSD	OC-SB-428-8.0/10-MSD	Solid	09/10/2009 1620	09/11/2009 1820
360-24563-10	OC-TBK-017	Solid	09/11/2009 1000	09/11/2009 1820
360-24563-11	OC-SB-456-0.0/1.0-XXX	Solid	09/11/2009 0830	09/11/2009 1820
360-24563-12	OC-SB-456-16/18-XXX	Solid	09/11/2009 1040	09/11/2009 1820
360-24563-13	OC-SB-456-7.0/9.0-DUP	Solid	09/11/2009 0900	09/11/2009 1820
360-24563-14	OC-SB-456-7.0/9.0-XXX	Solid	09/11/2009 0900	09/11/2009 1820
360-24563-14MS	OC-SB-456-7.0/9.0-XMS	Solid	09/11/2009 0900	09/11/2009 1820
360-24563-14MSD	OC-SB-456-7.0/9.0-MSD	Solid	09/11/2009 0900	09/11/2009 1820
360-24563-15	OC-SB-457-0.0/1.0-XXX	Solid	09/11/2009 1310	09/11/2009 1820
360-24563-16	OC-SB-457-8.0/10-XXX	Solid	09/11/2009 1320	09/11/2009 1820
360-24563-17	OC-SB-456-0.0/1.0-XXX	Solid	09/11/2009 0830	09/11/2009 1820
360-24563-18	OC-SB-456-16/18-XXX	Solid	09/11/2009 1040	09/11/2009 1820
360-24563-19	OC-SB-456-7.0/9.0-DUP	Solid	09/11/2009 0900	09/11/2009 1820
360-24563-20	OC-SB-456-7.0/9.0-XXX	Solid	09/11/2009 0900	09/11/2009 1820
360-24563-20MS	OC-SB-456-7.0/9.0-XMS	Solid	09/11/2009 0900	09/11/2009 1820
360-24563-21	OC-SB-457-0.0/1.0-XXX	Solid	09/11/2009 1310	09/11/2009 1820
360-24563-22	OC-SB-457-8.0/10-XXX	Solid	09/11/2009 1320	09/11/2009 1820
360-24563-23	OC-EBK-009	Water	09/10/2009 1850	09/11/2009 1820

Form 1's validated.

3/18/10

Client: Olin Corporation

Job Number: 360-24563-1
Sdg Number: OCRI-14

Client Sample ID: OC-SB-427-0.0/1.0-XXX

Lab Sample ID: 360-24563-1
Client Matrix: Solid
% Moisture: 7.1

Date Sampled: 09/10/2009 1340
Date Received: 09/11/2009 1820

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49518		Instrument ID:	Inst. J
Preparation:	3550B	Prep Batch: 360-49155		Lab File ID:	J03134.D
Dilution:	1.0			Initial Weight/Volume:	100.05 g
Date Analyzed:	09/25/2009 2159			Final Weight/Volume:	1.0 mL
Date Prepared:	09/18/2009 1122			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodimethylamine		ND		1.2	5.4

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	80		30 - 130
2-Fluorobiphenyl	65		30 - 130
2-Fluorophenol	58		30 - 130
Nitrobenzene-d5	66		30 - 130
Phenol-d5	66		30 - 130
Terphenyl-d14	109		30 - 130

Client: Olin Corporation

Job Number: 360-24563-1
Sdg Number: OCRI-14

Client Sample ID: OC-SB-427-0.0/1.0-XXX

Lab Sample ID: 360-24563-1
Client Matrix: Solid
% Moisture: 7.1

Date Sampled: 09/10/2009 1340
Date Received: 09/11/2009 1820

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49517		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49041		Lab File ID:	B10579.D
Dilution:	1.0			Initial Weight/Volume:	30.06 g
Date Analyzed:	09/26/2009 0834			Final Weight/Volume:	1.0 mL
Date Prepared:	09/16/2009 1513			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		23	J	11	36
1,2,4,5-Tetrachlorobenzene		ND		11	36
1,2,4-Trichlorobenzene		ND		11	36
1,2-Dichlorobenzene		ND		11	36
1,3-Dichlorobenzene		ND		11	36
1,4-Dichlorobenzene		ND		11	36
1-Methylnaphthalene		ND		11	36
2,2'-oxybis[1-chloropropane]		ND		11	36
2,3,4,6-Tetrachlorophenol		ND		11	36
2,4,5-Trichlorophenol		ND		11	36
2,4,6-Trichlorophenol		ND		11	36
2,4-Dichlorophenol		ND		11	36
2,4-Dimethylphenol		ND		14	36
2,4-Dinitrophenol		ND		11	36
2,4-Dinitrotoluene		ND		11	36
2,6-Dinitrotoluene		ND		11	36
2-Chloronaphthalene		ND		11	36
2-Chlorophenol		ND		11	36
2-Methylnaphthalene		ND		11	36
2-Methylphenol		ND		21	36
2-Nitroaniline		ND		11	180
2-Nitrophenol		ND		11	36
3 & 4 Methylphenol		ND		11	36
3,3'-Dichlorobenzidine		ND		11	72
3-Nitroaniline		ND		11	180
4,6-Dinitro-2-methylphenol		ND		11	180
4-Bromophenyl phenyl ether		ND		11	36
4-Chloro-3-methylphenol		ND		11	72
4-Chloroaniline		ND		11	72
4-Chlorophenyl phenyl ether		ND		11	36
4-Nitroaniline		ND		11	180
4-Nitrophenol		ND		11	180
Acenaphthene		ND		11	36
Acenaphthylene		ND		11	36
Acetophenone		ND		11	36
Aniline		16	J ✓	11	36
Anthracene		ND		11	36
Atrazine		ND		11	36
Azobenzene		ND		11	36
Benzaldehyde		15	J	11	36
Benzo[a]anthracene		ND		11	36
Benzo[a]pyrene		12	J	11	36
Benzo[b]fluoranthene		18	J	11	36
Benzo[g,h,i]perylene		ND		11	36
Benzo[k]fluoranthene		ND		11	36
Benzoic acid	1804	~~89~~	~~LB~~	16	180

3/15/10

SEMIVOLATILE ORGANICS

REGION I VALIDATION CHECKLIST for
OLIN CHEMICAL SUPERFUND SITE
Criteria and Qualifications: REGION I Organics Guideline (1996)

TIER I / (II) / III (circle one)

SITE: Olin Chemical Superfund Site Project #: 6107/0001G.12 SDG #: OCRI-14/14A

LAB #: TAL-Westfield

Sample IDs: Attach tracking sheet and/or sample listing.

This checklist is designed to be used with USEPA Region I Validation Guidelines Part II (12/1996). During Level III validation, calculation and transcription checks are completed for instrument tuning, surrogates, target compounds, spike recoveries, calibration data, and internal standards as specified in the guideline. These checks are documented on attached validation notes.

YES NO NA	
Data completeness ☑ ☐ ☐ All data summaries, QC forms and raw data available from hard copy or electronic data package ☑ ☐ ☐ Data summaries match EDD	Contact lab if missing data. Lab to respond with 24 hours.
Holding Times and Preservation ☑ ☐ ☐ Hold times met (Waters – Extract within 7 days, analyze within 40 days. Soils – extract within 14 days, analyze within 40 days)	
Instrument Performance Check (Tune) ☑ ☐ ☐ Tune available for each 12-hour period samples were analyzed ☑ ☐ ☐ Appropriate number of significant figures reported (at least 2) ☑ ☐ ☐ Mass/Charge list (m/z) criteria met	
Initial Calibration ☑ ☐ ☐ %RSD less than or equal to 30% ☑ ☐ ☐ RRF greater than or equal to 0.05	
Continuing Calibration ☑ ☐ ☐ %D less than or equal to 25% ☑ ☐ ☐ RRF greater than or equal to 0.05.	
Blank Contamination ☒ ☐ ☐ Method blank contamination ☒ ☐ ☐ Equipment/Rinseate blank contamination	Evaluate all blanks for contamination. Highest contaminant level used for action level. See below.

SEMIVOLATILE ORGANICS

REGION I VALIDATION CHECKLIST for
OLIN CHEMICAL SUPERFUND SITE
Criteria and Qualifications: REGION I Organics Guideline (1996)

TIER I / II / III (circle one)

Surrogate Recoveries ☐ ☒ ☐ Surrogates percent recovery criteria met: Soil = (base/neutral 30%-130%, acid 30%-130%) Water = (base/neutral 30%-130%, acid 15%-110%)	See below.
Matrix Spikes and Laboratory Control Samples ☐ ☒ ☐ MS/MSD percent recovery criteria met Soil and Water = (base/neutral 40%-140%, acid 30%-130%) ☐ ☒ ☐ MS/MSD RPD criteria met (soils <50%, water <30%) ☐ ☒ ☐ LCS percent recovery criteria met soil/water (base 40%-140%, acid 30%-130%)	See below.
Field Duplicates ☑ ☐ ☐ RPD criteria met (soils <50%, water <30%)	
Internal Standard ☐ ☒ ☐ Area counts within -50 to +100 percent of calib. std. ☑ ☐ ☐ Retention Time within 30 seconds of calib. std.	See below.
Target Compounds ☑ ☐ ☐ Reviewed narrative for anomalies	
Tentatively Identified Compounds (TICs) ☐ ☑ ☐ TCL compounds reported as TICs	

Validator's Signature: _____

Date: 3/18/10

Reference:

MACTEC, Quality Assurance Project Plan for Remedial Investigation/Feasibility Study – Olin Chemical Superfund Site, Wilmington Property, 51 Eames Street, Wilmington, MA", MACTEC Engineering and Consulting. Draft .October 2008.

SAMPLE SUMMARY

Client: Olin Corporation

Job Number: 360-24563-1
Sdg Number: OCRI-14

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
360-24563-1	OC-SB-427-0.0/1.0-XXX	Solid	09/10/2009 1340	09/11/2009 1820
360-24563-2	OC-SB-427-12/14-XXX	Solid	09/10/2009 1435	09/11/2009 1820
360-24563-3	OC-SB-427-17/19-XXX	Solid	09/10/2009 1505	09/11/2009 1820
360-24563-4	OC-SB-427-8.0/10-DUP	Solid	09/10/2009 1400	09/11/2009 1820
360-24563-5	OC-SB-427-8.0/10-XXX	Solid	09/10/2009 1400	09/11/2009 1820
360-24563-5MS	OC-SB-427-8.0/10-XMS	Solid	09/10/2009 1400	09/11/2009 1820
360-24563-5MSD	OC-SB-427-8.0/10-MSD	Solid	09/10/2009 1400	09/11/2009 1820
360-24563-6	OC-SB-428-0.0/1.0-XXX	Solid	09/10/2009 1600	09/11/2009 1820
360-24563-7	OC-SB-428-23/25-XXX	Solid	09/10/2009 1740	09/11/2009 1820
360-24563-8	OC-SB-428-8.0/10-DUP	Solid	09/10/2009 1620	09/11/2009 1820
360-24563-9	OC-SB-428-8.0/10-XXX	Solid	09/10/2009 1620	09/11/2009 1820
360-24563-9MS	OC-SB-428-8.0/10-XMS	Solid	09/10/2009 1620	09/11/2009 1820
360-24563-9MSD	OC-SB-428-8.0/10-MSD	Solid	09/10/2009 1620	09/11/2009 1820
360-24563-10	OC-TBK-017	Solid	09/11/2009 1000	09/11/2009 1820
360-24563-11	OC-SB-456-0.0/1.0-XXX	Solid	09/11/2009 0830	09/11/2009 1820
360-24563-12	OC-SB-456-16/18-XXX	Solid	09/11/2009 1040	09/11/2009 1820
360-24563-13	OC-SB-456-7.0/9.0-DUP	Solid	09/11/2009 0900	09/11/2009 1820
360-24563-14	OC-SB-456-7.0/9.0-XXX	Solid	09/11/2009 0900	09/11/2009 1820
360-24563-14MS	OC-SB-456-7.0/9.0-XMS	Solid	09/11/2009 0900	09/11/2009 1820
360-24563-14MSD	OC-SB-456-7.0/9.0-MSD	Solid	09/11/2009 0900	09/11/2009 1820
360-24563-15	OC-SB-457-0.0/1.0-XXX	Solid	09/11/2009 1310	09/11/2009 1820
360-24563-16	OC-SB-457-8.0/10-XXX	Solid	09/11/2009 1320	09/11/2009 1820
360-24563-17	OC-SB-456-0.0/1.0-XXX	Solid	09/11/2009 0830	09/11/2009 1820
360-24563-18	OC-SB-456-16/18-XXX	Solid	09/11/2009 1040	09/11/2009 1820
360-24563-19	OC-SB-456-7.0/9.0-DUP	Solid	09/11/2009 0900	09/11/2009 1820
360-24563-20	OC-SB-456-7.0/9.0-XXX	Solid	09/11/2009 0900	09/11/2009 1820
360-24563-20MS	OC-SB-456-7.0/9.0-XMS	Solid	09/11/2009 0900	09/11/2009 1820
360-24563-21	OC-SB-457-0.0/1.0-XXX	Solid	09/11/2009 1310	09/11/2009 1820
360-24563-22	OC-SB-457-8.0/10-XXX	Solid	09/11/2009 1320	09/11/2009 1820
360-24563-23	OC-EBK-009	Water	09/10/2009 1850	09/11/2009 1820

Form 1's validated.

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Client: Olin Corporation

Job Number: 360-24563-1
Sdg Number: OCRI-14

Client Sample ID: OC-SB-427-0.0/1.0-XXX

Lab Sample ID: 360-24563-1
Client Matrix: Solid % Moisture: 7.1

Date Sampled: 09/10/2009 1340
Date Received: 09/11/2009 1820

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49518		Instrument ID:	Inst. J
Preparation:	3550B	Prep Batch: 360-49155		Lab File ID:	J03134.D
Dilution:	1.0			Initial Weight/Volume:	100.05 g
Date Analyzed:	09/25/2009 2159			Final Weight/Volume:	1.0 mL
Date Prepared:	09/18/2009 1122			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodimethylamine		ND		1.2	5.4

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	80		30 - 130
2-Fluorobiphenyl	65		30 - 130
2-Fluorophenol	58		30 - 130
Nitrobenzene-d5	66		30 - 130
Phenol-d5	66		30 - 130
Terphenyl-d14	109		30 - 130

Client: Olin Corporation

Job Number: 360-24563-1
Sdg Number: OCRI-14

Client Sample ID: **OC-SB-427-0.0/1.0-XXX**

Lab Sample ID: 360-24563-1
Client Matrix: Solid
% Moisture: 7.1

Date Sampled: 09/10/2009 1340
Date Received: 09/11/2009 1820

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49517		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49041		Lab File ID:	B10579.D
Dilution:	1.0			Initial Weight/Volume:	30.06 g
Date Analyzed:	09/26/2009 0834			Final Weight/Volume:	1.0 mL
Date Prepared:	09/16/2009 1513			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		23	J	11	36
1,2,4,5-Tetrachlorobenzene		ND		11	36
1,2,4-Trichlorobenzene		ND		11	36
1,2-Dichlorobenzene		ND		11	36
1,3-Dichlorobenzene		ND		11	36
1,4-Dichlorobenzene		ND		11	36
1-Methylnaphthalene		ND		11	36
2,2'-oxybis[1-chloropropane]		ND		11	36
2,3,4,6-Tetrachlorophenol		ND		11	36
2,4,5-Trichlorophenol		ND		11	36
2,4,6-Trichlorophenol		ND		11	36
2,4-Dichlorophenol		ND		11	36
2,4-Dimethylphenol		ND		14	36
2,4-Dinitrophenol		ND		11	36
2,4-Dinitrotoluene		ND		11	36
2,6-Dinitrotoluene		ND		11	36
2-Chloronaphthalene		ND		11	36
2-Chlorophenol		ND		11	36
2-Methylnaphthalene		ND		11	36
2-Methylphenol		ND		21	36
2-Nitroaniline		ND		11	180
2-Nitrophenol		ND		11	36
3 & 4 Methylphenol		ND		11	36
3,3'-Dichlorobenzidine		ND		11	72
3-Nitroaniline		ND		11	180
4,6-Dinitro-2-methylphenol		ND		11	180
4-Bromophenyl phenyl ether		ND		11	36
4-Chloro-3-methylphenol		ND		11	72
4-Chloroaniline		ND		11	72
4-Chlorophenyl phenyl ether		ND		11	36
4-Nitroaniline		ND		11	180
4-Nitrophenol		ND		11	180
Acenaphthene		ND		11	36
Acenaphthylene		ND		11	36
Acetophenone		ND		11	36
Aniline		16	J ✓	11	36
Anthracene		ND		11	36
Atrazine		ND		11	36
Azobenzene		ND		11	36
Benzaldehyde		15	J	11	36
Benzo[a]anthracene		ND		11	36
Benzo[a]pyrene		12	J	11	36
Benzo[b]fluoranthene		18	J	11	36
Benzo[g,h,i]perylene		ND		11	36
Benzo[k]fluoranthene		ND		11	36
Benzoic acid	1804	~~89~~	~~LB~~	16	180

3/15/10

Client: Olin Corporation

Job Number: 360-24563-1
Sdg Number: OCRI-14

Client Sample ID: **OC-SB-427-0.0/1.0-XXX**

Lab Sample ID: 360-24563-1
Client Matrix: Solid
% Moisture: 7.1

Date Sampled: 09/10/2009 1340
Date Received: 09/11/2009 1820

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49517		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49041		Lab File ID:	B10579.D
Dilution:	1.0			Initial Weight/Volume:	30.06 g
Date Analyzed:	09/26/2009 0834			Final Weight/Volume:	1.0 mL
Date Prepared:	09/16/2009 1513			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		11	36
Benzyl alcohol		ND		31	72
Bis(2-chloroethoxy)methane		ND		11	36
Bis(2-chloroethyl)ether		ND		11	36
Butyl benzyl phthalate		ND		11	36
Caprolactam		ND		11	36
Carbazole		ND		11	36
Chrysene		22	J	11	36
Dibenz(a,h)anthracene		ND		11	36
Dibenzofuran		ND		11	36
Diethyl phthalate		ND		11	36
Dimethyl phthalate		ND		11	36
Di-n-butyl phthalate		ND		31	36
Di-n-octyl phthalate		ND		18	36
Diphenyl oxide		51		11	36
Fluoranthene		33	J	11	36
Fluorene		ND		11	36
Hexachlorobenzene		ND		11	36
Hexachlorobutadiene		ND		11	36
Hexachlorocyclopentadiene		ND		11	72
Hexachloroethane		ND		11	36
Indeno[1,2,3-cd]pyrene		ND		11	36
Isophorone		ND		11	36
Naphthalene		ND		11	86
Nitrobenzene		ND		11	36
N-Nitrosodimethylamine		ND		13	36
N-Nitrosodi-n-propylamine		ND		11	36
N-Nitrosodiphenylamine		230		11	36
Pentachlorophenol		ND		11	36
Phenanthrene		22	J	11	43
Phenol		ND		11	36
Pyrene		30	J	11	36

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	68		30 - 130
2-Fluorophenol	76		30 - 130
2-Fluorobiphenyl	63		30 - 130
Nitrobenzene-d5	66		30 - 130
Phenol-d5	69		30 - 130
Terphenyl-d14	67		30 - 130

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Client: Olin Corporation

Job Number: 360-24563-1
Sdg Number: OCRI-14

Client Sample ID: **OC-SB-427-0.0/1.0-XXX**

Lab Sample ID: 360-24563-1
Client Matrix: Solid
% Moisture: 7.1

Date Sampled: 09/10/2009 1340
Date Received: 09/11/2009 1820

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49517		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49041		Lab File ID:	B10579.D
Dilution:	1.0			Initial Weight/Volume:	30.06 g
Date Analyzed:	09/26/2009 0834			Final Weight/Volume:	1.0 mL
Date Prepared:	09/16/2009 1513			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 2

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
92-87-5	Benzidine	12.29	25	J
26603-23-6	p,p''-Dioctyldiphenylamine	16.71	1900	T J N

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Client: Olin Corporation

Job Number: 360-24563-1
Sdg Number: OCRI-14

Client Sample ID: OC-SB-427-0.0/1.0-XXX

Lab Sample ID: 360-24563-1
Client Matrix: Solid

% Moisture: 7.1

Date Sampled: 09/10/2009 1340
Date Received: 09/11/2009 1820

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49884		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-49041		Lab File ID:	J03337.D
Dilution:	1.0			Initial Weight/Volume:	30.06 g
Date Analyzed:	10/06/2009 0013	Run Type: DL		Final Weight/Volume:	1.0 mL
Date Prepared:	09/16/2009 1513			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Diphenylamine		49		11	36

Client: Olin Corporation

Job Number: 360-24563-1
Sdg Number: OCRI-14

Client Sample ID: OC-SB-427-0.0/1.0-XXX

Lab Sample ID: 360-24563-1
Client Matrix: Solid

% Moisture: 7.1

Date Sampled: 09/10/2009 1340
Date Received: 09/11/2009 1820

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49902		Instrument ID:	NOEQUIP
Preparation:	3546	Prep Batch: 360-49041		Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	30.06 g
Date Analyzed:	10/06/2009 0013	Run Type: DL3		Final Weight/Volume:	1.0 mL
Date Prepared:	09/16/2009 1513			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodiphenylamine		180	EB	11	36

3/10/10

Client: Olin Corporation

Job Number: 360-24563-1
Sdg Number: OCRI-14

Client Sample ID: **OC-SB-427-0.0/1.0-XXX**

Lab Sample ID: 360-24563-1
Client Matrix: Solid
% Moisture: 7.1

Date Sampled: 09/10/2009 1340
Date Received: 09/11/2009 1820

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49623		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49041		Lab File ID:	B10606.D
Dilution:	20			Initial Weight/Volume:	30.06 g
Date Analyzed:	09/28/2009 2035			Final Weight/Volume:	1.0 mL
Date Prepared:	09/16/2009 1513			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Bis(2-ethylhexyl) phthalate		13000 ~~J~~ JEB		210	720

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	0	X D	30 - 130
2-Fluorophenol	0	X D	30 - 130
2-Fluorobiphenyl	0	X D	30 - 130
Nitrobenzene-d5	0	X D	30 - 130
Phenol-d5	0	X D	30 - 130
Terphenyl-d14	0	X D	30 - 130

3/15/10

Client: Olin Corporation

Job Number: 360-24563-1
Sdg Number: OCRI-14

Client Sample ID: **OC-SB-427-12/14-XXX**

Lab Sample ID: 360-24563-2
Client Matrix: Solid

% Moisture: 10.2

Date Sampled: 09/10/2009 1435
Date Received: 09/11/2009 1820

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49518		Instrument ID:	Inst. J
Preparation:	3550B	Prep Batch: 360-49155		Lab File ID:	J03135.D
Dilution:	10			Initial Weight/Volume:	100.51 g
Date Analyzed:	09/25/2009 2231			Final Weight/Volume:	5.0 mL
Date Prepared:	09/18/2009 1122			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodimethylamine		ND 5		64	280

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	0	X	30 - 130
2-Fluorobiphenyl	89		30 - 130
2-Fluorophenol	62		30 - 130
Nitrobenzene-d5	96		30 - 130
Phenol-d5	89		30 - 130
Terphenyl-d14	0	X	30 - 130

3/18/10

Client: Olin Corporation

Job Number: 360-24563-1
Sdg Number: OCRI-14

Client Sample ID: **OC-SB-427-12/14-XXX**

Lab Sample ID: 360-24563-2
Client Matrix: Solid
% Moisture: 10.2

Date Sampled: 09/10/2009 1435
Date Received: 09/11/2009 1820

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49623		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49041		Lab File ID:	B10612.D
Dilution:	20			Initial Weight/Volume:	30.18 g
Date Analyzed:	09/28/2009 2323			Final Weight/Volume:	1.0 mL
Date Prepared:	09/16/2009 1513			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		1200		220	740
1,2,4,5-Tetrachlorobenzene		ND		220	740
1,2,4-Trichlorobenzene		ND		220	740
1,2-Dichlorobenzene		ND		220	740
1,3-Dichlorobenzene		ND		220	740
1,4-Dichlorobenzene		ND		220	740
1-Methylnaphthalene		ND		220	740
2,2'-oxybis[1-chloropropane]		ND		220	740
2,3,4,6-Tetrachlorophenol		ND		220	740
2,4,5-Trichlorophenol		ND		220	740
2,4,6-Trichlorophenol		ND		220	740
2,4-Dichlorophenol		ND		220	740
2,4-Dimethylphenol		ND		290	740
2,4-Dinitrophenol		ND		220	740
2,4-Dinitrotoluene		ND		220	740
2,6-Dinitrotoluene		ND		220	740
2-Chloronaphthalene		ND		220	740
2-Chlorophenol		ND		220	740
2-Methylnaphthalene		ND		220	740
2-Methylphenol		ND		440	740
2-Nitroaniline		ND		220	3700
2-Nitrophenol		ND		220	740
3 & 4 Methylphenol		ND		220	740
3,3'-Dichlorobenzidine		ND		220	1500
3-Nitroaniline		ND		220	3700
4,6-Dinitro-2-methylphenol		ND		220	3700
4-Bromophenyl phenyl ether		ND		220	740
4-Chloro-3-methylphenol		ND		220	1500
4-Chloroaniline		ND		220	1500
4-Chlorophenyl phenyl ether		ND		220	740
4-Nitroaniline		ND		220	3700
4-Nitrophenol		ND		220	3700
Acenaphthene		ND		220	740
Acenaphthylene		ND		220	740
Acetophenone		ND		220	740
Aniline		ND	J	220	740
Anthracene		ND		220	740
Atrazine		ND		220	740
Azobenzene		ND		220	740
Benzaldehyde		ND		220	740
Benzo[a]anthracene		ND		220	740
Benzo[a]pyrene		ND		220	740
Benzo[b]fluoranthene		ND		220	740
Benzo[g,h,i]perylene		ND		220	740
Benzo[k]fluoranthene		ND		220	740
Benzoic acid		ND		330	3700

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Client: Olin Corporation

Job Number: 360-24563-1
Sdg Number: OCRI-14

Client Sample ID: **OC-SB-427-12/14-XXX**

Lab Sample ID: 360-24563-2
Client Matrix: Solid

% Moisture: 10.2

Date Sampled: 09/10/2009 1435
Date Received: 09/11/2009 1820

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49623		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49041		Lab File ID:	B10612.D
Dilution:	20			Initial Weight/Volume:	30.18 g
Date Analyzed:	09/28/2009 2323			Final Weight/Volume:	1.0 mL
Date Prepared:	09/16/2009 1513			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		220	740
Benzyl alcohol		ND		630	1500
Bis(2-chloroethoxy)methane		ND		220	740
Bis(2-chloroethyl)ether		ND		220	740
Butyl benzyl phthalate		ND		220	740
Caprolactam		ND		220	740
Carbazole		ND		220	740
Chrysene		ND		220	740
Dibenz(a,h)anthracene		ND		220	740
Dibenzofuran		ND		220	740
Diethyl phthalate		ND		220	740
Dimethyl phthalate		ND		220	740
Di-n-butyl phthalate		ND		650	740
Di-n-octyl phthalate		ND		370	740
Diphenyl oxide		6900		220	740
Fluoranthene		ND		220	740
Fluorene		ND		220	740
Hexachlorobenzene		ND		220	740
Hexachlorobutadiene		ND		220	740
Hexachlorocyclopentadiene		ND		220	1500
Hexachloroethane		ND		220	740
Indeno[1,2,3-cd]pyrene		ND		220	740
Isophorone		ND		220	740
Naphthalene		ND		220	1800
Nitrobenzene		ND		220	740
N-Nitrosodimethylamine		ND		260	740
N-Nitrosodi-n-propylamine		ND		220	740
Pentachlorophenol		ND		220	740
Phenanthrene		380	J	220	890
Phenol		ND		220	740
Pyrene		ND		220	740

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	0	X D	30 - 130
2-Fluorophenol	0	X D	30 - 130
2-Fluorobiphenyl	0	X D	30 - 130
Nitrobenzene-d5	0	X D	30 - 130
Phenol-d5	0	X D	30 - 130
Terphenyl-d14	0	X D	30 - 130

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Client: Olin Corporation

Job Number: 360-24563-1
Sdg Number: OCRI-14

Client Sample ID: **OC-SB-427-12/14-XXX**

Lab Sample ID: 360-24563-2
Client Matrix: Solid
% Moisture: 10.2

Date Sampled: 09/10/2009 1435
Date Received: 09/11/2009 1820

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49623		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49041		Lab File ID:	B10612.D
Dilution:	20			Initial Weight/Volume:	30.18 g
Date Analyzed:	09/28/2009 2323			Final Weight/Volume:	1.0 mL
Date Prepared:	09/16/2009 1513			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 1

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Tentatively Identified Compound		None	
122-66-7	1,2-Diphenylhydrazine	10.32	19000	

Client: Olin Corporation

Job Number: 360-24563-1
Sdg Number: OCRI-14

Client Sample ID: **OC-SB-427-12/14-XXX**

Lab Sample ID: 360-24563-2
Client Matrix: Solid % Moisture: 10.2

Date Sampled: 09/10/2009 1435
Date Received: 09/11/2009 1820

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49831		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-49041		Lab File ID:	J03291.D
Dilution:	500			Initial Weight/Volume:	30.18 g
Date Analyzed:	10/03/2009 0315	Run Type: DL		Final Weight/Volume:	1.0 mL
Date Prepared:	09/16/2009 1513			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Diphenylamine		340000		5500	18000

Client: Olin Corporation

Job Number: 360-24563-1
Sdg Number: OCRI-14

Client Sample ID: **OC-SB-427-12/14-XXX**

Lab Sample ID: 360-24563-2
Client Matrix: Solid

% Moisture: 10.2

Date Sampled: 09/10/2009 1435
Date Received: 09/11/2009 1820

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49902		Instrument ID:	NOEQUIP
Preparation:	3546	Prep Batch: 360-49041		Lab File ID:	N/A
Dilution:	500			Initial Weight/Volume:	30.18 g
Date Analyzed:	10/03/2009 0315	Run Type: DL3		Final Weight/Volume:	1.0 mL
Date Prepared:	09/16/2009 1513			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodiphenylamine		160000 EB		5500	18000

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Client: Olin Corporation

Job Number: 360-24563-1
Sdg Number: OCRI-14

Client Sample ID: **OC-SB-427-12/14-XXX**

Lab Sample ID: 360-24563-2
Client Matrix: Solid

% Moisture: 10.2

Date Sampled: 09/10/2009 1435
Date Received: 09/11/2009 1820

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49884		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-49041		Lab File ID:	J03336.D
Dilution:	1000			Initial Weight/Volume:	30.18 g
Date Analyzed:	10/05/2009 2341	Run Type: DL2		Final Weight/Volume:	1.0 mL
Date Prepared:	09/16/2009 1513			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
~~N-Nitrosodiphenylamine~~		~~500000~~		~~11000~~	~~37000~~

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	0	X D	30 - 130
2-Fluorophenol	0	X D	30 - 130
2-Fluorobiphenyl	0	X D	30 - 130
Nitrobenzene-d5	0	X D	30 - 130
Phenol-d5	0	X D	30 - 130
Terphenyl-d14	0	X D	30 - 130

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Client: Olin Corporation

Job Number: 360-24563-1
Sdg Number: OCRI-14

Client Sample ID: **OC-SB-427-12/14-XXX**

Lab Sample ID: 360-24563-2
Client Matrix: Solid % Moisture: 10.2

Date Sampled: 09/10/2009 1435
Date Received: 09/11/2009 1820

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49910		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-49041		Lab File ID:	J03358.D
Dilution:	25000			Initial Weight/Volume:	30.18 g
Date Analyzed:	10/06/2009 1509			Final Weight/Volume:	1.0 mL
Date Prepared:	09/16/2009 1513			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Bis(2-ethylhexyl) phthalate		10000000 J6B		280000	920000

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	0	X D	30 - 130
2-Fluorophenol	0	X D	30 - 130
2-Fluorobiphenyl	0	X D	30 - 130
Nitrobenzene-d5	0	X D	30 - 130
Phenol-d5	0	X D	30 - 130
Terphenyl-d14	0	X D	30 - 130

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Client: Olin Corporation

Job Number: 360-24563-1
Sdg Number: OCRI-14

Client Sample ID: OC-SB-427-8.0/10-DUP

Lab Sample ID: 360-24563-4
Client Matrix: Solid % Moisture: 4.3

Date Sampled: 09/10/2009 1400
Date Received: 09/11/2009 1820

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49518		Instrument ID:	Inst. J
Preparation:	3550B	Prep Batch: 360-49155		Lab File ID:	J03136.D
Dilution:	1.0			Initial Weight/Volume:	100.39 g
Date Analyzed:	09/25/2009 2304			Final Weight/Volume:	1.0 mL
Date Prepared:	09/18/2009 1122			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodimethylamine		ND		1.2	5.2

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	41		30 - 130
2-Fluorobiphenyl	61		30 - 130
2-Fluorophenol	42		30 - 130
Nitrobenzene-d5	62		30 - 130
Phenol-d5	49		30 - 130
Terphenyl-d14	98		30 - 130

Client: Olin Corporation

Job Number: 360-24563-1
Sdg Number: OCRI-14

Client Sample ID: **OC-SB-427-8.0/10-DUP**

Lab Sample ID: 360-24563-4
Client Matrix: Solid % Moisture: 4.3

Date Sampled: 09/10/2009 1400
Date Received: 09/11/2009 1820

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49517		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49041		Lab File ID:	B10582.D
Dilution:	1.0			Initial Weight/Volume:	30.21 g
Date Analyzed:	09/26/2009 0957			Final Weight/Volume:	1.0 mL
Date Prepared:	09/16/2009 1513			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		10	35
1,2,4,5-Tetrachlorobenzene		ND		10	35
1,2,4-Trichlorobenzene		ND		10	35
1,2-Dichlorobenzene		ND		10	35
1,3-Dichlorobenzene		ND		10	35
1,4-Dichlorobenzene		ND		10	35
1-Methylnaphthalene		ND		10	35
2,2'-oxybis[1-chloropropane]		ND		10	35
2,3,4,6-Tetrachlorophenol		ND		10	35
2,4,5-Trichlorophenol		ND		10	35
2,4,6-Trichlorophenol		ND		10	35
2,4-Dichlorophenol		ND		10	35
2,4-Dimethylphenol		ND		14	35
2,4-Dinitrophenol		ND	J	10	35
2,4-Dinitrotoluene		ND		10	35
2,6-Dinitrotoluene		ND		10	35
2-Chloronaphthalene		ND		10	35
2-Chlorophenol		ND		10	35
2-Methylnaphthalene		ND		10	35
2-Methylphenol		ND		21	35
2-Nitroaniline		ND	J	10	170
2-Nitrophenol		ND		10	35
3 & 4 Methylphenol		ND		10	35
3,3'-Dichlorobenzidine		ND	J	10	69
3-Nitroaniline		ND	J	10	170
4,6-Dinitro-2-methylphenol		ND	J	10	170
4-Bromophenyl phenyl ether		ND		10	35
4-Chloro-3-methylphenol		ND		10	69
4-Chloroaniline		~~ND~~	R	10	69
4-Chlorophenyl phenyl ether		ND		10	35
4-Nitroaniline		ND		10	170
4-Nitrophenol		~~ND~~	R	10	170
Acenaphthene		ND		10	35
Acenaphthylene		ND		10	35
Acetophenone		ND		10	35
Aniline		92	J	10	35
Anthracene		ND		10	35
Atrazine		ND		10	35
Azobenzene		ND		10	35
Benzaldehyde		ND		10	35
Benzo[a]anthracene		ND		10	35
Benzo[a]pyrene		ND	J	10	35
Benzo[b]fluoranthene		ND	J	10	35
Benzo[g,h,i]perylene		ND	J	10	35
Benzo[k]fluoranthene		ND	J	10	35
Benzoic acid		ND		16	170

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Client: Olin Corporation

Job Number: 360-24563-1
Sdg Number: OCRI-14

Client Sample ID: **OC-SB-427-8.0/10-DUP**

Lab Sample ID: 360-24563-4
Client Matrix: Solid % Moisture: 4.3

Date Sampled: 09/10/2009 1400
Date Received: 09/11/2009 1820

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49517		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49041		Lab File ID:	B10582.D
Dilution:	1.0			Initial Weight/Volume:	30.21 g
Date Analyzed:	09/26/2009 0957			Final Weight/Volume:	1.0 mL
Date Prepared:	09/16/2009 1513			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		10	35
Benzyl alcohol		ND		29	69
Bis(2-chloroethoxy)methane		ND		10	35
Bis(2-chloroethyl)ether		ND		10	35
Butyl benzyl phthalate		ND		10	35
Caprolactam		ND		10	35
Carbazole		ND		10	35
Chrysene		ND		10	35
Dibenz(a,h)anthracene		ND	J	10	35
Dibenzofuran		ND		10	35
Diethyl phthalate		ND		10	35
Dimethyl phthalate		ND		10	35
Di-n-butyl phthalate		ND		30	35
Di-n-octyl phthalate		ND	J	17	35
Diphenyl oxide		ND		10	35
Fluoranthene		ND		10	35
Fluorene		ND		10	35
Hexachlorobenzene		ND		10	35
Hexachlorobutadiene		ND		10	35
Hexachlorocyclopentadiene		ND	R	10	69
Hexachloroethane		ND	J	10	35
Indeno[1,2,3-cd]pyrene		ND	J	10	35
Isophorone		ND		10	35
Naphthalene		ND		10	83
Nitrobenzene		ND		10	35
N-Nitrosodimethylamine		ND		12	35
N-Nitrosodi-n-propylamine		ND		10	35
N-Nitrosodiphenylamine		260		10	35
Pentachlorophenol		ND		10	35
Phenanthrene		ND		10	42
Phenol		ND		10	35
Pyrene		ND		10	35

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	47		30 - 130
2-Fluorophenol	61		30 - 130
2-Fluorobiphenyl	52		30 - 130
Nitrobenzene-d5	61		30 - 130
Phenol-d5	61		30 - 130
Terphenyl-d14	58		30 - 130

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Client: Olin Corporation

Job Number: 360-24563-1
Sdg Number: OCRI-14

Client Sample ID: **OC-SB-427-8.0/10-DUP**

Lab Sample ID: 360-24563-4
Client Matrix: Solid
% Moisture: 4.3

Date Sampled: 09/10/2009 1400
Date Received: 09/11/2009 1820

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49517		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49041		Lab File ID:	B10582.D
Dilution:	1.0			Initial Weight/Volume:	30.21 g
Date Analyzed:	09/26/2009 0957			Final Weight/Volume:	1.0 mL
Date Prepared:	09/16/2009 1513			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** **0**

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Tentatively Identified Compound		None	

Client: Olin Corporation

Job Number: 360-24563-1
Sdg Number: OCRI-14

Client Sample ID: **OC-SB-427-8.0/10-DUP**

Lab Sample ID: 360-24563-4
Client Matrix: Solid

% Moisture: 4.3

Date Sampled: 09/10/2009 1400
Date Received: 09/11/2009 1820

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49847		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-49041		Lab File ID:	J03306.D
Dilution:	1.0			Initial Weight/Volume:	30.21 g
Date Analyzed:	10/04/2009 1708	Run Type: DL2		Final Weight/Volume:	1.0 mL
Date Prepared:	09/16/2009 1513			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Diphenylamine		23	J	10	35

Client: Olin Corporation

Job Number: 360-24563-1
Sdg Number: OCRI-14

Client Sample ID: **OC-SB-427-8.0/10-DUP**

Lab Sample ID: 360-24563-4
Client Matrix: Solid

% Moisture: 4.3

Date Sampled: 09/10/2009 1400
Date Received: 09/11/2009 1820

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49902		Instrument ID:	NOEQUIP
Preparation:	3546	Prep Batch: 360-49041		Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	30.21 g
Date Analyzed:	10/04/2009 1708	Run Type:	DL3	Final Weight/Volume:	1.0 mL
Date Prepared:	09/16/2009 1513			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodiphenylamine		240 J EB		10	35

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Client: Olin Corporation

Job Number: 360-24563-1
Sdg Number: OCRI-14

Client Sample ID: **OC-SB-427-8.0/10-DUP**

Lab Sample ID: 360-24563-4
Client Matrix: Solid

% Moisture: 4.3

Date Sampled: 09/10/2009 1400
Date Received: 09/11/2009 1820

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49831		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-49041		Lab File ID:	J03285.D
Dilution:	100			Initial Weight/Volume:	30.21 g
Date Analyzed:	10/03/2009 0001	Run Type: DL		Final Weight/Volume:	1.0 mL
Date Prepared:	09/16/2009 1513			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Bis(2-ethylhexyl) phthalate		26000 E B		1000	3500

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	0	X D	30 - 130
2-Fluorophenol	0	X D	30 - 130
2-Fluorobiphenyl	0	X D	30 - 130
Nitrobenzene-d5	0	X D	30 - 130
Phenol-d5	0	X D	30 - 130
Terphenyl-d14	0	X D	30 - 130

Client: Olin Corporation

Job Number: 360-24563-1
Sdg Number: OCRI-14

Client Sample ID: **OC-SB-427-8.0/10-DUP**

Lab Sample ID: 360-24563-4
Client Matrix: Solid
% Moisture: 4.3

Date Sampled: 09/10/2009 1400
Date Received: 09/11/2009 1820

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49831		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-49041		Lab File ID:	J03285.D
Dilution:	100			Initial Weight/Volume:	30.21 g
Date Analyzed:	10/03/2009 0001	Run Type:	DL	Final Weight/Volume:	1.0 mL
Date Prepared:	09/16/2009 1513			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 0

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Tentatively Identified Compound		None	

Client: Olin Corporation

Job Number: 360-24563-1
Sdg Number: OCRI-14

Client Sample ID: **OC-SB-427-8.0/10-XXX**

Lab Sample ID: 360-24563-5
Client Matrix: Solid % Moisture: 4.1

Date Sampled: 09/10/2009 1400
Date Received: 09/11/2009 1820

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49518		Instrument ID:	Inst. J
Preparation:	3550B	Prep Batch: 360-49155		Lab File ID:	J03137.D
Dilution:	1.0			Initial Weight/Volume:	100.37 g
Date Analyzed:	09/25/2009 2336			Final Weight/Volume:	1.0 mL
Date Prepared:	09/18/2009 1122			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodimethylamine		ND		1.2	5.2

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	40		30 - 130
2-Fluorobiphenyl	68		30 - 130
2-Fluorophenol	42		30 - 130
Nitrobenzene-d5	63		30 - 130
Phenol-d5	51		30 - 130
Terphenyl-d14	62		30 - 130

Client: Olin Corporation

Job Number: 360-24563-1
Sdg Number: OCRI-14

Client Sample ID: OC-SB-427-8.0/10-XXX

Lab Sample ID: 360-24563-5
Client Matrix: Solid
% Moisture: 4.1

Date Sampled: 09/10/2009 1400
Date Received: 09/11/2009 1820

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49517		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49041		Lab File ID:	B10583.D
Dilution:	1.0			Initial Weight/Volume:	30.42 g
Date Analyzed:	09/26/2009 1024			Final Weight/Volume:	1.0 mL
Date Prepared:	09/16/2009 1513			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		10	34
1,2,4,5-Tetrachlorobenzene		ND		10	34
1,2,4-Trichlorobenzene		ND		10	34
1,2-Dichlorobenzene		ND		10	34
1,3-Dichlorobenzene		ND		10	34
1,4-Dichlorobenzene		ND		10	34
1-Methylnaphthalene		ND		10	34
2,2'-oxybis[1-chloropropane]		ND		10	34
2,3,4,6-Tetrachlorophenol		ND		10	34
2,4,5-Trichlorophenol		ND		10	34
2,4,6-Trichlorophenol		ND		10	34
2,4-Dichlorophenol		ND		10	34
2,4-Dimethylphenol		ND		13	34
2,4-Dinitrophenol		ND	J	10	34
2,4-Dinitrotoluene		ND		10	34
2,6-Dinitrotoluene		ND		10	34
2-Chloronaphthalene		ND		10	34
2-Chlorophenol		ND		10	34
2-Methylnaphthalene		ND		10	34
2-Methylphenol		ND		21	34
2-Nitroaniline		ND	J	10	170
2-Nitrophenol		ND		10	34
3 & 4 Methylphenol		ND		10	34
3,3'-Dichlorobenzidine		ND	J	10	69
3-Nitroaniline		ND	J	10	170
4,6-Dinitro-2-methylphenol		ND	J	10	170
4-Bromophenyl phenyl ether		ND		10	34
4-Chloro-3-methylphenol		ND		10	69
4-Chloroaniline		~~ND~~	R	10	69
4-Chlorophenyl phenyl ether		ND		10	34
4-Nitroaniline		ND		10	170
4-Nitrophenol		~~ND~~	R	10	170
Acenaphthene		ND		10	34
Acenaphthylene		ND		10	34
Acetophenone		ND		10	34
Aniline		86	J	10	34
Anthracene		ND		10	34
Atrazine		ND		10	34
Azobenzene		ND		10	34
Benzaldehyde		ND		10	34
Benzo[a]anthracene		ND		10	34
Benzo[a]pyrene		ND	J	10	34
Benzo[b]fluoranthene		ND		10	34
Benzo[g,h,i]perylene		ND		10	34
Benzo[k]fluoranthene		ND		10	34
Benzoic acid		ND		15	170

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Client: Olin Corporation

Job Number: 360-24563-1
Sdg Number: OCRI-14

Client Sample ID: **OC-SB-427-8.0/10-XXX**

Lab Sample ID: 360-24563-5
Client Matrix: Solid % Moisture: 4.1

Date Sampled: 09/10/2009 1400
Date Received: 09/11/2009 1820

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49517		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49041		Lab File ID:	B10583.D
Dilution:	1.0			Initial Weight/Volume:	30.42 g
Date Analyzed:	09/26/2009 1024			Final Weight/Volume:	1.0 mL
Date Prepared:	09/16/2009 1513			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		10	34
Benzyl alcohol		ND		29	69
Bis(2-chloroethoxy)methane		ND		10	34
Bis(2-chloroethyl)ether		ND		10	34
Butyl benzyl phthalate		ND		10	34
Caprolactam		ND		10	34
Carbazole		ND		10	34
Chrysene		ND		10	34
Dibenz(a,h)anthracene		ND		10	34
Dibenzofuran		ND		10	34
Diethyl phthalate		ND		10	34
Dimethyl phthalate		ND		10	34
Di-n-butyl phthalate		ND		30	34
Di-n-octyl phthalate		ND		17	34
Diphenyl oxide		ND		10	34
Fluoranthene		ND		10	34
Fluorene		ND		10	34
Hexachlorobenzene		ND		10	34
Hexachlorobutadiene		ND		10	34
Hexachlorocyclopentadiene		~~ND~~ R		10	69
Hexachloroethane		ND		10	34
Indeno[1,2,3-cd]pyrene		ND		10	34
Isophorone		ND		10	34
Naphthalene		ND		10	82
Nitrobenzene		ND		10	34
~~N-Nitrosodimethylamine~~		~~ND~~		~~12~~	~~34~~
N-Nitrosodi-n-propylamine		ND		10	34
~~N-Nitrosodiphenylamine~~		~~340~~ J		~~10~~	~~34~~
Pentachlorophenol		ND		10	34
Phenanthrene		ND		10	41
Phenol		ND		10	34
Pyrene		ND		10	34

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	57		30 - 130
2-Fluorophenol	74		30 - 130
2-Fluorobiphenyl	62		30 - 130
Nitrobenzene-d5	72		30 - 130
Phenol-d5	71		30 - 130
Terphenyl-d14	73		30 - 130

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Client: Olin Corporation

Job Number: 360-24563-1
Sdg Number: OCRI-14

Client Sample ID: **OC-SB-427-8.0/10-XXX**

Lab Sample ID: 360-24563-5
Client Matrix: Solid % Moisture: 4.1

Date Sampled: 09/10/2009 1400
Date Received: 09/11/2009 1820

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49517		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49041		Lab File ID:	B10583.D
Dilution:	1.0			Initial Weight/Volume:	30.42 g
Date Analyzed:	09/26/2009 1024			Final Weight/Volume:	1.0 mL
Date Prepared:	09/16/2009 1513			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** **0**

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Tentatively Identified Compound		None	

Client: Olin Corporation

Job Number: 360-24563-1
Sdg Number: OCRI-14

Client Sample ID: OC-SB-427-8.0/10-XXX

Lab Sample ID: 360-24563-5
Client Matrix: Solid

% Moisture: 4.1

Date Sampled: 09/10/2009 1400
Date Received: 09/11/2009 1820

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49847		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-49041		Lab File ID:	J03307.D
Dilution:	1.0			Initial Weight/Volume:	30.42 g
Date Analyzed:	10/04/2009 1741	Run Type: DL2		Final Weight/Volume:	1.0 mL
Date Prepared:	09/16/2009 1513			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Diphenylamine		22	J	10	34

Client: Olin Corporation

Job Number: 360-24563-1
Sdg Number: OCRI-14

Client Sample ID: OC-SB-427-8.0/10-XXX

Lab Sample ID: 360-24563-5
Client Matrix: Solid

% Moisture: 4.1

Date Sampled: 09/10/2009 1400
Date Received: 09/11/2009 1820

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49902		Instrument ID:	NOEQUIP
Preparation:	3546	Prep Batch: 360-49041		Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	30.42 g
Date Analyzed:	10/04/2009 1741	Run Type: DL3		Final Weight/Volume:	1.0 mL
Date Prepared:	09/16/2009 1513			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodiphenylamine		320		10	34

3/18/10

Client: Olin Corporation

Job Number: 360-24563-1
Sdg Number: OCRI-14

Client Sample ID: OC-SB-427-8.0/10-XXX

Lab Sample ID: 360-24563-5
Client Matrix: Solid

% Moisture: 4.1

Date Sampled: 09/10/2009 1400
Date Received: 09/11/2009 1820

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49831		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-49041		Lab File ID:	J03286.D
Dilution:	100			Initial Weight/Volume:	30.42 g
Date Analyzed:	10/03/2009 0033	Run Type: DL		Final Weight/Volume:	1.0 mL
Date Prepared:	09/16/2009 1513			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Bis(2-ethylhexyl) phthalate		19000 JE5		1000	3400

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	0	X D	30 - 130
2-Fluorophenol	0	X D	30 - 130
2-Fluorobiphenyl	0	X D	30 - 130
Nitrobenzene-d5	0	X D	30 - 130
Phenol-d5	0	X D	30 - 130
Terphenyl-d14	0	X D	30 - 130

3/15/10

Client: Olin Corporation

Job Number: 360-24563-1
Sdg Number: OCRI-14

Client Sample ID: **OC-SB-427-8.0/10-XXX**

Lab Sample ID: 360-24563-5
Client Matrix: Solid % Moisture: 4.1

Date Sampled: 09/10/2009 1400
Date Received: 09/11/2009 1820

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49831		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-49041		Lab File ID:	J03286.D
Dilution:	100			Initial Weight/Volume:	30.42 g
Date Analyzed:	10/03/2009 0033	Run Type: DL		Final Weight/Volume:	1.0 mL
Date Prepared:	09/16/2009 1513			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 0

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Tentatively Identified Compound		None	

Client: Olin Corporation

Job Number: 360-24563-1
Sdg Number: OCRI-14

Client Sample ID: **OC-SB-428-0.0/1.0-XXX**

Lab Sample ID: 360-24563-6
Client Matrix: Solid % Moisture: 5.4

Date Sampled: 09/10/2009 1600
Date Received: 09/11/2009 1820

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49518		Instrument ID:	Inst. J
Preparation:	3550B	Prep Batch: 360-49155		Lab File ID:	J03140.D
Dilution:	10			Initial Weight/Volume:	100.14 g
Date Analyzed:	09/26/2009 0114			Final Weight/Volume:	2.0 mL
Date Prepared:	09/18/2009 1122			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodimethylamine		ND		24	110

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	94		30 - 130
2-Fluorobiphenyl	79		30 - 130
2-Fluorophenol	63		30 - 130
Nitrobenzene-d5	64		30 - 130
Phenol-d5	51		30 - 130
Terphenyl-d14	108		30 - 130

Client: Olin Corporation

Job Number: 360-24563-1
Sdg Number: OCRI-14

Client Sample ID: **OC-SB-428-0.0/1.0-XXX**

Lab Sample ID: 360-24563-6
Client Matrix: Solid
% Moisture: 5.4

Date Sampled: 09/10/2009 1600
Date Received: 09/11/2009 1820

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49517		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49041		Lab File ID:	B10586.D
Dilution:	10			Initial Weight/Volume:	30.49 g
Date Analyzed:	09/26/2009 1147			Final Weight/Volume:	1.0 mL
Date Prepared:	09/16/2009 1513			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		100	350
1,2,4,5-Tetrachlorobenzene		ND		100	350
1,2,4-Trichlorobenzene		ND		100	350
1,2-Dichlorobenzene		ND		100	350
1,3-Dichlorobenzene		ND		100	350
1,4-Dichlorobenzene		ND		100	350
1-Methylnaphthalene		ND		100	350
2,2'-oxybis[1-chloropropane]		ND		100	350
2,3,4,6-Tetrachlorophenol		ND		100	350
2,4,5-Trichlorophenol		ND		100	350
2,4,6-Trichlorophenol		ND		100	350
2,4-Dichlorophenol		ND		100	350
2,4-Dimethylphenol		ND		140	350
2,4-Dinitrophenol		ND		100	350
2,4-Dinitrotoluene		ND		100	350
2,6-Dinitrotoluene		ND		100	350
2-Chloronaphthalene		ND		100	350
2-Chlorophenol		ND		100	350
2-Methylnaphthalene		ND		100	350
2-Methylphenol		ND		210	350
2-Nitroaniline		ND		100	1700
2-Nitrophenol		ND		100	350
3 & 4 Methylphenol		ND		100	350
3,3'-Dichlorobenzidine		ND		100	690
3-Nitroaniline		ND		100	1700
4,6-Dinitro-2-methylphenol		ND		100	1700
4-Bromophenyl phenyl ether		ND		100	350
4-Chloro-3-methylphenol		ND		100	690
4-Chloroaniline		ND		100	690
4-Chlorophenyl phenyl ether		ND		100	350
4-Nitroaniline		ND		100	1700
4-Nitrophenol		ND		100	1700
Acenaphthene		ND		100	350
Acenaphthylene		ND		100	350
Acetophenone		ND		100	350
Aniline		ND	J	100	350
Anthracene		ND		100	350
Atrazine		ND		100	350
Azobenzene		ND		100	350
Benzaldehyde		ND		100	350
Benzo[a]anthracene		ND		100	350
Benzo[a]pyrene		130	J	100	350
Benzo[b]fluoranthene		220	J	100	350
Benzo[g,h,i]perylene		140	J	100	350
Benzo[k]fluoranthene		ND		100	350
Benzoic acid		ND		160	1700

3/10/10

Client: Olin Corporation

Job Number: 360-24563-1
Sdg Number: OCRI-14

Client Sample ID: **OC-SB-428-0.0/1.0-XXX**

Lab Sample ID: 360-24563-6
Client Matrix: Solid % Moisture: 5.4

Date Sampled: 09/10/2009 1600
Date Received: 09/11/2009 1820

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49517		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49041		Lab File ID:	B10586.D
Dilution:	10			Initial Weight/Volume:	30.49 g
Date Analyzed:	09/26/2009 1147			Final Weight/Volume:	1.0 mL
Date Prepared:	09/16/2009 1513			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		100	350
Benzyl alcohol		ND		300	690
Bis(2-chloroethoxy)methane		ND		100	350
Bis(2-chloroethyl)ether		ND		100	350
Bis(2-ethylhexyl) phthalate		4700 KEBJ	~~B~~	100	350
Butyl benzyl phthalate		ND		100	350
Caprolactam		ND		100	350
Carbazole		ND		100	350
Chrysene		210	J	100	350
Dibenz(a,h)anthracene		ND		100	350
Dibenzofuran		ND		100	350
Diethyl phthalate		ND		100	350
Dimethyl phthalate		ND		100	350
Di-n-butyl phthalate		ND		300	350
Di-n-octyl phthalate		ND		170	350
Diphenyl oxide		ND		100	350
Fluoranthene		350		100	350
Fluorene		ND		100	350
Hexachlorobenzene		ND		100	350
Hexachlorobutadiene		ND		100	350
Hexachlorocyclopentadiene		ND		100	690
Hexachloroethane		ND		100	350
Indeno[1,2,3-cd]pyrene		120	J	100	350
Isophorone		ND		100	350
Naphthalene		ND		100	830
Nitrobenzene		ND		100	350
~~N-Nitrosodimethylamine~~		~~ND~~		~~120~~	~~350~~
N-Nitrosodi-n-propylamine		ND		100	350
~~N-Nitrosodiphenylamine~~		~~1300~~		~~100~~	~~350~~
Pentachlorophenol		ND		100	350
Phenanthrene		230	J	100	420
Phenol		ND		100	350
Pyrene		310	J	100	350

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	53		30 - 130
2-Fluorophenol	85		30 - 130
2-Fluorobiphenyl	64		30 - 130
Nitrobenzene-d5	57		30 - 130
Phenol-d5	32		30 - 130
Terphenyl-d14	90		30 - 130

3/15/10

Client: Olin Corporation

Job Number: 360-24563-1
Sdg Number: OCRI-14

Client Sample ID: **OC-SB-428-0.0/1.0-XXX**

Lab Sample ID: 360-24563-6
Client Matrix: Solid % Moisture: 5.4

Date Sampled: 09/10/2009 1600
Date Received: 09/11/2009 1820

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49517		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49041		Lab File ID:	B10586.D
Dilution:	10			Initial Weight/Volume:	30.49 g
Date Analyzed:	09/26/2009 1147			Final Weight/Volume:	1.0 mL
Date Prepared:	09/16/2009 1513			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 3

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
~~3910-35-8~~	~~1H-Indene, 2,3-dihydro-1,1,3-trimethyl-3~~	~~10.79~~	~~450~~	~~T J N~~
~~92-87-5~~	~~Benzidine~~	12.30	240	J
14064-41-6	Benzene, 1-methoxy-3-(2-phenylethenyl)-,	12.86	2000	T J N

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Client: Olin Corporation

Job Number: 360-24563-1
Sdg Number: OCRI-14

Client Sample ID: **OC-SB-428-0.0/1.0-XXX**

Lab Sample ID: 360-24563-6
Client Matrix: Solid
% Moisture: 5.4

Date Sampled: 09/10/2009 1600
Date Received: 09/11/2009 1820

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49847		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-49041		Lab File ID:	J03308.D
Dilution:	10			Initial Weight/Volume:	30.49 g
Date Analyzed:	10/04/2009 1814	Run Type: DL		Final Weight/Volume:	1.0 mL
Date Prepared:	09/16/2009 1513			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Diphenylamine		260	J	100	350

Client: Olin Corporation

Job Number: 360-24563-1
Sdg Number: OCRI-14

Client Sample ID: OC-SB-428-0.0/1.0-XXX

Lab Sample ID: 360-24563-6
Client Matrix: Solid

% Moisture: 5.4

Date Sampled: 09/10/2009 1600
Date Received: 09/11/2009 1820

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49902		Instrument ID:	NOEQUIP
Preparation:	3546	Prep Batch: 360-49041		Lab File ID:	N/A
Dilution:	10			Initial Weight/Volume:	30.49 g
Date Analyzed:	10/04/2009 1814	Run Type: DL3		Final Weight/Volume:	1.0 mL
Date Prepared:	09/16/2009 1513			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodiphenylamine		1000	E D	100	350

3/18/10

Client: Olin Corporation

Job Number: 360-24563-1
Sdg Number: OCRI-14

Client Sample ID: OC-SB-428-8.0/10-XXX

Lab Sample ID: 360-24563-9
Client Matrix: Solid

% Moisture: 6.1

Date Sampled: 09/10/2009 1620
Date Received: 09/11/2009 1820

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49518		Instrument ID:	Inst. J
Preparation:	3550B	Prep Batch: 360-49155		Lab File ID:	J03141.D
Dilution:	1.0			Initial Weight/Volume:	100.11 g
Date Analyzed:	09/26/2009 0146			Final Weight/Volume:	1.0 mL
Date Prepared:	09/18/2009 1122			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodimethylamine		ND 5		1.2	5.3

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	0	X	30 - 130
2-Fluorobiphenyl	140	X	30 - 130
2-Fluorophenol	59		30 - 130
Nitrobenzene-d5	68		30 - 130
Phenol-d5	67		30 - 130
Terphenyl-d14	0	X	30 - 130

3/18/10

Client: Olin Corporation

Job Number: 360-24563-1
Sdg Number: OCRI-14

Client Sample ID: **OC-SB-428-8.0/10-XXX**

Lab Sample ID: 360-24563-9
Client Matrix: Solid
% Moisture: 6.1

Date Sampled: 09/10/2009 1620
Date Received: 09/11/2009 1820

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49517		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49041		Lab File ID:	B10588.D
Dilution:	10			Initial Weight/Volume:	30.06 g
Date Analyzed:	09/26/2009 1242			Final Weight/Volume:	1.0 mL
Date Prepared:	09/16/2009 1513			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		110	350
1,2,4,5-Tetrachlorobenzene		ND		110	350
1,2,4-Trichlorobenzene		ND		110	350
1,2-Dichlorobenzene		ND		110	350
1,3-Dichlorobenzene		ND		110	350
1,4-Dichlorobenzene		ND		110	350
1-Methylnaphthalene		ND		110	350
2,2'-oxybis[1-chloropropane]		ND		110	350
2,3,4,6-Tetrachlorophenol		ND		110	350
2,4,5-Trichlorophenol		ND		110	350
2,4,6-Trichlorophenol		ND		110	350
2,4-Dichlorophenol		ND		110	350
2,4-Dimethylphenol		ND		140	350
2,4-Dinitrophenol		ND		110	350
2,4-Dinitrotoluene		ND		110	350
2,6-Dinitrotoluene		ND		110	350
2-Chloronaphthalene		ND		110	350
2-Chlorophenol		ND		110	350
2-Methylnaphthalene		ND		110	350
2-Methylphenol		ND		210	350
2-Nitroaniline		ND		110	1800
2-Nitrophenol		ND		110	350
3 & 4 Methylphenol		ND		110	350
3,3'-Dichlorobenzidine		ND		110	710
3-Nitroaniline		ND		110	1800
4,6-Dinitro-2-methylphenol		ND		110	1800
4-Bromophenyl phenyl ether		ND		110	350
4-Chloro-3-methylphenol		ND		110	710
4-Chloroaniline		ND		110	710
4-Chlorophenyl phenyl ether		ND		110	350
4-Nitroaniline		ND		110	1800
4-Nitrophenol		ND		110	1800
Acenaphthene		ND		110	350
Acenaphthylene		ND		110	350
Acetophenone		ND		110	350
Aniline		ND	J	110	350
Anthracene		ND		110	350
Atrazine		ND		110	350
Azobenzene		ND		110	350
Benzaldehyde		ND		110	350
Benzo[a]anthracene		ND		110	350
Benzo[a]pyrene		ND		110	350
Benzo[b]fluoranthene		ND		110	350
Benzo[g,h,i]perylene		ND		110	350
Benzo[k]fluoranthene		ND		110	350
Benzoic acid		ND		160	1800

3/18/10

Client: Olin Corporation

Job Number: 360-24563-1
Sdg Number: OCRI-14

Client Sample ID: **OC-SB-428-8.0/10-XXX**

Lab Sample ID: 360-24563-9
Client Matrix: Solid % Moisture: 6.1

Date Sampled: 09/10/2009 1620
Date Received: 09/11/2009 1820

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49517		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49041		Lab File ID:	B10588.D
Dilution:	10			Initial Weight/Volume:	30.06 g
Date Analyzed:	09/26/2009 1242			Final Weight/Volume:	1.0 mL
Date Prepared:	09/16/2009 1513			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		110	350
Benzyl alcohol		ND		300	710
Bis(2-chloroethoxy)methane		ND		110	350
Bis(2-chloroethyl)ether		ND		110	350
Bis(2-ethylhexyl) phthalate		1100	DEB J B	110	350
Butyl benzyl phthalate		ND		110	350
Caprolactam		ND		110	350
Carbazole		ND		110	350
Chrysene		ND		110	350
Dibenz(a,h)anthracene		ND		110	350
Dibenzofuran		ND		110	350
Diethyl phthalate		ND		110	350
Dimethyl phthalate		ND		110	350
Di-n-butyl phthalate		ND		310	350
Di-n-octyl phthalate		ND		180	350
Diphenyl oxide		ND		110	350
Diphenylamine		ND		110	350
Fluoranthene		ND		110	350
Fluorene		ND		110	350
Hexachlorobenzene		ND		110	350
Hexachlorobutadiene		ND		110	350
Hexachlorocyclopentadiene		ND		110	710
Hexachloroethane		ND		110	350
Indeno[1,2,3-cd]pyrene		ND		110	350
Isophorone		ND		110	350
Naphthalene		ND		110	850
Nitrobenzene		ND		110	350
N-Nitrosodimethylamine		ND		130	350
N-Nitrosodi-n-propylamine		ND		110	350
N-Nitrosodiphenylamine		ND		110	350
Pentachlorophenol		ND		110	350
Phenanthrene		ND		110	430
Phenol		ND		110	350
Pyrene		ND		110	350

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	52		30 - 130
2-Fluorophenol	71		30 - 130
2-Fluorobiphenyl	56		30 - 130
Nitrobenzene-d5	40		30 - 130
Phenol-d5	42		30 - 130
Terphenyl-d14	75		30 - 130

3/15/10

Client: Olin Corporation

Job Number: 360-24563-1
Sdg Number: OCRI-14

Client Sample ID: **OC-SB-428-8.0/10-XXX**

Lab Sample ID: 360-24563-9
Client Matrix: Solid
% Moisture: 6.1

Date Sampled: 09/10/2009 1620
Date Received: 09/11/2009 1820

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49517		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49041		Lab File ID:	B10588.D
Dilution:	10			Initial Weight/Volume:	30.06 g
Date Analyzed:	09/26/2009 1242			Final Weight/Volume:	1.0 mL
Date Prepared:	09/16/2009 1513			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 2

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
98-83-9	.alpha.-Methylstyrene	7.00	120	T J N
128-37-0	Butylated Hydroxytoluene	9.86	620	T J N

Client: Olin Corporation

Job Number: 360-24563-1
Sdg Number: OCRI-14

Client Sample ID: OC-SB-456-0.0/1.0-XXX

Lab Sample ID: 360-24563-11
Client Matrix: Solid
% Moisture: 2.5

Date Sampled: 09/11/2009 0830
Date Received: 09/11/2009 1820

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49518		Instrument ID:	Inst. J
Preparation:	3550B	Prep Batch: 360-49155		Lab File ID:	J03142.D
Dilution:	1.0			Initial Weight/Volume:	100.23 g
Date Analyzed:	09/26/2009 0218			Final Weight/Volume:	1.0 mL
Date Prepared:	09/18/2009 1122			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodimethylamine		ND		1.2	5.1

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	51		30 - 130
2-Fluorobiphenyl	62		30 - 130
2-Fluorophenol	42		30 - 130
Nitrobenzene-d5	41		30 - 130
Phenol-d5	51		30 - 130
Terphenyl-d14	104		30 - 130

Client: Olin Corporation

Job Number: 360-24563-1
Sdg Number: OCRI-14

Client Sample ID: **OC-SB-456-0.0/1.0-XXX**

Lab Sample ID: 360-24563-11
Client Matrix: Solid % Moisture: 2.5

Date Sampled: 09/11/2009 0830
Date Received: 09/11/2009 1820

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49517		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49041		Lab File ID:	B10589.D
Dilution:	1.0			Initial Weight/Volume:	30.51 g
Date Analyzed:	09/26/2009 1310			Final Weight/Volume:	1.0 mL
Date Prepared:	09/16/2009 1513			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		10	34
1,2,4,5-Tetrachlorobenzene		ND		10	34
1,2,4-Trichlorobenzene		ND		10	34
1,2-Dichlorobenzene		ND		10	34
1,3-Dichlorobenzene		ND		10	34
1,4-Dichlorobenzene		ND		10	34
1-Methylnaphthalene		ND		10	34
2,2'-oxybis[1-chloropropane]		ND		10	34
2,3,4,6-Tetrachlorophenol		ND		10	34
2,4,5-Trichlorophenol		ND		10	34
2,4,6-Trichlorophenol		ND		10	34
2,4-Dichlorophenol		ND		10	34
2,4-Dimethylphenol		ND		13	34
2,4-Dinitrophenol		ND		10	34
2,4-Dinitrotoluene		ND		10	34
2,6-Dinitrotoluene		ND		10	34
2-Chloronaphthalene		ND		10	34
2-Chlorophenol		ND		10	34
2-Methylnaphthalene		ND		10	34
2-Methylphenol		ND		20	34
2-Nitroaniline		ND		10	170
2-Nitrophenol		ND		10	34
3 & 4 Methylphenol		ND		10	34
3,3'-Dichlorobenzidine		ND		10	67
3-Nitroaniline		ND		10	170
4,6-Dinitro-2-methylphenol		ND		10	170
4-Bromophenyl phenyl ether		ND		10	34
4-Chloro-3-methylphenol		ND		10	67
4-Chloroaniline		ND		10	67
4-Chlorophenyl phenyl ether		ND		10	34
4-Nitroaniline		ND		10	170
4-Nitrophenol		ND		10	170
Acenaphthene		ND		10	34
Acenaphthylene		ND		10	34
Acetophenone		ND		10	34
Aniline		ND	J	10	34
Anthracene		ND		10	34
Atrazine		ND		10	34
Azobenzene		ND		10	34
Benzaldehyde		ND		10	34
Benzo[a]anthracene		ND		10	34
Benzo[a]pyrene		ND		10	34
Benzo[b]fluoranthene		ND		10	34
Benzo[g,h,i]perylene		ND		10	34
Benzo[k]fluoranthene		ND		10	34
Benzoic acid		ND		15	170

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Client: Olin Corporation

Job Number: 360-24563-1
Sdg Number: OCRI-14

Client Sample ID: **OC-SB-456-0.0/1.0-XXX**

Lab Sample ID: 360-24563-11
Client Matrix: Solid % Moisture: 2.5

Date Sampled: 09/11/2009 0830
Date Received: 09/11/2009 1820

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49517		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49041		Lab File ID:	B10589.D
Dilution:	1.0			Initial Weight/Volume:	30.51 g
Date Analyzed:	09/26/2009 1310			Final Weight/Volume:	1.0 mL
Date Prepared:	09/16/2009 1513			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		10	34
Benzyl alcohol		ND		29	67
Bis(2-chloroethoxy)methane		ND		10	34
Bis(2-chloroethyl)ether		ND		10	34
Butyl benzyl phthalate		ND		10	34
Caprolactam		ND		10	34
Carbazole		ND		10	34
Chrysene		ND		10	34
Dibenz(a,h)anthracene		ND		10	34
Dibenzofuran		ND		10	34
Diethyl phthalate		ND		10	34
Dimethyl phthalate		ND		10	34
Di-n-butyl phthalate		ND		30	34
Di-n-octyl phthalate		ND		17	34
Diphenyl oxide		ND		10	34
Fluoranthene		ND		10	34
Fluorene		ND		10	34
Hexachlorobenzene		ND		10	34
Hexachlorobutadiene		ND		10	34
Hexachlorocyclopentadiene		ND		10	67
Hexachloroethane		ND		10	34
Indeno[1,2,3-cd]pyrene		ND		10	34
Isophorone		ND		10	34
Naphthalene		ND		10	81
Nitrobenzene		ND		10	34
N-Nitrosodimethylamine		ND		12	34
N-Nitrosodi-n-propylamine		ND		10	34
N-Nitrosodiphenylamine		83		10	34
Pentachlorophenol		ND		10	34
Phenanthrene		ND		10	40
Phenol		ND		10	34
Pyrene		ND		10	34

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	59		30 - 130
2-Fluorophenol	74		30 - 130
2-Fluorobiphenyl	63		30 - 130
Nitrobenzene-d5	65		30 - 130
Phenol-d5	56		30 - 130
Terphenyl-d14	89		30 - 130

Client: Olin Corporation

Job Number: 360-24563-1
Sdg Number: OCRI-14

Client Sample ID: **OC-SB-456-0.0/1.0-XXX**

Lab Sample ID: 360-24563-11
Client Matrix: Solid % Moisture: 2.5

Date Sampled: 09/11/2009 0830
Date Received: 09/11/2009 1820

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49517		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49041		Lab File ID:	B10589.D
Dilution:	1.0			Initial Weight/Volume:	30.51 g
Date Analyzed:	09/26/2009 1310			Final Weight/Volume:	1.0 mL
Date Prepared:	09/16/2009 1513			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 5

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
~~92-87-5~~	~~Benzidine~~	~~12.29~~	~~23~~	~~J~~
112-88-9	1-Octadecene	13.77	190	T J N
1000131-9-4	Z-12-Pentacosene	15.20	290	T J N
112-84-5	Erucylamide	15.68	8.4	T J N
1000131-9-4	Z-12-Pentacosene	16.26	8.6	T J N

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Client: Olin Corporation

Job Number: 360-24563-1
Sdg Number: OCRI-14

Client Sample ID: OC-SB-456-0.0/1.0-XXX

Lab Sample ID: 360-24563-11
Client Matrix: Solid

% Moisture: 2.5

Date Sampled: 09/11/2009 0830
Date Received: 09/11/2009 1820

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49847		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-49041		Lab File ID:	J03309.D
Dilution:	1.0			Initial Weight/Volume:	30.51 g
Date Analyzed:	10/04/2009 1847	Run Type: DL2		Final Weight/Volume:	1.0 mL
Date Prepared:	09/16/2009 1513			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Diphenylamine		26	J	10	34

Client: Olin Corporation

Job Number: 360-24563-1
Sdg Number: OCRI-14

Client Sample ID: **OC-SB-456-0.0/1.0-XXX**

Lab Sample ID: 360-24563-11
Client Matrix: Solid

% Moisture: 2.5

Date Sampled: 09/11/2009 0830
Date Received: 09/11/2009 1820

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49902		Instrument ID:	NOEQUIP
Preparation:	3546	Prep Batch: 360-49041		Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	30.51 g
Date Analyzed:	10/04/2009 1847	Run Type: DL3		Final Weight/Volume:	1.0 mL
Date Prepared:	09/16/2009 1513			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodiphenylamine		57	J EB	10	34

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Client: Olin Corporation

Job Number: 360-24563-1
Sdg Number: OCRI-14

Client Sample ID: **OC-SB-456-0.0/1.0-XXX**

Lab Sample ID: 360-24563-11
Client Matrix: Solid % Moisture: 2.5

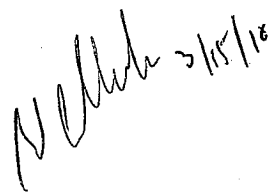
Date Sampled: 09/11/2009 0830
Date Received: 09/11/2009 1820

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49623		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49041		Lab File ID:	B10610.D
Dilution:	10			Initial Weight/Volume:	30.51 g
Date Analyzed:	09/28/2009 2227	Run Type: DL		Final Weight/Volume:	1.0 mL
Date Prepared:	09/16/2009 1513			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Bis(2-ethylhexyl) phthalate		2700 JE B		100	340

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	103		30 - 130
2-Fluorophenol	86		30 - 130
2-Fluorobiphenyl	80		30 - 130
Nitrobenzene-d5	74		30 - 130
Phenol-d5	78		30 - 130
Terphenyl-d14	83		30 - 130



Client: Olin Corporation

Job Number: 360-24563-1
Sdg Number: OCRI-14

Client Sample ID: **OC-SB-456-16/18-XXX**

Lab Sample ID: 360-24563-12
Client Matrix: Solid

% Moisture: 9.7

Date Sampled: 09/11/2009 1040
Date Received: 09/11/2009 1820

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49518		Instrument ID:	Inst. J
Preparation:	3550B	Prep Batch: 360-49155		Lab File ID:	J03143.D
Dilution:	1.0			Initial Weight/Volume:	100.15 g
Date Analyzed:	09/26/2009 0251			Final Weight/Volume:	1.0 mL
Date Prepared:	09/18/2009 1122			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodimethylamine		ND		1.3	5.5

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	30		30 - 130
2-Fluorobiphenyl	60		30 - 130
2-Fluorophenol	39		30 - 130
Nitrobenzene-d5	55		30 - 130
Phenol-d5	42		30 - 130
Terphenyl-d14	113		30 - 130

Client: Olin Corporation

Job Number: 360-24563-1
Sdg Number: OCRI-14

Client Sample ID: **OC-SB-456-16/18-XXX**

Lab Sample ID: 360-24563-12
Client Matrix: Solid % Moisture: 9.7

Date Sampled: 09/11/2009 1040
Date Received: 09/11/2009 1820

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49517		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49041		Lab File ID:	B10590.D
Dilution:	1.0			Initial Weight/Volume:	30.91 g
Date Analyzed:	09/26/2009 1338			Final Weight/Volume:	1.0 mL
Date Prepared:	09/16/2009 1513			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		11	36
1,2,4,5-Tetrachlorobenzene		ND		11	36
1,2,4-Trichlorobenzene		ND		11	36
1,2-Dichlorobenzene		ND		11	36
1,3-Dichlorobenzene		ND		11	36
1,4-Dichlorobenzene		ND		11	36
1-Methylnaphthalene		ND		11	36
2,2'-oxybis[1-chloropropane]		ND		11	36
2,3,4,6-Tetrachlorophenol		ND		11	36
2,4,5-Trichlorophenol		ND		11	36
2,4,6-Trichlorophenol		ND		11	36
2,4-Dichlorophenol		ND		11	36
2,4-Dimethylphenol		ND		14	36
2,4-Dinitrophenol		ND		11	36
2,4-Dinitrotoluene		ND		11	36
2,6-Dinitrotoluene		ND		11	36
2-Chloronaphthalene		ND		11	36
2-Chlorophenol		ND		11	36
2-Methylnaphthalene		ND		11	36
2-Methylphenol		ND		21	36
2-Nitroaniline		ND		11	180
2-Nitrophenol		ND		11	36
3 & 4 Methylphenol		ND		11	36
3,3'-Dichlorobenzidine		ND		11	72
3-Nitroaniline		ND		11	180
4,6-Dinitro-2-methylphenol		ND		11	180
4-Bromophenyl phenyl ether		ND		11	36
4-Chloro-3-methylphenol		ND		11	72
4-Chloroaniline		ND		11	72
4-Chlorophenyl phenyl ether		ND		11	36
4-Nitroaniline		ND		11	180
4-Nitrophenol		ND		11	180
Acenaphthene		ND		11	36
Acenaphthylene		ND		11	36
Acetophenone		ND		11	36
Aniline		ND	J	11	36
Anthracene		ND		11	36
Atrazine		ND		11	36
Azobenzene		ND		11	36
Benzaldehyde		ND		11	36
Benzo[a]anthracene		ND		11	36
Benzo[a]pyrene		ND		11	36
Benzo[b]fluoranthene		ND		11	36
Benzo[g,h,i]perylene		ND		11	36
Benzo[k]fluoranthene		ND		11	36
Benzoic acid		ND		16	180

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Client: Olin Corporation

Job Number: 360-24563-1
Sdg Number: OCRI-14

Client Sample ID: **OC-SB-456-16/18-XXX**

Lab Sample ID: 360-24563-12
Client Matrix: Solid % Moisture: 9.7

Date Sampled: 09/11/2009 1040
Date Received: 09/11/2009 1820

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49517		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49041		Lab File ID:	B10590.D
Dilution:	1.0			Initial Weight/Volume:	30.91 g
Date Analyzed:	09/26/2009 1338			Final Weight/Volume:	1.0 mL
Date Prepared:	09/16/2009 1513			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		11	36
Benzyl alcohol		ND		31	72
Bis(2-chloroethoxy)methane		ND		11	36
Bis(2-chloroethyl)ether		ND		11	36
Bis(2-ethylhexyl) phthalate		340 U	B	11	36
Butyl benzyl phthalate		ND		11	36
Caprolactam		ND		11	36
Carbazole		ND		11	36
Chrysene		ND		11	36
Dibenz(a,h)anthracene		ND		11	36
Dibenzofuran		ND		11	36
Diethyl phthalate		ND		11	36
Dimethyl phthalate		ND		11	36
Di-n-butyl phthalate		ND		31	36
Di-n-octyl phthalate		ND		18	36
Diphenyl oxide		ND		11	36
Diphenylamine		ND		11	36
Fluoranthene		ND		11	36
Fluorene		ND		11	36
Hexachlorobenzene		ND		11	36
Hexachlorobutadiene		ND		11	36
Hexachlorocyclopentadiene		ND		11	72
Hexachloroethane		ND		11	36
Indeno[1,2,3-cd]pyrene		ND		11	36
Isophorone		ND		11	36
Naphthalene		ND		11	86
Nitrobenzene		ND		11	36
N-Nitrosodimethylamine		ND		13	36
N-Nitrosodi-n-propylamine		ND		11	36
N-Nitrosodiphenylamine		ND		11	36
Pentachlorophenol		ND		11	36
Phenanthrene		ND		11	43
Phenol		ND		11	36
Pyrene		ND		11	36

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	38		30 - 130
2-Fluorophenol	61		30 - 130
2-Fluorobiphenyl	54		30 - 130
Nitrobenzene-d5	56		30 - 130
Phenol-d5	42		30 - 130
Terphenyl-d14	84		30 - 130

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Client: Olin Corporation

Job Number: 360-24563-1
Sdg Number: OCRI-14

Client Sample ID: OC-SB-456-16/18-XXX

Lab Sample ID: 360-24563-12
Client Matrix: Solid % Moisture: 9.7

Date Sampled: 09/11/2009 1040
Date Received: 09/11/2009 1820

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49517		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49041		Lab File ID:	B10590.D
Dilution:	1.0			Initial Weight/Volume:	30.91 g
Date Analyzed:	09/26/2009 1338			Final Weight/Volume:	1.0 mL
Date Prepared:	09/16/2009 1513			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 10

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
98-83-9	.alpha.-Methylstyrene	6.99	24	T J N
128-37-0	Butylated Hydroxytoluene	9.86	15	T J N
3910-35-8	1H-Indene, 2,3-dihydro-1,1,3-trimethyl-3	10.79	19	T J N e
92-87-5	Benzidine	12.29	25	J e
638-67-5	Tricosane	13.73	15	T J N e
629-78-7	Heptadecane	14.38	19	T J N
112-95-8	Eicosane	15.14	19	T J N e
112-95-8	Eicosane	15.71	59	T J N e
7683-64-9	Squalene	15.82	24	T J N
593-45-3	Octadecane	16.18	34	T J N

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Client: Olin Corporation

Job Number: 360-24563-1
Sdg Number: OCRI-14

Client Sample ID: **OC-SB-456-7.0/9.0-DUP**

Lab Sample ID: 360-24563-13
Client Matrix: Solid

% Moisture: 7.4

Date Sampled: 09/11/2009 0900
Date Received: 09/11/2009 1820

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49518		Instrument ID:	Inst. J
Preparation:	3550B	Prep Batch: 360-49155		Lab File ID:	J03144.D
Dilution:	1.0			Initial Weight/Volume:	100.45 g
Date Analyzed:	09/26/2009 0323			Final Weight/Volume:	1.0 mL
Date Prepared:	09/18/2009 1122			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodimethylamine		ND		1.2	5.4

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	29	X	30 - 130
2-Fluorobiphenyl	58		30 - 130
2-Fluorophenol	36		30 - 130
Nitrobenzene-d5	68		30 - 130
Phenol-d5	41		30 - 130
Terphenyl-d14	87		30 - 130

Client: Olin Corporation

Job Number: 360-24563-1
Sdg Number: OCRI-14

Client Sample ID: **OC-SB-456-7.0/9.0-DUP**

Lab Sample ID: 360-24563-13
Client Matrix: Solid
% Moisture: 7.4

Date Sampled: 09/11/2009 0900
Date Received: 09/11/2009 1820

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49648		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-49246		Lab File ID:	J03198.D
Dilution:	1.0			Initial Weight/Volume:	30.37 g
Date Analyzed:	09/28/2009 2218			Final Weight/Volume:	1.0 mL
Date Prepared:	09/21/2009 1530			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		11	36
1,2,4,5-Tetrachlorobenzene		ND		11	36
1,2,4-Trichlorobenzene		ND		11	36
1,2-Dichlorobenzene		ND		11	36
1,3-Dichlorobenzene		ND		11	36
1,4-Dichlorobenzene		ND		11	36
1-Methylnaphthalene		ND		11	36
2,2'-oxybis[1-chloropropane]		ND		11	36
2,3,4,6-Tetrachlorophenol		ND		11	36
2,4,5-Trichlorophenol		ND		11	36
2,4,6-Trichlorophenol		ND		11	36
2,4-Dichlorophenol		ND		11	36
2,4-Dimethylphenol		ND		14	36
2,4-Dinitrophenol		ND		11	36
2,4-Dinitrotoluene		ND		11	36
2,6-Dinitrotoluene		ND		11	36
2-Chloronaphthalene		ND		11	36
2-Chlorophenol		ND		11	36
2-Methylnaphthalene		ND		11	36
2-Methylphenol		ND		21	36
2-Nitroaniline		ND		11	180
2-Nitrophenol		ND		11	36
3 & 4 Methylphenol		ND		11	36
3,3'-Dichlorobenzidine		ND		11	71
3-Nitroaniline		ND		11	180
4,6-Dinitro-2-methylphenol		ND		11	180
4-Bromophenyl phenyl ether		ND		11	36
4-Chloro-3-methylphenol		ND		11	71
4-Chloroaniline		ND		11	71
4-Chlorophenyl phenyl ether		ND		11	36
4-Nitroaniline		ND		11	180
4-Nitrophenol		ND		11	180
Acenaphthene		ND		11	36
Acenaphthylene		ND		11	36
Acetophenone		ND		11	36
Aniline		ND	J	11	36
Anthracene		ND		11	36
Atrazine		ND		11	36
Azobenzene		ND		11	36
Benzaldehyde		ND		11	36
Benzo[a]anthracene		ND		11	36
Benzo[a]pyrene		ND		11	36
Benzo[b]fluoranthene		ND		11	36
Benzo[g,h,i]perylene		ND		11	36
Benzo[k]fluoranthene		ND		11	36
Benzoic acid		ND		16	180

3/18/10

Client: Olin Corporation

Job Number: 360-24563-1
Sdg Number: OCRI-14

Client Sample ID: **OC-SB-456-7.0/9.0-DUP**

Lab Sample ID: 360-24563-13
Client Matrix: Solid % Moisture: 7.4

Date Sampled: 09/11/2009 0900
Date Received: 09/11/2009 1820

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49648		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-49246		Lab File ID:	J03198.D
Dilution:	1.0			Initial Weight/Volume:	30.37 g
Date Analyzed:	09/28/2009 2218			Final Weight/Volume:	1.0 mL
Date Prepared:	09/21/2009 1530			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		11	36
Benzyl alcohol		ND		30	71
Bis(2-chloroethoxy)methane		ND		11	36
Bis(2-chloroethyl)ether		ND		11	36
Bis(2-ethylhexyl) phthalate		66 43	~~B~~	11	36
Butyl benzyl phthalate		ND		11	36
Caprolactam		ND		11	36
Carbazole		ND		11	36
Chrysene		ND		11	36
Dibenz(a,h)anthracene		ND		11	36
Dibenzofuran		ND		11	36
Diethyl phthalate		ND		11	36
Dimethyl phthalate		ND		11	36
Di-n-butyl phthalate		ND		31	36
Di-n-octyl phthalate		ND		18	36
Diphenyl oxide		ND		11	36
Diphenylamine		ND		11	36
Fluoranthene		ND		11	36
Fluorene		ND		11	36
Hexachlorobenzene		ND		11	36
Hexachlorobutadiene		ND		11	36
Hexachlorocyclopentadiene		ND		11	71
Hexachloroethane		ND		11	36
Indeno[1,2,3-cd]pyrene		ND		11	36
Isophorone		ND		11	36
Naphthalene		ND		11	85
Nitrobenzene		ND		11	36
N-Nitrosodimethylamine		ND		13	36
N-Nitrosodi-n-propylamine		ND		11	36
N-Nitrosodiphenylamine		ND		11	36
Pentachlorophenol		ND		11	36
Phenanthrene		ND		11	43
Phenol		ND		11	36
Pyrene		ND		11	36

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	66		30 - 130
2-Fluorophenol	65		30 - 130
2-Fluorobiphenyl	61		30 - 130
Nitrobenzene-d5	63		30 - 130
Phenol-d5	68		30 - 130
Terphenyl-d14	68		30 - 130

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Client: Olin Corporation

Job Number: 360-24563-1
Sdg Number: OCRI-14

Client Sample ID: **OC-SB-456-7.0/9.0-DUP**

Lab Sample ID: 360-24563-13
Client Matrix: Solid % Moisture: 7.4

Date Sampled: 09/11/2009 0900
Date Received: 09/11/2009 1820

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49648		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-49246		Lab File ID:	J03198.D
Dilution:	1.0			Initial Weight/Volume:	30.37 g
Date Analyzed:	09/28/2009 2218			Final Weight/Volume:	1.0 mL
Date Prepared:	09/21/2009 1530			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 6

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
763-93-9	3-Hexen-2-one	5.71	13	T J N
104-76-7	1-Hexanol, 2-ethyl-	8.08	28	T J N
321-60-8	1,1"-Biphenyl, 2-fluoro	10.40	10	T J N
3910-35-8	1H-Indene, 2,3-dihydro-1,1,3-trimethyl-3	12.24	7.7	T J N
7683-64-9	Squalene	16.19	55	T J N
26603-23-6	p,p"-Dioctyldiphenylamine	16.85	13	T J N

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Client: Olin Corporation

Job Number: 360-24563-1
Sdg Number: OCRI-14

Client Sample ID: OC-SB-456-7.0/9.0-XXX

Lab Sample ID: 360-24563-14
Client Matrix: Solid
% Moisture: 7.2

Date Sampled: 09/11/2009 0900
Date Received: 09/11/2009 1820

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49520		Instrument ID:	Inst. J
Preparation:	3550B	Prep Batch: 360-49302		Lab File ID:	J03159.D
Dilution:	1.0			Initial Weight/Volume:	100.12 g
Date Analyzed:	09/26/2009 1651			Final Weight/Volume:	1.0 mL
Date Prepared:	09/22/2009 1155			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodimethylamine		ND		1.2	5.4

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	62		30 - 130
2-Fluorobiphenyl	51		30 - 130
2-Fluorophenol	53		30 - 130
Nitrobenzene-d5	48		30 - 130
Phenol-d5	59		30 - 130
Terphenyl-d14	72		30 - 130

Client: Olin Corporation

Job Number: 360-24563-1
Sdg Number: OCRI-14

Client Sample ID: **OC-SB-456-7.0/9.0-XXX**

Lab Sample ID: 360-24563-14
Client Matrix: Solid % Moisture: 7.2

Date Sampled: 09/11/2009 0900
Date Received: 09/11/2009 1820

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49648		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-49246		Lab File ID:	J03199.D
Dilution:	1.0			Initial Weight/Volume:	30.02 g
Date Analyzed:	09/28/2009 2251			Final Weight/Volume:	1.0 mL
Date Prepared:	09/21/2009 1530			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		11	36
1,2,4,5-Tetrachlorobenzene		ND		11	36
1,2,4-Trichlorobenzene		ND		11	36
1,2-Dichlorobenzene		ND		11	36
1,3-Dichlorobenzene		ND		11	36
1,4-Dichlorobenzene		ND		11	36
1-Methylnaphthalene		ND		11	36
2,2'-oxybis[1-chloropropane]		ND		11	36
2,3,4,6-Tetrachlorophenol		ND		11	36
2,4,5-Trichlorophenol		ND		11	36
2,4,6-Trichlorophenol		ND		11	36
2,4-Dichlorophenol		ND		11	36
2,4-Dimethylphenol		ND		14	36
2,4-Dinitrophenol		ND		11	36
2,4-Dinitrotoluene		ND		11	36
2,6-Dinitrotoluene		ND		11	36
2-Chloronaphthalene		ND		11	36
2-Chlorophenol		ND		11	36
2-Methylnaphthalene		ND		11	36
2-Methylphenol		ND		22	36
2-Nitroaniline		ND		11	180
2-Nitrophenol		ND		11	36
3 & 4 Methylphenol		ND		11	36
3,3'-Dichlorobenzidine		ND		11	72
3-Nitroaniline		ND		11	180
4,6-Dinitro-2-methylphenol		ND		11	180
4-Bromophenyl phenyl ether		ND		11	36
4-Chloro-3-methylphenol		ND		11	72
4-Chloroaniline		ND		11	72
4-Chlorophenyl phenyl ether		ND		11	36
4-Nitroaniline		ND		11	180
4-Nitrophenol		ND		11	180
Acenaphthene		ND		11	36
Acenaphthylene		ND		11	36
Acetophenone		ND		11	36
Aniline		ND	J	11	36
Anthracene		ND		11	36
Atrazine		ND		11	36
Azobenzene		ND		11	36
Benzaldehyde		ND		11	36
Benzo[a]anthracene		ND		11	36
Benzo[a]pyrene		ND		11	36
Benzo[b]fluoranthene		ND		11	36
Benzo[g,h,i]perylene		ND		11	36
Benzo[k]fluoranthene		ND		11	36
Benzoic acid		ND		16	180

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Client: Olin Corporation

Job Number: 360-24563-1
Sdg Number: OCRI-14

Client Sample ID: OC-SB-456-7.0/9.0-XXX

Lab Sample ID: 360-24563-14
Client Matrix: Solid % Moisture: 7.2

Date Sampled: 09/11/2009 0900
Date Received: 09/11/2009 1820

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49648		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-49246		Lab File ID:	J03199.D
Dilution:	1.0			Initial Weight/Volume:	30.02 g
Date Analyzed:	09/28/2009 2251			Final Weight/Volume:	1.0 mL
Date Prepared:	09/21/2009 1530			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		11	36
Benzyl alcohol		ND		31	72
Bis(2-chloroethoxy)methane		ND		11	36
Bis(2-chloroethyl)ether		ND		11	36
Bis(2-ethylhexyl) phthalate		72 u J	B	11	36
Butyl benzyl phthalate		ND		11	36
Caprolactam		ND		11	36
Carbazole		ND		11	36
Chrysene		ND		11	36
Dibenz(a,h)anthracene		ND		11	36
Dibenzofuran		ND		11	36
Diethyl phthalate		ND		11	36
Dimethyl phthalate		ND		11	36
Di-n-butyl phthalate		ND		32	36
Di-n-octyl phthalate		ND		18	36
Diphenyl oxide		ND		11	36
Diphenylamine		ND		11	36
Fluoranthene		ND		11	36
Fluorene		ND		11	36
Hexachlorobenzene		ND		11	36
Hexachlorobutadiene		ND		11	36
Hexachlorocyclopentadiene		ND		11	72
Hexachloroethane		ND		11	36
Indeno[1,2,3-cd]pyrene		ND		11	36
Isophorone		ND		11	36
Naphthalene		ND		11	86
Nitrobenzene		ND		11	36
N-Nitrosodimethylamine		ND		13	36
N-Nitrosodi-n-propylamine		ND		11	36
N-Nitrosodiphenylamine		ND		11	36
Pentachlorophenol		ND		11	36
Phenanthrene		ND		11	43
Phenol		ND		11	36
Pyrene		ND		11	36

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	67		30 - 130
2-Fluorophenol	63		30 - 130
2-Fluorobiphenyl	56		30 - 130
Nitrobenzene-d5	59		30 - 130
Phenol-d5	66		30 - 130
Terphenyl-d14	68		30 - 130

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Client: Olin Corporation

Job Number: 360-24563-1
Sdg Number: OCRI-14

Client Sample ID: **OC-SB-456-7.0/9.0-XXX**

Lab Sample ID: 360-24563-14
Client Matrix: Solid % Moisture: 7.2

Date Sampled: 09/11/2009 0900
Date Received: 09/11/2009 1820

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49648		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-49246		Lab File ID:	J03199.D
Dilution:	1.0			Initial Weight/Volume:	30.02 g
Date Analyzed:	09/28/2009 2251			Final Weight/Volume:	1.0 mL
Date Prepared:	09/21/2009 1530			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 4

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
763-93-9	3-Hexen-2-one	5.71	13	T J N
104-76-7	1-Hexanol, 2-ethyl-	8.08	47	T J N
~~321-60-8~~	~~1,1"-Biphenyl, 2-fluoro-~~	10.40	12	T J N
~~7683-64-9~~	Squalene	16.19	70	T J N

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Client: Olin Corporation

Job Number: 360-24563-1
Sdg Number: OCRI-14

Client Sample ID: **OC-SB-457-0.0/1.0-XXX**

Lab Sample ID: 360-24563-15
Client Matrix: Solid
% Moisture: 4.8

Date Sampled: 09/11/2009 1310
Date Received: 09/11/2009 1820

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49518		Instrument ID:	Inst. J
Preparation:	3550B	Prep Batch: 360-49155		Lab File ID:	J03145.D
Dilution:	1.0			Initial Weight/Volume:	100.48 g
Date Analyzed:	09/26/2009 0355			Final Weight/Volume:	1.0 mL
Date Prepared:	09/18/2009 1122			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodimethylamine		ND		1.2	5.2

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	58		30 - 130
2-Fluorobiphenyl	64		30 - 130
2-Fluorophenol	39		30 - 130
Nitrobenzene-d5	47		30 - 130
Phenol-d5	49		30 - 130
Terphenyl-d14	100		30 - 130

Client: Olin Corporation

Job Number: 360-24563-1
Sdg Number: OCRI-14

Client Sample ID: **OC-SB-457-0.0/1.0-XXX**

Lab Sample ID: 360-24563-15
Client Matrix: Solid % Moisture: 4.8

Date Sampled: 09/11/2009 1310
Date Received: 09/11/2009 1820

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49648		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-49246		Lab File ID:	J03202.D
Dilution:	10			Initial Weight/Volume:	30.44 g
Date Analyzed:	09/29/2009 0030			Final Weight/Volume:	1.0 mL
Date Prepared:	09/21/2009 1530			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		100	340
1,2,4,5-Tetrachlorobenzene		ND		100	340
1,2,4-Trichlorobenzene		ND		100	340
1,2-Dichlorobenzene		ND		100	340
1,3-Dichlorobenzene		ND		100	340
1,4-Dichlorobenzene		ND		100	340
1-Methylnaphthalene		ND		100	340
2,2'-oxybis[1-chloropropane]		ND		100	340
2,3,4,6-Tetrachlorophenol		ND		100	340
2,4,5-Trichlorophenol		ND		100	340
2,4,6-Trichlorophenol		ND		100	340
2,4-Dichlorophenol		ND		100	340
2,4-Dimethylphenol		ND		140	340
2,4-Dinitrophenol		ND		100	340
2,4-Dinitrotoluene		ND		100	340
2,6-Dinitrotoluene		ND		100	340
2-Chloronaphthalene		ND		100	340
2-Chlorophenol		ND		100	340
2-Methylnaphthalene		ND		100	340
2-Methylphenol		ND		210	340
2-Nitroaniline		ND		100	1700
2-Nitrophenol		ND		100	340
3 & 4 Methylphenol		ND		100	340
3,3'-Dichlorobenzidine		ND		100	690
3-Nitroaniline		ND		100	1700
4,6-Dinitro-2-methylphenol		ND		100	1700
4-Bromophenyl phenyl ether		ND		100	340
4-Chloro-3-methylphenol		ND		100	690
4-Chloroaniline		ND		100	690
4-Chlorophenyl phenyl ether		ND		100	340
4-Nitroaniline		ND		100	1700
4-Nitrophenol		ND		100	1700
Acenaphthene		ND		100	340
Acenaphthylene		ND		100	340
Acetophenone		ND		100	340
Aniline		ND	J	100	340
Anthracene		ND		100	340
Atrazine		ND		100	340
Azobenzene		ND		100	340
Benzaldehyde		ND		100	340
Benzo[a]anthracene		ND		100	340
Benzo[a]pyrene		ND		100	340
Benzo[b]fluoranthene		ND		100	340
Benzo[g,h,i]perylene		ND		100	340
Benzo[k]fluoranthene		ND		100	340
Benzoic acid		ND		160	1700

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Client: Olin Corporation

Job Number: 360-24563-1
Sdg Number: OCRI-14

Client Sample ID: OC-SB-457-0.0/1.0-XXX

Lab Sample ID: 360-24563-15
Client Matrix: Solid
% Moisture: 4.8

Date Sampled: 09/11/2009 1310
Date Received: 09/11/2009 1820

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49648		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-49246		Lab File ID:	J03202.D
Dilution:	10			Initial Weight/Volume:	30.44 g
Date Analyzed:	09/29/2009 0030			Final Weight/Volume:	1.0 mL
Date Prepared:	09/21/2009 1530			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		100	340
Benzyl alcohol		ND		290	690
Bis(2-chloroethoxy)methane		ND		100	340
Bis(2-chloroethyl)ether		ND		100	340
Bis(2-ethylhexyl) phthalate		390	B	100	340
Butyl benzyl phthalate		ND		100	340
Caprolactam		ND		100	340
Carbazole		ND		100	340
Chrysene		ND		100	340
Dibenz(a,h)anthracene		ND		100	340
Dibenzofuran		ND		100	340
Diethyl phthalate		ND		100	340
Dimethyl phthalate		ND		100	340
Di-n-butyl phthalate		ND		300	340
Di-n-octyl phthalate		ND		170	340
Diphenyl oxide		ND		100	340
Diphenylamine		ND		100	340
Fluoranthene		ND		100	340
Fluorene		ND		100	340
Hexachlorobenzene		ND		100	340
Hexachlorobutadiene		ND		100	340
Hexachlorocyclopentadiene		ND		100	690
Hexachloroethane		ND		100	340
Indeno[1,2,3-cd]pyrene		ND		100	340
Isophorone		ND		100	340
Naphthalene		ND		100	830
Nitrobenzene		ND		100	340
N-Nitrosodimethylamine		ND		120	340
N-Nitrosodi-n-propylamine		ND		100	340
N-Nitrosodiphenylamine		ND		100	340
Pentachlorophenol		ND		100	340
Phenanthrene		ND		100	410
Phenol		ND		100	340
Pyrene		ND		100	340

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	71		30 - 130
2-Fluorophenol	78		30 - 130
2-Fluorobiphenyl	79		30 - 130
Nitrobenzene-d5	70		30 - 130
Phenol-d5	79		30 - 130
Terphenyl-d14	88		30 - 130

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Client: Olin Corporation

Job Number: 360-24563-1
Sdg Number: OCRI-14

Client Sample ID: **OC-SB-457-0.0/1.0-XXX**

Lab Sample ID: 360-24563-15
Client Matrix: Solid % Moisture: 4.8

Date Sampled: 09/11/2009 1310
Date Received: 09/11/2009 1820

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49648		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-49246		Lab File ID:	J03202.D
Dilution:	10			Initial Weight/Volume:	30.44 g
Date Analyzed:	09/29/2009 0030			Final Weight/Volume:	1.0 mL
Date Prepared:	09/21/2009 1530			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** **10**

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
27193-28-8	Phenol, (1,1,3,3-tetramethylbutyl)-	11.63	74	T J N
~~3910-35-8~~	~~1H-Indene, 2,3-dihydro-1,1,3-trimethyl-3~~	~~12.24~~	~~220~~	~~T J N~~
~~22768-22-5~~	~~2,4-Diphenyl-4-methyl-2(E)-pentene~~	~~12.72~~	~~160~~	~~T J N~~
112-61-8	Octadecanoic acid, methyl ester	13.68	120	T J N
~~92-87-5~~	~~Benzidine~~	~~13.83~~	~~300~~	~~J~~
1000149-68-9	Phenanthrene-1-carboxylic acid, 1,2,3,4,	14.74	400	T J N
13287-24-6	Nonadecane, 9-methyl-	15.00	110	T J N
629-92-5	Nonadecane	15.34	130	T J N
629-97-0	Docosane	15.67	120	T J N
112-88-9	1-Octadecene	15.78	170	T J N

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Client: Olin Corporation

Job Number: 360-24563-1
Sdg Number: OCRI-14

Client Sample ID: **OC-SB-457-8.0/10-XXX**

Lab Sample ID: 360-24563-16
Client Matrix: Solid

% Moisture: 9.2

Date Sampled: 09/11/2009 1320
Date Received: 09/11/2009 1820

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49518		Instrument ID:	Inst. J
Preparation:	3550B	Prep Batch: 360-49155		Lab File ID:	J03146.D
Dilution:	1.0			Initial Weight/Volume:	100.21 g
Date Analyzed:	09/26/2009 0428			Final Weight/Volume:	1.0 mL
Date Prepared:	09/18/2009 1122			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodimethylamine		ND		1.3	5.5

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	35		30 - 130
2-Fluorobiphenyl	56		30 - 130
2-Fluorophenol	39		30 - 130
Nitrobenzene-d5	45		30 - 130
Phenol-d5	43		30 - 130
Terphenyl-d14	99		30 - 130

Client: Olin Corporation

Job Number: 360-24563-1
Sdg Number: OCRI-14

Client Sample ID: **OC-SB-457-8.0/10-XXX**

Lab Sample ID: 360-24563-16
Client Matrix: Solid % Moisture: 9.2

Date Sampled: 09/11/2009 1320
Date Received: 09/11/2009 1820

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49648		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-49246		Lab File ID:	J03203.D
Dilution:	1.0			Initial Weight/Volume:	30.70 g
Date Analyzed:	09/29/2009 0103			Final Weight/Volume:	1.0 mL
Date Prepared:	09/21/2009 1530			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		11	36
1,2,4,5-Tetrachlorobenzene		ND		11	36
1,2,4-Trichlorobenzene		ND		11	36
1,2-Dichlorobenzene		ND		11	36
1,3-Dichlorobenzene		ND		11	36
1,4-Dichlorobenzene		ND		11	36
1-Methylnaphthalene		ND		11	36
2,2'-oxybis[1-chloropropane]		ND		11	36
2,3,4,6-Tetrachlorophenol		ND		11	36
2,4,5-Trichlorophenol		ND		11	36
2,4,6-Trichlorophenol		ND		11	36
2,4-Dichlorophenol		ND		11	36
2,4-Dimethylphenol		ND		14	36
2,4-Dinitrophenol		ND		11	36
2,4-Dinitrotoluene		ND		11	36
2,6-Dinitrotoluene		ND		11	36
2-Chloronaphthalene		ND		11	36
2-Chlorophenol		ND		11	36
2-Methylnaphthalene		ND		11	36
2-Methylphenol		ND		22	36
2-Nitroaniline		ND		11	180
2-Nitrophenol		ND		11	36
3 & 4 Methylphenol		ND		11	36
3,3'-Dichlorobenzidine		ND		11	72
3-Nitroaniline		ND		11	180
4,6-Dinitro-2-methylphenol		ND		11	180
4-Bromophenyl phenyl ether		ND		11	36
4-Chloro-3-methylphenol		ND		11	72
4-Chloroaniline		ND		11	72
4-Chlorophenyl phenyl ether		ND		11	36
4-Nitroaniline		ND		11	180
4-Nitrophenol		ND		11	180
Acenaphthene		ND		11	36
Acenaphthylene		ND		11	36
Acetophenone		ND		11	36
Aniline		ND	J	11	36
Anthracene		ND		11	36
Atrazine		ND		11	36
Azobenzene		ND		11	36
Benzaldehyde		ND		11	36
Benzo[a]anthracene		ND		11	36
Benzo[a]pyrene		ND		11	36
Benzo[b]fluoranthene		ND		11	36
Benzo[g,h,i]perylene		ND		11	36
Benzo[k]fluoranthene		ND		11	36
Benzoic acid		ND		16	180

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Client: Olin Corporation

Job Number: 360-24563-1
Sdg Number: OCRI-14

Client Sample ID: **OC-SB-457-8.0/10-XXX**

Lab Sample ID: 360-24563-16
Client Matrix: Solid

% Moisture: 9.2

Date Sampled: 09/11/2009 1320
Date Received: 09/11/2009 1820

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49648		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-49246		Lab File ID:	J03203.D
Dilution:	1.0			Initial Weight/Volume:	30.70 g
Date Analyzed:	09/29/2009 0103			Final Weight/Volume:	1.0 mL
Date Prepared:	09/21/2009 1530			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		11	36
Benzyl alcohol		ND		31	72
Bis(2-chloroethoxy)methane		ND		11	36
Bis(2-chloroethyl)ether		ND		11	36
Bis(2-ethylhexyl) phthalate		65 u	B	11	36
Butyl benzyl phthalate		ND		11	36
Caprolactam		ND		11	36
Carbazole		ND		11	36
Chrysene		ND		11	36
Dibenz(a,h)anthracene		ND		11	36
Dibenzofuran		ND		11	36
Diethyl phthalate		ND		11	36
Dimethyl phthalate		ND		11	36
Di-n-butyl phthalate		ND		32	36
Di-n-octyl phthalate		ND		18	36
Diphenyl oxide		ND		11	36
Diphenylamine		ND		11	36
Fluoranthene		ND		11	36
Fluorene		ND		11	36
Hexachlorobenzene		ND		11	36
Hexachlorobutadiene		ND		11	36
Hexachlorocyclopentadiene		ND		11	72
Hexachloroethane		ND		11	36
Indeno[1,2,3-cd]pyrene		ND		11	36
Isophorone		ND		11	36
Naphthalene		ND		11	86
Nitrobenzene		ND		11	36
N-Nitrosodimethylamine		ND		13	36
N-Nitrosodi-n-propylamine		ND		11	36
N-Nitrosodiphenylamine		ND		11	36
Pentachlorophenol		ND		11	36
Phenanthrene		ND		11	43
Phenol		ND		11	36
Pyrene		ND		11	36

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	62		30 - 130
2-Fluorophenol	60		30 - 130
2-Fluorobiphenyl	55		30 - 130
Nitrobenzene-d5	47		30 - 130
Phenol-d5	63		30 - 130
Terphenyl-d14	62		30 - 130

3/10/10

Client: Olin Corporation

Job Number: 360-24563-1
Sdg Number: OCRI-14

Client Sample ID: **OC-SB-457-8.0/10-XXX**

Lab Sample ID: 360-24563-16
Client Matrix: Solid % Moisture: 9.2

Date Sampled: 09/11/2009 1320
Date Received: 09/11/2009 1820

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49648		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-49246		Lab File ID:	J03203.D
Dilution:	1.0			Initial Weight/Volume:	30.70 g
Date Analyzed:	09/29/2009 0103			Final Weight/Volume:	1.0 mL
Date Prepared:	09/21/2009 1530			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 8

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
~~141-79-7~~	~~3-Penten-2-one, 4-methyl-~~	~~5.71~~	~~12~~	~~T J N~~
110-20-3	Hydrazinecarboxamide, 2-(1-methylethylid	9.90	32	T J N
~~3910-35-8~~	~~1H-Indene, 2,3-dihydro-1,1,3-trimethyl-3~~	~~12.24~~	~~11~~	~~T J N~~
~~22768-22-5~~	~~2,4-Diphenyl-4-methyl-2(E)-pentene~~	~~12.72~~	~~7.6~~	~~T J N~~
295-48-7	Cyclopentadecane	15.07	32	T J N
112-84-5	Erucylamide	16.08	45	T J N
~~7683-64-9~~	~~Squalene~~	~~16.19~~	~~110~~	~~T J N~~
~~26603-23-6~~	~~p,p''-Dioctyldiphenylamine~~	~~16.85~~	~~27~~	~~T J N~~

4/22/10

Client: Olin Corporation

Job Number: 360-24563-1
Sdg Number: OCRI-14

Client Sample ID: **OC-EBK-009**

Lab Sample ID: 360-24563-23
Client Matrix: Water

Date Sampled: 09/10/2009 1850
Date Received: 09/11/2009 1820

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49511		Instrument ID:	Inst. B
Preparation:	3510C	Prep Batch: 360-48980		Lab File ID:	B10562.D
Dilution:	1.0			Initial Weight/Volume:	1000 mL
Date Analyzed:	09/26/2009 0046			Final Weight/Volume:	1.0 mL
Date Prepared:	09/15/2009 1456			Injection Volume:	1.0 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Phenol	ND		0.50	5.0
Bis(2-chloroethyl)ether	ND		0.50	5.0
Benzyl alcohol	ND		0.50	10
2-Methylphenol	ND		0.50	5.0
N-Nitrosodi-n-propylamine	ND		0.50	5.0
Hexachloroethane	ND		0.50	3.0
3 & 4 Methylphenol	ND		0.50	5.0
2-Chlorophenol	ND		0.50	5.0
Nitrobenzene	ND		0.50	5.0
Bis(2-chloroethoxy)methane	ND		0.50	5.0
Benzoic acid	ND		0.50	5.0
Isophorone	ND		0.50	5.0
2,4-Dimethylphenol	ND		0.50	5.0
Aniline	ND		0.50	5.0
2,4-Dichlorophenol	ND		0.50	5.0
4-Chloroaniline	ND		0.50	5.0
2,4,6-Trichlorophenol	ND		0.50	5.0
2,4,5-Trichlorophenol	ND		0.50	5.0
Hexachlorocyclopentadiene	ND		0.50	5.0
2-Methylnaphthalene	ND		0.050	1.0
2-Nitroaniline	ND		0.50	5.0
2-Chloronaphthalene	ND		0.50	5.0
4-Chloro-3-methylphenol	ND		0.50	5.0
2,6-Dinitrotoluene	ND		0.50	5.0
2-Nitrophenol	ND		0.50	5.0
3-Nitroaniline	ND		0.50	5.0
Dimethyl phthalate	ND		0.50	5.0
2,4-Dinitrophenol	ND		0.50	5.0
Acenaphthylene	ND		0.050	0.30
2,4-Dinitrotoluene	ND		0.50	5.0
Acenaphthene	ND		0.050	1.0
Dibenzofuran	ND		0.50	5.0
4-Nitrophenol	ND		0.50	5.0
Fluorene	ND		0.050	1.0
4-Nitroaniline	ND		0.50	5.0
4-Bromophenyl phenyl ether	ND		0.50	5.0
Hexachlorobenzene	ND		0.50	1.0
Diethyl phthalate	ND		0.50	5.0
4-Chlorophenyl phenyl ether	ND		0.50	5.0
Pentachlorophenol	ND		0.50	1.0
N-Nitrosodiphenylamine	0.75	J	0.50	5.0
4,6-Dinitro-2-methylphenol	ND		0.50	5.0
Phenanthrene	ND		0.085	0.20
Anthracene	ND		0.070	1.0
Di-n-butyl phthalate	0.96	J B	0.60	5.0
Fluoranthene	ND		0.20	1.0

Client: Olin Corporation

Job Number: 360-24563-1
Sdg Number: OCRI-14

Client Sample ID: **OC-EBK-009**

Lab Sample ID: 360-24563-23
Client Matrix: Water

Date Sampled: 09/10/2009 1850
Date Received: 09/11/2009 1820

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49511		Instrument ID:	Inst. B
Preparation:	3510C	Prep Batch: 360-48980		Lab File ID:	B10562.D
Dilution:	1.0			Initial Weight/Volume:	1000 mL
Date Analyzed:	09/26/2009 0046			Final Weight/Volume:	1.0 mL
Date Prepared:	09/15/2009 1456			Injection Volume:	1.0 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Pyrene	ND		0.19	5.0
Butyl benzyl phthalate	0.82	J	0.50	5.0
Benzo[a]anthracene	ND		0.17	0.30
Chrysene	ND		0.17	1.0
3,3'-Dichlorobenzidine	ND		0.50	5.0
Di-n-octyl phthalate	ND		0.73	5.0
Benzo[b]fluoranthene	ND		0.14	0.30
Benzo[k]fluoranthene	ND		0.17	0.30
Benzo[a]pyrene	ND		0.10	0.20
Indeno[1,2,3-cd]pyrene	ND		0.079	0.50
Dibenz(a,h)anthracene	ND		0.064	0.50
Benzo[g,h,i]perylene	ND		0.094	0.50
Acetophenone	0.66	J	0.50	5.0
Azobenzene	ND		0.50	5.0
bis (2-chloroisopropyl) ether	ND		0.50	5.0
1-Methylnaphthalene	ND		0.050	5.0
1,1'-Biphenyl	ND		0.50	5.0
1,2,4,5-Tetrachlorobenzene	ND		0.50	5.0
2,3,4,6-Tetrachlorophenol	ND		0.50	5.0
Atrazine	ND		0.50	5.0
Benzaldehyde	ND		0.50	5.0
Caprolactam	ND	*	0.50	5.0
Carbazole	ND		0.50	5.0
Benzophenone	ND		0.50	5.0
Diphenyl oxide	ND		0.50	5.0

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorobiphenyl	66		30 - 130
2-Fluorophenol	23		15 - 110
Nitrobenzene-d5	75		30 - 130
Phenol-d5	12	X	15 - 110
Terphenyl-d14	78		30 - 130

Client: Olin Corporation

Job Number: 360-24563-1
Sdg Number: OCRI-14

Client Sample ID: **OC-EBK-009**

Lab Sample ID: 360-24563-23
Client Matrix: Water

Date Sampled: 09/10/2009 1850
Date Received: 09/11/2009 1820

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49511		Instrument ID:	Inst. B
Preparation:	3510C	Prep Batch: 360-48980		Lab File ID:	B10562.D
Dilution:	1.0			Initial Weight/Volume:	1000 mL
Date Analyzed:	09/26/2009 0046			Final Weight/Volume:	1.0 mL
Date Prepared:	09/15/2009 1456			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** **10**

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
95-16-9	Benzothiazole	8.62	0.38	T J N
6781-42-6	Ethanone, 1,1''-(1,3-phenylene)bis-	9.56	0.28	T J N
96-76-4	Phenol, 2,4-bis(1,1-dimethylethyl)-	9.84	0.52	T J N
134-62-3	Diethyltoluamide	10.17	1.5	T J N
126-73-8	Tributyl phosphate	10.36	0.48	T J N
122-39-4	Diphenylamine	10.41	0.75	J
3910-35-8	1H-Indene, 2,3-dihydro-1,1,3-trimethyl-3	10.78	0.33	T J N
92-87-5	Benzidine	12.29	0.70	J *
1921-70-6	Pentadecane, 2,6,10,14-tetramethyl-	15.13	0.30	T J N
7683-64-9	Squalene	15.81	0.62	T J N

Client: Olin Corporation

Job Number: 360-24563-1
Sdg Number: OCRI-14

Client Sample ID: **OC-EBK-009**

Lab Sample ID: 360-24563-23
Client Matrix: Water

Date Sampled: 09/10/2009 1850
Date Received: 09/11/2009 1820

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49623		Instrument ID:	Inst. B
Preparation:	3510C	Prep Batch: 360-48980		Lab File ID:	B10604.D
Dilution:	5.0			Initial Weight/Volume:	1000 mL
Date Analyzed:	09/28/2009 1939	Run Type:	DL2	Final Weight/Volume:	1.0 mL
Date Prepared:	09/15/2009 1456			Injection Volume:	1.0 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Bis(2-ethylhexyl) phthalate	44		2.5	10

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorobiphenyl	68		30 - 130
2-Fluorophenol	17		15 - 110
Nitrobenzene-d5	66		30 - 130
Phenol-d5	10	X	15 - 110
Terphenyl-d14	81		30 - 130

Client: Olin Corporation

Job Number: 360-24563-1
Sdg Number: OCRI-14

Client Sample ID: **OC-EBK-009**

Lab Sample ID: 360-24563-23
Client Matrix: Water

Date Sampled: 09/10/2009 1850
Date Received: 09/11/2009 1820

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49623		Instrument ID:	Inst. B
Preparation:	3510C	Prep Batch: 360-48980		Lab File ID:	B10604.D
Dilution:	5.0			Initial Weight/Volume:	1000 mL
Date Analyzed:	09/28/2009 1939	Run Type:	DL2	Final Weight/Volume:	1.0 mL
Date Prepared:	09/15/2009 1456			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** **0**

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
	Tentatively Identified Compound		None	

SAMPLE SUMMARY

Client: Olin Corporation

Job Number: 360-24563-2
Sdg Number: OCRI-14A

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
360-24563-3	OC-SB-427-17/19-XXX	Solid	09/10/2009 1505	09/11/2009 1820
360-24563-7	OC-SB-428-23/25-XXX	Solid	09/10/2009 1740	09/11/2009 1820

Note final results and units changed.

Form I's ~~pending~~ filled ~~need to print new ICAL~~ 2/9/10 2/9/10

Client: Olin Corporation

Job Number: 360-24563-2
Sdg Number: OCRI-14A

Client Sample ID: **OC-SB-427-17/19-XXX**

Lab Sample ID: 360-24563-3
Client Matrix: Solid
% Moisture: 8.9

Date Sampled: 09/10/2009 1505
Date Received: 09/11/2009 1820

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49517		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49041		Lab File ID:	B10581.D
Dilution:	1.0			Initial Weight/Volume:	30.49 g
Date Analyzed:	09/26/2009 0929			Final Weight/Volume:	1.0 mL
Date Prepared:	09/16/2009 1513			Injection Volume:	

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		11	36
1,2,4,5-Tetrachlorobenzene		ND		11	36
1,2,4-Trichlorobenzene		ND		11	36
1,2-Dichlorobenzene		ND		11	36
1,3-Dichlorobenzene		ND		11	36
1,4-Dichlorobenzene		ND		11	36
1-Methylnaphthalene		ND		11	36
2,2'-oxybis[1-chloropropane]		ND		11	36
2,3,4,6-Tetrachlorophenol		ND		11	36
2,4,5-Trichlorophenol		ND		11	36
2,4,6-Trichlorophenol		ND		11	36
2,4-Dichlorophenol		ND		11	36
2,4-Dimethylphenol		ND		14	36
2,4-Dinitrophenol		ND		11	36
2,4-Dinitrotoluene		ND		11	36
2,6-Dinitrotoluene		ND		11	36
2-Chloronaphthalene		ND		11	36
2-Chlorophenol		ND		11	36
2-Methylnaphthalene		ND		11	36
2-Methylphenol		ND		22	36
2-Nitroaniline		ND		11	180
2-Nitrophenol		ND		11	36
3 & 4 Methylphenol		ND		11	36
3,3'-Dichlorobenzidine		ND		11	72
3-Nitroaniline		ND		11	180
4,6-Dinitro-2-methylphenol		ND		11	180
4-Bromophenyl phenyl ether		ND		11	36
4-Chloro-3-methylphenol		ND		11	72
4-Chloroaniline		ND		11	72
4-Chlorophenyl phenyl ether		ND		11	36
4-Nitroaniline		ND		11	180
4-Nitrophenol		ND		11	180
Acenaphthene		ND		11	36
Acenaphthylene		ND		11	36
Acetophenone		ND		11	36
Aniline		ND J		11	36
Anthracene		ND		11	36
Atrazine		ND		11	36
Azobenzene		ND		11	36
Benzaldehyde		ND		11	36
Benzo[a]anthracene		ND		11	36
Benzo[a]pyrene		ND		11	36
Benzo[b]fluoranthene		ND		11	36
Benzo[g,h,i]perylene		ND		11	36
Benzo[k]fluoranthene		ND		11	36
Benzoic acid		ND		16	180

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Client: Olin Corporation

Job Number: 360-24563-2
Sdg Number: OCRI-14A

Client Sample ID: OC-SB-427-17/19-XXX

Lab Sample ID: 360-24563-3
Client Matrix: Solid % Moisture: 8.9

Date Sampled: 09/10/2009 1505
Date Received: 09/11/2009 1820

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49517		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49041		Lab File ID:	B10581.D
Dilution:	1.0			Initial Weight/Volume:	30.49 g
Date Analyzed:	09/26/2009 0929			Final Weight/Volume:	1.0 mL
Date Prepared:	09/16/2009 1513			Injection Volume:	

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		11	36
Benzyl alcohol		ND		31	72
Bis(2-chloroethoxy)methane		ND		11	36
Bis(2-chloroethyl)ether		ND		11	36
Butyl benzyl phthalate		ND		11	36
Caprolactam		ND		11	36
Carbazole		ND		11	36
Chrysene		ND		11	36
Dibenz(a,h)anthracene		ND		11	36
Dibenzofuran		ND		11	36
Diethyl phthalate		ND		11	36
Dimethyl phthalate		ND		11	36
Di-n-butyl phthalate		ND		32	36
Di-n-octyl phthalate		ND		18	36
Diphenyl oxide		ND		11	36
Fluoranthene		ND		11	36
Fluorene		ND		11	36
Hexachlorobenzene		ND		11	36
Hexachlorobutadiene		ND		11	36
Hexachlorocyclopentadiene		ND		11	72
Hexachloroethane		ND		11	36
Indeno[1,2,3-cd]pyrene		ND		11	36
Isophorone		ND		11	36
Naphthalene		ND		11	86
Nitrobenzene		ND		11	36
N-Nitrosodimethylamine		ND		13	36
N-Nitrosodi-n-propylamine		ND		11	36
N-Nitrosodiphenylamine		150		11	36
Pentachlorophenol		ND		11	36
Phenanthrene		ND		11	43
Phenol		ND		11	36
Pyrene		ND		11	36

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	65		30 - 130
2-Fluorophenol	71		30 - 130
2-Fluorobiphenyl	63		30 - 130
Nitrobenzene-d5	68		30 - 130
Phenol-d5	68		30 - 130
Terphenyl-d14	56		30 - 130

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Client: Olin Corporation

Job Number: 360-24563-2
Sdg Number: OCRI-14A

Client Sample ID: **OC-SB-427-17/19-XXX**

Lab Sample ID: 360-24563-3
Client Matrix: Solid % Moisture: 8.9

Date Sampled: 09/10/2009 1505
Date Received: 09/11/2009 1820

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49517		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49041		Lab File ID:	B10581.D
Dilution:	1.0			Initial Weight/Volume:	30.49 g
Date Analyzed:	09/26/2009 0929			Final Weight/Volume:	1.0 mL
Date Prepared:	09/16/2009 1513			Injection Volume:	

Tentatively Identified Compounds **Number TIC's Found:** 2

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
7683-64-9	Squalene	15.82	140	T J N
26603-23-6	p,p''-Dioctyldiphenylamine	16.63	220	T J N

Client: Olin Corporation

Job Number: 360-24563-2
Sdg Number: OCRI-14A

Client Sample ID: OC-SB-427-17/19-XXX

Lab Sample ID: 360-24563-3
Client Matrix: Solid

% Moisture: 8.9

Date Sampled: 09/10/2009 1505
Date Received: 09/11/2009 1820

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49884		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-49041		Lab File ID:	J03338.D
Dilution:	1.0			Initial Weight/Volume:	30.49 g
Date Analyzed:	10/06/2009 0046	Run Type: RA		Final Weight/Volume:	1.0 mL
Date Prepared:	09/16/2009 1513			Injection Volume:	

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Diphenylamine		37		11	36

Client: Olin Corporation

Job Number: 360-24563-2
Sdg Number: OCRI-14A

Client Sample ID: **OC-SB-427-17/19-XXX**

Lab Sample ID: 360-24563-3
Client Matrix: Solid % Moisture: 8.9

Date Sampled: 09/10/2009 1505
Date Received: 09/11/2009 1820

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49902		Instrument ID:	NOEQUIP
Preparation:	3546	Prep Batch: 360-49041		Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	30.49 g
Date Analyzed:	10/06/2009 0046			Final Weight/Volume:	1.0 mL
Date Prepared:	09/16/2009 1513			Injection Volume:	

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodiphenylamine		110		11	36

Client: Olin Corporation

Job Number: 360-24563-2
Sdg Number: OCRI-14A

Client Sample ID: OC-SB-427-17/19-XXX

Lab Sample ID: 360-24563-3
Client Matrix: Solid

% Moisture: 8.9

Date Sampled: 09/10/2009 1505
Date Received: 09/11/2009 1820

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49831		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-49041		Lab File ID:	J03284.D
Dilution:	50			Initial Weight/Volume:	30.49 g
Date Analyzed:	10/02/2009 2329	Run Type: DL		Final Weight/Volume:	1.0 mL
Date Prepared:	09/16/2009 1513			Injection Volume:	

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Bis(2-ethylhexyl) phthalate		13000 J B		540	1800

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	0	D X	30 - 130
2-Fluorophenol	0	D X	30 - 130
2-Fluorobiphenyl	0	D X	30 - 130
Nitrobenzene-d5	0	D X	30 - 130
Phenol-d5	0	D X	30 - 130
Terphenyl-d14	0	D X	30 - 130

2/18/10

Client: Olin Corporation

Job Number: 360-24563-2
Sdg Number: OCRI-14A

Client Sample ID: OC-SB-428-23/25-XXX

Lab Sample ID: 360-24563-7
Client Matrix: Solid

% Moisture: 11.9

Date Sampled: 09/10/2009 1740
Date Received: 09/11/2009 1820

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49517		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49041		Lab File ID:	B10587.D
Dilution:	1.0			Initial Weight/Volume:	30.36 g
Date Analyzed:	09/26/2009 1215			Final Weight/Volume:	1.0 mL
Date Prepared:	09/16/2009 1513			Injection Volume:	

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		11	37
1,2,4,5-Tetrachlorobenzene		ND		11	37
1,2,4-Trichlorobenzene		ND		11	37
1,2-Dichlorobenzene		ND		11	37
1,3-Dichlorobenzene		ND		11	37
1,4-Dichlorobenzene		ND		11	37
1-Methylnaphthalene		ND		11	37
2,2'-oxybis[1-chloropropane]		ND		11	37
2,3,4,6-Tetrachlorophenol		ND		11	37
2,4,5-Trichlorophenol		ND		11	37
2,4,6-Trichlorophenol		ND		11	37
2,4-Dichlorophenol		ND		11	37
2,4-Dimethylphenol		ND		15	37
2,4-Dinitrophenol		ND		11	37
2,4-Dinitrotoluene		ND		11	37
2,6-Dinitrotoluene		ND		11	37
2-Chloronaphthalene		ND		11	37
2-Chlorophenol		ND		11	37
2-Methylnaphthalene		ND		11	37
2-Methylphenol		ND		22	37
2-Nitroaniline		ND		11	190
2-Nitrophenol		ND		11	37
3 & 4 Methylphenol		ND		11	37
3,3'-Dichlorobenzidine		ND		11	75
3-Nitroaniline		ND		11	190
4,6-Dinitro-2-methylphenol		ND		11	190
4-Bromophenyl phenyl ether		ND		11	37
4-Chloro-3-methylphenol		ND		11	75
4-Chloroaniline		ND		11	75
4-Chlorophenyl phenyl ether		ND		11	37
4-Nitroaniline		ND		11	190
4-Nitrophenol		ND		11	190
Acenaphthene		ND		11	37
Acenaphthylene		ND		11	37
Acetophenone		ND		11	37
Aniline		ND J		11	37
Anthracene		ND		11	37
Atrazine		ND		11	37
Azobenzene		ND		11	37
Benzaldehyde		ND		11	37
Benzo[a]anthracene		ND		11	37
Benzo[a]pyrene		ND		11	37
Benzo[b]fluoranthene		ND		11	37
Benzo[g,h,i]perylene		ND		11	37
Benzo[k]fluoranthene		ND		11	37
Benzoic acid		ND		17	190

2/8/10

Client: Olin Corporation

Job Number: 360-24563-2
Sdg Number: OCRI-14A

Client Sample ID: **OC-SB-428-23/25-XXX**

Lab Sample ID: 360-24563-7
Client Matrix: Solid

% Moisture: 11.9

Date Sampled: 09/10/2009 1740
Date Received: 09/11/2009 1820

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49517		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49041		Lab File ID:	B10587.D
Dilution:	1.0			Initial Weight/Volume:	30.36 g
Date Analyzed:	09/26/2009 1215			Final Weight/Volume:	1.0 mL
Date Prepared:	09/16/2009 1513			Injection Volume:	

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		11	37
Benzyl alcohol		ND		32	75
Bis(2-chloroethoxy)methane		ND		11	37
Bis(2-chloroethyl)ether		ND		11	37
Bis(2-ethylhexyl) phthalate		420 4200	B*	11	37
Butyl benzyl phthalate		ND		11	37
Caprolactam		ND		11	37
Carbazole		ND		11	37
Chrysene		ND		11	37
Dibenz(a,h)anthracene		ND		11	37
Dibenzofuran		ND		11	37
Diethyl phthalate		ND		11	37
Dimethyl phthalate		ND		11	37
Di-n-butyl phthalate		ND		33	37
Di-n-octyl phthalate		ND		19	37
Diphenyl oxide		44		11	37
Fluoranthene		ND		11	37
Fluorene		ND		11	37
Hexachlorobenzene		ND		11	37
Hexachlorobutadiene		ND		11	37
Hexachlorocyclopentadiene		ND		11	75
Hexachloroethane		ND		11	37
Indeno[1,2,3-cd]pyrene		ND		11	37
Isophorone		ND		11	37
Naphthalene		ND		11	90
Nitrobenzene		ND		11	37
N-Nitrosodimethylamine		ND		13	37
N-Nitrosodi-n-propylamine		ND		11	37
N-Nitrosodiphenylamine		ND		11	37
Pentachlorophenol		ND		11	37
Phenanthrene		ND		11	45
Phenol		ND		11	37
Pyrene		ND		11	37

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	61		30 - 130
2-Fluorobiphenyl	66		30 - 130
2-Fluorophenol	75		30 - 130
Nitrobenzene-d5	70		30 - 130
Phenol-d5	61		30 - 130
Terphenyl-d14	84		30 - 130

2/12/10

Client: Olin Corporation

Job Number: 360-24563-2
Sdg Number: OCRI-14A

Client Sample ID: **OC-SB-428-23/25-XXX**

Lab Sample ID: 360-24563-7
Client Matrix: Solid % Moisture: 11.9

Date Sampled: 09/10/2009 1740
Date Received: 09/11/2009 1820

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49517		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49041		Lab File ID:	B10587.D
Dilution:	1.0			Initial Weight/Volume:	30.36 g
Date Analyzed:	09/26/2009 1215			Final Weight/Volume:	1.0 mL
Date Prepared:	09/16/2009 1513			Injection Volume:	

Tentatively Identified Compounds **Number TIC's Found:** 4

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
98-83-9	.alpha.-Methylstyrene	7.00	14	T J N
128-37-0	Butylated Hydroxytoluene	9.86	18	T J N
3910-35-8	1H-Indene, 2,3-dihydro-1,1,3-trimethyl-3	10.79	19	T J N
7683-64-9	Squalene	15.82	26	T J N

2/8/10

FORM II
GC/MS SEMI VOA SURROGATE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24563-1

SDG No.: OCRI-14

Matrix: Solid Level: Low

GC Column (1): Rtx-5ms ID: 0.25 (um)

Client Sample ID	Lab Sample ID	2FP #	PHL #	NBZ #	FBP #	TBP #	TPH #
OC-SB-427-0.0/1.0-XXX	360-24563-1	76	69	66	63	68	67
OC-SB-427-0.0/1.0-XXX	360-24563-1	0 X D	0 X D	0 X D	0 X D	0 X D	0 X D
OC-SB-427-0.0/1.0-XXX	360-24563-1	58	66	66	65	80	109
OC-SB-427-12/14-XXX	360-24563-2	0 X D	0 X D	0 X D	0 X D	0 X D	0 X D
OC-SB-427-12/14-XXX	360-24563-2	62	89	96	89	0 X	0 X
OC-SB-427-12/14-XXX	360-24563-2	0 X D	0 X D	0 X D	0 X D	0 X D	0 X D
OC-SB-427-12/14-XXX DL2	360-24563-2 DL2	0 X D	0 X D	0 X D	0 X D	0 X D	0 X D
OC-SB-427-8.0/10-DUP	360-24563-4	61	61	61	52	47	58
OC-SB-427-8.0/10-DUP	360-24563-4	42	49	62	61	41	98
OC-SB-427-8.0/10-DUP DL	360-24563-4 DL	0 X D	0 X D	0 X D	0 X D	0 X D	0 X D
OC-SB-427-8.0/10-XXX	360-24563-5	74	71	72	62	57	73
OC-SB-427-8.0/10-XXX	360-24563-5	42	51	63	68	40	62
OC-SB-427-8.0/10-XXX DL	360-24563-5 DL	0 X D	0 X D	0 X D	0 X D	0 X D	0 X D
OC-SB-428-0.0/1.0-XXX	360-24563-6	85	32	57	64	53	90
OC-SB-428-0.0/1.0-XXX	360-24563-6	63	51	64	79	94	108
OC-SB-428-8.0/10-XXX	360-24563-9	71	42	40	56	52	75
OC-SB-428-8.0/10-XXX	360-24563-9	59	67	68	140 X	0 X	0 X
OC-SB-456-0.0/1.0-XXX	360-24563-11	74	56	65	63	59	89
OC-SB-456-0.0/1.0-XXX	360-24563-11	42	51	41	62	51	104
OC-SB-456-0.0/1.0-XXX DL	360-24563-11 DL	86	78	74	80	103	83
OC-SB-456-16/18-XXX	360-24563-12	61	42	56	54	38	84
OC-SB-456-16/18-XXX	360-24563-12	39	42	55	60	30	113
OC-SB-456-7.0/9.0-DUP	360-24563-13	36	41	68	58	29 X	87
OC-SB-456-7.0/9.0-DUP	360-24563-13	65	68	63	61	66	68

	QC LIMITS
2FP = 2-Fluorophenol	30-130
PHL = Phenol-d5	30-130
NBZ = Nitrobenzene-d5	30-130
FBP = 2-Fluorobiphenyl	30-130
TBP = 2,4,6-Tribromophenol	30-130
TPH = Terphenyl-d14	30-130

Column to be used to flag recovery values

FORM II 8270C LL

FORM IV
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Westfield Job No.: 360-24563-1

SDG No.: OCRI-14

Lab File ID: B10564.D Lab Sample ID: MB 360-49041/1-A

Matrix: Solid Date Extracted: 09/16/2009 15:13

Instrument ID: Inst. B Date Analyzed: 09/26/2009 01:41

Level: (Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 360-49041/2-A	B10565.D	09/26/2009 02:09
	LCSD 360-49041/3-A	B10566.D	09/26/2009 02:37
OC-SB-427-0.0/1.0-XXX	360-24563-1	B10579.D	09/26/2009 08:34
OC-SB-427-8.0/10-DUP	360-24563-4	B10582.D	09/26/2009 09:57
OC-SB-427-8.0/10-XXX	360-24563-5	B10583.D	09/26/2009 10:24
OC-SB-427-8.0/10-XXX MS	360-24563-5 MS	B10584.D	09/26/2009 10:52
OC-SB-427-8.0/10-XXX MSD	360-24563-5 MSD	B10585.D	09/26/2009 11:19
OC-SB-428-0.0/1.0-XXX	360-24563-6	B10586.D	09/26/2009 11:47
OC-SB-428-8.0/10-XXX	360-24563-9	B10588.D	09/26/2009 12:42
OC-SB-456-0.0/1.0-XXX	360-24563-11	B10589.D	09/26/2009 13:10
OC-SB-456-16/18-XXX	360-24563-12	B10590.D	09/26/2009 13:38
OC-SB-427-0.0/1.0-XXX	360-24563-1	B10606.D	09/28/2009 20:35
OC-SB-456-0.0/1.0-XXX DL	360-24563-11 DL	B10610.D	09/28/2009 22:27
OC-SB-427-12/14-XXX	360-24563-2	B10612.D	09/28/2009 23:23
OC-SB-427-8.0/10-DUP DL	360-24563-4 DL	J03285.D	10/03/2009 00:01
OC-SB-427-8.0/10-XXX DL	360-24563-5 DL	J03286.D	10/03/2009 00:33
OC-SB-427-12/14-XXX DL	360-24563-2 DL	J03291.D	10/03/2009 03:15
OC-SB-427-12/14-XXX DL3	360-24563-2 DL3		10/03/2009 03:15
OC-SB-427-8.0/10-DUP DL2	360-24563-4 DL2	J03306.D	10/04/2009 17:08
OC-SB-427-8.0/10-DUP DL3	360-24563-4 DL3		10/04/2009 17:08
OC-SB-427-8.0/10-XXX DL2	360-24563-5 DL2	J03307.D	10/04/2009 17:41
OC-SB-427-8.0/10-XXX DL3	360-24563-5 DL3		10/04/2009 17:41
OC-SB-428-0.0/1.0-XXX DL	360-24563-6 DL	J03308.D	10/04/2009 18:14
OC-SB-428-0.0/1.0-XXX DL3	360-24563-6 DL3		10/04/2009 18:14
OC-SB-456-0.0/1.0-XXX DL2	360-24563-11 DL2	J03309.D	10/04/2009 18:47
OC-SB-456-0.0/1.0-XXX DL3	360-24563-11 DL3		10/04/2009 18:47
OC-SB-427-12/14-XXX DL2	360-24563-2 DL2	J03336.D	10/05/2009 23:41
OC-SB-427-0.0/1.0-XXX DL	360-24563-1 DL	J03337.D	10/06/2009 00:13
OC-SB-427-0.0/1.0-XXX DL3	360-24563-1 DL3		10/06/2009 00:13
OC-SB-427-12/14-XXX	360-24563-2	J03358.D	10/06/2009 15:09

LCS
aniline 27/30
bis (2-ethylhexyl) phthalate 159/158

MS
Benzoic acid 62.2
bis (2-ethylhexyl) phthalate 211
di-n-butyl phthalate 72.7

MS TIC
unk 7.89
vanillin
octadecane
eicosane
1-naphthalene propanol, alpha, -ethenyde
benzoic acid, 2propenyl ester
tricosane
squalene

MS/MSD
see attached

FORM IV 8270C LL

ICAL/CCAL OK # 4

10/08/2009

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24563-1

SDG No.: OCRI-14

Matrix: Solid Level: Low Lab File ID: B10565.D

Lab ID: LCS 360-49041/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
1,2,4-Trichlorobenzene	333	228	68	40-140	
1,2-Dichlorobenzene	333	195	58	40-140	
1,3-Dichlorobenzene	333	194	58	40-140	
1,4-Dichlorobenzene	333	194	58	40-140	
2,4-Dimethylphenol	333	248	74	30-130	
2,4-Dichlorophenol	333	264	79	30-130	
2,4,6-Trichlorophenol	333	300	90	30-130	
2,4,5-Trichlorophenol	333	262	79	30-130	
2-Chlorophenol	333	218	65	30-130	
2-Methylnaphthalene	333	208	63	40-140	
2-Methylphenol	333	235	71	30-130	
2-Chloronaphthalene	333	211	63	40-140	
2-Nitroaniline	333	307	92	40-140	
2,6-Dinitrotoluene	333	270	81	40-140	
3 & 4 Methylphenol	333	249	75	30-130	
2-Nitrophenol	333	257	77	30-130	
3-Nitroaniline	333	269	81	40-140	
2,4-Dinitrophenol	333	167	50	30-130	
4-Chloro-3-methylphenol	333	278	84	30-130	
2,4-Dinitrotoluene	333	252	76	40-140	
4-Chloroaniline	333	173	52	40-140	
4-Nitroaniline	333	273	82	40-140	
4-Nitrophenol	333	293	88	30-130	
4-Bromophenyl phenyl ether	333	288	87	40-140	
Acenaphthene	333	299	90	40-140	
Acenaphthylene	333	264	79	40-140	
4-Chlorophenyl phenyl ether	333	268	80	40-140	
Aniline	333	89.9	27	40-140	*
4,6-Dinitro-2-methylphenol	333	234	70	30-130	
Anthracene	333	340	102	40-140	
Benzo[a]anthracene	333	360	108	40-140	
Benzoic acid	333	143 J	43	30-130	
3,3'-Dichlorobenzidine	333	288	86	40-140	
Benzyl alcohol	333	244	73	30-130	
Benzo[b]fluoranthene	333	317	95	40-140	
Bis(2-chloroethoxy)methane	333	212	64	40-140	
Benzo[k]fluoranthene	333	343	103	40-140	
Bis(2-chloroethyl)ether	333	202	61	40-140	
Benzo[a]pyrene	333	325	98	40-140	
Butyl benzyl phthalate	333	321	96	40-140	
Benzo[g,h,i]perylene	333	348	104	40-140	

130

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

bis (2-ethylhexyl) phthalate 159/158

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24563-1

SDG No.: OCRI-14

Matrix: Solid Level: Low Lab File ID: B10565.D

Lab ID: LCS 360-49041/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
Acetophenone	333	230	69	40-140	
Chrysene	333	339	102	40-140	
Azobenzene	333	297	89	40-140	
Bis(2-ethylhexyl) phthalate	333	530	159	40-140	*
Dibenz(a,h)anthracene	333	345	104	40-140	
Dibenzofuran	333	262	79	40-140	
Diethyl phthalate	333	285	86	40-140	
Dimethyl phthalate	333	280	84	40-140	
Di-n-butyl phthalate	333	355	107	40-140	
Di-n-octyl phthalate	333	271	81	40-140	
2,2'-oxybis[1-chloropropane]	333	210	63	40-140	
Fluoranthene	333	320	96	40-140	
Fluorene	333	327	98	40-140	
Hexachlorobenzene	333	290	87	40-140	
Hexachlorobutadiene	333	202	61	40-140	
Hexachlorocyclopentadiene	333	201	60	40-140	
1-Methylnaphthalene	333	225	67	40-140	
Hexachloroethane	333	205	61	40-140	
1,1'-Biphenyl	333	286	86	40-140	
Indeno[1,2,3-cd]pyrene	333	351	105	40-140	
1,2,4,5-Tetrachlorobenzene	333	221	66	40-140	
Isophorone	333	198	59	40-140	
2,3,4,6-Tetrachlorophenol	333	241	72	40-140	
Naphthalene	333	204	61	40-140	
Atrazine	333	379	114	40-140	
Benzaldehyde	333	257	77	40-140	
Nitrobenzene	333	211	63	40-140	
Caprolactam	333	299	90	40-140	
Carbazole	333	326	98	40-140	
N-Nitrosodimethylamine	333	232	70	40-140	
Benzophenone	333	329	99	40-140	
N-Nitrosodi-n-propylamine	333	233	70	40-140	
Diphenyl oxide	333	240	72	40-140	
N-Nitrosodiphenylamine	333	211	63	40-140	
Pentachlorophenol	333	271	81	30-130	
Phenanthrene	333	316	95	40-140	
Phenol	333	232	69	30-130	
Pyrene	333	307	92	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24563-1

SDG No.: OCRI-14

Matrix: Solid Level: Low Lab File ID: B10566.D

Lab ID: LCSD 360-49041/3-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCSD CONCENTRATION (ug/Kg)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,2,4-Trichlorobenzene	333	249	75	9	30	40-140	
1,2-Dichlorobenzene	333	210	63	8	30	40-140	
1,3-Dichlorobenzene	333	208	62	7	30	40-140	
1,4-Dichlorobenzene	333	207	62	7	30	40-140	
2,4-Dimethylphenol	333	272	82	9	30	30-130	
2,4-Dichlorophenol	333	294	88	11	30	30-130	
2,4,6-Trichlorophenol	333	331	99	10	30	30-130	
2,4,5-Trichlorophenol	333	301	90	14	30	30-130	
2-Chlorophenol	333	239	72	9	30	30-130	
2-Methylnaphthalene	333	229	69	9	30	40-140	
2-Methylphenol	333	260	78	10	30	30-130	
2-Chloronaphthalene	333	233	70	10	30	40-140	
2-Nitroaniline	333	360	108	16	30	40-140	
2,6-Dinitrotoluene	333	305	91	12	30	40-140	
3 & 4 Methylphenol	333	275	82	10	30	30-130	
2-Nitrophenol	333	281	84	9	30	30-130	
3-Nitroaniline	333	298	89	10	30	40-140	
2,4-Dinitrophenol	333	197	59	17	30	30-130	
4-Chloro-3-methylphenol	333	311	93	11	30	30-130	
2,4-Dinitrotoluene	333	280	84	10	30	40-140	
4-Chloroaniline	333	205	62	17	30	40-140	
4-Nitroaniline	333	307	92	12	30	40-140	
4-Nitrophenol	333	340	102	15	30	30-130	
4-Bromophenyl phenyl ether	333	322	97	11	30	40-140	
Acenaphthene	333	336	101	12	30	40-140	
Acenaphthylene	333	293	88	11	30	40-140	
4-Chlorophenyl phenyl ether	333	304	91	13	30	40-140	
Aniline	333	99.5	30	10	30	40-140	*
4,6-Dinitro-2-methylphenol	333	264	79	12	30	30-130	
Anthracene	333	386	116	13	30	40-140	
Benzo[a]anthracene	333	390	117	8	30	40-140	
Benzoic acid	333	158 J	47	10	30	30-130	
3,3'-Dichlorobenzidine	333	323	97	12	30	40-140	
Benzyl alcohol	333	264	79	8	30	30-130	
Benzo[b]fluoranthene	333	345	104	9	30	40-140	
Bis(2-chloroethoxy)methane	333	234	70	10	30	40-140	
Benzo[k]fluoranthene	333	382	115	11	30	40-140	
Bis(2-chloroethyl)ether	333	219	66	8	30	40-140	
Benzo[a]pyrene	333	357	107	9	30	40-140	
Butyl benzyl phthalate	333	344	103	7	30	40-140	
Benzo[g,h,i]perylene	333	390	117	12	30	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24563-1

SDG No.: OCRI-14

Matrix: Solid Level: Low Lab File ID: B10566.D

Lab ID: LCSD 360-49041/3-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCSD CONCENTRATION (ug/Kg)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Acetophenone	333	251	75	9	30	40-140	
Chrysene	333	368	110	8	30	40-140	
Azobenzene	333	327	98	10	30	40-140	
Bis(2-ethylhexyl) phthalate	333	528	158	0	30	40-140	*
Dibenz(a,h)anthracene	333	390	117	12	30	40-140	
Dibenzofuran	333	294	88	11	30	40-140	
Diethyl phthalate	333	323	97	12	30	40-140	
Dimethyl phthalate	333	317	95	13	30	40-140	
Di-n-butyl phthalate	333	390	117	9	30	40-140	
Di-n-octyl phthalate	333	285	85	5	30	40-140	
2,2'-oxybis[1-chloropropane]	333	229	69	8	30	40-140	
Fluoranthene	333	361	108	12	30	40-140	
Fluorene	333	367	110	12	30	40-140	
Hexachlorobenzene	333	324	97	11	30	40-140	
Hexachlorobutadiene	333	219	66	8	30	40-140	
Hexachlorocyclopentadiene	333	225	67	11	30	40-140	
1-Methylnaphthalene	333	228	68	2	30	40-140	
Hexachloroethane	333	219	66	7	30	40-140	
1,1'-Biphenyl	333	297	89	4	30	40-140	
Indeno[1,2,3-cd]pyrene	333	390	117	11	30	40-140	
1,2,4,5-Tetrachlorobenzene	333	239	72	8	30	40-140	
Isophorone	333	219	66	10	30	40-140	
2,3,4,6-Tetrachlorophenol	333	255	77	5	30	40-140	
Naphthalene	333	222	67	9	30	40-140	
Atrazine	333	392	118	3	30	40-140	
Benzaldehyde	333	257	77	0	30	40-140	
Nitrobenzene	333	229	69	8	30	40-140	
Caprolactam	333	314	94	5	30	40-140	
Carbazole	333	368	110	12	30	40-140	
N-Nitrosodimethylamine	333	249	75	7	30	40-140	
Benzophenone	333	344	103	4	30	40-140	
N-Nitrosodi-n-propylamine	333	256	77	9	30	40-140	
Diphenyl oxide	333	244	73	2	30	40-140	
N-Nitrosodiphenylamine	333	238	71	12	30	40-140	
Pentachlorophenol	333	312	94	14	30	30-130	
Phenanthrene	333	353	106	11	30	40-140	
Phenol	333	251	75	8	30	30-130	
Pyrene	333	326	98	6	30	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Westfield | Job No.: 360-24563-1

SDG No.: OCRI-14

Client Sample ID: | Lab Sample ID: MB 360-49041/1-A

Matrix: Solid | Lab File ID: B10564.D

Analysis Method: 8270C LL | Date Collected:

Extract. Method: 3546 | Date Extracted: 09/16/2009 15:13

Sample wt/vol: 30.00(g) | Date Analyzed: 09/26/2009 01:41

Con. Extract Vol.: 1.0(mL) | Dilution Factor: 1

Injection Volume: 1.0(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 49511 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
120-82-1	1,2,4-Trichlorobenzene	ND		33	10
95-50-1	1,2-Dichlorobenzene	ND		33	10
541-73-1	1,3-Dichlorobenzene	ND		33	10
106-46-7	1,4-Dichlorobenzene	ND		33	10
105-67-9	2,4-Dimethylphenol	ND		33	13
120-83-2	2,4-Dichlorophenol	ND		33	10
88-06-2	2,4,6-Trichlorophenol	ND		33	10
95-95-4	2,4,5-Trichlorophenol	ND		33	10
95-57-8	2-Chlorophenol	ND		33	10
91-57-6	2-Methylnaphthalene	ND		33	10
95-48-7	2-Methylphenol	ND		33	20
91-58-7	2-Chloronaphthalene	ND		33	10
88-74-4	2-Nitroaniline	ND		170	10
606-20-2	2,6-Dinitrotoluene	ND		33	10
15831-10-4	3 & 4 Methylphenol	ND		33	10
88-75-5	2-Nitrophenol	ND		33	10
99-09-2	3-Nitroaniline	ND		170	10
51-28-5	2,4-Dinitrophenol	ND		33	10
59-50-7	4-Chloro-3-methylphenol	ND		67	10
121-14-2	2,4-Dinitrotoluene	ND		33	10
106-47-8	4-Chloroaniline	ND		67	10
100-01-6	4-Nitroaniline	ND		170	10
100-02-7	4-Nitrophenol	ND		170	10
101-55-3	4-Bromophenyl phenyl ether	ND		33	10
83-32-9	Acenaphthene	ND		33	10
208-96-8	Acenaphthylene	ND		33	10
7005-72-3	4-Chlorophenyl phenyl ether	ND		33	10
62-53-3	Aniline	ND		33	10
534-52-1	4,6-Dinitro-2-methylphenol	ND		170	10
120-12-7	Anthracene	ND		33	10
56-55-3	Benzo[a]anthracene	ND		33	10
65-85-0	Benzoic acid	62.2	J	170	15
91-94-1	3,3'-Dichlorobenzidine	ND		67	10
100-51-6	Benzyl alcohol	ND		67	28

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Westfield | Job No.: 360-24563-1

SDG No.: OCRI-14

Client Sample ID: | Lab Sample ID: MB 360-49041/1-A

Matrix: Solid | Lab File ID: B10564.D

Analysis Method: 8270C LL | Date Collected:

Extract. Method: 3546 | Date Extracted: 09/16/2009 15:13

Sample wt/vol: 30.00(g) | Date Analyzed: 09/26/2009 01:41

Con. Extract Vol.: 1.0(mL) | Dilution Factor: 1

Injection Volume: 1.0(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup: (Y/N) N

Analysis Batch No.: 49511 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
205-99-2	Benzo[b]fluoranthene	ND		33	10
111-91-1	Bis(2-chloroethoxy)methane	ND		33	10
207-08-9	Benzo[k]fluoranthene	ND		33	10
111-44-4	Bis(2-chloroethyl)ether	ND		33	10
50-32-8	Benzo[a]pyrene	ND		33	10
85-68-7	Butyl benzyl phthalate	ND		33	10
191-24-2	Benzo[g,h,i]perylene	ND		33	10
98-86-2	Acetophenone	ND		33	10
218-01-9	Chrysene	ND		33	10
103-33-3	Azobenzene	ND		33	10
117-81-7	Bis(2-ethylhexyl) phthalate	211		33	10
53-70-3	Dibenz(a,h)anthracene	ND		33	10
132-64-9	Dibenzofuran	ND		33	10
84-66-2	Diethyl phthalate	ND		33	10
131-11-3	Dimethyl phthalate	ND		33	10
84-74-2	Di-n-butyl phthalate	72.7		33	29
117-84-0	Di-n-octyl phthalate	ND		33	17
108-60-1	2,2'-oxybis[1-chloropropane]	ND		33	10
122-39-4	Diphenylamine	ND		33	10
206-44-0	Fluoranthene	ND		33	10
86-73-7	Fluorene	ND		33	10
118-74-1	Hexachlorobenzene	ND		33	10
87-68-3	Hexachlorobutadiene	ND		33	10
77-47-4	Hexachlorocyclopentadiene	ND		67	10
90-12-0	1-Methylnaphthalene	ND		33	10
67-72-1	Hexachloroethane	ND		33	10
92-52-4	1,1'-Biphenyl	ND		33	10
193-39-5	Indeno[1,2,3-cd]pyrene	ND		33	10
95-94-3	1,2,4,5-Tetrachlorobenzene	ND		33	10
78-59-1	Isophorone	ND		33	10
58-90-2	2,3,4,6-Tetrachlorophenol	ND		33	10
91-20-3	Naphthalene	ND		80	10
1912-24-9	Atrazine	ND		33	10
100-52-7	Benzaldehyde	ND		33	10

FORM III
GC/MS SEMI VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24563-1

SDG No.: OCRI-14

Matrix: Solid Level: Low Lab File ID: B10584.D

Lab ID: 360-24563-5 MS Client ID: OC-SB-427-8.0/10-XXX MS

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	QC LIMITS REC	#
1,1'-Biphenyl	342	ND	232	68	40-140	
1,2,4,5-Tetrachlorobenzene	342	ND	228	67	40-140	
1,2,4-Trichlorobenzene	342	ND	202	59	40-140	
1,2-Dichlorobenzene	342	ND	182	53	40-140	
1,3-Dichlorobenzene	342	ND	178	52	40-140	
1,4-Dichlorobenzene	342	ND	178	52	40-140	
1-Methylnaphthalene	342	ND	251	73	40-140	
2,2'-oxybis[1-chloropropane]	342	ND	203	59	40-140	
2,3,4,6-Tetrachlorophenol	342	ND	191	56	40-140	
2,4,5-Trichlorophenol	342	ND	193	56	30-130	
2,4,6-Trichlorophenol	342	ND	216	63	30-130	
2,4-Dichlorophenol	342	ND	252	74	30-130	
2,4-Dimethylphenol	342	ND	151	44	30-130	
2,4-Dinitrophenol	342	ND	58.8	17	30-130	F
2,4-Dinitrotoluene	342	ND	206	60	40-140	
2,6-Dinitrotoluene	342	ND	224	65	40-140	
2-Chloronaphthalene	342	ND	177	52	40-140	
2-Chlorophenol	342	ND	191	56	30-130	
2-Methylnaphthalene	342	ND	248	73	40-140	
2-Methylphenol	342	ND	152	44	30-130	
2-Nitroaniline	342	ND	55.5 J	16	40-140	F
2-Nitrophenol	342	ND	212	62	30-130	
3 & 4 Methylphenol	342	ND	212	62	30-130	
3,3'-Dichlorobenzidine	342	ND	51.0 J	15	40-140	F
3-Nitroaniline	342	ND	128 J	37	40-140	F
4,6-Dinitro-2-methylphenol	342	ND	63.1 J	18	30-130	F
4-Bromophenyl phenyl ether	342	ND	248	72	40-140	
4-Chloro-3-methylphenol	342	ND	275	80	30-130	
4-Chloroaniline	342	ND	11.7 J	3	40-140	F
4-Chlorophenyl phenyl ether	342	ND	246	72	40-140	
4-Nitroaniline	342	ND	252	74	40-140	
4-Nitrophenol	342	ND	19.9 J	6	30-130	F
Acenaphthene	342	ND	270	79	40-140	
Acenaphthylene	342	ND	232	68	40-140	
Acetophenone	342	ND	221	65	40-140	
Aniline	342	ND	145	17	40-140	F
Anthracene	342	ND	292	85	40-140	
Atrazine	342	ND	261	76	40-140	
Azobenzene	342	ND	236	69	40-140	
Benzaldehyde	342	ND	221	65	40-140	
Benzo[a]anthracene	342	ND	322	94	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24563-1

SDG No.: OCRI-14

Matrix: Solid Level: Low Lab File ID: B10584.D

Lab ID: 360-24563-5 MS Client ID: OC-SB-427-8.0/10-XXX MS

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	QC LIMITS REC	#
Benzo[a]pyrene	342	ND	121	35	40-140	F
Benzo[b]fluoranthene	342	ND	418	122	40-140	
Benzo[g,h,i]perylene	342	ND	343	100	40-140	
Benzo[k]fluoranthene	342	ND	479	140	40-140	
Benzoic acid	342	ND	338	99	30-130	
Benzophenone	342	ND	258	75	40-140	
Benzyl alcohol	342	ND	200	59	30-130	
Bis(2-chloroethoxy)methane	342	ND	201	59	40-140	
Bis(2-chloroethyl)ether	342	ND	255	74	40-140	
Bis(2-ethylhexyl) phthalate	342	ND	3900	-604	40-140	4
Butyl benzyl phthalate	342	ND	301	88	40-140	
Caprolactam	342	ND	286	84	40-140	
Carbazole	342	ND	285	83	40-140	
Chrysene	342	ND	298	87	40-140	
Dibenz(a,h)anthracene	342	ND	392	114	40-140	
Dibenzofuran	342	ND	239	70	40-140	
Diethyl phthalate	342	ND	256	75	40-140	
Dimethyl phthalate	342	ND	242	71	40-140	
Di-n-butyl phthalate	342	ND	240	70	40-140	
Di-n-octyl phthalate	342	ND	407	119	40-140	
Diphenyl oxide	342	ND	241	71	40-140	
Fluoranthene	342	ND	272	80	40-140	
Fluorene	342	ND	297	87	40-140	
Hexachlorobenzene	342	ND	242	71	40-140	
Hexachlorobutadiene	342	ND	179	52	40-140	
Hexachlorocyclopentadiene	342	ND	ND	0	40-140	F
Hexachloroethane	342	ND	135	39	40-140	F
Indeno[1,2,3-cd]pyrene	342	ND	383	112	40-140	
Isophorone	342	ND	183	53	40-140	
Naphthalene	342	ND	194	57	40-140	
Nitrobenzene	342	ND	189	55	40-140	
N-Nitrosodimethylamine	342	ND	193	57	40-140	
N-Nitrosodi-n-propylamine	342	ND	239	70	40-140	
N-Nitrosodiphenylamine	342	ND	519	51	40-140	
Pentachlorophenol	342	ND	158	46	30-130	
Phenanthrene	342	ND	277	81	40-140	
Phenol	342	ND	244	71	30-130	
Pyrene	342	ND	309	90	40-140	

OR

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24563-1

SDG No.: OCRI-14

Matrix: Solid Level: Low Lab File ID: B10585.D

Lab ID: 360-24563-5 MSD Client ID: OC-SB-427-8.0/10-XXX MSD

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Benzo[a]pyrene	347	319	92	90	30	40-140	F
Benzo[b]fluoranthene	347	324	94	25	30	40-140	
Benzo[g,h,i]perylene	347	250	72	31	30	40-140	F
Benzo[k]fluoranthene	347	389	112	21	30	40-140	
Benzoic acid	347	336	97	1	30	30-130	
Benzophenone	347	243	70	6	30	40-140	
Benzyl alcohol	347	191	55	5	30	30-130	
Bis(2-chloroethoxy)methane	347	190	55	6	30	40-140	
Bis(2-chloroethyl)ether	347	235	68	8	30	40-140	
Bis(2-ethylhexyl) phthalate	347	3160	-810	21	30	40-140	4
Butyl benzyl phthalate	347	289	83	4	30	40-140	
Caprolactam	347	288	83	0	30	40-140	
Carbazole	347	259	75	10	30	40-140	
Chrysene	347	280	81	6	30	40-140	
Dibenz(a,h)anthracene	347	318	92	21	30	40-140	
Dibenzofuran	347	226	65	6	30	40-140	
Diethyl phthalate	347	210	60	20	30	40-140	
Dimethyl phthalate	347	228	66	6	30	40-140	
Di-n-butyl phthalate	347	229	66	5	30	40-140	
Di-n-octyl phthalate	347	349	101	15	30	40-140	
Diphenyl oxide	347	234	68	3	30	40-140	
Fluoranthene	347	245	71	10	30	40-140	
Fluorene	347	274	79	8	30	40-140	
Hexachlorobenzene	347	227	66	6	30	40-140	
Hexachlorobutadiene	347	173	50	3	30	40-140	
Hexachlorocyclopentadiene	347	ND	0	NC	30	40-140	F
Hexachloroethane	347	124	36	8	30	40-140	F
Indeno[1,2,3-cd]pyrene	347	300	87	24	30	40-140	
Isophorone	347	168	49	8	30	40-140	
Naphthalene	347	187	54	4	30	40-140	
Nitrobenzene	347	178	51	6	30	40-140	
N-Nitrosodimethylamine	347	184	53	5	30	40-140	
N-Nitrosodi-n-propylamine	347	227	66	5	30	40-140	
N-Nitrosodiphenylamine	347	463	35	11	30	40-140	F
Pentachlorophenol	347	156	45	1	30	30-130	
Phenanthrene	347	206	59	29	30	40-140	
Phenol	347	227	65	7	30	30-130	
Pyrene	347	299	86	3	30	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24563-1

SDG No.: OCRI-14

Matrix: Solid Level: Low Lab File ID: B10585.D

Lab ID: 360-24563-5 MSD Client ID: OC-SB-427-8.0/10-XXX MSD

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1'-Biphenyl	347	228	66	2	30	40-140	
1,2,4,5-Tetrachlorobenzene	347	216	62	5	30	40-140	
1,2,4-Trichlorobenzene	347	192	55	5	30	40-140	
1,2-Dichlorobenzene	347	175	51	4	30	40-140	
1,3-Dichlorobenzene	347	173	50	3	30	40-140	
1,4-Dichlorobenzene	347	170	49	4	30	40-140	
1-Methylnaphthalene	347	239	69	5	30	40-140	
2,2'-oxybis[1-chloropropane]	347	188	54	8	30	40-140	
2,3,4,6-Tetrachlorophenol	347	180	52	6	30	40-140	
2,4,5-Trichlorophenol	347	185	53	4	30	30-130	
2,4,6-Trichlorophenol	347	208	60	4	30	30-130	
2,4-Dichlorophenol	347	235	68	7	30	30-130	
2,4-Dimethylphenol	347	137	39	10	30	30-130	
2,4-Dinitrophenol	347	62.6	18	6	30	30-130	F
2,4-Dinitrotoluene	347	205	59	0	30	40-140	
2,6-Dinitrotoluene	347	210	60	6	30	40-140	
2-Chloronaphthalene	347	172	49	3	30	40-140	
2-Chlorophenol	347	181	52	5	30	30-130	
2-Methylnaphthalene	347	233	67	6	30	40-140	
2-Methylphenol	347	129	37	16	30	30-130	
2-Nitroaniline	347	177	51	104	30	40-140	F
2-Nitrophenol	347	203	59	4	30	30-130	
3 & 4 Methylphenol	347	193	56	9	30	30-130	
3,3'-Dichlorobenzidine	347	52.3 J	15	3		40-140	F
3-Nitroaniline	347	130 J	37	1	30	40-140	F
4,6-Dinitro-2-methylphenol	347	60.0 J	17	5	30	30-130	F
4-Bromophenyl phenyl ether	347	223	64	11	30	40-140	
4-Chloro-3-methylphenol	347	259	75	6	30	30-130	
4-Chloroaniline	347	51.7 J	15	126	30	40-140	F
4-Chlorophenyl phenyl ether	347	231	67	6	30	40-140	
4-Nitroaniline	347	238	69	6	30	40-140	
4-Nitrophenol	347	20.2 J	6	1	30	30-130	F
Acenaphthene	347	252	73	7	30	40-140	
Acenaphthylene	347	221	64	5	30	40-140	
Acetophenone	347	210	61	5	30	40-140	
Aniline	347	122	10	18	30	40-140	F
Anthracene	347	270	78	8	30	40-140	
Atrazine	347	230	66	13	30	40-140	
Azobenzene	347	217	63	8	30	40-140	
Benzaldehyde	347	213	62	3	30	40-140	
Benzo[a]anthracene	347	294	85	9	30	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM IV
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Westfield Job No.: 360-24563-1

SDG No.: OCRI-14

Lab File ID: J03128.D Lab Sample ID: MB 360-49155/1-A

Matrix: Solid Date Extracted: 09/18/2009 11:22

Instrument ID: Inst. J Date Analyzed: 09/25/2009 18:43

Level:(Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 360-49155/2-A	J03129.D	09/25/2009 19:15
	LCSD 360-49155/3-A	J03130.D	09/25/2009 19:48
OC-SB-427-0.0/1.0-XXX	360-24563-1 *	J03134.D	09/25/2009 21:59
OC-SB-427-12/14-XXX	360-24563-2 4 #	J03135.D	09/25/2009 22:31
OC-SB-427-8.0/10-DUP	360-24563-4 #	J03136.D	09/25/2009 23:04
OC-SB-427-8.0/10-XXX	360-24563-5 #	J03137.D	09/25/2009 23:36
OC-SB-427-8.0/10-XXX MS	360-24563-5 MS #	J03138.D	09/26/2009 00:09
OC-SB-427-8.0/10-XXX MSD	360-24563-5 MSD #	J03139.D	09/26/2009 00:41
OC-SB-428-0.0/1.0-XXX	360-24563-6 #	J03140.D	09/26/2009 01:14
OC-SB-428-8.0/10-XXX	360-24563-9 #	J03141.D	09/26/2009 01:46
OC-SB-456-0.0/1.0-XXX	360-24563-11 #	J03142.D	09/26/2009 02:18
OC-SB-456-16/18-XXX	360-24563-12 #	J03143.D	09/26/2009 02:51
OC-SB-456-7.0/9.0-DUP	360-24563-13 #	J03144.D	09/26/2009 03:23
OC-SB-457-0.0/1.0-XXX	360-24563-15 #	J03145.D	09/26/2009 03:55
OC-SB-457-8.0/10-XXX	360-24563-16 #	J03146.D	09/26/2009 04:28

MOMA only

LCS OK

MB OK

MS/MSD OK

CCAL OK *

4 CCAL for bis(2-ethylhexyl)phthalate -28.20

n/a

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Westfield Job No.: 360-24563-1

SDG No.: OCRI-14

Instrument ID: Inst. J Start Date: 10/06/2009 12:15

Analysis Batch Number: 49910 End Date: 10/06/2009 15:09

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 360-49910/1		10/06/2009 12:15	1	J03353.D	Rtx-5ms 0.25(um)
CCV 360-49910/2 CCVIS		10/06/2009 12:48	1	J03354.D	Rtx-5ms 0.25(um)
360-24563-2	OC-SB-427-12/14-XXX	10/06/2009 15:09	25000	J03358.D	Rtx-5ms 0.25(um)

bis (2-ethylhexyl) phthalate.

2D -28

CCAL.

ICAL OK

8270C LL

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Westfield Job No.: 360-24563-1

SDG No.: OCRI-14

Lab Sample ID: CCV 360-49910/2 Calibration Date: 10/06/2009 12:48

Instrument ID: Inst. J Calib Start Date: 10/05/2009 16:05

GC Column: Rtx-5ms ID: 0.25(um) Calib End Date: 10/05/2009 20:26

Lab File ID: J03354.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Benzaldehyde	Ave	0.2962	0.2408		4060	5000	-18.7	30.0
Aniline	Ave	1.027	0.8111		3950	5000	-21.0	30.0
Phenol	Ave	0.9862	0.7348		3730	5000	-25.5*	20.0
Bis(2-chloroethyl)ether	Ave	0.7169	0.5175		3610	5000	-27.8	30.0
2-Chlorophenol	Ave	0.7029	0.5458		3880	5000	-22.4	30.0
1,4-Dichlorobenzene	Ave	0.8148	0.5925		3640	5000	-27.3*	20.0
1,3-Dichlorobenzene	Ave	0.8340	0.6082		3650	5000	-27.1	30.0
Benzyl alcohol	Ave	0.6140	0.5284		4300	5000	-13.9	30.0
1,2-Dichlorobenzene	Ave	0.7797	0.5583		3580	5000	-28.4	30.0
2-Methylphenol	Ave	0.6189	0.4852		3920	5000	-21.6	30.0
2,2'-oxybis[1-chloropropane]	Ave	0.7001	0.5139		3670	5000	-26.6	30.0
Acetophenone	Ave	0.9590	0.7406		3860	5000	-22.8	30.0
3 & 4 Methylphenol	Ave	0.6630	0.5066		3820	5000	-23.6	30.0
N-Nitrosodi-n-propylamine	Ave	0.5625	0.4361	0.0500	3880	5000	-22.5	30.0
Hexachloroethane	Ave	0.3381	0.2412		3570	5000	-28.7	30.0
Nitrobenzene	Qua		0.2382		3830	5000	-23.4	30.0
Isophorone	Qua		0.4192		4090	5000	-18.3	30.0
2-Nitrophenol	Qua		0.1026		4270	5000	-14.5	20.0
2,4-Dimethylphenol	Qua		0.1948		3670	5000	-26.6	30.0
Benzoic acid	Qua		0.0468		6590	5000	31.8*	30.0
Bis(2-chloroethoxy)methane	Qua		0.2287		3820	5000	-23.6	30.0
2,4-Dichlorophenol	Qua		0.1506		4120	5000	-17.6	20.0
1,2,4-Trichlorobenzene	Qua		0.1726		3800	5000	-23.9	30.0
Alpha-Terpineol	Qua		0.1533		4070	5000	-18.6	30.0
Naphthalene	Qua		0.5907		3770	5000	-24.6	30.0
4-Chloroaniline	Qua		0.2254		3930	5000	-21.4	30.0
Hexachlorobutadiene	Qua		0.0998		3820	5000	-23.6*	20.0
Caprolactam	Qua		0.0612		4770	5000	-4.5	30.0
4-Chloro-3-methylphenol	Qua		0.1814		4210	5000	-15.7	20.0
2-Methylnaphthalene	Qua		0.3853		3880	5000	-22.5	30.0
1-Methylnaphthalene	Qua		0.3720		3790	5000	-24.3	30.0
1,2,4,5-Tetrachlorobenzene	Qua		0.1442		3770	5000	-24.7	30.0
Hexachlorocyclopentadiene	Lin2		0.1569	0.0500	3990	5000	-20.3	30.0
2,4,6-Trichlorophenol	Lin2		0.2454		4050	5000	-19.1	20.0
2,4,5-Trichlorophenol	Lin2		0.2507		4120	5000	-17.5	30.0
1,1'-Biphenyl	Ave	1.422	1.052		3700	5000	-26.0	30.0
2-Chloronaphthalene	Ave	1.284	0.9578		3730	5000	-25.4	30.0
Phenyl ether	Qua		0.2310		3760	5000	-24.8	30.0
2-Nitroaniline	Lin2		0.2732		4100	5000	-17.9	30.0
Dimethyl phthalate	Ave	1.318	0.9979		3790	5000	-24.3	30.0
Acenaphthylene	Ave	1.719	1.338		3890	5000	-22.2	30.0

FORM IV
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Westfield Job No.: 360-24563-1

SDG No.: OCRI-14

Lab File ID: J03193.D Lab Sample ID: MB 360-49246/1-A

Matrix: Solid Date Extracted: 09/21/2009 15:30

Instrument ID: Inst. J Date Analyzed: 09/28/2009 19:32

Level: (Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 360-49246/2-A	J03194.D	09/28/2009 20:05
	LCSD 360-49246/3-A	J03195.D	09/28/2009 20:38
OC-SB-456-7.0/9.0-DUP	360-24563-13	J03198.D	09/28/2009 22:18
OC-SB-456-7.0/9.0-XXX	360-24563-14	J03199.D	09/28/2009 22:51
OC-SB-456-7.0/9.0-XXX MS	360-24563-14 MS	J03200.D	09/28/2009 23:24
OC-SB-456-7.0/9.0-XXX MSD	360-24563-14 MSD	J03201.D	09/28/2009 23:57
OC-SB-457-0.0/1.0-XXX	360-24563-15	J03202.D	09/29/2009 00:30
OC-SB-457-8.0/10-XXX	360-24563-16	J03203.D	09/29/2009 01:03

LCS
aniline 31/31

indeno [1,2,3-cd] pyrene 154/144

MS/MSD
aniline 26/25

bis(2-ethylhexyl)phthalate 78.2

RPD
15

MB
benzoic acid 81.3

Bis(2-ethylhexyl)phthalate 14.

di-n-butyl phthalate 56.6

TICs

ICAL/CCAL > OK

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24563-1

SDG No.: OCRI-14

Matrix: Solid Level: Low Lab File ID: J03194.D

Lab ID: LCS 360-49246/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
1,2,4-Trichlorobenzene	333	307	92	40-140	
1,2-Dichlorobenzene	333	216	65	40-140	
1,3-Dichlorobenzene	333	207	62	40-140	
1,4-Dichlorobenzene	333	208	62	40-140	
2,4-Dimethylphenol	333	391	117	30-130	
2,4-Dichlorophenol	333	424	127	30-130	
2,4,6-Trichlorophenol	333	293	88	30-130	
2,4,5-Trichlorophenol	333	348	104	30-130	
2-Chlorophenol	333	241	72	30-130	
2-Methylnaphthalene	333	331	99	40-140	
2-Methylphenol	333	256	77	30-130	
2-Chloronaphthalene	333	319	96	40-140	
2-Nitroaniline	333	332	99	40-140	
2,6-Dinitrotoluene	333	339	102	40-140	
3 & 4 Methylphenol	333	268	80	30-130	
2-Nitrophenol	333	338	101	30-130	
3-Nitroaniline	333	327	98	40-140	
2,4-Dinitrophenol	333	283	85	30-130	
4-Chloro-3-methylphenol	333	402	121	30-130	
2,4-Dinitrotoluene	333	324	97	40-140	
4-Chloroaniline	333	308	92	40-140	
4-Nitroaniline	333	375	113	40-140	
4-Nitrophenol	333	338	101	30-130	
4-Bromophenyl phenyl ether	333	327	98	40-140	
Acenaphthene	333	348	104	40-140	
Acenaphthylene	333	311	93	40-140	
4-Chlorophenyl phenyl ether	333	325	97	40-140	
Anfline	333	102	31	40-140	*
4,6-Dinitro-2-methylphenol	333	311	93	30-130	
Anthracene	333	358	108	40-140	
Benzo[a]anthracene	333	384	115	40-140	
Benzoic acid	333	272	81	30-130	
3,3'-Dichlorobenzidine	333	386	116	40-140	
Benzyl alcohol	333	262	79	30-130	
Benzo[b]fluoranthene	333	344	103	40-140	
Bis(2-chloroethoxy)methane	333	310	93	40-140	
Benzo[k]fluoranthene	333	384	115	40-140	
Bis(2-chloroethyl)ether	333	221	66	40-140	
Benzo[a]pyrene	333	423	127	40-140	
Butyl benzyl phthalate	333	331	99	40-140	
Benzo[g,h,i]perylene	333	452	136	40-140	

/31

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

Indeno[1,2,3-cd]pyrene 154/144

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24563-1

SDG No.: OCRI-14

Matrix: Solid Level: Low Lab File ID: J03194.D

Lab ID: LCS 360-49246/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
Acetophenone	333	249	75	40-140	
Chrysene	333	351	105	40-140	
Azobenzene	333	334	100	40-140	
Bis(2-ethylhexyl) phthalate	333	370	111	40-140	
Dibenz(a,h)anthracene	333	424	127	40-140	
Dibenzofuran	333	295	89	40-140	
Diethyl phthalate	333	327	98	40-140	
Dimethyl phthalate	333	313	94	40-140	
Di-n-butyl phthalate	333	417	125	40-140	
Di-n-octyl phthalate	333	365	110	40-140	
2,2'-oxybis[1-chloropropane]	333	234	70	40-140	
Fluoranthene	333	358	107	40-140	
Fluorene	333	368	110	40-140	
Hexachlorobenzene	333	322	97	40-140	
Hexachlorobutadiene	333	325	98	40-140	
Hexachlorocyclopentadiene	333	265	79	40-140	
1-Methylnaphthalene	333	336	101	40-140	
Hexachloroethane	333	220	66	40-140	
1,1'-Biphenyl	333	314	94	40-140	
Indeno[1,2,3-cd]pyrene	333	512	154	40-140	*
1,2,4,5-Tetrachlorobenzene	333	346	104	40-140	
Isophorone	333	314	94	40-140	
2,3,4,6-Tetrachlorophenol	333	281	84	40-140	
Naphthalene	333	321	96	40-140	
Atrazine	333	393	118	40-140	
Benzaldehyde	333	279	84	40-140	
Nitrobenzene	333	333	100	40-140	
Caprolactam	333	372	112	40-140	
Carbazole	333	355	107	40-140	
N-Nitrosodimethylamine	333	234	70	40-140	
Benzophenone	333	344	103	40-140	
N-Nitrosodi-n-propylamine	333	254	76	40-140	
Diphenyl oxide	333	366	110	40-140	
N-Nitrosodiphenylamine	333	239	72	40-140	
Pentachlorophenol	333	311	93	30-130	
Phenanthrene	333	388	117	40-140	
Phenol	333	247	74	30-130	
Pyrene	333	350	105	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24563-1

SDG No.: OCRI-14

Matrix: Solid Level: Low Lab File ID: J03195.D

Lab ID: LCSD 360-49246/3-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCSD CONCENTRATION (ug/Kg)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,2,4-Trichlorobenzene	333	294	88	4	30	40-140	
1,2-Dichlorobenzene	333	219	66	2	30	40-140	
1,3-Dichlorobenzene	333	213	64	3	30	40-140	
1,4-Dichlorobenzene	333	214	64	3	30	40-140	
2,4-Dimethylphenol	333	376	113	4	30	30-130	
2,4-Dichlorophenol	333	410	123	3	30	30-130	
2,4,6-Trichlorophenol	333	374	112	24	30	30-130	
2,4,5-Trichlorophenol	333	378	113	8	30	30-130	
2-Chlorophenol	333	247	74	3	30	30-130	
2-Methylnaphthalene	333	315	94	5	30	40-140	
2-Methylphenol	333	257	77	0	30	30-130	
2-Chloronaphthalene	333	330	99	3	30	40-140	
2-Nitroaniline	333	343	103	3	30	40-140	
2,6-Dinitrotoluene	333	364	109	7	30	40-140	
3 & 4 Methylphenol	333	270	81	1	30	30-130	
2-Nitrophenol	333	321	96	5	30	30-130	
3-Nitroaniline	333	334	100	2	30	40-140	
2,4-Dinitrophenol	333	287	86	2	30	30-130	
4-Chloro-3-methylphenol	333	385	116	4	30	30-130	
2,4-Dinitrotoluene	333	332	100	3	30	40-140	
4-Chloroaniline	333	293	88	5	30	40-140	
4-Nitroaniline	333	399	120	6	30	40-140	
4-Nitrophenol	333	345	103	2	30	30-130	
4-Bromophenyl phenyl ether	333	325	98	0	30	40-140	
Acenaphthene	333	364	109	5	30	40-140	
Acenaphthylene	333	321	96	3	30	40-140	
4-Chlorophenyl phenyl ether	333	333	100	3	30	40-140	
Aniline	333	105	31	2	30	40-140	*
4,6-Dinitro-2-methylphenol	333	322	97	4	30	30-130	
Anthracene	333	349	105	3	30	40-140	
Benzo[a]anthracene	333	385	116	0	30	40-140	
Benzoic acid	333	272	82	0	30	30-130	
3,3'-Dichlorobenzidine	333	387	116	0	30	40-140	
Benzyl alcohol	333	269	81	3	30	30-130	
Benzo[b]fluoranthene	333	351	105	2	30	40-140	
Bis(2-chloroethoxy)methane	333	334	100	8	30	40-140	
Benzo[k]fluoranthene	333	378	113	2	30	40-140	
Bis(2-chloroethyl)ether	333	223	67	1	30	40-140	
Benzo[a]pyrene	333	412	124	2	30	40-140	
Butyl benzyl phthalate	333	332	100	0	30	40-140	
Benzo[g,h,i]perylene	333	430	129	5	30	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24563-1

SDG No.: OCRI-14

Matrix: Solid Level: Low Lab File ID: J03195.D

Lab ID: LCSD 360-49246/3-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCSD CONCENTRATION (ug/Kg)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Acetophenone	333	254	76	2	30	40-140	
Chrysene	333	356	107	2	30	40-140	
Azobenzene	333	343	103	3	30	40-140	
Bis(2-ethylhexyl) phthalate	333	352	105	5	30	40-140	
Dibenz(a,h)anthracene	333	394	118	7	30	40-140	
Dibenzofuran	333	319	96	8	30	40-140	
Diethyl phthalate	333	346	104	6	30	40-140	
Dimethyl phthalate	333	340	102	8	30	40-140	
Di-n-butyl phthalate	333	418	125	0	30	40-140	
Di-n-octyl phthalate	333	366	110	0	30	40-140	
2,2'-oxybis[1-chloropropane]	333	239	72	2	30	40-140	
Fluoranthene	333	364	109	2	30	40-140	
Fluorene	333	380	114	3	30	40-140	
Hexachlorobenzene	333	327	98	2	30	40-140	
Hexachlorobutadiene	333	303	91	7	30	40-140	
Hexachlorocyclopentadiene	333	268	80	1	30	40-140	
1-Methylnaphthalene	333	329	99	2	30	40-140	
Hexachloroethane	333	220	66	0	30	40-140	
1,1'-Biphenyl	333	332	100	6	30	40-140	
Indeno[1,2,3-cd]pyrene	333	481	144	6	30	40-140	*
1,2,4,5-Tetrachlorobenzene	333	332	100	4	30	40-140	
Isophorone	333	299	90	5	30	40-140	
2,3,4,6-Tetrachlorophenol	333	292	88	4	30	40-140	
Naphthalene	333	305	92	5	30	40-140	
Atrazine	333	416	125	6	30	40-140	
Benzaldehyde	333	291	87	4	30	40-140	
Nitrobenzene	333	317	95	5	30	40-140	
Caprolactam	333	372	112	0	30	40-140	
Carbazole	333	359	108	1	30	40-140	
N-Nitrosodimethylamine	333	237	71	1	30	40-140	
Benzophenone	333	361	108	5	30	40-140	
N-Nitrosodi-n-propylamine	333	254	76	0	30	40-140	
Diphenyl oxide	333	355	107	3	30	40-140	
N-Nitrosodiphenylamine	333	249	75	4	30	40-140	
Pentachlorophenol	333	317	95	2	30	30-130	
Phenanthrene	333	399	120	3	30	40-140	
Phenol	333	255	77	3	30	30-130	
Pyrene	333	348	104	1	30	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24563-1

SDG No.: OCRI-14

Matrix: Solid Level: Low Lab File ID: J03200.D

Lab ID: 360-24563-14 MS Client ID: OC-SB-456-7.0/9.0-XXX MS

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	QC LIMITS REC	#
1,1'-Biphenyl	357	ND	281	79	40-140	
1,2,4,5-Tetrachlorobenzene	357	ND	273	76	40-140	
1,2,4-Trichlorobenzene	357	ND	235	66	40-140	
1,2-Dichlorobenzene	357	ND	192	54	40-140	
1,3-Dichlorobenzene	357	ND	181	51	40-140	
1,4-Dichlorobenzene	357	ND	210	59	40-140	
1-Methylnaphthalene	357	ND	271	76	40-140	
2,2'-oxybis[1-chloropropane]	357	ND	202	57	40-140	
2,3,4,6-Tetrachlorophenol	357	ND	272	76	40-140	
2,4,5-Trichlorophenol	357	ND	334	94	30-130	
2,4,6-Trichlorophenol	357	ND	346	97	30-130	
2,4-Dichlorophenol	357	ND	327	91	30-130	
2,4-Dimethylphenol	357	ND	301	84	30-130	
2,4-Dinitrophenol	357	ND	320	90	30-130	
2,4-Dinitrotoluene	357	ND	286	80	40-140	
2,6-Dinitrotoluene	357	ND	312	87	40-140	
2-Chloronaphthalene	357	ND	277	78	40-140	
2-Chlorophenol	357	ND	214	60	30-130	
2-Methylnaphthalene	357	ND	261	73	40-140	
2-Methylphenol	357	ND	228	64	30-130	
2-Nitroaniline	357	ND	283	79	40-140	
2-Nitrophenol	357	ND	249	70	30-130	
3 & 4 Methylphenol	357	ND	241	68	30-130	
3,3'-Dichlorobenzidine	357	ND	298	83	40-140	
3-Nitroaniline	357	ND	273	76	40-140	
4,6-Dinitro-2-methylphenol	357	ND	290	81	30-130	
4-Bromophenyl phenyl ether	357	ND	279	78	40-140	
4-Chloro-3-methylphenol	357	ND	318	89	30-130	
4-Chloroaniline	357	ND	220	61	40-140	
4-Chlorophenyl phenyl ether	357	ND	293	82	40-140	
4-Nitroaniline	357	ND	333	93	40-140	
4-Nitrophenol	357	ND	320	90	30-130	
Acenaphthene	357	ND	313	88	40-140	
Acenaphthylene	357	ND	277	78	40-140	
Acetophenone	357	ND	218	61	40-140	
Aniline	357	ND	91.2	26	40-140	F
Anthracene	357	ND	309	86	40-140	
Atrazine	357	ND	347	97	40-140	
Azobenzene	357	ND	292	82	40-140	
Benzaldehyde	357	ND	297	83	40-140	
Benzo[a]anthracene	357	ND	331	93	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24563-1

SDG No.: OCRI-14

Matrix: Solid Level: Low Lab File ID: J03201.D

Lab ID: 360-24563-14 MSD Client ID: OC-SB-456-7.0/9.0-XXX MSD

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1'-Biphenyl	359	239	67	16	30	40-140	
1,2,4,5-Tetrachlorobenzene	359	276	77	1	30	40-140	
1,2,4-Trichlorobenzene	359	231	64	2	30	40-140	
1,2-Dichlorobenzene	359	183	51	5	30	40-140	
1,3-Dichlorobenzene	359	169	47	7	30	40-140	
1,4-Dichlorobenzene	359	168	47	22	30	40-140	
1-Methylnaphthalene	359	257	72	5	30	40-140	
2,2'-oxybis[1-chloropropane]	359	206	57	2	30	40-140	
2,3,4,6-Tetrachlorophenol	359	241	67	12	30	40-140	
2,4,5-Trichlorophenol	359	309	86	8	30	30-130	
2,4,6-Trichlorophenol	359	314	88	10	30	30-130	
2,4-Dichlorophenol	359	336	94	3	30	30-130	
2,4-Dimethylphenol	359	304	85	1	30	30-130	
2,4-Dinitrophenol	359	326	91	2	30	30-130	
2,4-Dinitrotoluene	359	274	76	4	30	40-140	
2,6-Dinitrotoluene	359	290	81	7	30	40-140	
2-Chloronaphthalene	359	253	70	9	30	40-140	
2-Chlorophenol	359	209	58	2	30	30-130	
2-Methylnaphthalene	359	258	72	1	30	40-140	
2-Methylphenol	359	235	66	3	30	30-130	
2-Nitroaniline	359	274	76	3	30	40-140	
2-Nitrophenol	359	253	71	2	30	30-130	
3 & 4 Methylphenol	359	240	67	1	30	30-130	
3,3'-Dichlorobenzidine	359	328	92	10		40-140	
3-Nitroaniline	359	277	77	2	30	40-140	
4,6-Dinitro-2-methylphenol	359	285	79	2	30	30-130	
4-Bromophenyl phenyl ether	359	257	72	8	30	40-140	
4-Chloro-3-methylphenol	359	331	92	4	30	30-130	
4-Chloroaniline	359	239	67	8	30	40-140	
4-Chlorophenyl phenyl ether	359	269	75	9	30	40-140	
4-Nitroaniline	359	328	91	2	30	40-140	
4-Nitrophenol	359	323	90	1	30	30-130	
Acenaphthene	359	290	81	8	30	40-140	
Acenaphthylene	359	258	72	7	30	40-140	
Acetophenone	359	218	61	0	30	40-140	
Aniline	359	90.1	25	1	30	40-140	F
Anthracene	359	291	81	6	30	40-140	
Atrazine	359	303	84	14	30	40-140	
Azobenzene	359	274	76	6	30	40-140	
Benzaldehyde	359	241	67	21	30	40-140	
Benzo[a]anthracene	359	325	91	2	30	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24563-1

SDG No.: OCRI-14

Matrix: Solid Level: Low Lab File ID: J03201.D

Lab ID: 360-24563-14 MSD Client ID: OC-SB-456-7.0/9.0-XXX MSD

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Benzo[a]pyrene	359	337	94	5	30	40-140	
Benzo[b]fluoranthene	359	250	70	7	30	40-140	
Benzo[g,h,i]perylene	359	389	108	7	30	40-140	
Benzo[k]fluoranthene	359	315	88	7	30	40-140	
Benzoic acid	359	371	104	2	30	30-130	
Benzophenone	359	268	75	12	30	40-140	
Benzyl alcohol	359	252	70	6	30	30-130	
Bis(2-chloroethoxy)methane	359	259	72	1	30	40-140	
Bis(2-chloroethyl)ether	359	184	51	7	30	40-140	
Bis(2-ethylhexyl) phthalate	359	2890	786	256	30	40-140	F
Butyl benzyl phthalate	359	256	71	7	30	40-140	
Caprolactam	359	323	90	1	30	40-140	
Carbazole	359	298	83	3	30	40-140	
Chrysene	359	302	84	1	30	40-140	
Dibenz(a,h)anthracene	359	368	103	2	30	40-140	
Dibenzofuran	359	257	72	7	30	40-140	
Diethyl phthalate	359	276	77	6	30	40-140	
Dimethyl phthalate	359	265	74	8	30	40-140	
Di-n-butyl phthalate	359	292	82	5	30	40-140	
Di-n-octyl phthalate	359	256	71	9	30	40-140	
Diphenyl oxide	359	282	79	5	30	40-140	
Fluoranthene	359	305	85	1	30	40-140	
Fluorene	359	310	86	7	30	40-140	
Hexachlorobenzene	359	262	73	8	30	40-140	
Hexachlorobutadiene	359	245	68	2	30	40-140	
Hexachlorocyclopentadiene	359	250	70	3	30	40-140	
Hexachloroethane	359	177	49	6	30	40-140	
Indeno[1,2,3-cd]pyrene	359	433	121	6	30	40-140	
Isophorone	359	232	65	2	30	40-140	
Naphthalene	359	240	67	2	30	40-140	
Nitrobenzene	359	241	67	5	30	40-140	
N-Nitrosodimethylamine	359	242	67	1	30	40-140	
N-Nitrosodi-n-propylamine	359	213	60	6	30	40-140	
N-Nitrosodiphenylamine	359	210	59	0	30	40-140	
Pentachlorophenol	359	297	83	2	30	30-130	
Phenanthrene	359	323	90	5	30	40-140	
Phenol	359	223	62	1	30	30-130	
Pyrene	359	275	77	6	30	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Westfield Job No.: 360-24563-1 Analy Batch No.: 49396

SDG No.: OCRI-14

Instrument ID: Inst. J GC Column: Rtx-5ms ID: 0.25(um) Heated Purge: (Y/N) N

Calibration Start Date: 09/23/2009 16:23 Calibration End Date: 09/23/2009 20:48 Calibration ID: 4771

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
1,2-Dichlorobenzene	0.9018 0.6335	0.8485 0.6076	0.8203 0.6934	0.7861 0.7323	0.7613	Ave		0.7539				13.0		15.0			
2-Methylphenol	0.6154 0.5455	0.5680 0.5219	0.5933 0.6010	0.5991 0.6508	0.6272	Ave		0.5914				6.8		15.0			
2,2'-oxybis[1-chloropropane]	0.7426 0.5864	0.7015 0.5465	0.7138 0.6245	0.6734 0.6832	0.6630	Ave		0.6595				9.5		15.0			
3 & 4 Methylphenol	0.6215 0.5732	0.6213 0.5448	0.5973 0.6212	0.6233 0.6770	0.6482	Ave		0.6142				6.3		15.0			
N-Nitrosodi-n-propylamine	0.4516 0.4251	0.4240 0.3993	0.4289 0.4552	0.4413 0.5055	0.4683	Ave		0.4443			0.0500	6.9		15.0			
Acetophenone	0.8952 0.7772	0.9128 0.7418	0.8977 0.8500	0.8883 0.9139	0.9120	Ave		0.8654				7.4		15.0			
Hexachloroethane	0.2847 0.2509	0.2677 0.2421	0.2752 0.2710	0.2775 0.3054	0.2842	Ave		0.2732				6.9		15.0			
Nitrobenzene	0.2983 0.3151	0.2825 0.3370	0.2949 0.3311	0.3124 0.3323	0.3343	Ave		0.3153				6.3		15.0			
Isophorone	0.4506 0.5527	0.4512 0.5908	0.4564 0.5868	0.4989 0.5802	0.5661	Ave		0.5260				12.0		15.0			
2,4-Dimethylphenol	0.2572 0.2840	0.2599 0.2942	0.2474 0.2877	0.2672 0.2886	0.2937	Ave		0.2755				6.4		15.0			
2-Nitrophenol	0.0997 0.1586	0.1046 0.1710	0.1050 0.1602	0.1280 0.1663	0.1435	Lin1	-0.014	0.1644							0.9970		0.9900
4,6-Dinitro-2-methylphenol	+++++ 0.0719	+++++ 0.0508	0.0149 0.0479	0.0253 0.0764	0.0213	Qua	-0.010	0.0272 0.0407	0.0025						0.9980		0.9900
Bis(2-chloroethoxy)methane	~~0.3507~~ 0.3275	~~0.3385~~ 0.3518	0.3301 0.3459	0.3331 0.3391	0.3535	Ave		0.3411				2.9		15.0			
2,4-Dichlorophenol	0.1808 0.2207	0.1861 0.2402	0.1940 0.2390	0.2100 0.2348	0.2355	Ave		0.2157				11.0		15.0			
1,2,4-Trichlorobenzene	0.2909 0.2558	0.2797 0.2757	0.2759 0.2701	0.2779 0.2577	0.2856	Ave		0.2744				4.2		15.0			
Alpha-Terpineol	0.1805 0.1993	0.1687 0.2152	0.1741 0.2121	0.1820 0.2130	0.2074	Ave		0.1947				9.4		15.0			
Naphthalene	0.9667 0.8538	0.9178 0.9044	0.9020 0.8950	0.9169 0.8567	0.9518	Ave		0.9072				4.1		15.0			
4-Chloroaniline	0.3184 0.3242	0.2978 0.3574	0.3114 0.3659	0.3176 0.3634	0.3572	Ave		0.3348				7.8		15.0			
Hexachlorobutadiene	0.1512 0.1373	0.1485 0.1463	0.1352 0.1469	0.1444 0.1387	0.1561	Ave		0.1449				4.7		15.0			
Caprolactam	0.0648 0.0826	0.0460 0.0884	0.0474 0.0891	0.0542 0.0932	0.0734	Lin1	-0.009	0.0895							0.9930		0.9900

Note: The ml coefficient is the same as Ave RRF for an Ave curve type.

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24563-1

SDG No.: OCRI-14

Matrix: Water Level: Low Lab File ID: B10559.D

Lab ID: LCS 360-48980/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
2,4-Dimethylphenol	10.0	6.48	65	30-130	
2,4-Dichlorophenol	10.0	7.31	73	30-130	
2,4,6-Trichlorophenol	10.0	8.13	81	30-130	
2,4,5-Trichlorophenol	10.0	7.80	78	30-130	
2-Chlorophenol	10.0	5.23	52	40-130	
2-Methylnaphthalene	10.0	5.92	59	40-140	
2-Methylphenol	10.0	4.17 J	42	30-130	
2-Chloronaphthalene	10.0	5.92	59	40-140	
2-Nitroaniline	10.0	8.48	85	40-140	
2,6-Dinitrotoluene	10.0	8.16	82	40-140	
3 & 4 Methylphenol	10.0	3.56 J	36	30-130	
2-Nitrophenol	10.0	7.82	78	30-130	
3-Nitroaniline	10.0	7.36	74	40-140	
2,4-Dinitrophenol	10.0	7.54	75	30-130	
4-Chloro-3-methylphenol	10.0	6.70	67	30-130	
2,4-Dinitrotoluene	10.0	7.61	76	40-140	
4-Chloroaniline	10.0	5.97	60	40-140	
4-Nitroaniline	10.0	7.92	79	40-140	
4-Nitrophenol	10.0	1.45 J	14	30-130	*
4-Bromophenyl phenyl ether	10.0	8.63	86	40-140	
Acenaphthene	10.0	8.96	90	40-140	
Acenaphthylene	10.0	7.77	78	40-140	
4-Chlorophenyl phenyl ether	10.0	7.91	79	40-140	
Aniline	10.0	1.87 J	19	40-140	*
4,6-Dinitro-2-methylphenol	10.0	8.11	81	30-130	
Anthracene	10.0	10.8	108	40-140	
Benzo[a]anthracene	10.0	10.6	106	40-140	
Benzoic acid	10.0	2.12 J	21	30-130	*
3,3'-Dichlorobenzidine	10.0	8.52	85	40-140	
Benzyl alcohol	10.0	4.46 J	45	30-130	
Benzo[b]fluoranthene	10.0	9.66	97	40-140	
Bis(2-chloroethoxy)methane	10.0	6.57	66	40-140	
Benzo[k]fluoranthene	10.0	10.6	106	40-140	
Bis(2-chloroethyl)ether	10.0	6.43	64	40-140	
Benzo[a]pyrene	10.0	9.81	98	40-140	
Butyl benzyl phthalate	10.0	10.5	105	40-140	
Benzo[g,h,i]perylene	10.0	10.3	103	40-140	
Acetophenone	10.0	7.40	74	40-140	
Chrysene	10.0	10.3	103	40-140	
Azobenzene	10.0	9.30	93	40-140	
Bis(2-ethylhexyl) phthalate	10.0	13.8	138	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

Caprolactam 11/12
phenol 13/14

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24563-1

SDG No.: OCRI-14

Matrix: Water Level: Low Lab File ID: B10559.D

Lab ID: LCS 360-48980/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Dibenz(a,h)anthracene	10.0	10.1	101	40-140	
Dibenzofuran	10.0	7.81	78	40-140	
Diethyl phthalate	10.0	8.72	87	40-140	
Dimethyl phthalate	10.0	8.50	85	40-140	
Di-n-butyl phthalate	10.0	10.0	100	40-140	
Di-n-octyl phthalate	10.0	8.53	85	40-140	
bis (2-chloroisopropyl) ether	10.0	6.52	65	40-140	
Fluoranthene	10.0	9.64	96	40-140	
Fluorene	10.0	9.82	98	40-140	
Hexachlorobenzene	10.0	8.84	88	40-140	
Hexachlorocyclopentadiene	10.0	5.06	51	40-140	
1-Methylnaphthalene	10.0	7.20	72	40-140	
Hexachloroethane	10.0	5.36	54	40-140	
1,1'-Biphenyl	10.0	8.96	90	40-140	
Indeno[1,2,3-cd]pyrene	10.0	10.3	103	40-140	
1,2,4,5-Tetrachlorobenzene	10.0	6.04	60	40-140	
Isophorone	10.0	6.18	62	40-140	
2,3,4,6-Tetrachlorophenol	10.0	6.71	67	40-140	
Atrazine	10.0	11.7	117	40-140	
Benzaldehyde	10.0	9.32	93	40-140	
Nitrobenzene	10.0	6.51	65	40-140	
Caprolactam	10.0	1.08 J	11	40-140	*
Carbazole	10.0	9.75	97	40-140	
Benzophenone	10.0	10.2	102	40-140	
N-Nitrosodi-n-propylamine	10.0	7.34	73	40-140	
Diphenyl oxide	10.0	7.62	76	40-140	
N-Nitrosodiphenylamine	10.0	6.45	64	40-140	
Pentachlorophenol	10.0	8.51	85	30-130	
Phenanthrene	10.0	9.70	97	40-140	
Phenol	10.0	1.27 J	13	30-130	*
Pyrene	10.0	9.74	97	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24563-1

SDG No.: OCRI-14

Matrix: Water Level: Low Lab File ID: B10560.D

Lab ID: LCSD 360-48980/3-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
2,4-Dimethylphenol	10.0	6.61	66	2	20	30-130	
2,4-Dichlorophenol	10.0	7.74	77	6	20	30-130	
2,4,6-Trichlorophenol	10.0	9.01	90	10	20	30-130	
2,4,5-Trichlorophenol	10.0	8.33	83	7	20	30-130	
2-Chlorophenol	10.0	5.46	55	4	20	40-130	
2-Methylnaphthalene	10.0	6.14	61	4	20	40-140	
2-Methylphenol	10.0	4.36 J	44	4	20	30-130	
2-Chloronaphthalene	10.0	6.47	65	9	20	40-140	
2-Nitroaniline	10.0	9.24	92	9	20	40-140	
2,6-Dinitrotoluene	10.0	8.78	88	7	20	40-140	
3 & 4 Methylphenol	10.0	3.73 J	37	5	20	30-130	
2-Nitrophenol	10.0	8.10	81	4	20	30-130	
3-Nitroaniline	10.0	8.18	82	11	20	40-140	
2,4-Dinitrophenol	10.0	8.77	88	15	20	30-130	
4-Chloro-3-methylphenol	10.0	7.18	72	7	20	30-130	
2,4-Dinitrotoluene	10.0	8.06	81	6	20	40-140	
4-Chloroaniline	10.0	6.17	62	3	20	40-140	
4-Nitroaniline	10.0	8.72	87	10	20	40-140	
4-Nitrophenol	10.0	1.80 J	18	22	20	30-130	*
4-Bromophenyl phenyl ether	10.0	8.75	87	1	20	40-140	
Acenaphthene	10.0	9.66	97	8	20	40-140	
Acenaphthylene	10.0	8.35	84	7	20	40-140	
4-Chlorophenyl phenyl ether	10.0	8.69	87	9	20	40-140	
Aniline	10.0	2.17 J	22	15	20	40-140	*
4,6-Dinitro-2-methylphenol	10.0	8.84	88	9	20	30-130	
Anthracene	10.0	10.8	108	1	20	40-140	
Benzo[a]anthracene	10.0	10.8	108	3	20	40-140	
Benzoic acid	10.0	2.17 J	22	3	20	30-130	*
3,3'-Dichlorobenzidine	10.0	9.04	90	6	20	40-140	
Benzyl alcohol	10.0	4.90 J	49	9	20	30-130	
Benzo[b]fluoranthene	10.0	10.1	101	4	20	40-140	
Bis(2-chloroethoxy)methane	10.0	6.88	69	5	20	40-140	
Benzo[k]fluoranthene	10.0	10.8	108	2	20	40-140	
Bis(2-chloroethyl)ether	10.0	6.64	66	3	20	40-140	
Benzo[a]pyrene	10.0	10.2	102	4	20	40-140	
Butyl benzyl phthalate	10.0	10.1	101	4	20	40-140	
Benzo[g,h,i]perylene	10.0	10.3	103	0	20	40-140	
Acetophenone	10.0	7.75	77	5	20	40-140	
Chrysene	10.0	10.6	106	4	20	40-140	
Azobenzene	10.0	9.45	95	2	20	40-140	
Bis(2-ethylhexyl) phthalate	10.0	12.1	121	13	20	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24563-1

SDG No.: OCRI-14

Matrix: Water Level: Low Lab File ID: B10560.D

Lab ID: LCSD 360-48980/3-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Dibenz(a,h)anthracene	10.0	10.0	100	1	20	40-140	
Dibenzofuran	10.0	8.31	83	6	20	40-140	
Diethyl phthalate	10.0	9.33	93	7	20	40-140	
Dimethyl phthalate	10.0	9.03	90	6	20	40-140	
Di-n-butyl phthalate	10.0	10.1	101	1	20	40-140	
Di-n-octyl phthalate	10.0	8.17	82	4	20	40-140	
bis (2-chloroisopropyl) ether	10.0	6.82	68	5	20	40-140	
Fluoranthene	10.0	10.0	100	4	20	40-140	
Fluorene	10.0	10.5	105	7	20	40-140	
Hexachlorobenzene	10.0	9.01	90	2	20	40-140	
Hexachlorocyclopentadiene	10.0	5.74	57	13	20	40-140	
1-Methylnaphthalene	10.0	7.33	73	2	20	40-140	
Hexachloroethane	10.0	5.79	58	8	20	40-140	
1,1'-Biphenyl	10.0	9.61	96	7	20	40-140	
Indeno[1,2,3-cd]pyrene	10.0	10.2	102	1	20	40-140	
1,2,4,5-Tetrachlorobenzene	10.0	6.32	63	5	20	40-140	
Isophorone	10.0	6.46	65	4	20	40-140	
2,3,4,6-Tetrachlorophenol	10.0	7.19	72	7	20	40-140	
Atrazine	10.0	11.9	119	1	20	40-140	
Benzaldehyde	10.0	9.73	97	4	20	40-140	
Nitrobenzene	10.0	6.76	68	4	20	40-140	
Caprolactam	10.0	1.21 J	12	11	20	40-140	*
Carbazole	10.0	10.1	101	3	20	40-140	
Benzophenone	10.0	10.4	104	2	20	40-140	
N-Nitrosodi-n-propylamine	10.0	7.62	76	4	20	40-140	
Diphenyl oxide	10.0	7.81	78	3	20	40-140	
N-Nitrosodiphenylamine	10.0	6.63	66	3	20	40-140	
Pentachlorophenol	10.0	9.00	90	6	20	30-130	
Phenanthrene	10.0	9.83	98	1	20	40-140	
Phenol	10.0	1.37 J	14	8	20	30-130	*
Pyrene	10.0	9.64	96	1	20	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Westfield Job No.: 360-24563-1

SDG No.: OCRI-14

Sample No.: CCV 360-49520/2 Date Analyzed: 09/26/2009 13:04

Instrument ID: Inst. J GC Column: Rtx-5ms ID: 0.25(um)

Lab File ID (Standard): J03152.D Heated Purge: (Y/N) N

		PHN		CRY		PRY	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12 HOUR STD		157073	12.84	93401	15.62	61272	17.34
UPPER LIMIT		314146	13.34	186802	16.12	122544	17.84
LOWER LIMIT		78537	12.34	46701	15.12	30636	16.84
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 360-49302/1-A		212024	12.83	143816	15.62	113412	17.34
LCS 360-49302/2-A		217829	12.84	177531	15.62	146996*	17.34
LCSD 360-49302/3-A		170462	12.83	106647	15.62	69045	17.34
360-24563-14	OC-SB-456-7.0/9.0-XXX	184807	12.84	116848	15.62	79262	17.34
360-24563-14 MS	OC-SB-456-7.0/9.0-XXX MS	226155	12.84	156551	15.62	114603	17.34
360-24563-14 MSD	OC-SB-456-7.0/9.0-XXX MSD	153351	12.84	86154	15.62	47120	17.34

PHN = Phenanthrene-d10
CRY = Chrysene-d12
PRY = Perylene-d12

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.50 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270C LL

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Westfield Job No.: 360-24563-1

SDG No.: OCRI-14

Sample No.: CCV 360-49884/13 Date Analyzed: 10/05/2009 22:04

Instrument ID: Inst. J GC Column: Rtx-5ms ID: 0.25(um)

Lab File ID (Standard): J03333.D Heated Purge: (Y/N) N

		PHN		CRY		PRY	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12 HOUR STD		67600	11.65	49630	14.29	36470	15.75
UPPER LIMIT		135200	12.15	99260	14.79	72940	16.25
LOWER LIMIT		33800	11.15	24815	13.79	18235	15.25
LAB SAMPLE ID	CLIENT SAMPLE ID						
360-24563-2 DL2	OC-SB-427-12/14-XXX DL2	63251	11.65	35118	14.29	27469	15.75
360-24563-1 DL	OC-SB-427-0.0/1.0-XXX DL	105977	11.65	76260	14.29	373145*	15.74

OK DL

1023 NA

PHN = Phenanthrene-d10
CRY = Chrysene-d12
PRY = Perylene-d12

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.50 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270C LL

FORM VIII

GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Westfield Job No.: 360-24563-1

SDG No.: OCRI-14

Sample No.: CCV 360-49847/13 Date Analyzed: 10/04/2009 16:35

Instrument ID: Inst. J GC Column: Rtx-5ms ID: 0.25(um)

Lab File ID (Standard): J03305.D Heated Purge: (Y/N) N

		PHN		CRY		PRY	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12 HOUR STD		64859	11.85	28849	14.52	14568	15.99
UPPER LIMIT		129718	12.35	57698	15.02	29136	16.49
LOWER LIMIT		32430	11.35	14425	14.02	7284	15.49
LAB SAMPLE ID	CLIENT SAMPLE ID						
360-24563-4 DL2	OC-SB-427-8.0/10-DUP DL2	124662	11.85	87815*	14.52	445048*	15.96
360-24563-5 DL2	OC-SB-427-8.0/10-XXX DL2	123738	11.85	81027*	14.52	280730*	15.95
360-24563-6 DL	OC-SB-428-0.0/1.0-XXX DL	116095	11.85	74697*	14.51	65437*	15.99
360-24563-11 DL2	OC-SB-456-0.0/1.0-XXX DL2	128482	11.85	61559*	14.52	40547*	15.99

PHN = Phenanthrene-d10
CRY = Chrysene-d12
PRY = Perylene-d12

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.50 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270C LL

FORM VIII

GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Westfield Job No.: 360-24563-1

SDG No.: OCRI-14

Sample No.: CCV 360-49518/2 Date Analyzed: 09/25/2009 18:08

Instrument ID: Inst. J GC Column: Rtx-5ms ID: 0.25(um)

Lab File ID (Standard): J03127.D Heated Purge: (Y/N) N

		DCB		NPT		ANT	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12 HOUR STD		94952	8.41	195442	9.72	100076	11.51
UPPER LIMIT		189904	8.91	390884	10.22	200152	12.01
LOWER LIMIT		47476	7.91	97721	9.22	50038	11.01
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 360-49155/1-A		80058	8.41	201922	9.72	105732	11.52
LCS 360-49155/2-A		103699	8.41	201315	9.72	105217	11.52
LCSD 360-49155/3-A		112587	8.41	228122	9.72	115217	11.51
360-24563-1	OC-SB-427-0.0/1.0-XXX	89093	8.41	222611	9.72	117229	11.52
360-24563-2	OC-SB-427-12/14-XXX	79290	8.41	199361	9.72	106810	11.52
360-24563-4	OC-SB-427-8.0/10-DUP	89022	8.41	222547	9.72	116855	11.52
360-24563-5	OC-SB-427-8.0/10-XXX	86414	8.41	213534	9.72	106068	11.52
360-24563-5 MS	OC-SB-427-8.0/10-XXX MS	103382	8.41	205084	9.72	107325	11.52
360-24563-5 MSD	OC-SB-427-8.0/10-XXX MSD	119849	8.41	245157	9.73	131051	11.52
360-24563-6	OC-SB-428-0.0/1.0-XXX	69801	8.41	195262	9.72	106056	11.52
360-24563-9	OC-SB-428-8.0/10-XXX	86135	8.41	226575	9.73	58248	11.53
360-24563-11	OC-SB-456-0.0/1.0-XXX	149848	8.41	397221*	9.73	223985*	11.53
360-24563-12	OC-SB-456-16/18-XXX	68519	8.42	137417	9.73	109242	11.52
360-24563-13	OC-SB-456-7.0/9.0-DUP	65088	8.41	130098	9.73	105977	11.53
360-24563-15	OC-SB-457-0.0/1.0-XXX	65204	8.41	125688	9.73	110046	11.52
360-24563-16	OC-SB-457-8.0/10-XXX	61777	8.42	113272	9.73	110368	11.52

2032 2242

DCB = 1,4-Dichlorobenzene-d4
NPT = Naphthalene-d8
ANT = Acenaphthene-d10

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.50 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270C LL

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Westfield Job No.: 360-24563-1

SDG No.: OCRI-14

Sample No.: CCV 360-49518/2 Date Analyzed: 09/25/2009 18:08

Instrument ID: Inst. J GC Column: Rtx-5ms ID: 0.25(um)

Lab File ID (Standard): J03127.D Heated Purge: (Y/N) N

		PHN		CRY		PRY	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12 HOUR STD		160906	13.01	97869	15.81	60100	17.62
UPPER LIMIT		321812	13.51	195738	16.31	120200	18.12
LOWER LIMIT		80453	12.51	48935	15.31	30050	17.12
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 360-49155/1-A		167778	13.01	96779	15.81	62748	17.62
LCS 360-49155/2-A		166539	13.01	98533	15.81	56358	17.61
LCSD 360-49155/3-A		186475	13.01	113056	15.81	75340	17.62
360-24563-1	OC-SB-427-0.0/1.0-XXX	182903	13.01	74565	15.82	52929	17.63
360-24563-2	OC-SB-427-12/14-XXX	168155	13.02			73146	17.65
360-24563-4	OC-SB-427-8.0/10-DUP	166316	13.01	67531	15.83	21678*	17.66
360-24563-5	OC-SB-427-8.0/10-XXX	147025	13.01	98711	15.83	267001*	17.82
360-24563-5 MS	OC-SB-427-8.0/10-XXX MS	153058	13.01	86475	15.83	303988*	17.83
360-24563-5 MSD	OC-SB-427-8.0/10-XXX MSD	196512	13.02	114325	15.83	316789*	17.84
360-24563-6	OC-SB-428-0.0/1.0-XXX	166408	13.01	93175	15.82	45209	17.63
360-24563-9	OC-SB-428-8.0/10-XXX						
360-24563-11	OC-SB-456-0.0/1.0-XXX	380356*	13.02	184847	15.83	97573	17.65
360-24563-12	OC-SB-456-16/18-XXX	179379	13.02	83385	15.83	34480	17.64
360-24563-13	OC-SB-456-7.0/9.0-DUP	175514	13.02	96193	15.83	57118	17.64
360-24563-15	OC-SB-457-0.0/1.0-XXX	187909	13.02	91364	15.83	48834	17.65
360-24563-16	OC-SB-457-8.0/10-XXX	180126	13.02	85968	15.83	38708	17.65

36%

44%

12362

PHN = Phenanthrene-d10
CRY = Chrysene-d12
PRY = Perylene-d12

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.50 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270C LL

FORM IV
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Westfield Job No.: 360-24563-2

SDG No.: OCRI-14A

Lab File ID: B10564.D Lab Sample ID: MB 360-49041/1-A

Matrix: Solid Date Extracted: 09/16/2009 15:13

Instrument ID: Inst. B Date Analyzed: 09/26/2009 01:41

Level: (Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 360-49041/2-A	B10565.D	09/26/2009 02:09
	LCSD 360-49041/3-A	B10566.D	09/26/2009 02:37
OC-SB-427-17/19-XXX	360-24563-3	B10581.D	09/26/2009 09:29
OC-SB-428-23/25-XXX	360-24563-7	B10587.D	09/26/2009 12:15
OC-SB-427-17/19-XXX DL	360-24563-3 DL	J03284.D	10/02/2009 23:29
OC-SB-427-17/19-XXX RA	360-24563-3 RA	J03338.D	10/06/2009 00:46
OC-SB-427-17/19-XXX	360-24563-3		10/06/2009 00:46

✓ Surr OK
✓ tune OK.

✓ LCS
aniline 27/30 (LJ)
bis(2-ethylhexyl) phthalate 159/158 (J)

✓ IS
OC-SB-427-17/19-XXX chrysene-d12 209% (no action required) ~~LOOK UP ANALYTES~~

ICAL OK

✓ MB
ND Benzoic acid 62.2 311 5x
>+2RL as bis(2-ethylhexyl) phthalate 211 2110 10x
ND di-n-butyl-phthalate 72.7 727 10x
TIC unknown (7.89)
vanillin
octadecane
eicosane
1-naphthalene propanol, alpha.-ethenyl-
benzoic acid, 2-propenyl ester
tricosane
Squalene

CCAL OK

FORM IV 8270C LL

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24563-2

SDG No.: OCRI-14A

Matrix: Solid Level: Low Lab File ID: B10565.D

Lab ID: LCS 360-49041/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
1,1'-Biphenyl	333	286	86	40-140	
1,2,4,5-Tetrachlorobenzene	333	221	66	40-140	
1,2,4-Trichlorobenzene	333	228	68	40-140	
1,2-Dichlorobenzene	333	195	58	40-140	
1,3-Dichlorobenzene	333	194	58	40-140	
1,4-Dichlorobenzene	333	194	58	40-140	
1-Methylnaphthalene	333	225	67	40-140	
2,2'-oxybis[1-chloropropane]	333	210	63	40-140	
2,3,4,6-Tetrachlorophenol	333	241	72	40-140	
2,4,5-Trichlorophenol	333	262	79	30-130	
2,4,6-Trichlorophenol	333	300	90	30-130	
2,4-Dichlorophenol	333	264	79	30-130	
2,4-Dimethylphenol	333	248	74	30-130	
2,4-Dinitrophenol	333	167	50	30-130	
2,4-Dinitrotoluene	333	252	76	40-140	
2,6-Dinitrotoluene	333	270	81	40-140	
2-Chloronaphthalene	333	211	63	40-140	
2-Chlorophenol	333	218	65	30-130	
2-Methylnaphthalene	333	208	63	40-140	
2-Methylphenol	333	235	71	30-130	
2-Nitroaniline	333	307	92	40-140	
2-Nitrophenol	333	257	77	30-130	
3 & 4 Methylphenol	333	249	75	30-130	
3,3'-Dichlorobenzidine	333	288	86	40-140	
3-Nitroaniline	333	269	81	40-140	
4,6-Dinitro-2-methylphenol	333	234	70	30-130	
4-Bromophenyl phenyl ether	333	288	87	40-140	
4-Chloro-3-methylphenol	333	278	84	30-130	
4-Chloroaniline	333	173	52	40-140	
4-Chlorophenyl phenyl ether	333	268	80	40-140	
4-Nitroaniline	333	273	82	40-140	
4-Nitrophenol	333	293	88	30-130	
Acenaphthene	333	299	90	40-140	
Acenaphthylene	333	264	79	40-140	
Acetophenone	333	230	69	40-140	
Aniline	333	89.9	27	40-140	*
Anthracene	333	340	102	40-140	
Atrazine	333	379	114	40-140	
Azobenzene	333	297	89	40-140	
Benzaldehyde	333	257	77	40-140	
Benzo[a]anthracene	333	360	108	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

aniline 27/30

bis(2-ethylhexyl)phthalate 159/158

FORM III 8270C LL

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24563-2

SDG No.: OCRI-14A

Matrix: Solid Level: Low Lab File ID: B10565.D

Lab ID: LCS 360-49041/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
Benzo[a]pyrene	333	325	98	40-140	
Benzo[b]fluoranthene	333	317	95	40-140	
Benzo[g,h,i]perylene	333	348	104	40-140	
Benzo[k]fluoranthene	333	343	103	40-140	
Benzoic acid	333	143 J	43	30-130	
Benzophenone	333	329	99	40-140	
Benzyl alcohol	333	244	73	30-130	
Bis(2-chloroethoxy)methane	333	212	64	40-140	
Bis(2-chloroethyl)ether	333	202	61	40-140	
Bis(2-ethylhexyl) phthalate	333	530	159	40-140	*
Butyl benzyl phthalate	333	321	96	40-140	
Caprolactam	333	299	90	40-140	
Carbazole	333	326	98	40-140	
Chrysene	333	339	102	40-140	
Dibenz(a,h)anthracene	333	345	104	40-140	
Dibenzofuran	333	262	79	40-140	
Diethyl phthalate	333	285	86	40-140	
Dimethyl phthalate	333	280	84	40-140	
Di-n-butyl phthalate	333	355	107	40-140	
Di-n-octyl phthalate	333	271	81	40-140	
Diphenyl oxide	333	240	72	40-140	
Fluoranthene	333	320	96	40-140	
Fluorene	333	327	98	40-140	
Hexachlorobenzene	333	290	87	40-140	
Hexachlorobutadiene	333	202	61	40-140	
Hexachlorocyclopentadiene	333	201	60	40-140	
Hexachloroethane	333	205	61	40-140	
Indeno[1,2,3-cd]pyrene	333	351	105	40-140	
Isophorone	333	198	59	40-140	
Naphthalene	333	204	61	40-140	
Nitrobenzene	333	211	63	40-140	
N-Nitrosodimethylamine	333	232	70	40-140	
N-Nitrosodi-n-propylamine	333	233	70	40-140	
N-Nitrosodiphenylamine	333	211	63	40-140	
Pentachlorophenol	333	271	81	30-130	
Phenanthrene	333	316	95	40-140	
Phenol	333	232	69	30-130	
Pyrene	333	307	92	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24563-2

SDG No.: OCRI-14A

Matrix: Solid Level: Low Lab File ID: B10566.D

Lab ID: LCSD 360-49041/3-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCSD CONCENTRATION (ug/Kg)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1'-Biphenyl	333	297	89	4	30	40-140	
1,2,4,5-Tetrachlorobenzene	333	239	72	8	30	40-140	
1,2,4-Trichlorobenzene	333	249	75	9	30	40-140	
1,2-Dichlorobenzene	333	210	63	8	30	40-140	
1,3-Dichlorobenzene	333	208	62	7	30	40-140	
1,4-Dichlorobenzene	333	207	62	7	30	40-140	
1-Methylnaphthalene	333	228	68	2	30	40-140	
2,2'-oxybis[1-chloropropane]	333	229	69	8	30	40-140	
2,3,4,6-Tetrachlorophenol	333	255	77	5	30	40-140	
2,4,5-Trichlorophenol	333	301	90	14	30	30-130	
2,4,6-Trichlorophenol	333	331	99	10	30	30-130	
2,4-Dichlorophenol	333	294	88	11	30	30-130	
2,4-Dimethylphenol	333	272	82	9	30	30-130	
2,4-Dinitrophenol	333	197	59	17	30	30-130	
2,4-Dinitrotoluene	333	280	84	10	30	40-140	
2,6-Dinitrotoluene	333	305	91	12	30	40-140	
2-Chloronaphthalene	333	233	70	10	30	40-140	
2-Chlorophenol	333	239	72	9	30	30-130	
2-Methylnaphthalene	333	229	69	9	30	40-140	
2-Methylphenol	333	260	78	10	30	30-130	
2-Nitroaniline	333	360	108	16	30	40-140	
2-Nitrophenol	333	281	84	9	30	30-130	
3 & 4 Methylphenol	333	275	82	10	30	30-130	
3,3'-Dichlorobenzidine	333	323	97	12	30	40-140	
3-Nitroaniline	333	298	89	10	30	40-140	
4,6-Dinitro-2-methylphenol	333	264	79	12	30	30-130	
4-Bromophenyl phenyl ether	333	322	97	11	30	40-140	
4-Chloro-3-methylphenol	333	311	93	11	30	30-130	
4-Chloroaniline	333	205	62	17	30	40-140	
4-Chlorophenyl phenyl ether	333	304	91	13	30	40-140	
4-Nitroaniline	333	307	92	12	30	40-140	
4-Nitrophenol	333	340	102	15	30	30-130	
Acenaphthene	333	336	101	12	30	40-140	
Acenaphthylene	333	293	88	11	30	40-140	
Acetophenone	333	251	75	9	30	40-140	
Aniline	333	99.5	30	10	30	40-140	*
Anthracene	333	386	116	13	30	40-140	
Atrazine	333	392	118	3	30	40-140	
Azobenzene	333	327	98	10	30	40-140	
Benzaldehyde	333	257	77	0	30	40-140	
Benzo[a]anthracene	333	390	117	8	30	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24563-2

SDG No.: OCRI-14A

Matrix: Solid Level: Low Lab File ID: B10566.D

Lab ID: LCSD 360-49041/3-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCSD CONCENTRATION (ug/Kg)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Benzo[a]pyrene	333	357	107	9	30	40-140	
Benzo[b]fluoranthene	333	345	104	9	30	40-140	
Benzo[g,h,i]perylene	333	390	117	12	30	40-140	
Benzo[k]fluoranthene	333	382	115	11	30	40-140	
Benzoic acid	333	158 J	47	10	30	30-130	
Benzophenone	333	344	103	4	30	40-140	
Benzyl alcohol	333	264	79	8	30	30-130	
Bis(2-chloroethoxy)methane	333	234	70	10	30	40-140	
Bis(2-chloroethyl)ether	333	219	66	8	30	40-140	
Bis(2-ethylhexyl) phthalate	333	528	158	0	30	40-140	*
Butyl benzyl phthalate	333	344	103	7	30	40-140	
Caprolactam	333	314	94	5	30	40-140	
Carbazole	333	368	110	12	30	40-140	
Chrysene	333	368	110	8	30	40-140	
Dibenz(a,h)anthracene	333	390	117	12	30	40-140	
Dibenzofuran	333	294	88	11	30	40-140	
Diethyl phthalate	333	323	97	12	30	40-140	
Dimethyl phthalate	333	317	95	13	30	40-140	
Di-n-butyl phthalate	333	390	117	9	30	40-140	
Di-n-octyl phthalate	333	285	85	5	30	40-140	
Diphenyl oxide	333	244	73	2	30	40-140	
Fluoranthene	333	361	108	12	30	40-140	
Fluorene	333	367	110	12	30	40-140	
Hexachlorobenzene	333	324	97	11	30	40-140	
Hexachlorobutadiene	333	219	66	8	30	40-140	
Hexachlorocyclopentadiene	333	225	67	11	30	40-140	
Hexachloroethane	333	219	66	7	30	40-140	
Indeno[1,2,3-cd]pyrene	333	390	117	11	30	40-140	
Isophorone	333	219	66	10	30	40-140	
Naphthalene	333	222	67	9	30	40-140	
Nitrobenzene	333	229	69	8	30	40-140	
N-Nitrosodimethylamine	333	249	75	7	30	40-140	
N-Nitrosodi-n-propylamine	333	256	77	9	30	40-140	
N-Nitrosodiphenylamine	333	238	71	12	30	40-140	
Pentachlorophenol	333	312	94	14	30	30-130	
Phenanthrene	333	353	106	11	30	40-140	
Phenol	333	251	75	8	30	30-130	
Pyrene	333	326	98	6	30	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Westfield Job No.: 360-24563-2

SDG No.: OCRI-14A

Sample No.: CCV 360-49517/25 Date Analyzed: 09/26/2009 03:32

Instrument ID: Inst. B GC Column: Rtx-5ms ID: 0.25(um)

Lab File ID (Standard): B10568.D Heated Purge: (Y/N) N

		PHN		CRY		PRY	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12 HOUR STD		650326	11.13	495148	14.04	343438	16.53
UPPER LIMIT		1300652	11.63	990296	14.54	686876	17.03
LOWER LIMIT		325163	10.63	247574	13.54	171719	16.03
LAB SAMPLE ID	CLIENT SAMPLE ID						
360-24563-3	OC-SB-427-17/19-XXX	1102713	11.14	1029714*	14.07	553197	16.55
360-24563-7	OC-SB-428-23/25-XXX	1021308	11.15	583041	14.07	373649	16.56

PHN = Phenanthrene-d10
CRY = Chrysene-d12
PRY = Perylene-d12

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.50 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270C LL

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Westfield Job No.: 360-24563-2

SDG No.: OCRI-14A

Lab Sample ID: CCV 360-49831/16 Calibration Date: 10/02/2009 22:56

Instrument ID: Inst. J Calib Start Date: 10/02/2009 16:58

GC Column: Rtx-5ms ID: 0.25(um) Calib End Date: 10/02/2009 21:18

Lab File ID: J03283.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Pyridine	Ave	0.6496	0.5734		4410	5000	-11.7	30.0
N-Nitrosodimethylamine	Ave	0.3655	0.3327		4550	5000	-9.0	30.0
Benzaldehyde	Ave	0.2941	0.2635		4480	5000	-10.4	30.0
Phenol	Ave	0.9496	0.8605		4530	5000	-9.4	20.0
Aniline	Ave	1.027	0.9480		4620	5000	-7.7	30.0
Bis(2-chloroethyl)ether	Ave	0.7313	0.6356		4350	5000	-13.1	30.0
2-Chlorophenol	Ave	0.7276	0.6390		4390	5000	-12.2	30.0
1,4-Dichlorobenzene	Ave	0.8557	0.7217		4220	5000	-15.7	20.0
1,3-Dichlorobenzene	Ave	0.8680	0.7386		4250	5000	-14.9	30.0
Benzyl alcohol	Ave	0.6190	0.5662		4570	5000	-8.5	30.0
1,2-Dichlorobenzene	Ave	0.7984	0.6844		4290	5000	-14.3	30.0
2-Methylphenol	Ave	0.6342	0.5832		4600	5000	-8.0	30.0
2,2'-oxybis[1-chloropropane]	Ave	0.6914	0.6069		4390	5000	-12.2	30.0
3 & 4 Methylphenol	Ave	0.6584	0.6088		4620	5000	-7.5	30.0
Acetophenone	Ave	0.9691	0.8855		4570	5000	-8.6	30.0
N-Nitrosodi-n-propylamine	Ave	0.5537	0.4996	0.0500	4510	5000	-9.8	30.0
Hexachloroethane	Ave	0.3313	0.2942		4440	5000	-11.2	30.0
Nitrobenzene	Ave	0.3120	0.2921		4680	5000	-6.4	30.0
Isophorone	Ave	0.5115	0.4958		4850	5000	-3.1	30.0
2-Nitrophenol	Ave	0.1098	0.1218		5540	5000	10.9	20.0
2,4-Dimethylphenol	Ave	0.2734	0.2498		4570	5000	-8.6	30.0
Benzoic acid	Lin1		0.0476		4050	5000	-19.0	30.0
Bis(2-chloroethoxy)methane	Qua		0.2911		5250	5000	5.0	30.0
2,4-Dichlorophenol	Qua		0.1840		5080	5000	1.6	20.0
1,2,4-Trichlorobenzene	Qua		0.2217		5160	5000	3.2	30.0
Alpha-Terpineol	Qua		0.1821		5060	5000	1.3	30.0
Naphthalene	Qua		0.7537		5210	5000	4.2	30.0
4-Chloroaniline	Ave	0.2875	0.2785		4840	5000	-3.1	30.0
Hexachlorobutadiene	Qua		0.1242		4970	5000	-0.6	20.0
Caprolactam	Ave	0.0548	0.0631		5760	5000	15.2	30.0
4-Chloro-3-methylphenol	Ave	0.2048	0.2130		5200	5000	4.0	20.0
2-Methylnaphthalene	Lin		0.4855		5600	5000	11.9	30.0
1-Methylnaphthalene	Qua		0.4746		5210	5000	4.2	30.0
1,2,4,5-Tetrachlorobenzene	Qua		0.1889		5150	5000	2.9	30.0
Hexachlorocyclopentadiene	Lin1		0.2255	0.0500	4740	5000	-5.2	30.0
2,4,6-Trichlorophenol	Lin1		0.3217		4810	5000	-3.7	20.0
2,4,5-Trichlorophenol	Lin2		0.3199		5020	5000	0.3	30.0
1,1'-Biphenyl	Ave	1.492	1.462		4900	5000	-2.0	30.0
2-Chloronaphthalene	Ave	1.322	1.312		4960	5000	-0.7	30.0
Phenyl ether	Qua		0.2986		5130	5000	2.7	30.0
2-Nitroaniline	Lin1		0.3350		4960	5000	-0.8	30.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Westfield Job No.: 360-24563-2

SDG No.: OCRI-14A

Lab Sample ID: CCV 360-49831/16 Calibration Date: 10/02/2009 22:56

Instrument ID: Inst. J Calib Start Date: 10/02/2009 16:58

GC Column: Rtx-5ms ID: 0.25(um) Calib End Date: 10/02/2009 21:18

Lab File ID: J03283.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dimethyl phthalate	Ave	1.349	1.371		5080	5000	1.7	30.0
2,6-Dinitrotoluene	Lin2		0.2978		5160	5000	3.1	30.0
Acenaphthylene	Ave	1.755	1.825		5200	5000	3.9	30.0
3-Nitroaniline	Lin1		0.2637		5260	5000	5.3	30.0
Acenaphthene	Ave	1.197	1.140		4760	5000	-4.7	20.0
2,4-Dinitrophenol	Lin		0.0647	0.0500	4590	5000	-8.2	30.0
4-Nitrophenol	Lin1		0.1470	0.0500	4960	5000	-0.9	30.0
Dibenzofuran	Ave	1.540	1.538		4990	5000	-0.2	30.0
2,4-Dinitrotoluene	Lin1		0.3553		4920	5000	-1.5	30.0
2,3,4,6-Tetrachlorophenol	Lin1		0.2323		4760	5000	-4.8	30.0
Diethyl phthalate	Ave	1.372	1.410		5140	5000	2.8	30.0
4-Chlorophenyl phenyl ether	Ave	0.5963	0.5977		5010	5000	0.2	30.0
Fluorene	Ave	1.207	1.241		5140	5000	2.8	30.0
4-Nitroaniline	Lin1		0.1986		5670	5000	13.4	30.0
4,6-Dinitro-2-methylphenol	Lin		0.0815		4620	5000	-7.6	30.0
Diphenylamine	Ave	0.6837	0.7224		5280	5000	5.7	30.0
N-Nitrosodiphenylamine	Ave	0.6837	0.7224		5280	5000	5.7	20.0
1,2-Diphenylhydrazine	Ave	0.9719	1.028		5290	5000	5.8	30.0
Azobenzene	Ave	0.9719	1.028		5290	5000	5.8	30.0
Benzophenone	Ave	0.7090	0.7457		5260	5000	5.2	30.0
4-Bromophenyl phenyl ether	Ave	0.2328	0.2256		4840	5000	-3.1	30.0
Hexachlorobenzene	Ave	0.2568	0.2397		4670	5000	-6.6	30.0
Atrazine	Ave	0.1824	0.1989		5450	5000	9.0	30.0
Pentachlorophenol	Lin1		0.0876		4720	5000	-5.5	20.0
Pentachloronitrobenzene	Lin2		0.1048		5290	5000	5.9	30.0
Phenanthrene	Ave	1.119	1.104		4930	5000	-1.3	30.0
Anthracene	Ave	0.9511	1.046		5500	5000	10.0	30.0
Carbazole	Ave	0.7202	0.8753		6080	5000	21.5	30.0
Di-n-butyl phthalate	Ave	1.318	1.401		5310	5000	6.3	30.0
Fluoranthene	Ave	0.8746	0.9596		5490	5000	9.7	20.0
Benzidine	Ave	0.1188	0.1703		7170	5000	43.4*	30.0
Pyrene	Ave	1.720	1.430		4160	5000	-16.9	30.0
Butyl benzyl phthalate	Ave	0.6750	0.6459		4780	5000	-4.3	30.0
3,3'-Dichlorobenzidine	Lin2		0.2784		5410	5000	8.3	30.0
Bis(2-ethylhexyl) phthalate	Qua		0.8639		4350	5000	-13.0	30.0
Benzo[a]anthracene	Ave	0.9374	0.9838		5250	5000	5.0	30.0
Chrysene	Ave	0.9726	0.9329		4800	5000	-4.1	30.0
Di-n-octyl phthalate	Qua		1.466		4230	5000	-15.3	20.0
Benzo[b]fluoranthene	Lin1		1.280		4670	5000	-6.6	30.0
Benzo[k]fluoranthene	Ave	1.429	1.404		4910	5000	-1.8	30.0
Benzo[a]pyrene	Ave	0.9555	0.9932		5200	5000	3.9	20.0

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Westfield | Job No.: 360-24563-2

SDG No.: OCRI-14A

Client Sample ID: | Lab Sample ID: MB 360-49041/1-A

Matrix: Solid | Lab File ID: B10564.D

Analysis Method: 8270C LL | Date Collected:

Extract. Method: 3546 | Date Extracted: 09/16/2009 15:13

Sample wt/vol: 30.00(g) | Date Analyzed: 09/26/2009 01:41

Con. Extract Vol.: 1.0(mL) | Dilution Factor: 1

Injection Volume: 1.0(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup: (Y/N) N

Analysis Batch No.: 49511 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
98-86-2	Acetophenone	ND		33	10
62-53-3	Aniline	ND		33	10
120-12-7	Anthracene	ND		33	10
1912-24-9	Atrazine	ND		33	10
103-33-3	Azobenzene	ND		33	10
100-52-7	Benzaldehyde	ND		33	10
56-55-3	Benzo[a]anthracene	ND		33	10
50-32-8	Benzo[a]pyrene	ND		33	10
205-99-2	Benzo[b]fluoranthene	ND		33	10
191-24-2	Benzo[g,h,i]perylene	ND		33	10
207-08-9	Benzo[k]fluoranthene	ND		33	10
65-85-0	Benzoic acid	62.2	J	170	15
119-61-9	Benzophenone	ND		33	10
100-51-6	Benzyl alcohol	ND		67	28
111-91-1	Bis(2-chloroethoxy)methane	ND		33	10
111-44-4	Bis(2-chloroethyl)ether	ND		33	10
117-81-7	Bis(2-ethylhexyl) phthalate	211		33	10
85-68-7	Butyl benzyl phthalate	ND		33	10
105-60-2	Caprolactam	ND		33	10
86-74-8	Carbazole	ND		33	10
218-01-9	Chrysene	ND		33	10
53-70-3	Dibenz(a,h)anthracene	ND		33	10
132-64-9	Dibenzofuran	ND		33	10
84-66-2	Diethyl phthalate	ND		33	10
131-11-3	Dimethyl phthalate	ND		33	10
84-74-2	Di-n-butyl phthalate	72.7		33	29
117-84-0	Di-n-octyl phthalate	ND		33	17
101-84-8	Diphenyl oxide	ND		33	10
122-39-4	Diphenylamine	ND		33	10
206-44-0	Fluoranthene	ND		33	10
86-73-7	Fluorene	ND		33	10
118-74-1	Hexachlorobenzene	ND		33	10
87-68-3	Hexachlorobutadiene	ND		33	10
77-47-4	Hexachlorocyclopentadiene	ND		67	10

SEMIVOLATILE ORGANICS

REGION I VALIDATION CHECKLIST for
OLIN CHEMICAL SUPERFUND SITE
Criteria and Qualifications: REGION I Organics Guideline (1996)

TIER I /(II)/ III (circle one)

SITE: Olin Chemical Superfund Site Project #: 6/09/0006.12 SDG #: OCRI-15

LAB #: _TAL-Westfield___

Sample IDs: Attach tracking sheet and/or sample listing.

This checklist is designed to be used with USEPA Region I Validation Guidelines Part II (12/1996). During Level III validation, calculation and transcription checks are completed for instrument tuning, surrogates, target compounds, spike recoveries, calibration data, and internal standards as specified in the guideline. These checks are documented on attached validation notes.

YES NO NA	
Data completeness ☑ ☐ ☐ All data summaries, QC forms and raw data available from hard copy or electronic data package ☑ ☐ ☐ Data summaries match EDD	Contact lab if missing data. Lab to respond with 24 hours.
Holding Times and Preservation ☑ ☐ ☐ Hold times met (Waters – Extract within 7 days, analyze within 40 days. Soils – extract within 14 days, analyze within 40 days)	
Instrument Performance Check (Tune) ☑ ☐ ☐ Tune available for each 12-hour period samples were analyzed ☑ ☐ ☐ Appropriate number of significant figures reported (at least 2) ☑ ☐ ☐ Mass/Charge list (m/z) criteria met	
Initial Calibration ☑ ☐ ☐ %RSD less than or equal to 30% ☑ ☐ ☐ RRF greater than or equal to 0.05	
Continuing Calibration ☑ ☐ ☐ %D less than or equal to 25% ☑ ☐ ☐ RRF greater than or equal to 0.05.	
Blank Contamination ☒ ☐ ☐ Method blank contamination ☒ ☐ ☐ Equipment/Rinseate blank contamination	Evaluate all blanks for contamination. Highest contaminant level used for action level. See below.
Surrogate Recoveries	

SEMIVOLATILE ORGANICS

REGION I VALIDATION CHECKLIST for OLIN CHEMICAL SUPERFUND SITE
Criteria and Qualifications: REGION I Organics Guideline (1996)

TIER I / (II) / III (circle one)

☑ ☐ ☐ Surrogates percent recovery criteria met: Soil = (base/neutral 30%-130%, acid 30%-130%) Water = (base/neutral 30%-130%, acid 15%-110%)	
Matrix Spikes and Laboratory Control Samples	
☐ ☒ ☐ MS/MSD percent recovery criteria met Soil and Water = (base/neutral 40%-140%, acid 30%-130%)	
☐ ☒ ☐ MS/MSD RPD criteria met (soils <50%, water <30%)	See below.
☐ ☒ ☐ LCS percent recovery criteria met soil/water (base 40%-140%, acid 30%-130%)	
Field Duplicates	
☐ ☒ ☐ RPD criteria met (soils <50%, water <30%)	
Internal Standard	
☐ ☒ ☐ Area counts within -50 to +100 percent of calib. std.	See below.
☑ ☐ ☐ Retention Time within 30 seconds of calib. std.	
Target Compounds	
☑ ☐ ☐ Reviewed narrative for anomalies	
Tentatively Identified Compounds (TICs)	
☐ ☑ ☐ TCL compounds reported as TICs	

Validator's Signature: _____

Date: 3/11/10

Reference:

MACTEC, Quality Assurance Project Plan for Remedial Investigation/Feasibility Study – Olin Chemical Superfund Site, Wilmington Property, 51 Eames Street, Wilmington, MA", MACTEC Engineering and Consulting. Draft .October 2008.

SAMPLE SUMMARY

Client: Olin Corporation

Job Number: 360-24582-1
Sdg Number: OCRI-15

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
360-24582-1	OC-SB-457-28/30-XXX	Solid	09/14/2009 1130	09/14/2009 1750
360-24582-2	OC-TBK-018	Solid	09/14/2009 1415	09/14/2009 1750
360-24582-3	OC-SB-457-28/30-XXX	Solid	09/14/2009 1130	09/14/2009 1750
360-24582-4FB	OC-EBK-010	Water	09/14/2009 1300	09/14/2009 1750
360-24582-5	OC-SS-400-0.0/1.0-XXX	Solid	09/14/2009 1440	09/15/2009 1640
360-24582-6	OC-SS-401-0.1/1.0-XXX	Solid	09/14/2009 1505	09/15/2009 1640
360-24582-7	OC-SS-402-0.0/1.0-XXX	Solid	09/14/2009 1530	09/15/2009 1640
360-24582-8	OC-SS-403-0.0/1.0-XXX	Solid	09/14/2009 1550	09/15/2009 1640
360-24582-9	OC-SS-404-0.0/1.0-XXX	Solid	09/14/2009 1610	09/15/2009 1640
360-24582-10	OC-SS-405-0.0/1.0-XXX	Solid	09/14/2009 1630	09/15/2009 1640
360-24582-11	OC-SS-406-0.0/1.0-XXX	Solid	09/15/2009 0835	09/15/2009 1640
360-24582-12	OC-SS-407-0.0/1.0-XXX	Solid	09/15/2009 0905	09/15/2009 1640
360-24582-13	OC-SS-408-0.0/1.0-XXX	Solid	09/15/2009 0930	09/15/2009 1640
360-24582-14	OC-SS-409-0.0/1.0-XXX	Solid	09/15/2009 1000	09/15/2009 1640
360-24582-15	OC-SS-410-0.0/1.0-XXX	Solid	09/15/2009 1015	09/15/2009 1640
360-24582-16	OC-SS-411-0.0/1.0-XXX	Solid	09/15/2009 1055	09/15/2009 1640
360-24582-17	OC-SS-412-0.0/1.0-XXX	Solid	09/15/2009 1120	09/15/2009 1640
360-24582-18	OC-SS-413-0.0/1.0-XXX	Solid	09/15/2009 1130	09/15/2009 1640
360-24582-19	OC-SS-414-0.0/1.0-XXX	Solid	09/15/2009 1155	09/15/2009 1640
360-24582-20	OC-SS-415-0.0/1.0-XXX	Solid	09/15/2009 1215	09/15/2009 1640
360-24582-21	OC-SS-416-0.0/1.0-DUP	Solid	09/15/2009 1240	09/15/2009 1640
360-24582-22	OC-SS-416-0.0/1.0-XXX	Solid	09/15/2009 1240	09/15/2009 1640
360-24582-22MS	OC-SS-416-0.0/1.0-XMS	Solid	09/15/2009 1240	09/15/2009 1640
360-24582-22MSD	OC-SS-416-0.0/1.0-MSD	Solid	09/15/2009 1240	09/15/2009 1640
360-24582-23TB	OC-TBK-019	Solid	09/15/2009 1200	09/15/2009 1640
360-24582-24	OC-SS-416-0.0/1.0-DUP	Solid	09/15/2009 1240	09/15/2009 1640
360-24582-25	OC-SS-416-0.0/1.0-XXX	Solid	09/15/2009 1240	09/15/2009 1640
360-24582-25MS	OC-SS-416-0.0/1.0-XMS	Solid	09/15/2009 1240	09/15/2009 1640

Form I's updated.

3/11/10

Client: Olin Corporation

Job Number: 360-24582-1
Sdg Number: OCRI-15

Client Sample ID: OC-SB-457-28/30-XXX

Lab Sample ID: 360-24582-1
Client Matrix: Solid % Moisture: 22.0

Date Sampled: 09/14/2009 1130
Date Received: 09/14/2009 1750

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49520	Instrument ID: Inst. J
Preparation:	3550B	Prep Batch: 360-49302	Lab File ID: J03162.D
Dilution:	1.0		Initial Weight/Volume: 100.88 g
Date Analyzed:	09/26/2009 1829		Final Weight/Volume: 1.0 mL
Date Prepared:	09/22/2009 1155		Injection Volume: 1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodimethylamine		ND		1.5	6.4

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	73		30 - 130
2-Fluorobiphenyl	59		30 - 130
2-Fluorophenol	57		30 - 130
Nitrobenzene-d5	53		30 - 130
Phenol-d5	65		30 - 130
Terphenyl-d14	95		30 - 130

Client: Olin Corporation

Job Number: 360-24582-1
Sdg Number: OCRI-15

Client Sample ID: **OC-SB-457-28/30-XXX**

Lab Sample ID: 360-24582-1
Client Matrix: Solid % Moisture: 22.0

Date Sampled: 09/14/2009 1130
Date Received: 09/14/2009 1750

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49648		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-49246		Lab File ID:	J03204.D
Dilution:	1.0			Initial Weight/Volume:	30.34 g
Date Analyzed:	09/29/2009 0137			Final Weight/Volume:	1.0 mL
Date Prepared:	09/21/2009 1530			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		13	42
1,2,4,5-Tetrachlorobenzene		ND		13	42
1,2,4-Trichlorobenzene		ND		13	42
1,2-Dichlorobenzene		ND		13	42
1,3-Dichlorobenzene		ND		13	42
1,4-Dichlorobenzene		ND		13	42
1-Methylnaphthalene		ND		13	42
2,2'-oxybis[1-chloropropane]		ND		13	42
2,3,4,6-Tetrachlorophenol		ND		13	42
2,4,5-Trichlorophenol		ND		13	42
2,4,6-Trichlorophenol		ND		13	42
2,4-Dichlorophenol		ND		13	42
2,4-Dimethylphenol		ND		17	42
2,4-Dinitrophenol		ND		13	42
2,4-Dinitrotoluene		ND		13	42
2,6-Dinitrotoluene		ND		13	42
2-Chloronaphthalene		ND		13	42
2-Chlorophenol		ND		13	42
2-Methylnaphthalene		ND		13	42
2-Methylphenol		ND		25	42
2-Nitroaniline		ND		13	210
2-Nitrophenol		ND		13	42
3 & 4 Methylphenol		ND		13	42
3,3'-Dichlorobenzidine		ND		13	85
3-Nitroaniline		ND		13	210
4,6-Dinitro-2-methylphenol		ND		13	210
4-Bromophenyl phenyl ether		ND		13	42
4-Chloro-3-methylphenol		ND		13	85
4-Chloroaniline		ND		13	85
4-Chlorophenyl phenyl ether		ND		13	42
4-Nitroaniline		ND		13	210
4-Nitrophenol		ND		13	210
Acenaphthene		ND		13	42
Acenaphthylene		ND		13	42
Acetophenone		ND		13	42
Aniline		ND	J	13	42
Anthracene		ND		13	42
Atrazine		ND		13	42
Azobenzene		ND		13	42
Benzaldehyde		ND		13	42
Benzo[a]anthracene		ND		13	42
Benzo[a]pyrene		ND		13	42
Benzo[b]fluoranthene		ND		13	42
Benzo[g,h,i]perylene		ND		13	42
Benzo[k]fluoranthene		ND		13	42
Benzoic acid		ND		19	210

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Client: Olin Corporation

Job Number: 360-24582-1
Sdg Number: OCRI-15

Client Sample ID: **OC-SB-457-28/30-XXX**

Lab Sample ID: 360-24582-1
Client Matrix: Solid % Moisture: 22.0

Date Sampled: 09/14/2009 1130
Date Received: 09/14/2009 1750

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49648	Instrument ID: Inst. J
Preparation:	3546	Prep Batch: 360-49246	Lab File ID: J03204.D
Dilution:	1.0		Initial Weight/Volume: 30.34 g
Date Analyzed:	09/29/2009 0137		Final Weight/Volume: 1.0 mL
Date Prepared:	09/21/2009 1530		Injection Volume: 1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		13	42
Benzyl alcohol		ND		36	85
Bis(2-chloroethoxy)methane		ND		13	42
Bis(2-chloroethyl)ether		ND		13	42
Bis(2-ethylhexyl) phthalate		75 U	B	13	42
Butyl benzyl phthalate		ND		13	42
Caprolactam		ND		13	42
Carbazole		ND		13	42
Chrysene		ND		13	42
Dibenz(a,h)anthracene		ND		13	42
Dibenzofuran		ND		13	42
Diethyl phthalate		ND		13	42
Dimethyl phthalate		ND		13	42
Di-n-butyl phthalate		ND		37	42
Di-n-octyl phthalate		ND		21	42
Diphenyl oxide		ND		13	42
Diphenylamine		ND		13	42
Fluoranthene		ND		13	42
Fluorene		ND		13	42
Hexachlorobenzene		ND		13	42
Hexachlorobutadiene		ND		13	42
Hexachlorocyclopentadiene		ND		13	85
Hexachloroethane		ND		13	42
Indeno[1,2,3-cd]pyrene		ND		13	42
Isophorone		ND		13	42
Naphthalene		ND		13	100
Nitrobenzene		ND		13	42
N-Nitrosodimethylamine		ND		15	42
N-Nitrosodi-n-propylamine		ND		13	42
N-Nitrosodiphenylamine		ND		13	42
Pentachlorophenol		ND		13	42
Phenanthrene		ND		13	51
Phenol		ND		13	42
Pyrene		ND		13	42

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	68		30 - 130
2-Fluorophenol	64		30 - 130
2-Fluorobiphenyl	58		30 - 130
Nitrobenzene-d5	64		30 - 130
Phenol-d5	58		30 - 130
Terphenyl-d14	63		30 - 130

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Client: Olin Corporation

Job Number: 360-24582-1
Sdg Number: OCRI-15

Client Sample ID: OC-SB-457-28/30-XXX

Lab Sample ID: 360-24582-1
Client Matrix: Solid % Moisture: 22.0

Date Sampled: 09/14/2009 1130
Date Received: 09/14/2009 1750

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49648		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-49246		Lab File ID:	J03204.D
Dilution:	1.0			Initial Weight/Volume:	30.34 g
Date Analyzed:	09/29/2009 0137			Final Weight/Volume:	1.0 mL
Date Prepared:	09/21/2009 1530			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 7

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
763-93-9	3-Hexen-2-one	5.71	15	T J N
104-76-7	1-Hexanol, 2-ethyl-	8.09	18	T J N
110-20-3	Hydrazinecarboxamide, 2-(1-methylethylid	9.89	11	T J N
615-58-7	Phenol, 2,4-dibromo-	10.54	8.7	T J N
3910-35-8	1H-Indene, 2,3-dihydro-1,1,3-trimethyl-3	12.24	15	T J N
22768-22-5	2,4-Diphenyl-4-methyl-2(E)-pentene	12.72	9.2	T J N
7683-64-9	Squalene	16.19	140	T J N

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Client: Olin Corporation

Job Number: 360-24582-1
Sdg Number: OCRI-15

Client Sample ID: **OC-EBK-010**

Lab Sample ID: 360-24582-4FB
Client Matrix: Water

Date Sampled: 09/14/2009 1300
Date Received: 09/14/2009 1750

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49511	Instrument ID: Inst. B
Preparation:	3510C	Prep Batch: 360-48980	Lab File ID: B10563.D
Dilution:	1.0		Initial Weight/Volume: 1000 mL
Date Analyzed:	09/26/2009 0114		Final Weight/Volume: 1.0 mL
Date Prepared:	09/15/2009 1456		Injection Volume: 1.0 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1'-Biphenyl	ND		0.50	5.0
1,2,4,5-Tetrachlorobenzene	ND		0.50	5.0
1-Methylnaphthalene	ND		0.050	5.0
2,3,4,6-Tetrachlorophenol	ND		0.50	5.0
Bis(2-chloroethyl)ether	ND		0.50	5.0
Benzyl alcohol	ND		0.50	10
2-Methylphenol	ND		0.50	5.0
N-Nitrosodi-n-propylamine	ND		0.50	5.0
Hexachloroethane	ND		0.50	3.0
3 & 4 Methylphenol	ND		0.50	5.0
2-Chlorophenol	ND		0.50	5.0
3,3'-Dichlorobenzidine	ND		0.50	5.0
Nitrobenzene	ND		0.50	5.0
Bis(2-chloroethoxy)methane	ND		0.50	5.0
Benzoic acid	ND		0.50	5.0
Isophorone	ND		0.50	5.0
2,4-Dimethylphenol	ND		0.50	5.0
Aniline	ND	*	0.50	5.0
Azobenzene	ND		0.50	5.0
2,4-Dichlorophenol	ND		0.50	5.0
4-Chloroaniline	ND		0.50	5.0
2,4,6-Trichlorophenol	ND		0.50	5.0
2,4,5-Trichlorophenol	ND		0.50	5.0
Hexachlorocyclopentadiene	ND		0.50	5.0
2-Methylnaphthalene	ND		0.050	1.0
2-Nitroaniline	ND		0.50	5.0
Caprolactam	ND	*	0.50	5.0
2-Chloronaphthalene	ND		0.50	5.0
4-Chloro-3-methylphenol	ND		0.50	5.0
2,6-Dinitrotoluene	ND		0.50	5.0
2-Nitrophenol	ND		0.50	5.0
3-Nitroaniline	ND		0.50	5.0
Dimethyl phthalate	ND		0.50	5.0
2,4-Dinitrophenol	ND		0.50	5.0
Acenaphthylene	ND		0.050	0.30
2,4-Dinitrotoluene	ND		0.50	5.0
Acenaphthene	ND		0.050	1.0
Dibenzofuran	ND		0.50	5.0
4-Nitrophenol	ND	*	0.50	5.0
Fluorene	ND		0.050	1.0
4-Nitroaniline	ND		0.50	5.0
Phenol	ND	*	0.50	5.0
4-Bromophenyl phenyl ether	ND		0.50	5.0
Hexachlorobenzene	ND		0.50	1.0
Diethyl phthalate	ND		0.50	5.0
4-Chlorophenyl phenyl ether	ND		0.50	5.0

Client: Olin Corporation

Job Number: 360-24582-1
Sdg Number: OCRI-15

Client Sample ID: **OC-EBK-010**

Lab Sample ID: 360-24582-4FB
Client Matrix: Water

Date Sampled: 09/14/2009 1300
Date Received: 09/14/2009 1750

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49511	Instrument ID:	Inst. B
Preparation:	3510C	Prep Batch: 360-48980	Lab File ID:	B10563.D
Dilution:	1.0		Initial Weight/Volume:	1000 mL
Date Analyzed:	09/26/2009 0114		Final Weight/Volume:	1.0 mL
Date Prepared:	09/15/2009 1456		Injection Volume:	1.0 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Pentachlorophenol	ND		0.50	1.0
N-Nitrosodiphenylamine	ND		0.50	5.0
4,6-Dinitro-2-methylphenol	ND		0.50	5.0
Phenanthrene	ND		0.085	0.20
Anthracene	ND		0.070	1.0
Di-n-butyl phthalate	1.0	J B	0.60	5.0
Fluoranthene	ND		0.20	1.0
Pyrene	ND		0.19	5.0
Butyl benzyl phthalate	1.2	J	0.50	5.0
Benzo[a]anthracene	ND		0.17	0.30
Chrysene	ND		0.17	1.0
Di-n-octyl phthalate	ND		0.73	5.0
Benzo[b]fluoranthene	ND		0.14	0.30
Benzo[k]fluoranthene	ND		0.17	0.30
Benzo[a]pyrene	ND		0.10	0.20
Indeno[1,2,3-cd]pyrene	ND		0.079	0.50
Dibenz(a,h)anthracene	ND		0.064	0.50
Benzo[g,h,i]perylene	ND		0.094	0.50
Acetophenone	0.66	J	0.50	5.0
Bis(2-ethylhexyl) phthalate	1.6	J B	0.50	2.0
bis (2-chloroisopropyl) ether	ND		0.50	5.0
Atrazine	ND		0.50	5.0
Benzaldehyde	ND		0.50	5.0
Carbazole	ND		0.50	5.0
Benzophenone	ND		0.50	5.0
Diphenyl oxide	ND		0.50	5.0
Diphenylamine	ND		0.50	5.0

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	75		15 - 110
2-Fluorobiphenyl	73		30 - 130
2-Fluorophenol	23		15 - 110
Nitrobenzene-d5	81		30 - 130
Phenol-d5	12	X	15 - 110
Terphenyl-d14	91		30 - 130

Client: Olin Corporation

Job Number: 360-24582-1
Sdg Number: OCRI-15

Client Sample ID: **OC-EBK-010**

Lab Sample ID: 360-24582-4FB
Client Matrix: Water

Date Sampled: 09/14/2009 1300
Date Received: 09/14/2009 1750

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49511	Instrument ID:	Inst. B
Preparation:	3510C	Prep Batch: 360-48980	Lab File ID:	B10563.D
Dilution:	1.0		Initial Weight/Volume:	1000 mL
Date Analyzed:	09/26/2009 0114		Final Weight/Volume:	1.0 mL
Date Prepared:	09/15/2009 1456		Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 10

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
96-76-4	Phenol, 2,4-bis(1,1-dimethylethyl)-	9.84	0.59	T J N
134-62-3	Diethyltoluamide	10.17	1.9	T J N
80-39-7	Benzenesulfonamide, N-ethyl-4-methyl-	10.76	0.35	T J N
3622-84-2	Benzenesulfonamide, N-butyl-	11.01	0.33	T J N
92-87-5	Benzidine	12.28	0.69	J *
3892-0-0	Pentadecane, 2,6,10-trimethyl-	13.72	0.76	T J N
112-95-8	Eicosane	14.37	0.69	T J N
630-2-4	Octacosane	15.70	0.77	T J N
7683-64-9	Squalene	15.81	0.66	T J N
638-67-5	Tricosane	16.17	0.61	T J N

Client: Olin Corporation

Job Number: 360-24582-1
Sdg Number: OCRI-15

Client Sample ID: **OC-SS-400-0.0/1.0-XXX**

Lab Sample ID: 360-24582-5
Client Matrix: Solid % Moisture: 24.3

Date Sampled: 09/14/2009 1440
Date Received: 09/15/2009 1640

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49648		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-49246		Lab File ID:	J03205.D
Dilution:	10			Initial Weight/Volume:	30.37 g
Date Analyzed:	09/29/2009 0210			Final Weight/Volume:	1.0 mL
Date Prepared:	09/21/2009 1530			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		130	430
1,2,4,5-Tetrachlorobenzene		ND		130	430
1,2,4-Trichlorobenzene		ND		130	430
1,2-Dichlorobenzene		ND		130	430
1,3-Dichlorobenzene		ND		130	430
1,4-Dichlorobenzene		ND		130	430
1-Methylnaphthalene		ND		130	430
2,2'-oxybis[1-chloropropane]		ND		130	430
2,3,4,6-Tetrachlorophenol		ND		130	430
2,4,5-Trichlorophenol		ND		130	430
2,4,6-Trichlorophenol		ND		130	430
2,4-Dichlorophenol		ND	✓	130	430
2,4-Dimethylphenol		ND		170	430
2,4-Dinitrophenol		ND		130	430
2,4-Dinitrotoluene		ND		130	430
2,6-Dinitrotoluene		ND		130	430
2-Chloronaphthalene		ND		130	430
2-Chlorophenol		ND		130	430
2-Methylnaphthalene		ND		130	430
2-Methylphenol		ND		260	430
2-Nitroaniline		ND		130	2200
2-Nitrophenol		ND		130	430
3 & 4 Methylphenol		ND		130	430
3,3'-Dichlorobenzidine		ND		130	870
3-Nitroaniline		ND		130	2200
4,6-Dinitro-2-methylphenol		ND		130	2200
4-Bromophenyl phenyl ether		ND		130	430
4-Chloro-3-methylphenol		ND		130	870
4-Chloroaniline		ND		130	870
4-Chlorophenyl phenyl ether		ND		130	430
4-Nitroaniline		ND		130	2200
4-Nitrophenol		ND		130	2200
Acenaphthene		ND		130	430
Acenaphthylene		ND		130	430
Acetophenone		ND		130	430
Aniline		ND J	✓	130	430
Anthracene		ND		130	430
Atrazine		ND		130	430
Azobenzene		ND		130	430
Benzaldehyde		ND		130	430
Benzo[a]anthracene		130	J	130	430
Benzo[a]pyrene		170	J	130	430
Benzo[b]fluoranthene		190	J	130	430
Benzo[g,h,i]perylene		170	J	130	430
Benzo[k]fluoranthene		190	J	130	430
Benzoic acid	22004	~~720~~	J-B	200	2200

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Client: Olin Corporation

Job Number: 360-24582-1
Sdg Number: OCRI-15

Client Sample ID: **OC-SS-400-0.0/1.0-XXX**

Lab Sample ID: 360-24582-5
Client Matrix: Solid

% Moisture: 24.3

Date Sampled: 09/14/2009 1440
Date Received: 09/15/2009 1640

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49648	Instrument ID: Inst. J
Preparation:	3546	Prep Batch: 360-49246	Lab File ID: J03205.D
Dilution:	10		Initial Weight/Volume: 30.37 g
Date Analyzed:	09/29/2009 0210		Final Weight/Volume: 1.0 mL
Date Prepared:	09/21/2009 1530		Injection Volume: 1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		130	430
Benzyl alcohol		ND		370	870
Bis(2-chloroethoxy)methane		ND		130	430
Bis(2-chloroethyl)ether		ND		130	430
Bis(2-ethylhexyl) phthalate		~~270~~ 430 U	nJ-B→	130	430
Butyl benzyl phthalate		ND		130	430
Caprolactam		ND		130	430
Carbazole		ND		130	430
Chrysene		240	J	130	430
Dibenz(a,h)anthracene		310	J	130	430
Dibenzofuran		ND		130	430
Diethyl phthalate		ND		130	430
Dimethyl phthalate		ND		130	430
Di-n-butyl phthalate		ND		380	430
Di-n-octyl phthalate		ND		220	430
Diphenyl oxide		ND		130	430
Fluoranthene		390	J	130	430
Fluorene		ND		130	430
Hexachlorobenzene		ND		130	430
Hexachlorobutadiene		ND		130	430
Hexachlorocyclopentadiene		ND		130	870
Hexachloroethane		ND		130	430
Indeno[1,2,3-cd]pyrene		170	J	130	430
Isophorone		ND		130	430
Naphthalene		ND		130	1000
Nitrobenzene		ND		130	430
N-Nitrosodimethylamine		ND		150	430
N-Nitrosodi-n-propylamine		ND		130	430
N-Nitrosodiphenylamine		ND		130	430
Pentachlorophenol		ND		130	430
Phenanthrene		280	J	130	520
Phenol		ND		130	430
Pyrene		380	J	130	430

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	63		30 - 130
2-Fluorobiphenyl	56		30 - 130
2-Fluorophenol	56		30 - 130
Nitrobenzene-d5	64		30 - 130
Phenol-d5	57		30 - 130
Terphenyl-d14	62		30 - 130

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Client: Olin Corporation

Job Number: 360-24582-1
Sdg Number: OCRI-15

Client Sample ID: **OC-SS-400-0.0/1.0-XXX**

Lab Sample ID: 360-24582-5
Client Matrix: Solid % Moisture: 24.3

Date Sampled: 09/14/2009 1440
Date Received: 09/15/2009 1640

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49648	Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-49246	Lab File ID:	J03205.D
Dilution:	10		Initial Weight/Volume:	30.37 g
Date Analyzed:	09/29/2009 0210		Final Weight/Volume:	1.0 mL
Date Prepared:	09/21/2009 1530		Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 9

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
~~544-76-3~~	~~Hexadecane~~	~~15.00~~	~~560~~	~~T J N~~
19047-85-9	Phosphonic acid, dioctadecyl ester	15.03	2200	T J N
297-3-0	Cyclotetracosane	15.73	4100	T J N
638-66-4	Octadecanal	15.85	280	T J N
~~593-45-3~~	~~Octadecane~~	~~16.01~~	~~280~~	~~T J N~~
67860-4-2	Oxirane, heptadecyl-	16.18	2200	T J N
646-31-1	Tetracosane	16.34	4700	T J N
297-3-0	Cyclotetracosane	16.41	3600	T J N
545-47-1	Lupeol	19.83	3600	T J N

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Client: Olin Corporation

Job Number: 360-24582-1
Sdg Number: OCRI-15

Client Sample ID: **OC-SS-401-0.1/1.0-XXX**

Lab Sample ID: 360-24582-6
Client Matrix: Solid % Moisture: 6.8

Date Sampled: 09/14/2009 1505
Date Received: 09/15/2009 1640

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49648		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-49246		Lab File ID:	J03206.D
Dilution:	10			Initial Weight/Volume:	30.26 g
Date Analyzed:	09/29/2009 0243			Final Weight/Volume:	1.0 mL
Date Prepared:	09/21/2009 1530			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		110	350
1,2,4,5-Tetrachlorobenzene		ND		110	350
1,2,4-Trichlorobenzene		ND		110	350
1,2-Dichlorobenzene		ND		110	350
1,3-Dichlorobenzene		ND		110	350
1,4-Dichlorobenzene		ND		110	350
1-Methylnaphthalene		ND		110	350
2,2'-oxybis[1-chloropropane]		ND		110	350
2,3,4,6-Tetrachlorophenol		ND		110	350
2,4,5-Trichlorophenol		ND		110	350
2,4,6-Trichlorophenol		ND		110	350
2,4-Dichlorophenol		ND	✓	110	350
2,4-Dimethylphenol		ND		140	350
2,4-Dinitrophenol		ND		110	350
2,4-Dinitrotoluene		ND		110	350
2,6-Dinitrotoluene		ND		110	350
2-Chloronaphthalene		ND		110	350
2-Chlorophenol		ND		110	350
2-Methylnaphthalene		ND		110	350
2-Methylphenol		ND		210	350
2-Nitroaniline		ND		110	1800
2-Nitrophenol		ND		110	350
3 & 4 Methylphenol		ND		110	350
3,3'-Dichlorobenzidine		ND		110	710
3-Nitroaniline		ND		110	1800
4,6-Dinitro-2-methylphenol		ND		110	1800
4-Bromophenyl phenyl ether		ND		110	350
4-Chloro-3-methylphenol		ND		110	710
4-Chloroaniline		ND		110	710
4-Chlorophenyl phenyl ether		ND		110	350
4-Nitroaniline		ND		110	1800
4-Nitrophenol		ND		110	1800
Acenaphthene		ND		110	350
Acenaphthylene		160	J	110	350
Acetophenone		ND		110	350
Aniline		ND J	✓	110	350
Anthracene		ND		110	350
Atrazine		ND		110	350
Azobenzene		ND		110	350
Benzaldehyde		ND		110	350
Benzo[a]anthracene		540		110	350
Benzo[a]pyrene		940		110	350
Benzo[b]fluoranthene		570		110	350
Benzo[g,h,i]perylene		770		110	350
Benzo[k]fluoranthene		660		110	350
Benzoic acid		ND		160	1800

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Client: Olin Corporation

Job Number: 360-24582-1
Sdg Number: OCRI-15

Client Sample ID: **OC-SS-401-0.1/1.0-XXX**

Lab Sample ID: 360-24582-6
Client Matrix: Solid % Moisture: 6.8

Date Sampled: 09/14/2009 1505
Date Received: 09/15/2009 1640

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49648		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-49246		Lab File ID:	J03206.D
Dilution:	10			Initial Weight/Volume:	30.26 g
Date Analyzed:	09/29/2009 0243			Final Weight/Volume:	1.0 mL
Date Prepared:	09/21/2009 1530			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		110	350
Benzyl alcohol		ND		300	710
Bis(2-chloroethoxy)methane		ND		110	350
Bis(2-chloroethyl)ether		ND		110	350
Bis(2-ethylhexyl) phthalate		260 J	J B	110	350
Butyl benzyl phthalate		ND		110	350
Caprolactam		ND		110	350
Carbazole		ND		110	350
Chrysene		730		110	350
Dibenz(a,h)anthracene		500		110	350
Dibenzofuran		ND		110	350
Diethyl phthalate		ND		110	350
Dimethyl phthalate		ND		110	350
Di-n-butyl phthalate		ND		310	350
Di-n-octyl phthalate		ND		180	350
Diphenyl oxide		ND		110	350
Fluoranthene		920		110	350
Fluorene		ND		110	350
Hexachlorobenzene		ND		110	350
Hexachlorobutadiene		ND		110	350
Hexachlorocyclopentadiene		ND		110	710
Hexachloroethane		ND		110	350
Indeno[1,2,3-cd]pyrene		730 J	✓	110	350
Isophorone		ND		110	350
Naphthalene		ND		110	850
Nitrobenzene		ND		110	350
N-Nitrosodimethylamine		ND		130	350
N-Nitrosodi-n-propylamine		ND		110	350
N-Nitrosodiphenylamine		ND		110	350
Pentachlorophenol		ND		110	350
Phenanthrene		640		110	430
Phenol		ND		110	350
Pyrene		1200		110	350

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	74		30 - 130
2-Fluorobiphenyl	72		30 - 130
2-Fluorophenol	70		30 - 130
Nitrobenzene-d5	70		30 - 130
Phenol-d5	71		30 - 130
Terphenyl-d14	88		30 - 130

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Client: Olin Corporation

Job Number: 360-24582-1
Sdg Number: OCRI-15

Client Sample ID: **OC-SS-401-0.1/1.0-XXX**

Lab Sample ID: 360-24582-6
Client Matrix: Solid % Moisture: 6.8

Date Sampled: 09/14/2009 1505
Date Received: 09/15/2009 1640

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49648		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-49246		Lab File ID:	J03206.D
Dilution:	10			Initial Weight/Volume:	30.26 g
Date Analyzed:	09/29/2009 0243			Final Weight/Volume:	1.0 mL
Date Prepared:	09/21/2009 1530			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 9

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
80-56-8	.alpha.-Pinene	7.32	570	T J N
243-17-4	11H-Benzo[b]fluorene	14.43	440	T J N
629-92-5	Nonadecane	14.99	320	T J N
629-78-7	Heptadecane	15.67	370	T J N
297-3-0	Cyclotetracosane	15.73	1200	T J N
646-31-1	Tetracosane	16.34	2300	T J N
205-99-2	Benz[e]acephenanthrylene	16.88	420	T J N
630-4-6	Hentriacontane	17.09	1900	T J N
7390-81-0	Oxirane, hexadecyl-	17.84	1200	T J N

Client: Olin Corporation

Job Number: 360-24582-1
Sdg Number: OCRI-15

Client Sample ID: **OC-SS-402-0.0/1.0-XXX**

Lab Sample ID: 360-24582-7
Client Matrix: Solid
% Moisture: 25.0

Date Sampled: 09/14/2009 1530
Date Received: 09/15/2009 1640

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49648	Instrument ID: Inst. J
Preparation:	3546	Prep Batch: 360-49246	Lab File ID: J03207.D
Dilution:	10		Initial Weight/Volume: 30.46 g
Date Analyzed:	09/29/2009 0316		Final Weight/Volume: 1.0 mL
Date Prepared:	09/21/2009 1530		Injection Volume: 1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		130	440
1,2,4,5-Tetrachlorobenzene		ND		130	440
1,2,4-Trichlorobenzene		ND		130	440
1,2-Dichlorobenzene		ND		130	440
1,3-Dichlorobenzene		ND		130	440
1,4-Dichlorobenzene		ND		130	440
1-Methylnaphthalene		ND		130	440
2,2'-oxybis[1-chloropropane]		ND		130	440
2,3,4,6-Tetrachlorophenol		ND		130	440
2,4,5-Trichlorophenol		ND		130	440
2,4,6-Trichlorophenol		ND		130	440
2,4-Dichlorophenol		ND		130	440
2,4-Dimethylphenol		ND		170	440
2,4-Dinitrophenol		ND		130	440
2,4-Dinitrotoluene		ND		130	440
2,6-Dinitrotoluene		ND		130	440
2-Chloronaphthalene		ND		130	440
2-Chlorophenol		ND		130	440
2-Methylnaphthalene		ND		130	440
2-Methylphenol		ND		260	440
2-Nitroaniline		ND		130	2200
2-Nitrophenol		ND		130	440
3 & 4 Methylphenol		ND		130	440
3,3'-Dichlorobenzidine		ND		130	880
3-Nitroaniline		ND		130	2200
4,6-Dinitro-2-methylphenol		ND		130	2200
4-Bromophenyl phenyl ether		ND		130	440
4-Chloro-3-methylphenol		ND		130	880
4-Chloroaniline		ND		130	880
4-Chlorophenyl phenyl ether		ND		130	440
4-Nitroaniline		ND		130	2200
4-Nitrophenol		ND		130	2200
Acenaphthene		ND		130	440
Acenaphthylene		ND		130	440
Acetophenone		ND		130	440
Aniline		ND J		130	440
Anthracene		ND		130	440
Atrazine		ND		130	440
Azobenzene		ND		130	440
Benzaldehyde		290	J	130	440
Benzo[a]anthracene		ND		130	440
Benzo[a]pyrene		ND		130	440
Benzo[b]fluoranthene		150	J	130	440
Benzo[g,h,i]perylene		ND		130	440
Benzo[k]fluoranthene		ND		130	440
Benzoic acid		900	J-B	200	2200

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Client: Olin Corporation

Job Number: 360-24582-1
Sdg Number: OCRI-15

Client Sample ID: **OC-SS-402-0.0/1.0-XXX**

Lab Sample ID: 360-24582-7
Client Matrix: Solid % Moisture: 25.0

Date Sampled: 09/14/2009 1530
Date Received: 09/15/2009 1640

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49648	Instrument ID: Inst. J
Preparation:	3546	Prep Batch: 360-49246	Lab File ID: J03207.D
Dilution:	10		Initial Weight/Volume: 30.46 g
Date Analyzed:	09/29/2009 0316		Final Weight/Volume: 1.0 mL
Date Prepared:	09/21/2009 1530		Injection Volume: 1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		130	440
Benzyl alcohol		ND		370	880
Bis(2-chloroethoxy)methane		ND		130	440
Bis(2-chloroethyl)ether		ND		130	440
Bis(2-ethylhexyl) phthalate		250 440	J-B- U	130	440
Butyl benzyl phthalate		ND		130	440
Caprolactam		ND		130	440
Carbazole		ND		130	440
Chrysene		160	J	130	440
Dibenz(a,h)anthracene		ND		130	440
Dibenzofuran		ND		130	440
Diethyl phthalate		ND		130	440
Dimethyl phthalate		ND		130	440
Di-n-butyl phthalate		ND		390	440
Di-n-octyl phthalate		ND		220	440
Diphenyl oxide		ND		130	440
Fluoranthene		270	J	130	440
Fluorene		ND		130	440
Hexachlorobenzene		ND		130	440
Hexachlorobutadiene		ND		130	440
Hexachlorocyclopentadiene		ND		130	880
Hexachloroethane		ND		130	440
Indeno[1,2,3-cd]pyrene		ND		130	440
Isophorone		ND		130	440
Naphthalene		ND		130	1100
Nitrobenzene		ND		130	440
N-Nitrosodimethylamine		ND		160	440
N-Nitrosodi-n-propylamine		ND		130	440
N-Nitrosodiphenylamine		ND		130	440
Pentachlorophenol		ND		130	440
Phenanthrene		180	J	130	530
Phenol		ND		130	440
Pyrene		210	J	130	440

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	53		30 - 130
2-Fluorobiphenyl	47		30 - 130
2-Fluorophenol	47		30 - 130
Nitrobenzene-d5	57		30 - 130
Phenol-d5	46		30 - 130
Terphenyl-d14	52		30 - 130

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Client: Olin Corporation

Job Number: 360-24582-1
Sdg Number: OCRI-15

Client Sample ID: **OC-SS-402-0.0/1.0-XXX**

Lab Sample ID: 360-24582-7
Client Matrix: Solid % Moisture: 25.0

Date Sampled: 09/14/2009 1530
Date Received: 09/15/2009 1640

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49648	Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-49246	Lab File ID:	J03207.D
Dilution:	10		Initial Weight/Volume:	30.46 g
Date Analyzed:	09/29/2009 0316		Final Weight/Volume:	1.0 mL
Date Prepared:	09/21/2009 1530		Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 10

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
763-93-9	3-Hexen-2-one	5.69	390	T J N
121-33-5	Vanillin	10.59	140	T J N
3910-35-8	1H-Indene, 2,3-dihydro-1,1,3-trimethyl-3	12.24	330	T J N
629-94-7	Heneicosane	13.56	210	T J N
112-61-8	Octadecanoic acid, methyl ester	13.68	250	T J N
629-78-7	Heptadecane	14.29	210	T J N
1000144-57-9	16-Heptadecenal	14.80	190	T J N
481-74-3	9,10-Anthracenedione, 1,8-dihydroxy-3-me	14.87	150	T J N
593-45-3	Octadecane	15.00	320	T J N
67860-4-2	Oxirane, heptadecyl-	15.51	370	T J N

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Client: Olin Corporation

Job Number: 360-24582-1
Sdg Number: OCRI-15

Client Sample ID: **OC-SS-404-0.0/1.0-XXX**

Lab Sample ID: 360-24582-9
Client Matrix: Solid % Moisture: 8.2

Date Sampled: 09/14/2009 1610
Date Received: 09/15/2009 1640

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49648		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-49246		Lab File ID:	J03208.D
Dilution:	10			Initial Weight/Volume:	30.68 g
Date Analyzed:	09/29/2009 0349			Final Weight/Volume:	1.0 mL
Date Prepared:	09/21/2009 1530			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		110	350
1,2,4,5-Tetrachlorobenzene		ND		110	350
1,2,4-Trichlorobenzene		ND		110	350
1,2-Dichlorobenzene		ND		110	350
1,3-Dichlorobenzene		ND		110	350
1,4-Dichlorobenzene		ND		110	350
1-Methylnaphthalene		ND		110	350
2,2'-oxybis[1-chloropropane]		ND		110	350
2,3,4,6-Tetrachlorophenol		ND		110	350
2,4,5-Trichlorophenol		ND		110	350
2,4,6-Trichlorophenol		ND		110	350
2,4-Dichlorophenol		ND	✓	110	350
2,4-Dimethylphenol		ND		140	350
2,4-Dinitrophenol		ND		110	350
2,4-Dinitrotoluene		ND		110	350
2,6-Dinitrotoluene		ND		110	350
2-Chloronaphthalene		ND		110	350
2-Chlorophenol		ND		110	350
2-Methylnaphthalene		ND		110	350
2-Methylphenol		ND		210	350
2-Nitroaniline		ND		110	1800
2-Nitrophenol		ND		110	350
3 & 4 Methylphenol		ND		110	350
3,3'-Dichlorobenzidine		ND		110	710
3-Nitroaniline		ND		110	1800
4,6-Dinitro-2-methylphenol		ND		110	1800
4-Bromophenyl phenyl ether		ND		110	350
4-Chloro-3-methylphenol		ND		110	710
4-Chloroaniline		ND		110	710
4-Chlorophenyl phenyl ether		ND		110	350
4-Nitroaniline		ND		110	1800
4-Nitrophenol		ND		110	1800
Acenaphthene		220	J	110	350
Acenaphthylene		ND		110	350
Acetophenone		ND		110	350
Aniline		ND J	✓	110	350
Anthracene		280	J	110	350
Atrazine		ND		110	350
Azobenzene		ND		110	350
Benzaldehyde		ND		110	350
Benzo[a]anthracene		1000		110	350
Benzo[a]pyrene		960		110	350
Benzo[b]fluoranthene		740		110	350
Benzo[g,h,i]perylene		670		110	350
Benzo[k]fluoranthene		1000		110	350
Benzoic acid		ND		160	1800

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Client: Olin Corporation

Job Number: 360-24582-1
Sdg Number: OCRI-15

Client Sample ID: **OC-SS-404-0.0/1.0-XXX**

Lab Sample ID: 360-24582-9
Client Matrix: Solid % Moisture: 8.2

Date Sampled: 09/14/2009 1610
Date Received: 09/15/2009 1640

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49648		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-49246		Lab File ID:	J03208.D
Dilution:	10			Initial Weight/Volume:	30.68 g
Date Analyzed:	09/29/2009 0349			Final Weight/Volume:	1.0 mL
Date Prepared:	09/21/2009 1530			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		110	350
Benzyl alcohol		ND		300	710
Bis(2-chloroethoxy)methane		ND		110	350
Bis(2-chloroethyl)ether		ND		110	350
Bis(2-ethylhexyl) phthalate		2400	B	110	350
Butyl benzyl phthalate		130	J	110	350
Caprolactam		ND		110	350
Carbazole		320	J	110	350
Chrysene		1100		110	350
Dibenz(a,h)anthracene		390		110	350
Dibenzofuran		140	J	110	350
Diethyl phthalate		ND		110	350
Dimethyl phthalate		ND		110	350
Di-n-butyl phthalate		ND		310	350
Di-n-octyl phthalate		ND		180	350
Diphenyl oxide		ND		110	350
Fluoranthene		2700		110	350
Fluorene		190	J	110	350
Hexachlorobenzene		ND		110	350
Hexachlorobutadiene		ND		110	350
Hexachlorocyclopentadiene		ND		110	710
Hexachloroethane		ND		110	350
Indeno[1,2,3-cd]pyrene		650 J		110	350
Isophorone		ND		110	350
Naphthalene		130	J	110	850
Nitrobenzene		ND		110	350
N-Nitrosodimethylamine		ND		130	350
N-Nitrosodi-n-propylamine		ND		110	350
N-Nitrosodiphenylamine		ND		110	350
Pentachlorophenol		ND		110	350
Phenanthrene		2600		110	430
Phenol		ND		110	350
Pyrene		2500		110	350

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	65		30 - 130
2-Fluorobiphenyl	65		30 - 130
2-Fluorophenol	64		30 - 130
Nitrobenzene-d5	61		30 - 130
Phenol-d5	64		30 - 130
Terphenyl-d14	82		30 - 130

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Client: Olin Corporation

Job Number: 360-24582-1
Sdg Number: OCRI-15

Client Sample ID: **OC-SS-404-0.0/1.0-XXX**

Lab Sample ID: 360-24582-9
Client Matrix: Solid % Moisture: 8.2

Date Sampled: 09/14/2009 1610
Date Received: 09/15/2009 1640

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49648		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-49246		Lab File ID:	J03208.D
Dilution:	10			Initial Weight/Volume:	30.68 g
Date Analyzed:	09/29/2009 0349			Final Weight/Volume:	1.0 mL
Date Prepared:	09/21/2009 1530			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 9

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
203-64-5	4H-Cyclopenta[def]phenanthrene	13.26	390	T J N
84-65-1	9,10-Anthracenedione	13.45	280	T J N
239-30-5	Benzo[b]naphtho[2,1-d]furan	14.06	230	T J N
69782-90-7	1,1"-Biphenyl, 2,3,3",4,4",5"-hexachloro	14.64	310	T J N
60145-22-4	1,1"-Biphenyl, 2,2",4,4",5",6-Hexachloro	14.88	350	T J N
82-5-3	7H-Benz[de]anthracen-7-one	15.20	220	T J N
544-76-3	Hexadecane	15.68	290	T J N
630-3-5	Nonacosane	16.34	900	T J N
26609-23-6	p;p"-Dioctyldiphenylamine	16.85	6600	T J N

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Client: Olin Corporation

Job Number: 360-24582-1
Sdg Number: OCRI-15

Client Sample ID: **OC-SS-405-0.0/1.0-XXX**

Lab Sample ID: 360-24582-10
Client Matrix: Solid % Moisture: 6.6

Date Sampled: 09/14/2009 1630
Date Received: 09/15/2009 1640

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49648		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-49246		Lab File ID:	J03209.D
Dilution:	10			Initial Weight/Volume:	30.81 g
Date Analyzed:	09/29/2009 0422			Final Weight/Volume:	1.0 mL
Date Prepared:	09/21/2009 1530			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		100	350
1,2,4,5-Tetrachlorobenzene		ND		100	350
1,2,4-Trichlorobenzene		ND		100	350
1,2-Dichlorobenzene		ND		100	350
1,3-Dichlorobenzene		ND		100	350
1,4-Dichlorobenzene		ND		100	350
1-Methylnaphthalene		ND		100	350
2,2'-oxybis[1-chloropropane]		ND		100	350
2,3,4,6-Tetrachlorophenol		ND		100	350
2,4,5-Trichlorophenol		ND		100	350
2,4,6-Trichlorophenol		ND		100	350
2,4-Dichlorophenol		ND		100	350
2,4-Dimethylphenol		ND		140	350
2,4-Dinitrophenol		ND		100	350
2,4-Dinitrotoluene		ND		100	350
2,6-Dinitrotoluene		ND		100	350
2-Chloronaphthalene		ND		100	350
2-Chlorophenol		ND		100	350
2-Methylnaphthalene		ND		100	350
2-Methylphenol		ND		210	350
2-Nitroaniline		ND		100	1700
2-Nitrophenol		ND		100	350
3 & 4 Methylphenol		ND		100	350
3,3'-Dichlorobenzidine		ND		100	700
3-Nitroaniline		ND		100	1700
4,6-Dinitro-2-methylphenol		ND		100	1700
4-Bromophenyl phenyl ether		ND		100	350
4-Chloro-3-methylphenol		ND		100	700
4-Chloroaniline		ND		100	700
4-Chlorophenyl phenyl ether		ND		100	350
4-Nitroaniline		ND		100	1700
4-Nitrophenol		ND		100	1700
Acenaphthene		ND		100	350
Acenaphthylene		ND		100	350
Acetophenone		ND		100	350
Aniline		ND	J	100	350
Anthracene		ND		100	350
Atrazine		ND		100	350
Azobenzene		ND		100	350
Benzaldehyde		ND		100	350
Benzo[a]anthracene		ND		100	350
Benzo[a]pyrene		ND		100	350
Benzo[b]fluoranthene		ND		100	350
Benzo[g,h,i]perylene		ND		100	350
Benzo[k]fluoranthene		ND		100	350
Benzoic acid		ND		160	1700

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Client: Olin Corporation

Job Number: 360-24582-1
Sdg Number: OCRI-15

Client Sample ID: **OC-SS-405-0.0/1.0-XXX**

Lab Sample ID: 360-24582-10
Client Matrix: Solid
% Moisture: 6.6

Date Sampled: 09/14/2009 1630
Date Received: 09/15/2009 1640

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49648		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-49246		Lab File ID:	J03209.D
Dilution:	10			Initial Weight/Volume:	30.81 g
Date Analyzed:	09/29/2009 0422			Final Weight/Volume:	1.0 mL
Date Prepared:	09/21/2009 1530			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		100	350
Benzyl alcohol		ND		300	700
Bis(2-chloroethoxy)methane		ND		100	350
Bis(2-chloroethyl)ether		ND		100	350
Bis(2-ethylhexyl) phthalate		580 u	B	100	350
Butyl benzyl phthalate		ND		100	350
Caprolactam		ND		100	350
Carbazole		ND		100	350
Chrysene		ND		100	350
Dibenz(a,h)anthracene		ND		100	350
Dibenzofuran		ND		100	350
Diethyl phthalate		ND		100	350
Dimethyl phthalate		ND		100	350
Di-n-butyl phthalate		ND		310	350
Di-n-octyl phthalate		ND		180	350
Diphenyl oxide		ND		100	350
Fluoranthene		ND		100	350
Fluorene		ND		100	350
Hexachlorobenzene		ND		100	350
Hexachlorobutadiene		ND		100	350
Hexachlorocyclopentadiene		ND		100	700
Hexachloroethane		ND		100	350
Indeno[1,2,3-cd]pyrene		ND		100	350
Isophorone		ND		100	350
Naphthalene		ND		100	830
Nitrobenzena		ND		100	350
N-Nitrosodimethylamine		ND		120	350
N-Nitrosodi-n-propylamine		ND		100	350
N-Nitrosodiphenylamine		ND		100	350
Pentachlorophenol		ND		100	350
Phenanthrene		ND		100	420
Phenol		ND		100	350
Pyrene		ND		100	350

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	80		30 - 130
2-Fluorobiphenyl	78		30 - 130
2-Fluorophenol	79		30 - 130
Nitrobenzene-d5	74		30 - 130
Phenol-d5	81		30 - 130
Terphenyl-d14	99		30 - 130

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Client: Olin Corporation

Job Number: 360-24582-1
Sdg Number: OCRI-15

Client Sample ID: **OC-SS-405-0.0/1.0-XXX**

Lab Sample ID: 360-24582-10
Client Matrix: Solid % Moisture: 6.6

Date Sampled: 09/14/2009 1630
Date Received: 09/15/2009 1640

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49648		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-49246		Lab File ID:	J03209.D
Dilution:	10			Initial Weight/Volume:	30.81 g
Date Analyzed:	09/29/2009 0422			Final Weight/Volume:	1.0 mL
Date Prepared:	09/21/2009 1530			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 9

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
3910-35-8	1H-Indene, 2,3-dihydro-1,1,3-trimethyl-3	12.24	200	T J N
22768-22-5	2,4-Diphenyl-4-methyl-2(E)-pentene	12.72	150	T J N
112-95-8	Eicosane	14.64	120	T J N
629-99-2	Pentacosane	14.99	160	T J N
593-45-3	Octadecane	15.68	250	T J N
544-85-4	Dotriacontane	16.00	150	T J N
630-4-6	Hentriacontane	16.34	590	T J N
26603-23-6	p,p"-Dioctyldiphenylamine	16.85	3600	T J N
14021-23-9	D-Friedoolean-14-ene, 3-methoxy-, (3.bet	18.63	2400	T J N

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Client: Olin Corporation

Job Number: 360-24582-1
Sdg Number: OCRI-15

Client Sample ID: **OC-SS-406-0.0/1.0.-XXX**

Lab Sample ID: 360-24582-11
Client Matrix: Solid % Moisture: 25.2

Date Sampled: 09/15/2009 0835
Date Received: 09/15/2009 1640

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49648		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-49246		Lab File ID:	J03210.D
Dilution:	10			Initial Weight/Volume:	30.09 g
Date Analyzed:	09/29/2009 0455			Final Weight/Volume:	1.0 mL
Date Prepared:	09/21/2009 1530			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		130	440
1,2,4,5-Tetrachlorobenzene		ND		130	440
1,2,4-Trichlorobenzene		ND		130	440
1,2-Dichlorobenzene		ND		130	440
1,3-Dichlorobenzene		ND		130	440
1,4-Dichlorobenzene		ND		130	440
1-Methylnaphthalene		ND		130	440
2,2'-oxybis[1-chloropropane]		ND		130	440
2,3,4,6-Tetrachlorophenol		ND		130	440
2,4,5-Trichlorophenol		ND		130	440
2,4,6-Trichlorophenol		ND		130	440
2,4-Dichlorophenol		ND		130	440
2,4-Dimethylphenol		ND		170	440
2,4-Dinitrophenol		ND		130	440
2,4-Dinitrotoluene		ND		130	440
2,6-Dinitrotoluene		ND		130	440
2-Chloronaphthalene		ND		130	440
2-Chlorophenol		ND		130	440
2-Methylnaphthalene		ND		130	440
2-Methylphenol		ND		270	440
2-Nitroaniline		ND		130	2200
2-Nitrophenol		ND		130	440
3 & 4 Methylphenol		ND		130	440
3,3'-Dichlorobenzidine		ND		130	890
3-Nitroaniline		ND		130	2200
4,6-Dinitro-2-methylphenol		ND		130	2200
4-Bromophenyl phenyl ether		ND		130	440
4-Chloro-3-methylphenol		ND		130	890
4-Chloroaniline		ND		130	890
4-Chlorophenyl phenyl ether		ND		130	440
4-Nitroaniline		ND		130	2200
4-Nitrophenol		ND		130	2200
Acenaphthene		ND		130	440
Acenaphthylene		ND		130	440
Acetophenone		ND		130	440
Aniline		ND		130	440
Anthracene		ND		130	440
Atrazine		ND		130	440
Azobenzene		ND		130	440
Benzaldehyde		410	J	130	440
Benzo[a]anthracene		ND		130	440
Benzo[a]pyrene		ND		130	440
Benzo[b]fluoranthene		ND		130	440
Benzo[g,h,i]perylene		ND		130	440
Benzo[k]fluoranthene		ND		130	440
Benzoic acid		840	J-B	200	2200

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Client: Olin Corporation

Job Number: 360-24582-1
Sdg Number: OCRI-15

Client Sample ID: OC-SS-406-0.0/1.0.-XXX

Lab Sample ID: 360-24582-11
Client Matrix: Solid

% Moisture: 25.2

Date Sampled: 09/15/2009 0835
Date Received: 09/15/2009 1640

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49648		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-49246		Lab File ID:	J03210.D
Dilution:	10			Initial Weight/Volume:	30.09 g
Date Analyzed:	09/29/2009 0455			Final Weight/Volume:	1.0 mL
Date Prepared:	09/21/2009 1530			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		130	440
Benzyl alcohol		ND		380	890
Bis(2-chloroethoxy)methane		ND		130	440
Bis(2-chloroethyl)ether		ND		130	440
Bis(2-ethylhexyl) phthalate		ND		130	440
Butyl benzyl phthalate		ND		130	440
Caprolactam		ND		130	440
Carbazole		ND		130	440
Chrysene		150	J	130	440
Dibenz(a,h)anthracene		280	J	130	440
Dibenzofuran		ND		130	440
Diethyl phthalate		ND		130	440
Dimethyl phthalate		ND		130	440
Di-n-butyl phthalate		ND		390	440
Di-n-octyl phthalate		ND		220	440
Diphenyl oxide		ND		130	440
Fluoranthene		230	J	130	440
Fluorene		ND		130	440
Hexachlorobenzene		ND		130	440
Hexachlorobutadiene		ND		130	440
Hexachlorocyclopentadiene		ND		130	890
Hexachloroethane		ND		130	440
Indeno[1,2,3-cd]pyrene		ND		130	440
Isophorone		ND		130	440
Naphthalene		ND		130	1100
Nitrobenzene		ND		130	440
N-Nitrosodimethylamine		ND		160	440
N-Nitrosodi-n-propylamine		ND		130	440
N-Nitrosodiphenylamine		ND		130	440
Pentachlorophenol		ND		130	440
Phenanthrene		160	J	130	530
Phenol		ND		130	440
Pyrene		190	J	130	440

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	68		30 - 130
2-Fluorobiphenyl	63		30 - 130
2-Fluorophenol	61		30 - 130
Nitrobenzene-d5	67		30 - 130
Phenol-d5	64		30 - 130
Terphenyl-d14	70		30 - 130

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Client: Olin Corporation

Job Number: 360-24582-1
Sdg Number: OCRI-15

Client Sample ID: **OC-SS-406-0.0/1.0.-XXX**

Lab Sample ID: 360-24582-11
Client Matrix: Solid % Moisture: 25.2

Date Sampled: 09/15/2009 0835
Date Received: 09/15/2009 1640

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49648		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-49246		Lab File ID:	J03210.D
Dilution:	10			Initial Weight/Volume:	30.09 g
Date Analyzed:	09/29/2009 0455			Final Weight/Volume:	1.0 mL
Date Prepared:	09/21/2009 1530			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 9

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
1454-85-9	1-Heptadecanol	15.03	1200	T J N
593-49-7	Heptacosane	15.68	620	T J N
297-3-0	Cyclotetracosane	15.72	2700	T J N
630-3-5	Nonacosane	16.34	4000	T J N
297-3-0	Cyclotetracosane	16.41	2000	T J N
630-4-6	Hentriacontane	17.09	4800	T J N
18435-45-5	1-Nonadecene	17.20	580	T J N
7390-81-0	Oxirane, hexadecyl-	17.84	2400	T J N
629-94-7	Heneicosane	18.04	740	T J N

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Client: Olin Corporation

Job Number: 360-24582-1
Sdg Number: OCRI-15

Client Sample ID: **OC-SS-407-0.0/1.0-XXX**

Lab Sample ID: 360-24582-12
Client Matrix: Solid % Moisture: 10.9

Date Sampled: 09/15/2009 0905
Date Received: 09/15/2009 1640

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49648		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-49246		Lab File ID:	J03211.D
Dilution:	10			Initial Weight/Volume:	30.45 g
Date Analyzed:	09/29/2009 0528			Final Weight/Volume:	1.0 mL
Date Prepared:	09/21/2009 1530			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		110	370
1,2,4,5-Tetrachlorobenzene		ND		110	370
1,2,4-Trichlorobenzene		ND		110	370
1,2-Dichlorobenzene		ND		110	370
1,3-Dichlorobenzene		ND		110	370
1,4-Dichlorobenzene		ND		110	370
1-Methylnaphthalene		ND		110	370
2,2'-oxybis[1-chloropropane]		ND		110	370
2,3,4,6-Tetrachlorophenol		ND		110	370
2,4,5-Trichlorophenol		ND		110	370
2,4,6-Trichlorophenol		ND		110	370
2,4-Dichlorophenol		ND		110	370
2,4-Dimethylphenol		ND		140	370
2,4-Dinitrophenol		ND		110	370
2,4-Dinitrotoluene		ND		110	370
2,6-Dinitrotoluene		ND		110	370
2-Chloronaphthalene		ND		110	370
2-Chlorophenol		ND		110	370
2-Methylnaphthalene		ND		110	370
2-Methylphenol		ND		220	370
2-Nitroaniline		ND		110	1800
2-Nitrophenol		ND		110	370
3 & 4 Methylphenol		ND		110	370
3,3'-Dichlorobenzidine		ND		110	740
3-Nitroaniline		ND		110	1800
4,6-Dinitro-2-methylphenol		ND		110	1800
4-Bromophenyl phenyl ether		ND		110	370
4-Chloro-3-methylphenol		ND		110	740
4-Chloroaniline		ND		110	740
4-Chlorophenyl phenyl ether		ND		110	370
4-Nitroaniline		ND		110	1800
4-Nitrophenol		ND		110	1800
Acenaphthene		ND		110	370
Acenaphthylene		ND		110	370
Acetophenone		ND		110	370
Aniline		ND	J	110	370
Anthracene		ND		110	370
Atrazine		ND		110	370
Azobenzene		ND		110	370
Benzaldehyde		ND		110	370
Benzo[a]anthracene		ND		110	370
Benzo[a]pyrene		ND		110	370
Benzo[b]fluoranthene		110	J	110	370
Benzo[g,h,i]perylene		ND		110	370
Benzo[k]fluoranthene		ND		110	370
Benzoic acid		ND		170	1800

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Client: Olin Corporation

Job Number: 360-24582-1
Sdg Number: OCRI-15

Client Sample ID: OC-SS-407-0.0/1.0-XXX

Lab Sample ID: 360-24582-12
Client Matrix: Solid % Moisture: 10.9

Date Sampled: 09/15/2009 0905
Date Received: 09/15/2009 1640

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49648		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-49246		Lab File ID:	J03211.D
Dilution:	10			Initial Weight/Volume:	30.45 g
Date Analyzed:	09/29/2009 0528			Final Weight/Volume:	1.0 mL
Date Prepared:	09/21/2009 1530			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		110	370
Benzyl alcohol		ND		310	740
Bis(2-chloroethoxy)methane		ND		110	370
Bis(2-chloroethyl)ether		ND		110	370
Bis(2-ethylhexyl) phthalate		1400	B	110	370
Butyl benzyl phthalate		ND		110	370
Caprolactam		ND		110	370
Carbazole		ND		110	370
Chrysene		140	J	110	370
Dibenz(a,h)anthracene		ND		110	370
Dibenzofuran		ND		110	370
Diethyl phthalate		ND		110	370
Dimethyl phthalate		ND		110	370
Di-n-butyl phthalate		ND		320	370
Di-n-octyl phthalate		ND		190	370
Diphenyl oxide		ND		110	370
Fluoranthene		210	J	110	370
Fluorene		ND		110	370
Hexachlorobenzene		ND		110	370
Hexachlorobutadiene		ND		110	370
Hexachlorocyclopentadiene		ND		110	740
Hexachloroethane		ND		110	370
Indeno[1,2,3-cd]pyrene		ND		110	370
Isophorone		ND		110	370
Naphthalene		ND		110	880
Nitrobenzene		ND		110	370
N-Nitrosodimethylamine		ND		130	370
N-Nitrosodi-n-propylamine		ND		110	370
N-Nitrosodiphenylamine		ND		110	370
Pentachlorophenol		ND		110	370
Phenanthrene		ND		110	440
Phenol		ND		110	370
Pyrene		190	J	110	370

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	74		30 - 130
2-Fluorobiphenyl	75		30 - 130
2-Fluorophenol	73		30 - 130
Nitrobenzene-d5	68		30 - 130
Phenol-d5	69		30 - 130
Terphenyl-d14	78		30 - 130

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Client: Olin Corporation

Job Number: 360-24582-1
Sdg Number: OCRI-15

Client Sample ID: **OC-SS-407-0.0/1.0-XXX**

Lab Sample ID: 360-24582-12
Client Matrix: Solid % Moisture: 10.9

Date Sampled: 09/15/2009 0905
Date Received: 09/15/2009 1640

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49648	Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-49246	Lab File ID:	J03211.D
Dilution:	10		Initial Weight/Volume:	30.45 g
Date Analyzed:	09/29/2009 0528		Final Weight/Volume:	1.0 mL
Date Prepared:	09/21/2009 1530		Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 9

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
4237-44-9	Phenol, 2-(1-phenylethyl)-	12.23	440	T J N
84-15-1	o-Terphenyl	13.00	420	T J N
149-30-4	2-Mercaptobenzothiazole	13.33	530	T J N
2467-2-9	Phenol, 2,2"-methylenebis-	13.41	850	T J N
620-92-8	Phenol, 4,4"-methylenebis-	13.66	1100	T J N
629-92-5	Nonadecane	15.68	350	T J N
593-45-3	Octadecane	16.34	1100	T J N
26603-23-6	p;p"-Dioctyldiphenylamine	16.86	63000	T J N
7098-22-8	Tetratetracontane	17.09	590	T J N

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Client: Olin Corporation

Job Number: 360-24582-1
Sdg Number: OCRI-15

Client Sample ID: **OC-SS-408-0.0/1.0-XXX**

Lab Sample ID: 360-24582-13
Client Matrix: Solid % Moisture: 15.8

Date Sampled: 09/15/2009 0930
Date Received: 09/15/2009 1640

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49648		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-49246		Lab File ID:	J03212.D
Dilution:	10			Initial Weight/Volume:	30.10 g
Date Analyzed:	09/29/2009 0600			Final Weight/Volume:	1.0 mL
Date Prepared:	09/21/2009 1530			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		120	390
1,2,4,5-Tetrachlorobenzene		ND		120	390
1,2,4-Trichlorobenzene		ND		120	390
1,2-Dichlorobenzene		ND		120	390
1,3-Dichlorobenzene		ND		120	390
1,4-Dichlorobenzene		ND		120	390
1-Methylnaphthalene		ND		120	390
2,2'-oxybis[1-chloropropane]		ND		120	390
2,3,4,6-Tetrachlorophenol		ND		120	390
2,4,5-Trichlorophenol		ND		120	390
2,4,6-Trichlorophenol		ND		120	390
2,4-Dichlorophenol		ND		120	390
2,4-Dimethylphenol		ND		160	390
2,4-Dinitrophenol		ND		120	390
2,4-Dinitrotoluene		ND		120	390
2,6-Dinitrotoluene		ND		120	390
2-Chloronaphthalene		ND		120	390
2-Chlorophenol		ND		120	390
2-Methylnaphthalene		ND		120	390
2-Methylphenol		ND		240	390
2-Nitroaniline		ND		120	2000
2-Nitrophenol		ND		120	390
3 & 4 Methylphenol		ND		120	390
3,3'-Dichlorobenzidine		ND		120	790
3-Nitroaniline		ND		120	2000
4,6-Dinitro-2-methylphenol		ND		120	2000
4-Bromophenyl phenyl ether		ND		120	390
4-Chloro-3-methylphenol		ND		120	790
4-Chloroaniline		ND		120	790
4-Chlorophenyl phenyl ether		ND		120	390
4-Nitroaniline		ND		120	2000
4-Nitrophenol		ND		120	2000
Acenaphthene		ND		120	390
Acenaphthylene		ND		120	390
Acetophenone		ND		120	390
Aniline		ND J		120	390
Anthracene		ND		120	390
Atrazine		ND		120	390
Azobenzene		ND		120	390
Benzaldehyde		ND		120	390
Benzo[a]anthracene		120	J	120	390
Benzo[a]pyrene		130	J	120	390
Benzo[b]fluoranthene		120	J	120	390
Benzo[g,h,i]perylene		150	J	120	390
Benzo[k]fluoranthene		140	J	120	390
Benzoic acid		440	J-B	180	2000

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Client: Olin Corporation

Job Number: 360-24582-1
Sdg Number: OCRI-15

Client Sample ID: **OC-SS-408-0.0/1.0-XXX**

Lab Sample ID: 360-24582-13
Client Matrix: Solid % Moisture: 15.8

Date Sampled: 09/15/2009 0930
Date Received: 09/15/2009 1640

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49648		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-49246		Lab File ID:	J03212.D
Dilution:	10			Initial Weight/Volume:	30.10 g
Date Analyzed:	09/29/2009 0600			Final Weight/Volume:	1.0 mL
Date Prepared:	09/21/2009 1530			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		120	390
Benzyl alcohol		ND		340	790
Bis(2-chloroethoxy)methane		ND		120	390
Bis(2-chloroethyl)ether		ND		120	390
Bis(2-ethylhexyl) phthalate		2500	B	120	390
Butyl benzyl phthalate		ND		120	390
Caprolactam		ND		120	390
Carbazole		ND		120	390
Chrysene		170	J	120	390
Dibenz(a,h)anthracene		ND		120	390
Dibenzofuran		ND		120	390
Diethyl phthalate		ND		120	390
Dimethyl phthalate		ND		120	390
Di-n-butyl phthalate		ND		350	390
Di-n-octyl phthalate		ND		200	390
Diphenyl oxide		ND		120	390
Fluoranthene		240	J	120	390
Fluorene		ND		120	390
Hexachlorobenzene		ND		120	390
Hexachlorobutadiene		ND		120	390
Hexachlorocyclopentadiene		ND		120	790
Hexachloroethane		ND		120	390
Indeno[1,2,3-cd]pyrene		160	J	120	390
Isophorone		ND		120	390
Naphthalene		ND		120	950
Nitrobenzene		ND		120	390
N-Nitrosodimethylamine		ND		140	390
N-Nitrosodi-n-propylamine		ND		120	390
N-Nitrosodiphenylamine		390	J	120	390
Pentachlorophenol		ND		120	390
Phenanthrene		160	J	120	470
Phenol		ND		120	390
Pyrene		260	J	120	390

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	85		30 - 130
2-Fluorobiphenyl	75		30 - 130
2-Fluorophenol	78		30 - 130
Nitrobenzene-d5	71		30 - 130
Phenol-d5	76		30 - 130
Terphenyl-d14	88		30 - 130

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Client: Olin Corporation

Job Number: 360-24582-1
Sdg Number: OCRI-15

Client Sample ID: **OC-SS-408-0.0/1.0-XXX**

Lab Sample ID: 360-24582-13
Client Matrix: Solid % Moisture: 15.8

Date Sampled: 09/15/2009 0930
Date Received: 09/15/2009 1640

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49648		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-49246		Lab File ID:	J03212.D
Dilution:	10			Initial Weight/Volume:	30.10 g
Date Analyzed:	09/29/2009 0600			Final Weight/Volume:	1.0 mL
Date Prepared:	09/21/2009 1530			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 9

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
27193-28-8	Phenol, (1,1,3,3-tetramethylbutyl)-	11.63	130	T J N
3910-35-8	1H-Indene, 2,3-dihydro-1,1,3-trimethyl-3	12.24	520	T J N
1000111-58-0	2,4-Diphenyl-4-methyl-1(E)-pentene	12.57	190	T J N
84-15-1	p-Terphenyl	13.01	590	T J N
112-61-8	Octadecanoic acid, methyl ester	13.68	170	T J N
629-78-7	Heptadecane	14.29	170	T J N
646-31-1	Tetracosane	14.65	240	T J N
629-99-2	Pentacosane	14.99	310	T J N
646-31-1	Tetracosane	16.01	400	T J N

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Client: Olin Corporation

Job Number: 360-24582-1
Sdg Number: OCRI-15

Client Sample ID: **OC-SS-409-0.0/1.0-XXX**

Lab Sample ID: 360-24582-14
Client Matrix: Solid % Moisture: 3.7

Date Sampled: 09/15/2009 1000
Date Received: 09/15/2009 1640

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49648		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-49246		Lab File ID:	J03213.D
Dilution:	10			Initial Weight/Volume:	30.38 g
Date Analyzed:	09/29/2009 0633			Final Weight/Volume:	1.0 mL
Date Prepared:	09/21/2009 1530			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		100	340
1,2,4,5-Tetrachlorobenzene		ND		100	340
1,2,4-Trichlorobenzene		ND		100	340
1,2-Dichlorobenzene		ND		100	340
1,3-Dichlorobenzene		ND		100	340
1,4-Dichlorobenzene		ND		100	340
1-Methylnaphthalene		ND		100	340
2,2'-oxybis[1-chloropropane]		ND		100	340
2,3,4,6-Tetrachlorophenol		ND		100	340
2,4,5-Trichlorophenol		ND		100	340
2,4,6-Trichlorophenol		ND		100	340
2,4-Dichlorophenol		ND		100	340
2,4-Dimethylphenol		ND		130	340
2,4-Dinitrophenol		ND		100	340
2,4-Dinitrotoluene		ND		100	340
2,6-Dinitrotoluene		ND		100	340
2-Chloronaphthalene		ND		100	340
2-Chlorophenol		ND		100	340
2-Methylnaphthalene		ND		100	340
2-Methylphenol		ND		210	340
2-Nitroaniline		ND		100	1700
2-Nitrophenol		ND		100	340
3 & 4 Methylphenol		ND		100	340
3,3'-Dichlorobenzidine		ND		100	680
3-Nitroaniline		ND		100	1700
4,6-Dinitro-2-methylphenol		ND		100	1700
4-Bromophenyl phenyl ether		ND		100	340
4-Chloro-3-methylphenol		ND		100	680
4-Chloroaniline		ND		100	680
4-Chlorophenyl phenyl ether		ND		100	340
4-Nitroaniline		ND		100	1700
4-Nitrophenol		ND		100	1700
Acenaphthene		ND		100	340
Acenaphthylene		ND		100	340
Acetophenone		ND		100	340
Aniline		ND	J	100	340
Anthracene		ND		100	340
Atrazine		ND		100	340
Azobenzene		ND		100	340
Benzaldehyde		ND		100	340
Benzo[a]anthracene		ND		100	340
Benzo[a]pyrene		ND		100	340
Benzo[b]fluoranthene		ND		100	340
Benzo[g,h,i]perylene		ND		100	340
Benzo[k]fluoranthene		ND		100	340
Benzoic acid		ND		150	1700

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Client: Olin Corporation

Job Number: 360-24582-1
Sdg Number: OCRI-15

Client Sample ID: OC-SS-409-0.0/1.0-XXX

Lab Sample ID: 360-24582-14
Client Matrix: Solid % Moisture: 3.7

Date Sampled: 09/15/2009 1000
Date Received: 09/15/2009 1640

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49648		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-49246		Lab File ID:	J03213.D
Dilution:	10			Initial Weight/Volume:	30.38 g
Date Analyzed:	09/29/2009 0633			Final Weight/Volume:	1.0 mL
Date Prepared:	09/21/2009 1530			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		100	340
Benzyl alcohol		ND		290	680
Bis(2-chloroethoxy)methane		ND		100	340
Bis(2-chloroethyl)ether		ND		100	340
Bis(2-ethylhexyl) phthalate		2200	B	100	340
Butyl benzyl phthalate		ND		100	340
Caprolactam		ND		100	340
Carbazole		ND		100	340
Chrysene		ND		100	340
Dibenz(a,h)anthracene		210	J	100	340
Dibenzofuran		ND		100	340
Diethyl phthalate		ND		100	340
Dimethyl phthalate		ND		100	340
Di-n-butyl phthalate		ND		300	340
Di-n-octyl phthalate		ND		170	340
Diphenyl oxide		ND		100	340
Fluoranthene		ND		100	340
Fluorene		ND		100	340
Hexachlorobenzene		ND		100	340
Hexachlorobutadiene		ND		100	340
Hexachlorocyclopentadiene		ND		100	680
Hexachloroethane		ND		100	340
Indeno[1,2,3-cd]pyrene		ND		100	340
Isophorone		ND		100	340
Naphthalene		ND		100	820
Nitrobenzene		ND		100	340
N-Nitrosodimethylamine		ND		120	340
N-Nitrosodi-n-propylamine		ND		100	340
N-Nitrosodiphenylamine		330	J	100	340
Pentachlorophenol		ND		100	340
Phenanthrene		ND		100	410
Phenol		ND		100	340
Pyrene		ND		100	340

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	81		30 - 130
2-Fluorobiphenyl	75		30 - 130
2-Fluorophenol	72		30 - 130
Nitrobenzene-d5	69		30 - 130
Phenol-d5	72		30 - 130
Terphenyl-d14	82		30 - 130

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Client: Olin Corporation

Job Number: 360-24582-1
Sdg Number: OCRI-15

Client Sample ID: **OC-SS-409-0.0/1.0-XXX**

Lab Sample ID: 360-24582-14
Client Matrix: Solid % Moisture: 3.7

Date Sampled: 09/15/2009 1000
Date Received: 09/15/2009 1640

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49648		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-49246		Lab File ID:	J03213.D
Dilution:	10			Initial Weight/Volume:	30.38 g
Date Analyzed:	09/29/2009 0633			Final Weight/Volume:	1.0 mL
Date Prepared:	09/21/2009 1530			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 8

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
98-83-9	.alpha.-Methylstyrene	7.76	100	T J N
90-2-8	Benzaldehyde, 2-hydroxy-	8.31	130	T J N
123-8-0	Benzaldehyde, 4-hydroxy-	10.28	110	T J N
17699-5-7	Bicyclo[3.1.1]hept-2-ene, 2,6-dimethyl-6	10.75	80	T J N
27193-28-8	Phenol, (1,1,3,3-tetramethylbutyl)-	11.62	99	T J N
3910-35-8	1H-Indene, 2,3-dihydro-1,1,3-trimethyl-3	12.25	380	T J N
7342-86-1	Benzo[b]thiophene, 3-chloro-	12.38	86	T J N
2467-3-0	Phenol, 2-[(4-hydroxyphenyl)methyl]-	13.42	1200	T J N

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Client: Olin Corporation

Job Number: 360-24582-1
Sdg Number: OCRI-15

Client Sample ID: OC-SS-411-0.0/1.0-XXX

Lab Sample ID: 360-24582-16
Client Matrix: Solid % Moisture: 58.9

Date Sampled: 09/15/2009 1055
Date Received: 09/15/2009 1640

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49648		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-49246		Lab File ID:	J03214.D
Dilution:	10			Initial Weight/Volume:	30.21 g
Date Analyzed:	09/29/2009 0706			Final Weight/Volume:	5.0 mL
Date Prepared:	09/21/2009 1530			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		1200	4000
1,2,4,5-Tetrachlorobenzene		ND		1200	4000
1,2,4-Trichlorobenzene		ND		1200	4000
1,2-Dichlorobenzene		ND		1200	4000
1,3-Dichlorobenzene		ND		1200	4000
1,4-Dichlorobenzene		ND		1200	4000
1-Methylnaphthalene		ND		1200	4000
2,2'-oxybis[1-chloropropane]		ND		1200	4000
2,3,4,6-Tetrachlorophenol		ND		1200	4000
2,4,5-Trichlorophenol		ND		1200	4000
2,4,6-Trichlorophenol		ND		1200	4000
2,4-Dichlorophenol		ND		1200	4000
2,4-Dimethylphenol		ND		1600	4000
2,4-Dinitrophenol		ND		1200	4000
2,4-Dinitrotoluene		ND		1200	4000
2,6-Dinitrotoluene		ND		1200	4000
2-Chloronaphthalene		ND		1200	4000
2-Chlorophenol		ND		1200	4000
2-Methylnaphthalene		ND		1200	4000
2-Methylphenol		ND		2400	4000
2-Nitroaniline		ND		1200	20000
2-Nitrophenol		ND		1200	4000
3 & 4 Methylphenol		ND		1200	4000
3,3'-Dichlorobenzidine		ND		1200	8100
3-Nitroaniline		ND		1200	20000
4,6-Dinitro-2-methylphenol		ND		1200	20000
4-Bromophenyl phenyl ether		ND		1200	4000
4-Chloro-3-methylphenol		ND		1200	8100
4-Chloroaniline		ND		1200	8100
4-Chlorophenyl phenyl ether		ND		1200	4000
4-Nitroaniline		ND		1200	20000
4-Nitrophenol		ND		1200	20000
Acenaphthene		ND		1200	4000
Acenaphthylene		ND		1200	4000
Acetophenone		ND		1200	4000
Aniline		ND	J	1200	4000
Anthracene		ND		1200	4000
Atrazine		ND		1200	4000
Azobenzene		ND		1200	4000
Benzaldehyde		ND		1200	4000
Benzo[a]anthracene		ND		1200	4000
Benzo[a]pyrene		ND		1200	4000
Benzo[b]fluoranthene		ND		1200	4000
Benzo[g,h,i]perylene		ND		1200	4000
Benzo[k]fluoranthene		ND		1200	4000
Benzoic acid		5500	J	1800	20000

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Client: Olin Corporation

Job Number: 360-24582-1
Sdg Number: OCRI-15

Client Sample ID: OC-SS-411-0.0/1.0-XXX

Lab Sample ID: 360-24582-16
Client Matrix: Solid
% Moisture: 58.9

Date Sampled: 09/15/2009 1055
Date Received: 09/15/2009 1640

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49648		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-49246		Lab File ID:	J03214.D
Dilution:	10			Initial Weight/Volume:	30.21 g
Date Analyzed:	09/29/2009 0706			Final Weight/Volume:	5.0 mL
Date Prepared:	09/21/2009 1530			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		1200	4000
Benzyl alcohol		ND		3400	8100
Bis(2-chloroethoxy)methane		ND		1200	4000
Bis(2-chloroethyl)ether		ND		1200	4000
Bis(2-ethylhexyl) phthalate		ND		1200	4000
Butyl benzyl phthalate		ND		1200	4000
Caprolactam		ND		1200	4000
Carbazole		ND		1200	4000
Chrysene		ND		1200	4000
Dibenz(a,h)anthracene		ND		1200	4000
Dibenzofuran		ND		1200	4000
Diethyl phthalate		ND		1200	4000
Dimethyl phthalate		ND		1200	4000
Di-n-butyl phthalate		ND		3500	4000
Di-n-octyl phthalate		ND		2000	4000
Diphenyl oxide		ND		1200	4000
Fluoranthene		ND		1200	4000
Fluorene		ND		1200	4000
Hexachlorobenzene		ND		1200	4000
Hexachlorobutadiene		ND		1200	4000
Hexachlorocyclopentadiene		ND		1200	8100
Hexachloroethane		ND		1200	4000
Indeno[1,2,3-cd]pyrene		ND		1200	4000
Isophorone		ND		1200	4000
Naphthalene		ND		1200	9700
Nitrobenzene		ND		1200	4000
N-Nitrosodimethylamine		ND		1400	4000
N-Nitrosodi-n-propylamine		ND		1200	4000
N-Nitrosodiphenylamine		ND		1200	4000
Pentachlorophenol		ND		1200	4000
Phenanthrene		ND		1200	4800
Phenol		ND		1200	4000
Pyrene		ND		1200	4000

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	83		30 - 130
2-Fluorobiphenyl	49		30 - 130
2-Fluorophenol	46		30 - 130
Nitrobenzene-d5	65		30 - 130
Phenol-d5	42		30 - 130
Terphenyl-d14	64		30 - 130

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Client: Olin Corporation

Job Number: 360-24582-1
Sdg Number: OCRI-15

Client Sample ID: **OC-SS-411-0.0/1.0-XXX**

Lab Sample ID: 360-24582-16
Client Matrix: Solid % Moisture: 58.9

Date Sampled: 09/15/2009 1055
Date Received: 09/15/2009 1640

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49648		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-49246		Lab File ID:	J03214.D
Dilution:	10			Initial Weight/Volume:	30.21 g
Date Analyzed:	09/29/2009 0706			Final Weight/Volume:	5.0 mL
Date Prepared:	09/21/2009 1530			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 10

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
98-1-1	Furfural	6.19	9300	T J N
1599-67-3	1-Docosene	15.02	20000	T J N
297-3-0	Cyclotetracosane	15.72	29000	T J N
56554-89-3	14-Octadecenal	16.18	6900	T J N
630-3-5	Nonacosane	16.34	21000	T J N
1599-67-3	1-Docosene	16.40	21000	T J N
7796-19-2	2-Heptacosanone	16.45	18000	T J N
22513-81-1	1,22-Docosanediol	16.92	15000	T J N
630-4-6	Hentriacontane	17.09	21000	T J N
17600-99-6	2-Nonacosanone	17.25	20000	T J N

Client: Olin Corporation

Job Number: 360-24582-1
Sdg Number: OCRI-15

Client Sample ID: **OC-SS-412-0.0/1.0-XXX**

Lab Sample ID: 360-24582-17
Client Matrix: Solid % Moisture: 8.2

Date Sampled: 09/15/2009 1120
Date Received: 09/15/2009 1640

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49648		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-49246		Lab File ID:	J03215.D
Dilution:	10			Initial Weight/Volume:	30.50 g
Date Analyzed:	09/29/2009 0739			Final Weight/Volume:	1.0 mL
Date Prepared:	09/21/2009 1530			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		110	360
1,2,4,5-Tetrachlorobenzene		ND		110	360
1,2,4-Trichlorobenzene		ND		110	360
1,2-Dichlorobenzene		ND		110	360
1,3-Dichlorobenzene		ND		110	360
1,4-Dichlorobenzene		ND		110	360
1-Methylnaphthalene		ND		110	360
2,2'-oxybis[1-chloropropane]		ND		110	360
2,3,4,6-Tetrachlorophenol		ND		110	360
2,4,5-Trichlorophenol		ND		110	360
2,4,6-Trichlorophenol		ND		110	360
2,4-Dichlorophenol		ND		110	360
2,4-Dimethylphenol		ND		140	360
2,4-Dinitrophenol		ND		110	360
2,4-Dinitrotoluene		ND		110	360
2,6-Dinitrotoluene		ND		110	360
2-Chloronaphthalene		ND		110	360
2-Chlorophenol		ND		110	360
2-Methylnaphthalene		ND		110	360
2-Methylphenol		ND		210	360
2-Nitroaniline		ND		110	1800
2-Nitrophenol		ND		110	360
3 & 4 Methylphenol		ND		110	360
3,3'-Dichlorobenzidine		ND		110	710
3-Nitroaniline		ND		110	1800
4,6-Dinitro-2-methylphenol		ND		110	1800
4-Bromophenyl phenyl ether		ND		110	360
4-Chloro-3-methylphenol		ND		110	710
4-Chloroaniline		ND		110	710
4-Chlorophenyl phenyl ether		ND		110	360
4-Nitroaniline		ND		110	1800
4-Nitrophenol		ND		110	1800
Acenaphthene		ND		110	360
Acenaphthylene		ND		110	360
Acetophenone		ND		110	360
Aniline		ND J		110	360
Anthracene		ND		110	360
Atrazine		ND		110	360
Azobenzene		ND		110	360
Benzaldehyde		250	J	110	360
Benzo[a]anthracene		540		110	360
Benzo[a]pyrene		570		110	360
Benzo[b]fluoranthene		470		110	360
Benzo[g,h,i]perylene		420		110	360
Benzo[k]fluoranthene		480		110	360
Benzoic acid		420	J-B	160	1800

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Client: Olin Corporation

Job Number: 360-24582-1
Sdg Number: OCRI-15

Client Sample ID: **OC-SS-412-0.0/1.0-XXX**

Lab Sample ID: 360-24582-17
Client Matrix: Solid

% Moisture: 8.2

Date Sampled: 09/15/2009 1120
Date Received: 09/15/2009 1640

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49648		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-49246		Lab File ID:	J03215.D
Dilution:	10			Initial Weight/Volume:	30.50 g
Date Analyzed:	09/29/2009 0739			Final Weight/Volume:	1.0 mL
Date Prepared:	09/21/2009 1530			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		110	360
Benzyl alcohol		ND		300	710
Bis(2-chloroethoxy)methane		ND		110	360
Bis(2-chloroethyl)ether		ND		110	360
Bis(2-ethylhexyl) phthalate		880 U	B	110	360
Butyl benzyl phthalate		ND		110	360
Caprolactam		ND		110	360
Carbazole		ND		110	360
Chrysene		1000		110	360
Dibenz(a,h)anthracene		320	J	110	360
Dibenzofuran		ND		110	360
Diethyl phthalate		ND		110	360
Dimethyl phthalate		ND		110	360
Di-n-butyl phthalate		ND		310	360
Di-n-octyl phthalate		ND		180	360
Diphenyl oxide		ND		110	360
Fluoranthene		960		110	360
Fluorene		ND		110	360
Hexachlorobenzene		ND		110	360
Hexachlorobutadiene		ND		110	360
Hexachlorocyclopentadiene		ND		110	710
Hexachloroethane		ND		110	360
Indeno[1,2,3-cd]pyrene		320	J	110	360
Isophorone		ND		110	360
Naphthalene		ND		110	860
Nitrobenzene		ND		110	360
N-Nitrosodimethylamine		ND		130	360
N-Nitrosodi-n-propylamine		ND		110	360
N-Nitrosodiphenylamine		ND		110	360
Pentachlorophenol		ND		110	360
Phenanthrene		410	J	110	430
Phenol		ND		110	360
Pyrene		1400		110	360

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	79		30 - 130
2-Fluorobiphenyl	70		30 - 130
2-Fluorophenol	69		30 - 130
Nitrobenzene-d5	63		30 - 130
Phenol-d5	65		30 - 130
Terphenyl-d14	88		30 - 130

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Client: Olin Corporation

Job Number: 360-24582-1
Sdg Number: OCRI-15

Client Sample ID: **OC-SS-412-0.0/1.0-XXX**

Lab Sample ID: 360-24582-17
Client Matrix: Solid % Moisture: 8.2

Date Sampled: 09/15/2009 1120
Date Received: 09/15/2009 1640

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49648		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-49246		Lab File ID:	J03215.D
Dilution:	10			Initial Weight/Volume:	30.50 g
Date Analyzed:	09/29/2009 0739			Final Weight/Volume:	1.0 mL
Date Prepared:	09/21/2009 1530			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 9

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
3910-35-8	1H-Indene, 2,3-dihydro-1,1,3-trimethyl-3	12.24	320	T J N
1000142-23-9	Tricyclo[4.3.3.0(1,6)]dodeca-7,11-diene-	14.50	730	T J N
3353-12-6	Pyrene, 4-methyl-	14.65	350	T J N
629-92-5	Nonadecane	15.00	360	T J N
239-35-0	Benzo[b]naphtho[2,1-d]thiophene	15.11	320	T J N
629-78-7	Heptadecane	15.68	570	T J N
630-3-5	Nonacosane	16.34	2300	T J N
26603-23-6	p;p''-Dioctyldiphenylamine	16.86	79000	T J N
112-95-8	Eicosane	17.09	990	T J N

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Client: Olin Corporation

Job Number: 360-24582-1
Sdg Number: OCRI-15

Client Sample ID: OC-SS-414-0.0/1.0-XXX

Lab Sample ID: 360-24582-19
Client Matrix: Solid

% Moisture: 6.9

Date Sampled: 09/15/2009 1155
Date Received: 09/15/2009 1640

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49648		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-49246		Lab File ID:	J03216.D
Dilution:	10			Initial Weight/Volume:	30.34 g
Date Analyzed:	09/29/2009 0811			Final Weight/Volume:	1.0 mL
Date Prepared:	09/21/2009 1530			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		110	350
1,2,4,5-Tetrachlorobenzene		ND		110	350
1,2,4-Trichlorobenzene		ND		110	350
1,2-Dichlorobenzene		ND		110	350
1,3-Dichlorobenzene		ND		110	350
1,4-Dichlorobenzene		ND		110	350
1-Methylnaphthalene		ND		110	350
2,2'-oxybis[1-chloropropane]		ND		110	350
2,3,4,6-Tetrachlorophenol		ND		110	350
2,4,5-Trichlorophenol		ND		110	350
2,4,6-Trichlorophenol		ND		110	350
2,4-Dichlorophenol		ND	✓	110	350
2,4-Dimethylphenol		ND		140	350
2,4-Dinitrophenol		ND		110	350
2,4-Dinitrotoluene		ND		110	350
2,6-Dinitrotoluene		ND		110	350
2-Chloronaphthalene		ND		110	350
2-Chlorophenol		ND		110	350
2-Methylnaphthalene		ND		110	350
2-Methylphenol		ND		210	350
2-Nitroaniline		ND		110	1800
2-Nitrophenol		ND		110	350
3 & 4 Methylphenol		ND		110	350
3,3'-Dichlorobenzidine		ND		110	710
3-Nitroaniline		ND		110	1800
4,6-Dinitro-2-methylphenol		ND		110	1800
4-Bromophenyl phenyl ether		ND		110	350
4-Chloro-3-methylphenol		ND		110	710
4-Chloroaniline		ND		110	710
4-Chlorophenyl phenyl ether		ND		110	350
4-Nitroaniline		ND		110	1800
4-Nitrophenol		ND		110	1800
Acenaphthene		ND		110	350
Acenaphthylene		ND		110	350
Acetophenone		ND		110	350
Aniline		ND	J ✓	110	350
Anthracene		ND		110	350
Atrazine		ND		110	350
Azobenzene		ND		110	350
Benzaldehyde		ND		110	350
Benzo[a]anthracene		ND		110	350
Benzo[a]pyrene		ND		110	350
Benzo[b]fluoranthene		ND		110	350
Benzo[g,h,i]perylene		ND		110	350
Benzo[k]fluoranthene		ND		110	350
Benzoic acid		ND		160	1800

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Client: Olin Corporation

Job Number: 360-24582-1
Sdg Number: OCRI-15

Client Sample ID: **OC-SS-414-0.0/1.0-XXX**

Lab Sample ID: 360-24582-19
Client Matrix: Solid % Moisture: 6.9

Date Sampled: 09/15/2009 1155
Date Received: 09/15/2009 1640

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49648		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-49246		Lab File ID:	J03216.D
Dilution:	10			Initial Weight/Volume:	30.34 g
Date Analyzed:	09/29/2009 0811			Final Weight/Volume:	1.0 mL
Date Prepared:	09/21/2009 1530			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		110	350
Benzyl alcohol		ND		300	710
Bis(2-chloroethoxy)methane		ND		110	350
Bis(2-chloroethyl)ether		ND		110	350
Bis(2-ethylhexyl) phthalate		2100	B	110	350
Butyl benzyl phthalate		ND		110	350
Caprolactam		ND		110	350
Carbazole		ND		110	350
Chrysene		ND		110	350
Dibenz(a,h)anthracene		ND		110	350
Dibenzofuran		ND		110	350
Diethyl phthalate		ND		110	350
Dimethyl phthalate		ND		110	350
Di-n-butyl phthalate		ND		310	350
Di-n-octyl phthalate		ND		180	350
Diphenyl oxide		ND		110	350
Fluoranthene		120	J	110	350
Fluorene		ND		110	350
Hexachlorobenzene		ND		110	350
Hexachlorobutadiene		ND		110	350
Hexachlorocyclopentadiene		ND		110	710
Hexachloroethane		ND		110	350
Indeno[1,2,3-cd]pyrene		ND		110	350
Isophorone		ND		110	350
Naphthalene		ND		110	850
Nitrobenzene		ND		110	350
N-Nitrosodimathylamine		ND		130	350
N-Nitrosodi-n-propylamine		ND		110	350
N-Nitrosodiphenylamine		ND		110	350
Pentachlorophenol		ND		110	350
Phenanthrene		ND		110	420
Phenol		ND		110	350
Pyrene		140	J	110	350

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	88		30 - 130
2-Fluorobiphenyl	82		30 - 130
2-Fluorophenol	77		30 - 130
Nitrobenzene-d5	73		30 - 130
Phenol-d5	77		30 - 130
Terphenyl-d14	96		30 - 130

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Client: Olin Corporation

Job Number: 360-24582-1
Sdg Number: OCRI-15

Client Sample ID: **OC-SS-414-0.0/1.0-XXX**

Lab Sample ID: 360-24582-19
Client Matrix: Solid % Moisture: 6.9

Date Sampled: 09/15/2009 1155
Date Received: 09/15/2009 1640

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49648		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-49246		Lab File ID:	J03216.D
Dilution:	10			Initial Weight/Volume:	30.34 g
Date Analyzed:	09/29/2009 0811			Final Weight/Volume:	1.0 mL
Date Prepared:	09/21/2009 1530			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 7

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
27193-28-8	Phenol, (1,1,3,3-tetramethylbutyl)-	11.63	78	T J N
3910-35-8	1H-Indene, 2,3-dihydro-1,1,3-trimethyl-3	12.24	190	T J N
112-61-8	Octadecanoic acid, methyl ester	13.68	83	T J N
544-76-3	Hexadecane	15.34	140	T J N
7683-64-9	Squalene	16.19	330	T J N
26609-23-6	p,p'-Dioctyldiphenylamine	16.86	73000	T J N
544-76-3	Hexadecane	17.09	1200	T J N

M. Clark 3/11/10

Client: Olin Corporation

Job Number: 360-24582-1
Sdg Number: OCRI-15

Client Sample ID: **OC-SS-415-0.0/1.0-XXX**

Lab Sample ID: 360-24582-20
Client Matrix: Solid % Moisture: 57.4

Date Sampled: 09/15/2009 1215
Date Received: 09/15/2009 1640

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49648		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-49246		Lab File ID:	J03217.D
Dilution:	10			Initial Weight/Volume:	30.17 g
Date Analyzed:	09/29/2009 0844			Final Weight/Volume:	2.0 mL
Date Prepared:	09/21/2009 1530			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		470	1600
1,2,4,5-Tetrachlorobenzene		ND		470	1600
1,2,4-Trichlorobenzene		ND		470	1600
1,2-Dichlorobenzene		ND		470	1600
1,3-Dichlorobenzene		ND		470	1600
1,4-Dichlorobenzene		ND		470	1600
1-Methylnaphthalene		ND		470	1600
2,2'-oxybis[1-chloropropane]		ND		470	1600
2,3,4,6-Tetrachlorophenol		ND		470	1600
2,4,5-Trichlorophenol		ND		470	1600
2,4,6-Trichlorophenol		ND		470	1600
2,4-Dichlorophenol		ND	✓	470	1600
2,4-Dimethylphenol		ND		610	1600
2,4-Dinitrophenol		ND		470	1600
2,4-Dinitrotoluene		ND		470	1600
2,6-Dinitrotoluene		ND		470	1600
2-Chloronaphthalene		ND		470	1600
2-Chlorophenol		ND		470	1600
2-Methylnaphthalene		ND		470	1600
2-Methylphenol		ND		930	1600
2-Nitroaniline		ND		470	7800
2-Nitrophenol		ND		470	1600
3 & 4 Methylphenol		ND		470	1600
3,3'-Dichlorobenzidine		ND	J	470	3100
3-Nitroaniline		ND		470	7800
4,6-Dinitro-2-methylphenol		ND		470	7800
4-Bromophenyl phenyl ether		ND		470	1600
4-Chloro-3-methylphenol		ND		470	3100
4-Chloroaniline		ND		470	3100
4-Chlorophenyl phenyl ether		ND		470	1600
4-Nitroaniline		ND		470	7800
4-Nitrophenol		ND		470	7800
Acenaphthene		ND		470	1600
Acenaphthylene		ND		470	1600
Acetophenone		ND		470	1600
Aniline		ND	J ✓	470	1600
Anthracene		ND		470	1600
Atrazine		ND		470	1600
Azobenzene		ND		470	1600
Benzaldehyde		ND		470	1600
Benzo[a]anthracene		ND	J	470	1600
Benzo[a]pyrene		ND		470	1600
Benzo[b]fluoranthene		ND		470	1600
Benzo[g,h,i]perylene		ND		470	1600
Benzo[k]fluoranthene		ND		470	1600
Benzoic acid		2000	J,B ✓	700	7800

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Client: Olin Corporation

Job Number: 360-24582-1
Sdg Number: OCRI-15

Client Sample ID: **OC-SS-415-0.0/1.0-XXX**

Lab Sample ID: 360-24582-20
Client Matrix: Solid
% Moisture: 57.4

Date Sampled: 09/15/2009 1215
Date Received: 09/15/2009 1640

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49648		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-49246		Lab File ID:	J03217.D
Dilution:	10			Initial Weight/Volume:	30.17 g
Date Analyzed:	09/29/2009 0844			Final Weight/Volume:	2.0 mL
Date Prepared:	09/21/2009 1530			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		470	1600
Benzyl alcohol		ND		1300	3100
Bis(2-chloroethoxy)methane		ND		470	1600
Bis(2-chloroethyl)ether		ND		470	1600
Bis(2-ethylhexyl) phthalate		2900 J	B	470	1600
Butyl benzyl phthalate		ND J		470	1600
Caprolactam		ND		470	1600
Carbazole		ND		470	1600
Chrysene		ND J		470	1600
Dibenz(a,h)anthracene		ND		470	1600
Dibenzofuran		ND		470	1600
Diethyl phthalate		ND		470	1600
Dimethyl phthalate		ND		470	1600
Di-n-butyl phthalate		ND		1400	1600
Di-n-octyl phthalate		ND		780	1600
Diphenyl oxide		ND		470	1600
Fluoranthene		ND		470	1600
Fluorene		ND		470	1600
Hexachlorobenzene		ND		470	1600
Hexachlorobutadiene		ND		470	1600
Hexachlorocyclopentadiene		ND		470	3100
Hexachloroethane		ND		470	1600
Indeno[1,2,3-cd]pyrene		ND J		470	1600
Isophorone		ND		470	1600
Naphthalene		ND		470	3700
Nitrobenzene		ND		470	1600
N-Nitrosodimethylamine		ND		550	1600
N-Nitrosodi-n-propylamine		ND		470	1600
N-Nitrosodiphenylamine		ND		470	1600
Pentachlorophenol		ND		470	1600
Phenanthrene		ND		470	1900
Phenol		ND		470	1600
Pyrene		ND J		470	1600

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	58		30 - 130
2-Fluorobiphenyl	47		30 - 130
2-Fluorophenol	41		30 - 130
Nitrobenzene-d5	51		30 - 130
Phenol-d5	40		30 - 130
Terphenyl-d14	49		30 - 130

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Client: Olin Corporation

Job Number: 360-24582-1
Sdg Number: OCRI-15

Client Sample ID: **OC-SS-415-0.0/1.0-XXX**

Lab Sample ID: 360-24582-20
Client Matrix: Solid % Moisture: 57.4

Date Sampled: 09/15/2009 1215
Date Received: 09/15/2009 1640

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49648		Instrument ID:	Inst. J
Preparation:	3546	Prep Batch: 360-49246		Lab File ID:	J03217.D
Dilution:	10			Initial Weight/Volume:	30.17 g
Date Analyzed:	09/29/2009 0844			Final Weight/Volume:	2.0 mL
Date Prepared:	09/21/2009 1530			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 10

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
3910-35-8	1H-Indene, 2,3-dihydro-1,1,3-trimethyl-3	12.24	2000	T J N
31035-7-1	9-Nonadecene	15.03	7700	T J N
593-49-7	Heptacosane	15.68	2300	T J N
297-3-0	Cyclotetracosane	15.72	17000	T J N
6920-24-7	Hexadecane-1,2-diol	16.06	2700	T J N
7390-81-0	Oxirane, hexadecyl-	16.18	3000	T J N
630-3-5	Nonacosane	16.34	2500	T J N
71502-22-2	9-Hexacosene	16.41	3900	T J N
7390-81-0	Oxirane, hexadecyl-	16.92	2000	T J N
1000194-63-7	2,2,4a,6a,8a,9,12b,14a-Octamethyl-1,2,3,	18.77	7800	T J N

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Client: Olin Corporation

Job Number: 360-24582-1
Sdg Number: OCRI-15

Client Sample ID: **OC-SS-416-0.0/1.0-DUP**

Lab Sample ID: 360-24582-21
Client Matrix: Solid
% Moisture: 8.5

Date Sampled: 09/15/2009 1240
Date Received: 09/15/2009 1640

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49826		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49345		Lab File ID:	B10706.D
Dilution:	10			Initial Weight/Volume:	30.54 g
Date Analyzed:	10/03/2009 2223			Final Weight/Volume:	1.0 mL
Date Prepared:	09/23/2009 1139			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		110	360
1,2,4,5-Tetrachlorobenzene		ND		110	360
1,2,4-Trichlorobenzene		ND		110	360
1,2-Dichlorobenzene		ND		110	360
1,3-Dichlorobenzene		ND		110	360
1,4-Dichlorobenzene		ND		110	360
1-Methylnaphthalene		ND		110	360
2,2'-oxybis[1-chloropropane]		ND		110	360
2,3,4,6-Tetrachlorophenol		ND		110	360
2,4,5-Trichlorophenol		ND		110	360
2,4,6-Trichlorophenol		ND		110	360
2,4-Dichlorophenol		ND		110	360
2,4-Dimethylphenol		ND		140	360
2,4-Dinitrophenol		ND		110	360
2,4-Dinitrotoluene		ND		110	360
2,6-Dinitrotoluene		ND		110	360
2-Chloronaphthalene		ND		110	360
2-Chlorophenol		ND		110	360
2-Methylnaphthalene		ND		110	360
2-Methylphenol		ND		210	360
2-Nitroaniline		ND R		110	1800
2-Nitrophenol		ND		110	360
3 & 4 Methylphenol		ND		110	360
3,3'-Dichlorobenzidine		ND R		110	720
3-Nitroaniline		ND J		110	1800
4,6-Dinitro-2-methylphenol		ND		110	1800
4-Bromophenyl phenyl ether		ND		110	360
4-Chloro-3-methylphenol		ND		110	720
4-Chloroaniline		ND R		110	720
4-Chlorophenyl phenyl ether		ND		110	360
4-Nitroaniline		ND		110	1800
4-Nitrophenol		ND		110	1800
Acenaphthene		ND		110	360
Acenaphthylene		ND		110	360
Acetophenone		ND		110	360
Aniline		ND J R		110	360
Anthracene		ND		110	360
Atrazine		ND		110	360
Azobenzene		ND		110	360
Benzaldehyde		ND		110	360
Benzo[a]anthracene		410 J		110	360
Benzo[a]pyrene		480 J		110	360
Benzo[b]fluoranthene		640 J		110	360
Benzo[g,h,i]perylene		240	J	110	360
Benzo[k]fluoranthene		310	J	110	360
Benzoic acid		500	J B	160	1800

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Client: Olin Corporation

Job Number: 360-24582-1
Sdg Number: OCRI-15

Client Sample ID: OC-SS-416-0.0/1.0-DUP

Lab Sample ID: 360-24582-21
Client Matrix: Solid
% Moisture: 8.5

Date Sampled: 09/15/2009 1240
Date Received: 09/15/2009 1640

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49826		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49345		Lab File ID:	B10706.D
Dilution:	10			Initial Weight/Volume:	30.54 g
Date Analyzed:	10/03/2009 2223			Final Weight/Volume:	1.0 mL
Date Prepared:	09/23/2009 1139			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		110	360
Benzyl alcohol		ND R		300	720
Bis(2-chloroethoxy)methane		ND		110	360
Bis(2-chloroethyl)ether		ND		110	360
Bis(2-ethylhexyl) phthalate		500 J		110	360
Butyl benzyl phthalate		ND		110	360
Caprolactam		ND		110	360
Carbazole		ND		110	360
Chrysene		620 J		110	360
Dibenz(a,h)anthracene		ND		110	360
Dibenzofuran		ND		110	360
Diethyl phthalate		ND		110	360
Dimethyl phthalate		ND		110	360
Di-n-butyl phthalate		ND R		310	360
Di-n-octyl phthalate		ND		180	360
Diphenyl oxide		ND		110	360
Fluoranthene		790 J		110	360
Fluorene		210	J	110	360
Hexachlorobenzene		ND		110	360
Hexachlorobutadiene		ND		110	360
Hexachlorocyclopentadiene		ND		110	720
Hexachloroethane		ND		110	360
Indeno[1,2,3-cd]pyrene		260 J	J	110	360
Isophorone		ND		110	360
Naphthalene		ND		110	860
Nitrobenzene		ND		110	360
N-Nitrosodimethylamine		ND		130	360
N-Nitrosodi-n-propylamine		ND		110	360
N-Nitrosodiphenylamine		ND		110	360
Pentachlorophenol		ND		110	360
Phenanthrene		210	J	110	430
Phenol		ND		110	360
Pyrene		530		110	360

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	66		30 - 130
2-Fluorobiphenyl	62		30 - 130
2-Fluorophenol	69		30 - 130
Nitrobenzene-d5	60		30 - 130
Phenol-d5	66		30 - 130
Terphenyl-d14	64		30 - 130

3/10/10

Client: Olin Corporation

Job Number: 360-24582-1
Sdg Number: OCRI-15

Client Sample ID: **OC-SS-416-0.0/1.0-DUP**

Lab Sample ID: 360-24582-21
Client Matrix: Solid % Moisture: 8.5

Date Sampled: 09/15/2009 1240
Date Received: 09/15/2009 1640

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49826		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49345		Lab File ID:	B10706.D
Dilution:	10			Initial Weight/Volume:	30.54 g
Date Analyzed:	10/03/2009 2223			Final Weight/Volume:	1.0 mL
Date Prepared:	09/23/2009 1139			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 10

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
1928-30-9	Tricosane, 2-methyl-	12.34	250	T J N
13475-76-8	Docosane, 11-butyl-	12.73	350	T J N
630-3-5	Nonacosane	13.18	360	T J N
55124-79-3	Heptadecane, 9-hexyl-	13.74	460	T J N
629-78-7	Heptadecane	14.42	1400	T J N
7225-64-1	Heptadecane, 9-octyl-	15.19	3500	T J N
192-97-2	Benzo[e]pyrene	15.26	320	T J N
74298-93-4	1,1"-Biphenyl, 2,3",4,5"-tetrachloro-4"-	15.62	47000	T J N
544-76-3	Hexadecane	15.72	730	T J N
630-2-4	Octacosane	16.15	1700	T J N

4/22/10

Client: Olin Corporation

Job Number: 360-24582-1
Sdg Number: OCRI-15

Client Sample ID: **OC-SS-416-0.0/1.0-XXX**

Lab Sample ID: 360-24582-22
Client Matrix: Solid % Moisture: 8.8

Date Sampled: 09/15/2009 1240
Date Received: 09/15/2009 1640

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49826		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49345		Lab File ID:	B10707.D
Dilution:	10			Initial Weight/Volume:	30.40 g
Date Analyzed:	10/03/2009 2251			Final Weight/Volume:	1.0 mL
Date Prepared:	09/23/2009 1139			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		110	360
1,2,4,5-Tetrachlorobenzene		ND		110	360
1,2,4-Trichlorobenzene		ND		110	360
1,2-Dichlorobenzene		ND		110	360
1,3-Dichlorobenzene		ND		110	360
1,4-Dichlorobenzene		ND		110	360
1-Methylnaphthalene		ND		110	360
2,2'-oxybis[1-chloropropane]		ND		110	360
2,3,4,6-Tetrachlorophenol		ND		110	360
2,4,5-Trichlorophenol		ND		110	360
2,4,6-Trichlorophenol		ND		110	360
2,4-Dichlorophenol		ND		110	360
2,4-Dimethylphenol		ND		140	360
2,4-Dinitrophenol		ND		110	360
2,4-Dinitrotoluene		ND		110	360
2,6-Dinitrotoluene		ND		110	360
2-Chloronaphthalene		ND		110	360
2-Chlorophenol		ND		110	360
2-Methylnaphthalene		ND		110	360
2-Methylphenol		ND		220	360
2-Nitroaniline		ND R		110	1800
2-Nitrophenol		ND		110	360
3 & 4 Methylphenol		ND		110	360
3,3'-Dichlorobenzidine		ND R		110	720
3-Nitroaniline		ND J		110	1800
4,6-Dinitro-2-methylphenol		ND		110	1800
4-Bromophenyl phenyl ether		ND		110	360
4-Chloro-3-methylphenol		ND		110	720
4-Chloroaniline		ND R		110	720
4-Chlorophenyl phenyl ether		ND		110	360
4-Nitroaniline		ND		110	1800
4-Nitrophenol		ND		110	1800
Acenaphthene		ND		110	360
Acenaphthylene		ND		110	360
Acetophenone		ND		110	360
Aniline		ND J R	✓	110	360
Anthracene		ND		110	360
Atrazine		ND		110	360
Azobenzene		ND		110	360
Benzaldehyde		ND		110	360
Benzo[a]anthracene		130 J	J	110	360
Benzo[a]pyrene		170 J	J	110	360
Benzo[b]fluoranthene		310 J	J	110	360
Benzo[g,h,i]perylene		160	J	110	360
Benzo[k]fluoranthene		ND		110	360
Benzoic acid	I POOR	490	J-B	160	1800

3/11/10

Client: Olin Corporation

Job Number: 360-24582-1
Sdg Number: OCRI-15

Client Sample ID: **OC-SS-416-0.0/1.0-XXX**

Lab Sample ID: 360-24582-22
Client Matrix: Solid % Moisture: 8.8

Date Sampled: 09/15/2009 1240
Date Received: 09/15/2009 1640

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49826		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49345		Lab File ID:	B10707.D
Dilution:	10			Initial Weight/Volume:	30.40 g
Date Analyzed:	10/03/2009 2251			Final Weight/Volume:	1.0 mL
Date Prepared:	09/23/2009 1139			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		110	360
Benzyl alcohol		ND R		310	720
Bis(2-chloroethoxy)methane		ND		110	360
Bis(2-chloroethyl)ether		ND		110	360
Bis(2-ethylhexyl) phthalate		550 J		110	360
Butyl benzyl phthalate		ND		110	360
Caprolactam		ND		110	360
Carbazole		ND		110	360
Chrysene		300	J	110	360
Dibenz(a,h)anthracene		ND		110	360
Dibenzofuran		ND		110	360
Diethyl phthalate		ND		110	360
Dimethyl phthalate		ND		110	360
Di-n-butyl phthalate		ND R		320	360
Di-n-octyl phthalate		ND		180	360
Diphenyl oxide		ND		110	360
Fluoranthene		430 J		110	360
Fluorene		210	J	110	360
Hexachlorobenzene		ND		110	360
Hexachlorobutadiene		ND		110	360
Hexachlorocyclopentadiene		ND		110	720
Hexachloroethane		ND		110	360
Indeno[1,2,3-cd]pyrene		130	J	110	360
Isophorone		ND		110	360
Naphthalene		ND		110	870
Nitrobenzene		ND		110	360
N-Nitrosodimethylamine		ND		130	360
N-Nitrosodi-n-propylamine		ND		110	360
N-Nitrosodiphenylamine		ND		110	360
Pentachlorophenol		ND		110	360
Phenanthrene		150	J	110	430
Phenol		ND		110	360
Pyrene		340	J	110	360

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	74		30 - 130
2-Fluorobiphenyl	69		30 - 130
2-Fluorophenol	77		30 - 130
Nitrobenzene-d5	64		30 - 130
Phenol-d5	70		30 - 130
Terphenyl-d14	73		30 - 130

3/11/10

Client: Olin Corporation

Job Number: 360-24582-1
Sdg Number: OCRI-15

Client Sample ID: **OC-SS-416-0.0/1.0-XXX**

Lab Sample ID: 360-24582-22
Client Matrix: Solid % Moisture: 8.8

Date Sampled: 09/15/2009 1240
Date Received: 09/15/2009 1640

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49826		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49345		Lab File ID:	B10707.D
Dilution:	10			Initial Weight/Volume:	30.40 g
Date Analyzed:	10/03/2009 2251			Final Weight/Volume:	1.0 mL
Date Prepared:	09/23/2009 1139			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 9

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
638-67-5	Tricosane	12.01	140	T J N
544-76-3	Hexadecane	12.34	290	T J N
1560-88-9	Octadecane, 2-methyl-	12.73	340	T J N
593-49-7	Heptacosane	13.18	390	T J N
593-49-7	Heptacosane	13.74	520	T J N
6418-46-8	Eicosane, 3-methyl-	15.19	3100	T J N
112-95-8	Eicosane	15.72	610	T J N
630-2-4	Octacosane	16.15	1700	T J N
1058-61-3	Stigmast-4-en-3-one	18.27	1700	T J N

3/11/10

FORM IV
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Westfield Job No.: 360-24582-1

SDG No.: OCRI-15

Lab File ID: B10631.D Lab Sample ID: MB 360-49345/1-A

Matrix: Solid Date Extracted: 09/23/2009 11:39

Instrument ID: Inst. B Date Analyzed: 09/29/2009 21:47

Level: (Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 360-49345/2-A	B10632.D	09/29/2009 22:16
	LCSD 360-49345/3-A	B10633.D	09/29/2009 22:44
OC-SS-416-0.0/1.0-DUP	360-24582-21	B10706.D	10/03/2009 22:23
OC-SS-416-0.0/1.0-XXX	360-24582-22	B10707.D	10/03/2009 22:51
OC-SS-416-0.0/1.0-XXX MS	360-24582-22 MS	B10708.D	10/03/2009 23:19
OC-SS-416-0.0/1.0-XXX MSD	360-24582-22 MSD	B10709.D	10/03/2009 23:47

ICAL OK
CCAL OK
TUNE OK

MS/MSD
2,4-DNP 190/185
2-nitroaniline 0/0
3,3'-dichlorobenzidine 0/0 RPD
3-nitroaniline 35/77 (OK) 74
4-chloroaniline 0/0
aniline 0/0
benzyl alcohol 0/0
bis(2-ethylhexyl)phthalate 30/99 (OK) RPD 106
di-n-butyl phthalate 0/89 (OK) RPD 200

MB
Benzoic acid 99.8
Di-n-butyl phthalate 65.2

TIC
vanillin
dodecanoic acid, methyl ester
octadecane
eicosane

LCS
aniline 32/34

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Westfield | Job No.: 360-24582-1

SDG No.: OCRI-15

Client Sample ID: | Lab Sample ID: MB 360-49345/1-A

Matrix: Solid | Lab File ID: B10631.D

Analysis Method: 8270C LL | Date Collected:

Extract. Method: 3546 | Date Extracted: 09/23/2009 11:39

Sample wt/vol: 30.00(g) | Date Analyzed: 09/29/2009 21:47

Con. Extract Vol.: 1.0(mL) | Dilution Factor: 1

Injection Volume: 1.0(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 49685 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
534-52-1	4,6-Dinitro-2-methylphenol	ND		170	10
65-85-0	Benzoic acid	99.8	J	170	15
120-12-7	Anthracene	ND		33	10
100-51-6	Benzyl alcohol	ND		67	28
111-91-1	Bis(2-chloroethoxy)methane	ND		33	10
111-44-4	Bis(2-chloroethyl)ether	ND		33	10
85-68-7	Butyl benzyl phthalate	ND		33	10
56-55-3	Benzo[a]anthracene	ND		33	10
105-60-2	Caprolactam	ND		33	10
218-01-9	Chrysene	ND		33	10
205-99-2	Benzo[b]fluoranthene	ND		33	10
207-08-9	Benzo[k]fluoranthene	ND		33	10
50-32-8	Benzo[a]pyrene	ND		33	10
132-64-9	Dibenzofuran	ND		33	10
53-70-3	Dibenz(a,h)anthracene	ND		33	10
84-66-2	Diethyl phthalate	ND		33	10
191-24-2	Benzo[g,h,i]perylene	ND		33	10
131-11-3	Dimethyl phthalate	ND		33	10
98-86-2	Acetophenone	ND		33	10
84-74-2	Di-n-butyl phthalate	65.2		33	29
117-81-7	Bis(2-ethylhexyl) phthalate	ND		33	10
117-84-0	Di-n-octyl phthalate	ND		33	17
206-44-0	Fluoranthene	ND		33	10
86-73-7	Fluorene	ND		33	10
118-74-1	Hexachlorobenzene	ND		33	10
87-68-3	Hexachlorobutadiene	ND		33	10
108-60-1	2,2'-oxybis[1-chloropropane]	ND		33	10
77-47-4	Hexachlorocyclopentadiene	ND		67	10
67-72-1	Hexachloroethane	ND		33	10
193-39-5	Indeno[1,2,3-cd]pyrene	ND		33	10
78-59-1	Isophorone	ND		33	10
91-20-3	Naphthalene	ND		80	10
98-95-3	Nitrobenzene	ND		33	10
1912-24-9	Atrazine	ND		33	10

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24582-1

SDG No.: OCRI-15

Matrix: Solid Level: Low Lab File ID: B10632.D

Lab ID: LCS 360-49345/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
1,1'-Biphenyl	333	282	85	40-140	
1,2,4,5-Tetrachlorobenzene	333	245	74	40-140	
1,2,4-Trichlorobenzene	333	222	66	40-140	
1,2-Dichlorobenzene	333	211	63	40-140	
1,3-Dichlorobenzene	333	202	60	40-140	
1,4-Dichlorobenzene	333	199	60	40-140	
1-Methylnaphthalene	333	241	72	40-140	
2,3,4,6-Tetrachlorophenol	333	279	84	40-140	
2,4-Dimethylphenol	333	281	84	30-130	
2-Chlorophenol	333	225	68	30-130	
2,4-Dichlorophenol	333	275	82	30-130	
2,4,6-Trichlorophenol	333	320	96	30-130	
2-Methylphenol	333	250	75	30-130	
2,4,5-Trichlorophenol	333	303	91	30-130	
2-Methylnaphthalene	333	242	73	40-140	
3 & 4 Methylphenol	333	264	79	30-130	
2-Nitroaniline	333	350	105	40-140	
3,3'-Dichlorobenzidine	333	295	88	40-140	
2-Chloronaphthalene	333	214	64	40-140	
2,6-Dinitrotoluene	333	288	86	40-140	
4-Chloro-3-methylphenol	333	280	84	30-130	
2-Nitrophenol	333	260	78	30-130	
4-Chloroaniline	333	207	62	40-140	
3-Nitroaniline	333	307	92	40-140	
2,4-Dinitrophenol	333	247	74	30-130	
2,4-Dinitrotoluene	333	275	83	40-140	
Acenaphthene	333	313	94	40-140	
Acenaphthylene	333	260	78	40-140	
4-Nitrophenol	333	322	97	30-130	
Aniline	333	108	32	40-140	*
4-Nitroaniline	333	279	84	40-140	
Azobenzene	333	291	87	40-140	
4-Bromophenyl phenyl ether	333	288	86	40-140	
4-Chlorophenyl phenyl ether	333	281	84	40-140	
4,6-Dinitro-2-methylphenol	333	279	84	30-130	
Benzoic acid	333	219	66	30-130	
Anthracene	333	337	101	40-140	
Benzyl alcohol	333	247	74	30-130	
Bis(2-chloroethoxy)methane	333	243	73	40-140	
Bis(2-chloroethyl)ether	333	212	63	40-140	
Butyl benzyl phthalate	333	290	87	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24582-1

SDG No.: OCRI-15

Matrix: Solid Level: Low Lab File ID: B10633.D

Lab ID: LCSD 360-49345/3-A Client. ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCSD CONCENTRATION (ug/Kg)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1'-Biphenyl	333	298	89	5	30	40-140	
1,2,4,5-Tetrachlorobenzene	333	269	81	9	30	40-140	
1,2,4-Trichlorobenzene	333	239	72	8	30	40-140	
1,2-Dichlorobenzene	333	216	65	2	30	40-140	
1,3-Dichlorobenzene	333	206	62	2	30	40-140	
1,4-Dichlorobenzene	333	205	61	3	30	40-140	
1-Methylnaphthalene	333	261	78	8	30	40-140	
2,3,4,6-Tetrachlorophenol	333	299	90	7	30	40-140	
2,4-Dimethylphenol	333	310	93	10	30	30-130	
2-Chlorophenol	333	238	72	6	30	30-130	
2,4-Dichlorophenol	333	300	90	9	30	30-130	
2,4,6-Trichlorophenol	333	343	103	7	30	30-130	
2-Methylphenol	333	271	81	8	30	30-130	
2,4,5-Trichlorophenol	333	306	92	1	30	30-130	
2-Methylnaphthalene	333	266	80	10	30	40-140	
3 & 4 Methylphenol	333	274	82	4	30	30-130	
2-Nitroaniline	333	373	112	6	30	40-140	
3,3'-Dichlorobenzidine	333	316	95	7	30	40-140	
2-Chloronaphthalene	333	229	69	7	30	40-140	
2,6-Dinitrotoluene	333	307	92	6	30	40-140	
4-Chloro-3-methylphenol	333	311	93	10	30	30-130	
2-Nitrophenol	333	283	85	8	30	30-130	
4-Chloroaniline	333	224	67	8	30	40-140	
3-Nitroaniline	333	333	100	8	30	40-140	
2,4-Dinitrophenol	333	275	82	11	30	30-130	
2,4-Dinitrotoluene	333	294	88	7	30	40-140	
Acenaphthene	333	334	100	6	30	40-140	
Acenaphthylene	333	276	83	6	30	40-140	
4-Nitrophenol	333	346	104	7	30	30-130	
Aniline	333	115	34	6	30	40-140	*
4-Nitroaniline	333	296	89	6	30	40-140	
Azobenzene	333	302	91	4	30	40-140	
4-Bromophenyl phenyl ether	333	298	89	3	30	40-140	
4-Chlorophenyl phenyl ether	333	302	90	7	30	40-140	
4,6-Dinitro-2-methylphenol	333	316	95	12	30	30-130	
Benzoic acid	333	277	83	23	30	30-130	
Anthracene	333	348	104	3	30	40-140	
Benzyl alcohol	333	221	66	11	30	30-130	
Bis(2-chloroethoxy)methane	333	267	80	9	30	40-140	
Bis(2-chloroethyl)ether	333	219	66	3	30	40-140	
Butyl benzyl phthalate	333	299	90	3	30	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24582-1

SDG No.: OCRI-15

Matrix: Solid Level: Low Lab File ID: B10708.D

Lab ID: 360-24582-22 MS Client ID: OC-SS-416-0.0/1.0-XXX MS

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	QC LIMITS REC	#	
1,1'-Biphenyl	365	ND	267 J	73	40-140		
1,2,4,5-Tetrachlorobenzene	365	ND	266 J	73	40-140		
1,2,4-Trichlorobenzene	365	ND	239 J	65	40-140		
1,2-Dichlorobenzene	365	ND	229 J	63	40-140		
1,3-Dichlorobenzene	365	ND	227 J	62	40-140		
1,4-Dichlorobenzene	365	ND	222 J	61	40-140		
1-Methylnaphthalene	365	ND	258 J	71	40-140		
2,2'-oxybis[1-chloropropane]	365	ND	250 J	68	40-140		
2,3,4,6-Tetrachlorophenol	365	ND	261 J	71	40-140		
2,4,5-Trichlorophenol	365	ND	240 J	66	30-130		
2,4,6-Trichlorophenol	365	ND	255 J	70	30-130		
2,4-Dichlorophenol	365	ND	250 J	68	30-130		
2,4-Dimethylphenol	365	ND	265 J	73	30-130		
2,4-Dinitrophenol	365	ND	695	190	30-130	F	105
2,4-Dinitrotoluene	365	ND	230 J	63	40-140		
2,6-Dinitrotoluene	365	ND	244 J	67	40-140		
2-Chloronaphthalene	365	ND	197 J	54	40-140		
2-Chlorophenol	365	ND	253 J	69	30-130		
2-Methylnaphthalene	365	ND	251 J	69	40-140		
2-Methylphenol	365	ND	239 J	65	30-130		
2-Nitroaniline	365	ND	ND	0	40-140	F	10
2-Nitrophenol	365	ND	270 J	74	30-130		
3 & 4 Methylphenol	365	ND	251 J	69	30-130		
3,3'-Dichlorobenzidine	365	ND	ND	0	40-140	F	10 RPD
3-Nitroaniline	365	ND	128 J	35	40-140	F	177 79
4,6-Dinitro-2-methylphenol	365	ND	320 J	88	30-130		
4-Bromophenyl phenyl ether	365	ND	251 J	69	40-140		
4-Chloro-3-methylphenol	365	ND	237 J	65	30-130		
4-Chloroaniline	365	ND	ND	0	40-140	F	10
4-Chlorophenyl phenyl ether	365	ND	241 J	66	40-140		
4-Nitroaniline	365	ND	269 J	74	40-140		
4-Nitrophenol	365	ND	284 J	78	30-130		
Acenaphthene	365	ND	275 J	75	40-140		
Acenaphthylene	365	ND	241 J	66	40-140		
Acetophenone	365	ND	256 J	70	40-140		
Aniline	365	ND	ND	0	40-140	F	10
Anthracene	365	ND	302 J	83	40-140		
Atrazine	365	ND	344 J	94	40-140		
Azobenzene	365	ND	260 J	71	40-140		
Benzaldehyde	365	ND	487	133	40-140		
Benzo[a]anthracene	365	130 J	425	80	40-140		

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24582-1

SDG No.: OCRI-15

Matrix: Solid Level: Low Lab File ID: B10708.D

Lab ID: 360-24582-22 MS Client ID: OC-SS-416-0.0/1.0-XXX MS

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	QC LIMITS REC	#
Benzo[a]pyrene	365	170 J	426	70	40-140	
Benzo[b]fluoranthene	365	310 J	501	51	40-140	
Benzo[g,h,i]perylene	365	160 J	350 J	53	40-140	
Benzo[k]fluoranthene	365	ND	417	114	40-140	
Benzoic acid	365	490 J	922 J	118	30-130	
Benzophenone	365	ND	259 J	71	40-140	
Benzyl alcohol	365	ND	ND	0	30-130	F
Bis(2-chloroethoxy)methane	365	ND	242 J	66	40-140	
Bis(2-chloroethyl)ether	365	ND	236 J	65	40-140	
Bis(2-ethylhexyl) phthalate	365	550	666	30	40-140	F
Butyl benzyl phthalate	365	ND	314 J	86	40-140	
Caprolactam	365	ND	271 J	74	40-140	
Carbazole	365	ND	305 J	83	40-140	
Chrysene	365	300 J	529	62	40-140	
Dibenz(a,h)anthracene	365	ND	299 J	82	40-140	
Dibenzofuran	365	ND	250 J	68	40-140	
Diethyl phthalate	365	ND	255 J	70	40-140	
Dimethyl phthalate	365	ND	289 J	79	40-140	
Di-n-butyl phthalate	365	ND	ND	0	40-140	F
Di-n-octyl phthalate	365	ND	302 J	83	40-140	
Diphenyl oxide	365	ND	270 J	74	40-140	
Fluoranthene	365	430	614	51	40-140	
Fluorene	365	210 J	416	58	40-140	
Hexachlorobenzene	365	ND	237 J	65	40-140	
Hexachlorobutadiene	365	ND	225 J	62	40-140	
Hexachlorocyclopentadiene	365	ND	267 J	73	40-140	
Hexachloroethane	365	ND	212 J	58	40-140	
Indeno[1,2,3-cd]pyrene	365	130 J	390	71	40-140	
Isophorone	365	ND	207 J	57	40-140	
Naphthalene	365	ND	244 J	67	40-140	
Nitrobenzene	365	ND	235 J	64	40-140	
N-Nitrosodimethylamine	365	ND	238 J	65	40-140	
N-Nitrosodi-n-propylamine	365	ND	250 J	68	40-140	
N-Nitrosodiphenylamine	365	ND	197 J	54	40-140	
Pentachlorophenol	365	ND	460	126	30-130	
Phenanthrene	365	150 J	390 J	67	40-140	
Phenol	365	ND	254 J	69	30-130	
Pyrene	365	340 J	561	62	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24582-1

SDG No.: OCRI-15

Matrix: Solid Level: Low Lab File ID: B10709.D

Lab ID: 360-24582-22 MSD Client ID: OC-SS-416-0.0/1.0-XXX MSD

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1'-Biphenyl	362	253 J	70	6	30	40-140	
1,2,4,5-Tetrachlorobenzene	362	255 J	70	4	30	40-140	
1,2,4-Trichlorobenzene	362	229 J	63	4	30	40-140	
1,2-Dichlorobenzene	362	238 J	66	4	30	40-140	
1,3-Dichlorobenzene	362	209 J	58	9	30	40-140	
1,4-Dichlorobenzene	362	216 J	60	3	30	40-140	
1-Methylnaphthalene	362	246 J	68	5	30	40-140	
2,2'-oxybis[1-chloropropane]	362	248 J	69	1	30	40-140	
2,3,4,6-Tetrachlorophenol	362	260 J	72	0	30	40-140	
2,4,5-Trichlorophenol	362	267 J	74	11	30	30-130	
2,4,6-Trichlorophenol	362	260 J	72	2	30	30-130	
2,4-Dichlorophenol	362	262 J	73	5	30	30-130	
2,4-Dimethylphenol	362	258 J	71	3	30	30-130	
2,4-Dinitrophenol	362	669	185	4	30	30-130	F
2,4-Dinitrotoluene	362	236 J	65	3	30	40-140	
2,6-Dinitrotoluene	362	240 J	66	1	30	40-140	
2-Chloronaphthalene	362	193 J	53	2	30	40-140	
2-Chlorophenol	362	238 J	66	6	30	30-130	
2-Methylnaphthalene	362	253 J	70	1	30	40-140	
2-Methylphenol	362	237 J	65	1	30	30-130	
2-Nitroaniline	362	ND	0	NC	30	40-140	F
2-Nitrophenol	362	256 J	71	6	30	30-130	
3 & 4 Methylphenol	362	228 J	63	10	30	30-130	
3,3'-Dichlorobenzidine	362	ND	0	NC		40-140	F
3-Nitroaniline	362	277 J	77	74	30	40-140	F
4,6-Dinitro-2-methylphenol	362	277 J	77	14	30	30-130	
4-Bromophenyl phenyl ether	362	244 J	67	3	30	40-140	
4-Chloro-3-methylphenol	362	266 J	73	12	30	30-130	
4-Chloroaniline	362	ND	0	NC	30	40-140	F
4-Chlorophenyl phenyl ether	362	235 J	65	3	30	40-140	
4-Nitroaniline	362	251 J	69	7	30	40-140	
4-Nitrophenol	362	310 J	86	9	30	30-130	
Acenaphthene	362	270 J	75	2	30	40-140	
Acenaphthylene	362	230 J	64	5	30	40-140	
Acetophenone	362	260 J	72	2	30	40-140	
Aniline	362	ND	0	NC	30	40-140	F
Anthracene	362	303 J	84	0	30	40-140	
Atrazine	362	326 J	90	5	30	40-140	
Azobenzene	362	251 J	69	4	30	40-140	
Benzaldehyde	362	490	135	1	30	40-140	
Benzo[a]anthracene	362	414	77	3	30	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24582-1

SDG No.: OCRI-15

Matrix: Solid Level: Low Lab File ID: B10709.D

Lab ID: 360-24582-22 MSD Client ID: OC-SS-416-0.0/1.0-XXX MSD

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Benzo[a]pyrene	362	394	62	8	30	40-140	
Benzo[b]fluoranthene	362	486	47	3	30	40-140	
Benzo[g,h,i]perylene	362	352 J	54	0	30	40-140	
Benzo[k]fluoranthene	362	391	108	6	30	40-140	
Benzoic acid	362	905 J	115	2	30	30-130	
Benzophenone	362	241 J	67	7	30	40-140	
Benzyl alcohol	362	ND	0	NC	30	30-130	F
Bis(2-chloroethoxy)methane	362	227 J	63	7	30	40-140	
Bis(2-chloroethyl)ether	362	218 J	60	8	30	40-140	
Bis(2-ethylhexyl) phthalate	362	914	99	31	30	40-140	F
Butyl benzyl phthalate	362	322 J	89	2	30	40-140	
Caprolactam	362	266 J	74	2	30	40-140	
Carbazole	362	303 J	84	0	30	40-140	
Chrysene	362	526	62	1	30	40-140	
Dibenz(a,h)anthracene	362	322 J	89	7	30	40-140	
Dibenzofuran	362	244 J	67	2	30	40-140	
Diethyl phthalate	362	254 J	70	1	30	40-140	
Dimethyl phthalate	362	282 J	78	2	30	40-140	
Di-n-butyl phthalate	362	324 J	89	NC	30	40-140	
Di-n-octyl phthalate	362	289 J	80	4	30	40-140	
Diphenyl oxide	362	270 J	75	0	30	40-140	
Fluoranthene	362	614	51	0	30	40-140	
Fluorene	362	406	55	2	30	40-140	
Hexachlorobenzene	362	235 J	65	1	30	40-140	
Hexachlorobutadiene	362	214 J	59	5	30	40-140	
Hexachlorocyclopentadiene	362	236 J	65	12	30	40-140	
Hexachloroethane	362	186 J	51	13	30	40-140	
Indeno[1,2,3-cd]pyrene	362	369	66	5	30	40-140	
Isophorone	362	206 J	57	1	30	40-140	
Naphthalene	362	236 J	65	3	30	40-140	
Nitrobenzene	362	225 J	62	4	30	40-140	
N-Nitrosodimethylamine	362	212 J	59	11	30	40-140	
N-Nitrosodi-n-propylamine	362	231 J	64	8	30	40-140	
N-Nitrosodiphenylamine	362	228 J	63	15	30	40-140	
Pentachlorophenol	362	460	127	0	30	30-130	
Phenanthrene	362	390 J	67	0	30	40-140	
Phenol	362	237 J	66	7	30	30-130	
Pyrene	362	575	66	2	30	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM IV
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Westfield Job No.: 360-24582-1

SDG No.: OCRI-15

Lab File ID: J03193.D Lab Sample ID: MB 360-49246/1-A

Matrix: Solid Date Extracted: 09/21/2009 15:30

~~Instrument ID: Inst. J Date Analyzed: 09/28/2009 19:32~~

Level: (Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 360-49246/2-A	J03194.D	09/28/2009 20:05
	LCSD 360-49246/3-A	J03195.D	09/28/2009 20:38
OC-SB-457-28/30-XXX	360-24582-1	J03204.D	09/29/2009 01:37
OC-SS-400-0.0/1.0-XXX	360-24582-5	J03205.D	09/29/2009 02:10
OC-SS-401-0.1/1.0-XXX	360-24582-6	J03206.D	09/29/2009 02:43
OC-SS-402-0.0/1.0-XXX	360-24582-7	J03207.D	09/29/2009 03:16
OC-SS-404-0.0/1.0-XXX	360-24582-9	J03208.D	09/29/2009 03:49
OC-SS-405-0.0/1.0-XXX	360-24582-10	J03209.D	09/29/2009 04:22
OC-SS-406-0.0/1.0.-XXX	360-24582-11	J03210.D	09/29/2009 04:55
OC-SS-407-0.0/1.0-XXX	360-24582-12	J03211.D	09/29/2009 05:28
OC-SS-408-0.0/1.0-XXX	360-24582-13	J03212.D	09/29/2009 06:00
OC-SS-409-0.0/1.0-XXX	360-24582-14	J03213.D	09/29/2009 06:33
OC-SS-411-0.0/1.0-XXX	360-24582-16	J03214.D	09/29/2009 07:06
OC-SS-412-0.0/1.0-XXX	360-24582-17	J03215.D	09/29/2009 07:39
OC-SS-414-0.0/1.0-XXX	360-24582-19	J03216.D	09/29/2009 08:11
OC-SS-415-0.0/1.0-XXX	360-24582-20	J03217.D	09/29/2009 08:44

✓ MB
benzoic acid 81.3
Di-n-butyl phthalate 56.6
bis(2-ethylhexyl) phthalate 14

TICs
3-pentene 2-one, 4-methyl
ethanol, 2-(2-ethoxy ethoxy)
ethanol, 1-(2-butoxy-ethoxy)
1,1"-biphenyl, 2-fluoro-
hexadecane
octadecane
eicosane
squalene

✓ LCS
aniline 31/31
indeno[1,2,3-cd]pyrene 154/144
ICAL ok
CCAL ok

IS
OC-SS-415-0.0/1.0-XXX
chrysene-d12 48% area

Analytes
pyrene
butyl benzyl phthalate
3,3'-DCB
benzo[a]anthracene
bis(2-ethylhexyl) phthalate
chrysene.

FORM IV 8270C LL
p,p"-dioctyldiphenylamine

FORM I

GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Westfield | Job No.: 360-24582-1

SDG No.: OCRI-15

Client Sample ID: | Lab Sample ID: MB 360-49246/1-A

Matrix: Solid | Lab File ID: J03193.D

Analysis Method: 8270C LL | Date Collected:

Extract. Method: 3546 | Date Extracted: 09/21/2009 15:30

Sample wt/vol: 30.00(g) | Date Analyzed: 09/28/2009 19:32

Con. Extract Vol.: 1.0(mL) | Dilution Factor: 1

Injection Volume: 1.0(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 49645 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
534-52-1	4,6-Dinitro-2-methylphenol	ND		170	10
65-85-0	Benzoic acid	81.3	J	170	15
120-12-7	Anthracene	ND		33	10
100-51-6	Benzyl alcohol	ND		67	28
111-91-1	Bis(2-chloroethoxy)methane	ND		33	10
111-44-4	Bis(2-chloroethyl)ether	ND		33	10
85-68-7	Butyl benzyl phthalate	ND		33	10
56-55-3	Benzo[a]anthracene	ND		33	10
105-60-2	Caprolactam	ND		33	10
218-01-9	Chrysene	ND		33	10
205-99-2	Benzo[b]fluoranthene	ND		33	10
207-08-9	Benzo[k]fluoranthene	ND		33	10
50-32-8	Benzo[a]pyrene	ND		33	10
132-64-9	Dibenzofuran	ND		33	10
53-70-3	Dibenz(a,h)anthracene	ND		33	10
84-66-2	Diethyl phthalate	ND		33	10
191-24-2	Benzo[g,h,i]perylene	ND		33	10
131-11-3	Dimethyl phthalate	ND		33	10
98-86-2	Acetophenone	ND		33	10
84-74-2	Di-n-butyl phthalate	56.6		33	29
117-81-7	Bis(2-ethylhexyl) phthalate	14.0	J	33	10
117-84-0	Di-n-octyl phthalate	ND		33	17
206-44-0	Fluoranthene	ND		33	10
86-73-7	Fluorene	ND		33	10
118-74-1	Hexachlorobenzene	ND		33	10
87-68-3	Hexachlorobutadiene	ND		33	10
108-60-1	2,2'-oxybis[1-chloropropane]	ND		33	10
77-47-4	Hexachlorocyclopentadiene	ND		67	10
67-72-1	Hexachloroethane	ND		33	10
193-39-5	Indeno[1,2,3-cd]pyrene	ND		33	10
78-59-1	Isophorone	ND		33	10
91-20-3	Naphthalene	ND		80	10
98-95-3	Nitrobenzene	ND		33	10
1912-24-9	Atrazine	ND		33	10

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Westfield | Job No.: 360-24582-1

SDG No.: OCRI-15

Client Sample ID: | Lab Sample ID: MB 360-49246/1-A

Matrix: Solid | Lab File ID: J03193.D

Analysis Method: 8270C LL | Date Collected:

Extract. Method: 3546 | Date Extracted: 09/21/2009 15:30

Sample wt/vol: 30.00(g) | Date Analyzed: 09/28/2009 19:32

Con. Extract Vol.: 1.0(mL) | Dilution Factor: 1

Injection Volume: 1.0(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 49645 | Units: ug/Kg

Number TICs Found: 10 | TIC Result Total: 266.5

CAS NO.	COMPOUND NAME	RT	RESULT	Q
141-79-7	3-Penten-2-one, 4-methyl-	5.71	13.7	T J N
111-90-0	Ethanol, 2-(2-ethoxyethoxy)-	7.89	12.5	T J N
54446-78-5	Ethanol, 1-(2-butoxyethoxy)-	9.23	15.2	T J N
1146-65-2	Naphthalene-d8	9.33	21.7	T J N
321-60-8	1,1''-Biphenyl, 2-fluoro-	10.40	18.8	T J N
544-76-3	Hexadecane	11.44	26.6	T J N
593-45-3	Octadecane	12.35	45.1	T J N
112-95-8	Eicosane	13.17	24.9	T J N
7683-64-9	Squalene	16.19	53.0	T J N
26603-23-6	p,p''-Dioctyldiphenylamine	16.85	35.0	T J N

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24582-1

SDG No.: OCRI-15

Matrix: Solid Level: Low Lab File ID: J03194.D

Lab ID: LCS 360-49246/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
1,1'-Biphenyl	333	314	94	40-140	
1,2,4,5-Tetrachlorobenzene	333	346	104	40-140	
1,2,4-Trichlorobenzene	333	307	92	40-140	
1,2-Dichlorobenzene	333	216	65	40-140	
1,3-Dichlorobenzene	333	207	62	40-140	
1,4-Dichlorobenzene	333	208	62	40-140	
1-Methylnaphthalene	333	336	101	40-140	
2,3,4,6-Tetrachlorophenol	333	281	84	40-140	
2,4-Dimethylphenol	333	391	117	30-130	
2-Chlorophenol	333	241	72	30-130	
2,4-Dichlorophenol	333	424	127	30-130	
2,4,6-Trichlorophenol	333	293	88	30-130	
2-Methylphenol	333	256	77	30-130	
2,4,5-Trichlorophenol	333	348	104	30-130	
2-Methylnaphthalene	333	331	99	40-140	
3 & 4 Methylphenol	333	268	80	30-130	
2-Nitroaniline	333	332	99	40-140	
3,3'-Dichlorobenzidine	333	386	116	40-140	
2-Chloronaphthalene	333	319	96	40-140	
2,6-Dinitrotoluene	333	339	102	40-140	
4-Chloro-3-methylphenol	333	402	121	30-130	
2-Nitrophenol	333	338	101	30-130	
4-Chloroaniline	333	308	92	40-140	
3-Nitroaniline	333	327	98	40-140	
2,4-Dinitrophenol	333	283	85	30-130	
2,4-Dinitrotoluene	333	324	97	40-140	
Acenaphthene	333	348	104	40-140	
Acenaphthylene	333	311	93	40-140	
4-Nitrophenol	333	338	101	30-130	
Aniline	333	102	31	40-140	*
4-Nitroaniline	333	375	113	40-140	
Azobenzene	333	334	100	40-140	
4-Bromophenyl phenyl ether	333	327	98	40-140	
4-Chlorophenyl phenyl ether	333	325	97	40-140	
4,6-Dinitro-2-methylphenol	333	311	93	30-130	
Benzoic acid	333	272	81	30-130	
Anthracene	333	358	108	40-140	
Benzyl alcohol	333	262	79	30-130	
Bis(2-chloroethoxy)methane	333	310	93	40-140	
Bis(2-chloroethyl)ether	333	221	66	40-140	
Butyl benzyl phthalate	333	331	99	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24582-1

SDG No.: OCRI-15

Matrix: Solid Level: Low Lab File ID: J03194.D

Lab ID: LCS 360-49246/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
Benzo[a]anthracene	333	384	115	40-140	
Caprolactam	333	372	112	40-140	
Chrysene	333	351	105	40-140	
Benzo[b]fluoranthene	333	344	103	40-140	
Benzo[k]fluoranthene	333	384	115	40-140	
Benzo[a]pyrene	333	423	127	40-140	
Dibenzofuran	333	295	89	40-140	
Dibenz(a,h)anthracene	333	424	127	40-140	
Diethyl phthalate	333	327	98	40-140	
Benzo[g,h,i]perylene	333	452	136	40-140	
Dimethyl phthalate	333	313	94	40-140	
Acetophenone	333	249	75	40-140	
Di-n-butyl phthalate	333	417	125	40-140	
Bis(2-ethylhexyl) phthalate	333	370	111	40-140	
Di-n-octyl phthalate	333	365	110	40-140	
Fluoranthene	333	358	107	40-140	
Fluorene	333	368	110	40-140	
Hexachlorobenzene	333	322	97	40-140	
Hexachlorobutadiene	333	325	98	40-140	
2,2'-oxybis[1-chloropropane]	333	234	70	40-140	
Hexachlorocyclopentadiene	333	265	79	40-140	
Hexachloroethane	333	220	66	40-140	
Indeno[1,2,3-cd]pyrene	333	512	154	40-140	*
Isophorone	333	314	94	40-140	
Naphthalene	333	321	96	40-140	
Nitrobenzene	333	333	100	40-140	
Atrazine	333	393	118	40-140	
Benzaldehyde	333	279	84	40-140	
N-Nitrosodimethylamine	333	234	70	40-140	
Carbazole	333	355	107	40-140	
N-Nitrosodi-n-propylamine	333	254	76	40-140	
Benzophenone	333	344	103	40-140	
N-Nitrosodiphenylamine	333	239	72	40-140	
Diphenyl oxide	333	366	110	40-140	
Pentachlorophenol	333	311	93	30-130	
Phenanthrene	333	388	117	40-140	
Phenol	333	247	74	30-130	
Pyrene	333	350	105	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Westfield Job No.: 360-24582-1

SDG No.: OCRI-15

Lab Sample ID: ICV 360-49645/11 Calibration Date: 09/28/2009 18:59

Instrument ID: Inst. J Calib Start Date: 09/28/2009 14:03

GC Column: Rtx-5ms ID: 0.25(um) Calib End Date: 09/28/2009 18:26

Lab File ID: J03192.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Lin		0.2398		5130	5000	2.5	20.0
Pyridine	Ave	0.5814	0.5725		4920	5000	-1.5	20.0
N-Nitrosodimethylamine	Ave	0.3165	0.3367		5320	5000	6.4	20.0
Benzaldehyde	Ave	0.3654	0.4455		6100	5000	21.9*	20.0
Phenol	Ave	0.7521	0.7071		4700	5000	-6.0	20.0
Aniline	Ave	0.8810	0.3594		2040	5000	-59.2*	20.0
Bis(2-chloroethyl)ether	Ave	0.6136	0.5716		4660	5000	-6.8	20.0
2-Chlorophenol	Ave	0.6130	0.5884		4800	5000	-4.0	20.0
1,4-Dichlorobenzene	Ave	0.7142	0.6719		4700	5000	-5.9	20.0
1,3-Dichlorobenzene	Ave	0.7435	0.6869		4620	5000	-7.6	20.0
Benzyl alcohol	Ave	0.5100	0.4920		4820	5000	-3.5	20.0
1,2-Dichlorobenzene	Ave	0.6783	0.6451		4760	5000	-4.9	20.0
2-Methylphenol	Ave	0.5481	0.5373		4900	5000	-2.0	20.0
2,2'-oxybis[1-chloropropane]	Ave	0.5492	0.5389		4910	5000	-1.9	20.0
3 & 4 Methylphenol	Ave	0.5720	0.5594		4890	5000	-2.2	20.0
Acetophenone	Ave	0.8198	0.8240		5030	5000	0.5	20.0
N-Nitrosodi-n-propylamine	Ave	0.4360	0.4325	0.0500	4960	5000	-0.8	20.0
Hexachloroethane	Ave	0.2561	0.2492		4870	5000	-2.7	20.0
Nitrobenzene	Ave	0.2867	0.2991		5220	5000	4.3	20.0
Isophorone	Ave	0.4786	0.4421		4620	5000	-7.6	20.0
2,4-Dimethylphenol	Ave	0.2513	0.2835		5640	5000	12.8	20.0
2-Nitrophenol	Lin1		0.1416		5320	5000	6.4	20.0
Benzoic acid	Qua		0.0370		3210	5000	-35.9*	20.0
Bis(2-chloroethoxy)methane	Ave	0.2884	0.3098		5370	5000	7.4	20.0
2,4-Dichlorophenol	Ave	0.1777	0.2193		6170	5000	23.4*	20.0
1,2,4-Trichlorobenzene	Ave	0.2439	0.2464		5050	5000	1.0	20.0
Alpha-Terpineol	Ave	0.1732	0.1702		4910	5000	-1.7	20.0
Naphthalene	Ave	0.8020	0.8362		5210	5000	4.3	20.0
4-Chloroaniline	Ave	0.2912	0.2499		4290	5000	-14.2	20.0
Hexachlorobutadiene	Ave	0.1329	0.1414		5320	5000	6.4	20.0
Caprolactam	Lin1		0.0800		5570	5000	11.4	20.0
4-Chloro-3-methylphenol	Ave	0.2167	0.2417		5580	5000	11.5	20.0
2-Methylnaphthalene	Ave	0.5258	0.5457		5190	5000	3.8	20.0
1-Methylnaphthalene	Ave	0.5120	0.5262		5140	5000	2.8	20.0
1,2,4,5-Tetrachlorobenzene	Ave	0.2083	0.2272		5460	5000	9.1	20.0
Hexachlorocyclopentadiene	Lin1		0.1298	0.0500	4330	5000	-13.3	20.0
2,4,6-Trichlorophenol	Ave	0.2590	0.2888		5570	5000	11.5	20.0
2,4,5-Trichlorophenol	Ave	0.2632	0.2905		5520	5000	10.4	20.0
1,1'-Biphenyl	Ave	1.217	1.316		5410	5000	8.1	20.0
2-Chloronaphthalene	Ave	0.8874	0.9725		5480	5000	9.6	20.0
Phenyl ether	Ave	0.3324	0.3565		5360	5000	7.2	20.0

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Westfield Job No.: 360-24582-1

SDG No.: OCRI-15

Sample No.: CCV 360-49648/16 Date Analyzed: 09/28/2009 21:45

Instrument ID: Inst. J GC Column: Rtx-5ms ID: 0.25(um)

Lab File ID (Standard): J03197.D Heated Purge: (Y/N) N

		PHN		CRY		PRY	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12 HOUR STD		135500	12.62	103487	15.38	56150	17.01
UPPER LIMIT		271000	13.12	206974	15.88	112300	17.51
LOWER LIMIT		67750	12.12	51744	14.88	28075	16.51
LAB SAMPLE ID	CLIENT SAMPLE ID						
360-24582-1	OC-SB-457-28/30-XXX	147699	12.62	109819	15.38	76645	17.01
360-24582-5	OC-SS-400-0.0/1.0-XXX	123473	12.62	78108	15.38	50158	17.02
360-24582-6	OC-SS-401-0.1/1.0-XXX	130119	12.62	77397	15.38	48310	17.02
360-24582-7	OC-SS-402-0.0/1.0-XXX	120436	12.62	74522	15.38	48645	17.02
360-24582-9	OC-SS-404-0.0/1.0-XXX	132049	12.62	76013	15.38	43000	17.02
360-24582-10	OC-SS-405-0.0/1.0-XXX	138714	12.62	76140	15.38	43043	17.01
360-24582-11	OC-SS-406-0.0/1.0. -XXX	125124	12.62	79890	15.38	59230	17.01
360-24582-12	OC-SS-407-0.0/1.0-XXX	111719	12.62	64800	15.38	50418	17.02
360-24582-13	OC-SS-408-0.0/1.0-XXX	104281	12.62	53898	15.38	42151	17.02
360-24582-14	OC-SS-409-0.0/1.0-XXX	119061	12.62	81240	15.38	60668	17.02
360-24582-16	OC-SS-411-0.0/1.0-XXX	130091	12.62	69750	15.38	47923	17.02
360-24582-17	OC-SS-412-0.0/1.0-XXX	111031	12.62	56255	15.38	40679	17.02
360-24582-19	OC-SS-414-0.0/1.0-XXX	111412	12.62	60086	15.38	44964	17.02
360-24582-20	OC-SS-415-0.0/1.0-XXX	100832	12.62	49203*	15.38	36466	17.02

4PZ0

PHN = Phenanthrene-d10
CRY = Chrysene-d12
PRY = Perylene-d12

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.50 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270C LL

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Westfield Job No.: 360-24582-1

SDG No.: OCRI-15

Instrument ID: Inst. J Start Date: 09/23/2009 14:44

Analysis Batch Number: 49396 End Date: 09/23/2009 21:21

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 360-49396/1		09/23/2009 14:44	1	J03090.D	Rtx-5ms 0.25(um)
STD5 360-49396/2 ICIS		09/23/2009 16:23	1	J03091.D	Rtx-5ms 0.25(um)
STD01 360-49396/3 IC		09/23/2009 16:56	1	J03092.D	Rtx-5ms 0.25(um)
STD025 360-49396/4 IC		09/23/2009 17:29	1	J03093.D	Rtx-5ms 0.25(um)
STD05 360-49396/5 IC		09/23/2009 18:02	1	J03094.D	Rtx-5ms 0.25(um)
STD1 360-49396/6 IC		09/23/2009 18:35	1	J03095.D	Rtx-5ms 0.25(um)
STD25 360-49396/7 IC		09/23/2009 19:08	1	J03096.D	Rtx-5ms 0.25(um)
STD8 360-49396/8 IC		09/23/2009 19:41	1	J03097.D	Rtx-5ms 0.25(um)
STD10 360-49396/9 IC		09/23/2009 20:14	1	J03098.D	Rtx-5ms 0.25(um)
STD20 360-49396/10 IC		09/23/2009 20:48	1	J03099.D	Rtx-5ms 0.25(um)
ICV 360-49396/11		09/23/2009 21:21	1		Rtx-5ms 0.25(um)

2,4-DNP 0.0454

4,6-Dinitro-2-methylphenol 0.0440

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Westfield Job No.: 360-24582-1 Analy Batch No.: 49396

SDG No.: OCRI-15

Instrument ID: Inst. J GC Column: Rtx-5ms ID: 0.25(um) Heated Purge: (Y/N) N

Calibration Start Date: 09/23/2009 16:23 Calibration End Date: 09/23/2009 20:48 Calibration ID: 4771

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD01 360-49396/3	J03092.D
Level 2	STD025 360-49396/4	J03093.D
Level 3	STD05 360-49396/5	J03094.D
Level 4	STD1 360-49396/6	J03095.D
Level 5	STD25 360-49396/7	J03096.D
Level 6	STD5 360-49396/2	J03091.D
Level 7	STD8 360-49396/8	J03097.D
Level 8	STD10 360-49396/9	J03098.D
Level 9	STD20 360-49396/10	J03099.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
1,4-Dioxane	0.6721 0.2368	0.4334 0.2250	0.3691 0.2546	0.3106 0.2770	0.2926	Lin2	0.0424	0.2570							0.9910		0.9900
Pyridine	0.6825 0.6289	0.6933 0.5887	0.6385 0.6790	0.7085 0.7420	0.7193	Ave		0.6756				7.2		15.0			
N-Nitrosodimethylamine	0.3777 0.3207	0.3453 0.3026	0.3641 0.3449	0.3634 0.3845	0.3637	Ave		0.3519				7.6		15.0			
Benzoic acid	+++++ 0.1077	+++++ 0.0727	0.0136 0.0586	0.0356 0.1208	0.0296	Qua	0.0102	0.0158	0.0052						0.9950		0.9900
2,4-Dinitrophenol	+++++ 0.0639	+++++ 0.0476	+++++ 0.0467	0.0173 0.0803	0.0166	Qua	-0.014	0.0209	0.0030	*	0.0500				0.9990		0.9900
Benzaldehyde	0.4770 0.3889	0.4220 0.3643	0.4235 0.4226	0.4283 0.4477	0.4383	Ave		0.4236				7.6		15.0			
Phenol	0.8394 0.7411	0.8378 0.7106	0.8533 0.8100	0.8645 0.8725	0.8569	Ave		0.8207				7.0		15.0			
Aniline	0.9568 0.8803	0.9553 0.8385	0.9450 0.9788	0.9512 1.0655	1.0073	Ave		0.9532				6.9		15.0			
Bis(2-chloroethyl)ether	0.7921 0.5981	0.7060 0.5753	0.7409 0.6442	0.7145 0.6887	0.7100	Ave		0.6855				10.0		15.0			
2-Chlorophenol	0.6525 0.5996	0.6720 0.5790	0.6509 0.6547	0.6763 0.7156	0.6979	Ave		0.6554				6.6		15.0			
1,4-Dichlorobenzene	0.8572 0.6654	0.8481 0.6425	0.8191 0.7355	0.8142 0.7899	0.8006	Ave		0.7747				10.0		15.0			
1,3-Dichlorobenzene	0.9153 0.6846	0.8701 0.6581	0.8524 0.7537	0.8479 0.8079	0.8191	Ave		0.8010				11.0		15.0			
Benzyl alcohol	0.5662 0.5037	0.5124 0.4793	0.4934 0.5479	0.4992 0.6194	0.5582	Ave		0.5311				8.5		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Westfield Job No.: 360-24582-1 Analy Batch No.: 49396

SDG No.: OCRI-15

Instrument ID: Inst. J GC Column: Rtx-5ms ID: 0.25(um) Heated Purge: (Y/N) N

Calibration Start Date: 09/23/2009 16:23 Calibration End Date: 09/23/2009 20:48 Calibration ID: 4771

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
1,2-Dichlorobenzene	0.9018 0.6335	0.8485 0.6076	0.8203 0.6934	0.7861 0.7323	0.7613	Ave		0.7539				13.0		15.0			
2-Methylphenol	0.6154 0.5455	0.5680 0.5219	0.5933 0.6010	0.5991 0.6508	0.6272	Ave		0.5914				6.8		15.0			
2,2'-oxybis[1-chloropropane]	0.7426 0.5864	0.7015 0.5465	0.7138 0.6245	0.6734 0.6832	0.6630	Ave		0.6595				9.5		15.0			
3 & 4 Methylphenol	0.6215 0.5732	0.6213 0.5448	0.5973 0.6212	0.6233 0.6770	0.6482	Ave		0.6142				6.3		15.0			
N-Nitrosodi-n-propylamine	0.4516 0.4251	0.4240 0.3993	0.4289 0.4552	0.4413 0.5055	0.4683	Ave		0.4443			0.0500	6.9		15.0			
Acetophenone	0.8952 0.7772	0.9128 0.7418	0.8977 0.8500	0.8883 0.9139	0.9120	Ave		0.8654				7.4		15.0			
Hexachloroethane	0.2847 0.2509	0.2677 0.2421	0.2752 0.2710	0.2775 0.3054	0.2842	Ave		0.2732				6.9		15.0			
Nitrobenzene	0.2983 0.3151	0.2825 0.3370	0.2949 0.3311	0.3124 0.3323	0.3343	Ave		0.3153				6.3		15.0			
Isophorone	0.4506 0.5527	0.4512 0.5908	0.4564 0.5868	0.4989 0.5802	0.5661	Ave		0.5260				12.0		15.0			
2,4-Dimethylphenol	0.2572 0.2840	0.2599 0.2942	0.2474 0.2877	0.2672 0.2886	0.2937	Ave		0.2755				6.4		15.0			
2-Nitrophenol	0.0997 0.1586	0.1046 0.1710	0.1050 0.1602	0.1280 0.1663	0.1435	Lin1	-0.014	0.1644							0.9970		0.9900
4,6-Dinitro-2-methylphenol	+++++ 0.0719	+++++ 0.0508	0.0149 0.0479	0.0253 0.0764	0.0213	Qua	-0.010	0.0272 0.0440	0.0025						0.9980		0.9900
Bis(2-chloroethoxyl)methane	0.3507 0.3275	0.3385 0.3518	0.3301 0.3459	0.3331 0.3391	0.3535	Ave		0.3411				2.9		15.0			
2,4-Dichlorophenol	0.1808 0.2207	0.1861 0.2402	0.1940 0.2390	0.2100 0.2348	0.2355	Ave		0.2157				11.0		15.0			
1,2,4-Trichlorobenzene	0.2909 0.2558	0.2797 0.2757	0.2759 0.2701	0.2779 0.2577	0.2856	Ave		0.2744				4.2		15.0			
Alpha-Terpineol	0.1805 0.1993	0.1687 0.2152	0.1741 0.2121	0.1820 0.2130	0.2074	Ave		0.1947				9.4		15.0			
Naphthalene	0.9667 0.8538	0.9178 0.9044	0.9020 0.8950	0.9169 0.8567	0.9518	Ave		0.9072				4.1		15.0			
4-Chloroaniline	0.3184 0.3242	0.2978 0.3574	0.3114 0.3659	0.3176 0.3634	0.3572	Ave		0.3348				7.8		15.0			
Hexachlorobutadiene	0.1512 0.1373	0.1485 0.1463	0.1352 0.1469	0.1444 0.1387	0.1561	Ave		0.1449				4.7		15.0			
Caprolactam	0.0648 0.0826	0.0460 0.0884	0.0474 0.0891	0.0542 0.0932	0.0734	Lin1	-0.009	0.0895							0.9930		0.9900

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

SEMIVOLATILE ORGANICS

REGION I VALIDATION CHECKLIST for
OLIN CHEMICAL SUPERFUND SITE
Criteria and Qualifications: REGION I Organics Guideline (1996)

TIER I /(II)/ III (circle one)

SITE: Olin Chemical Superfund Site Project #: 6/07/0002/6.12 SDG #: OCRI-16

LAB #: _TAL-Westfield___

Sample IDs: Attach tracking sheet and/or sample listing.

This checklist is designed to be used with USEPA Region I Validation Guidelines Part II (12/1996). During Level III validation, calculation and transcription checks are completed for instrument tuning, surrogates, target compounds, spike recoveries, calibration data, and internal standards as specified in the guideline. These checks are documented on attached validation notes.

YES NO NA	
Data completeness ☑ ☐ ☐ All data summaries, QC forms and raw data available from hard copy or electronic data package ☑ ☐ ☐ Data summaries match EDD	Contact lab if missing data. Lab to respond with 24 hours.
Holding Times and Preservation ☑ ☐ ☐ Hold times met (Waters – Extract within 7 days, analyze within 40 days. Soils – extract within 14 days, analyze within 40 days)	
Instrument Performance Check (Tune) ☑ ☐ ☐ Tune available for each 12-hour period samples were analyzed ☑ ☐ ☐ Appropriate number of significant figures reported (at least 2) ☑ ☐ ☐ Mass/Charge list (m/z) criteria met	
Initial Calibration ☑ ☐ ☐ %RSD less than or equal to 30% ☑ ☐ ☐ RRF greater than or equal to 0.05	
Continuing Calibration ☑ ☐ ☐ %D less than or equal to 25% ☑ ☐ ☐ RRF greater than or equal to 0.05.	
Blank Contamination ☒ ☐ ☐ Method blank contamination ☒ ☐ ☐ Equipment/Rinseate blank contamination	Evaluate all blanks for contamination. Highest contaminant level used for action level. See below.
Surrogate Recoveries	

SEMIVOLATILE ORGANICS

REGION I VALIDATION CHECKLIST for
OLIN CHEMICAL SUPERFUND SITE
Criteria and Qualifications: REGION I Organics Guideline (1996)

TIER I / (II) / III (circle one)

☑ ☐ ☐ Surrogates percent recovery criteria met: Soil = (base/neutral 30%-130%, acid 30%-130%) Water = (base/neutral 30%-130%, acid 15%-110%)	
Matrix Spikes and Laboratory Control Samples ☐ ☐ ☑ MS/MSD percent recovery criteria met Soil and Water = (base/neutral 40%-140%, acid 30%-130%) ☐ ☐ ☑ MS/MSD RPD criteria met (soils <50%, water <30%) ☐ ☒ ☐ LCS percent recovery criteria met soil/water (base 40%-140%, acid 30%-130%)	See below.
Field Duplicates ☐ ☐ ☑ RPD criteria met (soils <50%, water <30%)	
Internal Standard ☐ ☒ ☐ Area counts within -50 to +100 percent of calib. std. ☑ ☐ ☐ Retention Time within 30 seconds of calib. std.	See below.
Target Compounds ☑ ☐ ☐ Reviewed narrative for anomalies	
Tentatively Identified Compounds (TICs) ☐ ☑ ☐ TCL compounds reported as TICs	

Validator's Signature: _____

Date: 3/10/10

Reference:

MACTEC, Quality Assurance Project Plan for Remedial Investigation/Feasibility Study – Olin Chemical Superfund Site, Wilmington Property, 51 Eames Street, Wilmington, MA", MACTEC Engineering and Consulting. Draft .October 2008.

SAMPLE SUMMARY

Client: Olin Corporation

Job Number: 360-24634-1
Sdg Number: OCRI-16

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
360-24634-1	OC-SS-417-0.0/1.0-XXX	Solid	09/15/2009 1420	09/16/2009 1620
360-24634-2	OC-SS-418-0.0/1.0-XXX	Solid	09/15/2009 1440	09/16/2009 1620
360-24634-3	OC-SS-419-0.0/1.0-XXX	Solid	09/15/2009 1505	09/16/2009 1620
360-24634-4	OC-SS-420-0.0/1.0-XXX	Solid	09/15/2009 1525	09/16/2009 1620
360-24634-5	OC-SS-421-0.0/1.0-XXX	Solid	09/15/2009 1555	09/16/2009 1620
360-24634-6	OC-SS-422-0.0/1.0-XXX	Solid	09/15/2009 1630	09/16/2009 1620
360-24634-7	OC-SS-423-0.0/1.0-XXX	Solid	09/15/2009 1655	09/16/2009 1620
360-24634-8	OC-SS-424-0.0/1.0-XXX	Solid	09/15/2009 1720	09/16/2009 1620
360-24634-9	OC-SS-425-0.0/1.0-XXX	Solid	09/15/2009 1740	09/16/2009 1620
360-24634-10	OC-SS-426-0.0/1.0-XXX	Solid	09/16/2009 0915	09/16/2009 1620
360-24634-11	OC-SS-427-0.0/1.0-XXX	Solid	09/16/2009 0940	09/16/2009 1620
360-24634-12	OC-SS-428-0.0/1.0-XXX	Solid	09/16/2009 1005	09/16/2009 1620
360-24634-13	OC-SS-429-0.0/1.0-XXX	Solid	09/16/2009 1025	09/16/2009 1620
360-24634-14	OC-SS-430-0.0/1.0-XXX	Solid	09/16/2009 1050	09/16/2009 1620
360-24634-15	OC-SS-431-0.0/1.0-XXX	Solid	09/16/2009 1135	09/16/2009 1620
360-24634-16	OC-SS-432-0.0/1.0-XXX	Solid	09/16/2009 1155	09/16/2009 1620
360-24634-17	OC-TBK-020	Solid	09/16/2009 1320	09/16/2009 1620
360-24634-18	OC-EBK-011	Water	09/16/2009 0835	09/16/2009 1620

Form I's updated
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Client: Olin Corporation

Job Number: 360-24634-1
Sdg Number: OCRI-16

Client Sample ID: OC-SS-417-0.0/1.0-XXX

Lab Sample ID: 360-24634-1
Client Matrix: Solid

% Moisture: 4.1

Date Sampled: 09/15/2009 1420
Date Received: 09/16/2009 1620

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49826		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49345		Lab File ID:	B10710.D
Dilution:	10			Initial Weight/Volume:	30.88 g
Date Analyzed:	10/04/2009 0014			Final Weight/Volume:	1.0 mL
Date Prepared:	09/23/2009 1139			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		100	340
1,2,4,5-Tetrachlorobenzene		ND		100	340
1,2,4-Trichlorobenzene		ND		100	340
1,2-Dichlorobenzene		ND		100	340
1,3-Dichlorobenzene		ND		100	340
1,4-Dichlorobenzene		ND		100	340
1-Methylnaphthalene		ND		100	340
2,2'-oxybis[1-chloropropane]		ND		100	340
2,3,4,6-Tetrachlorophenol		ND		100	340
2,4,5-Trichlorophenol		ND		100	340
2,4,6-Trichlorophenol		ND		100	340
2,4-Dichlorophenol		ND		100	340
2,4-Dimethylphenol		ND		130	340
2,4-Dinitrophenol		ND		100	340
2,4-Dinitrotoluene		ND		100	340
2,6-Dinitrotoluene		ND		100	340
2-Chloronaphthalene		ND		100	340
2-Chlorophenol		ND		100	340
2-Methylnaphthalene		ND		100	340
2-Methylphenol		ND		200	340
2-Nitroaniline		ND		100	1700
2-Nitrophenol		ND		100	340
3 & 4 Methylphenol		ND		100	340
3,3'-Dichlorobenzidine		ND		100	680
3-Nitroaniline		ND		100	1700
4,6-Dinitro-2-methylphenol		ND		100	1700
4-Bromophenyl phenyl ether		ND		100	340
4-Chloro-3-methylphenol		ND		100	680
4-Chloroaniline		ND		100	680
4-Chlorophenyl phenyl ether		ND		100	340
4-Nitroaniline		ND		100	1700
4-Nitrophenol		ND		100	1700
Acenaphthene		ND		100	340
Acenaphthylene		ND		100	340
Acetophenone		ND		100	340
Aniline		ND J	✓	100	340
Anthracene		ND		100	340
Atrazine		ND		100	340
Azobenzene		ND		100	340
Benzaldehyde		ND		100	340
Benzo[a]anthracene		ND		100	340
Benzo[a]pyrene		ND		100	340
Benzo[b]fluoranthene		ND		100	340
Benzo[g,h,i]perylene		ND		100	340
Benzo[k]fluoranthene		ND		100	340
Benzoic acid		~~450~~ U	~~J B~~	150	1700

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Client: Olin Corporation

Job Number: 360-24634-1
Sdg Number: OCRI-16

Client Sample ID: OC-SS-417-0.0/1.0-XXX

Lab Sample ID: 360-24634-1
Client Matrix: Solid % Moisture: 4.1

Date Sampled: 09/15/2009 1420
Date Received: 09/16/2009 1620

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49826		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49345		Lab File ID:	B10710.D
Dilution:	10			Initial Weight/Volume:	30.88 g
Date Analyzed:	10/04/2009 0014			Final Weight/Volume:	1.0 mL
Date Prepared:	09/23/2009 1139			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		100	340
Benzyl alcohol		ND		290	680
Bis(2-chloroethoxy)methane		ND		100	340
Bis(2-chloroethyl)ether		ND		100	340
Bis(2-ethylhexyl) phthalate		1100		100	340
Butyl benzyl phthalate		ND		100	340
Caprolactam		ND		100	340
Carbazole		ND		100	340
Chrysene		ND		100	340
Dibenz(a,h)anthracene		ND		100	340
Dibenzofuran		ND		100	340
Diethyl phthalate		ND		100	340
Dimethyl phthalate		110	J	100	340
Di-n-butyl phthalate		ND		300	340
Di-n-octyl phthalate		ND		170	340
Diphenyl oxide		ND		100	340
Fluoranthene		ND		100	340
Fluorene		ND		100	340
Hexachlorobenzene		ND		100	340
Hexachlorobutadiene		ND		100	340
Hexachlorocyclopentadiene		ND		100	680
Hexachloroethane		ND		100	340
Indeno[1,2,3-cd]pyrene		ND		100	340
Isophorone		ND		100	340
Naphthalene		ND		100	810
Nitrobenzene		ND		100	340
N-Nitrosodimethylamine		ND		120	340
N-Nitrosodi-n-propylamine		ND		100	340
N-Nitrosodiphenylamine		450		100	340
Pentachlorophenol		ND		100	340
Phenanthrene		ND		100	410
Phenol		ND		100	340
Pyrene		ND		100	340

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	83		30 - 130
2-Fluorobiphenyl	68		30 - 130
2-Fluorophenol	86		30 - 130
Nitrobenzene-d5	67		30 - 130
Phenol-d5	70		30 - 130
Terphenyl-d14	82		30 - 130

Client: Olin Corporation

Job Number: 360-24634-1
Sdg Number: OCRI-16

Client Sample ID: OC-SS-417-0.0/1.0-XXX

Lab Sample ID: 360-24634-1
Client Matrix: Solid % Moisture: 4.1

Date Sampled: 09/15/2009 1420
Date Received: 09/16/2009 1620

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49826		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49345		Lab File ID:	B10710.D
Dilution:	10			Initial Weight/Volume:	30.88 g
Date Analyzed:	10/04/2009 0014			Final Weight/Volume:	1.0 mL
Date Prepared:	09/23/2009 1139			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 2

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
54815-23-5	Benzeneacetic acid, 4-amino-.alpha.,.alp	9.76	3200	T J N
~~26603-23-6~~	~~p,p''-Dioctyldiphenylamine~~	~~13.15~~	~~1200~~	~~T J N~~

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Client: Olin Corporation

Job Number: 360-24634-1
Sdg Number: OCRI-16

Client Sample ID: **OC-SS-418-0.0/1.0-XXX**

Lab Sample ID: 360-24634-2
Client Matrix: Solid
% Moisture: 9.5

Date Sampled: 09/15/2009 1440
Date Received: 09/16/2009 1620

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49826		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49345		Lab File ID:	B10711.D
Dilution:	1.0			Initial Weight/Volume:	30.28 g
Date Analyzed:	10/04/2009 0042			Final Weight/Volume:	1.0 mL
Date Prepared:	09/23/2009 1139			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		11	36
1,2,4,5-Tetrachlorobenzene		ND		11	36
1,2,4-Trichlorobenzene		ND		11	36
1,2-Dichlorobenzene		ND		11	36
1,3-Dichlorobenzene		ND		11	36
1,4-Dichlorobenzene		ND		11	36
1-Methylnaphthalene		ND		11	36
2,2'-oxybis[1-chloropropane]		ND		11	36
2,3,4,6-Tetrachlorophenol		ND		11	36
2,4,5-Trichlorophenol		ND		11	36
2,4,6-Trichlorophenol		ND		11	36
2,4-Dichlorophenol		ND		11	36
2,4-Dimethylphenol		ND		14	36
2,4-Dinitrophenol		ND		11	36
2,4-Dinitrotoluene		ND		11	36
2,6-Dinitrotoluene		ND		11	36
2-Chloronaphthalene		ND		11	36
2-Chlorophenol		ND		11	36
2-Methylnaphthalene		ND		11	36
2-Methylphenol		ND		22	36
2-Nitroaniline		ND		11	180
2-Nitrophenol		ND		11	36
3 & 4 Methylphenol		ND		11	36
3,3'-Dichlorobenzidine		ND		11	73
3-Nitroaniline		ND		11	180
4,6-Dinitro-2-methylphenol		ND		11	180
4-Bromophenyl phenyl ether		ND		11	36
4-Chloro-3-methylphenol		ND		11	73
4-Chloroaniline		ND		11	73
4-Chlorophenyl phenyl ether		ND		11	36
4-Nitroaniline		ND		11	180
4-Nitrophenol		ND		11	180
Acenaphthene		ND		11	36
Acenaphthylene		ND		11	36
Acetophenone		ND		11	36
Aniline		ND J	✓	11	36
Anthracene		ND		11	36
Atrazine		ND		11	36
Azobenzene		ND		11	36
Benzaldehyde		23	J	11	36
Benzo[a]anthracene		ND		11	36
Benzo[a]pyrene		ND		11	36
Benzo[b]fluoranthene		ND		11	36
Benzo[g,h,i]perylene		ND		11	36
Benzo[k]fluoranthene		ND		11	36
Benzoic acid		240 u	B ✓	16	180

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Client: Olin Corporation

Job Number: 360-24634-1
Sdg Number: OCRI-16

Client Sample ID: **OC-SS-418-0.0/1.0-XXX**

Lab Sample ID: 360-24634-2
Client Matrix: Solid

% Moisture: 9.5

Date Sampled: 09/15/2009 1440
Date Received: 09/16/2009 1620

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49826		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49345		Lab File ID:	B10711.D
Dilution:	1.0			Initial Weight/Volume:	30.28 g
Date Analyzed:	10/04/2009 0042			Final Weight/Volume:	1.0 mL
Date Prepared:	09/23/2009 1139			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		11	36
Benzyl alcohol		ND		31	73
Bis(2-chloroethoxy)methane		ND		11	36
Bis(2-chloroethyl)ether		ND		11	36
Bis(2-ethylhexyl) phthalate		20	J	11	36
Butyl benzyl phthalate		ND		11	36
Caprolactam		ND		11	36
Carbazole		ND		11	36
Chrysene		13	J	11	36
Dibenz(a,h)anthracene		ND		11	36
Dibenzofuran		ND		11	36
Diethyl phthalate		ND		11	36
Dimethyl phthalate		ND		11	36
Di-n-butyl phthalate		ND		32	36
Di-n-octyl phthalate		ND		18	36
Diphenyl oxide		ND		11	36
Fluoranthene		16	J	11	36
Fluorene		ND		11	36
Hexachlorobenzene		ND		11	36
Hexachlorobutadiene		ND		11	36
Hexachlorocyclopentadiene		ND		11	73
Hexachloroethane		ND		11	36
Indeno[1,2,3-cd]pyrene		ND		11	36
Isophorone		ND		11	36
Naphthalene		ND		11	88
Nitrobenzene		ND		11	36
N-Nitrosodimethylamine		ND		13	36
N-Nitrosodi-n-propylamine		ND		11	36
N-Nitrosodiphenylamine		ND		11	36
Pentachlorophenol		ND		11	36
Phenanthrene		ND		11	44
Phenol		ND		11	36
Pyrene		17	J	11	36

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	68		30 - 130
2-Fluorobiphenyl	54		30 - 130
2-Fluorophenol	74		30 - 130
Nitrobenzene-d5	53		30 - 130
Phenol-d5	59		30 - 130
Terphenyl-d14	69		30 - 130

Client: Olin Corporation

Job Number: 360-24634-1
Sdg Number: OCRI-16

Client Sample ID: **OC-SS-418-0.0/1.0-XXX**

Lab Sample ID: 360-24634-2
Client Matrix: Solid % Moisture: 9.5

Date Sampled: 09/15/2009 1440
Date Received: 09/16/2009 1620

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49826		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49345		Lab File ID:	B10711.D
Dilution:	1.0			Initial Weight/Volume:	30.28 g
Date Analyzed:	10/04/2009 0042			Final Weight/Volume:	1.0 mL
Date Prepared:	09/23/2009 1139			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** **10**

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
6624-79-9	1-Dotriacontanol	12.73	430	T J N
1599-67-3	1-Docosene	13.77	1700	T J N
53057-53-7	1,21-Docosadiene	14.76	710	T J N
55124-79-3	Heptadecane, 9-hexyl-	15.20	620	T J N
14811-95-1	1,19-Eicosadiene	15.92	630	T J N
630-3-5	Nonacosane	16.16	950	T J N
638-66-4	Octadecanal	16.86	250	T J N
83-47-6	.gamma.-Sitosterol	17.44	600	T J N
1000158-8-0	.beta.-Humulene	18.09	650	T J N
559-74-0	Friedelin	19.15	3300	T J N

Client: Olin Corporation

Job Number: 360-24634-1
Sdg Number: OCRI-16

Client Sample ID: **OC-SS-419-0.0/1.0-XXX**

Lab Sample ID: 360-24634-3
Client Matrix: Solid

% Moisture: 9.9

Date Sampled: 09/15/2009 1505
Date Received: 09/16/2009 1620

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49826	Instrument ID: Inst. B
Preparation:	3546	Prep Batch: 360-49345	Lab File ID: B10712.D
Dilution:	1.0		Initial Weight/Volume: 30.68 g
Date Analyzed:	10/04/2009 0110		Final Weight/Volume: 1.0 mL
Date Prepared:	09/23/2009 1139		Injection Volume: 1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		11	36
1,2,4,5-Tetrachlorobenzene		ND		11	36
1,2,4-Trichlorobenzene		ND		11	36
1,2-Dichlorobenzene		ND		11	36
1,3-Dichlorobenzene		ND		11	36
1,4-Dichlorobenzene		ND		11	36
1-Methylnaphthalene		ND		11	36
2,2'-oxybis[1-chloropropane]		ND		11	36
2,3,4,6-Tetrachlorophenol		ND		11	36
2,4,5-Trichlorophenol		ND		11	36
2,4,6-Trichlorophenol		ND		11	36
2,4-Dichlorophenol		ND		11	36
2,4-Dimethylphenol		ND		14	36
2,4-Dinitrophenol		ND		11	36
2,4-Dinitrotoluene		ND		11	36
2,6-Dinitrotoluene		ND		11	36
2-Chloronaphthalene		ND		11	36
2-Chlorophenol		ND		11	36
2-Methylnaphthalene		ND		11	36
2-Methylphenol		ND		22	36
2-Nitroaniline		ND		11	180
2-Nitrophenol		ND		11	36
3 & 4 Methylphenol		ND		11	36
3,3'-Dichlorobenzidine		ND		11	72
3-Nitroaniline		ND		11	180
4,6-Dinitro-2-methylphenol		ND		11	180
4-Bromophenyl phenyl ether		ND		11	36
4-Chloro-3-methylphenol		ND		11	72
4-Chloroaniline		ND		11	72
4-Chlorophenyl phenyl ether		ND		11	36
4-Nitroaniline		ND		11	180
4-Nitrophenol		ND		11	180
Acenaphthene		ND		11	36
Acenaphthylene		ND		11	36
Acetophenone		ND		11	36
Aniline		ND J		11	36
Anthracene		ND		11	36
Atrazine		ND		11	36
Azobenzene		ND		11	36
Benzaldehyde		ND		11	36
Benzo[a]anthracene		33	J	11	36
Benzo[a]pyrene		38		11	36
Benzo[b]fluoranthene		62		11	36
Benzo[g,h,i]perylene		24	J	11	36
Benzo[k]fluoranthene		19	J	11	36
Benzoic acid		210 U	B	16	180

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Client: Olin Corporation

Job Number: 360-24634-1
Sdg Number: OCRI-16

Client Sample ID: OC-SS-419-0.0/1.0-XXX

Lab Sample ID: 360-24634-3
Client Matrix: Solid

% Moisture: 9.9

Date Sampled: 09/15/2009 1505
Date Received: 09/16/2009 1620

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49826		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49345		Lab File ID:	B10712.D
Dilution:	1.0			Initial Weight/Volume:	30.68 g
Date Analyzed:	10/04/2009 0110			Final Weight/Volume:	1.0 mL
Date Prepared:	09/23/2009 1139			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		11	36
Benzyl alcohol		ND		31	72
Bis(2-chloroethoxy)methane		ND		11	36
Bis(2-chloroethyl)ether		ND		11	36
Bis(2-ethylhexyl) phthalate		210		11	36
Butyl benzyl phthalate		ND		11	36
Caprolactam		ND		11	36
Carbazole		ND		11	36
Chrysene		47		11	36
Dibenz(a,h)anthracene		ND		11	36
Dibenzofuran		ND		11	36
Diethyl phthalate		ND		11	36
Dimethyl phthalate		ND		11	36
Di-n-butyl phthalate		ND		32	36
Di-n-octyl phthalate		ND		18	36
Diphenyl oxide		ND		11	36
Fluoranthene		90		11	36
Fluorene		22	J	11	36
Hexachlorobenzene		ND		11	36
Hexachlorobutadiene		ND		11	36
Hexachlorocyclopentadiene		ND		11	72
Hexachloroethane		ND		11	36
Indeno[1,2,3-cd]pyrene		23	J	11	36
Isophorone		ND		11	36
Naphthalene		13	J	11	87
Nitrobenzene		ND		11	36
N-Nitrosodimethylamine		ND		13	36
N-Nitrosodi-n-propylamine		ND		11	36
N-Nitrosodiphenylamine		ND		11	36
Pentachlorophenol		ND		11	36
Phenanthrene		34	J	11	43
Phenol		ND		11	36
Pyrene		73		11	36

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	67		30 - 130
2-Fluorobiphenyl	52		30 - 130
2-Fluorophenol	69		30 - 130
Nitrobenzene-d5	52		30 - 130
Phenol-d5	56		30 - 130
Terphenyl-d14	62		30 - 130

Client: Olin Corporation

Job Number: 360-24634-1
Sdg Number: OCRI-16

Client Sample ID: **OC-SS-419-0.0/1.0-XXX**

Lab Sample ID: 360-24634-3
Client Matrix: Solid % Moisture: 9.9

Date Sampled: 09/15/2009 1505
Date Received: 09/16/2009 1620

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49826		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49345		Lab File ID:	B10712.D
Dilution:	1.0			Initial Weight/Volume:	30.68 g
Date Analyzed:	10/04/2009 0110			Final Weight/Volume:	1.0 mL
Date Prepared:	09/23/2009 1139			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** **10**

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
100-52-7	Benzaldehyde	6.21	41	T J N
544-63-8	Tetradecanoic acid	10.23	72	T J N
1000197-59-7	Perhydrobenzo[a]cycloheptene-6,8-dicarbo	10.92	43	T J N
2050-77-3	Decane, 1-iodo-	11.08	48	T J N
6765-39-5	1-Heptadecene	11.38	30	T J N
18435-45-5	1-Nonadecene	12.00	33	T J N
1599-67-3	1-Docosene	12.74	200	T J N
1599-67-3	1-Docosene	13.77	350	T J N
630-2-4	Octacosane	16.16	250	T J N
75207-54-4	2-Pentacosanone	16.26	62	T J N

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Client: Olin Corporation

Job Number: 360-24634-1
Sdg Number: OCRI-16

Client Sample ID: **OC-SS-420-0.0/1.0-XXX**

Lab Sample ID: 360-24634-4
Client Matrix: Solid
% Moisture: 11.6

Date Sampled: 09/15/2009 1525
Date Received: 09/16/2009 1620

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49520		Instrument ID:	Inst. J
Preparation:	3550B	Prep Batch: 360-49302		Lab File ID:	J03163.D
Dilution:	1.0			Initial Weight/Volume:	100.75 g
Date Analyzed:	09/26/2009 1902			Final Weight/Volume:	1.0 mL
Date Prepared:	09/22/2009 1155			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodimethylamine		ND		1.3	5.6

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	75		30 - 130
2-Fluorobiphenyl	60		30 - 130
2-Fluorophenol	54		30 - 130
Nitrobenzene-d5	57		30 - 130
Phenol-d5	64		30 - 130
Terphenyl-d14	84		30 - 130

Client: Olin Corporation

Job Number: 360-24634-1
Sdg Number: OCRI-16

Client Sample ID: OC-SS-420-0.0/1.0-XXX

Lab Sample ID: 360-24634-4
Client Matrix: Solid

% Moisture: 11.6

Date Sampled: 09/15/2009 1525
Date Received: 09/16/2009 1620

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49826		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49345		Lab File ID:	B10713.D
Dilution:	1.0			Initial Weight/Volume:	30.60 g
Date Analyzed:	10/04/2009 0137			Final Weight/Volume:	1.0 mL
Date Prepared:	09/23/2009 1139			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		11	37
1,2,4,5-Tetrachlorobenzene		ND		11	37
1,2,4-Trichlorobenzene		ND		11	37
1,2-Dichlorobenzene		ND		11	37
1,3-Dichlorobenzene		ND		11	37
1,4-Dichlorobenzene		ND		11	37
1-Methylnaphthalene		ND		11	37
2,2'-oxybis[1-chloropropane]		ND		11	37
2,3,4,6-Tetrachlorophenol		ND		11	37
2,4,5-Trichlorophenol		ND		11	37
2,4,6-Trichlorophenol		ND		11	37
2,4-Dichlorophenol		ND		11	37
2,4-Dimethylphenol		ND		15	37
2,4-Dinitrophenol		ND		11	37
2,4-Dinitrotoluene		ND		11	37
2,6-Dinitrotoluene		ND		11	37
2-Chloronaphthalene		ND		11	37
2-Chlorophenol		ND		11	37
2-Methylnaphthalene		ND		11	37
2-Methylphenol		ND		22	37
2-Nitroaniline		ND		11	180
2-Nitrophenol		ND		11	37
3 & 4 Methylphenol		ND		11	37
3,3'-Dichlorobenzidine		ND		11	74
3-Nitroaniline		ND		11	180
4,6-Dinitro-2-methylphenol		ND		11	180
4-Bromophenyl phenyl ether		ND		11	37
4-Chloro-3-methylphenol		ND		11	74
4-Chloroaniline		ND		11	74
4-Chlorophenyl phenyl ether		ND		11	37
4-Nitroaniline		ND		11	180
4-Nitrophenol		ND		11	180
Acenaphthene		ND		11	37
Acenaphthylene		ND		11	37
Acetophenone		ND		11	37
Aniline		ND	J	11	37
Anthracene		ND		11	37
Atrazine		ND		11	37
Azobenzene		ND		11	37
Benzaldehyde		15	J	11	37
Benzo[a]anthracene		ND		11	37
Benzo[a]pyrene		11	J	11	37
Benzo[b]fluoranthene		ND		11	37
Benzo[g,h,i]perylene		ND		11	37
Benzo[k]fluoranthene		ND		11	37
Benzoic acid		ND		17	180

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Client: Olin Corporation

Job Number: 360-24634-1
Sdg Number: OCRI-16

Client Sample ID: OC-SS-420-0.0/1.0-XXX

Lab Sample ID: 360-24634-4
Client Matrix: Solid

% Moisture: 11.6

Date Sampled: 09/15/2009 1525
Date Received: 09/16/2009 1620

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49826		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49345		Lab File ID:	B10713.D
Dilution:	1.0			Initial Weight/Volume:	30.60 g
Date Analyzed:	10/04/2009 0137			Final Weight/Volume:	1.0 mL
Date Prepared:	09/23/2009 1139			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		11	37
Benzyl alcohol		ND		32	74
Bis(2-chloroethoxy)methane		ND		11	37
Bis(2-chloroethyl)ether		ND		11	37
Bis(2-ethylhexyl) phthalate		520		11	37
Butyl benzyl phthalate		ND		11	37
Caprolactam		ND		11	37
Carbazole		ND		11	37
Chrysene		ND		11	37
Dibenz(a,h)anthracene		ND		11	37
Dibenzofuran		ND		11	37
Diethyl phthalate		ND		11	37
Dimethyl phthalate		ND		11	37
Di-n-butyl phthalate		ND		33	37
Di-n-octyl phthalate		ND		19	37
Diphenyl oxide		ND		11	37
Fluoranthene		12	J	11	37
Fluorene		ND		11	37
Hexachlorobenzene		ND		11	37
Hexachlorobutadiene		ND		11	37
Hexachlorocyclopentadiene		ND		11	74
Hexachloroethane		ND		11	37
Indeno[1,2,3-cd]pyrene		ND		11	37
Isophorone		ND		11	37
Naphthalene		ND		11	89
Nitrobenzene		ND		11	37
N-Nitrosodimethylamine		ND		13	37
N-Nitrosodi-n-propylamine		ND		11	37
N-Nitrosodiphenylamine		26	J	11	37
Pentachlorophenol		ND		11	37
Phenanthrene		ND		11	44
Phenol		ND		11	37
Pyrene		13	J	11	37

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	78		30 - 130
2-Fluorophenol	77		30 - 130
2-Fluorobiphenyl	59		30 - 130
Nitrobenzene-d5	60		30 - 130
Phenol-d5	62		30 - 130
Terphenyl-d14	70		30 - 130

Client: Olin Corporation

Job Number: 360-24634-1
Sdg Number: OCRI-16

Client Sample ID: **OC-SS-420-0.0/1.0-XXX**

Lab Sample ID: 360-24634-4
Client Matrix: Solid % Moisture: 11.6

Date Sampled: 09/15/2009 1525
Date Received: 09/16/2009 1620

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49826		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49345		Lab File ID:	B10713.D
Dilution:	1.0			Initial Weight/Volume:	30.60 g
Date Analyzed:	10/04/2009 0137			Final Weight/Volume:	1.0 mL
Date Prepared:	09/23/2009 1139			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 4

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
112-88-9	1-Octadecene	12.00	12	T J N
14064-41-6	Benzene, 1-methoxy-3-(2-phenylethenyl)-,	12.08	63	T J N
77899-3-7	1-Heneicosyl formate	12.73	38	T J N
506-52-5	1-Hexacosanol	13.76	55	T J N

Client: Olin Corporation

Job Number: 360-24634-1
Sdg Number: OCRI-16

Client Sample ID: **OC-SS-420-0.0/1.0-XXX**

Lab Sample ID: 360-24634-4
Client Matrix: Solid

% Moisture: 11.6

Date Sampled: 09/15/2009 1525
Date Received: 09/16/2009 1620

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-50051		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49345		Lab File ID:	B10803.D
Dilution:	1.0			Initial Weight/Volume:	30.60 g
Date Analyzed:	10/08/2009 1252	Run Type: RA		Final Weight/Volume:	1.0 mL
Date Prepared:	09/23/2009 1139			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Diphenylamine		14	J	11	37

Client: Olin Corporation

Job Number: 360-24634-1
Sdg Number: OCRI-16

Client Sample ID: OC-SS-420-0.0/1.0-XXX

Lab Sample ID: 360-24634-4
Client Matrix: Solid

% Moisture: 11.6

Date Sampled: 09/15/2009 1525
Date Received: 09/16/2009 1620

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-50126		Instrument ID:	NOEQUIP
Preparation:	3546	Prep Batch: 360-49345		Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	30.60 g
Date Analyzed:	10/08/2009 1252	Run Type:	RA2	Final Weight/Volume:	1.0 mL
Date Prepared:	09/23/2009 1139			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodiphenylamine		13	J	11	37

Client: Olin Corporation

Job Number: 360-24634-1
Sdg Number: OCRI-16

Client Sample ID: **OC-SS-421-0.0/1.0-XXX**

Lab Sample ID: 360-24634-5
Client Matrix: Solid

% Moisture: 21.5

Date Sampled: 09/15/2009 1555
Date Received: 09/16/2009 1620

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49826		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49345		Lab File ID:	B10714.D
Dilution:	1.0			Initial Weight/Volume:	30.43 g
Date Analyzed:	10/04/2009 0205			Final Weight/Volume:	1.0 mL
Date Prepared:	09/23/2009 1139			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		13	42
1,2,4,5-Tetrachlorobenzene		ND		13	42
1,2,4-Trichlorobenzene		ND		13	42
1,2-Dichlorobenzene		ND		13	42
1,3-Dichlorobenzene		ND		13	42
1,4-Dichlorobenzene		ND		13	42
1-Methylnaphthalene		ND		13	42
2,2'-oxybis[1-chloropropane]		ND		13	42
2,3,4,6-Tetrachlorophenol		ND		13	42
2,4,5-Trichlorophenol		ND		13	42
2,4,6-Trichlorophenol		ND		13	42
2,4-Dichlorophenol		ND		13	42
2,4-Dimethylphenol		ND		16	42
2,4-Dinitrophenol		ND		13	42
2,4-Dinitrotoluene		ND		13	42
2,6-Dinitrotoluene		ND		13	42
2-Chloronaphthalene		ND		13	42
2-Chlorophenol		ND		13	42
2-Methylnaphthalene		ND		13	42
2-Methylphenol		ND		25	42
2-Nitroaniline		ND		13	210
2-Nitrophenol		ND		13	42
3 & 4 Methylphenol		ND		13	42
3,3'-Dichlorobenzidine		ND		13	84
3-Nitroaniline		ND		13	210
4,6-Dinitro-2-methylphenol		ND		13	210
4-Bromophenyl phenyl ether		ND		13	42
4-Chloro-3-methylphenol		ND		13	84
4-Chloroaniline		ND		13	84
4-Chlorophenyl phenyl ether		ND		13	42
4-Nitroaniline		ND		13	210
4-Nitrophenol		ND		13	210
Acenaphthene		ND		13	42
Acenaphthylene		ND		13	42
Acetophenone		ND		13	42
Aniline		ND	J	13	42
Anthracene		ND		13	42
Atrazine		ND		13	42
Azobenzene		ND		13	42
Benzaldehyde		ND		13	42
Benzo[a]anthracene		ND		13	42
Benzo[a]pyrene		ND		13	42
Benzo[b]fluoranthene		ND		13	42
Benzo[g,h,i]perylene		ND		13	42
Benzo[k]fluoranthene		ND		13	42
Benzoic acid		ND		19	210

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Client: Olin Corporation

Job Number: 360-24634-1
Sdg Number: OCRI-16

Client Sample ID: OC-SS-421-0.0/1.0-XXX

Lab Sample ID: 360-24634-5
Client Matrix: Solid % Moisture: 21.5

Date Sampled: 09/15/2009 1555
Date Received: 09/16/2009 1620

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49826		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49345		Lab File ID:	B10714.D
Dilution:	1.0			Initial Weight/Volume:	30.43 g
Date Analyzed:	10/04/2009 0205			Final Weight/Volume:	1.0 mL
Date Prepared:	09/23/2009 1139			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		13	42
Benzyl alcohol		ND		36	84
Bis(2-chloroethoxy)methane		ND		13	42
Bis(2-chloroethyl)ether		ND		13	42
Butyl benzyl phthalate		ND		13	42
Caprolactam		ND		13	42
Carbazole		ND		13	42
Chrysene		ND		13	42
Dibenz(a,h)anthracene		ND		13	42
Dibenzofuran		ND		13	42
Diethyl phthalate		ND		13	42
Dimethyl phthalate		ND		13	42
Di-n-butyl phthalate		ND		37	42
Di-n-octyl phthalate		ND		21	42
Diphenyl oxide		15	J	13	42
Fluoranthene		20	J	13	42
Fluorene		ND		13	42
Hexachlorobenzene		ND		13	42
Hexachlorobutadiene		ND		13	42
Hexachlorocyclopentadiene		ND		13	84
Hexachloroethane		ND		13	42
Indeno[1,2,3-cd]pyrene		ND		13	42
Isophorone		ND		13	42
Naphthalene		ND		13	100
Nitrobenzene		ND		13	42
N-Nitrosodimethylamine		ND		15	42
N-Nitrosodi-n-propylamine		ND		13	42
N-Nitrosodiphenylamine		33	J	13	42
Pentachlorophenol		ND		13	42
Phenanthrene		ND		13	50
Phenol		ND		13	42
Pyrene		16	J	13	42

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	19	X	30 - 130
2-Fluorobiphenyl	55		30 - 130
2-Fluorophenol	49		30 - 130
Nitrobenzene-d5	73		30 - 130
Phenol-d5	60		30 - 130
Terphenyl-d14	61		30 - 130

Client: Olin Corporation

Job Number: 360-24634-1
Sdg Number: OCRI-16

Client Sample ID: OC-SS-421-0.0/1.0-XXX

Lab Sample ID: 360-24634-5
Client Matrix: Solid % Moisture: 21.5

Date Sampled: 09/15/2009 1555
Date Received: 09/16/2009 1620

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49826		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49345		Lab File ID:	B10714.D
Dilution:	1.0			Initial Weight/Volume:	30.43 g
Date Analyzed:	10/04/2009 0205			Final Weight/Volume:	1.0 mL
Date Prepared:	09/23/2009 1139			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 6

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
27193-28-8	Phenol, (1,1,3,3-tetramethylbutyl)-	10.08	180	T J N
112-88-9	1-Octadecene	12.00	9.5	T J N
1599-67-3	1-Docosene	12.73	39	T J N
18835-33-1	1-Hexacosene	13.76	47	T J N
26603-23-6	p,p"-Dioctyldiphenylamine	15.57	140	T J N
74298-93-4	1,1"-Biphenyl, 2,3",4,5"-tetrachloro-4"-	15.94	190	T J N

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Client: Olin Corporation

Job Number: 360-24634-1
Sdg Number: OCRI-16

Client Sample ID: OC-SS-421-0.0/1.0-XXX

Lab Sample ID: 360-24634-5
Client Matrix: Solid

% Moisture: 21.5

Date Sampled: 09/15/2009 1555
Date Received: 09/16/2009 1620

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-50051		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49345		Lab File ID:	B10808.D
Dilution:	2.0			Initial Weight/Volume:	30.43 g
Date Analyzed:	10/08/2009 1510	Run Type: DL		Final Weight/Volume:	1.0 mL
Date Prepared:	09/23/2009 1139			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Bis(2-ethylhexyl) phthalate		1600		25	84

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	23	X	30 - 130
2-Fluorobiphenyl	69		30 - 130
2-Fluorophenol	66		30 - 130
Nitrobenzene-d5	67		30 - 130
Phenol-d5	73		30 - 130
Terphenyl-d14	84		30 - 130

Client: Olin Corporation

Job Number: 360-24634-1
Sdg Number: OCRI-16

Client Sample ID: OC-SS-422-0.0/1.0-XXX

Lab Sample ID: 360-24634-6
Client Matrix: Solid

% Moisture: 15.9

Date Sampled: 09/15/2009 1630
Date Received: 09/16/2009 1620

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49520		Instrument ID:	Inst. J
Preparation:	3550B	Prep Batch: 360-49302		Lab File ID:	J03164.D
Dilution:	1.0			Initial Weight/Volume:	100.71 g
Date Analyzed:	09/26/2009 1934			Final Weight/Volume:	1.0 mL
Date Prepared:	09/22/2009 1155			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodimethylamine		ND		1.4	5.9

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	17	X	30 - 130
2-Fluorobiphenyl	40		30 - 130
2-Fluorophenol	35		30 - 130
Nitrobenzene-d5	38		30 - 130
Phenol-d5	42		30 - 130
Terphenyl-d14	46		30 - 130

Client: Olin Corporation

Job Number: 360-24634-1
Sdg Number: OCRI-16

Client Sample ID: OC-SS-422-0.0/1.0-XXX

Lab Sample ID: 360-24634-6
Client Matrix: Solid

% Moisture: 15.9

Date Sampled: 09/15/2009 1630
Date Received: 09/16/2009 1620

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49826		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49345		Lab File ID:	B10715.D
Dilution:	1.0			Initial Weight/Volume:	30.58 g
Date Analyzed:	10/04/2009 0233			Final Weight/Volume:	1.0 mL
Date Prepared:	09/23/2009 1139			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		12	39
1,2,4,5-Tetrachlorobenzene		ND		12	39
1,2,4-Trichlorobenzene		ND		12	39
1,2-Dichlorobenzene		ND		12	39
1,3-Dichlorobenzene		ND		12	39
1,4-Dichlorobenzene		ND		12	39
1-Methylnaphthalene		ND		12	39
2,2'-oxybis[1-chloropropane]		ND		12	39
2,3,4,6-Tetrachlorophenol		ND		12	39
2,4,5-Trichlorophenol		ND		12	39
2,4,6-Trichlorophenol		ND		12	39
2,4-Dichlorophenol		ND		12	39
2,4-Dimethylphenol		ND		15	39
2,4-Dinitrophenol		ND		12	39
2,4-Dinitrotoluene		ND		12	39
2,6-Dinitrotoluene		ND		12	39
2-Chloronaphthalene		ND		12	39
2-Chlorophenol		ND		12	39
2-Methylnaphthalene		ND		12	39
2-Methylphenol		ND		23	39
2-Nitroaniline		ND		12	190
2-Nitrophenol		ND		12	39
3 & 4 Methylphenol		ND		12	39
3,3'-Dichlorobenzidine		ND		12	78
3-Nitroaniline		ND		12	190
4,6-Dinitro-2-methylphenol		ND		12	190
4-Bromophenyl phenyl ether		ND		12	39
4-Chloro-3-methylphenol		ND		12	78
4-Chloroaniline		ND		12	78
4-Chlorophenyl phenyl ether		ND		12	39
4-Nitroaniline		ND		12	190
4-Nitrophenol		ND		12	190
Acenaphthene		ND		12	39
Acenaphthylene		ND		12	39
Acetophenone		ND		12	39
Aniline		ND	J	12	39
Anthracene		ND		12	39
Atrazine		ND		12	39
Azobenzene		ND		12	39
Benzaldehyde		ND		12	39
Benzo[a]anthracene		ND		12	39
Benzo[a]pyrene		ND		12	39
Benzo[b]fluoranthene		ND		12	39
Benzo[g,h,i]perylene		ND		12	39
Benzo[k]fluoranthene		ND		12	39
Benzoic acid		ND		17	190

Client: Olin Corporation

Job Number: 360-24634-1
Sdg Number: OCRI-16

Client Sample ID: OC-SS-422-0.0/1.0-XXX

Lab Sample ID: 360-24634-6
Client Matrix: Solid

% Moisture: 15.9

Date Sampled: 09/15/2009 1630
Date Received: 09/16/2009 1620

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49826		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49345		Lab File ID:	B10715.D
Dilution:	1.0			Initial Weight/Volume:	30.58 g
Date Analyzed:	10/04/2009 0233			Final Weight/Volume:	1.0 mL
Date Prepared:	09/23/2009 1139			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		12	39
Benzyl alcohol		ND		33	78
Bis(2-chloroethoxy)methane		ND		12	39
Bis(2-chloroethyl)ether		ND		12	39
Bis(2-ethylhexyl) phthalate		410		12	39
Butyl benzyl phthalate		ND		12	39
Caprolactam		ND		12	39
Carbazole		ND		12	39
Chrysene		12	J	12	39
Dibenz(a,h)anthracene		ND		12	39
Dibenzofuran		ND		12	39
Diethyl phthalate		ND		12	39
Dimethyl phthalate		ND		12	39
Di-n-butyl phthalate		ND		34	39
Di-n-octyl phthalate		ND		20	39
Diphenyl oxide		ND		12	39
Fluoranthene		16	J	12	39
Fluorene		ND		12	39
Hexachlorobenzene		ND		12	39
Hexachlorobutadiene		ND		12	39
Hexachlorocyclopentadiene		ND		12	78
Hexachloroethane		ND		12	39
Indeno[1,2,3-cd]pyrene		ND		12	39
Isophorone		ND		12	39
Naphthalene		ND		12	93
Nitrobenzene		ND		12	39
N-Nitrosodimethylamine		ND		14	39
N-Nitrosodi-n-propylamine		ND		12	39
N-Nitrosodiphenylamine		17	J	12	39
Pentachlorophenol		ND		12	39
Phenanthrene		ND		12	47
Phenol		ND		12	39
Pyrene		14	J	12	39

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	22	X	30 - 130
2-Fluorophenol	37		30 - 130
2-Fluorobiphenyl	56		30 - 130
Nitrobenzene-d5	69		30 - 130
Phenol-d5	55		30 - 130
Terphenyl-d14	69		30 - 130

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Client: Olin Corporation

Job Number: 360-24634-1
Sdg Number: OCRI-16

Client Sample ID: **OC-SS-422-0.0/1.0-XXX**

Lab Sample ID: 360-24634-6
Client Matrix: Solid % Moisture: 15.9

Date Sampled: 09/15/2009 1630
Date Received: 09/16/2009 1620

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49826		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49345		Lab File ID:	B10715.D
Dilution:	1.0			Initial Weight/Volume:	30.58 g
Date Analyzed:	10/04/2009 0233			Final Weight/Volume:	1.0 mL
Date Prepared:	09/23/2009 1139			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 9

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
541-2-6	Cyclopentasiloxane, decamethyl-	7.35	11	T J N
27193-28-8	Phenol, (1,1,3,3-tetramethylbutyl)-	9.70	11	T J N
615-22-5	Benzothiazole, 2-(methylthio)-	9.79	29	T J N
27193-28-8	Phenol, (1,1,3,3-tetramethylbutyl)-	10.08	190	T J N
74685-33-9	3-Eicosene, (E)-	12.00	21	T J N
14064-41-6	Benzene, 1-methoxy-3-(2-phenylethenyl)-,	12.08	120	T J N
1000155-85-3	Cyclohexadecane, 1,2-diethyl-	12.73	93	T J N
6624-79-9	1-Dotriacontanol	13.76	93	T J N
593-45-3	Octadecane	16.16	76	T J N

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Client: Olin Corporation

Job Number: 360-24634-1
Sdg Number: OCRI-16

Client Sample ID: OC-SS-422-0.0/1.0-XXX

Lab Sample ID: 360-24634-6
Client Matrix: Solid

% Moisture: 15.9

Date Sampled: 09/15/2009 1630
Date Received: 09/16/2009 1620

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-50051		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49345		Lab File ID:	B10804.D
Dilution:	1.0			Initial Weight/Volume:	30.58 g
Date Analyzed:	10/08/2009 1319	Run Type: RA		Final Weight/Volume:	1.0 mL
Date Prepared:	09/23/2009 1139			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Diphenylamine		ND		12	39

Client: Olin Corporation

Job Number: 360-24634-1
Sdg Number: OCRI-16

Client Sample ID: **OC-SS-422-0.0/1.0-XXX**

Lab Sample ID: 360-24634-6
Client Matrix: Solid

% Moisture: 15.9

Date Sampled: 09/15/2009 1630
Date Received: 09/16/2009 1620

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-50126		Instrument ID:	NOEQUIP
Preparation:	3546	Prep Batch: 360-49345		Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	30.58 g
Date Analyzed:	10/08/2009 1319	Run Type: RA2		Final Weight/Volume:	1.0 mL
Date Prepared:	09/23/2009 1139			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodiphenylamine		ND		12	39

Client: Olin Corporation

Job Number: 360-24634-1
Sdg Number: OCRI-16

Client Sample ID: OC-SS-423-0.0/1.0-XXX

Lab Sample ID: 360-24634-7
Client Matrix: Solid

% Moisture: 16.0

Date Sampled: 09/15/2009 1655
Date Received: 09/16/2009 1620

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49826		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49345		Lab File ID:	B10716.D
Dilution:	1.0			Initial Weight/Volume:	30.37 g
Date Analyzed:	10/04/2009 0301			Final Weight/Volume:	1.0 mL
Date Prepared:	09/23/2009 1139			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		12	39
1,2,4,5-Tetrachlorobenzene		ND		12	39
1,2,4-Trichlorobenzene		ND		12	39
1,2-Dichlorobenzene		ND		12	39
1,3-Dichlorobenzene		ND		12	39
1,4-Dichlorobenzene		ND		12	39
1-Methylnaphthalene		ND		12	39
2,2'-oxybis[1-chloropropane]		ND		12	39
2,3,4,6-Tetrachlorophenol		ND		12	39
2,4,5-Trichlorophenol		ND		12	39
2,4,6-Trichlorophenol		ND		12	39
2,4-Dichlorophenol		ND		12	39
2,4-Dimethylphenol		ND		15	39
2,4-Dinitrophenol		ND		12	39
2,4-Dinitrotoluene		ND		12	39
2,6-Dinitrotoluene		ND		12	39
2-Chloronaphthalene		ND		12	39
2-Chlorophenol		ND		12	39
2-Methylnaphthalene		ND		12	39
2-Methylphenol		ND		24	39
2-Nitroaniline		ND		12	200
2-Nitrophenol		ND		12	39
3 & 4 Methylphenol		ND		12	39
3,3'-Dichlorobenzidine		ND		12	78
3-Nitroaniline		ND		12	200
4,6-Dinitro-2-methylphenol		ND		12	200
4-Bromophenyl phenyl ether		ND		12	39
4-Chloro-3-methylphenol		ND		12	78
4-Chloroaniline		ND		12	78
4-Chlorophenyl phenyl ether		ND		12	39
4-Nitroaniline		ND		12	200
4-Nitrophenol		ND		12	200
Acenaphthene		ND		12	39
Acenaphthylene		ND		12	39
Acetophenone		ND		12	39
Aniline		ND	J	12	39
Anthracene		ND		12	39
Atrazine		ND		12	39
Azobenzene		ND		12	39
Benzaldehyde		17	J	12	39
Benzo[a]anthracene		ND		12	39
Benzo[a]pyrene		ND		12	39
Benzo[b]fluoranthene		ND		12	39
Benzo[g,h,i]perylene		ND		12	39
Benzo[k]fluoranthene		ND		12	39
Benzoic acid		ND		18	200

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Client: Olin Corporation

Job Number: 360-24634-1
Sdg Number: OCRI-16

Client Sample ID: **OC-SS-423-0.0/1.0-XXX**

Lab Sample ID: 360-24634-7
Client Matrix: Solid

% Moisture: 16.0

Date Sampled: 09/15/2009 1655
Date Received: 09/16/2009 1620

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49826		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49345		Lab File ID:	B10716.D
Dilution:	1.0			Initial Weight/Volume:	30.37 g
Date Analyzed:	10/04/2009 0301			Final Weight/Volume:	1.0 mL
Date Prepared:	09/23/2009 1139			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		12	39
Benzyl alcohol		ND		33	78
Bis(2-chloroethoxy)methane		ND		12	39
Bis(2-chloroethyl)ether		ND		12	39
Bis(2-ethylhexyl) phthalate		450		12	39
Butyl benzyl phthalate		ND		12	39
Caprolactam		ND		12	39
Carbazole		ND		12	39
Chrysene		ND		12	39
Dibenz(a,h)anthracene		ND		12	39
Dibenzofuran		ND		12	39
Diethyl phthalate		ND		12	39
Dimethyl phthalate		ND		12	39
Di-n-butyl phthalate		ND		34	39
Di-n-octyl phthalate		ND		20	39
Diphenyl oxide		ND		12	39
Fluoranthene		ND		12	39
Fluorene		ND		12	39
Hexachlorobenzene		ND		12	39
Hexachlorobutadiene		ND		12	39
Hexachlorocyclopentadiene		ND		12	78
Hexachloroethane		ND		12	39
Indeno[1,2,3-cd]pyrene		ND		12	39
Isophorone		ND		12	39
Naphthalene		ND		12	94
Nitrobenzene		ND		12	39
N-Nitrosodimethylamine		ND		14	39
N-Nitrosodi-n-propylamine		ND		12	39
N-Nitrosodiphenylamine		21	J	12	39
Pentachlorophenol		ND		12	39
Phenanthrene		ND		12	47
Phenol		ND		12	39
Pyrene		ND		12	39

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	79		30 - 130
2-Fluorobiphenyl	59		30 - 130
2-Fluorophenol	81		30 - 130
Nitrobenzene-d5	62		30 - 130
Phenol-d5	49		30 - 130
Terphenyl-d14	71		30 - 130

Client: Olin Corporation

Job Number: 360-24634-1
Sdg Number: OCRI-16

Client Sample ID: **OC-SS-423-0.0/1.0-XXX**

Lab Sample ID: 360-24634-7
Client Matrix: Solid % Moisture: 16.0

Date Sampled: 09/15/2009 1655
Date Received: 09/16/2009 1620

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49826		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49345		Lab File ID:	B10716.D
Dilution:	1.0			Initial Weight/Volume:	30.37 g
Date Analyzed:	10/04/2009 0301			Final Weight/Volume:	1.0 mL
Date Prepared:	09/23/2009 1139			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 5

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
~~615-22-5~~	~~Benzothiazole, 2-(methylthio)~~	~~9.79~~	~~36~~	~~T J N~~
6624-79-9	1-Dotriacontanol	12.74	27	T J N
1599-67-3	1-Docosene	13.76	40	T J N
31035-7-1	9-Nonadecene	15.26	72	T J N
~~26603-23-6~~	~~p,p''-Dioctyldiphenylamine~~	15.65	9900	T J N

Client: Olin Corporation

Job Number: 360-24634-1
Sdg Number: OCRI-16

Client Sample ID: OC-SS-424-0.0/1.0-XXX

Lab Sample ID: 360-24634-8
Client Matrix: Solid

% Moisture: 12.9

Date Sampled: 09/15/2009 1720
Date Received: 09/16/2009 1620

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49520		Instrument ID:	Inst. J
Preparation:	3550B	Prep Batch: 360-49302		Lab File ID:	J03165.D
Dilution:	1.0			Initial Weight/Volume:	100.77 g
Date Analyzed:	09/26/2009 2007			Final Weight/Volume:	1.0 mL
Date Prepared:	09/22/2009 1155			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodimethylamine		ND		1.3	5.7

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	75		30 - 130
2-Fluorobiphenyl	58		30 - 130
2-Fluorophenol	55		30 - 130
Nitrobenzene-d5	57		30 - 130
Phenol-d5	64		30 - 130
Terphenyl-d14	64		30 - 130

Client: Olin Corporation

Job Number: 360-24634-1
Sdg Number: OCRI-16

Client Sample ID: **OC-SS-424-0.0/1.0-XXX**

Lab Sample ID: 360-24634-8
Client Matrix: Solid

% Moisture: 12.9

Date Sampled: 09/15/2009 1720
Date Received: 09/16/2009 1620

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49826		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49345		Lab File ID:	B10717.D
Dilution:	1.0			Initial Weight/Volume:	30.27 g
Date Analyzed:	10/04/2009 0328			Final Weight/Volume:	1.0 mL
Date Prepared:	09/23/2009 1139			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		11	38
1,2,4,5-Tetrachlorobenzene		ND		11	38
1,2,4-Trichlorobenzene		ND		11	38
1,2-Dichlorobenzene		ND		11	38
1,3-Dichlorobenzene		ND		11	38
1,4-Dichlorobenzene		ND		11	38
1-Methylnaphthalene		ND		11	38
2,2'-oxybis[1-chloropropane]		ND		11	38
2,3,4,6-Tetrachlorophenol		ND		11	38
2,4,5-Trichlorophenol		ND		11	38
2,4,6-Trichlorophenol		ND		11	38
2,4-Dichlorophenol		ND		11	38
2,4-Dimethylphenol		ND		15	38
2,4-Dinitrophenol		ND		11	38
2,4-Dinitrotoluene		ND		11	38
2,6-Dinitrotoluene		ND		11	38
2-Chloronaphthalene		ND		11	38
2-Chlorophenol		ND		11	38
2-Methylnaphthalene		ND		11	38
2-Methylphenol		ND		23	38
2-Nitroaniline		ND		11	190
2-Nitrophenol		ND		11	38
3 & 4 Methylphenol		ND		11	38
3,3'-Dichlorobenzidine		ND		11	76
3-Nitroaniline		ND		11	190
4,6-Dinitro-2-methylphenol		ND		11	190
4-Bromophenyl phenyl ether		ND		11	38
4-Chloro-3-methylphenol		ND		11	76
4-Chloroaniline		ND		11	76
4-Chlorophenyl phenyl ether		ND		11	38
4-Nitroaniline		ND		11	190
4-Nitrophenol		ND		11	190
Acenaphthene		ND		11	38
Acenaphthylene		ND		11	38
Acetophenone		ND		11	38
Aniline		ND	J	11	38
Anthracene		ND		11	38
Atrazine		ND		11	38
Azobenzene		ND		11	38
Benzaldehyde		ND		11	38
Benzo[a]anthracene		ND		11	38
Benzo[a]pyrene		ND		11	38
Benzo[b]fluoranthene		ND		11	38
Benzo[g,h,i]perylene		ND		11	38
Benzo[k]fluoranthene		ND		11	38
Benzoic acid		ND		17	190

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Client: Olin Corporation

Job Number: 360-24634-1
Sdg Number: OCRI-16

Client Sample ID: OC-SS-424-0.0/1.0-XXX

Lab Sample ID: 360-24634-8
Client Matrix: Solid

% Moisture: 12.9

Date Sampled: 09/15/2009 1720
Date Received: 09/16/2009 1620

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49826		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49345		Lab File ID:	B10717.D
Dilution:	1.0			Initial Weight/Volume:	30.27 g
Date Analyzed:	10/04/2009 0328			Final Weight/Volume:	1.0 mL
Date Prepared:	09/23/2009 1139			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		11	38
Benzyl alcohol		ND		32	76
Bis(2-chloroethoxy)methane		ND		11	38
Bis(2-chloroethyl)ether		ND		11	38
Bis(2-ethylhexyl) phthalate		380		11	38
Butyl benzyl phthalate		ND		11	38
Caprolactam		ND		11	38
Carbazole		ND		11	38
Chrysene		ND		11	38
Dibenz(a,h)anthracene		ND		11	38
Dibenzofuran		ND		11	38
Diethyl phthalate		ND		11	38
Dimethyl phthalate		ND		11	38
Di-n-butyl phthalate		ND		33	38
Di-n-octyl phthalate		ND		19	38
Diphenyl oxide		ND		11	38
Fluoranthene		ND		11	38
Fluorene		ND		11	38
Hexachlorobenzene		ND		11	38
Hexachlorobutadiene		ND		11	38
Hexachlorocyclopentadiene		ND		11	76
Hexachloroethane		ND		11	38
Indeno[1,2,3-cd]pyrene		ND		11	38
Isophorone		ND		11	38
Naphthalene		ND		11	91
Nitrobenzene		ND		11	38
N-Nitrosodimethylamine		ND		13	38
N-Nitrosodi-n-propylamine		ND		11	38
N-Nitrosodiphenylamine		21	J	11	38
Pentachlorophenol		ND		11	38
Phenanthrene		ND		11	46
Phenol		ND		11	38
Pyrene		ND		11	38

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	66		30 - 130
2-Fluorophenol	72		30 - 130
2-Fluorobiphenyl	61		30 - 130
Nitrobenzene-d5	68		30 - 130
Phenol-d5	53		30 - 130
Terphenyl-d14	65		30 - 130

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Client: Olin Corporation

Job Number: 360-24634-1
Sdg Number: OCRI-16

Client Sample ID: OC-SS-424-0.0/1.0-XXX

Lab Sample ID: 360-24634-8
Client Matrix: Solid % Moisture: 12.9

Date Sampled: 09/15/2009 1720
Date Received: 09/16/2009 1620

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49826		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49345		Lab File ID:	B10717.D
Dilution:	1.0			Initial Weight/Volume:	30.27 g
Date Analyzed:	10/04/2009 0328			Final Weight/Volume:	1.0 mL
Date Prepared:	09/23/2009 1139			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 8

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
27193-28-8	Phenol, (1,1,3,3-tetramethylbutyl)-	9.70	9.7	T J N
~~615-22-5~~	~~Benzothiazole, 2-(methylthio)-~~	~~9.79~~	~~29~~	~~T J N~~
~~22768-22-5~~	~~2,4-Diphenyl-4-methyl-2(E)-pentene~~	~~10.59~~	~~16~~	~~T J N~~
14064-41-6	Benzene, 1-methoxy-3-(2-phenylethenyl)-,	12.08	55	T J N
1599-67-3	1-Docosene	12.74	49	T J N
77899-3-7	1-Heneicosyl formate	13.77	58	T J N
6971-40-0	17-Pentatriacontene	15.25	47	T J N
~~112-95-8~~	~~Eicosane~~	~~16.15~~	~~19~~	~~T J N~~

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Client: Olin Corporation

Job Number: 360-24634-1
Sdg Number: OCRI-16

Client Sample ID: OC-SS-424-0.0/1.0-XXX

Lab Sample ID: 360-24634-8
Client Matrix: Solid

% Moisture: 12.9

Date Sampled: 09/15/2009 1720
Date Received: 09/16/2009 1620

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-50051		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49345		Lab File ID:	B10805.D
Dilution:	1.0			Initial Weight/Volume:	30.27 g
Date Analyzed:	10/08/2009 1347	Run Type: RA		Final Weight/Volume:	1.0 mL
Date Prepared:	09/23/2009 1139			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Diphenylamine		ND		11	38

Client: Olin Corporation

Job Number: 360-24634-1
Sdg Number: OCRI-16

Client Sample ID: OC-SS-424-0.0/1.0-XXX

Lab Sample ID: 360-24634-8
Client Matrix: Solid

% Moisture: 12.9

Date Sampled: 09/15/2009 1720
Date Received: 09/16/2009 1620

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-50126		Instrument ID:	NOEQUIP
Preparation:	3546	Prep Batch: 360-49345		Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	30.27 g
Date Analyzed:	10/08/2009 1347	Run Type:	RA2	Final Weight/Volume:	1.0 mL
Date Prepared:	09/23/2009 1139			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodiphenylamine		ND		11	38

Client: Olin Corporation

Job Number: 360-24634-1
Sdg Number: OCRI-16

Client Sample ID: OC-SS-425-0.0/1.0-XXX

Lab Sample ID: 360-24634-9
Client Matrix: Solid

% Moisture: 17.2

Date Sampled: 09/15/2009 1740
Date Received: 09/16/2009 1620

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49826		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49345		Lab File ID:	B10718.D
Dilution:	1.0			Initial Weight/Volume:	30.44 g
Date Analyzed:	10/04/2009 0356			Final Weight/Volume:	1.0 mL
Date Prepared:	09/23/2009 1139			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		12	40
1,2,4,5-Tetrachlorobenzene		ND		12	40
1,2,4-Trichlorobenzene		ND		12	40
1,2-Dichlorobenzene		ND		12	40
1,3-Dichlorobenzene		ND		12	40
1,4-Dichlorobenzene		ND		12	40
1-Methylnaphthalene		ND		12	40
2,2'-oxybis[1-chloropropane]		ND		12	40
2,3,4,6-Tetrachlorophenol		ND		12	40
2,4,5-Trichlorophenol		ND		12	40
2,4,6-Trichlorophenol		ND		12	40
2,4-Dichlorophenol		ND		12	40
2,4-Dimethylphenol		ND		16	40
2,4-Dinitrophenol		ND		12	40
2,4-Dinitrotoluene		ND		12	40
2,6-Dinitrotoluene		ND		12	40
2-Chloronaphthalene		ND		12	40
2-Chlorophenol		ND		12	40
2-Methylnaphthalene		ND		12	40
2-Methylphenol		ND		24	40
2-Nitroaniline		ND		12	200
2-Nitrophenol		ND		12	40
3 & 4 Methylphenol		ND		12	40
3,3'-Dichlorobenzidine		ND		12	79
3-Nitroaniline		ND		12	200
4,6-Dinitro-2-methylphenol		ND		12	200
4-Bromophenyl phenyl ether		ND		12	40
4-Chloro-3-methylphenol		ND		12	79
4-Chloroaniline		ND		12	79
4-Chlorophenyl phenyl ether		ND		12	40
4-Nitroaniline		ND		12	200
4-Nitrophenol		ND		12	200
Acenaphthene		ND		12	40
Acenaphthylene		ND		12	40
Acetophenone		ND		12	40
Aniline		ND	J	12	40
Anthracene		ND		12	40
Atrazine		ND		12	40
Azobenzene		ND		12	40
Benzaldehyde		ND		12	40
Benzo[a]anthracene		ND		12	40
Benzo[a]pyrene		ND		12	40
Benzo[b]fluoranthene		ND		12	40
Benzo[g,h,i]perylene		ND		12	40
Benzo[k]fluoranthene		ND		12	40
Benzoic acid		ND		18	200

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Client: Olin Corporation

Job Number: 360-24634-1
Sdg Number: OCRI-16

Client Sample ID: **OC-SS-425-0.0/1.0-XXX**

Lab Sample ID: 360-24634-9
Client Matrix: Solid % Moisture: 17.2

Date Sampled: 09/15/2009 1740
Date Received: 09/16/2009 1620

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49826		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49345		Lab File ID:	B10718.D
Dilution:	1.0			Initial Weight/Volume:	30.44 g
Date Analyzed:	10/04/2009 0356			Final Weight/Volume:	1.0 mL
Date Prepared:	09/23/2009 1139			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		12	40
Benzyl alcohol		ND		34	79
Bis(2-chloroethoxy)methane		ND		12	40
Bis(2-chloroethyl)ether		ND		12	40
Bis(2-ethylhexyl) phthalate		660		12	40
Butyl benzyl phthalate		ND		12	40
Caprolactam		ND		12	40
Carbazole		ND		12	40
Chrysene		ND		12	40
Dibenz(a,h)anthracene		ND		12	40
Dibenzofuran		ND		12	40
Diethyl phthalate		ND		12	40
Dimethyl phthalate		ND		12	40
Di-n-butyl phthalate		ND		35	40
Di-n-octyl phthalate		ND		20	40
Diphenyl oxide		15	J	12	40
Fluoranthene		ND		12	40
Fluorene		ND		12	40
Hexachlorobenzene		ND		12	40
Hexachlorobutadiene		ND		12	40
Hexachlorocyclopentadiene		ND		12	79
Hexachloroethane		ND		12	40
Indeno[1,2,3-cd]pyrene		ND		12	40
Isophorone		ND		12	40
Naphthalene		ND		12	95
Nitrobenzene		ND		12	40
N-Nitrosodimethylamine		ND		14	40
N-Nitrosodi-n-propylamine		ND		12	40
N-Nitrosodiphenylamine		36	J	12	40
Pentachlorophenol		ND		12	40
Phenanthrene		ND		12	48
Phenol		ND		12	40
Pyrene		ND		12	40

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	48		30 - 130
2-Fluorobiphenyl	66		30 - 130
2-Fluorophenol	73		30 - 130
Nitrobenzene-d5	84		30 - 130
Phenol-d5	58		30 - 130
Terphenyl-d14	64		30 - 130

Client: Olin Corporation

Job Number: 360-24634-1
Sdg Number: OCRI-16

Client Sample ID: **OC-SS-425-0.0/1.0-XXX**

Lab Sample ID: 360-24634-9
Client Matrix: Solid % Moisture: 17.2

Date Sampled: 09/15/2009 1740
Date Received: 09/16/2009 1620

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49826		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49345		Lab File ID:	B10718.D
Dilution:	1.0			Initial Weight/Volume:	30.44 g
Date Analyzed:	10/04/2009 0356			Final Weight/Volume:	1.0 mL
Date Prepared:	09/23/2009 1139			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 2

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
1599-67-3	1-Docosene	12.74	39	T J N
6624-79-9	1-Dotriacontanol	13.77	57	T J N

Client: Olin Corporation

Job Number: 360-24634-1
Sdg Number: OCRI-16

Client Sample ID: **OC-SS-426-0.0/1.0-XXX**

Lab Sample ID: 360-24634-10
Client Matrix: Solid
% Moisture: 8.5

Date Sampled: 09/16/2009 0915
Date Received: 09/16/2009 1620

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49826		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49345		Lab File ID:	B10719.D
Dilution:	1.0			Initial Weight/Volume:	30.35 g
Date Analyzed:	10/04/2009 0424			Final Weight/Volume:	1.0 mL
Date Prepared:	09/23/2009 1139			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		11	36
1,2,4,5-Tetrachlorobenzene		ND		11	36
1,2,4-Trichlorobenzene		ND		11	36
1,2-Dichlorobenzene		ND		11	36
1,3-Dichlorobenzene		ND		11	36
1,4-Dichlorobenzene		ND		11	36
1-Methylnaphthalene		ND		11	36
2,2'-oxybis[1-chloropropane]		ND		11	36
2,3,4,6-Tetrachlorophenol		ND		11	36
2,4,5-Trichlorophenol		ND		11	36
2,4,6-Trichlorophenol		ND		11	36
2,4-Dichlorophenol		ND		11	36
2,4-Dimethylphenol		ND		14	36
2,4-Dinitrophenol		ND		11	36
2,4-Dinitrotoluene		ND		11	36
2,6-Dinitrotoluene		ND		11	36
2-Chloronaphthalene		ND		11	36
2-Chlorophenol		ND		11	36
2-Methylnaphthalene		ND		11	36
2-Methylphenol		ND		22	36
2-Nitroaniline		ND		11	180
2-Nitrophenol		ND		11	36
3 & 4 Methylphenol		ND		11	36
3,3'-Dichlorobenzidine		ND		11	72
3-Nitroaniline		ND		11	180
4,6-Dinitro-2-methylphenol		ND		11	180
4-Bromophenyl phenyl ether		ND		11	36
4-Chloro-3-methylphenol		ND		11	72
4-Chloroaniline		ND		11	72
4-Chlorophenyl phenyl ether		ND		11	36
4-Nitroaniline		ND		11	180
4-Nitrophenol		ND		11	180
Acenaphthene		ND		11	36
Acenaphthylene		ND		11	36
Acetophenone		ND		11	36
Aniline		ND	J	11	36
Anthracene		ND		11	36
Atrazine		ND		11	36
Azobenzene		ND		11	36
Benzaldehyde		ND		11	36
Benzo[a]anthracene		ND		11	36
Benzo[a]pyrene		ND		11	36
Benzo[b]fluoranthene		ND		11	36
Benzo[g,h,i]perylene		ND		11	36
Benzo[k]fluoranthene		ND		11	36
Benzoic acid		ND		16	180

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Client: Olin Corporation

Job Number: 360-24634-1
Sdg Number: OCRI-16

Client Sample ID: **OC-SS-426-0.0/1.0-XXX**

Lab Sample ID: 360-24634-10
Client Matrix: Solid

% Moisture: 8.5

Date Sampled: 09/16/2009 0915
Date Received: 09/16/2009 1620

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49826		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49345		Lab File ID:	B10719.D
Dilution:	1.0			Initial Weight/Volume:	30.35 g
Date Analyzed:	10/04/2009 0424			Final Weight/Volume:	1.0 mL
Date Prepared:	09/23/2009 1139			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		11	36
Benzyl alcohol		ND		31	72
Bis(2-chloroethoxy)methane		ND		11	36
Bis(2-chloroethyl)ether		ND		11	36
Bis(2-ethylhexyl) phthalate		620		11	36
Butyl benzyl phthalate		ND		11	36
Caprolactam		ND		11	36
Carbazole		ND		11	36
Chrysene		ND		11	36
Dibenz(a,h)anthracene		ND		11	36
Dibenzofuran		ND		11	36
Diethyl phthalate		ND		11	36
Dimethyl phthalate		ND		11	36
Di-n-butyl phthalate		ND		32	36
Di-n-octyl phthalate		ND		18	36
Diphenyl oxide		ND		11	36
Fluoranthene		12	J	11	36
Fluorene		20	J	11	36
Hexachlorobenzene		ND		11	36
Hexachlorobutadiene		ND		11	36
Hexachlorocyclopentadiene		ND		11	72
Hexachloroethane		ND		11	36
Indeno[1,2,3-cd]pyrene		ND		11	36
Isophorone		ND		11	36
Naphthalene		ND		11	86
Nitrobenzene		ND		11	36
N-Nitrosodimethylamine		ND		13	36
N-Nitrosodi-n-propylamine		ND		11	36
N-Nitrosodiphenylamine		14	J	11	36
Pentachlorophenol		ND		11	36
Phenanthrene		ND		11	43
Phenol		ND		11	36
Pyrene		ND		11	36

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	80		30 - 130
2-Fluorobiphenyl	59		30 - 130
2-Fluorophenol	76		30 - 130
Nitrobenzene-d5	59		30 - 130
Phenol-d5	58		30 - 130
Terphenyl-d14	59		30 - 130

Client: Olin Corporation

Job Number: 360-24634-1
Sdg Number: OCRI-16

Client Sample ID: OC-SS-426-0.0/1.0-XXX

Lab Sample ID: 360-24634-10
Client Matrix: Solid

% Moisture: 8.5

Date Sampled: 09/16/2009 0915
Date Received: 09/16/2009 1620

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49826		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49345		Lab File ID:	B10719.D
Dilution:	1.0			Initial Weight/Volume:	30.35 g
Date Analyzed:	10/04/2009 0424			Final Weight/Volume:	1.0 mL
Date Prepared:	09/23/2009 1139			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 1

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
6624-79-9	1-Dotriacontanol	12.74	9.4	T J N

Client: Olin Corporation

Job Number: 360-24634-1
Sdg Number: OCRI-16

Client Sample ID: **OC-SS-427-0.0/1.0-XXX**

Lab Sample ID: 360-24634-11
Client Matrix: Solid

% Moisture: 17.6

Date Sampled: 09/16/2009 0940
Date Received: 09/16/2009 1620

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49520		Instrument ID:	Inst. J
Preparation:	3550B	Prep Batch: 360-49302		Lab File ID:	J03166.D
Dilution:	1.0			Initial Weight/Volume:	100.64 g
Date Analyzed:	09/26/2009 2039			Final Weight/Volume:	1.0 mL
Date Prepared:	09/22/2009 1155			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodimethylamine		ND		1.4	6.0

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	60		30 - 130
2-Fluorobiphenyl	48		30 - 130
2-Fluorophenol	41		30 - 130
Nitrobenzene-d5	49		30 - 130
Phenol-d5	45		30 - 130
Terphenyl-d14	55		30 - 130

Client: Olin Corporation

Job Number: 360-24634-1
Sdg Number: OCRI-16

Client Sample ID: OC-SS-427-0.0/1.0-XXX

Lab Sample ID: 360-24634-11
Client Matrix: Solid

% Moisture: 17.6

Date Sampled: 09/16/2009 0940
Date Received: 09/16/2009 1620

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49826		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49345		Lab File ID:	B10720.D
Dilution:	1.0			Initial Weight/Volume:	30.85 g
Date Analyzed:	10/04/2009 0451			Final Weight/Volume:	1.0 mL
Date Prepared:	09/23/2009 1139			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		12	39
1,2,4,5-Tetrachlorobenzene		ND		12	39
1,2,4-Trichlorobenzene		ND		12	39
1,2-Dichlorobenzene		ND		12	39
1,3-Dichlorobenzene		ND		12	39
1,4-Dichlorobenzene		ND		12	39
1-Methylnaphthalene		ND		12	39
2,2'-oxybis[1-chloropropane]		ND		12	39
2,3,4,6-Tetrachlorophenol		ND		12	39
2,4,5-Trichlorophenol		ND		12	39
2,4,6-Trichlorophenol		ND		12	39
2,4-Dichlorophenol		ND		12	39
2,4-Dimethylphenol		ND		15	39
2,4-Dinitrophenol		ND		12	39
2,4-Dinitrotoluene		ND		12	39
2,6-Dinitrotoluene		ND		12	39
2-Chloronaphthalene		ND		12	39
2-Chlorophenol		ND		12	39
2-Methylnaphthalene		ND		12	39
2-Methylphenol		ND		24	39
2-Nitroaniline		ND		12	200
2-Nitrophenol		ND		12	39
3 & 4 Methylphenol		ND		12	39
3,3'-Dichlorobenzidine		ND		12	79
3-Nitroaniline		ND		12	200
4,6-Dinitro-2-methylphenol		ND		12	200
4-Bromophenyl phenyl ether		ND		12	39
4-Chloro-3-methylphenol		ND		12	79
4-Chloroaniline		ND		12	79
4-Chlorophenyl phenyl ether		ND		12	39
4-Nitroaniline		ND		12	200
4-Nitrophenol		ND		12	200
Acenaphthene		ND		12	39
Acenaphthylene		ND		12	39
Acetophenone		ND		12	39
Aniline		ND J		12	39
Anthracene		ND		12	39
Atrazine		ND		12	39
Azobenzene		ND		12	39
Benzaldehyde		85		12	39
Benzo[a]anthracene		ND		12	39
Benzo[a]pyrene		ND		12	39
Benzo[b]fluoranthene		ND		12	39
Benzo[g,h,i]perylene		ND		12	39
Benzo[k]fluoranthene		ND		12	39
Benzoic acid		300 U	B	18	200

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Client: Olin Corporation

Job Number: 360-24634-1
Sdg Number: OCRI-16

Client Sample ID: OC-SS-427-0.0/1.0-XXX

Lab Sample ID: 360-24634-11
Client Matrix: Solid

% Moisture: 17.6

Date Sampled: 09/16/2009 0940
Date Received: 09/16/2009 1620

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49826		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49345		Lab File ID:	B10720.D
Dilution:	1.0			Initial Weight/Volume:	30.85 g
Date Analyzed:	10/04/2009 0451			Final Weight/Volume:	1.0 mL
Date Prepared:	09/23/2009 1139			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		12	39
Benzyl alcohol		ND		34	79
Bis(2-chloroethoxy)methane		ND		12	39
Bis(2-chloroethyl)ether		ND		12	39
Bis(2-ethylhexyl) phthalate		14	J	12	39
Butyl benzyl phthalate		ND		12	39
Caprolactam		ND		12	39
Carbazole		ND		12	39
Chrysene		15	J	12	39
Dibenz(a,h)anthracene		ND		12	39
Dibenzofuran		ND		12	39
Diethyl phthalate		ND		12	39
Dimethyl phthalate		ND		12	39
Di-n-butyl phthalate		ND		35	39
Di-n-octyl phthalate		ND		20	39
Diphenyl oxide		ND		12	39
Diphenylamine		ND		12	39
Fluoranthene		18	J	12	39
Fluorene		ND		12	39
Hexachlorobenzene		ND		12	39
Hexachlorobutadiene		ND		12	39
Hexachlorocyclopentadiene		ND		12	79
Hexachloroethane		ND		12	39
Indeno[1,2,3-cd]pyrene		ND		12	39
Isophorone		ND		12	39
Naphthalene		ND		12	94
Nitrobenzene		ND		12	39
N-Nitrosodimethylamine		ND		14	39
N-Nitrosodi-n-propylamine		ND		12	39
N-Nitrosodiphenylamine		ND		12	39
Pentachlorophenol		ND		12	39
Phenanthrene		ND		12	47
Phenol		ND		12	39
Pyrene		18	J	12	39

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	58		30 - 130
2-Fluorophenol	60		30 - 130
2-Fluorobiphenyl	48		30 - 130
Nitrobenzene-d5	48		30 - 130
Phenol-d5	52		30 - 130
Terphenyl-d14	60		30 - 130

Client: Olin Corporation

Job Number: 360-24634-1
Sdg Number: OCRI-16

Client Sample ID: **OC-SS-427-0.0/1.0-XXX**

Lab Sample ID: 360-24634-11
Client Matrix: Solid % Moisture: 17.6

Date Sampled: 09/16/2009 0940
Date Received: 09/16/2009 1620

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49826		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49345		Lab File ID:	B10720.D
Dilution:	1.0			Initial Weight/Volume:	30.85 g
Date Analyzed:	10/04/2009 0451			Final Weight/Volume:	1.0 mL
Date Prepared:	09/23/2009 1139			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** **10**

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
103-82-2	Benzeneacetic acid	8.05	150	T J N
544-63-8	Tetradecanoic acid	10.24	120	T J N
~~112-95-8~~	~~Eicosane~~	~~11.40~~	~~85~~	~~T J N~~
112-88-9	1-Octadecene	12.00	610	T J N
2885-0-9	1-Octadecanethiol	12.35	150	T J N
56554-86-0	17-Octadecenal	12.48	140	T J N
1599-67-3	1-Docosene	12.74	2200	T J N
18835-33-1	1-Hexacosene	13.20	270	T J N
53057-53-7	1,21-Docosadiene	13.40	200	T J N
297-3-0	Cyclotetracosane	13.79	3900	T J N

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Client: Olin Corporation

Job Number: 360-24634-1
Sdg Number: OCRI-16

Client Sample ID: **OC-SS-428-0.0/1.0-XXX**

Lab Sample ID: 360-24634-12
Client Matrix: Solid % Moisture: 15.8

Date Sampled: 09/16/2009 1005
Date Received: 09/16/2009 1620

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49826		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49345		Lab File ID:	B10721.D
Dilution:	1.0			Initial Weight/Volume:	30.18 g
Date Analyzed:	10/04/2009 0519			Final Weight/Volume:	1.0 mL
Date Prepared:	09/23/2009 1139			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		12	39
1,2,4,5-Tetrachlorobenzene		ND		12	39
1,2,4-Trichlorobenzene		ND		12	39
1,2-Dichlorobenzene		ND		12	39
1,3-Dichlorobenzene		ND		12	39
1,4-Dichlorobenzene		ND		12	39
1-Methylnaphthalene		ND		12	39
2,2'-oxybis[1-chloropropane]		ND		12	39
2,3,4,6-Tetrachlorophenol		ND		12	39
2,4,5-Trichlorophenol		ND		12	39
2,4,6-Trichlorophenol		ND		12	39
2,4-Dichlorophenol		ND		12	39
2,4-Dimethylphenol		ND		15	39
2,4-Dinitrophenol		ND		12	39
2,4-Dinitrotoluene		ND		12	39
2,6-Dinitrotoluene		ND		12	39
2-Chloronaphthalene		ND		12	39
2-Chlorophenol		ND		12	39
2-Methylnaphthalene		ND		12	39
2-Methylphenol		ND		24	39
2-Nitroaniline		ND		12	200
2-Nitrophenol		ND		12	39
3 & 4 Methylphenol		ND		12	39
3,3'-Dichlorobenzidine		ND		12	79
3-Nitroaniline		ND		12	200
4,6-Dinitro-2-methylphenol		ND		12	200
4-Bromophenyl phenyl ether		ND		12	39
4-Chloro-3-methylphenol		ND		12	79
4-Chloroaniline		ND		12	79
4-Chlorophenyl phenyl ether		ND		12	39
4-Nitroaniline		ND		12	200
4-Nitrophenol		ND		12	200
Acenaphthene		ND		12	39
Acenaphthylene		ND		12	39
Acetophenone		ND		12	39
Aniline		ND J	✓	12	39
Anthracene		ND		12	39
Atrazine		ND		12	39
Azobenzene		ND		12	39
Benzaldehyde		27	J	12	39
Benzo[a]anthracene		ND		12	39
Benzo[a]pyrene		12	J	12	39
Benzo[b]fluoranthene		21	J	12	39
Benzo[g,h,i]perylene		ND		12	39
Benzo[k]fluoranthene		ND		12	39
Benzoic acid		~~81~~ ND U 200	~~JB~~	18	200

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Client: Olin Corporation

Job Number: 360-24634-1
Sdg Number: OCRI-16

Client Sample ID: OC-SS-428-0.0/1.0-XXX

Lab Sample ID: 360-24634-12
Client Matrix: Solid

% Moisture: 15.8

Date Sampled: 09/16/2009 1005
Date Received: 09/16/2009 1620

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49826		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49345		Lab File ID:	B10721.D
Dilution:	1.0			Initial Weight/Volume:	30.18 g
Date Analyzed:	10/04/2009 0519			Final Weight/Volume:	1.0 mL
Date Prepared:	09/23/2009 1139			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		12	39
Benzyl alcohol		ND		34	79
Bis(2-chloroethoxy)methane		ND		12	39
Bis(2-chloroethyl)ether		ND		12	39
Bis(2-ethylhexyl) phthalate		390		12	39
Butyl benzyl phthalate		ND		12	39
Caprolactam		ND		12	39
Carbazole		ND		12	39
Chrysene		18	J	12	39
Dibenz(a,h)anthracene		ND		12	39
Dibenzofuran		ND		12	39
Diethyl phthalate		ND		12	39
Dimethyl phthalate		ND		12	39
Di-n-butyl phthalate		~~36~~ 39u	~~JB~~	35	39
Di-n-octyl phthalate		ND		20	39
Diphenyl oxide		26	J	12	39
Fluoranthene		27	J	12	39
Fluorene		ND		12	39
Hexachlorobenzene		ND		12	39
Hexachlorobutadiene		ND		12	39
Hexachlorocyclopentadiene		ND		12	79
Hexachloroethane		ND		12	39
Indeno[1,2,3-cd]pyrene		ND		12	39
Isophorone		ND		12	39
Naphthalene		ND		12	94
Nitrobenzene		ND		12	39
~~N-Nitrosodimethylamine~~		~~ND~~		~~14~~	~~39~~
N-Nitrosodi-n-propylamine		ND		12	39
N-Nitrosodiphenylamine		37	J	12	39
Pentachlorophenol		ND		12	39
Phenanthrene		12	J	12	47
Phenol		ND		12	39
Pyrene		26	J	12	39

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	72		30 - 130
2-Fluorobiphenyl	56		30 - 130
2-Fluorophenol	67		30 - 130
Nitrobenzene-d5	56		30 - 130
Phenol-d5	52		30 - 130
Terphenyl-d14	66		30 - 130

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Client: Olin Corporation

Job Number: 360-24634-1
Sdg Number: OCRI-16

Client Sample ID: **OC-SS-428-0.0/1.0-XXX**

Lab Sample ID: 360-24634-12
Client Matrix: Solid
% Moisture: 15.8

Date Sampled: 09/16/2009 1005
Date Received: 09/16/2009 1620

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49826		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49345		Lab File ID:	B10721.D
Dilution:	1.0			Initial Weight/Volume:	30.18 g
Date Analyzed:	10/04/2009 0519			Final Weight/Volume:	1.0 mL
Date Prepared:	09/23/2009 1139			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 1

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
1599-67-3	1-Docosene	13.77	120	T J N

Client: Olin Corporation

Job Number: 360-24634-1
Sdg Number: OCRI-16

Client Sample ID: **OC-SS-429-0.0/1.0-XXX**

Lab Sample ID: 360-24634-13
Client Matrix: Solid
% Moisture: 17.5

Date Sampled: 09/16/2009 1025
Date Received: 09/16/2009 1620

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49520		Instrument ID:	Inst. J
Preparation:	3550B	Prep Batch: 360-49302		Lab File ID:	J03167.D
Dilution:	1.0			Initial Weight/Volume:	100.54 g
Date Analyzed:	09/26/2009 2112			Final Weight/Volume:	1.0 mL
Date Prepared:	09/22/2009 1155			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodimethylamine		ND		1.4	6.0

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	55		30 - 130
2-Fluorobiphenyl	57		30 - 130
2-Fluorophenol	53		30 - 130
Nitrobenzene-d5	55		30 - 130
Phenol-d5	61		30 - 130
Terphenyl-d14	58		30 - 130

Client: Olin Corporation

Job Number: 360-24634-1
Sdg Number: OCRI-16

Client Sample ID: OC-SS-429-0.0/1.0-XXX

Lab Sample ID: 360-24634-13
Client Matrix: Solid

% Moisture: 17.5

Date Sampled: 09/16/2009 1025
Date Received: 09/16/2009 1620

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49826		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49345		Lab File ID:	B10722.D
Dilution:	1.0			Initial Weight/Volume:	30.76 g
Date Analyzed:	10/04/2009 0547			Final Weight/Volume:	1.0 mL
Date Prepared:	09/23/2009 1139			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		12	39
1,2,4,5-Tetrachlorobenzene		ND		12	39
1,2,4-Trichlorobenzene		ND		12	39
1,2-Dichlorobenzene		ND		12	39
1,3-Dichlorobenzene		ND		12	39
1,4-Dichlorobenzene		ND		12	39
1-Methylnaphthalene		ND		12	39
2,2'-oxybis[1-chloropropane]		ND		12	39
2,3,4,6-Tetrachlorophenol		ND		12	39
2,4,5-Trichlorophenol		ND		12	39
2,4,6-Trichlorophenol		ND		12	39
2,4-Dichlorophenol		ND		12	39
2,4-Dimethylphenol		ND		15	39
2,4-Dinitrophenol		ND		12	39
2,4-Dinitrotoluene		ND		12	39
2,6-Dinitrotoluene		ND		12	39
2-Chloronaphthalene		ND		12	39
2-Chlorophenol		ND		12	39
2-Methylnaphthalene		ND		12	39
2-Methylphenol		ND		24	39
2-Nitroaniline		ND		12	200
2-Nitrophenol		ND		12	39
3 & 4 Methylphenol		ND		12	39
3,3'-Dichlorobenzidine		ND		12	79
3-Nitroaniline		ND		12	200
4,6-Dinitro-2-methylphenol		ND		12	200
4-Bromophenyl phenyl ether		ND		12	39
4-Chloro-3-methylphenol		ND		12	79
4-Chloroaniline		ND		12	79
4-Chlorophenyl phenyl ether		ND		12	39
4-Nitroaniline		ND		12	200
4-Nitrophenol		ND		12	200
Acenaphthene		ND		12	39
Acenaphthylene		ND		12	39
Acetophenone		ND		12	39
Aniline		ND	J	12	39
Anthracene		ND		12	39
Atrazine		ND		12	39
Azobenzene		ND		12	39
Benzaldehyde		ND		12	39
Benzo[a]anthracene		19	J	12	39
Benzo[a]pyrene		14	J	12	39
Benzo[b]fluoranthene		23	J	12	39
Benzo[g,h,i]perylene		ND		12	39
Benzo[k]fluoranthene		ND		12	39
Benzoic acid		ND		18	200

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Client: Olin Corporation

Job Number: 360-24634-1
Sdg Number: OCRI-16

Client Sample ID: **OC-SS-429-0.0/1.0-XXX**

Lab Sample ID: 360-24634-13
Client Matrix: Solid

% Moisture: 17.5

Date Sampled: 09/16/2009 1025
Date Received: 09/16/2009 1620

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49826		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49345		Lab File ID:	B10722.D
Dilution:	1.0			Initial Weight/Volume:	30.76 g
Date Analyzed:	10/04/2009 0547			Final Weight/Volume:	1.0 mL
Date Prepared:	09/23/2009 1139			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		12	39
Benzyl alcohol		ND		34	79
Bis(2-chloroethoxy)methane		ND		12	39
Bis(2-chloroethyl)ether		ND		12	39
Bis(2-ethylhexyl) phthalate		330		12	39
Butyl benzyl phthalate		ND		12	39
Caprolactam		ND		12	39
Carbazole		ND		12	39
Chrysene		21	J	12	39
Dibenz(a,h)anthracene		ND		12	39
Dibenzofuran		ND		12	39
Diethyl phthalate		ND		12	39
Dimethyl phthalate		ND		12	39
Di-n-butyl phthalate		ND		35	39
Di-n-octyl phthalate		ND		20	39
Diphenyl oxide		ND		12	39
Fluoranthene		42		12	39
Fluorene		ND		12	39
Hexachlorobenzene		ND		12	39
Hexachlorobutadiene		ND		12	39
Hexachlorocyclopentadiene		ND		12	79
Hexachloroethane		ND		12	39
Indeno[1,2,3-cd]pyrene		ND		12	39
Isophorone		ND		12	39
Naphthalene		ND		12	95
Nitrobenzene		ND		12	39
N-Nitrosodimethylamine		ND		14	39
N-Nitrosodi-n-propylamine		ND		12	39
N-Nitrosodiphenylamine		23	J	12	39
Pentachlorophenol		ND		12	39
Phenanthrene		ND		12	47
Phenol		ND		12	39
Pyrene		47		12	39

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	21	X	30 - 130
2-Fluorophenol	84		30 - 130
2-Fluorobiphenyl	53		30 - 130
Nitrobenzene-d5	73		30 - 130
Phenol-d5	76		30 - 130
Terphenyl-d14	75		30 - 130

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Client: Olin Corporation

Job Number: 360-24634-1
Sdg Number: OCRI-16

Client Sample ID: **OC-SS-429-0.0/1.0-XXX**

Lab Sample ID: 360-24634-13
Client Matrix: Solid % Moisture: 17.5

Date Sampled: 09/16/2009 1025
Date Received: 09/16/2009 1620

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49826		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49345		Lab File ID:	B10722.D
Dilution:	1.0			Initial Weight/Volume:	30.76 g
Date Analyzed:	10/04/2009 0547			Final Weight/Volume:	1.0 mL
Date Prepared:	09/23/2009 1139			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 3

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
1000155-85-3	Cyclohexadecane, 1,2-diethyl-	12.01	77	T J N
3452-7-1	1-Eicosene	12.74	390	T J N
822-26-4	1-Docosanol, acetate	13.78	400	T J N

Client: Olin Corporation

Job Number: 360-24634-1
Sdg Number: OCRI-16

Client Sample ID: **OC-SS-429-0.0/1.0-XXX**

Lab Sample ID: 360-24634-13
Client Matrix: Solid

% Moisture: 17.5

Date Sampled: 09/16/2009 1025
Date Received: 09/16/2009 1620

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-50051		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49345		Lab File ID:	B10806.D
Dilution:	1.0			Initial Weight/Volume:	30.76 g
Date Analyzed:	10/08/2009 1414	Run Type: RA		Final Weight/Volume:	1.0 mL
Date Prepared:	09/23/2009 1139			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Diphenylamine		ND		12	39

Client: Olin Corporation

Job Number: 360-24634-1
Sdg Number: OCRI-16

Client Sample ID: OC-SS-429-0.0/1.0-XXX

Lab Sample ID: 360-24634-13
Client Matrix: Solid

% Moisture: 17.5

Date Sampled: 09/16/2009 1025
Date Received: 09/16/2009 1620

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-50126		Instrument ID:	NOEQUIP
Preparation:	3546	Prep Batch: 360-49345		Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	30.76 g
Date Analyzed:	10/08/2009 1414	Run Type: RA2		Final Weight/Volume:	1.0 mL
Date Prepared:	09/23/2009 1139			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodiphenylamine		12	J	12	39

Client: Olin Corporation

Job Number: 360-24634-1
Sdg Number: OCRI-16

Client Sample ID: **OC-SS-430-0.0/1.0-XXX**

Lab Sample ID: 360-24634-14
Client Matrix: Solid

% Moisture: 24.2

Date Sampled: 09/16/2009 1050
Date Received: 09/16/2009 1620

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49826		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49345		Lab File ID:	B10723.D
Dilution:	1.0			Initial Weight/Volume:	30.10 g
Date Analyzed:	10/04/2009 0614			Final Weight/Volume:	1.0 mL
Date Prepared:	09/23/2009 1139			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		13	44
1,2,4,5-Tetrachlorobenzene		ND		13	44
1,2,4-Trichlorobenzene		ND		13	44
1,2-Dichlorobenzene		ND		13	44
1,3-Dichlorobenzene		ND		13	44
1,4-Dichlorobenzene		ND		13	44
1-Methylnaphthalene		ND		13	44
2,2'-oxybis[1-chloropropane]		ND		13	44
2,3,4,6-Tetrachlorophenol		ND		13	44
2,4,5-Trichlorophenol		ND		13	44
2,4,6-Trichlorophenol		ND		13	44
2,4-Dichlorophenol		ND		13	44
2,4-Dimethylphenol		ND		17	44
2,4-Dinitrophenol		ND		13	44
2,4-Dinitrotoluene		ND		13	44
2,6-Dinitrotoluene		ND		13	44
2-Chloronaphthalene		ND		13	44
2-Chlorophenol		ND		13	44
2-Methylnaphthalene		ND		13	44
2-Methylphenol		ND		26	44
2-Nitroaniline		ND		13	220
2-Nitrophenol		ND		13	44
3 & 4 Methylphenol		ND		13	44
3,3'-Dichlorobenzidine		ND		13	88
3-Nitroaniline		ND		13	220
4,6-Dinitro-2-methylphenol		ND		13	220
4-Bromophenyl phenyl ether		ND		13	44
4-Chloro-3-methylphenol		ND		13	88
4-Chloroaniline		ND		13	88
4-Chlorophenyl phenyl ether		ND		13	44
4-Nitroaniline		ND		13	220
4-Nitrophenol		ND		13	220
Acenaphthene		ND		13	44
Acenaphthylene		ND		13	44
Acetophenone		ND		13	44
Aniline		ND	J	13	44
Anthracene		ND		13	44
Atrazine		ND		13	44
Azobenzene		ND		13	44
Benzaldehyde		60		13	44
Benzo[a]anthracene		17	J	13	44
Benzo[a]pyrene		17	J	13	44
Benzo[b]fluoranthene		27	J	13	44
Benzo[g,h,i]perylene		ND		13	44
Benzo[k]fluoranthene		ND		13	44
Benzoic acid		ND		20	220

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Client: Olin Corporation

Job Number: 360-24634-1
Sdg Number: OCRI-16

Client Sample ID: OC-SS-430-0.0/1.0-XXX

Lab Sample ID: 360-24634-14
Client Matrix: Solid

% Moisture: 24.2

Date Sampled: 09/16/2009 1050
Date Received: 09/16/2009 1620

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49826		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49345		Lab File ID:	B10723.D
Dilution:	1.0			Initial Weight/Volume:	30.10 g
Date Analyzed:	10/04/2009 0614			Final Weight/Volume:	1.0 mL
Date Prepared:	09/23/2009 1139			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		13	44
Benzyl alcohol		ND		37	88
Bis(2-chloroethoxy)methane		ND		13	44
Bis(2-chloroethyl)ether		ND		13	44
Bis(2-ethylhexyl) phthalate		400		13	44
Butyl benzyl phthalate		ND		13	44
Caprolactam		ND		13	44
Carbazole		ND		13	44
Chrysene		21	J	13	44
Dibenz(a,h)anthracene		ND		13	44
Dibenzofuran		ND		13	44
Diethyl phthalate		ND		13	44
Dimethyl phthalate		ND		13	44
Di-n-butyl phthalate		ND		39	44
Di-n-octyl phthalate		ND		22	44
Diphenyl oxide		ND		13	44
Fluoranthene		41	J	13	44
Fluorene		ND		13	44
Hexachlorobenzene		ND		13	44
Hexachlorobutadiene		ND		13	44
Hexachlorocyclopentadiene		ND		13	88
Hexachloroethane		ND		13	44
Indeno[1,2,3-cd]pyrene		ND		13	44
Isophorone		ND		13	44
Naphthalene		ND		13	110
Nitrobenzene		ND		13	44
N-Nitrosodimethylamine		ND		16	44
N-Nitrosodi-n-propylamine		ND		13	44
N-Nitrosodiphenylamine		55		13	44
Pentachlorophenol		ND		13	44
Phenanthrene		15	J	13	53
Phenol		ND		13	44
Pyrene		32	J	13	44

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	64		30 - 130
2-Fluorobiphenyl	64		30 - 130
2-Fluorophenol	69		30 - 130
Nitrobenzene-d5	52		30 - 130
Phenol-d5	53		30 - 130
Terphenyl-d14	55		30 - 130

Client: Olin Corporation

Job Number: 360-24634-1
Sdg Number: OCRI-16

Client Sample ID: **OC-SS-430-0.0/1.0-XXX**

Lab Sample ID: 360-24634-14
Client Matrix: Solid % Moisture: 24.2

Date Sampled: 09/16/2009 1050
Date Received: 09/16/2009 1620

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49826		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49345		Lab File ID:	B10723.D
Dilution:	1.0			Initial Weight/Volume:	30.10 g
Date Analyzed:	10/04/2009 0614			Final Weight/Volume:	1.0 mL
Date Prepared:	09/23/2009 1139			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 9

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
112-88-9	1-Octadecene	11.38	48	T J N
14064-41-6	Benzene, 1-methoxy-3-(2-phenylethenyl)-,	12.09	120	T J N
1000216-79-4	Trifluoroacetic acid, n-octadecyl ester	12.74	95	T J N
1599-67-3	1-Docosene	13.78	200	T J N
7225-64-1	Heptadecane, 9-octyl-	15.21	440	T J N
26603-23-6	p,p''-Dioctyldiphenylamine	15.94	320	T J N
7225-64-1	Heptadecane, 9-octyl-	16.17	400	T J N
75207-54-4	2-Pentacosanone	16.27	100	T J N
559-74-0	Friedelin	19.14	290	T J N

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Client: Olin Corporation

Job Number: 360-24634-1
Sdg Number: OCRI-16

Client Sample ID: **OC-SS-431-0.0/1.0-XXX**

Lab Sample ID: 360-24634-15
Client Matrix: Solid

% Moisture: 12.8

Date Sampled: 09/16/2009 1135
Date Received: 09/16/2009 1620

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49520	Instrument ID: Inst. J
Preparation:	3550B	Prep Batch: 360-49302	Lab File ID: J03168.D
Dilution:	1.0		Initial Weight/Volume: 100.37 g
Date Analyzed:	09/26/2009 2144		Final Weight/Volume: 1.0 mL
Date Prepared:	09/22/2009 1155		Injection Volume: 1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodimethylamine		ND		1.3	5.7

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	70		30 - 130
2-Fluorobiphenyl	49		30 - 130
2-Fluorophenol	47		30 - 130
Nitrobenzene-d5	54		30 - 130
Phenol-d5	57		30 - 130
Terphenyl-d14	56		30 - 130

Client: Olin Corporation

Job Number: 360-24634-1
Sdg Number: OCRI-16

Client Sample ID: **OC-SS-431-0.0/1.0-XXX**

Lab Sample ID: 360-24634-15
Client Matrix: Solid

% Moisture: 12.8

Date Sampled: 09/16/2009 1135
Date Received: 09/16/2009 1620

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49826		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49345		Lab File ID:	B10724.D
Dilution:	1.0			Initial Weight/Volume:	30.09 g
Date Analyzed:	10/04/2009 0642			Final Weight/Volume:	1.0 mL
Date Prepared:	09/23/2009 1139			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		11	38
1,2,4,5-Tetrachlorobenzene		ND		11	38
1,2,4-Trichlorobenzene		ND		11	38
1,2-Dichlorobenzene		ND		11	38
1,3-Dichlorobenzene		ND		11	38
1,4-Dichlorobenzene		ND		11	38
1-Methylnaphthalene		ND		11	38
2,2'-oxybis[1-chloropropane]		ND		11	38
2,3,4,6-Tetrachlorophenol		ND		11	38
2,4,5-Trichlorophenol		ND		11	38
2,4,6-Trichlorophenol		ND		11	38
2,4-Dichlorophenol		ND		11	38
2,4-Dimethylphenol		ND		15	38
2,4-Dinitrophenol		ND		11	38
2,4-Dinitrotoluene		ND		11	38
2,6-Dinitrotoluene		ND		11	38
2-Chloronaphthalene		ND		11	38
2-Chlorophenol		ND		11	38
2-Methylnaphthalene		ND		11	38
2-Methylphenol		ND		23	38
2-Nitroaniline		ND		11	190
2-Nitrophenol		ND		11	38
3 & 4 Methylphenol		ND		11	38
3,3'-Dichlorobenzidine		ND		11	76
3-Nitroaniline		ND		11	190
4,6-Dinitro-2-methylphenol		ND		11	190
4-Bromophenyl phenyl ether		ND		11	38
4-Chloro-3-methylphenol		ND		11	76
4-Chloroaniline		ND		11	76
4-Chlorophenyl phenyl ether		ND		11	38
4-Nitroaniline		ND		11	190
4-Nitrophenol		ND		11	190
Acenaphthene		ND		11	38
Acenaphthylene		ND		11	38
Acetophenone		ND		11	38
Aniline		ND	J	11	38
Anthracene		ND		11	38
Atrazine		ND		11	38
Azobenzene		ND		11	38
Benzaldehyde		ND		11	38
Benzo[a]anthracene		ND		11	38
Benzo[a]pyrene		ND		11	38
Benzo[b]fluoranthene		14	J	11	38
Benzo[g,h,i]perylene		ND		11	38
Benzo[k]fluoranthene		ND		11	38
Benzoic acid		ND		17	190

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Client: Olin Corporation

Job Number: 360-24634-1
Sdg Number: OCRI-16

Client Sample ID: **OC-SS-431-0.0/1.0-XXX**

Lab Sample ID: 360-24634-15
Client Matrix: Solid

% Moisture: 12.8

Date Sampled: 09/16/2009 1135
Date Received: 09/16/2009 1620

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49826		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49345		Lab File ID:	B10724.D
Dilution:	1.0			Initial Weight/Volume:	30.09 g
Date Analyzed:	10/04/2009 0642			Final Weight/Volume:	1.0 mL
Date Prepared:	09/23/2009 1139			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		11	38
Benzyl alcohol		ND		32	76
Bis(2-chloroethoxy)methane		ND		11	38
Bis(2-chloroethyl)ether		ND		11	38
Butyl benzyl phthalate		ND		11	38
Caprolactam		ND		11	38
Carbazole		ND		11	38
Chrysene		ND		11	38
Dibenz(a,h)anthracene		ND		11	38
Dibenzofuran		ND		11	38
Diethyl phthalate		ND		11	38
Dimethyl phthalate		ND		11	38
Di-n-butyl phthalate		ND		34	38
Di-n-octyl phthalate		ND		19	38
Diphenyl oxide		ND		11	38
Fluoranthene		12	J	11	38
Fluorene		22	J	11	38
Hexachlorobenzene		ND		11	38
Hexachlorobutadiene		ND		11	38
Hexachlorocyclopentadiene		ND		11	76
Hexachloroethane		ND		11	38
Indeno[1,2,3-cd]pyrene		ND		11	38
Isophorone		ND		11	38
Naphthalene		ND		11	91
Nitrobenzene		ND		11	38
~~N-Nitrosodimethylamine~~		~~ND~~		~~13~~	38
N-Nitrosodi-n-propylamine		ND		11	38
~~N-Nitrosodiphenylamine~~		~~56~~		~~11~~	38
Pentachlorophenol		ND		11	38
Phenanthrene		ND		11	46
Phenol		ND		11	38
Pyrene		ND		11	38

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	71		30 - 130
2-Fluorophenol	77		30 - 130
2-Fluorobiphenyl	66		30 - 130
Nitrobenzene-d5	60		30 - 130
Phenol-d5	61		30 - 130
Terphenyl-d14	65		30 - 130

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Client: Olin Corporation

Job Number: 360-24634-1
Sdg Number: OCRI-16

Client Sample ID: **OC-SS-431-0.0/1.0-XXX**

Lab Sample ID: 360-24634-15
Client Matrix: Solid % Moisture: 12.8

Date Sampled: 09/16/2009 1135
Date Received: 09/16/2009 1620

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49826		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49345		Lab File ID:	B10724.D
Dilution:	1.0			Initial Weight/Volume:	30.09 g
Date Analyzed:	10/04/2009 0642			Final Weight/Volume:	1.0 mL
Date Prepared:	09/23/2009 1139			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 5

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
2467-2-9	Phenol, 2,2"-methylenebis-	11.10	210	T J N
14064-41-6	Benzene, 1-methoxy-3-(2-phenylethenyl)-,	12.09	65	T J N
77899-3-7	1-Heneicosyl formate	12.74	15	T J N
506-52-5	1-Hexacosanol	13.78	25	T J N
~~26603-23-6~~	~~p,p"-Dioctyldiphenylamine~~	~~15.71~~	~~11000~~	~~T J N~~

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Client: Olin Corporation

Job Number: 360-24634-1
Sdg Number: OCRI-16

Client Sample ID: OC-SS-431-0.0/1.0-XXX

Lab Sample ID: 360-24634-15
Client Matrix: Solid

% Moisture: 12.8

Date Sampled: 09/16/2009 1135
Date Received: 09/16/2009 1620

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-50105		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49345		Lab File ID:	B10821.D
Dilution:	1.0			Initial Weight/Volume:	30.09 g
Date Analyzed:	10/09/2009 1116	Run Type: RA		Final Weight/Volume:	1.0 mL
Date Prepared:	09/23/2009 1139			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Diphenylamine		20	J	11	38

Client: Olin Corporation

Job Number: 360-24634-1
Sdg Number: OCRI-16

Client Sample ID: OC-SS-431-0.0/1.0-XXX

Lab Sample ID: 360-24634-15
Client Matrix: Solid

% Moisture: 12.8

Date Sampled: 09/16/2009 1135
Date Received: 09/16/2009 1620

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-50126		Instrument ID:	NOEQUIP
Preparation:	3546	Prep Batch: 360-49345		Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	30.09 g
Date Analyzed:	10/09/2009 1116	Run Type:	RA2	Final Weight/Volume:	1.0 mL
Date Prepared:	09/23/2009 1139			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodiphenylamine		36	J	11	38

Client: Olin Corporation

Job Number: 360-24634-1
Sdg Number: OCRI-16

Client Sample ID: **OC-SS-431-0.0/1.0-XXX**

Lab Sample ID: 360-24634-15
Client Matrix: Solid

% Moisture: 12.8

Date Sampled: 09/16/2009 1135
Date Received: 09/16/2009 1620

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-50051		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49345		Lab File ID:	B10809.D
Dilution:	2.0			Initial Weight/Volume:	30.09 g
Date Analyzed:	10/08/2009 1537	Run Type: DL		Final Weight/Volume:	1.0 mL
Date Prepared:	09/23/2009 1139			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Bis(2-ethylhexyl) phthalate		1500		23	76

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	84		30 - 130
2-Fluorophenol	88		30 - 130
2-Fluorobiphenyl	69		30 - 130
Nitrobenzene-d5	70		30 - 130
Phenol-d5	72		30 - 130
Terphenyl-d14	81		30 - 130

Client: Olin Corporation

Job Number: 360-24634-1
Sdg Number: OCRI-16

Client Sample ID: **OC-SS-432-0.0/1.0-XXX**

Lab Sample ID: 360-24634-16
Client Matrix: Solid % Moisture: 15.5

Date Sampled: 09/16/2009 1155
Date Received: 09/16/2009 1620

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49826		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49345		Lab File ID:	B10725.D
Dilution:	1.0			Initial Weight/Volume:	30.27 g
Date Analyzed:	10/04/2009 0710			Final Weight/Volume:	1.0 mL
Date Prepared:	09/23/2009 1139			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		12	39
1,2,4,5-Tetrachlorobenzene		ND		12	39
1,2,4-Trichlorobenzene		ND		12	39
1,2-Dichlorobenzene		ND		12	39
1,3-Dichlorobenzene		ND		12	39
1,4-Dichlorobenzene		ND		12	39
1-Methylnaphthalene		ND		12	39
2,2'-oxybis[1-chloropropane]		ND		12	39
2,3,4,6-Tetrachlorophenol		ND		12	39
2,4,5-Trichlorophenol		ND		12	39
2,4,6-Trichlorophenol		ND		12	39
2,4-Dichlorophenol		ND		12	39
2,4-Dimethylphenol		ND		15	39
2,4-Dinitrophenol		ND		12	39
2,4-Dinitrotoluene		ND		12	39
2,6-Dinitrotoluene		ND		12	39
2-Chloronaphthalene		ND		12	39
2-Chlorophenol		ND		12	39
2-Methylnaphthalene		ND		12	39
2-Methylphenol		ND		23	39
2-Nitroaniline		ND		12	200
2-Nitrophenol		ND		12	39
3 & 4 Methylphenol		ND		12	39
3,3'-Dichlorobenzidine		ND		12	78
3-Nitroaniline		ND		12	200
4,6-Dinitro-2-methylphenol		ND		12	200
4-Bromophenyl phenyl ether		ND		12	39
4-Chloro-3-methylphenol		ND		12	78
4-Chloroaniline		ND		12	78
4-Chlorophenyl phenyl ether		ND		12	39
4-Nitroaniline		ND		12	200
4-Nitrophenol		ND		12	200
Acenaphthene		ND		12	39
Acenaphthylene		ND		12	39
Acetophenone		13	J	12	39
Aniline		ND J		12	39
Anthracene		20	J	12	39
Atrazine		ND		12	39
Azobenzene		ND		12	39
Benzaldehyde		180		12	39
Benzo[a]anthracene		140		12	39
Benzo[a]pyrene		150		12	39
Benzo[b]fluoranthene		240		12	39
Benzo[g,h,i]perylene		74		12	39
Benzo[k]fluoranthene		89		12	39
Benzoic acid		390 u	B	18	200

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Client: Olin Corporation

Job Number: 360-24634-1
Sdg Number: OCRI-16

Client Sample ID: OC-SS-432-0.0/1.0-XXX

Lab Sample ID: 360-24634-16
Client Matrix: Solid

% Moisture: 15.5

Date Sampled: 09/16/2009 1155
Date Received: 09/16/2009 1620

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49826		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49345		Lab File ID:	B10725.D
Dilution:	1.0			Initial Weight/Volume:	30.27 g
Date Analyzed:	10/04/2009 0710			Final Weight/Volume:	1.0 mL
Date Prepared:	09/23/2009 1139			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		12	39
Benzyl alcohol		ND		33	78
Bis(2-chloroethoxy)methane		ND		12	39
Bis(2-chloroethyl)ether		ND		12	39
Bis(2-ethylhexyl) phthalate		180		12	39
Butyl benzyl phthalate		ND		12	39
Caprolactam		ND		12	39
Carbazole		20	J	12	39
Chrysene		180		12	39
Dibenz(a,h)anthracene		28	J	12	39
Dibenzofuran		ND		12	39
Diethyl phthalate		ND		12	39
Dimethyl phthalate		ND		12	39
Di-n-butyl phthalate		ND		34	39
Di-n-octyl phthalate		ND		20	39
Diphenyl oxide		ND		12	39
Fluoranthene		460		12	39
Fluorene		28	J	12	39
Hexachlorobenzene		ND		12	39
Hexachlorobutadiene		ND		12	39
Hexachlorocyclopentadiene		ND		12	78
Hexachloroethane		ND		12	39
Indeno[1,2,3-cd]pyrene		79		12	39
Isophorone		ND		12	39
Naphthalene		ND		12	94
Nitrobenzene		ND		12	39
N-Nitrosodimethylamine		ND		14	39
N-Nitrosodi-n-propylamine		ND		12	39
N-Nitrosodiphenylamine		ND		12	39
Pentachlorophenol		ND		12	39
Phenanthrene		160		12	47
Phenol		ND		12	39
Pyrene		330		12	39

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	62		30 - 130
2-Fluorobiphenyl	51		30 - 130
2-Fluorophenol	67		30 - 130
Nitrobenzene-d5	53		30 - 130
Phenol-d5	55		30 - 130
Terphenyl-d14	69		30 - 130

Client: Olin Corporation

Job Number: 360-24634-1
Sdg Number: OCRI-16

Client Sample ID: **OC-SS-432-0.0/1.0-XXX**

Lab Sample ID: 360-24634-16
Client Matrix: Solid % Moisture: 15.5

Date Sampled: 09/16/2009 1155
Date Received: 09/16/2009 1620

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49826		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49345		Lab File ID:	B10725.D
Dilution:	1.0			Initial Weight/Volume:	30.27 g
Date Analyzed:	10/04/2009 0710			Final Weight/Volume:	1.0 mL
Date Prepared:	09/23/2009 1139			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 10

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
621-59-0	Benzaldehyde, 3-hydroxy-4-methoxy-	8.83	79	T J N
544-63-8	Tetradecanoic acid	10.24	120	T J N
613-12-7	Anthracene, 2-methyl-	10.93	51	T J N
84-65-1	9,10-Anthracenedione	11.20	46	T J N
638-58-4	Tetradecanamide	11.69	150	T J N
1000130-97-9	E-15-Heptadecenal	12.02	16	T J N
18956-15-5	2-Propen-1-one, 1-(2,6-dihydroxy-4-metho	12.54	16	T J N
1599-67-3	1-Docosene	12.74	63	T J N
77899-3-7	1-Heneicosyl formate	13.78	100	T J N
~~112-95-8~~	~~Eicosane~~	~~16.16~~	~~44~~	T J N

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Client: Olin Corporation

Job Number: 360-24634-1
Sdg Number: OCRI-16

Client Sample ID: **OC-EBK-011**

Lab Sample ID: 360-24634-18
Client Matrix: Water

Date Sampled: 09/16/2009 0835
Date Received: 09/16/2009 1620

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-50350		Instrument ID:	Inst. B
Preparation:	3510C	Prep Batch: 360-49233		Lab File ID:	B10909.D
Dilution:	1.0			Initial Weight/Volume:	990 mL
Date Analyzed:	10/15/2009 1653			Final Weight/Volume:	1.0 mL
Date Prepared:	09/21/2009 1337			Injection Volume:	1.0 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
N-Nitrosodimethylamine	ND	*	0.51	5.1

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	71		15 - 110
2-Fluorobiphenyl	63		30 - 130
2-Fluorophenol	21		15 - 110
Nitrobenzene-d5	61		30 - 130
Phenol-d5	14	X	15 - 110
Terphenyl-d14	74		30 - 130

Client: Olin Corporation

Job Number: 360-24634-1
Sdg Number: OCRI-16

Client Sample ID: **OC-EBK-011**

Lab Sample ID: 360-24634-18
Client Matrix: Water

Date Sampled: 09/16/2009 0835
Date Received: 09/16/2009 1620

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-50350		Instrument ID:	Inst. B
Preparation:	3510C	Prep Batch: 360-49233		Lab File ID:	B10909.D
Dilution:	1.0			Initial Weight/Volume:	990 mL
Date Analyzed:	10/15/2009 1653			Final Weight/Volume:	1.0 mL
Date Prepared:	09/21/2009 1337			Injection Volume:	1.0 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1'-Biphenyl	ND		0.51	5.1
1,2,4,5-Tetrachlorobenzene	ND		0.51	5.1
1-Methylnaphthalene	ND		0.051	5.1
2,3,4,6-Tetrachlorophenol	ND		0.51	5.1
Bis(2-chloroethyl)ether	ND		0.51	5.1
Benzyl alcohol	0.64	J	0.51	10
2-Methylphenol	ND		0.51	5.1
N-Nitrosodi-n-propylamine	ND		0.51	5.1
Hexachloroethane	ND		0.51	3.0
3 & 4 Methylphenol	ND		0.51	5.1
2-Chlorophenol	ND		0.51	5.1
3,3'-Dichlorobenzidine	ND		0.51	5.1
Nitrobenzene	ND		0.51	5.1
Bis(2-chloroethoxy)methane	ND		0.51	5.1
Benzoic acid	ND	*	0.51	5.1
Isophorone	ND		0.51	5.1
2,4-Dimethylphenol	ND		0.51	5.1
Aniline	ND	*	0.51	5.1
Azobenzene	ND		0.51	5.1
2,4-Dichlorophenol	ND		0.51	5.1
4-Chloroaniline	ND		0.51	5.1
2,4,6-Trichlorophenol	ND		0.51	5.1
2,4,5-Trichlorophenol	ND		0.51	5.1
Hexachlorocyclopentadiene	ND		0.51	5.1
2-Methylnaphthalene	ND		0.051	1.0
2-Nitroaniline	ND		0.51	5.1
Caprolactam	ND	*	0.51	5.1
2-Chloronaphthalene	ND		0.51	5.1
4-Chloro-3-methylphenol	ND		0.51	5.1
2,6-Dinitrotoluene	ND		0.51	5.1
2-Nitrophenol	ND		0.51	5.1
3-Nitroaniline	ND		0.51	5.1
Dimethyl phthalate	ND		0.51	5.1
2,4-Dinitrophenol	ND		0.51	5.1
Acenaphthylene	ND		0.051	0.30
2,4-Dinitrotoluene	ND		0.51	5.1
Acenaphthene	ND		0.051	1.0
Dibenzofuran	ND		0.51	5.1
4-Nitrophenol	ND	*	0.51	5.1
Fluorene	ND		0.051	1.0
4-Nitroaniline	ND		0.51	5.1
Phenol	ND	*	0.51	5.1
4-Bromophenyl phenyl ether	ND		0.51	5.1
Hexachlorobenzene	ND		0.51	1.0
Diethyl phthalate	ND		0.51	5.1
4-Chlorophenyl phenyl ether	ND		0.51	5.1

Client: Olin Corporation

Job Number: 360-24634-1
Sdg Number: OCRI-16

Client Sample ID: **OC-EBK-011**

Lab Sample ID: 360-24634-18
Client Matrix: Water

Date Sampled: 09/16/2009 0835
Date Received: 09/16/2009 1620

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-50350		Instrument ID:	Inst. B
Preparation:	3510C	Prep Batch: 360-49233		Lab File ID:	B10909.D
Dilution:	1.0			Initial Weight/Volume:	990 mL
Date Analyzed:	10/15/2009 1653			Final Weight/Volume:	1.0 mL
Date Prepared:	09/21/2009 1337			Injection Volume:	1.0 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Pentachlorophenol	ND		0.51	1.0
N-Nitrosodiphenylamine	ND		0.51	5.1
4,6-Dinitro-2-methylphenol	ND		0.51	5.1
Phenanthrene	ND		0.086	0.20
Anthracene	ND		0.071	1.0
Di-n-butyl phthalate	0.83	J B	0.61	5.1
Fluoranthene	ND		0.20	1.0
Pyrene	ND		0.19	5.1
Butyl benzyl phthalate	ND		0.51	5.1
Benzo[a]anthracene	ND		0.17	0.30
Chrysene	ND		0.17	1.0
Di-n-octyl phthalate	ND		0.74	5.1
Benzo[b]fluoranthene	ND		0.15	0.30
Benzo[k]fluoranthene	ND		0.17	0.30
Benzo[a]pyrene	ND		0.10	0.20
Indeno[1,2,3-cd]pyrene	ND		0.080	0.51
Dibenz(a,h)anthracene	ND		0.065	0.51
Benzo[g,h,i]perylene	ND		0.095	0.51
Acetophenone	1.5	J B	0.51	5.1
Bis(2-ethylhexyl) phthalate	ND		0.51	2.0
bis (2-chloroisopropyl) ether	ND		0.51	5.1
Atrazine	ND		0.51	5.1
Benzaldehyde	ND	*	0.51	5.1
Carbazole	ND		0.51	5.1
Benzophenone	ND		0.51	5.1
Diphenyl oxide	ND		0.51	5.1
Diphenylamine	ND		0.51	5.1

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	71		15 - 110
2-Fluorobiphenyl	63		30 - 130
2-Fluorophenol	21		15 - 110
Nitrobenzene-d5	61		30 - 130
Phenol-d5	14	X	15 - 110
Terphenyl-d14	74		30 - 130

Client: Olin Corporation

Job Number: 360-24634-1
Sdg Number: OCRI-16

Client Sample ID: **OC-EBK-011**

Lab Sample ID: 360-24634-18
Client Matrix: Water

Date Sampled: 09/16/2009 0835
Date Received: 09/16/2009 1620

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-50350		Instrument ID:	Inst. B
Preparation:	3510C	Prep Batch: 360-49233		Lab File ID:	B10909.D
Dilution:	1.0			Initial Weight/Volume:	990 mL
Date Analyzed:	10/15/2009 1653			Final Weight/Volume:	1.0 mL
Date Prepared:	09/21/2009 1337			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 8

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
95-16-9	Benzothiazole	7.30	0.78	T J N
134-62-3	Diethyltoluamide	8.88	2.8	T J N
615-22-5	Benzothiazole, 2-(methylthio)-	9.05	4.3	T J N
3910-35-8	1H-Indene, 2,3-dihydro-1,1,3-trimethyl-3	9.45	3.9	T J N
14035-33-7	3,5-di-tert-Butyl-4-hydroxyacetophenone	9.77	0.54	T J N
22768-22-5	2,4-Diphenyl-4-methyl-2(E)-pentene	9.87	3.3	T J N
112-39-0	Hexadecanoic acid, methyl ester	10.14	0.95	T J N
149-30-4	2-Mercaptobenzothiazole	10.36	1.4	T J N

FORM IV
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Westfield Job No.: 360-24634-1

SDG No.: OCRI-16

Lab File ID: B10631.D Lab Sample ID: MB 360-49345/1-A

Matrix: Solid Date Extracted: 09/23/2009 11:39

Instrument ID: Inst. B Date Analyzed: 09/29/2009 21:47

Level: (Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 360-49345/2-A	B10632.D	09/29/2009 22:16
	LCSD 360-49345/3-A	B10633.D	09/29/2009 22:44
OC-SS-417-0.0/1.0-XXX	360-24634-1 *	B10710.D	10/04/2009 00:14
OC-SS-418-0.0/1.0-XXX	360-24634-2	B10711.D	10/04/2009 00:42
OC-SS-419-0.0/1.0-XXX	360-24634-3	B10712.D	10/04/2009 01:10
OC-SS-420-0.0/1.0-XXX	360-24634-4	B10713.D	10/04/2009 01:37
OC-SS-421-0.0/1.0-XXX	360-24634-5	B10714.D	10/04/2009 02:05
OC-SS-422-0.0/1.0-XXX	360-24634-6	B10715.D	10/04/2009 02:33
OC-SS-423-0.0/1.0-XXX	360-24634-7	B10716.D	10/04/2009 03:01
OC-SS-424-0.0/1.0-XXX	360-24634-8	B10717.D	10/04/2009 03:28
OC-SS-425-0.0/1.0-XXX	360-24634-9	B10718.D	10/04/2009 03:56
OC-SS-426-0.0/1.0-XXX	360-24634-10	B10719.D	10/04/2009 04:24
OC-SS-427-0.0/1.0-XXX	360-24634-11	B10720.D	10/04/2009 04:51
OC-SS-428-0.0/1.0-XXX	360-24634-12	B10721.D	10/04/2009 05:19
OC-SS-429-0.0/1.0-XXX	360-24634-13	B10722.D	10/04/2009 05:47
OC-SS-430-0.0/1.0-XXX	360-24634-14	B10723.D	10/04/2009 06:14
OC-SS-431-0.0/1.0-XXX	360-24634-15	B10724.D	10/04/2009 06:42
OC-SS-432-0.0/1.0-XXX	360-24634-16	B10725.D	10/04/2009 07:10
OC-SS-420-0.0/1.0-XXX RA	360-24634-4 RA ▲	B10803.D	10/08/2009 12:52
OC-SS-420-0.0/1.0-XXX RA2	360-24634-4 RA2		10/08/2009 12:52
OC-SS-422-0.0/1.0-XXX RA	360-24634-6 RA ▲	B10804.D	10/08/2009 13:19
OC-SS-422-0.0/1.0-XXX RA2	360-24634-6 RA2		10/08/2009 13:19
OC-SS-424-0.0/1.0-XXX RA	360-24634-8 RA ▲	B10805.D	10/08/2009 13:47
OC-SS-424-0.0/1.0-XXX RA2	360-24634-8 RA2		10/08/2009 13:47
OC-SS-429-0.0/1.0-XXX RA	360-24634-13 RA ▲	B10806.D	10/08/2009 14:14
OC-SS-429-0.0/1.0-XXX RA2	360-24634-13 RA2		10/08/2009 14:14
OC-SS-421-0.0/1.0-XXX DL	360-24634-5 DL ▲	B10808.D	10/08/2009 15:10
OC-SS-431-0.0/1.0-XXX DL	360-24634-15 DL ▲	B10809.D	10/08/2009 15:37
OC-SS-431-0.0/1.0-XXX RA	360-24634-15 RA ▲	B10821.D	10/09/2009 11:16
OC-SS-431-0.0/1.0-XXX RA2	360-24634-15 RA2		10/09/2009 11:16

LCS aniline 32/34
Tune OK

MB benzoic acid 99.8
di-n-butyl phthalate 65.2

* ICAL OK / CCAL OK
▲ ICAL OK / CCAL OK

FJ OK

FORM IV 8270C LL

TIC
vanillin
dodecanoic acid
octadecane
eicosane

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24634-1

SDG No.: OCRI-16

Matrix: Solid Level: Low Lab File ID: B10632.D

Lab ID: LCS 360-49345/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
1,1'-Biphenyl	333	282	85	40-140	
1,2,4,5-Tetrachlorobenzene	333	245	74	40-140	
1,2,4-Trichlorobenzene	333	222	66	40-140	
1,2-Dichlorobenzene	333	211	63	40-140	
1,3-Dichlorobenzene	333	202	60	40-140	
1,4-Dichlorobenzene	333	199	60	40-140	
1-Methylnaphthalene	333	241	72	40-140	
2,3,4,6-Tetrachlorophenol	333	279	84	40-140	
2,4-Dimethylphenol	333	281	84	30-130	
2-Chlorophenol	333	225	68	30-130	
2,4-Dichlorophenol	333	275	82	30-130	
2,4,6-Trichlorophenol	333	320	96	30-130	
2-Methylphenol	333	250	75	30-130	
2,4,5-Trichlorophenol	333	303	91	30-130	
2-Methylnaphthalene	333	242	73	40-140	
3 & 4 Methylphenol	333	264	79	30-130	
2-Nitroaniline	333	350	105	40-140	
3,3'-Dichlorobenzidine	333	295	88	40-140	
2-Chloronaphthalene	333	214	64	40-140	
2,6-Dinitrotoluene	333	288	86	40-140	
4-Chloro-3-methylphenol	333	280	84	30-130	
2-Nitrophenol	333	260	78	30-130	
4-Chloroaniline	333	207	62	40-140	
3-Nitroaniline	333	307	92	40-140	
2,4-Dinitrophenol	333	247	74	30-130	
2,4-Dinitrotoluene	333	275	83	40-140	
Acenaphthene	333	313	94	40-140	
Acenaphthylene	333	260	78	40-140	
4-Nitrophenol	333	322	97	30-130	
Aniline	333	108	32	40-140	*
4-Nitroaniline	333	279	84	40-140	
Azobenzene	333	291	87	40-140	
4-Bromophenyl phenyl ether	333	288	86	40-140	
4-Chlorophenyl phenyl ether	333	281	84	40-140	
4,6-Dinitro-2-methylphenol	333	279	84	30-130	
Benzoic acid	333	219	66	30-130	
Anthracene	333	337	101	40-140	
Benzyl alcohol	333	247	74	30-130	
Bis(2-chloroethoxy)methane	333	243	73	40-140	
Bis(2-chloroethyl)ether	333	212	63	40-140	
Butyl benzyl phthalate	333	290	87	40-140	

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Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24634-1

SDG No.: OCRI-16

Matrix: Solid Level: Low Lab File ID: B10633.D

Lab ID: LCSD 360-49345/3-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCSD CONCENTRATION (ug/Kg)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1'-Biphenyl	333	298	89	5	30	40-140	
1,2,4,5-Tetrachlorobenzene	333	269	81	9	30	40-140	
1,2,4-Trichlorobenzene	333	239	72	8	30	40-140	
1,2-Dichlorobenzene	333	216	65	2	30	40-140	
1,3-Dichlorobenzene	333	206	62	2	30	40-140	
1,4-Dichlorobenzene	333	205	61	3	30	40-140	
1-Methylnaphthalene	333	261	78	8	30	40-140	
2,3,4,6-Tetrachlorophenol	333	299	90	7	30	40-140	
2,4-Dimethylphenol	333	310	93	10	30	30-130	
2-Chlorophenol	333	238	72	6	30	30-130	
2,4-Dichlorophenol	333	300	90	9	30	30-130	
2,4,6-Trichlorophenol	333	343	103	7	30	30-130	
2-Methylphenol	333	271	81	8	30	30-130	
2,4,5-Trichlorophenol	333	306	92	1	30	30-130	
2-Methylnaphthalene	333	266	80	10	30	40-140	
3 & 4 Methylphenol	333	274	82	4	30	30-130	
2-Nitroaniline	333	373	112	6	30	40-140	
3,3'-Dichlorobenzidine	333	316	95	7	30	40-140	
2-Chloronaphthalene	333	229	69	7	30	40-140	
2,6-Dinitrotoluene	333	307	92	6	30	40-140	
4-Chloro-3-methylphenol	333	311	93	10	30	30-130	
2-Nitrophenol	333	283	85	8	30	30-130	
4-Chloroaniline	333	224	67	8	30	40-140	
3-Nitroaniline	333	333	100	8	30	40-140	
2,4-Dinitrophenol	333	275	82	11	30	30-130	
2,4-Dinitrotoluene	333	294	88	7	30	40-140	
Acenaphthene	333	334	100	6	30	40-140	
Acenaphthylene	333	276	83	6	30	40-140	
4-Nitrophenol	333	346	104	7	30	30-130	
Aniline	333	115	34	6	30	40-140	*
4-Nitroaniline	333	296	89	6	30	40-140	
Azobenzene	333	302	91	4	30	40-140	
4-Bromophenyl phenyl ether	333	298	89	3	30	40-140	
4-Chlorophenyl phenyl ether	333	302	90	7	30	40-140	
4,6-Dinitro-2-methylphenol	333	316	95	12	30	30-130	
Benzoic acid	333	277	83	23	30	30-130	
Anthracene	333	348	104	3	30	40-140	
Benzyl alcohol	333	221	66	11	30	30-130	
Bis(2-chloroethoxy)methane	333	267	80	9	30	40-140	
Bis(2-chloroethyl)ether	333	219	66	3	30	40-140	
Butyl benzyl phthalate	333	299	90	3	30	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Westfield | Job No.: 360-24634-1

SDG No.: OCRI-16

Client Sample ID: | Lab Sample ID: MB 360-49345/1-A

Matrix: Solid | Lab File ID: B10631.D

Analysis Method: 8270C LL | Date Collected:

Extract. Method: 3546 | Date Extracted: 09/23/2009 11:39

Sample wt/vol: 30.00(g) | Date Analyzed: 09/29/2009 21:47

Con. Extract Vol.: 1.0(mL) | Dilution Factor: 1

Injection Volume: 1.0(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 49685 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
534-52-1	4,6-Dinitro-2-methylphenol	ND		170	10
65-85-0	Benzoic acid	99.8	J	170	15
120-12-7	Anthracene	ND		33	10
100-51-6	Benzyl alcohol	ND		67	28
111-91-1	Bis(2-chloroethoxy)methane	ND		33	10
111-44-4	Bis(2-chloroethyl)ether	ND		33	10
85-68-7	Butyl benzyl phthalate	ND		33	10
56-55-3	Benzo[a]anthracene	ND		33	10
105-60-2	Caprolactam	ND		33	10
218-01-9	Chrysene	ND		33	10
205-99-2	Benzo[b]fluoranthene	ND		33	10
207-08-9	Benzo[k]fluoranthene	ND		33	10
50-32-8	Benzo[a]pyrene	ND		33	10
132-64-9	Dibenzofuran	ND		33	10
53-70-3	Dibenz(a,h)anthracene	ND		33	10
84-66-2	Diethyl phthalate	ND		33	10
191-24-2	Benzo[g,h,i]perylene	ND		33	10
131-11-3	Dimethyl phthalate	ND		33	10
98-86-2	Acetophenone	ND		33	10
84-74-2	Di-n-butyl phthalate	65.2		33	29
117-81-7	Bis(2-ethylhexyl) phthalate	ND		33	10
117-84-0	Di-n-octyl phthalate	ND		33	17
206-44-0	Fluoranthene	ND		33	10
86-73-7	Fluorene	ND		33	10
118-74-1	Hexachlorobenzene	ND		33	10
87-68-3	Hexachlorobutadiene	ND		33	10
108-60-1	2,2'-oxybis[1-chloropropane]	ND		33	10
77-47-4	Hexachlorocyclopentadiene	ND		67	10
67-72-1	Hexachloroethane	ND		33	10
193-39-5	Indeno[1,2,3-cd]pyrene	ND		33	10
78-59-1	Isophorone	ND		33	10
91-20-3	Naphthalene	ND		80	10
98-95-3	Nitrobenzene	ND		33	10
1912-24-9	Atrazine	ND		33	10

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Westfield Job No.: 360-24634-1

SDG No.: OCRI-16

Lab Sample ID: CCV 360-50105/2 Calibration Date: 10/09/2009 10:49

Instrument ID: Inst. B Calib Start Date: 10/07/2009 16:51

GC Column: Rtx-5ms ID: 0.25(um) Calib End Date: 10/07/2009 20:07

Lab File ID: B10820.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Pyridine	Qua		0.5329		4390	5000	-12.1	30.0
N-Nitrosodimethylamine	Qua		0.6125		4640	5000	-7.1	30.0
Benzaldehyde	Qua		0.2692		4240	5000	-15.1	30.0
Aniline	Qua		0.6998		3710	5000	-25.8	30.0
Phenol	Qua		0.5721		3300	5000	-34.0*	20.0
Bis(2-chloroethyl)ether	Qua		0.5556		4570	5000	-8.7	30.0
2-Chlorophenol	Qua		0.5918		4210	5000	-15.8	30.0
1,4-Dichlorobenzene	Qua		0.7138		4240	5000	-15.1	20.0
1,3-Dichlorobenzene	Qua		0.7538		4300	5000	-14.1	30.0
1,2-Dichlorobenzene	Qua		0.6842		4060	5000	-18.8	30.0
Benzyl alcohol	Qua		0.5200		3590	5000	-28.3	30.0
2,2'-oxybis[1-chloropropane]	Qua		1.009		4200	5000	-16.0	30.0
2-Methylphenol	Qua		0.5124		4000	5000	-19.9	30.0
Acetophenone	Qua		0.8027		4110	5000	-17.8	30.0
N-Nitrosodi-n-propylamine	Qua		0.4386	0.0500	4150	5000	-17.1	30.0
3 & 4 Methylphenol	Qua		0.5193		4050	5000	-19.0	30.0
Hexachloroethane	Qua		0.2204		3220	5000	-35.7*	30.0
Nitrobenzene	Ave	0.3816	0.3922		5140	5000	2.8	30.0
Isophorone	Lin1		0.6246		4490	5000	-10.3	30.0
2-Nitrophenol	Lin1		0.1531		4160	5000	-16.9	20.0
2,4-Dimethylphenol	Lin1		0.3093		4030	5000	-19.4	30.0
Bis(2-chloroethoxy)methane	Ave	0.3317	0.3119		4700	5000	-6.0	30.0
Benzoic acid	Qua		0.0807		3880	5000	-22.4	30.0
2,4-Dichlorophenol	Lin1		0.2323		3750	5000	-25.0	20.0
1,2,4-Trichlorobenzene	Lin1		0.2886		4100	5000	-18.0	30.0
Naphthalene	Ave	0.9619	0.9513		4950	5000	-1.1	30.0
Alpha-Terpineol	Lin1		0.3117		4380	5000	-12.4	30.0
4-Chloroaniline	Qua		0.2798		3230	5000	-35.4*	30.0
Hexachlorobutadiene	Lin1		0.1632		3950	5000	-21.0*	20.0
Caprolactam	Lin1		0.1260		4260	5000	-14.7	30.0
4-Chloro-3-methylphenol	Lin1		0.2877		4180	5000	-16.4	20.0
2-Methylnaphthalene	Lin1		0.6516		4200	5000	-16.1	30.0
1-Methylnaphthalene	Lin1		0.6195		4080	5000	-18.5	30.0
Hexachlorocyclopentadiene	Qua		0.0402*	0.0500	1060	5000	-78.9*	30.0
1,2,4,5-Tetrachlorobenzene	Qua		0.2455		4370	5000	-12.7	30.0
2,4,6-Trichlorophenol	Lin1		0.3376		4000	5000	-20.0	20.0
2,4,5-Trichlorophenol	Lin1		0.3538		4040	5000	-19.1	30.0
1,1'-Biphenyl	Lin1		1.614		4080	5000	-18.5	30.0
2-Chloronaphthalene	Qua		1.478		4350	5000	-12.9	30.0
Phenyl ether	Lin1		0.3788		3970	5000	-20.7	30.0
4-Nitroaniline	Lin1		0.3970		4200	5000	-16.0	30.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Westfield Job No.: 360-24634-1

SDG No.: OCRI-16

Lab Sample ID: CCV 360-50105/2 Calibration Date: 10/09/2009 10:49

Instrument ID: Inst. B Calib Start Date: 10/07/2009 16:51

GC Column: Rtx-5ms ID: 0.25(um) Calib End Date: 10/07/2009 20:07

Lab File ID: B10820.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dimethyl phthalate	Ave	1.425	1.380		4840	5000	-3.2	30.0
2,6-Dinitrotoluene	Lin1		0.2755		3970	5000	-20.7	30.0
Acenaphthylene	Lin1		1.996		4200	5000	-16.1	30.0
3-Nitroaniline	Lin1		0.2726		3820	5000	-23.6	30.0
Acenaphthene	Lin1		1.269		4040	5000	-19.2	20.0
2,4-Dinitrophenol	Qua		0.0578	0.0500	3860	5000	-22.8	30.0
Dibenzofuran	Lin1		1.756		4060	5000	-18.7	30.0
2,4-Dinitrotoluene	Lin		0.4131		3710	5000	-25.8	30.0
4-Nitrophenol	Lin1		0.2244	0.0500	3160	5000	-36.7*	30.0
2,3,4,6-Tetrachlorophenol	Qua		0.2516		4430	5000	-11.3	30.0
Diethyl phthalate	Ave	1.598	1.518		4750	5000	-5.0	30.0
Fluorene	Lin1		1.514		3900	5000	-22.0	30.0
4-Chlorophenyl phenyl ether	Qua		0.6741		4250	5000	-14.9	30.0
2-Nitroaniline	Lin1		0.3770		4350	5000	-13.1	30.0
4,6-Dinitro-2-methylphenol	Lin		0.0652		3730	5000	-25.5	30.0
Diphenylamine	Lin1		0.7856		4390	5000	-12.2	30.0
N-Nitrosodiphenylamine	Lin1		0.7856		4390	5000	-12.2	20.0
1,2-Diphenylhydrazine	Lin1		1.909		4980	5000	-0.3	30.0
Azobenzene	Lin1		1.909		4980	5000	-0.4	30.0
Benzophenone	Lin1		0.9348		4470	5000	-10.7	30.0
4-Bromophenyl phenyl ether	Qua		0.2166		4850	5000	-2.9	30.0
Hexachlorobenzene	Qua		0.2002		4730	5000	-5.5	30.0
Atrazine	Lin1		0.1769		4280	5000	-14.4	30.0
Pentachloronitrobenzene	Lin1		0.1219		4200	5000	-16.0	30.0
Pentachlorophenol	Qua		0.0945		4920	5000	-1.6	20.0
Phenanthrene	Lin1		1.141		4270	5000	-14.7	30.0
Anthracene	Lin1		1.154		4330	5000	-13.3	30.0
Carbazole	Ave	0.9866	0.8866		4490	5000	-10.1	30.0
Di-n-butyl phthalate	Lin1		1.503		4710	5000	-5.8	30.0
Fluoranthene	Lin1		0.8579		3500	5000	-30.1*	20.0
Benzidine	Qua		0.0437		1600	5000	-67.9*	30.0
Pyrene	Ave	1.521	1.938		6370	5000	27.4	30.0
Butyl benzyl phthalate	Lin1		1.145		6550	5000	30.9*	30.0
3,3'-Dichlorobenzidine	Lin1		0.2539		4090	5000	-18.3	30.0
Benzo[a]anthracene	Ave	0.9959	0.9825		4930	5000	-1.3	30.0
Chrysene	Ave	0.9541	0.9109		4770	5000	-4.5	30.0
Bis(2-ethylhexyl) phthalate	Lin1		1.629		7880	5000	57.6*	30.0
Di-n-octyl phthalate	Lin		0.0032		421	5000	-91.6*	20.0
Benzo[b]fluoranthene	Qua		1.378		4520	5000	-9.5	30.0
Benzo[k]fluoranthene	Lin1		1.411		5060	5000	1.3	30.0
Benzo[a]pyrene	Lin1		1.073		4850	5000	-3.0	20.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Westfield Job No.: 360-24634-1

SDG No.: OCRI-16

Lab Sample ID: CCV 360-50105/2 Calibration Date: 10/09/2009 10:49

Instrument ID: Inst. B Calib Start Date: 10/07/2009 16:51

GC Column: Rtx-5ms ID: 0.25(um) Calib End Date: 10/07/2009 20:07

Lab File ID: B10820.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Indeno[1,2,3-cd]pyrene	Lin1		0.6586		4970	5000	-0.5	30.0
Dibenz(a,h)anthracene	Lin		0.7368		5810	5000	16.3	30.0
Benzo[g,h,i]perylene	Lin1		0.7159		5550	5000	10.9	30.0
2-Fluorophenol	Qua		0.4763		4120	5000	-17.5	30.0
Phenol-d5	Qua		0.6448		3750	5000	-25.0	30.0
Nitrobenzene-d5	Ave	0.3872	0.3930		5070	5000	1.5	30.0
2-Fluorobiphenyl	Ave	1.536	1.479		4820	5000	-3.7	30.0
2,4,6-Tribromophenol	Qua		0.0886		4910	5000	-1.9	30.0
Terphenyl-d14	Ave	0.9602	1.251		6510	5000	30.3*	30.0

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Westfield Job No.: 360-24634-1

SDG No.: OCRI-16

Sample No.: CCV 360-49826/16 Date Analyzed: 10/03/2009 21:56

Instrument ID: Inst. B GC Column: Rtx-5ms ID: 0.25(um)

Lab File ID (Standard): B10705.D Heated Purge: (Y/N) N

		PHN		CRY		PRY	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12 HOUR STD		332851	10.50	227995	12.90	157060	15.43
UPPER LIMIT		665702	11.00	455990	13.40	314120	15.93
LOWER LIMIT		166426	10.00	113998	12.40	78530	14.93
LAB SAMPLE ID	CLIENT SAMPLE ID						
360-24634-1	OC-SS-417-0.0/1.0-XXX	420563	10.50	299152	12.91	506425*	15.47
360-24634-2	OC-SS-418-0.0/1.0-XXX	434550	10.50	227271	12.91	158239	15.45
360-24634-3	OC-SS-419-0.0/1.0-XXX	466864	10.50	322795	12.92	161733	15.46
360-24634-4	OC-SS-420-0.0/1.0-XXX	413156	10.50	283526	12.92	156281	15.46
360-24634-5	OC-SS-421-0.0/1.0-XXX	488839	10.50	410296	12.92	168414	15.46
360-24634-6	OC-SS-422-0.0/1.0-XXX	438097	10.51	282127	12.91	171780	15.46
360-24634-7	OC-SS-423-0.0/1.0-XXX	396641	10.50	255505	12.91	148713	15.46
360-24634-8	OC-SS-424-0.0/1.0-XXX	384632	10.50	264574	12.92	160198	15.46
360-24634-9	OC-SS-425-0.0/1.0-XXX	473526	10.50	434965	12.92	213089	15.47
360-24634-10	OC-SS-426-0.0/1.0-XXX	437762	10.51	368351	12.91	179781	15.46
360-24634-11	OC-SS-427-0.0/1.0-XXX	421448	10.50	237832	12.92	132885	15.47
360-24634-12	OC-SS-428-0.0/1.0-XXX	357180	10.51	218143	12.92	128477	15.47
360-24634-13	OC-SS-429-0.0/1.0-XXX	455455	10.51	244257	12.92	128544	15.47
360-24634-14	OC-SS-430-0.0/1.0-XXX	454732	10.51	348270	12.92	201922	15.47
360-24634-15	OC-SS-431-0.0/1.0-XXX	442629	10.51	341912	12.92	149268	15.47
360-24634-16	OC-SS-432-0.0/1.0-XXX	416211	10.51	302559	12.93	134473	15.47

32240

OK

PHN = Phenanthrene-d10
CRY = Chrysene-d12
PRY = Perylene-d12

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.50 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270C LL

FORM VIII

GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Westfield Job No.: 360-24634-1

SDG No.: OCRI-16

Sample No.: CCV 360-49520/2 Date Analyzed: 09/26/2009 13:04

Instrument ID: Inst. J GC Column: Rtx-5ms ID: 0.25(um)

Lab File ID (Standard): J03152.D Heated Purge: (Y/N) N

		PHN		CRY		PRY	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12 HOUR STD		157073	12.84	93401	15.62	61272	17.34
UPPER LIMIT		314146	13.34	186802	16.12	122544	17.84
LOWER LIMIT		78537	12.34	46701	15.12	30636	16.84
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 360-49302/1-A		212024	12.83	143816	15.62	113412	17.34
LCS 360-49302/2-A		217829	12.84	177531	15.62	146996*	17.34
LCSD 360-49302/3-A		170462	12.83	106647	15.62	69045	17.34
360-24634-4	OC-SS-420-0.0/1.0-XXX	162864	12.84	92065	15.62	62301	17.35
360-24634-6	OC-SS-422-0.0/1.0-XXX	190429	12.84	147031	15.62	122293	17.35
360-24634-8	OC-SS-424-0.0/1.0-XXX	193411	12.84	138360	15.63	99740	17.36
360-24634-11	OC-SS-427-0.0/1.0-XXX	163867	12.84	99049	15.62	75473	17.35
360-24634-13	OC-SS-429-0.0/1.0-XXX	200247	12.84	152160	15.63	122562*	17.36
360-24634-15	OC-SS-431-0.0/1.0-XXX	179965	12.84	131663	15.63	35062	17.37

240%

2003

OK

PHN = Phenanthrene-d10
CRY = Chrysene-d12
PRY = Perylene-d12

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.50 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270C LL

FORM II
GC/MS SEMI VOA SURROGATE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24634-1

SDG No.: OCRI-16

Matrix: Solid Level: Low

GC Column (1): Rtx-5ms ID: 0.25 (um)

Client Sample ID	Lab Sample ID	2FP #	PHL #	NBZ #	FBP #	TBP #	TPH #
OC-SS-417-0.0/1.0-XXX	360-24634-1	86	70	67	68	83	82
OC-SS-418-0.0/1.0-XXX	360-24634-2	74	59	53	54	68	69
OC-SS-419-0.0/1.0-XXX	360-24634-3	69	56	52	52	67	62
OC-SS-420-0.0/1.0-XXX	360-24634-4	77	62	60	59	78	70
OC-SS-420-0.0/1.0-XXX	360-24634-4	54	64	57	60	75	84
OC-SS-421-0.0/1.0-XXX	360-24634-5	49	60	73	55	19 X	61
OC-SS-421-0.0/1.0-XXX DL	360-24634-5 DL	66	73	67	69	23 X	84
OC-SS-422-0.0/1.0-XXX	360-24634-6	37	55	69	56	22 X	69
OC-SS-422-0.0/1.0-XXX	360-24634-6	35	42	38	40	17 X	46
OC-SS-423-0.0/1.0-XXX	360-24634-7	81	49	62	59	79	71
OC-SS-424-0.0/1.0-XXX	360-24634-8	72	53	68	61	66	65
OC-SS-424-0.0/1.0-XXX	360-24634-8	55	64	57	58	75	64
OC-SS-425-0.0/1.0-XXX	360-24634-9	73	58	84	66	48	64
OC-SS-426-0.0/1.0-XXX	360-24634-10	76	58	59	59	80	59
OC-SS-427-0.0/1.0-XXX	360-24634-11	60	52	48	48	58	60
OC-SS-427-0.0/1.0-XXX	360-24634-11	41	45	49	48	60	55
OC-SS-428-0.0/1.0-XXX	360-24634-12	67	52	56	56	72	66
OC-SS-429-0.0/1.0-XXX	360-24634-13	84	76	73	53	21 X	75
OC-SS-429-0.0/1.0-XXX	360-24634-13	53	61	55	57	55	58
OC-SS-430-0.0/1.0-XXX	360-24634-14	69	53	52	64	64	55
OC-SS-431-0.0/1.0-XXX	360-24634-15	77	61	60	66	71	65
OC-SS-431-0.0/1.0-XXX	360-24634-15	47	57	54	49	70	56
OC-SS-431-0.0/1.0-XXX DL	360-24634-15 DL	88	72	70	69	84	81
OC-SS-432-0.0/1.0-XXX	360-24634-16	67	55	53	51	62	69

→ OK / DL

	QC LIMITS
2FP = 2-Fluorophenol	30-130
PHL = Phenol-d5	30-130
NBZ = Nitrobenzene-d5	30-130
FBP = 2-Fluorobiphenyl	30-130
TBP = 2,4,6-Tribromophenol	30-130
TPH = Terphenyl-d14	30-130

OK only 1 surrogate.

Column to be used to flag recovery values

FORM II 8270C LL

Corrected

SEMIVOLATILE ORGANICS

REGION I VALIDATION CHECKLIST for
OLIN CHEMICAL SUPERFUND SITE
Criteria and Qualifications: REGION I Organics Guideline (1996)

TIER I /(II) III (circle one)

SITE: Olin Chemical Superfund Site Project #: 6107/6026/12 SDG #: OCRI-17, -17A

LAB #: TAL-Westfield

Sample IDs: Attach tracking sheet and/or sample listing.

This checklist is designed to be used with USEPA Region I Validation Guidelines Part II (12/1996). During Level III validation, calculation and transcription checks are completed for instrument tuning, surrogates, target compounds, spike recoveries, calibration data, and internal standards as specified in the guideline. These checks are documented on attached validation notes.

YES	NO	NA		
Data completeness				
☑	☐	☐	All data summaries, QC forms and raw data available from hard copy or electronic data package	Contact lab if missing data. Lab to respond with 24 hours.
☑	☐	☐	Data summaries match EDD	
Holding Times and Preservation				
☑	☐	☐	Hold times met (Waters – Extract within 7 days, analyze within 40 days. Soils – extract within 14 days, analyze within 40 days)	
Instrument Performance Check (Tune)				
☑	☐	☐	Tune available for each 12-hour period samples were analyzed	
☑	☐	☐	Appropriate number of significant figures reported (at least 2)	
☑	☐	☐	Mass/Charge list (m/z) criteria met	
Initial Calibration				
☑	☐	☐	%RSD less than or equal to 30%	
☑	☐	☐	RRF greater than or equal to 0.05	
Continuing Calibration				
☑	☐	☐	%D less than or equal to 25%	
☑	☐	☐	RRF greater than or equal to 0.05.	
Blank Contamination				Evaluate all blanks for contamination. Highest contaminant level used for action level. See below.
☒	☐	☐	Method blank contamination	
☒	☐	☐	Equipment/Rinseate blank contamination	

SEMIVOLATILE ORGANICS

REGION I VALIDATION CHECKLIST for
OLIN CHEMICAL SUPERFUND SITE
Criteria and Qualifications: REGION I Organics Guideline (1996)

TIER I / (II) / III (circle one)

Surrogate Recoveries ☐ ☒ ☐ Surrogates percent recovery criteria met: Soil = (base/neutral 30%-130%, acid 30%-130%) Water = (base/neutral 30%-130%, acid 15%-110%)	See below.
Matrix Spikes and Laboratory Control Samples ☐ ☒ ☐ MS/MSD percent recovery criteria met Soil and Water = (base/neutral 40%-140%, acid 30%-130%) ☐ ☒ ☐ MS/MSD RPD criteria met (soils <50%, water <30%) ☐ ☒ ☐ LCS percent recovery criteria met soil/water (base 40%-140%, acid 30%-130%)	See below.
Field Duplicates ☐ ☐ ☑ RPD criteria met (soils <50%, water <30%)	
Internal Standard ☐ ☒ ☐ Area counts within -50 to +100 percent of calib. std. ☑ ☐ ☐ Retention Time within 30 seconds of calib. std.	See below.
Target Compounds ☑ ☐ ☐ Reviewed narrative for anomalies	
Tentatively Identified Compounds (TICs) ☐ ☑ ☐ TCL compounds reported as TICs	

Validator's Signature: _____

Date: 3/12/10

Reference:

MACTEC, Quality Assurance Project Plan for Remedial Investigation/Feasibility Study – Olin Chemical Superfund Site, Wilmington Property, 51 Eames Street, Wilmington, MA", MACTEC Engineering and Consulting. Draft .October 2008.

SAMPLE SUMMARY

Client: Olin Corporation

Job Number: 360-24665-1
Sdg Number: OCRI-17

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
360-24665-1	OC-SS-434-0.0/1.0-XXX	Solid	09/16/2009 1615	09/17/2009 1630
360-24665-2	OC-SS-435-0.0/1.0-XXX	Solid	09/16/2009 1540	09/17/2009 1630
360-24665-3	OC-SS-436-0.0/1.0-XXX	Solid	09/16/2009 1430	09/17/2009 1630
360-24665-4	OC-SS-437-0.0/1.0-XXX	Solid	09/16/2009 1410	09/17/2009 1630
360-24665-5	OC-SS-440-0.0/1.0-XXX	Solid	09/16/2009 1345	09/17/2009 1630
360-24665-6	OC-SS-442-0.0/1.0-XXX	Solid	09/16/2009 1325	09/17/2009 1630
360-24665-7	OC-SS-449-0.0/1.0-XXX	Solid	09/16/2009 1640	09/17/2009 1630
360-24665-8	OC-SS-450-0.0/1.0-XXX	Solid	09/16/2009 1555	09/17/2009 1630
360-24665-9	OC-SS-451-0.0/1.0-XXX	Solid	09/16/2009 1520	09/17/2009 1630
360-24665-10	OC-SS-454-0.0/1.0-XXX	Solid	09/17/2009 0755	09/17/2009 1630
360-24665-11	OC-SS-455-0.0/1.0-XXX	Solid	09/16/2009 1750	09/17/2009 1630
360-24665-12	OC-SS-460-0.0/1.0-XXX	Solid	09/16/2009 1730	09/17/2009 1630
360-24665-13	OC-SB-406-0.0/1.0-XXX	Solid	09/17/2009 1125	09/17/2009 1630
360-24665-14	OC-SB-406-13/15-XXX	Solid	09/17/2009 1200	09/17/2009 1630
360-24665-15	OC-SB-406-8.0/10-XXX	Solid	09/17/2009 1145	09/17/2009 1630
360-24665-16	OC-SB-413-0.0/1.0-XXX	Solid	09/17/2009 1110	09/17/2009 1630
360-24665-17	OC-SB-413-1.0/5.0-XXX	Solid	09/17/2009 1020	09/17/2009 1630
360-24665-18	OC-SB-413-10/12-XXX	Solid	09/17/2009 1050	09/17/2009 1630
360-24665-19	OC-TBK-021	Solid	09/17/2009 1315	09/17/2009 1630
360-24665-20	OC-SS-436-0.0/1.0-XXX	Solid	09/17/2009 1430	09/17/2009 1630
360-24665-21	OC-SS-437-0.0/1.0-XXX	Solid	09/17/2009 1410	09/17/2009 1630

Form 1s updated.

3/12/10

Client: Olin Corporation

Job Number: 360-24665-1
Sdg Number: OCRI-17

Client Sample ID: **OC-SS-434-0.0/1.0-XXX**

Lab Sample ID: 360-24665-1
Client Matrix: Solid % Moisture: 17.2

Date Sampled: 09/16/2009 1615
Date Received: 09/17/2009 1630

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-50051	Instrument ID: Inst. B
Preparation:	3546	Prep Batch: 360-49545	Lab File ID: B10811.D
Dilution:	1.0		Initial Weight/Volume: 30.10 g
Date Analyzed:	10/08/2009 1633		Final Weight/Volume: 1.0 mL
Date Prepared:	09/28/2009 1051		Injection Volume: 1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		12	40
1,2,4,5-Tetrachlorobenzene		ND		12	40
1,2,4-Trichlorobenzene		ND		12	40
1,2-Dichlorobenzene		ND		12	40
1,3-Dichlorobenzene		ND		12	40
1,4-Dichlorobenzene		ND		12	40
1-Methylnaphthalene		ND		12	40
2,2'-oxybis[1-chloropropane]		ND		12	40
2,3,4,6-Tetrachlorophenol		ND		12	40
2,4,5-Trichlorophenol		ND		12	40
2,4,6-Trichlorophenol		ND		12	40
2,4-Dichlorophenol		ND		12	40
2,4-Dimethylphenol		ND		16	40
2,4-Dinitrophenol		ND		12	40
2,4-Dinitrotoluene		ND		12	40
2,6-Dinitrotoluene		ND		12	40
2-Chloronaphthalene		ND		12	40
2-Chlorophenol		ND		12	40
2-Methylnaphthalene		ND		12	40
2-Methylphenol		ND		24	40
2-Nitroaniline		ND J		12	200
2-Nitrophenol		ND		12	40
3 & 4 Methylphenol		ND		12	40
3,3'-Dichlorobenzidine		ND R		12	80
3-Nitroaniline		ND J R		12	200
4,6-Dinitro-2-methylphenol		ND		12	200
4-Bromophenyl phenyl ether		ND		12	40
4-Chloro-3-methylphenol		ND		12	80
4-Chloroaniline		ND R		12	80
4-Chlorophenyl phenyl ether		ND		12	40
4-Nitroaniline		ND		12	200
4-Nitrophenol		ND		12	200
Acenaphthene		ND		12	40
Acenaphthylene		ND		12	40
Acetophenone		ND		12	40
Aniline		ND J R		12	40
Anthracene		ND		12	40
Atrazine		ND		12	40
Azobenzene		ND J		12	40
Benzaldehyde		51		12	40
Benzo[a]anthracene		ND		12	40
Benzo[a]pyrene		ND		12	40
Benzo[b]fluoranthene		ND		12	40
Benzo[g,h,i]perylene		ND		12	40
Benzo[k]fluoranthene		ND		12	40
Benzoic acid		2000 J 140	B	18	200

3/12/10

Client: Olin Corporation

Job Number: 360-24665-1
Sdg Number: OCRI-17

Client Sample ID: OC-SS-434-0.0/1.0-XXX

Lab Sample ID: 360-24665-1
Client Matrix: Solid % Moisture: 17.2

Date Sampled: 09/16/2009 1615
Date Received: 09/17/2009 1630

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C-LL	Analysis Batch: 360-50051	Instrument ID: Inst_B
Preparation:	3546	Prep Batch: 360-49545	Lab File ID: B10811.D
Dilution:	1.0		Initial Weight/Volume: 30.10 g
Date Analyzed:	10/08/2009 1633		Final Weight/Volume: 1.0 mL
Date Prepared:	09/28/2009 1051		Injection Volume: 1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		12	40
Benzyl alcohol		ND		34	80
Bis(2-chloroethoxy)methane		ND		12	40
Bis(2-chloroethyl)ether		ND		12	40
Bis(2-ethylhexyl) phthalate		ND		12	40
Butyl benzyl phthalate		ND		12	40
Caprolactam		ND		12	40
Carbazole		ND		12	40
Chrysene		ND		12	40
Dibenz(a,h)anthracene		ND		12	40
Dibenzofuran		ND		12	40
Diethyl phthalate		ND		12	40
Dimethyl phthalate		ND		12	40
Di-n-butyl phthalate		ND		35	40
Di-n-octyl phthalate		ND		20	40
Diphenyl oxide		ND		12	40
Diphenylamine		ND		12	40
Fluoranthene		ND		12	40
Fluorene		ND		12	40
Hexachlorobenzene		ND		12	40
Hexachlorobutadiene		ND		12	40
Hexachlorocyclopentadiene		ND	J	12	80
Hexachloroethane		ND		12	40
Indeno[1,2,3-cd]pyrene		ND	J	12	40
Isophorone		ND		12	40
Naphthalene		ND		12	96
Nitrobenzene		ND		12	40
N-Nitrosodimethylamine		ND		14	40
N-Nitrosodi-n-propylamine		ND		12	40
N-Nitrosodiphenylamine		ND	J	12	40
Pentachlorophenol		ND		12	40
Phenanthrene		ND		12	48
Phenol		ND		12	40
Pyrene		ND		12	40

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	50		30 - 130
2-Fluorophenol	53		30 - 130
2-Fluorobiphenyl	41		30 - 130
Nitrobenzene-d5	43		30 - 130
Phenol-d5	41		30 - 130
Terphenyl-d14	49		30 - 130

3/12/10

Client: Olin Corporation

Job Number: 360-24665-1
Sdg Number: OCRI-17

Client Sample ID: **OC-SS-434-0.0/1.0-XXX**

Lab Sample ID: 360-24665-1
Client Matrix: Solid % Moisture: 17.2

Date Sampled: 09/16/2009 1615
Date Received: 09/17/2009 1630

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-50051	Instrument ID: Inst. B
Preparation:	3546	Prep Batch: 360-49545	Lab File ID: B10811.D
Dilution:	1.0		Initial Weight/Volume: 30.10 g
Date Analyzed:	10/08/2009 1633		Final Weight/Volume: 1.0 mL
Date Prepared:	09/28/2009 1051		Injection Volume: 1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** **10**

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
629-96-9	1-Eicosanol	12.11	2600	T J N
1599-67-3	1-Docosene	12.87	4300	T J N
14811-95-1	1,19-Eicosadiene	13.56	700	T J N
1560-89-0	Heptadecane, 2-methyl-	13.95	3900	T J N
77899-10-6	(Z)14-Tricosenyl formate	15.02	1200	T J N
638-68-6	Triacontane	15.38	2200	T J N
14811-95-1	1,19-Eicosadiene	16.01	900	T J N
55282-16-1	Docosane, 5-butyl-	16.23	460	T J N
83-47-6	.gamma.-Sitosterol	16.38	670	T J N
74022-4-1	2,4a,8,8-Tetramethyldecahydrocyclopropa[	17.58	1400	T J N

Client: Olin Corporation

Job Number: 360-24665-1
Sdg Number: OCRI-17

Client Sample ID: **OC-SS-434-0.0/1.0-XXX**

Lab Sample ID: 360-24665-1
Client Matrix: Solid % Moisture: 17.2

Date Sampled: 09/16/2009 1615
Date Received: 09/17/2009 1630

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49520	Instrument ID: Inst. J
Preparation:	3550B	Prep Batch: 360-49302	Lab File ID: J03169.D
Dilution:	1.0		Initial Weight/Volume: 100.36 g
Date Analyzed:	09/26/2009 2217		Final Weight/Volume: 1.0 mL
Date Prepared:	09/22/2009 1155		Injection Volume: 1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodimethylamine		ND		1.4	6.0

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	77		30 - 130
2-Fluorobiphenyl	58		30 - 130
2-Fluorophenol	54		30 - 130
Nitrobenzene-d5	60		30 - 130
Phenol-d5	60		30 - 130
Terphenyl-d14	66		30 - 130

Client: Olin Corporation

Job Number: 360-24665-1
Sdg Number: OCRI-17

Client Sample ID: OC-SS-435-0.0/1.0-XXX

Lab Sample ID: 360-24665-2
Client Matrix: Solid % Moisture: 17.6

Date Sampled: 09/16/2009 1540
Date Received: 09/17/2009 1630

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-50051	Instrument ID: Inst. B
Preparation:	3546	Prep Batch: 360-49545	Lab File ID: B10812.D
Dilution:	1.0		Initial Weight/Volume: 30.97 g
Date Analyzed:	10/08/2009 1701		Final Weight/Volume: 1.0 mL
Date Prepared:	09/28/2009 1051		Injection Volume: 1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		12	39
1,2,4,5-Tetrachlorobenzene		ND		12	39
1,2,4-Trichlorobenzene		ND		12	39
1,2-Dichlorobenzene		ND		12	39
1,3-Dichlorobenzene		ND		12	39
1,4-Dichlorobenzene		ND		12	39
1-Methylnaphthalene		ND		12	39
2,2'-oxybis[1-chloropropane]		ND		12	39
2,3,4,6-Tetrachlorophenol		ND		12	39
2,4,5-Trichlorophenol		ND		12	39
2,4,6-Trichlorophenol		ND		12	39
2,4-Dichlorophenol		ND		12	39
2,4-Dimethylphenol		ND		15	39
2,4-Dinitrophenol		ND		12	39
2,4-Dinitrotoluene		ND		12	39
2,6-Dinitrotoluene		ND		12	39
2-Chloronaphthalene		ND		12	39
2-Chlorophenol		ND		12	39
2-Methylnaphthalene		ND		12	39
2-Methylphenol		ND		23	39
2-Nitroaniline		ND		12	200
2-Nitrophenol		ND		12	39
3 & 4 Methylphenol		ND		12	39
3,3'-Dichlorobenzidine		ND		12	78
3-Nitroaniline		ND		12	200
4,6-Dinitro-2-methylphenol		ND		12	200
4-Bromophenyl phenyl ether		ND		12	39
4-Chloro-3-methylphenol		ND		12	78
4-Chloroaniline		ND		12	78
4-Chlorophenyl phenyl ether		ND		12	39
4-Nitroaniline		ND		12	200
4-Nitrophenol		ND		12	200
Acenaphthene		ND		12	39
Acenaphthylene		ND		12	39
Acetophenone		ND		12	39
Aniline		ND	J	12	39
Anthracene		ND		12	39
Atrazine		ND		12	39
Azobenzene		ND		12	39
Benzaldehyde		36	J	12	39
Benzo[a]anthracene		ND		12	39
Benzo[a]pyrene		ND		12	39
Benzo[b]fluoranthene		ND		12	39
Benzo[g,h,i]perylene		ND		12	39
Benzo[k]fluoranthene		ND		12	39
Benzoic acid		130	JB*	18	200

200 43

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Client: Olin Corporation

Job Number: 360-24665-1
Sdg Number: OCRI-17

Client Sample ID: OC-SS-435-0.0/1.0-XXX

Lab Sample ID: 360-24665-2
Client Matrix: Solid % Moisture: 17.6

Date Sampled: 09/16/2009 1540
Date Received: 09/17/2009 1630

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-50051	Instrument ID: Inst. B
Preparation:	3546	Prep Batch: 360-49545	Lab File ID: B10812.D
Dilution:	1.0		Initial Weight/Volume: 30.97 g
Date Analyzed:	10/08/2009 1701		Final Weight/Volume: 1.0 mL
Date Prepared:	09/28/2009 1051		Injection Volume: 1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		12	39
Benzyl alcohol		ND		33	78
Bis(2-chloroethoxy)methane		ND		12	39
Bis(2-chloroethyl)ether		ND		12	39
Bis(2-ethylhexyl) phthalate		12	J	12	39
Butyl benzyl phthalate		ND		12	39
Caprolactam		ND		12	39
Carbazole		ND		12	39
Chrysene		15	J	12	39
Dibenz(a,h)anthracene		ND		12	39
Dibenzofuran		ND		12	39
Diethyl phthalate		ND		12	39
Dimethyl phthalate		ND		12	39
Di-n-butyl phthalate		ND		34	39
Di-n-octyl phthalate		ND		20	39
Diphenyl oxide		ND		12	39
Fluoranthene		22	J	12	39
Fluorene		ND		12	39
Hexachlorobenzene		ND		12	39
Hexachlorobutadiene		ND		12	39
Hexachlorocyclopentadiene		ND		12	78
Hexachloroethane		ND		12	39
Indeno[1,2,3-cd]pyrene		15	J	12	39
Isophorone		ND		12	39
Naphthalene		ND		12	94
Nitrobenzene		ND		12	39
N-Nitrosodimethylamine		ND		14	39
N-Nitrosodi-n-propylamine		ND		12	39
N-Nitrosodiphenylamine		ND		12	39
Pentachlorophenol		ND		12	39
Phenanthrene		14	J	12	47
Phenol		ND		12	39
Pyrene		20	J	12	39

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	45		30 - 130
2-Fluorobiphenyl	36		30 - 130
2-Fluorophenol	46		30 - 130
Nitrobenzene-d5	40		30 - 130
Phenol-d5	32		30 - 130
Terphenyl-d14	37		30 - 130

Client: Olin Corporation

Job Number: 360-24665-1
Sdg Number: OCRI-17

Client Sample ID: **OC-SS-435-0.0/1.0-XXX**

Lab Sample ID: 360-24665-2
Client Matrix: Solid % Moisture: 17.6

Date Sampled: 09/16/2009 1540
Date Received: 09/17/2009 1630

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-50051		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49545		Lab File ID:	B10812.D
Dilution:	1.0			Initial Weight/Volume:	30.97 g
Date Analyzed:	10/08/2009 1701			Final Weight/Volume:	1.0 mL
Date Prepared:	09/28/2009 1051			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 9

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
112-80-1	Oleic Acid	11.08	190	T J N
112-88-9	1-Octadecene	11.52	680	T J N
1599-67-3	1-Docosene	12.12	4300	T J N
112-85-6	Docosanoic acid	12.36	810	T J N
2136-70-1	Ethanol, 2-(tetradecyloxy)-	12.45	480	T J N
297-3-0	Cyclotetracosane	12.88	7700	T J N
1000155-85-0	Bicyclo[10.8.0]eicosane, (E)-	13.57	15	T J N
77899-10-6	(Z)14-Tricosenyl formate	15.03	18	T J N
638-68-6	Triacontane	15.38	29	T J N

Client: Olin Corporation

Job Number: 360-24665-1
Sdg Number: OCRI-17

Client Sample ID: OC-SS-436-0.0/1.0-XXX

Lab Sample ID: 360-24665-3
Client Matrix: Solid % Moisture: 25.1

Date Sampled: 09/16/2009 1430
Date Received: 09/17/2009 1630

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-50051	Instrument ID: Inst. B
Preparation:	3546	Prep Batch: 360-49545	Lab File ID: B10813.D
Dilution:	1.0		Initial Weight/Volume: 30.95 g
Date Analyzed:	10/08/2009 1728		Final Weight/Volume: 1.0 mL
Date Prepared:	09/28/2009 1051		Injection Volume: 1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		13	43
1,2,4,5-Tetrachlorobenzene		ND		13	43
1,2,4-Trichlorobenzene		ND		13	43
1,2-Dichlorobenzene		ND		13	43
1,3-Dichlorobenzene		ND		13	43
1,4-Dichlorobenzene		ND		13	43
1-Methylnaphthalene		ND		13	43
2,2'-oxybis[1-chloropropane]		ND		13	43
2,3,4,6-Tetrachlorophenol		ND		13	43
2,4,5-Trichlorophenol		ND		13	43
2,4,6-Trichlorophenol		ND		13	43
2,4-Dichlorophenol		ND		13	43
2,4-Dimethylphenol		ND		17	43
2,4-Dinitrophenol		ND		13	43
2,4-Dinitrotoluene		ND		13	43
2,6-Dinitrotoluene		ND		13	43
2-Chloronaphthalene		ND		13	43
2-Chlorophenol		ND		13	43
2-Methylnaphthalene		ND		13	43
2-Methylphenol		ND		26	43
2-Nitroaniline		ND		13	220
2-Nitrophenol		ND		13	43
3 & 4 Methylphenol		ND		13	43
3,3'-Dichlorobenzidine		ND		13	86
3-Nitroaniline		ND		13	220
4,6-Dinitro-2-methylphenol		ND		13	220
4-Bromophenyl phenyl ether		ND		13	43
4-Chloro-3-methylphenol		ND		13	86
4-Chloroaniline		ND		13	86
4-Chlorophenyl phenyl ether		ND		13	43
4-Nitroaniline		ND		13	220
4-Nitrophenol		ND		13	220
Acenaphthene		ND		13	43
Acenaphthylene		ND		13	43
Acetophenone		ND		13	43
Aniline		ND	J	13	43
Anthracene		ND		13	43
Atrazine		ND		13	43
Azobenzene		ND		13	43
Benzaldehyde		75		13	43
Benzo[a]anthracene		ND		13	43
Benzo[a]pyrene		ND		13	43
Benzo[b]fluoranthene		ND		13	43
Benzo[g,h,i]perylene		ND		13	43
Benzo[k]fluoranthene		ND		13	43
Benzoic acid		220 J 440	J B	19	220

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Client: Olin Corporation

Job Number: 360-24665-1
Sdg Number: OCRI-17

Client Sample ID: **OC-SS-436-0.0/1.0-XXX**

Lab Sample ID: 360-24665-3
Client Matrix: Solid % Moisture: 25.1

Date Sampled: 09/16/2009 1430
Date Received: 09/17/2009 1630

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-50051	Instrument ID: Inst. B
Preparation:	3546	Prep Batch: 360-49545	Lab File ID: B10813.D
Dilution:	1.0		Initial Weight/Volume: 30.95 g
Date Analyzed:	10/08/2009 1728		Final Weight/Volume: 1.0 mL
Date Prepared:	09/28/2009 1051		Injection Volume: 1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		13	43
Benzyl alcohol		ND		37	86
Bis(2-chloroethoxy)methane		ND		13	43
Bis(2-chloroethyl)ether		ND		13	43
Bis(2-ethylhexyl) phthalate		ND		13	43
Butyl benzyl phthalate		ND		13	43
Caprolactam		ND		13	43
Carbazole		ND		13	43
Chrysene		ND		13	43
Dibenz(a,h)anthracene		ND		13	43
Dibenzofuran		ND		13	43
Diethyl phthalate		ND		13	43
Dimethyl phthalate		ND		13	43
Di-n-butyl phthalate		ND		38	43
Di-n-octyl phthalate		ND		22	43
Diphenyl oxide		ND		13	43
Fluoranthene		14	J	13	43
Fluorene		ND		13	43
Hexachlorobenzene		ND		13	43
Hexachlorobutadiene		ND		13	43
Hexachlorocyclopentadiene		ND		13	86
Hexachloroethane		ND		13	43
Indeno[1,2,3-cd]pyrene		ND		13	43
Isophorone		ND		13	43
Naphthalene		ND		13	100
Nitrobenzene		ND		13	43
N-Nitrosodimethylamine		ND		15	43
N-Nitrosodi-n-propylamine		ND		13	43
N-Nitrosodiphenylamine		ND		13	43
Pentachlorophenol		ND		13	43
Phenanthrene		ND		13	52
Phenol		ND		13	43
Pyrene		13	J	13	43

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	62		30 - 130
2-Fluorobiphenyl	53		30 - 130
2-Fluorophenol	67		30 - 130
Nitrobenzene-d5	54		30 - 130
Phenol-d5	51		30 - 130
Terphenyl-d14	62		30 - 130

Client: Olin Corporation

Job Number: 360-24665-1
Sdg Number: OCRI-17

Client Sample ID: **OC-SS-436-0.0/1.0-XXX**

Lab Sample ID: 360-24665-3
Client Matrix: Solid % Moisture: 25.1

Date Sampled: 09/16/2009 1430
Date Received: 09/17/2009 1630

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-50051	Instrument ID: Inst. B
Preparation:	3546	Prep Batch: 360-49545	Lab File ID: B10813.D
Dilution:	1.0		Initial Weight/Volume: 30.95 g
Date Analyzed:	10/08/2009 1728		Final Weight/Volume: 1.0 mL
Date Prepared:	09/28/2009 1051		Injection Volume: 1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 10

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
1454-85-9	1-Heptadecanol	11.52	290	T J N
1000155-85-3	Cyclohexadecane, 1,2-diethyl-	12.11	1700	T J N
112-85-6	Docosanoic acid	12.34	170	T J N
18435-45-5	1-Nonadecene	12.45	250	T J N
1599-67-3	1-Docosene	12.86	3500	T J N
1000131-9-4	Z-12-Pentacosene	13.34	12	T J N
56554-89-3	14-Octadecenal	13.57	9.9	T J N
1000144-57-9	16-Heptadecenal	15.02	14	T J N
62016-79-9	Heptacosane, 1-chloro-	15.37	22	T J N
77899-10-6	(Z)14-Tricosenyl formate	16.02	14	T J N

Client: Olin Corporation

Job Number: 360-24665-1
Sdg Number: OCRI-17

Client Sample ID: OC-SS-437-0.0/1.0-XXX

Lab Sample ID: 360-24665-4
Client Matrix: Solid % Moisture: 26.9

Date Sampled: 09/16/2009 1410
Date Received: 09/17/2009 1630

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49983	Instrument ID: Inst. B
Preparation:	3546	Prep Batch: 360-49545	Lab File ID: B10778.D
Dilution:	1.0		Initial Weight/Volume: 30.22 g
Date Analyzed:	10/06/2009 2250		Final Weight/Volume: 1.0 mL
Date Prepared:	09/28/2009 1051		Injection Volume: 1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		14	45
1,2,4,5-Tetrachlorobenzene		ND		14	45
1,2,4-Trichlorobenzene		ND		14	45
1,2-Dichlorobenzene		ND		14	45
1,3-Dichlorobenzene		ND		14	45
1,4-Dichlorobenzene		ND		14	45
1-Methylnaphthalene		ND		14	45
2,2'-oxybis[1-chloropropane]		ND		14	45
2,3,4,6-Tetrachlorophenol		ND		14	45
2,4,5-Trichlorophenol		ND		14	45
2,4,6-Trichlorophenol		ND		14	45
2,4-Dichlorophenol		ND		14	45
2,4-Dimethylphenol		ND		18	45
2,4-Dinitrophenol		ND		14	45
2,4-Dinitrotoluene		ND		14	45
2,6-Dinitrotoluene		ND		14	45
2-Chloronaphthalene		ND		14	45
2-Chlorophenol		ND		14	45
2-Methylnaphthalene		ND		14	45
2-Methylphenol		ND		27	45
2-Nitroaniline		ND		14	230
2-Nitrophenol		ND		14	45
3 & 4 Methylphenol		ND		14	45
3,3'-Dichlorobenzidine		ND		14	91
3-Nitroaniline		ND		14	230
4,6-Dinitro-2-methylphenol		ND		14	230
4-Bromophenyl phenyl ether		ND		14	45
4-Chloro-3-methylphenol		ND		14	91
4-Chloroaniline		ND		14	91
4-Chlorophenyl phenyl ether		ND		14	45
4-Nitroaniline		ND		14	230
4-Nitrophenol		ND		14	230
Acenaphthene		ND		14	45
Acenaphthylene		ND		14	45
Acetophenone		ND		14	45
Aniline		ND J	J	14	45
Anthracene		ND		14	45
Atrazine		ND		14	45
Azobenzene		ND		14	45
Benzaldehyde		50		14	45
Benzo[a]anthracene		ND		14	45
Benzo[a]pyrene		16	J	14	45
Benzo[b]fluoranthene		18	J	14	45
Benzo[g,h,i]perylene		18	J	14	45
Benzo[k]fluoranthene		ND		14	45
Benzoic acid		2304 J 130	J-B	20	230

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Client: Olin Corporation

Job Number: 360-24665-1
Sdg Number: OCRI-17

Client Sample ID: OC-SS-437-0.0/1.0-XXX

Lab Sample ID: 360-24665-4
Client Matrix: Solid % Moisture: 26.9

Date Sampled: 09/16/2009 1410
Date Received: 09/17/2009 1630

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49983	Instrument ID: Inst. B
Preparation:	3546	Prep Batch: 360-49545	Lab File ID: B10778.D
Dilution:	1.0		Initial Weight/Volume: 30.22 g
Date Analyzed:	10/06/2009 2250		Final Weight/Volume: 1.0 mL
Date Prepared:	09/28/2009 1051		Injection Volume: 1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		14	45
Benzyl alcohol		ND		39	91
Bis(2-chloroethoxy)methane		ND		14	45
Bis(2-chloroethyl)ether		ND		14	45
Bis(2-ethylhexyl) phthalate		27	J	14	45
Butyl benzyl phthalate		ND		14	45
Caprolactam		ND		14	45
Carbazole		ND		14	45
Chrysene		19	J	14	45
Dibenz(a,h)anthracene		ND		14	45
Dibenzofuran		ND		14	45
Diethyl phthalate		ND		14	45
Dimethyl phthalate		ND		14	45
Di-n-butyl phthalate		ND		40	45
Di-n-octyl phthalate		ND		23	45
Diphenyl oxide		ND		14	45
Fluoranthene		32	J	14	45
Fluorene		ND		14	45
Hexachlorobenzene		ND		14	45
Hexachlorobutadiene		ND		14	45
Hexachlorocyclopentadiene		ND		14	91
Hexachloroethane		ND		14	45
Indeno[1,2,3-cd]pyrene		22	J	14	45
Isophorone		ND		14	45
Naphthalene		ND		14	110
Nitrobenzene		ND		14	45
N-Nitrosodimethylamine		ND		16	45
N-Nitrosodi-n-propylamine		ND		14	45
N-Nitrosodiphenylamine		ND		14	45
Pentachlorophenol		ND		14	45
Phenanthrene		19	J	14	54
Phenol		ND		14	45
Pyrene		32	J	14	45

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	64		30 - 130
2-Fluorobiphenyl	56		30 - 130
2-Fluorophenol	69		30 - 130
Nitrobenzene-d5	56		30 - 130
Phenol-d5	55		30 - 130
Terphenyl-d14	66		30 - 130

Client: Olin Corporation

Job Number: 360-24665-1
Sdg Number: OCRI-17

Client Sample ID: **OC-SS-437-0.0/1.0-XXX**

Lab Sample ID: 360-24665-4
Client Matrix: Solid % Moisture: 26.9

Date Sampled: 09/16/2009 1410
Date Received: 09/17/2009 1630

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49983		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49545		Lab File ID:	B10778.D
Dilution:	1.0			Initial Weight/Volume:	30.22 g
Date Analyzed:	10/06/2009 2250			Final Weight/Volume:	1.0 mL
Date Prepared:	09/28/2009 1051			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 6

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
6624-79-9	1-Dotriacontanol	12.29	890	T J N
6624-79-9	1-Dotriacontanol	13.11	1900	T J N
53057-53-7	1,21-Docosadiene	15.36	10	T J N
7225-66-3	Tridecane, 7-hexyl-	15.65	52	T J N
506-52-5	1-Hexacosanol	16.55	10	T J N
83-47-6	.gamma.-Sitosterol	16.69	18	T J N

Client: Olin Corporation

Job Number: 360-24665-1
Sdg Number: OCRI-17

Client Sample ID: **OC-SS-440-0.0/1.0-XXX**

Lab Sample ID: 360-24665-5
Client Matrix: Solid % Moisture: 45.0

Date Sampled: 09/16/2009 1345
Date Received: 09/17/2009 1630

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49521	Instrument ID: Inst. J
Preparation:	3550B	Prep Batch: 360-49302	Lab File ID: J03177.D
Dilution:	1.0		Initial Weight/Volume: 100.25 g
Date Analyzed:	09/27/2009 0237		Final Weight/Volume: 1.0 mL
Date Prepared:	09/22/2009 1155		Injection Volume: 1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodimethylamine		ND		2.1	9.1

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	76		30 - 130
2-Fluorobiphenyl	59		30 - 130
2-Fluorophenol	50		30 - 130
Nitrobenzene-d5	63		30 - 130
Phenol-d5	58		30 - 130
Terphenyl-d14	74		30 - 130

Client: Olin Corporation

Job Number: 360-24665-1
Sdg Number: OCRI-17

Client Sample ID: OC-SS-440-0.0/1.0-XXX

Lab Sample ID: 360-24665-5
Client Matrix: Solid % Moisture: 45.0

Date Sampled: 09/16/2009 1345
Date Received: 09/17/2009 1630

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49983		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49545		Lab File ID:	B10779.D
Dilution:	1.0			Initial Weight/Volume:	30.02 g
Date Analyzed:	10/06/2009 2318			Final Weight/Volume:	1.0 mL
Date Prepared:	09/28/2009 1051			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		18	61
1,2,4,5-Tetrachlorobenzene		ND		18	61
1,2,4-Trichlorobenzene		ND		18	61
1,2-Dichlorobenzene		ND		18	61
1,3-Dichlorobenzene		ND		18	61
1,4-Dichlorobenzene		ND		18	61
1-Methylnaphthalene		ND		18	61
2,2'-oxybis[1-chloropropane]		ND		18	61
2,3,4,6-Tetrachlorophenol		ND		18	61
2,4,5-Trichlorophenol		ND		18	61
2,4,6-Trichlorophenol		ND		18	61
2,4-Dichlorophenol		ND		18	61
2,4-Dimethylphenol		ND		24	61
2,4-Dinitrophenol		ND		18	61
2,4-Dinitrotoluene		ND		18	61
2,6-Dinitrotoluene		ND		18	61
2-Chloronaphthalene		ND		18	61
2-Chlorophenol		ND		18	61
2-Methylnaphthalene		ND		18	61
2-Methylphenol		ND		36	61
2-Nitroaniline		ND		18	300
2-Nitrophenol		ND		18	61
3 & 4 Methylphenol		ND		18	61
3,3'-Dichlorobenzidine		ND		18	120
3-Nitroaniline		ND		18	300
4,6-Dinitro-2-methylphenol		ND		18	300
4-Bromophenyl phenyl ether		ND		18	61
4-Chloro-3-methylphenol		ND		18	120
4-Chloroaniline		ND		18	120
4-Chlorophenyl phenyl ether		ND		18	61
4-Nitroaniline		ND		18	300
4-Nitrophenol		ND		18	300
Acenaphthene		ND		18	61
Acenaphthylene		ND		18	61
Acetophenone		ND		18	61
Aniline		ND	J	18	61
Anthracene		ND		18	61
Atrazine		ND		18	61
Azobenzene		ND		18	61
Benzaldehyde		61		18	61
Benzo[a]anthracene		ND		18	61
Benzo[a]pyrene		ND		18	61
Benzo[b]fluoranthene		ND		18	61
Benzo[g,h,i]perylene		ND		18	61
Benzo[k]fluoranthene		ND		18	61
Benzoic acid		~~96~~ 3004 J	~~J B~~	27	300

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Client: Olin Corporation

Job Number: 360-24665-1
Sdg Number: OCRI-17

Client Sample ID: **OC-SS-440-0.0/1.0-XXX**

Lab Sample ID: 360-24665-5
Client Matrix: Solid % Moisture: 45.0

Date Sampled: 09/16/2009 1345
Date Received: 09/17/2009 1630

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49983	Instrument ID: Inst. B
Preparation:	3546	Prep Batch: 360-49545	Lab File ID: B10779.D
Dilution:	1.0		Initial Weight/Volume: 30.02 g
Date Analyzed:	10/06/2009 2318		Final Weight/Volume: 1.0 mL
Date Prepared:	09/28/2009 1051		Injection Volume: 1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		18	61
Benzyl alcohol		ND		52	120
Bis(2-chloroethoxy)methane		ND		18	61
Bis(2-chloroethyl)ether		ND		18	61
Bis(2-ethylhexyl) phthalate		22	J	18	61
Butyl benzyl phthalate		ND		18	61
Caprolactam		ND		18	61
Carbazole		ND		18	61
Chrysene		ND		18	61
Dibenz(a,h)anthracene		ND		18	61
Dibenzofuran		ND		18	61
Diethyl phthalate		ND		18	61
Dimethyl phthalate		ND		18	61
Di-n-butyl phthalate		ND		53	61
Di-n-octyl phthalate		ND		31	61
Diphenyl oxide		ND		18	61
Diphenylamine		ND		18	61
Fluoranthene		ND		18	61
Fluorene		ND		18	61
Hexachlorobenzene		ND		18	61
Hexachlorobutadiene		ND		18	61
Hexachlorocyclopentadiene		ND		18	120
Hexachloroethane		ND		18	61
Indeno[1,2,3-cd]pyrene		ND		18	61
Isophorone		ND		18	61
Naphthalene		ND		18	150
Nitrobenzene		ND		18	61
N-Nitrosodimethylamine		ND		21	61
N-Nitrosodi-n-propylamine		ND		18	61
N-Nitrosodiphenylamine		ND		18	61
Pentachlorophenol		ND		18	61
Phenanthrene		ND		18	73
Phenol		ND		18	61
Pyrene		ND		18	61

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	50		30 - 130
2-Fluorophenol	62		30 - 130
2-Fluorobiphenyl	46		30 - 130
Nitrobenzene-d5	48		30 - 130
Phenol-d5	49		30 - 130
Terphenyl-d14	43		30 - 130

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Client: Olin Corporation

Job Number: 360-24665-1
Sdg Number: OCRI-17

Client Sample ID: **OC-SS-440-0.0/1.0-XXX**

Lab Sample ID: 360-24665-5
Client Matrix: Solid % Moisture: 45.0

Date Sampled: 09/16/2009 1345
Date Received: 09/17/2009 1630

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49983		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49545		Lab File ID:	B10779.D
Dilution:	1.0			Initial Weight/Volume:	30.02 g
Date Analyzed:	10/06/2009 2318			Final Weight/Volume:	1.0 mL
Date Prepared:	09/28/2009 1051			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** **10**

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
10544-50-0	Cyclic octaatomic sulfur	11.20	110	T J N
481-74-3	9,10-Anthracenedione, 1,8-dihydroxy-3-me	11.94	200	T J N
6624-79-9	1-Dotriacontanol	12.28	440	T J N
593-45-3	Octadecane	12.66	160	T J N
1000151-22-6	Cyclodocosane, ethyl-	13.10	720	T J N
544-85-4	Dotriacontane	13.64	150	T J N
7683-64-9	Squalene	13.75	150	T J N
55124-79-3	Heptadecane, 9-hexyl-	14.31	950	T J N
544-76-3	Hexadecane	15.64	350	T J N
83-47-6	.gamma.-Sitosterol	16.67	160	T J N

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Client: Olin Corporation

Job Number: 360-24665-1
Sdg Number: OCRI-17

Client Sample ID: **OC-SS-442-0.0/1.0-XXX**

Lab Sample ID: 360-24665-6
Client Matrix: Solid % Moisture: 47.0

Date Sampled: 09/16/2009 1325
Date Received: 09/17/2009 1630

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49983	Instrument ID: Inst. B
Preparation:	3546	Prep Batch: 360-49545	Lab File ID: B10780.D
Dilution:	1.0		Initial Weight/Volume: 30.31 g
Date Analyzed:	10/06/2009 2346		Final Weight/Volume: 1.0 mL
Date Prepared:	09/28/2009 1051		Injection Volume: 1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		19	62
1,2,4,5-Tetrachlorobenzene		ND		19	62
1,2,4-Trichlorobenzene		ND		19	62
1,2-Dichlorobenzene		ND		19	62
1,3-Dichlorobenzene		ND		19	62
1,4-Dichlorobenzene		ND		19	62
1-Methylnaphthalene		ND		19	62
2,2'-oxybis[1-chloropropane]		ND		19	62
2,3,4,6-Tetrachlorophenol		ND		19	62
2,4,5-Trichlorophenol		ND		19	62
2,4,6-Trichlorophenol		ND		19	62
2,4-Dichlorophenol		ND		19	62
2,4-Dimethylphenol		ND		24	62
2,4-Dinitrophenol		ND		19	62
2,4-Dinitrotoluene		ND		19	62
2,6-Dinitrotoluene		ND		19	62
2-Chloronaphthalene		ND		19	62
2-Chlorophenol		ND		19	62
2-Methylnaphthalene		ND		19	62
2-Methylphenol		ND		37	62
2-Nitroaniline		ND		19	310
2-Nitrophenol		ND		19	62
3 & 4 Methylphenol		ND		19	62
3,3'-Dichlorobenzidine		ND		19	120
3-Nitroaniline		ND		19	310
4,6-Dinitro-2-methylphenol		ND		19	310
4-Bromophenyl phenyl ether		ND		19	62
4-Chloro-3-methylphenol		ND		19	120
4-Chloroaniline		ND		19	120
4-Chlorophenyl phenyl ether		ND		19	62
4-Nitroaniline		ND		19	310
4-Nitrophenol		ND		19	310
Acenaphthene		ND		19	62
Acenaphthylene		ND		19	62
Acetophenone		21	J	19	62
Aniline		ND J		19	62
Anthracene		ND		19	62
Atrazine		ND		19	62
Azobenzene		ND		19	62
Benzaldehyde		170		19	62
Benzo[a]anthracene		22	J	19	62
Benzo[a]pyrene		26	J	19	62
Benzo[b]fluoranthene		40	J	19	62
Benzo[g,h,i]perylene		23	J	19	62
Benzo[k]fluoranthene		ND		19	62
Benzoic acid		~~3104~~ 440 J	B*	28	310

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Client: Olin Corporation

Job Number: 360-24665-1
Sdg Number: OCRI-17

Client Sample ID: **OC-SS-442-0.0/1.0-XXX**

Lab Sample ID: 360-24665-6
Client Matrix: Solid % Moisture: 47.0

Date Sampled: 09/16/2009 1325
Date Received: 09/17/2009 1630

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49983	Instrument ID: Inst. B
Preparation:	3546	Prep Batch: 360-49545	Lab File ID: B10780.D
Dilution:	1.0		Initial Weight/Volume: 30.31 g
Date Analyzed:	10/06/2009 2346		Final Weight/Volume: 1.0 mL
Date Prepared:	09/28/2009 1051		Injection Volume: 1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		19	62
Benzyl alcohol		ND		53	120
Bis(2-chloroethoxy)methane		ND		19	62
Bis(2-chloroethyl)ether		ND		19	62
Bis(2-ethylhexyl) phthalate		31	J	19	62
Butyl benzyl phthalate		ND		19	62
Caprolactam		ND		19	62
Carbazole		ND		19	62
Chrysene		38	J	19	62
Dibenz(a,h)anthracene		ND		19	62
Dibenzofuran		ND		19	62
Diethyl phthalate		ND		19	62
Dimethyl phthalate		ND		19	62
Di-n-butyl phthalate		ND		55	62
Di-n-octyl phthalate		ND		31	62
Diphenyl oxide		ND		19	62
Fluoranthene		55	J	19	62
Fluorene		ND		19	62
Hexachlorobenzene		ND		19	62
Hexachlorobutadiene		ND		19	62
Hexachlorocyclopentadiene		ND		19	120
Hexachloroethane		ND		19	62
Indeno[1,2,3-cd]pyrene		36	J	19	62
Isophorone		ND		19	62
Naphthalene		20	J	19	150
Nitrobenzene		ND		19	62
N-Nitrosodimethylamine		ND		22	62
N-Nitrosodi-n-propylamine		ND		19	62
N-Nitrosodiphenylamine		ND		19	62
Pentachlorophenol		ND		19	62
Phenanthrene		42	J	19	75
Phenol		ND		19	62
Pyrene		64		19	62

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	50		30 - 130
2-Fluorobiphenyl	50		30 - 130
2-Fluorophenol	66		30 - 130
Nitrobenzene-d5	51		30 - 130
Phenol-d5	54		30 - 130
Terphenyl-d14	62		30 - 130

Client: Olin Corporation

Job Number: 360-24665-1
Sdg Number: OCRI-17

Client Sample ID: **OC-SS-442-0.0/1.0-XXX**

Lab Sample ID: 360-24665-6
Client Matrix: Solid % Moisture: 47.0

Date Sampled: 09/16/2009 1325
Date Received: 09/17/2009 1630

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49983	Instrument ID: Inst. B
Preparation:	3546	Prep Batch: 360-49545	Lab File ID: B10780.D
Dilution:	1.0		Initial Weight/Volume: 30.31 g
Date Analyzed:	10/06/2009 2346		Final Weight/Volume: 1.0 mL
Date Prepared:	09/28/2009 1051		Injection Volume: 1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** **10**

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
621-59-0	Benzaldahyde, 3-hydroxy-4-methoxy=	8.51	570	T J N
121-34-6	Benzoic acid, 4-hydroxy-3-methoxy-	9.26	950	T J N
112-88-9	1-Octadecene	11.67	620	T J N
3452-7-1	1-Eicosene	12.29	2300	T J N
18835-33-1	1-Hexacosene	13.12	4900	T J N
18835-33-1	1-Hexacosene	14.34	4000	T J N
7390-81-0	Oxirane, hexadecyl-	15.37	1400	T J N
638-68-6	Triacontane	15.66	2100	T J N
7390-81-0	Oxirane, hexadecyl-	16.26	560	T J N
83-47-6	.gamma.-Sitosterol	16.69	670	T J N

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Client: Olin Corporation

Job Number: 360-24665-1
Sdg Number: OCRI-17

Client Sample ID: OC-SS-449-0.0/1.0-XXX

Lab Sample ID: 360-24665-7
Client Matrix: Solid % Moisture: 30.2

Date Sampled: 09/16/2009 1640
Date Received: 09/17/2009 1630

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49983		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49545		Lab File ID:	B10781.D
Dilution:	1.0			Initial Weight/Volume:	30.09 g
Date Analyzed:	10/07/2009 0013			Final Weight/Volume:	1.0 mL
Date Prepared:	09/28/2009 1051			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		14	48
1,2,4,5-Tetrachlorobenzene		ND		14	48
1,2,4-Trichlorobenzene		ND		14	48
1,2-Dichlorobenzene		ND		14	48
1,3-Dichlorobenzene		ND		14	48
1,4-Dichlorobenzene		ND		14	48
1-Methylnaphthalene		ND		14	48
2,2'-oxybis[1-chloropropane]		ND		14	48
2,3,4,6-Tetrachlorophenol		ND		14	48
2,4,5-Trichlorophenol		ND		14	48
2,4,6-Trichlorophenol		ND		14	48
2,4-Dichlorophenol		ND		14	48
2,4-Dimethylphenol		ND		19	48
2,4-Dinitrophenol		ND		14	48
2,4-Dinitrotoluene		ND		14	48
2,6-Dinitrotoluene		ND		14	48
2-Chloronaphthalene		ND		14	48
2-Chlorophenol		ND		14	48
2-Methylnaphthalene		ND		14	48
2-Methylphenol		ND		29	48
2-Nitroaniline		ND		14	240
2-Nitrophenol		ND		14	48
3 & 4 Methylphenol		ND		14	48
3,3'-Dichlorobenzidine		ND		14	95
3-Nitroaniline		ND		14	240
4,6-Dinitro-2-methylphenol		ND		14	240
4-Bromophenyl phenyl ether		ND		14	48
4-Chloro-3-methylphenol		ND		14	95
4-Chloroaniline		ND		14	95
4-Chlorophenyl phenyl ether		ND		14	48
4-Nitroaniline		ND		14	240
4-Nitrophenol		ND		14	240
Acenaphthene		ND		14	48
Acenaphthylene		ND		14	48
Acetophenone		ND		14	48
Aniline		ND J	✓	14	48
Anthracene		ND		14	48
Atrazine		ND		14	48
Azobenzene		ND		14	48
Benzaldehyde		58		14	48
Benzo[a]anthracene		ND		14	48
Benzo[a]pyrene		ND		14	48
Benzo[b]fluoranthene		ND		14	48
Benzo[g,h,i]perylene		ND		14	48
Benzo[k]fluoranthene		ND		14	48
Benzoic acid		2404 J 92	J B	21	240

W. Clubs 3/12/10

Client: Olin Corporation

Job Number: 360-24665-1
Sdg Number: OCRI-17

Client Sample ID: **OC-SS-449-0.0/1.0-XXX**

Lab Sample ID: 360-24665-7
Client Matrix: Solid % Moisture: 30.2

Date Sampled: 09/16/2009 1640
Date Received: 09/17/2009 1630

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49983		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49545		Lab File ID:	B10781.D
Dilution:	1.0			Initial Weight/Volume:	30.09 g
Date Analyzed:	10/07/2009 0013			Final Weight/Volume:	1.0 mL
Date Prepared:	09/28/2009 1051			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		14	48
Benzyl alcohol		ND		41	95
Bis(2-chloroethoxy)methane		ND		14	48
Bis(2-chloroethyl)ether		ND		14	48
Bis(2-ethylhexyl) phthalate		31	J	14	48
Butyl benzyl phthalate		ND		14	48
Caprolactam		ND		14	48
Carbazole		ND		14	48
Chrysene		ND		14	48
Dibenz(a,h)anthracene		ND		14	48
Dibenzofuran		ND		14	48
Diethyl phthalate		ND		14	48
Dimethyl phthalate		ND		14	48
Di-n-butyl phthalate		ND		42	48
Di-n-octyl phthalate		ND		24	48
Diphenyl oxide		ND		14	48
Fluoranthene		19	J	14	48
Fluorene		ND		14	48
Hexachlorobenzene		ND		14	48
Hexachlorobutadiene		ND		14	48
Hexachlorocyclopentadiene		ND		14	95
Hexachloroethane		ND		14	48
Indeno[1,2,3-cd]pyrene		17	J	14	48
Isophorone		ND		14	48
Naphthalene		ND		14	110
Nitrobenzene		ND		14	48
N-Nitrosodimethylamine		ND		17	48
N-Nitrosodi-n-propylamine		ND		14	48
N-Nitrosodiphenylamine		ND		14	48
Pentachlorophenol		ND		14	48
Phenanthrene		ND		14	57
Phenol		ND		14	48
Pyrene		17	J	14	48

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	61		30 - 130
2-Fluorobiphenyl	55		30 - 130
2-Fluorophenol	75		30 - 130
Nitrobenzene-d5	56		30 - 130
Phenol-d5	55		30 - 130
Terphenyl-d14	57		30 - 130

Client: Olin Corporation

Job Number: 360-24665-1
Sdg Number: OCRI-17

Client Sample ID: **OC-SS-449-0.0/1.0-XXX**

Lab Sample ID: 360-24665-7
Client Matrix: Solid % Moisture: 30.2

Date Sampled: 09/16/2009 1640
Date Received: 09/17/2009 1630

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49983		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49545		Lab File ID:	B10781.D
Dilution:	1.0			Initial Weight/Volume:	30.09 g
Date Analyzed:	10/07/2009 0013			Final Weight/Volume:	1.0 mL
Date Prepared:	09/28/2009 1051			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 10

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
103-82-2	Benzeneacetic acid	7.73	39	T J N
121-33-5	Vanillin	8.49	95	T J N
121-34-6	Benzoic acid, 4-hydroxy-3-methoxy-	9.18	60	T J N
106-2-5	Oxacyclohexadecan-2-one	10.56	63	T J N
629-97-0	Docosane	11.39	42	T J N
1599-67-3	1-Docosene	13.11	1000	T J N
7683-64-9	Squalene	13.75	670	T J N
56554-87-1	16-Octadecenal	15.37	1300	T J N
593-49-7	Heptacosane	15.65	1500	T J N
559-74-0	Friedelin	18.01	660	T J N

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Client: Olin Corporation

Job Number: 360-24665-1
Sdg Number: OCRI-17

Client Sample ID: **OC-SS-450-0.0/1.0-XXX**

Lab Sample ID: 360-24665-8
Client Matrix: Solid % Moisture: 34.7

Date Sampled: 09/16/2009 1555
Date Received: 09/17/2009 1630

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49521		Instrument ID:	Inst. J
Preparation:	3550B	Prep Batch: 360-49302		Lab File ID:	J03178.D
Dilution:	1.0			Initial Weight/Volume:	100.33 g
Date Analyzed:	09/27/2009 0309			Final Weight/Volume:	1.0 mL
Date Prepared:	09/22/2009 1155			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodimethylamine		ND		1.8	7.6

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	70		30 - 130
2-Fluorobiphenyl	55		30 - 130
2-Fluorophenol	54		30 - 130
Nitrobenzene-d5	61		30 - 130
Phenol-d5	56		30 - 130
Terphenyl-d14	62		30 - 130

Client: Olin Corporation

Job Number: 360-24665-1
Sdg Number: OCRI-17

Client Sample ID: OC-SS-450-0.0/1.0-XXX

Lab Sample ID: 360-24665-8
Client Matrix: Solid % Moisture: 34.7

Date Sampled: 09/16/2009 1555
Date Received: 09/17/2009 1630

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49983	Instrument ID: Inst. B
Preparation:	3546	Prep Batch: 360-49545	Lab File ID: B10782.D
Dilution:	1.0		Initial Weight/Volume: 30.93 g
Date Analyzed:	10/07/2009 0041		Final Weight/Volume: 1.0 mL
Date Prepared:	09/28/2009 1051		Injection Volume: 1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		15	50
1,2,4,5-Tetrachlorobenzene		ND		15	50
1,2,4-Trichlorobenzene		ND		15	50
1,2-Dichlorobenzene		ND		15	50
1,3-Dichlorobenzene		ND		15	50
1,4-Dichlorobenzene		ND		15	50
1-Methylnaphthalene		ND		15	50
2,2'-oxybis[1-chloropropane]		ND		15	50
2,3,4,6-Tetrachlorophenol		ND		15	50
2,4,5-Trichlorophenol		ND		15	50
2,4,6-Trichlorophenol		ND		15	50
2,4-Dichlorophenol		ND		15	50
2,4-Dimethylphenol		ND		19	50
2,4-Dinitrophenol		ND		15	50
2,4-Dinitrotoluene		ND		15	50
2,6-Dinitrotoluene		ND		15	50
2-Chloronaphthalene		ND		15	50
2-Chlorophenol		ND		15	50
2-Methylnaphthalene		ND		15	50
2-Methylphenol		ND		30	50
2-Nitroaniline		ND		15	250
2-Nitrophenol		ND		15	50
3 & 4 Methylphenol		ND		15	50
3,3'-Dichlorobenzidine		ND		15	99
3-Nitroaniline		ND		15	250
4,6-Dinitro-2-methylphenol		ND		15	250
4-Bromophenyl phenyl ether		ND		15	50
4-Chloro-3-methylphenol		ND		15	99
4-Chloroaniline		ND		15	99
4-Chlorophenyl phenyl ether		ND		15	50
4-Nitroaniline		ND		15	250
4-Nitrophenol		ND		15	250
Acenaphthene		ND		15	50
Acenaphthylene		ND		15	50
Acetophenone		ND		15	50
Aniline		ND	J	15	50
Anthracene		ND		15	50
Atrazine		ND		15	50
Azobenzene		ND		15	50
Benzaldehyde		85		15	50
Benzo[a]anthracene		17	J	15	50
Benzo[a]pyrene		22	J	15	50
Benzo[b]fluoranthene		19	J	15	50
Benzo[g,h,i]perylene		21	J	15	50
Benzo[k]fluoranthene		ND		15	50
Benzoic acid		250 J ~~240~~	~~J-B~~	22	250

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Client: Olin Corporation

Job Number: 360-24665-1
Sdg Number: OCRI-17

Client Sample ID: **OC-SS-450-0.0/1.0-XXX**

Lab Sample ID: 360-24665-8
Client Matrix: Solid % Moisture: 34.7

Date Sampled: 09/16/2009 1555
Date Received: 09/17/2009 1630

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49983	Instrument ID: Inst. B
Preparation:	3546	Prep Batch: 360-49545	Lab File ID: B10782.D
Dilution:	1.0		Initial Weight/Volume: 30.93 g
Date Analyzed:	10/07/2009 0041		Final Weight/Volume: 1.0 mL
Date Prepared:	09/28/2009 1051		Injection Volume: 1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		15	50
Benzyl alcohol		ND		42	99
Bis(2-chloroethoxy)methane		ND		15	50
Bis(2-chloroethyl)ether		ND		15	50
Bis(2-ethylhexyl) phthalate		16	J	15	50
Butyl benzyl phthalate		ND		15	50
Caprolactam		ND		15	50
Carbazole		ND		15	50
Chrysene		27	J	15	50
Dibenz(a,h)anthracene		ND		15	50
Dibenzofuran		ND		15	50
Diethyl phthalate		ND		15	50
Dimethyl phthalate		ND		15	50
Di-n-butyl phthalate		ND		44	50
Di-n-octyl phthalate		ND		25	50
Diphenyl oxide		ND		15	50
Diphenylamine		ND		15	50
Fluoranthene		43	J	15	50
Fluorene		ND		15	50
Hexachlorobenzene		ND		15	50
Hexachlorobutadiene		ND		15	50
Hexachlorocyclopentadiene		ND		15	99
Hexachloroethane		ND		15	50
Indeno[1,2,3-cd]pyrene		30	J	15	50
Isophorone		ND		15	50
Naphthalene		ND		15	120
Nitrobenzene		ND		15	50
N-Nitrosodimethylamine		ND		18	50
N-Nitrosodi-n-propylamine		ND		15	50
N-Nitrosodiphenylamine		ND		15	50
Pentachlorophenol		ND		15	50
Phenanthrene		35	J	15	59
Phenol		ND		15	50
Pyrene		49	J	15	50

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	51		30 - 130
2-Fluorophenol	68		30 - 130
2-Fluorobiphenyl	50		30 - 130
Nitrobenzene-d5	51		30 - 130
Phenol-d5	53		30 - 130
Terphenyl-d14	60		30 - 130

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Client: Olin Corporation

Job Number: 360-24665-1
Sdg Number: OCRI-17

Client Sample ID: **OC-SS-450-0.0/1.0-XXX**

Lab Sample ID: 360-24665-8
Client Matrix: Solid % Moisture: 34.7

Date Sampled: 09/16/2009 1555
Date Received: 09/17/2009 1630

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49983		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49545		Lab File ID:	B10782.D
Dilution:	1.0			Initial Weight/Volume:	30.93 g
Date Analyzed:	10/07/2009 0041			Final Weight/Volume:	1.0 mL
Date Prepared:	09/28/2009 1051			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 10

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
121-34-6	Benzoic acid, 4-hydroxy-3-methoxy-	9.20	180	T J N
77899-3-7	1-Heneicosyl formate	12.29	1400	T J N
2885-0-9	1-Octadecanethiol	12.66	200	T J N
1599-67-3	1-Docosene	13.12	2800	T J N
638-68-6	Triacontane	13.65	190	T J N
630-2-4	Octacosane	14.34	3000	T J N
1000155-85-0	Bicyclo[10.8.0]eicosane, (E)-	15.38	1200	T J N
544-85-4	Dotriacontane	15.66	1500	T J N
629-66-3	2-Nonadecanone	15.75	210	T J N
629-96-9	1-Eicosanol	16.55	280	T J N

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Client: Olin Corporation

Job Number: 360-24665-1
Sdg Number: OCRI-17

Client Sample ID: OC-SS-451-0.0/1.0-XXX

Lab Sample ID: 360-24665-9
Client Matrix: Solid % Moisture: 23.1

Date Sampled: 09/16/2009 1520
Date Received: 09/17/2009 1630

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49983		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49545		Lab File ID:	B10783.D
Dilution:	1.0			Initial Weight/Volume:	30.30 g
Date Analyzed:	10/07/2009 0109			Final Weight/Volume:	1.0 mL
Date Prepared:	09/28/2009 1051			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		13	43
1,2,4,5-Tetrachlorobenzene		ND		13	43
1,2,4-Trichlorobenzene		ND		13	43
1,2-Dichlorobenzene		ND		13	43
1,3-Dichlorobenzene		ND		13	43
1,4-Dichlorobenzene		ND		13	43
1-Methylnaphthalene		ND		13	43
2,2'-oxybis[1-chloropropane]		ND		13	43
2,3,4,6-Tetrachlorophenol		ND		13	43
2,4,5-Trichlorophenol		ND		13	43
2,4,6-Trichlorophenol		ND		13	43
2,4-Dichlorophenol		ND		13	43
2,4-Dimethylphenol		ND		17	43
2,4-Dinitrophenol		ND		13	43
2,4-Dinitrotoluene		ND		13	43
2,6-Dinitrotoluene		ND		13	43
2-Chloronaphthalene		ND		13	43
2-Chlorophenol		ND		13	43
2-Methylnaphthalene		ND		13	43
2-Methylphenol		ND		26	43
2-Nitroaniline		ND		13	210
2-Nitrophenol		ND		13	43
3 & 4 Methylphenol		ND		13	43
3,3'-Dichlorobenzidine		ND		13	86
3-Nitroaniline		ND		13	210
4,6-Dinitro-2-methylphenol		ND		13	210
4-Bromophenyl phenyl ether		ND		13	43
4-Chloro-3-methylphenol		ND		13	86
4-Chloroaniline		ND		13	86
4-Chlorophenyl phenyl ether		ND		13	43
4-Nitroaniline		ND		13	210
4-Nitrophenol		ND		13	210
Acenaphthene		ND		13	43
Acenaphthylene		ND		13	43
Acetophenone		ND		13	43
Aniline		ND	J	13	43
Anthracene		ND		13	43
Atrazine		ND		13	43
Azobenzene		ND		13	43
Benzaldehyde		51		13	43
Benzo[a]anthracene		ND		13	43
Benzo[a]pyrene		15	J	13	43
Benzo[b]fluoranthene		18	J	13	43
Benzo[g,h,i]perylene		ND		13	43
Benzo[k]fluoranthene		ND		13	43
Benzoic acid		2104J ~~130~~	JB	19	210

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Client: Olin Corporation

Job Number: 360-24665-1
Sdg Number: OCRI-17

Client Sample ID: OC-SS-451-0.0/1.0-XXX

Lab Sample ID: 360-24665-9
Client Matrix: Solid % Moisture: 23.1

Date Sampled: 09/16/2009 1520
Date Received: 09/17/2009 1630

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49983		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49545		Lab File ID:	B10783.D
Dilution:	1.0			Initial Weight/Volume:	30.30 g
Date Analyzed:	10/07/2009 0109			Final Weight/Volume:	1.0 mL
Date Prepared:	09/28/2009 1051			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		13	43
Benzyl alcohol		ND		37	86
Bis(2-chloroethoxy)methane		ND		13	43
Bis(2-chloroethyl)ether		ND		13	43
Bis(2-ethylhexyl) phthalate		20	J	13	43
Butyl benzyl phthalate		ND		13	43
Caprolactam		ND		13	43
Carbazole		ND		13	43
Chrysene		18	J	13	43
Dibenz(a,h)anthracene		ND		13	43
Dibenzofuran		ND		13	43
Diethyl phthalate		ND		13	43
Dimethyl phthalate		ND		13	43
Di-n-butyl phthalate		ND		38	43
Di-n-octyl phthalate		ND		22	43
Diphenyl oxide		ND		13	43
Fluoranthene		29	J	13	43
Fluorene		ND		13	43
Hexachlorobenzene		ND		13	43
Hexachlorobutadiene		ND		13	43
Hexachlorocyclopentadiene		ND		13	86
Hexachloroethane		ND		13	43
Indeno[1,2,3-cd]pyrene		21	J	13	43
Isophorone		ND		13	43
Naphthalene		ND		13	100
Nitrobenzene		ND		13	43
N-Nitrosodimethylamine		ND		15	43
N-Nitrosodi-n-propylamine		ND		13	43
N-Nitrosodiphenylamine		ND		13	43
Pentachlorophenol		ND		13	43
Phenanthrene		18	J	13	52
Phenol		ND		13	43
Pyrene		33	J	13	43

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	56		30 - 130
2-Fluorobiphenyl	50		30 - 130
2-Fluorophenol	68		30 - 130
Nitrobenzene-d5	50		30 - 130
Phenol-d5	51		30 - 130
Terphenyl-d14	67		30 - 130

Client: Olin Corporation

Job Number: 360-24665-1
Sdg Number: OCRI-17

Client Sample ID: **OC-SS-451-0.0/1.0-XXX**

Lab Sample ID: 360-24665-9
Client Matrix: Solid % Moisture: 23.1

Date Sampled: 09/16/2009 1520
Date Received: 09/17/2009 1630

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49983		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49545		Lab File ID:	B10783.D
Dilution:	1.0			Initial Weight/Volume:	30.30 g
Date Analyzed:	10/07/2009 0109			Final Weight/Volume:	1.0 mL
Date Prepared:	09/28/2009 1051			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 10

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
121-33-5	Vanillin	8.50	67	T J N
121-34-6	Benzoic acid, 4-hydroxy-3-methoxy-	9.18	67	T J N
88256-5-7	1,3,4-Trimethoxydibenzofuran-2-ol (.alph	11.63	140	T J N
112-88-9	1-Octadecene	11.66	380	T J N
3452-7-1	1-Eicosene	12.28	1000	T J N
1599-67-3	1-Docosene	13.12	1800	T J N
112-88-9	1-Octadecene	14.34	2000	T J N
14811-95-1	1,19-Eicosadiene	15.38	1100	T J N
544-85-4	Dotriacontane	15.66	1300	T J N
83-47-6	.gamma.-Sitosterol	16.69	870	T J N

Client: Olin Corporation

Job Number: 360-24665-1
Sdg Number: OCRI-17

Client Sample ID: **OC-SS-454-0.0/1.0-XXX**

Lab Sample ID: 360-24665-10
Client Matrix: Solid % Moisture: 13.5

Date Sampled: 09/17/2009 0755
Date Received: 09/17/2009 1630

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-50051		Instrument ID:	inst. B
Preparation:	3546	Prep Batch: 360-49545		Lab File ID:	B10814.D
Dilution:	1.0			Initial Weight/Volume:	30.18 g
Date Analyzed:	10/08/2009 1756			Final Weight/Volume:	1.0 mL
Date Prepared:	09/28/2009 1051			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		11	38
1,2,4,5-Tetrachlorobenzene		ND		11	38
1,2,4-Trichlorobenzene		ND		11	38
1,2-Dichlorobenzene		ND		11	38
1,3-Dichlorobenzene		ND		11	38
1,4-Dichlorobenzene		ND		11	38
1-Methylnaphthalene		ND		11	38
2,2'-oxybis[1-chloropropane]		ND		11	38
2,3,4,6-Tetrachlorophenol		ND		11	38
2,4,5-Trichlorophenol		ND		11	38
2,4,6-Trichlorophenol		ND		11	38
2,4-Dichlorophenol		ND		11	38
2,4-Dimethylphenol		ND		15	38
2,4-Dinitrophenol		ND		11	38
2,4-Dinitrotoluene		ND		11	38
2,6-Dinitrotoluene		ND		11	38
2-Chloronaphthalene		ND		11	38
2-Chlorophenol		ND		11	38
2-Methylnaphthalene		ND		11	38
2-Methylphenol		ND		23	38
2-Nitroaniline		ND		11	190
2-Nitrophenol		ND		11	38
3 & 4 Methylphenol		ND		11	38
3,3'-Dichlorobenzidine		ND		11	77
3-Nitroaniline		ND		11	190
4,6-Dinitro-2-methylphenol		ND		11	190
4-Bromophenyl phenyl ether		ND		11	38
4-Chloro-3-methylphenol		ND		11	77
4-Chloroaniline		ND		11	77
4-Chlorophenyl phenyl ether		ND		11	38
4-Nitroaniline		ND		11	190
4-Nitrophenol		ND		11	190
Acenaphthene		ND		11	38
Acenaphthylene		ND		11	38
Acetophenone		ND		11	38
Aniline		ND J		11	38
Anthracene		ND		11	38
Atrazine		ND		11	38
Azobenzene		ND		11	38
Benzaldehyde		67		11	38
Benzo[a]anthracene		13	J	11	38
Benzo[a]pyrene		18	J	11	38
Benzo[b]fluoranthene		19	J	11	38
Benzo[g,h,i]perylene		15	J	11	38
Benzo[k]fluoranthene		ND		11	38
Benzoic acid		190 J 180	J-B	17	190

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Client: Olin Corporation

Job Number: 360-24665-1
Sdg Number: OCRI-17

Client Sample ID: **OC-SS-454-0.0/1.0-XXX**

Lab Sample ID: 360-24665-10
Client Matrix: Solid % Moisture: 13.5

Date Sampled: 09/17/2009 0755
Date Received: 09/17/2009 1630

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-50051		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49545		Lab File ID:	B10814.D
Dilution:	1.0			Initial Weight/Volume:	30.18 g
Date Analyzed:	10/08/2009 1756			Final Weight/Volume:	1.0 mL
Date Prepared:	09/28/2009 1051			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		11	38
Benzyl alcohol		ND		33	77
Bis(2-chloroethoxy)methane		ND		11	38
Bis(2-chloroethyl)ether		ND		11	38
Bis(2-ethylhexyl) phthalate		ND		11	38
Butyl benzyl phthalate		ND		11	38
Caprolactam		ND		11	38
Carbazole		ND		11	38
Chrysene		20	J	11	38
Dibenz(a,h)anthracene		ND		11	38
Dibenzofuran		ND		11	38
Diethyl phthalate		ND		11	38
Dimethyl phthalate		ND		11	38
Di-n-butyl phthalate		ND		34	38
Di-n-octyl phthalate		ND		19	38
Diphenyl oxide		ND		11	38
Fluoranthene		23	J	11	38
Fluorene		ND		11	38
Hexachlorobenzene		ND		11	38
Hexachlorobutadiene		ND		11	38
Hexachlorocyclopentadiene		ND		11	77
Hexachloroethane		ND		11	38
Indeno[1,2,3-cd]pyrene		17	J	11	38
Isophorone		ND		11	38
Naphthalene		ND		11	92
Nitrobenzene		ND		11	38
N-Nitrosodimethylamine		ND		14	38
N-Nitrosodi-n-propylamine		ND		11	38
N-Nitrosodiphenylamine		ND		11	38
Pentachlorophenol		ND		11	38
Phenanthrene		14	J	11	46
Phenol		ND		11	38
Pyrene		27	J	11	38

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	62		30 - 130
2-Fluorobiphenyl	53		30 - 130
2-Fluorophenol	71		30 - 130
Nitrobenzene-d5	55		30 - 130
Phenol-d5	52		30 - 130
Terphenyl-d14	62		30 - 130

Client: Olin Corporation

Job Number: 360-24665-1
Sdg Number: OCRI-17

Client Sample ID: **OC-SS-454-0.0/1.0-XXX**

Lab Sample ID: 360-24665-10
Client Matrix: Solid % Moisture: 13.5

Date Sampled: 09/17/2009 0755
Date Received: 09/17/2009 1630

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-50051		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49545		Lab File ID:	B10814.D
Dilution:	1.0			Initial Weight/Volume:	30.18 g
Date Analyzed:	10/08/2009 1756			Final Weight/Volume:	1.0 mL
Date Prepared:	09/28/2009 1051			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 8

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
1454-85-9	1-Heptadecanol	11.52	200	T J N
1000155-85-3	Cyclohexadecane, 1,2-diethyl-	12.11	1400	T J N
1599-67-3	1-Docosene	12.45	190	T J N
1599-67-3	1-Docosene	12.86	2500	T J N
7390-81-0	Oxirane, hexadecyl-	15.03	25	T J N
55282-14-9	Docosane, 9-butyl-	15.38	31	T J N
14021-23-9	D-Friedoolean-14-ene, 3-methoxy-, (3.bet	16.07	42	T J N
83-47-6	.gamma.-Sitosterol	16.38	12	T J N

Client: Olin Corporation

Job Number: 360-24665-1
Sdg Number: OCRI-17

Client Sample ID: **OC-SS-455-0.0/1.0-XXX**

Lab Sample ID: 360-24665-11
Client Matrix: Solid % Moisture: 15.1

Date Sampled: 09/16/2009 1750
Date Received: 09/17/2009 1630

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49520	Instrument ID: Inst. J
Preparation:	3550B	Prep Batch: 360-49302	Lab File ID: J03170.D
Dilution:	1.0		Initial Weight/Volume: 100.11 g
Date Analyzed:	09/26/2009 2249		Final Weight/Volume: 1.0 mL
Date Prepared:	09/22/2009 1155		Injection Volume: 1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodimethylamine		ND		1.4	5.9

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	70		30 - 130
2-Fluorobiphenyl	55		30 - 130
2-Fluorophenol	52		30 - 130
Nitrobenzene-d5	58		30 - 130
Phenol-d5	54		30 - 130
Terphenyl-d14	64		30 - 130

Client: Olin Corporation

Job Number: 360-24665-1
Sdg Number: OCRI-17

Client Sample ID: **OC-SS-455-0.0/1.0-XXX**

Lab Sample ID: 360-24665-11
Client Matrix: Solid

% Moisture: 15.1

Date Sampled: 09/16/2009 1750
Date Received: 09/17/2009 1630

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49983		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49545		Lab File ID:	B10784.D
Dilution:	1.0			Initial Weight/Volume:	30.34 g
Date Analyzed:	10/07/2009 0137			Final Weight/Volume:	1.0 mL
Date Prepared:	09/28/2009 1051			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		12	39
1,2,4,5-Tetrachlorobenzene		ND		12	39
1,2,4-Trichlorobenzene		ND		12	39
1,2-Dichlorobenzene		ND		12	39
1,3-Dichlorobenzene		ND		12	39
1,4-Dichlorobenzene		ND		12	39
1-Methylnaphthalene		ND		12	39
2,2'-oxybis[1-chloropropane]		ND		12	39
2,3,4,6-Tetrachlorophenol		ND		12	39
2,4,5-Trichlorophenol		ND		12	39
2,4,6-Trichlorophenol		ND		12	39
2,4-Dichlorophenol		ND		12	39
2,4-Dimethylphenol		ND		15	39
2,4-Dinitrophenol		ND		12	39
2,4-Dinitrotoluene		ND		12	39
2,6-Dinitrotoluene		ND		12	39
2-Chloronaphthalene		ND		12	39
2-Chlorophenol		ND		12	39
2-Methylnaphthalene		ND		12	39
2-Methylphenol		ND		23	39
2-Nitroaniline		ND		12	190
2-Nitrophenol		ND		12	39
3 & 4 Methylphenol		ND		12	39
3,3'-Dichlorobenzidine		ND		12	78
3-Nitroaniline		ND		12	190
4,6-Dinitro-2-methylphenol		ND		12	190
4-Bromophenyl phenyl ether		ND		12	39
4-Chloro-3-methylphenol		ND		12	78
4-Chloroaniline		ND		12	78
4-Chlorophenyl phenyl ether		ND		12	39
4-Nitroaniline		ND		12	190
4-Nitrophenol		ND		12	190
Acenaphthene		ND		12	39
Acenaphthylene		ND		12	39
Acetophenone		ND		12	39
Aniline		ND	J	12	39
Anthracene		ND		12	39
Atrazine		ND		12	39
Azobenzene		ND		12	39
Benzaldehyde		45		12	39
Benzo[a]anthracene		ND		12	39
Benzo[a]pyrene		ND		12	39
Benzo[b]fluoranthene		ND		12	39
Benzo[g,h,i]perylene		ND		12	39
Benzo[k]fluoranthene		ND		12	39
Benzoic acid		1904 J-86	J-B	17	190

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Client: Olin Corporation

Job Number: 360-24665-1
Sdg Number: OCRI-17

Client Sample ID: **OC-SS-455-0.0/1.0-XXX**

Lab Sample ID: 360-24665-11
Client Matrix: Solid
% Moisture: 15.1

Date Sampled: 09/16/2009 1750
Date Received: 09/17/2009 1630

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49983	Instrument ID: Inst. B
Preparation:	3546	Prep Batch: 360-49545	Lab File ID: B10784.D
Dilution:	1.0		Initial Weight/Volume: 30.34 g
Date Analyzed:	10/07/2009 0137		Final Weight/Volume: 1.0 mL
Date Prepared:	09/28/2009 1051		Injection Volume: 1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		12	39
Benzyl alcohol		ND		33	78
Bis(2-chloroethoxy)methane		ND		12	39
Bis(2-chloroethyl)ether		ND		12	39
Bis(2-ethylhexyl) phthalate		12	J	12	39
Butyl benzyl phthalate		ND		12	39
Caprolactam		ND		12	39
Carbazole		ND		12	39
Chrysene		ND		12	39
Dibenz(a,h)anthracene		ND		12	39
Dibenzofuran		ND		12	39
Diethyl phthalate		ND		12	39
Dimethyl phthalate		ND		12	39
Di-n-butyl phthalate		ND		34	39
Di-n-octyl phthalate		ND		20	39
Diphenyl oxide		ND		12	39
Diphenylamine		ND		12	39
Fluoranthene		15	J	12	39
Fluorene		ND		12	39
Hexachlorobenzene		ND		12	39
Hexachlorobutadiene		ND		12	39
Hexachlorocyclopentadiene		ND		12	78
Hexachloroethane		ND		12	39
Indeno[1,2,3-cd]pyrene		17	J	12	39
Isophorone		ND		12	39
Naphthalene		ND		12	93
Nitrobenzene		ND		12	39
N-Nitrosodimethylamine		ND		14	39
N-Nitrosodi-n-propylamine		ND		12	39
N-Nitrosodiphenylamine		ND		12	39
Pentachlorophenol		ND		12	39
Phenanthrene		ND		12	47
Phenol		ND		12	39
Pyrene		18	J	12	39

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	42		30 - 130
2-Fluorophenol	62		30 - 130
2-Fluorobiphenyl	43		30 - 130
Nitrobenzene-d5	45		30 - 130
Phenol-d5	48		30 - 130
Terphenyl-d14	61		30 - 130

W. Olin 3/12/10

Client: Olin Corporation

Job Number: 360-24665-1
Sdg Number: OCRI-17

Client Sample ID: **OC-SS-455-0.0/1.0-XXX**

Lab Sample ID: 360-24665-11
Client Matrix: Solid % Moisture: 15.1

Date Sampled: 09/16/2009 1750
Date Received: 09/17/2009 1630

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49983		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49545		Lab File ID:	B10784.D
Dilution:	1.0			Initial Weight/Volume:	30.34 g
Date Analyzed:	10/07/2009 0137			Final Weight/Volume:	1.0 mL
Date Prepared:	09/28/2009 1051			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 7

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
1000155-85-3	Cyclohexadecane, 1,2-diethyl-	11.67	420	T J N
1599-67-3	1-Docosene	12.29	3500	T J N
6624-79-9	1-Dotriacontanol	12.66	420	T J N
53057-53-7	1,21-Docosadiene	12.82	260	T J N
297-3-0	Cyclotetracosane	13.14	5900	T J N
56554-90-6	13-Octadecenal	15.38	21	T J N
630-6-8	Hexatriacontane	15.66	22	T J N

Client: Olin Corporation

Job Number: 360-24665-1
Sdg Number: OCRI-17

Client Sample ID: **OC-SS-460-0.0/1.0-XXX**

Lab Sample ID: 360-24665-12
Client Matrix: Solid % Moisture: 15.6

Date Sampled: 09/16/2009 1730
Date Received: 09/17/2009 1630

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49520		Instrument ID:	Inst. J
Preparation:	3550B	Prep Batch: 360-49302		Lab File ID:	J03171.D
Dilution:	1.0			Initial Weight/Volume:	100.69 g
Date Analyzed:	09/26/2009 2322			Final Weight/Volume:	1.0 mL
Date Prepared:	09/22/2009 1155			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodimethylamine		ND		1.4	5.9

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	59		30 - 130
2-Fluorobiphenyl	46		30 - 130
2-Fluorophenol	39		30 - 130
Nitrobenzene-d5	52		30 - 130
Phenol-d5	45		30 - 130
Terphenyl-d14	57		30 - 130

Client: Olin Corporation

Job Number: 360-24665-1
Sdg Number: OCRI-17

Client Sample ID: **OC-SS-460-0.0/1.0-XXX**

Lab Sample ID: 360-24665-12
Client Matrix: Solid % Moisture: 15.6

Date Sampled: 09/16/2009 1730
Date Received: 09/17/2009 1630

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49983		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49545		Lab File ID:	B10785.D
Dilution:	1.0			Initial Weight/Volume:	30.19 g
Date Analyzed:	10/07/2009 0204			Final Weight/Volume:	1.0 mL
Date Prepared:	09/28/2009 1051			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		12	39
1,2,4,5-Tetrachlorobenzene		ND		12	39
1,2,4-Trichlorobenzene		ND		12	39
1,2-Dichlorobenzene		ND		12	39
1,3-Dichlorobenzene		ND		12	39
1,4-Dichlorobenzene		ND		12	39
1-Methylnaphthalene		ND		12	39
2,2'-oxybis[1-chloropropane]		ND		12	39
2,3,4,6-Tetrachlorophenol		ND		12	39
2,4,5-Trichlorophenol		ND		12	39
2,4,6-Trichlorophenol		ND		12	39
2,4-Dichlorophenol		ND		12	39
2,4-Dimethylphenol		ND		15	39
2,4-Dinitrophenol		ND		12	39
2,4-Dinitrotoluene		ND		12	39
2,6-Dinitrotoluene		ND		12	39
2-Chloronaphthalene		ND		12	39
2-Chlorophenol		ND		12	39
2-Methylnaphthalene		ND		12	39
2-Methylphenol		ND		24	39
2-Nitroaniline		ND		12	200
2-Nitrophenol		ND		12	39
3 & 4 Methylphenol		ND		12	39
3,3'-Dichlorobenzidine		ND		12	79
3-Nitroaniline		ND		12	200
4,6-Dinitro-2-methylphenol		ND		12	200
4-Bromophenyl phenyl ether		ND		12	39
4-Chloro-3-methylphenol		ND		12	79
4-Chloroaniline		ND		12	79
4-Chlorophenyl phenyl ether		ND		12	39
4-Nitroaniline		ND		12	200
4-Nitrophenol		ND		12	200
Acenaphthene		ND		12	39
Acenaphthylene		ND		12	39
Acetophenone		ND		12	39
Aniline		ND J		12	39
Anthracene		ND		12	39
Atrazine		ND		12	39
Azobenzene		ND		12	39
Benzaldehyde		98		12	39
Benzo[a]anthracene		12	J	12	39
Benzo[a]pyrene		14	J	12	39
Benzo[b]fluoranthene		20	J	12	39
Benzo[g,h,i]perylene		ND		12	39
Benzo[k]fluoranthene		ND		12	39
Benzoic acid		2000 J 140	J-B	18	200

W. Clark 3/12/10

Client: Olin Corporation

Job Number: 360-24665-1
Sdg Number: OCRI-17

Client Sample ID: **OC-SS-460-0.0/1.0-XXX**

Lab Sample ID: 360-24665-12
Client Matrix: Solid % Moisture: 15.6

Date Sampled: 09/16/2009 1730
Date Received: 09/17/2009 1630

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49983	Instrument ID: Inst. B
Preparation:	3546	Prep Batch: 360-49545	Lab File ID: B10785.D
Dilution:	1.0		Initial Weight/Volume: 30.19 g
Date Analyzed:	10/07/2009 0204		Final Weight/Volume: 1.0 mL
Date Prepared:	09/28/2009 1051		Injection Volume: 1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		12	39
Benzyl alcohol		ND		33	79
Bis(2-chloroethoxy)methane		ND		12	39
Bis(2-chloroethyl)ether		ND		12	39
Bis(2-ethylhexyl) phthalate		14	J	12	39
Butyl benzyl phthalate		ND		12	39
Caprolactam		ND		12	39
Carbazole		ND		12	39
Chrysene		18	J	12	39
Dibenz(a,h)anthracene		ND		12	39
Dibenzofuran		ND		12	39
Diethyl phthalate		ND		12	39
Dimethyl phthalate		ND		12	39
Di-n-butyl phthalate		ND		34	39
Di-n-octyl phthalate		ND		20	39
Diphenyl oxide		ND		12	39
Diphenylamine		ND		12	39
Fluoranthene		25	J	12	39
Fluorene		ND		12	39
Hexachlorobenzene		ND		12	39
Hexachlorobutadiene		ND		12	39
Hexachlorocyclopentadiene		ND		12	79
Hexachloroethane		ND		12	39
Indeno[1,2,3-cd]pyrene		21	J	12	39
Isophorone		ND		12	39
Naphthalene		ND		12	94
Nitrobenzene		ND		12	39
N-Nitrosodimethylamine		ND		14	39
N-Nitrosodi-n-propylamine		ND		12	39
N-Nitrosodiphenylamine		ND		12	39
Pentachlorophenol		ND		12	39
Phenanthrene		14	J	12	47
Phenol		ND		12	39
Pyrene		29	J	12	39

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	42		30 - 130
2-Fluorophenol	59		30 - 130
2-Fluorobiphenyl	40		30 - 130
Nitrobenzene-d5	43		30 - 130
Phenol-d5	45		30 - 130
Terphenyl-d14	61		30 - 130

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Client: Olin Corporation

Job Number: 360-24665-1
Sdg Number: OCRI-17

Client Sample ID: **OC-SS-460-0.0/1.0-XXX**

Lab Sample ID: 360-24665-12
Client Matrix: Solid % Moisture: 15.6

Date Sampled: 09/16/2009 1730
Date Received: 09/17/2009 1630

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49983		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49545		Lab File ID:	B10785.D
Dilution:	1.0			Initial Weight/Volume:	30.19 g
Date Analyzed:	10/07/2009 0204			Final Weight/Volume:	1.0 mL
Date Prepared:	09/28/2009 1051			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 10

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
112-88-9	1-Octadecene	11.67	430	T J N
~~638-67-5~~	~~Tricosane~~	~~11.69~~	~~260~~	~~T J N~~
7225-64-1	Heptadecane, 9-octyl-	11.97	260	T J N
1599-67-3	1-Docosene	12.30	3000	T J N
2136-70-1	Ethanol, 2-(tetradecyloxy)-	12.67	430	T J N
53057-53-7	1,21-Docosadiene	12.83	500	T J N
297-3-0	Cyclotetracosane	13.15	7300	T J N
7390-81-0	Oxirane, hexadecyl-	15.39	36	T J N
630-6-8	Hexatriacontane	15.66	25	T J N
559-74-0	Friedelin	18.10	260	T J N

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Client: Olin Corporation

Job Number: 360-24665-1
Sdg Number: OCRI-17

Client Sample ID: **OC-SB-406-0.0/1.0-XXX**

Lab Sample ID: 360-24665-13
Client Matrix: Solid % Moisture: 56.8

Date Sampled: 09/17/2009 1125
Date Received: 09/17/2009 1630

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49983		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49545		Lab File ID:	B10786.D
Dilution:	1.0			Initial Weight/Volume:	30.19 g
Date Analyzed:	10/07/2009 0232			Final Weight/Volume:	1.0 mL
Date Prepared:	09/28/2009 1051			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		23	77
1,2,4,5-Tetrachlorobenzene		ND		23	77
1,2,4-Trichlorobenzene		ND		23	77
1,2-Dichlorobenzene		ND		23	77
1,3-Dichlorobenzene		ND		23	77
1,4-Dichlorobenzene		ND		23	77
1-Methylnaphthalene		ND		23	77
2,2'-oxybis[1-chloropropane]		ND		23	77
2,3,4,6-Tetrachlorophenol		ND		23	77
2,4,5-Trichlorophenol		ND		23	77
2,4,6-Trichlorophenol		ND		23	77
2,4-Dichlorophenol		ND		23	77
2,4-Dimethylphenol		ND		30	77
2,4-Dinitrophenol		ND		23	77
2,4-Dinitrotoluene		ND		23	77
2,6-Dinitrotoluene		ND		23	77
2-Chloronaphthalene		ND		23	77
2-Chlorophenol		ND		23	77
2-Methylnaphthalene		ND		23	77
2-Methylphenol		ND		46	77
2-Nitroaniline		ND		23	380
2-Nitrophenol		ND		23	77
3 & 4 Methylphenol		ND		23	77
3,3'-Dichlorobenzidine		ND		23	150
3-Nitroaniline		ND		23	380
4,6-Dinitro-2-methylphenol		ND		23	380
4-Bromophenyl phenyl ether		ND		23	77
4-Chloro-3-methylphenol		ND		23	150
4-Chloroaniline		ND		23	150
4-Chlorophenyl phenyl ether		ND		23	77
4-Nitroaniline		ND		23	380
4-Nitrophenol		ND		23	380
Acenaphthene		ND		23	77
Acenaphthylene		ND		23	77
Acetophenone		38	J	23	77
Aniline		ND		23	77
Anthracene		ND		23	77
Atrazine		ND		23	77
Azobenzene		ND		23	77
Benzaldehyde		220		23	77
Benzo[a]anthracene		ND		23	77
Benzo[a]pyrene		ND		23	77
Benzo[b]fluoranthene		ND		23	77
Benzo[g,h,i]perylene		ND		23	77
Benzo[k]fluoranthene		ND		23	77
Benzoic acid		420	B	34	380

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Client: Olin Corporation

Job Number: 360-24665-1
Sdg Number: OCRI-17

Client Sample ID: **OC-SB-406-0.0/1.0-XXX**

Lab Sample ID: 360-24665-13
Client Matrix: Solid % Moisture: 56.8

Date Sampled: 09/17/2009 1125
Date Received: 09/17/2009 1630

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49983	Instrument ID: Inst. B
Preparation:	3546	Prep Batch: 360-49545	Lab File ID: B10786.D
Dilution:	1.0		Initial Weight/Volume: 30.19 g
Date Analyzed:	10/07/2009 0232		Final Weight/Volume: 1.0 mL
Date Prepared:	09/28/2009 1051		Injection Volume: 1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		23	77
Benzyl alcohol		ND		65	150
Bis(2-chloroethoxy)methane		ND		23	77
Bis(2-chloroethyl)ether		ND		23	77
Bis(2-ethylhexyl) phthalate		36	J	23	77
Butyl benzyl phthalate		ND		23	77
Caprolactam		ND		23	77
Carbazole		ND		23	77
Chrysene		31	J	23	77
Dibenz(a,h)anthracene		ND		23	77
Dibenzofuran		ND		23	77
Diethyl phthalate		ND		23	77
Dimethyl phthalate		ND		23	77
Di-n-butyl phthalate		ND		67	77
Di-n-octyl phthalate		ND		39	77
Diphenyl oxide		ND		23	77
Fluoranthene		43	J	23	77
Fluorene		ND		23	77
Hexachlorobenzene		ND		23	77
Hexachlorobutadiene		ND		23	77
Hexachlorocyclopentadiene		ND		23	150
Hexachloroethane		ND		23	77
Indeno[1,2,3-cd]pyrene		38	J	23	77
Isophorone		ND		23	77
Naphthalene		ND		23	180
Nitrobenzene		ND		23	77
N-Nitrosodimethylamine		ND		27	77
N-Nitrosodi-n-propylamine		ND		23	77
N-Nitrosodiphenylamine		ND		23	77
Pentachlorophenol		ND		23	77
Phenanthrene		32	J	23	92
Phenol		ND		23	77
Pyrene		42	J	23	77

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	26	X	30 - 130
2-Fluorobiphenyl	28	X	30 - 130
2-Fluorophenol	37		30 - 130
Nitrobenzene-d5	33		30 - 130
Phenol-d5	34		30 - 130
Terphenyl-d14	31		30 - 130

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Client: Olin Corporation

Job Number: 360-24665-1
Sdg Number: OCRI-17

Client Sample ID: **OC-SB-406-0.0/1.0-XXX**

Lab Sample ID: 360-24665-13
Client Matrix: Solid % Moisture: 56.8

Date Sampled: 09/17/2009 1125
Date Received: 09/17/2009 1630

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49983		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49545		Lab File ID:	B10786.D
Dilution:	1.0			Initial Weight/Volume:	30.19 g
Date Analyzed:	10/07/2009 0232			Final Weight/Volume:	1.0 mL
Date Prepared:	09/28/2009 1051			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** **10**

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
17108-52-0	Furan, 2,3-dihydro-2,5-dimethyl-	4.59	290	T J N
621-59-0	Benzaldehyde, 3-hydroxy-4-methoxy-	8.51	360	T J N
97-54-1	Phenol, 2-methoxy-4-(1-propenyl)-	8.73	240	T J N
498-2-2	Ethanone, 1-(4-hydroxy-3-methoxyphenyl)-	8.89	240	T J N
99-96-7	Benzoic acid, 4-hydroxy-	9.05	250	T J N
121-34-6	Benzoic acid, 4-hydroxy-3-methoxy-	9.24	450	T J N
18435-45-5	1-Nonadecene	11.67	550	T J N
638-67-5	Tricosane	11.69	500	T J N
629-92-5	Nonadecane	11.98	460	T J N
14811-95-1	1,19-Eicosadiene	12.08	220	T J N

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Client: Olin Corporation

Job Number: 360-24665-1
Sdg Number: OCRI-17

Client Sample ID: **OC-SB-406-8.0/10-XXX**

Lab Sample ID: 360-24665-15
Client Matrix: Solid % Moisture: 14.9

Date Sampled: 09/17/2009 1145
Date Received: 09/17/2009 1630

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-50051		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49545		Lab File ID:	B10815.D
Dilution:	1.0			Initial Weight/Volume:	30.14 g
Date Analyzed:	10/08/2009 1824			Final Weight/Volume:	1.0 mL
Date Prepared:	09/28/2009 1051			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		12	39
1,2,4,5-Tetrachlorobenzene		ND		12	39
1,2,4-Trichlorobenzene		ND		12	39
1,2-Dichlorobenzene		ND		12	39
1,3-Dichlorobenzene		ND		12	39
1,4-Dichlorobenzene		ND		12	39
1-Methylnaphthalene		ND		12	39
2,2'-oxybis[1-chloropropane]		ND		12	39
2,3,4,6-Tetrachlorophenol		ND		12	39
2,4,5-Trichlorophenol		ND		12	39
2,4,6-Trichlorophenol		ND		12	39
2,4-Dichlorophenol		ND		12	39
2,4-Dimethylphenol		ND		15	39
2,4-Dinitrophenol		ND		12	39
2,4-Dinitrotoluene		ND		12	39
2,6-Dinitrotoluene		ND		12	39
2-Chloronaphthalene		ND		12	39
2-Chlorophenol		ND		12	39
2-Methylnaphthalene		ND		12	39
2-Methylphenol		ND		23	39
2-Nitroaniline		ND		12	190
2-Nitrophenol		ND		12	39
3 & 4 Methylphenol		ND		12	39
3,3'-Dichlorobenzidine		ND		12	78
3-Nitroaniline		ND		12	190
4,6-Dinitro-2-methylphenol		ND		12	190
4-Bromophenyl phenyl ether		ND		12	39
4-Chloro-3-methylphenol		ND		12	78
4-Chloroaniline		ND		12	78
4-Chlorophenyl phenyl ether		ND		12	39
4-Nitroaniline		ND		12	190
4-Nitrophenol		ND		12	190
Acenaphthene		ND		12	39
Acenaphthylene		ND		12	39
Acetophenone		ND		12	39
Aniline		ND J		12	39
Anthracene		ND		12	39
Atrazine		ND		12	39
Azobenzene		ND		12	39
Benzaldehyde		ND		12	39
Benzo[a]anthracene		ND		12	39
Benzo[a]pyrene		ND		12	39
Benzo[b]fluoranthene		ND		12	39
Benzo[g,h,i]perylene		ND		12	39
Benzo[k]fluoranthene		ND		12	39
Benzoic acid		ND J		18	190

Client: Olin Corporation

Job Number: 360-24665-1
Sdg Number: OCRI-17

Client Sample ID: OC-SB-406-8.0/10-XXX

Lab Sample ID: 360-24665-15
Client Matrix: Solid % Moisture: 14.9

Date Sampled: 09/17/2009 1145
Date Received: 09/17/2009 1630

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-50051	Instrument ID: Inst. B
Preparation:	3546	Prep Batch: 360-49545	Lab File ID: B10815.D
Dilution:	1.0		Initial Weight/Volume: 30.14 g
Date Analyzed:	10/08/2009 1824		Final Weight/Volume: 1.0 mL
Date Prepared:	09/28/2009 1051		Injection Volume: 1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		12	39
Benzyl alcohol		ND		33	78
Bis(2-chloroethoxy)methane		ND		12	39
Bis(2-chloroethyl)ether		ND		12	39
Bis(2-ethylhexyl) phthalate		ND		12	39
Butyl benzyl phthalate		ND		12	39
Caprolactam		ND		12	39
Carbazole		ND		12	39
Chrysene		ND		12	39
Dibenz(a,h)anthracene		ND		12	39
Dibenzofuran		ND		12	39
Diethyl phthalate		ND		12	39
Dimethyl phthalate		ND		12	39
Di-n-butyl phthalate		ND		34	39
Di-n-octyl phthalate		ND		20	39
Diphenyl oxide		ND		12	39
Fluoranthene		ND		12	39
Fluorene		ND		12	39
Hexachlorobenzene		ND		12	39
Hexachlorobutadiene		ND		12	39
Hexachlorocyclopentadiene		ND		12	78
Hexachloroethane		ND		12	39
Indeno[1,2,3-cd]pyrene		ND		12	39
Isophorone		ND		12	39
Naphthalene		ND		12	94
Nitrobenzene		ND		12	39
N-Nitrosodimethylamine		ND		14	39
N-Nitrosodi-n-propylamine		ND		12	39
N-Nitrosodiphenylamine		ND		12	39
Pentachlorophenol		ND		12	39
Phenanthrene		ND		12	47
Phenol		ND		12	39
Pyrene		ND		12	39

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	62		30 - 130
2-Fluorobiphenyl	53		30 - 130
2-Fluorophenol	68		30 - 130
Nitrobenzene-d5	54		30 - 130
Phenol-d5	51		30 - 130
Terphenyl-d14	71		30 - 130

Client: Olin Corporation

Job Number: 360-24665-1
Sdg Number: OCRI-17

Client Sample ID: **OC-SB-406-8.0/10-XXX**

Lab Sample ID: 360-24665-15
Client Matrix: Solid % Moisture: 14.9

Date Sampled: 09/17/2009 1145
Date Received: 09/17/2009 1630

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-50051		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49545		Lab File ID:	B10815.D
Dilution:	1.0			Initial Weight/Volume:	30.14 g
Date Analyzed:	10/08/2009 1824			Final Weight/Volume:	1.0 mL
Date Prepared:	09/28/2009 1051			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 10

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
128-37-0	Butylated Hydroxytoluene	8.81	16	T J N
3910-35-8	1H-Indene, 2,3-dihydro-1,1,3-trimethyl-3	9.69	18	T J N
22768-22-5	2,4-Diphenyl-4-methyl-2(E)-pentene	10.10	13	T J N
5129-60-2	Pentadecanoic acid, 14-methyl-, methyl e	10.36	9.3	T J N
10544-50-0	Cyclic octaatomic sulfur	11.03	24	T J N
112-95-8	Eicosane	11.54	23	T J N
629-97-0	Docosane	11.82	25	T J N
593-45-3	Octadecane	12.11	58	T J N
630-2-4	Octacosane	12.45	33	T J N
593-45-3	Octadecane	12.84	45	T J N

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Client: Olin Corporation

Job Number: 360-24665-1
Sdg Number: OCRI-17

Client Sample ID: **OC-SB-413-0.0/1.0-XXX**

Lab Sample ID: 360-24665-16
Client Matrix: Solid

% Moisture: 27.4

Date Sampled: 09/17/2009 1110
Date Received: 09/17/2009 1630

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49520		Instrument ID:	Inst. J
Preparation:	3550B	Prep Batch: 360-49302		Lab File ID:	J03172.D
Dilution:	1.0			Initial Weight/Volume:	100.63 g
Date Analyzed:	09/26/2009 2354			Final Weight/Volume:	1.0 mL
Date Prepared:	09/22/2009 1155			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodimethylamine		ND		1.6	6.8

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	61		30 - 130
2-Fluorobiphenyl	47		30 - 130
2-Fluorophenol	44		30 - 130
Nitrobenzene-d5	50		30 - 130
Phenol-d5	48		30 - 130
Terphenyl-d14	55		30 - 130

Client: Olin Corporation

Job Number: 360-24665-1
Sdg Number: OCRI-17

Client Sample ID: **OC-SB-413-0.0/1.0-XXX**

Lab Sample ID: 360-24665-16
Client Matrix: Solid % Moisture: 27.4

Date Sampled: 09/17/2009 1110
Date Received: 09/17/2009 1630

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49983		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49545		Lab File ID:	B10788.D
Dilution:	1.0			Initial Weight/Volume:	30.23 g
Date Analyzed:	10/07/2009 0328			Final Weight/Volume:	1.0 mL
Date Prepared:	09/28/2009 1051			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		14	46
1,2,4,5-Tetrachlorobenzene		ND		14	46
1,2,4-Trichlorobenzene		ND		14	46
1,2-Dichlorobenzene		ND		14	46
1,3-Dichlorobenzene		ND		14	46
1,4-Dichlorobenzene		ND		14	46
1-Methylnaphthalene		ND		14	46
2,2'-oxybis[1-chloropropane]		ND		14	46
2,3,4,6-Tetrachlorophenol		ND		14	46
2,4,5-Trichlorophenol		ND		14	46
2,4,6-Trichlorophenol		ND		14	46
2,4-Dichlorophenol		ND		14	46
2,4-Dimethylphenol		ND		18	46
2,4-Dinitrophenol		ND		14	46
2,4-Dinitrotoluene		ND		14	46
2,6-Dinitrotoluene		ND		14	46
2-Chloronaphthalene		ND		14	46
2-Chlorophenol		ND		14	46
2-Methylnaphthalene		ND		14	46
2-Methylphenol		ND		27	46
2-Nitroaniline		ND		14	230
2-Nitrophenol		ND		14	46
3 & 4 Methylphenol		ND		14	46
3,3'-Dichlorobenzidine		ND		14	91
3-Nitroaniline		ND		14	230
4,6-Dinitro-2-methylphenol		ND		14	230
4-Bromophenyl phenyl ether		ND		14	46
4-Chloro-3-methylphenol		ND		14	91
4-Chloroaniline		ND		14	91
4-Chlorophenyl phenyl ether		ND		14	46
4-Nitroaniline		ND		14	230
4-Nitrophenol		ND		14	230
Acenaphthene		ND		14	46
Acenaphthylene		ND		14	46
Acetophenone		ND		14	46
Aniline		ND J		14	46
Anthracene		ND		14	46
Atrazine		ND		14	46
Azobenzene		ND		14	46
Benzaldehyde		86		14	46
Benzo[a]anthracene		15	J	14	46
Benzo[a]pyrene		21	J	14	46
Benzo[b]fluoranthene		28	J	14	46
Benzo[g,h,i]perylene		24	J	14	46
Benzo[k]fluoranthene		ND		14	46
Benzoic acid		~~210~~ 2360 J	J B	21	230

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Client: Olin Corporation

Job Number: 360-24665-1
Sdg Number: OCRI-17

Client Sample ID: **OC-SB-413-0.0/1.0-XXX**

Lab Sample ID: 360-24665-16
Client Matrix: Solid % Moisture: 27.4

Date Sampled: 09/17/2009 1110
Date Received: 09/17/2009 1630

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49983		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49545		Lab File ID:	B10788.D
Dilution:	1.0			Initial Weight/Volume:	30.23 g
Date Analyzed:	10/07/2009 0328			Final Weight/Volume:	1.0 mL
Date Prepared:	09/28/2009 1051			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		14	46
Benzyl alcohol		ND		39	91
Bis(2-chloroethoxy)methane		ND		14	46
Bis(2-chloroethyl)ether		ND		14	46
Bis(2-ethylhexyl) phthalate		22	J	14	46
Butyl benzyl phthalate		ND		14	46
Caprolactam		ND		14	46
Carbazole		ND		14	46
Chrysene		24	J	14	46
Dibenz(a,h)anthracene		ND		14	46
Dibenzofuran		ND		14	46
Diethyl phthalate		ND		14	46
Dimethyl phthalate		ND		14	46
Di-n-butyl phthalate		ND		40	46
Di-n-octyl phthalate		ND		23	46
Diphenyl oxide		ND		14	46
Diphenylamine		ND		14	46
Fluoranthene		37	J	14	46
Fluorene		ND		14	46
Hexachlorobenzene		ND		14	46
Hexachlorobutadiene		ND		14	46
Hexachlorocyclopentadiene		ND		14	91
Hexachloroethane		ND		14	46
Indeno[1,2,3-cd]pyrene		32	J	14	46
Isophorone		ND		14	46
Naphthalene		ND		14	110
Nitrobenzene		ND		14	46
N-Nitrosodimethylamine		ND		16	46
N-Nitrosodi-n-propylamine		ND		14	46
N-Nitrosodiphenylamine		ND		14	46
Pentachlorophenol		ND		14	46
Phenanthrene		26	J	14	55
Phenol		ND		14	46
Pyrene		43	J	14	46

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	51		30 - 130
2-Fluorophenol	66		30 - 130
2-Fluorobiphenyl	48		30 - 130
Nitrobenzene-d5	48		30 - 130
Phenol-d5	51		30 - 130
Terphenyl-d14	59		30 - 130

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Client: Olin Corporation

Job Number: 360-24665-1
Sdg Number: OCRI-17

Client Sample ID: **OC-SB-413-0.0/1.0-XXX**

Lab Sample ID: 360-24665-16
Client Matrix: Solid % Moisture: 27.4

Date Sampled: 09/17/2009 1110
Date Received: 09/17/2009 1630

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49983		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49545		Lab File ID:	B10788.D
Dilution:	1.0			Initial Weight/Volume:	30.23 g
Date Analyzed:	10/07/2009 0328			Final Weight/Volume:	1.0 mL
Date Prepared:	09/28/2009 1051			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** **10**

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
7785-70-8	1R-.alpha.-Pinene	5.55	300	T J N
87-44-5	Caryophyllene	8.65	140	T J N
112-88-9	1-Octadecene	11.67	190	T J N
62016-76-6	Nonadecane, 1-chloro-	11.98	73	T J N
77899-3-7	1-Heneicosyl formate	12.30	740	T J N
1000131-11-8	Z-5-Nonadecene	12.67	84	T J N
1599-67-3	1-Docosene	13.14	900	T J N
56554-87-1	16-Octadecanal	15.40	28	T J N
630-6-8	Hexatriacontane	15.67	59	T J N
559-74-0	Friedelin	18.07	42	T J N

Client: Olin Corporation

Job Number: 360-24665-1
Sdg Number: OCRI-17

Client Sample ID: **OC-SB-413-1.0/5.0-XXX**

Lab Sample ID: 360-24665-17
Client Matrix: Solid % Moisture: 10.9

Date Sampled: 09/17/2009 1020
Date Received: 09/17/2009 1630

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49521		Instrument ID:	Inst. J
Preparation:	3550B	Prep Batch: 360-49302		Lab File ID:	J03175.D
Dilution:	1.0			Initial Weight/Volume:	100.59 g
Date Analyzed:	09/27/2009 0132			Final Weight/Volume:	1.0 mL
Date Prepared:	09/22/2009 1155			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodimethylamine		ND		1.3	5.6

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	75		30 - 130
2-Fluorobiphenyl	56		30 - 130
2-Fluorophenol	53		30 - 130
Nitrobenzene-d5	55		30 - 130
Phenol-d5	58		30 - 130
Terphenyl-d14	78		30 - 130

Client: Olin Corporation

Job Number: 360-24665-1
Sdg Number: OCRI-17

Client Sample ID: **OC-SB-413-1.0/5.0-XXX**

Lab Sample ID: 360-24665-17
Client Matrix: Solid % Moisture: 10.9

Date Sampled: 09/17/2009 1020
Date Received: 09/17/2009 1630

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49983	Instrument ID: Inst. B
Preparation:	3546	Prep Batch: 360-49545	Lab File ID: B10789.D
Dilution:	1.0		Initial Weight/Volume: 30.52 g
Date Analyzed:	10/07/2009 0355		Final Weight/Volume: 1.0 mL
Date Prepared:	09/28/2009 1051		Injection Volume: 1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		11	37
1,2,4,5-Tetrachlorobenzene		ND		11	37
1,2,4-Trichlorobenzene		ND		11	37
1,2-Dichlorobenzene		ND		11	37
1,3-Dichlorobenzene		ND		11	37
1,4-Dichlorobenzene		ND		11	37
1-Methylnaphthalene		ND		11	37
2,2'-oxybis[1-chloropropane]		ND		11	37
2,3,4,6-Tetrachlorophenol		ND		11	37
2,4,5-Trichlorophenol		ND		11	37
2,4,6-Trichlorophenol		ND		11	37
2,4-Dichlorophenol		ND		11	37
2,4-Dimethylphenol		ND		14	37
2,4-Dinitrophenol		ND		11	37
2,4-Dinitrotoluene		ND		11	37
2,6-Dinitrotoluene		ND		11	37
2-Chloronaphthalene		ND		11	37
2-Chlorophenol		ND		11	37
2-Methylnaphthalene		ND		11	37
2-Methylphenol		ND		22	37
2-Nitroaniline		ND		11	180
2-Nitrophenol		ND		11	37
3 & 4 Methylphenol		ND		11	37
3,3'-Dichlorobenzidine		ND		11	74
3-Nitroaniline		ND		11	180
4,6-Dinitro-2-methylphenol		ND		11	180
4-Bromophenyl phenyl ether		ND		11	37
4-Chloro-3-methylphenol		ND		11	74
4-Chloroaniline		ND		11	74
4-Chlorophenyl phenyl ether		ND		11	37
4-Nitroaniline		ND		11	180
4-Nitrophenol		ND		11	180
Acenaphthene		ND		11	37
Acenaphthylene		ND		11	37
Acetophenone		ND		11	37
Aniline		ND J	✓	11	37
Anthracene		ND		11	37
Atrazine		ND		11	37
Azobenzene		ND		11	37
Benzaldehyde		ND		11	37
Benzo[a]anthracene		ND		11	37
Benzo[a]pyrene		ND		11	37
Benzo[b]fluoranthene		ND		11	37
Benzo[g,h,i]perylene		ND		11	37
Benzo[k]fluoranthene		ND		11	37
Benzoic acid		1804 J-46	JB	17	180

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Client: Olin Corporation

Job Number: 360-24665-1
Sdg Number: OCRI-17

Client Sample ID: OC-SB-413-1.0/5.0-XXX

Lab Sample ID: 360-24665-17
Client Matrix: Solid % Moisture: 10.9

Date Sampled: 09/17/2009 1020
Date Received: 09/17/2009 1630

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49983	Instrument ID: Inst. B
Preparation:	3546	Prep Batch: 360-49545	Lab File ID: B10789.D
Dilution:	1.0		Initial Weight/Volume: 30.52 g
Date Analyzed:	10/07/2009 0355		Final Weight/Volume: 1.0 mL
Date Prepared:	09/28/2009 1051		Injection Volume: 1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		11	37
Benzyl alcohol		ND		31	74
Bis(2-chloroethoxy)methane		ND		11	37
Bis(2-chloroethyl)ether		ND		11	37
Bis(2-ethylhexyl) phthalate		17	J	11	37
Butyl benzyl phthalate		ND		11	37
Caprolactam		ND		11	37
Carbazole		ND		11	37
Chrysene		ND		11	37
Dibenz(a,h)anthracene		ND		11	37
Dibenzofuran		ND		11	37
Diethyl phthalate		ND		11	37
Dimethyl phthalate		ND		11	37
Di-n-butyl phthalate		39	B	32	37
Di-n-octyl phthalate		ND		19	37
Diphenyl oxide		ND		11	37
Diphenylamine		ND		11	37
Fluoranthene		ND		11	37
Fluorene		ND		11	37
Hexachlorobenzene		ND		11	37
Hexachlorobutadiene		ND		11	37
Hexachlorocyclopentadiene		ND		11	74
Hexachloroethane		ND		11	37
Indeno[1,2,3-cd]pyrene		ND		11	37
Isophorone		ND		11	37
Naphthalene		ND		11	88
Nitrobenzene		ND		11	37
N-Nitrosodimethylamine		ND		13	37
N-Nitrosodi-n-propylamine		ND		11	37
N-Nitrosodiphenylamine		ND		11	37
Pentachlorophenol		ND		11	37
Phenanthrene		ND		11	44
Phenol		ND		11	37
Pyrene		ND		11	37

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	69		30 - 130
2-Fluorophenol	76		30 - 130
2-Fluorobiphenyl	58		30 - 130
Nitrobenzene-d5	57		30 - 130
Phenol-d5	55		30 - 130
Terphenyl-d14	86		30 - 130

5/12/10

Client: Olin Corporation

Job Number: 360-24665-1
Sdg Number: OCRI-17

Client Sample ID: **OC-SB-413-1.0/5.0-XXX**

Lab Sample ID: 360-24665-17
Client Matrix: Solid % Moisture: 10.9

Date Sampled: 09/17/2009 1020
Date Received: 09/17/2009 1630

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49983		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49545		Lab File ID:	B10789.D
Dilution:	1.0			Initial Weight/Volume:	30.52 g
Date Analyzed:	10/07/2009 0355			Final Weight/Volume:	1.0 mL
Date Prepared:	09/28/2009 1051			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 8

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
7785-70-8	1R-.alpha.-Pinene	5.55	23	T J N
128-37-0	Butylated Hydroxytoluene	8.95	33	T J N
3910-35-8	1H-Indene, 2,3-dihydro-1,1,3-trimethyl-3	9.84	25	T J N
5129-60-2	Pentadecanoic acid, 14-methyl-, methyl e	10.51	22	T J N
1454-85-9	1-Heptadecanol	11.67	42	T J N
18835-33-1	1-Hexacosene	12.29	230	T J N
6624-79-9	1-Dotriacontanol	13.12	250	T J N
7683-64-9	Squalene	13.77	50	T J N

4/22/10

SAMPLE SUMMARY

Client: Olin Corporation

Job Number: 360-24665-2
Sdg Number: OCRI-17A

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
360-24665-14	OC-SB-406-13/15-XXX	Solid	09/17/2009 1200	09/17/2009 1630
360-24665-18	OC-SB-413-10/12-XXX	Solid	09/17/2009 1050	09/17/2009 1630

Form I's ok

2/5/10

need to update COC

2/5/10

Client: Olin Corporation

Job Number: 360-24665-2
Sdg Number: OCRI-17A

Client Sample ID: **OC-SB-406-13/15-XXX**

Lab Sample ID: 360-24665-14
Client Matrix: Solid % Moisture: 10.8

Date Sampled: 09/17/2009 1200
Date Received: 09/17/2009 1630

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49983		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49545		Lab File ID:	B10787.D
Dilution:	1.0			Initial Weight/Volume:	30.31 g
Date Analyzed:	10/07/2009 0300			Final Weight/Volume:	1.0 mL
Date Prepared:	09/28/2009 1051			Injection Volume:	

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		11	37
1,2,4,5-Tetrachlorobenzene		ND		11	37
1,2,4-Trichlorobenzene		ND		11	37
1,2-Dichlorobenzene		ND		11	37
1,3-Dichlorobenzene		ND		11	37
1,4-Dichlorobenzene		ND		11	37
1-Methylnaphthalene		ND		11	37
2,2'-oxybis[1-chloropropane]		ND		11	37
2,3,4,6-Tetrachlorophenol		ND		11	37
2,4,5-Trichlorophenol		ND		11	37
2,4,6-Trichlorophenol		ND		11	37
2,4-Dichlorophenol		ND		11	37
2,4-Dimethylphenol		ND		15	37
2,4-Dinitrophenol		ND		11	37
2,4-Dinitrotoluene		ND		11	37
2,6-Dinitrotoluene		ND		11	37
2-Chloronaphthalene		ND		11	37
2-Chlorophenol		ND		11	37
2-Methylnaphthalene		ND		11	37
2-Methylphenol		ND		22	37
2-Nitroaniline		ND		11	180
2-Nitrophenol		ND		11	37
3 & 4 Methylphenol		ND		11	37
3,3'-Dichlorobenzidine		ND		11	74
3-Nitroaniline		ND		11	180
4,6-Dinitro-2-methylphenol		ND		11	180
4-Bromophenyl phenyl ether		ND		11	37
4-Chloro-3-methylphenol		ND		11	74
4-Chloroaniline		ND		11	74
4-Chlorophenyl phenyl ether		ND		11	37
4-Nitroaniline		ND		11	180
4-Nitrophenol		ND		11	180
Acenaphthene		ND		11	37
Acenaphthylene		ND		11	37
Acetophenone		ND		11	37
Aniline		ND	J	11	37
Anthracene		ND		11	37
Atrazine		ND		11	37
Azobenzene		ND		11	37
Benzaldehyde		ND		11	37
Benzo[a]anthracene		ND		11	37
Benzo[a]pyrene		ND		11	37
Benzo[b]fluoranthene		ND		11	37
Benzo[g,h,i]perylene		ND		11	37
Benzo[k]fluoranthene		ND		11	37
Benzoic acid		ND	J	17	180

2/5/10

Client: Olin Corporation

Job Number: 360-24665-2
Sdg Number: OCRI-17A

Client Sample ID: **OC-SB-406-13/15-XXX**

Lab Sample ID: 360-24665-14
Client Matrix: Solid
% Moisture: 10.8

Date Sampled: 09/17/2009 1200
Date Received: 09/17/2009 1630

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49983		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49545		Lab File ID:	B10787.D
Dilution:	1.0			Initial Weight/Volume:	30.31 g
Date Analyzed:	10/07/2009 0300			Final Weight/Volume:	1.0 mL
Date Prepared:	09/28/2009 1051			Injection Volume:	

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		11	37
Benzyl alcohol		ND		31	74
Bis(2-chloroethoxy)methane		ND		11	37
Bis(2-chloroethyl)ether		ND		11	37
Bis(2-ethylhexyl) phthalate		37	J	11	37
Butyl benzyl phthalate		ND		11	37
Caprolactam		ND		11	37
Carbazole		ND		11	37
Chrysene		ND		11	37
Dibenz(a,h)anthracene		ND		11	37
Dibenzofuran		ND		11	37
Diethyl phthalate		ND		11	37
Dimethyl phthalate		ND		11	37
Di-n-butyl phthalate		ND		32	37
Di-n-octyl phthalate		ND		19	37
Diphenyl oxide		ND		11	37
Fluoranthene		ND		11	37
Fluorene		ND		11	37
Hexachlorobenzene		ND		11	37
Hexachlorobutadiene		ND		11	37
Hexachlorocyclopentadiene		ND		11	74
Hexachloroethane		ND		11	37
Indeno[1,2,3-cd]pyrene		ND		11	37
Isophorone		ND		11	37
Naphthalene		ND		11	89
Nitrobenzene		ND		11	37
N-Nitrosodimethylamine		ND		13	37
N-Nitrosodi-n-propylamine		ND		11	37
N-Nitrosodiphenylamine		ND		11	37
Pentachlorophenol		ND		11	37
Phenanthrene		ND		11	44
Phenol		ND		11	37
Pyrene		ND		11	37

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	68		30 - 130
2-Fluorobiphenyl	54		30 - 130
2-Fluorophenol	77		30 - 130
Nitrobenzene-d5	57		30 - 130
Phenol-d5	55		30 - 130
Terphenyl-d14	87		30 - 130

Client: Olin Corporation

Job Number: 360-24665-2
Sdg Number: OCRI-17A

Client Sample ID: **OC-SB-406-13/15-XXX**

Lab Sample ID: 360-24665-14
Client Matrix: Solid % Moisture: 10.8

Date Sampled: 09/17/2009 1200
Date Received: 09/17/2009 1630

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49983		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49545		Lab File ID:	B10787.D
Dilution:	1.0			Initial Weight/Volume:	30.31 g
Date Analyzed:	10/07/2009 0300			Final Weight/Volume:	1.0 mL
Date Prepared:	09/28/2009 1051			Injection Volume:	

Tentatively Identified Compounds **Number TIC's Found:** 8

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
10544-50-0	Cyclic octaatomic sulfur	11.21	41	T J N
629-97-0	Docosane	11.40	18	T J N
629-94-7	Heneicosane	11.69	30	T J N
7098-21-7	Tritetracontane	12.29	84	T J N
55320-6-4	Heneicosane, 11-decyl-	12.66	71	T J N
62016-79-9	Heptacosane, 1-chloro-	13.11	110	T J N
629-99-2	Pentacosane	13.65	120	T J N
111-2-4	2,6,10,14,18,22-Tetracosahexaene, 2,6,10	13.76	150	T J N

Client: Olin Corporation

Job Number: 360-24665-2
Sdg Number: OCRI-17A

Client Sample ID: **OC-SB-413-10/12-XXX**

Lab Sample ID: 360-24665-18
Client Matrix: Solid % Moisture: 9.8

Date Sampled: 09/17/2009 1050
Date Received: 09/17/2009 1630

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49983		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49545		Lab File ID:	B10790.D
Dilution:	1.0			Initial Weight/Volume:	30.80 g
Date Analyzed:	10/07/2009 0423			Final Weight/Volume:	1.0 mL
Date Prepared:	09/28/2009 1051			Injection Volume:	

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		11	36
1,2,4,5-Tetrachlorobenzene		ND		11	36
1,2,4-Trichlorobenzene		ND		11	36
1,2-Dichlorobenzene		ND		11	36
1,3-Dichlorobenzene		ND		11	36
1,4-Dichlorobenzene		ND		11	36
1-Methylnaphthalene		ND		11	36
2,2'-oxybis[1-chloropropane]		ND		11	36
2,3,4,6-Tetrachlorophenol		ND		11	36
2,4,5-Trichlorophenol		ND		11	36
2,4,6-Trichlorophenol		ND		11	36
2,4-Dichlorophenol		ND		11	36
2,4-Dimethylphenol		ND		14	36
2,4-Dinitrophenol		ND		11	36
2,4-Dinitrotoluene		ND		11	36
2,6-Dinitrotoluene		ND		11	36
2-Chloronaphthalene		ND		11	36
2-Chlorophenol		ND		11	36
2-Methylnaphthalene		ND		11	36
2-Methylphenol		ND		22	36
2-Nitroaniline		ND		11	180
2-Nitrophenol		ND		11	36
3 & 4 Methylphenol		ND		11	36
3,3'-Dichlorobenzidine		ND		11	72
3-Nitroaniline		ND		11	180
4,6-Dinitro-2-methylphenol		ND		11	180
4-Bromophenyl phenyl ether		ND		11	36
4-Chloro-3-methylphenol		ND		11	72
4-Chloroaniline		ND		11	72
4-Chlorophenyl phenyl ether		ND		11	36
4-Nitroaniline		ND		11	180
4-Nitrophenol		ND		11	180
Acenaphthene		ND		11	36
Acenaphthylene		ND		11	36
Acetophenone		ND		11	36
Aniline		ND	J	11	36
Anthracene		ND		11	36
Atrazine		ND		11	36
Azobenzene		ND		11	36
Benzaldehyde		ND		11	36
Benzo[a]anthracene		ND		11	36
Benzo[a]pyrene		ND		11	36
Benzo[b]fluoranthene		ND		11	36
Benzo[g,h,i]perylene		ND		11	36
Benzo[k]fluoranthene		ND		11	36
Benzoic acid		ND	J	16	180

Client: Olin Corporation

Job Number: 360-24665-2
Sdg Number: OCRI-17A

Client Sample ID: **OC-SB-413-10/12-XXX**

Lab Sample ID: 360-24665-18
Client Matrix: Solid % Moisture: 9.8

Date Sampled: 09/17/2009 1050
Date Received: 09/17/2009 1630

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49983		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49545		Lab File ID:	B10790.D
Dilution:	1.0			Initial Weight/Volume:	30.80 g
Date Analyzed:	10/07/2009 0423			Final Weight/Volume:	1.0 mL
Date Prepared:	09/28/2009 1051			Injection Volume:	

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		11	36
Benzyl alcohol		ND		31	72
Bis(2-chloroethoxy)methane		ND		11	36
Bis(2-chloroethyl)ether		ND		11	36
Bis(2-ethylhexyl) phthalate		16	J	11	36
Butyl benzyl phthalate		40		11	36
Caprolactam		ND		11	36
Carbazole		ND		11	36
Chrysene		ND		11	36
Dibenz(a,h)anthracane		ND		11	36
Dibenzofuran		ND		11	36
Diethyl phthalate		ND		11	36
Dimethyl phthalate		ND		11	36
Di-n-butyl phthalate		ND		32	36
Di-n-octyl phthalate		ND		18	36
Diphenyl oxide		ND		11	36
Fluoranthene		ND		11	36
Fluorene		ND		11	36
Hexachlorobenzene		ND		11	36
Hexachlorobutadiena		ND		11	36
Hexachlorocyclopentadiene		ND		11	72
Hexachloroethane		ND		11	36
Indeno[1,2,3-cd]pyrene		ND		11	36
Isophorone		ND		11	36
Naphthalene		ND		11	86
Nitrobenzene		ND		11	36
N-Nitrosodimethylamine		ND J		13	36
N-Nitrosodi-n-propylamine		ND		11	36
N-Nitrosodiphenylamine		ND		11	36
Pentachlorophenol		ND		11	36
Phenanthrene		ND		11	43
Phenol		ND		11	36
Pyrene		ND		11	36

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	63		30 - 130
2-Fluorobiphenyl	55		30 - 130
2-Fluorophenol	74		30 - 130
Nitrobenzene-d5	55		30 - 130
Phenol-d5	52		30 - 130
Terphenyl-d14	78		30 - 130

2/5/10

Client: Olin Corporation

Job Number: 360-24665-2
Sdg Number: OCRI-17A

Client Sample ID: OC-SB-413-10/12-XXX

Lab Sample ID: 360-24665-18
Client Matrix: Solid % Moisture: 9.8

Date Sampled: 09/17/2009 1050
Date Received: 09/17/2009 1630

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49983		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49545		Lab File ID:	B10790.D
Dilution:	1.0			Initial Weight/Volume:	30.80 g
Date Analyzed:	10/07/2009 0423			Final Weight/Volume:	1.0 mL
Date Prepared:	09/28/2009 1051			Injection Volume:	

Tentatively Identified Compounds **Number TIC's Found:** 10

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
128-37-0	Butylated Hydroxytoluene	8.95	56	T J N
3910-35-8	1H-Indene, 2,3-dihydro-1,1,3-trimethyl-3	9.84	87	T J N
22768-22-5	2,4-Diphenyl-4-methyl-2(E)-pentene	10.26	58	T J N
149-30-4	2-Mercaptobenzothiazole	10.79	44	T J N
638-67-5	Tricosane	11.69	49	T J N
55319-83-0	Docosane, 9-octyl-	12.29	100	T J N
630-2-4	Octacosane	12.67	110	T J N
593-49-7	Heptacosane	13.11	140	T J N
1928-30-9	Tricosane, 2-methyl-	13.65	72	T J N
7683-64-9	Squalene	13.77	230	T J N

2/15/10

FORM IV
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Westfield Job No.: 360-24665-1

SDG No.: OCRI-17

Lab File ID: B10667.D Lab Sample ID: MB 360-49545/1-A

Matrix: Solid Date Extracted: 09/28/2009 10:51

~~Instrument ID: Inst. B~~ ~~Date Analyzed: 10/01/2009 09:45~~

Level: (Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 360-49545/2-A	B10668.D	10/01/2009 10:13
	LCSD 360-49545/3-A	B10669.D	10/01/2009 10:41
OC-SS-437-0.0/1.0-XXX	360-24665-4	B10778.D	10/06/2009 22:50
OC-SS-440-0.0/1.0-XXX	360-24665-5	B10779.D	10/06/2009 23:18
OC-SS-442-0.0/1.0-XXX	360-24665-6	B10780.D	10/06/2009 23:46
OC-SS-449-0.0/1.0-XXX	360-24665-7	B10781.D	10/07/2009 00:13
OC-SS-450-0.0/1.0-XXX	360-24665-8	B10782.D	10/07/2009 00:41
OC-SS-451-0.0/1.0-XXX	360-24665-9	B10783.D	10/07/2009 01:09
OC-SS-455-0.0/1.0-XXX	360-24665-11	B10784.D	10/07/2009 01:37
OC-SS-460-0.0/1.0-XXX	360-24665-12	B10785.D	10/07/2009 02:04
OC-SB-406-0.0/1.0-XXX	360-24665-13	B10786.D	10/07/2009 02:32
OC-SB-413-0.0/1.0-XXX	360-24665-16	B10788.D	10/07/2009 03:28
OC-SB-413-1.0/5.0-XXX	360-24665-17	B10789.D	10/07/2009 03:55
OC-SS-434-0.0/1.0-XXX	360-24665-1	B10811.D	10/08/2009 16:33
OC-SS-435-0.0/1.0-XXX	360-24665-2	B10812.D	10/08/2009 17:01
OC-SS-436-0.0/1.0-XXX	360-24665-3	B10813.D	10/08/2009 17:28
OC-SS-454-0.0/1.0-XXX	360-24665-10	B10814.D	10/08/2009 17:56
OC-SB-406-8.0/10-XXX	360-24665-15	B10815.D	10/08/2009 18:24
OC-SS-434-0.0/1.0-XXX MS	360-24665-1 MS	B10816.D	10/08/2009 18:52
OC-SS-434-0.0/1.0-XXX MSD	360-24665-1 MSD	B10817.D	10/08/2009 19:19

MB
benzoic acid 95.1
di-n-butyl phthalate 88.6

TICs
ethanol, 2-butoxy
cyclopentasiloxane, decamethyl
benzaldehyde, 3-hydroxy-4-methoxy
dodecanoic acid, methyl ester
octane, 2,4,6-trimethyl
octadecane
7,9-di-tert-butyl-1-oxaspiro(4,5)deca-6,9-dione
eicosane
squalene

LCS ✓
aniline 30/31
benzoic acid RPD 31

Tuned OK
IS OK

✓CCAL / ICAL OK see attached

MS/MSD see attached

✓Surr recs attached ✗

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Westfield | Job No.: 360-24665-1

SDG No.: OCRI-17

Client Sample ID: | Lab Sample ID: MB 360-49545/1-A

Matrix: Solid | Lab File ID: B10667.D

Analysis Method: 8270C LL | Date Collected:

Extract. Method: 3546 | Date Extracted: 09/28/2009 10:51

Sample wt/vol: 30.00(g) | Date Analyzed: 10/01/2009 09:45

Con. Extract Vol.: 1.0(mL) | Dilution Factor: 1

Injection Volume: 1.0(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 49705 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
98-86-2	Acetophenone	ND		33	10
62-53-3	Aniline	ND		33	10
120-12-7	Anthracene	ND		33	10
1912-24-9	Atrazine	ND		33	10
103-33-3	Azobenzene	ND		33	10
100-52-7	Benzaldehyde	ND		33	10
56-55-3	Benzo[a]anthracene	ND		33	10
50-32-8	Benzo[a]pyrene	ND		33	10
205-99-2	Benzo[b]fluoranthene	ND		33	10
191-24-2	Benzo[g,h,i]perylene	ND		33	10
207-08-9	Benzo[k]fluoranthene	ND		33	10
65-85-0	Benzoic acid	95.1	J	170	15
119-61-9	Benzophenone	ND		33	10
100-51-6	Benzyl alcohol	ND		67	28
111-91-1	Bis(2-chloroethoxy)methane	ND		33	10
111-44-4	Bis(2-chloroethyl)ether	ND		33	10
117-81-7	Bis(2-ethylhexyl) phthalate	ND		33	10
85-68-7	Butyl benzyl phthalate	ND		33	10
105-60-2	Caprolactam	ND		33	10
86-74-8	Carbazole	ND		33	10
218-01-9	Chrysene	ND		33	10
53-70-3	Dibenz(a,h)anthracene	ND		33	10
132-64-9	Dibenzofuran	ND		33	10
84-66-2	Diethyl phthalate	ND		33	10
131-11-3	Dimethyl phthalate	ND		33	10
84-74-2	Di-n-butyl phthalate	88.6		33	29
117-84-0	Di-n-octyl phthalate	ND		33	17
101-84-8	Diphenyl oxide	ND		33	10
122-39-4	Diphenylamine	ND		33	10
206-44-0	Fluoranthene	ND		33	10
86-73-7	Fluorene	ND		33	10
118-74-1	Hexachlorobenzene	ND		33	10
87-68-3	Hexachlorobutadiene	ND		33	10
77-47-4	Hexachlorocyclopentadiene	ND		67	10

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24665-1

SDG No.: OCRI-17

Matrix: Solid Level: Low Lab File ID: B10668.D

Lab ID: LCS 360-49545/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
1,1'-Biphenyl	333	266	80	40-140	
1,2,4,5-Tetrachlorobenzene	333	252	75	40-140	
1,2,4-Trichlorobenzene	333	223	67	40-140	
1,2-Dichlorobenzene	333	195	58	40-140	
1,3-Dichlorobenzene	333	189	57	40-140	
1,4-Dichlorobenzene	333	187	56	40-140	
1-Methylnaphthalene	333	234	70	40-140	
2,2'-oxybis[1-chloropropane]	333	213	64	40-140	
2,3,4,6-Tetrachlorophenol	333	256	77	40-140	
2,4,5-Trichlorophenol	333	301	90	30-130	
2,4,6-Trichlorophenol	333	308	92	30-130	
2,4-Dichlorophenol	333	278	83	30-130	
2,4-Dimethylphenol	333	300	90	30-130	
2,4-Dinitrophenol	333	235	71	30-130	
2,4-Dinitrotoluene	333	278	83	40-140	
2,6-Dinitrotoluene	333	284	85	40-140	
2-Chloronaphthalene	333	210	63	40-140	
2-Chlorophenol	333	207	62	30-130	
2-Methylnaphthalene	333	238	71	40-140	
2-Methylphenol	333	215	64	30-130	
2-Nitroaniline	333	318	96	40-140	
2-Nitrophenol	333	266	80	30-130	
3 & 4 Methylphenol	333	252	76	30-130	
3,3'-Dichlorobenzidine	333	276	83	40-140	
3-Nitroaniline	333	288	86	40-140	
4,6-Dinitro-2-methylphenol	333	282	85	30-130	
4-Bromophenyl phenyl ether	333	273	82	40-140	
4-Chloro-3-methylphenol	333	288	86	30-130	
4-Chloroaniline	333	205	62	40-140	
4-Chlorophenyl phenyl ether	333	275	82	40-140	
4-Nitroaniline	333	273	82	40-140	
4-Nitrophenol	333	295	89	30-130	
Acenaphthene	333	304	91	40-140	
Acenaphthylene	333	255	76	40-140	
Acetophenone	333	234	70	40-140	
Aniline	333	100	30	40-140	*
Anthracene	333	345	103	40-140	
Atrazine	333	354	106	40-140	
Azobenzene	333	278	83	40-140	
Benzaldehyde	333	273	82	40-140	
Benzo[a]anthracene	333	340	102	40-140	

/31

Calculations are performed before rounding

benzoic acid /31

Column to be used to flag recovery and RPD values

benzoic acid RPD 31

FORM III 8270C LL

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24665-1

SDG No.: OCRI-17

Matrix: Solid Level: Low Lab File ID: B10669.D

Lab ID: LCSD 360-49545/3-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCSD CONCENTRATION (ug/Kg)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1'-Biphenyl	333	281	84	6	30	40-140	
1,2,4,5-Tetrachlorobenzene	333	251	75	0	30	40-140	
1,2,4-Trichlorobenzene	333	230	69	3	30	40-140	
1,2-Dichlorobenzene	333	199	60	2	30	40-140	
1,3-Dichlorobenzene	333	189	57	0	30	40-140	
1,4-Dichlorobenzene	333	189	57	1	30	40-140	
1-Methylnaphthalene	333	244	73	4	30	40-140	
2,2'-oxybis[1-chloropropane]	333	219	66	3	30	40-140	
2,3,4,6-Tetrachlorophenol	333	258	78	1	30	40-140	
2,4,5-Trichlorophenol	333	300	90	0	30	30-130	
2,4,6-Trichlorophenol	333	319	96	4	30	30-130	
2,4-Dichlorophenol	333	280	84	1	30	30-130	
2,4-Dimethylphenol	333	305	91	2	30	30-130	
2,4-Dinitrophenol	333	239	72	2	30	30-130	
2,4-Dinitrotoluene	333	279	84	0	30	40-140	
2,6-Dinitrotoluene	333	294	88	3	30	40-140	
2-Chloronaphthalene	333	216	65	3	30	40-140	
2-Chlorophenol	333	211	63	2	30	30-130	
2-Methylnaphthalene	333	244	73	2	30	40-140	
2-Methylphenol	333	227	68	5	30	30-130	
2-Nitroaniline	333	313	94	2	30	40-140	
2-Nitrophenol	333	275	82	3	30	30-130	
3 & 4 Methylphenol	333	259	78	3	30	30-130	
3,3'-Dichlorobenzidine	333	280	84	1	30	40-140	
3-Nitroaniline	333	293	88	2	30	40-140	
4,6-Dinitro-2-methylphenol	333	278	83	2	30	30-130	
4-Bromophenyl phenyl ether	333	276	83	1	30	40-140	
4-Chloro-3-methylphenol	333	290	87	1	30	30-130	
4-Chloroaniline	333	201	60	2	30	40-140	
4-Chlorophenyl phenyl ether	333	285	86	4	30	40-140	
4-Nitroaniline	333	282	84	3	30	40-140	
4-Nitrophenol	333	289	87	2	30	30-130	
Acenaphthene	333	315	95	4	30	40-140	
Acenaphthylene	333	257	77	1	30	40-140	
Acetophenone	333	236	71	1	30	40-140	
Aniline	333	102	31	2	30	40-140	*
Anthracene	333	333	100	3	30	40-140	
Atrazine	333	358	107	1	30	40-140	
Azobenzene	333	280	84	1	30	40-140	
Benzaldehyde	333	286	86	5	30	40-140	
Benzo[a]anthracene	333	340	102	0	30	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24665-1

SDG No.: OCRI-17

Matrix: Solid Level: Low Lab File ID: B10669.D

Lab ID: LCSD 360-49545/3-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCSD CONCENTRATION (ug/Kg)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Benzo[a]pyrene	333	311	93	0	30	40-140	
Benzo[b]fluoranthene	333	298	89	2	30	40-140	
Benzo[g,h,i]perylene	333	312	93	4	30	40-140	
Benzo[k]fluoranthene	333	336	101	1	30	40-140	
Benzoic acid	333	179	54	33	30	30-130	
Benzophenone	333	302	91	3	30	40-140	
Benzyl alcohol	333	200	60	5	30	30-130	
Bis(2-chloroethoxy)methane	333	250	75	2	30	40-140	
Bis(2-chloroethyl)ether	333	204	61	3	30	40-140	
Bis(2-ethylhexyl) phthalate	333	244	73	2	30	40-140	
Butyl benzyl phthalate	333	295	88	0	30	40-140	
Caprolactam	333	273	82	5	30	40-140	
Carbazole	333	309	93	3	30	40-140	
Chrysene	333	298	89	3	30	40-140	
Dibenz(a,h)anthracene	333	356	107	3	30	40-140	
Dibenzofuran	333	269	81	1	30	40-140	
Diethyl phthalate	333	283	85	1	30	40-140	
Dimethyl phthalate	333	279	84	1	30	40-140	
Di-n-butyl phthalate	333	373	112	1	30	40-140	
Di-n-octyl phthalate	333	257	77	6	30	40-140	
Diphenyl oxide	333	263	79	3	30	40-140	
Fluoranthene	333	311	93	2	30	40-140	
Fluorene	333	332	100	1	30	40-140	
Hexachlorobenzene	333	293	88	0	30	40-140	
Hexachlorobutadiene	333	233	70	0	30	40-140	
Hexachlorocyclopentadiene	333	210	63	3	30	40-140	
Hexachloroethane	333	200	60	2	30	40-140	
Indeno[1,2,3-cd]pyrene	333	344	103	5	30	40-140	
Isophorone	333	225	67	2	30	40-140	
Naphthalene	333	245	74	1	30	40-140	
Nitrobenzene	333	244	73	3	30	40-140	
N-Nitrosodimethylamine	333	231	69	0	30	40-140	
N-Nitrosodi-n-propylamine	333	253	76	4	30	40-140	
N-Nitrosodiphenylamine	333	207	62	0	30	40-140	
Pentachlorophenol	333	280	84	1	30	30-130	
Phenanthrene	333	320	96	1	30	40-140	
Phenol	333	232	70	2	30	30-130	
Pyrene	333	289	87	0	30	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM II
GC/MS SEMI VOA SURROGATE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24665-1

SDG No.: OCRI-17

Matrix: Solid Level: Low

GC Column (1): Rtx-5ms ID: 0.25 (um)

Client Sample ID	Lab Sample ID	2FP #	PHL #	NBZ #	FBP #	TBP #	TPH #
OC-SS-434-0.0/1.0-XXX	360-24665-1	53	41	43	41	50	49
OC-SS-434-0.0/1.0-XXX	360-24665-1	54	60	60	58	77	66
OC-SS-435-0.0/1.0-XXX	360-24665-2	46	32	40	36	45	37
OC-SS-436-0.0/1.0-XXX	360-24665-3	67	51	54	53	62	62
OC-SS-437-0.0/1.0-XXX	360-24665-4	69	55	56	56	64	66
OC-SS-440-0.0/1.0-XXX	360-24665-5	62	49	48	46	50	43
OC-SS-440-0.0/1.0-XXX	360-24665-5	50	58	63	59	76	74
OC-SS-442-0.0/1.0-XXX	360-24665-6	66	54	51	50	50	62
OC-SS-449-0.0/1.0-XXX	360-24665-7	75	55	56	55	61	57
OC-SS-450-0.0/1.0-XXX	360-24665-8	68	53	51	50	51	60
OC-SS-450-0.0/1.0-XXX	360-24665-8	54	56	61	55	70	62
OC-SS-451-0.0/1.0-XXX	360-24665-9	68	51	50	50	56	67
OC-SS-454-0.0/1.0-XXX	360-24665-10	71	52	55	53	62	62
OC-SS-455-0.0/1.0-XXX	360-24665-11	62	48	45	43	42	61
OC-SS-455-0.0/1.0-XXX	360-24665-11	52	54	58	55	70	64
OC-SS-460-0.0/1.0-XXX	360-24665-12	59	45	43	40	42	61
OC-SS-460-0.0/1.0-XXX	360-24665-12	39	45	52	46	59	57
OC-SB-406-0.0/1.0-XXX	360-24665-13	37	34	33	28 X	26 X	31
OC-SB-406-8.0/10-XXX	360-24665-15	68	51	54	53	62	71
OC-SB-413-0.0/1.0-XXX	360-24665-16	66	51	48	48	51	59
OC-SB-413-0.0/1.0-XXX	360-24665-16	44	48	50	47	61	55
OC-SB-413-1.0/5.0-XXX	360-24665-17	76	55	57	58	69	86
OC-SB-413-1.0/5.0-XXX	360-24665-17	53	58	55	56	75	78
	MB 360-49302/1-A	71	76	61	68	75	80

	QC LIMITS
2FP = 2-Fluorophenol	30-130
PHL = Phenol-d5	30-130
NBZ = Nitrobenzene-d5	30-130
FBP = 2-Fluorobiphenyl	30-130
TBP = 2,4,6-Tribromophenol	30-130
TPH = Terphenyl-d14	30-130

Column to be used to flag recovery values

FORM II 8270C LL

FORM III
GC/MS SEMI VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24665-1

SDG No.: OCRI-17

Matrix: Solid Level: Low Lab File ID: B10816.D

Lab ID: 360-24665-1 MS Client ID: OC-SS-434-0.0/1.0-XXX MS

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	QC LIMITS REC	#
1,1'-Biphenyl	401	ND	251	63	40-140	
1,2,4,5-Tetrachlorobenzene	401	ND	237	59	40-140	
1,2,4-Trichlorobenzene	401	ND	191	48	40-140	
1,2-Dichlorobenzene	401	ND	184	46	40-140	
1,3-Dichlorobenzene	401	ND	189	47	40-140	
1,4-Dichlorobenzene	401	ND	180	45	40-140	
1-Methylnaphthalene	401	ND	222	55	40-140	
2,2'-oxybis[1-chloropropane]	401	ND	214	53	40-140	
2,3,4,6-Tetrachlorophenol	401	ND	247	62	40-140	
2,4,5-Trichlorophenol	401	ND	245	61	30-130	
2,4,6-Trichlorophenol	401	ND	254	63	30-130	
2,4-Dichlorophenol	401	ND	229	57	30-130	
2,4-Dimethylphenol	401	ND	240	60	30-130	
2,4-Dinitrophenol	401	ND	292	73	30-130	
2,4-Dinitrotoluene	401	ND	222	55	40-140	
2,6-Dinitrotoluene	401	ND	221	55	40-140	
2-Chloronaphthalene	401	ND	209	52	40-140	
2-Chlorophenol	401	ND	214	53	30-130	
2-Methylnaphthalene	401	ND	223	56	40-140	
2-Methylphenol	401	ND	225	56	30-130	
2-Nitroaniline	401	ND	72.7 J	18	40-140	F
2-Nitrophenol	401	ND	226	56	30-130	
3 & 4 Methylphenol	401	ND	227	57	30-130	
3,3'-Dichlorobenzidine	401	ND	ND	0	40-140	F
3-Nitroaniline	401	ND	30.3 J	8	40-140	F
4,6-Dinitro-2-methylphenol	401	ND	245	61	30-130	
4-Bromophenyl phenyl ether	401	ND	258	64	40-140	
4-Chloro-3-methylphenol	401	ND	235	59	30-130	
4-Chloroaniline	401	ND	ND	0	40-140	F
4-Chlorophenyl phenyl ether	401	ND	268	67	40-140	
4-Nitroaniline	401	ND	197 J	49	40-140	
4-Nitrophenol	401	ND	235	59	30-130	
Acenaphthene	401	ND	287	72	40-140	
Acenaphthylene	401	ND	213	53	40-140	
Acetophenone	401	ND	224	56	40-140	
Aniline	401	ND	54.6	14	40-140	F
Anthracene	401	ND	280	70	40-140	
Atrazine	401	ND	211	53	40-140	
Azobenzene	401	ND	245	61	40-140	
Benzaldehyde	401	51	341	72	40-140	
Benzo[a]anthracene	401	ND	315	79	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24665-1

SDG No.: OCRI-17

Matrix: Solid Level: Low Lab File ID: B10816.D

Lab ID: 360-24665-1 MS Client ID: OC-SS-434-0.0/1.0-XXX MS

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	QC LIMITS REC	#
Benzo[a]pyrene	401	ND	294	73	40-140	
Benzo[b]fluoranthene	401	ND	263	65	40-140	
Benzo[g,h,i]perylene	401	ND	348	87	40-140	
Benzo[k]fluoranthene	401	ND	311	78	40-140	
Benzoic acid	401	140 J	513	94	30-130	
Benzophenone	401	ND	248	62	40-140	
Benzyl alcohol	401	ND	203	51	30-130	
Bis(2-chloroethoxy)methane	401	ND	251	63	40-140	
Bis(2-chloroethyl)ether	401	ND	209	52	40-140	
Bis(2-ethylhexyl) phthalate	401	ND	360	90	40-140	
Butyl benzyl phthalate	401	ND	282	70	40-140	
Caprolactam	401	ND	238	59	40-140	
Carbazole	401	ND	248	62	40-140	
Chrysene	401	ND	301	75	40-140	
Dibenz(a,h)anthracene	401	ND	383	95	40-140	
Dibenzofuran	401	ND	249	62	40-140	
Diethyl phthalate	401	ND	272	68	40-140	
Dimethyl phthalate	401	ND	277	69	40-140	
Di-n-butyl phthalate	401	ND	319	80	40-140	
Di-n-octyl phthalate	401	ND	281	70	40-140	
Diphenyl oxide	401	ND	231	58	40-140	
Fluoranthene	401	ND	223	53	40-140	
Fluorene	401	ND	290	72	40-140	
Hexachlorobenzene	401	ND	275	68	40-140	
Hexachlorobutadiene	401	ND	189	47	40-140	
Hexachlorocyclopentadiene	401	ND	103	26	40-140	F
Hexachloroethane	401	ND	158	40	40-140	
Indeno[1,2,3-cd]pyrene	401	ND	448	112	40-140	
Isophorone	401	ND	192	48	40-140	
Naphthalene	401	ND	252	63	40-140	
Nitrobenzene	401	ND	246	61	40-140	
N-Nitrosodimethylamine	401	ND	208	52	40-140	
N-Nitrosodi-n-propylamine	401	ND	226	56	40-140	
N-Nitrosodiphenylamine	401	ND	135	34	40-140	F
Pentachlorophenol	401	ND	362	90	30-130	
Phenanthrene	401	ND	307	76	40-140	
Phenol	401	ND	203	51	30-130	
Pyrene	401	ND	345	86	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24665-1

SDG No.: OCRI-17

Matrix: Solid Level: Low Lab File ID: B10817.D

Lab ID: 360-24665-1 MSD Client ID: OC-SS-434-0.0/1.0-XXX MSD

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1'-Biphenyl	398	229	58	9	30	40-140	
1,2,4,5-Tetrachlorobenzene	398	203	51	16	30	40-140	
1,2,4-Trichlorobenzene	398	164	41	15	30	40-140	
1,2-Dichlorobenzene	398	168	42	9	30	40-140	
1,3-Dichlorobenzene	398	165	41	13	30	40-140	
1,4-Dichlorobenzene	398	168	42	7	30	40-140	
1-Methylnaphthalene	398	182	46	20	30	40-140	
2,2'-oxybis[1-chloropropane]	398	187	47	14	30	40-140	
2,3,4,6-Tetrachlorophenol	398	229	57	8	30	40-140	
2,4,5-Trichlorophenol	398	211	53	15	30	30-130	
2,4,6-Trichlorophenol	398	247	62	3	30	30-130	
2,4-Dichlorophenol	398	194	49	17	30	30-130	
2,4-Dimethylphenol	398	194	49	21	30	30-130	
2,4-Dinitrophenol	398	265	66	10	30	30-130	
2,4-Dinitrotoluene	398	178	45	22	30	40-140	
2,6-Dinitrotoluene	398	183	46	19	30	40-140	
2-Chloronaphthalene	398	195	49	7	30	40-140	
2-Chlorophenol	398	190	48	12	30	30-130	
2-Methylnaphthalene	398	183	46	20	30	40-140	
2-Methylphenol	398	186	47	19	30	30-130	
2-Nitroaniline	398	54.9 J	14	28	30	40-140	F
2-Nitrophenol	398	195	49	15	30	30-130	
3 & 4 Methylphenol	398	194	49	16	30	30-130	
3,3'-Dichlorobenzidine	398	ND	0	NC		40-140	F
3-Nitroaniline	398	35.3 J	9	15	30	40-140	F
4,6-Dinitro-2-methylphenol	398	181 J	45	30	30	30-130	
4-Bromophenyl phenyl ether	398	185	47	33	30	40-140	F
4-Chloro-3-methylphenol	398	201	51	16	30	30-130	
4-Chloroaniline	398	70.7 J	18	NC	30	40-140	F
4-Chlorophenyl phenyl ether	398	220	55	20	30	40-140	
4-Nitroaniline	398	175 J	44	12	30	40-140	
4-Nitrophenol	398	232	58	2	30	30-130	
Acenaphthene	398	226	57	24	30	40-140	
Acenaphthylene	398	173	43	21	30	40-140	
Acetophenone	398	201	50	11	30	40-140	
Aniline	398	19.0 J	5	97	30	40-140	F
Anthracene	398	216	54	26	30	40-140	
Atrazine	398	198	50	6	30	40-140	
Azobenzene	398	178	45	31	30	40-140	F
Benzaldehyde	398	336	72	1	30	40-140	
Benzo[a]anthracene	398	276	69	13	30	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24665-1

SDG No.: OCRI-17

Matrix: Solid Level: Low Lab File ID: B10817.D

Lab ID: 360-24665-1 MSD Client ID: OC-SS-434-0.0/1.0-XXX MSD

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Benzo[a]pyrene	398	244	61	19	30	40-140	
Benzo[b]fluoranthene	398	210	53	22	30	40-140	
Benzo[g,h,i]perylene	398	256	64	30	30	40-140	
Benzo[k]fluoranthene	398	278	70	11	30	40-140	
Benzoic acid	398	486	88	5	30	30-130	
Benzophenone	398	174	44	35	30	40-140	F
Benzyl alcohol	398	179	45	13	30	30-130	
Bis(2-chloroethoxy)methane	398	215	54	16	30	40-140	
Bis(2-chloroethyl)ether	398	192	48	8	30	40-140	
Bis(2-ethylhexyl) phthalate	398	303	76	17	30	40-140	
Butyl benzyl phthalate	398	234	59	18	30	40-140	
Caprolactam	398	161	41	38	30	40-140	F
Carbazole	398	220	55	12	30	40-140	
Chrysene	398	270	68	11	30	40-140	
Dibenz(a,h)anthracene	398	289	73	28	30	40-140	
Dibenzofuran	398	196	49	24	30	40-140	
Diethyl phthalate	398	221	56	21	30	40-140	
Dimethyl phthalate	398	217	54	25	30	40-140	
Di-n-butyl phthalate	398	235	59	30	30	40-140	
Di-n-octyl phthalate	398	258	65	9	30	40-140	
Diphenyl oxide	398	165	42	33	30	40-140	F
Fluoranthene	398	214	51	4	30	40-140	
Fluorene	398	234	59	21	30	40-140	
Hexachlorobenzene	398	195	49	34	30	40-140	F
Hexachlorobutadiene	398	160	40	16	30	40-140	
Hexachlorocyclopentadiene	398	70.4 J	18	38	30	40-140	F
Hexachloroethane	398	123	31	26	30	40-140	F
Indeno[1,2,3-cd]pyrene	398	265	67	51	30	40-140	F
Isophorone	398	168	42	14	30	40-140	
Naphthalene	398	215	54	16	30	40-140	
Nitrobenzene	398	226	57	8	30	40-140	
N-Nitrosodimethylamine	398	195	49	6	30	40-140	
N-Nitrosodi-n-propylamine	398	195	49	15	30	40-140	
N-Nitrosodiphenylamine	398	109	27	22	30	40-140	F
Pentachlorophenol	398	296	74	20	30	30-130	
Phenanthrene	398	251	63	20	30	40-140	
Phenol	398	177	44	14	30	30-130	
Pyrene	398	265	67	26	30	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM IV
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Westfield Job No.: 360-24665-2

SDG No.: OCRI-17A

Lab File ID: B10667.D Lab Sample ID: MB 360-49545/1-A

Matrix: Solid Date Extracted: 09/28/2009 10:51

Instrument ID: Inst. B Date Analyzed: 10/01/2009 09:45

Level: (Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 360-49545/2-A	B10668.D	10/01/2009 10:13
	LCSD 360-49545/3-A	B10669.D	10/01/2009 10:41
OC-SB-406-13/15-XXX	360-24665-14	B10787.D	10/07/2009 03:00
OC-SB-413-10/12-XXX	360-24665-18	B10790.D	10/07/2009 04:23

LCS
aniline 30/31
benzoic acid RPD 33

Surr OK
Tune OK
IS OK
Scan OK

MB Area

benzoic acid	95.1	475.5	5x
di-n-butyl phthalate	88.6	886	10x

CCAL
n-nitrosodimethylamine
20-25%

TIC
Ethanol, 2-butoxy
cyclopentasiloxane, decamethyl
benzaldehyde, 3-hydroxy-4-methoxy
dodecanoic acid, methyl ester
Octane, 2,4,6-trimethyl
Octadecane
7,9-di-tert-butyl-1-oxaspiro(4,5)deca-6
Eicosane
1H, 3Z, 9S-4, 8, 11, 11-tetramethyl bicyclo[7
Squalene

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24665-2

SDG No.: OCRI-17A

Matrix: Solid Level: Low Lab File ID: B10668.D

Lab ID: LCS 360-49545/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
1,1'-Biphenyl	333	266	80	40-140	
1,2,4,5-Tetrachlorobenzene	333	252	75	40-140	
1,2,4-Trichlorobenzene	333	223	67	40-140	
1,2-Dichlorobenzene	333	195	58	40-140	
1,3-Dichlorobenzene	333	189	57	40-140	
1,4-Dichlorobenzene	333	187	56	40-140	
1-Methylnaphthalene	333	234	70	40-140	
2,2'-oxybis[1-chloropropane]	333	213	64	40-140	
2,3,4,6-Tetrachlorophenol	333	256	77	40-140	
2,4,5-Trichlorophenol	333	301	90	30-130	
2,4,6-Trichlorophenol	333	308	92	30-130	
2,4-Dichlorophenol	333	278	83	30-130	
2,4-Dimethylphenol	333	300	90	30-130	
2,4-Dinitrophenol	333	235	71	30-130	
2,4-Dinitrotoluene	333	278	83	40-140	
2,6-Dinitrotoluene	333	284	85	40-140	
2-Chloronaphthalene	333	210	63	40-140	
2-Chlorophenol	333	207	62	30-130	
2-Methylnaphthalene	333	238	71	40-140	
2-Methylphenol	333	215	64	30-130	
2-Nitroaniline	333	318	96	40-140	
2-Nitrophenol	333	266	80	30-130	
3 & 4 Methylphenol	333	252	76	30-130	
3,3'-Dichlorobenzidine	333	276	83	40-140	
3-Nitroaniline	333	288	86	40-140	
4,6-Dinitro-2-methylphenol	333	282	85	30-130	
4-Bromophenyl phenyl ether	333	273	82	40-140	
4-Chloro-3-methylphenol	333	288	86	30-130	
4-Chloroaniline	333	205	62	40-140	
4-Chlorophenyl phenyl ether	333	275	82	40-140	
4-Nitroaniline	333	273	82	40-140	
4-Nitrophenol	333	295	89	30-130	
Acenaphthene	333	304	91	40-140	
Acenaphthylene	333	255	76	40-140	
Acetophenone	333	234	70	40-140	
Aniline	333	100	30	40-140	*
Anthracene	333	345	103	40-140	
Atrazine	333	354	106	40-140	
Azobenzene	333	278	83	40-140	
Benzaldehyde	333	273	82	40-140	
Benzo[a]anthracene	333	340	102	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

Aniline 30/31

benzoic acid RPD 33

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24665-2

SDG No.: OCRI-17A

Matrix: Solid Level: Low Lab File ID: B10669.D

Lab ID: LCSD 360-49545/3-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCSD CONCENTRATION (ug/Kg)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1'-Biphenyl	333	281	84	6	30	40-140	
1,2,4,5-Tetrachlorobenzene	333	251	75	0	30	40-140	
1,2,4-Trichlorobenzene	333	230	69	3	30	40-140	
1,2-Dichlorobenzene	333	199	60	2	30	40-140	
1,3-Dichlorobenzene	333	189	57	0	30	40-140	
1,4-Dichlorobenzene	333	189	57	1	30	40-140	
1-Methylnaphthalene	333	244	73	4	30	40-140	
2,2'-oxybis[1-chloropropane]	333	219	66	3	30	40-140	
2,3,4,6-Tetrachlorophenol	333	258	78	1	30	40-140	
2,4,5-Trichlorophenol	333	300	90	0	30	30-130	
2,4,6-Trichlorophenol	333	319	96	4	30	30-130	
2,4-Dichlorophenol	333	280	84	1	30	30-130	
2,4-Dimethylphenol	333	305	91	2	30	30-130	
2,4-Dinitrophenol	333	239	72	2	30	30-130	
2,4-Dinitrotoluene	333	279	84	0	30	40-140	
2,6-Dinitrotoluene	333	294	88	3	30	40-140	
2-Chloronaphthalene	333	216	65	3	30	40-140	
2-Chlorophenol	333	211	63	2	30	30-130	
2-Methylnaphthalene	333	244	73	2	30	40-140	
2-Methylphenol	333	227	68	5	30	30-130	
2-Nitroaniline	333	313	94	2	30	40-140	
2-Nitrophenol	333	275	82	3	30	30-130	
3 & 4 Methylphenol	333	259	78	3	30	30-130	
3,3'-Dichlorobenzidine	333	280	84	1	30	40-140	
3-Nitroaniline	333	293	88	2	30	40-140	
4,6-Dinitro-2-methylphenol	333	278	83	2	30	30-130	
4-Bromophenyl phenyl ether	333	276	83	1	30	40-140	
4-Chloro-3-methylphenol	333	290	87	1	30	30-130	
4-Chloroaniline	333	201	60	2	30	40-140	
4-Chlorophenyl phenyl ether	333	285	86	4	30	40-140	
4-Nitroaniline	333	282	84	3	30	40-140	
4-Nitrophenol	333	289	87	2	30	30-130	
Acenaphthene	333	315	95	4	30	40-140	
Acenaphthylene	333	257	77	1	30	40-140	
Acetophenone	333	236	71	1	30	40-140	
Aniline	333	102	31	2	30	40-140	*
Anthracene	333	333	100	3	30	40-140	
Atrazine	333	358	107	1	30	40-140	
Azobenzene	333	280	84	1	30	40-140	
Benzaldehyde	333	286	86	5	30	40-140	
Benzo[a]anthracene	333	340	102	0	30	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24665-2

SDG No.: OCRI-17A

Matrix: Solid Level: Low Lab File ID: B10669.D

Lab ID: LCSD 360-49545/3-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCSD CONCENTRATION (ug/Kg)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Benzo[a]pyrene	333	311	93	0	30	40-140	
Benzo[b]fluoranthene	333	298	89	2	30	40-140	
Benzo[g,h,i]perylene	333	312	93	4	30	40-140	
Benzo[k]fluoranthene	333	336	101	1	30	40-140	
Benzoic acid	333	179	54	33	30	30-130	*
Benzophenone	333	302	91	3	30	40-140	
Benzyl alcohol	333	200	60	5	30	30-130	
Bis(2-chloroethoxy)methane	333	250	75	2	30	40-140	
Bis(2-chloroethyl)ether	333	204	61	3	30	40-140	
Bis(2-ethylhexyl) phthalate	333	244	73	2	30	40-140	
Butyl benzyl phthalate	333	295	88	0	30	40-140	
Caprolactam	333	273	82	5	30	40-140	
Carbazole	333	309	93	3	30	40-140	
Chrysene	333	298	89	3	30	40-140	
Dibenz(a,h)anthracene	333	356	107	3	30	40-140	
Dibenzofuran	333	269	81	1	30	40-140	
Diethyl phthalate	333	283	85	1	30	40-140	
Dimethyl phthalate	333	279	84	1	30	40-140	
Di-n-butyl phthalate	333	373	112	1	30	40-140	
Di-n-octyl phthalate	333	257	77	6	30	40-140	
Diphenyl oxide	333	263	79	3	30	40-140	
Fluoranthene	333	311	93	2	30	40-140	
Fluorene	333	332	100	1	30	40-140	
Hexachlorobenzene	333	293	88	0	30	40-140	
Hexachlorobutadiene	333	233	70	0	30	40-140	
Hexachlorocyclopentadiene	333	210	63	3	30	40-140	
Hexachloroethane	333	200	60	2	30	40-140	
Indeno[1,2,3-cd]pyrene	333	344	103	5	30	40-140	
Isophorone	333	225	67	2	30	40-140	
Naphthalene	333	245	74	1	30	40-140	
Nitrobenzene	333	244	73	3	30	40-140	
N-Nitrosodimethylamine	333	231	69	0	30	40-140	
N-Nitrosodi-n-propylamine	333	253	76	4	30	40-140	
N-Nitrosodiphenylamine	333	207	62	0	30	40-140	
Pentachlorophenol	333	280	84	1	30	30-130	
Phenanthrene	333	320	96	1	30	40-140	
Phenol	333	232	70	2	30	30-130	
Pyrene	333	289	87	0	30	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM I

GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Westfield | Job No.: 360-24665-2

SDG No.: OCRI-17A

Client Sample ID: | Lab Sample ID: MB 360-49545/1-A

Matrix: Solid | Lab File ID: B10667.D

Analysis Method: 8270C LL | Date Collected:

Extract. Method: 3546 | Date Extracted: 09/28/2009 10:51

Sample wt/vol: 30.00(g) | Date Analyzed: 10/01/2009 09:45

Con. Extract Vol.: 1.0(mL) | Dilution Factor: 1

Injection Volume: 1.0(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 49705 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
98-86-2	Acetophenone	ND		33	10
62-53-3	Aniline	ND		33	10
120-12-7	Anthracene	ND		33	10
1912-24-9	Atrazine	ND		33	10
103-33-3	Azobenzene	ND		33	10
100-52-7	Benzaldehyde	ND		33	10
56-55-3	Benzo[a]anthracene	ND		33	10
50-32-8	Benzo[a]pyrene	ND		33	10
205-99-2	Benzo[b]fluoranthene	ND		33	10
191-24-2	Benzo[g,h,i]perylene	ND		33	10
207-08-9	Benzo[k]fluoranthene	ND		33	10
65-85-0	Benzoic acid	95.1	J	170	15
119-61-9	Benzophenone	ND		33	10
100-51-6	Benzyl alcohol	ND		67	28
111-91-1	Bis(2-chloroethoxy)methane	ND		33	10
111-44-4	Bis(2-chloroethyl)ether	ND		33	10
117-81-7	Bis(2-ethylhexyl) phthalate	ND		33	10
85-68-7	Butyl benzyl phthalate	ND		33	10
105-60-2	Caprolactam	ND		33	10
86-74-8	Carbazole	ND		33	10
218-01-9	Chrysene	ND		33	10
53-70-3	Dibenz(a,h)anthracene	ND		33	10
132-64-9	Dibenzofuran	ND		33	10
84-66-2	Diethyl phthalate	ND		33	10
131-11-3	Dimethyl phthalate	ND		33	10
84-74-2	Di-n-butyl phthalate	88.6		33	29
117-84-0	Di-n-octyl phthalate	ND		33	17
101-84-8	Diphenyl oxide	ND		33	10
206-44-0	Fluoranthene	ND		33	10
86-73-7	Fluorene	ND		33	10
118-74-1	Hexachlorobenzene	ND		33	10
87-68-3	Hexachlorobutadiene	ND		33	10
77-47-4	Hexachlorocyclopentadiene	ND		67	10
67-72-1	Hexachloroethane	ND		33	10

2 95.1 J 5

473 5

Coversheet

SEMIVOLATILE ORGANICS

REGION I VALIDATION CHECKLIST for
OLIN CHEMICAL SUPERFUND SITE
Criteria and Qualifications: REGION I Organics Guideline (1996)

TIER I / (II) / III (circle one)

SITE: Olin Chemical Superfund Site Project #: 6107100016.12 SDG #: OCRI-18

LAB #: TAL-Westfield

Sample IDs: Attach tracking sheet and/or sample listing.

This checklist is designed to be used with USEPA Region I Validation Guidelines Part II (12/1996). During Level III validation, calculation and transcription checks are completed for instrument tuning, surrogates, target compounds, spike recoveries, calibration data, and internal standards as specified in the guideline. These checks are documented on attached validation notes.

YES NO NA	
Data completeness ☑ ☐ ☐ All data summaries, QC forms and raw data available from hard copy or electronic data package ☑ ☐ ☐ Data summaries match EDD	Contact lab if missing data. Lab to respond with 24 hours.
Holding Times and Preservation ☑ ☐ ☐ Hold times met (Waters – Extract within 7 days, analyze within 40 days. Soils – extract within 14 days, analyze within 40 days)	
Instrument Performance Check (Tune) ☑ ☐ ☐ Tune available for each 12-hour period samples were analyzed ☑ ☐ ☐ Appropriate number of significant figures reported (at least 2) ☑ ☐ ☐ Mass/Charge list (m/z) criteria met	
Initial Calibration ☑ ☐ ☐ %RSD less than or equal to 30% ☑ ☐ ☐ RRF greater than or equal to 0.05	
Continuing Calibration ☑ ☐ ☐ %D less than or equal to 25% ☑ ☐ ☐ RRF greater than or equal to 0.05.	
Blank Contamination ☒ ☐ ☐ Method blank contamination ☒ ☐ ☐ Equipment/Rinseate blank contamination	Evaluate all blanks for contamination. Highest contaminant level used for action level. See below.

SEMIVOLATILE ORGANICS

REGION I VALIDATION CHECKLIST for OLIN CHEMICAL SUPERFUND SITE
Criteria and Qualifications: REGION I Organics Guideline (1996)

TIER I / II / III (circle one)

Surrogate Recoveries ☑ ☐ ☐ Surrogates percent recovery criteria met: Soil = (base/neutral 30%-130%, acid 30%-130%) Water = (base/neutral 30%-130%, acid 15%-110%)	
Matrix Spikes and Laboratory Control Samples ☐ ☒ ☐ MS/MSD percent recovery criteria met Soil and Water = (base/neutral 40%-140%, acid 30%-130%) ☐ ☒ ☐ MS/MSD RPD criteria met (soils <50%, water <30%) ☐ ☒ ☐ LCS percent recovery criteria met soil/water (base 40%-140%, acid 30%-130%)	See below.
Field Duplicates ☐ ☐ ☑ RPD criteria met (soils <50%, water <30%)	
Internal Standard ☐ ☒ ☐ Area counts within -50 to +100 percent of calib. std. ☑ ☐ ☐ Retention Time within 30 seconds of calib. std.	See below.
Target Compounds ☑ ☐ ☐ Reviewed narrative for anomalies	
Tentatively Identified Compounds (TICs) ☐ ☑ ☐ TCL compounds reported as TICs	

Validator's Signature: _____

Date: 5/12/10

Reference:

MACTEC, Quality Assurance Project Plan for Remedial Investigation/Feasibility Study – Olin Chemical Superfund Site, Wilmington Property, 51 Eames Street, Wilmington, MA", MACTEC Engineering and Consulting. Draft .October 2008.

SAMPLE SUMMARY

Client: Olin Corporation

Job Number: 360-24686-1
Sdg Number: OCRI-18

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
360-24686-1	OC-SB-400-17/19-XXX	Solid	09/18/2009 1100	09/18/2009 1700
360-24686-2	OC-SB-435-0.0/1.0-XXX	Solid	09/17/2009 1445	09/18/2009 1700
360-24686-3	OC-SB-435-11/15-XXX	Solid	09/17/2009 1400	09/18/2009 1700
360-24686-4	OC-SB-435-6.0/10-XXX	Solid	09/17/2009 1335	09/18/2009 1700
360-24686-5	OC-SB-453-0.0/1.0-XXX	Solid	09/17/2009 1625	09/18/2009 1700
360-24686-6	OC-SB-453-1.0/6.0-XXX	Solid	09/17/2009 1600	09/18/2009 1700
360-24686-7	OC-SB-473-0.0/1.0-XXX	Solid	09/18/2009 0940	09/18/2009 1700
360-24686-8	OC-SB-473-13/15-XXX	Solid	09/18/2009 0920	09/18/2009 1700
360-24686-9	OC-SB-473-4.0/6.0-XXX	Solid	09/18/2009 0905	09/18/2009 1700
360-24686-10	OC-SS-453-0.0/1.0-XXX	Solid	09/17/2009 1740	09/18/2009 1700
360-24686-11	OC-SS-457-0.0/1.0-XXX	Solid	09/17/2009 1755	09/18/2009 1700
360-24686-12	OC-TBK-022	Solid	09/18/2009 1245	09/18/2009 1700
360-24686-13	OC-SS-456-0.0/1.0-XXX	Solid	09/18/2009 1320	09/18/2009 1700
360-24686-14	OC-SS-458-0.0/1.0-XXX	Solid	09/18/2009 1355	09/18/2009 1700
360-24686-15	OC-SS-459-0.0/1.0-XXX	Solid	09/18/2009 1345	09/18/2009 1700
360-24686-16	OC-SS-461-0.0/1.0-XXX	Solid	09/18/2009 1330	09/18/2009 1700
360-24686-17	OC-SB-473-0.0/1.0-XXX	Solid	09/18/2009 0940	09/18/2009 1700
360-24686-19	OC-SB-473-4.0/6.0-XXX	Solid	09/18/2009 0905	09/18/2009 1700
360-24686-20	OC-EBK-012	Water	09/17/2009 1715	09/18/2009 1700

Form I's updated.

3/12/10

Client: Olin Corporation

Job Number: 360-24686-1
Sdg Number: OCRI-18

Client Sample ID: **OC-SB-435-0.0/1.0-XXX**

Lab Sample ID: 360-24686-2
Client Matrix: Solid % Moisture: 82.4

Date Sampled: 09/17/2009 1445
Date Received: 09/18/2009 1700

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49754		Instrument ID:	Inst. J
Preparation:	3550B	Prep Batch: 360-49633		Lab File ID:	J03268.D
Dilution:	10			Initial Weight/Volume:	100.44 g
Date Analyzed:	10/01/2009 2154			Final Weight/Volume:	2.0 mL
Date Prepared:	09/29/2009 1050			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodimethylamine		ND		130	570

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	64		30 - 130
2-Fluorobiphenyl	45		30 - 130
2-Fluorophenol	33		30 - 130
Nitrobenzene-d5	48		30 - 130
Phenol-d5	37		30 - 130
Terphenyl-d14	67		30 - 130

Client: Olin Corporation

Job Number: 360-24686-1
Sdg Number: OCRI-18

Client Sample ID: **OC-SB-435-0.0/1.0-XXX**

Lab Sample ID: 360-24686-2
Client Matrix: Solid
% Moisture: 82.4

Date Sampled: 09/17/2009 1445
Date Received: 09/18/2009 1700

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49955		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49658		Lab File ID:	B10748.D
Dilution:	10			Initial Weight/Volume:	30.18 g
Date Analyzed:	10/05/2009 2309			Final Weight/Volume:	1.0 mL
Date Prepared:	09/29/2009 1545			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		570	1900
1,2,4,5-Tetrachlorobenzene		ND		570	1900
1,2,4-Trichlorobenzene		ND		570	1900
1,2-Dichlorobenzene		ND		570	1900
1,3-Dichlorobenzene		ND		570	1900
1,4-Dichlorobenzene		ND		570	1900
1-Methylnaphthalene		ND		570	1900
2,2'-oxybis[1-chloropropane]		ND		570	1900
2,3,4,6-Tetrachlorophenol		ND		570	1900
2,4,5-Trichlorophenol		ND		570	1900
2,4,6-Trichlorophenol		ND		570	1900
2,4-Dichlorophenol		ND		570	1900
2,4-Dimethylphenol		ND		740	1900
2,4-Dinitrophenol		ND		570	1900
2,4-Dinitrotoluene		ND		570	1900
2,6-Dinitrotoluene		ND		570	1900
2-Chloronaphthalene		ND		570	1900
2-Chlorophenol		ND		570	1900
2-Methylnaphthalene		ND		570	1900
2-Methylphenol		ND		1100	1900
2-Nitroaniline		ND		570	9400
2-Nitrophenol		ND		570	1900
3 & 4 Methylphenol		ND		570	1900
3,3'-Dichlorobenzidine		ND		570	3800
3-Nitroaniline		ND		570	9400
4,6-Dinitro-2-methylphenol		ND		570	9400
4-Bromophenyl phenyl ether		ND		570	1900
4-Chloro-3-methylphenol		ND		570	3800
4-Chloroaniline		ND		570	3800
4-Chlorophenyl phenyl ether		ND		570	1900
4-Nitroaniline		ND		570	9400
4-Nitrophenol		ND		570	9400
Acenaphthene		ND		570	1900
Acenaphthylene		ND		570	1900
Acetophenone		ND		570	1900
Aniline		ND	J	570	1900
Anthracene		ND		570	1900
Atrazine		ND		570	1900
Azobenzene		ND		570	1900
Benzaldehyde		1900		570	1900
Benzo[a]anthracene		ND		570	1900
Benzo[a]pyrene		ND		570	1900
Benzo[b]fluoranthene		ND		570	1900
Benzo[g,h,i]perylene		ND		570	1900
Benzo[k]fluoranthene		ND		570	1900
Benzoic acid		8100	J B	850	9400

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Client: Olin Corporation

Job Number: 360-24686-1
Sdg Number: OCRI-18

Client Sample ID: OC-SB-435-0.0/1.0-XXX

Lab Sample ID: 360-24686-2
Client Matrix: Solid
% Moisture: 82.4

Date Sampled: 09/17/2009 1445
Date Received: 09/18/2009 1700

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49955		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49658		Lab File ID:	B10748.D
Dilution:	10			Initial Weight/Volume:	30.18 g
Date Analyzed:	10/05/2009 2309			Final Weight/Volume:	1.0 mL
Date Prepared:	09/29/2009 1545			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		570	1900
Benzyl alcohol		ND		1600	3800
Bis(2-chloroethoxy)methane		ND		570	1900
Bis(2-chloroethyl)ether		ND		570	1900
Bis(2-ethylhexyl) phthalate		1400	J	570	1900
Butyl benzyl phthalate		ND		570	1900
Caprolactam		ND		570	1900
Carbazole		ND		570	1900
Chrysene		ND		570	1900
Dibenz(a,h)anthracene		ND		570	1900
Dibenzofuran		ND		570	1900
Diethyl phthalate		ND		570	1900
Dimethyl phthalate		ND		570	1900
Di-n-butyl phthalate		ND		1700	1900
Di-n-octyl phthalate		ND		950	1900
Diphenyl oxide		ND		570	1900
Diphenylamine		ND		570	1900
Fluoranthene		ND		570	1900
Fluorene		ND		570	1900
Hexachlorobenzene		ND		570	1900
Hexachlorobutadiene		ND		570	1900
Hexachlorocyclopentadiene		ND		570	3800
Hexachloroethane		ND		570	1900
Indeno[1,2,3-cd]pyrene		ND		570	1900
Isophorone		ND		570	1900
Naphthalene		ND		570	4500
Nitrobenzene		ND		570	1900
N-Nitrosodimethylamine		ND		670	1900
N-Nitrosodi-n-propylamine		ND		570	1900
N-Nitrosodiphenylamine		ND		570	1900
Pentachlorophenol		ND		570	1900
Phenanthrene		ND		570	2300
Phenol		ND		570	1900
Pyrene		ND		570	1900

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	68		30 - 130
2-Fluorophenol	46		30 - 130
2-Fluorobiphenyl	38		30 - 130
Nitrobenzene-d5	38		30 - 130
Phenol-d5	42		30 - 130
Terphenyl-d14	46		30 - 130

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Client: Olin Corporation

Job Number: 360-24686-1
Sdg Number: OCRI-18

Client Sample ID: **OC-SB-435-0.0/1.0-XXX**

Lab Sample ID: 360-24686-2
Client Matrix: Solid % Moisture: 82.4

Date Sampled: 09/17/2009 1445
Date Received: 09/18/2009 1700

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49955		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49658		Lab File ID:	B10748.D
Dilution:	10			Initial Weight/Volume:	30.18 g
Date Analyzed:	10/05/2009 2309			Final Weight/Volume:	1.0 mL
Date Prepared:	09/29/2009 1545			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** **10**

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
67-47-0	2-Furancarboxaldehyde, 5-(hydroxymethyl)	7.77	27000	T J N
~~121-33-5~~	~~Vanillin~~	~~8.64~~	~~6400~~	~~T J N~~
121-34-6	Benzoic acid, 4-hydroxy-3-methoxy-	9.33	7700	T J N
1599-67-3	1-Docosene	11.82	7200	T J N
6624-79-9	1-Dotriacontanol	12.48	14000	T J N
1599-67-3	1-Docosene	13.40	19000	T J N
14739-72-1	Heneicosane, 11-pentyl-	14.72	18000	T J N
~~638-67-5~~	~~Tricosane~~	~~15.87~~	~~31000~~	~~T J N~~
10191-41-0	Vitamin e	16.04	6000	T J N
127-22-0	Taraxerol	17.22	25000	T J N

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Client: Olin Corporation

Job Number: 360-24686-1
Sdg Number: OCRI-18

Client Sample ID: OC-SB-435-11/15-XXX

Lab Sample ID: 360-24686-3
Client Matrix: Solid

% Moisture: 8.5

Date Sampled: 09/17/2009 1400
Date Received: 09/18/2009 1700

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49754		Instrument ID:	Inst. J
Preparation:	3550B	Prep Batch: 360-49633		Lab File ID:	J03260.D
Dilution:	1.0			Initial Weight/Volume:	100.64 g
Date Analyzed:	10/01/2009 1735			Final Weight/Volume:	1.0 mL
Date Prepared:	09/29/2009 1050			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodimethylamine		ND		1.3	5.4

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	68		30 - 130
2-Fluorobiphenyl	65		30 - 130
2-Fluorophenol	73		30 - 130
Nitrobenzene-d5	74		30 - 130
Phenol-d5	79		30 - 130
Terphenyl-d14	65		30 - 130

Client: Olin Corporation

Job Number: 360-24686-1
Sdg Number: OCRI-18

Client Sample ID: **OC-SB-435-11/15-XXX**

Lab Sample ID: 360-24686-3
Client Matrix: Solid
% Moisture: 8.5

Date Sampled: 09/17/2009 1400
Date Received: 09/18/2009 1700

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49955		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49658		Lab File ID:	B10749.D
Dilution:	1.0			Initial Weight/Volume:	30.28 g
Date Analyzed:	10/05/2009 2337			Final Weight/Volume:	1.0 mL
Date Prepared:	09/29/2009 1545			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		11	36
1,2,4,5-Tetrachlorobenzene		ND		11	36
1,2,4-Trichlorobenzene		ND		11	36
1,2-Dichlorobenzene		ND		11	36
1,3-Dichlorobenzene		ND		11	36
1,4-Dichlorobenzene		ND		11	36
1-Methylnaphthalene		ND		11	36
2,2'-oxybis[1-chloropropane]		ND		11	36
2,3,4,6-Tetrachlorophenol		ND		11	36
2,4,5-Trichlorophenol		ND		11	36
2,4,6-Trichlorophenol		ND		11	36
2,4-Dichlorophenol		ND		11	36
2,4-Dimethylphenol		ND		14	36
2,4-Dinitrophenol		ND		11	36
2,4-Dinitrotoluene		ND		11	36
2,6-Dinitrotoluene		ND		11	36
2-Chloronaphthalene		ND		11	36
2-Chlorophenol		ND		11	36
2-Methylnaphthalene		ND		11	36
2-Methylphenol		ND		22	36
2-Nitroaniline		ND		11	180
2-Nitrophenol		ND		11	36
3 & 4 Methylphenol		ND		11	36
3,3'-Dichlorobenzidine		ND		11	72
3-Nitroaniline		ND		11	180
4,6-Dinitro-2-methylphenol		ND		11	180
4-Bromophenyl phenyl ether		ND		11	36
4-Chloro-3-methylphenol		ND		11	72
4-Chloroaniline		ND		11	72
4-Chlorophenyl phenyl ether		ND		11	36
4-Nitroaniline		ND		11	180
4-Nitrophenol		ND		11	180
Acenaphthene		ND		11	36
Acenaphthylene		ND		11	36
Acetophenone		ND		11	36
Aniline		ND	J	11	36
Anthracene		ND		11	36
Atrazine		ND		11	36
Azobenzene		ND		11	36
Benzaldehyde		ND		11	36
Benzo[a]anthracene		ND		11	36
Benzo[a]pyrene		ND		11	36
Benzo[b]fluoranthene		ND		11	36
Benzo[g,h,i]perylene		ND		11	36
Benzo[k]fluoranthene		ND		11	36
Benzoic acid		ND		16	180

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Client: Olin Corporation

Job Number: 360-24686-1
Sdg Number: OCRI-18

Client Sample ID: **OC-SB-435-11/15-XXX**

Lab Sample ID: 360-24686-3
Client Matrix: Solid % Moisture: 8.5

Date Sampled: 09/17/2009 1400
Date Received: 09/18/2009 1700

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49955		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49658		Lab File ID:	B10749.D
Dilution:	1.0			Initial Weight/Volume:	30.28 g
Date Analyzed:	10/05/2009 2337			Final Weight/Volume:	1.0 mL
Date Prepared:	09/29/2009 1545			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		11	36
Benzyl alcohol		ND		31	72
Bis(2-chloroethoxy)methane		ND		11	36
Bis(2-chloroethyl)ether		ND		11	36
Bis(2-ethylhexyl) phthalate		ND		11	36
Butyl benzyl phthalate		ND		11	36
Caprolactam		ND		11	36
Carbazole		ND		11	36
Chrysene		ND		11	36
Dibenz(a,h)anthracene		ND		11	36
Dibenzofuran		ND		11	36
Diethyl phthalate		ND		11	36
Dimethyl phthalate		ND		11	36
Di-n-butyl phthalate		ND		32	36
Di-n-octyl phthalate		ND		18	36
Diphenyl oxide		ND		11	36
Diphenylamine		ND		11	36
Fluoranthene		ND		11	36
Fluorene		ND		11	36
Hexachlorobenzene		ND		11	36
Hexachlorobutadiene		ND		11	36
Hexachlorocyclopentadiene		ND		11	72
Hexachloroethane		ND		11	36
Indeno[1,2,3-cd]pyrene		ND		11	36
Isophorone		ND		11	36
Naphthalene		ND		11	87
Nitrobenzene		ND		11	36
N-Nitrosodimethylamine		ND		13	36
N-Nitrosodi-n-propylamine		ND		11	36
N-Nitrosodiphenylamine		ND		11	36
Pentachlorophenol		ND		11	36
Phenanthrene		ND		11	43
Phenol		ND		11	36
Pyrene		ND		11	36

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	62		30 - 130
2-Fluorophenol	72		30 - 130
2-Fluorobiphenyl	55		30 - 130
Nitrobenzene-d5	54		30 - 130
Phenol-d5	60		30 - 130
Terphenyl-d14	67		30 - 130

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Client: Olin Corporation

Job Number: 360-24686-1
Sdg Number: OCRI-18

Client Sample ID: **OC-SB-435-11/15-XXX**

Lab Sample ID: 360-24686-3
Client Matrix: Solid
% Moisture: 8.5

Date Sampled: 09/17/2009 1400
Date Received: 09/18/2009 1700

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49955		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49658		Lab File ID:	B10749.D
Dilution:	1.0			Initial Weight/Volume:	30.28 g
Date Analyzed:	10/05/2009 2337			Final Weight/Volume:	1.0 mL
Date Prepared:	09/29/2009 1545			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 4

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
~~615-22-5~~	~~Benzothiazole, 2-(methylthio)-~~	~~9.60~~	~~8.8~~	~~T J N~~
~~3910-35-8~~	~~1H-Indene, 2,3-dihydro-1,1,3-trimethyl-3-~~	~~9.99~~	~~7.9~~	~~T J N~~
10544-50-0	Cyclic octaatomic sulfur	11.36	9.5	T J N
629-99-2	Pentacosane	12.48	11	T J N

Client: Olin Corporation

Job Number: 360-24686-1
Sdg Number: OCRI-18

Client Sample ID: OC-SB-435-6.0/10-XXX

Lab Sample ID: 360-24686-4
Client Matrix: Solid
% Moisture: 13.1

Date Sampled: 09/17/2009 1335
Date Received: 09/18/2009 1700

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49754		Instrument ID:	Inst. J
Preparation:	3550B	Prep Batch: 360-49633		Lab File ID:	J03261.D
Dilution:	1.0			Initial Weight/Volume:	100.87 g
Date Analyzed:	10/01/2009 1807			Final Weight/Volume:	1.0 mL
Date Prepared:	09/29/2009 1050			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodimethylamine		ND		1.3	5.7

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	73		30 - 130
2-Fluorobiphenyl	65		30 - 130
2-Fluorophenol	72		30 - 130
Nitrobenzene-d5	76		30 - 130
Phenol-d5	77		30 - 130
Terphenyl-d14	63		30 - 130

Client: Olin Corporation

Job Number: 360-24686-1
Sdg Number: OCRI-18

Client Sample ID: OC-SB-435-6.0/10-XXX

Lab Sample ID: 360-24686-4
Client Matrix: Solid % Moisture: 13.1

Date Sampled: 09/17/2009 1335
Date Received: 09/18/2009 1700

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49955		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49658		Lab File ID:	B10750.D
Dilution:	1.0			Initial Weight/Volume:	30.37 g
Date Analyzed:	10/06/2009 0004			Final Weight/Volume:	1.0 mL
Date Prepared:	09/29/2009 1545			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		11	38
1,2,4,5-Tetrachlorobenzene		ND		11	38
1,2,4-Trichlorobenzene		ND		11	38
1,2-Dichlorobenzene		ND		11	38
1,3-Dichlorobenzene		ND		11	38
1,4-Dichlorobenzene		ND		11	38
1-Methylnaphthalene		ND		11	38
2,2'-oxybis[1-chloropropane]		ND		11	38
2,3,4,6-Tetrachlorophenol		ND		11	38
2,4,5-Trichlorophenol		ND		11	38
2,4,6-Trichlorophenol		ND		11	38
2,4-Dichlorophenol		ND		11	38
2,4-Dimethylphenol		ND		15	38
2,4-Dinitrophenol		ND		11	38
2,4-Dinitrotoluene		ND		11	38
2,6-Dinitrotoluene		ND		11	38
2-Chloronaphthalene		ND		11	38
2-Chlorophenol		ND		11	38
2-Methylnaphthalene		ND		11	38
2-Methylphenol		ND		23	38
2-Nitroaniline		ND		11	190
2-Nitrophenol		ND		11	38
3 & 4 Methylphenol		ND		11	38
3,3'-Dichlorobenzidine		ND		11	76
3-Nitroaniline		ND		11	190
4,6-Dinitro-2-methylphenol		ND		11	190
4-Bromophenyl phenyl ether		ND		11	38
4-Chloro-3-methylphenol		ND		11	76
4-Chloroaniline		ND		11	76
4-Chlorophenyl phenyl ether		ND		11	38
4-Nitroaniline		ND		11	190
4-Nitrophenol		ND		11	190
Acenaphthene		ND		11	38
Acenaphthylene		ND		11	38
Acetophenone		ND		11	38
Aniline		ND		11	38
Anthracene		ND		11	38
Atrazine		ND		11	38
Azobenzene		ND		11	38
Benzaldehyde		ND		11	38
Benzo[a]anthracene		ND		11	38
Benzo[a]pyrene		ND		11	38
Benzo[b]fluoranthene		ND		11	38
Benzo[g,h,i]perylene		ND		11	38
Benzo[k]fluoranthene		ND		11	38
Benzoic acid		ND		17	190

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Client: Olin Corporation

Job Number: 360-24686-1
Sdg Number: OCRI-18

Client Sample ID: **OC-SB-435-6.0/10-XXX**

Lab Sample ID: 360-24686-4
Client Matrix: Solid % Moisture: 13.1

Date Sampled: 09/17/2009 1335
Date Received: 09/18/2009 1700

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49955		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49658		Lab File ID:	B10750.D
Dilution:	1.0			Initial Weight/Volume:	30.37 g
Date Analyzed:	10/06/2009 0004			Final Weight/Volume:	1.0 mL
Date Prepared:	09/29/2009 1545			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		11	38
Benzyl alcohol		ND		32	76
Bis(2-chloroethoxy)methane		ND		11	38
Bis(2-chloroethyl)ether		ND		11	38
Bis(2-ethylhexyl) phthalate		ND		11	38
Butyl benzyl phthalate		ND		11	38
Caprolactam		ND		11	38
Carbazole		ND		11	38
Chrysene		ND		11	38
Dibenz(a,h)anthracene		ND		11	38
Dibenzofuran		ND		11	38
Diethyl phthalate		ND		11	38
Dimethyl phthalate		ND		11	38
Di-n-butyl phthalate		ND		33	38
Di-n-octyl phthalate		ND		19	38
Diphenyl oxide		ND		11	38
Diphenylamine		ND		11	38
Fluoranthene		ND		11	38
Fluorene		ND		11	38
Hexachlorobenzene		ND		11	38
Hexachlorobutadiene		ND		11	38
Hexachlorocyclopentadiene		ND		11	76
Hexachloroethane		ND		11	38
Indeno[1,2,3-cd]pyrene		ND		11	38
Isophorone		ND		11	38
Naphthalene		ND		11	91
Nitrobenzene		ND		11	38
N-Nitrosodimethylamine		ND		13	38
N-Nitrosodi-n-propylamine		ND		11	38
N-Nitrosodiphenylamine		ND		11	38
Pentachlorophenol		ND		11	38
Phenanthrene		ND		11	45
Phenol		ND		11	38
Pyrene		ND		11	38

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	64		30 - 130
2-Fluorophenol	76		30 - 130
2-Fluorobiphenyl	58		30 - 130
Nitrobenzene-d5	56		30 - 130
Phenol-d5	64		30 - 130
Terphenyl-d14	65		30 - 130

Client: Olin Corporation

Job Number: 360-24686-1
Sdg Number: OCRI-18

Client Sample ID: **OC-SB-435-6.0/10-XXX**

Lab Sample ID: 360-24686-4
Client Matrix: Solid
% Moisture: 13.1

Date Sampled: 09/17/2009 1335
Date Received: 09/18/2009 1700

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49955		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49658		Lab File ID:	B10750.D
Dilution:	1.0			Initial Weight/Volume:	30.37 g
Date Analyzed:	10/06/2009 0004			Final Weight/Volume:	1.0 mL
Date Prepared:	09/29/2009 1545			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 2

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
74685-33-9	3-Eicosene, (E)-	12.48	14	T J N
~~7683-64-9~~	~~Squalene~~	~~14.10~~	~~26~~	~~T J N~~

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Client: Olin Corporation

Job Number: 360-24686-1
Sdg Number: OCRI-18

Client Sample ID: **OC-SB-453-0.0/1.0-XXX**

Lab Sample ID: 360-24686-5
Client Matrix: Solid

% Moisture: 81.3

Date Sampled: 09/17/2009 1625
Date Received: 09/18/2009 1700

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49754		Instrument ID:	Inst. J
Preparation:	3550B	Prep Batch: 360-49633		Lab File ID:	J03269.D
Dilution:	10			Initial Weight/Volume:	100.11 g
Date Analyzed:	10/01/2009 2226			Final Weight/Volume:	3.0 mL
Date Prepared:	09/29/2009 1050			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodimethylamine		ND		190	800

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	77		30 - 130
2-Fluorobiphenyl	44		30 - 130
2-Fluorophenol	34		30 - 130
Nitrobenzene-d5	53		30 - 130
Phenol-d5	41		30 - 130
Terphenyl-d14	53		30 - 130

Client: Olin Corporation

Job Number: 360-24686-1
Sdg Number: OCRI-18

Client Sample ID: **OC-SB-453-0.0/1.0-XXX**

Lab Sample ID: 360-24686-5
Client Matrix: Solid

% Moisture: 81.3

Date Sampled: 09/17/2009 1625
Date Received: 09/18/2009 1700

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49955		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49658		Lab File ID:	B10751.D
Dilution:	10			Initial Weight/Volume:	15.49 g
Date Analyzed:	10/06/2009 0032			Final Weight/Volume:	5.0 mL
Date Prepared:	09/29/2009 1545			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		5200	17000
1,2,4,5-Tetrachlorobenzene		ND		5200	17000
1,2,4-Trichlorobenzene		ND		5200	17000
1,2-Dichlorobenzene		ND		5200	17000
1,3-Dichlorobenzene		ND		5200	17000
1,4-Dichlorobenzene		ND		5200	17000
1-Methylnaphthalene		ND		5200	17000
2,2'-oxybis[1-chloropropane]		ND		5200	17000
2,3,4,6-Tetrachlorophenol		ND		5200	17000
2,4,5-Trichlorophenol		ND		5200	17000
2,4,6-Trichlorophenol		ND		5200	17000
2,4-Dichlorophenol		ND		5200	17000
2,4-Dimethylphenol		ND		6800	17000
2,4-Dinitrophenol		ND		5200	17000
2,4-Dinitrotoluene		ND		5200	17000
2,6-Dinitrotoluene		ND		5200	17000
2-Chloronaphthalene		ND		5200	17000
2-Chlorophenol		ND		5200	17000
2-Methylnaphthalene		ND		5200	17000
2-Methylphenol		ND		10000	17000
2-Nitroaniline		ND		5200	86000
2-Nitrophenol		ND		5200	17000
3 & 4 Methylphenol		ND		5200	17000
3,3'-Dichlorobenzidine		ND		5200	35000
3-Nitroaniline		ND		5200	86000
4,6-Dinitro-2-methylphenol		ND		5200	86000
4-Bromophenyl phenyl ether		ND		5200	17000
4-Chloro-3-methylphenol		ND		5200	35000
4-Chloroaniline		ND		5200	35000
4-Chlorophenyl phenyl ether		ND		5200	17000
4-Nitroaniline		ND		5200	86000
4-Nitrophenol		ND		5200	86000
Acenaphthene		ND		5200	17000
Acenaphthylene		ND		5200	17000
Acetophenone		ND		5200	17000
Aniline		ND	J	5200	17000
Anthracene		ND		5200	17000
Atrazine		ND		5200	17000
Azobenzene		ND		5200	17000
Benzaldehyde		ND		5200	17000
Benzo[a]anthracene		ND		5200	17000
Benzo[a]pyrene		ND		5200	17000
Benzo[b]fluoranthene		ND		5200	17000
Benzo[g,h,i]perylene		ND		5200	17000
Benzo[k]fluoranthene		ND		5200	17000
Benzoic acid		34000	J B	7800	86000

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Client: Olin Corporation

Job Number: 360-24686-1
Sdg Number: OCRI-18

Client Sample ID: **OC-SB-453-0.0/1.0-XXX**

Lab Sample ID: 360-24686-5
Client Matrix: Solid

% Moisture: 81.3

Date Sampled: 09/17/2009 1625
Date Received: 09/18/2009 1700

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49955		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49658		Lab File ID:	B10751.D
Dilution:	10			Initial Weight/Volume:	15.49 g
Date Analyzed:	10/06/2009 0032			Final Weight/Volume:	5.0 mL
Date Prepared:	09/29/2009 1545			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		5200	17000
Benzyl alcohol		ND		15000	35000
Bis(2-chloroethoxy)methane		ND		5200	17000
Bis(2-chloroethyl)ether		ND		5200	17000
Bis(2-ethylhexyl) phthalate		17000	J	5200	17000
Butyl benzyl phthalate		ND		5200	17000
Caprolactam		ND		5200	17000
Carbazole		ND		5200	17000
Chrysene		ND		5200	17000
Dibenz(a,h)anthracene		ND		5200	17000
Dibenzofuran		ND		5200	17000
Diethyl phthalate		ND		5200	17000
Dimethyl phthalate		ND		5200	17000
Di-n-butyl phthalate		ND		15000	17000
Di-n-octyl phthalate		ND		8700	17000
Diphenyl oxide		ND		5200	17000
Diphenylamine		ND		5200	17000
Fluoranthene		ND		5200	17000
Fluorene		ND		5200	17000
Hexachlorobenzene		ND		5200	17000
Hexachlorobutadiene		ND		5200	17000
Hexachlorocyclopentadiene		ND		5200	35000
Hexachloroethane		ND		5200	17000
Indeno[1,2,3-cd]pyrene		ND		5200	17000
Isophorone		ND		5200	17000
Naphthalene		ND		5200	41000
Nitrobenzene		ND		5200	17000
N-Nitrosodimethylamine		ND		6100	17000
N-Nitrosodi-n-propylamine		ND		5200	17000
N-Nitrosodiphenylamine		ND		5200	17000
Pentachlorophenol		ND		5200	17000
Phenanthrene		ND		5200	21000
Phenol		ND		5200	17000
Pyrene		ND		5200	17000

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	196	X	30 - 130
2-Fluorophenol	62		30 - 130
2-Fluorobiphenyl	48		30 - 130
Nitrobenzene-d5	60		30 - 130
Phenol-d5	53		30 - 130
Terphenyl-d14	60		30 - 130

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Client: Olin Corporation

Job Number: 360-24686-1
Sdg Number: OCRI-18

Client Sample ID: **OC-SB-453-0.0/1.0-XXX**

Lab Sample ID: 360-24686-5
Client Matrix: Solid
% Moisture: 81.3

Date Sampled: 09/17/2009 1625
Date Received: 09/18/2009 1700

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49955		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49658		Lab File ID:	B10751.D
Dilution:	10			Initial Weight/Volume:	15.49 g
Date Analyzed:	10/06/2009 0032			Final Weight/Volume:	5.0 mL
Date Prepared:	09/29/2009 1545			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** **10**

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
6624-79-9	1-Dotriacontanol	13.38	140000	T J N
143-28-2	Oleyl Alcohol	14.26	79000	T J N
630-2-4	Octacosane	14.72	140000	T J N
638-67-5	Tricosane	15.41	30000	T J N
56554-90-6	13-Octadecenal	15.64	110000	T J N
630-6-8	Hexatriacontane	15.87	270000	T J N
95008-11-0	10-Heneicosene (c,t)	15.92	150000	T J N
7320-37-8	Oxirane, tetradecyl-	16.52	70000	T J N
7683-64-9	Squalene	16.74	520000	T J N
127-22-0	Taraxerol	17.21	120000	T J N

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Client: Olin Corporation

Job Number: 360-24686-1
Sdg Number: OCRI-18

Client Sample ID: **OC-SB-453-1.0/6.0-XXX**

Lab Sample ID: 360-24686-6
Client Matrix: Solid
% Moisture: 20.6

Date Sampled: 09/17/2009 1600
Date Received: 09/18/2009 1700

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49754		Instrument ID:	Inst. J
Preparation:	3550B	Prep Batch: 360-49633		Lab File ID:	J03266.D
Dilution:	5.0			Initial Weight/Volume:	100.59 g
Date Analyzed:	10/01/2009 2050			Final Weight/Volume:	1.0 mL
Date Prepared:	09/29/2009 1050			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodimethylamine		ND		7.3	31

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	73		30 - 130
2-Fluorobiphenyl	71		30 - 130
2-Fluorophenol	74		30 - 130
Nitrobenzene-d5	79		30 - 130
Phenol-d5	79		30 - 130
Terphenyl-d14	71		30 - 130

Client: Olin Corporation

Job Number: 360-24686-1
Sdg Number: OCRI-18

Client Sample ID: **OC-SB-453-1.0/6.0-XXX**

Lab Sample ID: 360-24686-6
Client Matrix: Solid
% Moisture: 20.6

Date Sampled: 09/17/2009 1600
Date Received: 09/18/2009 1700

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49955		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49658		Lab File ID:	B10752.D
Dilution:	1.0			Initial Weight/Volume:	30.83 g
Date Analyzed:	10/06/2009 0100			Final Weight/Volume:	1.0 mL
Date Prepared:	09/29/2009 1545			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		12	41
1,2,4,5-Tetrachlorobenzene		ND		12	41
1,2,4-Trichlorobenzene		ND		12	41
1,2-Dichlorobenzene		ND		12	41
1,3-Dichlorobenzene		ND		12	41
1,4-Dichlorobenzene		ND		12	41
1-Methylnaphthalene		ND		12	41
2,2'-oxybis[1-chloropropane]		ND		12	41
2,3,4,6-Tetrachlorophenol		ND		12	41
2,4,5-Trichlorophenol		ND		12	41
2,4,6-Trichlorophenol		ND		12	41
2,4-Dichlorophenol		ND		12	41
2,4-Dimethylphenol		ND		16	41
2,4-Dinitrophenol		ND		12	41
2,4-Dinitrotoluene		ND		12	41
2,6-Dinitrotoluene		ND		12	41
2-Chloronaphthalene		ND		12	41
2-Chlorophenol		ND		12	41
2-Methylnaphthalene		ND		12	41
2-Methylphenol		ND		25	41
2-Nitroaniline		ND		12	200
2-Nitrophenol		ND		12	41
3 & 4 Methylphenol		ND		12	41
3,3'-Dichlorobenzidine		ND		12	82
3-Nitroaniline		ND		12	200
4,6-Dinitro-2-methylphenol		ND		12	200
4-Bromophenyl phenyl ether		ND		12	41
4-Chloro-3-methylphenol		ND		12	82
4-Chloroaniline		ND		12	82
4-Chlorophenyl phenyl ether		ND		12	41
4-Nitroaniline		ND		12	200
4-Nitrophenol		ND		12	200
Acenaphthene		ND		12	41
Acenaphthylene		ND		12	41
Acetophenone		ND		12	41
Aniline		ND	J	12	41
Anthracene		ND		12	41
Atrazine		ND		12	41
Azobenzene		ND		12	41
Benzaldehyde		ND		12	41
Benzo[a]anthracene		ND		12	41
Benzo[a]pyrene		ND		12	41
Benzo[b]fluoranthene		ND		12	41
Benzo[g,h,i]perylene		ND		12	41
Benzo[k]fluoranthene		ND		12	41
Benzoic acid		~~80~~	J B	18	200

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Client: Olin Corporation

Job Number: 360-24686-1
Sdg Number: OCRI-18

Client Sample ID: OC-SB-453-1.0/6.0-XXX

Lab Sample ID: 360-24686-6
Client Matrix: Solid

% Moisture: 20.6

Date Sampled: 09/17/2009 1600
Date Received: 09/18/2009 1700

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49955		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49658		Lab File ID:	B10752.D
Dilution:	1.0			Initial Weight/Volume:	30.83 g
Date Analyzed:	10/06/2009 0100			Final Weight/Volume:	1.0 mL
Date Prepared:	09/29/2009 1545			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		12	41
Benzyl alcohol		ND		35	82
Bis(2-chloroethoxy)methane		ND		12	41
Bis(2-chloroethyl)ether		ND		12	41
Bis(2-ethylhexyl) phthalate		ND		12	41
Butyl benzyl phthalate		14	J	12	41
Caprolactam		ND		12	41
Carbazole		ND		12	41
Chrysene		ND		12	41
Dibenz(a,h)anthracene		ND		12	41
Dibenzofuran		ND		12	41
Diethyl phthalate		ND		12	41
Dimethyl phthalate		ND		12	41
Di-n-butyl phthalate		ND		36	41
Di-n-octyl phthalate		ND		21	41
Diphenyl oxide		ND		12	41
Diphenylamine		ND		12	41
Fluoranthene		ND		12	41
Fluorene		ND		12	41
Hexachlorobenzene		ND		12	41
Hexachlorobutadiene		ND		12	41
Hexachlorocyclopentadiene		ND		12	82
Hexachloroethane		ND		12	41
Indeno[1,2,3-cd]pyrene		ND		12	41
Isophorone		ND		12	41
Naphthalene		ND		12	98
Nitrobenzene		ND		12	41
N-Nitrosodimethylamine		ND		14	41
N-Nitrosodi-n-propylamine		ND		12	41
N-Nitrosodiphenylamine		ND		12	41
Pentachlorophenol		ND		12	41
Phenanthrene		ND		12	49
Phenol		ND		12	41
Pyrene		ND		12	41

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	68		30 - 130
2-Fluorophenol	74		30 - 130
2-Fluorobiphenyl	57		30 - 130
Nitrobenzene-d5	56		30 - 130
Phenol-d5	62		30 - 130
Terphenyl-d14	71		30 - 130

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Client: Olin Corporation

Job Number: 360-24686-1
Sdg Number: OCRI-18

Client Sample ID: **OC-SB-453-1.0/6.0-XXX**

Lab Sample ID: 360-24686-6
Client Matrix: Solid % Moisture: 20.6

Date Sampled: 09/17/2009 1600
Date Received: 09/18/2009 1700

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49955		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49658		Lab File ID:	B10752.D
Dilution:	1.0			Initial Weight/Volume:	30.83 g
Date Analyzed:	10/06/2009 0100			Final Weight/Volume:	1.0 mL
Date Prepared:	09/29/2009 1545			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** **10**

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
~~638-67-5~~	~~Tricosane~~	~~11.83~~	~~250~~	~~T J N~~
7098-21-7	Tritetracontane	12.48	450	T J N
~~593-49-7~~	~~Heptacosane~~	~~13.38~~	~~580~~	~~T J N~~
6418-46-8	Eicosane, 3-methyl-	14.72	150	T J N
7796-19-2	2-Heptacosanone	14.89	350	T J N
~~112-95-8~~	~~Eicosane~~	~~15.87~~	~~270~~	~~T J N~~
77899-3-7	1-Heneicosyl formate	15.92	610	T J N
83-47-6	.gamma.-Sitosterol	17.02	400	T J N
1000140-7-7	1,4-Dimethyl-8-isopropylidenetricyclo[5.	17.22	120	T J N
80249-75-8	3,4-Epoxy-4a-ethyl-2,3,4,4a,5,6-hexahydr	17.52	230	T J N

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Client: Olin Corporation

Job Number: 360-24686-1
Sdg Number: OCRI-18

Client Sample ID: OC-SB-473-0.0/1.0-XXX

Lab Sample ID: 360-24686-7
Client Matrix: Solid

% Moisture: 18.4

Date Sampled: 09/18/2009 0940
Date Received: 09/18/2009 1700

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49754		Instrument ID:	Inst. J
Preparation:	3550B	Prep Batch: 360-49633		Lab File ID:	J03267.D
Dilution:	1.0			Initial Weight/Volume:	100.41 g
Date Analyzed:	10/01/2009 2122			Final Weight/Volume:	1.0 mL
Date Prepared:	09/29/2009 1050			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodimethylamine		ND		1.4	6.1

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	66		30 - 130
2-Fluorobiphenyl	62		30 - 130
2-Fluorophenol	63		30 - 130
Nitrobenzene-d5	74		30 - 130
Phenol-d5	70		30 - 130
Terphenyl-d14	79		30 - 130

Client: Olin Corporation

Job Number: 360-24686-1
Sdg Number: OCRI-18

Client Sample ID: **OC-SB-473-0.0/1.0-XXX**

Lab Sample ID: 360-24686-7
Client Matrix: Solid % Moisture: 18.4

Date Sampled: 09/18/2009 0940
Date Received: 09/18/2009 1700

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49955		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49658		Lab File ID:	B10753.D
Dilution:	10			Initial Weight/Volume:	30.17 g
Date Analyzed:	10/06/2009 0127			Final Weight/Volume:	1.0 mL
Date Prepared:	09/29/2009 1545			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		120	410
1,2,4,5-Tetrachlorobenzene		ND		120	410
1,2,4-Trichlorobenzene		ND		120	410
1,2-Dichlorobenzene		ND		120	410
1,3-Dichlorobenzene		ND		120	410
1,4-Dichlorobenzene		ND		120	410
1-Methylnaphthalene		ND		120	410
2,2'-oxybis[1-chloropropane]		ND		120	410
2,3,4,6-Tetrachlorophenol		ND		120	410
2,4,5-Trichlorophenol		ND		120	410
2,4,6-Trichlorophenol		ND		120	410
2,4-Dichlorophenol		ND		120	410
2,4-Dimethylphenol		ND		160	410
2,4-Dinitrophenol		ND		120	410
2,4-Dinitrotoluene		ND		120	410
2,6-Dinitrotoluene		ND		120	410
2-Chloronaphthalene		ND		120	410
2-Chlorophenol		ND		120	410
2-Methylnaphthalene		ND		120	410
2-Methylphenol		ND		240	410
2-Nitroaniline		ND		120	2000
2-Nitrophenol		ND		120	410
3 & 4 Methylphenol		ND		120	410
3,3'-Dichlorobenzidine		ND		120	810
3-Nitroaniline		ND		120	2000
4,6-Dinitro-2-methylphenol		ND		120	2000
4-Bromophenyl phenyl ether		ND		120	410
4-Chloro-3-methylphenol		ND		120	810
4-Chloroaniline		ND		120	810
4-Chlorophenyl phenyl ether		ND		120	410
4-Nitroaniline		ND		120	2000
4-Nitrophenol		ND		120	2000
Acenaphthene		ND		120	410
Acenaphthylene		ND		120	410
Acetophenone		ND		120	410
Aniline		ND	J	120	410
Anthracene		ND		120	410
Atrazine		ND		120	410
Azobenzene		ND		120	410
Benzaldehyde		ND		120	410
Benzo[a]anthracene		ND		120	410
Benzo[a]pyrene		ND		120	410
Benzo[b]fluoranthene		ND		120	410
Benzo[g,h,i]perylene		ND		120	410
Benzo[k]fluoranthene		ND		120	410
Benzoic acid		2000 ~~760~~	JB	180	2000

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Client: Olin Corporation

Job Number: 360-24686-1
Sdg Number: OCRI-18

Client Sample ID: **OC-SB-473-0.0/1.0-XXX**

Lab Sample ID: 360-24686-7
Client Matrix: Solid % Moisture: 18.4

Date Sampled: 09/18/2009 0940
Date Received: 09/18/2009 1700

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49955		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49658		Lab File ID:	B10753.D
Dilution:	10			Initial Weight/Volume:	30.17 g
Date Analyzed:	10/06/2009 0127			Final Weight/Volume:	1.0 mL
Date Prepared:	09/29/2009 1545			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		120	410
Benzyl alcohol		ND		350	810
Bis(2-chloroethoxy)methane		ND		120	410
Bis(2-chloroethyl)ether		ND		120	410
Bis(2-ethylhexyl) phthalate		ND		120	410
Butyl benzyl phthalate		ND		120	410
Caprolactam		ND		120	410
Carbazole		ND		120	410
Chrysene		ND		120	410
Dibenz(a,h)anthracene		ND		120	410
Dibenzofuran		ND		120	410
Diethyl phthalate		ND		120	410
Dimethyl phthalate		ND		120	410
Di-n-butyl phthalate		ND		360	410
Di-n-octyl phthalate		ND		200	410
Diphenyl oxide		ND		120	410
Diphenylamine		ND		120	410
Fluoranthene		ND		120	410
Fluorene		ND		120	410
Hexachlorobenzene		ND		120	410
Hexachlorobutadiene		ND		120	410
Hexachlorocyclopentadiene		ND		120	810
Hexachloroethane		ND		120	410
Indeno[1,2,3-cd]pyrene		ND		120	410
Isophorone		ND		120	410
Naphthalene		ND		120	980
Nitrobenzene		ND		120	410
N-Nitrosodimethylamine		ND		140	410
N-Nitrosodi-n-propylamine		ND		120	410
N-Nitrosodiphenylamine		ND		120	410
Pentachlorophenol		ND		120	410
Phenanthrene		ND		120	490
Phenol		ND		120	410
Pyrene		ND		120	410

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	75		30 - 130
2-Fluorophenol	62		30 - 130
2-Fluorobiphenyl	52		30 - 130
Nitrobenzene-d5	53		30 - 130
Phenol-d5	53		30 - 130
Terphenyl-d14	65		30 - 130

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Client: Olin Corporation

Job Number: 360-24686-1
Sdg Number: OCRI-18

Client Sample ID: **OC-SB-473-0.0/1.0-XXX**

Lab Sample ID: 360-24686-7
Client Matrix: Solid % Moisture: 18.4

Date Sampled: 09/18/2009 0940
Date Received: 09/18/2009 1700

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49955		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49658		Lab File ID:	B10753.D
Dilution:	10			Initial Weight/Volume:	30.17 g
Date Analyzed:	10/06/2009 0127			Final Weight/Volume:	1.0 mL
Date Prepared:	09/29/2009 1545			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 10

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
638-68-6	Triacontane	12.88	460	T J N
6624-79-9	1-Dotriacontanol	13.38	2600	T J N
593-45-3	Octadecane	13.97	530	T J N
53057-53-7	1,21-Docosadiene	14.26	1200	T J N
629-97-0	Docosane	14.71	2500	T J N
56554-86-0	17-Octadecenal	15.63	2200	T J N
630-2-4	Octacosane	15.87	3000	T J N
55401-72-4	Cyclohexane, [6-cyclopentyl-3-(3-cyclope	15.92	1100	T J N
1000130-79-7	11-Tetradecyn-1-ol acetate	16.51	1300	T J N
83-47-6	.gamma.-Sitosterol	17.01	1500	T J N

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Client: Olin Corporation

Job Number: 360-24686-1
Sdg Number: OCRI-18

Client Sample ID: **OC-SB-473-4.0/6.0-XXX**

Lab Sample ID: 360-24686-9
Client Matrix: Solid

% Moisture: 16.2

Date Sampled: 09/18/2009 0905
Date Received: 09/18/2009 1700

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49754		Instrument ID:	Inst. J
Preparation:	3550B	Prep Batch: 360-49633		Lab File ID:	J03263.D
Dilution:	1.0			Initial Weight/Volume:	100.46 g
Date Analyzed:	10/01/2009 1913			Final Weight/Volume:	1.0 mL
Date Prepared:	09/29/2009 1050			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodimethylamine		ND		1.4	5.9

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	63		30 - 130
2-Fluorobiphenyl	59		30 - 130
2-Fluorophenol	64		30 - 130
Nitrobenzene-d5	64		30 - 130
Phenol-d5	69		30 - 130
Terphenyl-d14	57		30 - 130

Client: Olin Corporation

Job Number: 360-24686-1
Sdg Number: OCRI-18

Client Sample ID: **OC-SB-473-4.0/6.0-XXX**

Lab Sample ID: 360-24686-9
Client Matrix: Solid % Moisture: 16.2

Date Sampled: 09/18/2009 0905
Date Received: 09/18/2009 1700

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49955		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49658		Lab File ID:	B10755.D
Dilution:	1.0			Initial Weight/Volume:	30.22 g
Date Analyzed:	10/06/2009 0223			Final Weight/Volume:	1.0 mL
Date Prepared:	09/29/2009 1545			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		12	39
1,2,4,5-Tetrachlorobenzene		ND		12	39
1,2,4-Trichlorobenzene		ND		12	39
1,2-Dichlorobenzene		ND		12	39
1,3-Dichlorobenzene		ND		12	39
1,4-Dichlorobenzene		ND		12	39
1-Methylnaphthalene		ND		12	39
2,2'-oxybis[1-chloropropane]		ND		12	39
2,3,4,6-Tetrachlorophenol		ND		12	39
2,4,5-Trichlorophenol		ND		12	39
2,4,6-Trichlorophenol		ND		12	39
2,4-Dichlorophenol		ND		12	39
2,4-Dimethylphenol		ND		16	39
2,4-Dinitrophenol		ND		12	39
2,4-Dinitrotoluene		ND		12	39
2,6-Dinitrotoluene		ND		12	39
2-Chloronaphthalene		ND		12	39
2-Chlorophenol		ND		12	39
2-Methylnaphthalene		ND		12	39
2-Methylphenol		ND		24	39
2-Nitroaniline		ND	J	12	200
2-Nitrophenol		ND		12	39
3 & 4 Methylphenol		ND		12	39
3,3'-Dichlorobenzidine		ND		12	79
3-Nitroaniline		ND		12	200
4,6-Dinitro-2-methylphenol		ND		12	200
4-Bromophenyl phenyl ether		ND		12	39
4-Chloro-3-methylphenol		ND		12	79
4-Chloroaniline		ND		12	79
4-Chlorophenyl phenyl ether		ND		12	39
4-Nitroaniline		ND		12	200
4-Nitrophenol		ND		12	200
Acenaphthene		ND		12	39
Acenaphthylene		ND		12	39
Acetophenone		ND		12	39
Aniline		ND	J	12	39
Anthracene		ND		12	39
Atrazine		ND		12	39
Azobenzene		ND		12	39
Benzaldehyde		ND		12	39
Benzo[a]anthracene		ND		12	39
Benzo[a]pyrene		ND		12	39
Benzo[b]fluoranthene		ND		12	39
Benzo[g,h,i]perylene		ND		12	39
Benzo[k]fluoranthene		ND		12	39
Benzoic acid		ND		18	200

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Client: Olin Corporation

Job Number: 360-24686-1
Sdg Number: OCRI-18

Client Sample ID: OC-SB-473-4.0/6.0-XXX

Lab Sample ID: 360-24686-9
Client Matrix: Solid % Moisture: 16.2

Date Sampled: 09/18/2009 0905
Date Received: 09/18/2009 1700

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49955		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49658		Lab File ID:	B10755.D
Dilution:	1.0			Initial Weight/Volume:	30.22 g
Date Analyzed:	10/06/2009 0223			Final Weight/Volume:	1.0 mL
Date Prepared:	09/29/2009 1545			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		12	39
Benzyl alcohol		ND		34	79
Bis(2-chloroethoxy)methane		ND		12	39
Bis(2-chloroethyl)ether		ND		12	39
Bis(2-ethylhexyl) phthalate		ND		12	39
Butyl benzyl phthalate		ND		12	39
Caprolactam		ND		12	39
Carbazole		ND		12	39
Chrysene		ND		12	39
Dibenz(a,h)anthracene		ND		12	39
Dibenzofuran		ND		12	39
Diethyl phthalate		ND		12	39
Dimethyl phthalate		ND		12	39
Di-n-butyl phthalate		ND		35	39
Di-n-octyl phthalate		ND		20	39
Diphenyl oxide		ND		12	39
Diphenylamine		ND		12	39
Fluoranthene		ND		12	39
Fluorene		ND		12	39
Hexachlorobenzene		ND		12	39
Hexachlorobutadiene		ND		12	39
Hexachlorocyclopentadiene		ND	J	12	79
Hexachloroethane		ND	J	12	39
Indeno[1,2,3-cd]pyrene		ND		12	39
Isophorone		ND		12	39
Naphthalene		ND		12	95
Nitrobenzene		ND		12	39
N-Nitrosodimethylamine		ND		14	39
N-Nitrosodi-n-propylamine		ND		12	39
N-Nitrosodiphenylamine		ND		12	39
Pentachlorophenol		ND		12	39
Phenanthrene		ND		12	47
Phenol		ND		12	39
Pyrene		ND		12	39

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	66		30 - 130
2-Fluorophenol	76		30 - 130
2-Fluorobiphenyl	59		30 - 130
Nitrobenzene-d5	54		30 - 130
Phenol-d5	61		30 - 130
Terphenyl-d14	82		30 - 130

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Client: Olin Corporation

Job Number: 360-24686-1
Sdg Number: OCRI-18

Client Sample ID: **OC-SB-473-4.0/6.0-XXX**

Lab Sample ID: 360-24686-9
Client Matrix: Solid

% Moisture: 16.2

Date Sampled: 09/18/2009 0905
Date Received: 09/18/2009 1700

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49955		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49658		Lab File ID:	B10755.D
Dilution:	1.0			Initial Weight/Volume:	30.22 g
Date Analyzed:	10/06/2009 0223			Final Weight/Volume:	1.0 mL
Date Prepared:	09/29/2009 1545			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 2

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
~~615-22-5~~	~~Benzothiazole, 2-(methylthio)~~	~~9.60~~	~~11~~	~~TJN~~
~~3910-35-8~~	~~1H-Indene, 2,3-dihydro-1,1,3-trimethyl-3~~	~~9.99~~	~~8.6~~	~~TJN~~

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Client: Olin Corporation

Job Number: 360-24686-1
Sdg Number: OCRI-18

Client Sample ID: **OC-SS-453-0.0/1.0-XXX**

Lab Sample ID: 360-24686-10
Client Matrix: Solid % Moisture: 28.3

Date Sampled: 09/17/2009 1740
Date Received: 09/18/2009 1700

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49521		Instrument ID:	Inst. J
Preparation:	3550B	Prep Batch: 360-49302		Lab File ID:	J03179.D
Dilution:	1.0			Initial Weight/Volume:	100.54 g
Date Analyzed:	09/27/2009 0342			Final Weight/Volume:	1.0 mL
Date Prepared:	09/22/2009 1155			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodimethylamine		ND		1.6	6.9

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	66		30 - 130
2-Fluorobiphenyl	52		30 - 130
2-Fluorophenol	48		30 - 130
Nitrobenzene-d5	55		30 - 130
Phenol-d5	50		30 - 130
Terphenyl-d14	62		30 - 130

Client: Olin Corporation

Job Number: 360-24686-1
Sdg Number: OCRI-18

Client Sample ID: **OC-SS-453-0.0/1.0-XXX**

Lab Sample ID: 360-24686-10
Client Matrix: Solid % Moisture: 28.3

Date Sampled: 09/17/2009 1740
Date Received: 09/18/2009 1700

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49955		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49658		Lab File ID:	B10756.D
Dilution:	1.0			Initial Weight/Volume:	30.18 g
Date Analyzed:	10/06/2009 0250			Final Weight/Volume:	1.0 mL
Date Prepared:	09/29/2009 1545			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		14	46
1,2,4,5-Tetrachlorobenzene		ND		14	46
1,2,4-Trichlorobenzene		ND		14	46
1,2-Dichlorobenzene		ND		14	46
1,3-Dichlorobenzene		ND		14	46
1,4-Dichlorobenzene		ND		14	46
1-Methylnaphthalene		ND		14	46
2,2'-oxybis[1-chloropropane]		ND		14	46
2,3,4,6-Tetrachlorophenol		ND		14	46
2,4,5-Trichlorophenol		ND		14	46
2,4,6-Trichlorophenol		ND		14	46
2,4-Dichlorophenol		ND		14	46
2,4-Dimethylphenol		ND		18	46
2,4-Dinitrophenol		ND		14	46
2,4-Dinitrotoluene		ND		14	46
2,6-Dinitrotoluene		ND		14	46
2-Chloronaphthalene		ND		14	46
2-Chlorophenol		ND		14	46
2-Methylnaphthalene		ND		14	46
2-Methylphenol		ND		28	46
2-Nitroaniline		ND		14	230
2-Nitrophenol		ND		14	46
3 & 4 Methylphenol		ND		14	46
3,3'-Dichlorobenzidine		ND		14	92
3-Nitroaniline		ND		14	230
4,6-Dinitro-2-methylphenol		ND		14	230
4-Bromophenyl phenyl ether		ND		14	46
4-Chloro-3-methylphenol		ND		14	92
4-Chloroaniline		ND		14	92
4-Chlorophenyl phenyl ether		ND		14	46
4-Nitroaniline		ND		14	230
4-Nitrophenol		ND		14	230
Acenaphthene		ND		14	46
Acenaphthylene		ND		14	46
Acetophenone		ND		14	46
Aniline		ND J		14	46
Anthracene		ND		14	46
Atrazine		ND		14	46
Azobenzene		ND		14	46
Benzaldehyde		75		14	46
Benzo[a]anthracene		17	J	14	46
Benzo[a]pyrene		18	J	14	46
Benzo[b]fluoranthene		29	J	14	46
Benzo[g,h,i]perylene		ND		14	46
Benzo[k]fluoranthene		ND		14	46
Benzoic acid		240 U	B	21	230

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Client: Olin Corporation

Job Number: 360-24686-1
Sdg Number: OCRI-18

Client Sample ID: OC-SS-453-0.0/1.0-XXX

Lab Sample ID: 360-24686-10
Client Matrix: Solid

% Moisture: 28.3

Date Sampled: 09/17/2009 1740
Date Received: 09/18/2009 1700

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49955		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49658		Lab File ID:	B10756.D
Dilution:	1.0			Initial Weight/Volume:	30.18 g
Date Analyzed:	10/06/2009 0250			Final Weight/Volume:	1.0 mL
Date Prepared:	09/29/2009 1545			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		14	46
Benzyl alcohol		ND		39	92
Bis(2-chloroethoxy)methane		ND		14	46
Bis(2-chloroethyl)ether		ND		14	46
Bis(2-ethylhexyl) phthalate		ND		14	46
Butyl benzyl phthalate		ND		14	46
Caprolactam		ND		14	46
Carbazole		ND		14	46
Chrysene		24	J	14	46
Dibenz(a,h)anthracene		ND		14	46
Dibenzofuran		ND		14	46
Diethyl phthalate		ND		14	46
Dimethyl phthalate		ND		14	46
Di-n-butyl phthalate		ND		41	46
Di-n-octyl phthalate		ND		23	46
Diphenyl oxide		ND		14	46
Diphenylamine		ND		14	46
Fluoranthene		38	J	14	46
Fluorene		ND		14	46
Hexachlorobenzene		ND		14	46
Hexachlorobutadiene		ND		14	46
Hexachlorocyclopentadiene		ND		14	92
Hexachloroethane		ND		14	46
Indeno[1,2,3-cd]pyrene		30	J	14	46
Isophorone		ND		14	46
Naphthalene		ND		14	110
Nitrobenzene		ND		14	46
~~N-Nitrosodimethylamine~~		~~ND~~		~~16~~	~~46~~
N-Nitrosodi-n-propylamine		ND		14	46
N-Nitrosodiphenylamine		ND		14	46
Pentachlorophenol		ND		14	46
Phenanthrene		27	J	14	55
Phenol		ND		14	46
Pyrene		43	J	14	46

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	47		30 - 130
2-Fluorophenol	63		30 - 130
2-Fluorobiphenyl	47		30 - 130
Nitrobenzene-d5	47		30 - 130
Phenol-d5	52		30 - 130
Terphenyl-d14	60		30 - 130

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Client: Olin Corporation

Job Number: 360-24686-1
Sdg Number: OCRI-18

Client Sample ID: **OC-SS-453-0.0/1.0-XXX**

Lab Sample ID: 360-24686-10
Client Matrix: Solid % Moisture: 28.3

Date Sampled: 09/17/2009 1740
Date Received: 09/18/2009 1700

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49955		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49658		Lab File ID:	B10756.D
Dilution:	1.0			Initial Weight/Volume:	30.18 g
Date Analyzed:	10/06/2009 0250			Final Weight/Volume:	1.0 mL
Date Prepared:	09/29/2009 1545			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** **10**

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
~~121-33-5~~	~~Vanillin~~	~~8.64~~	~~120~~	~~T J N~~
112-88-9	1-Octadecene	11.82	160	T J N
3452-7-1	1-Eicosene	12.48	920	T J N
6624-79-9	1-Dotriacontanol	12.89	110	T J N
1599-67-3	1-Docosene	13.40	1400	T J N
630-6-8	Hexatriacontane	14.74	1100	T J N
14811-95-1	1,19-Eicosadiene	15.65	970	T J N
~~630-2-4~~	~~Octacosane~~	~~15.89~~	~~1200~~	~~T J N~~
83-47-6	.gamma.-Sitosterol	17.03	730	T J N
559-74-0	Friedelin	18.50	450	T J N

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Client: Olin Corporation

Job Number: 360-24686-1
Sdg Number: OCRI-18

Client Sample ID: OC-SS-457-0.0/1.0-XXX

Lab Sample ID: 360-24686-11
Client Matrix: Solid

% Moisture: 10.2

Date Sampled: 09/17/2009 1755
Date Received: 09/18/2009 1700

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49521		Instrument ID:	Inst. J
Preparation:	3550B	Prep Batch: 360-49302		Lab File ID:	J03180.D
Dilution:	1.0			Initial Weight/Volume:	100.34 g
Date Analyzed:	09/27/2009 0414			Final Weight/Volume:	1.0 mL
Date Prepared:	09/22/2009 1155			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodimethylamine		ND		1.3	5.5

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	67		30 - 130
2-Fluorobiphenyl	49		30 - 130
2-Fluorophenol	46		30 - 130
Nitrobenzene-d5	49		30 - 130
Phenol-d5	50		30 - 130
Terphenyl-d14	54		30 - 130

Client: Olin Corporation

Job Number: 360-24686-1
Sdg Number: OCRI-18

Client Sample ID: OC-SS-457-0.0/1.0-XXX

Lab Sample ID: 360-24686-11
Client Matrix: Solid % Moisture: 10.2

Date Sampled: 09/17/2009 1755
Date Received: 09/18/2009 1700

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49955		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49658		Lab File ID:	B10757.D
Dilution:	1.0			Initial Weight/Volume:	30.49 g
Date Analyzed:	10/06/2009 0318			Final Weight/Volume:	1.0 mL
Date Prepared:	09/29/2009 1545			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		11	37
1,2,4,5-Tetrachlorobenzene		ND		11	37
1,2,4-Trichlorobenzene		ND		11	37
1,2-Dichlorobenzene		ND		11	37
1,3-Dichlorobenzene		ND		11	37
1,4-Dichlorobenzene		ND		11	37
1-Methylnaphthalene		ND		11	37
2,2'-oxybis[1-chloropropane]		ND		11	37
2,3,4,6-Tetrachlorophenol		ND		11	37
2,4,5-Trichlorophenol		ND		11	37
2,4,6-Trichlorophenol		ND		11	37
2,4-Dichlorophenol		ND		11	37
2,4-Dimethylphenol		ND		14	37
2,4-Dinitrophenol		ND		11	37
2,4-Dinitrotoluene		ND		11	37
2,6-Dinitrotoluene		ND		11	37
2-Chloronaphthalene		ND		11	37
2-Chlorophenol		ND		11	37
2-Methylnaphthalene		ND		11	37
2-Methylphenol		ND		22	37
2-Nitroaniline		ND		11	180
2-Nitrophenol		ND		11	37
3 & 4 Methylphenol		ND		11	37
3,3'-Dichlorobenzidine		ND		11	73
3-Nitroaniline		ND		11	180
4,6-Dinitro-2-methylphenol		ND		11	180
4-Bromophenyl phenyl ether		ND		11	37
4-Chloro-3-methylphenol		ND		11	73
4-Chloroaniline		ND		11	73
4-Chlorophenyl phenyl ether		ND		11	37
4-Nitroaniline		ND		11	180
4-Nitrophenol		ND		11	180
Acenaphthene		ND		11	37
Acenaphthylene		ND		11	37
Acetophenone		ND		11	37
Aniline		ND J		11	37
Anthracene		ND		11	37
Atrazine		ND		11	37
Azobenzene		ND		11	37
Benzaldehyde		12	J	11	37
Benzo[a]anthracene		21	J	11	37
Benzo[a]pyrene		22	J	11	37
Benzo[b]fluoranthene		34	J	11	37
Benzo[g,h,i]perylene		15	J	11	37
Benzo[k]fluoranthene		ND		11	37
Benzoic acid		~~75~~ 1804	J B	16	180

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Client: Olin Corporation

Job Number: 360-24686-1
Sdg Number: OCRI-18

Client Sample ID: **OC-SS-457-0.0/1.0-XXX**

Lab Sample ID: 360-24686-11
Client Matrix: Solid
% Moisture: 10.2

Date Sampled: 09/17/2009 1755
Date Received: 09/18/2009 1700

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49955		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49658		Lab File ID:	B10757.D
Dilution:	1.0			Initial Weight/Volume:	30.49 g
Date Analyzed:	10/06/2009 0318			Final Weight/Volume:	1.0 mL
Date Prepared:	09/29/2009 1545			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		11	37
Benzyl alcohol		ND		31	73
Bis(2-chloroethoxy)methane		ND		11	37
Bis(2-chloroethyl)ether		ND		11	37
Bis(2-ethylhexyl) phthalate		37		11	37
Butyl benzyl phthalate		ND		11	37
Caprolactam		ND		11	37
Carbazole		ND		11	37
Chrysene		23	J	11	37
Dibenz(a,h)anthracene		21	J	11	37
Dibenzofuran		ND		11	37
Diethyl phthalate		ND		11	37
Dimethyl phthalate		ND		11	37
Di-n-butyl phthalate		ND		32	37
Di-n-octyl phthalate		ND		18	37
Diphenyl oxide		ND		11	37
Diphenylamine		ND		11	37
Fluoranthene		41		11	37
Fluorene		ND		11	37
Hexachlorobenzene		ND		11	37
Hexachlorobutadiene		ND		11	37
Hexachlorocyclopentadiene		ND		11	73
Hexachloroethane		ND		11	37
Indeno[1,2,3-cd]pyrene		29	J	11	37
Isophorone		ND		11	37
Naphthalene		ND		11	88
Nitrobenzene		ND		11	37
N-Nitrosodimethylamine		ND		13	37
N-Nitrosodi-n-propylamine		ND		11	37
N-Nitrosodiphenylamine		ND		11	37
Pentachlorophenol		ND		11	37
Phenanthrene		15	J	11	44
Phenol		ND		11	37
Pyrene		40		11	37

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	52		30 - 130
2-Fluorophenol	60		30 - 130
2-Fluorobiphenyl	45		30 - 130
Nitrobenzene-d5	44		30 - 130
Phenol-d5	48		30 - 130
Terphenyl-d14	59		30 - 130

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Client: Olin Corporation

Job Number: 360-24686-1
Sdg Number: OCRI-18

Client Sample ID: **OC-SS-457-0.0/1.0-XXX**

Lab Sample ID: 360-24686-11
Client Matrix: Solid % Moisture: 10.2

Date Sampled: 09/17/2009 1755
Date Received: 09/18/2009 1700

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49955		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49658		Lab File ID:	B10757.D
Dilution:	1.0			Initial Weight/Volume:	30.49 g
Date Analyzed:	10/06/2009 0318			Final Weight/Volume:	1.0 mL
Date Prepared:	09/29/2009 1545			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** **10**

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
~~615-22-5~~	~~Benzothiazole, 2-(methylthio)-~~	~~9.60~~	~~14~~	~~T J N~~
2416-20-8	Hexadecenoic acid, Z-11-	10.74	120	T J N
112-88-9	1-Octadecene	11.81	19	T J N
1000216-79-4	Trifluoroacetic acid, n-octadecyl ester	12.47	94	T J N
506-52-5	1-Hexacosanol	13.39	150	T J N
1928-30-9	Tricosane, 2-methyl-	14.73	120	T J N
~~26603-23-6~~	~~p,p"-Dioctyldiphenylamine~~	~~15.25~~	~~230~~	~~T J N~~
26543-89-5	2(3H)-Furanone, 3,4-bis(1,3-benzodioxol-	15.84	30	T J N
~~630-1-3~~	~~Hexacosane~~	~~15.88~~	~~360~~	~~T J N~~
506-52-5	1-Hexacosanol	15.92	92	T J N

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Client: Olin Corporation

Job Number: 360-24686-1
Sdg Number: OCRI-18

Client Sample ID: OC-SS-456-0.0/1.0-XXX

Lab Sample ID: 360-24686-13
Client Matrix: Solid

% Moisture: 16.5

Date Sampled: 09/18/2009 1320
Date Received: 09/18/2009 1700

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49754		Instrument ID:	Inst. J
Preparation:	3550B	Prep Batch: 360-49633		Lab File ID:	J03264.D
Dilution:	1.0			Initial Weight/Volume:	100.14 g
Date Analyzed:	10/01/2009 1945			Final Weight/Volume:	1.0 mL
Date Prepared:	09/29/2009 1050			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodimethylamine		ND		1.4	6.0

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	67		30 - 130
2-Fluorobiphenyl	59		30 - 130
2-Fluorophenol	60		30 - 130
Nitrobenzene-d5	67		30 - 130
Phenol-d5	66		30 - 130
Terphenyl-d14	56		30 - 130

Client: Olin Corporation

Job Number: 360-24686-1
Sdg Number: OCRI-18

Client Sample ID: **OC-SS-456-0.0/1.0-XXX**

Lab Sample ID: 360-24686-13
Client Matrix: Solid % Moisture: 16.5

Date Sampled: 09/18/2009 1320
Date Received: 09/18/2009 1700

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49955		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49658		Lab File ID:	B10758.D
Dilution:	1.0			Initial Weight/Volume:	30.61 g
Date Analyzed:	10/06/2009 0345			Final Weight/Volume:	1.0 mL
Date Prepared:	09/29/2009 1545			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		12	39
1,2,4,5-Tetrachlorobenzene		ND		12	39
1,2,4-Trichlorobenzene		ND		12	39
1,2-Dichlorobenzene		ND		12	39
1,3-Dichlorobenzene		ND		12	39
1,4-Dichlorobenzene		ND		12	39
1-Methylnaphthalene		ND		12	39
2,2'-oxybis[1-chloropropane]		ND		12	39
2,3,4,6-Tetrachlorophenol		ND		12	39
2,4,5-Trichlorophenol		ND		12	39
2,4,6-Trichlorophenol		ND		12	39
2,4-Dichlorophenol		ND		12	39
2,4-Dimethylphenol		ND		15	39
2,4-Dinitrophenol		ND		12	39
2,4-Dinitrotoluene		ND		12	39
2,6-Dinitrotoluene		ND		12	39
2-Chloronaphthalene		ND		12	39
2-Chlorophenol		ND		12	39
2-Methylnaphthalene		ND		12	39
2-Methylphenol		ND		23	39
2-Nitroaniline		ND		12	200
2-Nitrophenol		ND		12	39
3 & 4 Methylphenol		ND		12	39
3,3'-Dichlorobenzidine		ND		12	78
3-Nitroaniline		ND		12	200
4,6-Dinitro-2-methylphenol		ND		12	200
4-Bromophenyl phenyl ether		ND		12	39
4-Chloro-3-methylphenol		ND		12	78
4-Chloroaniline		ND		12	78
4-Chlorophenyl phenyl ether		ND		12	39
4-Nitroaniline		ND		12	200
4-Nitrophenol		ND		12	200
Acenaphthene		ND		12	39
Acenaphthylene		ND		12	39
Acetophenone		ND		12	39
Aniline		ND J		12	39
Anthracene		ND		12	39
Atrazine		ND		12	39
Azobenzene		ND		12	39
Benzo[a]anthracene		17	J	12	39
Benzo[a]pyrene		18	J	12	39
Benzo[b]fluoranthene		25	J	12	39
Benzo[g,h,i]perylene		ND		12	39
Benzo[k]fluoranthene		13	J	12	39
Benzophenone		ND		12	39
Benzyl alcohol		ND		33	78

Client: Olin Corporation

Job Number: 360-24686-1
Sdg Number: OCRI-18

Client Sample ID: OC-SS-456-0.0/1.0-XXX

Lab Sample ID: 360-24686-13
Client Matrix: Solid

% Moisture: 16.5

Date Sampled: 09/18/2009 1320
Date Received: 09/18/2009 1700

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49955		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49658		Lab File ID:	B10758.D
Dilution:	1.0			Initial Weight/Volume:	30.61 g
Date Analyzed:	10/06/2009 0345			Final Weight/Volume:	1.0 mL
Date Prepared:	09/29/2009 1545			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Bis(2-chloroethoxy)methane		ND		12	39
Bis(2-chloroethyl)ether		ND		12	39
Bis(2-ethylhexyl) phthalate		19	J	12	39
Butyl benzyl phthalate		ND		12	39
Caprolactam		ND		12	39
Carbazole		ND		12	39
Chrysene		29	J	12	39
Dibenz(a,h)anthracene		ND		12	39
Dibenzofuran		ND		12	39
Diethyl phthalate		ND		12	39
Dimethyl phthalate		ND		12	39
Di-n-butyl phthalate		ND		34	39
Di-n-octyl phthalate		ND		20	39
Diphenyl oxide		ND		12	39
Diphenylamine		ND		12	39
Fluoranthene		35	J	12	39
Fluorene		ND		12	39
Hexachlorobenzene		ND		12	39
Hexachlorobutadiene		ND		12	39
Hexachlorocyclopentadiene		ND		12	78
Hexachloroethane		ND		12	39
Indeno[1,2,3-cd]pyrene		27	J	12	39
Isophorone		ND		12	39
Naphthalene		ND		12	94
Nitrobenzene		ND		12	39
N-Nitrosodimethylamine		ND		14	39
N-Nitrosodi-n-propylamine		ND		12	39
N-Nitrosodiphenylamine		ND		12	39
Pentachlorophenol		ND		12	39
Phenanthrene		23	J	12	47
Phenol		ND		12	39
Pyrene		36	J	12	39

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	56		30 - 130
2-Fluorophenol	66		30 - 130
2-Fluorobiphenyl	50		30 - 130
Nitrobenzene-d5	51		30 - 130
Phenol-d5	56		30 - 130
Terphenyl-d14	71		30 - 130

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Client: Olin Corporation

Job Number: 360-24686-1
Sdg Number: OCRI-18

Client Sample ID: OC-SS-456-0.0/1.0-XXX

Lab Sample ID: 360-24686-13
Client Matrix: Solid % Moisture: 16.5

Date Sampled: 09/18/2009 1320
Date Received: 09/18/2009 1700

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49955		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49658		Lab File ID:	B10758.D
Dilution:	1.0			Initial Weight/Volume:	30.61 g
Date Analyzed:	10/06/2009 0345			Final Weight/Volume:	1.0 mL
Date Prepared:	09/29/2009 1545			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** 10

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
~~121-33-5~~	~~Vanillin~~	~~8.64~~	~~76~~	T J N
2416-20-8	Hexadecenoic acid, Z-11-	10.72	78	T J N
629-73-2	1-Hexadecene	11.20	99	T J N
112-88-9	1-Octadecene	11.82	140	T J N
481-74-3	9,10-Anthracenedione, 1,8-dihydroxy-3-me	12.12	99	T J N
77899-3-7	1-Heneicosyl formate	12.40	75	T J N
52078-56-5	11-Tricosene	12.48	800	T J N
6624-79-9	1-Dotriacontanol	12.89	100	T J N
1599-67-3	1-Docosene	13.40	980	T J N
~~630-2-4~~	~~Octacosane~~	~~15.89~~	~~95~~	T J N

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Client: Olin Corporation

Job Number: 360-24686-1
Sdg Number: OCRI-18

Client Sample ID: **OC-SS-456-0.0/1.0-XXX**

Lab Sample ID: 360-24686-13
Client Matrix: Solid % Moisture: 16.5

Date Sampled: 09/18/2009 1320
Date Received: 09/18/2009 1700

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-50051		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49658		Lab File ID:	B10810.D
Dilution:	5.0			Initial Weight/Volume:	30.61 g
Date Analyzed:	10/08/2009 1605	Run Type: DL		Final Weight/Volume:	1.0 mL
Date Prepared:	09/29/2009 1545			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzaldehyde		1200		59	200
Benzoic acid		2200 ~~B~~ U		88	980

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	87		30 - 130
2-Fluorophenol	91		30 - 130
2-Fluorobiphenyl	66		30 - 130
Nitrobenzene-d5	66		30 - 130
Phenol-d5	79		30 - 130
Terphenyl-d14	78		30 - 130

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Client: Olin Corporation

Job Number: 360-24686-1
Sdg Number: OCRI-18

Client Sample ID: **OC-SS-458-0.0/1.0-XXX**

Lab Sample ID: 360-24686-14
Client Matrix: Solid % Moisture: 11.3

Date Sampled: 09/18/2009 1355
Date Received: 09/18/2009 1700

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49955		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49658		Lab File ID:	B10759.D
Dilution:	10			Initial Weight/Volume:	30.11 g
Date Analyzed:	10/06/2009 0413			Final Weight/Volume:	1.0 mL
Date Prepared:	09/29/2009 1545			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		110	370
1,2,4,5-Tetrachlorobenzene		ND		110	370
1,2,4-Trichlorobenzene		ND		110	370
1,2-Dichlorobenzene		ND		110	370
1,3-Dichlorobenzene		ND		110	370
1,4-Dichlorobenzene		ND		110	370
1-Methylnaphthalene		ND		110	370
2,2'-oxybis[1-chloropropane]		ND		110	370
2,3,4,6-Tetrachlorophenol		ND		110	370
2,4,5-Trichlorophenol		ND		110	370
2,4,6-Trichlorophenol		ND		110	370
2,4-Dichlorophenol		ND		110	370
2,4-Dimethylphenol		ND		150	370
2,4-Dinitrophenol		ND		110	370
2,4-Dinitrotoluene		ND		110	370
2,6-Dinitrotoluene		ND		110	370
2-Chloronaphthalene		ND		110	370
2-Chlorophenol		ND		110	370
2-Methylnaphthalene		ND		110	370
2-Methylphenol		ND		220	370
2-Nitroaniline		ND		110	1900
2-Nitrophenol		ND		110	370
3 & 4 Methylphenol		ND		110	370
3,3'-Dichlorobenzidine		ND		110	750
3-Nitroaniline		ND		110	1900
4,6-Dinitro-2-methylphenol		ND		110	1900
4-Bromophenyl phenyl ether		ND		110	370
4-Chloro-3-methylphenol		ND		110	750
4-Chloroaniline		ND		110	750
4-Chlorophenyl phenyl ether		ND		110	370
4-Nitroaniline		ND		110	1900
4-Nitrophenol		ND		110	1900
Acenaphthene		ND		110	370
Acenaphthylene		ND		110	370
Acetophenone		ND		110	370
Aniline		ND J		110	370
Anthracene		ND		110	370
Atrazine		ND		110	370
Azobenzene		ND		110	370
Benzaldehyde		690		110	370
Benzo[a]anthracene		ND		110	370
Benzo[a]pyrene		ND		110	370
Benzo[b]fluoranthene		130	J	110	370
Benzo[g,h,i]perylene		ND		110	370
Benzo[k]fluoranthene		ND		110	370
Benzoic acid		~~1600~~ 1900	~~J B~~	170	1900

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Client: Olin Corporation

Job Number: 360-24686-1
Sdg Number: OCRI-18

Client Sample ID: OC-SS-458-0.0/1.0-XXX

Lab Sample ID: 360-24686-14
Client Matrix: Solid % Moisture: 11.3

Date Sampled: 09/18/2009 1355
Date Received: 09/18/2009 1700

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49955		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49658		Lab File ID:	B10759.D
Dilution:	10			Initial Weight/Volume:	30.11 g
Date Analyzed:	10/06/2009 0413			Final Weight/Volume:	1.0 mL
Date Prepared:	09/29/2009 1545			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		110	370
Benzyl alcohol		ND		320	750
Bis(2-chloroethoxy)methane		ND		110	370
Bis(2-chloroethyl)ether		ND		110	370
Bis(2-ethylhexyl) phthalate		120	J	110	370
Butyl benzyl phthalate		ND		110	370
Caprolactam		ND		110	370
Carbazole		ND		110	370
Chrysene		140	J	110	370
Dibenz(a,h)anthracene		ND	J	110	370
Dibenzofuran		ND		110	370
Diethyl phthalate		ND		110	370
Dimethyl phthalate		ND		110	370
Di-n-butyl phthalate		ND		330	370
Di-n-octyl phthalate		ND	J	190	370
Diphenyl oxide		ND		110	370
Fluoranthene		200	J	110	370
Fluorene		ND		110	370
Hexachlorobenzene		ND		110	370
Hexachlorobutadiene		ND		110	370
Hexachlorocyclopentadiene		ND		110	750
Hexachloroethane		ND		110	370
Indeno[1,2,3-cd]pyrene		ND	J	110	370
Isophorone		ND		110	370
Naphthalene		210	J	110	900
Nitrobenzene		ND		110	370
N-Nitrosodimethylamine		ND		130	370
N-Nitrosodi-n-propylamine		ND		110	370
N-Nitrosodiphenylamine		ND		110	370
Pentachlorophenol		ND		110	370
Phenanthrene		170	J	110	450
Phenol		ND		110	370
Pyrene		190	J	110	370

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	82		30 - 130
2-Fluorobiphenyl	51		30 - 130
2-Fluorophenol	64		30 - 130
Nitrobenzene-d5	48		30 - 130
Phenol-d5	50		30 - 130
Terphenyl-d14	69		30 - 130

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Client: Olin Corporation

Job Number: 360-24686-1
Sdg Number: OCRI-18

Client Sample ID: **OC-SS-458-0.0/1.0-XXX**

Lab Sample ID: 360-24686-14
Client Matrix: Solid % Moisture: 11.3

Date Sampled: 09/18/2009 1355
Date Received: 09/18/2009 1700

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49955		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49658		Lab File ID:	B10759.D
Dilution:	10			Initial Weight/Volume:	30.11 g
Date Analyzed:	10/06/2009 0413			Final Weight/Volume:	1.0 mL
Date Prepared:	09/29/2009 1545			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** **10**

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
79-34-5	Ethane, 1,1,2,2-tetrachloro-	5.59	510	T J N
123-8-0	Benzaldehyde, 4-hydroxy-	8.45	230	T J N
121-33-5	Vanillin	8.64	200	T J N
75163-97-2	Octadecane, 2,6-dimethyl-	9.85	230	T J N
74685-30-6	5-Eicosene, (E)-	11.82	210	T J N
544-76-3	Hexadecane	12.13	260	T J N
1000155-82-2	Bicyclo[10.8.0]eicosane, (Z)-	12.25	320	T J N
112-88-9	1-Octadecene	12.48	920	T J N
1599-67-3	1-Docosene	13.39	860	T J N
62016-79-9	Heptacosane, 1-chloro-	15.88	810	T J N

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Client: Olin Corporation

Job Number: 360-24686-1
Sdg Number: OCRI-18

Client Sample ID: **OC-SS-459-0.0/1.0-XXX**

Lab Sample ID: 360-24686-15
Client Matrix: Solid % Moisture: 12.9

Date Sampled: 09/18/2009 1345
Date Received: 09/18/2009 1700

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49754		Instrument ID:	Inst. J
Preparation:	3550B	Prep Batch: 360-49633		Lab File ID:	J03265.D
Dilution:	1.0			Initial Weight/Volume:	100.77 g
Date Analyzed:	10/01/2009 2017			Final Weight/Volume:	1.0 mL
Date Prepared:	09/29/2009 1050			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
N-Nitrosodimethylamine		ND		1.3	5.7

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	63		30 - 130
2-Fluorobiphenyl	58		30 - 130
2-Fluorophenol	58		30 - 130
Nitrobenzene-d5	70		30 - 130
Phenol-d5	66		30 - 130
Terphenyl-d14	80		30 - 130

Client: Olin Corporation

Job Number: 360-24686-1
Sdg Number: OCRI-18

Client Sample ID: **OC-SS-459-0.0/1.0-XXX**

Lab Sample ID: 360-24686-15
Client Matrix: Solid
% Moisture: 12.9

Date Sampled: 09/18/2009 1345
Date Received: 09/18/2009 1700

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49955		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49658		Lab File ID:	B10760.D
Dilution:	10			Initial Weight/Volume:	30.14 g
Date Analyzed:	10/06/2009 0441			Final Weight/Volume:	1.0 mL
Date Prepared:	09/29/2009 1545			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		110	380
1,2,4,5-Tetrachlorobenzene		ND		110	380
1,2,4-Trichlorobenzene		ND		110	380
1,2-Dichlorobenzene		ND		110	380
1,3-Dichlorobenzene		ND		110	380
1,4-Dichlorobenzene		ND		110	380
1-Methylnaphthalene		ND		110	380
2,2'-oxybis[1-chloropropane]		ND		110	380
2,3,4,6-Tetrachlorophenol		ND		110	380
2,4,5-Trichlorophenol		ND		110	380
2,4,6-Trichlorophenol		ND		110	380
2,4-Dichlorophenol		ND		110	380
2,4-Dimethylphenol		ND		150	380
2,4-Dinitrophenol		ND		110	380
2,4-Dinitrotoluene		ND		110	380
2,6-Dinitrotoluene		ND		110	380
2-Chloronaphthalene		ND		110	380
2-Chlorophenol		ND		110	380
2-Methylnaphthalene		ND		110	380
2-Methylphenol		ND		230	380
2-Nitroaniline		ND		110	1900
2-Nitrophenol		ND		110	380
3 & 4 Methylphenol		ND		110	380
3,3'-Dichlorobenzidine		ND		110	760
3-Nitroaniline		ND		110	1900
4,6-Dinitro-2-methylphenol		ND		110	1900
4-Bromophenyl phenyl ether		ND		110	380
4-Chloro-3-methylphenol		ND		110	760
4-Chloroaniline		ND		110	760
4-Chlorophenyl phenyl ether		ND		110	380
4-Nitroaniline		ND		110	1900
4-Nitrophenol		ND		110	1900
Acenaphthene		ND		110	380
Acenaphthylene		ND		110	380
Acetophenone		ND		110	380
Aniline		ND J	✓	110	380
Anthracene		ND		110	380
Atrazine		ND		110	380
Azobenzene		ND		110	380
Benzaldehyde		240	J	110	380
Benzo[a]anthracene		400		110	380
Benzo[a]pyrene		380	J	110	380
Benzo[b]fluoranthene		460		110	380
Benzo[g,h,i]perylene		260	J	110	380
Benzo[k]fluoranthene		230	J	110	380
Benzoic acid		~~1100~~ 1600	~~J B~~	170	1900

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Client: Olin Corporation

Job Number: 360-24686-1
Sdg Number: OCRI-18

Client Sample ID: **OC-SS-459-0.0/1.0-XXX**

Lab Sample ID: 360-24686-15
Client Matrix: Solid % Moisture: 12.9

Date Sampled: 09/18/2009 1345
Date Received: 09/18/2009 1700

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49955		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49658		Lab File ID:	B10760.D
Dilution:	10			Initial Weight/Volume:	30.14 g
Date Analyzed:	10/06/2009 0441			Final Weight/Volume:	1.0 mL
Date Prepared:	09/29/2009 1545			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		110	380
Benzyl alcohol		ND		320	760
Bis(2-chloroethoxy)methane		ND		110	380
Bis(2-chloroethyl)ether		ND		110	380
Bis(2-ethylhexyl) phthalate		ND		110	380
Butyl benzyl phthalate		ND		110	380
Caprolactam		ND		110	380
Carbazole		ND		110	380
Chrysene		360	J	110	380
Dibenz(a,h)anthracene		250	J	110	380
Dibenzofuran		ND		110	380
Diethyl phthalate		ND		110	380
Dimethyl phthalate		ND		110	380
Di-n-butyl phthalate		ND		330	380
Di-n-octyl phthalate		ND		190	380
Diphenyl oxide		ND		110	380
Diphenylamine		ND		110	380
Fluoranthene		690		110	380
Fluorene		ND		110	380
Hexachlorobenzene		ND		110	380
Hexachlorobutadiene		ND		110	380
Hexachlorocyclopentadiene		ND		110	760
Hexachloroethane		ND		110	380
Indeno[1,2,3-cd]pyrene		380	J	110	380
Isophorone		ND		110	380
Naphthalene		ND		110	910
Nitrobenzene		ND		110	380
N-Nitrosodimethylamine		ND		130	380
N-Nitrosodi-n-propylamine		ND		110	380
N-Nitrosodiphenylamine		ND		110	380
Pentachlorophenol		ND		110	380
Phenanthrene		170	J	110	460
Phenol		ND		110	380
Pyrene		800		110	380

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	82		30 - 130
2-Fluorophenol	73		30 - 130
2-Fluorobiphenyl	57		30 - 130
Nitrobenzene-d5	52		30 - 130
Phenol-d5	53		30 - 130
Terphenyl-d14	72		30 - 130

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Client: Olin Corporation

Job Number: 360-24686-1
Sdg Number: OCRI-18

Client Sample ID: **OC-SS-459-0.0/1.0-XXX**

Lab Sample ID: 360-24686-15
Client Matrix: Solid
% Moisture: 12.9

Date Sampled: 09/18/2009 1345
Date Received: 09/18/2009 1700

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49955		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49658		Lab File ID:	B10760.D
Dilution:	10			Initial Weight/Volume:	30.14 g
Date Analyzed:	10/06/2009 0441			Final Weight/Volume:	1.0 mL
Date Prepared:	09/29/2009 1545			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** **10**

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
~~615-22-5~~	~~Benzothiazole, 2-(methylthio)-~~	~~9.60~~	~~330~~	~~T J N~~
1000155-85-3	Cyclohexadecane, 1,2-diethyl-	11.82	400	T J N
2136-70-1	Ethanol, 2-(tetradecyloxy)-	12.48	1400	T J N
629-78-7	Heptadecane	12.89	290	T J N
56554-87-1	16-Octadecenal	13.07	340	T J N
1599-67-3	1-Docosene	13.39	2300	T J N
1560-89-0	Heptadecane, 2-methyl-	14.72	5900	T J N
~~630-1-3~~	~~Hexacosane~~	~~15.42~~	~~780~~	~~T J N~~
1000155-85-0	Bicyclo[10.8.0]eicosane, (E)-	15.64	14000	T J N
~~630-2-4~~	~~Octacosane~~	~~15.88~~	~~8900~~	~~T J N~~

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Client: Olin Corporation

Job Number: 360-24686-1
Sdg Number: OCRI-18

Client Sample ID: **OC-SS-461-0.0/1.0-XXX**

Lab Sample ID: 360-24686-16
Client Matrix: Solid % Moisture: 15.3

Date Sampled: 09/18/2009 1330
Date Received: 09/18/2009 1700

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49955		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49658		Lab File ID:	B10761.D
Dilution:	10			Initial Weight/Volume:	30.21 g
Date Analyzed:	10/06/2009 0508			Final Weight/Volume:	1.0 mL
Date Prepared:	09/29/2009 1545			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		120	390
1,2,4,5-Tetrachlorobenzene		ND		120	390
1,2,4-Trichlorobenzene		ND		120	390
1,2-Dichlorobenzene		ND		120	390
1,3-Dichlorobenzene		ND		120	390
1,4-Dichlorobenzene		ND		120	390
1-Methylnaphthalene		ND		120	390
2,2'-oxybis[1-chloropropane]		ND		120	390
2,3,4,6-Tetrachlorophenol		ND		120	390
2,4,5-Trichlorophenol		ND		120	390
2,4,6-Trichlorophenol		ND		120	390
2,4-Dichlorophenol		ND		120	390
2,4-Dimethylphenol		ND		150	390
2,4-Dinitrophenol		ND		120	390
2,4-Dinitrotoluene		ND		120	390
2,6-Dinitrotoluene		ND		120	390
2-Chloronaphthalene		ND		120	390
2-Chlorophenol		ND		120	390
2-Methylnaphthalene		ND		120	390
2-Methylphenol		ND		230	390
2-Nitroaniline		ND		120	2000
2-Nitrophenol		ND		120	390
3 & 4 Methylphenol		ND		120	390
3,3'-Dichlorobenzidine		ND		120	780
3-Nitroaniline		ND		120	2000
4,6-Dinitro-2-methylphenol		ND		120	2000
4-Bromophenyl phenyl ether		ND		120	390
4-Chloro-3-methylphenol		ND		120	780
4-Chloroaniline		ND		120	780
4-Chlorophenyl phenyl ether		ND		120	390
4-Nitroaniline		ND		120	2000
4-Nitrophenol		ND		120	2000
Acenaphthene		ND		120	390
Acenaphthylene		ND		120	390
Acetophenone		ND		120	390
Aniline		ND J		120	390
Anthracene		ND		120	390
Atrazine		ND		120	390
Azobenzene		ND		120	390
Benzaldehyde		160	J	120	390
Benzo[a]anthracene		ND		120	390
Benzo[a]pyrene		ND		120	390
Benzo[b]fluoranthene		ND		120	390
Benzo[g,h,i]perylene		ND		120	390
Benzo[k]fluoranthene		ND		120	390
Benzoic acid		~~1200~~ 2000J	~~J B~~	180	2000

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Client: Olin Corporation

Job Number: 360-24686-1
Sdg Number: OCRI-18

Client Sample ID: **OC-SS-461-0.0/1.0-XXX**

Lab Sample ID: 360-24686-16
Client Matrix: Solid % Moisture: 15.3

Date Sampled: 09/18/2009 1330
Date Received: 09/18/2009 1700

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49955		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49658		Lab File ID:	B10761.D
Dilution:	10			Initial Weight/Volume:	30.21 g
Date Analyzed:	10/06/2009 0508			Final Weight/Volume:	1.0 mL
Date Prepared:	09/29/2009 1545			Injection Volume:	1.0 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		120	390
Benzyl alcohol		ND		330	780
Bis(2-chloroethoxy)methane		ND		120	390
Bis(2-chloroethyl)ether		ND		120	390
Bis(2-ethylhexyl) phthalate		ND		120	390
Butyl benzyl phthalate		ND		120	390
Caprolactam		ND		120	390
Carbazole		ND		120	390
Chrysene		ND		120	390
Dibenz(a,h)anthracene		ND		120	390
Dibenzofuran		ND		120	390
Diethyl phthalate		ND		120	390
Dimethyl phthalate		ND		120	390
Di-n-butyl phthalate		ND		340	390
Di-n-octyl phthalate		ND		200	390
Diphenyl oxide		ND		120	390
Fluoranthene		120	J	120	390
Fluorene		ND		120	390
Hexachlorobenzene		ND		120	390
Hexachlorobutadiene		ND		120	390
Hexachlorocyclopentadiene		ND		120	780
Hexachloroethane		ND		120	390
Indeno[1,2,3-cd]pyrene		220	J	120	390
Isophorone		ND		120	390
Naphthalene		ND		120	940
Nitrobenzene		ND		120	390
N-Nitrosodimethylamine		ND		140	390
N-Nitrosodi-n-propylamine		ND		120	390
N-Nitrosodiphenylamine		ND		120	390
Pentachlorophenol		ND		120	390
Phenanthrene		ND		120	470
Phenol		ND		120	390
Pyrene		120	J	120	390

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	89		30 - 130
2-Fluorobiphenyl	62		30 - 130
2-Fluorophenol	79		30 - 130
Nitrobenzene-d5	58		30 - 130
Phenol-d5	59		30 - 130
Terphenyl-d14	81		30 - 130

Client: Olin Corporation

Job Number: 360-24686-1
Sdg Number: OCRI-18

Client Sample ID: **OC-SS-461-0.0/1.0-XXX**

Lab Sample ID: 360-24686-16
Client Matrix: Solid % Moisture: 15.3

Date Sampled: 09/18/2009 1330
Date Received: 09/18/2009 1700

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49955		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49658		Lab File ID:	B10761.D
Dilution:	10			Initial Weight/Volume:	30.21 g
Date Analyzed:	10/06/2009 0508			Final Weight/Volume:	1.0 mL
Date Prepared:	09/29/2009 1545			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** **10**

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
112-88-9	1-Octadecene	11.82	540	T J N
638-66-4	Octadecanal	12.25	260	T J N
3452-7-1	1-Eicosene	12.48	1600	T J N
53057-53-7	1,21-Docosadiene	13.06	280	T J N
6971-40-0	17-Pentatriacontene	13.39	1900	T J N
14739-72-1	Heneicosane, 11-pentyl-	14.73	7800	T J N
22513-81-1	1,22-Docosanediol	15.64	3300	T J N
14739-72-1	Heneicosane, 11-pentyl-	15.88	5600	T J N
74685-30-6	5-Eicosene, (E)-	15.92	1800	T J N
14021-23-9	D-Friedoolean-14-ene, 3-methoxy-, (3.bet	16.65	7700	T J N

Client: Olin Corporation

Job Number: 360-24686-1
Sdg Number: OCRI-18

Client Sample ID: **OC-EBK-012**

Lab Sample ID: 360-24686-20
Client Matrix: Water

Date Sampled: 09/17/2009 1715
Date Received: 09/18/2009 1700

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-50350		Instrument ID:	Inst. B
Preparation:	3510C	Prep Batch: 360-49233		Lab File ID:	B10910.D
Dilution:	1.0			Initial Weight/Volume:	990 mL
Date Analyzed:	10/15/2009 1721			Final Weight/Volume:	1.0 mL
Date Prepared:	09/21/2009 1337			Injection Volume:	1.0 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
N-Nitrosodimethylamine	ND	*	0.51	5.1

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	80		15 - 110
2-Fluorobiphenyl	67		30 - 130
2-Fluorophenol	23		15 - 110
Nitrobenzene-d5	66		30 - 130
Phenol-d5	14	X	15 - 110
Terphenyl-d14	81		30 - 130

Client: Olin Corporation

Job Number: 360-24686-1
Sdg Number: OCRI-18

Client Sample ID: OC-EBK-012

Lab Sample ID: 360-24686-20
Client Matrix: Water

Date Sampled: 09/17/2009 1715
Date Received: 09/18/2009 1700

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-50350		Instrument ID:	Inst. B
Preparation:	3510C	Prep Batch: 360-49233		Lab File ID:	B10910.D
Dilution:	1.0			Initial Weight/Volume:	990 mL
Date Analyzed:	10/15/2009 1721			Final Weight/Volume:	1.0 mL
Date Prepared:	09/21/2009 1337			Injection Volume:	1.0 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1'-Biphenyl	ND		0.51	5.1
1,2,4,5-Tetrachlorobenzene	ND		0.51	5.1
1-Methylnaphthalene	ND		0.051	5.1
2,3,4,6-Tetrachlorophenol	ND		0.51	5.1
Bis(2-chloroethyl)ether	ND		0.51	5.1
Benzyl alcohol	0.67	J	0.51	10
2-Methylphenol	ND		0.51	5.1
N-Nitrosodi-n-propylamine	ND		0.51	5.1
Hexachloroethane	ND		0.51	3.0
3 & 4 Methylphenol	ND		0.51	5.1
2-Chlorophenol	ND		0.51	5.1
3,3'-Dichlorobenzidine	ND		0.51	5.1
Nitrobenzene	ND		0.51	5.1
Bis(2-chloroethoxy)methane	ND		0.51	5.1
Benzoic acid	ND	*	0.51	5.1
Isophorone	ND		0.51	5.1
2,4-Dimethylphenol	ND		0.51	5.1
Aniline	ND	*	0.51	5.1
Azobenzene	ND		0.51	5.1
2,4-Dichlorophenol	ND		0.51	5.1
4-Chloroaniline	ND		0.51	5.1
2,4,6-Trichlorophenol	ND		0.51	5.1
2,4,5-Trichlorophenol	ND		0.51	5.1
Hexachlorocyclopentadiene	ND		0.51	5.1
2-Methylnaphthalene	ND		0.051	1.0
2-Nitroaniline	ND		0.51	5.1
Caprolactam	ND	*	0.51	5.1
2-Chloronaphthalene	ND		0.51	5.1
4-Chloro-3-methylphenol	ND		0.51	5.1
2,6-Dinitrotoluene	ND		0.51	5.1
2-Nitrophenol	ND		0.51	5.1
3-Nitroaniline	ND		0.51	5.1
Dimethyl phthalate	ND		0.51	5.1
2,4-Dinitrophenol	ND		0.51	5.1
Acenaphthylene	ND		0.051	0.30
2,4-Dinitrotoluene	ND		0.51	5.1
Acenaphthene	ND		0.051	1.0
Dibenzofuran	ND		0.51	5.1
4-Nitrophenol	ND	*	0.51	5.1
Fluorene	ND		0.051	1.0
4-Nitroaniline	ND		0.51	5.1
Phenol	ND	*	0.51	5.1
4-Bromophenyl phenyl ether	ND		0.51	5.1
Hexachlorobenzene	ND		0.51	1.0
Diethyl phthalate	0.54	J	0.51	5.1
4-Chlorophenyl phenyl ether	ND		0.51	5.1

Client: Olin Corporation

Job Number: 360-24686-1
Sdg Number: OCRI-18

Client Sample ID: **OC-EBK-012**

Lab Sample ID: 360-24686-20
Client Matrix: Water

Date Sampled: 09/17/2009 1715
Date Received: 09/18/2009 1700

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-50350		Instrument ID:	Inst. B
Preparation:	3510C	Prep Batch: 360-49233		Lab File ID:	B10910.D
Dilution:	1.0			Initial Weight/Volume:	990 mL
Date Analyzed:	10/15/2009 1721			Final Weight/Volume:	1.0 mL
Date Prepared:	09/21/2009 1337			Injection Volume:	1.0 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Pentachlorophenol	ND		0.51	1.0
N-Nitrosodiphenylamine	ND		0.51	5.1
4,6-Dinitro-2-methylphenol	ND		0.51	5.1
Phenanthrene	ND		0.086	0.20
Anthracene	0.58	J	0.071	1.0
Di-n-butyl phthalate	1.2	J B	0.61	5.1
Fluoranthene	ND		0.20	1.0
Pyrene	ND		0.19	5.1
Butyl benzyl phthalate	1.0	J	0.51	5.1
Benzo[a]anthracene	ND		0.17	0.30
Chrysene	ND		0.17	1.0
Di-n-octyl phthalate	ND		0.74	5.1
Benzo[b]fluoranthene	ND		0.15	0.30
Benzo[k]fluoranthene	ND		0.17	0.30
Benzo[a]pyrene	ND		0.10	0.20
Indeno[1,2,3-cd]pyrene	ND		0.080	0.51
Dibenz(a,h)anthracene	ND		0.065	0.51
Benzo[g,h,i]perylene	ND		0.095	0.51
Acetophenone	1.1	J B	0.51	5.1
Bis(2-ethylhexyl) phthalate	ND		0.51	2.0
bis (2-chloroisopropyl) ether	ND		0.51	5.1
Atrazine	ND		0.51	5.1
Benzaldehyde	ND	*	0.51	5.1
Carbazole	ND		0.51	5.1
Benzophenone	ND		0.51	5.1
Diphenyl oxide	ND		0.51	5.1
Diphenylamine	ND		0.51	5.1

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	80		15 - 110
2-Fluorobiphenyl	67		30 - 130
2-Fluorophenol	23		15 - 110
Nitrobenzene-d5	66		30 - 130
Phenol-d5	14	X	15 - 110
Terphenyl-d14	81		30 - 130

Client: Olin Corporation

Job Number: 360-24686-1
Sdg Number: OCRI-18

Client Sample ID: **OC-EBK-012**

Lab Sample ID: 360-24686-20
Client Matrix: Water

Date Sampled: 09/17/2009 1715
Date Received: 09/18/2009 1700

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-50350		Instrument ID:	Inst. B
Preparation:	3510C	Prep Batch: 360-49233		Lab File ID:	B10910.D
Dilution:	1.0			Initial Weight/Volume:	990 mL
Date Analyzed:	10/15/2009 1721			Final Weight/Volume:	1.0 mL
Date Prepared:	09/21/2009 1337			Injection Volume:	1.0 uL

Tentatively Identified Compounds **Number TIC's Found:** **0**

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
	Tentatively Identified Compound		None	

SAMPLE SUMMARY

Client: Olin Corporation

Job Number: 360-24686-2
Sdg Number: OCRI-18A

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
360-24686-1	OC-SB-400-17/19-XXX	Solid	09/18/2009 1100	09/18/2009 1700
360-24686-8	OC-SB-473-13/15-XXX	Solid	09/18/2009 0920	09/18/2009 1700

Form I: edited.

~~EDDS sent to QA~~ 2/5/10

2/5/10

Client: Olin Corporation

Job Number: 360-24686-2
Sdg Number: OCRI-18A

Client Sample ID: OC-SB-400-17/19-XXX

Lab Sample ID: 360-24686-1
Client Matrix: Solid
% Moisture: 11.4

Date Sampled: 09/18/2009 1100
Date Received: 09/18/2009 1700

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49955		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49658		Lab File ID:	B10747.D
Dilution:	1.0			Initial Weight/Volume:	30.86 g
Date Analyzed:	10/05/2009 2241			Final Weight/Volume:	1.0 mL
Date Prepared:	09/29/2009 1545			Injection Volume:	

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		11	37
1,2,4,5-Tetrachlorobenzene		ND		11	37
1,2,4-Trichlorobenzene		ND		11	37
1,2-Dichlorobenzene		ND		11	37
1,3-Dichlorobenzene		ND		11	37
1,4-Dichlorobenzene		ND		11	37
1-Methylnaphthalene		ND		11	37
2,2'-oxybis[1-chloropropane]		ND		11	37
2,3,4,6-Tetrachlorophenol		ND		11	37
2,4,5-Trichlorophenol		ND		11	37
2,4,6-Trichlorophenol		ND		11	37
2,4-Dichlorophenol		ND		11	37
2,4-Dimethylphenol		ND		14	37
2,4-Dinitrophenol		ND		11	37
2,4-Dinitrotoluene		ND		11	37
2,6-Dinitrotoluene		ND		11	37
2-Chloronaphthalene		ND		11	37
2-Chlorophenol		ND		11	37
2-Methylnaphthalene		ND		11	37
2-Methylphenol		ND		22	37
2-Nitroaniline		ND		11	180
2-Nitrophenol		ND		11	37
3 & 4 Methylphenol		ND		11	37
3,3'-Dichlorobenzidine		ND		11	73
3-Nitroaniline		ND		11	180
4,6-Dinitro-2-methylphenol		ND		11	180
4-Bromophenyl phenyl ether		ND		11	37
4-Chloro-3-methylphenol		ND		11	73
4-Chloroaniline		ND		11	73
4-Chlorophenyl phenyl ether		ND		11	37
4-Nitroaniline		ND		11	180
4-Nitrophenol		ND		11	180
Acenaphthene		ND		11	37
Acenaphthylene		ND		11	37
Acetophenone		ND		11	37
Aniline		ND	J	11	37
Anthracene		ND		11	37
Atrazine		ND		11	37
Azobenzene		ND		11	37
Benzaldehyde		ND		11	37
Benzo[a]anthracene		ND		11	37
Benzo[a]pyrene		ND		11	37
Benzo[b]fluoranthene		ND		11	37
Benzo[g,h,i]perylene		ND		11	37
Benzo[k]fluoranthene		ND		11	37
Benzoic acid		~~ND~~ 1200	~~J B~~	16	180

2/5/10

Client: Olin Corporation

Job Number: 360-24686-2
Sdg Number: OCRI-18A

Client Sample ID: **OC-SB-400-17/19-XXX**

Lab Sample ID: 360-24686-1
Client Matrix: Solid % Moisture: 11.4

Date Sampled: 09/18/2009 1100
Date Received: 09/18/2009 1700

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49955		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49658		Lab File ID:	B10747.D
Dilution:	1.0			Initial Weight/Volume:	30.86 g
Date Analyzed:	10/05/2009 2241			Final Weight/Volume:	1.0 mL
Date Prepared:	09/29/2009 1545			Injection Volume:	

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		11	37
Benzyl alcohol		ND		31	73
Bis(2-chloroethoxy)methane		ND		11	37
Bis(2-chloroethyl)ether		ND		11	37
Bis(2-ethylhexyl) phthalate		ND		11	37
Butyl benzyl phthalate		31	J	11	37
Caprolactam		ND		11	37
Carbazole		ND		11	37
Chrysene		ND		11	37
Dibenz(a,h)anthracene		ND		11	37
Dibenzofuran		ND		11	37
Diethyl phthalate		ND		11	37
Dimethyl phthalate		ND		11	37
Di-n-butyl phthalate		ND		32	37
Di-n-octyl phthalate		ND		18	37
Diphenyl oxide		ND		11	37
Fluoranthene		ND		11	37
Fluorene		ND		11	37
Hexachlorobenzene		ND		11	37
Hexachlorobutadiene		ND		11	37
Hexachlorocyclopentadiene		ND		11	73
Hexachloroethane		ND		11	37
Indeno[1,2,3-cd]pyrene		ND		11	37
Isophorone		ND		11	37
Naphthalene		ND		11	88
Nitrobenzene		ND		11	37
N-Nitrosodimethylamine		ND		13	37
N-Nitrosodi-n-propylamine		ND		11	37
N-Nitrosodiphenylamine		ND		11	37
Pentachlorophenol		ND		11	37
Phenanthrene		ND		11	44
Phenol		ND		11	37
Pyrene		ND		11	37

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	65		30 - 130
2-Fluorobiphenyl	62		30 - 130
2-Fluorophenol	79		30 - 130
Nitrobenzene-d5	59		30 - 130
Phenol-d5	67		30 - 130
Terphenyl-d14	73		30 - 130

2/5/10

Client: Olin Corporation

Job Number: 360-24686-2
Sdg Number: OCRI-18A

Client Sample ID: **OC-SB-400-17/19-XXX**

Lab Sample ID: 360-24686-1
Client Matrix: Solid
% Moisture: 11.4

Date Sampled: 09/18/2009 1100
Date Received: 09/18/2009 1700

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49955		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49658		Lab File ID:	B10747.D
Dilution:	1.0			Initial Weight/Volume:	30.86 g
Date Analyzed:	10/05/2009 2241			Final Weight/Volume:	1.0 mL
Date Prepared:	09/29/2009 1545			Injection Volume:	

Tentatively Identified Compounds **Number TIC's Found:** 1

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
~~3910-35-8~~	~~1H-Indene, 2,3-dihydro-1,1,3-trimethyl-3~~	~~9.98~~	~~12~~	~~T J N~~

4/22/10

Client: Olin Corporation

Job Number: 360-24686-2
Sdg Number: OCRI-18A

Client Sample ID: **OC-SB-473-13/15-XXX**

Lab Sample ID: 360-24686-8
Client Matrix: Solid
% Moisture: 8.8

Date Sampled: 09/18/2009 0920
Date Received: 09/18/2009 1700

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49955		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49658		Lab File ID:	B10754.D
Dilution:	1.0			Initial Weight/Volume:	30.76 g
Date Analyzed:	10/06/2009 0155			Final Weight/Volume:	1.0 mL
Date Prepared:	09/29/2009 1545			Injection Volume:	

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		ND		11	36
1,2,4,5-Tetrachlorobenzene		ND		11	36
1,2,4-Trichlorobenzene		ND		11	36
1,2-Dichlorobenzene		ND		11	36
1,3-Dichlorobenzene		ND		11	36
1,4-Dichlorobenzene		ND		11	36
1-Methylnaphthalene		ND		11	36
2,2'-oxybis[1-chloropropane]		ND		11	36
2,3,4,6-Tetrachlorophenol		ND		11	36
2,4,5-Trichlorophenol		ND		11	36
2,4,6-Trichlorophenol		ND		11	36
2,4-Dichlorophenol		ND		11	36
2,4-Dimethylphenol		ND		14	36
2,4-Dinitrophenol		ND		11	36
2,4-Dinitrotoluene		ND		11	36
2,6-Dinitrotoluene		ND		11	36
2-Chloronaphthalene		ND		11	36
2-Chlorophenol		ND		11	36
2-Methylnaphthalene		ND		11	36
2-Methylphenol		ND		21	36
2-Nitroaniline		ND		11	180
2-Nitrophenol		ND		11	36
3 & 4 Methylphenol		ND		11	36
3,3'-Dichlorobenzidine		ND		11	71
3-Nitroaniline		ND		11	180
4,6-Dinitro-2-methylphenol		ND		11	180
4-Bromophenyl phenyl ether		ND		11	36
4-Chloro-3-methylphenol		ND		11	71
4-Chloroaniline		ND		11	71
4-Chlorophenyl phenyl ether		ND		11	36
4-Nitroaniline		ND		11	180
4-Nitrophenol		ND		11	180
Acenaphthene		ND		11	36
Acenaphthylene		ND		11	36
Acetophenone		ND		11	36
Aniline		ND	J	11	36
Anthracene		ND		11	36
Atrazine		ND		11	36
Azobenzene		ND		11	36
Benzaldehyde		ND		11	36
Benzo[a]anthracene		ND		11	36
Benzo[a]pyrene		ND		11	36
Benzo[b]fluoranthene		ND		11	36
Benzo[g,h,i]perylene		ND		11	36
Benzo[k]fluoranthene		ND		11	36
Benzoic acid		ND		16	180

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Client: Olin Corporation

Job Number: 360-24686-2
Sdg Number: OCRI-18A

Client Sample ID: **OC-SB-473-13/15-XXX**

Lab Sample ID: 360-24686-8
Client Matrix: Solid
% Moisture: 8.8

Date Sampled: 09/18/2009 0920
Date Received: 09/18/2009 1700

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49955		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49658		Lab File ID:	B10754.D
Dilution:	1.0			Initial Weight/Volume:	30.76 g
Date Analyzed:	10/06/2009 0155			Final Weight/Volume:	1.0 mL
Date Prepared:	09/29/2009 1545			Injection Volume:	

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzophenone		ND		11	36
Benzyl alcohol		ND		30	71
Bis(2-chloroethoxy)methane		ND		11	36
Bis(2-chloroethyl)ether		ND		11	36
Bis(2-ethylhexyl) phthalate		ND		11	36
Butyl benzyl phthalate		ND		11	36
Caprolactam		ND		11	36
Carbazole		ND		11	36
Chrysene		ND		11	36
Dibenz(a,h)anthracene		ND		11	36
Dibenzofuran		ND		11	36
Diethyl phthalate		ND		11	36
Dimethyl phthalate		ND		11	36
Di-n-butyl phthalate		ND		31	36
Di-n-octyl phthalate		ND		18	36
Diphenyl oxide		ND		11	36
Fluoranthene		ND		11	36
Fluorene		ND		11	36
Hexachlorobenzene		ND		11	36
Hexachlorobutadiene		ND		11	36
Hexachlorocyclopentadiene		ND		11	71
Hexachloroethane		ND		11	36
Indeno[1,2,3-cd]pyrene		ND		11	36
Isophorone		ND		11	36
Naphthalene		ND		11	86
Nitrobenzene		ND		11	36
N-Nitrosodimethylamine		ND		13	36
N-Nitrosodi-n-propylamine		ND		11	36
N-Nitrosodiphenylamine		ND		11	36
Pentachlorophenol		ND		11	36
Phenanthrene		ND		11	43
Phenol		ND		11	36
Pyrene		ND		11	36

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	64		30 - 130
2-Fluorobiphenyl	56		30 - 130
2-Fluorophenol	75		30 - 130
Nitrobenzene-d5	55		30 - 130
Phenol-d5	59		30 - 130
Terphenyl-d14	68		30 - 130

Client: Olin Corporation

Job Number: 360-24686-2
Sdg Number: OCRI-18A

Client Sample ID: OC-SB-473-13/15-XXX

Lab Sample ID: 360-24686-8
Client Matrix: Solid

% Moisture: 8.8

Date Sampled: 09/18/2009 0920
Date Received: 09/18/2009 1700

8270C LL Semivolatile Organic Compounds by GCMS - Low Levels

Method:	8270C LL	Analysis Batch: 360-49955		Instrument ID:	Inst. B
Preparation:	3546	Prep Batch: 360-49658		Lab File ID:	B10754.D
Dilution:	1.0			Initial Weight/Volume:	30.76 g
Date Analyzed:	10/06/2009 0155			Final Weight/Volume:	1.0 mL
Date Prepared:	09/29/2009 1545			Injection Volume:	

Tentatively Identified Compounds **Number TIC's Found:** 2

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
~~615-22-5~~	~~Benzothiazole, 2-(methylthio)-~~	~~9.60~~	~~10~~	~~T J N~~
~~3910-35-8~~	~~1H-Indene, 2,3-dihydro-1,1,3-trimethyl-3~~	~~9.98~~	~~9.0~~	~~T J N~~

4/22/10

FORM IV
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Westfield Job No.: 360-24686-1

SDG No.: OCRI-18

Lab File ID: B10744.D Lab Sample ID: MB 360-49658/1-A

Matrix: Solid Date Extracted: 09/29/2009 15:45

Instrument ID: Inst. B Date Analyzed: 10/05/2009 21:18

Level: (Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 360-49658/2-A	B10745.D	10/05/2009 21:46
	LCSD 360-49658/3-A	B10746.D	10/05/2009 22:14
OC-SB-435-0.0/1.0-XXX	360-24686-2 *	B10748.D	10/05/2009 23:09
OC-SB-435-11/15-XXX	360-24686-3	B10749.D	10/05/2009 23:37
OC-SB-435-6.0/10-XXX	360-24686-4	B10750.D	10/06/2009 00:04
OC-SB-453-0.0/1.0-XXX	360-24686-5	B10751.D	10/06/2009 00:32
OC-SB-453-1.0/6.0-XXX	360-24686-6	B10752.D	10/06/2009 01:00
OC-SB-473-0.0/1.0-XXX	360-24686-7	B10753.D	10/06/2009 01:27
OC-SB-473-4.0/6.0-XXX	360-24686-9	B10755.D	10/06/2009 02:23
OC-SS-453-0.0/1.0-XXX	360-24686-10	B10756.D	10/06/2009 02:50
OC-SS-457-0.0/1.0-XXX	360-24686-11	B10757.D	10/06/2009 03:18
OC-SS-456-0.0/1.0-XXX	360-24686-13	B10758.D	10/06/2009 03:45
OC-SS-458-0.0/1.0-XXX	360-24686-14	B10759.D	10/06/2009 04:13
OC-SS-459-0.0/1.0-XXX	360-24686-15	B10760.D	10/06/2009 04:41
OC-SS-461-0.0/1.0-XXX	360-24686-16	B10761.D	10/06/2009 05:08
OC-SB-473-4.0/6.0-XXX MS	360-24686-9 MS	B10762.D	10/06/2009 05:36
OC-SB-473-4.0/6.0-XXX MSD	360-24686-9 MSD	B10763.D	10/06/2009 06:03
OC-SS-456-0.0/1.0-XXX DL	360-24686-13 DL *	B10810.D	10/08/2009 16:05

LCS
aniline 23/25

* ICAL / CCAL OK

Surr OK
TUNE OK

IS
-14 perylene-d12 (47%)

MB
benzoic acid 104
di-n-butyl phthalate Col.2
TICs
vanillin
hexadecane
octadecane
eicosane
dodecane, 2-methyl-

MS/MSD
aniline 23/24
hexachlorocyclopentadiene 14/12
hexachloroethane 31/31

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24686-1

SDG No.: OCRI-18

Matrix: Solid Level: Low Lab File ID: B10745.D

Lab ID: LCS 360-49658/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
1,1'-Biphenyl	333	254	76	40-140	
1,2,4,5-Tetrachlorobenzene	333	240	72	40-140	
1,2,4-Trichlorobenzene	333	208	62	40-140	
1,2-Dichlorobenzene	333	183	55	40-140	
1,3-Dichlorobenzene	333	170	51	40-140	
1,4-Dichlorobenzene	333	170	51	40-140	
1-Methylnaphthalene	333	214	64	40-140	
2,3,4,6-Tetrachlorophenol	333	226	68	40-140	
2,4-Dimethylphenol	333	258	77	30-130	
2-Chlorophenol	333	192	58	30-130	
2,4-Dichlorophenol	333	250	75	30-130	
2,4,6-Trichlorophenol	333	246	74	30-130	
2-Methylphenol	333	205	62	30-130	
2,4,5-Trichlorophenol	333	225	67	30-130	
2-Methylnaphthalene	333	215	64	40-140	
3 & 4 Methylphenol	333	209	63	30-130	
2-Nitroaniline	333	241	72	40-140	
3,3'-Dichlorobenzidine	333	282	85	40-140	
2-Chloronaphthalene	333	196	59	40-140	
2,6-Dinitrotoluene	333	263	79	40-140	
4-Chloro-3-methylphenol	333	261	78	30-130	
2-Nitrophenol	333	210	63	30-130	
4-Chloroaniline	333	187	56	40-140	
3-Nitroaniline	333	258	78	40-140	
2,4-Dinitrophenol	333	274	82	30-130	
2,4-Dinitrotoluene	333	242	73	40-140	
Acenaphthene	333	284	85	40-140	
Acenaphthylene	333	227	68	40-140	
4-Nitrophenol	333	260	78	30-130	
Aniline	333	76.3	23	40-140	*
4-Nitroaniline	333	241	72	40-140	
Azobenzene	333	256	77	40-140	
4-Bromophenyl phenyl ether	333	265	79	40-140	
4-Chlorophenyl phenyl ether	333	238	71	40-140	
4,6-Dinitro-2-methylphenol	333	295	88	30-130	
Benzoic acid	333	258	78	30-130	
Anthracene	333	314	94	40-140	
Benzyl alcohol	333	194	58	30-130	
Bis(2-chloroethoxy)methane	333	221	66	40-140	
Bis(2-chloroethyl)ether	333	181	54	40-140	
Butyl benzyl phthalate	333	271	81	40-140	

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Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24686-1

SDG No.: OCRI-18

Matrix: Solid Level: Low Lab File ID: B10746.D

Lab ID: LCSD 360-49658/3-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCSD CONCENTRATION (ug/Kg)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1'-Biphenyl	333	275	83	8	30	40-140	
1,2,4,5-Tetrachlorobenzene	333	252	76	5	30	40-140	
1,2,4-Trichlorobenzene	333	219	66	5	30	40-140	
1,2-Dichlorobenzene	333	185	55	1	30	40-140	
1,3-Dichlorobenzene	333	172	52	1	30	40-140	
1,4-Dichlorobenzene	333	176	53	3	30	40-140	
1-Methylnaphthalene	333	229	69	7	30	40-140	
2,3,4,6-Tetrachlorophenol	333	251	75	11	30	40-140	
2,4-Dimethylphenol	333	272	82	5	30	30-130	
2-Chlorophenol	333	196	59	2	30	30-130	
2,4-Dichlorophenol	333	262	79	5	30	30-130	
2,4,6-Trichlorophenol	333	258	77	5	30	30-130	
2-Methylphenol	333	210	63	2	30	30-130	
2,4,5-Trichlorophenol	333	223	67	1	30	30-130	
2-Methylnaphthalene	333	224	67	4	30	40-140	
3 & 4 Methylphenol	333	213	64	2	30	30-130	
2-Nitroaniline	333	262	79	8	30	40-140	
3,3'-Dichlorobenzidine	333	296	89	5	30	40-140	
2-Chloronaphthalene	333	205	62	4	30	40-140	
2,6-Dinitrotoluene	333	281	84	7	30	40-140	
4-Chloro-3-methylphenol	333	268	80	2	30	30-130	
2-Nitrophenol	333	220	66	4	30	30-130	
4-Chloroaniline	333	186	56	1	30	40-140	
3-Nitroaniline	333	277	83	7	30	40-140	
2,4-Dinitrophenol	333	270	81	2	30	30-130	
2,4-Dinitrotoluene	333	259	78	7	30	40-140	
Acenaphthene	333	298	89	5	30	40-140	
Acenaphthylene	333	240	72	5	30	40-140	
4-Nitrophenol	333	270	81	4	30	30-130	
Aniline	333	82.9	25	8	30	40-140	*
4-Nitroaniline	333	257	77	6	30	40-140	
Azobenzene	333	267	80	4	30	40-140	
4-Bromophenyl phenyl ether	333	274	82	3	30	40-140	
4-Chlorophenyl phenyl ether	333	251	75	5	30	40-140	
4,6-Dinitro-2-methylphenol	333	302	91	2	30	30-130	
Benzoic acid	333	269	81	4	30	30-130	
Anthracene	333	331	99	5	30	40-140	
Benzyl alcohol	333	200	60	3	30	30-130	
Bis(2-chloroethoxy)methane	333	232	70	5	30	40-140	
Bis(2-chloroethyl)ether	333	185	56	2	30	40-140	
Butyl benzyl phthalate	333	277	83	2	30	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Westfield Job No.: 360-24686-1

SDG No.: OCRI-18

Sample No.: CCV 360-49955/13 Date Analyzed: 10/05/2009 20:50

Instrument ID: Inst. B GC Column: Rtx-5ms ID: 0.25(um)

Lab File ID (Standard): B10743.D Heated Purge: (Y/N) N

		PHN		CRY		PRY	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12 HOUR STD		394308	10.31	318944	12.61	198887	15.00
UPPER LIMIT		788616	10.81	637888	13.11	397774	15.50
LOWER LIMIT		197154	9.81	159472	12.11	99444	14.50
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 360-49658/1-A		403663	10.30	326114	12.61	231381	15.00
LCS 360-49658/2-A		404172	10.31	364682	12.62	204954	15.00
LCSD 360-49658/3-A		402523	10.31	373089	12.62	214126	15.01
360-24686-2	OC-SB-435-0.0/1.0-XXX	391307	10.30	230689	12.61	133563	15.00
360-24686-3	OC-SB-435-11/15-XXX	443614	10.30	304473	12.61	182825	15.00
360-24686-4	OC-SB-435-6.0/10-XXX	445450	10.31	335620	12.61	221426	15.00
360-24686-5	OC-SB-453-0.0/1.0-XXX	433640	10.31	262469	12.61	136821	15.00
360-24686-6	OC-SB-453-1.0/6.0-XXX	432961	10.31	276185	12.61	162284	15.01
360-24686-7	OC-SB-473-0.0/1.0-XXX	378877	10.30	229746	12.61	117653	15.00
360-24686-9	OC-SB-473-4.0/6.0-XXX	412615	10.31	240199	12.61	120496	15.01
360-24686-10	OC-SS-453-0.0/1.0-XXX	568364	10.31	330904	12.62	159828	15.03
360-24686-11	OC-SS-457-0.0/1.0-XXX	465747	10.31	312651	12.62	157788	15.02
360-24686-13	OC-SS-456-0.0/1.0-XXX	501014	10.31	247817	12.62	103073	15.03
360-24686-14	OC-SS-458-0.0/1.0-XXX	410081	10.31	213329	12.62	93382*	15.02
360-24686-15	OC-SS-459-0.0/1.0-XXX	420788	10.31	256460	12.62	132581	15.02
360-24686-16	OC-SS-461-0.0/1.0-XXX	400692	10.31	228068	12.62	114649	15.03
360-24686-9 MS	OC-SB-473-4.0/6.0-XXX MS	479269	10.31	352516	12.62	157560	15.03
360-24686-9 MSD	OC-SB-473-4.0/6.0-XXX MSD	450262	10.31	243729	12.62	95165*	15.03

47%

PHN = Phenanthrene-d10
CRY = Chrysene-d12
PRY = Perylene-d12

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.50 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270C LL

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Westfield | Job No.: 360-24686-1

SDG No.: OCRI-18

Client Sample ID: | Lab Sample ID: MB 360-49658/1-A

Matrix: Solid | Lab File ID: B10744.D

Analysis Method: 8270C LL | Date Collected:

Extract. Method: 3546 | Date Extracted: 09/29/2009 15:45

Sample wt/vol: 30.00(g) | Date Analyzed: 10/05/2009 21:18

Con. Extract Vol.: 1.0(mL) | Dilution Factor: 1

Injection Volume: 1.0(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 49955 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
534-52-1	4,6-Dinitro-2-methylphenol	ND		170	10
65-85-0	Benzoic acid	104	J	170	15
120-12-7	Anthracene	ND		33	10
100-51-6	Benzyl alcohol	ND		67	28
111-91-1	Bis(2-chloroethoxy)methane	ND		33	10
111-44-4	Bis(2-chloroethyl)ether	ND		33	10
85-68-7	Butyl benzyl phthalate	ND		33	10
56-55-3	Benzo[a]anthracene	ND		33	10
105-60-2	Caprolactam	ND		33	10
218-01-9	Chrysene	ND		33	10
205-99-2	Benzo[b]fluoranthene	ND		33	10
207-08-9	Benzo[k]fluoranthene	ND		33	10
50-32-8	Benzo[a]pyrene	ND		33	10
132-64-9	Dibenzofuran	ND		33	10
53-70-3	Dibenz(a,h)anthracene	ND		33	10
84-66-2	Diethyl phthalate	ND		33	10
191-24-2	Benzo[g,h,i]perylene	ND		33	10
131-11-3	Dimethyl phthalate	ND		33	10
98-86-2	Acetophenone	ND		33	10
84-74-2	Di-n-butyl phthalate	61.2		33	29
117-81-7	Bis(2-ethylhexyl) phthalate	ND		33	10
117-84-0	Di-n-octyl phthalate	ND		33	17
206-44-0	Fluoranthene	ND		33	10
86-73-7	Fluorene	ND		33	10
118-74-1	Hexachlorobenzene	ND		33	10
87-68-3	Hexachlorobutadiene	ND		33	10
108-60-1	2,2'-oxybis[1-chloropropane]	ND		33	10
77-47-4	Hexachlorocyclopentadiene	ND		67	10
67-72-1	Hexachloroethane	ND		33	10
193-39-5	Indeno[1,2,3-cd]pyrene	ND		33	10
78-59-1	Isophorone	ND		33	10
91-20-3	Naphthalene	ND		80	10
98-95-3	Nitrobenzene	ND		33	10
1912-24-9	Atrazine	ND		33	10

FORM III
GC/MS SEMI VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24686-1

SDG No.: OCRI-18

Matrix: Solid Level: Low Lab File ID: B10762.D

Lab ID: 360-24686-9 MS Client ID: OC-SB-473-4.0/6.0-XXX MS

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	QC LIMITS REC	#
1,1'-Biphenyl	388	ND	265	68	40-140	
1,2,4,5-Tetrachlorobenzene	388	ND	233	60	40-140	
1,2,4-Trichlorobenzene	388	ND	203	52	40-140	
1,2-Dichlorobenzene	388	ND	186	48	40-140	
1,3-Dichlorobenzene	388	ND	178	46	40-140	
1,4-Dichlorobenzene	388	ND	178	46	40-140	
1-Methylnaphthalene	388	ND	223	57	40-140	
2,3,4,6-Tetrachlorophenol	388	ND	248	64	40-140	
2,4-Dimethylphenol	388	ND	252	65	30-130	
2-Chlorophenol	388	ND	201	52	30-130	
2,4-Dichlorophenol	388	ND	246	64	30-130	
2,4,6-Trichlorophenol	388	ND	269	69	30-130	
2-Methylphenol	388	ND	216	56	30-130	
2,4,5-Trichlorophenol	388	ND	215	55	30-130	
2-Methylnaphthalene	388	ND	220	57	40-140	
3 & 4 Methylphenol	388	ND	210	54	30-130	
2-Nitroaniline	388	ND	260	67	40-140	
3,3'-Dichlorobenzidine	388	ND	233	60	40-140	
2-Chloronaphthalene	388	ND	199	51	40-140	
2,6-Dinitrotoluene	388	ND	245	63	40-140	
4-Chloro-3-methylphenol	388	ND	261	67	30-130	
2-Nitrophenol	388	ND	201	52	30-130	
4-Chloroaniline	388	ND	158	41	40-140	
3-Nitroaniline	388	ND	233	60	40-140	
2,4-Dinitrophenol	388	ND	259	67	30-130	
2,4-Dinitrotoluene	388	ND	235	61	40-140	
Acenaphthene	388	ND	289	74	40-140	
Acenaphthylene	388	ND	227	59	40-140	
4-Nitrophenol	388	ND	258	67	30-130	
Aniline	388	ND	88.8	23	40-140	F
4-Nitroaniline	388	ND	231	60	40-140	
Azobenzene	388	ND	267	69	40-140	
4-Bromophenyl phenyl ether	388	ND	264	68	40-140	
4-Chlorophenyl phenyl ether	388	ND	239	62	40-140	
4,6-Dinitro-2-methylphenol	388	ND	267	69	30-130	
Benzoic acid	388	ND	336	87	30-130	
Anthracene	388	ND	322	83	40-140	
Benzyl alcohol	388	ND	209	54	30-130	
Bis(2-chloroethoxy)methane	388	ND	225	58	40-140	
Bis(2-chloroethyl)ether	388	ND	195	50	40-140	
Butyl benzyl phthalate	388	ND	321	83	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24686-1

SDG No.: OCRI-18

Matrix: Solid Level: Low Lab File ID: B10762.D

Lab ID: 360-24686-9 MS Client ID: OC-SB-473-4.0/6.0-XXX MS

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	QC LIMITS REC	#
Benzo[a]anthracene	388	ND	314	81	40-140	
Caprolactam	388	ND	185	48	40-140	
Chrysene	388	ND	293	76	40-140	
Benzo[b]fluoranthene	388	ND	297	77	40-140	
Benzo[k]fluoranthene	388	ND	329	85	40-140	
Benzo[a]pyrene	388	ND	289	75	40-140	
Dibenzofuran	388	ND	257	66	40-140	
Dibenz(a,h)anthracene	388	ND	298	77	40-140	
Diethyl phthalate	388	ND	262	68	40-140	
Benzo[g,h,i]perylene	388	ND	316	82	40-140	
Dimethyl phthalate	388	ND	254	66	40-140	
Acetophenone	388	ND	219	56	40-140	
Di-n-butyl phthalate	388	ND	276	71	40-140	
Bis(2-ethylhexyl) phthalate	388	ND	335	87	40-140	
Di-n-octyl phthalate	388	ND	356	92	40-140	
Fluoranthene	388	ND	272	70	40-140	
Fluorene	388	ND	259	67	40-140	
Hexachlorobenzene	388	ND	273	70	40-140	
Hexachlorobutadiene	388	ND	196	51	40-140	
2,2'-oxybis[1-chloropropane]	388	ND	198	51	40-140	
Hexachlorocyclopentadiene	388	ND	54.6 J	14	40-140	F
Hexachloroethane	388	ND	122	31	40-140	F
Indeno[1,2,3-cd]pyrene	388	ND	298	77	40-140	
Isophorone	388	ND	191	49	40-140	
Naphthalene	388	ND	223	58	40-140	
Nitrobenzene	388	ND	219	57	40-140	
Atrazine	388	ND	324	84	40-140	
Benzaldehyde	388	ND	375	97	40-140	
N-Nitrosodimethylamine	388	ND	213	55	40-140	
Carbazole	388	ND	290	75	40-140	
N-Nitrosodi-n-propylamine	388	ND	204	53	40-140	
Benzophenone	388	ND	279	72	40-140	
N-Nitrosodiphenylamine	388	ND	187	48	40-140	
Diphenyl oxide	388	ND	241	62	40-140	
Pentachlorophenol	388	ND	324	84	30-130	
Phenanthrene	388	ND	307	79	40-140	
Phenol	388	ND	182	47	30-130	
Pyrene	388	ND	329	85	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24686-1

SDG No.: OCRI-18

Matrix: Solid Level: Low Lab File ID: B10763.D

Lab ID: 360-24686-9 MSD Client ID: OC-SB-473-4.0/6.0-XXX MSD

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1'-Biphenyl	387	274	71	3	30	40-140	
1,2,4,5-Tetrachlorobenzene	387	242	63	4	30	40-140	
1,2,4-Trichlorobenzene	387	213	55	5	30	40-140	
1,2-Dichlorobenzene	387	185	48	1	30	40-140	
1,3-Dichlorobenzene	387	179	46	0	30	40-140	
1,4-Dichlorobenzene	387	179	46	1	30	40-140	
1-Methylnaphthalene	387	233	60	5	30	40-140	
2,3,4,6-Tetrachlorophenol	387	243	63	2	30	40-140	
2,4-Dimethylphenol	387	259	67	3	30	30-130	
2-Chlorophenol	387	204	53	2	30	30-130	
2,4-Dichlorophenol	387	256	66	4	30	30-130	
2,4,6-Trichlorophenol	387	246	64	9	30	30-130	
2-Methylphenol	387	226	58	5	30	30-130	
2,4,5-Trichlorophenol	387	235	61	9	30	30-130	
2-Methylnaphthalene	387	229	59	4	30	40-140	
3 & 4 Methylphenol	387	216	56	3	30	30-130	
2-Nitroaniline	387	253	65	3	30	40-140	
3,3'-Dichlorobenzidine	387	244	63	4		40-140	
2-Chloronaphthalene	387	206	53	3	30	40-140	
2,6-Dinitrotoluene	387	252	65	3	30	40-140	
4-Chloro-3-methylphenol	387	270	70	3	30	30-130	
2-Nitrophenol	387	205	53	2	30	30-130	
4-Chloroaniline	387	183	47	15	30	40-140	
3-Nitroaniline	387	241	62	3	30	40-140	
2,4-Dinitrophenol	387	229	59	12	30	30-130	
2,4-Dinitrotoluene	387	243	63	3	30	40-140	
Acenaphthene	387	296	76	2	30	40-140	
Acenaphthylene	387	232	60	2	30	40-140	
4-Nitrophenol	387	219	57	16	30	30-130	
Aniline	387	94.4	24	6	30	40-140	F
4-Nitroaniline	387	236	61	2	30	40-140	
Azobenzene	387	276	71	3	30	40-140	
4-Bromophenyl phenyl ether	387	272	70	3	30	40-140	
4-Chlorophenyl phenyl ether	387	249	64	4	30	40-140	
4,6-Dinitro-2-methylphenol	387	254	66	5	30	30-130	
Benzoic acid	387	335	86	0	30	30-130	
Anthracene	387	324	84	1	30	40-140	
Benzyl alcohol	387	204	53	2	30	30-130	
Bis(2-chloroethoxy)methane	387	232	60	3	30	40-140	
Bis(2-chloroethyl)ether	387	198	51	1	30	40-140	
Butyl benzyl phthalate	387	395	102	21	30	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Westfield Job No.: 360-24686-1

SDG No.: OCRI-18

Matrix: Solid Level: Low Lab File ID: B10763.D

Lab ID: 360-24686-9 MSD Client ID: OC-SB-473-4.0/6.0-XXX MSD

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Benzo[a]anthracene	387	332	86	6	30	40-140	
Caprolactam	387	267	69	37	30	40-140	F
Chrysene	387	307	79	4	30	40-140	
Benzo[b]fluoranthene	387	307	79	3	30	40-140	
Benzo[k]fluoranthene	387	333	86	1	30	40-140	
Benzo[a]pyrene	387	287	74	1	30	40-140	
Dibenzofuran	387	262	68	2	30	40-140	
Dibenz(a,h)anthracene	387	277	71	8	30	40-140	
Diethyl phthalate	387	266	69	2	30	40-140	
Benzo[g,h,i]perylene	387	288	74	9	30	40-140	
Dimethyl phthalate	387	259	67	2	30	40-140	
Acetophenone	387	222	57	2	30	40-140	
Di-n-butyl phthalate	387	287	74	4	30	40-140	
Bis(2-ethylhexyl) phthalate	387	393	101	16	30	40-140	
Di-n-octyl phthalate	387	438	113	21	30	40-140	
Fluoranthene	387	262	68	4	30	40-140	
Fluorene	387	267	69	3	30	40-140	
Hexachlorobenzene	387	288	74	5	30	40-140	
Hexachlorobutadiene	387	204	53	4	30	40-140	
2,2'-oxybis[1-chloropropane]	387	202	52	2	30	40-140	
Hexachlorocyclopentadiene	387	45.4 J	12	18	30	40-140	F
Hexachloroethane	387	118	31	3	30	40-140	F
Indeno[1,2,3-cd]pyrene	387	269	69	10	30	40-140	
Isophorone	387	197	51	3	30	40-140	
Naphthalene	387	230	59	3	30	40-140	
Nitrobenzene	387	219	57	0	30	40-140	
Atrazine	387	337	87	4	30	40-140	
Benzaldehyde	387	375	97	0	30	40-140	
N-Nitrosodimethylamine	387	212	55	0	30	40-140	
Carbazole	387	281	73	3	30	40-140	
N-Nitrosodi-n-propylamine	387	207	53	1	30	40-140	
Benzophenone	387	294	76	5	30	40-140	
N-Nitrosodiphenylamine	387	198	51	6	30	40-140	
Diphenyl oxide	387	249	64	3	30	40-140	
Pentachlorophenol	387	295	76	9	30	30-130	
Phenanthrene	387	307	79	0	30	40-140	
Phenol	387	185	48	2	30	30-130	
Pyrene	387	416	107	23	30	40-140	

Calculations are performed before rounding

Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM IV
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Westfield Job No.: 360-24686-2

SDG No.: OCRI-18A

Lab File ID: B10744.D Lab Sample ID: MB 360-49658/1-A

Matrix: Solid Date Extracted: 09/29/2009 15:45

Instrument ID: Inst. B Date Analyzed: 10/05/2009 21:18

Level: (Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 360-49658/2-A	B10745.D	10/05/2009 21:46
	LCSD 360-49658/3-A	B10746.D	10/05/2009 22:14
OC-SB-400-17/19-XXX	360-24686-1	B10747.D	10/05/2009 22:41
OC-SB-473-13/15-XXX	360-24686-8	B10754.D	10/06/2009 01:55

LCS
aniline 23/25

Scan OK
Time OK
ICAL/CCAL OK

~~MB Ben~~
MB

Benzoic acid 104 520 5x

di-n-butyl phthalate 61.2 612 10x

TIC vanillin
hexadecane
octadecane
eicosane
dodecane, 2-methyl-