Gulf Coast ACCUTEST LABORATORIES

09/17/14

Technical Report for

Weston Solutions

CES- Chemical Spill/4904 Griggs, Houston, TX

Accutest Job Number: TC52720

Sampling Date: 08/05/14

Report to:

Weston Solutions

k.warr@westonsolutions.com

ATTN: Kristie Kettler

Total number of pages in report: **369**

Richard Rodriguez
Laboratory Director

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

Client Service contact: Sylvia Garza 713-271-4700

Certifications: TX (T104704220-14-15, 1M104704220-14-1) AR (14-016-0) AZ (AZ0769) FL (E87628) KS (E-10366) LA (85695/04004) NJ (TX010) OK (2014-139) VA (2085)

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Sample Summary

Weston Solutions

CES- Chemical Spill/4904 Griggs, Houston, TX

Job No: TC52720

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
TC52720-1	08/05/14	14:46		08/06/14	SO	Soil	CES-CS-01-51
TC52720-1A	08/05/14	14:46		08/06/14	SO	Soil	CES-CS-01-51
TC52720-2	08/05/14	15:30		08/06/14	SO	Soil	CES-CS-02-51
TC52720-2A	08/05/14	15:30		08/06/14	SO	Soil	CES-CS-02-51
TC52720-3	08/05/14	16:10		08/06/14	SO	Soil	CES-CS-03-51
TC52720-3A	08/05/14	16:10		08/06/14	SO	Soil	CES-CS-03-51
TC52720-4	08/05/14	16:30		08/06/14	SO	Soil	CES-CS-04-51
TC52720-4A	08/05/14	16:30		08/06/14	SO	Soil	CES-CS-04-51
TC52720-5	08/05/14	17:00		08/06/14	SO	Soil	CES-CS-05-51
TC52720-5A	08/05/14	17:00		08/06/14	SO	Soil	CES-CS-05-51

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client:	Weston Solutions	**Job No**	TC52720
Site:	CES- Chemical Spill/4904 Griggs, Houston, TX	**Report Date**	8/20/2014 3:17:08 PM

5 Samples were collected on 08/05/2014 and received intact at Accutest on 08/06/2014 and properly preserved in 1 cooler at 4.2 Deg C. These Samples received an Accutest job number of TC52720. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Volatiles by GCMS By Method SW846 8260C

Matrix SO **Batch ID:** VY3712

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) TC52252-1MS, TC52252-1MSD were used as the QC samples indicated.
- Matrix Spike Recovery(s) for 1,1,2,2-Tetrachloroethane, 1,2,3-Trichloropropane, 1,2-Dibromo-3-chloropropane, Bromobenzene, n-Butylbenzene, o-Chlorotoluene, p-Chlorotoluene, Styrene, Tetrachloroethylene are outside control limits. Probable cause due to matrix interference.
- Matrix Spike Duplicate Recovery(s) for 1,1,2,2-Tetrachloroethane, 1,2,3-Trichloropropane, 1,2-Dibromo-3-chloropropane, n-Butylbenzene, o-Chlorotoluene, p-Chlorotoluene are outside control limits. Probable cause due to matrix interference.

Matrix SO **Batch ID:** VY3713

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) TC52429-2MS, TC52429-2MSD were used as the QC samples indicated.
- Matrix Spike Recovery(s) for Chloroethane, Tetrachloroethylene are outside control limits. Probable cause due to matrix interference.
- Matrix Spike Duplicate Recovery(s) for Tetrachloroethylene are outside control limits. Probable cause due to matrix interference.

Matrix SO **Batch ID:** VY3714

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) TC52929-1MS, TC52929-1MSD were used as the QC samples indicated.
- Matrix Spike Recovery(s) for Chloroethane, Methyl bromide, n-Butylbenzene, o-Chlorotoluene are outside control limits. Probable cause due to matrix interference.
- Matrix Spike Duplicate Recovery(s) for Chloroethane, Methyl bromide, n-Butylbenzene are outside control limits. Probable cause due to matrix interference.

Extractables by GCMS By Method SW846 8270D

Matrix SO	**Batch ID:** OP33453

- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- Sample(s) TC52720-1MS, TC52720-1MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- Matrix Spike Recovery(s) for 2,4-Dinitrophenol, 4,6-Dinitro-o-cresol, Benzidine, Benzoic acid, Di-n-octyl phthalate are outside control limits. Probable cause due to matrix interference.
- Matrix Spike Duplicate Recovery(s) for 2,4-Dinitrophenol, 4,6-Dinitro-o-cresol, Benzidine, Benzo(b)fluoranthene, Benzoic acid, Di-n-octyl phthalate are outside control limits. Probable cause due to matrix interference.
- RPD(s) for MSD for 3,3'-Dichlorobenzidine, 4,6-Dinitro-o-cresol are outside control limits for sample OP33453-MSD. Probable cause due to sample non-homogeneity.
- OP33453-MSD: Internal standard Perylene-d12 outside of control limits biased low due to mattrix interference.

Extractables by GC By Method SW846 8081A

Matrix SO	**Batch ID:** OP33468

- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- Sample(s) TC52720-1AMS, TC52720-1AMSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- Matrix Spike/Matrix Spike Duplicate Recovery(s) for alpha-Chlordane are outside control limits. Probable cause due to matrix interference.
- TC52720-2A: Elevated reporting limits due to matrix interference, extract was dark and viscous.
- TC52720-3A: Elevated reporting limits due to matrix interference, extract was dark and viscous.
- TC52720-4A: Elevated reporting limits due to matrix interference, extract was dark and viscous.
- TC52720-5A: Elevated reporting limits due to matrix interference, extract was dark and viscous.
- TC52720-1A: Elevated reporting limits due to matrix interference, extract was dark and viscous.
- TC52720-5A for alpha-Chlordane: More than 40% RPD for detected concentrations between two GC columns.
- TC52720-3A for alpha-Chlordane: More than 40% RPD for detected concentrations between two GC columns.

Extractables by GC By Method SW846 8082

Matrix SO	**Batch ID:** OP33467

- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- Sample(s) TC52720-1AMS, TC52720-1AMSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- Matrix Spike Recovery(s) for Aroclor 1260 are outside control limits. Probable cause due to matrix interference.
- Matrix Spike/Matrix Spike Duplicate Recovery(s) for Aroclor 1260 are outside control limits. Probable cause due to matrix interference.
- TC52720-2A: Acid clean-up performed by method 3665A.
- OP33467-MS: Acid clean-up performed by method 3665A.
- OP33467-MSD: Acid clean-up performed by method 3665A.
- TC52720-1A: Acid clean-up performed by method 3665A.

Extractables by GC By Method SW846 8151

Matrix SO	**Batch ID:** OP33527

- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) TC52720-1AMS, TC52720-1AMSD were used as the QC samples indicated.
- Sample(s) TC52720-4A have surrogates outside control limits. Outside control limits biased high.

Extractables by GC By Method TNRCC 1005

Matrix SO	**Batch ID:** OP33456

- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) TC52502-4MS, TC52502-4MSD were used as the QC samples indicated.

Metals By Method SW846 6010B

Matrix SO	Batch ID: MP23965

- All samples were digested within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) TC52720-1MS, TC52720-1MSD, TC52720-1SDL were used as the QC samples for metals.
- Matrix Spike Recovery(s) for Aluminum, Antimony are outside control limits. Spike recovery indicates possible matrix interference or sample non-homogeneity.
- Matrix Spike Duplicate Recovery(s) for Aluminum, Antimony, Arsenic, Chromium, Cobalt, Nickel are outside control limits. Probable cause due to matrix interference.
- Matrix Spike Duplicate Recovery(s) for Calcium, Manganese are outside control limits. Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.
- Matrix Spike Recovery(s) for Barium, Calcium, Zinc are outside control limits. Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.
- RPD(s) for Serial Dilution for Barium, Beryllium, Chromium, Cobalt, Copper, Iron, Magnesium, Manganese, Potassium, Sodium, Vanadium, Zinc, Antimony, Selenium, Silver are outside control limits for sample MP23965-SD1. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).
- TC52720-2 for Selenium: Elevated reporting limit due to dilution required for high interfering element.
- TC52720-2 for Aluminum: Elevated reporting limit due to dilution required for high interfering element.
- TC52720-5 for Thallium: Elevated reporting limit due to matrix interference.
- TC52720-1 for Calcium: Elevated reporting limit due to dilution required for high interfering element.
- RPD(s) for Serial Dilution for Aluminum, Arsenic, Cadmium, Calcium are outside control limits for sample MP23965-SD1. Serial dilution indicates possible matrix interference.
- TC52720-1 for Aluminum: Elevated reporting limit due to dilution required for high interfering element.
- TC52720-1 for Antimony: Elevated reporting limit due to dilution required for high interfering element.
- TC52720-1 for Arsenic: Elevated reporting limit due to dilution required for high interfering element.
- TC52720-2 for Arsenic: Elevated reporting limit due to dilution required for high interfering element.
- TC52720-1 for Cadmium: Elevated reporting limit due to dilution required for high interfering element.
- TC52720-2 for Lead: Elevated reporting limit due to dilution required for high interfering element.
- TC52720-1 for Lead: Elevated reporting limit due to dilution required for high interfering element.
- TC52720-1 for Selenium: Elevated reporting limit due to dilution required for high interfering element.
- TC52720-2 for Antimony: Elevated reporting limit due to dilution required for high interfering element.
- TC52720-2 for Cadmium: Elevated reporting limit due to dilution required for high interfering element.
- TC52720-2 for Calcium: Elevated reporting limit due to dilution required for high interfering element.

Metals By Method SW846 7471A

Matrix SO	Batch ID: MP23971

- All samples were digested within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) TC52743-1MSD, TC52743-1MS were used as the QC samples for metals.
- Matrix Spike/Matrix Spike Duplicate Recovery(s) for Mercury are outside control limits. Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.

Wet Chemistry By Method SM 2540 G

Matrix SO	Batch ID: GN60219

- Sample(s) TC52689-1DUP were used as the QC samples for Solids, Percent.

Accutest Laboratories Gulf Coast (ALGC) certifies that this report meets the project requirements for analytical data produced for the samples as received at ALGC and as stated on the COC. ALGC certifies that the data meets the Data QualityObjectives for precision, accuracy and completeness as specified in the ALGC Quality Manual except as noted above. This report is to be used in its entirety. ALGC is not responsible for any assumptions of data quality if partial data packages are used

Summary of Hits

Job Number: TC52720
Account: Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX
Collected: 08/05/14

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	MQL	SDL	Units	Method
TC52720-1	**CES-CS-01-51**					
Acetone		71.1 J	85	21	ug/kg	SW846 8260C
Carbon disulfide		3.5 J	8.5	1.2	ug/kg	SW846 8260C
Ethylbenzene		13.3	8.5	2.1	ug/kg	SW846 8260C
Methyl ethyl ketone		26.2 J	85	11	ug/kg	SW846 8260C
1,2,4-Trimethylbenzene		9.1	8.5	0.86	ug/kg	SW846 8260C
1,3,5-Trimethylbenzene		2.4 J	8.5	2.0	ug/kg	SW846 8260C
Toluene		2.7 J	8.5	2.2	ug/kg	SW846 8260C
Xylene (total)		18.6 J	26	6.0	ug/kg	SW846 8260C
m,p-Xylene		12.1 J	17	3.8	ug/kg	SW846 8260C
o-Xylene		6.5 J	8.5	2.2	ug/kg	SW846 8260C
TPH (> C12-C28)		234	58	32	mg/kg	TNRCC 1005
TPH (> C28-C35)		147	58	32	mg/kg	TNRCC 1005
TPH (C6-C35)		381	58	27	mg/kg	TNRCC 1005
Aluminum [a]		18800	98	12	mg/kg	SW846 6010B
Antimony [a]		1.4 J	2.5	0.88	mg/kg	SW846 6010B
Arsenic [a]		6.8	2.5	0.86	mg/kg	SW846 6010B
Barium		432	20	0.025	mg/kg	SW846 6010B
Beryllium		2.7	0.39	0.067	mg/kg	SW846 6010B
Cadmium [a]		0.85 J	2.0	0.12	mg/kg	SW846 6010B
Calcium [a]		121000	2500	3.9	mg/kg	SW846 6010B
Chromium		34.2	0.98	0.14	mg/kg	SW846 6010B
Cobalt		6.1	4.9	0.039	mg/kg	SW846 6010B
Copper		48.4	2.0	0.22	mg/kg	SW846 6010B
Iron		12800	9.8	1.4	mg/kg	SW846 6010B
Lead [a]		69.9	1.5	1.1	mg/kg	SW846 6010B
Magnesium		2710	490	2.7	mg/kg	SW846 6010B
Manganese		288	1.5	0.038	mg/kg	SW846 6010B
Mercury		1.6	0.061	0.025	mg/kg	SW846 7471A
Nickel		95.9	3.9	0.074	mg/kg	SW846 6010B
Potassium		1950	490	4.1	mg/kg	SW846 6010B
Selenium [a]		1.9 J	2.5	0.92	mg/kg	SW846 6010B
Silver		0.094 J	0.98	0.068	mg/kg	SW846 6010B
Sodium		465 J	490	1.5	mg/kg	SW846 6010B
Vanadium		32.8	4.9	0.040	mg/kg	SW846 6010B
Zinc		354	2.0	0.55	mg/kg	SW846 6010B
TC52720-1A	**CES-CS-01-51**					
No hits reported in this sample.						
TC52720-2	**CES-CS-02-51**					
Aluminum [a]		11000	61	7.4	mg/kg	SW846 6010B

Summary of Hits

Job Number: TC52720
Account: Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX
Collected: 08/05/14

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Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	MQL	SDL	Units	Method
Arsenic [a]		8.4	1.5	0.53	mg/kg	SW846 6010B
Barium		60.2	12	0.015	mg/kg	SW846 6010B
Beryllium		0.55	0.24	0.041	mg/kg	SW846 6010B
Cadmium [a]		0.22 J	1.2	0.076	mg/kg	SW846 6010B
Calcium [a]		101000	1500	2.4	mg/kg	SW846 6010B
Chromium		11.1	0.61	0.085	mg/kg	SW846 6010B
Cobalt		4.1	3.0	0.024	mg/kg	SW846 6010B
Copper		10.2	1.2	0.14	mg/kg	SW846 6010B
Iron		14100	6.1	0.88	mg/kg	SW846 6010B
Lead [a]		31.0	0.91	0.68	mg/kg	SW846 6010B
Magnesium		1450	300	1.7	mg/kg	SW846 6010B
Manganese		100	0.91	0.024	mg/kg	SW846 6010B
Mercury		0.035	0.033	0.013	mg/kg	SW846 7471A
Nickel		8.4	2.4	0.046	mg/kg	SW846 6010B
Potassium		1010	300	2.6	mg/kg	SW846 6010B
Selenium [a]		1.6	1.5	0.57	mg/kg	SW846 6010B
Sodium		316	300	0.93	mg/kg	SW846 6010B
Vanadium		41.2	3.0	0.025	mg/kg	SW846 6010B
Zinc		64.9	1.2	0.34	mg/kg	SW846 6010B
TC52720-2A	**CES-CS-02-51**					
alpha-Chlordane [b]		3.3 J	9.5	2.1	ug/kg	SW846 8081A
TC52720-3	**CES-CS-03-51**					
bis(2-Ethylhexyl)phthalate		235	230	190	ug/kg	SW846 8270D
Aluminum		14100	15	1.8	mg/kg	SW846 6010B
Antimony		0.33 J	0.36	0.13	mg/kg	SW846 6010B
Arsenic		2.1	0.36	0.13	mg/kg	SW846 6010B
Barium		100	15	0.018	mg/kg	SW846 6010B
Beryllium		0.55	0.29	0.050	mg/kg	SW846 6010B
Cadmium		0.44	0.29	0.018	mg/kg	SW846 6010B
Calcium		19000	360	0.57	mg/kg	SW846 6010B
Chromium		15.0	0.73	0.10	mg/kg	SW846 6010B
Cobalt		3.8	3.6	0.029	mg/kg	SW846 6010B
Copper		16.2	1.5	0.16	mg/kg	SW846 6010B
Iron		10900	7.3	1.0	mg/kg	SW846 6010B
Lead		48.7	0.22	0.16	mg/kg	SW846 6010B
Magnesium		2000	360	2.0	mg/kg	SW846 6010B
Manganese		145	1.1	0.028	mg/kg	SW846 6010B
Mercury		0.066	0.046	0.019	mg/kg	SW846 7471A
Nickel		10.9	2.9	0.055	mg/kg	SW846 6010B
Potassium		1790	360	3.1	mg/kg	SW846 6010B
Selenium		0.71	0.36	0.14	mg/kg	SW846 6010B

Summary of Hits

Job Number: TC52720
Account: Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX
Collected: 08/05/14

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	MQL	SDL	Units	Method
Sodium		160 J	360	1.1	mg/kg	SW846 6010B
Vanadium		20.8	3.6	0.030	mg/kg	SW846 6010B
Zinc		130	1.5	0.41	mg/kg	SW846 6010B
TC52720-3A	**CES-CS-03-51**					
alpha-Chlordane [c]		3.2 J	12	2.5	ug/kg	SW846 8081A
TC52720-4	**CES-CS-04-51**					
Aluminum		14400	15	1.8	mg/kg	SW846 6010B
Antimony		0.32 J	0.36	0.13	mg/kg	SW846 6010B
Arsenic		2.5	0.36	0.13	mg/kg	SW846 6010B
Barium		98.1	15	0.018	mg/kg	SW846 6010B
Beryllium		0.86	0.29	0.049	mg/kg	SW846 6010B
Cadmium		0.61	0.29	0.018	mg/kg	SW846 6010B
Calcium		14700	360	0.57	mg/kg	SW846 6010B
Chromium		18.0	0.73	0.10	mg/kg	SW846 6010B
Cobalt		4.8	3.6	0.029	mg/kg	SW846 6010B
Copper		17.5	1.5	0.16	mg/kg	SW846 6010B
Iron		10100	7.3	1.0	mg/kg	SW846 6010B
Lead		124	0.22	0.16	mg/kg	SW846 6010B
Magnesium		1830	360	2.0	mg/kg	SW846 6010B
Manganese		198	1.1	0.028	mg/kg	SW846 6010B
Mercury		0.11	0.044	0.017	mg/kg	SW846 7471A
Nickel		11.8	2.9	0.054	mg/kg	SW846 6010B
Potassium		1430	360	3.1	mg/kg	SW846 6010B
Selenium		0.73	0.36	0.14	mg/kg	SW846 6010B
Sodium		167 J	360	1.1	mg/kg	SW846 6010B
Vanadium		21.4	3.6	0.030	mg/kg	SW846 6010B
Zinc		216	1.5	0.41	mg/kg	SW846 6010B
TC52720-4A	**CES-CS-04-51**					
No hits reported in this sample.						
TC52720-5	**CES-CS-05-51**					
Benzo(b)fluoranthene		115 J	220	55	ug/kg	SW846 8270D
bis(2-Ethylhexyl)phthalate		258	220	170	ug/kg	SW846 8270D
Fluoranthene		83.6 J	220	72	ug/kg	SW846 8270D
Pyrene		119 J	220	97	ug/kg	SW846 8270D
Aluminum		12800	13	1.6	mg/kg	SW846 6010B
Antimony		0.36	0.34	0.12	mg/kg	SW846 6010B
Arsenic		2.8	0.34	0.12	mg/kg	SW846 6010B

Summary of Hits

Job Number: TC52720
Account: Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX
Collected: 08/05/14

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	MQL	SDL	Units	Method
Barium		112	13	0.017	mg/kg	SW846 6010B
Beryllium		1.1	0.27	0.046	mg/kg	SW846 6010B
Cadmium		0.54	0.27	0.017	mg/kg	SW846 6010B
Calcium		20200	340	0.53	mg/kg	SW846 6010B
Chromium		16.5	0.67	0.094	mg/kg	SW846 6010B
Cobalt		4.2	3.4	0.027	mg/kg	SW846 6010B
Copper		20.9	1.3	0.15	mg/kg	SW846 6010B
Iron		9810	6.7	0.97	mg/kg	SW846 6010B
Lead		75.7	0.20	0.15	mg/kg	SW846 6010B
Magnesium		1830	340	1.8	mg/kg	SW846 6010B
Manganese		184	1.0	0.026	mg/kg	SW846 6010B
Mercury		0.087	0.039	0.015	mg/kg	SW846 7471A
Nickel		13.4	2.7	0.051	mg/kg	SW846 6010B
Potassium		1690	340	2.8	mg/kg	SW846 6010B
Selenium		0.57	0.34	0.13	mg/kg	SW846 6010B
Silver		0.13 J	0.67	0.046	mg/kg	SW846 6010B
Sodium		207 J	340	1.0	mg/kg	SW846 6010B
Vanadium		18.7	3.4	0.028	mg/kg	SW846 6010B
Zinc		171	1.3	0.38	mg/kg	SW846 6010B
TC52720-5A	**CES-CS-05-51**					
alpha-Chlordane [c]		2.4 J	11	2.3	ug/kg	SW846 8081A

(a) Elevated reporting limit due to dilution required for high interfering element.
(b) Elevated reporting limits due to matrix interference, extract was dark and viscous.
(c) Elevated reporting limits due to matrix interference, extract was dark and viscous. More than 40% RPD for detected concentrations between two GC columns.

Gulf Coast ACCUTEST LABORATORIES

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	CES-CS-01-51		
Lab Sample ID:	TC52720-1	**Date Sampled:**	08/05/14
Matrix:	SO - Soil	**Date Received:**	08/06/14
Method:	SW846 8260C	**Percent Solids:**	50.9
Project:	CES- Chemical Spill/4904 Griggs, Houston, TX		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Y1069989.D	1	08/08/14	CF	n/a	n/a	VY3712
Run #2 [a]	Y1070027.D	1	08/11/14	CF	n/a	n/a	VY3714

	Initial Weight	Final Volume
Run #1	4.61 g	5.0 ml
Run #2	5.31 g	5.0 ml

VOA 8260 List

CAS No.	Compound	Result	MQL	SDL	Units	Q
67-64-1	Acetone	71.1	85	21	ug/kg	J
71-43-2	Benzene	1.4 U	8.5	1.4	ug/kg	
108-86-1	Bromobenzene	0.86 U	8.5	0.86	ug/kg	
74-97-5	Bromochloromethane	2.3 U	8.5	2.3	ug/kg	
75-27-4	Bromodichloromethane	0.96 U	8.5	0.96	ug/kg	
75-25-2	Bromoform	1.6 U	8.5	1.6	ug/kg	
104-51-8	n-Butylbenzene	0.94 U	8.5	0.94	ug/kg	
135-98-8	sec-Butylbenzene	1.9 U	8.5	1.9	ug/kg	
98-06-6	tert-Butylbenzene	1.7 U	8.5	1.7	ug/kg	
108-90-7	Chlorobenzene	2.0 U	8.5	2.0	ug/kg	
75-00-3	Chloroethane	3.3 U	8.5	3.3	ug/kg	
67-66-3	Chloroform	0.92 U	8.5	0.92	ug/kg	
95-49-8	o-Chlorotoluene	1.0 U	8.5	1.0	ug/kg	
106-43-4	p-Chlorotoluene	0.88 U	8.5	0.88	ug/kg	
75-15-0	Carbon disulfide	3.5	8.5	1.2	ug/kg	J
56-23-5	Carbon tetrachloride	1.8 U	8.5	1.8	ug/kg	
75-34-3	1,1-Dichloroethane	0.87 U	8.5	0.87	ug/kg	
75-35-4	1,1-Dichloroethylene	0.89 U	8.5	0.89	ug/kg	
563-58-6	1,1-Dichloropropene	0.95 U	8.5	0.95	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	6.7 U	8.5	6.7	ug/kg	
106-93-4	1,2-Dibromoethane	0.90 U	8.5	0.90	ug/kg	
107-06-2	1,2-Dichloroethane	1.0 U	8.5	1.0	ug/kg	
78-87-5	1,2-Dichloropropane	1.2 U	8.5	1.2	ug/kg	
142-28-9	1,3-Dichloropropane	2.2 U	8.5	2.2	ug/kg	
594-20-7	2,2-Dichloropropane	1.2 U	8.5	1.2	ug/kg	
124-48-1	Dibromochloromethane	1.9 U	8.5	1.9	ug/kg	
75-71-8	Dichlorodifluoromethane	2.4 U	8.5	2.4	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	0.97 U	8.5	0.97	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	0.96 U	8.5	0.96	ug/kg	
541-73-1	m-Dichlorobenzene	1.3 U	8.5	1.3	ug/kg	
95-50-1	o-Dichlorobenzene	2.1 U	8.5	2.1	ug/kg	
106-46-7	p-Dichlorobenzene	1.8 U	8.5	1.8	ug/kg	

U = Not detected SDL = Sample Detection Limit
MQL = Method Quantitation Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CES-CS-01-51		
Lab Sample ID:	TC52720-1	**Date Sampled:**	08/05/14
Matrix:	SO - Soil	**Date Received:**	08/06/14
Method:	SW846 8260C	**Percent Solids:**	50.9
Project:	CES- Chemical Spill/4904 Griggs, Houston, TX		

VOA 8260 List

CAS No.	Compound	Result	MQL	SDL	Units	Q
156-60-5	trans-1,2-Dichloroethylene	0.93 U	8.5	0.93	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	1.1 U	8.5	1.1	ug/kg	
100-41-4	Ethylbenzene	13.3	8.5	2.1	ug/kg	
591-78-6	2-Hexanone	16 U	85	16	ug/kg	
87-68-3	Hexachlorobutadiene	1.5 U	8.5	1.5	ug/kg	
98-82-8	Isopropylbenzene	2.4 U	8.5	2.4	ug/kg	
99-87-6	p-Isopropyltoluene	2.8 U	8.5	2.8	ug/kg	
108-10-1	4-Methyl-2-pentanone	13 U	85	13	ug/kg	
74-83-9	Methyl bromide	4.0 U	8.5	4.0	ug/kg	
74-87-3	Methyl chloride	1.6 U	8.5	1.6	ug/kg	
74-95-3	Methylene bromide	1.4 U	8.5	1.4	ug/kg	
75-09-2	Methylene chloride	5.3 U	21	5.3	ug/kg	
78-93-3	Methyl ethyl ketone	26.2	85	11	ug/kg	J
1634-04-4	Methyl Tert Butyl Ether	1.1 U	8.5	1.1	ug/kg	
91-20-3	Naphthalene	4.3 U	8.5	4.3	ug/kg	
103-65-1	n-Propylbenzene	2.2 U	8.5	2.2	ug/kg	
100-42-5	Styrene	2.0 U	8.5	2.0	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	1.1 U	8.5	1.1	ug/kg	
71-55-6	1,1,1-Trichloroethane	1.3 U	8.5	1.3	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	1.4 U	8.5	1.4	ug/kg	
79-00-5	1,1,2-Trichloroethane	1.4 U	8.5	1.4	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	1.1 U	8.5	1.1	ug/kg	
96-18-4	1,2,3-Trichloropropane	1.9 U	8.5	1.9	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	1.1 U	8.5	1.1	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	9.1	8.5	0.86	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	2.4	8.5	2.0	ug/kg	J
127-18-4	Tetrachloroethylene	2.2 U	8.5	2.2	ug/kg	
108-88-3	Toluene	2.7	8.5	2.2	ug/kg	J
79-01-6	Trichloroethylene	0.99 U	8.5	0.99	ug/kg	
75-69-4	Trichlorofluoromethane	1.3 U	8.5	1.3	ug/kg	
75-01-4	Vinyl chloride	1.2 U	8.5	1.2	ug/kg	
1330-20-7	Xylene (total)	18.6	26	6.0	ug/kg	J
	m,p-Xylene	12.1	17	3.8	ug/kg	J
95-47-6	o-Xylene	6.5	8.5	2.2	ug/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	82%	82%	59-126%
2037-26-5	Toluene-D8	109%	109%	70-139%
460-00-4	4-Bromofluorobenzene	120%	118%	63-138%

U = Not detected SDL = Sample Detection Limit
MQL = Method Quantitation Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CES-CS-01-51		
Lab Sample ID:	TC52720-1	**Date Sampled:**	08/05/14
Matrix:	SO - Soil	**Date Received:**	08/06/14
Method:	SW846 8260C	**Percent Solids:**	50.9
Project:	CES- Chemical Spill/4904 Griggs, Houston, TX		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	73%	70%	54-123%

(a) Confirmation run.

U = Not detected SDL = Sample Detection Limit
MQL = Method Quantitation Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CES-CS-01-51		
Lab Sample ID:	TC52720-1	**Date Sampled:**	08/05/14
Matrix:	SO - Soil	**Date Received:**	08/06/14
Method:	SW846 8270D SW846 3550B	**Percent Solids:**	50.9
Project:	CES- Chemical Spill/4904 Griggs, Houston, TX		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	P34911.D	1	08/06/14	SC	08/06/14	OP33453	EP1682
Run #2							

	Initial Weight	Final Volume
Run #1	30.3 g	1.0 ml
Run #2		

ABN Full List

CAS No.	Compound	Result	MQL	SDL	Units	Q
65-85-0	Benzoic acid	520 U	1600	520	ug/kg	
95-57-8	2-Chlorophenol	140 U	320	140	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	110 U	320	110	ug/kg	
120-83-2	2,4-Dichlorophenol	100 U	320	100	ug/kg	
105-67-9	2,4-Dimethylphenol	110 U	320	110	ug/kg	
51-28-5	2,4-Dinitrophenol	520 U	1600	520	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	77 U	650	77	ug/kg	
95-48-7	2-Methylphenol	140 U	320	140	ug/kg	
	3&4-Methylphenol	140 U	320	140	ug/kg	
88-75-5	2-Nitrophenol	110 U	320	110	ug/kg	
100-02-7	4-Nitrophenol	92 U	1600	92	ug/kg	
87-86-5	Pentachlorophenol	240 U	1600	240	ug/kg	
108-95-2	Phenol	150 U	320	150	ug/kg	
95-95-4	2,4,5-Trichlorophenol	100 U	320	100	ug/kg	
88-06-2	2,4,6-Trichlorophenol	85 U	320	85	ug/kg	
83-32-9	Acenaphthene	93 U	320	93	ug/kg	
208-96-8	Acenaphthylene	88 U	320	88	ug/kg	
62-53-3	Aniline	130 U	1600	130	ug/kg	
120-12-7	Anthracene	82 U	320	82	ug/kg	
92-87-5	Benzidine	6300 U	13000	6300	ug/kg	
56-55-3	Benzo(a)anthracene	130 U	320	130	ug/kg	
50-32-8	Benzo(a)pyrene	100 U	320	100	ug/kg	
205-99-2	Benzo(b)fluoranthene	82 U	320	82	ug/kg	
191-24-2	Benzo(g,h,i)perylene	88 U	320	88	ug/kg	
207-08-9	Benzo(k)fluoranthene	140 U	320	140	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	99 U	320	99	ug/kg	
85-68-7	Butyl benzyl phthalate	110 U	320	110	ug/kg	
100-51-6	Benzyl Alcohol	130 U	320	130	ug/kg	
91-58-7	2-Chloronaphthalene	95 U	320	95	ug/kg	
106-47-8	4-Chloroaniline	120 U	320	120	ug/kg	
86-74-8	Carbazole	100 U	320	100	ug/kg	
218-01-9	Chrysene	140 U	320	140	ug/kg	

U = Not detected SDL = Sample Detection Limit J = Indicates an estimated value
MQL = Method Quantitation Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CES-CS-01-51		
Lab Sample ID:	TC52720-1	**Date Sampled:**	08/05/14
Matrix:	SO - Soil	**Date Received:**	08/06/14
Method:	SW846 8270D SW846 3550B	**Percent Solids:**	50.9
Project:	CES- Chemical Spill/4904 Griggs, Houston, TX		

ABN Full List

CAS No.	Compound	Result	MQL	SDL	Units	Q
111-91-1	bis(2-Chloroethoxy)methane	100 U	320	100	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	140 U	320	140	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	130 U	320	130	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	120 U	320	120	ug/kg	
95-50-1	1,2-Dichlorobenzene	130 U	320	130	ug/kg	
122-66-7	1,2-Diphenylhydrazine	82 U	320	82	ug/kg	
541-73-1	1,3-Dichlorobenzene	110 U	320	110	ug/kg	
106-46-7	1,4-Dichlorobenzene	120 U	320	120	ug/kg	
121-14-2	2,4-Dinitrotoluene	100 U	320	100	ug/kg	
606-20-2	2,6-Dinitrotoluene	90 U	320	90	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	120 U	650	120	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	110 U	320	110	ug/kg	
132-64-9	Dibenzofuran	110 U	320	110	ug/kg	
84-74-2	Di-n-butyl phthalate	100 U	320	100	ug/kg	
117-84-0	Di-n-octyl phthalate	86 U	320	86	ug/kg	
84-66-2	Diethyl phthalate	95 U	320	95	ug/kg	
131-11-3	Dimethyl phthalate	93 U	320	93	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	260 U	320	260	ug/kg	
206-44-0	Fluoranthene	110 U	320	110	ug/kg	
86-73-7	Fluorene	97 U	320	97	ug/kg	
118-74-1	Hexachlorobenzene	110 U	320	110	ug/kg	
87-68-3	Hexachlorobutadiene	120 U	320	120	ug/kg	
77-47-4	Hexachlorocyclopentadiene	150 U	1600	150	ug/kg	
67-72-1	Hexachloroethane	120 U	320	120	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	120 U	320	120	ug/kg	
78-59-1	Isophorone	100 U	320	100	ug/kg	
90-12-0	1-Methylnaphthalene	120 U	320	120	ug/kg	
91-57-6	2-Methylnaphthalene	120 U	320	120	ug/kg	
88-74-4	2-Nitroaniline	100 U	320	100	ug/kg	
99-09-2	3-Nitroaniline	95 U	320	95	ug/kg	
100-01-6	4-Nitroaniline	110 U	650	110	ug/kg	
91-20-3	Naphthalene	120 U	320	120	ug/kg	
98-95-3	Nitrobenzene	93 U	320	93	ug/kg	
62-75-9	n-Nitrosodimethylamine	100 U	320	100	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	130 U	320	130	ug/kg	
86-30-6	N-Nitrosodiphenylamine	92 U	320	92	ug/kg	
85-01-8	Phenanthrene	92 U	320	92	ug/kg	
129-00-0	Pyrene	150 U	320	150	ug/kg	
110-86-1	Pyridine	86 U	320	86	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	120 U	320	120	ug/kg	

U = Not detected SDL = Sample Detection Limit
MQL = Method Quantitation Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CES-CS-01-51		
Lab Sample ID:	TC52720-1	**Date Sampled:**	08/05/14
Matrix:	SO - Soil	**Date Received:**	08/06/14
Method:	SW846 8270D SW846 3550B	**Percent Solids:**	50.9
Project:	CES- Chemical Spill/4904 Griggs, Houston, TX		

ABN Full List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	61%		26-124%
4165-62-2	Phenol-d5	73%		19-106%
118-79-6	2,4,6-Tribromophenol	64%		18-129%
4165-60-0	Nitrobenzene-d5	63%		18-104%
321-60-8	2-Fluorobiphenyl	57%		21-114%
1718-51-0	Terphenyl-d14	88%		24-149%

U = Not detected SDL = Sample Detection Limit
MQL = Method Quantitation Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CES-CS-01-51		
Lab Sample ID:	TC52720-1	**Date Sampled:**	08/05/14
Matrix:	SO - Soil	**Date Received:**	08/06/14
Method:	TNRCC 1005 TX1005	**Percent Solids:**	50.9
Project:	CES- Chemical Spill/4904 Griggs, Houston, TX		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	VB14083.D	1	08/07/14	RV	08/06/14	OP33456	GVB329
Run #2							

	Initial Weight	Final Volume
Run #1	8.40 g	10.0 ml
Run #2		

CAS No.	Compound	Result	MQL	SDL	Units	Q
	TPH (C6-C12)	27 U	58	27	mg/kg	
	TPH (> C12-C28)	234	58	32	mg/kg	
	TPH (> C28-C35)	147	58	32	mg/kg	
	TPH (C6-C35)	381	58	27	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	103%		70-130%
98-08-8	aaa-Trifluorotoluene	103%		70-130%

U = Not detected SDL = Sample Detection Limit J = Indicates an estimated value
MQL = Method Quantitation Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: CES-CS-01-51
Lab Sample ID: TC52720-1
Matrix: SO - Soil
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Date Sampled: 08/05/14
Date Received: 08/06/14
Percent Solids: 50.9

Metals Analysis

Analyte	Result	MQL	SDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum [a]	18800	98	12	mg/kg	5	08/06/14	08/09/14	EG	SW846 6010B [2]	SW846 3050B [3]
Antimony [a]	1.4 J	2.5	0.88	mg/kg	5	08/06/14	08/09/14	EG	SW846 6010B [2]	SW846 3050B [3]
Arsenic [a]	6.8	2.5	0.86	mg/kg	5	08/06/14	08/09/14	EG	SW846 6010B [2]	SW846 3050B [3]
Barium	432	20	0.025	mg/kg	1	08/06/14	08/09/14	EG	SW846 6010B [2]	SW846 3050B [3]
Beryllium	2.7	0.39	0.067	mg/kg	1	08/06/14	08/09/14	EG	SW846 6010B [2]	SW846 3050B [3]
Cadmium [a]	0.85 J	2.0	0.12	mg/kg	5	08/06/14	08/09/14	EG	SW846 6010B [2]	SW846 3050B [3]
Calcium [a]	121000	2500	3.9	mg/kg	5	08/06/14	08/09/14	EG	SW846 6010B [2]	SW846 3050B [3]
Chromium	34.2	0.98	0.14	mg/kg	1	08/06/14	08/09/14	EG	SW846 6010B [2]	SW846 3050B [3]
Cobalt	6.1	4.9	0.039	mg/kg	1	08/06/14	08/09/14	EG	SW846 6010B [2]	SW846 3050B [3]
Copper	48.4	2.0	0.22	mg/kg	1	08/06/14	08/09/14	EG	SW846 6010B [2]	SW846 3050B [3]
Iron	12800	9.8	1.4	mg/kg	1	08/06/14	08/09/14	EG	SW846 6010B [2]	SW846 3050B [3]
Lead [a]	69.9	1.5	1.1	mg/kg	5	08/06/14	08/09/14	EG	SW846 6010B [2]	SW846 3050B [3]
Magnesium	2710	490	2.7	mg/kg	1	08/06/14	08/09/14	EG	SW846 6010B [2]	SW846 3050B [3]
Manganese	288	1.5	0.038	mg/kg	1	08/06/14	08/09/14	EG	SW846 6010B [2]	SW846 3050B [3]
Mercury	1.6	0.061	0.025	mg/kg	1	08/07/14	08/07/14	CC	SW846 7471A [1]	SW846 7471A [4]
Nickel	95.9	3.9	0.074	mg/kg	1	08/06/14	08/09/14	EG	SW846 6010B [2]	SW846 3050B [3]
Potassium	1950	490	4.1	mg/kg	1	08/06/14	08/09/14	EG	SW846 6010B [2]	SW846 3050B [3]
Selenium [a]	1.9 J	2.5	0.92	mg/kg	5	08/06/14	08/09/14	EG	SW846 6010B [2]	SW846 3050B [3]
Silver	0.094 J	0.98	0.068	mg/kg	1	08/06/14	08/09/14	EG	SW846 6010B [2]	SW846 3050B [3]
Sodium	465 J	490	1.5	mg/kg	1	08/06/14	08/09/14	EG	SW846 6010B [2]	SW846 3050B [3]
Thallium	0.23 U	0.98	0.23	mg/kg	1	08/06/14	08/09/14	EG	SW846 6010B [2]	SW846 3050B [3]
Vanadium	32.8	4.9	0.040	mg/kg	1	08/06/14	08/09/14	EG	SW846 6010B [2]	SW846 3050B [3]
Zinc	354	2.0	0.55	mg/kg	1	08/06/14	08/09/14	EG	SW846 6010B [2]	SW846 3050B [3]

(1) Instrument QC Batch: MA10010
(2) Instrument QC Batch: MA10018
(3) Prep QC Batch: MP23965
(4) Prep QC Batch: MP23971

(a) Elevated reporting limit due to dilution required for high interfering element.

MQL = Method Quantitation Limit
SDL = Sample Detection Limit

U = Indicates a result < SDL
J = Indicates a result > = SDL but < MQL

Report of Analysis

Client Sample ID:	CES-CS-01-51		
Lab Sample ID:	TC52720-1A	**Date Sampled:**	08/05/14
Matrix:	SO - Soil	**Date Received:**	08/06/14
Method:	SW846 8151 SW846 3550B	**Percent Solids:**	50.9
Project:	CES- Chemical Spill/4904 Griggs, Houston, TX		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD772849.D	1	08/16/14	AR	08/14/14	OP33527	GDD2385
Run #2							

	Initial Weight	Final Volume
Run #1	30.1 g	10.0 ml
Run #2		

Herbicide List

CAS No.	Compound	Result	MQL	SDL	Units	Q
94-75-7	2,4-D	31 U	65	31	ug/kg	
93-72-1	2,4,5-TP (Silvex)	6.8 U	13	6.8	ug/kg	
93-76-5	2,4,5-T	4.4 U	13	4.4	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
19719-28-9	2,4-DCAA	102%		30-154%

U = Not detected SDL = Sample Detection Limit
MQL = Method Quantitation Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CES-CS-01-51		
Lab Sample ID:	TC52720-1A	**Date Sampled:**	08/05/14
Matrix:	SO - Soil	**Date Received:**	08/06/14
Method:	SW846 8081A SW846 3550B	**Percent Solids:**	50.9
Project:	CES- Chemical Spill/4904 Griggs, Houston, TX		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	NN175501.D	10	08/11/14	AR	08/07/14	OP33468	GNN1458
Run #2							

	Initial Weight	Final Volume
Run #1	30.2 g	10.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	MQL	SDL	Units	Q
309-00-2	Aldrin	11 U	32	11	ug/kg	
319-84-6	alpha-BHC	14 U	32	14	ug/kg	
319-85-7	beta-BHC	9.7 U	32	9.7	ug/kg	
319-86-8	delta-BHC	12 U	32	12	ug/kg	
58-89-9	gamma-BHC (Lindane)	12 U	32	12	ug/kg	
5103-71-9	alpha-Chlordane	7.1 U	32	7.1	ug/kg	
5103-74-2	gamma-Chlordane	7.5 U	32	7.5	ug/kg	
60-57-1	Dieldrin	25 U	65	25	ug/kg	
72-54-8	4,4'-DDD	23 U	65	23	ug/kg	
72-55-9	4,4'-DDE	25 U	65	25	ug/kg	
50-29-3	4,4'-DDT	27 U	65	27	ug/kg	
72-20-8	Endrin	25 U	65	25	ug/kg	
1031-07-8	Endosulfan sulfate	28 U	65	28	ug/kg	
7421-93-4	Endrin aldehyde	28 U	65	28	ug/kg	
53494-70-5	Endrin ketone	26 U	65	26	ug/kg	
959-98-8	Endosulfan-I	14 U	65	14	ug/kg	
33213-65-9	Endosulfan-II	26 U	65	26	ug/kg	
76-44-8	Heptachlor	9.6 U	32	9.6	ug/kg	
1024-57-3	Heptachlor epoxide	14 U	32	14	ug/kg	
72-43-5	Methoxychlor	130 U	320	130	ug/kg	
8001-35-2	Toxaphene	160 U	320	160	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	69%		27-125%
2051-24-3	Decachlorobiphenyl	88%		21-130%

(a) Elevated reporting limits due to matrix interference, extract was dark and viscous.

U = Not detected SDL = Sample Detection Limit
MQL = Method Quantitation Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CES-CS-01-51		
Lab Sample ID:	TC52720-1A	**Date Sampled:**	08/05/14
Matrix:	SO - Soil	**Date Received:**	08/06/14
Method:	SW846 8082 SW846 3550B	**Percent Solids:**	50.9
Project:	CES- Chemical Spill/4904 Griggs, Houston, TX		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	OO30867.D	1	08/08/14	AR	08/07/14	OP33467	GOO508
Run #2							

	Initial Weight	Final Volume
Run #1	30.2 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	MQL	SDL	Units	Q
12674-11-2	Aroclor 1016	6.5 U	32	6.5	ug/kg	
11104-28-2	Aroclor 1221	13 U	32	13	ug/kg	
11141-16-5	Aroclor 1232	13 U	32	13	ug/kg	
53469-21-9	Aroclor 1242	6.7 U	32	6.7	ug/kg	
12672-29-6	Aroclor 1248	7.7 U	32	7.7	ug/kg	
11097-69-1	Aroclor 1254	7.5 U	32	7.5	ug/kg	
11096-82-5	Aroclor 1260	17 U	32	17	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	45%		30-118%
2051-24-3	Decachlorobiphenyl	50%		29-122%

(a) Acid clean-up performed by method 3665A.

U = Not detected SDL = Sample Detection Limit
MQL = Method Quantitation Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CES-CS-02-51		
Lab Sample ID:	TC52720-2	**Date Sampled:**	08/05/14
Matrix:	SO - Soil	**Date Received:**	08/06/14
Method:	SW846 8260C	**Percent Solids:**	87.5
Project:	CES- Chemical Spill/4904 Griggs, Houston, TX		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Y1069990.D	1	08/08/14	CF	n/a	n/a	VY3712
Run #2							

	Initial Weight	Final Volume
Run #1	5.88 g	5.0 ml
Run #2		

VOA 8260 List

CAS No.	Compound	Result	MQL	SDL	Units	Q
67-64-1	Acetone	9.7 U	39	9.7	ug/kg	
71-43-2	Benzene	0.66 U	3.9	0.66	ug/kg	
108-86-1	Bromobenzene	0.39 U	3.9	0.39	ug/kg	
74-97-5	Bromochloromethane	1.1 U	3.9	1.1	ug/kg	
75-27-4	Bromodichloromethane	0.44 U	3.9	0.44	ug/kg	
75-25-2	Bromoform	0.73 U	3.9	0.73	ug/kg	
104-51-8	n-Butylbenzene	0.43 U	3.9	0.43	ug/kg	
135-98-8	sec-Butylbenzene	0.85 U	3.9	0.85	ug/kg	
98-06-6	tert-Butylbenzene	0.76 U	3.9	0.76	ug/kg	
108-90-7	Chlorobenzene	0.91 U	3.9	0.91	ug/kg	
75-00-3	Chloroethane	1.5 U	3.9	1.5	ug/kg	
67-66-3	Chloroform	0.42 U	3.9	0.42	ug/kg	
95-49-8	o-Chlorotoluene	0.46 U	3.9	0.46	ug/kg	
106-43-4	p-Chlorotoluene	0.40 U	3.9	0.40	ug/kg	
75-15-0	Carbon disulfide	0.56 U	3.9	0.56	ug/kg	
56-23-5	Carbon tetrachloride	0.84 U	3.9	0.84	ug/kg	
75-34-3	1,1-Dichloroethane	0.40 U	3.9	0.40	ug/kg	
75-35-4	1,1-Dichloroethylene	0.41 U	3.9	0.41	ug/kg	
563-58-6	1,1-Dichloropropene	0.43 U	3.9	0.43	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	3.1 U	3.9	3.1	ug/kg	
106-93-4	1,2-Dibromoethane	0.41 U	3.9	0.41	ug/kg	
107-06-2	1,2-Dichloroethane	0.46 U	3.9	0.46	ug/kg	
78-87-5	1,2-Dichloropropane	0.56 U	3.9	0.56	ug/kg	
142-28-9	1,3-Dichloropropane	0.99 U	3.9	0.99	ug/kg	
594-20-7	2,2-Dichloropropane	0.52 U	3.9	0.52	ug/kg	
124-48-1	Dibromochloromethane	0.88 U	3.9	0.88	ug/kg	
75-71-8	Dichlorodifluoromethane	1.1 U	3.9	1.1	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	0.44 U	3.9	0.44	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	0.44 U	3.9	0.44	ug/kg	
541-73-1	m-Dichlorobenzene	0.61 U	3.9	0.61	ug/kg	
95-50-1	o-Dichlorobenzene	0.94 U	3.9	0.94	ug/kg	
106-46-7	p-Dichlorobenzene	0.84 U	3.9	0.84	ug/kg	

U = Not detected SDL = Sample Detection Limit
MQL = Method Quantitation Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CES-CS-02-51		
Lab Sample ID:	TC52720-2	**Date Sampled:**	08/05/14
Matrix:	SO - Soil	**Date Received:**	08/06/14
Method:	SW846 8260C	**Percent Solids:**	87.5
Project:	CES- Chemical Spill/4904 Griggs, Houston, TX		

VOA 8260 List

CAS No.	Compound	Result	MQL	SDL	Units	Q
156-60-5	trans-1,2-Dichloroethylene	0.42 U	3.9	0.42	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	0.50 U	3.9	0.50	ug/kg	
100-41-4	Ethylbenzene	0.94 U	3.9	0.94	ug/kg	
591-78-6	2-Hexanone	7.2 U	39	7.2	ug/kg	
87-68-3	Hexachlorobutadiene	0.67 U	3.9	0.67	ug/kg	
98-82-8	Isopropylbenzene	1.1 U	3.9	1.1	ug/kg	
99-87-6	p-Isopropyltoluene	1.3 U	3.9	1.3	ug/kg	
108-10-1	4-Methyl-2-pentanone	6.1 U	39	6.1	ug/kg	
74-83-9	Methyl bromide	1.8 U	3.9	1.8	ug/kg	
74-87-3	Methyl chloride	0.75 U	3.9	0.75	ug/kg	
74-95-3	Methylene bromide	0.63 U	3.9	0.63	ug/kg	
75-09-2	Methylene chloride	2.4 U	9.7	2.4	ug/kg	
78-93-3	Methyl ethyl ketone	4.9 U	39	4.9	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	0.49 U	3.9	0.49	ug/kg	
91-20-3	Naphthalene	1.9 U	3.9	1.9	ug/kg	
103-65-1	n-Propylbenzene	1.0 U	3.9	1.0	ug/kg	
100-42-5	Styrene	0.90 U	3.9	0.90	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	0.49 U	3.9	0.49	ug/kg	
71-55-6	1,1,1-Trichloroethane	0.61 U	3.9	0.61	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	0.66 U	3.9	0.66	ug/kg	
79-00-5	1,1,2-Trichloroethane	0.65 U	3.9	0.65	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	0.51 U	3.9	0.51	ug/kg	
96-18-4	1,2,3-Trichloropropane	0.88 U	3.9	0.88	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	0.48 U	3.9	0.48	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	0.39 U	3.9	0.39	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	0.91 U	3.9	0.91	ug/kg	
127-18-4	Tetrachloroethylene	0.98 U	3.9	0.98	ug/kg	
108-88-3	Toluene	0.99 U	3.9	0.99	ug/kg	
79-01-6	Trichloroethylene	0.45 U	3.9	0.45	ug/kg	
75-69-4	Trichlorofluoromethane	0.61 U	3.9	0.61	ug/kg	
75-01-4	Vinyl chloride	0.56 U	3.9	0.56	ug/kg	
1330-20-7	Xylene (total)	2.7 U	12	2.7	ug/kg	
	m,p-Xylene	1.7 U	7.8	1.7	ug/kg	
95-47-6	o-Xylene	0.98 U	3.9	0.98	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	79%		59-126%
2037-26-5	Toluene-D8	94%		70-139%
460-00-4	4-Bromofluorobenzene	90%		63-138%

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B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CES-CS-02-51		
Lab Sample ID:	TC52720-2	**Date Sampled:**	08/05/14
Matrix:	SO - Soil	**Date Received:**	08/06/14
Method:	SW846 8260C	**Percent Solids:**	87.5
Project:	CES- Chemical Spill/4904 Griggs, Houston, TX		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	73%		54-123%

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MQL = Method Quantitation Limit
E = Indicates value exceeds calibration range

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N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CES-CS-02-51		
Lab Sample ID:	TC52720-2	**Date Sampled:**	08/05/14
Matrix:	SO - Soil	**Date Received:**	08/06/14
Method:	SW846 8270D SW846 3550B	**Percent Solids:**	87.5
Project:	CES- Chemical Spill/4904 Griggs, Houston, TX		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	P34923.D	1	08/06/14	SC	08/06/14	OP33453	EP1682
Run #2							

	Initial Weight	Final Volume
Run #1	30.1 g	1.0 ml
Run #2		

ABN Full List

CAS No.	Compound	Result	MQL	SDL	Units	Q
65-85-0	Benzoic acid	300 U	950	300	ug/kg	
95-57-8	2-Chlorophenol	82 U	190	82	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	65 U	190	65	ug/kg	
120-83-2	2,4-Dichlorophenol	61 U	190	61	ug/kg	
105-67-9	2,4-Dimethylphenol	65 U	190	65	ug/kg	
51-28-5	2,4-Dinitrophenol	300 U	950	300	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	45 U	380	45	ug/kg	
95-48-7	2-Methylphenol	83 U	190	83	ug/kg	
	3&4-Methylphenol	83 U	190	83	ug/kg	
88-75-5	2-Nitrophenol	65 U	190	65	ug/kg	
100-02-7	4-Nitrophenol	54 U	950	54	ug/kg	
87-86-5	Pentachlorophenol	140 U	950	140	ug/kg	
108-95-2	Phenol	87 U	190	87	ug/kg	
95-95-4	2,4,5-Trichlorophenol	59 U	190	59	ug/kg	
88-06-2	2,4,6-Trichlorophenol	50 U	190	50	ug/kg	
83-32-9	Acenaphthene	54 U	190	54	ug/kg	
208-96-8	Acenaphthylene	51 U	190	51	ug/kg	
62-53-3	Aniline	78 U	950	78	ug/kg	
120-12-7	Anthracene	48 U	190	48	ug/kg	
92-87-5	Benzidine	3700 U	7600	3700	ug/kg	
56-55-3	Benzo(a)anthracene	75 U	190	75	ug/kg	
50-32-8	Benzo(a)pyrene	59 U	190	59	ug/kg	
205-99-2	Benzo(b)fluoranthene	48 U	190	48	ug/kg	
191-24-2	Benzo(g,h,i)perylene	52 U	190	52	ug/kg	
207-08-9	Benzo(k)fluoranthene	84 U	190	84	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	58 U	190	58	ug/kg	
85-68-7	Butyl benzyl phthalate	62 U	190	62	ug/kg	
100-51-6	Benzyl Alcohol	75 U	190	75	ug/kg	
91-58-7	2-Chloronaphthalene	56 U	190	56	ug/kg	
106-47-8	4-Chloroaniline	71 U	190	71	ug/kg	
86-74-8	Carbazole	61 U	190	61	ug/kg	
218-01-9	Chrysene	81 U	190	81	ug/kg	

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MQL = Method Quantitation Limit
E = Indicates value exceeds calibration range

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B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CES-CS-02-51		
Lab Sample ID:	TC52720-2	**Date Sampled:**	08/05/14
Matrix:	SO - Soil	**Date Received:**	08/06/14
Method:	SW846 8270D SW846 3550B	**Percent Solids:**	87.5
Project:	CES- Chemical Spill/4904 Griggs, Houston, TX		

ABN Full List

CAS No.	Compound	Result	MQL	SDL	Units	Q
111-91-1	bis(2-Chloroethoxy)methane	60 U	190	60	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	84 U	190	84	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	73 U	190	73	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	73 U	190	73	ug/kg	
95-50-1	1,2-Dichlorobenzene	76 U	190	76	ug/kg	
122-66-7	1,2-Diphenylhydrazine	48 U	190	48	ug/kg	
541-73-1	1,3-Dichlorobenzene	67 U	190	67	ug/kg	
106-46-7	1,4-Dichlorobenzene	71 U	190	71	ug/kg	
121-14-2	2,4-Dinitrotoluene	60 U	190	60	ug/kg	
606-20-2	2,6-Dinitrotoluene	52 U	190	52	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	72 U	380	72	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	67 U	190	67	ug/kg	
132-64-9	Dibenzofuran	62 U	190	62	ug/kg	
84-74-2	Di-n-butyl phthalate	60 U	190	60	ug/kg	
117-84-0	Di-n-octyl phthalate	50 U	190	50	ug/kg	
84-66-2	Diethyl phthalate	56 U	190	56	ug/kg	
131-11-3	Dimethyl phthalate	54 U	190	54	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	150 U	190	150	ug/kg	
206-44-0	Fluoranthene	63 U	190	63	ug/kg	
86-73-7	Fluorene	57 U	190	57	ug/kg	
118-74-1	Hexachlorobenzene	62 U	190	62	ug/kg	
87-68-3	Hexachlorobutadiene	70 U	190	70	ug/kg	
77-47-4	Hexachlorocyclopentadiene	91 U	950	91	ug/kg	
67-72-1	Hexachloroethane	70 U	190	70	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	69 U	190	69	ug/kg	
78-59-1	Isophorone	59 U	190	59	ug/kg	
90-12-0	1-Methylnaphthalene	72 U	190	72	ug/kg	
91-57-6	2-Methylnaphthalene	72 U	190	72	ug/kg	
88-74-4	2-Nitroaniline	60 U	190	60	ug/kg	
99-09-2	3-Nitroaniline	56 U	190	56	ug/kg	
100-01-6	4-Nitroaniline	63 U	380	63	ug/kg	
91-20-3	Naphthalene	69 U	190	69	ug/kg	
98-95-3	Nitrobenzene	55 U	190	55	ug/kg	
62-75-9	n-Nitrosodimethylamine	59 U	190	59	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	78 U	190	78	ug/kg	
86-30-6	N-Nitrosodiphenylamine	54 U	190	54	ug/kg	
85-01-8	Phenanthrene	54 U	190	54	ug/kg	
129-00-0	Pyrene	85 U	190	85	ug/kg	
110-86-1	Pyridine	51 U	190	51	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	68 U	190	68	ug/kg	

U = Not detected SDL = Sample Detection Limit J = Indicates an estimated value
MQL = Method Quantitation Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CES-CS-02-51		
Lab Sample ID:	TC52720-2	**Date Sampled:**	08/05/14
Matrix:	SO - Soil	**Date Received:**	08/06/14
Method:	SW846 8270D SW846 3550B	**Percent Solids:**	87.5
Project:	CES- Chemical Spill/4904 Griggs, Houston, TX		

ABN Full List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	51%		26-124%
4165-62-2	Phenol-d5	59%		19-106%
118-79-6	2,4,6-Tribromophenol	56%		18-129%
4165-60-0	Nitrobenzene-d5	53%		18-104%
321-60-8	2-Fluorobiphenyl	51%		21-114%
1718-51-0	Terphenyl-d14	97%		24-149%

U = Not detected SDL = Sample Detection Limit
MQL = Method Quantitation Limit
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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CES-CS-02-51		
Lab Sample ID:	TC52720-2	**Date Sampled:**	08/05/14
Matrix:	SO - Soil	**Date Received:**	08/06/14
Method:	TNRCC 1005 TX1005	**Percent Solids:**	87.5
Project:	CES- Chemical Spill/4904 Griggs, Houston, TX		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	VF14084.D	1	08/07/14	RV	08/06/14	OP33456	GVF329
Run #2							

	Initial Weight	Final Volume
Run #1	9.36 g	10.0 ml
Run #2		

CAS No.	Compound	Result	MQL	SDL	Units	Q
	TPH (C6-C12)	14 U	31	14	mg/kg	
	TPH (> C12-C28)	17 U	31	17	mg/kg	
	TPH (> C28-C35)	17 U	31	17	mg/kg	
	TPH (C6-C35)	14 U	31	14	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	107%		70-130%
98-08-8	aaa-Trifluorotoluene	104%		70-130%

U = Not detected SDL = Sample Detection Limit
MQL = Method Quantitation Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: CES-CS-02-51
Lab Sample ID: TC52720-2
Matrix: SO - Soil
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Date Sampled: 08/05/14
Date Received: 08/06/14
Percent Solids: 87.5

Metals Analysis

Analyte	Result	MQL	SDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum [a]	11000	61	7.4	mg/kg	5	08/06/14	08/09/14	EG	SW846 6010B [2]	SW846 3050B [3]
Antimony [a]	0.55 U	1.5	0.55	mg/kg	5	08/06/14	08/09/14	EG	SW846 6010B [2]	SW846 3050B [3]
Arsenic [a]	8.4	1.5	0.53	mg/kg	5	08/06/14	08/09/14	EG	SW846 6010B [2]	SW846 3050B [3]
Barium	60.2	12	0.015	mg/kg	1	08/06/14	08/09/14	EG	SW846 6010B [2]	SW846 3050B [3]
Beryllium	0.55	0.24	0.041	mg/kg	1	08/06/14	08/09/14	EG	SW846 6010B [2]	SW846 3050B [3]
Cadmium [a]	0.22 J	1.2	0.076	mg/kg	5	08/06/14	08/09/14	EG	SW846 6010B [2]	SW846 3050B [3]
Calcium [a]	101000	1500	2.4	mg/kg	5	08/06/14	08/09/14	EG	SW846 6010B [2]	SW846 3050B [3]
Chromium	11.1	0.61	0.085	mg/kg	1	08/06/14	08/09/14	EG	SW846 6010B [2]	SW846 3050B [3]
Cobalt	4.1	3.0	0.024	mg/kg	1	08/06/14	08/09/14	EG	SW846 6010B [2]	SW846 3050B [3]
Copper	10.2	1.2	0.14	mg/kg	1	08/06/14	08/09/14	EG	SW846 6010B [2]	SW846 3050B [3]
Iron	14100	6.1	0.88	mg/kg	1	08/06/14	08/09/14	EG	SW846 6010B [2]	SW846 3050B [3]
Lead [a]	31.0	0.91	0.68	mg/kg	5	08/06/14	08/09/14	EG	SW846 6010B [2]	SW846 3050B [3]
Magnesium	1450	300	1.7	mg/kg	1	08/06/14	08/09/14	EG	SW846 6010B [2]	SW846 3050B [3]
Manganese	100	0.91	0.024	mg/kg	1	08/06/14	08/09/14	EG	SW846 6010B [2]	SW846 3050B [3]
Mercury	0.035	0.033	0.013	mg/kg	1	08/07/14	08/07/14	CC	SW846 7471A [1]	SW846 7471A [4]
Nickel	8.4	2.4	0.046	mg/kg	1	08/06/14	08/09/14	EG	SW846 6010B [2]	SW846 3050B [3]
Potassium	1010	300	2.6	mg/kg	1	08/06/14	08/09/14	EG	SW846 6010B [2]	SW846 3050B [3]
Selenium [a]	1.6	1.5	0.57	mg/kg	5	08/06/14	08/09/14	EG	SW846 6010B [2]	SW846 3050B [3]
Silver	0.042 U	0.61	0.042	mg/kg	1	08/06/14	08/09/14	EG	SW846 6010B [2]	SW846 3050B [3]
Sodium	316	300	0.93	mg/kg	1	08/06/14	08/09/14	EG	SW846 6010B [2]	SW846 3050B [3]
Thallium	0.71 U	3.0	0.71	mg/kg	5	08/06/14	08/09/14	EG	SW846 6010B [2]	SW846 3050B [3]
Vanadium	41.2	3.0	0.025	mg/kg	1	08/06/14	08/09/14	EG	SW846 6010B [2]	SW846 3050B [3]
Zinc	64.9	1.2	0.34	mg/kg	1	08/06/14	08/09/14	EG	SW846 6010B [2]	SW846 3050B [3]

(1) Instrument QC Batch: MA10010
(2) Instrument QC Batch: MA10018
(3) Prep QC Batch: MP23965
(4) Prep QC Batch: MP23971

(a) Elevated reporting limit due to dilution required for high interfering element.

MQL = Method Quantitation Limit
SDL = Sample Detection Limit

U = Indicates a result < SDL
J = Indicates a result > = SDL but < MQL

Report of Analysis

Client Sample ID:	CES-CS-02-51		
Lab Sample ID:	TC52720-2A	**Date Sampled:**	08/05/14
Matrix:	SO - Soil	**Date Received:**	08/06/14
Method:	SW846 8151 SW846 3550B	**Percent Solids:**	87.5
Project:	CES- Chemical Spill/4904 Griggs, Houston, TX		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD772852.D	1	08/16/14	AR	08/14/14	OP33527	GDD2385
Run #2							

	Initial Weight	Final Volume
Run #1	30.1 g	10.0 ml
Run #2		

Herbicide List

CAS No.	Compound	Result	MQL	SDL	Units	Q
94-75-7	2,4-D	18 U	38	18	ug/kg	
93-72-1	2,4,5-TP (Silvex)	3.9 U	7.6	3.9	ug/kg	
93-76-5	2,4,5-T	2.6 U	7.6	2.6	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
19719-28-9	2,4-DCAA	88%		30-154%

U = Not detected SDL = Sample Detection Limit
MQL = Method Quantitation Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CES-CS-02-51		
Lab Sample ID:	TC52720-2A	**Date Sampled:**	08/05/14
Matrix:	SO - Soil	**Date Received:**	08/06/14
Method:	SW846 8081A SW846 3550B	**Percent Solids:**	87.5
Project:	CES- Chemical Spill/4904 Griggs, Houston, TX		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	NN175507.D	5	08/11/14	AR	08/07/14	OP33468	GNN1458
Run #2							

	Initial Weight	Final Volume
Run #1	30.0 g	10.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	MQL	SDL	Units	Q
309-00-2	Aldrin	3.3 U	9.5	3.3	ug/kg	
319-84-6	alpha-BHC	4.1 U	9.5	4.1	ug/kg	
319-85-7	beta-BHC	2.8 U	9.5	2.8	ug/kg	
319-86-8	delta-BHC	3.5 U	9.5	3.5	ug/kg	
58-89-9	gamma-BHC (Lindane)	3.5 U	9.5	3.5	ug/kg	
5103-71-9	alpha-Chlordane	3.3	9.5	2.1	ug/kg	J
5103-74-2	gamma-Chlordane	2.2 U	9.5	2.2	ug/kg	
60-57-1	Dieldrin	7.5 U	19	7.5	ug/kg	
72-54-8	4,4'-DDD	6.8 U	19	6.8	ug/kg	
72-55-9	4,4'-DDE	7.2 U	19	7.2	ug/kg	
50-29-3	4,4'-DDT	8.0 U	19	8.0	ug/kg	
72-20-8	Endrin	7.2 U	19	7.2	ug/kg	
1031-07-8	Endosulfan sulfate	8.2 U	19	8.2	ug/kg	
7421-93-4	Endrin aldehyde	8.1 U	19	8.1	ug/kg	
53494-70-5	Endrin ketone	7.5 U	19	7.5	ug/kg	
959-98-8	Endosulfan-I	4.2 U	19	4.2	ug/kg	
33213-65-9	Endosulfan-II	7.7 U	19	7.7	ug/kg	
76-44-8	Heptachlor	2.8 U	9.5	2.8	ug/kg	
1024-57-3	Heptachlor epoxide	4.0 U	9.5	4.0	ug/kg	
72-43-5	Methoxychlor	38 U	95	38	ug/kg	
8001-35-2	Toxaphene	48 U	95	48	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	77%		27-125%
2051-24-3	Decachlorobiphenyl	78%		21-130%

(a) Elevated reporting limits due to matrix interference, extract was dark and viscous.

U = Not detected SDL = Sample Detection Limit J = Indicates an estimated value
MQL = Method Quantitation Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CES-CS-02-51		
Lab Sample ID:	TC52720-2A	**Date Sampled:**	08/05/14
Matrix:	SO - Soil	**Date Received:**	08/06/14
Method:	SW846 8082 SW846 3550B	**Percent Solids:**	87.5
Project:	CES- Chemical Spill/4904 Griggs, Houston, TX		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	OO30868.D	1	08/08/14	AR	08/07/14	OP33467	GOO508
Run #2							

	Initial Weight	Final Volume
Run #1	30.0 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	MQL	SDL	Units	Q
12674-11-2	Aroclor 1016	3.8 U	19	3.8	ug/kg	
11104-28-2	Aroclor 1221	7.6 U	19	7.6	ug/kg	
11141-16-5	Aroclor 1232	7.6 U	19	7.6	ug/kg	
53469-21-9	Aroclor 1242	3.9 U	19	3.9	ug/kg	
12672-29-6	Aroclor 1248	4.5 U	19	4.5	ug/kg	
11097-69-1	Aroclor 1254	4.4 U	19	4.4	ug/kg	
11096-82-5	Aroclor 1260	9.8 U	19	9.8	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	56%		30-118%
2051-24-3	Decachlorobiphenyl	58%		29-122%

(a) Acid clean-up performed by method 3665A.

U = Not detected SDL = Sample Detection Limit
MQL = Method Quantitation Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CES-CS-03-51		
Lab Sample ID:	TC52720-3	**Date Sampled:**	08/05/14
Matrix:	SO - Soil	**Date Received:**	08/06/14
Method:	SW846 8260C	**Percent Solids:**	71.0
Project:	CES- Chemical Spill/4904 Griggs, Houston, TX		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Y1069991.D	1	08/08/14	CF	n/a	n/a	VY3712
Run #2							

	Initial Weight	Final Volume
Run #1	4.95 g	5.0 ml
Run #2		

VOA 8260 List

CAS No.	Compound	Result	MQL	SDL	Units	Q
67-64-1	Acetone	14 U	57	14	ug/kg	
71-43-2	Benzene	0.96 U	5.7	0.96	ug/kg	
108-86-1	Bromobenzene	0.57 U	5.7	0.57	ug/kg	
74-97-5	Bromochloromethane	1.5 U	5.7	1.5	ug/kg	
75-27-4	Bromodichloromethane	0.64 U	5.7	0.64	ug/kg	
75-25-2	Bromoform	1.1 U	5.7	1.1	ug/kg	
104-51-8	n-Butylbenzene	0.62 U	5.7	0.62	ug/kg	
135-98-8	sec-Butylbenzene	1.2 U	5.7	1.2	ug/kg	
98-06-6	tert-Butylbenzene	1.1 U	5.7	1.1	ug/kg	
108-90-7	Chlorobenzene	1.3 U	5.7	1.3	ug/kg	
75-00-3	Chloroethane	2.2 U	5.7	2.2	ug/kg	
67-66-3	Chloroform	0.61 U	5.7	0.61	ug/kg	
95-49-8	o-Chlorotoluene	0.68 U	5.7	0.68	ug/kg	
106-43-4	p-Chlorotoluene	0.58 U	5.7	0.58	ug/kg	
75-15-0	Carbon disulfide	0.83 U	5.7	0.83	ug/kg	
56-23-5	Carbon tetrachloride	1.2 U	5.7	1.2	ug/kg	
75-34-3	1,1-Dichloroethane	0.58 U	5.7	0.58	ug/kg	
75-35-4	1,1-Dichloroethylene	0.59 U	5.7	0.59	ug/kg	
563-58-6	1,1-Dichloropropene	0.64 U	5.7	0.64	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	4.5 U	5.7	4.5	ug/kg	
106-93-4	1,2-Dibromoethane	0.60 U	5.7	0.60	ug/kg	
107-06-2	1,2-Dichloroethane	0.68 U	5.7	0.68	ug/kg	
78-87-5	1,2-Dichloropropane	0.83 U	5.7	0.83	ug/kg	
142-28-9	1,3-Dichloropropane	1.5 U	5.7	1.5	ug/kg	
594-20-7	2,2-Dichloropropane	0.77 U	5.7	0.77	ug/kg	
124-48-1	Dibromochloromethane	1.3 U	5.7	1.3	ug/kg	
75-71-8	Dichlorodifluoromethane	1.6 U	5.7	1.6	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	0.65 U	5.7	0.65	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	0.64 U	5.7	0.64	ug/kg	
541-73-1	m-Dichlorobenzene	0.89 U	5.7	0.89	ug/kg	
95-50-1	o-Dichlorobenzene	1.4 U	5.7	1.4	ug/kg	
106-46-7	p-Dichlorobenzene	1.2 U	5.7	1.2	ug/kg	

U = Not detected SDL = Sample Detection Limit
MQL = Method Quantitation Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CES-CS-03-51		
Lab Sample ID:	TC52720-3	**Date Sampled:**	08/05/14
Matrix:	SO - Soil	**Date Received:**	08/06/14
Method:	SW846 8260C	**Percent Solids:**	71.0
Project:	CES- Chemical Spill/4904 Griggs, Houston, TX		

VOA 8260 List

CAS No.	Compound	Result	MQL	SDL	Units	Q
156-60-5	trans-1,2-Dichloroethylene	0.62 U	5.7	0.62	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	0.73 U	5.7	0.73	ug/kg	
100-41-4	Ethylbenzene	1.4 U	5.7	1.4	ug/kg	
591-78-6	2-Hexanone	11 U	57	11	ug/kg	
87-68-3	Hexachlorobutadiene	0.98 U	5.7	0.98	ug/kg	
98-82-8	Isopropylbenzene	1.6 U	5.7	1.6	ug/kg	
99-87-6	p-Isopropyltoluene	1.8 U	5.7	1.8	ug/kg	
108-10-1	4-Methyl-2-pentanone	9.0 U	57	9.0	ug/kg	
74-83-9	Methyl bromide	2.6 U	5.7	2.6	ug/kg	
74-87-3	Methyl chloride	1.1 U	5.7	1.1	ug/kg	
74-95-3	Methylene bromide	0.92 U	5.7	0.92	ug/kg	
75-09-2	Methylene chloride	3.6 U	14	3.6	ug/kg	
78-93-3	Methyl ethyl ketone	7.1 U	57	7.1	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	0.72 U	5.7	0.72	ug/kg	
91-20-3	Naphthalene	2.8 U	5.7	2.8	ug/kg	
103-65-1	n-Propylbenzene	1.5 U	5.7	1.5	ug/kg	
100-42-5	Styrene	1.3 U	5.7	1.3	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	0.72 U	5.7	0.72	ug/kg	
71-55-6	1,1,1-Trichloroethane	0.89 U	5.7	0.89	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	0.96 U	5.7	0.96	ug/kg	
79-00-5	1,1,2-Trichloroethane	0.95 U	5.7	0.95	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	0.75 U	5.7	0.75	ug/kg	
96-18-4	1,2,3-Trichloropropane	1.3 U	5.7	1.3	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	0.70 U	5.7	0.70	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	0.58 U	5.7	0.58	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	1.3 U	5.7	1.3	ug/kg	
127-18-4	Tetrachloroethylene	1.4 U	5.7	1.4	ug/kg	
108-88-3	Toluene	1.5 U	5.7	1.5	ug/kg	
79-01-6	Trichloroethylene	0.66 U	5.7	0.66	ug/kg	
75-69-4	Trichlorofluoromethane	0.89 U	5.7	0.89	ug/kg	
75-01-4	Vinyl chloride	0.83 U	5.7	0.83	ug/kg	
1330-20-7	Xylene (total)	4.0 U	17	4.0	ug/kg	
	m,p-Xylene	2.5 U	11	2.5	ug/kg	
95-47-6	o-Xylene	1.4 U	5.7	1.4	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	81%		59-126%
2037-26-5	Toluene-D8	90%		70-139%
460-00-4	4-Bromofluorobenzene	80%		63-138%

U = Not detected SDL = Sample Detection Limit J = Indicates an estimated value
MQL = Method Quantitation Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CES-CS-03-51		
Lab Sample ID:	TC52720-3	**Date Sampled:**	08/05/14
Matrix:	SO - Soil	**Date Received:**	08/06/14
Method:	SW846 8260C	**Percent Solids:**	71.0
Project:	CES- Chemical Spill/4904 Griggs, Houston, TX		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	78%		54-123%

U = Not detected SDL = Sample Detection Limit
MQL = Method Quantitation Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CES-CS-03-51		
Lab Sample ID:	TC52720-3	**Date Sampled:**	08/05/14
Matrix:	SO - Soil	**Date Received:**	08/06/14
Method:	SW846 8270D SW846 3550B	**Percent Solids:**	71.0
Project:	CES- Chemical Spill/4904 Griggs, Houston, TX		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	P34924.D	1	08/06/14	SC	08/06/14	OP33453	EP1682
Run #2							

	Initial Weight	Final Volume
Run #1	30.1 g	1.0 ml
Run #2		

ABN Full List

CAS No.	Compound	Result	MQL	SDL	Units	Q
65-85-0	Benzoic acid	370 U	1200	370	ug/kg	
95-57-8	2-Chlorophenol	100 U	230	100	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	80 U	230	80	ug/kg	
120-83-2	2,4-Dichlorophenol	75 U	230	75	ug/kg	
105-67-9	2,4-Dimethylphenol	80 U	230	80	ug/kg	
51-28-5	2,4-Dinitrophenol	370 U	1200	370	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	56 U	470	56	ug/kg	
95-48-7	2-Methylphenol	100 U	230	100	ug/kg	
	3&4-Methylphenol	100 U	230	100	ug/kg	
88-75-5	2-Nitrophenol	79 U	230	79	ug/kg	
100-02-7	4-Nitrophenol	66 U	1200	66	ug/kg	
87-86-5	Pentachlorophenol	170 U	1200	170	ug/kg	
108-95-2	Phenol	110 U	230	110	ug/kg	
95-95-4	2,4,5-Trichlorophenol	73 U	230	73	ug/kg	
88-06-2	2,4,6-Trichlorophenol	61 U	230	61	ug/kg	
83-32-9	Acenaphthene	67 U	230	67	ug/kg	
208-96-8	Acenaphthylene	63 U	230	63	ug/kg	
62-53-3	Aniline	95 U	1200	95	ug/kg	
120-12-7	Anthracene	59 U	230	59	ug/kg	
92-87-5	Benzidine	4500 U	9300	4500	ug/kg	
56-55-3	Benzo(a)anthracene	92 U	230	92	ug/kg	
50-32-8	Benzo(a)pyrene	73 U	230	73	ug/kg	
205-99-2	Benzo(b)fluoranthene	59 U	230	59	ug/kg	
191-24-2	Benzo(g,h,i)perylene	64 U	230	64	ug/kg	
207-08-9	Benzo(k)fluoranthene	100 U	230	100	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	71 U	230	71	ug/kg	
85-68-7	Butyl benzyl phthalate	76 U	230	76	ug/kg	
100-51-6	Benzyl Alcohol	92 U	230	92	ug/kg	
91-58-7	2-Chloronaphthalene	68 U	230	68	ug/kg	
106-47-8	4-Chloroaniline	87 U	230	87	ug/kg	
86-74-8	Carbazole	75 U	230	75	ug/kg	
218-01-9	Chrysene	100 U	230	100	ug/kg	

U = Not detected SDL = Sample Detection Limit J = Indicates an estimated value
MQL = Method Quantitation Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CES-CS-03-51		
Lab Sample ID:	TC52720-3	**Date Sampled:**	08/05/14
Matrix:	SO - Soil	**Date Received:**	08/06/14
Method:	SW846 8270D SW846 3550B	**Percent Solids:**	71.0
Project:	CES- Chemical Spill/4904 Griggs, Houston, TX		

ABN Full List

CAS No.	Compound	Result	MQL	SDL	Units	Q
111-91-1	bis(2-Chloroethoxy)methane	73 U	230	73	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	100 U	230	100	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	90 U	230	90	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	90 U	230	90	ug/kg	
95-50-1	1,2-Dichlorobenzene	94 U	230	94	ug/kg	
122-66-7	1,2-Diphenylhydrazine	59 U	230	59	ug/kg	
541-73-1	1,3-Dichlorobenzene	83 U	230	83	ug/kg	
106-46-7	1,4-Dichlorobenzene	88 U	230	88	ug/kg	
121-14-2	2,4-Dinitrotoluene	73 U	230	73	ug/kg	
606-20-2	2,6-Dinitrotoluene	65 U	230	65	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	88 U	470	88	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	82 U	230	82	ug/kg	
132-64-9	Dibenzofuran	77 U	230	77	ug/kg	
84-74-2	Di-n-butyl phthalate	74 U	230	74	ug/kg	
117-84-0	Di-n-octyl phthalate	62 U	230	62	ug/kg	
84-66-2	Diethyl phthalate	68 U	230	68	ug/kg	
131-11-3	Dimethyl phthalate	67 U	230	67	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	235	230	190	ug/kg	
206-44-0	Fluoranthene	78 U	230	78	ug/kg	
86-73-7	Fluorene	70 U	230	70	ug/kg	
118-74-1	Hexachlorobenzene	76 U	230	76	ug/kg	
87-68-3	Hexachlorobutadiene	86 U	230	86	ug/kg	
77-47-4	Hexachlorocyclopentadiene	110 U	1200	110	ug/kg	
67-72-1	Hexachloroethane	86 U	230	86	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	85 U	230	85	ug/kg	
78-59-1	Isophorone	72 U	230	72	ug/kg	
90-12-0	1-Methylnaphthalene	88 U	230	88	ug/kg	
91-57-6	2-Methylnaphthalene	88 U	230	88	ug/kg	
88-74-4	2-Nitroaniline	73 U	230	73	ug/kg	
99-09-2	3-Nitroaniline	69 U	230	69	ug/kg	
100-01-6	4-Nitroaniline	78 U	470	78	ug/kg	
91-20-3	Naphthalene	85 U	230	85	ug/kg	
98-95-3	Nitrobenzene	67 U	230	67	ug/kg	
62-75-9	n-Nitrosodimethylamine	73 U	230	73	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	95 U	230	95	ug/kg	
86-30-6	N-Nitrosodiphenylamine	66 U	230	66	ug/kg	
85-01-8	Phenanthrene	66 U	230	66	ug/kg	
129-00-0	Pyrene	100 U	230	100	ug/kg	
110-86-1	Pyridine	62 U	230	62	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	84 U	230	84	ug/kg	

U = Not detected SDL = Sample Detection Limit J = Indicates an estimated value
MQL = Method Quantitation Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CES-CS-03-51		
Lab Sample ID:	TC52720-3	**Date Sampled:**	08/05/14
Matrix:	SO - Soil	**Date Received:**	08/06/14
Method:	SW846 8270D SW846 3550B	**Percent Solids:**	71.0
Project:	CES- Chemical Spill/4904 Griggs, Houston, TX		

ABN Full List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	61%		26-124%
4165-62-2	Phenol-d5	73%		19-106%
118-79-6	2,4,6-Tribromophenol	60%		18-129%
4165-60-0	Nitrobenzene-d5	69%		18-104%
321-60-8	2-Fluorobiphenyl	66%		21-114%
1718-51-0	Terphenyl-d14	98%		24-149%

U = Not detected SDL = Sample Detection Limit
MQL = Method Quantitation Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CES-CS-03-51		
Lab Sample ID:	TC52720-3	**Date Sampled:**	08/05/14
Matrix:	SO - Soil	**Date Received:**	08/06/14
Method:	TNRCC 1005 TX1005	**Percent Solids:**	71.0
Project:	CES- Chemical Spill/4904 Griggs, Houston, TX		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	VB14085.D	1	08/07/14	RV	08/06/14	OP33456	GVB329
Run #2							

	Initial Weight	Final Volume
Run #1	9.88 g	10.0 ml
Run #2		

CAS No.	Compound	Result	MQL	SDL	Units	Q
	TPH (C6-C12)	16 U	36	16	mg/kg	
	TPH (> C12-C28)	20 U	36	20	mg/kg	
	TPH (> C28-C35)	20 U	36	20	mg/kg	
	TPH (C6-C35)	16 U	36	16	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	104%		70-130%
98-08-8	aaa-Trifluorotoluene	107%		70-130%

U = Not detected SDL = Sample Detection Limit
MQL = Method Quantitation Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: CES-CS-03-51
Lab Sample ID: TC52720-3
Matrix: SO - Soil
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Date Sampled: 08/05/14
Date Received: 08/06/14
Percent Solids: 71.0

Metals Analysis

Analyte	Result	MQL	SDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	14100	15	1.8	mg/kg	1	08/06/14	08/09/14	EG	SW846 6010B [2]	SW846 3050B [3]
Antimony	0.33 J	0.36	0.13	mg/kg	1	08/06/14	08/09/14	EG	SW846 6010B [2]	SW846 3050B [3]
Arsenic	2.1	0.36	0.13	mg/kg	1	08/06/14	08/09/14	EG	SW846 6010B [2]	SW846 3050B [3]
Barium	100	15	0.018	mg/kg	1	08/06/14	08/09/14	EG	SW846 6010B [2]	SW846 3050B [3]
Beryllium	0.55	0.29	0.050	mg/kg	1	08/06/14	08/09/14	EG	SW846 6010B [2]	SW846 3050B [3]
Cadmium	0.44	0.29	0.018	mg/kg	1	08/06/14	08/09/14	EG	SW846 6010B [2]	SW846 3050B [3]
Calcium	19000	360	0.57	mg/kg	1	08/06/14	08/09/14	EG	SW846 6010B [2]	SW846 3050B [3]
Chromium	15.0	0.73	0.10	mg/kg	1	08/06/14	08/09/14	EG	SW846 6010B [2]	SW846 3050B [3]
Cobalt	3.8	3.6	0.029	mg/kg	1	08/06/14	08/09/14	EG	SW846 6010B [2]	SW846 3050B [3]
Copper	16.2	1.5	0.16	mg/kg	1	08/06/14	08/09/14	EG	SW846 6010B [2]	SW846 3050B [3]
Iron	10900	7.3	1.0	mg/kg	1	08/06/14	08/09/14	EG	SW846 6010B [2]	SW846 3050B [3]
Lead	48.7	0.22	0.16	mg/kg	1	08/06/14	08/09/14	EG	SW846 6010B [2]	SW846 3050B [3]
Magnesium	2000	360	2.0	mg/kg	1	08/06/14	08/09/14	EG	SW846 6010B [2]	SW846 3050B [3]
Manganese	145	1.1	0.028	mg/kg	1	08/06/14	08/09/14	EG	SW846 6010B [2]	SW846 3050B [3]
Mercury	0.066	0.046	0.019	mg/kg	1	08/07/14	08/07/14	CC	SW846 7471A [1]	SW846 7471A [4]
Nickel	10.9	2.9	0.055	mg/kg	1	08/06/14	08/09/14	EG	SW846 6010B [2]	SW846 3050B [3]
Potassium	1790	360	3.1	mg/kg	1	08/06/14	08/09/14	EG	SW846 6010B [2]	SW846 3050B [3]
Selenium	0.71	0.36	0.14	mg/kg	1	08/06/14	08/09/14	EG	SW846 6010B [2]	SW846 3050B [3]
Silver	0.050 U	0.73	0.050	mg/kg	1	08/06/14	08/09/14	EG	SW846 6010B [2]	SW846 3050B [3]
Sodium	160 J	360	1.1	mg/kg	1	08/06/14	08/09/14	EG	SW846 6010B [2]	SW846 3050B [3]
Thallium	0.17 U	0.73	0.17	mg/kg	1	08/06/14	08/09/14	EG	SW846 6010B [2]	SW846 3050B [3]
Vanadium	20.8	3.6	0.030	mg/kg	1	08/06/14	08/09/14	EG	SW846 6010B [2]	SW846 3050B [3]
Zinc	130	1.5	0.41	mg/kg	1	08/06/14	08/09/14	EG	SW846 6010B [2]	SW846 3050B [3]

(1) Instrument QC Batch: MA10010
(2) Instrument QC Batch: MA10018
(3) Prep QC Batch: MP23965
(4) Prep QC Batch: MP23971

MQL = Method Quantitation Limit
SDL = Sample Detection Limit

U = Indicates a result < SDL
J = Indicates a result > = SDL but < MQL

Report of Analysis

Client Sample ID:	CES-CS-03-51		
Lab Sample ID:	TC52720-3A	**Date Sampled:**	08/05/14
Matrix:	SO - Soil	**Date Received:**	08/06/14
Method:	SW846 8151 SW846 3550B	**Percent Solids:**	71.0
Project:	CES- Chemical Spill/4904 Griggs, Houston, TX		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD772853.D	1	08/16/14	AR	08/14/14	OP33527	GDD2385
Run #2							

	Initial Weight	Final Volume
Run #1	30.1 g	10.0 ml
Run #2		

Herbicide List

CAS No.	Compound	Result	MQL	SDL	Units	Q
94-75-7	2,4-D	22 U	47	22	ug/kg	
93-72-1	2,4,5-TP (Silvex)	4.9 U	9.4	4.9	ug/kg	
93-76-5	2,4,5-T	3.2 U	9.4	3.2	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
19719-28-9	2,4-DCAA	103%		30-154%

U = Not detected SDL = Sample Detection Limit
MQL = Method Quantitation Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CES-CS-03-51		
Lab Sample ID:	TC52720-3A	**Date Sampled:**	08/05/14
Matrix:	SO - Soil	**Date Received:**	08/06/14
Method:	SW846 8081A SW846 3550B	**Percent Solids:**	71.0
Project:	CES- Chemical Spill/4904 Griggs, Houston, TX		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	NN175509.D	5	08/11/14	AR	08/07/14	OP33468	GNN1458
Run #2							

	Initial Weight	Final Volume
Run #1	30.4 g	10.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	MQL	SDL	Units	Q
309-00-2	Aldrin	4.0 U	12	4.0	ug/kg	
319-84-6	alpha-BHC	5.0 U	12	5.0	ug/kg	
319-85-7	beta-BHC	3.5 U	12	3.5	ug/kg	
319-86-8	delta-BHC	4.3 U	12	4.3	ug/kg	
58-89-9	gamma-BHC (Lindane)	4.3 U	12	4.3	ug/kg	
5103-71-9	alpha-Chlordane [b]	3.2	12	2.5	ug/kg	J
5103-74-2	gamma-Chlordane	2.7 U	12	2.7	ug/kg	
60-57-1	Dieldrin	9.1 U	23	9.1	ug/kg	
72-54-8	4,4'-DDD	8.2 U	23	8.2	ug/kg	
72-55-9	4,4'-DDE	8.7 U	23	8.7	ug/kg	
50-29-3	4,4'-DDT	9.8 U	23	9.8	ug/kg	
72-20-8	Endrin	8.8 U	23	8.8	ug/kg	
1031-07-8	Endosulfan sulfate	9.9 U	23	9.9	ug/kg	
7421-93-4	Endrin aldehyde	9.8 U	23	9.8	ug/kg	
53494-70-5	Endrin ketone	9.1 U	23	9.1	ug/kg	
959-98-8	Endosulfan-I	5.1 U	23	5.1	ug/kg	
33213-65-9	Endosulfan-II	9.4 U	23	9.4	ug/kg	
76-44-8	Heptachlor	3.4 U	12	3.4	ug/kg	
1024-57-3	Heptachlor epoxide	4.9 U	12	4.9	ug/kg	
72-43-5	Methoxychlor	46 U	120	46	ug/kg	
8001-35-2	Toxaphene	58 U	120	58	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	63%		27-125%
2051-24-3	Decachlorobiphenyl	62%		21-130%

(a) Elevated reporting limits due to matrix interference, extract was dark and viscous.
(b) More than 40% RPD for detected concentrations between two GC columns.

U = Not detected SDL = Sample Detection Limit
MQL = Method Quantitation Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CES-CS-03-51		
Lab Sample ID:	TC52720-3A	**Date Sampled:**	08/05/14
Matrix:	SO - Soil	**Date Received:**	08/06/14
Method:	SW846 8082 SW846 3550B	**Percent Solids:**	71.0
Project:	CES- Chemical Spill/4904 Griggs, Houston, TX		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OO30846.D	1	08/07/14	AR	08/07/14	OP33467	GOO507
Run #2							

	Initial Weight	Final Volume
Run #1	30.4 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	MQL	SDL	Units	Q
12674-11-2	Aroclor 1016	4.6 U	23	4.6	ug/kg	
11104-28-2	Aroclor 1221	9.3 U	23	9.3	ug/kg	
11141-16-5	Aroclor 1232	9.3 U	23	9.3	ug/kg	
53469-21-9	Aroclor 1242	4.8 U	23	4.8	ug/kg	
12672-29-6	Aroclor 1248	5.5 U	23	5.5	ug/kg	
11097-69-1	Aroclor 1254	5.4 U	23	5.4	ug/kg	
11096-82-5	Aroclor 1260	12 U	23	12	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	61%		30-118%
2051-24-3	Decachlorobiphenyl	48%		29-122%

U = Not detected SDL = Sample Detection Limit J = Indicates an estimated value
MQL = Method Quantitation Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CES-CS-04-51		
Lab Sample ID:	TC52720-4	**Date Sampled:**	08/05/14
Matrix:	SO - Soil	**Date Received:**	08/06/14
Method:	SW846 8260C	**Percent Solids:**	70.0
Project:	CES- Chemical Spill/4904 Griggs, Houston, TX		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Y1070028.D	1	08/11/14	CF	n/a	n/a	VY3714
Run #2							

	Initial Weight	Final Volume
Run #1	4.17 g	5.0 ml
Run #2		

VOA 8260 List

CAS No.	Compound	Result	MQL	SDL	Units	Q
67-64-1	Acetone	17 U	69	17	ug/kg	
71-43-2	Benzene	1.2 U	6.9	1.2	ug/kg	
108-86-1	Bromobenzene	0.69 U	6.9	0.69	ug/kg	
74-97-5	Bromochloromethane	1.9 U	6.9	1.9	ug/kg	
75-27-4	Bromodichloromethane	0.77 U	6.9	0.77	ug/kg	
75-25-2	Bromoform	1.3 U	6.9	1.3	ug/kg	
104-51-8	n-Butylbenzene	0.75 U	6.9	0.75	ug/kg	
135-98-8	sec-Butylbenzene	1.5 U	6.9	1.5	ug/kg	
98-06-6	tert-Butylbenzene	1.3 U	6.9	1.3	ug/kg	
108-90-7	Chlorobenzene	1.6 U	6.9	1.6	ug/kg	
75-00-3	Chloroethane	2.7 U	6.9	2.7	ug/kg	
67-66-3	Chloroform	0.74 U	6.9	0.74	ug/kg	
95-49-8	o-Chlorotoluene	0.82 U	6.9	0.82	ug/kg	
106-43-4	p-Chlorotoluene	0.70 U	6.9	0.70	ug/kg	
75-15-0	Carbon disulfide	1.0 U	6.9	1.0	ug/kg	
56-23-5	Carbon tetrachloride	1.5 U	6.9	1.5	ug/kg	
75-34-3	1,1-Dichloroethane	0.70 U	6.9	0.70	ug/kg	
75-35-4	1,1-Dichloroethylene	0.71 U	6.9	0.71	ug/kg	
563-58-6	1,1-Dichloropropene	0.77 U	6.9	0.77	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	5.4 U	6.9	5.4	ug/kg	
106-93-4	1,2-Dibromoethane	0.72 U	6.9	0.72	ug/kg	
107-06-2	1,2-Dichloroethane	0.81 U	6.9	0.81	ug/kg	
78-87-5	1,2-Dichloropropane	0.99 U	6.9	0.99	ug/kg	
142-28-9	1,3-Dichloropropane	1.7 U	6.9	1.7	ug/kg	
594-20-7	2,2-Dichloropropane	0.92 U	6.9	0.92	ug/kg	
124-48-1	Dibromochloromethane	1.6 U	6.9	1.6	ug/kg	
75-71-8	Dichlorodifluoromethane	1.9 U	6.9	1.9	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	0.78 U	6.9	0.78	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	0.77 U	6.9	0.77	ug/kg	
541-73-1	m-Dichlorobenzene	1.1 U	6.9	1.1	ug/kg	
95-50-1	o-Dichlorobenzene	1.7 U	6.9	1.7	ug/kg	
106-46-7	p-Dichlorobenzene	1.5 U	6.9	1.5	ug/kg	

U = Not detected SDL = Sample Detection Limit J = Indicates an estimated value
MQL = Method Quantitation Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CES-CS-04-51		
Lab Sample ID:	TC52720-4	**Date Sampled:**	08/05/14
Matrix:	SO - Soil	**Date Received:**	08/06/14
Method:	SW846 8260C	**Percent Solids:**	70.0
Project:	CES- Chemical Spill/4904 Griggs, Houston, TX		

VOA 8260 List

CAS No.	Compound	Result	MQL	SDL	Units	Q
156-60-5	trans-1,2-Dichloroethylene	0.75 U	6.9	0.75	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	0.88 U	6.9	0.88	ug/kg	
100-41-4	Ethylbenzene	1.7 U	6.9	1.7	ug/kg	
591-78-6	2-Hexanone	13 U	69	13	ug/kg	
87-68-3	Hexachlorobutadiene	1.2 U	6.9	1.2	ug/kg	
98-82-8	Isopropylbenzene	1.9 U	6.9	1.9	ug/kg	
99-87-6	p-Isopropyltoluene	2.2 U	6.9	2.2	ug/kg	
108-10-1	4-Methyl-2-pentanone	11 U	69	11	ug/kg	
74-83-9	Methyl bromide	3.2 U	6.9	3.2	ug/kg	
74-87-3	Methyl chloride	1.3 U	6.9	1.3	ug/kg	
74-95-3	Methylene bromide	1.1 U	6.9	1.1	ug/kg	
75-09-2	Methylene chloride	4.3 U	17	4.3	ug/kg	
78-93-3	Methyl ethyl ketone	8.6 U	69	8.6	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	0.87 U	6.9	0.87	ug/kg	
91-20-3	Naphthalene	3.4 U	6.9	3.4	ug/kg	
103-65-1	n-Propylbenzene	1.8 U	6.9	1.8	ug/kg	
100-42-5	Styrene	1.6 U	6.9	1.6	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	0.86 U	6.9	0.86	ug/kg	
71-55-6	1,1,1-Trichloroethane	1.1 U	6.9	1.1	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	1.2 U	6.9	1.2	ug/kg	
79-00-5	1,1,2-Trichloroethane	1.1 U	6.9	1.1	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	0.90 U	6.9	0.90	ug/kg	
96-18-4	1,2,3-Trichloropropane	1.6 U	6.9	1.6	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	0.85 U	6.9	0.85	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	0.69 U	6.9	0.69	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	1.6 U	6.9	1.6	ug/kg	
127-18-4	Tetrachloroethylene	1.7 U	6.9	1.7	ug/kg	
108-88-3	Toluene	1.7 U	6.9	1.7	ug/kg	
79-01-6	Trichloroethylene	0.80 U	6.9	0.80	ug/kg	
75-69-4	Trichlorofluoromethane	1.1 U	6.9	1.1	ug/kg	
75-01-4	Vinyl chloride	0.99 U	6.9	0.99	ug/kg	
1330-20-7	Xylene (total)	4.8 U	21	4.8	ug/kg	
	m,p-Xylene	3.1 U	14	3.1	ug/kg	
95-47-6	o-Xylene	1.7 U	6.9	1.7	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	81%		59-126%
2037-26-5	Toluene-D8	98%		70-139%
460-00-4	4-Bromofluorobenzene	103%		63-138%

U = Not detected SDL = Sample Detection Limit
MQL = Method Quantitation Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CES-CS-04-51		
Lab Sample ID:	TC52720-4	**Date Sampled:**	08/05/14
Matrix:	SO - Soil	**Date Received:**	08/06/14
Method:	SW846 8260C	**Percent Solids:**	70.0
Project:	CES- Chemical Spill/4904 Griggs, Houston, TX		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	70%		54-123%

U = Not detected SDL = Sample Detection Limit
MQL = Method Quantitation Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CES-CS-04-51		
Lab Sample ID:	TC52720-4	**Date Sampled:**	08/05/14
Matrix:	SO - Soil	**Date Received:**	08/06/14
Method:	SW846 8270D SW846 3550B	**Percent Solids:**	70.0
Project:	CES- Chemical Spill/4904 Griggs, Houston, TX		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	P34925.D	1	08/06/14	SC	08/06/14	OP33453	EP1682
Run #2							

	Initial Weight	Final Volume
Run #1	30.3 g	1.0 ml
Run #2		

ABN Full List

CAS No.	Compound	Result	MQL	SDL	Units	Q
65-85-0	Benzoic acid	380 U	1200	380	ug/kg	
95-57-8	2-Chlorophenol	100 U	240	100	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	81 U	240	81	ug/kg	
120-83-2	2,4-Dichlorophenol	76 U	240	76	ug/kg	
105-67-9	2,4-Dimethylphenol	81 U	240	81	ug/kg	
51-28-5	2,4-Dinitrophenol	380 U	1200	380	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	56 U	470	56	ug/kg	
95-48-7	2-Methylphenol	100 U	240	100	ug/kg	
	3&4-Methylphenol	100 U	240	100	ug/kg	
88-75-5	2-Nitrophenol	80 U	240	80	ug/kg	
100-02-7	4-Nitrophenol	67 U	1200	67	ug/kg	
87-86-5	Pentachlorophenol	180 U	1200	180	ug/kg	
108-95-2	Phenol	110 U	240	110	ug/kg	
95-95-4	2,4,5-Trichlorophenol	74 U	240	74	ug/kg	
88-06-2	2,4,6-Trichlorophenol	62 U	240	62	ug/kg	
83-32-9	Acenaphthene	68 U	240	68	ug/kg	
208-96-8	Acenaphthylene	64 U	240	64	ug/kg	
62-53-3	Aniline	96 U	1200	96	ug/kg	
120-12-7	Anthracene	60 U	240	60	ug/kg	
92-87-5	Benzidine	4600 U	9400	4600	ug/kg	
56-55-3	Benzo(a)anthracene	93 U	240	93	ug/kg	
50-32-8	Benzo(a)pyrene	74 U	240	74	ug/kg	
205-99-2	Benzo(b)fluoranthene	60 U	240	60	ug/kg	
191-24-2	Benzo(g,h,i)perylene	64 U	240	64	ug/kg	
207-08-9	Benzo(k)fluoranthene	100 U	240	100	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	72 U	240	72	ug/kg	
85-68-7	Butyl benzyl phthalate	77 U	240	77	ug/kg	
100-51-6	Benzyl Alcohol	93 U	240	93	ug/kg	
91-58-7	2-Chloronaphthalene	69 U	240	69	ug/kg	
106-47-8	4-Chloroaniline	88 U	240	88	ug/kg	
86-74-8	Carbazole	76 U	240	76	ug/kg	
218-01-9	Chrysene	100 U	240	100	ug/kg	

U = Not detected SDL = Sample Detection Limit J = Indicates an estimated value
MQL = Method Quantitation Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CES-CS-04-51		
Lab Sample ID:	TC52720-4	**Date Sampled:**	08/05/14
Matrix:	SO - Soil	**Date Received:**	08/06/14
Method:	SW846 8270D SW846 3550B	**Percent Solids:**	70.0
Project:	CES- Chemical Spill/4904 Griggs, Houston, TX		

ABN Full List

CAS No.	Compound	Result	MQL	SDL	Units	Q
111-91-1	bis(2-Chloroethoxy)methane	74 U	240	74	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	100 U	240	100	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	91 U	240	91	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	91 U	240	91	ug/kg	
95-50-1	1,2-Dichlorobenzene	95 U	240	95	ug/kg	
122-66-7	1,2-Diphenylhydrazine	60 U	240	60	ug/kg	
541-73-1	1,3-Dichlorobenzene	84 U	240	84	ug/kg	
106-46-7	1,4-Dichlorobenzene	89 U	240	89	ug/kg	
121-14-2	2,4-Dinitrotoluene	74 U	240	74	ug/kg	
606-20-2	2,6-Dinitrotoluene	65 U	240	65	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	89 U	470	89	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	83 U	240	83	ug/kg	
132-64-9	Dibenzofuran	77 U	240	77	ug/kg	
84-74-2	Di-n-butyl phthalate	75 U	240	75	ug/kg	
117-84-0	Di-n-octyl phthalate	62 U	240	62	ug/kg	
84-66-2	Diethyl phthalate	69 U	240	69	ug/kg	
131-11-3	Dimethyl phthalate	68 U	240	68	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	190 U	240	190	ug/kg	
206-44-0	Fluoranthene	78 U	240	78	ug/kg	
86-73-7	Fluorene	70 U	240	70	ug/kg	
118-74-1	Hexachlorobenzene	77 U	240	77	ug/kg	
87-68-3	Hexachlorobutadiene	86 U	240	86	ug/kg	
77-47-4	Hexachlorocyclopentadiene	110 U	1200	110	ug/kg	
67-72-1	Hexachloroethane	86 U	240	86	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	86 U	240	86	ug/kg	
78-59-1	Isophorone	73 U	240	73	ug/kg	
90-12-0	1-Methylnaphthalene	89 U	240	89	ug/kg	
91-57-6	2-Methylnaphthalene	89 U	240	89	ug/kg	
88-74-4	2-Nitroaniline	74 U	240	74	ug/kg	
99-09-2	3-Nitroaniline	69 U	240	69	ug/kg	
100-01-6	4-Nitroaniline	78 U	470	78	ug/kg	
91-20-3	Naphthalene	85 U	240	85	ug/kg	
98-95-3	Nitrobenzene	68 U	240	68	ug/kg	
62-75-9	n-Nitrosodimethylamine	74 U	240	74	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	96 U	240	96	ug/kg	
86-30-6	N-Nitrosodiphenylamine	67 U	240	67	ug/kg	
85-01-8	Phenanthrene	67 U	240	67	ug/kg	
129-00-0	Pyrene	110 U	240	110	ug/kg	
110-86-1	Pyridine	63 U	240	63	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	85 U	240	85	ug/kg	

U = Not detected SDL = Sample Detection Limit
MQL = Method Quantitation Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CES-CS-04-51		
Lab Sample ID:	TC52720-4	**Date Sampled:**	08/05/14
Matrix:	SO - Soil	**Date Received:**	08/06/14
Method:	SW846 8270D SW846 3550B	**Percent Solids:**	70.0
Project:	CES- Chemical Spill/4904 Griggs, Houston, TX		

ABN Full List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	59%		26-124%
4165-62-2	Phenol-d5	65%		19-106%
118-79-6	2,4,6-Tribromophenol	53%		18-129%
4165-60-0	Nitrobenzene-d5	55%		18-104%
321-60-8	2-Fluorobiphenyl	49%		21-114%
1718-51-0	Terphenyl-d14	97%		24-149%

U = Not detected SDL = Sample Detection Limit
MQL = Method Quantitation Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CES-CS-04-51		
Lab Sample ID:	TC52720-4	**Date Sampled:**	08/05/14
Matrix:	SO - Soil	**Date Received:**	08/06/14
Method:	TNRCC 1005 TX1005	**Percent Solids:**	70.0
Project:	CES- Chemical Spill/4904 Griggs, Houston, TX		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	VF14086.D	1	08/07/14	RV	08/06/14	OP33456	GVF329
Run #2							

	Initial Weight	Final Volume
Run #1	9.19 g	10.0 ml
Run #2		

CAS No.	Compound	Result	MQL	SDL	Units	Q
	TPH (C6-C12)	18 U	39	18	mg/kg	
	TPH (> C12-C28)	21 U	39	21	mg/kg	
	TPH (> C28-C35)	21 U	39	21	mg/kg	
	TPH (C6-C35)	18 U	39	18	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	108%		70-130%
98-08-8	aaa-Trifluorotoluene	99%		70-130%

U = Not detected SDL = Sample Detection Limit
MQL = Method Quantitation Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: CES-CS-04-51
Lab Sample ID: TC52720-4
Matrix: SO - Soil
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Date Sampled: 08/05/14
Date Received: 08/06/14
Percent Solids: 70.0

Metals Analysis

Analyte	Result	MQL	SDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	14400	15	1.8	mg/kg	1	08/06/14	08/09/14	EG	SW846 6010B [2]	SW846 3050B [3]
Antimony	0.32 J	0.36	0.13	mg/kg	1	08/06/14	08/09/14	EG	SW846 6010B [2]	SW846 3050B [3]
Arsenic	2.5	0.36	0.13	mg/kg	1	08/06/14	08/09/14	EG	SW846 6010B [2]	SW846 3050B [3]
Barium	98.1	15	0.018	mg/kg	1	08/06/14	08/09/14	EG	SW846 6010B [2]	SW846 3050B [3]
Beryllium	0.86	0.29	0.049	mg/kg	1	08/06/14	08/09/14	EG	SW846 6010B [2]	SW846 3050B [3]
Cadmium	0.61	0.29	0.018	mg/kg	1	08/06/14	08/09/14	EG	SW846 6010B [2]	SW846 3050B [3]
Calcium	14700	360	0.57	mg/kg	1	08/06/14	08/09/14	EG	SW846 6010B [2]	SW846 3050B [3]
Chromium	18.0	0.73	0.10	mg/kg	1	08/06/14	08/09/14	EG	SW846 6010B [2]	SW846 3050B [3]
Cobalt	4.8	3.6	0.029	mg/kg	1	08/06/14	08/09/14	EG	SW846 6010B [2]	SW846 3050B [3]
Copper	17.5	1.5	0.16	mg/kg	1	08/06/14	08/09/14	EG	SW846 6010B [2]	SW846 3050B [3]
Iron	10100	7.3	1.0	mg/kg	1	08/06/14	08/09/14	EG	SW846 6010B [2]	SW846 3050B [3]
Lead	124	0.22	0.16	mg/kg	1	08/06/14	08/09/14	EG	SW846 6010B [2]	SW846 3050B [3]
Magnesium	1830	360	2.0	mg/kg	1	08/06/14	08/09/14	EG	SW846 6010B [2]	SW846 3050B [3]
Manganese	198	1.1	0.028	mg/kg	1	08/06/14	08/09/14	EG	SW846 6010B [2]	SW846 3050B [3]
Mercury	0.11	0.044	0.017	mg/kg	1	08/07/14	08/07/14	CC	SW846 7471A [1]	SW846 7471A [4]
Nickel	11.8	2.9	0.054	mg/kg	1	08/06/14	08/09/14	EG	SW846 6010B [2]	SW846 3050B [3]
Potassium	1430	360	3.1	mg/kg	1	08/06/14	08/09/14	EG	SW846 6010B [2]	SW846 3050B [3]
Selenium	0.73	0.36	0.14	mg/kg	1	08/06/14	08/09/14	EG	SW846 6010B [2]	SW846 3050B [3]
Silver	0.050 U	0.73	0.050	mg/kg	1	08/06/14	08/09/14	EG	SW846 6010B [2]	SW846 3050B [3]
Sodium	167 J	360	1.1	mg/kg	1	08/06/14	08/09/14	EG	SW846 6010B [2]	SW846 3050B [3]
Thallium	0.17 U	0.73	0.17	mg/kg	1	08/06/14	08/09/14	EG	SW846 6010B [2]	SW846 3050B [3]
Vanadium	21.4	3.6	0.030	mg/kg	1	08/06/14	08/09/14	EG	SW846 6010B [2]	SW846 3050B [3]
Zinc	216	1.5	0.41	mg/kg	1	08/06/14	08/09/14	EG	SW846 6010B [2]	SW846 3050B [3]

(1) Instrument QC Batch: MA10010
(2) Instrument QC Batch: MA10018
(3) Prep QC Batch: MP23965
(4) Prep QC Batch: MP23971

MQL = Method Quantitation Limit
SDL = Sample Detection Limit

U = Indicates a result < SDL
J = Indicates a result > = SDL but < MQL

Report of Analysis

Client Sample ID:	CES-CS-04-51		
Lab Sample ID:	TC52720-4A	**Date Sampled:**	08/05/14
Matrix:	SO - Soil	**Date Received:**	08/06/14
Method:	SW846 8151 SW846 3550B	**Percent Solids:**	70.0
Project:	CES- Chemical Spill/4904 Griggs, Houston, TX		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD772854.D	1	08/16/14	AR	08/14/14	OP33527	GDD2385
Run #2							

	Initial Weight	Final Volume
Run #1	30.2 g	10.0 ml
Run #2		

Herbicide List

CAS No.	Compound	Result	MQL	SDL	Units	Q
94-75-7	2,4-D	22 U	47	22	ug/kg	
93-72-1	2,4,5-TP (Silvex)	4.9 U	9.5	4.9	ug/kg	
93-76-5	2,4,5-T	3.2 U	9.5	3.2	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
19719-28-9	2,4-DCAA	219% [a]		30-154%

(a) Outside control limits biased high.

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E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CES-CS-04-51		
Lab Sample ID:	TC52720-4A	**Date Sampled:**	08/05/14
Matrix:	SO - Soil	**Date Received:**	08/06/14
Method:	SW846 8081A SW846 3550B	**Percent Solids:**	70.0
Project:	CES- Chemical Spill/4904 Griggs, Houston, TX		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	NN175536.D	2	08/11/14	AR	08/07/14	OP33468	GNN1459
Run #2							

	Initial Weight	Final Volume
Run #1	30.3 g	10.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	MQL	SDL	Units	Q
309-00-2	Aldrin	1.6 U	4.7	1.6	ug/kg	
319-84-6	alpha-BHC	2.0 U	4.7	2.0	ug/kg	
319-85-7	beta-BHC	1.4 U	4.7	1.4	ug/kg	
319-86-8	delta-BHC	1.8 U	4.7	1.8	ug/kg	
58-89-9	gamma-BHC (Lindane)	1.7 U	4.7	1.7	ug/kg	
5103-71-9	alpha-Chlordane	1.0 U	4.7	1.0	ug/kg	
5103-74-2	gamma-Chlordane	1.1 U	4.7	1.1	ug/kg	
60-57-1	Dieldrin	3.7 U	9.4	3.7	ug/kg	
72-54-8	4,4'-DDD	3.3 U	9.4	3.3	ug/kg	
72-55-9	4,4'-DDE	3.6 U	9.4	3.6	ug/kg	
50-29-3	4,4'-DDT	4.0 U	9.4	4.0	ug/kg	
72-20-8	Endrin	3.6 U	9.4	3.6	ug/kg	
1031-07-8	Endosulfan sulfate	4.0 U	9.4	4.0	ug/kg	
7421-93-4	Endrin aldehyde	4.0 U	9.4	4.0	ug/kg	
53494-70-5	Endrin ketone	3.7 U	9.4	3.7	ug/kg	
959-98-8	Endosulfan-I	2.1 U	9.4	2.1	ug/kg	
33213-65-9	Endosulfan-II	3.8 U	9.4	3.8	ug/kg	
76-44-8	Heptachlor	1.4 U	4.7	1.4	ug/kg	
1024-57-3	Heptachlor epoxide	2.0 U	4.7	2.0	ug/kg	
72-43-5	Methoxychlor	19 U	47	19	ug/kg	
8001-35-2	Toxaphene	24 U	47	24	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	73%		27-125%
2051-24-3	Decachlorobiphenyl	74%		21-130%

(a) Elevated reporting limits due to matrix interference, extract was dark and viscous.

U = Not detected SDL = Sample Detection Limit J = Indicates an estimated value
MQL = Method Quantitation Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CES-CS-04-51		
Lab Sample ID:	TC52720-4A	**Date Sampled:**	08/05/14
Matrix:	SO - Soil	**Date Received:**	08/06/14
Method:	SW846 8082 SW846 3550B	**Percent Solids:**	70.0
Project:	CES- Chemical Spill/4904 Griggs, Houston, TX		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OO30847.D	1	08/07/14	AR	08/07/14	OP33467	GOO507
Run #2							

	Initial Weight	Final Volume
Run #1	30.3 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	MQL	SDL	Units	Q
12674-11-2	Aroclor 1016	4.7 U	24	4.7	ug/kg	
11104-28-2	Aroclor 1221	9.4 U	24	9.4	ug/kg	
11141-16-5	Aroclor 1232	9.4 U	24	9.4	ug/kg	
53469-21-9	Aroclor 1242	4.9 U	24	4.9	ug/kg	
12672-29-6	Aroclor 1248	5.6 U	24	5.6	ug/kg	
11097-69-1	Aroclor 1254	5.5 U	24	5.5	ug/kg	
11096-82-5	Aroclor 1260	12 U	24	12	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	64%		30-118%
2051-24-3	Decachlorobiphenyl	58%		29-122%

U = Not detected SDL = Sample Detection Limit J = Indicates an estimated value
MQL = Method Quantitation Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CES-CS-05-51		
Lab Sample ID:	TC52720-5	**Date Sampled:**	08/05/14
Matrix:	SO - Soil	**Date Received:**	08/06/14
Method:	SW846 8260C	**Percent Solids:**	76.7
Project:	CES- Chemical Spill/4904 Griggs, Houston, TX		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Y1070008.D	1	08/09/14	CF	n/a	n/a	VY3713
Run #2							

	Initial Weight	Final Volume
Run #1	4.94 g	5.0 ml
Run #2		

VOA 8260 List

CAS No.	Compound	Result	MQL	SDL	Units	Q
67-64-1	Acetone	13 U	53	13	ug/kg	
71-43-2	Benzene	0.89 U	5.3	0.89	ug/kg	
108-86-1	Bromobenzene	0.53 U	5.3	0.53	ug/kg	
74-97-5	Bromochloromethane	1.4 U	5.3	1.4	ug/kg	
75-27-4	Bromodichloromethane	0.59 U	5.3	0.59	ug/kg	
75-25-2	Bromoform	0.99 U	5.3	0.99	ug/kg	
104-51-8	n-Butylbenzene	0.58 U	5.3	0.58	ug/kg	
135-98-8	sec-Butylbenzene	1.2 U	5.3	1.2	ug/kg	
98-06-6	tert-Butylbenzene	1.0 U	5.3	1.0	ug/kg	
108-90-7	Chlorobenzene	1.2 U	5.3	1.2	ug/kg	
75-00-3	Chloroethane	2.1 U	5.3	2.1	ug/kg	
67-66-3	Chloroform	0.57 U	5.3	0.57	ug/kg	
95-49-8	o-Chlorotoluene	0.63 U	5.3	0.63	ug/kg	
106-43-4	p-Chlorotoluene	0.54 U	5.3	0.54	ug/kg	
75-15-0	Carbon disulfide	0.77 U	5.3	0.77	ug/kg	
56-23-5	Carbon tetrachloride	1.1 U	5.3	1.1	ug/kg	
75-34-3	1,1-Dichloroethane	0.54 U	5.3	0.54	ug/kg	
75-35-4	1,1-Dichloroethylene	0.55 U	5.3	0.55	ug/kg	
563-58-6	1,1-Dichloropropene	0.59 U	5.3	0.59	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	4.2 U	5.3	4.2	ug/kg	
106-93-4	1,2-Dibromoethane	0.56 U	5.3	0.56	ug/kg	
107-06-2	1,2-Dichloroethane	0.63 U	5.3	0.63	ug/kg	
78-87-5	1,2-Dichloropropane	0.77 U	5.3	0.77	ug/kg	
142-28-9	1,3-Dichloropropane	1.3 U	5.3	1.3	ug/kg	
594-20-7	2,2-Dichloropropane	0.71 U	5.3	0.71	ug/kg	
124-48-1	Dibromochloromethane	1.2 U	5.3	1.2	ug/kg	
75-71-8	Dichlorodifluoromethane	1.5 U	5.3	1.5	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	0.60 U	5.3	0.60	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	0.60 U	5.3	0.60	ug/kg	
541-73-1	m-Dichlorobenzene	0.82 U	5.3	0.82	ug/kg	
95-50-1	o-Dichlorobenzene	1.3 U	5.3	1.3	ug/kg	
106-46-7	p-Dichlorobenzene	1.1 U	5.3	1.1	ug/kg	

U = Not detected SDL = Sample Detection Limit
MQL = Method Quantitation Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CES-CS-05-51		
Lab Sample ID:	TC52720-5	**Date Sampled:**	08/05/14
Matrix:	SO - Soil	**Date Received:**	08/06/14
Method:	SW846 8260C	**Percent Solids:**	76.7
Project:	CES- Chemical Spill/4904 Griggs, Houston, TX		

VOA 8260 List

CAS No.	Compound	Result	MQL	SDL	Units	Q
156-60-5	trans-1,2-Dichloroethylene	0.58 U	5.3	0.58	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	0.68 U	5.3	0.68	ug/kg	
100-41-4	Ethylbenzene	1.3 U	5.3	1.3	ug/kg	
591-78-6	2-Hexanone	9.8 U	53	9.8	ug/kg	
87-68-3	Hexachlorobutadiene	0.91 U	5.3	0.91	ug/kg	
98-82-8	Isopropylbenzene	1.5 U	5.3	1.5	ug/kg	
99-87-6	p-Isopropyltoluene	1.7 U	5.3	1.7	ug/kg	
108-10-1	4-Methyl-2-pentanone	8.3 U	53	8.3	ug/kg	
74-83-9	Methyl bromide	2.4 U	5.3	2.4	ug/kg	
74-87-3	Methyl chloride	1.0 U	5.3	1.0	ug/kg	
74-95-3	Methylene bromide	0.85 U	5.3	0.85	ug/kg	
75-09-2	Methylene chloride	3.3 U	13	3.3	ug/kg	
78-93-3	Methyl ethyl ketone	6.6 U	53	6.6	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	0.67 U	5.3	0.67	ug/kg	
91-20-3	Naphthalene	2.6 U	5.3	2.6	ug/kg	
103-65-1	n-Propylbenzene	1.4 U	5.3	1.4	ug/kg	
100-42-5	Styrene	1.2 U	5.3	1.2	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	0.66 U	5.3	0.66	ug/kg	
71-55-6	1,1,1-Trichloroethane	0.83 U	5.3	0.83	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	0.89 U	5.3	0.89	ug/kg	
79-00-5	1,1,2-Trichloroethane	0.88 U	5.3	0.88	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	0.69 U	5.3	0.69	ug/kg	
96-18-4	1,2,3-Trichloropropane	1.2 U	5.3	1.2	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	0.65 U	5.3	0.65	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	0.53 U	5.3	0.53	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	1.2 U	5.3	1.2	ug/kg	
127-18-4	Tetrachloroethylene	1.3 U	5.3	1.3	ug/kg	
108-88-3	Toluene	1.3 U	5.3	1.3	ug/kg	
79-01-6	Trichloroethylene	0.61 U	5.3	0.61	ug/kg	
75-69-4	Trichlorofluoromethane	0.83 U	5.3	0.83	ug/kg	
75-01-4	Vinyl chloride	0.77 U	5.3	0.77	ug/kg	
1330-20-7	Xylene (total)	3.7 U	16	3.7	ug/kg	
	m,p-Xylene	2.4 U	11	2.4	ug/kg	
95-47-6	o-Xylene	1.3 U	5.3	1.3	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	81%		59-126%
2037-26-5	Toluene-D8	90%		70-139%
460-00-4	4-Bromofluorobenzene	82%		63-138%

U = Not detected SDL = Sample Detection Limit J = Indicates an estimated value
MQL = Method Quantitation Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CES-CS-05-51		
Lab Sample ID:	TC52720-5	**Date Sampled:**	08/05/14
Matrix:	SO - Soil	**Date Received:**	08/06/14
Method:	SW846 8260C	**Percent Solids:**	76.7
Project:	CES- Chemical Spill/4904 Griggs, Houston, TX		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	79%		54-123%

U = Not detected SDL = Sample Detection Limit
MQL = Method Quantitation Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CES-CS-05-51		
Lab Sample ID:	TC52720-5	**Date Sampled:**	08/05/14
Matrix:	SO - Soil	**Date Received:**	08/06/14
Method:	SW846 8270D SW846 3550B	**Percent Solids:**	76.7
Project:	CES- Chemical Spill/4904 Griggs, Houston, TX		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	P34926.D	1	08/06/14	SC	08/06/14	OP33453	EP1682
Run #2							

	Initial Weight	Final Volume
Run #1	30.1 g	1.0 ml
Run #2		

ABN Full List

CAS No.	Compound	Result	MQL	SDL	Units	Q
65-85-0	Benzoic acid	350 U	1100	350	ug/kg	
95-57-8	2-Chlorophenol	93 U	220	93	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	74 U	220	74	ug/kg	
120-83-2	2,4-Dichlorophenol	69 U	220	69	ug/kg	
105-67-9	2,4-Dimethylphenol	74 U	220	74	ug/kg	
51-28-5	2,4-Dinitrophenol	350 U	1100	350	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	52 U	430	52	ug/kg	
95-48-7	2-Methylphenol	94 U	220	94	ug/kg	
	3&4-Methylphenol	94 U	220	94	ug/kg	
88-75-5	2-Nitrophenol	74 U	220	74	ug/kg	
100-02-7	4-Nitrophenol	61 U	1100	61	ug/kg	
87-86-5	Pentachlorophenol	160 U	1100	160	ug/kg	
108-95-2	Phenol	99 U	220	99	ug/kg	
95-95-4	2,4,5-Trichlorophenol	68 U	220	68	ug/kg	
88-06-2	2,4,6-Trichlorophenol	57 U	220	57	ug/kg	
83-32-9	Acenaphthene	62 U	220	62	ug/kg	
208-96-8	Acenaphthylene	58 U	220	58	ug/kg	
62-53-3	Aniline	88 U	1100	88	ug/kg	
120-12-7	Anthracene	55 U	220	55	ug/kg	
92-87-5	Benzidine	4200 U	8700	4200	ug/kg	
56-55-3	Benzo(a)anthracene	85 U	220	85	ug/kg	
50-32-8	Benzo(a)pyrene	68 U	220	68	ug/kg	
205-99-2	Benzo(b)fluoranthene	115	220	55	ug/kg	J
191-24-2	Benzo(g,h,i)perylene	59 U	220	59	ug/kg	
207-08-9	Benzo(k)fluoranthene	96 U	220	96	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	66 U	220	66	ug/kg	
85-68-7	Butyl benzyl phthalate	70 U	220	70	ug/kg	
100-51-6	Benzyl Alcohol	85 U	220	85	ug/kg	
91-58-7	2-Chloronaphthalene	63 U	220	63	ug/kg	
106-47-8	4-Chloroaniline	81 U	220	81	ug/kg	
86-74-8	Carbazole	69 U	220	69	ug/kg	
218-01-9	Chrysene	93 U	220	93	ug/kg	

U = Not detected SDL = Sample Detection Limit J = Indicates an estimated value
MQL = Method Quantitation Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CES-CS-05-51		
Lab Sample ID:	TC52720-5	**Date Sampled:**	08/05/14
Matrix:	SO - Soil	**Date Received:**	08/06/14
Method:	SW846 8270D SW846 3550B	**Percent Solids:**	76.7
Project:	CES- Chemical Spill/4904 Griggs, Houston, TX		

ABN Full List

CAS No.	Compound	Result	MQL	SDL	Units	Q
111-91-1	bis(2-Chloroethoxy)methane	68 U	220	68	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	96 U	220	96	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	84 U	220	84	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	83 U	220	83	ug/kg	
95-50-1	1,2-Dichlorobenzene	87 U	220	87	ug/kg	
122-66-7	1,2-Diphenylhydrazine	55 U	220	55	ug/kg	
541-73-1	1,3-Dichlorobenzene	77 U	220	77	ug/kg	
106-46-7	1,4-Dichlorobenzene	81 U	220	81	ug/kg	
121-14-2	2,4-Dinitrotoluene	68 U	220	68	ug/kg	
606-20-2	2,6-Dinitrotoluene	60 U	220	60	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	82 U	430	82	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	76 U	220	76	ug/kg	
132-64-9	Dibenzofuran	71 U	220	71	ug/kg	
84-74-2	Di-n-butyl phthalate	68 U	220	68	ug/kg	
117-84-0	Di-n-octyl phthalate	57 U	220	57	ug/kg	
84-66-2	Diethyl phthalate	63 U	220	63	ug/kg	
131-11-3	Dimethyl phthalate	62 U	220	62	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	258	220	170	ug/kg	
206-44-0	Fluoranthene	83.6	220	72	ug/kg	J
86-73-7	Fluorene	64 U	220	64	ug/kg	
118-74-1	Hexachlorobenzene	70 U	220	70	ug/kg	
87-68-3	Hexachlorobutadiene	79 U	220	79	ug/kg	
77-47-4	Hexachlorocyclopentadiene	100 U	1100	100	ug/kg	
67-72-1	Hexachloroethane	79 U	220	79	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	79 U	220	79	ug/kg	
78-59-1	Isophorone	67 U	220	67	ug/kg	
90-12-0	1-Methylnaphthalene	82 U	220	82	ug/kg	
91-57-6	2-Methylnaphthalene	82 U	220	82	ug/kg	
88-74-4	2-Nitroaniline	68 U	220	68	ug/kg	
99-09-2	3-Nitroaniline	64 U	220	64	ug/kg	
100-01-6	4-Nitroaniline	72 U	430	72	ug/kg	
91-20-3	Naphthalene	78 U	220	78	ug/kg	
98-95-3	Nitrobenzene	62 U	220	62	ug/kg	
62-75-9	n-Nitrosodimethylamine	68 U	220	68	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	88 U	220	88	ug/kg	
86-30-6	N-Nitrosodiphenylamine	61 U	220	61	ug/kg	
85-01-8	Phenanthrene	61 U	220	61	ug/kg	
129-00-0	Pyrene	119	220	97	ug/kg	J
110-86-1	Pyridine	58 U	220	58	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	77 U	220	77	ug/kg	

U = Not detected SDL = Sample Detection Limit J = Indicates an estimated value
MQL = Method Quantitation Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CES-CS-05-51		
Lab Sample ID:	TC52720-5	**Date Sampled:**	08/05/14
Matrix:	SO - Soil	**Date Received:**	08/06/14
Method:	SW846 8270D SW846 3550B	**Percent Solids:**	76.7
Project:	CES- Chemical Spill/4904 Griggs, Houston, TX		

ABN Full List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	51%		26-124%
4165-62-2	Phenol-d5	63%		19-106%
118-79-6	2,4,6-Tribromophenol	60%		18-129%
4165-60-0	Nitrobenzene-d5	65%		18-104%
321-60-8	2-Fluorobiphenyl	67%		21-114%
1718-51-0	Terphenyl-d14	110%		24-149%

U = Not detected SDL = Sample Detection Limit
MQL = Method Quantitation Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CES-CS-05-51		
Lab Sample ID:	TC52720-5	**Date Sampled:**	08/05/14
Matrix:	SO - Soil	**Date Received:**	08/06/14
Method:	TNRCC 1005 TX1005	**Percent Solids:**	76.7
Project:	CES- Chemical Spill/4904 Griggs, Houston, TX		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	VB14087.D	1	08/07/14	RV	08/06/14	OP33456	GVB329
Run #2							

	Initial Weight	Final Volume
Run #1	9.33 g	10.0 ml
Run #2		

CAS No.	Compound	Result	MQL	SDL	Units	Q
	TPH (C6-C12)	16 U	35	16	mg/kg	
	TPH (> C12-C28)	19 U	35	19	mg/kg	
	TPH (> C28-C35)	19 U	35	19	mg/kg	
	TPH (C6-C35)	16 U	35	16	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	105%		70-130%
98-08-8	aaa-Trifluorotoluene	107%		70-130%

U = Not detected SDL = Sample Detection Limit
MQL = Method Quantitation Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: CES-CS-05-51
Lab Sample ID: TC52720-5
Matrix: SO - Soil
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Date Sampled: 08/05/14
Date Received: 08/06/14
Percent Solids: 76.7

Metals Analysis

Analyte	Result	MQL	SDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	12800	13	1.6	mg/kg	1	08/06/14	08/09/14	EG	SW846 6010B [2]	SW846 3050B [3]
Antimony	0.36	0.34	0.12	mg/kg	1	08/06/14	08/09/14	EG	SW846 6010B [2]	SW846 3050B [3]
Arsenic	2.8	0.34	0.12	mg/kg	1	08/06/14	08/09/14	EG	SW846 6010B [2]	SW846 3050B [3]
Barium	112	13	0.017	mg/kg	1	08/06/14	08/09/14	EG	SW846 6010B [2]	SW846 3050B [3]
Beryllium	1.1	0.27	0.046	mg/kg	1	08/06/14	08/09/14	EG	SW846 6010B [2]	SW846 3050B [3]
Cadmium	0.54	0.27	0.017	mg/kg	1	08/06/14	08/09/14	EG	SW846 6010B [2]	SW846 3050B [3]
Calcium	20200	340	0.53	mg/kg	1	08/06/14	08/09/14	EG	SW846 6010B [2]	SW846 3050B [3]
Chromium	16.5	0.67	0.094	mg/kg	1	08/06/14	08/09/14	EG	SW846 6010B [2]	SW846 3050B [3]
Cobalt	4.2	3.4	0.027	mg/kg	1	08/06/14	08/09/14	EG	SW846 6010B [2]	SW846 3050B [3]
Copper	20.9	1.3	0.15	mg/kg	1	08/06/14	08/09/14	EG	SW846 6010B [2]	SW846 3050B [3]
Iron	9810	6.7	0.97	mg/kg	1	08/06/14	08/09/14	EG	SW846 6010B [2]	SW846 3050B [3]
Lead	75.7	0.20	0.15	mg/kg	1	08/06/14	08/09/14	EG	SW846 6010B [2]	SW846 3050B [3]
Magnesium	1830	340	1.8	mg/kg	1	08/06/14	08/09/14	EG	SW846 6010B [2]	SW846 3050B [3]
Manganese	184	1.0	0.026	mg/kg	1	08/06/14	08/09/14	EG	SW846 6010B [2]	SW846 3050B [3]
Mercury	0.087	0.039	0.015	mg/kg	1	08/07/14	08/07/14	CC	SW846 7471A [1]	SW846 7471A [4]
Nickel	13.4	2.7	0.051	mg/kg	1	08/06/14	08/09/14	EG	SW846 6010B [2]	SW846 3050B [3]
Potassium	1690	340	2.8	mg/kg	1	08/06/14	08/09/14	EG	SW846 6010B [2]	SW846 3050B [3]
Selenium	0.57	0.34	0.13	mg/kg	1	08/06/14	08/09/14	EG	SW846 6010B [2]	SW846 3050B [3]
Silver	0.13 J	0.67	0.046	mg/kg	1	08/06/14	08/09/14	EG	SW846 6010B [2]	SW846 3050B [3]
Sodium	207 J	340	1.0	mg/kg	1	08/06/14	08/09/14	EG	SW846 6010B [2]	SW846 3050B [3]
Thallium [a]	0.79 U	3.4	0.79	mg/kg	5	08/06/14	08/09/14	EG	SW846 6010B [2]	SW846 3050B [3]
Vanadium	18.7	3.4	0.028	mg/kg	1	08/06/14	08/09/14	EG	SW846 6010B [2]	SW846 3050B [3]
Zinc	171	1.3	0.38	mg/kg	1	08/06/14	08/09/14	EG	SW846 6010B [2]	SW846 3050B [3]

(1) Instrument QC Batch: MA10010
(2) Instrument QC Batch: MA10018
(3) Prep QC Batch: MP23965
(4) Prep QC Batch: MP23971

(a) Elevated reporting limit due to matrix interference.

MQL = Method Quantitation Limit
SDL = Sample Detection Limit

U = Indicates a result < SDL
J = Indicates a result > = SDL but < MQL

Report of Analysis

Client Sample ID:	CES-CS-05-51		
Lab Sample ID:	TC52720-5A	**Date Sampled:**	08/05/14
Matrix:	SO - Soil	**Date Received:**	08/06/14
Method:	SW846 8151 SW846 3550B	**Percent Solids:**	76.7
Project:	CES- Chemical Spill/4904 Griggs, Houston, TX		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD772855.D	1	08/16/14	AR	08/14/14	OP33527	GDD2385
Run #2							

	Initial Weight	Final Volume
Run #1	30.1 g	10.0 ml
Run #2		

Herbicide List

CAS No.	Compound	Result	MQL	SDL	Units	Q
94-75-7	2,4-D	21 U	43	21	ug/kg	
93-72-1	2,4,5-TP (Silvex)	4.5 U	8.7	4.5	ug/kg	
93-76-5	2,4,5-T	2.9 U	8.7	2.9	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
19719-28-9	2,4-DCAA	84%		30-154%

U = Not detected SDL = Sample Detection Limit
MQL = Method Quantitation Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CES-CS-05-51		
Lab Sample ID:	TC52720-5A	**Date Sampled:**	08/05/14
Matrix:	SO - Soil	**Date Received:**	08/06/14
Method:	SW846 8081A SW846 3550B	**Percent Solids:**	76.7
Project:	CES- Chemical Spill/4904 Griggs, Houston, TX		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	NN175538.D	5	08/11/14	AR	08/07/14	OP33468	GNN1459
Run #2							

	Initial Weight	Final Volume
Run #1	30.3 g	10.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	MQL	SDL	Units	Q
309-00-2	Aldrin	3.7 U	11	3.7	ug/kg	
319-84-6	alpha-BHC	4.6 U	11	4.6	ug/kg	
319-85-7	beta-BHC	3.2 U	11	3.2	ug/kg	
319-86-8	delta-BHC	4.0 U	11	4.0	ug/kg	
58-89-9	gamma-BHC (Lindane)	4.0 U	11	4.0	ug/kg	
5103-71-9	alpha-Chlordane [b]	2.4	11	2.3	ug/kg	J
5103-74-2	gamma-Chlordane	2.5 U	11	2.5	ug/kg	
60-57-1	Dieldrin	8.4 U	22	8.4	ug/kg	
72-54-8	4,4'-DDD	7.6 U	22	7.6	ug/kg	
72-55-9	4,4'-DDE	8.1 U	22	8.1	ug/kg	
50-29-3	4,4'-DDT	9.1 U	22	9.1	ug/kg	
72-20-8	Endrin	8.2 U	22	8.2	ug/kg	
1031-07-8	Endosulfan sulfate	9.2 U	22	9.2	ug/kg	
7421-93-4	Endrin aldehyde	9.1 U	22	9.1	ug/kg	
53494-70-5	Endrin ketone	8.5 U	22	8.5	ug/kg	
959-98-8	Endosulfan-I	4.7 U	22	4.7	ug/kg	
33213-65-9	Endosulfan-II	8.7 U	22	8.7	ug/kg	
76-44-8	Heptachlor	3.2 U	11	3.2	ug/kg	
1024-57-3	Heptachlor epoxide	4.5 U	11	4.5	ug/kg	
72-43-5	Methoxychlor	43 U	110	43	ug/kg	
8001-35-2	Toxaphene	54 U	110	54	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	94%		27-125%
2051-24-3	Decachlorobiphenyl	90%		21-130%

(a) Elevated reporting limits due to matrix interference, extract was dark and viscous.
(b) More than 40% RPD for detected concentrations between two GC columns.

U = Not detected SDL = Sample Detection Limit J = Indicates an estimated value
MQL = Method Quantitation Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CES-CS-05-51		
Lab Sample ID:	TC52720-5A	**Date Sampled:**	08/05/14
Matrix:	SO - Soil	**Date Received:**	08/06/14
Method:	SW846 8082 SW846 3550B	**Percent Solids:**	76.7
Project:	CES- Chemical Spill/4904 Griggs, Houston, TX		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OO30848.D	1	08/07/14	AR	08/07/14	OP33467	GOO507
Run #2							

	Initial Weight	Final Volume
Run #1	30.3 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	MQL	SDL	Units	Q
12674-11-2	Aroclor 1016	4.3 U	22	4.3	ug/kg	
11104-28-2	Aroclor 1221	8.6 U	22	8.6	ug/kg	
11141-16-5	Aroclor 1232	8.6 U	22	8.6	ug/kg	
53469-21-9	Aroclor 1242	4.4 U	22	4.4	ug/kg	
12672-29-6	Aroclor 1248	5.1 U	22	5.1	ug/kg	
11097-69-1	Aroclor 1254	5.0 U	22	5.0	ug/kg	
11096-82-5	Aroclor 1260	11 U	22	11	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	73%		30-118%
2051-24-3	Decachlorobiphenyl	59%		29-122%

U = Not detected SDL = Sample Detection Limit J = Indicates an estimated value
MQL = Method Quantitation Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Gulf Coast ACCUTEST LABORATORIES

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

CHAIN OF CUSTODY

PAGE ___ OF ___

ACCUTEST Laboratories

10165 Harwin Dr, Ste 150 Houston, TX 77036
TEL 713-271-4700 FAX 713-271-4770
www.accutest.com

FED-EX Tracking #:
Bottle Order Control #:
Accutest Quote #:
Accutest Job #: TC52720

Client / Reporting Information

Company Name: Weston Solutions, Inc.
Street Address: 5599 San Felipe, Suite 700
City / State / Zip: Houston, TX 77056
Project Contact: Tom Walzer/Kristi Warr
E-mail: t.a.walzer@westonsolutions.com K.Warr@westonsolutions.com
Phone #: 713-705-1467
Fax #: 832-444-7976 (Warr)
Sampler(s) Name(s): Tom Walzer
Phone #:

Project Information

Project Name: CES - Chemical Spill
Street: 4904 Griggs
City / State: Houston TX
Project #:
Client Purchase Order #:
Project Manager: Derrick Cobb

Billing Information (if different from Report to)
Company Name: Weston Solutions
Street Address: 5599 San Felipe Suite 700
City / State / Zip: Houston, TX 77056
Attention: Kristi Warr

Requested Analyses

Matrix Codes: DW - Drinking Water; GW - Ground Water; WW - Water; SW - Surface Water; SO - Soil; SL- Sludge; SED-Sediment; OI - Oil; LIQ - Other Liquid; AIR - Air; SOL - Other Solid; WP - Wipe; FB-Field Blank

Accutest Sample #	Field ID / Point of Collection	Date	Time	Sampled By	Matrix	# of bottles	HCl	NaOH	ZnNaOH	HNO3	H2SO4	NONE	DI Water	MEOH	TSP	NaHSO4	ENCORE	OTHER	VOA (8260)	SVOA (8270)	PEST (8081)	PCB (8082)	HERB (8151)	TAL METALS	TPH (TX1005)	LAB USE ONLY
1	CES-CS-01-51	8-5-14	1446	TAW	SO	7													✓	✓	✓	✓	✓	✓	✓	
2	CES-CS-02-51	8-5-14	1530	TAW	SO	7													✓	✓	✓	✓	✓	✓	✓	
3	CES-CS-03-51	8-5-14	1610	TAW	SO	7													✓	✓	✓	✓	✓	✓	✓	
4	CES-CS-04-51	8-5-14	1630	TAW	SO	7													✓	✓	✓	✓	✓	✓	✓	
5	CES-CS-05-51	8-5-14	1700	TAW	SO	7													✓	✓	✓	✓	✓	✓	✓	

Turnaround Time (Business days)
- ☐ Standard Call Kristie Warr
- ☐ 5 Day *RUSH*
- ☐ 4 Day *RUSH*
- ☐ 3 Day *RUSH*
- ☐ 2 Day *RUSH*
- ☐ 1 Day *EMERGENCY*

Emergency & Rush T/A data available VIA Lablink

Approved By (Accutest PM): / Date:

Data Deliverable Information
- ☐ Commercial "A" (Level 1)
- ☐ Commercial "B" (Level 2)
- ☐ FULT1 (Level 3+4)
- ☐ REDT1 (Level 3+4)
- ☐ Commercial "C"
- ☐ TRRP
- ☐ EDD Format
- ☐ Other _____

Commercial "A" = Results Only
Commercial "B" = Results + QC Summary
Commercial "C" = Results + QC & Surrogate Summary

Comments / Special Instructions: Preliminary report requested

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1	08/05/2014 0830	1 Dennis Melder	2 Dennis Melder	8-6-14 900	2
Relinquished by Sampler: 3	Date Time:	Received By: 3	Relinquished By: 4	Date Time:	Received By: 4
Relinquished by: 5	Date Time:	Received By: 5	Custody Seal # ☐ Intact ☐ Not intact	Preserved where applicable ☐	On Ice ☐ Cooler Temp.

TC52720: Chain of Custody
Page 1 of 4

Accutest Laboratories Sample Receipt Summary

Accutest Job Number: TC52720 **Client:** WESTON SOLUTIONS **Project:** CES-CHEMICAL SPILL

Date / Time Received: 8/6/2014 **Delivery Method:** **Airbill #'s:**

No. Coolers: 1 **Therm ID:** IR-5; **Temp Adjustment Factor:** 0;

Cooler Temps (Initial/Adjusted): #1: (4.2/4.2);

Cooler Security	Y	N		Y	N
1. Custody Seals Present:	☑	☐	3. COC Present:	☑	☐
2. Custody Seals Intact:	☑	☐	4. Smpl Dates/Time OK	☑	☐

Cooler Temperature	Y	N
1. Temp criteria achieved:	☑	☐
2. Cooler temp verification:		
3. Cooler media:	Ice (Bag)	

Quality Control Preservation	Y	N	N/A	WTB	STB
1. Trip Blank present / cooler:	☐	☐	☑	☐	☐
2. Trip Blank listed on COC:	☐	☐	☑		
3. Samples preserved properly:	☑	☐			
4. VOCs headspace free:	☐	☐	☑		

Sample Integrity - Documentation	Y	N
1. Sample labels present on bottles:	☑	☐
2. Container labeling complete:	☑	☐
3. Sample container label / COC agree:	☑	☐

Sample Integrity - Condition	Y	N
1. Sample recvd within HT:	☑	☐
2. All containers accounted for:	☑	☐
3. Condition of sample:	Intact	

Sample Integrity - Instructions	Y	N	N/A
1. Analysis requested is clear:	☑	☐	
2. Bottles received for unspecified tests	☐	☑	
3. Sufficient volume recvd for analysis:	☑	☐	
4. Compositing instructions clear:	☐	☐	☑
5. Filtering instructions clear:	☐	☐	☑

Comments

Accutest Laboratories
V:713.271.4700
10165 Harwin Drive
F: 713.271.4770
Houston, TX 77036
www/accutest.com

Sample Receipt Log

Job #: TC52720 **Date / Time Received:** 8/6/2014 9:00:00 AM **Initials:** BG

Client: WESTON SOLUTIONS

Cooler #	Sample ID:	Vol	Bot #	Location	Pres	pH	Therm ID	Initial Temp	Therm CF	Corrected Temp
1	TC52720-1	8oz	1	2-40	N/P	Note #2 - Preservative check not applicable.	IR-5	4.2	0	4.2
1	TC52720-1	8oz	2	2-40	N/P	Note #2 - Preservative check not applicable.	IR-5	4.2	0	4.2
1	TC52720-1	40ml	3	VR	MeOH	Note #1 - Preservative to be checked by analyst at the instrument.	IR-5	4.2	0	4.2
1	TC52720-1	40ml	4	VR	DI H2O	Note #2 - Preservative check not applicable.	IR-5	4.2	0	4.2
1	TC52720-1	40ml	5	VR	DI H2O	Note #2 - Preservative check not applicable.	IR-5	4.2	0	4.2
1	TC52720-1	40ml	6	2-40	N/P	Note #2 - Preservative check not applicable.	IR-5	4.2	0	4.2
1	TC52720-1	40ml	7	2-40	N/P	Note #2 - Preservative check not applicable.	IR-5	4.2	0	4.2
1	TC52720-2	8oz	1	2-40	N/P	Note #2 - Preservative check not applicable.	IR-5	4.2	0	4.2
1	TC52720-2	8oz	2	2-40	N/P	Note #2 - Preservative check not applicable.	IR-5	4.2	0	4.2
1	TC52720-2	40ml	3	VR	MeOH	Note #1 - Preservative to be checked by analyst at the instrument.	IR-5	4.2	0	4.2
1	TC52720-2	40ml	4	VR	DI H2O	Note #2 - Preservative check not applicable.	IR-5	4.2	0	4.2
1	TC52720-2	40ml	5	VR	DI H2O	Note #2 - Preservative check not applicable.	IR-5	4.2	0	4.2
1	TC52720-2	40ml	6	2-40	N/P	Note #2 - Preservative check not applicable.	IR-5	4.2	0	4.2
1	TC52720-2	40ml	7	2-40	N/P	Note #2 - Preservative check not applicable.	IR-5	4.2	0	4.2
1	TC52720-3	8oz	1	2-40	N/P	Note #2 - Preservative check not applicable.	IR-5	4.2	0	4.2
1	TC52720-3	8oz	2	2-40	N/P	Note #2 - Preservative check not applicable.	IR-5	4.2	0	4.2
1	TC52720-3	40ml	3	VR	MeOH	Note #1 - Preservative to be checked by analyst at the instrument.	IR-5	4.2	0	4.2
1	TC52720-3	40ml	4	VR	DI H2O	Note #2 - Preservative check not applicable.	IR-5	4.2	0	4.2
1	TC52720-3	40ml	5	VR	DI H2O	Note #2 - Preservative check not applicable.	IR-5	4.2	0	4.2
1	TC52720-3	40ml	6	2-40	N/P	Note #2 - Preservative check not applicable.	IR-5	4.2	0	4.2
1	TC52720-3	40ml	7	2-40	N/P	Note #2 - Preservative check not applicable.	IR-5	4.2	0	4.2
1	TC52720-4	8oz	1	2-40	N/P	Note #2 - Preservative check not applicable.	IR-5	4.2	0	4.2
1	TC52720-4	8oz	2	2-40	N/P	Note #2 - Preservative check not applicable.	IR-5	4.2	0	4.2

Sample Receipt Log

Job #: TC52720 **Date / Time Received:** 8/6/2014 9:00:00 AM **Initials:** BG

Client: WESTON SOLUTIONS

Cooler #	Sample ID:	Vol	Bot #	Location	Pres	pH	Therm ID	Initial Temp	Therm CF	Corrected Temp
1	TC52720-4	40ml	3	VR	MeOH	Note #1 - Preservative to be checked by analyst at the instrument.	IR-5	4.2	0	4.2
1	TC52720-4	40ml	4	VR	DI H2O	Note #2 - Preservative check not applicable.	IR-5	4.2	0	4.2
1	TC52720-4	40ml	5	VR	DI H2O	Note #2 - Preservative check not applicable.	IR-5	4.2	0	4.2
1	TC52720-4	40ml	6	2-40	N/P	Note #2 - Preservative check not applicable.	IR-5	4.2	0	4.2
1	TC52720-4	40ml	7	2-40	N/P	Note #2 - Preservative check not applicable.	IR-5	4.2	0	4.2
1	TC52720-5	8oz	1	2-40	N/P	Note #2 - Preservative check not applicable.	IR-5	4.2	0	4.2
1	TC52720-5	8oz	2	2-40	N/P	Note #2 - Preservative check not applicable.	IR-5	4.2	0	4.2
1	TC52720-5	40ml	3	VR	MeOH	Note #1 - Preservative to be checked by analyst at the instrument.	IR-5	4.2	0	4.2
1	TC52720-5	40ml	4	VR	DI H2O	Note #2 - Preservative check not applicable.	IR-5	4.2	0	4.2
1	TC52720-5	40ml	5	VR	DI H2O	Note #2 - Preservative check not applicable.	IR-5	4.2	0	4.2
1	TC52720-5	40ml	6	2-40	N/P	Note #2 - Preservative check not applicable.	IR-5	4.2	0	4.2
1	TC52720-5	40ml	7	2-40	N/P	Note #2 - Preservative check not applicable.	IR-5	4.2	0	4.2

TC52720: Chain of Custody
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Gulf Coast ACCUTEST LABORATORIES

GC/MS Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Instrument Performance Checks (BFB)
- Internal Standard Area Summaries
- Surrogate Recovery Summaries
- Initial and Continuing Calibration Summaries

Method Blank Summary

Job Number: TC52720
Account: RFWTXHO Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VY3712-MB	Y1069971.D	1	08/08/14	CF	n/a	n/a	VY3712

The QC reported here applies to the following samples: **Method:** SW846 8260C

TC52720-1, TC52720-2, TC52720-3

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	40	9.9	ug/kg	
71-43-2	Benzene	ND	4.0	0.67	ug/kg	
108-86-1	Bromobenzene	ND	4.0	0.40	ug/kg	
74-97-5	Bromochloromethane	ND	4.0	1.1	ug/kg	
75-27-4	Bromodichloromethane	ND	4.0	0.44	ug/kg	
75-25-2	Bromoform	ND	4.0	0.75	ug/kg	
104-51-8	n-Butylbenzene	ND	4.0	0.43	ug/kg	
135-98-8	sec-Butylbenzene	ND	4.0	0.86	ug/kg	
98-06-6	tert-Butylbenzene	ND	4.0	0.77	ug/kg	
108-90-7	Chlorobenzene	ND	4.0	0.92	ug/kg	
75-00-3	Chloroethane	ND	4.0	1.6	ug/kg	
67-66-3	Chloroform	ND	4.0	0.43	ug/kg	
95-49-8	o-Chlorotoluene	ND	4.0	0.47	ug/kg	
106-43-4	p-Chlorotoluene	ND	4.0	0.41	ug/kg	
75-15-0	Carbon disulfide	ND	4.0	0.58	ug/kg	
56-23-5	Carbon tetrachloride	ND	4.0	0.85	ug/kg	
75-34-3	1,1-Dichloroethane	ND	4.0	0.40	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	4.0	0.41	ug/kg	
563-58-6	1,1-Dichloropropene	ND	4.0	0.44	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	4.0	3.1	ug/kg	
106-93-4	1,2-Dibromoethane	ND	4.0	0.42	ug/kg	
107-06-2	1,2-Dichloroethane	ND	4.0	0.47	ug/kg	
78-87-5	1,2-Dichloropropane	ND	4.0	0.57	ug/kg	
142-28-9	1,3-Dichloropropane	ND	4.0	1.0	ug/kg	
594-20-7	2,2-Dichloropropane	ND	4.0	0.53	ug/kg	
124-48-1	Dibromochloromethane	ND	4.0	0.90	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	4.0	1.1	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	4.0	0.45	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	4.0	0.45	ug/kg	
541-73-1	m-Dichlorobenzene	ND	4.0	0.62	ug/kg	
95-50-1	o-Dichlorobenzene	ND	4.0	0.96	ug/kg	
106-46-7	p-Dichlorobenzene	ND	4.0	0.85	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	4.0	0.43	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	4.0	0.51	ug/kg	
100-41-4	Ethylbenzene	ND	4.0	0.96	ug/kg	
591-78-6	2-Hexanone	ND	40	7.3	ug/kg	

Method Blank Summary

Job Number: TC52720
Account: RFWTXHO Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VY3712-MB	Y1069971.D	1	08/08/14	CF	n/a	n/a	VY3712

The QC reported here applies to the following samples: **Method:** SW846 8260C

TC52720-1, TC52720-2, TC52720-3

CAS No.	Compound	Result	RL	MDL	Units	Q
87-68-3	Hexachlorobutadiene	ND	4.0	0.68	ug/kg	
98-82-8	Isopropylbenzene	ND	4.0	1.1	ug/kg	
99-87-6	p-Isopropyltoluene	ND	4.0	1.3	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	40	6.2	ug/kg	
74-83-9	Methyl bromide	ND	4.0	1.8	ug/kg	
74-87-3	Methyl chloride	ND	4.0	0.76	ug/kg	
74-95-3	Methylene bromide	ND	4.0	0.64	ug/kg	
75-09-2	Methylene chloride	ND	9.9	2.5	ug/kg	
78-93-3	Methyl ethyl ketone	ND	40	5.0	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	4.0	0.50	ug/kg	
91-20-3	Naphthalene	ND	4.0	2.0	ug/kg	
103-65-1	n-Propylbenzene	ND	4.0	1.0	ug/kg	
100-42-5	Styrene	ND	4.0	0.91	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	4.0	0.50	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	4.0	0.62	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	4.0	0.67	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	4.0	0.66	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	4.0	0.52	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	4.0	0.90	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	4.0	0.49	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	4.0	0.40	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	4.0	0.93	ug/kg	
127-18-4	Tetrachloroethylene	ND	4.0	1.0	ug/kg	
108-88-3	Toluene	ND	4.0	1.0	ug/kg	
79-01-6	Trichloroethylene	ND	4.0	0.46	ug/kg	
75-69-4	Trichlorofluoromethane	ND	4.0	0.62	ug/kg	
75-01-4	Vinyl chloride	ND	4.0	0.57	ug/kg	
1330-20-7	Xylene (total)	ND	12	2.8	ug/kg	
	m,p-Xylene	ND	7.9	1.8	ug/kg	
95-47-6	o-Xylene	ND	4.0	1.0	ug/kg	

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	80%	59-126%
2037-26-5	Toluene-D8	89%	70-139%

Method Blank Summary

Job Number: TC52720
Account: RFWTXHO Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VY3712-MB	Y1069971.D	1	08/08/14	CF	n/a	n/a	VY3712

The QC reported here applies to the following samples: **Method:** SW846 8260C

TC52720-1, TC52720-2, TC52720-3

CAS No.	Surrogate Recoveries		Limits
460-00-4	4-Bromofluorobenzene	78%	63-138%
17060-07-0	1,2-Dichloroethane-D4	75%	54-123%

Method Blank Summary

Job Number: TC52720
Account: RFWTXHO Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VY3713-MB	Y1069999.D	1	08/09/14	CF	n/a	n/a	VY3713

The QC reported here applies to the following samples: **Method:** SW846 8260C

TC52720-5

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	37	9.3	ug/kg	
71-43-2	Benzene	ND	3.7	0.63	ug/kg	
108-86-1	Bromobenzene	ND	3.7	0.38	ug/kg	
74-97-5	Bromochloromethane	ND	3.7	1.0	ug/kg	
75-27-4	Bromodichloromethane	ND	3.7	0.42	ug/kg	
75-25-2	Bromoform	ND	3.7	0.70	ug/kg	
104-51-8	n-Butylbenzene	ND	3.7	0.41	ug/kg	
135-98-8	sec-Butylbenzene	ND	3.7	0.82	ug/kg	
98-06-6	tert-Butylbenzene	ND	3.7	0.73	ug/kg	
108-90-7	Chlorobenzene	ND	3.7	0.87	ug/kg	
75-00-3	Chloroethane	ND	3.7	1.5	ug/kg	
67-66-3	Chloroform	ND	3.7	0.40	ug/kg	
95-49-8	o-Chlorotoluene	ND	3.7	0.44	ug/kg	
106-43-4	p-Chlorotoluene	ND	3.7	0.38	ug/kg	
75-15-0	Carbon disulfide	ND	3.7	0.54	ug/kg	
56-23-5	Carbon tetrachloride	ND	3.7	0.81	ug/kg	
75-34-3	1,1-Dichloroethane	ND	3.7	0.38	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	3.7	0.39	ug/kg	
563-58-6	1,1-Dichloropropene	ND	3.7	0.42	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	3.7	3.0	ug/kg	
106-93-4	1,2-Dibromoethane	ND	3.7	0.40	ug/kg	
107-06-2	1,2-Dichloroethane	ND	3.7	0.44	ug/kg	
78-87-5	1,2-Dichloropropane	ND	3.7	0.54	ug/kg	
142-28-9	1,3-Dichloropropane	ND	3.7	0.95	ug/kg	
594-20-7	2,2-Dichloropropane	ND	3.7	0.50	ug/kg	
124-48-1	Dibromochloromethane	ND	3.7	0.85	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	3.7	1.0	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	3.7	0.43	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	3.7	0.42	ug/kg	
541-73-1	m-Dichlorobenzene	ND	3.7	0.58	ug/kg	
95-50-1	o-Dichlorobenzene	ND	3.7	0.91	ug/kg	
106-46-7	p-Dichlorobenzene	ND	3.7	0.81	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	3.7	0.41	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	3.7	0.48	ug/kg	
100-41-4	Ethylbenzene	ND	3.7	0.91	ug/kg	
591-78-6	2-Hexanone	ND	37	6.9	ug/kg	

Method Blank Summary

Job Number: TC52720
Account: RFWTXHO Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VY3713-MB	Y1069999.D	1	08/09/14	CF	n/a	n/a	VY3713

The QC reported here applies to the following samples: **Method:** SW846 8260C

TC52720-5

CAS No.	Compound	Result	RL	MDL	Units	Q
87-68-3	Hexachlorobutadiene	ND	3.7	0.65	ug/kg	
98-82-8	Isopropylbenzene	ND	3.7	1.0	ug/kg	
99-87-6	p-Isopropyltoluene	ND	3.7	1.2	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	37	5.9	ug/kg	
74-83-9	Methyl bromide	ND	3.7	1.7	ug/kg	
74-87-3	Methyl chloride	ND	3.7	0.72	ug/kg	
74-95-3	Methylene bromide	ND	3.7	0.60	ug/kg	
75-09-2	Methylene chloride	ND	9.3	2.3	ug/kg	
78-93-3	Methyl ethyl ketone	ND	37	4.7	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	3.7	0.47	ug/kg	
91-20-3	Naphthalene	ND	3.7	1.9	ug/kg	
103-65-1	n-Propylbenzene	ND	3.7	0.97	ug/kg	
100-42-5	Styrene	ND	3.7	0.86	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	3.7	0.47	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	3.7	0.59	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	3.7	0.63	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	3.7	0.63	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	3.7	0.49	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	3.7	0.85	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	3.7	0.46	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	3.7	0.38	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	3.7	0.88	ug/kg	
127-18-4	Tetrachloroethylene	ND	3.7	0.94	ug/kg	
108-88-3	Toluene	ND	3.7	0.95	ug/kg	
79-01-6	Trichloroethylene	ND	3.7	0.44	ug/kg	
75-69-4	Trichlorofluoromethane	ND	3.7	0.59	ug/kg	
75-01-4	Vinyl chloride	ND	3.7	0.54	ug/kg	
1330-20-7	Xylene (total)	ND	11	2.6	ug/kg	
	m,p-Xylene	ND	7.5	1.7	ug/kg	
95-47-6	o-Xylene	ND	3.7	0.94	ug/kg	

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	80%	59-126%
2037-26-5	Toluene-D8	88%	70-139%

Method Blank Summary

Job Number: TC52720
Account: RFWTXHO Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VY3713-MB	Y1069999.D	1	08/09/14	CF	n/a	n/a	VY3713

The QC reported here applies to the following samples: **Method:** SW846 8260C

TC52720-5

CAS No.	Surrogate Recoveries		Limits
460-00-4	4-Bromofluorobenzene	77%	63-138%
17060-07-0	1,2-Dichloroethane-D4	75%	54-123%

Method Blank Summary

Job Number: TC52720
Account: RFWTXHO Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VY3714-MB	Y1070026.D	1	08/11/14	CF	n/a	n/a	VY3714

The QC reported here applies to the following samples: **Method:** SW846 8260C

TC52720-4

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	37	9.1	ug/kg	
71-43-2	Benzene	ND	3.7	0.62	ug/kg	
108-86-1	Bromobenzene	ND	3.7	0.37	ug/kg	
74-97-5	Bromochloromethane	ND	3.7	1.0	ug/kg	
75-27-4	Bromodichloromethane	ND	3.7	0.41	ug/kg	
75-25-2	Bromoform	ND	3.7	0.69	ug/kg	
104-51-8	n-Butylbenzene	ND	3.7	0.40	ug/kg	
135-98-8	sec-Butylbenzene	ND	3.7	0.80	ug/kg	
98-06-6	tert-Butylbenzene	ND	3.7	0.71	ug/kg	
108-90-7	Chlorobenzene	ND	3.7	0.85	ug/kg	
75-00-3	Chloroethane	ND	3.7	1.4	ug/kg	
67-66-3	Chloroform	ND	3.7	0.39	ug/kg	
95-49-8	o-Chlorotoluene	ND	3.7	0.44	ug/kg	
106-43-4	p-Chlorotoluene	ND	3.7	0.38	ug/kg	
75-15-0	Carbon disulfide	ND	3.7	0.53	ug/kg	
56-23-5	Carbon tetrachloride	ND	3.7	0.79	ug/kg	
75-34-3	1,1-Dichloroethane	ND	3.7	0.37	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	3.7	0.38	ug/kg	
563-58-6	1,1-Dichloropropene	ND	3.7	0.41	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	3.7	2.9	ug/kg	
106-93-4	1,2-Dibromoethane	ND	3.7	0.39	ug/kg	
107-06-2	1,2-Dichloroethane	ND	3.7	0.43	ug/kg	
78-87-5	1,2-Dichloropropane	ND	3.7	0.53	ug/kg	
142-28-9	1,3-Dichloropropane	ND	3.7	0.93	ug/kg	
594-20-7	2,2-Dichloropropane	ND	3.7	0.49	ug/kg	
124-48-1	Dibromochloromethane	ND	3.7	0.83	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	3.7	1.0	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	3.7	0.42	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	3.7	0.41	ug/kg	
541-73-1	m-Dichlorobenzene	ND	3.7	0.57	ug/kg	
95-50-1	o-Dichlorobenzene	ND	3.7	0.89	ug/kg	
106-46-7	p-Dichlorobenzene	ND	3.7	0.79	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	3.7	0.40	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	3.7	0.47	ug/kg	
100-41-4	Ethylbenzene	ND	3.7	0.89	ug/kg	
591-78-6	2-Hexanone	ND	37	6.8	ug/kg	

Method Blank Summary

Job Number: TC52720
Account: RFWTXHO Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VY3714-MB	Y1070026.D	1	08/11/14	CF	n/a	n/a	VY3714

The QC reported here applies to the following samples: **Method:** SW846 8260C

TC52720-4

CAS No.	Compound	Result	RL	MDL	Units	Q
87-68-3	Hexachlorobutadiene	ND	3.7	0.63	ug/kg	
98-82-8	Isopropylbenzene	ND	3.7	1.0	ug/kg	
99-87-6	p-Isopropyltoluene	ND	3.7	1.2	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	37	5.8	ug/kg	
74-83-9	Methyl bromide	ND	3.7	1.7	ug/kg	
74-87-3	Methyl chloride	ND	3.7	0.70	ug/kg	
74-95-3	Methylene bromide	ND	3.7	0.59	ug/kg	
75-09-2	Methylene chloride	ND	9.1	2.3	ug/kg	
78-93-3	Methyl ethyl ketone	ND	37	4.6	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	3.7	0.46	ug/kg	
91-20-3	Naphthalene	ND	3.7	1.8	ug/kg	
103-65-1	n-Propylbenzene	ND	3.7	0.95	ug/kg	
100-42-5	Styrene	ND	3.7	0.84	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	3.7	0.46	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	3.7	0.57	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	3.7	0.62	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	3.7	0.61	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	3.7	0.48	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	3.7	0.83	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	3.7	0.45	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	3.7	0.37	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	3.7	0.86	ug/kg	
127-18-4	Tetrachloroethylene	ND	3.7	0.92	ug/kg	
108-88-3	Toluene	ND	3.7	0.93	ug/kg	
79-01-6	Trichloroethylene	ND	3.7	0.43	ug/kg	
75-69-4	Trichlorofluoromethane	ND	3.7	0.57	ug/kg	
75-01-4	Vinyl chloride	ND	3.7	0.53	ug/kg	
1330-20-7	Xylene (total)	ND	11	2.6	ug/kg	
	m,p-Xylene	ND	7.3	1.6	ug/kg	
95-47-6	o-Xylene	ND	3.7	0.92	ug/kg	

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	75%	59-126%
2037-26-5	Toluene-D8	83%	70-139%

Method Blank Summary

Job Number: TC52720
Account: RFWTXHO Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VY3714-MB	Y1070026.D	1	08/11/14	CF	n/a	n/a	VY3714

The QC reported here applies to the following samples: **Method:** SW846 8260C

TC52720-4

CAS No.	Surrogate Recoveries		Limits
460-00-4	4-Bromofluorobenzene	73%	63-138%
17060-07-0	1,2-Dichloroethane-D4	68%	54-123%

Blank Spike Summary

Job Number: TC52720
Account: RFWTXHO Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VY3712-BS	Y1069969.D	1	08/08/14	CF	n/a	n/a	VY3712

The QC reported here applies to the following samples: **Method:** SW846 8260C

TC52720-1, TC52720-2, TC52720-3

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
67-64-1	Acetone	248	240	97	43-141
71-43-2	Benzene	49.6	54.5	110	58-124
108-86-1	Bromobenzene	49.6	53.8	108	72-110
74-97-5	Bromochloromethane	49.6	55.2	111	71-122
75-27-4	Bromodichloromethane	49.6	52.4	106	72-119
75-25-2	Bromoform	49.6	51.7	104	61-120
104-51-8	n-Butylbenzene	49.6	50.5	102	58-118
135-98-8	sec-Butylbenzene	49.6	50.6	102	63-119
98-06-6	tert-Butylbenzene	49.6	51.1	103	67-121
108-90-7	Chlorobenzene	49.6	52.5	106	74-116
75-00-3	Chloroethane	49.6	60.4	122	48-133
67-66-3	Chloroform	49.6	56.1	113	72-119
95-49-8	o-Chlorotoluene	49.6	51.0	103	65-121
106-43-4	p-Chlorotoluene	49.6	52.1	105	67-118
75-15-0	Carbon disulfide	49.6	55.6	112	45-133
56-23-5	Carbon tetrachloride	49.6	51.5	104	58-128
75-34-3	1,1-Dichloroethane	49.6	58.7	118	69-122
75-35-4	1,1-Dichloroethylene	49.6	56.2	113	60-131
563-58-6	1,1-Dichloropropene	49.6	58.4	118	66-123
96-12-8	1,2-Dibromo-3-chloropropane	49.6	53.4	108	55-125
106-93-4	1,2-Dibromoethane	49.6	52.8	106	73-120
107-06-2	1,2-Dichloroethane	49.6	52.8	106	69-121
78-87-5	1,2-Dichloropropane	49.6	53.0	107	71-121
142-28-9	1,3-Dichloropropane	49.6	53.0	107	72-117
594-20-7	2,2-Dichloropropane	49.6	58.9	119	57-129
124-48-1	Dibromochloromethane	49.6	53.3	107	71-121
75-71-8	Dichlorodifluoromethane	49.6	32.5	66	22-158
156-59-2	cis-1,2-Dichloroethylene	49.6	57.4	116	70-119
10061-01-5	cis-1,3-Dichloropropene	49.6	50.2	101	75-117
541-73-1	m-Dichlorobenzene	49.6	51.0	103	70-119
95-50-1	o-Dichlorobenzene	49.6	50.4	102	73-116
106-46-7	p-Dichlorobenzene	49.6	50.9	103	70-119
156-60-5	trans-1,2-Dichloroethylene	49.6	58.7	118	62-119
10061-02-6	trans-1,3-Dichloropropene	49.6	56.3	114	78-125
100-41-4	Ethylbenzene	49.6	54.6	110	57-124
591-78-6	2-Hexanone	248	238	96	58-124

* = Outside of Control Limits.

Blank Spike Summary

Job Number: TC52720
Account: RFWTXHO Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VY3712-BS	Y1069969.D	1	08/08/14	CF	n/a	n/a	VY3712

The QC reported here applies to the following samples: **Method:** SW846 8260C

TC52720-1, TC52720-2, TC52720-3

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
87-68-3	Hexachlorobutadiene	49.6	46.4	94	57-127
98-82-8	Isopropylbenzene	49.6	54.9	111	77-135
99-87-6	p-Isopropyltoluene	49.6	52.3	105	66-120
108-10-1	4-Methyl-2-pentanone	248	240	97	60-127
74-83-9	Methyl bromide	49.6	50.0	101	47-137
74-87-3	Methyl chloride	49.6	50.0	101	46-139
74-95-3	Methylene bromide	49.6	51.6	104	72-118
75-09-2	Methylene chloride	49.6	49.3	99	50-134
78-93-3	Methyl ethyl ketone	248	250	101	60-131
1634-04-4	Methyl Tert Butyl Ether	49.6	56.0	113	65-119
91-20-3	Naphthalene	49.6	46.3	93	56-122
103-65-1	n-Propylbenzene	49.6	52.5	106	65-119
100-42-5	Styrene	49.6	53.4	108	74-117
630-20-6	1,1,1,2-Tetrachloroethane	49.6	56.0	113	74-119
71-55-6	1,1,1-Trichloroethane	49.6	56.3	114	63-126
79-34-5	1,1,2,2-Tetrachloroethane	49.6	54.7	110	65-120
79-00-5	1,1,2-Trichloroethane	49.6	53.2	107	72-119
87-61-6	1,2,3-Trichlorobenzene	49.6	45.6	92	62-116
96-18-4	1,2,3-Trichloropropane	49.6	54.5	110	68-118
120-82-1	1,2,4-Trichlorobenzene	49.6	47.3	95	58-122
95-63-6	1,2,4-Trimethylbenzene	49.6	52.3	105	61-119
108-67-8	1,3,5-Trimethylbenzene	49.6	52.1	105	53-123
127-18-4	Tetrachloroethylene	49.6	60.7	122	64-130
108-88-3	Toluene	49.6	55.8	112	67-119
79-01-6	Trichloroethylene	49.6	53.2	107	70-122
75-69-4	Trichlorofluoromethane	49.6	44.3	89	41-137
75-01-4	Vinyl chloride	49.6	48.1	97	43-120
1330-20-7	Xylene (total)	149	158	106	62-120
	m,p-Xylene	99.2	106	107	62-120
95-47-6	o-Xylene	49.6	52.1	105	62-121

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	84%	59-126%
2037-26-5	Toluene-D8	87%	70-139%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: TC52720
Account: RFWTXHO Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VY3712-BS	Y1069969.D	1	08/08/14	CF	n/a	n/a	VY3712

The QC reported here applies to the following samples: **Method:** SW846 8260C

TC52720-1, TC52720-2, TC52720-3

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	80%	63-138%
17060-07-0	1,2-Dichloroethane-D4	73%	54-123%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: TC52720
Account: RFWTXHO Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VY3713-BS	Y1069997.D	1	08/08/14	CF	n/a	n/a	VY3713

The QC reported here applies to the following samples: **Method:** SW846 8260C

TC52720-5

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
67-64-1	Acetone	247	253	103	43-141
71-43-2	Benzene	49.3	51.9	105	58-124
108-86-1	Bromobenzene	49.3	50.8	103	72-110
74-97-5	Bromochloromethane	49.3	53.2	108	71-122
75-27-4	Bromodichloromethane	49.3	50.1	102	72-119
75-25-2	Bromoform	49.3	52.1	106	61-120
104-51-8	n-Butylbenzene	49.3	49.6	101	58-118
135-98-8	sec-Butylbenzene	49.3	50.6	103	63-119
98-06-6	tert-Butylbenzene	49.3	50.5	102	67-121
108-90-7	Chlorobenzene	49.3	49.2	100	74-116
75-00-3	Chloroethane	49.3	57.0	116	48-133
67-66-3	Chloroform	49.3	52.7	107	72-119
95-49-8	o-Chlorotoluene	49.3	48.5	98	65-121
106-43-4	p-Chlorotoluene	49.3	49.0	99	67-118
75-15-0	Carbon disulfide	49.3	53.4	108	45-133
56-23-5	Carbon tetrachloride	49.3	51.9	105	58-128
75-34-3	1,1-Dichloroethane	49.3	54.7	111	69-122
75-35-4	1,1-Dichloroethylene	49.3	55.5	113	60-131
563-58-6	1,1-Dichloropropene	49.3	55.7	113	66-123
96-12-8	1,2-Dibromo-3-chloropropane	49.3	55.5	113	55-125
106-93-4	1,2-Dibromoethane	49.3	51.6	105	73-120
107-06-2	1,2-Dichloroethane	49.3	52.2	106	69-121
78-87-5	1,2-Dichloropropane	49.3	50.2	102	71-121
142-28-9	1,3-Dichloropropane	49.3	51.5	104	72-117
594-20-7	2,2-Dichloropropane	49.3	53.4	108	57-129
124-48-1	Dibromochloromethane	49.3	51.6	105	71-121
75-71-8	Dichlorodifluoromethane	49.3	37.1	75	22-158
156-59-2	cis-1,2-Dichloroethylene	49.3	53.7	109	70-119
10061-01-5	cis-1,3-Dichloropropene	49.3	46.9	95	75-117
541-73-1	m-Dichlorobenzene	49.3	47.7	97	70-119
95-50-1	o-Dichlorobenzene	49.3	49.5	100	73-116
106-46-7	p-Dichlorobenzene	49.3	47.6	97	70-119
156-60-5	trans-1,2-Dichloroethylene	49.3	55.6	113	62-119
10061-02-6	trans-1,3-Dichloropropene	49.3	52.3	106	78-125
100-41-4	Ethylbenzene	49.3	51.7	105	57-124
591-78-6	2-Hexanone	247	253	103	58-124

* = Outside of Control Limits.

Blank Spike Summary

Job Number: TC52720
Account: RFWTXHO Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VY3713-BS	Y1069997.D	1	08/08/14	CF	n/a	n/a	VY3713

The QC reported here applies to the following samples: **Method:** SW846 8260C

TC52720-5

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
87-68-3	Hexachlorobutadiene	49.3	48.6	99	57-127
98-82-8	Isopropylbenzene	49.3	52.5	106	77-135
99-87-6	p-Isopropyltoluene	49.3	51.0	103	66-120
108-10-1	4-Methyl-2-pentanone	247	259	105	60-127
74-83-9	Methyl bromide	49.3	46.7	95	47-137
74-87-3	Methyl chloride	49.3	47.1	96	46-139
74-95-3	Methylene bromide	49.3	51.5	104	72-118
75-09-2	Methylene chloride	49.3	47.7	97	50-134
78-93-3	Methyl ethyl ketone	247	256	104	60-131
1634-04-4	Methyl Tert Butyl Ether	49.3	55.3	112	65-119
91-20-3	Naphthalene	49.3	52.9	107	56-122
103-65-1	n-Propylbenzene	49.3	50.3	102	65-119
100-42-5	Styrene	49.3	52.2	106	74-117
630-20-6	1,1,1,2-Tetrachloroethane	49.3	53.4	108	74-119
71-55-6	1,1,1-Trichloroethane	49.3	54.8	111	63-126
79-34-5	1,1,2,2-Tetrachloroethane	49.3	54.6	111	65-120
79-00-5	1,1,2-Trichloroethane	49.3	51.7	105	72-119
87-61-6	1,2,3-Trichlorobenzene	49.3	48.5	98	62-116
96-18-4	1,2,3-Trichloropropane	49.3	55.4	112	68-118
120-82-1	1,2,4-Trichlorobenzene	49.3	47.0	95	58-122
95-63-6	1,2,4-Trimethylbenzene	49.3	51.1	104	61-119
108-67-8	1,3,5-Trimethylbenzene	49.3	50.3	102	53-123
127-18-4	Tetrachloroethylene	49.3	62.6	127	64-130
108-88-3	Toluene	49.3	52.1	106	67-119
79-01-6	Trichloroethylene	49.3	50.4	102	70-122
75-69-4	Trichlorofluoromethane	49.3	48.1	98	41-137
75-01-4	Vinyl chloride	49.3	48.2	98	43-120
1330-20-7	Xylene (total)	148	151	102	62-120
	m,p-Xylene	98.6	100	101	62-120
95-47-6	o-Xylene	49.3	50.8	103	62-121

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	84%	59-126%
2037-26-5	Toluene-D8	87%	70-139%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: TC52720
Account: RFWTXHO Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VY3713-BS	Y1069997.D	1	08/08/14	CF	n/a	n/a	VY3713

The QC reported here applies to the following samples: **Method:** SW846 8260C

TC52720-5

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	79%	63-138%
17060-07-0	1,2-Dichloroethane-D4	75%	54-123%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: TC52720
Account: RFWTXHO Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VY3714-BS	Y1070024.D	1	08/11/14	CF	n/a	n/a	VY3714

The QC reported here applies to the following samples: **Method:** SW846 8260C

TC52720-4

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
67-64-1	Acetone	247	205	83	43-141
71-43-2	Benzene	49.4	52.4	106	58-124
108-86-1	Bromobenzene	49.4	53.7	109	72-110
74-97-5	Bromochloromethane	49.4	48.7	99	71-122
75-27-4	Bromodichloromethane	49.4	50.6	102	72-119
75-25-2	Bromoform	49.4	49.3	100	61-120
104-51-8	n-Butylbenzene	49.4	53.5	108	58-118
135-98-8	sec-Butylbenzene	49.4	52.9	107	63-119
98-06-6	tert-Butylbenzene	49.4	52.6	106	67-121
108-90-7	Chlorobenzene	49.4	51.2	104	74-116
75-00-3	Chloroethane	49.4	54.4	110	48-133
67-66-3	Chloroform	49.4	49.3	100	72-119
95-49-8	o-Chlorotoluene	49.4	52.3	106	65-121
106-43-4	p-Chlorotoluene	49.4	53.6	108	67-118
75-15-0	Carbon disulfide	49.4	50.0	101	45-133
56-23-5	Carbon tetrachloride	49.4	49.2	100	58-128
75-34-3	1,1-Dichloroethane	49.4	51.5	104	69-122
75-35-4	1,1-Dichloroethylene	49.4	50.6	102	60-131
563-58-6	1,1-Dichloropropene	49.4	51.3	104	66-123
96-12-8	1,2-Dibromo-3-chloropropane	49.4	49.7	101	55-125
106-93-4	1,2-Dibromoethane	49.4	50.9	103	73-120
107-06-2	1,2-Dichloroethane	49.4	51.1	103	69-121
78-87-5	1,2-Dichloropropane	49.4	51.2	104	71-121
142-28-9	1,3-Dichloropropane	49.4	50.7	103	72-117
594-20-7	2,2-Dichloropropane	49.4	53.4	108	57-129
124-48-1	Dibromochloromethane	49.4	51.2	104	71-121
75-71-8	Dichlorodifluoromethane	49.4	26.4	53	22-158
156-59-2	cis-1,2-Dichloroethylene	49.4	50.8	103	70-119
10061-01-5	cis-1,3-Dichloropropene	49.4	49.8	101	75-117
541-73-1	m-Dichlorobenzene	49.4	52.6	106	70-119
95-50-1	o-Dichlorobenzene	49.4	50.5	102	73-116
106-46-7	p-Dichlorobenzene	49.4	52.0	105	70-119
156-60-5	trans-1,2-Dichloroethylene	49.4	52.4	106	62-119
10061-02-6	trans-1,3-Dichloropropene	49.4	54.9	111	78-125
100-41-4	Ethylbenzene	49.4	53.1	107	57-124
591-78-6	2-Hexanone	247	224	91	58-124

* = Outside of Control Limits.

Blank Spike Summary

Job Number: TC52720
Account: RFWTXHO Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VY3714-BS	Y1070024.D	1	08/11/14	CF	n/a	n/a	VY3714

The QC reported here applies to the following samples: **Method:** SW846 8260C

TC52720-4

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
87-68-3	Hexachlorobutadiene	49.4	51.1	103	57-127
98-82-8	Isopropylbenzene	49.4	54.6	111	77-135
99-87-6	p-Isopropyltoluene	49.4	54.5	110	66-120
108-10-1	4-Methyl-2-pentanone	247	227	92	60-127
74-83-9	Methyl bromide	49.4	44.9	91	47-137
74-87-3	Methyl chloride	49.4	44.1	89	46-139
74-95-3	Methylene bromide	49.4	49.6	100	72-118
75-09-2	Methylene chloride	49.4	44.4	90	50-134
78-93-3	Methyl ethyl ketone	247	220	89	60-131
1634-04-4	Methyl Tert Butyl Ether	49.4	50.2	102	65-119
91-20-3	Naphthalene	49.4	46.7	95	56-122
103-65-1	n-Propylbenzene	49.4	53.7	109	65-119
100-42-5	Styrene	49.4	53.3	108	74-117
630-20-6	1,1,1,2-Tetrachloroethane	49.4	52.5	106	74-119
71-55-6	1,1,1-Trichloroethane	49.4	50.4	102	63-126
79-34-5	1,1,2,2-Tetrachloroethane	49.4	52.7	107	65-120
79-00-5	1,1,2-Trichloroethane	49.4	50.5	102	72-119
87-61-6	1,2,3-Trichlorobenzene	49.4	47.7	97	62-116
96-18-4	1,2,3-Trichloropropane	49.4	52.5	106	68-118
120-82-1	1,2,4-Trichlorobenzene	49.4	50.4	102	58-122
95-63-6	1,2,4-Trimethylbenzene	49.4	54.8	111	61-119
108-67-8	1,3,5-Trimethylbenzene	49.4	53.9	109	53-123
127-18-4	Tetrachloroethylene	49.4	57.2	116	64-130
108-88-3	Toluene	49.4	53.9	109	67-119
79-01-6	Trichloroethylene	49.4	51.0	103	70-122
75-69-4	Trichlorofluoromethane	49.4	40.3	82	41-137
75-01-4	Vinyl chloride	49.4	42.6	86	43-120
1330-20-7	Xylene (total)	148	156	105	62-120
	m,p-Xylene	98.8	105	106	62-120
95-47-6	o-Xylene	49.4	51.0	103	62-121

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	77%	59-126%
2037-26-5	Toluene-D8	86%	70-139%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: TC52720
Account: RFWTXHO Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VY3714-BS	Y1070024.D	1	08/11/14	CF	n/a	n/a	VY3714

The QC reported here applies to the following samples: **Method:** SW846 8260C

TC52720-4

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	82%	63-138%
17060-07-0	1,2-Dichloroethane-D4	72%	54-123%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: TC52720
Account: RFWTXHO Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
TC52252-1MS	Y1069979.D	1	08/08/14	CF	n/a	n/a	VY3712
TC52252-1MSD	Y1069980.D	1	08/08/14	CF	n/a	n/a	VY3712
TC52252-1	Y1069977.D	1	08/08/14	CF	n/a	n/a	VY3712
TC52252-1	Y1069981.D	10	08/08/14	CF	n/a	n/a	VY3712

The QC reported here applies to the following samples: **Method:** SW846 8260C

TC52720-1, TC52720-2, TC52720-3

CAS No.	Compound	TC52252-1 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	3480		18500	21200	96	18500	21000	95	1	43-141/33
71-43-2	Benzene	410		3710	4370	107	3710	3990	97	9	58-124/26
108-86-1	Bromobenzene	ND		3710	4200	113*	3710	4000	108	5	72-110/28
74-97-5	Bromochloromethane	ND		3710	3890	105	3710	3540	95	9	71-122/25
75-27-4	Bromodichloromethane	ND		3710	3790	102	3710	3630	98	4	72-119/25
75-25-2	Bromoform	ND		3710	3770	102	3710	3890	105	3	61-120/27
104-51-8	n-Butylbenzene	ND		3710	10300	278*	3710	10000	270*	3	58-118/32
135-98-8	sec-Butylbenzene	1340		3710	5590	115	3710	5140	103	8	63-119/31
98-06-6	tert-Butylbenzene	ND		3710	4420	119	3710	3790	102	15	67-121/30
108-90-7	Chlorobenzene	ND		3710	3860	104	3710	3630	98	6	74-116/26
75-00-3	Chloroethane	ND		3710	1920	52	3710	1480	40*	26	48-133/38
67-66-3	Chloroform	ND		3710	3980	107	3710	3420	92	15	72-119/25
95-49-8	o-Chlorotoluene	ND		3710	8780	237*	3710	8340	225*	5	65-121/30
106-43-4	p-Chlorotoluene	ND		3710	5580	151*	3710	5280	142*	6	67-118/29
75-15-0	Carbon disulfide	ND		3710	3810	103	3710	3070	83	22	45-133/34
56-23-5	Carbon tetrachloride	ND		3710	3950	107	3710	3410	92	15	58-128/28
75-34-3	1,1-Dichloroethane	ND		3710	4100	111	3710	3420	92	18	69-122/25
75-35-4	1,1-Dichloroethylene	ND		3710	4190	113	3710	3310	89	23	60-131/31
563-58-6	1,1-Dichloropropene	ND		3710	4330	117	3710	3470	94	22	66-123/27
96-12-8	1,2-Dibromo-3-chloropropane	ND		3710	7110	192*	3710	7330	198*	3	55-125/33
106-93-4	1,2-Dibromoethane	ND		3710	3890	105	3710	3990	108	3	73-120/26
107-06-2	1,2-Dichloroethane	ND		3710	3820	103	3710	3740	101	2	69-121/24
78-87-5	1,2-Dichloropropane	ND		3710	3870	104	3710	3620	98	7	71-121/26
142-28-9	1,3-Dichloropropane	ND		3710	3940	106	3710	3890	105	1	72-117/25
594-20-7	2,2-Dichloropropane	ND		3710	4150	112	3710	3420	92	19	57-129/29
124-48-1	Dibromochloromethane	ND		3710	3840	104	3710	3800	103	1	71-121/26
75-71-8	Dichlorodifluoromethane	ND		3710	2930	79	3710	2290	62	25	22-158/38
156-59-2	cis-1,2-Dichloroethylene	ND		3710	4020	108	3710	3450	93	15	70-119/25
10061-01-5	cis-1,3-Dichloropropene	ND		3710	3580	97	3710	3440	93	4	75-117/27
541-73-1	m-Dichlorobenzene	ND		3710	3930	106	3710	3730	101	5	70-119/30
95-50-1	o-Dichlorobenzene	ND		3710	3960	107	3710	3800	103	4	73-116/30
106-46-7	p-Dichlorobenzene	ND		3710	4140	112	3710	3940	106	5	70-119/30
156-60-5	trans-1,2-Dichloroethylene	ND		3710	4160	112	3710	3420	92	20	62-119/29
10061-02-6	trans-1,3-Dichloropropene	ND		3710	4000	108	3710	3900	105	3	78-125/27
100-41-4	Ethylbenzene	7300		3710	11000	100	3710	10700	92	3	57-124/29
591-78-6	2-Hexanone	ND		18500	17300	93	18500	19000	103	9	58-124/32

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: TC52720
Account: RFWTXHO Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
TC52252-1MS	Y1069979.D	1	08/08/14	CF	n/a	n/a	VY3712
TC52252-1MSD	Y1069980.D	1	08/08/14	CF	n/a	n/a	VY3712
TC52252-1	Y1069977.D	1	08/08/14	CF	n/a	n/a	VY3712
TC52252-1	Y1069981.D	10	08/08/14	CF	n/a	n/a	VY3712

The QC reported here applies to the following samples: **Method:** SW846 8260C

TC52720-1, TC52720-2, TC52720-3

CAS No.	Compound	TC52252-1 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
87-68-3	Hexachlorobutadiene	ND		3710	3180	86	3710	3010	81	5	57-127/33
98-82-8	Isopropylbenzene	1140		3710	5500	118	3710	5000	104	10	77-135/29
99-87-6	p-Isopropyltoluene	5200		3710	9320	111	3710	9010	103	3	66-120/30
108-10-1	4-Methyl-2-pentanone	ND		18500	18300	99	18500	19500	105	6	60-127/30
74-83-9	Methyl bromide	ND		3710	2140	58	3710	1790	48	18	47-137/37
74-87-3	Methyl chloride	ND		3710	3440	93	3710	2810	76	20	46-139/36
74-95-3	Methylene bromide	ND		3710	3670	99	3710	3710	100	1	72-118/25
75-09-2	Methylene chloride	ND		3710	3510	95	3710	3090	83	13	50-134/35
78-93-3	Methyl ethyl ketone	669	J	18500	19100	99	18500	18800	98	2	60-131/31
1634-04-4	Methyl Tert Butyl Ether	ND		3710	3890	105	3710	3690	100	5	65-119/29
91-20-3	Naphthalene	6760		3710	9660	78	3710	10500	101	8	56-122/36
103-65-1	n-Propylbenzene	5700		3710	9730	109	3710	9260	96	5	65-119/31
100-42-5	Styrene	ND		3710	4510	122*	3710	4280	115	5	74-117/28
630-20-6	1,1,1,2-Tetrachloroethane	ND		3710	4170	112	3710	3980	107	5	74-119/27
71-55-6	1,1,1-Trichloroethane	ND		3710	4150	112	3710	3400	92	20	63-126/27
79-34-5	1,1,2,2-Tetrachloroethane	ND		3710	4670	126*	3710	4800	129*	3	65-120/31
79-00-5	1,1,2-Trichloroethane	ND		3710	4340	117	3710	4290	116	1	72-119/27
87-61-6	1,2,3-Trichlorobenzene	ND		3710	3070	83	3710	3150	85	3	62-116/33
96-18-4	1,2,3-Trichloropropane	ND		3710	4900	132*	3710	5220	141*	6	68-118/31
120-82-1	1,2,4-Trichlorobenzene	ND		3710	3260	88	3710	3310	89	2	58-122/34
95-63-6	1,2,4-Trimethylbenzene	26300 [a]		3710	29000	73	3710	28800	67	1	61-119/30
108-67-8	1,3,5-Trimethylbenzene	13500		3710	17200	100	3710	16800	89	2	53-123/30
127-18-4	Tetrachloroethylene	ND		3710	5030	136*	3710	4650	125	8	64-130/28
108-88-3	Toluene	7610		3710	11300	100	3710	11000	91	3	67-119/28
79-01-6	Trichloroethylene	ND		3710	3940	106	3710	3560	96	10	70-122/27
75-69-4	Trichlorofluoromethane	ND		3710	2960	80	3710	2290	62	26	41-137/39
75-01-4	Vinyl chloride	ND		3710	3550	96	3710	2700	73	27	43-120/38
1330-20-7	Xylene (total)	30200		11100	40200	90	11100	39500	84	2	62-120/27
	m,p-Xylene	15700		7410	22600	93	7410	22000	85	3	62-120/28
95-47-6	o-Xylene	14500		3710	17600	84	3710	17500	81	1	62-121/28

CAS No.	Surrogate Recoveries	MS	MSD	TC52252-1	TC52252-1	Limits
1868-53-7	Dibromofluoromethane	80%	74%	77%	78%	59-126%
2037-26-5	Toluene-D8	92%	91%	94%	92%	70-139%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: TC52720
Account: RFWTXHO Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
TC52252-1MS	Y1069979.D	1	08/08/14	CF	n/a	n/a	VY3712
TC52252-1MSD	Y1069980.D	1	08/08/14	CF	n/a	n/a	VY3712
TC52252-1	Y1069977.D	1	08/08/14	CF	n/a	n/a	VY3712
TC52252-1	Y1069981.D	10	08/08/14	CF	n/a	n/a	VY3712

The QC reported here applies to the following samples: **Method:** SW846 8260C

TC52720-1, TC52720-2, TC52720-3

CAS No.	Surrogate Recoveries	MS	MSD	TC52252-1	TC52252-1	Limits
460-00-4	4-Bromofluorobenzene	85%	83%	85%	80%	63-138%
17060-07-0	1,2-Dichloroethane-D4	71%	72%	73%	72%	54-123%

(a) Result is from Run #2.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: TC52720
Account: RFWTXHO Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
TC52429-2MS	Y1070003.D	1	08/09/14	CF	n/a	n/a	VY3713
TC52429-2MSD	Y1070004.D	1	08/09/14	CF	n/a	n/a	VY3713
TC52429-2	Y1070001.D	1	08/09/14	CF	n/a	n/a	VY3713
TC52429-2	Y1070002.D	1	08/09/14	CF	n/a	n/a	VY3713

The QC reported here applies to the following samples: **Method:** SW846 8260C

TC52720-5

CAS No.	Compound	TC52429-2 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	107		18900	16500	87	18900	18100	96	9	43-141/33
71-43-2	Benzene	ND		3770	3510	93	3770	3850	102	9	58-124/26
108-86-1	Bromobenzene	ND [a]		3770	3680	98	3770	3840	102	4	72-110/28
74-97-5	Bromochloromethane	ND [a]		3770	3460	92	3770	3720	99	7	71-122/25
75-27-4	Bromodichloromethane	ND		3770	3420	91	3770	3650	97	7	72-119/25
75-25-2	Bromoform	ND		3770	3580	95	3770	3710	98	4	61-120/27
104-51-8	n-Butylbenzene	ND [a]		3770	3370	89	3770	3550	94	5	58-118/32
135-98-8	sec-Butylbenzene	ND [a]		3770	3460	92	3770	3770	100	9	63-119/31
98-06-6	tert-Butylbenzene	ND [a]		3770	3430	91	3770	3740	99	9	67-121/30
108-90-7	Chlorobenzene	ND		3770	3460	92	3770	3720	99	7	74-116/26
75-00-3	Chloroethane	ND		3770	1730	46*	3770	1850	49	7	48-133/38
67-66-3	Chloroform	ND		3770	3310	88	3770	3650	97	10	72-119/25
95-49-8	o-Chlorotoluene	ND [a]		3770	3400	90	3770	3640	96	7	65-121/30
106-43-4	p-Chlorotoluene	ND [a]		3770	3410	90	3770	3560	94	4	67-118/29
75-15-0	Carbon disulfide	ND		3770	2900	77	3770	3360	89	15	45-133/34
56-23-5	Carbon tetrachloride	ND		3770	3300	87	3770	3690	98	11	58-128/28
75-34-3	1,1-Dichloroethane	ND		3770	3400	90	3770	3810	101	11	69-122/25
75-35-4	1,1-Dichloroethylene	ND		3770	3190	85	3770	3690	98	15	60-131/31
563-58-6	1,1-Dichloropropene	ND [a]		3770	3390	90	3770	3890	103	14	66-123/27
96-12-8	1,2-Dibromo-3-chloropropane	ND [a]		3770	3820	101	3770	4050	107	6	55-125/33
106-93-4	1,2-Dibromoethane	ND [a]		3770	3680	98	3770	3870	103	5	73-120/26
107-06-2	1,2-Dichloroethane	ND		3770	3630	96	3770	3800	101	5	69-121/24
78-87-5	1,2-Dichloropropane	ND		3770	3570	95	3770	3810	101	7	71-121/26
142-28-9	1,3-Dichloropropane	ND [a]		3770	3670	97	3770	3820	101	4	72-117/25
594-20-7	2,2-Dichloropropane	ND [a]		3770	3190	85	3770	3660	97	14	57-129/29
124-48-1	Dibromochloromethane	ND		3770	3580	95	3770	3740	99	4	71-121/26
75-71-8	Dichlorodifluoromethane	ND [a]		3770	2190	58	3770	2550	68	15	22-158/38
156-59-2	cis-1,2-Dichloroethylene	ND		3770	3380	90	3770	3770	100	11	70-119/25
10061-01-5	cis-1,3-Dichloropropene	ND		3770	3260	86	3770	3500	93	7	75-117/27
541-73-1	m-Dichlorobenzene	ND [a]		3770	3460	92	3770	3600	95	4	70-119/30
95-50-1	o-Dichlorobenzene	ND [a]		3770	3580	95	3770	3640	96	2	73-116/30
106-46-7	p-Dichlorobenzene	ND [a]		3770	3490	93	3770	3600	95	3	70-119/30
156-60-5	trans-1,2-Dichloroethylene	ND		3770	3340	89	3770	3790	100	13	62-119/29
10061-02-6	trans-1,3-Dichloropropene	ND		3770	3650	97	3770	3870	103	6	78-125/27
100-41-4	Ethylbenzene	ND		3770	3600	95	3770	3880	103	7	57-124/29
591-78-6	2-Hexanone	ND		18900	17400	92	18900	18400	98	6	58-124/32

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: TC52720
Account: RFWTXHO Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
TC52429-2MS	Y1070003.D	1	08/09/14	CF	n/a	n/a	VY3713
TC52429-2MSD	Y1070004.D	1	08/09/14	CF	n/a	n/a	VY3713
TC52429-2	Y1070001.D	1	08/09/14	CF	n/a	n/a	VY3713
TC52429-2	Y1070002.D	1	08/09/14	CF	n/a	n/a	VY3713

The QC reported here applies to the following samples: **Method:** SW846 8260C

TC52720-5

CAS No.	Compound	TC52429-2 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
87-68-3	Hexachlorobutadiene	ND [a]		3770	3710	98	3770	4100	109	10	57-127/33
98-82-8	Isopropylbenzene	ND [a]		3770	3550	94	3770	3850	102	8	77-135/29
99-87-6	p-Isopropyltoluene	ND [a]		3770	3520	93	3770	3790	100	7	66-120/30
108-10-1	4-Methyl-2-pentanone	20.2	J	18900	17700	94	18900	18300	97	3	60-127/30
74-83-9	Methyl bromide	ND		3770	1910	51	3770	2070	55	8	47-137/37
74-87-3	Methyl chloride	ND		3770	2800	74	3770	3160	84	12	46-139/36
74-95-3	Methylene bromide	ND [a]		3770	3580	95	3770	3740	99	4	72-118/25
75-09-2	Methylene chloride	ND		3770	3060	81	3770	3280	87	7	50-134/35
78-93-3	Methyl ethyl ketone	27.6	J	18900	17200	91	18900	18700	99	8	60-131/31
1634-04-4	Methyl Tert Butyl Ether	ND [a]		3770	3550	94	3770	3810	101	7	65-119/29
91-20-3	Naphthalene	ND [a]		3770	3820	101	3770	3950	105	3	56-122/36
103-65-1	n-Propylbenzene	ND [a]		3770	3400	90	3770	3690	98	8	65-119/31
100-42-5	Styrene	ND		3770	3690	98	3770	3890	103	5	74-117/28
630-20-6	1,1,1,2-Tetrachloroethane	ND [a]		3770	3800	101	3770	3960	105	4	74-119/27
71-55-6	1,1,1-Trichloroethane	ND		3770	3280	87	3770	3750	99	13	63-126/27
79-34-5	1,1,2,2-Tetrachloroethane	ND		3770	3780	100	3770	3920	104	4	65-120/31
79-00-5	1,1,2-Trichloroethane	ND		3770	3690	98	3770	3850	102	4	72-119/27
87-61-6	1,2,3-Trichlorobenzene	ND [a]		3770	3600	95	3770	3620	96	1	62-116/33
96-18-4	1,2,3-Trichloropropane	ND [a]		3770	3970	105	3770	4080	108	3	68-118/31
120-82-1	1,2,4-Trichlorobenzene	ND [a]		3770	3490	93	3770	3500	93	0	58-122/34
95-63-6	1,2,4-Trimethylbenzene	ND [a]		3770	3610	96	3770	3770	100	4	61-119/30
108-67-8	1,3,5-Trimethylbenzene	ND [a]		3770	3470	92	3770	3700	98	6	53-123/30
127-18-4	Tetrachloroethylene	165		3770	6370	133*	3770	6640	140*	4	64-130/28
108-88-3	Toluene	ND		3770	3620	96	3770	3940	104	8	67-119/28
79-01-6	Trichloroethylene	ND		3770	3460	92	3770	3790	100	9	70-122/27
75-69-4	Trichlorofluoromethane	ND [a]		3770	2200	58	3770	2490	66	12	41-137/39
75-01-4	Vinyl chloride	ND		3770	2780	74	3770	3190	85	14	43-120/38
1330-20-7	Xylene (total)	ND		11300	10500	93	11300	11300	100	7	62-120/27
	m,p-Xylene	ND [a]		7540	6990	93	7540	7500	99	7	62-120/28
95-47-6	o-Xylene	ND [a]		3770	3530	94	3770	3770	100	7	62-121/28

CAS No.	Surrogate Recoveries	MS	MSD	TC52429-2	TC52429-2	Limits
1868-53-7	Dibromofluoromethane	74%	76%	84%	77%	59-126%
2037-26-5	Toluene-D8	88%	86%	93%	90%	70-139%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: TC52720
Account: RFWTXHO Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
TC52429-2MS	Y1070003.D	1	08/09/14	CF	n/a	n/a	VY3713
TC52429-2MSD	Y1070004.D	1	08/09/14	CF	n/a	n/a	VY3713
TC52429-2	Y1070001.D	1	08/09/14	CF	n/a	n/a	VY3713
TC52429-2	Y1070002.D	1	08/09/14	CF	n/a	n/a	VY3713

The QC reported here applies to the following samples: **Method:** SW846 8260C

TC52720-5

CAS No.	Surrogate Recoveries	MS	MSD	TC52429-2	TC52429-2	Limits
460-00-4	4-Bromofluorobenzene	80%	78%	86%	78%	63-138%
17060-07-0	1,2-Dichloroethane-D4	71%	71%	78%	72%	54-123%

(a) Result is from Run #2.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: TC52720
Account: RFWTXHO Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
TC52929-1MS	Y1070032.D	1	08/11/14	CF	n/a	n/a	VY3714
TC52929-1MSD	Y1070033.D	1	08/11/14	CF	n/a	n/a	VY3714
TC52929-1 [a]	Y1070031.D	1	08/11/14	CF	n/a	n/a	VY3714

The QC reported here applies to the following samples: **Method:** SW846 8260C

TC52720-4

CAS No.	Compound	TC52929-1 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	2400 U		14900	11800	79	14900	11800	79	0	43-141/33
71-43-2	Benzene	240 U		2970	2960	100	2970	2750	92	7	58-124/26
108-86-1	Bromobenzene	240 U		2970	3050	103	2970	2980	100	2	72-110/28
74-97-5	Bromochloromethane	240 U		2970	2780	94	2970	2740	92	1	71-122/25
75-27-4	Bromodichloromethane	240 U		2970	2820	95	2970	2800	94	1	72-119/25
75-25-2	Bromoform	240 U		2970	2730	92	2970	2760	93	1	61-120/27
104-51-8	n-Butylbenzene	240 U		2970	3800	128*	2970	3570	120*	6	58-118/32
135-98-8	sec-Butylbenzene	208	J	2970	3070	96	2970	2810	88	9	63-119/31
98-06-6	tert-Butylbenzene	240 U		2970	2830	95	2970	2620	88	8	67-121/30
108-90-7	Chlorobenzene	240 U		2970	2930	99	2970	2810	95	4	74-116/26
75-00-3	Chloroethane	240 U		2970	1180	40*	2970	1030	35*	14	48-133/38
67-66-3	Chloroform	240 U		2970	2760	93	2970	2630	88	5	72-119/25
95-49-8	o-Chlorotoluene	240 U		2970	3730	125*	2970	3540	119	5	65-121/30
106-43-4	p-Chlorotoluene	240 U		2970	3060	103	2970	2890	97	6	67-118/29
75-15-0	Carbon disulfide	240 U		2970	2470	83	2970	2220	75	11	45-133/34
56-23-5	Carbon tetrachloride	240 U		2970	2760	93	2970	2490	84	10	58-128/28
75-34-3	1,1-Dichloroethane	240 U		2970	2810	95	2970	2630	88	7	69-122/25
75-35-4	1,1-Dichloroethylene	240 U		2970	2660	89	2970	2380	80	11	60-131/31
563-58-6	1,1-Dichloropropene	240 U		2970	2810	95	2970	2510	84	11	66-123/27
96-12-8	1,2-Dibromo-3-chloropropane	240 U		2970	2990	101	2970	3060	103	2	55-125/33
106-93-4	1,2-Dibromoethane	240 U		2970	2880	97	2970	2930	99	2	73-120/26
107-06-2	1,2-Dichloroethane	240 U		2970	2830	95	2970	2770	93	2	69-121/24
78-87-5	1,2-Dichloropropane	240 U		2970	2920	98	2970	2840	96	3	71-121/26
142-28-9	1,3-Dichloropropane	240 U		2970	2880	97	2970	2850	96	1	72-117/25
594-20-7	2,2-Dichloropropane	240 U		2970	2840	96	2970	2590	87	9	57-129/29
124-48-1	Dibromochloromethane	240 U		2970	2830	95	2970	2830	95	0	71-121/26
75-71-8	Dichlorodifluoromethane	240 U		2970	1570	53	2970	1350	45	15	22-158/38
156-59-2	cis-1,2-Dichloroethylene	240 U		2970	2820	95	2970	2690	90	5	70-119/25
10061-01-5	cis-1,3-Dichloropropene	240 U		2970	2700	91	2970	2670	90	1	75-117/27
541-73-1	m-Dichlorobenzene	240 U		2970	2970	100	2970	2870	97	3	70-119/30
95-50-1	o-Dichlorobenzene	240 U		2970	2870	97	2970	2840	96	1	73-116/30
106-46-7	p-Dichlorobenzene	240 U		2970	2990	101	2970	2930	99	2	70-119/30
156-60-5	trans-1,2-Dichloroethylene	240 U		2970	2770	93	2970	2570	86	7	62-119/29
10061-02-6	trans-1,3-Dichloropropene	240 U		2970	2980	100	2970	2960	100	1	78-125/27
100-41-4	Ethylbenzene	444		2970	3460	101	2970	3250	94	6	57-124/29
591-78-6	2-Hexanone	2400 U		14900	11600	78	14900	12100	81	4	58-124/32

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: TC52720
Account: RFWTXHO Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
TC52929-1MS	Y1070032.D	1	08/11/14	CF	n/a	n/a	VY3714
TC52929-1MSD	Y1070033.D	1	08/11/14	CF	n/a	n/a	VY3714
TC52929-1 [a]	Y1070031.D	1	08/11/14	CF	n/a	n/a	VY3714

The QC reported here applies to the following samples: **Method:** SW846 8260C

TC52720-4

CAS No.	Compound	TC52929-1 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
87-68-3	Hexachlorobutadiene	240 U		2970	3150	106	2970	2880	97	9	57-127/33
98-82-8	Isopropylbenzene	184	J	2970	3200	101	2970	2960	93	8	77-135/29
99-87-6	p-Isopropyltoluene	104	J	2970	3140	102	2970	2920	95	7	66-120/30
108-10-1	4-Methyl-2-pentanone	2400 U		14900	12600	85	14900	12900	87	2	60-127/30
74-83-9	Methyl bromide	240 U		2970	1380	46*	2970	1240	42*	11	47-137/37
74-87-3	Methyl chloride	240 U		2970	2310	78	2970	2080	70	10	46-139/36
74-95-3	Methylene bromide	240 U		2970	2740	92	2970	2760	93	1	72-118/25
75-09-2	Methylene chloride	590 U		2970	2410	81	2970	2330	78	3	50-134/35
78-93-3	Methyl ethyl ketone	2400 U		14900	11900	80	14900	12200	82	2	60-131/31
1634-04-4	Methyl Tert Butyl Ether	240 U		2970	2750	92	2970	2780	94	1	65-119/29
91-20-3	Naphthalene	1230		2970	3830	87	2970	3830	87	0	56-122/36
103-65-1	n-Propylbenzene	1130		2970	3980	96	2970	3700	86	7	65-119/31
100-42-5	Styrene	240 U		2970	3100	104	2970	2990	101	4	74-117/28
630-20-6	1,1,1,2-Tetrachloroethane	240 U		2970	3080	104	2970	3010	101	2	74-119/27
71-55-6	1,1,1-Trichloroethane	240 U		2970	2750	92	2970	2510	84	9	63-126/27
79-34-5	1,1,2,2-Tetrachloroethane	240 U		2970	2870	97	2970	2910	98	1	65-120/31
79-00-5	1,1,2-Trichloroethane	240 U		2970	3170	107	2970	3030	102	5	72-119/27
87-61-6	1,2,3-Trichlorobenzene	240 U		2970	2900	98	2970	2840	96	2	62-116/33
96-18-4	1,2,3-Trichloropropane	240 U		2970	2940	99	2970	2940	99	0	68-118/31
120-82-1	1,2,4-Trichlorobenzene	240 U		2970	2890	97	2970	2790	94	4	58-122/34
95-63-6	1,2,4-Trimethylbenzene	7360		2970	10000	89	2970	9830	83	2	61-119/30
108-67-8	1,3,5-Trimethylbenzene	2390		2970	5210	95	2970	5000	88	4	53-123/30
127-18-4	Tetrachloroethylene	240 U		2970	3780	127	2970	3510	118	7	64-130/28
108-88-3	Toluene	240 U		2970	3120	105	2970	2900	98	7	67-119/28
79-01-6	Trichloroethylene	240 U		2970	2900	98	2970	2690	90	8	70-122/27
75-69-4	Trichlorofluoromethane	240 U		2970	1890	64	2970	1630	55	15	41-137/39
75-01-4	Vinyl chloride	240 U		2970	2300	77	2970	2030	68	12	43-120/38
1330-20-7	Xylene (total)	3010		8920	11600	96	8920	11100	91	4	62-120/27
	m,p-Xylene	2220		5950	7980	97	5950	7580	90	5	62-120/28
95-47-6	o-Xylene	795		2970	3670	97	2970	3520	92	4	62-121/28

CAS No.	Surrogate Recoveries	MS	MSD	TC52929-1	Limits
1868-53-7	Dibromofluoromethane	74%	75%	79%	59-126%
2037-26-5	Toluene-D8	87%	87%	90%	70-139%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: TC52720
Account: RFWTXHO Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
TC52929-1MS	Y1070032.D	1	08/11/14	CF	n/a	n/a	VY3714
TC52929-1MSD	Y1070033.D	1	08/11/14	CF	n/a	n/a	VY3714
TC52929-1 [a]	Y1070031.D	1	08/11/14	CF	n/a	n/a	VY3714

The QC reported here applies to the following samples: **Method:** SW846 8260C

TC52720-4

CAS No.	Surrogate Recoveries	MS	MSD	TC52929-1	Limits
460-00-4	4-Bromofluorobenzene	79%	79%	77%	63-138%
17060-07-0	1,2-Dichloroethane-D4	67%	68%	71%	54-123%

(a) Dilution required due to high concentrations of non-target analytes.

* = Outside of Control Limits.

Instrument Performance Check (BFB)

Job Number: TC52720
Account: RFWTXHO Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Sample: VY3708-BFB
Lab File ID: Y1069868.D
Instrument ID: GCMSY
Injection Date: 08/06/14
Injection Time: 10:33

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	13492	16.5		Pass
75	30.0 - 60.0% of mass 95	36760	45.1		Pass
95	Base peak, 100% relative abundance	81579	100.0		Pass
96	5.0 - 9.0% of mass 95	5335	6.54		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 100.0% of mass 95	71437	87.6		Pass
175	5.0 - 9.0% of mass 174	6116	7.50	(8.56) [a]	Pass
176	95.0 - 101.0% of mass 174	69483	85.2	(97.3) [a]	Pass
177	5.0 - 9.0% of mass 176	4644	5.69	(6.68) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VY3708-IC3708	Y1069869.D	08/06/14	11:01	00:28	Initial cal 4
VY3708-IC3708	Y1069870.D	08/06/14	11:29	00:56	Initial cal 10
VY3708-IC3708	Y1069871.D	08/06/14	11:57	01:24	Initial cal 20
VY3708-ICC3708	Y1069872.D	08/06/14	12:25	01:52	Initial cal 40
VY3708-IC3708	Y1069873.D	08/06/14	12:53	02:20	Initial cal 70
VY3708-IC3708	Y1069874.D	08/06/14	13:21	02:48	Initial cal 100
VY3708-IC3708	Y1069875.D	08/06/14	13:48	03:15	Initial cal 200
VY3708-ICV3708	Y1069877.D	08/06/14	14:45	04:12	Initial cal verification 40
VY3708-BS	Y1069878.D	08/06/14	15:15	04:42	Blank Spike
VY3708-MB	Y1069880.D	08/06/14	16:12	05:39	Method Blank
ZZZZZZ	Y1069881.D	08/06/14	16:40	06:07	(unrelated sample)
ZZZZZZ	Y1069882.D	08/06/14	17:08	06:35	(unrelated sample)
TC52355-3	Y1069883.D	08/06/14	17:36	07:03	(used for QC only; not part of job TC52720)
TC52355-3MS	Y1069884.D	08/06/14	18:05	07:32	Matrix Spike
TC52355-3MSD	Y1069885.D	08/06/14	18:33	08:00	Matrix Spike Duplicate
ZZZZZZ	Y1069887.D	08/06/14	19:30	08:57	(unrelated sample)
ZZZZZZ	Y1069888.D	08/06/14	19:58	09:25	(unrelated sample)
ZZZZZZ	Y1069889.D	08/06/14	20:26	09:53	(unrelated sample)
ZZZZZZ	Y1069890.D	08/06/14	20:54	10:21	(unrelated sample)
ZZZZZZ	Y1069891.D	08/06/14	21:22	10:49	(unrelated sample)
ZZZZZZ	Y1069892.D	08/06/14	21:50	11:17	(unrelated sample)
ZZZZZZ	Y1069893.D	08/06/14	22:18	11:45	(unrelated sample)

Instrument Performance Check (BFB)

Job Number: TC52720
Account: RFWTXHO Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Sample: VY3712-BFB
Lab File ID: Y1069967.D
Instrument ID: GCMSY
Injection Date: 08/08/14
Injection Time: 09:31

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	12382	15.4		Pass
75	30.0 - 60.0% of mass 95	35531	44.2		Pass
95	Base peak, 100% relative abundance	80467	100.0		Pass
96	5.0 - 9.0% of mass 95	5233	6.50		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 100.0% of mass 95	76032	94.5		Pass
175	5.0 - 9.0% of mass 174	6419	7.98	(8.44) [a]	Pass
176	95.0 - 101.0% of mass 174	73341	91.1	(96.5) [a]	Pass
177	5.0 - 9.0% of mass 176	4951	6.15	(6.75) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VY3712-CC3708	Y1069968.D	08/08/14	10:00	00:29	Continuing cal 20
VY3712-BS	Y1069969.D	08/08/14	10:28	00:57	Blank Spike
VY3712-MB	Y1069971.D	08/08/14	11:24	01:53	Method Blank
ZZZZZZ	Y1069972.D	08/08/14	11:52	02:21	(unrelated sample)
ZZZZZZ	Y1069973.D	08/08/14	12:20	02:49	(unrelated sample)
ZZZZZZ	Y1069974.D	08/08/14	12:47	03:16	(unrelated sample)
ZZZZZZ	Y1069975.D	08/08/14	13:16	03:45	(unrelated sample)
ZZZZZZ	Y1069976.D	08/08/14	13:44	04:13	(unrelated sample)
TC52252-1	Y1069977.D	08/08/14	14:12	04:41	(used for QC only; not part of job TC52720)
ZZZZZZ	Y1069978.D	08/08/14	14:57	05:26	(unrelated sample)
TC52252-1MS	Y1069979.D	08/08/14	15:25	05:54	Matrix Spike
TC52252-1MSD	Y1069980.D	08/08/14	15:54	06:23	Matrix Spike Duplicate
TC52252-1	Y1069981.D	08/08/14	16:22	06:51	(used for QC only; not part of job TC52720)
ZZZZZZ	Y1069982.D	08/08/14	16:50	07:19	(unrelated sample)
ZZZZZZ	Y1069983.D	08/08/14	17:19	07:48	(unrelated sample)
ZZZZZZ	Y1069984.D	08/08/14	17:47	08:16	(unrelated sample)
ZZZZZZ	Y1069985.D	08/08/14	18:15	08:44	(unrelated sample)
ZZZZZZ	Y1069986.D	08/08/14	18:44	09:13	(unrelated sample)
ZZZZZZ	Y1069987.D	08/08/14	19:12	09:41	(unrelated sample)
ZZZZZZ	Y1069988.D	08/08/14	19:40	10:09	(unrelated sample)
TC52720-1	Y1069989.D	08/08/14	20:08	10:37	CES-CS-01-51
TC52720-2	Y1069990.D	08/08/14	20:36	11:05	CES-CS-02-51
TC52720-3	Y1069991.D	08/08/14	21:04	11:33	CES-CS-03-51

Instrument Performance Check (BFB)

Job Number: TC52720
Account: RFWTXHO Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Sample: VY3713-BFB
Lab File ID: Y1069994.D
Instrument ID: GCMSY
Injection Date: 08/08/14
Injection Time: 22:28

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	12174	15.7		Pass
75	30.0 - 60.0% of mass 95	33592	43.4		Pass
95	Base peak, 100% relative abundance	77344	100.0		Pass
96	5.0 - 9.0% of mass 95	5017	6.49		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 100.0% of mass 95	73339	94.8		Pass
175	5.0 - 9.0% of mass 174	6144	7.94	(8.38) [a]	Pass
176	95.0 - 101.0% of mass 174	70755	91.5	(96.5) [a]	Pass
177	5.0 - 9.0% of mass 176	4631	5.99	(6.55) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VY3713-CC3708	Y1069995.D	08/08/14	22:56	00:28	Continuing cal 40
VY3713-BS	Y1069997.D	08/08/14	23:52	01:24	Blank Spike
VY3713-MB	Y1069999.D	08/09/14	00:48	02:20	Method Blank
ZZZZZZ	Y1070000.D	08/09/14	01:16	02:48	(unrelated sample)
TC52429-2	Y1070001.D	08/09/14	01:45	03:17	(used for QC only; not part of job TC52720)
TC52429-2	Y1070002.D	08/09/14	02:13	03:45	(used for QC only; not part of job TC52720)
TC52429-2MS	Y1070003.D	08/09/14	02:41	04:13	Matrix Spike
TC52429-2MSD	Y1070004.D	08/09/14	03:09	04:41	Matrix Spike Duplicate
ZZZZZZ	Y1070006.D	08/09/14	04:06	05:38	(unrelated sample)
ZZZZZZ	Y1070007.D	08/09/14	04:34	06:06	(unrelated sample)
TC52720-5	Y1070008.D	08/09/14	05:02	06:34	CES-CS-05-51
ZZZZZZ	Y1070009.D	08/09/14	05:30	07:02	(unrelated sample)
ZZZZZZ	Y1070010.D	08/09/14	05:58	07:30	(unrelated sample)
ZZZZZZ	Y1070011.D	08/09/14	06:26	07:58	(unrelated sample)
ZZZZZZ	Y1070012.D	08/09/14	06:55	08:27	(unrelated sample)
ZZZZZZ	Y1070013.D	08/09/14	07:23	08:55	(unrelated sample)
ZZZZZZ	Y1070014.D	08/09/14	07:51	09:23	(unrelated sample)
ZZZZZZ	Y1070015.D	08/09/14	08:19	09:51	(unrelated sample)
ZZZZZZ	Y1070016.D	08/09/14	08:47	10:19	(unrelated sample)
ZZZZZZ	Y1070017.D	08/09/14	09:15	10:47	(unrelated sample)
ZZZZZZ	Y1070018.D	08/09/14	09:44	11:16	(unrelated sample)
ZZZZZZ	Y1070019.D	08/09/14	10:12	11:44	(unrelated sample)

Instrument Performance Check (BFB)

Job Number: TC52720
Account: RFWTXHO Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Sample: VY3714-BFB
Lab File ID: Y1070022.D
Instrument ID: GCMSY
Injection Date: 08/11/14
Injection Time: 09:08

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	13419	16.4		Pass
75	30.0 - 60.0% of mass 95	36600	44.8		Pass
95	Base peak, 100% relative abundance	81776	100.0		Pass
96	5.0 - 9.0% of mass 95	5567	6.81		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 100.0% of mass 95	71701	87.7		Pass
175	5.0 - 9.0% of mass 174	6356	7.77	(8.86) [a]	Pass
176	95.0 - 101.0% of mass 174	69885	85.5	(97.5) [a]	Pass
177	5.0 - 9.0% of mass 176	4803	5.87	(6.87) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VY3714-CC3708	Y1070023.D	08/11/14	09:36	00:28	Continuing cal 20
VY3714-BS	Y1070024.D	08/11/14	10:05	00:57	Blank Spike
VY3714-MB	Y1070026.D	08/11/14	11:01	01:53	Method Blank
TC52720-1	Y1070027.D	08/11/14	11:29	02:21	CES-CS-01-51
TC52720-4	Y1070028.D	08/11/14	11:57	02:49	CES-CS-04-51
ZZZZZZ	Y1070029.D	08/11/14	12:25	03:17	(unrelated sample)
ZZZZZZ	Y1070030.D	08/11/14	12:53	03:45	(unrelated sample)
TC52929-1	Y1070031.D	08/11/14	13:21	04:13	(used for QC only; not part of job TC52720)
TC52929-1MS	Y1070032.D	08/11/14	13:49	04:41	Matrix Spike
TC52929-1MSD	Y1070033.D	08/11/14	14:17	05:09	Matrix Spike Duplicate
ZZZZZZ	Y1070035.D	08/11/14	15:12	06:04	(unrelated sample)
ZZZZZZ	Y1070036.D	08/11/14	15:41	06:33	(unrelated sample)
ZZZZZZ	Y1070037.D	08/11/14	16:09	07:01	(unrelated sample)
ZZZZZZ	Y1070038.D	08/11/14	16:37	07:29	(unrelated sample)
ZZZZZZ	Y1070039.D	08/11/14	17:05	07:57	(unrelated sample)
ZZZZZZ	Y1070040.D	08/11/14	17:33	08:25	(unrelated sample)
ZZZZZZ	Y1070041.D	08/11/14	18:01	08:53	(unrelated sample)
ZZZZZZ	Y1070042.D	08/11/14	18:29	09:21	(unrelated sample)
ZZZZZZ	Y1070043.D	08/11/14	18:57	09:49	(unrelated sample)
ZZZZZZ	Y1070044.D	08/11/14	19:25	10:17	(unrelated sample)
ZZZZZZ	Y1070045.D	08/11/14	19:53	10:45	(unrelated sample)
ZZZZZZ	Y1070046.D	08/11/14	20:21	11:13	(unrelated sample)
ZZZZZZ	Y1070047.D	08/11/14	20:49	11:41	(unrelated sample)

Volatile Internal Standard Area Summary

Job Number: TC52720
Account: RFWTXHO Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Check Std:	VY3712-CC3708	**Injection Date:**	08/08/14
Lab File ID:	Y1069968.D	**Injection Time:**	10:00
Instrument ID:	GCMSY	**Method:**	SW846 8260C

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT
Check Std	155093	5.01	466165	5.80	416981	8.91	212224	11.13
Upper Limit [a]	310186	5.51	932330	6.30	833962	9.41	424448	11.63
Lower Limit [b]	77547	4.51	233083	5.30	208491	8.41	106112	10.63

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT
VY3712-BS	136134	5.01	465592	5.80	410485	8.91	203626	11.13
VY3712-MB	156469	5.01	492873	5.80	436730	8.91	233542	11.13
ZZZZZZ	152169	5.02	475258	5.80	419554	8.91	226580	11.13
ZZZZZZ	152622	5.02	478732	5.80	427468	8.91	235117	11.13
ZZZZZZ	152926	5.01	481211	5.80	430250	8.91	233964	11.13
ZZZZZZ	151954	5.01	479965	5.80	412022	8.91	202994	11.13
ZZZZZZ	87407	5.01	291656	5.80	126186[c]	8.91	17232[c]	11.13
TC52252-1	145757	5.01	447393	5.80	377906	8.91	184840	11.13
ZZZZZZ	150602	5.01	477057	5.80	426200	8.91	225167	11.13
TC52252-1MS	133487	5.01	443879	5.80	387024	8.91	188775	11.14
TC52252-1MSD	146359	5.01	451379	5.80	395391	8.91	196752	11.14
TC52252-1	155321	5.01	491478	5.80	422554	8.91	222210	11.13
ZZZZZZ	25427*	5.01	89813*	5.80	39206*	8.91	9659*	11.13
ZZZZZZ	160263	5.01	520709	5.80	468152	8.91	245117	11.13
ZZZZZZ	161985	5.01	510977	5.80	450474	8.91	238443	11.13
ZZZZZZ	160734	5.01	505921	5.80	447432	8.91	244555	11.13
ZZZZZZ	163527	5.02	512688	5.80	456392	8.91	246656	11.13
ZZZZZZ	159369	5.02	498302	5.80	424961	8.91	200413	11.13
ZZZZZZ	156371	5.01	489604	5.80	413614	8.91	192015	11.13
TC52720-1	137185	5.01	436767	5.80	278496	8.91	69778*	11.13
TC52720-2	156692	5.02	487066	5.80	405040	8.91	172254	11.13
TC52720-3	153858	5.02	478662	5.80	421401	8.91	219978	11.13

IS 1 = Pentafluorobenzene
IS 2 = 1,4-Difluorobenzene
IS 3 = Chlorobenzene-D5
IS 4 = 1,4-Dichlorobenzene-d4

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.
(c) Outside control limits due to matrix interference. Confirmed by reanalysis.

Volatile Internal Standard Area Summary

Job Number: TC52720
Account: RFWTXHO Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Check Std:	VY3713-CC3708	**Injection Date:**	08/08/14
Lab File ID:	Y1069995.D	**Injection Time:**	22:56
Instrument ID:	GCMSY	**Method:**	SW846 8260C

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT
Check Std	149217	5.01	466172	5.80	419081	8.91	213351	11.13
Upper Limit [a]	298434	5.51	932344	6.30	838162	9.41	426702	11.63
Lower Limit [b]	74609	4.51	233086	5.30	209541	8.41	106676	10.63

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT
VY3713-BS	136648	5.01	460844	5.80	415836	8.91	211246	11.13
VY3713-MB	156709	5.01	490592	5.80	441500	8.91	241433	11.13
ZZZZZZ	153771	5.01	481430	5.80	421609	8.91	213464	11.13
TC52429-2	144843	5.01	457998	5.80	377076	8.91	178275	11.13
TC52429-2	154607	5.01	485288	5.80	426472	8.91	229891	11.13
TC52429-2MS	148682	5.01	459454	5.80	409127	8.91	208024	11.13
TC52429-2MSD	148470	5.01	469933	5.80	420815	8.91	214330	11.13
ZZZZZZ	143533	5.01	460759	5.80	343185	8.91	102882[c]	11.13
ZZZZZZ	153987	5.01	485366	5.80	440712	8.91	239379	11.13
TC52720-5	157196	5.01	488489	5.80	431636	8.91	219527	11.13
ZZZZZZ	136767	5.01	432460	5.80	328009	8.91	114438	11.13
ZZZZZZ	156708	5.01	493296	5.80	437930	8.91	234771	11.13
ZZZZZZ	159630	5.01	500049	5.80	439767	8.91	228124	11.13
ZZZZZZ	155225	5.01	489767	5.80	434899	8.91	224165	11.13
ZZZZZZ	157933	5.01	492070	5.80	435505	8.91	222657	11.13
ZZZZZZ	157797	5.01	493950	5.80	445401	8.91	244003	11.13
ZZZZZZ	153066	5.01	476664	5.80	409681	8.91	192689	11.13
ZZZZZZ	148583	5.01	462249	5.80	401461	8.91	198939	11.13
ZZZZZZ	152478	5.01	477432	5.80	425837	8.91	230110	11.13
ZZZZZZ	155277	5.01	484837	5.80	437642	8.91	237176	11.13
ZZZZZZ	151321	5.02	480959	5.80	427510	8.91	231818	11.13

IS 1 = Pentafluorobenzene
IS 2 = 1,4-Difluorobenzene
IS 3 = Chlorobenzene-D5
IS 4 = 1,4-Dichlorobenzene-d4

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.
(c) Outside control limits due to matrix interference. Confirmed by reanalysis.

Volatile Internal Standard Area Summary

Job Number: TC52720
Account: RFWTXHO Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Check Std:	VY3714-CC3708	**Injection Date:**	08/11/14
Lab File ID:	Y1070023.D	**Injection Time:**	09:36
Instrument ID:	GCMSY	**Method:**	SW846 8260C

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT
Check Std	159487	5.01	474152	5.80	426586	8.91	216512	11.13
Upper Limit [a]	318974	5.51	948304	6.30	853172	9.41	433024	11.63
Lower Limit [b]	79744	4.51	237076	5.30	213293	8.41	108256	10.63

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT
VY3714-BS	151360	5.01	475369	5.80	432925	8.91	210251	11.13
VY3714-MB	160319	5.01	511484	5.80	458139	8.91	240705	11.13
TC52720-1 [c]	134565	5.01	436543	5.80	279168	8.91	69717[d]	11.13
TC52720-4	149883	5.01	477026	5.80	369775	8.91	123471	11.13
ZZZZZZ	150846	5.01	469597	5.80	388859	8.91	215168	11.13
ZZZZZZ	156555	5.01	492259	5.80	436218	8.91	232670	11.13
TC52929-1	157531	5.01	488568	5.80	426419	8.91	224721	11.13
TC52929-1MS	155577	5.01	478294	5.80	425521	8.91	217351	11.13
TC52929-1MSD	155267	5.01	478358	5.80	429150	8.91	220049	11.13
ZZZZZZ	162496	5.01	514487	5.80	465130	8.91	252683	11.13
ZZZZZZ	169038	5.01	536188	5.79	483496	8.91	260621	11.13
ZZZZZZ	163680	5.01	525478	5.80	470006	8.91	251400	11.13
ZZZZZZ	163913	5.01	517755	5.80	473458	8.91	257030	11.13
ZZZZZZ	159285	5.01	513600	5.80	465658	8.91	251198	11.13
ZZZZZZ	164099	5.00	518099	5.79	463801	8.91	235209	11.13
ZZZZZZ	161614	5.01	517225	5.80	455374	8.91	234507	11.13
ZZZZZZ	163476	5.01	518470	5.80	465788	8.91	243576	11.13
ZZZZZZ	157494	5.01	500460	5.80	438293	8.91	221073	11.13
ZZZZZZ	159354	5.01	511107	5.80	468245	8.91	246095	11.13
ZZZZZZ	169485	5.01	534828	5.80	492297	8.91	270733	11.13
ZZZZZZ	167062	5.01	534273	5.80	474190	8.91	249527	11.13
ZZZZZZ	162283	5.00	521676	5.79	472174	8.91	250125	11.13

IS 1 = Pentafluorobenzene
IS 2 = 1,4-Difluorobenzene
IS 3 = Chlorobenzene-D5
IS 4 = 1,4-Dichlorobenzene-d4

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.
(c) Confirmation run.
(d) Outside control limits due to matrix interference. Confirmed by reanalysis.

Volatile Surrogate Recovery Summary

Job Number: TC52720
Account: RFWTXHO Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Method: SW846 8260C **Matrix:** SO

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4
TC52720-1	Y1070027.D	82	109	118	70
TC52720-1	Y1069989.D	82	109	120	73
TC52720-2	Y1069990.D	79	94	90	73
TC52720-3	Y1069991.D	81	90	80	78
TC52720-4	Y1070028.D	81	98	103	70
TC52720-5	Y1070008.D	81	90	82	79
TC52252-1MS	Y1069979.D	80	92	85	71
TC52252-1MSD	Y1069980.D	74	91	83	72
TC52429-2MS	Y1070003.D	74	88	80	71
TC52429-2MSD	Y1070004.D	76	86	78	71
TC52929-1MS	Y1070032.D	74	87	79	67
TC52929-1MSD	Y1070033.D	75	87	79	68
VY3712-BS	Y1069969.D	84	87	80	73
VY3712-MB	Y1069971.D	80	89	78	75
VY3713-BS	Y1069997.D	84	87	79	75
VY3713-MB	Y1069999.D	80	88	77	75
VY3714-BS	Y1070024.D	77	86	82	72
VY3714-MB	Y1070026.D	75	83	73	68

Surrogate Compounds	Recovery Limits
S1 = Dibromofluoromethane	59-126%
S2 = Toluene-D8	70-139%
S3 = 4-Bromofluorobenzene	63-138%
S4 = 1,2-Dichloroethane-D4	54-123%

Initial Calibration Summary

Job Number: TC52720
Account: RFWTXHO Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Sample: VY3708-ICC3708
Lab FileID: Y1069872.D

Response Factor Report MSY

Method : C:\msdchem\1\METHODS\vy3708Ccs.m (RTE Integrator)
Title : SW846 8260B and EPA624
Last Update : Wed Aug 06 14:13:01 2014
Response via : Initial Calibration

Calibration Files
4 =Y1069869.D 10 =Y1069870.D 40 =Y1069872.D 20 =Y1069871.D
100 =Y1069874.D 200 =Y1069875.D 70 =Y1069873.D =

Compound	4	10	40	20	100	200	70	Avg	%RSD
1) I Pentafluorobenzene	----------ISTD----------								
2) Dichlorodifl	0.945	0.841	1.013	1.044	1.024	1.179	1.005	1.007	10.16
3) Chloromethan	1.447	1.289	1.421	1.358	1.391	1.530	1.368	1.401	5.43
4) 1,3-Butadien	0.859	0.742	0.866	0.838	0.798	0.926	0.831	0.837	6.88
5) Vinyl Chlori	1.291	1.167	1.306	1.276	1.266	1.406	1.252	1.281	5.57
6) Bromomethane	0.862	0.810	0.824	0.814	0.715	0.696	0.742	0.780	7.98
7) Ethylene Oxi	0.171	0.201	0.218	0.206	0.187	0.156	0.182	0.189	11.31
8) Chloroethane	0.587	0.540	0.564	0.553	0.515	0.509	0.524	0.542	5.19
9) Vinyl Bromid	0.696	0.650	0.710	0.682	0.675	0.721	0.672	0.687	3.52
10) Trichloroflu	1.393	1.247	1.370	1.397	1.312	1.427	1.303	1.350	4.74
11) Ethyl Alcoho		0.001	0.002	0.000	0.004	0.004	0.004	0.003	70.02
12) Ethyl Ether	0.658	0.688	0.776	0.730	0.739	0.755	0.697	0.720	5.75
13) Propylene Ox	0.117	0.150	0.173	0.155	0.172	0.170	0.152	0.156	12.64
14) Acrolein	0.073	0.080	0.090	0.083	0.087	0.088	0.076	0.083	7.68
15) 1,1-Dichloro	1.294	1.175	1.301	1.249	1.213	1.358	1.255	1.264	4.78
16) Freon 113	0.813	0.709	0.839	0.854	0.763	0.899	0.809	0.812	7.63
17) Acetone	0.201	0.182	0.197	0.184	0.185	0.177	0.164	0.184	6.72
18) Iodomethane	1.698	1.671	1.821	1.730	1.698	1.872	1.719	1.744	4.22
19) Isopropyl Al	0.043	0.042	0.047	0.044	0.044	0.042	0.040	0.043	5.58
20) Methyl Aceta	0.499	0.543	0.607	0.559	0.574	0.558	0.511	0.550	6.68
21) Carbon Disul	2.993	2.765	2.998	2.901	2.763	3.081	2.842	2.906	4.23
22) Methylene Ch	1.856	1.560	1.405	1.456	1.258	1.321	1.266	1.446	14.56
23) Tert Butyl A	0.066	0.069	0.078	0.073	0.074	0.075	0.070	0.072	5.75
24) Allyl Chlori	0.524	0.540	0.590	0.561	0.560	0.612	0.571	0.565	5.23
25) Acetonitrile	0.354	0.350	0.377	0.363	0.357	0.383	0.351	0.362	3.63
26) trans-1,2-Di	1.306	1.261	1.351	1.279	1.252	1.379	1.278	1.301	3.66
27) Acrylonitril	0.219	0.245	0.278	0.253	0.270	0.267	0.236	0.253	8.16
28) Methyl Tert	2.176	2.372	2.645	2.441	2.516	2.567	2.339	2.436	6.45
29) Hexane	1.134	0.915	1.065	1.077	0.962	1.163	1.010	1.046	8.56
30) 1,1-Dichloro	1.696	1.635	1.794	1.694	1.705	1.879	1.692	1.728	4.72
31) Vinyl Acetat	1.394	1.470	1.652	1.532	1.571	1.590	1.482	1.527	5.63
32) Di-isopropyl	2.848	2.921	3.228	3.052	3.046	3.208	3.007	3.044	4.56
33) Chloroprene	1.337	1.255	1.346	1.305	1.240	1.382	1.278	1.306	3.97
34) Ethyl tert-b	2.626	2.733	3.061	2.862	2.969	3.154	2.819	2.889	6.41
35) 2,2-Dichloro	1.318	1.267	1.355	1.290	1.283	1.431	1.307	1.322	4.23
36) cis-1,2-Dich	1.068	1.084	1.169	1.111	1.095	1.192	1.092	1.116	4.16
37) Ethyl Acetat	0.579	0.632	0.694	0.643	0.668	0.675	0.583	0.639	6.98
38) 2-Butanone	0.276	0.296	0.333	0.306	0.317	0.298	0.277	0.301	6.89
39) Propionitril	0.080	0.088	0.103	0.092	0.098	0.099	0.086	0.092	8.91
40) Methacryloni	0.396	0.424	0.473	0.437	0.451	0.438	0.405	0.432	6.14
41) Bromochlorom	0.495	0.521	0.571	0.537	0.535	0.568	0.524	0.536	5.02
42) Chloroform	1.784	1.726	1.788	1.743	1.686	1.837	1.681	1.749	3.26
43) Tetrahydrofu	0.255	0.276	0.301	0.280	0.288	0.217	0.251	0.267	10.55
44) 1,1,1-Trichl	1.482	1.376	1.476	1.427	1.407	1.592	1.416	1.454	4.93
45) Dibromofluor	1.098	1.058	1.131	1.083	1.093	1.174	1.049	1.098	3.94
46) Cyclohexane	1.773	1.362	1.448	1.471	1.307	1.548	1.367	1.468	10.66

Initial Calibration Summary

Job Number: TC52720 **Sample:** VY3708-ICC3708
Account: RFWTXHO Weston Solutions **Lab FileID:** Y1069872.D
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

47)	1,1-Dichloro	1.299	1.161	1.260	1.221	1.178	1.331	1.188	1.234	5.22
48)	I 1,4-Difluorobenzene	----------ISTD----------								
49)	Carbon Tetra	0.449	0.401	0.407	0.397	0.386	0.402	0.413	0.408	4.94
50)	1,2-Dichloro	0.328	0.324	0.327	0.314	0.317	0.304	0.310	0.318	2.85
51)	Benzene	1.308	1.276	1.276	1.222	1.204	1.199	1.271	1.251	3.37
52)	Isobutyl Alc	0.008	0.010	0.010	0.009	0.011	0.009	0.009	0.010	8.18
53)	1,2-Dichloro	0.345	0.365	0.367	0.349	0.350	0.331	0.352	0.351	3.49
54)	2,2,4-Trimet	1.019	0.859	0.927	0.956	0.887	0.950	0.939	0.934	5.51
55)	tert-amyl me	0.806	0.850	0.884	0.834	0.856	0.808	0.841	0.840	3.27
56)	Crotonaldehy	0.133	0.142	0.146	0.137	0.141	0.124	0.132	0.136	5.58
57)	n-Butyl Alco	0.005	0.005	0.007	0.006	0.007	0.006	0.006	0.006	13.74
58)	Trichloroeth	0.338	0.326	0.325	0.313	0.313	0.319	0.328	0.323	2.73
59)	Methylcycloh	0.492	0.423	0.457	0.466	0.431	0.463	0.470	0.457	5.13
60)	Methyl Metha	0.176	0.193	0.211	0.193	0.203	0.185	0.193	0.193	5.98
61)	1,2-Dichloro	0.324	0.330	0.337	0.317	0.325	0.318	0.335	0.327	2.41
62)	Dibromometha	0.179	0.190	0.197	0.185	0.191	0.181	0.187	0.187	3.36
63)	1,4-Dioxane	0.002	0.002	0.002	0.002	0.003	0.003	0.003	0.002	12.53
64)	Bromodichlor	0.419	0.434	0.451	0.427	0.436	0.433	0.446	0.435	2.47
65)	2-Nitropropa	0.047	0.054	0.058	0.053	0.058	0.053	0.053	0.054	6.88
66)	2-Chloroethy	0.232	0.251	0.266	0.249	0.258	0.240	0.250	0.249	4.41
67)	1-Bromo-2-Ch	0.373	0.404	0.429	0.401	0.418	0.391	0.404	0.403	4.53
68)	Epichlorohyd	0.031	0.033	0.035	0.033	0.034	0.032	0.032	0.033	3.83
69)	4-Methyl-2-p	0.213	0.240	0.252	0.229	0.243	0.213	0.223	0.230	6.59
70)	cis-1,3-Dich	0.513	0.542	0.560	0.531	0.545	0.535	0.552	0.540	2.83
71)	I Chlorobenzene-d5	----------ISTD----------								
72)	Toluene-d8	1.477	1.360	1.316	1.303	1.245	1.197	1.302	1.314	6.76
73)	Toluene	1.519	1.470	1.422	1.398	1.313	1.291	1.413	1.404	5.74
74)	Ethyl Methac	0.329	0.357	0.384	0.356	0.381	0.346	0.362	0.359	5.34
75)	trans-1,3-Di	0.412	0.442	0.474	0.445	0.465	0.451	0.462	0.450	4.48
76)	1,1,2-Trichl	0.241	0.243	0.250	0.240	0.239	0.220	0.237	0.239	3.82
77)	Tetrachloroe	0.414	0.381	0.383	0.368	0.358	0.373	0.386	0.380	4.68
78)	2-hexanone	0.155	0.172	0.179	0.167	0.173	0.149	0.157	0.165	6.74
79)	1,3-Dichloro	0.457	0.471	0.471	0.462	0.452	0.421	0.450	0.455	3.75
80)	Dibromochlor	0.343	0.362	0.381	0.360	0.374	0.361	0.371	0.364	3.34
81)	n-Butyl Acet	0.361	0.396	0.411	0.385	0.399	0.355	0.371	0.383	5.50
82)	1,2-Dibromoe	0.269	0.290	0.293	0.279	0.283	0.267	0.278	0.280	3.55
83)	1-Chlorohexa	0.475	0.417	0.426	0.425	0.403	0.412	0.436	0.428	5.45
84)	Chlorobenzen	1.006	0.994	1.009	0.976	0.959	0.936	1.012	0.984	2.92
85)	1,1,1,2-Tetr	0.352	0.361	0.375	0.353	0.363	0.362	0.374	0.363	2.46
86)	Ethylbenzene	1.636	1.571	1.537	1.503	1.433	1.422	1.523	1.518	4.95
87)	m,p-Xylene	1.272	1.232	1.186	1.174	1.109	1.088	1.182	1.178	5.47
88)	o-Xylene	1.359	1.359	1.349	1.314	1.282	1.262	1.352	1.325	3.00
89)	Styrene	1.020	1.036	1.056	1.025	0.993	0.962	1.041	1.019	3.12
90)	Bromoform	0.224	0.238	0.253	0.236	0.254	0.246	0.243	0.242	4.32
91)	I 1,4-Dichlorobenzene-d	----------ISTD----------								
92)	Isopropylben	3.245	3.139	3.225	3.086	3.114	3.083	3.298	3.170	2.69
93)	Cyclohexanon	0.015	0.016	0.018	0.017	0.018	0.016	0.017	0.017	6.88
94)	4-Bromofluor	1.123	0.996	0.999	0.960	0.969	0.938	0.983	0.995	6.04
95)	Bromobenzene	0.829	0.818	0.874	0.819	0.856	0.845	0.878	0.845	2.96
96)	1,1,2,2-Tetr	0.673	0.719	0.752	0.701	0.735	0.663	0.696	0.705	4.55
97)	Trans-1,4-Di	0.151	0.166	0.181	0.166	0.176	0.161	0.163	0.166	5.97
98)	1,2,3-Trichl	0.159	0.179	0.182	0.171	0.178	0.163	0.167	0.171	5.09
99)	n-Propylbenz	3.683	3.393	3.423	3.309	3.226	3.202	3.427	3.381	4.78
100)	2-Chlorotolu	2.345	2.194	2.153	2.082	2.090	2.064	2.190	2.160	4.49
101)	4-Chlorotolu	2.528	2.409	2.425	2.348	2.304	2.256	2.409	2.383	3.75
102)	1,3,5-Trimet	2.564	2.537	2.575	2.460	2.455	2.443	2.573	2.515	2.39
103)	alpha-Methyl	1.404	1.400	1.480	1.393	1.456	1.453	1.513	1.443	3.16

Initial Calibration Summary

Job Number: TC52720 **Sample:** VY3708-ICC3708
Account: RFWTXHO Weston Solutions **Lab FileID:** Y1069872.D
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

104)	Pentachloroe	0.512	0.535	0.555	0.525	0.559	0.535	0.550	0.539	3.16
105)	sec-Butylben	3.450	3.302	3.383	3.211	3.244	3.251	3.429	3.324	2.89
106)	1,3-Dichloro	1.583	1.556	1.575	1.508	1.532	1.518	1.593	1.552	2.15
107)	4-Isopropylt	2.778	2.724	2.731	2.655	2.614	2.616	2.776	2.699	2.62
108)	1,4-Dichloro	1.615	1.522	1.501	1.443	1.449	1.434	1.496	1.494	4.19
109)	tert-Butylbe	1.493	1.425	1.421	1.368	1.371	1.367	1.448	1.413	3.39
110)	Dicyclopenta	3.379	3.170	3.152	3.062	2.954	2.909	3.125	3.107	5.00
111)	Benzyl Chlor	2.047	2.335	2.586	2.322	2.623	2.442	2.489	2.406	8.11
112)	p-Diethylben	1.704	1.657	1.643	1.579	1.561	1.587	1.655	1.626	3.18
113)	n-Butylbenze	3.061	2.856	2.776	2.751	2.572	2.563	2.776	2.765	6.17
114)	1,2-Dichloro	1.483	1.506	1.551	1.467	1.478	1.427	1.521	1.490	2.68
115)	1,2,4-Trimet	2.536	2.531	2.469	2.414	2.362	2.341	2.484	2.448	3.19
116)	Hexachloroet	0.519	0.538	0.561	0.547	0.569	0.585	0.590	0.559	4.54
117)	1,2-Dibromo-	0.099	0.118	0.128	0.112	0.133	0.122	0.119	0.119	9.30
118)	1,2,4-Trichl	1.144	1.207	1.237	1.155	1.222	1.199	1.275	1.205	3.78
119)	1,3-Diethylb	1.704	1.657	1.643	1.579	1.561	1.587	1.655	1.626	3.18
120)	Hexachlorobu	0.673	0.660	0.674	0.655	0.665	0.694	0.722	0.678	3.42
121)	Naphthalene	2.164	2.350	2.434	2.256	2.374	2.195	2.347	2.303	4.32
122)	1,2,3-Trichl	1.070	1.136	1.165	1.091	1.131	1.108	1.186	1.127	3.61

123) I 1,4-Dichlorobenzene-d ----------ISTD----------

124)	TPH-GRO (C6-	5.237	5.237	0.00

(#) = Out of Range ### Number of calibration levels exceeded format ###

vy3708Ccs.m Wed Aug 06 15:22:00 2014

6.7.1

6

Initial Calibration Verification

Job Number: TC52720 **Sample:** VY3708-ICV3708
Account: RFWTXHO Weston Solutions **Lab FileID:** Y1069877.D
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\vy3708\Y1069877.D Vial: 14
Acq On : 6 Aug 2014 2:45 pm Operator: kaths
Sample : icv3708-40 Inst : MSY
Misc : ms15947,vy3708,5.,,,5,,soil Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\msdchem\1\METHODS\vy3708Ccs.m (RTE Integrator)
Title : SW846 8260B and EPA624
Last Update : Wed Aug 06 14:13:01 2014
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	Pentafluorobenzene	1.000	1.000	0.0	107	0.00	5.01
2	p	Dichlorodifluoromethane	1.007	0.765	24.0	81	0.00	1.34
3	P	Chloromethane	1.401	1.267	9.6	95	0.00	1.43
4		1,3-Butadiene	0.837	0.968	-15.7	119	0.00	1.56
5	p	Vinyl Chloride	1.281	1.128	11.9	92	0.00	1.54
6	p	Bromomethane	0.780	0.693	11.2	90	0.00	1.82
7		Ethylene Oxide	0.189	0.197	-4.2	96	0.01	1.82
8	p	Chloroethane	0.542	0.581	-7.2	110	0.00	1.91
9		Vinyl Bromide	0.687	0.646	6.0	97	0.00	2.10
10	p	Trichlorofluoromethane	1.350	1.187	12.1	92	0.00	2.19
11		Ethyl Alcohol	0.003	0.002	33.3#	120	0.00	2.43
12		Ethyl Ether	0.720	0.631	12.4	87	0.00	2.43
13		Propylene Oxide	0.156	0.157	-0.6	97	0.00	2.49
14		Acrolein	0.083	0.052	37.3#	61	0.00	2.55
15	p	1,1-Dichloroethene	1.264	1.282	-1.4	105	0.00	2.64
16	p	Freon 113	0.812	0.844	-3.9	107	0.00	2.68
17	p	Acetone	0.184	0.172	6.5	93	0.00	2.71
18		Iodomethane	1.744	1.782	-2.2	104	0.00	2.78
19		Isopropyl Alcohol	0.043	0.048	-11.6	108	0.00	2.88
20	p	Methyl Acetate	0.550	0.495	10.0	87	0.00	3.03
21	p	Carbon Disulfide	2.906	2.855	1.8	102	0.00	2.84
22	p	Methylene Chloride	1.446	1.380	4.6	105	0.00	3.13
23		Tert Butyl Alcohol	0.072	0.063	12.5	87	0.00	2.43
24		Allyl Chloride	0.565	0.555	1.8	100	0.00	3.00
25		Acetonitrile	0.362	0.353	2.5	100	0.00	3.00
26	p	trans-1,2-Dichloroethene	1.301	1.328	-2.1	105	0.00	3.40
27		Acrylonitrile	0.253	0.252	0.4	97	0.00	3.37
28	p	Methyl Tert Butyl Ether	2.436	2.502	-2.7	101	0.00	3.42
29		Hexane	1.046	1.084	-3.6	108	0.00	3.68
30	P	1,1-Dichloroethane	1.728	1.757	-1.7	104	0.00	3.82
31		Vinyl Acetate	1.527	2.908	-90.4#	188	0.00	3.90
32		Di-isopropyl ether	3.044	3.153	-3.6	104	0.00	3.92
33		Chloroprene	1.306	1.262	3.4	100	0.00	3.92
34		Ethyl tert-butyl ether	2.889	2.918	-1.0	102	0.00	4.30
35		2,2-Dichloropropane	1.322	1.331	-0.7	105	0.00	4.43
36	p	cis-1,2-Dichloroethene	1.116	1.131	-1.3	103	0.00	4.43
37		Ethyl Acetate	0.639	0.641	-0.3	99	0.00	4.54
38	p	2-Butanone	0.301	0.289	4.0	93	0.00	4.45
39		Propionitrile	0.092	0.094	-2.2	97	0.00	4.52
40		Methacrylonitrile	0.432	0.438	-1.4	99	0.00	4.68
41		Bromochloromethane	0.536	0.539	-0.6	101	0.00	4.68
42	p	Chloroform	1.749	1.728	1.2	103	0.00	4.77

Initial Calibration Verification

Job Number: TC52720 **Sample:** VY3708-ICV3708
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Project: CES- Chemical Spill/4904 Griggs, Houston, TX

43		Tetrahydrofuran	0.267	0.199	25.5	71	0.00	4.73
44	p	1,1,1-Trichloroethane	1.454	1.447	0.5	105	0.00	4.96
45	S	Dibromofluoromethane	1.098	1.103	-0.5	104	0.00	4.94
46	p	Cyclohexane	1.468	1.489	-1.4	110	0.00	5.01
47		1,1-Dichloropropene	1.234	1.253	-1.5	106	0.00	5.13
48	I	1,4-Difluorobenzene	1.000	1.000	0.0	102	0.00	5.80
49	p	Carbon Tetrachloride	0.408	0.416	-2.0	105	0.00	5.13
50	S	1,2-Dichloroethane-d4	0.318	0.302	5.0	94	0.00	5.30
51	p	Benzene	1.251	1.302	-4.1	104	0.00	5.35
52		Isobutyl Alcohol	0.010	0.010	0.0	93	0.00	5.32
53	p	1,2-Dichloroethane	0.351	0.367	-4.6	102	0.00	5.38
54		2,2,4-Trimethylpentane	0.934	0.966	-3.4	107	0.00	5.46
55		tert-amyl methyl ether	0.840	0.840	0.0	97	0.00	5.50
56		Crotonaldehyde	0.136	0.141	-3.7	99	0.00	4.68
57		n-Butyl Alcohol	0.006	0.006	0.0	98	0.00	6.06
58	p	Trichloroethene	0.323	0.325	-0.6	102	0.00	6.08
59	p	Methylcyclohexane	0.457	0.501	-9.6	112	0.00	6.29
60		Methyl Methacrylate	0.193	0.207	-7.3	100	0.00	6.50
61	p	1,2-Dichloropropane	0.327	0.339	-3.7	103	0.00	6.33
62		Dibromomethane	0.187	0.195	-4.3	101	0.00	6.46
63		1,4-Dioxane	0.002	0.002	0.0	103	0.00	6.50
64	p	Bromodichloromethane	0.435	0.447	-2.8	101	0.00	6.65
65		2-Nitropropane	0.054	0.053	1.9	93	0.00	6.92
66		2-Chloroethyl vinyl ether	0.249	0.255	-2.4	98	0.00	7.01
67		1-Bromo-2-Chloroethane	0.403	0.412	-2.2	98	0.00	7.01
68		Epichlorohydrin	0.033	0.033	0.0	98	0.00	7.02
69	p	4-Methyl-2-pentanone	0.230	0.222	3.5	90	0.00	7.34
70	p	cis-1,3-Dichloropropene	0.540	0.547	-1.3	100	0.00	7.16
71	I	Chlorobenzene-d5	1.000	1.000	0.0	102	0.00	8.91
72	S	Toluene-d8	1.314	1.480	-12.6	115	0.00	7.44
73	p	Toluene	1.404	1.459	-3.9	105	0.00	7.51
74		Ethyl Methacrylate	0.359	0.381	-6.1	102	0.00	7.88
75	p	trans-1,3-Dichloropropene	0.450	0.494	-9.8	107	0.00	7.76
76	p	1,1,2-Trichloroethane	0.239	0.245	-2.5	100	0.00	7.94
77	p	Tetrachloroethene	0.380	0.423	-11.3	113	0.00	8.08
78	p	2-hexanone	0.165	0.158	4.2	90	0.00	8.22
79		1,3-Dichloropropane	0.455	0.476	-4.6	103	0.00	8.11
80	p	Dibromochloromethane	0.364	0.378	-3.8	102	0.00	8.34
81		n-Butyl Acetate	0.383	0.386	-0.8	96	0.00	8.36
82	p	1,2-Dibromoethane	0.280	0.295	-5.4	103	0.00	8.44
83		1-Chlorohexane	0.428	0.423	1.2	101	0.00	8.94
84	P	Chlorobenzene	0.984	0.994	-1.0	101	0.00	8.94
85		1,1,1,2-Tetrachloroethane	0.363	0.382	-5.2	104	0.00	9.03
86	p	Ethylbenzene	1.518	1.570	-3.4	105	0.00	9.06
87	p	m,p-Xylene	1.178	1.204	-2.2	104	0.00	9.18
88	p	o-Xylene	1.325	1.329	-0.3	101	0.00	9.56
89	p	Styrene	1.019	1.096	-7.6	106	0.00	9.57
90	P	Bromoform	0.242	0.249	-2.9	101	0.00	9.74
91	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	102	0.00	11.13
92	p	Isopropylbenzene	3.170	3.216	-1.5	102	0.00	9.91
93		Cyclohexanone	0.017	0.030	-76.5#	174	0.00	9.99
94	S	4-Bromofluorobenzene	0.995	1.044	-4.9	107	0.00	10.05
95		Bromobenzene	0.845	0.895	-5.9	105	0.00	10.19
96	P	1,1,2,2-Tetrachloroethane	0.705	0.741	-5.1	101	0.00	10.20
97		Trans-1,4-Dichloro-2-bute	0.166	0.160	3.6	91	0.00	10.26
98		1,2,3-Trichloropropane	0.171	0.182	-6.4	103	0.00	10.24
99		n-Propylbenzene	3.381	3.378	0.1	101	0.00	10.30

Initial Calibration Verification

Job Number: TC52720 **Sample:** VY3708-ICV3708
Account: RFWTXHO Weston Solutions **Lab FileID:** Y1069877.D
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

100		2-Chlorotoluene	2.160	2.118	1.9	101	0.00	10.38
101		4-Chlorotoluene	2.383	2.410	-1.1	102	0.00	10.48
102		1,3,5-Trimethylbenzene	2.515	2.536	-0.8	101	0.00	10.47
103		alpha-Methylstyrene	1.443	1.459	-1.1	101	0.00	10.68
104		Pentachloroethane	0.539	0.530	1.7	98	0.00	10.78
105		sec-Butylbenzene	3.324	3.284	1.2	99	0.00	10.98
106	p	1,3-Dichlorobenzene	1.552	1.570	-1.2	102	0.00	11.07
107		4-Isopropyltoluene	2.699	2.752	-2.0	103	0.00	11.12
108	p	1,4-Dichlorobenzene	1.494	1.510	-1.1	103	0.00	11.16
109		tert-Butylbenzene	1.413	1.388	1.8	100	0.00	10.77
110		Dicyclopentadiene	3.107	3.198	-2.9	104	0.00	11.17
111		Benzyl Chloride	2.406	2.254	6.3	89	0.00	11.28
112		p-Diethylbenzene	1.626	1.590	2.2	99	0.00	11.47
113		n-Butylbenzene	2.765	2.745	0.7	101	0.00	11.49
114	p	1,2-Dichlorobenzene	1.490	1.530	-2.7	101	0.00	11.50
115		1,2,4-Trimethylbenzene	2.448	2.534	-3.5	105	0.00	10.82
116		Hexachloroethane	0.559	0.478	14.5	87	0.00	11.73
117	p	1,2-Dibromo-3-Chloropropa	0.119	0.125	-5.0	100	0.00	12.21
118	p	1,2,4-Trichlorobenzene	1.205	1.249	-3.7	103	0.00	12.96
119		1,3-Diethylbenzene	1.626	1.590	2.2	99	0.00	11.47
120		Hexachlorobutadiene	0.678	0.700	-3.2	106	0.00	13.11
121		Naphthalene	2.303	2.440	-5.9	102	0.00	13.18
122		1,2,3-Trichlorobenzene	1.127	1.176	-4.3	103	0.00	13.39
123	I	1,4-Dichlorobenzene-d4a	1.000	1.000	0.0	102	0.00	11.13
124	H	TPH-GRO (C6-C10)	5.237	5.334	-1.9	104	0.00	7.08

(#) = Out of Range SPCC's out = 0 CCC's out = 0
Y1069872.D vy3708Ccs.m Wed Aug 06 15:21:27 2014

6.7.2

6

Continuing Calibration Summary

Job Number: TC52720 **Sample:** VY3712-CC3708
Account: RFWTXHO Weston Solutions **Lab FileID:** Y1069968.D
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\vy3712\Y1069968.D Vial: 2
Acq On : 8 Aug 2014 10:00 am Operator: caitlinf
Sample : cc3708-20 Inst : MSY
Misc : ms15963,vy3712,5.,,,5,,soil Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\msdchem\1\METHODS\vy3708Ccs.m (RTE Integrator)
Title : SW846 8260B and EPA624
Last Update : Wed Aug 06 14:13:01 2014
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	Pentafluorobenzene	1.000	1.000	0.0	108	0.00	5.01
2	p	Dichlorodifluoromethane	1.007	0.832	17.4	86	0.00	1.34
3	P	Chloromethane	1.401	1.330	5.1	106	0.00	1.43
4		1,3-Butadiene	0.837	0.775	7.4	100	0.00	1.56
5	p	Vinyl Chloride	1.281	1.189	7.2	100	0.00	1.55
6	p	Bromomethane	0.780	0.786	-0.8	104	0.01	1.83
7		Ethylene Oxide	0.189	0.210	-11.1	110	0.02	1.83
8	p	Chloroethane	0.542	0.542	0.0	106	0.01	1.92
9		Vinyl Bromide	0.687	0.661	3.8	104	0.00	2.10
10	p	Trichlorofluoromethane	1.350	1.203	10.9	93	0.00	2.19
11		Ethyl Alcohol	0.003	0.003	0.0	1289#	0.00	2.43
12		Ethyl Ether	0.720	0.738	-2.5	109	0.01	2.44
13		Propylene Oxide	0.156	0.170	-9.0	118	0.00	2.49
14		Acrolein	0.083	0.086	-3.6	111	0.01	2.56
15	p	1,1-Dichloroethene	1.264	1.235	2.3	107	0.00	2.64
16	p	Freon 113	0.812	0.747	8.0	94	0.01	2.69
17	p	Acetone	0.184	0.192	-4.3	112	0.00	2.71
18		Iodomethane	1.744	1.758	-0.8	110	0.00	2.78
19		Isopropyl Alcohol	0.043	0.049	-14.0	121	0.00	2.88
20	p	Methyl Acetate	0.550	0.585	-6.4	113	0.00	3.04
21	p	Carbon Disulfide	2.906	2.856	1.7	106	0.01	2.85
22	p	Methylene Chloride	1.446	1.349	6.7	100	0.00	3.13
23		Tert Butyl Alcohol	0.072	0.074	-2.8	109	0.01	2.44
24		Allyl Chloride	0.565	0.570	-0.9	110	0.00	3.00
25		Acetonitrile	0.362	0.372	-2.8	110	0.00	3.00
26	p	trans-1,2-Dichloroethene	1.301	1.318	-1.3	111	0.00	3.41
27		Acrylonitrile	0.253	0.264	-4.3	112	0.00	3.38
28	p	Methyl Tert Butyl Ether	2.436	2.477	-1.7	109	0.01	3.42
29		Hexane	1.046	0.921	12.0	92	0.00	3.68
30	P	1,1-Dichloroethane	1.728	1.730	-0.1	110	0.00	3.83
31		Vinyl Acetate	1.527	1.536	-0.6	108	0.00	3.90
32		Di-isopropyl ether	3.044	3.027	0.6	107	0.00	3.93
33		Chloroprene	1.306	1.295	0.8	107	0.00	3.92
34		Ethyl tert-butyl ether	2.889	2.856	1.1	108	0.00	4.31
35		2,2-Dichloropropane	1.322	1.285	2.8	107	0.00	4.43
36	p	cis-1,2-Dichloroethene	1.116	1.129	-1.2	110	0.00	4.43
37		Ethyl Acetate	0.639	0.676	-5.8	113	0.00	4.54
38	p	2-Butanone	0.301	0.324	-7.6	114	0.00	4.46
39		Propionitrile	0.092	0.100	-8.7	117	0.01	4.52
40		Methacrylonitrile	0.432	0.458	-6.0	113	0.00	4.68
41		Bromochloromethane	0.536	0.548	-2.2	110	0.00	4.68
42	p	Chloroform	1.749	1.746	0.2	108	0.00	4.78

Continuing Calibration Summary

Job Number: TC52720 **Sample:** VY3712-CC3708
Account: RFWTXHO Weston Solutions **Lab FileID:** Y1069968.D
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

43		Tetrahydrofuran	0.267	0.223	16.5	86	0.00	4.73
44	p	1,1,1-Trichloroethane	1.454	1.400	3.7	106	0.00	4.96
45	S	Dibromofluoromethane	1.098	1.075	2.1	107	0.00	4.94
46	p	Cyclohexane	1.468	1.343	8.5	98	0.00	5.02
47		1,1-Dichloropropene	1.234	1.207	2.2	107	0.00	5.13
48	I	1,4-Difluorobenzene	1.000	1.000	0.0	102	0.00	5.80
49	p	Carbon Tetrachloride	0.408	0.403	1.2	103	0.00	5.14
50	S	1,2-Dichloroethane-d4	0.318	0.332	-4.4	107	0.00	5.30
51	p	Benzene	1.251	1.328	-6.2	110	0.00	5.36
52		Isobutyl Alcohol	0.010	0.011	-10.0	119	0.01	5.33
53	p	1,2-Dichloroethane	0.351	0.379	-8.0	110	0.00	5.38
54		2,2,4-Trimethylpentane	0.934	0.836	10.5	89	0.00	5.46
55		tert-amyl methyl ether	0.840	0.882	-5.0	107	0.00	5.50
56		Crotonaldehyde	0.136	0.152	-11.8	113	0.00	4.68
57		n-Butyl Alcohol	0.006	0.007	-16.7	118	0.00	6.06
58	p	Trichloroethene	0.323	0.339	-5.0	110	0.00	6.08
59	p	Methylcyclohexane	0.457	0.424	7.2	92	0.00	6.29
60		Methyl Methacrylate	0.193	0.204	-5.7	107	0.00	6.50
61	p	1,2-Dichloropropane	0.327	0.338	-3.4	108	0.00	6.33
62		Dibromomethane	0.187	0.197	-5.3	108	0.00	6.46
63		1,4-Dioxane	0.002	0.003	-50.0#	110	0.00	6.50
64	p	Bromodichloromethane	0.435	0.455	-4.6	108	0.00	6.66
65		2-Nitropropane	0.054	0.058	-7.4	110	0.00	6.92
66		2-Chloroethyl vinyl ether	0.249	0.270	-8.4	110	0.00	7.01
67		1-Bromo-2-Chloroethane	0.403	0.437	-8.4	111	0.00	7.01
68		Epichlorohydrin	0.033	0.035	-6.1	109	0.00	7.02
69	p	4-Methyl-2-pentanone	0.230	0.255	-10.9	113	0.00	7.34
70	p	cis-1,3-Dichloropropene	0.540	0.553	-2.4	106	0.00	7.16
71	I	Chlorobenzene-d5	1.000	1.000	0.0	98	0.00	8.91
72	S	Toluene-d8	1.314	1.402	-6.7	105	0.00	7.44
73	p	Toluene	1.404	1.526	-8.7	107	0.00	7.51
74		Ethyl Methacrylate	0.359	0.391	-8.9	107	0.00	7.88
75	p	trans-1,3-Dichloropropene	0.450	0.475	-5.6	104	0.00	7.76
76	p	1,1,2-Trichloroethane	0.239	0.258	-7.9	105	0.00	7.94
77	p	Tetrachloroethene	0.380	0.415	-9.2	110	0.00	8.08
78	p	2-hexanone	0.165	0.185	-12.1	109	0.00	8.22
79		1,3-Dichloropropane	0.455	0.496	-9.0	105	0.00	8.11
80	p	Dibromochloromethane	0.364	0.386	-6.0	105	0.00	8.34
81		n-Butyl Acetate	0.383	0.424	-10.7	107	0.00	8.36
82	p	1,2-Dibromoethane	0.280	0.299	-6.8	105	0.00	8.44
83		1-Chlorohexane	0.428	0.428	0.0	98	0.00	8.94
84	P	Chlorobenzene	0.984	1.024	-4.1	102	0.00	8.94
85		1,1,1,2-Tetrachloroethane	0.363	0.392	-8.0	108	0.00	9.03
86	p	Ethylbenzene	1.518	1.597	-5.2	104	0.00	9.06
87	p	m,p-Xylene	1.178	1.225	-4.0	102	0.00	9.17
88	p	o-Xylene	1.325	1.388	-4.8	103	0.00	9.56
89	p	Styrene	1.019	1.045	-2.6	100	0.00	9.57
90	P	Bromoform	0.242	0.250	-3.3	103	0.00	9.74
91	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	96	0.00	11.13
92	p	Isopropylbenzene	3.170	3.333	-5.1	103	0.00	9.91
93		Cyclohexanone	0.017	0.019	-11.8	110	0.00	9.99
94	S	4-Bromofluorobenzene	0.995	0.995	0.0	99	0.00	10.05
95		Bromobenzene	0.845	0.860	-1.8	100	0.00	10.19
96	P	1,1,2,2-Tetrachloroethane	0.705	0.788	-11.8	108	0.00	10.20
97		Trans-1,4-Dichloro-2-bute	0.166	0.184	-10.8	106	0.00	10.26
98		1,2,3-Trichloropropane	0.171	0.190	-11.1	107	0.00	10.24
99		n-Propylbenzene	3.381	3.480	-2.9	101	0.00	10.30

Continuing Calibration Summary

Job Number: TC52720 **Sample:** VY3712-CC3708
Account: RFWTXHO Weston Solutions **Lab FileID:** Y1069968.D
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

100		2-Chlorotoluene	2.160	2.220	-2.8	102	0.00	10.38
101		4-Chlorotoluene	2.383	2.427	-1.8	99	0.00	10.48
102		1,3,5-Trimethylbenzene	2.515	2.563	-1.9	100	0.00	10.47
103		alpha-Methylstyrene	1.443	1.458	-1.0	100	0.00	10.68
104		Pentachloroethane	0.539	0.532	1.3	97	0.00	10.78
105		sec-Butylbenzene	3.324	3.309	0.5	99	0.00	10.98
106	p	1,3-Dichlorobenzene	1.552	1.556	-0.3	99	0.00	11.07
107		4-Isopropyltoluene	2.699	2.718	-0.7	98	0.00	11.12
108	p	1,4-Dichlorobenzene	1.494	1.479	1.0	98	0.00	11.16
109		tert-Butylbenzene	1.413	1.436	-1.6	100	0.00	10.78
110		Dicyclopentadiene	3.107	3.338	-7.4	104	0.00	11.17
111		Benzyl Chloride	2.406	2.486	-3.3	102	0.00	11.28
112		p-Diethylbenzene	1.626	1.617	0.6	98	0.00	11.47
113		n-Butylbenzene	2.765	2.759	0.2	96	0.00	11.49
114	p	1,2-Dichlorobenzene	1.490	1.526	-2.4	100	0.00	11.50
115		1,2,4-Trimethylbenzene	2.448	2.499	-2.1	99	0.00	10.82
116		Hexachloroethane	0.559	0.561	-0.4	98	0.00	11.73
117	p	1,2-Dibromo-3-Chloropropa	0.119	0.125	-5.0	107	0.00	12.21
118	p	1,2,4-Trichlorobenzene	1.205	1.104	8.4	92	0.00	12.96
119		1,3-Diethylbenzene	1.626	1.617	0.6	98	0.00	11.47
120		Hexachlorobutadiene	0.678	0.606	10.6	89	0.00	13.11
121		Naphthalene	2.303	2.224	3.4	94	0.00	13.18
122		1,2,3-Trichlorobenzene	1.127	1.051	6.7	92	0.00	13.39
123	I	1,4-Dichlorobenzene-d4a	1.000	1.000	0.0	96	0.00	11.13
124	H	TPH-GRO (C6-C10)	5.237	5.397	-3.1	0#	0.00	7.08

(#) = Out of Range SPCC's out = 0 CCC's out = 0
Y1069871.D vy3708Ccs.m Fri Aug 08 13:57:04 2014

6.7.3

6

Continuing Calibration Summary

Job Number: TC52720 **Sample:** VY3713-CC3708
Account: RFWTXHO Weston Solutions **Lab FileID:** Y1069995.D
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\vy3712\Y1069995.D Vial: 29
Acq On : 8 Aug 2014 10:56 pm Operator: caitlinf
Sample : cc3708-40 Inst : MSY
Misc : ms15972,vy3713,5.,,,5,,soil Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\msdchem\1\METHODS\vy3708Ccs.m (RTE Integrator)
Title : SW846 8260B and EPA624
Last Update : Wed Aug 06 14:13:01 2014
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	Pentafluorobenzene	1.000	1.000	0.0	106	0.00	5.01
2	p	Dichlorodifluoromethane	1.007	0.992	1.5	104	0.00	1.34
3	P	Chloromethane	1.401	1.378	1.6	103	0.00	1.43
4		1,3-Butadiene	0.837	0.850	-1.6	104	0.00	1.56
5	p	Vinyl Chloride	1.281	1.294	-1.0	105	0.00	1.54
6	p	Bromomethane	0.780	0.794	-1.8	102	0.01	1.83
7		Ethylene Oxide	0.189	0.205	-8.5	100	0.01	1.82
8	p	Chloroethane	0.542	0.557	-2.8	105	0.00	1.91
9		Vinyl Bromide	0.687	0.691	-0.6	103	0.00	2.10
10	p	Trichlorofluoromethane	1.350	1.354	-0.3	105	0.00	2.19
11		Ethyl Alcohol	0.003	0.003	0.0	125	0.00	2.43
12		Ethyl Ether	0.720	0.736	-2.2	101	0.00	2.43
13		Propylene Oxide	0.156	0.167	-7.1	103	0.01	2.49
14		Acrolein	0.083	0.072	13.3	85	0.00	2.55
15	p	1,1-Dichloroethene	1.264	1.259	0.4	103	0.00	2.64
16	p	Freon 113	0.812	0.816	-0.5	103	0.00	2.68
17	p	Acetone	0.184	0.181	1.6	98	0.00	2.71
18		Iodomethane	1.744	1.751	-0.4	102	0.00	2.78
19		Isopropyl Alcohol	0.043	0.043	0.0	98	0.00	2.88
20	p	Methyl Acetate	0.550	0.565	-2.7	99	0.00	3.04
21	p	Carbon Disulfide	2.906	2.877	1.0	102	0.00	2.84
22	p	Methylene Chloride	1.446	1.294	10.5	98	0.00	3.13
23		Tert Butyl Alcohol	0.072	0.074	-2.8	101	0.00	2.43
24		Allyl Chloride	0.565	0.566	-0.2	102	0.00	3.00
25		Acetonitrile	0.362	0.356	1.7	100	0.00	3.00
26	p	trans-1,2-Dichloroethene	1.301	1.325	-1.8	104	0.00	3.40
27		Acrylonitrile	0.253	0.263	-4.0	101	0.00	3.38
28	p	Methyl Tert Butyl Ether	2.436	2.476	-1.6	99	0.00	3.42
29		Hexane	1.046	1.047	-0.1	104	0.00	3.68
30	P	1,1-Dichloroethane	1.728	1.727	0.1	102	0.00	3.82
31		Vinyl Acetate	1.527	1.478	3.2	95	0.00	3.90
32		Di-isopropyl ether	3.044	3.079	-1.1	101	0.00	3.93
33		Chloroprene	1.306	1.310	-0.3	103	0.00	3.92
34		Ethyl tert-butyl ether	2.889	2.864	0.9	99	0.00	4.30
35		2,2-Dichloropropane	1.322	1.253	5.2	98	0.00	4.43
36	p	cis-1,2-Dichloroethene	1.116	1.133	-1.5	103	0.00	4.43
37		Ethyl Acetate	0.639	0.665	-4.1	102	0.00	4.54
38	p	2-Butanone	0.301	0.292	3.0	93	0.00	4.46
39		Propionitrile	0.092	0.096	-4.3	100	0.00	4.52
40		Methacrylonitrile	0.432	0.447	-3.5	100	0.00	4.68
41		Bromochloromethane	0.536	0.551	-2.8	102	0.00	4.68
42	p	Chloroform	1.749	1.732	1.0	103	0.00	4.78

Continuing Calibration Summary

Job Number: TC52720 **Sample:** VY3713-CC3708
Account: RFWTXHO Weston Solutions **Lab FileID:** Y1069995.D
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

43		Tetrahydrofuran	0.267	0.285	-6.7	101	0.01	4.73
44	p	1,1,1-Trichloroethane	1.454	1.412	2.9	102	0.00	4.96
45	S	Dibromofluoromethane	1.098	1.090	0.7	102	0.00	4.94
46	p	Cyclohexane	1.468	1.423	3.1	104	0.00	5.01
47		1,1-Dichloropropene	1.234	1.211	1.9	102	0.00	5.13
48	I	1,4-Difluorobenzene	1.000	1.000	0.0	103	0.00	5.80
49	p	Carbon Tetrachloride	0.408	0.404	1.0	102	0.00	5.13
50	S	1,2-Dichloroethane-d4	0.318	0.322	-1.3	101	0.00	5.30
51	p	Benzene	1.251	1.279	-2.2	103	0.00	5.36
52		Isobutyl Alcohol	0.010	0.010	0.0	100	0.00	5.32
53	p	1,2-Dichloroethane	0.351	0.364	-3.7	102	0.00	5.38
54		2,2,4-Trimethylpentane	0.934	0.926	0.9	103	0.00	5.46
55		tert-amyl methyl ether	0.840	0.849	-1.1	99	0.00	5.50
56		Crotonaldehyde	0.136	0.143	-5.1	100	0.00	4.68
57		n-Butyl Alcohol	0.006	0.007	-16.7	101	0.00	6.06
58	p	Trichloroethene	0.323	0.327	-1.2	104	0.00	6.08
59	p	Methylcyclohexane	0.457	0.472	-3.3	106	0.00	6.29
60		Methyl Methacrylate	0.193	0.194	-0.5	94	0.00	6.50
61	p	1,2-Dichloropropane	0.327	0.330	-0.9	101	0.00	6.33
62		Dibromomethane	0.187	0.191	-2.1	99	0.00	6.46
63		1,4-Dioxane	0.002	0.002	0.0	105	0.00	6.50
64	p	Bromodichloromethane	0.435	0.440	-1.1	100	0.00	6.66
65		2-Nitropropane	0.054	0.055	-1.9	97	0.00	6.92
66		2-Chloroethyl vinyl ether	0.249	0.255	-2.4	99	0.00	7.01
67		1-Bromo-2-Chloroethane	0.403	0.413	-2.5	99	0.00	7.01
68		Epichlorohydrin	0.033	0.033	0.0	98	0.00	7.02
69	p	4-Methyl-2-pentanone	0.230	0.240	-4.3	98	0.00	7.35
70	p	cis-1,3-Dichloropropene	0.540	0.524	3.0	96	0.00	7.16
71	I	Chlorobenzene-d5	1.000	1.000	0.0	98	0.00	8.91
72	S	Toluene-d8	1.314	1.359	-3.4	102	0.00	7.44
73	p	Toluene	1.404	1.449	-3.2	100	0.00	7.51
74		Ethyl Methacrylate	0.359	0.375	-4.5	96	0.00	7.88
75	p	trans-1,3-Dichloropropene	0.450	0.444	1.3	92	0.00	7.76
76	p	1,1,2-Trichloroethane	0.239	0.247	-3.3	97	0.00	7.94
77	p	Tetrachloroethene	0.380	0.455	-19.7	117	0.00	8.08
78	p	2-hexanone	0.165	0.171	-3.6	94	0.00	8.22
79		1,3-Dichloropropane	0.455	0.463	-1.8	97	0.00	8.11
80	p	Dibromochloromethane	0.364	0.378	-3.8	98	0.00	8.34
81		n-Butyl Acetate	0.383	0.395	-3.1	94	0.00	8.36
82	p	1,2-Dibromoethane	0.280	0.285	-1.8	96	0.00	8.44
83		1-Chlorohexane	0.428	0.425	0.7	98	0.00	8.94
84	P	Chlorobenzene	0.984	1.001	-1.7	98	0.00	8.94
85		1,1,1,2-Tetrachloroethane	0.363	0.382	-5.2	100	0.00	9.03
86	p	Ethylbenzene	1.518	1.533	-1.0	98	0.00	9.06
87	p	m,p-Xylene	1.178	1.187	-0.8	99	0.00	9.17
88	p	o-Xylene	1.325	1.370	-3.4	100	0.00	9.56
89	p	Styrene	1.019	1.050	-3.0	98	0.00	9.57
90	P	Bromoform	0.242	0.249	-2.9	97	0.00	9.74
91	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	98	0.00	11.13
92	p	Isopropylbenzene	3.170	3.309	-4.4	101	0.00	9.91
93		Cyclohexanone	0.017	0.018	-5.9	101	0.00	9.99
94	S	4-Bromofluorobenzene	0.995	0.979	1.6	97	0.00	10.05
95		Bromobenzene	0.845	0.858	-1.5	97	0.00	10.19
96	P	1,1,2,2-Tetrachloroethane	0.705	0.739	-4.8	97	0.00	10.20
97		Trans-1,4-Dichloro-2-bute	0.166	0.165	0.6	90	0.00	10.26
98		1,2,3-Trichloropropane	0.171	0.182	-6.4	99	0.00	10.24
99		n-Propylbenzene	3.381	3.398	-0.5	98	0.00	10.30

Continuing Calibration Summary

Job Number: TC52720 **Sample:** VY3713-CC3708
Account: RFWTXHO Weston Solutions **Lab FileID:** Y1069995.D
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

100		2-Chlorotoluene	2.160	2.186	-1.2	100	0.00	10.38
101		4-Chlorotoluene	2.383	2.368	0.6	96	0.00	10.48
102		1,3,5-Trimethylbenzene	2.515	2.544	-1.2	97	0.00	10.47
103		alpha-Methylstyrene	1.443	1.465	-1.5	97	0.00	10.68
104		Pentachloroethane	0.539	0.426	21.0#	76	0.00	10.79
105		sec-Butylbenzene	3.324	3.339	-0.5	97	0.00	10.98
106	p	1,3-Dichlorobenzene	1.552	1.514	2.4	95	0.00	11.07
107		4-Isopropyltoluene	2.699	2.658	1.5	96	0.00	11.12
108	p	1,4-Dichlorobenzene	1.494	1.440	3.6	94	0.00	11.16
109		tert-Butylbenzene	1.413	1.446	-2.3	100	0.00	10.77
110		Dicyclopentadiene	3.107	3.274	-5.4	102	0.00	11.17
111		Benzyl Chloride	2.406	2.144	10.9	82	0.00	11.28
112		p-Diethylbenzene	1.626	1.561	4.0	94	0.00	11.47
113		n-Butylbenzene	2.765	2.668	3.5	95	0.00	11.49
114	p	1,2-Dichlorobenzene	1.490	1.513	-1.5	96	0.00	11.50
115		1,2,4-Trimethylbenzene	2.448	2.450	-0.1	98	0.00	10.82
116		Hexachloroethane	0.559	0.570	-2.0	100	0.00	11.73
117	p	1,2-Dibromo-3-Chloropropa	0.119	0.124	-4.2	95	0.00	12.21
118	p	1,2,4-Trichlorobenzene	1.205	1.109	8.0	88	0.00	12.96
119		1,3-Diethylbenzene	1.626	1.561	4.0	94	0.00	11.47
120		Hexachlorobutadiene	0.678	0.621	8.4	91	0.00	13.11
121		Naphthalene	2.303	2.351	-2.1	95	0.00	13.18
122		1,2,3-Trichlorobenzene	1.127	1.073	4.8	91	0.00	13.39
123	I	1,4-Dichlorobenzene-d4a	1.000	1.000	0.0	98	0.00	11.13
124	H	TPH-GRO (C6-C10)	5.237	5.384	-2.8	101	0.00	7.08

(#) = Out of Range SPCC's out = 0 CCC's out = 0
Y1069872.D vy3708Ccs.m Mon Aug 11 12:09:37 2014

6.7.4

6

Continuing Calibration Summary

Job Number: TC52720 **Sample:** VY3714-CC3708
Account: RFWTXHO Weston Solutions **Lab FileID:** Y1070023.D
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\vy3714\Y1070023.D Vial: 2
Acq On : 11 Aug 2014 9:36 am Operator: caitlinf
Sample : cc3708-20 Inst : MSY
Misc : ms15972,vy3714,5.,,,5,,soil Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\msdchem\1\METHODS\vy3708Ccs.m (RTE Integrator)
Title : SW846 8260B and EPA624
Last Update : Wed Aug 06 14:13:01 2014
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	Pentafluorobenzene	1.000	1.000	0.0	111	0.00	5.01
2	p	Dichlorodifluoromethane	1.007	0.823	18.3	87	0.00	1.34
3	P	Chloromethane	1.401	1.322	5.6	108	0.00	1.43
4		1,3-Butadiene	0.837	0.802	4.2	106	0.00	1.55
5	p	Vinyl Chloride	1.281	1.193	6.9	104	0.00	1.54
6	p	Bromomethane	0.780	0.808	-3.6	110	0.00	1.82
7		Ethylene Oxide	0.189	0.196	-3.7	105	0.00	1.81
8	p	Chloroethane	0.542	0.555	-2.4	111	0.00	1.91
9		Vinyl Bromide	0.687	0.665	3.2	108	0.00	2.09
10	p	Trichlorofluoromethane	1.350	1.288	4.6	102	-0.01	2.18
11		Ethyl Alcohol	0.003	0.003	0.0	1402#	-0.01	2.41
12		Ethyl Ether	0.720	0.706	1.9	107	0.00	2.42
13		Propylene Oxide	0.156	0.165	-5.8	118	0.00	2.48
14		Acrolein	0.083	0.075	9.6	100	0.00	2.54
15	p	1,1-Dichloroethene	1.264	1.242	1.7	110	0.00	2.63
16	p	Freon 113	0.812	0.775	4.6	101	0.00	2.68
17	p	Acetone	0.184	0.171	7.1	103	-0.01	2.69
18		Iodomethane	1.744	1.705	2.2	109	0.00	2.77
19		Isopropyl Alcohol	0.043	0.041	4.7	103	0.00	2.87
20	p	Methyl Acetate	0.550	0.537	2.4	107	0.00	3.03
21	p	Carbon Disulfide	2.906	2.934	-1.0	112	0.00	2.83
22	p	Methylene Chloride	1.446	1.318	8.9	100	0.00	3.12
23		Tert Butyl Alcohol	0.072	0.071	1.4	107	0.00	2.42
24		Allyl Chloride	0.565	0.566	-0.2	112	0.00	3.00
25		Acetonitrile	0.362	0.370	-2.2	113	0.00	2.99
26	p	trans-1,2-Dichloroethene	1.301	1.345	-3.4	117	0.00	3.39
27		Acrylonitrile	0.253	0.244	3.6	107	0.00	3.37
28	p	Methyl Tert Butyl Ether	2.436	2.391	1.8	109	0.00	3.41
29		Hexane	1.046	0.984	5.9	101	0.00	3.68
30	P	1,1-Dichloroethane	1.728	1.732	-0.2	113	0.00	3.82
31		Vinyl Acetate	1.527	1.501	1.7	109	0.00	3.90
32		Di-isopropyl ether	3.044	3.085	-1.3	112	0.00	3.92
33		Chloroprene	1.306	1.326	-1.5	113	0.00	3.92
34		Ethyl tert-butyl ether	2.889	2.841	1.7	110	0.00	4.29
35		2,2-Dichloropropane	1.322	1.359	-2.8	117	0.00	4.43
36	p	cis-1,2-Dichloroethene	1.116	1.117	-0.1	111	0.00	4.43
37		Ethyl Acetate	0.639	0.614	3.9	106	0.00	4.53
38	p	2-Butanone	0.301	0.281	6.6	102	0.00	4.45
39		Propionitrile	0.092	0.087	5.4	105	0.00	4.51
40		Methacrylonitrile	0.432	0.419	3.0	106	0.00	4.67
41		Bromochloromethane	0.536	0.520	3.0	107	0.00	4.67
42	p	Chloroform	1.749	1.739	0.6	111	0.00	4.77

Continuing Calibration Summary

Job Number: TC52720 **Sample:** VY3714-CC3708
Account: RFWTXHO Weston Solutions **Lab FileID:** Y1070023.D
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

43		Tetrahydrofuran	0.267	0.261	2.2	103	0.00	4.72
44	p	1,1,1-Trichloroethane	1.454	1.424	2.1	111	0.00	4.96
45	S	Dibromofluoromethane	1.098	1.058	3.6	108	0.00	4.94
46	p	Cyclohexane	1.468	1.374	6.4	104	0.00	5.01
47		1,1-Dichloropropene	1.234	1.217	1.4	111	0.00	5.13
48	I	1,4-Difluorobenzene	1.000	1.000	0.0	103	0.00	5.80
49	p	Carbon Tetrachloride	0.408	0.420	-2.9	109	0.00	5.13
50	S	1,2-Dichloroethane-d4	0.318	0.325	-2.2	107	0.00	5.29
51	p	Benzene	1.251	1.323	-5.8	112	0.00	5.35
52		Isobutyl Alcohol	0.010	0.010	0.0	106	0.00	5.32
53	p	1,2-Dichloroethane	0.351	0.373	-6.3	111	0.00	5.38
54		2,2,4-Trimethylpentane	0.934	0.935	-0.1	101	0.00	5.46
55		tert-amyl methyl ether	0.840	0.877	-4.4	109	0.00	5.50
56		Crotonaldehyde	0.136	0.141	-3.7	106	0.00	4.67
57		n-Butyl Alcohol	0.006	0.006	0.0	101	0.00	6.05
58	p	Trichloroethene	0.323	0.344	-6.5	113	0.00	6.07
59	p	Methylcyclohexane	0.457	0.454	0.7	101	0.00	6.29
60		Methyl Methacrylate	0.193	0.195	-1.0	104	0.00	6.50
61	p	1,2-Dichloropropane	0.327	0.340	-4.0	111	0.00	6.33
62		Dibromomethane	0.187	0.189	-1.1	106	0.00	6.45
63		1,4-Dioxane	0.002	0.002	0.0	101	0.00	6.50
64	p	Bromodichloromethane	0.435	0.449	-3.2	109	0.00	6.65
65		2-Nitropropane	0.054	0.054	0.0	106	0.00	6.92
66		2-Chloroethyl vinyl ether	0.249	0.258	-3.6	107	0.00	7.01
67		1-Bromo-2-Chloroethane	0.403	0.412	-2.2	106	0.00	7.01
68		Epichlorohydrin	0.033	0.033	0.0	105	0.00	7.01
69	p	4-Methyl-2-pentanone	0.230	0.233	-1.3	105	0.00	7.34
70	p	cis-1,3-Dichloropropene	0.540	0.549	-1.7	107	0.00	7.15
71	I	Chlorobenzene-d5	1.000	1.000	0.0	100	0.00	8.91
72	S	Toluene-d8	1.314	1.417	-7.8	109	0.00	7.44
73	p	Toluene	1.404	1.540	-9.7	110	0.00	7.51
74		Ethyl Methacrylate	0.359	0.375	-4.5	105	0.00	7.88
75	p	trans-1,3-Dichloropropene	0.450	0.465	-3.3	104	0.00	7.75
76	p	1,1,2-Trichloroethane	0.239	0.249	-4.2	103	0.00	7.94
77	p	Tetrachloroethene	0.380	0.411	-8.2	112	0.00	8.08
78	p	2-hexanone	0.165	0.169	-2.4	101	0.00	8.22
79		1,3-Dichloropropane	0.455	0.473	-4.0	102	0.00	8.11
80	p	Dibromochloromethane	0.364	0.379	-4.1	105	0.00	8.33
81		n-Butyl Acetate	0.383	0.393	-2.6	102	0.00	8.36
82	p	1,2-Dibromoethane	0.280	0.289	-3.2	104	0.00	8.44
83		1-Chlorohexane	0.428	0.459	-7.2	108	0.00	8.94
84	P	Chlorobenzene	0.984	1.045	-6.2	107	0.00	8.94
85		1,1,1,2-Tetrachloroethane	0.363	0.388	-6.9	110	0.00	9.03
86	p	Ethylbenzene	1.518	1.657	-9.2	110	0.00	9.06
87	p	m,p-Xylene	1.178	1.289	-9.4	110	0.00	9.17
88	p	o-Xylene	1.325	1.437	-8.5	109	0.00	9.56
89	p	Styrene	1.019	1.083	-6.3	105	0.00	9.57
90	P	Bromoform	0.242	0.242	0.0	102	0.00	9.74
91	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	98	0.00	11.13
92	p	Isopropylbenzene	3.170	3.459	-9.1	109	0.00	9.91
93		Cyclohexanone	0.017	0.017	0.0	98	0.00	9.99
94	S	4-Bromofluorobenzene	0.995	1.047	-5.2	106	0.00	10.05
95		Bromobenzene	0.845	0.883	-4.5	105	0.00	10.19
96	P	1,1,2,2-Tetrachloroethane	0.705	0.740	-5.0	103	0.00	10.20
97		Trans-1,4-Dichloro-2-bute	0.166	0.174	-4.8	102	0.00	10.26
98		1,2,3-Trichloropropane	0.171	0.180	-5.3	103	0.00	10.24
99		n-Propylbenzene	3.381	3.726	-10.2	110	0.00	10.30

Continuing Calibration Summary

Job Number: TC52720 **Sample:** VY3714-CC3708
Account: RFWTXHO Weston Solutions **Lab FileID:** Y1070023.D
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

100		2-Chlorotoluene	2.160	2.333	-8.0	109	0.00	10.38
101		4-Chlorotoluene	2.383	2.584	-8.4	107	0.00	10.48
102		1,3,5-Trimethylbenzene	2.515	2.739	-8.9	109	0.00	10.47
103		alpha-Methylstyrene	1.443	1.539	-6.7	108	0.00	10.68
104		Pentachloroethane	0.539	0.561	-4.1	104	0.00	10.78
105		sec-Butylbenzene	3.324	3.592	-8.1	109	0.00	10.98
106	p	1,3-Dichlorobenzene	1.552	1.648	-6.2	107	0.00	11.07
107		4-Isopropyltoluene	2.699	2.966	-9.9	109	0.00	11.12
108	p	1,4-Dichlorobenzene	1.494	1.588	-6.3	107	0.00	11.16
109		tert-Butylbenzene	1.413	1.533	-8.5	109	0.00	10.77
110		Dicyclopentadiene	3.107	3.511	-13.0	112	0.00	11.17
111		Benzyl Chloride	2.406	2.588	-7.6	109	0.00	11.28
112		p-Diethylbenzene	1.626	1.755	-7.9	109	0.00	11.47
113		n-Butylbenzene	2.765	3.054	-10.5	108	0.00	11.49
114	p	1,2-Dichlorobenzene	1.490	1.589	-6.6	106	0.00	11.50
115		1,2,4-Trimethylbenzene	2.448	2.680	-9.5	108	0.00	10.82
116		Hexachloroethane	0.559	0.598	-7.0	107	0.00	11.73
117	p	1,2-Dibromo-3-Chloropropa	0.119	0.119	0.0	104	0.00	12.20
118	p	1,2,4-Trichlorobenzene	1.205	1.243	-3.2	105	0.00	12.96
119		1,3-Diethylbenzene	1.626	1.755	-7.9	109	0.00	11.47
120		Hexachlorobutadiene	0.678	0.710	-4.7	106	0.00	13.11
121		Naphthalene	2.303	2.243	2.6	97	0.00	13.18
122		1,2,3-Trichlorobenzene	1.127	1.139	-1.1	102	0.00	13.39
123	I	1,4-Dichlorobenzene-d4a	1.000	1.000	0.0	98	0.00	11.13
124	H	TPH-GRO (C6-C10)	5.237	5.440	-3.9	0#	0.00	7.08

(#) = Out of Range SPCC's out = 0 CCC's out = 0
Y1069871.D vy3708Ccs.m Mon Aug 11 14:25:49 2014

Gulf Coast ACCUTEST LABORATORIES

GC/MS Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Instrument Performance Checks (DFTPP)
- Internal Standard Area Summaries
- Surrogate Recovery Summaries
- Initial and Continuing Calibration Summaries

Method Blank Summary

Job Number: TC52720
Account: RFWTXHO Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP33453-MB	P34907.D	1	08/06/14	SC	08/06/14	OP33453	EP1682

The QC reported here applies to the following samples: **Method:** SW846 8270D

TC52720-1, TC52720-2, TC52720-3, TC52720-4, TC52720-5

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic acid	ND	830	270	ug/kg	
95-57-8	2-Chlorophenol	ND	170	72	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	170	57	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	170	53	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	170	57	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	830	270	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	330	40	ug/kg	
95-48-7	2-Methylphenol	ND	170	73	ug/kg	
	3&4-Methylphenol	ND	170	72	ug/kg	
88-75-5	2-Nitrophenol	ND	170	57	ug/kg	
100-02-7	4-Nitrophenol	ND	830	47	ug/kg	
87-86-5	Pentachlorophenol	ND	830	120	ug/kg	
108-95-2	Phenol	ND	170	76	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	170	52	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	170	44	ug/kg	
83-32-9	Acenaphthene	ND	170	48	ug/kg	
208-96-8	Acenaphthylene	ND	170	45	ug/kg	
62-53-3	Aniline	ND	830	68	ug/kg	
120-12-7	Anthracene	ND	170	42	ug/kg	
92-87-5	Benzidine	ND	6700	3200	ug/kg	
56-55-3	Benzo(a)anthracene	ND	170	66	ug/kg	
50-32-8	Benzo(a)pyrene	ND	170	52	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	170	42	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	170	45	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	170	74	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	170	51	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	170	54	ug/kg	
100-51-6	Benzyl Alcohol	ND	170	66	ug/kg	
91-58-7	2-Chloronaphthalene	ND	170	49	ug/kg	
106-47-8	4-Chloroaniline	ND	170	62	ug/kg	
86-74-8	Carbazole	ND	170	53	ug/kg	
218-01-9	Chrysene	ND	170	71	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	170	52	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	170	74	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	170	64	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	170	64	ug/kg	

Method Blank Summary

Job Number: TC52720
Account: RFWTXHO Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP33453-MB	P34907.D	1	08/06/14	SC	08/06/14	OP33453	EP1682

The QC reported here applies to the following samples: **Method:** SW846 8270D

TC52720-1, TC52720-2, TC52720-3, TC52720-4, TC52720-5

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	170	67	ug/kg	
122-66-7	1,2-Diphenylhydrazine	ND	170	42	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	170	59	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	170	63	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	170	52	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	170	46	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	330	63	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	170	58	ug/kg	
132-64-9	Dibenzofuran	ND	170	55	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	170	53	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	170	44	ug/kg	
84-66-2	Diethyl phthalate	ND	170	49	ug/kg	
131-11-3	Dimethyl phthalate	ND	170	48	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	170	130	ug/kg	
206-44-0	Fluoranthene	ND	170	55	ug/kg	
86-73-7	Fluorene	ND	170	50	ug/kg	
118-74-1	Hexachlorobenzene	ND	170	54	ug/kg	
87-68-3	Hexachlorobutadiene	ND	170	61	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	830	79	ug/kg	
67-72-1	Hexachloroethane	ND	170	61	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	170	61	ug/kg	
78-59-1	Isophorone	ND	170	51	ug/kg	
90-12-0	1-Methylnaphthalene	ND	170	63	ug/kg	
91-57-6	2-Methylnaphthalene	ND	170	63	ug/kg	
88-74-4	2-Nitroaniline	ND	170	52	ug/kg	
99-09-2	3-Nitroaniline	ND	170	49	ug/kg	
100-01-6	4-Nitroaniline	ND	330	55	ug/kg	
91-20-3	Naphthalene	ND	170	60	ug/kg	
98-95-3	Nitrobenzene	ND	170	48	ug/kg	
62-75-9	n-Nitrosodimethylamine	ND	170	52	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	170	68	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	170	47	ug/kg	
85-01-8	Phenanthrene	ND	170	47	ug/kg	
129-00-0	Pyrene	ND	170	75	ug/kg	
110-86-1	Pyridine	ND	170	44	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	170	60	ug/kg	

Method Blank Summary

Job Number: TC52720
Account: RFWTXHO Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP33453-MB	P34907.D	1	08/06/14	SC	08/06/14	OP33453	EP1682

The QC reported here applies to the following samples: **Method:** SW846 8270D

TC52720-1, TC52720-2, TC52720-3, TC52720-4, TC52720-5

CAS No.	Surrogate Recoveries		Limits
367-12-4	2-Fluorophenol	74%	26-124%
4165-62-2	Phenol-d5	78%	19-106%
118-79-6	2,4,6-Tribromophenol	66%	18-129%
4165-60-0	Nitrobenzene-d5	73%	18-104%
321-60-8	2-Fluorobiphenyl	72%	21-114%
1718-51-0	Terphenyl-d14	91%	24-149%

Blank Spike Summary

Job Number: TC52720
Account: RFWTXHO Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP33453-BS	P34908.D	1	08/06/14	SC	08/06/14	OP33453	EP1682

The QC reported here applies to the following samples: **Method:** SW846 8270D

TC52720-1, TC52720-2, TC52720-3, TC52720-4, TC52720-5

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
65-85-0	Benzoic acid	1670	369	22	10-122
95-57-8	2-Chlorophenol	1670	1200	72	49-106
59-50-7	4-Chloro-3-methyl phenol	1670	1310	79	35-116
120-83-2	2,4-Dichlorophenol	1670	1210	73	53-107
105-67-9	2,4-Dimethylphenol	1670	1250	75	51-109
51-28-5	2,4-Dinitrophenol	1670	913	55	30-125
534-52-1	4,6-Dinitro-o-cresol	1670	1230	74	41-125
95-48-7	2-Methylphenol	1670	1210	73	46-105
	3&4-Methylphenol	1670	1230	74	43-120
88-75-5	2-Nitrophenol	1670	1150	69	49-104
100-02-7	4-Nitrophenol	1670	1150	69	29-129
87-86-5	Pentachlorophenol	1670	967	58	36-122
108-95-2	Phenol	1670	1240	74	48-117
95-95-4	2,4,5-Trichlorophenol	1670	1230	74	57-116
88-06-2	2,4,6-Trichlorophenol	1670	1200	72	54-112
83-32-9	Acenaphthene	1670	1230	74	52-109
208-96-8	Acenaphthylene	1670	1260	76	54-115
62-53-3	Aniline	1670	1270	76	28-116
120-12-7	Anthracene	1670	1280	77	57-114
92-87-5	Benzidine	3330	1600	47	15-156
56-55-3	Benzo(a)anthracene	1670	1300	78	59-114
50-32-8	Benzo(a)pyrene	1670	1280	77	53-106
205-99-2	Benzo(b)fluoranthene	1670	1300	78	54-115
191-24-2	Benzo(g,h,i)perylene	1670	1290	77	44-127
207-08-9	Benzo(k)fluoranthene	1670	1300	78	52-124
101-55-3	4-Bromophenyl phenyl ether	1670	1170	70	51-116
85-68-7	Butyl benzyl phthalate	1670	1330	80	52-117
100-51-6	Benzyl Alcohol	1670	1200	72	52-104
91-58-7	2-Chloronaphthalene	1670	1300	78	47-125
106-47-8	4-Chloroaniline	1670	1160	70	38-113
86-74-8	Carbazole	1670	1280	77	53-113
218-01-9	Chrysene	1670	1320	79	62-117
111-91-1	bis(2-Chloroethoxy)methane	1670	1120	67	41-106
111-44-4	bis(2-Chloroethyl)ether	1670	1040	62	36-108
108-60-1	bis(2-Chloroisopropyl)ether	1670	997	60	33-111
7005-72-3	4-Chlorophenyl phenyl ether	1670	1150	69	52-113

* = Outside of Control Limits.

Blank Spike Summary

Job Number: TC52720
Account: RFWTXHO Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP33453-BS	P34908.D	1	08/06/14	SC	08/06/14	OP33453	EP1682

The QC reported here applies to the following samples: **Method:** SW846 8270D

TC52720-1, TC52720-2, TC52720-3, TC52720-4, TC52720-5

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
95-50-1	1,2-Dichlorobenzene	1670	1110	67	41-106
122-66-7	1,2-Diphenylhydrazine	1670	1250	75	51-113
541-73-1	1,3-Dichlorobenzene	1670	1110	67	39-104
106-46-7	1,4-Dichlorobenzene	1670	1140	68	40-105
121-14-2	2,4-Dinitrotoluene	1670	1280	77	55-117
606-20-2	2,6-Dinitrotoluene	1670	1250	75	56-112
91-94-1	3,3'-Dichlorobenzidine	1670	1170	70	33-129
53-70-3	Dibenzo(a,h)anthracene	1670	1270	76	47-126
132-64-9	Dibenzofuran	1670	1200	72	51-112
84-74-2	Di-n-butyl phthalate	1670	1290	77	54-117
117-84-0	Di-n-octyl phthalate	1670	1320	79	47-119
84-66-2	Diethyl phthalate	1670	1220	73	53-114
131-11-3	Dimethyl phthalate	1670	1200	72	55-111
117-81-7	bis(2-Ethylhexyl)phthalate	1670	1330	80	51-123
206-44-0	Fluoranthene	1670	1270	76	54-118
86-73-7	Fluorene	1670	1210	73	55-114
118-74-1	Hexachlorobenzene	1670	1120	67	51-117
87-68-3	Hexachlorobutadiene	1670	1080	65	37-111
77-47-4	Hexachlorocyclopentadiene	1670	639	38	10-121
67-72-1	Hexachloroethane	1670	1230	74	42-100
193-39-5	Indeno(1,2,3-cd)pyrene	1670	1220	73	45-129
78-59-1	Isophorone	1670	1240	74	47-102
90-12-0	1-Methylnaphthalene	1670	1220	73	50-106
91-57-6	2-Methylnaphthalene	1670	1180	71	45-104
88-74-4	2-Nitroaniline	1670	1280	77	46-121
99-09-2	3-Nitroaniline	1670	1130	68	33-107
100-01-6	4-Nitroaniline	1670	1110	67	52-110
91-20-3	Naphthalene	1670	1190	71	47-108
98-95-3	Nitrobenzene	1670	1190	71	45-105
62-75-9	n-Nitrosodimethylamine	1670	1220	73	33-103
621-64-7	N-Nitroso-di-n-propylamine	1670	1120	67	42-110
86-30-6	N-Nitrosodiphenylamine	3330	2250	68	37-114
85-01-8	Phenanthrene	1670	1310	79	57-116
129-00-0	Pyrene	1670	1260	76	52-120
110-86-1	Pyridine	1670	1110	67	17-105
120-82-1	1,2,4-Trichlorobenzene	1670	1120	67	40-101

* = Outside of Control Limits.

Blank Spike Summary

Job Number: TC52720
Account: RFWTXHO Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP33453-BS	P34908.D	1	08/06/14	SC	08/06/14	OP33453	EP1682

The QC reported here applies to the following samples: **Method:** SW846 8270D

TC52720-1, TC52720-2, TC52720-3, TC52720-4, TC52720-5

CAS No.	Surrogate Recoveries	BSP	Limits
367-12-4	2-Fluorophenol	73%	26-124%
4165-62-2	Phenol-d5	75%	19-106%
118-79-6	2,4,6-Tribromophenol	64%	18-129%
4165-60-0	Nitrobenzene-d5	68%	18-104%
321-60-8	2-Fluorobiphenyl	69%	21-114%
1718-51-0	Terphenyl-d14	80%	24-149%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: TC52720
Account: RFWTXHO Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP33453-MS	P34914.D	1	08/06/14	SC	08/06/14	OP33453	EP1682
OP33453-MSD [a]	P34915.D	1	08/06/14	SC	08/06/14	OP33453	EP1682
TC52720-1	P34911.D	1	08/06/14	SC	08/06/14	OP33453	EP1682

The QC reported here applies to the following samples: **Method:** SW846 8270D

TC52720-1, TC52720-2, TC52720-3, TC52720-4, TC52720-5

CAS No.	Compound	TC52720-1 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
65-85-0	Benzoic acid	1600	U	3260	ND	0*	3240	ND	0*	nc	10-122/40
95-57-8	2-Chlorophenol	320	U	3260	1860	57	3240	1970	61	6	49-106/36
59-50-7	4-Chloro-3-methyl phenol	320	U	3260	2190	67	3240	2440	75	11	35-116/37
120-83-2	2,4-Dichlorophenol	320	U	3260	2020	62	3240	2190	68	8	53-107/37
105-67-9	2,4-Dimethylphenol	320	U	3260	2120	65	3240	2330	72	9	51-109/35
51-28-5	2,4-Dinitrophenol	1600	U	3260	ND	0*	3240	ND	0*	nc	30-125/43
534-52-1	4,6-Dinitro-o-cresol	650	U	3260	305	9*	3240	182	6*	51*	41-125/39
95-48-7	2-Methylphenol	320	U	3260	2020	62	3240	2110	65	4	46-105/36
	3&4-Methylphenol	320	U	3260	2000	61	3240	2130	66	6	43-120/34
88-75-5	2-Nitrophenol	320	U	3260	1970	60	3240	2000	62	2	49-104/40
100-02-7	4-Nitrophenol	1600	U	3260	1820	56	3240	2360	73	26	29-129/41
87-86-5	Pentachlorophenol	1600	U	3260	1380	42	3240	1530	47	10	36-122/39
108-95-2	Phenol	320	U	3260	1980	61	3240	2090	65	5	48-117/36
95-95-4	2,4,5-Trichlorophenol	320	U	3260	2140	66	3240	2440	75	13	57-116/37
88-06-2	2,4,6-Trichlorophenol	320	U	3260	2090	64	3240	2360	73	12	54-112/36
83-32-9	Acenaphthene	320	U	3260	2190	67	3240	2430	75	10	52-109/35
208-96-8	Acenaphthylene	320	U	3260	2210	68	3240	2450	76	10	54-115/33
62-53-3	Aniline	1600	U	3260	1790	55	3240	1920	59	7	28-116/39
120-12-7	Anthracene	320	U	3260	2270	70	3240	2570	79	12	57-114/35
92-87-5	Benzidine	13000	U	6520	ND	0*	6480	ND	0*	nc	15-156/40
56-55-3	Benzo(a)anthracene	320	U	3260	2560	79	3240	2950	91	14	59-114/38
50-32-8	Benzo(a)pyrene	320	U	3260	2870	88	3240	3240	100	12	53-106/37
205-99-2	Benzo(b)fluoranthene	320	U	3260	3440	106	3240	3750	116*	9	54-115/40
191-24-2	Benzo(g,h,i)perylene	320	U	3260	1800	55	3240	2080	64	14	44-127/39
207-08-9	Benzo(k)fluoranthene	320	U	3260	3200	98	3240	3620	112	12	52-124/38
101-55-3	4-Bromophenyl phenyl ether	320	U	3260	2130	65	3240	2360	73	10	51-116/35
85-68-7	Butyl benzyl phthalate	320	U	3260	2720	83	3240	3170	98	15	52-117/36
100-51-6	Benzyl Alcohol	320	U	3260	1920	59	3240	1980	61	3	52-104/37
91-58-7	2-Chloronaphthalene	320	U	3260	2180	67	3240	2510	77	14	47-125/36
106-47-8	4-Chloroaniline	320	U	3260	1970	60	3240	2130	66	8	38-113/36
86-74-8	Carbazole	320	U	3260	2260	69	3240	2610	81	14	53-113/36
218-01-9	Chrysene	320	U	3260	2610	80	3240	2940	91	12	62-117/38
111-91-1	bis(2-Chloroethoxy)methane	320	U	3260	1980	61	3240	2080	64	5	41-106/35
111-44-4	bis(2-Chloroethyl)ether	320	U	3260	1780	55	3240	1820	56	2	36-108/37
108-60-1	bis(2-Chloroisopropyl)ether	320	U	3260	1700	52	3240	1690	52	1	33-111/39
7005-72-3	4-Chlorophenyl phenyl ether	320	U	3260	2030	62	3240	2300	71	12	52-113/34

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: TC52720
Account: RFWTXHO Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP33453-MS	P34914.D	1	08/06/14	SC	08/06/14	OP33453	EP1682
OP33453-MSD [a]	P34915.D	1	08/06/14	SC	08/06/14	OP33453	EP1682
TC52720-1	P34911.D	1	08/06/14	SC	08/06/14	OP33453	EP1682

The QC reported here applies to the following samples: **Method:** SW846 8270D

TC52720-1, TC52720-2, TC52720-3, TC52720-4, TC52720-5

CAS No.	Compound	TC52720-1 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
95-50-1	1,2-Dichlorobenzene	320	U	3260	1590	49	3240	1670	52	5	41-106/38
122-66-7	1,2-Diphenylhydrazine	320	U	3260	2160	66	3240	2470	76	13	51-113/34
541-73-1	1,3-Dichlorobenzene	320	U	3260	1490	46	3240	1620	50	8	39-104/39
106-46-7	1,4-Dichlorobenzene	320	U	3260	1550	48	3240	1670	52	7	40-105/39
121-14-2	2,4-Dinitrotoluene	320	U	3260	2190	67	3240	2460	76	12	55-117/37
606-20-2	2,6-Dinitrotoluene	320	U	3260	2160	66	3240	2420	75	11	56-112/36
91-94-1	3,3'-Dichlorobenzidine	650	U	3260	1190	37	3240	2130	66	57*	33-129/39
53-70-3	Dibenzo(a,h)anthracene	320	U	3260	1810	56	3240	2160	67	18	47-126/38
132-64-9	Dibenzofuran	320	U	3260	2100	64	3240	2350	73	11	51-112/34
84-74-2	Di-n-butyl phthalate	320	U	3260	2300	71	3240	2610	81	13	54-117/36
117-84-0	Di-n-octyl phthalate	320	U	3260	4220	129*	3240	5020	155*	17	47-119/40
84-66-2	Diethyl phthalate	320	U	3260	2160	66	3240	2420	75	11	53-114/36
131-11-3	Dimethyl phthalate	320	U	3260	2110	65	3240	2390	74	12	55-111/34
117-81-7	bis(2-Ethylhexyl)phthalate	320	U	3260	2970	91	3240	3350	103	12	51-123/40
206-44-0	Fluoranthene	320	U	3260	2270	70	3240	2580	80	13	54-118/39
86-73-7	Fluorene	320	U	3260	2180	67	3240	2430	75	11	55-114/37
118-74-1	Hexachlorobenzene	320	U	3260	1990	61	3240	2230	69	11	51-117/37
87-68-3	Hexachlorobutadiene	320	U	3260	1790	55	3240	1880	58	5	37-111/38
77-47-4	Hexachlorocyclopentadiene	1600	U	3260	322	10	3240	330	10	2	10-121/45
67-72-1	Hexachloroethane	320	U	3260	1710	52	3240	1760	54	3	42-100/41
193-39-5	Indeno(1,2,3-cd)pyrene	320	U	3260	1710	52	3240	1980	61	15	45-129/38
78-59-1	Isophorone	320	U	3260	2150	66	3240	2270	70	5	47-102/35
90-12-0	1-Methylnaphthalene	320	U	3260	2150	66	3240	2250	69	5	50-106/38
91-57-6	2-Methylnaphthalene	320	U	3260	2090	64	3240	2170	67	4	45-104/37
88-74-4	2-Nitroaniline	320	U	3260	2340	72	3240	2700	83	14	46-121/40
99-09-2	3-Nitroaniline	320	U	3260	2600	80	3240	2560	79	2	33-107/37
100-01-6	4-Nitroaniline	650	U	3260	2130	65	3240	2610	81	20	52-110/36
91-20-3	Naphthalene	320	U	3260	2080	64	3240	2130	66	2	47-108/34
98-95-3	Nitrobenzene	320	U	3260	2040	63	3240	2120	65	4	45-105/36
62-75-9	n-Nitrosodimethylamine	320	U	3260	1770	54	3240	1900	59	7	33-103/39
621-64-7	N-Nitroso-di-n-propylamine	320	U	3260	2030	62	3240	1970	61	3	42-110/36
86-30-6	N-Nitrosodiphenylamine	320	U	6520	4100	63	6480	4600	71	11	37-114/35
85-01-8	Phenanthrene	320	U	3260	2360	72	3240	2630	81	11	57-116/42
129-00-0	Pyrene	320	U	3260	2740	84	3240	3140	97	14	52-120/40
110-86-1	Pyridine	320	U	3260	1220	37	3240	1410	44	14	17-105/43
120-82-1	1,2,4-Trichlorobenzene	320	U	3260	1860	57	3240	1970	61	6	40-101/36

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: TC52720
Account: RFWTXHO Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP33453-MS	P34914.D	1	08/06/14	SC	08/06/14	OP33453	EP1682
OP33453-MSD [a]	P34915.D	1	08/06/14	SC	08/06/14	OP33453	EP1682
TC52720-1	P34911.D	1	08/06/14	SC	08/06/14	OP33453	EP1682

The QC reported here applies to the following samples: **Method:** SW846 8270D

TC52720-1, TC52720-2, TC52720-3, TC52720-4, TC52720-5

CAS No.	Surrogate Recoveries	MS	MSD	TC52720-1	Limits
367-12-4	2-Fluorophenol	56%	60%	61%	26-124%
4165-62-2	Phenol-d5	67%	67%	73%	19-106%
118-79-6	2,4,6-Tribromophenol	62%	65%	64%	18-129%
4165-60-0	Nitrobenzene-d5	61%	61%	63%	18-104%
321-60-8	2-Fluorobiphenyl	60%	55%	57%	21-114%
1718-51-0	Terphenyl-d14	87%	91%	88%	24-149%

(a) Internal standard Perylene-d12 outside of control limits biased low due to mattrix interference.

* = Outside of Control Limits.

Instrument Performance Check (DFTPP)

Job Number: TC52720
Account: RFWTXHO Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Sample: EP1592-DFTPP
Lab File ID: P33148.D
Instrument ID: GCMSP
Injection Date: 04/01/14
Injection Time: 11:29

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	158544	30.6		Pass
68	Less than 2.0% of mass 69	3345	0.65	(1.79) [a]	Pass
69	Mass 69 relative abundance	186645	36.1		Pass
70	Less than 2.0% of mass 69	909	0.18	(0.49) [a]	Pass
127	40.0 - 60.0% of mass 198	226517	43.8		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	517312	100.0		Pass
199	5.0 - 9.0% of mass 198	35056	6.78		Pass
275	10.0 - 30.0% of mass 198	141757	27.4		Pass
365	1.0 - 100.0% of mass 198	17176	3.32		Pass
441	Present, but less than mass 443	71152	13.8	(78.5) [b]	Pass
442	40.0 - 100.0% of mass 198	474347	91.7		Pass
443	17.0 - 23.0% of mass 442	90616	17.5	(19.1) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
EP1592-ICC1592	P33150.D	04/01/14	12:23	00:54	Initial cal 50
EP1592-IC1592	P33151.D	04/01/14	12:53	01:24	Initial cal 5
EP1592-IC1592	P33152.D	04/01/14	13:23	01:54	Initial cal 10
EP1592-IC1592	P33153.D	04/01/14	13:51	02:22	Initial cal 25
EP1592-IC1592	P33154.D	04/01/14	14:20	02:51	Initial cal 40
EP1592-IC1592	P33155.D	04/01/14	14:50	03:21	Initial cal 75
EP1592-ICV1592	P33156.D	04/01/14	15:17	03:48	Initial cal verification 50

Instrument Performance Check (DFTPP)

Job Number: TC52720
Account: RFWTXHO Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Sample: EP1652-DFTPP
Lab File ID: P34247.D
Instrument ID: GCMSP
Injection Date: 06/27/14
Injection Time: 12:19

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	136331	30.7		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	172914	38.9		Pass
70	Less than 2.0% of mass 69	1074	0.24	(0.62) [a]	Pass
127	40.0 - 60.0% of mass 198	196053	44.1		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	444288	100.0		Pass
199	5.0 - 9.0% of mass 198	30208	6.80		Pass
275	10.0 - 30.0% of mass 198	126048	28.4		Pass
365	1.0 - 100.0% of mass 198	11586	2.61		Pass
441	Present, but less than mass 443	52819	11.9	(83.6) [b]	Pass
442	40.0 - 100.0% of mass 198	330240	74.3		Pass
443	17.0 - 23.0% of mass 442	63184	14.2	(19.1) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
EP1652-IC1652	P34248.D	06/27/14	12:51	00:32	Initial cal 40
EP1652-ICC1652	P34249.D	06/27/14	13:21	01:02	Initial cal 50
EP1652-IC1652	P34250.D	06/27/14	13:51	01:32	Initial cal 10
EP1652-IC1652	P34251.D	06/27/14	14:20	02:01	Initial cal 5
EP1652-IC1652	P34252.D	06/27/14	14:50	02:31	Initial cal 25
EP1652-IC1652	P34253.D	06/27/14	15:20	03:01	Initial cal 75
EP1652-IC1652	P34254.D	06/27/14	15:50	03:31	Initial cal 100
EP1652-ICV1652	P34255.D	06/27/14	16:20	04:01	Initial cal verification 50
EP1652-ICV1652	P34256.D	06/27/14	16:50	04:31	Initial cal verification 50
EP1652-ICV1652	P34257.D	06/27/14	17:20	05:01	Initial cal verification 50
EP1652-ICV1652	P34258.D	06/27/14	17:49	05:30	Initial cal verification 50
EP1652-ICV1652	P34259.D	06/27/14	18:16	05:57	Initial cal verification 50
EP1652-ICV1652	P34260.D	06/27/14	18:45	06:26	Initial cal verification 50
EP1652-ICV1652	P34261.D	06/27/14	19:15	06:56	Initial cal verification 50

Instrument Performance Check (DFTPP)

Job Number: TC52720
Account: RFWTXHO Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Sample: EP1654-DFTPP
Lab File ID: P34266.D
Instrument ID: GCMSP
Injection Date: 06/30/14
Injection Time: 14:42

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	128560	31.5		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	162453	39.8		Pass
70	Less than 2.0% of mass 69	902	0.22	(0.56) [a]	Pass
127	40.0 - 60.0% of mass 198	185259	45.4		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	408085	100.0		Pass
199	5.0 - 9.0% of mass 198	27861	6.83		Pass
275	10.0 - 30.0% of mass 198	114459	28.0		Pass
365	1.0 - 100.0% of mass 198	10669	2.61		Pass
441	Present, but less than mass 443	44440	10.9	(80.3) [b]	Pass
442	40.0 - 100.0% of mass 198	286144	70.1		Pass
443	17.0 - 23.0% of mass 442	55325	13.6	(19.3) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
EP1654-ICC1654	P34267.D	06/30/14	15:13	00:31	Initial cal 50
EP1654-IC1654	P34269.D	06/30/14	16:11	01:29	Initial cal 10
EP1654-IC1654	P34270.D	06/30/14	16:41	01:59	Initial cal 25
EP1654-IC1654	P34271.D	06/30/14	17:10	02:28	Initial cal 40
EP1654-IC1654	P34272.D	06/30/14	17:39	02:57	Initial cal 75
EP1654-IC1654	P34273.D	06/30/14	18:09	03:27	Initial cal 5
EP1654-IC1654	P34274.D	06/30/14	18:38	03:56	Initial cal 100
EP1654-ICV1654	P34276.D	06/30/14	19:37	04:55	Initial cal verification 50
EP1654-ICV1654	P34277.D	06/30/14	20:07	05:25	Initial cal verification 50

Instrument Performance Check (DFTPP)

Job Number: TC52720
Account: RFWTXHO Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Sample: EP1682-DFTPP
Lab File ID: P34903.D
Instrument ID: GCMSP
Injection Date: 08/06/14
Injection Time: 12:06

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	207019	34.2		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	257792	42.6		Pass
70	Less than 2.0% of mass 69	1404	0.23	(0.54) [a]	Pass
127	40.0 - 60.0% of mass 198	291669	48.2		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	605333	100.0		Pass
199	5.0 - 9.0% of mass 198	41080	6.79		Pass
275	10.0 - 30.0% of mass 198	155797	25.7		Pass
365	1.0 - 100.0% of mass 198	11732	1.94		Pass
441	Present, but less than mass 443	43533	7.19	(85.4) [b]	Pass
442	40.0 - 100.0% of mass 198	260501	43.0		Pass
443	17.0 - 23.0% of mass 442	50965	8.42	(19.6) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
EP1682-CC1652	P34904.D	08/06/14	12:28	00:22	Continuing cal 50
EP1682-CC1592	P34905.D	08/06/14	13:00	00:54	Continuing cal 50
EP1682-CC1654	P34906.D	08/06/14	13:57	01:51	Continuing cal 50
OP33453-MB	P34907.D	08/06/14	14:30	02:24	Method Blank
OP33453-BS	P34908.D	08/06/14	15:06	03:00	Blank Spike
ZZZZZZ	P34910.D	08/06/14	16:04	03:58	(unrelated sample)
TC52720-1	P34911.D	08/06/14	16:32	04:26	CES-CS-01-51
ZZZZZZ	P34912.D	08/06/14	17:01	04:55	(unrelated sample)
OP33453-MS	P34914.D	08/06/14	17:59	05:53	Matrix Spike
OP33453-MSD	P34915.D	08/06/14	18:28	06:22	Matrix Spike Duplicate
ZZZZZZ	P34918.D	08/06/14	19:54	07:48	(unrelated sample)
ZZZZZZ	P34919.D	08/06/14	20:23	08:17	(unrelated sample)
ZZZZZZ	P34920.D	08/06/14	20:52	08:46	(unrelated sample)
ZZZZZZ	P34921.D	08/06/14	21:21	09:15	(unrelated sample)
ZZZZZZ	P34922.D	08/06/14	21:49	09:43	(unrelated sample)
TC52720-2	P34923.D	08/06/14	22:18	10:12	CES-CS-02-51
TC52720-3	P34924.D	08/06/14	22:47	10:41	CES-CS-03-51
TC52720-4	P34925.D	08/06/14	23:16	11:10	CES-CS-04-51
TC52720-5	P34926.D	08/06/14	23:45	11:39	CES-CS-05-51

Semivolatile Internal Standard Area Summary

Job Number: TC52720
Account: RFWTXHO Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Check Std:	EP1682-CC1652	**Injection Date:**	08/06/14
Lab File ID:	P34904.D	**Injection Time:**	12:28
Instrument ID:	GCMSP	**Method:**	SW846 8270D

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
Check Std	198605	5.06	770450	6.24	511368	8.66	909721	11.33	948432	16.54	932486	19.17
Upper Limit [a]	397210	5.56	1540900	6.74	1022736	9.16	1819442	11.83	1896864	17.04	1864972	19.67
Lower Limit [b]	99303	4.56	385225	5.74	255684	8.16	454861	10.83	474216	16.04	466243	18.67

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
OP33453-MB	241266	5.06	957517	6.24	657431	8.65	1220250	11.33	1317518	16.53	1219463	19.17
OP33453-BS	188461	5.06	753350	6.24	500273	8.66	899600	11.33	1012372	16.54	975716	19.17
ZZZZZZ	178906	5.06	707639	6.24	474264	8.65	856361	11.32	904087	16.53	860540	19.16
TC52720-1	172510	5.06	713107	6.24	484923	8.65	852238	11.33	847933	16.54	591060	19.17
ZZZZZZ	172252	5.06	727733	6.24	529745	8.65	961095	11.33	942036	16.53	711524	19.16
OP33453-MS	198769	5.06	795663	6.24	516956	8.66	916650	11.33	859708	16.55	466592	19.18
OP33453-MSD [c]	197681	5.06	760572	6.24	483332	8.66	861589	11.33	796838	16.54	434730*	19.17
ZZZZZZ	272561	5.06	1050467	6.24	694735	8.65	1237966	11.33	1069769	16.54	537236	19.17
ZZZZZZ	282592	5.06	1103244	6.24	714033	8.65	1256754	11.33	1156434	16.53	646722	19.16
ZZZZZZ	271852	5.06	1087644	6.24	719156	8.65	1277784	11.33	1090573	16.53	576172	19.16
ZZZZZZ	303483	5.06	1173316	6.24	748738	8.65	1318155	11.32	1144433	16.53	589977	19.16
ZZZZZZ	292382	5.06	1078833	6.24	684099	8.65	1195083	11.33	1051351	16.53	558579	19.16
TC52720-2	292447	5.06	1146916	6.24	717777	8.65	1233281	11.33	1069590	16.53	567761	19.16
TC52720-3	281348	5.06	1120180	6.24	737287	8.65	1324427	11.33	1118954	16.53	584395	19.16
TC52720-4	294502	5.06	1187765	6.24	785172	8.65	1391811	11.33	1102603	16.53	564157	19.16
TC52720-5	305915	5.06	1195215	6.24	761451	8.65	1328974	11.32	973427	16.53	499322	19.16

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-D10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.
(c) Internal standard Perylene-d12 outside of control limits biased low due to mattrix interference.

Semivolatile Surrogate Recovery Summary

Job Number: TC52720
Account: RFWTXHO Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Method: SW846 8270D **Matrix:** SO

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4	S5	S6
TC52720-1	P34911.D	61	73	64	63	57	88
TC52720-2	P34923.D	51	59	56	53	51	97
TC52720-3	P34924.D	61	73	60	69	66	98
TC52720-4	P34925.D	59	65	53	55	49	97
TC52720-5	P34926.D	51	63	60	65	67	110
OP33453-BS	P34908.D	73	75	64	68	69	80
OP33453-MB	P34907.D	74	78	66	73	72	91
OP33453-MS	P34914.D	56	67	62	61	60	87
OP33453-MSD	P34915.D	60	67	65	61	55	91

Surrogate Compounds	Recovery Limits
S1 = 2-Fluorophenol	26-124%
S2 = Phenol-d5	19-106%
S3 = 2,4,6-Tribromophenol	18-129%
S4 = Nitrobenzene-d5	18-104%
S5 = 2-Fluorobiphenyl	21-114%
S6 = Terphenyl-d14	24-149%

Initial Calibration Summary

Job Number: TC52720
Account: RFWTXHO Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX
Sample: EP1592-ICC1592
Lab FileID: P33150.D

```
                         Response Factor Report  GCMS P

 Method       : C:\msdchem\1\MET...1592organophos.m (RTE Integrator)
 Title        : SW846 8270C Appendix 9
 Last Update  : Tue Apr 01 16:29:13 2014
 Response via : Initial Calibration

 Calibration Files
 5   =p33151.D    25  =p33153.D    50  =p33150.D    75  =p33155.D
 40  =p33154.D    10  =p33152.D        =

    Compound             5     25    50    75    40    10          Avg   %RSD
 -------------------------------------------------------------------------------

 1) I   1,4-Dichlorobenzene-d ----------------ISTD---------------------
 2)S 2-Fluorophenol    1.127 1.077 1.044 0.922 1.019 1.101       1.048   6.94
 3)S Phenol-d5         1.380 1.371 1.333 1.175 1.303 1.393       1.326   6.11

 4) I   Naphthalene-d8        ----------------ISTD---------------------
 5)S Nitrobenzene-d5   0.316 0.324 0.330 0.301 0.317 0.318       0.317   2.99
 6)  O,O,O-Triethyl ph 0.125 0.147 0.144 0.135 0.145 0.141       0.139   6.06

 7) I   Acenaphthene-d10      ----------------ISTD---------------------
 8)S 2-Fluorobiphenyl  1.189 1.122 1.094 1.013 1.056 1.138       1.102   5.67
 9)  Thionazin         0.150 0.217 0.231 0.212 0.235 0.205       0.208  14.74

10) I   Phenanthrene-d10      ----------------ISTD---------------------
11)S 2,4,6-Tribromophe 0.079 0.099 0.103 0.105 0.101 0.088       0.096  10.42
12)  Tetraethyl dithio 0.079 0.104 0.113 0.105 0.107 0.095       0.100  11.90
13)  Phorate           0.260 0.365 0.403 0.370 0.372 0.322       0.349  14.55
14)  Dimethoate        0.166 0.199 0.239 0.220 0.214 0.177       0.203  13.58
15)  Disulfoton        0.220 0.303 0.329 0.304 0.315 0.276       0.291  13.45
16)  Methyl parathion  0.079 0.165 0.194 0.187 0.186 0.127       0.156  28.73
            ---- Linear regression ----  Coefficient =  0.9985
              Response Ratio = -0.01609 + 0.19919 *A

17)  Parathion         0.045 0.098 0.120 0.113 0.113 0.076       0.094  30.63
            ---- Linear regression ----  Coefficient =  0.9971
              Response Ratio = -0.01031 + 0.12144 *A


18) I   Chrysene-d12         ----------------ISTD---------------------
19)S Terphenyl-d14     0.627 0.810 0.740 0.709 0.818 0.794       0.750   9.82
20)  Famphur           0.262 0.358 0.373 0.386 0.334 0.283       0.333  15.09

21) I   Perylene-d12         ----------------ISTD---------------------
-------------------------------------------------------------------------------
(#) = Out of Range

          ep1592organophos.m        Tue Apr 01 16:30:10 2014
```

7.7.1

7

Initial Calibration Verification

Job Number: TC52720
Account: RFWTXHO Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX
Sample: EP1592-ICV1592
Lab FileID: P33156.D

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\EP1592\p33156.D            Vial: 9
Acq On    :  1 Apr 2014   3:17 pm                     Operator: sheilac
Sample    : icv1592-50,ophos                          Inst    : GCMS P
Misc      : op30663,Ep1592,1000,,,1,1,water           Multiplr: 1.00
MS Integration Params: RTEINT.P

Method       : C:\msdchem\1\MET...1592organophos.m (RTE Integrator)
Title        : SW846 8270C Appendix 9
Last Update  : Tue Apr 01 16:29:13 2014
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 200%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	129	0.00	5.41
2	S	2-Fluorophenol		----------NA----------				
3	S	Phenol-d5		----------NA----------				
4	I	Naphthalene-d8	1.000	1.000	0.0	132	0.00	6.64
5	S	Nitrobenzene-d5		----------NA----------				
6		O,O,O-Triethyl phosphorot	0.139	0.165	-18.7	151	0.00	6.31
7	I	Acenaphthene-d10	1.000	1.000	0.0	137	0.00	9.16
8	S	2-Fluorobiphenyl		----------NA----------				
9		Thionazin	0.208	0.256	-23.1	153	0.00	10.12
10	I	Phenanthrene-d10	1.000	1.000	0.0	140	0.00	11.87
11	S	2,4,6-Tribromophenol		----------NA----------				
12		Tetraethyl dithiopyrophos	0.100	0.114	-14.0	141	0.00	10.72
13		Phorate	0.349	0.397	-13.8	137	0.00	10.94
14		Dimethoate	0.203	0.167	17.7	97	0.00	11.25
15		Disulfoton	0.291	0.328	-12.7	139	0.00	11.96
		----------	Amount	Calc.	%Drift		----------	
16		Methyl parathion	50.000	53.319	-6.6	144	0.00	12.68
17		Parathion	50.000	50.240	-0.5	132	0.01	13.47
		----------	AvgRF	CCRF	%Dev		----------	
18	I	Chrysene-d12	1.000	1.000	0.0	102	0.01	17.12
19	S	Terphenyl-d14		----------NA----------				
20		Famphur	0.333	0.366	-9.9	100	0.00	15.99
21	I	Perylene-d12	1.000	1.000	0.0	102	0.01	19.77

(#) = Out of Range SPCC's out = 0 CCC's out = 0
p33150.D ep1592organophos.m Tue Apr 01 16:31:32 2014

7.7.2

7

Initial Calibration Summary

Job Number: TC52720
Account: RFWTXHO Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Sample: EP1652-ICC1652
Lab FileID: P34249.D

Response Factor Report GCMS P

Method : C:\msdchem\1\METHODS\ep1652.m (RTE Integrator)
Title : SW846 8270 Appendix 9
Last Update : Fri Jun 27 17:50:07 2014
Response via : Initial Calibration

Calibration Files
5 =p34251.D 10 =p34250.D 25 =p34252.D 40 =p34248.D
50 =p34249.D 75 =p34253.D 100 =p34254.D

Compound	5	10	25	40	50	75	100	Avg	%RSD
1) I 1,4-Dichlorobenzene-d	----------ISTD----------								
2) bis(Chloromethyl)	1.058	1.102	1.052	0.987	0.929	0.915	0.822	0.981	10.02
3) 1,4-Dioxane	0.369	0.416	0.413	0.398	0.390	0.400	0.395	0.397	3.99
4) N-nitrosodimethyl	0.453	0.507	0.518	0.529	0.535	0.538	0.541	0.517	5.99
5) Pyridine	0.966	1.125	1.124	1.107	1.107	1.138	1.126	1.099	5.44
6) 2-Picoline	1.284	1.385	1.400	1.392	1.383	1.408	1.386	1.377	3.05
7) N-Nitrosomethylet	0.494	0.482	0.493	0.493	0.479	0.497	0.655	0.513	12.22
8) Methyl methanesul	0.781	0.795	0.803	0.789	0.770	0.753	0.715	0.772	3.92
9) N-Nitrosodiethyla	0.676	0.678	0.696	0.682	0.674	0.677	0.659	0.678	1.59
10) 2-Butoxyethanol	1.110	1.109	1.127	1.140	1.112	1.102	1.073	1.110	1.89
11) Ethyl methanesulf	1.010	0.992	1.028	1.007	0.994	0.997	0.965	0.999	1.95
12)p Benzaldehyde	0.912	0.712	0.480	0.344	0.266	0.205	0.125	0.435	65.85
13) Pentachloroethane	0.545	0.581	0.565	0.561	0.559	0.544	0.538	0.556	2.63
14) Aniline	2.053	1.997	2.048	1.991	1.950	1.883	1.813	1.962	4.47
15)S 2-Fluorophenol	1.065	1.176	1.133	1.142	1.115	1.100	1.082	1.116	3.39
16)p bis(2-Chloroethyl	1.285	1.227	1.236	1.225	1.207	1.213	1.189	1.226	2.46
17)S Phenol-d5	1.550	1.523	1.523	1.504	1.469	1.426	1.373	1.481	4.23
18)p Phenol	1.847	1.848	1.867	1.828	1.805	1.762	1.701	1.808	3.24
19)p 2-Chlorophenol	1.411	1.422	1.437	1.422	1.408	1.383	1.350	1.405	2.10
20) n-Decane	1.029	1.069	1.031	1.028	0.985	0.960	0.951	1.007	4.27
21) 1,3-Dichlorobenze	1.586	1.604	1.579	1.587	1.575	1.539	1.528	1.571	1.75
22) 1,4-Dichlorobenze	1.658	1.631	1.630	1.618	1.604	1.576	1.565	1.612	2.04
23) 1,2-Dichlorobenze	1.560	1.569	1.578	1.570	1.557	1.524	1.495	1.550	1.94
24) Benzyl alcohol	0.929	0.927	0.968	0.953	0.951	0.953	0.914	0.942	2.02
25)p bis(2-chloroisopr	1.312	1.296	1.315	1.298	1.258	1.250	1.202	1.276	3.22
26)p 2-Methylphenol	1.289	1.260	1.314	1.293	1.293	1.302	1.262	1.287	1.54
27) N-nitrosopyrrolid	0.786	0.766	0.811	0.787	0.783	0.778	0.729	0.777	3.24
28) N-Nitrosomorpholi	0.882	0.878	0.908	0.885	0.870	0.858	0.817	0.871	3.25
29) o-Toluidine	2.468	2.361	2.451	2.374	2.336	2.284	2.151	2.347	4.57
30)p Acetophenone	1.999	1.927	1.996	1.918	1.902	1.899	1.816	1.923	3.27
31)p Hexachloroethane	0.614	0.611	0.602	0.615	0.612	0.605	0.599	0.608	1.02
32)p N-Nitroso-di-n-pr	1.043	1.028	1.047	1.013	1.001	0.990	0.940	1.009	3.64
33)p 3&4-Methylphenol	1.516	1.493	1.541	1.512	1.485	1.457	1.377	1.483	3.63
34) I Naphthalene-d8	----------ISTD----------								
35)S Nitrobenzene-d5	0.378	0.383	0.376	0.374	0.370	0.362	0.363	0.372	2.06
36)p Nitrobenzene	0.374	0.381	0.374	0.371	0.370	0.362	0.362	0.370	1.84
37) 2,6-Dimethylpheno	0.339	0.347	0.346	0.339	0.338	0.333	0.335	0.339	1.50
38) N-Nitrosopiperidi	0.226	0.231	0.231	0.227	0.227	0.221	0.217	0.226	2.16
39) A,A-Dimethylphene	0.728	0.833	0.885	0.771	0.884	0.907	0.871	0.840	7.96
40)p Isophorone	0.660	0.668	0.660	0.650	0.642	0.631	0.620	0.647	2.67
41)p 2-Nitrophenol	0.197	0.209	0.209	0.209	0.211	0.207	0.209	0.207	2.27
42)p 2,4-Dimethylpheno	0.380	0.394	0.390	0.387	0.382	0.381	0.374	0.384	1.76
43)p bis(2-Chloroethox	0.393	0.398	0.398	0.394	0.384	0.379	0.373	0.389	2.53
44) Benzoic Acid		0.146	0.211	0.223	0.263	0.292	0.293	0.238	23.78

---- Quadratic regression ---- Coefficient = 0.9969

Initial Calibration Summary

Job Number: TC52720 **Sample:** EP1652-ICC1652
Account: RFWTXHO Weston Solutions **Lab FileID:** P34249.D
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

```
                Response Ratio = -0.02763 + 0.24215 *A + 0.02749 *A^2

45)p 2,4-Dichloropheno 0.322 0.344 0.348 0.343 0.344 0.341 0.336 0.340   2.53
46)  1,2,4-Trichlorobe 0.378 0.381 0.371 0.370 0.368 0.362 0.362 0.370   1.88
47)p Naphthalene       1.115 1.120 1.103 1.097 1.082 1.057 1.047 1.089   2.59
48)p 4-Chloroaniline   0.494 0.495 0.499 0.493 0.492 0.481 0.470 0.489   2.04
49)  2,6-Dichloropheno 0.307 0.325 0.322 0.321 0.319 0.311 0.306 0.316   2.47
50)  Hexachloropropene 0.217 0.240 0.243 0.244 0.248 0.245 0.245 0.240   4.36
51)p Hexachlorobutadie 0.232 0.237 0.232 0.230 0.229 0.227 0.229 0.231   1.40
52)  p-Phenylenediamin 0.294 0.351 0.355 0.320 0.300 0.268 0.228 0.302  15.00
             ---- Quadratic regression ----  Coefficient =  0.9993
                Response Ratio = -0.01085 + 0.40244 *A + -0.06877 *A^2

53)p Caprolactam       0.119 0.121 0.120 0.118 0.114 0.124 0.119 0.119   2.43
54)  N-Nitrosodi-n-but 0.336 0.338 0.279 0.263 0.260 0.257 0.251 0.283  13.28
55)  Hydroquinone      0.268 0.343 0.337 0.294 0.349 0.378 0.406 0.339  13.79
56)p 4-Chloro-3-methyl 0.348 0.354 0.355 0.353 0.351 0.365 0.359 0.355   1.58
57)  Isosafrole        0.312 0.315 0.313 0.312 0.310 0.304 0.299 0.309   1.81
58)p 2-Methylnaphthale 0.814 0.810 0.801 0.779 0.777 0.764 0.748 0.785   3.15
59)  1-Methylnaphthale 0.754 0.750 0.738 0.723 0.721 0.708 0.698 0.727   2.89
60)p 1,2,4,5-Tetrachlo 0.421 0.422 0.415 0.405 0.403 0.397 0.392 0.408   2.89

61) I   Acenaphthene-d10      ----------------ISTD---------------------
62)p Hexachlorocyclope 0.085 0.180 0.221 0.250 0.283 0.306 0.316 0.234  34.71
             ---- Linear regression ----  Coefficient =  0.9937
                Response Ratio = -0.03464 + 0.31533 *A

63)p 2,4,6-Trichloroph 0.374 0.400 0.404 0.408 0.407 0.407 0.409 0.401   3.11
64)p 2,4,5-Trichloroph 0.404 0.435 0.436 0.436 0.443 0.445 0.446 0.435   3.30
65)S 2-Fluorobiphenyl  1.424 1.424 1.388 1.374 1.320 1.273 1.260 1.352   5.07
66)  Safrole           0.478 0.491 0.486 0.486 0.478 0.478 0.480 0.482   1.05
67)p 1,1'-Biphenyl     1.501 1.497 1.469 1.463 1.417 1.382 1.373 1.443   3.65
68)p 2-Chloronaphthale 1.207 1.284 1.267 1.195 1.218 1.239 1.181 1.227   3.10
69)  1-Chloronaphthale 1.091 1.028 1.022 1.066 1.007 0.955 1.014 1.026   4.24
70)  Diphenyl ether    0.825 0.823 0.819 0.813 0.797 0.780 0.783 0.806   2.36
71)p 2-Nitroaniline    0.315 0.323 0.327 0.325 0.329 0.324 0.324 0.324   1.34
72)  1,4-Naphthoquinon 0.405 0.439 0.432 0.412 0.426 0.453 0.462 0.433   4.78
73)  Acenaphthylene    1.940 1.953 1.937 1.913 1.897 1.862 1.846 1.907   2.14
74)p Dimethylphthalate 1.431 1.419 1.403 1.398 1.400 1.398 1.385 1.405   1.09
75)  m-Dinitrobenzene  0.222 0.244 0.247 0.247 0.253 0.257 0.256 0.246   4.82
76)p 2,6-Dinitrotoluen 0.318 0.325 0.334 0.325 0.333 0.332 0.330 0.328   1.76
77)p Acenaphthene      1.249 1.256 1.241 1.229 1.219 1.202 1.193 1.227   1.93
78)p 3-Nitroaniline    0.344 0.355 0.364 0.356 0.368 0.368 0.365 0.360   2.45
79)p 2,4-Dinitrophenol 0.065 0.130 0.159 0.172 0.201 0.218 0.222 0.167  33.46
             ---- Linear regression ----  Coefficient =  0.9929
                Response Ratio = -0.02372 + 0.22194 *A

80)p Dibenzofuran      1.773 1.764 1.748 1.712 1.716 1.695 1.681 1.727   2.03
81)  Pentachlorobenzen 0.620 0.629 0.620 0.611 0.610 0.611 0.606 0.615   1.27
82)p 2,4-Dinitrotoluen 0.422 0.445 0.452 0.443 0.460 0.465 0.459 0.450   3.21
83)p 4-Nitrophenol     0.150 0.183 0.204 0.194 0.214 0.210 0.217 0.196  12.00
84)  1-Naphthylamine   0.828 1.212 1.208 1.225 1.229 1.169 1.096 1.138  12.69
85)  2-Naphthylamine   1.178 1.335 1.297 1.233 1.242 1.169 1.087 1.220   6.84
86)p 2,3,4,6-Tetrachlo 0.356 0.396 0.410 0.401 0.415 0.416 0.419 0.402   5.43
87)p Fluorene          1.464 1.454 1.440 1.422 1.418 1.407 1.384 1.427   1.94
88)p 4-Chlorophenyl-ph 0.743 0.729 0.726 0.714 0.711 0.705 0.699 0.718   2.10
89)p Diethylphthalate  1.396 1.396 1.384 1.366 1.395 1.392 1.376 1.386   0.83
90)  5-Nitro-o-toluidi 0.429 0.445 0.452 0.443 0.465 0.461 0.455 0.450   2.72
91)p 4-Nitroaniline    0.350 0.351 0.368 0.353 0.372 0.360 0.365 0.360   2.40
```

Initial Calibration Summary

Job Number: TC52720 **Sample:** EP1652-ICC1652
Account: RFWTXHO Weston Solutions **Lab FileID:** P34249.D
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

```
 92) I   Phenanthrene-d10      ----------------ISTD---------------------
 93)  Dinoseb           0.123 0.168 0.185 0.186 0.204 0.206 0.209 0.183  16.53
             ---- Linear regression ----  Coefficient =  0.9988
               Response Ratio = -0.01180 + 0.21034 *A

 94)p 4,6-Dinitro-2-met 0.107 0.136 0.149 0.151 0.161 0.164 0.166 0.148  14.14
 95)p n-Nitrosodiphenyl 0.678 0.684 0.681 0.675 0.665 0.657 0.650 0.670   1.92
 96)  1,2-Diphenylhydra 0.659 0.685 0.680 0.679 0.658 0.653 0.646 0.666   2.31
 97)  Diphenylamine     0.678 0.684 0.681 0.675 0.665 0.657 0.650 0.670   1.92
 98)S 2,4,6-Tribromophe 0.133 0.140 0.141 0.141 0.139 0.138 0.138 0.139   2.06
 99)  sym-Trinitrobenze 0.063 0.088 0.098 0.096 0.104 0.101 0.107 0.094  15.81
             ---- Linear regression ----  Coefficient =  0.9989
               Response Ratio = -0.00541 + 0.10649 *A

100)  Diallate          0.201 0.208 0.204 0.207 0.201 0.199 0.195 0.202   2.38
101)p 4-Bromophenyl-phe 0.253 0.254 0.255 0.252 0.251 0.249 0.245 0.251   1.40
102)  Phenacetin        0.367 0.384 0.398 0.385 0.403 0.378 0.385 0.386   3.08
103)p Hexachlorobenzene 0.300 0.304 0.304 0.302 0.299 0.303 0.303 0.302   0.63
104)p Atrazine          0.231 0.224 0.202 0.182 0.133             0.194  20.41
105)  4-aminobiphenyl   0.845 0.879 0.858 0.773 0.760 0.628 0.596 0.763  14.71
106)p Pentachlorophenol 0.086 0.128 0.144 0.151 0.165 0.170 0.176 0.146  21.19
             ---- Linear regression ----  Coefficient =  0.9979
               Response Ratio = -0.01264 + 0.17534 *A

107)  Pentachloronitrob 0.098 0.106 0.108 0.106 0.109 0.109 0.109 0.107   3.69
108)  Pronamide         0.347 0.369 0.376 0.370 0.379 0.372 0.371 0.369   2.82
109)  n-Octadecane      0.347 0.360 0.349 0.352 0.333 0.324 0.321 0.341   4.39
110)p Phenanthrene      1.195 1.187 1.171 1.141 1.145 1.117 1.101 1.151   3.06
111)p Anthracene        1.195 1.217 1.215 1.185 1.197 1.162 1.155 1.189   2.02
112)p Carbazole         1.123 1.154 1.163 1.121 1.149 1.074 1.095 1.125   2.89
113)p Di-n-butylphthala 1.256 1.299 1.313 1.283 1.319 1.265 1.277 1.287   1.86
114)  4-Nitroquinoline  0.026 0.050 0.065 0.062 0.074 0.072 0.073 0.060  29.02
             ---- Linear regression ----  Coefficient =  0.9973
               Response Ratio = -0.00643 + 0.07540 *A

115)  Methapyrilene     0.353 0.408 0.425 0.402 0.415 0.364 0.386 0.393   6.83
116)  Octachlorostyrene 0.105 0.109 0.112 0.109 0.112 0.113 0.113 0.110   2.72
117)  Isodrin           0.133 0.133 0.136 0.135 0.137 0.135 0.136 0.135   1.14
118)  Fluoranthene      1.408 1.432 1.440 1.361 1.393 1.282 1.321 1.377   4.28
119)S Fluoranthene-D10                                            0.000  -1.00
120)  4,4'-Methylenedia 0.438 0.469 0.474 0.425 0.417 0.368 0.374 0.423   9.83

121) I   Chrysene-d12         ----------------ISTD---------------------
122)  Benzidine         0.576 0.659 0.658 0.652 0.613 0.610 0.591 0.623   5.42
123)  Pyrene            1.187 1.273 1.261 1.248 1.263 1.255 1.260 1.250   2.28
124)S Terphenyl-d14     0.860 0.910 0.900 0.895 0.884 0.872 0.865 0.884   2.14
125)  Aramite           0.062 0.073 0.075 0.077 0.076 0.075 0.074 0.073   6.62
126)  p-(Dimethylamine) 0.275 0.317 0.324 0.326 0.330 0.333 0.337 0.320   6.57
127)  Chlorobenzilate   0.319 0.354 0.358 0.362 0.370 0.372 0.376 0.359   5.30
128)  Kepone                  0.031 0.043 0.045 0.053 0.050 0.044 0.044  17.42
             ---- Quadratic regression ----  Coefficient =  0.9930
               Response Ratio = -0.00846 + 0.06335 *A + -0.00584 *A^2

129)  3,3'-Dimethylbenz 0.620 0.683 0.730 0.710 0.692 0.690 0.690 0.688   4.95
130)  Butylbenzylphthal 0.479 0.518 0.521 0.522 0.525 0.525 0.537 0.518   3.51
131)  2-Acetylaminofluo 0.471 0.508 0.519 0.529 0.534 0.545 0.563 0.524   5.58
132)p 3,3'-Dichlorobenz 0.433 0.450 0.453 0.458 0.453 0.455 0.456 0.451   1.84
133)p Benzo[a]anthracen 1.181 1.198 1.188 1.177 1.167 1.153 1.167 1.176   1.28
134)p Chrysene          1.126 1.136 1.126 1.103 1.097 1.080 1.089 1.108   1.91
135)p bis(2-Ethylhexyl) 0.664 0.704 0.712 0.734 0.730 0.728 0.741 0.716   3.66
```

Initial Calibration Summary

Job Number: TC52720
Account: RFWTXHO Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX
Sample: EP1652-ICC1652
Lab FileID: P34249.D

```
136) I   Perylene-d12          ----------------ISTD---------------------
137)p Di-n-octylphthala 1.211 1.306 1.349 1.326 1.323 1.268 1.252 1.291   3.77
138)p Benzo[b]fluoranth 1.242 1.289 1.324 1.261 1.262 1.265 1.258 1.272   2.13
139)p Benzo[k]fluoranth 1.332 1.337 1.336 1.291 1.274 1.191 1.161 1.275   5.64
140)  7,12-Dimethylbenz 0.182 0.472 0.501 0.549 0.553 0.547 0.559 0.480  28.22
             ---- Linear regression ----  Coefficient =  0.9988
               Response Ratio = -0.04213 + 0.57868 *A

141)p Benzo[a]pyrene    1.183 1.223 1.247 1.204 1.226 1.190 1.188 1.208   1.97
142)S Benzo[a]pyrene-D1                                           0.000  -1.00
143)  3-Methylcholanthr 0.539 0.584 0.599 0.602 0.604 0.508 0.581 0.574   6.39
144)  Dibenz(a,j)acridi 0.945 0.983 1.036 1.028 1.037 1.032 1.026 1.012   3.48
145)p Indeno[1,2,3-cd]p 1.007 1.083 1.126 1.143 1.156 1.158 1.187 1.123   5.38
146)p Dibenz[a,h]anthra 1.124 1.198 1.240 1.225 1.226 1.205 1.188 1.201   3.19
147)p Benzo[g,h,i]peryl 1.146 1.206 1.247 1.215 1.210 1.203 1.149 1.197   3.03
 ---------------------------------------------------------------------------
 (#) = Out of Range

          ep1652.m          Mon Jun 30 11:57:46 2014
```

7.7.3

7

Initial Calibration Verification

Job Number: TC52720
Account: RFWTXHO Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX
Sample: EP1652-ICV1652
Lab FileID: P34255.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\EP1652\p34255.D Vial: 9
Acq On : 27 Jun 2014 4:20 pm Operator: sheilac
Sample : icv1652-50,lcs mix1 Inst : GCMS P
Misc : op30663,Ep1652,1000,,,1,1,water Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\msdchem\1\METHODS\ep1652.m (RTE Integrator)
Title : SW846 8270 Appendix 9
Last Update : Fri Jun 27 17:50:07 2014
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 250%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	81	0.00	5.20
2		bis(Chloromethyl)ether		----------NA----------				
3		1,4-Dioxane		----------NA----------				
4		N-nitrosodimethylamine	0.517	0.516	0.2	79	0.00	3.11
5		Pyridine	1.099	1.130	-2.8	83	0.00	3.13
6		2-Picoline		----------NA----------				
7		N-Nitrosomethylethylamine		----------NA----------				
8		Methyl methanesulfonate		----------NA----------				
9		N-Nitrosodiethylamine		----------NA----------				
10		2-Butoxyethanol		----------NA----------				
11		Ethyl methanesulfonate		----------NA----------				
12	p	Benzaldehyde		----------NA----------				
13		Pentachloroethane		----------NA----------				
14		Aniline		----------NA----------				
15	S	2-Fluorophenol		----------NA----------				
16	p	bis(2-Chloroethyl)ether	1.226	1.101	10.2	74	0.00	4.98
17	S	Phenol-d5		----------NA----------				
18	p	Phenol	1.808	1.680	7.1	76	0.00	4.96
19	p	2-Chlorophenol	1.405	1.379	1.9	80	0.00	5.05
20		n-Decane		----------NA----------				
21		1,3-Dichlorobenzene	1.571	1.479	5.9	76	0.00	5.15
22		1,4-Dichlorobenzene	1.612	1.531	5.0	78	0.00	5.21
23		1,2-Dichlorobenzene	1.550	1.465	5.5	77	0.00	5.34
24		Benzyl alcohol	0.942	0.809	14.1	69	-0.01	5.31
25	p	bis(2-chloroisopropyl)eth	1.276	1.134	11.1	73	-0.01	5.41
26	p	2-Methylphenol	1.287	1.182	8.2	74	-0.02	5.42
27		N-nitrosopyrrolidine		----------NA----------				
28		N-Nitrosomorpholine		----------NA----------				
29		o-Toluidine		----------NA----------				
30	p	Acetophenone		----------NA----------				
31	p	Hexachloroethane	0.608	0.572	5.9	76	0.00	5.63
32	p	N-Nitroso-di-n-propylamin	1.009	0.898	11.0	73	-0.02	5.53
33	p	3&4-Methylphenol	1.483	1.258	15.2	69	-0.02	5.56
34	I	Naphthalene-d8	1.000	1.000	0.0	77	-0.01	6.40
35	S	Nitrobenzene-d5		----------NA----------				
36	p	Nitrobenzene	0.370	0.347	6.2	72	-0.02	5.69
37		2,6-Dimethylphenol		----------NA----------				
38		N-Nitrosopiperidine		----------NA----------				
39		A,A-Dimethylphenethylamin		----------NA----------				
40	p	Isophorone	0.647	0.621	4.0	74	-0.02	5.91
41	p	2-Nitrophenol	0.207	0.201	2.9	73	-0.01	5.99

Initial Calibration Verification

Job Number: TC52720 **Sample:** EP1652-ICV1652
Account: RFWTXHO Weston Solutions **Lab FileID:** P34255.D
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

42	p	2,4-Dimethylphenol	0.384	0.346	9.9	70	-0.01	6.04
43	p	bis(2-Chloroethoxy)methan	0.389	0.367	5.7	73	-0.01	6.12
		----------	Amount	Calc.	%Drift		----------	
44		Benzoic Acid	50.000	52.401	-4.8	78	-0.02	6.18
		----------	AvgRF	CCRF	%Dev		----------	
45	p	2,4-Dichlorophenol	0.340	0.333	2.1	75	-0.01	6.26
46		1,2,4-Trichlorobenzene	0.370	0.348	5.9	73	-0.01	6.33
47	p	Naphthalene	1.089	1.011	7.2	72	-0.01	6.42
48	p	4-Chloroaniline		----------NA----------				
49		2,6-Dichlorophenol		----------NA----------				
50		Hexachloropropene		----------NA----------				
51	p	Hexachlorobutadiene	0.231	0.214	7.4	72	-0.01	6.55
		----------	Amount	Calc.	%Drift		----------	
52		p-Phenylenediamine		----------NA----------				
		----------	AvgRF	CCRF	%Dev		----------	
53	p	Caprolactam		----------NA----------				
54		N-Nitrosodi-n-butylamine		----------NA----------				
55		Hydroquinone		----------NA----------				
56	p	4-Chloro-3-methylphenol	0.355	0.336	5.4	74	-0.02	7.10
57		Isosafrole		----------NA----------				
58	p	2-Methylnaphthalene	0.785	0.714	9.0	71	-0.01	7.28
59		1-Methylnaphthalene	0.727	0.666	8.4	71	-0.02	7.41
60	p	1,2,4,5-Tetrachlorobenzen		----------NA----------				
61	I	Acenaphthene-d10	1.000	1.000	0.0	75	-0.02	8.86
		----------	Amount	Calc.	%Drift		----------	
62	p	Hexachlorocyclopentadiene	50.000	46.577	6.8	71	-0.02	7.49
		----------	AvgRF	CCRF	%Dev		----------	
63	p	2,4,6-Trichlorophenol	0.401	0.401	0.0	74	-0.02	7.68
64	p	2,4,5-Trichlorophenol	0.435	0.428	1.6	72	-0.02	7.76
65	S	2-Fluorobiphenyl		----------NA----------				
66		Safrole		----------NA----------				
67	p	1,1'-Biphenyl		----------NA----------				
68	p	2-Chloronaphthalene	1.227	1.107	9.8	68	-0.02	7.97
69		1-Chloronaphthalene		----------NA----------				
70		Diphenyl ether		----------NA----------				
71	p	2-Nitroaniline	0.324	0.313	3.4	71	-0.02	8.15
72		1,4-Naphthoquinone		----------NA----------				
73		Acenaphthylene	1.907	1.813	4.9	72	-0.01	8.63
74	p	Dimethylphthalate	1.405	1.312	6.6	70	-0.02	8.45
75		m-Dinitrobenzene	0.246	0.224	8.9	67	-0.02	8.50
76	p	2,6-Dinitrotoluene	0.328	0.307	6.4	69	-0.02	8.55
77	p	Acenaphthene	1.227	1.142	6.9	70	-0.01	8.92
78	p	3-Nitroaniline		----------NA----------				
		----------	Amount	Calc.	%Drift		----------	
79	p	2,4-Dinitrophenol	50.000	40.719	18.6	60	-0.02	9.01
		----------	AvgRF	CCRF	%Dev		----------	
80	p	Dibenzofuran	1.727	1.603	7.2	70	-0.01	9.21
81		Pentachlorobenzene		----------NA----------				
82	p	2,4-Dinitrotoluene	0.450	0.414	8.0	68	-0.02	9.22
83	p	4-Nitrophenol	0.196	0.181	7.7	64	-0.02	9.22
84		1-Naphthylamine		----------NA----------				

Initial Calibration Verification

Job Number: TC52720 **Sample:** EP1652-ICV1652
Account: RFWTXHO Weston Solutions **Lab FileID:** P34255.D
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

85		2-Naphthylamine		----------NA----------				
86	p	2,3,4,6-Tetrachlorophenol	0.402	0.371	7.7	67	-0.02	9.45
87	p	Fluorene	1.427	1.328	6.9	70	-0.01	9.82
88	p	4-Chlorophenyl-phenylethe	0.718	0.686	4.5	72	-0.02	9.84
89	p	Diethylphthalate	1.386	1.278	7.8	69	-0.02	9.67
90		5-Nitro-o-toluidine		----------NA----------				
91	p	4-Nitroaniline	0.360	0.300	16.7	61	-0.03	9.90
92	I	Phenanthrene-d10	1.000	1.000	0.0	71	-0.02	11.55
		----------	Amount	Calc.	%Drift		----------	
93		Dinoseb		----------NA----------				
		----------	AvgRF	CCRF	%Dev		----------	
94	p	4,6-Dinitro-2-methylpheno	0.148	0.144	2.7	64	-0.02	9.95
95	p	n-Nitrosodiphenylamine	0.670	0.563	16.0	60	-0.02	10.07
96		1,2-Diphenylhydrazine	0.666	0.663	0.5	71	-0.02	10.13
97		Diphenylamine	0.670	0.563	16.0	60	-0.02	10.07
98	S	2,4,6-Tribromophenol		----------NA----------				
		----------	Amount	Calc.	%Drift		----------	
99		sym-Trinitrobenzene		----------NA----------				
		----------	AvgRF	CCRF	%Dev		----------	
100		Diallate		----------NA----------				
101	p	4-Bromophenyl-phenylether	0.251	0.241	4.0	68	-0.02	10.74
102		Phenacetin		----------NA----------				
103	p	Hexachlorobenzene	0.302	0.287	5.0	68	-0.02	10.81
104	p	Atrazine		----------NA----------				
105		4-aminobiphenyl		----------NA----------				
		----------	Amount	Calc.	%Drift		----------	
106	p	Pentachlorophenol	50.000	50.309	-0.6	63	-0.02	11.22
		----------	AvgRF	CCRF	%Dev		----------	
107		Pentachloronitrobenzene		----------NA----------				
108		Pronamide		----------NA----------				
109		n-Octadecane		----------NA----------				
110	p	Phenanthrene	1.151	1.083	5.9	67	-0.02	11.60
111	p	Anthracene	1.189	1.089	8.4	65	-0.02	11.70
112	p	Carbazole	1.125	1.012	10.0	62	-0.01	12.05
113	p	Di-n-butylphthalate	1.287	1.163	9.6	63	-0.02	12.82
		----------	Amount	Calc.	%Drift		----------	
114		4-Nitroquinoline 1-Oxide		----------NA----------				
		----------	AvgRF	CCRF	%Dev		----------	
115		Methapyrilene		----------NA----------				
116		Octachlorostyrene		----------NA----------				
117		Isodrin		----------NA----------				
118		Fluoranthene	1.377	1.222	11.3	62	-0.02	13.92
119	S	Fluoranthene-D10		----------NA----------				
120		4,4'-Methylenedianiline		----------NA----------				
121	I	Chrysene-d12	1.000	1.000	0.0	71	-0.02	16.77
122		Benzidine		----------NA----------				
123		Pyrene	1.250	1.170	6.4	66	-0.02	14.35
124	S	Terphenyl-d14		----------NA----------				
125		Aramite		----------NA----------				
126		p-(Dimethylamine)azobenze		----------NA----------				

Initial Calibration Verification

Job Number: TC52720 **Sample:** EP1652-ICV1652
Account: RFWTXHO Weston Solutions **Lab FileID:** P34255.D
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

127		Chlorobenzilate		----------NA----------				
		----------	Amount	Calc.	%Drift			----------
128		Kepone		----------NA----------				
		----------	AvgRF	CCRF	%Dev			----------
129		3,3'-Dimethylbenzidine		----------NA----------				
130		Butylbenzylphthalate	0.518	0.474	8.5	64	-0.01	15.80
131		2-Acetylaminofluorene		----------NA----------				
132	p	3,3'-Dichlorobenzidine		----------NA----------				
133	p	Benzo[a]anthracene	1.176	1.068	9.2	65	-0.01	16.76
134	p	Chrysene	1.108	1.055	4.8	68	-0.02	16.82
135	p	bis(2-Ethylhexyl)phthalat	0.716	0.679	5.2	66	0.00	17.00
136	I	Perylene-d12	1.000	1.000	0.0	73	-0.02	19.40
137	p	Di-n-octylphthalate	1.291	1.248	3.3	68	-0.01	18.23
138	p	Benzo[b]fluoranthene	1.272	1.103	13.3	63	-0.02	18.76
139	p	Benzo[k]fluoranthene	1.275	1.149	9.9	65	-0.03	18.80
		----------	Amount	Calc.	%Drift			----------
140		7,12-Dimethylbenz(a)anthr		----------NA----------				
		----------	AvgRF	CCRF	%Dev			----------
141	p	Benzo[a]pyrene	1.208	1.120	7.3	66	-0.02	19.31
142	S	Benzo[a]pyrene-D12		----------NA----------				
143		3-Methylcholanthrene		----------NA----------				
144		Dibenz(a,j)acridine		----------NA----------				
145	p	Indeno[1,2,3-cd]pyrene	1.123	1.050	6.5	66	-0.03	21.31
146	p	Dibenz[a,h]anthracene	1.201	1.155	3.8	68	-0.03	21.36
147	p	Benzo[g,h,i]perylene	1.197	1.157	3.3	69	-0.03	21.85

(#) = Out of Range SPCC's out = 9 CCC's out = 0
p34249.D ep1652.m Fri Jun 27 17:53:47 2014

7.7.4

7

Initial Calibration Verification

Job Number: TC52720
Account: RFWTXHO Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX
Sample: EP1652-ICV1652
Lab FileID: P34256.D

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\EP1652\p34256.D            Vial: 10
Acq On    : 27 Jun 2014   4:50 pm                    Operator: sheilac
Sample    : icv1652-50,cresent                       Inst    : GCMS P
Misc      : op30663,Ep1652,1000,,,1,1,water          Multiplr: 1.00
MS Integration Params: rteint.p

Method       : C:\msdchem\1\METHODS\ep1652.m (RTE Integrator)
Title        : SW846 8270 Appendix 9
Last Update  : Fri Jun 27 17:50:07 2014
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  30%     Max. Rel. Area : 250%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	97	0.00	5.20
2		bis(Chloromethyl)ether		----------NA----------				
3		1,4-Dioxane		----------NA----------				
4		N-nitrosodimethylamine		----------NA----------				
5		Pyridine		----------NA----------				
6		2-Picoline	1.377	1.200	12.9	84	0.00	3.76
7		N-Nitrosomethylethylamine	0.513	0.509	0.8	103	0.00	3.85
8		Methyl methanesulfonate	0.772	0.354	54.1#	45#	0.00	4.10
9		N-Nitrosodiethylamine	0.678	0.701	-3.4	101	0.00	4.39
10		2-Butoxyethanol		----------NA----------				
11		Ethyl methanesulfonate	0.999	1.106	-10.7	108	0.00	4.61
12	p	Benzaldehyde		----------NA----------				
13		Pentachloroethane	0.556	0.612	-10.1	106	0.00	4.98
14		Aniline	1.962	2.280	-16.2	114	0.00	4.95
15	S	2-Fluorophenol		----------NA----------				
16	p	bis(2-Chloroethyl)ether		----------NA----------				
17	S	Phenol-d5		----------NA----------				
18	p	Phenol		----------NA----------				
19	p	2-Chlorophenol		----------NA----------				
20		n-Decane		----------NA----------				
21		1,3-Dichlorobenzene		----------NA----------				
22		1,4-Dichlorobenzene		----------NA----------				
23		1,2-Dichlorobenzene		----------NA----------				
24		Benzyl alcohol		----------NA----------				
25	p	bis(2-chloroisopropyl)eth		----------NA----------				
26	p	2-Methylphenol		----------NA----------				
27		N-nitrosopyrrolidine	0.777	0.795	-2.3	99	-0.01	5.53
28		N-Nitrosomorpholine	0.871	0.907	-4.1	101	-0.01	5.56
29		o-Toluidine	2.347	2.007	14.5	83	-0.01	5.57
30	p	Acetophenone		----------NA----------				
31	p	Hexachloroethane		----------NA----------				
32	p	N-Nitroso-di-n-propylamin		----------NA----------				
33	p	3&4-Methylphenol		----------NA----------				
34	I	Naphthalene-d8	1.000	1.000	0.0	100	-0.01	6.40
35	S	Nitrobenzene-d5		----------NA----------				
36	p	Nitrobenzene		----------NA----------				
37		2,6-Dimethylphenol	0.339	0.365	-7.7	108	0.00	5.80
38		N-Nitrosopiperidine	0.226	0.218	3.5	96	-0.01	5.84
39		A,A-Dimethylphenethylamin	0.840	0.758	9.8	85	-0.04	6.77
40	p	Isophorone		----------NA----------				
41	p	2-Nitrophenol		----------NA----------				

Initial Calibration Verification

Job Number: TC52720 **Sample:** EP1652-ICV1652
Account: RFWTXHO Weston Solutions **Lab FileID:** P34256.D
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

42	p	2,4-Dimethylphenol		----------NA----------				
43	p	bis(2-Chloroethoxy)methan		----------NA----------				
		----------	Amount	Calc.	%Drift		----------	
44		Benzoic Acid		----------NA----------				
		----------	AvgRF	CCRF	%Dev		----------	
45	p	2,4-Dichlorophenol		----------NA----------				
46		1,2,4-Trichlorobenzene		----------NA----------				
47	p	Naphthalene		----------NA----------				
48	p	4-Chloroaniline	0.489	0.388	20.7	79	-0.01	6.49
49		2,6-Dichlorophenol	0.316	0.359	-13.6	112	-0.01	6.50
50		Hexachloropropene	0.240	0.261	-8.8	105	-0.01	6.52
51	p	Hexachlorobutadiene		----------NA----------				
		----------	Amount	Calc.	%Drift		----------	
52		p-Phenylenediamine	500.000	111.410	77.7#	15	-0.05	6.94
		----------	AvgRF	CCRF	%Dev		----------	
53	p	Caprolactam	0.119	0.119	0.0	103	0.00	6.95
54		N-Nitrosodi-n-butylamine	0.283	0.268	5.3	103	-0.01	6.88
55		Hydroquinone		----------NA----------				
56	p	4-Chloro-3-methylphenol		----------NA----------				
57		Isosafrole	0.309	0.222	28.0	72	0.00	7.16
58	p	2-Methylnaphthalene		----------NA----------				
59		1-Methylnaphthalene		----------NA----------				
60	p	1,2,4,5-Tetrachlorobenzen	0.408	0.444	-8.8	110	-0.01	7.51
61	I	Acenaphthene-d10	1.000	1.000	0.0	97	-0.01	8.87
		----------	Amount	Calc.	%Drift		----------	
62	p	Hexachlorocyclopentadiene		----------NA----------				
		----------	AvgRF	CCRF	%Dev		----------	
63	p	2,4,6-Trichlorophenol		----------NA----------				
64	p	2,4,5-Trichlorophenol		----------NA----------				
65	S	2-Fluorobiphenyl		----------NA----------				
66		Safrole	0.482	0.557	-15.5	112	0.00	7.91
67	p	1,1'-Biphenyl	1.443	1.610	-11.6	110	-0.01	7.96
68	p	2-Chloronaphthalene		----------NA----------				
69		1-Chloronaphthalene	1.026	1.114	-8.6	107	-0.01	8.02
70		Diphenyl ether	0.806	0.882	-9.4	107	-0.01	8.11
71	p	2-Nitroaniline		----------NA----------				
72		1,4-Naphthoquinone	0.433	0.108	75.1#	24#	-0.02	8.26
73		Acenaphthylene		----------NA----------				
74	p	Dimethylphthalate		----------NA----------				
75		m-Dinitrobenzene		----------NA----------				
76	p	2,6-Dinitrotoluene		----------NA----------				
77	p	Acenaphthene		----------NA----------				
78	p	3-Nitroaniline	0.360	0.332	7.8	87	-0.01	8.83
		----------	Amount	Calc.	%Drift		----------	
79	p	2,4-Dinitrophenol		----------NA----------				
		----------	AvgRF	CCRF	%Dev		----------	
80	p	Dibenzofuran		----------NA----------				
81		Pentachlorobenzene	0.615	0.695	-13.0	110	-0.01	9.14
82	p	2,4-Dinitrotoluene		----------NA----------				
83	p	4-Nitrophenol		----------NA----------				
84		1-Naphthylamine	1.138	0.682	40.1#	54	-0.02	9.36

Initial Calibration Verification

Job Number: TC52720 **Sample:** EP1652-ICV1652
Account: RFWTXHO Weston Solutions **Lab FileID:** P34256.D
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

85		2-Naphthylamine	1.220	0.605	50.4#	47#	-0.02	9.51
86	p	2,3,4,6-Tetrachlorophenol	0.402	0.409	-1.7	95	-0.01	9.46
87	p	Fluorene		----------NA----------				
88	p	4-Chlorophenyl-phenylethe		----------NA----------				
89	p	Diethylphthalate		----------NA----------				
90		5-Nitro-o-toluidine	0.450	0.332	26.2	69	-0.02	9.88
91	p	4-Nitroaniline		----------NA----------				
92	I	Phenanthrene-d10	1.000	1.000	0.0	88	-0.01	11.56
		----------	Amount	Calc.	%Drift		----------	
93		Dinoseb	50.000	57.917	-15.8	101	-0.01	11.62
		----------	AvgRF	CCRF	%Dev		----------	
94	p	4,6-Dinitro-2-methylpheno		----------NA----------				
95	p	n-Nitrosodiphenylamine		----------NA----------				
96		1,2-Diphenylhydrazine		----------NA----------				
97		Diphenylamine		----------NA----------				
98	S	2,4,6-Tribromophenol		----------NA----------				
		----------	Amount	Calc.	%Drift		----------	
99		sym-Trinitrobenzene	50.000	27.917	44.2#	47	-0.02	10.65
		----------	AvgRF	CCRF	%Dev		----------	
100		Diallate	0.202	0.226	-11.9	99	0.00	10.62
101	p	4-Bromophenyl-phenylether		----------NA----------				
102		Phenacetin	0.386	0.395	-2.3	86	-0.01	10.72
103	p	Hexachlorobenzene		----------NA----------				
104	p	Atrazine	0.194	0.095	51.0#	63	-0.02	11.12
105		4-aminobiphenyl	0.763	0.335	56.1#	39#	-0.02	11.25
		----------	Amount	Calc.	%Drift		----------	
106	p	Pentachlorophenol		----------NA----------				
		----------	AvgRF	CCRF	%Dev		----------	
107		Pentachloronitrobenzene	0.107	0.116	-8.4	94	-0.01	11.22
108		Pronamide	0.369	0.396	-7.3	92	-0.01	11.42
109		n-Octadecane		----------NA----------				
110	p	Phenanthrene		----------NA----------				
111	p	Anthracene		----------NA----------				
112	p	Carbazole		----------NA----------				
113	p	Di-n-butylphthalate		----------NA----------				
		----------	Amount	Calc.	%Drift		----------	
114		4-Nitroquinoline 1-Oxide	50.000	28.252	43.5#	44	-0.01	13.15
		----------	AvgRF	CCRF	%Dev		----------	
115		Methapyrilene	0.393	0.357	9.2	76	-0.01	13.35
116		Octachlorostyrene	0.110	0.118	-7.3	93	-0.01	13.57
117		Isodrin	0.135	0.147	-8.9	94	-0.01	13.61
118		Fluoranthene		----------NA----------				
119	S	Fluoranthene-D10		----------NA----------				
120		4,4'-Methylenedianiline	0.423	0.130	69.3#	28#	-0.01	14.32
121	I	Chrysene-d12	1.000	1.000	0.0	84	-0.01	16.78
122		Benzidine		----------NA----------				
123		Pyrene		----------NA----------				
124	S	Terphenyl-d14		----------NA----------				
125		Aramite	0.073	0.074	-1.4	83	-0.01	14.94
126		p-(Dimethylamine)azobenze	0.320	0.261	18.4	67	-0.01	15.04

Initial Calibration Verification

Job Number: TC52720 **Sample:** EP1652-ICV1652
Account: RFWTXHO Weston Solutions **Lab FileID:** P34256.D
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

127		Chlorobenzilate	0.359	0.391	-8.9	89	-0.01	15.16
		----------	Amount	Calc.	%Drift			----------
128		Kepone		----------NA----------				
		----------	AvgRF	CCRF	%Dev			----------
129		3,3'-Dimethylbenzidine	0.688	0.487	29.2	59	-0.02	15.72
130		Butylbenzylphthalate		----------NA----------				
131		2-Acetylaminofluorene	0.524	0.557	-6.3	88	-0.01	16.23
132	p	3,3'-Dichlorobenzidine	0.451	0.489	-8.4	91	0.00	16.78
133	p	Benzo[a]anthracene		----------NA----------				
134	p	Chrysene		----------NA----------				
135	p	bis(2-Ethylhexyl)phthalat		----------NA----------				
136	I	Perylene-d12	1.000	1.000	0.0	93	-0.01	19.41
137	p	Di-n-octylphthalate		----------NA----------				
138	p	Benzo[b]fluoranthene		----------NA----------				
139	p	Benzo[k]fluoranthene		----------NA----------				
		----------	Amount	Calc.	%Drift			----------
140		7,12-Dimethylbenz(a)anthr	50.000	54.954	-9.9	101	-0.01	18.77
		----------	AvgRF	CCRF	%Dev			----------
141	p	Benzo[a]pyrene		----------NA----------				
142	S	Benzo[a]pyrene-D12		----------NA----------				
143		3-Methylcholanthrene	0.574	0.717	-24.9	111	-0.01	19.91
144		Dibenz(a,j)acridine	1.012	1.163	-14.9	104	-0.01	20.99
145	p	Indeno[1,2,3-cd]pyrene	1.123	1.183	-5.3	95	-0.01	21.32
146	p	Dibenz[a,h]anthracene	1.201	1.266	-5.4	96	-0.01	21.38
147	p	Benzo[g,h,i]perylene	1.197	1.217	-1.7	94	-0.02	21.86

(#) = Out of Range SPCC's out = 48 CCC's out = 0
p34249.D ep1652.m Fri Jun 27 18:00:23 2014

Initial Calibration Verification

Job Number: TC52720
Account: RFWTXHO Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX
Sample: EP1652-ICV1652
Lab FileID: P34257.D

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\EP1652\p34257.D            Vial: 11
Acq On    : 27 Jun 2014   5:20 pm                    Operator: sheilac
Sample    : icv1652-50,custom                        Inst    : GCMS P
Misc      : op30663,Ep1652,1000,,,1,1,water          Multiplr: 1.00
MS Integration Params: rteint.p

Method       : C:\msdchem\1\METHODS\ep1652.m (RTE Integrator)
Title        : SW846 8270 Appendix 9
Last Update  : Fri Jun 27 17:50:07 2014
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  30%     Max. Rel. Area : 250%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	65	0.00	5.20
2		bis(Chloromethyl)ether		----------NA----------				
3		1,4-Dioxane	0.397	0.495	-24.7	82	0.00	2.81
4		N-nitrosodimethylamine		----------NA----------				
5		Pyridine		----------NA----------				
6		2-Picoline		----------NA----------				
7		N-Nitrosomethylethylamine		----------NA----------				
8		Methyl methanesulfonate		----------NA----------				
9		N-Nitrosodiethylamine		----------NA----------				
10		2-Butoxyethanol		----------NA----------				
11		Ethyl methanesulfonate		----------NA----------				
12	p	Benzaldehyde		----------NA----------				
13		Pentachloroethane		----------NA----------				
14		Aniline		----------NA----------				
15	S	2-Fluorophenol		----------NA----------				
16	p	bis(2-Chloroethyl)ether		----------NA----------				
17	S	Phenol-d5		----------NA----------				
18	p	Phenol		----------NA----------				
19	p	2-Chlorophenol		----------NA----------				
20		n-Decane	1.007	1.163	-15.5	77	0.00	5.05
21		1,3-Dichlorobenzene		----------NA----------				
22		1,4-Dichlorobenzene		----------NA----------				
23		1,2-Dichlorobenzene		----------NA----------				
24		Benzyl alcohol		----------NA----------				
25	p	bis(2-chloroisopropyl)eth		----------NA----------				
26	p	2-Methylphenol		----------NA----------				
27		N-nitrosopyrrolidine		----------NA----------				
28		N-Nitrosomorpholine		----------NA----------				
29		o-Toluidine		----------NA----------				
30	p	Acetophenone		----------NA----------				
31	p	Hexachloroethane		----------NA----------				
32	p	N-Nitroso-di-n-propylamin		----------NA----------				
33	p	3&4-Methylphenol		----------NA----------				
34	I	Naphthalene-d8	1.000	1.000	0.0	62	-0.02	6.40
35	S	Nitrobenzene-d5		----------NA----------				
36	p	Nitrobenzene		----------NA----------				
37		2,6-Dimethylphenol		----------NA----------				
38		N-Nitrosopiperidine		----------NA----------				
39		A,A-Dimethylphenethylamin		----------NA----------				
40	p	Isophorone		----------NA----------				
41	p	2-Nitrophenol		----------NA----------				

Initial Calibration Verification

Job Number: TC52720 **Sample:** EP1652-ICV1652
Account: RFWTXHO Weston Solutions **Lab FileID:** P34257.D
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

42	p	2,4-Dimethylphenol		----------NA----------				
43	p	bis(2-Chloroethoxy)methan		----------NA----------				
		----------	Amount	Calc.	%Drift	----------		
44		Benzoic Acid		----------NA----------				
		----------	AvgRF	CCRF	%Dev	----------		
45	p	2,4-Dichlorophenol		----------NA----------				
46		1,2,4-Trichlorobenzene		----------NA----------				
47	p	Naphthalene		----------NA----------				
48	p	4-Chloroaniline		----------NA----------				
49		2,6-Dichlorophenol		----------NA----------				
50		Hexachloropropene		----------NA----------				
51	p	Hexachlorobutadiene		----------NA----------				
		----------	Amount	Calc.	%Drift	----------		
52		p-Phenylenediamine		----------NA----------				
		----------	AvgRF	CCRF	%Dev	----------		
53	p	Caprolactam		----------NA----------				
54		N-Nitrosodi-n-butylamine		----------NA----------				
55		Hydroquinone		----------NA----------				
56	p	4-Chloro-3-methylphenol		----------NA----------				
57		Isosafrole		----------NA----------				
58	p	2-Methylnaphthalene		----------NA----------				
59		1-Methylnaphthalene		----------NA----------				
60	p	1,2,4,5-Tetrachlorobenzen		----------NA----------				
61	I	Acenaphthene-d10	1.000	1.000	0.0	62	-0.02	8.86
		----------	Amount	Calc.	%Drift	----------		
62	p	Hexachlorocyclopentadiene		----------NA----------				
		----------	AvgRF	CCRF	%Dev	----------		
63	p	2,4,6-Trichlorophenol		----------NA----------				
64	p	2,4,5-Trichlorophenol		----------NA----------				
65	S	2-Fluorobiphenyl		----------NA----------				
66		Safrole		----------NA----------				
67	p	1,1'-Biphenyl		----------NA----------				
68	p	2-Chloronaphthalene		----------NA----------				
69		1-Chloronaphthalene		----------NA----------				
70		Diphenyl ether		----------NA----------				
71	p	2-Nitroaniline		----------NA----------				
72		1,4-Naphthoquinone		----------NA----------				
73		Acenaphthylene		----------NA----------				
74	p	Dimethylphthalate		----------NA----------				
75		m-Dinitrobenzene		----------NA----------				
76	p	2,6-Dinitrotoluene		----------NA----------				
77	p	Acenaphthene		----------NA----------				
78	p	3-Nitroaniline		----------NA----------				
		----------	Amount	Calc.	%Drift	----------		
79	p	2,4-Dinitrophenol		----------NA----------				
		----------	AvgRF	CCRF	%Dev	----------		
80	p	Dibenzofuran		----------NA----------				
81		Pentachlorobenzene		----------NA----------				
82	p	2,4-Dinitrotoluene		----------NA----------				
83	p	4-Nitrophenol		----------NA----------				
84		1-Naphthylamine		----------NA----------				

Initial Calibration Verification

Job Number: TC52720
Account: RFWTXHO Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Sample: EP1652-ICV1652
Lab FileID: P34257.D

85		2-Naphthylamine		----------NA----------				
86	p	2,3,4,6-Tetrachlorophenol		----------NA----------				
87	p	Fluorene		----------NA----------				
88	p	4-Chlorophenyl-phenylethe		----------NA----------				
89	p	Diethylphthalate		----------NA----------				
90		5-Nitro-o-toluidine		----------NA----------				
91	p	4-Nitroaniline		----------NA----------				
92	I	Phenanthrene-d10	1.000	1.000	0.0	59	-0.02	11.55
		----------	Amount	Calc.	%Drift			----------
93		Dinoseb		----------NA----------				
		----------	AvgRF	CCRF	%Dev			----------
94	p	4,6-Dinitro-2-methylpheno		----------NA----------				
95	p	n-Nitrosodiphenylamine		----------NA----------				
96		1,2-Diphenylhydrazine		----------NA----------				
97		Diphenylamine		----------NA----------				
98	S	2,4,6-Tribromophenol		----------NA----------				
		----------	Amount	Calc.	%Drift			----------
99		sym-Trinitrobenzene		----------NA----------				
		----------	AvgRF	CCRF	%Dev			----------
100		Diallate		----------NA----------				
101	p	4-Bromophenyl-phenylether		----------NA----------				
102		Phenacetin		----------NA----------				
103	p	Hexachlorobenzene		----------NA----------				
104	p	Atrazine		----------NA----------				
105		4-aminobiphenyl		----------NA----------				
		----------	Amount	Calc.	%Drift			----------
106	p	Pentachlorophenol		----------NA----------				
		----------	AvgRF	CCRF	%Dev			----------
107		Pentachloronitrobenzene		----------NA----------				
108		Pronamide		----------NA----------				
109		n-Octadecane	0.341	0.352	-3.2	63	-0.02	11.48
110	p	Phenanthrene		----------NA----------				
111	p	Anthracene		----------NA----------				
112	p	Carbazole		----------NA----------				
113	p	Di-n-butylphthalate		----------NA----------				
		----------	Amount	Calc.	%Drift			----------
114		4-Nitroquinoline 1-Oxide		----------NA----------				
		----------	AvgRF	CCRF	%Dev			----------
115		Methapyrilene		----------NA----------				
116		Octachlorostyrene		----------NA----------				
117		Isodrin		----------NA----------				
118		Fluoranthene		----------NA----------				
119	S	Fluoranthene-D10		----------NA----------				
120		4,4'-Methylenedianiline		----------NA----------				
121	I	Chrysene-d12	1.000	1.000	0.0	57	-0.03	16.76
122		Benzidine		----------NA----------				
123		Pyrene		----------NA----------				
124	S	Terphenyl-d14		----------NA----------				
125		Aramite		----------NA----------				
126		p-(Dimethylamine)azobenze		----------NA----------				

Initial Calibration Verification

Job Number: TC52720
Account: RFWTXHO Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Sample: EP1652-ICV1652
Lab FileID: P34257.D

```
127      Chlorobenzilate                      ----------NA----------

             ------------------------ Amount  Calc.    %Drift   -------------
128      Kepone                        50.000  42.200     15.6   44  -0.03   15.70

             ------------------------ AvgRF   CCRF      %Dev   --------------
129      3,3'-Dimethylbenzidine                ----------NA----------
130      Butylbenzylphthalate                  ----------NA----------
131      2-Acetylaminofluorene                 ----------NA----------
132 p    3,3'-Dichlorobenzidine                ----------NA----------
133 p    Benzo[a]anthracene                    ----------NA----------
134 p    Chrysene                              ----------NA----------
135 p    bis(2-Ethylhexyl)phthalat             ----------NA----------

136 I    Perylene-d12                   1.000   1.000      0.0   57  -0.03   19.39
137 p    Di-n-octylphthalate                   ----------NA----------
138 p    Benzo[b]fluoranthene                  ----------NA----------
139 p    Benzo[k]fluoranthene                  ----------NA----------

             ------------------------ Amount  Calc.    %Drift   -------------
140      7,12-Dimethylbenz(a)anthr             ----------NA----------

             ------------------------ AvgRF   CCRF      %Dev   --------------
141 p    Benzo[a]pyrene                        ----------NA----------
142 S    Benzo[a]pyrene-D12                    ----------NA----------
143      3-Methylcholanthrene                  ----------NA----------
144      Dibenz(a,j)acridine                   ----------NA----------
145 p    Indeno[1,2,3-cd]pyrene                ----------NA----------
146 p    Dibenz[a,h]anthracene                 ----------NA----------
147 p    Benzo[g,h,i]perylene                  ----------NA----------
 ---------------------------------------------------------------------------
 ---------------------------------------------------------------------------

    (#) = Out of Range                SPCC's out = 59  CCC's out = 0
     p34249.D   ep1652.m         Fri Jun 27 18:09:39 2014
```

7.7.6

7

Initial Calibration Verification

Job Number: TC52720
Account: RFWTXHO Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Sample: EP1652-ICV1652
Lab FileID: P34258.D

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\EP1652\p34258.D            Vial: 12
Acq On    : 27 Jun 2014   5:49 pm                    Operator: sheilac
Sample    : icv1652-50,2-butoxyethanol               Inst    : GCMS P
Misc      : op30663,Ep1652,1000,,,1,1,water          Multiplr: 1.00
MS Integration Params: rteint.p

Method       : C:\msdchem\1\METHODS\ep1652.m (RTE Integrator)
Title        : SW846 8270 Appendix 9
Last Update  : Fri Jun 27 17:50:07 2014
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  30%     Max. Rel. Area : 250%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	95	0.00	5.20
2		bis(Chloromethyl)ether		----------NA----------				
3		1,4-Dioxane		----------NA----------				
4		N-nitrosodimethylamine		----------NA----------				
5		Pyridine		----------NA----------				
6		2-Picoline		----------NA----------				
7		N-Nitrosomethylethylamine		----------NA----------				
8		Methyl methanesulfonate		----------NA----------				
9		N-Nitrosodiethylamine		----------NA----------				
10		2-Butoxyethanol	1.110	0.981	11.6	84	0.00	4.44
11		Ethyl methanesulfonate		----------NA----------				
12	p	Benzaldehyde		----------NA----------				
13		Pentachloroethane		----------NA----------				
14		Aniline		----------NA----------				
15	S	2-Fluorophenol		----------NA----------				
16	p	bis(2-Chloroethyl)ether		----------NA----------				
17	S	Phenol-d5		----------NA----------				
18	p	Phenol		----------NA----------				
19	p	2-Chlorophenol		----------NA----------				
20		n-Decane		----------NA----------				
21		1,3-Dichlorobenzene		----------NA----------				
22		1,4-Dichlorobenzene		----------NA----------				
23		1,2-Dichlorobenzene		----------NA----------				
24		Benzyl alcohol		----------NA----------				
25	p	bis(2-chloroisopropyl)eth		----------NA----------				
26	p	2-Methylphenol		----------NA----------				
27		N-nitrosopyrrolidine		----------NA----------				
28		N-Nitrosomorpholine		----------NA----------				
29		o-Toluidine		----------NA----------				
30	p	Acetophenone		----------NA----------				
31	p	Hexachloroethane		----------NA----------				
32	p	N-Nitroso-di-n-propylamin		----------NA----------				
33	p	3&4-Methylphenol		----------NA----------				
34	I	Naphthalene-d8	1.000	1.000	0.0	94	-0.02	6.40
35	S	Nitrobenzene-d5		----------NA----------				
36	p	Nitrobenzene		----------NA----------				
37		2,6-Dimethylphenol		----------NA----------				
38		N-Nitrosopiperidine		----------NA----------				
39		A,A-Dimethylphenethylamin		----------NA----------				
40	p	Isophorone		----------NA----------				
41	p	2-Nitrophenol		----------NA----------				

Initial Calibration Verification

Job Number: TC52720
Account: RFWTXHO Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Sample: EP1652-ICV1652
Lab FileID: P34258.D

42	p	2,4-Dimethylphenol		----------NA----------				
43	p	bis(2-Chloroethoxy)methan		----------NA----------				
		----------	Amount	Calc.	%Drift	----------		
44		Benzoic Acid		----------NA----------				
		----------	AvgRF	CCRF	%Dev	----------		
45	p	2,4-Dichlorophenol		----------NA----------				
46		1,2,4-Trichlorobenzene		----------NA----------				
47	p	Naphthalene		----------NA----------				
48	p	4-Chloroaniline		----------NA----------				
49		2,6-Dichlorophenol		----------NA----------				
50		Hexachloropropene		----------NA----------				
51	p	Hexachlorobutadiene		----------NA----------				
		----------	Amount	Calc.	%Drift	----------		
52		p-Phenylenediamine		----------NA----------				
		----------	AvgRF	CCRF	%Dev	----------		
53	p	Caprolactam		----------NA----------				
54		N-Nitrosodi-n-butylamine		----------NA----------				
55		Hydroquinone		----------NA----------				
56	p	4-Chloro-3-methylphenol		----------NA----------				
57		Isosafrole		----------NA----------				
58	p	2-Methylnaphthalene		----------NA----------				
59		1-Methylnaphthalene		----------NA----------				
60	p	1,2,4,5-Tetrachlorobenzen		----------NA----------				
61	I	Acenaphthene-d10	1.000	1.000	0.0	96	-0.02	8.86
		----------	Amount	Calc.	%Drift	----------		
62	p	Hexachlorocyclopentadiene		----------NA----------				
		----------	AvgRF	CCRF	%Dev	----------		
63	p	2,4,6-Trichlorophenol		----------NA----------				
64	p	2,4,5-Trichlorophenol		----------NA----------				
65	S	2-Fluorobiphenyl		----------NA----------				
66		Safrole		----------NA----------				
67	p	1,1'-Biphenyl		----------NA----------				
68	p	2-Chloronaphthalene		----------NA----------				
69		1-Chloronaphthalene		----------NA----------				
70		Diphenyl ether		----------NA----------				
71	p	2-Nitroaniline		----------NA----------				
72		1,4-Naphthoquinone		----------NA----------				
73		Acenaphthylene		----------NA----------				
74	p	Dimethylphthalate		----------NA----------				
75		m-Dinitrobenzene		----------NA----------				
76	p	2,6-Dinitrotoluene		----------NA----------				
77	p	Acenaphthene		----------NA----------				
78	p	3-Nitroaniline		----------NA----------				
		----------	Amount	Calc.	%Drift	----------		
79	p	2,4-Dinitrophenol		----------NA----------				
		----------	AvgRF	CCRF	%Dev	----------		
80	p	Dibenzofuran		----------NA----------				
81		Pentachlorobenzene		----------NA----------				
82	p	2,4-Dinitrotoluene		----------NA----------				
83	p	4-Nitrophenol		----------NA----------				
84		1-Naphthylamine		----------NA----------				

Initial Calibration Verification

Job Number: TC52720
Account: RFWTXHO Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Sample: EP1652-ICV1652
Lab FileID: P34258.D

85		2-Naphthylamine		----------NA----------				
86	p	2,3,4,6-Tetrachlorophenol		----------NA----------				
87	p	Fluorene		----------NA----------				
88	p	4-Chlorophenyl-phenylethe		----------NA----------				
89	p	Diethylphthalate		----------NA----------				
90		5-Nitro-o-toluidine		----------NA----------				
91	p	4-Nitroaniline		----------NA----------				
92	I	Phenanthrene-d10	1.000	1.000	0.0	94	-0.02	11.55
		----------	Amount	Calc.	%Drift			----------
93		Dinoseb		----------NA----------				
		----------	AvgRF	CCRF	%Dev			----------
94	p	4,6-Dinitro-2-methylpheno		----------NA----------				
95	p	n-Nitrosodiphenylamine		----------NA----------				
96		1,2-Diphenylhydrazine		----------NA----------				
97		Diphenylamine		----------NA----------				
98	S	2,4,6-Tribromophenol		----------NA----------				
		----------	Amount	Calc.	%Drift			----------
99		sym-Trinitrobenzene		----------NA----------				
		----------	AvgRF	CCRF	%Dev			----------
100		Diallate		----------NA----------				
101	p	4-Bromophenyl-phenylether		----------NA----------				
102		Phenacetin		----------NA----------				
103	p	Hexachlorobenzene		----------NA----------				
104	p	Atrazine		----------NA----------				
105		4-aminobiphenyl		----------NA----------				
		----------	Amount	Calc.	%Drift			----------
106	p	Pentachlorophenol		----------NA----------				
		----------	AvgRF	CCRF	%Dev			----------
107		Pentachloronitrobenzene		----------NA----------				
108		Pronamide		----------NA----------				
109		n-Octadecane		----------NA----------				
110	p	Phenanthrene		----------NA----------				
111	p	Anthracene		----------NA----------				
112	p	Carbazole		----------NA----------				
113	p	Di-n-butylphthalate		----------NA----------				
		----------	Amount	Calc.	%Drift			----------
114		4-Nitroquinoline 1-Oxide		----------NA----------				
		----------	AvgRF	CCRF	%Dev			----------
115		Methapyrilene		----------NA----------				
116		Octachlorostyrene		----------NA----------				
117		Isodrin		----------NA----------				
118		Fluoranthene		----------NA----------				
119	S	Fluoranthene-D10		----------NA----------				
120		4,4'-Methylenedianiline		----------NA----------				
121	I	Chrysene-d12	1.000	1.000	0.0	105	-0.02	16.77
122		Benzidine		----------NA----------				
123		Pyrene		----------NA----------				
124	S	Terphenyl-d14		----------NA----------				
125		Aramite		----------NA----------				
126		p-(Dimethylamine)azobenze		----------NA----------				

Initial Calibration Verification

Job Number: TC52720
Account: RFWTXHO Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Sample: EP1652-ICV1652
Lab FileID: P34258.D

```
127      Chlorobenzilate                      ----------NA----------

             ----------------------- Amount  Calc.    %Drift   -------------
128      Kepone                               ----------NA----------

             ----------------------- AvgRF   CCRF      %Dev   --------------
129      3,3'-Dimethylbenzidine               ----------NA----------
130      Butylbenzylphthalate                 ----------NA----------
131      2-Acetylaminofluorene                ----------NA----------
132 p    3,3'-Dichlorobenzidine               ----------NA----------
133 p    Benzo[a]anthracene                   ----------NA----------
134 p    Chrysene                             ----------NA----------
135 p    bis(2-Ethylhexyl)phthalat            ----------NA----------

136 I    Perylene-d12                 1.000   1.000      0.0  104  -0.02   19.40
137 p    Di-n-octylphthalate                  ----------NA----------
138 p    Benzo[b]fluoranthene                 ----------NA----------
139 p    Benzo[k]fluoranthene                 ----------NA----------

             ----------------------- Amount  Calc.    %Drift   -------------
140      7,12-Dimethylbenz(a)anthr            ----------NA----------

             ----------------------- AvgRF   CCRF      %Dev   --------------
141 p    Benzo[a]pyrene                       ----------NA----------
142 S    Benzo[a]pyrene-D12                   ----------NA----------
143      3-Methylcholanthrene                 ----------NA----------
144      Dibenz(a,j)acridine                  ----------NA----------
145 p    Indeno[1,2,3-cd]pyrene               ----------NA----------
146 p    Dibenz[a,h]anthracene                ----------NA----------
147 p    Benzo[g,h,i]perylene                 ----------NA----------
 ---------------------------------------------------------------------------
 ---------------------------------------------------------------------------

    (#) = Out of Range                SPCC's out = 59  CCC's out = 0
     p34249.D   ep1652.m         Fri Jun 27 18:10:35 2014
```

7.2.7

7

Initial Calibration Verification

Job Number: TC52720
Account: RFWTXHO Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX
Sample: EP1652-ICV1652
Lab FileID: P34259.D

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\EP1652\p34259.D            Vial: 13
Acq On    : 27 Jun 2014   6:16 pm                    Operator: sheilac
Sample    : icv1652-50,hydroquinone                  Inst    : GCMS P
Misc      : op30663,Ep1652,1000,,,1,1,water          Multiplr: 1.00
MS Integration Params: rteint.p

Method       : C:\msdchem\1\METHODS\ep1652.m (RTE Integrator)
Title        : SW846 8270 Appendix 9
Last Update  : Fri Jun 27 17:50:07 2014
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  30%     Max. Rel. Area : 250%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	83	0.00	5.20
2		bis(Chloromethyl)ether		----------NA----------				
3		1,4-Dioxane		----------NA----------				
4		N-nitrosodimethylamine		----------NA----------				
5		Pyridine		----------NA----------				
6		2-Picoline		----------NA----------				
7		N-Nitrosomethylethylamine		----------NA----------				
8		Methyl methanesulfonate		----------NA----------				
9		N-Nitrosodiethylamine		----------NA----------				
10		2-Butoxyethanol		----------NA----------				
11		Ethyl methanesulfonate		----------NA----------				
12	p	Benzaldehyde		----------NA----------				
13		Pentachloroethane		----------NA----------				
14		Aniline		----------NA----------				
15	S	2-Fluorophenol		----------NA----------				
16	p	bis(2-Chloroethyl)ether		----------NA----------				
17	S	Phenol-d5		----------NA----------				
18	p	Phenol		----------NA----------				
19	p	2-Chlorophenol		----------NA----------				
20		n-Decane		----------NA----------				
21		1,3-Dichlorobenzene		----------NA----------				
22		1,4-Dichlorobenzene		----------NA----------				
23		1,2-Dichlorobenzene		----------NA----------				
24		Benzyl alcohol		----------NA----------				
25	p	bis(2-chloroisopropyl)eth		----------NA----------				
26	p	2-Methylphenol		----------NA----------				
27		N-nitrosopyrrolidine		----------NA----------				
28		N-Nitrosomorpholine		----------NA----------				
29		o-Toluidine		----------NA----------				
30	p	Acetophenone		----------NA----------				
31	p	Hexachloroethane		----------NA----------				
32	p	N-Nitroso-di-n-propylamin		----------NA----------				
33	p	3&4-Methylphenol		----------NA----------				
34	I	Naphthalene-d8	1.000	1.000	0.0	80	-0.02	6.39
35	S	Nitrobenzene-d5		----------NA----------				
36	p	Nitrobenzene		----------NA----------				
37		2,6-Dimethylphenol		----------NA----------				
38		N-Nitrosopiperidine		----------NA----------				
39		A,A-Dimethylphenethylamin		----------NA----------				
40	p	Isophorone		----------NA----------				
41	p	2-Nitrophenol		----------NA----------				

Initial Calibration Verification

Job Number: TC52720
Account: RFWTXHO Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX
Sample: EP1652-ICV1652
Lab FileID: P34259.D

42	p	2,4-Dimethylphenol		----------NA----------				
43	p	bis(2-Chloroethoxy)methan		----------NA----------				
		----------	Amount	Calc.	%Drift	----------		
44		Benzoic Acid		----------NA----------				
		----------	AvgRF	CCRF	%Dev	----------		
45	p	2,4-Dichlorophenol		----------NA----------				
46		1,2,4-Trichlorobenzene		----------NA----------				
47	p	Naphthalene		----------NA----------				
48	p	4-Chloroaniline		----------NA----------				
49		2,6-Dichlorophenol		----------NA----------				
50		Hexachloropropene		----------NA----------				
51	p	Hexachlorobutadiene		----------NA----------				
		----------	Amount	Calc.	%Drift	----------		
52		p-Phenylenediamine		----------NA----------				
		----------	AvgRF	CCRF	%Dev	----------		
53	p	Caprolactam		----------NA----------				
54		N-Nitrosodi-n-butylamine		----------NA----------				
55		Hydroquinone	0.339	0.384	-13.3	88	-0.04	6.92
56	p	4-Chloro-3-methylphenol		----------NA----------				
57		Isosafrole		----------NA----------				
58	p	2-Methylnaphthalene		----------NA----------				
59		1-Methylnaphthalene		----------NA----------				
60	p	1,2,4,5-Tetrachlorobenzen		----------NA----------				
61	I	Acenaphthene-d10	1.000	1.000	0.0	81	-0.02	8.86
		----------	Amount	Calc.	%Drift	----------		
62	p	Hexachlorocyclopentadiene		----------NA----------				
		----------	AvgRF	CCRF	%Dev	----------		
63	p	2,4,6-Trichlorophenol		----------NA----------				
64	p	2,4,5-Trichlorophenol		----------NA----------				
65	S	2-Fluorobiphenyl		----------NA----------				
66		Safrole		----------NA----------				
67	p	1,1'-Biphenyl		----------NA----------				
68	p	2-Chloronaphthalene		----------NA----------				
69		1-Chloronaphthalene		----------NA----------				
70		Diphenyl ether		----------NA----------				
71	p	2-Nitroaniline		----------NA----------				
72		1,4-Naphthoquinone		----------NA----------				
73		Acenaphthylene		----------NA----------				
74	p	Dimethylphthalate		----------NA----------				
75		m-Dinitrobenzene		----------NA----------				
76	p	2,6-Dinitrotoluene		----------NA----------				
77	p	Acenaphthene		----------NA----------				
78	p	3-Nitroaniline		----------NA----------				
		----------	Amount	Calc.	%Drift	----------		
79	p	2,4-Dinitrophenol		----------NA----------				
		----------	AvgRF	CCRF	%Dev	----------		
80	p	Dibenzofuran		----------NA----------				
81		Pentachlorobenzene		----------NA----------				
82	p	2,4-Dinitrotoluene		----------NA----------				
83	p	4-Nitrophenol		----------NA----------				
84		1-Naphthylamine		----------NA----------				

Initial Calibration Verification

Job Number: TC52720
Account: RFWTXHO Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Sample: EP1652-ICV1652
Lab FileID: P34259.D

85		2-Naphthylamine		----------NA----------				
86	p	2,3,4,6-Tetrachlorophenol		----------NA----------				
87	p	Fluorene		----------NA----------				
88	p	4-Chlorophenyl-phenylethe		----------NA----------				
89	p	Diethylphthalate		----------NA----------				
90		5-Nitro-o-toluidine		----------NA----------				
91	p	4-Nitroaniline		----------NA----------				
92	I	Phenanthrene-d10	1.000	1.000	0.0	82	-0.02	11.55
		----------	Amount	Calc.	%Drift			----------
93		Dinoseb		----------NA----------				
		----------	AvgRF	CCRF	%Dev			----------
94	p	4,6-Dinitro-2-methylpheno		----------NA----------				
95	p	n-Nitrosodiphenylamine		----------NA----------				
96		1,2-Diphenylhydrazine		----------NA----------				
97		Diphenylamine		----------NA----------				
98	S	2,4,6-Tribromophenol		----------NA----------				
		----------	Amount	Calc.	%Drift			----------
99		sym-Trinitrobenzene		----------NA----------				
		----------	AvgRF	CCRF	%Dev			----------
100		Diallate		----------NA----------				
101	p	4-Bromophenyl-phenylether		----------NA----------				
102		Phenacetin		----------NA----------				
103	p	Hexachlorobenzene		----------NA----------				
104	p	Atrazine		----------NA----------				
105		4-aminobiphenyl		----------NA----------				
		----------	Amount	Calc.	%Drift			----------
106	p	Pentachlorophenol		----------NA----------				
		----------	AvgRF	CCRF	%Dev			----------
107		Pentachloronitrobenzene		----------NA----------				
108		Pronamide		----------NA----------				
109		n-Octadecane		----------NA----------				
110	p	Phenanthrene		----------NA----------				
111	p	Anthracene		----------NA----------				
112	p	Carbazole		----------NA----------				
113	p	Di-n-butylphthalate		----------NA----------				
		----------	Amount	Calc.	%Drift			----------
114		4-Nitroquinoline 1-Oxide		----------NA----------				
		----------	AvgRF	CCRF	%Dev			----------
115		Methapyrilene		----------NA----------				
116		Octachlorostyrene		----------NA----------				
117		Isodrin		----------NA----------				
118		Fluoranthene		----------NA----------				
119	S	Fluoranthene-D10		----------NA----------				
120		4,4'-Methylenedianiline		----------NA----------				
121	I	Chrysene-d12	1.000	1.000	0.0	92	-0.02	16.77
122		Benzidine		----------NA----------				
123		Pyrene		----------NA----------				
124	S	Terphenyl-d14		----------NA----------				
125		Aramite		----------NA----------				
126		p-(Dimethylamine)azobenze		----------NA----------				

Initial Calibration Verification

Job Number: TC52720
Account: RFWTXHO Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Sample: EP1652-ICV1652
Lab FileID: P34259.D

```
127      Chlorobenzilate                      ----------NA----------

             ----------------------- Amount  Calc.    %Drift   -------------
128      Kepone                               ----------NA----------

             ----------------------- AvgRF   CCRF      %Dev   --------------
129      3,3'-Dimethylbenzidine               ----------NA----------
130      Butylbenzylphthalate                 ----------NA----------
131      2-Acetylaminofluorene                ----------NA----------
132 p    3,3'-Dichlorobenzidine               ----------NA----------
133 p    Benzo[a]anthracene                   ----------NA----------
134 p    Chrysene                             ----------NA----------
135 p    bis(2-Ethylhexyl)phthalat            ----------NA----------

136 I    Perylene-d12                 1.000   1.000      0.0   90  -0.02   19.40
137 p    Di-n-octylphthalate                  ----------NA----------
138 p    Benzo[b]fluoranthene                 ----------NA----------
139 p    Benzo[k]fluoranthene                 ----------NA----------

             ----------------------- Amount  Calc.    %Drift   -------------
140      7,12-Dimethylbenz(a)anthr            ----------NA----------

             ----------------------- AvgRF   CCRF      %Dev   --------------
141 p    Benzo[a]pyrene                       ----------NA----------
142 S    Benzo[a]pyrene-D12                   ----------NA----------
143      3-Methylcholanthrene                 ----------NA----------
144      Dibenz(a,j)acridine                  ----------NA----------
145 p    Indeno[1,2,3-cd]pyrene               ----------NA----------
146 p    Dibenz[a,h]anthracene                ----------NA----------
147 p    Benzo[g,h,i]perylene                 ----------NA----------
 ---------------------------------------------------------------------------
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    (#) = Out of Range                SPCC's out = 59  CCC's out = 0
     p34249.D   ep1652.m          Mon Jun 30 10:25:36 2014
```

7.7.8

7

Initial Calibration Verification

Job Number: TC52720
Account: RFWTXHO Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Sample: EP1652-ICV1652
Lab FileID: P34260.D

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\EP1652\p34260.D            Vial: 14
Acq On    : 27 Jun 2014   6:45 pm                    Operator: sheilac
Sample    : icv1652-50,benzidine                     Inst    : GCMS P
Misc      : op30663,Ep1652,1000,,,1,1,water          Multiplr: 1.00
MS Integration Params: rteint.p

Method       : C:\msdchem\1\METHODS\ep1652.m (RTE Integrator)
Title        : SW846 8270 Appendix 9
Last Update  : Fri Jun 27 17:50:07 2014
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  30%     Max. Rel. Area : 250%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	75	0.00	5.20
2		bis(Chloromethyl)ether		----------NA----------				
3		1,4-Dioxane		----------NA----------				
4		N-nitrosodimethylamine		----------NA----------				
5		Pyridine		----------NA----------				
6		2-Picoline		----------NA----------				
7		N-Nitrosomethylethylamine		----------NA----------				
8		Methyl methanesulfonate		----------NA----------				
9		N-Nitrosodiethylamine		----------NA----------				
10		2-Butoxyethanol		----------NA----------				
11		Ethyl methanesulfonate		----------NA----------				
12	p	Benzaldehyde		----------NA----------				
13		Pentachloroethane		----------NA----------				
14		Aniline		----------NA----------				
15	S	2-Fluorophenol		----------NA----------				
16	p	bis(2-Chloroethyl)ether		----------NA----------				
17	S	Phenol-d5		----------NA----------				
18	p	Phenol		----------NA----------				
19	p	2-Chlorophenol		----------NA----------				
20		n-Decane		----------NA----------				
21		1,3-Dichlorobenzene		----------NA----------				
22		1,4-Dichlorobenzene		----------NA----------				
23		1,2-Dichlorobenzene		----------NA----------				
24		Benzyl alcohol		----------NA----------				
25	p	bis(2-chloroisopropyl)eth		----------NA----------				
26	p	2-Methylphenol		----------NA----------				
27		N-nitrosopyrrolidine		----------NA----------				
28		N-Nitrosomorpholine		----------NA----------				
29		o-Toluidine		----------NA----------				
30	p	Acetophenone		----------NA----------				
31	p	Hexachloroethane		----------NA----------				
32	p	N-Nitroso-di-n-propylamin		----------NA----------				
33	p	3&4-Methylphenol		----------NA----------				
34	I	Naphthalene-d8	1.000	1.000	0.0	73	-0.02	6.40
35	S	Nitrobenzene-d5		----------NA----------				
36	p	Nitrobenzene		----------NA----------				
37		2,6-Dimethylphenol		----------NA----------				
38		N-Nitrosopiperidine		----------NA----------				
39		A,A-Dimethylphenethylamin		----------NA----------				
40	p	Isophorone		----------NA----------				
41	p	2-Nitrophenol		----------NA----------				

Initial Calibration Verification

Job Number: TC52720
Account: RFWTXHO Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Sample: EP1652-ICV1652
Lab FileID: P34260.D

```
42 p   2,4-Dimethylphenol                  ----------NA----------
43 p   bis(2-Chloroethoxy)methan           ----------NA----------

           ----------------------- Amount  Calc.    %Drift   -------------
44     Benzoic Acid                        ----------NA----------

           ----------------------- AvgRF   CCRF      %Dev   --------------
45 p   2,4-Dichlorophenol                  ----------NA----------
46     1,2,4-Trichlorobenzene              ----------NA----------
47 p   Naphthalene                         ----------NA----------
48 p   4-Chloroaniline                     ----------NA----------
49     2,6-Dichlorophenol                  ----------NA----------
50     Hexachloropropene                   ----------NA----------
51 p   Hexachlorobutadiene                 ----------NA----------

           ----------------------- Amount  Calc.    %Drift   -------------
52     p-Phenylenediamine                  ----------NA----------

           ----------------------- AvgRF   CCRF      %Dev   --------------
53 p   Caprolactam                         ----------NA----------
54     N-Nitrosodi-n-butylamine            ----------NA----------
55     Hydroquinone                        ----------NA----------
56 p   4-Chloro-3-methylphenol             ----------NA----------
57     Isosafrole                          ----------NA----------
58 p   2-Methylnaphthalene                 ----------NA----------
59     1-Methylnaphthalene                 ----------NA----------
60 p   1,2,4,5-Tetrachlorobenzen           ----------NA----------

61 I   Acenaphthene-d10            1.000   1.000      0.0   75  -0.02    8.86

           ----------------------- Amount  Calc.    %Drift   -------------
62 p   Hexachlorocyclopentadiene           ----------NA----------

           ----------------------- AvgRF   CCRF      %Dev   --------------
63 p   2,4,6-Trichlorophenol               ----------NA----------
64 p   2,4,5-Trichlorophenol               ----------NA----------
65 S   2-Fluorobiphenyl                    ----------NA----------
66     Safrole                             ----------NA----------
67 p   1,1'-Biphenyl                       ----------NA----------
68 p   2-Chloronaphthalene                 ----------NA----------
69     1-Chloronaphthalene                 ----------NA----------
70     Diphenyl ether                      ----------NA----------
71 p   2-Nitroaniline                      ----------NA----------
72     1,4-Naphthoquinone                  ----------NA----------
73     Acenaphthylene                      ----------NA----------
74 p   Dimethylphthalate                   ----------NA----------
75     m-Dinitrobenzene                    ----------NA----------
76 p   2,6-Dinitrotoluene                  ----------NA----------
77 p   Acenaphthene                        ----------NA----------
78 p   3-Nitroaniline                      ----------NA----------

           ----------------------- Amount  Calc.    %Drift   -------------
79 p   2,4-Dinitrophenol                   ----------NA----------

           ----------------------- AvgRF   CCRF      %Dev   --------------
80 p   Dibenzofuran                        ----------NA----------
81     Pentachlorobenzene                  ----------NA----------
82 p   2,4-Dinitrotoluene                  ----------NA----------
83 p   4-Nitrophenol                       ----------NA----------
84     1-Naphthylamine                     ----------NA----------
```

7.7.9

7

Initial Calibration Verification

Job Number: TC52720
Account: RFWTXHO Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Sample: EP1652-ICV1652
Lab FileID: P34260.D

85		2-Naphthylamine		----------NA----------				
86	p	2,3,4,6-Tetrachlorophenol		----------NA----------				
87	p	Fluorene		----------NA----------				
88	p	4-Chlorophenyl-phenylethe		----------NA----------				
89	p	Diethylphthalate		----------NA----------				
90		5-Nitro-o-toluidine		----------NA----------				
91	p	4-Nitroaniline		----------NA----------				
92	I	Phenanthrene-d10	1.000	1.000	0.0	73	-0.02	11.55
		----------	Amount	Calc.	%Drift		----------	
93		Dinoseb		----------NA----------				
		----------	AvgRF	CCRF	%Dev		----------	
94	p	4,6-Dinitro-2-methylpheno		----------NA----------				
95	p	n-Nitrosodiphenylamine		----------NA----------				
96		1,2-Diphenylhydrazine		----------NA----------				
97		Diphenylamine		----------NA----------				
98	S	2,4,6-Tribromophenol		----------NA----------				
		----------	Amount	Calc.	%Drift		----------	
99		sym-Trinitrobenzene		----------NA----------				
		----------	AvgRF	CCRF	%Dev		----------	
100		Diallate		----------NA----------				
101	p	4-Bromophenyl-phenylether		----------NA----------				
102		Phenacetin		----------NA----------				
103	p	Hexachlorobenzene		----------NA----------				
104	p	Atrazine		----------NA----------				
105		4-aminobiphenyl		----------NA----------				
		----------	Amount	Calc.	%Drift		----------	
106	p	Pentachlorophenol		----------NA----------				
		----------	AvgRF	CCRF	%Dev		----------	
107		Pentachloronitrobenzene		----------NA----------				
108		Pronamide		----------NA----------				
109		n-Octadecane		----------NA----------				
110	p	Phenanthrene		----------NA----------				
111	p	Anthracene		----------NA----------				
112	p	Carbazole		----------NA----------				
113	p	Di-n-butylphthalate		----------NA----------				
		----------	Amount	Calc.	%Drift		----------	
114		4-Nitroquinoline 1-Oxide		----------NA----------				
		----------	AvgRF	CCRF	%Dev		----------	
115		Methapyrilene		----------NA----------				
116		Octachlorostyrene		----------NA----------				
117		Isodrin		----------NA----------				
118		Fluoranthene		----------NA----------				
119	S	Fluoranthene-D10		----------NA----------				
120		4,4'-Methylenedianiline		----------NA----------				
121	I	Chrysene-d12	1.000	1.000	0.0	78	-0.02	16.77
122		Benzidine	0.623	0.739	-18.6	95	-0.03	14.26
123		Pyrene		----------NA----------				
124	S	Terphenyl-d14		----------NA----------				
125		Aramite		----------NA----------				
126		p-(Dimethylamine)azobenze		----------NA----------				

Initial Calibration Verification

Job Number: TC52720
Account: RFWTXHO Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Sample: EP1652-ICV1652
Lab FileID: P34260.D

```
127      Chlorobenzilate                      ----------NA----------

             ----------------------- Amount  Calc.    %Drift   -------------
128      Kepone                               ----------NA----------

             ----------------------- AvgRF   CCRF      %Dev   --------------
129      3,3'-Dimethylbenzidine               ----------NA----------
130      Butylbenzylphthalate                 ----------NA----------
131      2-Acetylaminofluorene                ----------NA----------
132 p    3,3'-Dichlorobenzidine               ----------NA----------
133 p    Benzo[a]anthracene                   ----------NA----------
134 p    Chrysene                             ----------NA----------
135 p    bis(2-Ethylhexyl)phthalat            ----------NA----------

136 I    Perylene-d12                 1.000   1.000      0.0   80  -0.02   19.40
137 p    Di-n-octylphthalate                  ----------NA----------
138 p    Benzo[b]fluoranthene                 ----------NA----------
139 p    Benzo[k]fluoranthene                 ----------NA----------

             ----------------------- Amount  Calc.    %Drift   -------------
140      7,12-Dimethylbenz(a)anthr            ----------NA----------

             ----------------------- AvgRF   CCRF      %Dev   --------------
141 p    Benzo[a]pyrene                       ----------NA----------
142 S    Benzo[a]pyrene-D12                   ----------NA----------
143      3-Methylcholanthrene                 ----------NA----------
144      Dibenz(a,j)acridine                  ----------NA----------
145 p    Indeno[1,2,3-cd]pyrene               ----------NA----------
146 p    Dibenz[a,h]anthracene                ----------NA----------
147 p    Benzo[g,h,i]perylene                 ----------NA----------
 ---------------------------------------------------------------------------
 ---------------------------------------------------------------------------

    (#) = Out of Range                SPCC's out = 59  CCC's out = 0
     p34249.D   ep1652.m          Mon Jun 30 10:25:38 2014
```

7.7.9

7

Initial Calibration Verification

Job Number: TC52720
Account: RFWTXHO Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Sample: EP1652-ICV1652
Lab FileID: P34261.D

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\EP1652\p34261.D            Vial: 15
Acq On    : 27 Jun 2014   7:15 pm                    Operator: sheilac
Sample    : icv1652-50,bis(chloromethyl)ether        Inst    : GCMS P
Misc      : op30663,Ep1652,1000,,,1,1,water          Multiplr: 1.00
MS Integration Params: rteint.p

Method       : C:\msdchem\1\METHODS\ep1652.m (RTE Integrator)
Title        : SW846 8270 Appendix 9
Last Update  : Fri Jun 27 17:50:07 2014
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  30%     Max. Rel. Area : 250%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	69	0.00	5.20
2		bis(Chloromethyl)ether	0.981	1.174	-19.7	87	0.00	2.92
3		1,4-Dioxane		----------NA----------				
4		N-nitrosodimethylamine		----------NA----------				
5		Pyridine		----------NA----------				
6		2-Picoline		----------NA----------				
7		N-Nitrosomethylethylamine		----------NA----------				
8		Methyl methanesulfonate		----------NA----------				
9		N-Nitrosodiethylamine		----------NA----------				
10		2-Butoxyethanol		----------NA----------				
11		Ethyl methanesulfonate		----------NA----------				
12	p	Benzaldehyde		----------NA----------				
13		Pentachloroethane		----------NA----------				
14		Aniline		----------NA----------				
15	S	2-Fluorophenol		----------NA----------				
16	p	bis(2-Chloroethyl)ether		----------NA----------				
17	S	Phenol-d5		----------NA----------				
18	p	Phenol		----------NA----------				
19	p	2-Chlorophenol		----------NA----------				
20		n-Decane		----------NA----------				
21		1,3-Dichlorobenzene		----------NA----------				
22		1,4-Dichlorobenzene		----------NA----------				
23		1,2-Dichlorobenzene		----------NA----------				
24		Benzyl alcohol		----------NA----------				
25	p	bis(2-chloroisopropyl)eth		----------NA----------				
26	p	2-Methylphenol		----------NA----------				
27		N-nitrosopyrrolidine		----------NA----------				
28		N-Nitrosomorpholine		----------NA----------				
29		o-Toluidine		----------NA----------				
30	p	Acetophenone		----------NA----------				
31	p	Hexachloroethane		----------NA----------				
32	p	N-Nitroso-di-n-propylamin		----------NA----------				
33	p	3&4-Methylphenol		----------NA----------				
34	I	Naphthalene-d8	1.000	1.000	0.0	66	-0.02	6.40
35	S	Nitrobenzene-d5		----------NA----------				
36	p	Nitrobenzene		----------NA----------				
37		2,6-Dimethylphenol		----------NA----------				
38		N-Nitrosopiperidine		----------NA----------				
39		A,A-Dimethylphenethylamin		----------NA----------				
40	p	Isophorone		----------NA----------				
41	p	2-Nitrophenol		----------NA----------				

Initial Calibration Verification

Job Number: TC52720
Account: RFWTXHO Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Sample: EP1652-ICV1652
Lab FileID: P34261.D

42	p	2,4-Dimethylphenol		----------NA----------			
43	p	bis(2-Chloroethoxy)methan		----------NA----------			
		----------	Amount	Calc.	%Drift	----------	
44		Benzoic Acid		----------NA----------			
		----------	AvgRF	CCRF	%Dev	----------	
45	p	2,4-Dichlorophenol		----------NA----------			
46		1,2,4-Trichlorobenzene		----------NA----------			
47	p	Naphthalene		----------NA----------			
48	p	4-Chloroaniline		----------NA----------			
49		2,6-Dichlorophenol		----------NA----------			
50		Hexachloropropene		----------NA----------			
51	p	Hexachlorobutadiene		----------NA----------			
		----------	Amount	Calc.	%Drift	----------	
52		p-Phenylenediamine		----------NA----------			
		----------	AvgRF	CCRF	%Dev	----------	
53	p	Caprolactam		----------NA----------			
54		N-Nitrosodi-n-butylamine		----------NA----------			
55		Hydroquinone		----------NA----------			
56	p	4-Chloro-3-methylphenol		----------NA----------			
57		Isosafrole		----------NA----------			
58	p	2-Methylnaphthalene		----------NA----------			
59		1-Methylnaphthalene		----------NA----------			
60	p	1,2,4,5-Tetrachlorobenzen		----------NA----------			
61	I	Acenaphthene-d10	1.000	1.000	0.0	66	-0.02 8.86
		----------	Amount	Calc.	%Drift	----------	
62	p	Hexachlorocyclopentadiene		----------NA----------			
		----------	AvgRF	CCRF	%Dev	----------	
63	p	2,4,6-Trichlorophenol		----------NA----------			
64	p	2,4,5-Trichlorophenol		----------NA----------			
65	S	2-Fluorobiphenyl		----------NA----------			
66		Safrole		----------NA----------			
67	p	1,1'-Biphenyl		----------NA----------			
68	p	2-Chloronaphthalene		----------NA----------			
69		1-Chloronaphthalene		----------NA----------			
70		Diphenyl ether		----------NA----------			
71	p	2-Nitroaniline		----------NA----------			
72		1,4-Naphthoquinone		----------NA----------			
73		Acenaphthylene		----------NA----------			
74	p	Dimethylphthalate		----------NA----------			
75		m-Dinitrobenzene		----------NA----------			
76	p	2,6-Dinitrotoluene		----------NA----------			
77	p	Acenaphthene		----------NA----------			
78	p	3-Nitroaniline		----------NA----------			
		----------	Amount	Calc.	%Drift	----------	
79	p	2,4-Dinitrophenol		----------NA----------			
		----------	AvgRF	CCRF	%Dev	----------	
80	p	Dibenzofuran		----------NA----------			
81		Pentachlorobenzene		----------NA----------			
82	p	2,4-Dinitrotoluene		----------NA----------			
83	p	4-Nitrophenol		----------NA----------			
84		1-Naphthylamine		----------NA----------			

Initial Calibration Verification

Job Number: TC52720
Account: RFWTXHO Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Sample: EP1652-ICV1652
Lab FileID: P34261.D

85		2-Naphthylamine		----------NA----------				
86	p	2,3,4,6-Tetrachlorophenol		----------NA----------				
87	p	Fluorene		----------NA----------				
88	p	4-Chlorophenyl-phenylethe		----------NA----------				
89	p	Diethylphthalate		----------NA----------				
90		5-Nitro-o-toluidine		----------NA----------				
91	p	4-Nitroaniline		----------NA----------				
92	I	Phenanthrene-d10	1.000	1.000	0.0	65	-0.02	11.55
		----------	Amount	Calc.	%Drift	----------		
93		Dinoseb		----------NA----------				
		----------	AvgRF	CCRF	%Dev	----------		
94	p	4,6-Dinitro-2-methylpheno		----------NA----------				
95	p	n-Nitrosodiphenylamine		----------NA----------				
96		1,2-Diphenylhydrazine		----------NA----------				
97		Diphenylamine		----------NA----------				
98	S	2,4,6-Tribromophenol		----------NA----------				
		----------	Amount	Calc.	%Drift	----------		
99		sym-Trinitrobenzene		----------NA----------				
		----------	AvgRF	CCRF	%Dev	----------		
100		Diallate		----------NA----------				
101	p	4-Bromophenyl-phenylether		----------NA----------				
102		Phenacetin		----------NA----------				
103	p	Hexachlorobenzene		----------NA----------				
104	p	Atrazine		----------NA----------				
105		4-aminobiphenyl		----------NA----------				
		----------	Amount	Calc.	%Drift	----------		
106	p	Pentachlorophenol		----------NA----------				
		----------	AvgRF	CCRF	%Dev	----------		
107		Pentachloronitrobenzene		----------NA----------				
108		Pronamide		----------NA----------				
109		n-Octadecane		----------NA----------				
110	p	Phenanthrene		----------NA----------				
111	p	Anthracene		----------NA----------				
112	p	Carbazole		----------NA----------				
113	p	Di-n-butylphthalate		----------NA----------				
		----------	Amount	Calc.	%Drift	----------		
114		4-Nitroquinoline 1-Oxide		----------NA----------				
		----------	AvgRF	CCRF	%Dev	----------		
115		Methapyrilene		----------NA----------				
116		Octachlorostyrene		----------NA----------				
117		Isodrin		----------NA----------				
118		Fluoranthene		----------NA----------				
119	S	Fluoranthene-D10		----------NA----------				
120		4,4'-Methylenedianiline		----------NA----------				
121	I	Chrysene-d12	1.000	1.000	0.0	67	-0.03	16.76
122		Benzidine		----------NA----------				
123		Pyrene		----------NA----------				
124	S	Terphenyl-d14		----------NA----------				
125		Aramite		----------NA----------				
126		p-(Dimethylamine)azobenze		----------NA----------				

Initial Calibration Verification

Job Number: TC52720
Account: RFWTXHO Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Sample: EP1652-ICV1652
Lab FileID: P34261.D

```
127      Chlorobenzilate                      ----------NA----------

             ----------------------- Amount  Calc.    %Drift   -------------
128      Kepone                               ----------NA----------

             ----------------------- AvgRF   CCRF      %Dev   --------------
129      3,3'-Dimethylbenzidine               ----------NA----------
130      Butylbenzylphthalate                 ----------NA----------
131      2-Acetylaminofluorene                ----------NA----------
132 p    3,3'-Dichlorobenzidine               ----------NA----------
133 p    Benzo[a]anthracene                   ----------NA----------
134 p    Chrysene                             ----------NA----------
135 p    bis(2-Ethylhexyl)phthalat            ----------NA----------

136 I    Perylene-d12                 1.000   1.000      0.0   68  -0.03   19.39
137 p    Di-n-octylphthalate                  ----------NA----------
138 p    Benzo[b]fluoranthene                 ----------NA----------
139 p    Benzo[k]fluoranthene                 ----------NA----------

             ----------------------- Amount  Calc.    %Drift   -------------
140      7,12-Dimethylbenz(a)anthr            ----------NA----------

             ----------------------- AvgRF   CCRF      %Dev   --------------
141 p    Benzo[a]pyrene                       ----------NA----------
142 S    Benzo[a]pyrene-D12                   ----------NA----------
143      3-Methylcholanthrene                 ----------NA----------
144      Dibenz(a,j)acridine                  ----------NA----------
145 p    Indeno[1,2,3-cd]pyrene               ----------NA----------
146 p    Dibenz[a,h]anthracene                ----------NA----------
147 p    Benzo[g,h,i]perylene                 ----------NA----------
 ---------------------------------------------------------------------------
 ---------------------------------------------------------------------------

    (#) = Out of Range                SPCC's out = 59  CCC's out = 0
     p34249.D   ep1652.m          Mon Jun 30 10:25:40 2014
```

7.7.10

7

Initial Calibration Summary

Job Number: TC52720 **Sample:** EP1654-ICC1654
Account: RFWTXHO Weston Solutions **Lab FileID:** P34267.D
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Response Factor Report GCMS P

Method : C:\msdchem\1\METHODS\ep1654ap9m2.m (RTE Integrator)
Title : SW846 8270C Appendix 9
Last Update : Mon Jun 30 19:11:54 2014
Response via : Initial Calibration

Calibration Files
5 =p34273.D 25 =p34270.D 50 =p34267.D 75 =p34272.D
100 =p34274.D 40 =p34271.D 10 =p34269.D

Compound	5	25	50	75	100	40	10	Avg	%RSD
1) I 1,4-Dichlorobenzene-d	----------ISTD----------								
2) 1,4-Dioxane	0.529	0.474	0.432	0.468	0.486	0.469	0.490	0.478	6.10
3) Methyl methanesul	0.870	0.810	0.747	0.826	0.831	0.808	0.806	0.814	4.56
4) Ethyl methanesulf	1.100	0.993	0.905	0.989	0.989	0.989	0.993	0.994	5.70
5) Benzaldehyde	1.165	1.070	0.983	1.064	1.074	1.059	1.075	1.070	4.92
6) Pentachloroethane	0.660	0.586	0.538	0.588	0.594	0.578	0.595	0.591	6.08
7)S 2-Fluorophenol	1.378	1.231	1.090	1.171	1.155	1.189	1.240	1.208	7.47
8)S Phenol-d5	1.729	1.550	1.358	1.473	1.439	1.501	1.567	1.517	7.70
9) Acetophenone	2.140	1.928	1.746	1.931	1.917	1.906	1.908	1.925	5.97
10) I Naphthalene-d8	----------ISTD----------								
11)S Nitrobenzene-d5	0.420	0.368	0.342	0.365	0.367	0.363	0.380	0.372	6.40
12) 2,6-Dichloropheno	0.305	0.282	0.265	0.292	0.292	0.286	0.278	0.286	4.42
13) Hexachloropropene	0.257	0.238	0.226	0.251	0.259	0.240	0.231	0.243	5.23
14) Caprolactam	0.115	0.115	0.108	0.120	0.116	0.116	0.108	0.114	4.04
15) Isosafrole	0.342	0.308	0.285	0.308	0.308	0.304	0.310	0.309	5.44
16) 1,2,4,5-Tetrachlo	0.486	0.415	0.374	0.410	0.410	0.407	0.428	0.419	8.13
17) I Acenaphthene-d10	----------ISTD----------								
18)S 2-Fluorobiphenyl	1.677	1.381	1.238	1.283	1.247	1.336	1.469	1.376	11.30
19) Safrole	0.514	0.454	0.423	0.456	0.453	0.453	0.460	0.459	5.95
20) 1,1'-Biphenyl	1.741	1.442	1.334	1.406	1.378	1.417	1.536	1.465	9.33
21) 1-Chloronaphthale	1.303	1.093	1.013	1.078	1.065	1.087	1.160	1.114	8.44
22) Diphenyl ether	0.960	0.794	0.735	0.781	0.770	0.778	0.838	0.808	9.09
23) 1,4-Naphthoquinon	0.393	0.427	0.425	0.487	0.478	0.458	0.381	0.435	9.37
24) Pentachlorobenzen	0.748	0.608	0.560	0.609	0.595	0.607	0.641	0.624	9.57
25) I Phenanthrene-d10	----------ISTD----------								
26)S 2,4,6-Tribromophe	0.139	0.129	0.124	0.130	0.129	0.131	0.127	0.130	3.63
27) sym-Trinitrobenze	0.040	0.060	0.070	0.090	0.087	0.078	0.041	0.066	30.74
---- Quadratic regression ---- Coefficient = 0.9924									
Response Ratio = -0.00863 + 0.07728 *A + 0.00580 *A^2									
28) Diallate	0.213	0.188	0.181	0.180	0.179	0.183	0.194	0.188	6.50
29) Phenacetin	0.359	0.351	0.340	0.373	0.352	0.364	0.336	0.354	3.68
30) Atrazine	0.259	0.233	0.218	0.235	0.224	0.231	0.238	0.234	5.59
31) Pentachloronitrob	0.112	0.099	0.093	0.102	0.102	0.100	0.097	0.101	5.68
32) Pronamide	0.371	0.346	0.330	0.358	0.348	0.352	0.343	0.350	3.70
33) 4-Nitroquinoline	0.010	0.032	0.051	0.081		0.055	0.012	0.040	68.99
---- Quadratic regression ---- Coefficient = 0.9928									
Response Ratio = -0.00118 + 0.01167 *A + 0.03692 *A^2									
34) Isodrin	0.146	0.127	0.121	0.130	0.128	0.127	0.131	0.130	5.96
35) I Chrysene-d12	----------ISTD----------								
36)S Terphenyl-d14	1.057	0.866	0.792	0.789	0.778	0.833	0.927	0.863	11.61

Initial Calibration Summary

Job Number: TC52720 **Sample:** EP1654-ICC1654
Account: RFWTXHO Weston Solutions **Lab FileID:** P34267.D
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

```
37)  Aramite           0.063 0.064 0.066 0.071 0.070 0.067 0.059 0.066   6.17
38)  Chlorobenzilate   0.349 0.319 0.310 0.329 0.327 0.326 0.320 0.326   3.72
39)  Kepone            0.014 0.042 0.047 0.056 0.059 0.057 0.021 0.042  43.02
            ---- Quadratic regression ----  Coefficient =  0.9943
              Response Ratio = -0.00608 + 0.05210 *A + 0.00378 *A^2


40) I   Perylene-d12          ----------------ISTD---------------------
41)  7,12-Dimethylbenz 0.578 0.532 0.543 0.552 0.532 0.534 0.519 0.542   3.52
42)  3-Methylcholanthr 0.398 0.407 0.419 0.447 0.438 0.429 0.390 0.418   5.07
43)  Dibenz(a,j)acridi 0.803 0.847 0.856 0.933 0.928 0.891 0.793 0.865   6.43
-------------------------------------------------------------------------------
(#) = Out of Range

          ep1654ap9m2.m        Mon Jun 30 19:12:30 2014
```

7.7.11

7

Initial Calibration Verification

Job Number: TC52720
Account: RFWTXHO Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Sample: EP1654-ICV1654
Lab FileID: P34276.D

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\EP1654\p34276.D            Vial: 11
Acq On    : 30 Jun 2014   7:37 pm                    Operator: sheilac
Sample    : icv1654-50,atrazine                      Inst    : GCMS P
Misc      : op30927,Ep1654,1000,,,1,1,water          Multiplr: 1.00
MS Integration Params: RTEINT.P

Method       : C:\msdchem\1\METHODS\ep1654ap9m2.m (RTE Integrator)
Title        : SW846 8270C Appendix 9
Last Update  : Mon Jun 30 19:32:48 2014
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  30%     Max. Rel. Area : 200%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	108	0.00	5.19
2		1,4-Dioxane		----------NA----------				
3		Methyl methanesulfonate		----------NA----------				
4		Ethyl methanesulfonate		----------NA----------				
5		Benzaldehyde		----------NA----------				
6		Pentachloroethane		----------NA----------				
7	S	2-Fluorophenol		----------NA----------				
8	S	Phenol-d5		----------NA----------				
9		Acetophenone		----------NA----------				
10	I	Naphthalene-d8	1.000	1.000	0.0	108	0.00	6.40
11	S	Nitrobenzene-d5		----------NA----------				
12		2,6-Dichlorophenol		----------NA----------				
13		Hexachloropropene		----------NA----------				
14		Caprolactam		----------NA----------				
15		Isosafrole		----------NA----------				
16		1,2,4,5-Tetrachlorobenzen		----------NA----------				
17	I	Acenaphthene-d10	1.000	1.000	0.0	109	0.00	8.86
18	S	2-Fluorobiphenyl		----------NA----------				
19		Safrole		----------NA----------				
20		1,1'-Biphenyl		----------NA----------				
21		1-Chloronaphthalene		----------NA----------				
22		Diphenyl ether		----------NA----------				
23		1,4-Naphthoquinone		----------NA----------				
24		Pentachlorobenzene		----------NA----------				
25	I	Phenanthrene-d10	1.000	1.000	0.0	108	0.00	11.55
26	S	2,4,6-Tribromophenol		----------NA----------				
		----------	Amount	Calc.	%Drift		----------	
27		sym-Trinitrobenzene		----------NA----------				
		----------	AvgRF	CCRF	%Dev		----------	
28		Diallate		----------NA----------				
29		Phenacetin		----------NA----------				
30		Atrazine	0.234	0.247	-5.6	123	0.00	11.12
31		Pentachloronitrobenzene		----------NA----------				
32		Pronamide		----------NA----------				
		----------	Amount	Calc.	%Drift		----------	
33		4-Nitroquinoline 1-Oxide		----------NA----------				

Initial Calibration Verification

Job Number: TC52720
Account: RFWTXHO Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Sample: EP1654-ICV1654
Lab FileID: P34276.D

```
            ----------------------- AvgRF   CCRF      %Dev   --------------
34      Isodrin                             ----------NA----------

35 I    Chrysene-d12                1.000   1.000      0.0  107   0.00   16.76
36 S    Terphenyl-d14                       ----------NA----------
37      Aramite                             ----------NA----------
38      Chlorobenzilate                     ----------NA----------

            ----------------------- Amount  Calc.    %Drift   -------------
39      Kepone                              ----------NA----------


            ----------------------- AvgRF   CCRF      %Dev   --------------
40 I    Perylene-d12                1.000   1.000      0.0  110   0.00   19.40
41      7,12-Dimethylbenz(a)anthr           ----------NA----------
42      3-Methylcholanthrene                ----------NA----------
43      Dibenz(a,j)acridine                 ----------NA----------
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------

   (#) = Out of Range                 SPCC's out = 0  CCC's out = 0
    p34267.D   ep1654ap9m2.m        Tue Jul 01 12:28:16 2014
```

7.7.12

7

Initial Calibration Verification

Job Number: TC52720
Account: RFWTXHO Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX
Sample: EP1654-ICV1654
Lab FileID: P34277.D

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\EP1654\p34277.D            Vial: 12
Acq On    : 30 Jun 2014   8:07 pm                    Operator: sheilac
Sample    : icv1654-50,custom spike                  Inst    : GCMS P
Misc      : op30927,Ep1654,1000,,,1,1,water          Multiplr: 1.00
MS Integration Params: RTEINT.P

Method       : C:\msdchem\1\METHODS\ep1654ap9m2.m (RTE Integrator)
Title        : SW846 8270C Appendix 9
Last Update  : Mon Jun 30 19:32:48 2014
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  30%     Max. Rel. Area : 200%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	100	0.00	5.20
2		1,4-Dioxane	0.478	0.437	8.6	101	0.01	2.81
3		Methyl methanesulfonate		----------NA----------				
4		Ethyl methanesulfonate		----------NA----------				
5		Benzaldehyde	1.070	0.884	17.4	90	0.00	4.86
6		Pentachloroethane		----------NA----------				
7	S	2-Fluorophenol		----------NA----------				
8	S	Phenol-d5		----------NA----------				
9		Acetophenone		----------NA----------				
10	I	Naphthalene-d8	1.000	1.000	0.0	97	0.00	6.40
11	S	Nitrobenzene-d5		----------NA----------				
12		2,6-Dichlorophenol		----------NA----------				
13		Hexachloropropene		----------NA----------				
14		Caprolactam		----------NA----------				
15		Isosafrole		----------NA----------				
16		1,2,4,5-Tetrachlorobenzen		----------NA----------				
17	I	Acenaphthene-d10	1.000	1.000	0.0	94	0.00	8.85
18	S	2-Fluorobiphenyl		----------NA----------				
19		Safrole		----------NA----------				
20		1,1'-Biphenyl		----------NA----------				
21		1-Chloronaphthalene		----------NA----------				
22		Diphenyl ether		----------NA----------				
23		1,4-Naphthoquinone		----------NA----------				
24		Pentachlorobenzene		----------NA----------				
25	I	Phenanthrene-d10	1.000	1.000	0.0	91	0.00	11.55
26	S	2,4,6-Tribromophenol		----------NA----------				
		----------	Amount	Calc.	%Drift	----------		
27		sym-Trinitrobenzene		----------NA----------				
		----------	AvgRF	CCRF	%Dev	----------		
28		Diallate		----------NA----------				
29		Phenacetin		----------NA----------				
30		Atrazine		----------NA----------				
31		Pentachloronitrobenzene		----------NA----------				
32		Pronamide		----------NA----------				
		----------	Amount	Calc.	%Drift	----------		
33		4-Nitroquinoline 1-Oxide		----------NA----------				

7.7.13

7

Initial Calibration Verification

Job Number: TC52720
Account: RFWTXHO Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Sample: EP1654-ICV1654
Lab FileID: P34277.D

```
            ----------------------- AvgRF   CCRF      %Dev   --------------
34      Isodrin                             ----------NA----------

35 I    Chrysene-d12                1.000   1.000      0.0   84   0.00   16.76
36 S    Terphenyl-d14                       ----------NA----------
37      Aramite                             ----------NA----------
38      Chlorobenzilate                     ----------NA----------

            ----------------------- Amount  Calc.    %Drift   -------------
39      Kepone                     50.000  37.562     24.9   66   0.39   16.08


            ----------------------- AvgRF   CCRF      %Dev   --------------
40 I    Perylene-d12                1.000   1.000      0.0   87   0.00   19.40
41      7,12-Dimethylbenz(a)anthr           ----------NA----------
42      3-Methylcholanthrene                ----------NA----------
43      Dibenz(a,j)acridine                 ----------NA----------
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------

   (#) = Out of Range                SPCC's out = 0  CCC's out = 0
    p34267.D   ep1654ap9m2.m       Tue Jul 01 10:30:28 2014
```

7.7.13

7

Continuing Calibration Summary

Job Number: TC52720
Account: RFWTXHO Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Sample: EP1682-CC1652
Lab FileID: P34904.D

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\EP1682\p34904.D            Vial: 2
Acq On    :  6 Aug 2014  12:28 pm                     Operator: sheilac
Sample    : cc1652-50                                 Inst    : GCMS P
Misc      : op33453,Ep1682,1000,,,1,1,water           Multiplr: 1.00
MS Integration Params: rteint.p

Method       : C:\msdchem\1\METHODS\ep1652.m (RTE Integrator)
Title        : SW846 8270D and EPA625
Last Update  : Mon Aug 04 16:13:28 2014
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 250%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	112	-0.03	5.06
2		bis(Chloromethyl)ether	0.981	1.373	-40.0#	166	-0.09	2.78
3		1,4-Dioxane	0.397	0.466	-17.4	134	-0.03	2.66
4		N-nitrosodimethylamine	0.517	0.589	-13.9	123	-0.02	2.97
5		Pyridine	1.099	1.286	-17.0	130	-0.08	2.98
6		2-Picoline	1.377	1.533	-11.3	124	-0.06	3.63
7		N-Nitrosomethylethylamine	0.513	0.530	-3.3	124	-0.05	3.73
8		Methyl methanesulfonate	0.772	0.893	-15.7	130	-0.04	3.97
9		N-Nitrosodiethylamine	0.678	0.726	-7.1	121	-0.04	4.27
10		2-Butoxyethanol	1.110	1.079	2.8	109	-0.04	4.32
11		Ethyl methanesulfonate	0.999	1.056	-5.7	119	-0.03	4.49
12	p	Benzaldehyde	0.435	0.165	62.1#	69	-0.03	4.73
13		Pentachloroethane	0.556	0.605	-8.8	121	-0.03	4.85
14		Aniline	1.962	2.073	-5.7	119	-0.03	4.82
15	S	2-Fluorophenol	1.116	1.259	-12.8	127	-0.03	4.12
16	p	bis(2-Chloroethyl)ether	1.226	1.280	-4.4	119	-0.03	4.86
17	S	Phenol-d5	1.481	1.582	-6.8	121	0.00	4.81
18	p	Phenol	1.808	1.820	-0.7	113	-0.04	4.82
19	p	2-Chlorophenol	1.405	1.505	-7.1	120	-0.04	4.92
20		n-Decane	1.007	1.036	-2.9	118	-0.03	4.92
21		1,3-Dichlorobenzene	1.571	1.688	-7.4	120	-0.03	5.02
22		1,4-Dichlorobenzene	1.612	1.709	-6.0	119	-0.03	5.08
23		1,2-Dichlorobenzene	1.550	1.647	-6.3	119	-0.03	5.20
24		Benzyl alcohol	0.942	1.006	-6.8	119	-0.03	5.18
25	p	bis(2-chloroisopropyl)eth	1.276	1.248	2.2	111	-0.03	5.28
26	p	2-Methylphenol	1.287	1.365	-6.1	118	-0.04	5.29
27		N-nitrosopyrrolidine	0.777	0.828	-6.6	118	-0.03	5.40
28		N-Nitrosomorpholine	0.871	0.940	-7.9	121	-0.03	5.42
29		o-Toluidine	2.347	2.452	-4.5	118	-0.04	5.43
30	p	Acetophenone	1.923	2.032	-5.7	120	-0.03	5.40
31	p	Hexachloroethane	0.608	0.651	-7.1	119	-0.03	5.49
32	p	N-Nitroso-di-n-propylamin	1.009	1.057	-4.8	118	-0.03	5.40
33	p	3&4-Methylphenol	1.483	1.575	-6.2	119	-0.04	5.41
34	I	Naphthalene-d8	1.000	1.000	0.0	107	-0.04	6.24
35	S	Nitrobenzene-d5	0.372	0.412	-10.8	120	-0.03	5.54
36	p	Nitrobenzene	0.370	0.407	-10.0	118	-0.18	5.56
37		2,6-Dimethylphenol	0.339	0.358	-5.6	114	-0.01	5.65
38		N-Nitrosopiperidine	0.226	0.254	-12.4	121	-0.19	5.70
39		A,A-Dimethylphenethylamin	0.840	0.908	-8.1	110	-0.64#	6.21
40	p	Isophorone	0.647	0.711	-9.9	119	-0.20	5.77
41	p	2-Nitrophenol	0.207	0.230	-11.1	117	-0.20	5.85

Continuing Calibration Summary

Job Number: TC52720 **Sample:** EP1682-CC1652
Account: RFWTXHO Weston Solutions **Lab FileID:** P34904.D
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

42	p	2,4-Dimethylphenol	0.384	0.427	-11.2	120	-0.20	5.89
43	p	bis(2-Chloroethoxy)methan	0.389	0.417	-7.2	116	-0.20	5.97
		----------	Amount	Calc.	%Drift		----------	
44		Benzoic Acid	50.000	41.632	16.7	83	-0.15	6.01
		----------	AvgRF	CCRF	%Dev		----------	
45	p	2,4-Dichlorophenol	0.340	0.343	-0.9	107	0.03	6.34
46		1,2,4-Trichlorobenzene	0.370	0.397	-7.3	116	-0.21	6.17
47	p	Naphthalene	1.089	1.180	-8.4	117	-0.21	6.26
48	p	4-Chloroaniline	0.489	0.529	-8.2	115	-0.21	6.33
49		2,6-Dichlorophenol	0.316	0.343	-8.5	115	-0.21	6.34
50		Hexachloropropene	0.240	0.261	-8.8	113	-0.21	6.35
51	p	Hexachlorobutadiene	0.231	0.239	-3.5	112	-0.21	6.39
		----------	Amount	Calc.	%Drift		----------	
52		p-Phenylenediamine	50.000	50.919	-1.8	112	-0.02	6.76
		----------	AvgRF	CCRF	%Dev		----------	
53	p	Caprolactam	0.119	0.107	10.1	100	-0.02	6.76
54		N-Nitrosodi-n-butylamine	0.283	0.293	-3.5	121	-0.22	6.71
55		Hydroquinone	0.339	0.360	-6.2	111	-0.01	6.78
56	p	4-Chloro-3-methylphenol	0.355	0.385	-8.5	118	-0.01	6.93
57		Isosafrole	0.309	0.335	-8.4	116	-0.22	6.99
58	p	2-Methylnaphthalene	0.785	0.844	-7.5	116	-0.05	7.10
59		1-Methylnaphthalene	0.727	0.783	-7.7	117	-0.05	7.23
60	p	1,2,4,5-Tetrachlorobenzen	0.408	0.423	-3.7	113	-0.01	7.33
61	I	Acenaphthene-d10	1.000	1.000	0.0	108	-0.04	8.66
		----------	Amount	Calc.	%Drift		----------	
62	p	Hexachlorocyclopentadiene	50.000	45.697	8.6	99	-0.05	7.31
		----------	AvgRF	CCRF	%Dev		----------	
63	p	2,4,6-Trichlorophenol	0.401	0.425	-6.0	113	-0.05	7.50
64	p	2,4,5-Trichlorophenol	0.435	0.457	-5.1	111	-0.05	7.58
65	S	2-Fluorobiphenyl	1.352	1.433	-6.0	117	-0.03	7.62
66		Safrole	0.482	0.520	-7.9	117	-0.04	7.72
67	p	1,1'-Biphenyl	1.443	1.540	-6.7	117	-0.05	7.77
68	p	2-Chloronaphthalene	1.227	1.340	-9.2	119	-0.05	7.79
69		1-Chloronaphthalene	1.026	1.059	-3.2	114	-0.05	7.82
70		Diphenyl ether	0.806	0.848	-5.2	115	-0.05	7.92
71	p	2-Nitroaniline	0.324	0.354	-9.3	116	-0.05	7.96
72		1,4-Naphthoquinone	0.433	0.256	40.9#	65	-0.05	8.07
73		Acenaphthylene	1.907	2.052	-7.6	117	-0.05	8.43
74	p	Dimethylphthalate	1.405	1.512	-7.6	117	-0.04	8.26
75		m-Dinitrobenzene	0.246	0.262	-6.5	112	-0.04	8.31
76	p	2,6-Dinitrotoluene	0.328	0.353	-7.6	114	-0.04	8.35
77	p	Acenaphthene	1.227	1.311	-6.8	116	-0.04	8.72
78	p	3-Nitroaniline	0.360	0.382	-6.1	112	-0.04	8.63
		----------	Amount	Calc.	%Drift		----------	
79	p	2,4-Dinitrophenol	50.000	42.844	14.3	92	-0.03	8.82
		----------	AvgRF	CCRF	%Dev		----------	
80	p	Dibenzofuran	1.727	1.835	-6.3	115	-0.03	9.01
81		Pentachlorobenzene	0.615	0.604	1.8	107	-0.04	8.94
82	p	2,4-Dinitrotoluene	0.450	0.485	-7.8	114	-0.03	9.04
83	p	4-Nitrophenol	0.196	0.208	-6.1	105	-0.03	9.03
84		1-Naphthylamine	1.138	1.369	-20.3#	120	-0.04	9.16

Continuing Calibration Summary

Job Number: TC52720 **Sample:** EP1682-CC1652
Account: RFWTXHO Weston Solutions **Lab FileID:** P34904.D
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

85		2-Naphthylamine	1.220	1.413	-15.8	123	-0.04	9.30
86	p	2,3,4,6-Tetrachlorophenol	0.402	0.393	2.2	102	-0.04	9.25
87	p	Fluorene	1.427	1.492	-4.6	114	-0.03	9.61
88	p	4-Chlorophenyl-phenylethe	0.718	0.743	-3.5	113	-0.03	9.63
89	p	Diethylphthalate	1.386	1.499	-8.2	116	-0.02	9.48
90		5-Nitro-o-toluidine	0.450	0.468	-4.0	109	-0.03	9.68
91	p	4-Nitroaniline	0.360	0.374	-3.9	108	-0.03	9.71
92	I	Phenanthrene-d10	1.000	1.000	0.0	102	-0.04	11.33
		----------	Amount	Calc.	%Drift	----------		
93		Dinoseb	50.000	47.703	4.6	96	-0.03	11.40
		----------	AvgRF	CCRF	%Dev	----------		
94	p	4,6-Dinitro-2-methylpheno	0.148	0.160	-8.1	102	-0.05	9.76
95	p	n-Nitrosodiphenylamine	0.670	0.720	-7.5	111	-0.05	9.87
96		1,2-Diphenylhydrazine	0.666	0.742	-11.4	115	-0.05	9.92
97		Diphenylamine	0.670	0.720	-7.5	111	-0.05	9.87
98	S	2,4,6-Tribromophenol	0.139	0.125	10.1	92	-0.05	10.06
		----------	Amount	Calc.	%Drift	----------		
99		sym-Trinitrobenzene	50.000	49.412	1.2	99	-0.03	10.46
		----------	AvgRF	CCRF	%Dev	----------		
100		Diallate	0.202	0.216	-6.9	110	-0.04	10.41
101	p	4-Bromophenyl-phenylether	0.251	0.262	-4.4	107	-0.04	10.53
102		Phenacetin	0.386	0.421	-9.1	107	-0.04	10.51
103	p	Hexachlorobenzene	0.302	0.295	2.3	101	-0.04	10.61
104	p	Atrazine	0.194	0.195	-0.5	151	-0.03	10.92
105		4-aminobiphenyl	0.763	0.869	-13.9	117	-0.04	11.03
		----------	Amount	Calc.	%Drift	----------		
106	p	Pentachlorophenol	50.000	42.604	14.8	86	-0.04	11.02
		----------	AvgRF	CCRF	%Dev	----------		
107		Pentachloronitrobenzene	0.107	0.111	-3.7	105	-0.04	11.01
108		Pronamide	0.369	0.403	-9.2	109	-0.03	11.21
109		n-Octadecane	0.341	0.351	-2.9	108	-0.03	11.28
110	p	Phenanthrene	1.151	1.210	-5.1	108	-0.04	11.38
111	p	Anthracene	1.189	1.242	-4.5	106	-0.03	11.48
112	p	Carbazole	1.125	1.175	-4.4	105	-0.03	11.84
113	p	Di-n-butylphthalate	1.287	1.419	-10.3	110	0.00	12.62
		----------	Amount	Calc.	%Drift	----------		
114		4-Nitroquinoline 1-Oxide	50.000	41.802	16.4	70	0.00	12.93
		----------	AvgRF	CCRF	%Dev	----------		
115		Methapyrilene	0.393	0.453	-15.3	112	0.00	13.14
116		Octachlorostyrene	0.110	0.096	12.7	88	0.00	13.34
117		Isodrin	0.135	0.145	-7.4	108	-0.02	13.37
118		Fluoranthene	1.377	1.376	0.1	101	0.00	13.69
119	S	Fluoranthene-D10		----------NA----------				
120		4,4'-Methylenedianiline	0.423	0.389	8.0	96	0.00	14.09
121	I	Chrysene-d12	1.000	1.000	0.0	94	-0.03	16.54
122		Benzidine	0.623	0.526	15.6	80	-0.06	14.05
123		Pyrene	1.250	1.348	-7.8	100	-0.06	14.13
124	S	Terphenyl-d14	0.884	0.946	-7.0	100	-0.05	14.53
125		Aramite	0.073	0.082	-12.3	102	-0.04	14.72
126		p-(Dimethylamine)azobenze	0.320	0.372	-16.2	106	-0.04	14.82

Continuing Calibration Summary

Job Number: TC52720 **Sample:** EP1682-CC1652
Account: RFWTXHO Weston Solutions **Lab FileID:** P34904.D
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

127		Chlorobenzilate	0.359	0.418	-16.4	106	-0.04	14.94
		----------	Amount	Calc.	%Drift	----------		
128		Kepone	50.000	16.153	67.7#	23	-0.03	15.49
		----------	AvgRF	CCRF	%Dev	----------		
129		3,3'-Dimethylbenzidine	0.688	0.697	-1.3	94	-0.04	15.50
130		Butylbenzylphthalate	0.518	0.595	-14.9	106	-0.03	15.58
131		2-Acetylaminofluorene	0.524	0.584	-11.5	103	-0.03	16.01
132	p	3,3'-Dichlorobenzidine	0.451	0.449	0.4	93	-0.02	16.55
133	p	Benzo[a]anthracene	1.176	1.257	-6.9	101	-0.03	16.53
134	p	Chrysene	1.108	1.177	-6.2	101	-0.03	16.60
135	p	bis(2-Ethylhexyl)phthalat	0.716	0.822	-14.8	105	0.00	16.78
136	I	Perylene-d12	1.000	1.000	0.0	98	-0.02	19.17
137	p	Di-n-octylphthalate	1.291	1.425	-10.4	106	-0.02	18.01
138	p	Benzo[b]fluoranthene	1.272	1.306	-2.7	102	-0.03	18.53
139	p	Benzo[k]fluoranthene	1.275	1.278	-0.2	98	-0.03	18.59
		----------	Amount	Calc.	%Drift	----------		
140		7,12-Dimethylbenz(a)anthr	50.000	54.484	-9.0	106	-0.03	18.53
		----------	AvgRF	CCRF	%Dev	----------		
141	p	Benzo[a]pyrene	1.208	1.240	-2.6	99	-0.02	19.08
142	S	Benzo[a]pyrene-D12		----------NA----------				
143		3-Methylcholanthrene	0.574	0.585	-1.9	95	-0.02	19.67
144		Dibenz(a,j)acridine	1.012	1.011	0.1	96	-0.07	20.69
145	p	Indeno[1,2,3-cd]pyrene	1.123	1.120	0.3	95	-0.08	21.01
146	p	Dibenz[a,h]anthracene	1.201	1.205	-0.3	96	-0.08	21.06
147	p	Benzo[g,h,i]perylene	1.197	1.199	-0.2	97	-0.10	21.52

(#) = Out of Range SPCC's out = 0 CCC's out = 0
p34249.D ep1652.m Wed Aug 06 13:50:53 2014

7.7.14

7

Continuing Calibration Summary

Job Number: TC52720
Account: RFWTXHO Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX
Sample: EP1682-CC1592
Lab FileID: P34905.D

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\EP1682\p34905.D            Vial: 3
Acq On    :  6 Aug 2014   1:00 pm                     Operator: sheilac
Sample    : cc1592-50,ophos                           Inst    : GCMS P
Misc      : op33453,Ep1682,1000,,,1,1,water           Multiplr: 1.00
MS Integration Params: RTEINT.P

Method       : C:\msdchem\1\MET...1592organophos.m (RTE Integrator)
Title        : SW846 8270C Appendix 9
Last Update  : Tue Apr 01 16:29:13 2014
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 200%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	105	-0.03	5.06
2	S	2-Fluorophenol	1.048	0.917	12.5	92	-0.02	4.12
3	S	Phenol-d5	1.326	1.213	8.5	96	-0.02	4.81
4	I	Naphthalene-d8	1.000	1.000	0.0	102	-0.02	6.24
5	S	Nitrobenzene-d5	0.317	0.312	1.6	96	0.00	5.53
6		O,O,O-Triethyl phosphorot	0.139	0.138	0.7	97	0.00	5.93
7	I	Acenaphthene-d10	1.000	1.000	0.0	113	-0.02	8.65
8	S	2-Fluorobiphenyl	1.102	1.080	2.0	111	-0.01	7.62
9		Thionazin	0.208	0.237	-13.9	116	0.02	9.61
10	I	Phenanthrene-d10	1.000	1.000	0.0	129	-0.02	11.33
11	S	2,4,6-Tribromophenol	0.096	0.093	3.1	116	-0.01	10.05
12		Tetraethyl dithiopyrophos	0.100	0.109	-9.0	124	0.00	10.20
13		Phorate	0.349	0.314	10.0	100	-0.02	10.41
14		Dimethoate	0.203	0.211	-3.9	113	0.00	10.73
15		Disulfoton	0.291	0.258	11.3	101	-0.01	11.42
		----------	Amount	Calc.	%Drift		----------	
16		Methyl parathion	50.000	54.271	-8.5	135	0.00	12.14
17		Parathion	50.000	58.616	-17.2	143	0.02	12.92
		----------	AvgRF	CCRF	%Dev		----------	
18	I	Chrysene-d12	1.000	1.000	0.0	153	-0.02	16.54
19	S	Terphenyl-d14	0.750	0.694	7.5	144	-0.02	14.53
20		Famphur	0.333	0.367	-10.2	151	-0.02	15.43
21	I	Perylene-d12	1.000	1.000	0.0	176	-0.01	19.17

(#) = Out of Range SPCC's out = 0 CCC's out = 0
p33150.D ep1592organophos.m Wed Aug 06 13:23:03 2014

7.7.15

7

Continuing Calibration Summary

Job Number: TC52720 **Sample:** EP1682-CC1654
Account: RFWTXHO Weston Solutions **Lab FileID:** P34906.D
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\EP1682\p34906.D Vial: 4
Acq On : 6 Aug 2014 1:57 pm Operator: sheilac
Sample : cc1654-50,ap9m2 Inst : GCMS P
Misc : op33453,Ep1682,1000,,,1,1,water Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\msdchem\1\METHODS\ep1654ap9m2.m (RTE Integrator)
Title : SW846 8270C Appendix 9
Last Update : Mon Jun 30 19:32:48 2014
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 250%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	135	-0.13	5.06
2		1,4-Dioxane	0.478	0.360	24.7#	112	-0.14	2.66
3		Methyl methanesulfonate	0.814	0.795	2.3	144	-0.11	3.98
4		Ethyl methanesulfonate	0.994	0.931	6.3	139	-0.12	4.49
5		Benzaldehyde	1.070	1.003	6.3	138	-0.12	4.74
6		Pentachloroethane	0.591	0.540	8.6	135	-0.12	4.85
7	S	2-Fluorophenol	1.208	1.056	12.6	131	-0.13	4.12
8	S	Phenol-d5	1.517	1.412	6.9	140	-0.13	4.81
9		Acetophenone	1.925	1.831	4.9	142	-0.14	5.39
10	I	Naphthalene-d8	1.000	1.000	0.0	139	-0.16	6.24
11	S	Nitrobenzene-d5	0.372	0.356	4.3	144	-0.13	5.54
12		2,6-Dichlorophenol	0.286	0.279	2.4	146	-0.16	6.33
13		Hexachloropropene	0.243	0.231	4.9	142	-0.16	6.35
14		Caprolactam	0.114	0.115	-0.9	148	-0.15	6.72
15		Isosafrole	0.309	0.293	5.2	143	-0.17	6.98
16		1,2,4,5-Tetrachlorobenzen	0.419	0.373	11.0	138	-0.17	7.32
17	I	Acenaphthene-d10	1.000	1.000	0.0	144	-0.20	8.65
18	S	2-Fluorobiphenyl	1.376	1.216	11.6	141	-0.18	7.62
19		Safrole	0.459	0.431	6.1	147	-0.18	7.71
20		1,1'-Biphenyl	1.465	1.328	9.4	143	-0.18	7.76
21		1-Chloronaphthalene	1.114	1.016	8.8	144	-0.19	7.82
22		Diphenyl ether	0.808	0.730	9.7	143	-0.19	7.92
23		1,4-Naphthoquinone	0.435	0.465	-6.9	157	-0.18	8.07
24		Pentachlorobenzene	0.624	0.536	14.1	138	-0.20	8.93
25	I	Phenanthrene-d10	1.000	1.000	0.0	146	-0.21	11.33
26	S	2,4,6-Tribromophenol	0.130	0.107	17.7	126	-0.20	10.06
			Amount	Calc.	%Drift			
27		sym-Trinitrobenzene	50.000	55.359	-10.7	182	-0.19	10.43
			AvgRF	CCRF	%Dev			
28		Diallate	0.188	0.186	1.1	150	-0.20	10.40
29		Phenacetin	0.354	0.366	-3.4	157	-0.19	10.50
30		Atrazine	0.234	0.221	5.6	148	-0.20	10.92
31		Pentachloronitrobenzene	0.101	0.094	6.9	147	-0.21	11.01
32		Pronamide	0.350	0.348	0.6	154	-0.20	11.20
			Amount	Calc.	%Drift			
33		4-Nitroquinoline 1-Oxide	50.000	52.557	-5.1	178	-0.22	12.92

Continuing Calibration Summary

Job Number: TC52720
Account: RFWTXHO Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Sample: EP1682-CC1654
Lab FileID: P34906.D

			AvgRF	CCRF	%Dev			
34		Isodrin	0.130	0.127	2.3	153	-0.23	13.37
35	I	Chrysene-d12	1.000	1.000	0.0	132	-0.23	16.54
36	S	Terphenyl-d14	0.863	0.824	4.5	138	-0.22	14.53
37		Aramite	0.066	0.076	-15.2	152	-0.21	14.72
38		Chlorobenzilate	0.326	0.364	-11.7	155	-0.22	14.94

			Amount	Calc.	%Drift			
39		Kepone	50.000	57.928	-15.9	173	-0.24	15.45

			AvgRF	CCRF	%Dev			
40	I	Perylene-d12	1.000	1.000	0.0	136	-0.23	19.17
41		7,12-Dimethylbenz(a)anthr	0.542	0.459	15.3	115	-0.23	18.52
42		3-Methylcholanthrene	0.418	0.419	-0.2	136	-0.24	19.67
43		Dibenz(a,j)acridine	0.865	0.919	-6.2	146	-0.29	20.69

(#) = Out of Range SPCC's out = 0 CCC's out = 0
p34267.D ep1654ap9m2.m Wed Aug 06 14:49:18 2014

7.7.16

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Gulf Coast ACCUTEST LABORATORIES

GC Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- DDT/Endrin Breakdown Checks
- GC Identification Summaries (Hits)
- Surrogate Recovery Summaries
- GC Surrogate Retention Time Summaries
- Initial and Continuing Calibration Summaries

Method Blank Summary

Job Number: TC52720
Account: RFWTXHO Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP33456-MB	VB14077.D	1	08/07/14	RV	08/06/14	OP33456	GVB329

The QC reported here applies to the following samples: **Method:** TNRCC 1005

TC52720-1, TC52720-2, TC52720-3, TC52720-4, TC52720-5

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C6-C12)	ND	25	11	mg/kg	
	TPH (> C12-C28)	ND	25	14	mg/kg	
	TPH (> C28-C35)	ND	25	14	mg/kg	
	TPH (C6-C35)	ND	25	11	mg/kg	

CAS No.	Surrogate Recoveries		Limits
84-15-1	o-Terphenyl	105%	70-130%
98-08-8	aaa-Trifluorotoluene	107%	70-130%

Method Blank Summary

Job Number: TC52720
Account: RFWTXHO Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP33527-MB	DD772856.D	1	08/16/14	AR	08/14/14	OP33527	GDD2385

The QC reported here applies to the following samples: **Method:** SW846 8151

TC52720-1A, TC52720-2A, TC52720-3A, TC52720-4A, TC52720-5A

CAS No.	Compound	Result	RL	MDL	Units	Q
94-75-7	2,4-D	ND	33	16	ug/kg	
93-72-1	2,4,5-TP (Silvex)	ND	6.7	3.5	ug/kg	
93-76-5	2,4,5-T	ND	6.7	2.3	ug/kg	

CAS No.	Surrogate Recoveries		Limits
19719-28-9	2,4-DCAA	106%	30-154%

Method Blank Summary

Job Number: TC52720
Account: RFWTXHO Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP33468-MB	NN175449.D	1	08/08/14	AR	08/07/14	OP33468	GNN1456

The QC reported here applies to the following samples: **Method:** SW846 8081A

TC52720-1A, TC52720-2A, TC52720-3A, TC52720-4A, TC52720-5A

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	1.7	0.58	ug/kg	
319-84-6	alpha-BHC	ND	1.7	0.72	ug/kg	
319-85-7	beta-BHC	ND	1.7	0.50	ug/kg	
319-86-8	delta-BHC	ND	1.7	0.62	ug/kg	
58-89-9	gamma-BHC (Lindane)	ND	1.7	0.62	ug/kg	
5103-71-9	alpha-Chlordane	ND	1.7	0.36	ug/kg	
5103-74-2	gamma-Chlordane	ND	1.7	0.39	ug/kg	
60-57-1	Dieldrin	ND	3.3	1.3	ug/kg	
72-54-8	4,4'-DDD	ND	3.3	1.2	ug/kg	
72-55-9	4,4'-DDE	ND	3.3	1.3	ug/kg	
50-29-3	4,4'-DDT	ND	3.3	1.4	ug/kg	
72-20-8	Endrin	ND	3.3	1.3	ug/kg	
1031-07-8	Endosulfan sulfate	ND	3.3	1.4	ug/kg	
7421-93-4	Endrin aldehyde	ND	3.3	1.4	ug/kg	
53494-70-5	Endrin ketone	ND	3.3	1.3	ug/kg	
959-98-8	Endosulfan-I	ND	3.3	0.73	ug/kg	
33213-65-9	Endosulfan-II	ND	3.3	1.3	ug/kg	
76-44-8	Heptachlor	ND	1.7	0.49	ug/kg	
1024-57-3	Heptachlor epoxide	ND	1.7	0.70	ug/kg	
72-43-5	Methoxychlor	ND	17	6.7	ug/kg	
8001-35-2	Toxaphene	ND	17	8.3	ug/kg	

CAS No.	Surrogate Recoveries		Limits
877-09-8	Tetrachloro-m-xylene	92%	27-125%
2051-24-3	Decachlorobiphenyl	91%	21-130%

Method Blank Summary

Job Number: TC52720
Account: RFWTXHO Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP33467-MB	OO30852.D	1	08/07/14	AR	08/07/14	OP33467	GOO507

The QC reported here applies to the following samples: **Method:** SW846 8082

TC52720-1A, TC52720-2A, TC52720-3A, TC52720-4A, TC52720-5A

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	17	3.3	ug/kg	
11104-28-2	Aroclor 1221	ND	17	6.7	ug/kg	
11141-16-5	Aroclor 1232	ND	17	6.7	ug/kg	
53469-21-9	Aroclor 1242	ND	17	3.4	ug/kg	
12672-29-6	Aroclor 1248	ND	17	4.0	ug/kg	
11097-69-1	Aroclor 1254	ND	17	3.9	ug/kg	
11096-82-5	Aroclor 1260	ND	17	8.6	ug/kg	

CAS No.	Surrogate Recoveries		Limits
877-09-8	Tetrachloro-m-xylene	86%	30-118%
2051-24-3	Decachlorobiphenyl	93%	29-122%

Blank Spike Summary

Job Number: TC52720
Account: RFWTXHO Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP33527-BS	DD772857.D	1	08/16/14	AR	08/14/14	OP33527	GDD2385

The QC reported here applies to the following samples: **Method:** SW846 8151

TC52720-1A, TC52720-2A, TC52720-3A, TC52720-4A, TC52720-5A

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
94-75-7	2,4-D	66.3	67.1	101	42-148
93-72-1	2,4,5-TP (Silvex)	13.3	11.2	84	48-134
93-76-5	2,4,5-T	13.3	12.0	90	27-124

CAS No.	Surrogate Recoveries	BSP	Limits
19719-28-9	2,4-DCAA	113%	30-154%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: TC52720
Account: RFWTXHO Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP33468-BS	NN175450.D	1	08/08/14	AR	08/07/14	OP33468	GNN1456

The QC reported here applies to the following samples: **Method:** SW846 8081A

TC52720-1A, TC52720-2A, TC52720-3A, TC52720-4A, TC52720-5A

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
309-00-2	Aldrin	8.29	7.5	91	51-119
319-84-6	alpha-BHC	8.29	8.2	99	51-144
319-85-7	beta-BHC	8.29	8.1	98	45-144
319-86-8	delta-BHC	8.29	8.9	107	53-142
58-89-9	gamma-BHC (Lindane)	8.29	8.1	98	54-132
5103-71-9	alpha-Chlordane	8.29	9.0	109	53-135
5103-74-2	gamma-Chlordane	8.29	8.6	104	51-133
60-57-1	Dieldrin	16.6	16.9	102	61-135
72-54-8	4,4'-DDD	16.6	18.1	109	62-151
72-55-9	4,4'-DDE	16.6	16.8	101	56-142
50-29-3	4,4'-DDT	16.6	17.4	105	62-146
72-20-8	Endrin	16.6	18.8	113	63-153
1031-07-8	Endosulfan sulfate	16.6	17.3	104	55-139
7421-93-4	Endrin aldehyde	16.6	17.0	103	37-119
53494-70-5	Endrin ketone	16.6	17.8	107	56-136
959-98-8	Endosulfan-I	8.29	8.8	106	59-136
33213-65-9	Endosulfan-II	16.6	17.6	106	62-140
76-44-8	Heptachlor	8.29	8.5	103	53-130
1024-57-3	Heptachlor epoxide	8.29	8.5	103	53-131
72-43-5	Methoxychlor	82.9	91.4	110	59-142

CAS No.	Surrogate Recoveries	BSP	Limits
877-09-8	Tetrachloro-m-xylene	97%	27-125%
2051-24-3	Decachlorobiphenyl	93%	21-130%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: TC52720
Account: RFWTXHO Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP33467-BS	OO30853.D	1	08/07/14	AR	08/07/14	OP33467	GOO507

The QC reported here applies to the following samples: **Method:** SW846 8082

TC52720-1A, TC52720-2A, TC52720-3A, TC52720-4A, TC52720-5A

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
12674-11-2	Aroclor 1016	66.6	57.7	87	73-123
11096-82-5	Aroclor 1260	66.6	63.7	96	73-124

CAS No.	Surrogate Recoveries	BSP	Limits
877-09-8	Tetrachloro-m-xylene	77%	30-118%
2051-24-3	Decachlorobiphenyl	87%	29-122%

8.2.3

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* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: TC52720
Account: RFWTXHO Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP33456-BS	VB14079.D	1	08/07/14	RV	08/06/14	OP33456	GVB329
OP33456-BSD	VB14081.D	1	08/07/14	RV	08/06/14	OP33456	GVB329

The QC reported here applies to the following samples: **Method:** TNRCC 1005

TC52720-1, TC52720-2, TC52720-3, TC52720-4, TC52720-5

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	BSD mg/kg	BSD %	RPD	Limits Rec/RPD
	TPH (C6-C12)	250	290	116	280	112	4	75-125/20
	TPH (> C12-C28)	250	283	113	279	112	1	75-125/20
	TPH (C6-C35)	500	573	115	559	112	2	75-125/20

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
84-15-1	o-Terphenyl	114%	114%	70-130%
98-08-8	aaa-Trifluorotoluene	109%	103%	70-130%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: TC52720
Account: RFWTXHO Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP33456-MS	VF14080.D	1	08/07/14	RV	08/06/14	OP33456	GVF329
OP33456-MSD	VF14082.D	1	08/07/14	RV	08/06/14	OP33456	GVF329
TC52502-4	VF14078.D	1	08/07/14	RV	08/06/14	OP33456	GVF329

The QC reported here applies to the following samples: **Method:** TNRCC 1005

TC52720-1, TC52720-2, TC52720-3, TC52720-4, TC52720-5

CAS No.	Compound	TC52502-4 mg/kg	Q	Spike mg/kg	MS mg/kg	MS %	Spike mg/kg	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH (C6-C12)	48	U	522	609	117	550	643	117	5	75-125/20
	TPH (> C12-C28)	48	U	522	526	101	550	558	101	6	75-125/20
	TPH (C6-C35)	48	U	1040	1130	108	1100	1200	109	6	75-125/20

CAS No.	Surrogate Recoveries	MS	MSD	TC52502-4	Limits
84-15-1	o-Terphenyl	117%	109%	103%	70-130%
98-08-8	aaa-Trifluorotoluene	96%	97%	104%	70-130%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: TC52720
Account: RFWTXHO Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP33527-MS	DD772850.D	1	08/16/14	AR	08/14/14	OP33527	GDD2385
OP33527-MSD	DD772851.D	1	08/16/14	AR	08/14/14	OP33527	GDD2385
TC52720-1A	DD772849.D	1	08/16/14	AR	08/14/14	OP33527	GDD2385

The QC reported here applies to the following samples: **Method:** SW846 8151

TC52720-1A, TC52720-2A, TC52720-3A, TC52720-4A, TC52720-5A

CAS No.	Compound	TC52720-1A ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
94-75-7	2,4-D	65	U	130	90.7	70	130	78.1	60	15	42-148/36
93-72-1	2,4,5-TP (Silvex)	13	U	26.1	20.1	77	26.1	20.1	77	0	48-134/35
93-76-5	2,4,5-T	13	U	26.1	19.4	74	26.1	21.3	82	9	27-124/35

CAS No.	Surrogate Recoveries	MS	MSD	TC52720-1A	Limits
19719-28-9	2,4-DCAA	112%	93%	102%	30-154%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: TC52720
Account: RFWTXHO Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP33468-MS	NN175503.D	10	08/11/14	AR	08/07/14	OP33468	GNN1458
OP33468-MSD	NN175505.D	10	08/11/14	AR	08/07/14	OP33468	GNN1458
TC52720-1A [a]	NN175501.D	10	08/11/14	AR	08/07/14	OP33468	GNN1458

The QC reported here applies to the following samples: **Method:** SW846 8081A

TC52720-1A, TC52720-2A, TC52720-3A, TC52720-4A, TC52720-5A

CAS No.	Compound	TC52720-1A ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
309-00-2	Aldrin	32 U		16.4	13.3	81	16.1	11.1	69	18	51-119/36
319-84-6	alpha-BHC	32 U		16.4	12	76	16.1	14.6	90	16	51-144/31
319-85-7	beta-BHC	32 U		16.4	15.5	95	16.1	15.5	96	0	45-144/34
319-86-8	delta-BHC	32 U		16.4	11	67	16.1	12.9	80	16	53-142/29
58-89-9	gamma-BHC (Lindane)	32 U		16.4	13.4	82	16.1	13.6	84	1	54-132/28
5103-71-9	alpha-Chlordane	32 U		16.4	25.1	153*	16.1	22.4	139*	11	53-135/32
5103-74-2	gamma-Chlordane	32 U		16.4	15.8	97	16.1	15.9	99	1	51-133/37
60-57-1	Dieldrin	65 U		32.7	29.5	90	32.3	30.6	95	4	61-135/32
72-54-8	4,4'-DDD	65 U		32.7	28.8	88	32.3	29.8	92	3	62-151/31
72-55-9	4,4'-DDE	65 U		32.7	32.4	99	32.3	39.2	121	19	56-142/29
50-29-3	4,4'-DDT	65 U		32.7	29.5	90	32.3	31.2	97	6	62-146/27
72-20-8	Endrin	65 U		32.7	29.3	90	32.3	30.8	95	5	63-153/28
1031-07-8	Endosulfan sulfate	65 U		32.7	27	82	32.3	28.1	87	4	55-139/33
7421-93-4	Endrin aldehyde	65 U		32.7	24	72	32.3	25	78	6	37-119/27
53494-70-5	Endrin ketone	65 U		32.7	30.7	94	32.3	30.7	95	0	56-136/28
959-98-8	Endosulfan-I	65 U		16.4	14	83	16.1	13	83	1	59-136/29
33213-65-9	Endosulfan-II	65 U		32.7	33.0	101	32.3	33.7	104	2	62-140/33
76-44-8	Heptachlor	32 U		16.4	13.7	84	16.1	12.3	76	11	53-130/32
1024-57-3	Heptachlor epoxide	32 U		16.4	12	72	16.1	10	62	17	53-131/32
72-43-5	Methoxychlor	320 U		164	163	100	161	167	103	2	59-142/27

CAS No.	Surrogate Recoveries	MS	MSD	TC52720-1A	Limits
877-09-8	Tetrachloro-m-xylene	80%	84%	69%	27-125%
2051-24-3	Decachlorobiphenyl	91%	92%	88%	21-130%

(a) Elevated reporting limits due to matrix interference, extract was dark and viscous.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: TC52720
Account: RFWTXHO Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP33467-MS [a]	OO30870.D	1	08/08/14	AR	08/07/14	OP33467	GOO508
OP33467-MSD [a]	OO30871.D	1	08/08/14	AR	08/07/14	OP33467	GOO508
TC52720-1A [a]	OO30867.D	1	08/08/14	AR	08/07/14	OP33467	GOO508

The QC reported here applies to the following samples: **Method:** SW846 8082

TC52720-1A, TC52720-2A, TC52720-3A, TC52720-4A, TC52720-5A

CAS No.	Compound	TC52720-1A ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
12674-11-2	Aroclor 1016	32	U	131	134	102	130	123	95	9	73-123/33
11096-82-5	Aroclor 1260	32	U	131	84.3	64*	130	89.3	69*	6	73-124/30

CAS No.	Surrogate Recoveries	MS	MSD	TC52720-1A	Limits
877-09-8	Tetrachloro-m-xylene	54%	56%	45%	30-118%
2051-24-3	Decachlorobiphenyl	64%	64%	50%	29-122%

(a) Acid clean-up performed by method 3665A.

* = Outside of Control Limits.

DDT/Endrin Breakdown Check

Job Number: TC52720
Account: RFWTXHO Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Sample: GNN1445-DDT
Lab File ID: NN175102.D
Instrument ID: GCNN
Injection Date: 07/24/14
Injection Time: 10:43

Compound	Response Signal 1	Response Signal 2
4,4'-DDD	3377179	2441598
4,4'-DDE	1851740	1556608
4,4'-DDT	617175814	511715275
DDT Breakdown [a]	0.8 %	0.8 %
Endrin aldehyde	8113176	4942453
Endrin ketone	11881545	9441703
Endrin	634519860	512669455
Endrin Breakdown [b]	3.1 %	2.7 %

(a) Calculated as: (DDD + DDE) / (DDD + DDE + DDT) x 100
(b) Calculated as: (Endrin Aldehyde + Endrin Ketone) / (Endrin Aldehyde + Endrin Ketone + Endrin) x 100

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
GNN1445-IC1445	NN175104.D	07/24/14	11:11	00:28	Initial cal 200
GNN1445-IC1445	NN175105.D	07/24/14	11:24	00:41	Initial cal 200
GNN1445-IC1445	NN175106.D	07/24/14	11:38	00:55	Initial cal 20
GNN1445-IC1445	NN175109.D	07/24/14	12:20	01:37	Initial cal 200
GNN1445-IC1445	NN175110.D	07/24/14	12:34	01:51	Initial cal 200
GNN1445-IC1445	NN175111.D	07/24/14	12:47	02:04	Initial cal 200
GNN1445-IC1445	NN175112.D	07/24/14	13:00	02:18	Initial cal 200
GNN1445-IC1445	NN175113.D	07/24/14	13:14	02:31	Initial cal 50
GNN1445-IC1445	NN175114.D	07/24/14	13:28	02:45	Initial cal 100
GNN1445-ICC1445	NN175115.D	07/24/14	13:41	02:59	Initial cal 200
GNN1445-IC1445	NN175116.D	07/24/14	13:55	03:13	Initial cal 300
GNN1445-IC1445	NN175117.D	07/24/14	14:09	03:27	Initial cal 400
GNN1445-IC1445	NN175118.D	07/24/14	14:23	03:41	Initial cal 500
GNN1445-IC1445	NN175119.D	07/24/14	14:37	03:54	Initial cal 1000
GNN1445-ICV1445	NN175120.D	07/24/14	14:50	04:07	Initial cal verification 200
GNN1445-IC1445	NN175121.D	07/24/14	15:18	04:35	Initial cal 50
GNN1445-IC1445	NN175122.D	07/24/14	15:31	04:48	Initial cal 100
GNN1445-ICC1445	NN175123.D	07/24/14	15:44	05:02	Initial cal 200
GNN1445-IC1445	NN175124.D	07/24/14	15:58	05:16	Initial cal 300
GNN1445-IC1445	NN175125.D	07/24/14	16:11	05:29	Initial cal 400
GNN1445-IC1445	NN175126.D	07/24/14	16:25	05:43	Initial cal 500
GNN1445-IC1445	NN175127.D	07/24/14	16:39	05:56	Initial cal 600
GNN1445-ICV1445	NN175128.D	07/24/14	16:52	06:10	Initial cal verification 200
ZZZZZZ	NN175130.D	07/24/14	17:21	06:38	(unrelated sample)

DDT/Endrin Breakdown Check

Job Number: TC52720
Account: RFWTXHO Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Sample: GNN1445-DDT
Lab File ID: NN175102.D
Instrument ID: GCNN
Injection Date: 07/24/14
Injection Time: 10:43

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ZZZZZZ	NN175131.D	07/24/14	17:35	06:52	(unrelated sample)
OP33313-MB	NN175132.D	07/24/14	17:49	07:06	Method Blank
OP33325-MB	NN175133A.D	07/24/14	18:03	07:20	Method Blank
OP33313-BS2	NN175134.D	07/24/14	18:17	07:34	Laboratory Control Sample
OP33313-BS	NN175135.D	07/24/14	18:31	07:48	Blank Spike
OP33313-BSD	NN175136.D	07/24/14	18:45	08:02	Blank Spike Duplicate
OP33313-BS1	NN175137.D	07/24/14	18:59	08:17	Blank Spike
OP33313-BSD1	NN175138.D	07/24/14	19:13	08:31	Blank Spike Duplicate
OP33325-BS1	NN175139.D	07/24/14	19:27	08:45	Laboratory Control Sample
GNN1445-CC1445	NN175140.D	07/24/14	19:41	08:59	Continuing cal 300
GNN1445-CC1445	NN175141.D	07/24/14	19:55	09:13	Continuing cal 300
ZZZZZZ	NN175143.D	07/24/14	20:23	09:41	(unrelated sample)
ZZZZZZ	NN175144.D	07/24/14	20:38	09:55	(unrelated sample)
ZZZZZZ	NN175145.D	07/24/14	20:52	10:09	(unrelated sample)
TC51439-2	NN175146.D	07/24/14	21:06	10:23	(used for QC only; not part of job TC52720)
OP33315-MS	NN175147.D	07/24/14	21:20	10:38	Matrix Spike
OP33315-MSD	NN175148.D	07/24/14	21:34	10:52	Matrix Spike Duplicate
ZZZZZZ	NN175149.D	07/24/14	21:48	11:06	(unrelated sample)
ZZZZZZ	NN175150.D	07/24/14	22:02	11:19	(unrelated sample)
OP33315-MB	NN175151.D	07/24/14	22:16	11:33	Method Blank
OP33315-BS	NN175152.D	07/24/14	22:30	11:47	Blank Spike

DDT/Endrin Breakdown Check

Job Number: TC52720
Account: RFWTXHO Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Sample:	GNN1456-DDT	**Injection Date:**	08/08/14
Lab File ID:	NN175436.D	**Injection Time:**	09:47
Instrument ID:	GCNN		

Compound	Response Signal 1	Response Signal 2
4,4'-DDD	595410	370749
4,4'-DDE	330658	372188
4,4'-DDT	120725463	89173056
DDT Breakdown [a]	0.8 %	0.8 %
Endrin aldehyde	0	0
Endrin ketone	937334	589078
Endrin	63611594	48315889
Endrin Breakdown [b]	1.5 %	1.2 %

(a) Calculated as: (DDD + DDE) / (DDD + DDE + DDT) x 100
(b) Calculated as: (Endrin Aldehyde + Endrin Ketone) / (Endrin Aldehyde + Endrin Ketone + Endrin) x 100

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
GNN1456-CC1445	NN175437.D	08/08/14	10:01	00:14	Continuing cal 200
GNN1456-CC1445	NN175438.D	08/08/14	10:14	00:27	Continuing cal 200
GNN1456-CC1445	NN175439.D	08/08/14	10:27	00:40	Continuing cal 200
TC52496-1	NN175441.D	08/08/14	10:54	01:07	(used for QC only; not part of job TC52720)
OP33460-MB	NN175442.D	08/08/14	11:08	01:21	Method Blank
OP33460-BS	NN175443.D	08/08/14	11:22	01:35	Blank Spike
OP33460-BSD	NN175444.D	08/08/14	11:36	01:49	Blank Spike Duplicate
OP33478-MB	NN175445.D	08/08/14	11:50	02:03	Method Blank
OP33478-BS	NN175446.D	08/08/14	12:05	02:18	Blank Spike
OP33478-MS	NN175447.D	08/08/14	12:19	02:32	Matrix Spike
OP33478-MSD	NN175448.D	08/08/14	12:33	02:46	Matrix Spike Duplicate
OP33468-MB	NN175449.D	08/08/14	12:47	03:00	Method Blank
OP33468-BS	NN175450.D	08/08/14	13:00	03:13	Blank Spike
GNN1456-CC1445	NN175451.D	08/08/14	13:14	03:27	Continuing cal 300

DDT/Endrin Breakdown Check

Job Number: TC52720
Account: RFWTXHO Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Sample:	GNN1458-DDT	**Injection Date:**	08/11/14
Lab File ID:	NN175496.D	**Injection Time:**	10:11
Instrument ID:	GCNN		

Compound	Response Signal 1	Response Signal 2
4,4'-DDD	511948	546452
4,4'-DDE	0	376574
4,4'-DDT	121399958	158286191
DDT Breakdown [a]	0.4 %	0.6 %
Endrin aldehyde	455321	769125
Endrin ketone	1321420	1773745
Endrin	63228046	81001421
Endrin Breakdown [b]	2.7 %	3 %

(a) Calculated as: (DDD + DDE) / (DDD + DDE + DDT) x 100
(b) Calculated as: (Endrin Aldehyde + Endrin Ketone) / (Endrin Aldehyde + Endrin Ketone + Endrin) x 100

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
GNN1458-CC1445	NN175497.D	08/11/14	10:25	00:14	Continuing cal 200
GNN1458-CC1445	NN175498.D	08/11/14	10:40	00:29	Continuing cal 200
GNN1458-CC1445	NN175499.D	08/11/14	10:54	00:43	Continuing cal 200
TC52720-1A	NN175501.D	08/11/14	11:22	01:11	CES-CS-01-51
OP33468-MS	NN175503.D	08/11/14	11:50	01:39	Matrix Spike
OP33468-MSD	NN175505.D	08/11/14	12:18	02:07	Matrix Spike Duplicate
TC52720-2A	NN175507.D	08/11/14	12:46	02:35	CES-CS-02-51
TC52720-3A	NN175509.D	08/11/14	13:15	03:04	CES-CS-03-51
GNN1458-ECC1445	NN175511.D	08/11/14	13:42	03:31	Ending cal 300

DDT/Endrin Breakdown Check

Job Number: TC52720
Account: RFWTXHO Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Sample:	GNN1459-DDT	**Injection Date:**	08/11/14
Lab File ID:	NN175531.D	**Injection Time:**	20:37
Instrument ID:	GCNN		

Compound	Response Signal 1	Response Signal 2
4,4'-DDD	831280	515238
4,4'-DDE	484795	610155
4,4'-DDT	172000022	132002264
DDT Breakdown [a]	0.8 %	0.8 %
Endrin aldehyde	658238	0
Endrin ketone	1626410	1153942
Endrin	87612788	67487480
Endrin Breakdown [b]	2.5 %	1.7 %

(a) Calculated as: (DDD + DDE) / (DDD + DDE + DDT) x 100
(b) Calculated as: (Endrin Aldehyde + Endrin Ketone) / (Endrin Aldehyde + Endrin Ketone + Endrin) x 100

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
GNN1459-CC1445	NN175532.D	08/11/14	20:51	00:14	Continuing cal 200
GNN1459-CC1445	NN175533.D	08/11/14	21:05	00:28	Continuing cal 200
GNN1459-CC1445	NN175534.D	08/11/14	21:20	00:43	Continuing cal 200
TC52720-4A	NN175536.D	08/11/14	21:48	01:11	CES-CS-04-51
TC52720-5A	NN175538.D	08/11/14	22:16	01:38	CES-CS-05-51
ZZZZZZ	NN175540.D	08/11/14	22:44	02:06	(unrelated sample)
ZZZZZZ	NN175542.D	08/11/14	23:12	02:34	(unrelated sample)
ZZZZZZ	NN175544.D	08/11/14	23:40	03:02	(unrelated sample)
GNN1459-ECC1445	NN175546.D	08/12/14	00:08	03:30	Ending cal 300

GC Identification Summary

Job Number: TC52720
Account: RFWTXHO Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Check Std:	GNN1458-CC1445	**Injection Date:**	08/11/14
Lab File ID:	NN175497.D	**Injection Time:**	10:25
Instrument ID:	GCNN	**Method:**	SW846 8081A

Sample ID:	TC52720-2A	**Injection Date:**	08/11/14
Lab File ID:	NN175507.D	**Injection Time:**	12:46
Client ID:	CES-CS-02-51		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
alpha-Chlordane	1 [a]	3.79	3.81	3.3	J	ug/kg	16.4
alpha-Chlordane	2	4.37	4.37	2.8	J	ug/kg	

(a) Final result reported from this column.

GC Identification Summary

Job Number: TC52720
Account: RFWTXHO Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Check Std:	GNN1458-CC1445	**Injection Date:**	08/11/14
Lab File ID:	NN175497.D	**Injection Time:**	10:25
Instrument ID:	GCNN	**Method:**	SW846 8081A

Sample ID:	TC52720-3A	**Injection Date:**	08/11/14
Lab File ID:	NN175509.D	**Injection Time:**	13:15
Client ID:	CES-CS-03-51		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
alpha-Chlordane	1	3.80	3.81	11.0	J	ug/kg	109.9
alpha-Chlordane [a]	2 [b]	4.37	4.37	3.2	J	ug/kg	

(a) More than 40% RPD for detected concentrations between two GC columns.
(b) Final result reported from this column.

GC Identification Summary

Job Number: TC52720
Account: RFWTXHO Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Check Std:	GNN1459-CC1445	**Injection Date:**	08/11/14
Lab File ID:	NN175532.D	**Injection Time:**	20:51
Instrument ID:	GCNN	**Method:**	SW846 8081A

Sample ID:	TC52720-5A	**Injection Date:**	08/11/14
Lab File ID:	NN175538.D	**Injection Time:**	22:16
Client ID:	CES-CS-05-51		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
alpha-Chlordane [a]	1 [b]	4.37	4.37	2.4	J	ug/kg	148.7
alpha-Chlordane [a]	2	3.79	3.81	16.3		ug/kg	

(a) More than 40% RPD for detected concentrations between two GC columns.
(b) Final result reported from this column.

Semivolatile Surrogate Recovery Summary

Job Number: TC52720
Account: RFWTXHO Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Method: SW846 8151 **Matrix:** SO

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]
TC52720-1A	DD772849.D	102
TC52720-2A	DD772852.D	88
TC52720-3A	DD772853.D	103
TC52720-4A	DD772854.D	219* [b]
TC52720-5A	DD772855.D	84
OP33527-BS	DD772857.D	113
OP33527-MB	DD772856.D	106
OP33527-MS	DD772850.D	112
OP33527-MSD	DD772851.D	93

Surrogate Compounds	Recovery Limits
S1 = 2,4-DCAA	30-154%

(a) Recovery from GC signal #1
(b) Outside control limits biased high.

Semivolatile Surrogate Recovery Summary

Job Number: TC52720
Account: RFWTXHO Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Method: SW846 8081A **Matrix:** SO

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]	S2 [a]
TC52720-1A	NN175501.D	69	88
TC52720-2A	NN175507.D	77	78
TC52720-3A	NN175509.D	63	62
TC52720-4A	NN175536.D	73	74
TC52720-5A	NN175538.D	94	90
OP33468-BS	NN175450.D	97	93
OP33468-MB	NN175449.D	92	91
OP33468-MS	NN175503.D	80	91
OP33468-MSD	NN175505.D	84	92

Surrogate Compounds	Recovery Limits
S1 = Tetrachloro-m-xylene	27-125%
S2 = Decachlorobiphenyl	21-130%

(a) Recovery from GC signal #1

Semivolatile Surrogate Recovery Summary

Job Number: TC52720
Account: RFWTXHO Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Method: SW846 8082 **Matrix:** SO

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]	S2 [a]
TC52720-1A	OO30867.D	45	50
TC52720-2A	OO30868.D	56	58
TC52720-3A	OO30846.D	61	48
TC52720-4A	OO30847.D	64	58
TC52720-5A	OO30848.D	73	59
OP33467-BS	OO30853.D	77	87
OP33467-MB	OO30852.D	86	93
OP33467-MS	OO30870.D	54	64
OP33467-MSD	OO30871.D	56	64

Surrogate Compounds	Recovery Limits
S1 = Tetrachloro-m-xylene	30-118%
S2 = Decachlorobiphenyl	29-122%

(a) Recovery from GC signal #1

Semivolatile Surrogate Recovery Summary

Job Number: TC52720
Account: RFWTXHO Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Method: TNRCC 1005 **Matrix:** SO

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]	S2 [a]
TC52720-1	VB14083.D	103	103
TC52720-2	VF14084.D	107	104
TC52720-3	VB14085.D	104	107
TC52720-4	VF14086.D	108	99
TC52720-5	VB14087.D	105	107
OP33456-BS	VB14079.D	114	109
OP33456-BSD	VB14081.D	114	103
OP33456-MB	VB14077.D	105	107
OP33456-MS	VF14080.D	117	96
OP33456-MSD	VF14082.D	109	97

Surrogate Compounds	Recovery Limits
S1 = o-Terphenyl	70-130%
S2 = aaa-Trifluorotoluene	70-130%

(a) Recovery from GC signal #1

GC Surrogate Retention Time Summary

Job Number: TC52720
Account: RFWTXHO Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Check Std:	GVB328-CC323	**Injection Date:**	08/06/14
Lab File ID:	VB14063.D	**Injection Time:**	21:54
Instrument ID:	GCVB	**Method:**	TNRCC 1005

	S1 [a] RT	S2 [a] RT
Check Std	10.35	2.76

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S2 [a] RT
GVB329-RT	VB14071.D	08/07/14	10:12	10.34	0.00

Surrogate Compounds

S1 = o-Terphenyl
S2 = aaa-Trifluorotoluene

(a) Retention time from GC signal #1

GC Surrogate Retention Time Summary

Job Number: TC52720
Account: RFWTXHO Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Check Std:	GVB329-CC323	**Injection Date:**	08/07/14
Lab File ID:	VB14073.D	**Injection Time:**	10:35
Instrument ID:	GCVB	**Method:**	TNRCC 1005

	S1 [a] RT	S2 [a] RT
Check Std	10.35	2.76

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S2 [a] RT
OP33456-MB	VB14077.D	08/07/14	11:23	10.34	2.76
OP33456-BS	VB14079.D	08/07/14	11:47	10.35	2.76
OP33456-BSD	VB14081.D	08/07/14	12:11	10.34	2.76
TC52720-1	VB14083.D	08/07/14	12:34	10.35	2.76
TC52720-3	VB14085.D	08/07/14	12:58	10.34	2.76
TC52720-5	VB14087.D	08/07/14	13:22	10.34	2.76
ZZZZZZ	VB14091.D	08/07/14	14:09	10.34	2.76
ZZZZZZ	VB14093.D	08/07/14	14:33	10.34	2.76
ZZZZZZ	VB14095.D	08/07/14	14:57	10.35	2.76

Surrogate Compounds

S1 = o-Terphenyl
S2 = aaa-Trifluorotoluene

(a) Retention time from GC signal #1

GC Surrogate Retention Time Summary

Job Number: TC52720
Account: RFWTXHO Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Check Std:	GVF328-CC323	**Injection Date:**	08/06/14
Lab File ID:	VF14064.D	**Injection Time:**	21:54
Instrument ID:	GCVF	**Method:**	TNRCC 1005

	S1 [a] RT	S2 [a] RT
Check Std	10.32	2.62

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S2 [a] RT
GVF329-RT	VF14072.D	08/07/14	10:12	0.00	0.00

Surrogate Compounds

S1 = o-Terphenyl
S2 = aaa-Trifluorotoluene

(a) Retention time from GC signal #1

8.8.3

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GC Surrogate Retention Time Summary

Job Number: TC52720
Account: RFWTXHO Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Check Std:	GVF329-CC323	**Injection Date:**	08/07/14
Lab File ID:	VF14074.D	**Injection Time:**	10:35
Instrument ID:	GCVF	**Method:**	TNRCC 1005

	S1 [a] RT	S2 [a] RT
Check Std	10.32	2.62

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S2 [a] RT
TC52502-4	VF14078.D	08/07/14	11:23	10.32	2.62
OP33456-MS	VF14080.D	08/07/14	11:47	10.32	2.62
OP33456-MSD	VF14082.D	08/07/14	12:11	10.32	2.62
TC52720-2	VF14084.D	08/07/14	12:34	10.32	2.62
TC52720-4	VF14086.D	08/07/14	12:58	10.32	2.62
ZZZZZZ	VF14088.D	08/07/14	13:22	10.32	2.62
ZZZZZZ	VF14090.D	08/07/14	13:46	10.32	2.62
ZZZZZZ	VF14092.D	08/07/14	14:09	10.32	2.62
ZZZZZZ	VF14094.D	08/07/14	14:33	10.32	2.62
ZZZZZZ	VF14096.D	08/07/14	14:57	10.32	2.62

Surrogate Compounds

S1 = o-Terphenyl
S2 = aaa-Trifluorotoluene

(a) Retention time from GC signal #1

GC Surrogate Retention Time Summary

Job Number: TC52720
Account: RFWTXHO Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Check Std:	GDD2385-CC2382	**Injection Date:**	08/16/14
Lab File ID:	DD772846.D	**Injection Time:**	13:56
Instrument ID:	GCDD	**Method:**	SW846 8151

	S1 [a] **RT**
Check Std	14.43

Lab Sample ID	**Lab File ID**	**Date Analyzed**	**Time Analyzed**	**S1** [a] **RT**
TC52720-1A	DD772849.D	08/16/14	15:59	14.42
OP33527-MS	DD772850.D	08/16/14	16:41	14.42
OP33595-MS	DD772850A.D	08/16/14	16:41	14.42
OP33527-MSD	DD772851.D	08/16/14	17:23	14.42
OP33595-MSD	DD772851A.D	08/16/14	17:23	14.42
TC52720-2A	DD772852.D	08/16/14	18:04	14.43
TC52720-3A	DD772853.D	08/16/14	18:46	14.41
TC52720-4A	DD772854.D	08/16/14	19:28	14.37
TC52720-5A	DD772855.D	08/16/14	20:09	14.42
OP33527-MB	DD772856.D	08/16/14	20:51	14.43
OP33527-BS	DD772857.D	08/16/14	21:32	14.43

Surrogate Compounds

S1 = 2,4-DCAA

(a) Retention time from GC signal #1

GC Surrogate Retention Time Summary

Job Number: TC52720
Account: RFWTXHO Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Check Std:	GNN1456-CC1445	**Injection Date:**	08/08/14
Lab File ID:	NN175437.D	**Injection Time:**	10:01
Instrument ID:	GCNN	**Method:**	SW846 8081A

	S1 [a] RT	S2 [a] RT
Check Std	2.30	6.64

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S2 [a] RT
TC52496-1	NN175441.D	08/08/14	10:54	2.29	6.63
OP33460-MB	NN175442.D	08/08/14	11:08	2.30	6.64
OP33460-BS	NN175443.D	08/08/14	11:22	2.30	6.64
OP33460-BSD	NN175444.D	08/08/14	11:36	2.30	6.65
OP33478-MB	NN175445.D	08/08/14	11:50	2.30	6.65
OP33478-BS	NN175446.D	08/08/14	12:05	2.30	6.64
OP33478-MS	NN175447.D	08/08/14	12:19	2.30	6.64
OP33478-MSD	NN175448.D	08/08/14	12:33	2.30	6.64
OP33468-MB	NN175449.D	08/08/14	12:47	2.30	6.64
OP33468-BS	NN175450.D	08/08/14	13:00	2.29	6.63

Surrogate Compounds

S1 = Tetrachloro-m-xylene
S2 = Decachlorobiphenyl

(a) Retention time from GC signal #1

GC Surrogate Retention Time Summary

Job Number: TC52720
Account: RFWTXHO Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Check Std:	GNN1458-CC1445	**Injection Date:**	08/11/14
Lab File ID:	NN175497.D	**Injection Time:**	10:25
Instrument ID:	GCNN	**Method:**	SW846 8081A

	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
Check Std	2.09	2.30	5.99	6.64

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
TC52720-1A	NN175501.D	08/11/14	11:22	2.09		5.98	
OP33468-MS	NN175503.D	08/11/14	11:50	2.09		5.98	
OP33468-MSD	NN175505.D	08/11/14	12:18	2.09		5.98	
TC52720-2A	NN175507.D	08/11/14	12:46	2.09		5.98	
TC52720-3A	NN175509.D	08/11/14	13:15	2.09		5.98	
GNN1458-ECC1445	NN175511.D	08/11/14	13:42	2.09	2.30	5.98	6.64

Surrogate Compounds

S1 = Tetrachloro-m-xylene
S2 = Decachlorobiphenyl

(a) Retention time from GC signal #1
(b) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: TC52720
Account: RFWTXHO Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Check Std:	GNN1459-CC1445	**Injection Date:**	08/11/14
Lab File ID:	NN175532.D	**Injection Time:**	20:51
Instrument ID:	GCNN	**Method:**	SW846 8081A

	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
Check Std	2.30	2.09	6.64	5.98

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
TC52720-4A	NN175536.D	08/11/14	21:48	2.30		6.64	
TC52720-5A	NN175538.D	08/11/14	22:16	2.30		6.64	
ZZZZZZ	NN175540.D	08/11/14	22:44	2.30		6.64	
ZZZZZZ	NN175542.D	08/11/14	23:12	2.30		6.64	
ZZZZZZ	NN175544.D	08/11/14	23:40	2.30		6.64	
GNN1459-ECC1445	NN175546.D	08/12/14	00:08	2.30	2.09	6.64	5.98

Surrogate Compounds

S1 = Tetrachloro-m-xylene
S2 = Decachlorobiphenyl

(a) Retention time from GC signal #1
(b) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: TC52720
Account: RFWTXHO Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Check Std:	GOO507-CC505	**Injection Date:**	08/07/14
Lab File ID:	OO30844.D	**Injection Time:**	14:56
Instrument ID:	GCOO	**Method:**	SW846 8082

	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
Check Std	1.45	1.83	8.60	9.82

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
TC52720-3A	OO30846.D	08/07/14	15:35	1.45		8.60	
TC52720-4A	OO30847.D	08/07/14	15:54	1.45		8.60	
TC52720-5A	OO30848.D	08/07/14	16:14	1.45		8.60	
ZZZZZZ	OO30849.D	08/07/14	16:36	1.45		8.60	
ZZZZZZ	OO30850.D	08/07/14	16:56	1.45		8.60	
ZZZZZZ	OO30851.D	08/07/14	17:16	1.45		8.60	
OP33467-MB	OO30852.D	08/07/14	17:36	1.45		8.60	
OP33467-BS	OO30853.D	08/07/14	17:57	1.45		8.60	
GOO507-ECC505	OO30854.D	08/07/14	18:17	1.45	1.83	8.60	9.82

Surrogate Compounds

S1 = Tetrachloro-m-xylene
S2 = Decachlorobiphenyl

(a) Retention time from GC signal #1
(b) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: TC52720
Account: RFWTXHO Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Check Std:	GOO508-CC505	**Injection Date:**	08/08/14
Lab File ID:	OO30861.D	**Injection Time:**	10:12
Instrument ID:	GCOO	**Method:**	SW846 8082

	S1 [a] RT	S2 [a] RT
Check Std	1.45	8.60

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S2 [a] RT
TC52720-1A	OO30867.D	08/08/14	12:12	1.45	8.61
TC52720-2A	OO30868.D	08/08/14	12:32	1.45	8.60
ZZZZZZ	OO30869.D	08/08/14	12:52	1.45	8.60
OP33467-MS	OO30870.D	08/08/14	13:12	1.45	8.60
OP33467-MSD	OO30871.D	08/08/14	13:32	1.45	8.61
TC52894-1	OO30872.D	08/08/14	13:52	1.45	8.60
OP33480-MS	OO30873.D	08/08/14	14:12	1.45	8.60
OP33480-MSD	OO30874.D	08/08/14	14:32	1.45	8.60

Surrogate Compounds

S1 = Tetrachloro-m-xylene
S2 = Decachlorobiphenyl

(a) Retention time from GC signal #1

Initial Calibration Summary

Job Number: TC52720 **Sample:** GDD2382-ICC2382
Account: RFWTXHO Weston Solutions **Lab FileID:** DD772785.D
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Response Factor Report HP5890

Method : C:\MSDCHEM\1\METHODS\HRB2382.M (Chemstation Integrator)
Title : Herbicides by 8151
Last Update : Wed Aug 13 08:45:35 2014
Response via : Initial Calibration

Calibration Files
1 =DD772783.D 2 =DD772784.D 3 =DD772785.D 4 =DD772786.D
5 =DD772787.D 6 =DD772788.D 7 =DD772789.D

	Compound	1	2	3	4	5	6	7	Avg		%RSD
1)	Dalapon	1.420	1.385	1.319	1.304	1.254	1.229	1.164	1.296	E3	6.87
2)	4-Nitrophenol	9.624	9.126	8.643	8.295	8.011	7.577	6.959	8.319	E2	10.92
3)S	2,4-DCAA	7.908	7.475	6.963	6.788	6.554	6.202	5.729	6.803	E2	10.86
4)	MCPP	1.078	1.361	1.344	1.364	1.351	1.325	1.274	1.300		7.88
5)	Dicamba	3.291	3.007	2.817	2.749	2.700	2.573	2.598	2.819	E3	9.01
6)	MCPA	2.212	2.780	2.754	2.731	2.651	2.550	2.436	2.588		7.96
7)	Dichlorprop	9.469	9.181	8.642	8.419	8.125	7.823	7.246	8.415	E2	9.14
8)	2,4-D	1.215	1.171	1.079	1.051	1.009	0.962	0.892	1.054	E3	10.73
9)	Pentachlorophenol	1.037	1.092	1.092	1.125	1.130	1.117	1.176	1.110	E4	3.86
10)	2,4,5-TP (SILVEX)	4.214	4.348	4.371	4.512	4.521	4.441	4.577	4.426	E3	2.82
11)	2,4,5-T	4.594	4.687	4.661	4.810	4.751	4.650	4.664	4.688	E3	1.52
12)	Chloramben	2.834	3.090	3.186	3.338	3.348	3.302	3.329	3.204	E3	5.90
13)	Dinoseb	4.094	4.067	4.007	4.061	3.887	3.775	3.724	3.945	E3	3.81
14)	2,4-DB	6.042	5.890	5.628	5.531	5.371	5.156	4.803	5.489	E2	7.74
15)	Picloram	3.849	3.992	4.014	4.206	4.352	4.371	4.567	4.193	E3	6.06

Signal #2

17)	Dalapon #2	1.984	1.836	1.716	1.639	1.579	1.498	1.392	1.663	E3	12.11
18)	4-Nitrophenol #2	1.120	1.094	1.014	0.978	0.946	0.900	0.823	0.982	E3	10.66
19)S	2,4-DCAA #2	1.094	1.056	0.975	0.940	0.914	0.894	0.811	0.955	E3	10.14
20)	MCPP #2	2.045	2.433	2.344	2.409	2.412	2.326	2.287	2.322		5.73
21)	Dicamba #2	4.172	4.259	4.186	4.191	4.421	4.230	4.013	4.210	E3	2.89
22)	MCPA #2	3.990	4.585	4.411	4.367	4.264	4.069	3.847	4.219		6.18
23)	Dichlorprop #2	1.293	1.224	1.154	1.130	1.092	1.036	0.966	1.128	E3	9.80
24)	2,4-D #2	1.639	1.550	1.450	1.411	1.358	1.291	1.201	1.414	E3	10.56
25)	Pentachlorophenol	1.360	1.440	1.482	1.557	1.580	1.571	1.659	1.521	E4	6.59
26)	2,4,5-TP (SILVEX)	5.525	5.833	5.934	6.199	6.231	6.128	6.199	6.007	E3	4.33
27)	Chloramben #2	3.969	4.373	4.428	4.510	4.474	4.413	4.343	4.359	E3	4.15
28)	2,4,5-T #2	6.095	6.406	6.431	6.596	6.529	6.409	6.362	6.404	E3	2.47
29)	Dinoseb #2	5.213	5.269	5.194	5.244	5.121	4.995	4.866	5.129	E3	2.88
30)	2,4-DB #2	7.988	7.447	7.203	7.214	6.992	6.761	6.459	7.152	E2	6.88
31)	Picloram #2	4.584	5.214	5.409	5.752	6.051	6.095	6.577	5.669	E3	11.64

(#) = Out of Range

HRB2382.M Wed Aug 13 08:49:05 2014

8.9.1

8

Initial Calibration Verification

Job Number: TC52720 **Sample:** GDD2382-ICV2382
Account: RFWTXHO Weston Solutions **Lab FileID:** DD772790.D
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Evaluate Continuing Calibration Report

```
Signal #1 : C:\HPCHEM\1\DATA\GDD2382\DD772790.D\ECD1A.CH Vial: 11
Signal #2 : C:\HPCHEM\1\DATA\GDD2382\DD772790.D\ECD2B.CH
Acq On    : 12-Aug-2014, 19:58:24                    Operator: almar
Sample    : icv2382-300,herb                         Inst    : HP5890
Misc      : op33421,gdd2382                          Multiplr: 1.00
IntFile Signal #1: EVENTS.E     IntFile Signal #2: events2.e

Method       : C:\MSDCHEM\1\METHODS\HRB2382.M (Chemstation Integrator)
Title        : Herbicides by 8151
Last Update  : Wed Aug 13 08:45:35 2014
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.10min
Max. RRF Dev :  15%     Max. Rel. Area : 150%
```

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	Dalapon	300.000	303.540	-1.2	99	0.00	1.97- 2.03
2	4-Nitrophenol	300.000	315.747	-5.2	101	0.00	15.08-15.18
3 S	2,4-DCAA		----------NA----------				
4	MCPP	30000.000	31191.459	-4.0	101	0.00	17.49-17.55
5	Dicamba	60.000	58.509	2.5	98	0.00	17.58-17.64
6	MCPA	30000.000	28661.491	4.5	90	0.00	18.63-18.69
7	Dichlorprop	300.000	333.266	-11.1	108	0.00	19.54-19.60
8	2,4-D	300.000	316.164	-5.4	103	0.00	21.04-21.11
9	Pentachlorophenol	15.000	15.014	-0.1	102	0.00	22.04-22.10
10	2,4,5-TP (SILVEX)	60.000	68.767	-14.6	116	0.00	23.38-23.44
11	2,4,5-T	60.000	61.330	-2.2	103	0.00	25.30-25.36
12	Chloramben	300.000	291.999	2.7	98	0.00	26.63-26.69
13	Dinoseb	60.000	61.849	-3.1	101	0.00	25.72-25.78
14	2,4-DB	600.000	611.414	-1.9	99	0.00	26.95-27.01
15	Picloram	60.000	59.765	0.4	104	0.00	32.10-32.16
*****	Signal #2 *****						
17	Dalapon #2	300.000	310.028	-3.3	100	0.00	0.92- 0.98
18	4-Nitrophenol #2	300.000	314.936	-5.0	102	0.00	13.09-13.18
19 S	2,4-DCAA #2		----------NA----------				
20	MCPP #2	30000.000	29101.987	3.0	96	0.00	14.98-15.04
21	Dicamba #2	60.000	60.215	-0.4	101	0.00	14.74-14.80
22	MCPA #2	30000.000	28905.667	3.6	92	0.00	15.92-15.98
23	Dichlorprop #2	300.000	325.901	-8.6	106	0.00	16.67-16.73
24	2,4-D #2	300.000	317.876	-6.0	103	0.00	17.93-17.99
25	Pentachlorophenol #2	15.000	14.722	1.9	101	0.00	19.04-19.10
26	2,4,5-TP (SILVEX) #2	60.000	62.576	-4.3	106	0.00	20.13-20.19
27	Chloramben #2	300.000	297.720	0.8	98	0.00	22.27-22.33
28	2,4,5-T #2	60.000	61.162	-1.9	102	0.00	21.83-21.89
29	Dinoseb #2	60.000	61.500	-2.5	101	0.00	23.12-23.18
30	2,4-DB #2	600.000	613.477	-2.2	102	0.00	23.48-23.55
31	Picloram #2	60.000	59.507	0.8	104	0.00	28.54-28.60

```
   (#) = Out of Range              SPCC's out = 0  CCC's out = 0
    DD772785.D HRB2382.M        Wed Aug 13 08:48:47 2014
```

8.9.2

8

Continuing Calibration Summary

Job Number: TC52720 **Sample:** GDD2385-CC2382
Account: RFWTXHO Weston Solutions **Lab FileID:** DD772846.D
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Evaluate Continuing Calibration Report

```
Signal #2 : C:\HPCHEM\1\DATA\GDD2385\DD772846.D\ECD1A.CH Vial: 2
Signal #1 : C:\HPCHEM\1\DATA\GDD2385\DD772846.D\ECD2B.CH
Acq On    : 16-Aug-2014, 13:56:46                    Operator: almar
Sample    : cc2382-300,herb                          Inst    : HP5890
Misc      : op33527,gdd2385                          Multiplr: 1.00
IntFile Signal #2: EVENTS.E     IntFile Signal #1: events2.e

Method       : C:\MSDCHEM\1\METHODS\HRB2382.M (Chemstation Integrator)
Title        : Herbicides by 8151
Last Update  : Wed Aug 13 08:45:35 2014
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.10min
Max. RRF Dev :  15%     Max. Rel. Area : 150%
```

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	Dalapon	300.000	308.650	-2.9	101	0.00	1.97- 2.03
2	4-Nitrophenol	300.000	329.319	-9.8	106	0.00	15.08-15.18
3 S	2,4-DCAA	300.000	304.129	-1.4	99	0.00	16.84-16.90
4	MCPP	30000.000	30601.467	-2.0	99	0.00	17.49-17.55
5	Dicamba	60.000	59.532	0.8	99	0.00	17.58-17.64
6	MCPA	30000.000	31536.264	-5.1	99	0.00	18.63-18.69
7	Dichlorprop	300.000	316.982	-5.7	103	0.00	19.54-19.60
8	2,4-D	300.000	316.402	-5.5	103	0.00	21.04-21.11
9	Pentachlorophenol	15.000	15.032	-0.2	102	0.00	22.04-22.10
10	2,4,5-TP (SILVEX)	60.000	60.976	-1.6	103	0.00	23.38-23.44
11	2,4,5-T	60.000	62.807	-4.7	105	0.00	25.30-25.36
12	Chloramben	300.000	324.098	-8.0	109	0.00	26.63-26.69
13	Dinoseb	60.000	61.973	-3.3	102	0.00	25.72-25.78
14	2,4-DB	600.000	644.067	-7.3	105	0.00	26.95-27.01
15	Picloram	60.000	69.162	-15.3#	120	0.00	32.10-32.16
*****	Signal #1 *****						
17	Dalapon #2	300.000	304.292	-1.4	98	0.00	0.92- 0.98
18	4-Nitrophenol #2	300.000	327.078	-9.0	106	0.00	13.09-13.18
19 S	2,4-DCAA #2	300.000	312.058	-4.0	102	0.00	14.40-14.46
20	MCPP #2	30000.000	30084.921	-0.3	99	0.00	14.98-15.04
21	Dicamba #2	60.000	64.357	-7.3	108	0.00	14.74-14.80
22	MCPA #2	30000.000	31546.105	-5.2	101	0.00	15.92-15.98
23	Dichlorprop #2	300.000	309.943	-3.3	101	0.00	16.67-16.73
24	2,4-D #2	300.000	315.211	-5.1	103	0.00	17.93-17.99
25	Pentachlorophenol #2	15.000	14.678	2.1	100	0.00	19.04-19.10
26	2,4,5-TP (SILVEX) #2	60.000	60.762	-1.3	103	0.00	20.13-20.19
27	Chloramben #2	300.000	323.041	-7.7	106	0.00	22.27-22.33
28	2,4,5-T #2	60.000	63.119	-5.2	105	0.00	21.83-21.89
29	Dinoseb #2	60.000	62.200	-3.7	102	0.00	23.12-23.18
30	2,4-DB #2	600.000	646.264	-7.7	107	0.00	23.48-23.55
31	Picloram #2	60.000	70.714	-17.9#	124	0.00	28.54-28.60

(#) = Out of Range SPCC's out = 0 CCC's out = 0
DD772785.D HRB2382.M Sun Aug 17 10:32:13 2014

Continuing Calibration Summary

Job Number: TC52720 **Sample:** GDD2385-CC2382
Account: RFWTXHO Weston Solutions **Lab FileID:** DD772858.D
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Evaluate Continuing Calibration Report

```
Signal #2 : C:\HPCHEM\1\DATA\GDD2385\DD772858.D\ECD1A.CH Vial: 14
Signal #1 : C:\HPCHEM\1\DATA\GDD2385\DD772858.D\ECD2B.CH
Acq On    : 16-Aug-2014, 22:14:38                    Operator: almar
Sample    : cc2382-400,herb                          Inst    : HP5890
Misc      : op33527,gdd2385                          Multiplr: 1.00
IntFile Signal #2: EVENTS.E     IntFile Signal #1: events2.e

Method       : C:\MSDCHEM\1\METHODS\HRB2382.M (Chemstation Integrator)
Title        : Herbicides by 8151
Last Update  : Wed Aug 13 08:45:35 2014
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.10min
Max. RRF Dev :  15%     Max. Rel. Area : 150%
```

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	Dalapon	400.000	402.049	-0.5	100	0.00	1.97- 2.03
2	4-Nitrophenol	400.000	417.353	-4.3	105	0.00	15.08-15.18
3 S	2,4-DCAA	400.000	394.882	1.3	99	0.00	16.84-16.90
4	MCPP	40000.000	40098.281	-0.2	96	0.00	17.49-17.55
5	Dicamba	80.000	76.586	4.3	98	0.00	17.58-17.64
6	MCPA	40000.000	38322.102	4.2	91	0.00	18.63-18.69
7	Dichlorprop	400.000	407.510	-1.9	102	0.00	19.54-19.60
8	2,4-D	400.000	403.822	-1.0	101	0.00	21.04-21.11
9	Pentachlorophenol	20.000	20.405	-2.0	101	0.00	22.04-22.10
10	2,4,5-TP (SILVEX)	80.000	81.689	-2.1	100	0.00	23.38-23.44
11	2,4,5-T	80.000	84.081	-5.1	102	0.00	25.30-25.36
12	Chloramben	400.000	444.845	-11.2	107	0.00	26.63-26.69
13	Dinoseb	80.000	78.852	1.4	96	0.00	25.72-25.78
14	2,4-DB	800.000	827.232	-3.4	103	0.00	26.95-27.01
15	Picloram	80.000	94.863	-18.6#	118	0.00	32.10-32.16
*****	Signal #1 *****						
17	Dalapon #2	400.000	386.991	3.3	98	0.00	0.92- 0.98
18	4-Nitrophenol #2	400.000	412.130	-3.0	103	0.00	13.09-13.18
19 S	2,4-DCAA #2	400.000	391.310	2.2	99	0.00	14.40-14.46
20	MCPP #2	40000.000	39151.115	2.1	94	0.00	14.98-15.04
21	Dicamba #2	80.000	78.820	1.5	99	0.00	14.74-14.80
22	MCPA #2	40000.000	37852.392	5.4	91	0.00	15.92-15.98
23	Dichlorprop #2	400.000	394.162	1.5	98	0.00	16.67-16.73
24	2,4-D #2	400.000	401.688	-0.4	101	0.00	17.93-17.99
25	Pentachlorophenol #2	20.000	19.982	0.1	98	0.00	19.04-19.10
26	2,4,5-TP (SILVEX) #2	80.000	82.415	-3.0	100	0.00	20.13-20.19
27	Chloramben #2	400.000	433.611	-8.4	105	0.00	22.27-22.33
28	2,4,5-T #2	80.000	84.462	-5.6	103	0.00	21.83-21.89
29	Dinoseb #2	80.000	80.058	-0.1	98	0.00	23.12-23.18
30	2,4-DB #2	800.000	839.107	-4.9	104	0.00	23.48-23.55
31	Picloram #2	80.000	100.925	-26.2#	124	-0.01	28.54-28.60

(#) = Out of Range SPCC's out = 0 CCC's out = 0
DD772786.D HRB2382.M Sun Aug 17 10:31:17 2014

8.9.4

8

Initial Calibration Summary

Job Number: TC52720
Account: RFWTXHO Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Sample: GNN1445-ICC1445
Lab FileID: NN175115.D

Response Factor Report GCNN

Method : C:\MSDCHEM\1\METHODS\608Q1445.M (Chemstation Integrator)
Title : Pesticides by 608 or 8081
Last Update : Fri Jul 25 13:07:57 2014
Response via : Initial Calibration

Calibration Files
1 =NN175113.D 2 =NN175114.D 3 =NN175115.D 4 =NN175116.D
5 =NN175117.D 6 =NN175118.D 7 =NN175119.D

Compound	1	2	3	4	5	6	7	Avg	%RSD
1)S Tetrachloro-m-xyl	1.313	1.244	1.231	1.242	1.276	1.269	1.276	1.265 E6	2.22
2) Hexachlorobenzene	1.671	1.484	1.557	1.501	1.402	1.398	1.438	1.493 E6	6.49
3) alpha-BHC	1.583	1.529	1.735	1.723	1.637	1.670	1.753	1.662 E6	5.03
4) gamma-BHC (Lindan	1.624	1.507	1.676	1.653	1.580	1.595	1.667	1.615 E6	3.68
5) Heptachlor	1.806	1.669	1.778	1.720	1.644	1.647	1.699	1.709 E6	3.71
6) Aldrin	1.548	1.423	1.556	1.556	1.505	1.501	1.568	1.522 E6	3.34
7) Chlorothalonil	1.815	1.703	1.832	1.783	1.704	1.697	1.755	1.756 E6	3.20
8) beta-BHC	9.010	8.307	8.840	8.484	7.924	7.845	7.974	8.341 E5	5.52
9) Dacthal	1.454	1.341	1.420	1.358	1.287	1.283	1.316	1.351 E6	4.83
10) Delta-BHC	1.514	1.388	1.554	1.546	1.490	1.510	1.586	1.513 E6	4.20
11) Heptachlor Epoxid	1.569	1.433	1.575	1.515	1.449	1.451	1.486	1.497 E6	3.89
12) Endosulfan I	1.433	1.318	1.434	1.368	1.320	1.328	1.353	1.365 E6	3.68
13) gamma-Chlordane	1.661	1.486	1.558	1.501	1.435	1.446	1.476	1.509 E6	5.18
14) alpha-Chlordane	1.610	1.451	1.550	1.484	1.420	1.432	1.467	1.488 E6	4.61
15) 4,4'-DDE	1.345	1.255	1.407	1.388	1.350	1.391	1.441	1.368 E6	4.37
16) Dieldrin	1.487	1.376	1.533	1.491	1.462	1.490	1.529	1.481 E6	3.56
17) Endrin	1.301	1.233	1.326	1.270	1.242	1.268	1.303	1.277 E6	2.67
18) 4,4'-DDD	1.111	1.053	1.157	1.114	1.087	1.119	1.156	1.114 E6	3.30
19) Endosulfan II	1.418	1.287	1.419	1.339	1.312	1.323	1.358	1.351 E6	3.79
20) 4,4'-DDT	1.373	1.215	1.343	1.308	1.271	1.299	1.348	1.308 E6	4.09
21) Endrin Aldehyde	1.177	1.031	1.110	1.066	1.033	1.033	1.064	1.073 E6	4.99
22) Methoxychlor	8.064	7.271	7.738	7.365	6.938	7.002	7.146	7.361 E5	5.54
23) Endosulfan Sulfat	1.451	1.281	1.365	1.326	1.250	1.262	1.317	1.322 E6	5.27
24) Endrin Ketone	1.669	1.504	1.657	1.577	1.524	1.542	1.578	1.579 E6	4.02
25)L1Chlordane-A			6.154					6.154 E4	0.00
26)L1Chlordane-B			9.955					9.955 E4	0.00
27)L1Chlordane-C			6.922					6.922 E4	0.00
28)L1Chlordane-D			2.086					2.086 E5	0.00
29)L1Chlordane-E			1.636					1.636 E5	0.00
30)L1Chlordane-F			5.872					5.872 E4	0.00
31)H Toxaphene			1.362					1.362 E6	0.00
32) Mirex			1.441					1.441 E6	0.00
33) Dicofol			1.169					1.169 E6	0.00
34)L1AR1016-A	6.742	6.026	5.763	5.528	5.524	5.389	4.976	5.707 E4	9.80
35)L1AR1016-B	1.276	1.185	1.130	1.085	1.109	1.076	1.032	1.128 E5	7.20
36)L1AR1016-C	5.941	5.674	5.295	4.995	5.029	4.936	4.609	5.211 E4	8.84
37)L1AR1016-D	4.202	4.006	3.870	3.618	3.696	3.574	3.455	3.775 E4	6.99
38)L1AR1016-E	4.077	3.985	3.806	3.645	3.649	3.598	3.479	3.748 E4	5.80
39)L1AR1016-F	5.654	5.087	4.855	4.595	4.594	4.499	4.247	4.790 E4	9.70
40)L2AR1221-A			1.307					1.307 E4	0.00
41)L2AR1221-B			1.746					1.746 E4	0.00
42)L2AR1221-C			1.149					1.149 E4	0.00
43)L2AR1221-D			4.930					4.930 E4	0.00
44)L2AR1221-E			8.105					8.105 E3	0.00
45)L3AR1232-A			2.859					2.859 E4	0.00
46)L3AR1232-B			5.277					5.277 E4	0.00
47)L3AR1232-C			2.443					2.443 E4	0.00

Initial Calibration Summary

Job Number: TC52720 **Sample:** GNN1445-ICC1445
Account: RFWTXHO Weston Solutions **Lab FileID:** NN175115.D
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

48)	L3AR1232-D			1.683				1.683	E4	0.00
49)	L3AR1232-E			1.653				1.653	E4	0.00
50)	L3AR1232-F			2.335				2.335	E4	0.00
51)	L4AR1242-A			6.166				6.166	E4	0.00
52)	L4AR1242-B			1.178				1.178	E5	0.00
53)	L4AR1242-C			5.491				5.491	E4	0.00
54)	L4AR1242-D			3.989				3.989	E4	0.00
55)	L4AR1242-E			4.007				4.007	E4	0.00
56)	L4AR1242-F			5.237				5.237	E4	0.00
57)	L5AR1248-A			2.425				2.425	E4	0.00
58)	L5AR1248-B			5.917				5.917	E4	0.00
59)	L5AR1248-C			4.132				4.132	E4	0.00
60)	L5AR1248-D			5.137				5.137	E4	0.00
61)	L5AR1248-E			6.376				6.376	E4	0.00
62)	L5AR1248-F			3.659				3.659	E4	0.00
63)	L6AR1254-A			7.500				7.500	E4	0.00
64)	L6AR1254-B			7.969				7.969	E4	0.00
65)	L6AR1254-C			1.226				1.226	E5	0.00
66)	L6AR1254-D			8.179				8.179	E4	0.00
67)	L6AR1254-E			9.022				9.022	E4	0.00
68)	L6AR1254-F			1.094				1.094	E5	0.00
69)	L7AR1260-A	9.671	8.815	8.522	8.074	8.135	7.988	7.394	8.371	E4	8.66
70)	L7AR1260-B	1.089	1.012	0.980	0.927	0.935	0.923	0.851	0.959	E5	7.94
71)	L7AR1260-C	8.509	7.661	7.430	6.967	7.072	6.901	6.405	7.278	E4	9.27
72)	L7AR1260-D	9.199	8.276	8.221	7.749	7.906	7.787	7.248	8.055	E4	7.55
73)	L7AR1260-E	1.848	1.650	1.611	1.543	1.623	1.605	1.492	1.625	E5	6.90
74)	L7AR1260-F	1.311	1.201	1.173	1.127	1.130	1.124	1.075	1.163	E5	6.56
75)	L8AR1262-A			3.545				3.545	E3	0.00
76)	L8AR1262-B			3.953				3.953	E3	0.00
77)	L8AR1262-C			3.779				3.779	E3	0.00
78)	L8AR1262-D			5.600				5.600	E3	0.00
79)	L8AR1262-E			2.603				2.603	E3	0.00
80)	L8AR1262-F			6.510				6.510	E3	0.00
81)	L9AR1268-A			5.392				5.392	E4	0.00
82)	L9AR1268-B			6.614				6.614	E4	0.00
83)	L9AR1268-C			2.304				2.304	E5	0.00
84)	L9AR1268-D			2.399				2.399	E5	0.00
85)	L9AR1268-E			1.684				1.684	E5	0.00
86)	L9AR1268-F			7.388				7.388	E4	0.00
87)	S Decachlorobipheny	1.488	1.386	1.349	1.281	1.308	1.274	1.222	1.330	E6	6.60

Signal #2

89)	S Tetrachloro-m-xyl	1.092	1.010	1.016	1.018	1.046	1.045	1.045	1.039	E6	2.72
90)	Hexachlorobenzene	1.598	1.433	1.492	1.430	1.363	1.341	1.375	1.433	E6	6.22
91)	alpha-BHC #2	1.308	1.251	1.441	1.413	1.371	1.359	1.467	1.373	E6	5.52
92)	gamma-BHC (Lindan	1.272	1.191	1.361	1.338	1.302	1.309	1.383	1.308	E6	4.86
93)	beta-BHC #2	6.688	6.147	6.522	6.493	6.207	6.112	6.376	6.364	E5	3.41
94)	Heptachlor #2	1.494	1.366	1.473	1.440	1.386	1.389	1.452	1.429	E6	3.42
95)	Chlorothalonil #2	1.310	1.228	1.330	1.357	1.244	1.250	1.297	1.288	E6	3.74
96)	delta-BHC #2	1.237	1.161	1.256	1.298	1.249	1.264	1.339	1.258	E6	4.37
97)	Aldrin #2	1.211	1.148	1.263	1.248	1.197	1.210	1.261	1.220	E6	3.38
98)	Dacthal #2	1.028	0.936	1.006	0.993	0.929	0.949	0.983	0.975	E6	3.87
99)	Heptachlor Epoxid	1.508	1.503	1.613	1.464	1.444	1.413	1.453	1.485	E6	4.40
100)	gamma-Chlordane #	1.414	1.280	1.334	1.252	1.198	1.200	1.239	1.274	E6	6.10
101)	alpha-Chlordane #	1.386	1.261	1.297	1.236	1.184	1.188	1.228	1.254	E6	5.60
102)	Endosulfan I #2	1.612	1.455	1.607	1.423	1.413	1.382	1.387	1.468	E6	6.76
103)	4,4'-DDE #2	1.008	0.874	0.963	1.004	0.946	0.997	1.067	0.980	E6	6.16
104)	Dieldrin #2	1.216	1.126	1.256	1.217	1.185	1.212	1.261	1.210	E6	3.78
105)	Endrin #2	1.098	1.003	1.102	1.068	1.032	1.050	1.093	1.064	E6	3.53

Initial Calibration Summary

Job Number: TC52720 **Sample:** GNN1445-ICC1445
Account: RFWTXHO Weston Solutions **Lab FileID:** NN175115.D
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

106)	4,4'-DDD #2	9.065	8.299	9.139	9.019	8.664	8.863	9.271	8.903	E5	3.71
107)	Endosulfan II #2	1.149	1.089	1.178	1.119	1.080	1.089	1.124	1.118	E6	3.20
108)	4,4'-DDT #2	1.065	1.001	1.110	1.090	1.041	1.066	1.109	1.069	E6	3.66
109)	Endrin Aldehyde #	9.629	8.592	9.304	8.782	8.470	8.500	8.735	8.859	E5	4.97
110)	Endosulfan Sulfat	1.170	1.050	1.144	1.080	1.041	1.048	1.082	1.088	E6	4.62
111)	Methoxychlor #2	6.715	6.064	6.453	6.146	5.800	5.860	5.971	6.144	E5	5.39
112)	Endrin Ketone #2	1.364	1.251	1.374	1.306	1.254	1.270	1.311	1.304	E6	3.82
113)	L1Chlordane-A #2			4.397					4.397	E4	0.00
114)	L1Chlordane-B #2			8.178					8.178	E4	0.00
115)	L1Chlordane-C #2			6.041					6.041	E4	0.00
116)	L1Chlordane-D #2			1.712					1.712	E5	0.00
117)	L1Chlordane-E #2			2.681					2.681	E5	0.00
118)	L1Chlordane-F #2			4.601					4.601	E4	0.00
119)	H Toxaphene #2			1.095					1.095	E6	0.00
120)	Mirex #2			1.224					1.224	E6	0.00
121)	Dicofol #2			6.870					6.870	E5	0.00
122)	L1AR1016-A #2	4.839	4.456	4.377	4.298	4.236	4.179	4.042	4.347	E4	5.87
123)	L1AR1016-B #2	9.513	9.498	9.427	9.354	9.519	9.378	8.744	9.348	E4	2.93
124)	L1AR1016-C #2	3.795	3.831	3.831	3.660	3.809	3.728	3.605	3.751	E4	2.40
125)	L1AR1016-D #2	2.656	2.661	2.748	2.708	2.747	2.596	2.524	2.663	E4	3.08
126)	L1AR1016-E #2	4.072	3.806	3.880	3.842	3.855	3.818	3.810	3.869	E4	2.42
127)	L1AR1016-F #2	2.186	1.706	1.869	1.753	1.715	1.966	2.026	1.889	E4	9.55
128)	L2AR1221-A #2			9.241					9.241	E3	0.00
129)	L2AR1221-B #2			1.360					1.360	E4	0.00
130)	L2AR1221-C #2			6.008					6.008	E3	0.00
131)	L2AR1221-D #2			2.799					2.799	E4	0.00
132)	L2AR1221-E #2			9.786					9.786	E3	0.00
133)	L3AR1232-A #2			1.829					1.829	E3	0.00
134)	L3AR1232-B #2			2.143					2.143	E4	0.00
135)	L3AR1232-C #2			4.313					4.313	E4	0.00
136)	L3AR1232-D #2			1.752					1.752	E4	0.00
137)	L3AR1232-E #2			1.514					1.514	E4	0.00
138)	L3AR1232-F #2			1.699					1.699	E4	0.00
139)	L4AR1242-A #2			5.003					5.003	E4	0.00
140)	L4AR1242-B #2			1.005					1.005	E5	0.00
141)	L4AR1242-C #2			4.051					4.051	E4	0.00
142)	L4AR1242-D #2			2.923					2.923	E4	0.00
143)	L4AR1242-E #2			4.217					4.217	E4	0.00
144)	L4AR1242-F #2			2.039					2.039	E4	0.00
145)	L5AR1248-A #2			1.726					1.726	E4	0.00
146)	L5AR1248-B #2			3.404					3.404	E4	0.00
147)	L5AR1248-C #2			5.266					5.266	E4	0.00
148)	L5AR1248-D #2			2.586					2.586	E4	0.00
149)	L5AR1248-E #2			3.577					3.577	E4	0.00
150)	L5AR1248-F #2			2.605					2.605	E4	0.00
151)	L6AR1254-A #2			5.111					5.111	E4	0.00
152)	L6AR1254-B #2			9.245					9.245	E4	0.00
153)	L6AR1254-C #2			9.478					9.478	E4	0.00
154)	L6AR1254-D #2			7.166					7.166	E4	0.00
155)	L6AR1254-E #2			6.550					6.550	E4	0.00
156)	L6AR1254-F #2			8.733					8.733	E4	0.00
157)	L7AR1260-A #2	7.085	6.798	6.572	6.067	6.392	6.211	5.771	6.414	E4	6.97
158)	L7AR1260-B #2	1.014	0.964	0.935	0.898	0.922	0.900	0.856	0.927	E5	5.52
159)	L7AR1260-C #2	1.111	1.017	1.017	0.976	1.007	0.981	0.935	1.006	E5	5.42
160)	L7AR1260-D #2	6.504	5.924	6.082	5.875	6.022	5.884	5.602	5.985	E4	4.59
161)	L7AR1260-E #2	1.696	1.565	1.572	1.508	1.539	1.511	1.444	1.548	E5	5.04
162)	L7AR1260-F #2	6.905	6.242	6.147	5.982	6.274	6.116	5.975	6.234	E4	5.09
163)	L8AR1262-A #2			4.073					4.073	E3	0.00
164)	L8AR1262-B #2			2.264					2.264	E3	0.00
165)	L8AR1262-C #2			3.133					3.133	E3	0.00

Initial Calibration Summary

Job Number: TC52720 **Sample:** GNN1445-ICC1445
Account: RFWTXHO Weston Solutions **Lab FileID:** NN175115.D
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

```
166)L8AR1262-D #2                    3.238                          3.238 E3   0.00
167)L8AR1262-E #2                    2.380                          2.380 E3   0.00
168)L8AR1262-F #2                    5.517                          5.517 E3   0.00
169)L9AR1268-A #2                    4.979                          4.979 E4   0.00
170)L9AR1268-B #2                    5.980                          5.980 E4   0.00
171)L9AR1268-C #2                    2.159                          2.159 E5   0.00
172)L9AR1268-D #2                    2.471                          2.471 E5   0.00
173)L9AR1268-E #2                    1.760                          1.760 E5   0.00
174)L9AR1268-F #2                    7.130                          7.130 E4   0.00
175)S Decachlorobipheny 1.516 1.393 1.344 1.268 1.295 1.260 1.203 1.326 E6   7.82
 ---------------------------------------------------------------------------
 (#) = Out of Range

          608Q1445.M        Fri Jul 25 13:46:56 2014
```

8.9.5

8

Initial Calibration Verification

Job Number: TC52720
Account: RFWTXHO Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX
Sample: GNN1445-ICV1445
Lab FileID: NN175120.D

Evaluate Continuing Calibration Report

```
Signal #1 : C:\MSDCHEM\1\DATA\GNN1445\NN175120.D\ECD1A.CH Vial: 24
Signal #2 : C:\MSDCHEM\1\DATA\GNN1445\NN175120.D\ECD2B.CH
Acq On    : 7-24-2014 02:50:28 PM                    Operator: almar
Sample    : icv1445-200,1016/1260                    Inst    : GCNN
Misc      : op33313,gnn1445                          Multiplr: 1.00
IntFile Signal #1: EVENTS.E     IntFile Signal #2: events2.e

Method       : C:\MSDCHEM\1\METHODS\608Q1445.M (Chemstation Integrator)
Title        : Pesticides by 608 or 8081
Last Update  : Fri Jul 25 13:07:57 2014
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  15%     Max. Rel. Area : 150%
```

		Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	S	Tetrachloro-m-xylene		----------NA----------				
2		Hexachlorobenzene		----------NA----------				
3		alpha-BHC		----------NA----------				
4		gamma-BHC (Lindane)		----------NA----------				
5		Heptachlor		----------NA----------				
6		Aldrin		----------NA----------				
7		Chlorothalonil		----------NA----------				
8		beta-BHC		----------NA----------				
9		Dacthal		----------NA----------				
10		Delta-BHC		----------NA----------				
11		Heptachlor Epoxide		----------NA----------				
12		Endosulfan I		----------NA----------				
13		gamma-Chlordane		----------NA----------				
14		alpha-Chlordane		----------NA----------				
15		4,4'-DDE		----------NA----------				
16		Dieldrin		----------NA----------				
17		Endrin		----------NA----------				
18		4,4'-DDD		----------NA----------				
19		Endosulfan II		----------NA----------				
20		4,4'-DDT		----------NA----------				
21		Endrin Aldehyde		----------NA----------				
22		Methoxychlor		----------NA----------				
23		Endosulfan Sulfate		----------NA----------				
24		Endrin Ketone		----------NA----------				
25	L1	Chlordane-A		----------NA----------				
26	L1	Chlordane-B		----------NA----------				
27	L1	Chlordane-C		----------NA----------				
28	L1	Chlordane-D		----------NA----------				
29	L1	Chlordane-E		----------NA----------				
30	L1	Chlordane-F		----------NA----------				
31	H	Toxaphene		----------NA----------				
32		Mirex		----------NA----------				
33		Dicofol		----------NA----------				
34	L1	AR1016-A	200.000	191.519	4.2	95	-0.01	2.88- 2.94
35	L1	AR1016-B	200.000	194.046	3.0	97	-0.01	3.23- 3.29
36	L1	AR1016-C	200.000	200.319	-0.2	99	-0.01	3.33- 3.39
37	L1	AR1016-D	200.000	204.868	-2.4	100	-0.01	3.41- 3.47
38	L1	AR1016-E	200.000	191.281	4.4	94	-0.01	3.71- 3.77
39	L1	AR1016-F	200.000	181.606	9.2	90	-0.01	3.82- 3.88
40	L2	AR1221-A		----------NA----------				
41	L2	AR1221-B		----------NA----------				

Initial Calibration Verification

Job Number: TC52720
Account: RFWTXHO Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Sample: GNN1445-ICV1445
Lab FileID: NN175120.D

42	L2	AR1221-C			----------NA----------			
43	L2	AR1221-D			----------NA----------			
44	L2	AR1221-E			----------NA----------			
45	L3	AR1232-A			----------NA----------			
46	L3	AR1232-B			----------NA----------			
47	L3	AR1232-C			----------NA----------			
48	L3	AR1232-D			----------NA----------			
49	L3	AR1232-E			----------NA----------			
50	L3	AR1232-F			----------NA----------			
51	L4	AR1242-A			----------NA----------			
52	L4	AR1242-B			----------NA----------			
53	L4	AR1242-C			----------NA----------			
54	L4	AR1242-D			----------NA----------			
55	L4	AR1242-E			----------NA----------			
56	L4	AR1242-F			----------NA----------			
57	L5	AR1248-A			----------NA----------			
58	L5	AR1248-B			----------NA----------			
59	L5	AR1248-C			----------NA----------			
60	L5	AR1248-D			----------NA----------			
61	L5	AR1248-E			----------NA----------			
62	L5	AR1248-F			----------NA----------			
63	L6	AR1254-A			----------NA----------			
64	L6	AR1254-B			----------NA----------			
65	L6	AR1254-C			----------NA----------			
66	L6	AR1254-D			----------NA----------			
67	L6	AR1254-E			----------NA----------			
68	L6	AR1254-F			----------NA----------			
69	L7	AR1260-A	200.000	184.813	7.6	91	0.00	4.73- 4.79
70	L7	AR1260-B	200.000	189.393	5.3	93	0.00	4.89- 4.95
71	L7	AR1260-C	200.000	188.913	5.5	93	0.00	5.21- 5.27
72	L7	AR1260-D	200.000	188.762	5.6	92	0.00	5.42- 5.48
73	L7	AR1260-E	200.000	185.984	7.0	94	0.00	5.59- 5.65
74	L7	AR1260-F	200.000	186.044	7.0	92	0.00	5.84- 5.90
75	L8	AR1262-A			----------NA----------			
76	L8	AR1262-B			----------NA----------			
77	L8	AR1262-C			----------NA----------			
78	L8	AR1262-D			----------NA----------			
79	L8	AR1262-E			----------NA----------			
80	L8	AR1262-F			----------NA----------			
81	L9	AR1268-A			----------NA----------			
82	L9	AR1268-B			----------NA----------			
83	L9	AR1268-C			----------NA----------			
84	L9	AR1268-D			----------NA----------			
85	L9	AR1268-E			----------NA----------			
86	L9	AR1268-F			----------NA----------			
87	S	Decachlorobiphenyl			----------NA----------			
*****		Signal #2 *****						
89	S	Tetrachloro-m-xylene #2			----------NA----------			
90		Hexachlorobenzene #2			----------NA----------			
91		alpha-BHC #2			----------NA----------			
92		gamma-BHC (Lindane) #2			----------NA----------			
93		beta-BHC #2			----------NA----------			
94		Heptachlor #2			----------NA----------			
95		Chlorothalonil #2			----------NA----------			
96		delta-BHC #2			----------NA----------			
97		Aldrin #2			----------NA----------			
98		Dacthal #2			----------NA----------			
99		Heptachlor Epoxide #2			----------NA----------			

Initial Calibration Verification

Job Number: TC52720 **Sample:** GNN1445-ICV1445
Account: RFWTXHO Weston Solutions **Lab FileID:** NN175120.D
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

100		gamma-Chlordane #2		----------NA----------				
101		alpha-Chlordane #2		----------NA----------				
102		Endosulfan I #2		----------NA----------				
103		4,4'-DDE #2		----------NA----------				
104		Dieldrin #2		----------NA----------				
105		Endrin #2		----------NA----------				
106		4,4'-DDD #2		----------NA----------				
107		Endosulfan II #2		----------NA----------				
108		4,4'-DDT #2		----------NA----------				
109		Endrin Aldehyde #2		----------NA----------				
110		Endosulfan Sulfate #2		----------NA----------				
111		Methoxychlor #2		----------NA----------				
112		Endrin Ketone #2		----------NA----------				
113	L1	Chlordane-A #2		----------NA----------				
114	L1	Chlordane-B #2		----------NA----------				
115	L1	Chlordane-C #2		----------NA----------				
116	L1	Chlordane-D #2		----------NA----------				
117	L1	Chlordane-E #2		----------NA----------				
118	L1	Chlordane-F #2		----------NA----------				
119	H	Toxaphene #2		----------NA----------				
120		Mirex #2		----------NA----------				
121		Dicofol #2		----------NA----------				
122	L1	AR1016-A #2	200.000	197.133	1.4	98	-0.01	2.48- 2.54
123	L1	AR1016-B #2	200.000	202.201	-1.1	100	0.00	2.76- 2.82
124	L1	AR1016-C #2	200.000	212.630	-6.3	104	0.00	2.85- 2.91
125	L1	AR1016-D #2	200.000	217.214	-8.6	105	0.00	2.89- 2.95
126	L1	AR1016-E #2	200.000	207.638	-3.8	104	0.00	3.13- 3.19
127	L1	AR1016-F #2	200.000	203.148	-1.6	103	0.00	3.22- 3.28
128	L2	AR1221-A #2		----------NA----------				
129	L2	AR1221-B #2		----------NA----------				
130	L2	AR1221-C #2		----------NA----------				
131	L2	AR1221-D #2		----------NA----------				
132	L2	AR1221-E #2		----------NA----------				
133	L3	AR1232-A #2		----------NA----------				
134	L3	AR1232-B #2		----------NA----------				
135	L3	AR1232-C #2		----------NA----------				
136	L3	AR1232-D #2		----------NA----------				
137	L3	AR1232-E #2		----------NA----------				
138	L3	AR1232-F #2		----------NA----------				
139	L4	AR1242-A #2		----------NA----------				
140	L4	AR1242-B #2		----------NA----------				
141	L4	AR1242-C #2		----------NA----------				
142	L4	AR1242-D #2		----------NA----------				
143	L4	AR1242-E #2		----------NA----------				
144	L4	AR1242-F #2		----------NA----------				
145	L5	AR1248-A #2		----------NA----------				
146	L5	AR1248-B #2		----------NA----------				
147	L5	AR1248-C #2		----------NA----------				
148	L5	AR1248-D #2		----------NA----------				
149	L5	AR1248-E #2		----------NA----------				
150	L5	AR1248-F #2		----------NA----------				
151	L6	AR1254-A #2		----------NA----------				
152	L6	AR1254-B #2		----------NA----------				
153	L6	AR1254-C #2		----------NA----------				
154	L6	AR1254-D #2		----------NA----------				
155	L6	AR1254-E #2		----------NA----------				
156	L6	AR1254-F #2		----------NA----------				
157	L7	AR1260-A #2	200.000	181.641	9.2	89	0.00	4.08- 4.14
158	L7	AR1260-B #2	200.000	182.891	8.6	91	0.00	4.30- 4.36
159	L7	AR1260-C #2	200.000	179.421	10.3	89	0.00	4.52- 4.58

Initial Calibration Verification

Job Number: TC52720
Account: RFWTXHO Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Sample: GNN1445-ICV1445
Lab FileID: NN175120.D

160	L7	AR1260-D #2	200.000	188.935	5.5	93	0.00	4.78- 4.84
161	L7	AR1260-E #2	200.000	189.389	5.3	93	0.00	5.01- 5.07
162	L7	AR1260-F #2	200.000	194.546	2.7	99	0.00	5.21- 5.27
163	L8	AR1262-A #2	----------NA----------					
164	L8	AR1262-B #2	----------NA----------					
165	L8	AR1262-C #2	----------NA----------					
166	L8	AR1262-D #2	----------NA----------					
167	L8	AR1262-E #2	----------NA----------					
168	L8	AR1262-F #2	----------NA----------					
169	L9	AR1268-A #2	----------NA----------					
170	L9	AR1268-B #2	----------NA----------					
171	L9	AR1268-C #2	----------NA----------					
172	L9	AR1268-D #2	----------NA----------					
173	L9	AR1268-E #2	----------NA----------					
174	L9	AR1268-F #2	----------NA----------					
175	S	Decachlorobiphenyl #2	----------NA----------					

(#) = Out of Range SPCC's out = 0 CCC's out = 0
NN175115.D 608Q1445.M Fri Jul 25 13:46:04 2014

8.9.6

8

Initial Calibration Verification

Job Number: TC52720
Account: RFWTXHO Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX
Sample: GNN1445-ICV1445
Lab FileID: NN175128.D

Evaluate Continuing Calibration Report

```
Signal #1 : C:\MSDCHEM\1\DATA\GNN1445\NN175128.D\ECD1A.CH Vial: 32
Signal #2 : C:\MSDCHEM\1\DATA\GNN1445\NN175128.D\ECD2B.CH
Acq On    : 7-24-2014 04:52:54 PM                    Operator: almar
Sample    : icv1445-200,pest                         Inst    : GCNN
Misc      : op33313,gnn1445                          Multiplr: 1.00
IntFile Signal #1: EVENTS.E     IntFile Signal #2: events2.e

Method       : C:\MSDCHEM\1\METHODS\608Q1445.M (Chemstation Integrator)
Title        : Pesticides by 608 or 8081
Last Update  : Fri Jul 25 13:07:57 2014
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  15%     Max. Rel. Area : 150%
```

		Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	S	Tetrachloro-m-xylene		----------NA----------				
2		Hexachlorobenzene	40.000	42.127	-5.3	101	0.00	2.59- 2.65
3		alpha-BHC	20.000	19.453	2.7	93	0.00	2.68- 2.74
4		gamma-BHC (Lindane)	20.000	18.434	7.8	89	0.00	2.94- 3.00
5		Heptachlor	20.000	19.920	0.4	96	0.00	3.29- 3.35
6		Aldrin	20.000	19.766	1.2	97	0.00	3.56- 3.62
7		Chlorothalonil	40.000	42.528	-6.3	102	0.01	3.39- 3.45
8		beta-BHC	20.000	19.228	3.9	91	0.00	3.01- 3.07
9		Dacthal	40.000	40.586	-1.5	97	0.00	3.84- 3.90
10		Delta-BHC	20.000	19.127	4.4	93	0.00	3.24- 3.30
11		Heptachlor Epoxide	20.000	19.020	4.9	90	0.00	4.05- 4.11
12		Endosulfan I	20.000	20.315	-1.6	97	0.00	4.37- 4.43
13		gamma-Chlordane	20.000	19.984	0.1	97	0.00	4.21- 4.27
14		alpha-Chlordane	20.000	20.699	-3.5	99	0.00	4.33- 4.39
15		4,4'-DDE	40.000	38.204	4.5	93	0.00	4.47- 4.53
16		Dieldrin	40.000	38.382	4.0	93	0.00	4.59- 4.65
17		Endrin	40.000	41.909	-4.8	101	0.00	4.82- 4.88
18		4,4'-DDD	40.000	39.801	0.5	96	0.00	4.91- 4.97
19		Endosulfan II	40.000	40.126	-0.3	95	0.00	4.98- 5.04
20		4,4'-DDT	40.000	39.412	1.5	96	0.00	5.14- 5.20
21		Endrin Aldehyde	40.000	41.435	-3.6	100	0.00	5.23- 5.29
22		Methoxychlor	200.000	207.365	-3.7	99	0.00	5.63- 5.69
23		Endosulfan Sulfate	40.000	39.239	1.9	95	0.00	5.43- 5.49
24		Endrin Ketone	40.000	40.295	-0.7	96	0.00	5.79- 5.85
25	L1	Chlordane-A		----------NA----------				
26	L1	Chlordane-B		----------NA----------				
27	L1	Chlordane-C		----------NA----------				
28	L1	Chlordane-D		----------NA----------				
29	L1	Chlordane-E		----------NA----------				
30	L1	Chlordane-F		----------NA----------				
31	H	Toxaphene		----------NA----------				
32		Mirex		----------NA----------				
33		Dicofol		----------NA----------				
34	L1	AR1016-A		----------NA----------				
35	L1	AR1016-B		----------NA----------				
36	L1	AR1016-C		----------NA----------				
37	L1	AR1016-D		----------NA----------				
38	L1	AR1016-E		----------NA----------				
39	L1	AR1016-F		----------NA----------				
40	L2	AR1221-A		----------NA----------				
41	L2	AR1221-B		----------NA----------				

Initial Calibration Verification

Job Number: TC52720 **Sample:** GNN1445-ICV1445
Account: RFWTXHO Weston Solutions **Lab FileID:** NN175128.D
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

42	L2	AR1221-C	----------NA----------					
43	L2	AR1221-D	----------NA----------					
44	L2	AR1221-E	----------NA----------					
45	L3	AR1232-A	----------NA----------					
46	L3	AR1232-B	----------NA----------					
47	L3	AR1232-C	----------NA----------					
48	L3	AR1232-D	----------NA----------					
49	L3	AR1232-E	----------NA----------					
50	L3	AR1232-F	----------NA----------					
51	L4	AR1242-A	----------NA----------					
52	L4	AR1242-B	----------NA----------					
53	L4	AR1242-C	----------NA----------					
54	L4	AR1242-D	----------NA----------					
55	L4	AR1242-E	----------NA----------					
56	L4	AR1242-F	----------NA----------					
57	L5	AR1248-A	----------NA----------					
58	L5	AR1248-B	----------NA----------					
59	L5	AR1248-C	----------NA----------					
60	L5	AR1248-D	----------NA----------					
61	L5	AR1248-E	----------NA----------					
62	L5	AR1248-F	----------NA----------					
63	L6	AR1254-A	----------NA----------					
64	L6	AR1254-B	----------NA----------					
65	L6	AR1254-C	----------NA----------					
66	L6	AR1254-D	----------NA----------					
67	L6	AR1254-E	----------NA----------					
68	L6	AR1254-F	----------NA----------					
69	L7	AR1260-A	----------NA----------					
70	L7	AR1260-B	----------NA----------					
71	L7	AR1260-C	----------NA----------					
72	L7	AR1260-D	----------NA----------					
73	L7	AR1260-E	----------NA----------					
74	L7	AR1260-F	----------NA----------					
75	L8	AR1262-A	----------NA----------					
76	L8	AR1262-B	----------NA----------					
77	L8	AR1262-C	----------NA----------					
78	L8	AR1262-D	----------NA----------					
79	L8	AR1262-E	----------NA----------					
80	L8	AR1262-F	----------NA----------					
81	L9	AR1268-A	----------NA----------					
82	L9	AR1268-B	----------NA----------					
83	L9	AR1268-C	----------NA----------					
84	L9	AR1268-D	----------NA----------					
85	L9	AR1268-E	----------NA----------					
86	L9	AR1268-F	----------NA----------					
87	S	Decachlorobiphenyl	----------NA----------					

***** Signal #2 *****

89	S	Tetrachloro-m-xylene #2	----------NA----------					
90		Hexachlorobenzene #2	40.000	41.971	-4.9	101	-0.02	2.30- 2.36
91		alpha-BHC #2	20.000	20.182	-0.9	96	-0.02	2.40- 2.46
92		gamma-BHC (Lindane) #2	20.000	18.699	6.5	90	-0.03	2.60- 2.66
93		beta-BHC #2	20.000	19.761	1.2	96	-0.03	2.65- 2.71
94		Heptachlor #2	20.000	19.928	0.4	97	0.00	2.89- 2.95
95		Chlorothalonil #2	40.000	43.228	-8.1	105	0.00	3.15- 3.21
96		delta-BHC #2	20.000	19.622	1.9	98	0.00	2.75- 2.81
97		Aldrin #2	20.000	19.510	2.4	94	-0.01	3.11- 3.17
98		Dacthal #2	40.000	41.528	-3.8	101	0.00	3.53- 3.59
99		Heptachlor Epoxide #2	20.000	20.301	-1.5	93	0.00	3.55- 3.61

Initial Calibration Verification

Job Number: TC52720 **Sample:** GNN1445-ICV1445
Account: RFWTXHO Weston Solutions **Lab FileID:** NN175128.D
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

100		gamma-Chlordane #2	20.000	20.249	-1.2	97	0.00	3.66- 3.72
101		alpha-Chlordane #2	20.000	20.873	-4.4	101	0.00	3.77- 3.83
102		Endosulfan I #2	20.000	21.739	-8.7	99	0.00	3.87- 3.93
103		4,4'-DDE #2	40.000	36.115	9.7	92	0.00	3.85- 3.91
104		Dieldrin #2	40.000	38.815	3.0	94	-0.02	4.08- 4.14
105		Endrin #2	40.000	42.643	-6.6	103	-0.02	4.26- 4.32
106		4,4'-DDD #2	40.000	40.158	-0.4	98	-0.01	4.34- 4.40
107		Endosulfan II #2	40.000	40.988	-2.5	97	-0.02	4.43- 4.49
108		4,4'-DDT #2	40.000	39.416	1.5	95	-0.01	4.55- 4.61
109		Endrin Aldehyde #2	40.000	41.360	-3.4	98	-0.02	4.75- 4.81
110		Endosulfan Sulfate #2	40.000	40.261	-0.7	96	-0.02	5.06- 5.12
111		Methoxychlor #2	200.000	211.795	-5.9	101	-0.01	4.92- 4.98
112		Endrin Ketone #2	40.000	40.425	-1.1	96	-0.02	5.26- 5.32
113	L1	Chlordane-A #2		----------NA----------				
114	L1	Chlordane-B #2		----------NA----------				
115	L1	Chlordane-C #2		----------NA----------				
116	L1	Chlordane-D #2		----------NA----------				
117	L1	Chlordane-E #2		----------NA----------				
118	L1	Chlordane-F #2		----------NA----------				
119	H	Toxaphene #2		----------NA----------				
120		Mirex #2		----------NA----------				
121		Dicofol #2		----------NA----------				
122	L1	AR1016-A #2		----------NA----------				
123	L1	AR1016-B #2		----------NA----------				
124	L1	AR1016-C #2		----------NA----------				
125	L1	AR1016-D #2		----------NA----------				
126	L1	AR1016-E #2		----------NA----------				
127	L1	AR1016-F #2		----------NA----------				
128	L2	AR1221-A #2		----------NA----------				
129	L2	AR1221-B #2		----------NA----------				
130	L2	AR1221-C #2		----------NA----------				
131	L2	AR1221-D #2		----------NA----------				
132	L2	AR1221-E #2		----------NA----------				
133	L3	AR1232-A #2		----------NA----------				
134	L3	AR1232-B #2		----------NA----------				
135	L3	AR1232-C #2		----------NA----------				
136	L3	AR1232-D #2		----------NA----------				
137	L3	AR1232-E #2		----------NA----------				
138	L3	AR1232-F #2		----------NA----------				
139	L4	AR1242-A #2		----------NA----------				
140	L4	AR1242-B #2		----------NA----------				
141	L4	AR1242-C #2		----------NA----------				
142	L4	AR1242-D #2		----------NA----------				
143	L4	AR1242-E #2		----------NA----------				
144	L4	AR1242-F #2		----------NA----------				
145	L5	AR1248-A #2		----------NA----------				
146	L5	AR1248-B #2		----------NA----------				
147	L5	AR1248-C #2		----------NA----------				
148	L5	AR1248-D #2		----------NA----------				
149	L5	AR1248-E #2		----------NA----------				
150	L5	AR1248-F #2		----------NA----------				
151	L6	AR1254-A #2		----------NA----------				
152	L6	AR1254-B #2		----------NA----------				
153	L6	AR1254-C #2		----------NA----------				
154	L6	AR1254-D #2		----------NA----------				
155	L6	AR1254-E #2		----------NA----------				
156	L6	AR1254-F #2		----------NA----------				
157	L7	AR1260-A #2		----------NA----------				
158	L7	AR1260-B #2		----------NA----------				
159	L7	AR1260-C #2		----------NA----------				

Initial Calibration Verification

Job Number: TC52720
Account: RFWTXHO Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Sample: GNN1445-ICV1445
Lab FileID: NN175128.D

```
160 L7  AR1260-D #2                          ----------NA----------
161 L7  AR1260-E #2                          ----------NA----------
162 L7  AR1260-F #2                          ----------NA----------
163 L8  AR1262-A #2                          ----------NA----------
164 L8  AR1262-B #2                          ----------NA----------
165 L8  AR1262-C #2                          ----------NA----------
166 L8  AR1262-D #2                          ----------NA----------
167 L8  AR1262-E #2                          ----------NA----------
168 L8  AR1262-F #2                          ----------NA----------
169 L9  AR1268-A #2                          ----------NA----------
170 L9  AR1268-B #2                          ----------NA----------
171 L9  AR1268-C #2                          ----------NA----------
172 L9  AR1268-D #2                          ----------NA----------
173 L9  AR1268-E #2                          ----------NA----------
174 L9  AR1268-F #2                          ----------NA----------
175 S   Decachlorobiphenyl #2                ----------NA----------
 ---------------------------------------------------------------------------
 ---------------------------------------------------------------------------

    (#) = Out of Range                SPCC's out = 0  CCC's out = 0
     NN175115.D 608Q1445.M       Fri Jul 25 13:46:06 2014
```

8.9.7

8

Continuing Calibration Summary

Job Number: TC52720 **Sample:** GNN1456-CC1445
Account: RFWTXHO Weston Solutions **Lab FileID:** NN175437.D
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Evaluate Continuing Calibration Report

```
Signal #1 : C:\MSDCHEM\1\DATA\GNN1456\NN175437.D\ECD1A.CH Vial: 10
Signal #2 : C:\MSDCHEM\1\DATA\GNN1456\NN175437.D\ECD2B.CH
Acq On    : 08 Aug 2014  10:01 am                    Operator: almar
Sample    : cc1445-200,pest                          Inst    : GCNN
Misc      : op33313,gnn1456                          Multiplr: 1.00
IntFile Signal #1: EVENTS.E     IntFile Signal #2: events2.e

Method       : C:\MSDCHEM\1\METHODS\608Q1445.M (Chemstation Integrator)
Title        : Pesticides by 608 or 8081
Last Update  : Fri Aug 08 13:58:42 2014
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  15%     Max. Rel. Area : 150%
```

		Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	S	Tetrachloro-m-xylene	40.000	39.852	0.4	102	0.00	2.27- 2.33
2		Hexachlorobenzene	40.000	38.689	3.3	93	0.00	2.59- 2.65
3		alpha-BHC	20.000	19.391	3.0	93	0.00	2.68- 2.74
4		gamma-BHC (Lindane)	20.000	19.614	1.9	94	0.00	2.95- 3.01
5		Heptachlor	20.000	20.083	-0.4	97	0.00	3.30- 3.36
6		Aldrin	20.000	19.573	2.1	96	0.00	3.57- 3.63
7		Chlorothalonil	40.000	41.731	-4.3	100	0.00	3.40- 3.46
8		beta-BHC	20.000	19.425	2.9	92	0.00	3.01- 3.07
9		Dacthal	40.000	39.223	1.9	93	0.00	3.85- 3.91
10		Delta-BHC	20.000	19.638	1.8	96	0.00	3.25- 3.31
11		Heptachlor Epoxide	20.000	20.044	-0.2	95	0.00	4.06- 4.12
12		Endosulfan I	20.000	19.555	2.2	93	0.00	4.38- 4.44
13		gamma-Chlordane	20.000	19.358	3.2	94	0.00	4.22- 4.28
14		alpha-Chlordane	20.000	19.494	2.5	94	0.00	4.34- 4.40
15		4,4'-DDE	40.000	37.995	5.0	92	0.00	4.48- 4.54
16		Dieldrin	40.000	38.389	4.0	93	0.00	4.60- 4.66
17		Endrin	40.000	38.346	4.1	92	0.00	4.83- 4.89
18		4,4'-DDD	40.000	38.165	4.6	92	0.00	4.92- 4.98
19		Endosulfan II	40.000	38.432	3.9	91	0.00	4.99- 5.05
20		4,4'-DDT	40.000	37.778	5.6	92	0.00	5.15- 5.21
21		Endrin Aldehyde	40.000	38.671	3.3	93	0.00	5.24- 5.30
22		Methoxychlor	200.000	198.098	1.0	94	0.00	5.64- 5.70
23		Endosulfan Sulfate	40.000	38.912	2.7	94	0.00	5.43- 5.49
24		Endrin Ketone	40.000	38.999	2.5	93	0.00	5.80- 5.86
25	L1	Chlordane-A		----------NA----------				
26	L1	Chlordane-B		----------NA----------				
27	L1	Chlordane-C		----------NA----------				
28	L1	Chlordane-D		----------NA----------				
29	L1	Chlordane-E		----------NA----------				
30	L1	Chlordane-F		----------NA----------				
31	H	Toxaphene		----------NA----------				
32		Mirex		----------NA----------				
33		Dicofol		----------NA----------				
34	L1	AR1016-A		----------NA----------				
35	L1	AR1016-B		----------NA----------				
36	L1	AR1016-C		----------NA----------				
37	L1	AR1016-D		----------NA----------				
38	L1	AR1016-E		----------NA----------				
39	L1	AR1016-F		----------NA----------				
40	L2	AR1221-A		----------NA----------				
41	L2	AR1221-B		----------NA----------				

Continuing Calibration Summary

Job Number: TC52720 **Sample:** GNN1456-CC1445
Account: RFWTXHO Weston Solutions **Lab FileID:** NN175437.D
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

42	L2	AR1221-C		----------NA----------				
43	L2	AR1221-D		----------NA----------				
44	L2	AR1221-E		----------NA----------				
45	L3	AR1232-A		----------NA----------				
46	L3	AR1232-B		----------NA----------				
47	L3	AR1232-C		----------NA----------				
48	L3	AR1232-D		----------NA----------				
49	L3	AR1232-E		----------NA----------				
50	L3	AR1232-F		----------NA----------				
51	L4	AR1242-A		----------NA----------				
52	L4	AR1242-B		----------NA----------				
53	L4	AR1242-C		----------NA----------				
54	L4	AR1242-D		----------NA----------				
55	L4	AR1242-E		----------NA----------				
56	L4	AR1242-F		----------NA----------				
57	L5	AR1248-A		----------NA----------				
58	L5	AR1248-B		----------NA----------				
59	L5	AR1248-C		----------NA----------				
60	L5	AR1248-D		----------NA----------				
61	L5	AR1248-E		----------NA----------				
62	L5	AR1248-F		----------NA----------				
63	L6	AR1254-A		----------NA----------				
64	L6	AR1254-B		----------NA----------				
65	L6	AR1254-C		----------NA----------				
66	L6	AR1254-D		----------NA----------				
67	L6	AR1254-E		----------NA----------				
68	L6	AR1254-F		----------NA----------				
69	L7	AR1260-A		----------NA----------				
70	L7	AR1260-B		----------NA----------				
71	L7	AR1260-C		----------NA----------				
72	L7	AR1260-D		----------NA----------				
73	L7	AR1260-E		----------NA----------				
74	L7	AR1260-F		----------NA----------				
75	L8	AR1262-A		----------NA----------				
76	L8	AR1262-B		----------NA----------				
77	L8	AR1262-C		----------NA----------				
78	L8	AR1262-D		----------NA----------				
79	L8	AR1262-E		----------NA----------				
80	L8	AR1262-F		----------NA----------				
81	L9	AR1268-A		----------NA----------				
82	L9	AR1268-B		----------NA----------				
83	L9	AR1268-C		----------NA----------				
84	L9	AR1268-D		----------NA----------				
85	L9	AR1268-E		----------NA----------				
86	L9	AR1268-F		----------NA----------				
87	S	Decachlorobiphenyl	40.000	38.224	4.4	94	0.00	6.60- 6.66
*****		Signal #2 *****						
89	S	Tetrachloro-m-xylene #	40.000	36.310	9.2	93	0.00	2.05- 2.11
90		Hexachlorobenzene #2	40.000	34.755	13.1	83	0.00	2.28- 2.34
91		alpha-BHC #2	20.000	17.948	10.3	85	0.00	2.37- 2.43
92		gamma-BHC (Lindane) #2	20.000	18.361	8.2	88	0.00	2.57- 2.63
93		beta-BHC #2	20.000	18.565	7.2	91	0.00	2.63- 2.69
94		Heptachlor #2	20.000	18.104	9.5	88	0.00	2.88- 2.94
95		Chlorothalonil #2	40.000	40.291	-0.7	98	0.00	3.14- 3.20
96		delta-BHC #2	20.000	18.349	8.3	92	0.00	2.74- 2.80
97		Aldrin #2	20.000	18.281	8.6	88	0.00	3.10- 3.16
98		Dacthal #2	40.000	37.486	6.3	91	0.00	3.53- 3.59
99		Heptachlor Epoxide #2	20.000	17.513	12.4	81	0.00	3.55- 3.61

Continuing Calibration Summary

Job Number: TC52720 **Sample:** GNN1456-CC1445
Account: RFWTXHO Weston Solutions **Lab FileID:** NN175437.D
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

100		gamma-Chlordane #2	20.000	17.373	13.1	83	0.00	3.65- 3.71
101		alpha-Chlordane #2	20.000	17.516	12.4	85	0.00	3.76- 3.82
102		Endosulfan I #2	20.000	17.340	13.3	79	0.00	3.87- 3.93
103		4,4'-DDE #2	40.000	35.279	11.8	90	0.00	3.84- 3.90
104		Dieldrin #2	40.000	35.401	11.5	85	0.00	4.06- 4.12
105		Endrin #2	40.000	35.658	10.9	86	0.00	4.24- 4.30
106		4,4'-DDD #2	40.000	35.215	12.0	86	0.00	4.32- 4.38
107		Endosulfan II #2	40.000	36.017	10.0	86	0.00	4.42- 4.48
108		4,4'-DDT #2	40.000	35.273	11.8	85	0.00	4.53- 4.59
109		Endrin Aldehyde #2	40.000	36.720	8.2	87	0.00	4.73- 4.79
110		Endosulfan Sulfate #2	40.000	36.552	8.6	87	0.00	5.04- 5.10
111		Methoxychlor #2	200.000	177.784	11.1	85	0.00	4.91- 4.97
112		Endrin Ketone #2	40.000	36.422	8.9	86	0.00	5.24- 5.30
113	L1	Chlordane-A #2		----------NA----------				
114	L1	Chlordane-B #2		----------NA----------				
115	L1	Chlordane-C #2		----------NA----------				
116	L1	Chlordane-D #2		----------NA----------				
117	L1	Chlordane-E #2		----------NA----------				
118	L1	Chlordane-F #2		----------NA----------				
119	H	Toxaphene #2		----------NA----------				
120		Mirex #2		----------NA----------				
121		Dicofol #2		----------NA----------				
122	L1	AR1016-A #2		----------NA----------				
123	L1	AR1016-B #2		----------NA----------				
124	L1	AR1016-C #2		----------NA----------				
125	L1	AR1016-D #2		----------NA----------				
126	L1	AR1016-E #2		----------NA----------				
127	L1	AR1016-F #2		----------NA----------				
128	L2	AR1221-A #2		----------NA----------				
129	L2	AR1221-B #2		----------NA----------				
130	L2	AR1221-C #2		----------NA----------				
131	L2	AR1221-D #2		----------NA----------				
132	L2	AR1221-E #2		----------NA----------				
133	L3	AR1232-A #2		----------NA----------				
134	L3	AR1232-B #2		----------NA----------				
135	L3	AR1232-C #2		----------NA----------				
136	L3	AR1232-D #2		----------NA----------				
137	L3	AR1232-E #2		----------NA----------				
138	L3	AR1232-F #2		----------NA----------				
139	L4	AR1242-A #2		----------NA----------				
140	L4	AR1242-B #2		----------NA----------				
141	L4	AR1242-C #2		----------NA----------				
142	L4	AR1242-D #2		----------NA----------				
143	L4	AR1242-E #2		----------NA----------				
144	L4	AR1242-F #2		----------NA----------				
145	L5	AR1248-A #2		----------NA----------				
146	L5	AR1248-B #2		----------NA----------				
147	L5	AR1248-C #2		----------NA----------				
148	L5	AR1248-D #2		----------NA----------				
149	L5	AR1248-E #2		----------NA----------				
150	L5	AR1248-F #2		----------NA----------				
151	L6	AR1254-A #2		----------NA----------				
152	L6	AR1254-B #2		----------NA----------				
153	L6	AR1254-C #2		----------NA----------				
154	L6	AR1254-D #2		----------NA----------				
155	L6	AR1254-E #2		----------NA----------				
156	L6	AR1254-F #2		----------NA----------				
157	L7	AR1260-A #2		----------NA----------				
158	L7	AR1260-B #2		----------NA----------				
159	L7	AR1260-C #2		----------NA----------				

Continuing Calibration Summary

Job Number: TC52720 **Sample:** GNN1456-CC1445
Account: RFWTXHO Weston Solutions **Lab FileID:** NN175437.D
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

```
160 L7  AR1260-D #2                          ----------NA----------
161 L7  AR1260-E #2                          ----------NA----------
162 L7  AR1260-F #2                          ----------NA----------
163 L8  AR1262-A #2                          ----------NA----------
164 L8  AR1262-B #2                          ----------NA----------
165 L8  AR1262-C #2                          ----------NA----------
166 L8  AR1262-D #2                          ----------NA----------
167 L8  AR1262-E #2                          ----------NA----------
168 L8  AR1262-F #2                          ----------NA----------
169 L9  AR1268-A #2                          ----------NA----------
170 L9  AR1268-B #2                          ----------NA----------
171 L9  AR1268-C #2                          ----------NA----------
172 L9  AR1268-D #2                          ----------NA----------
173 L9  AR1268-E #2                          ----------NA----------
174 L9  AR1268-F #2                          ----------NA----------
175 S   Decachlorobiphenyl #2   40.000  35.603     11.0   88   0.00    5.93- 5.99
 ---------------------------------------------------------------------------
 ---------------------------------------------------------------------------

    (#) = Out of Range              SPCC's out = 0  CCC's out = 0
     NN175115.D 608Q1445.M       Fri Aug 08 14:03:56 2014
```

8.9.8

8

Continuing Calibration Summary

Job Number: TC52720
Account: RFWTXHO Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX
Sample: GNN1456-CC1445
Lab FileID: NN175438.D

Evaluate Continuing Calibration Report

```
Signal #1 : C:\MSDCHEM\1\DATA\GNN1456\NN175438.D\ECD1A.CH Vial: 11
Signal #2 : C:\MSDCHEM\1\DATA\GNN1456\NN175438.D\ECD2B.CH
Acq On    : 08 Aug 2014  10:14 am                    Operator: almar
Sample    : cc1445-200,chlor                         Inst    : GCNN
Misc      : op33313,gnn1456                          Multiplr: 1.00
IntFile Signal #1: EVENTS.E     IntFile Signal #2: events2.e

Method       : C:\MSDCHEM\1\METHODS\608Q1445.M (Chemstation Integrator)
Title        : Pesticides by 608 or 8081
Last Update  : Fri Aug 08 13:58:42 2014
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  15%     Max. Rel. Area : 150%
```

		Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	S	Tetrachloro-m-xylene	40.000	44.318	-10.8	114	0.00	2.27- 2.33
2		Hexachlorobenzene		----------NA----------				
3		alpha-BHC		----------NA----------				
4		gamma-BHC (Lindane)		----------NA----------				
5		Heptachlor		----------NA----------				
6		Aldrin		----------NA----------				
7		Chlorothalonil		----------NA----------				
8		beta-BHC		----------NA----------				
9		Dacthal		----------NA----------				
10		Delta-BHC		----------NA----------				
11		Heptachlor Epoxide		----------NA----------				
12		Endosulfan I		----------NA----------				
13		gamma-Chlordane		----------NA----------				
14		alpha-Chlordane		----------NA----------				
15		4,4'-DDE		----------NA----------				
16		Dieldrin		----------NA----------				
17		Endrin		----------NA----------				
18		4,4'-DDD		----------NA----------				
19		Endosulfan II		----------NA----------				
20		4,4'-DDT		----------NA----------				
21		Endrin Aldehyde		----------NA----------				
22		Methoxychlor		----------NA----------				
23		Endosulfan Sulfate		----------NA----------				
24		Endrin Ketone		----------NA----------				
25	L1	Chlordane-A	200.000	213.698	-6.8	107	0.00	3.18- 3.24
26	L1	Chlordane-B	200.000	223.738	-11.9	112	0.00	3.30- 3.36
27	L1	Chlordane-C	200.000	222.458	-11.2	111	0.00	3.70- 3.76
28	L1	Chlordane-D	200.000	219.753	-9.9	110	0.00	4.22- 4.28
29	L1	Chlordane-E	200.000	218.447	-9.2	109	0.00	4.34- 4.40
30	L1	Chlordane-F	200.000	213.792	-6.9	107	0.00	5.03- 5.09
31	H	Toxaphene		----------NA----------				
32		Mirex		----------NA----------				
33		Dicofol		----------NA----------				
34	L1	AR1016-A		----------NA----------				
35	L1	AR1016-B		----------NA----------				
36	L1	AR1016-C		----------NA----------				
37	L1	AR1016-D		----------NA----------				
38	L1	AR1016-E		----------NA----------				
39	L1	AR1016-F		----------NA----------				
40	L2	AR1221-A		----------NA----------				
41	L2	AR1221-B		----------NA----------				

Continuing Calibration Summary

Job Number: TC52720 **Sample:** GNN1456-CC1445
Account: RFWTXHO Weston Solutions **Lab FileID:** NN175438.D
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

42	L2	AR1221-C			----------NA----------			
43	L2	AR1221-D			----------NA----------			
44	L2	AR1221-E			----------NA----------			
45	L3	AR1232-A			----------NA----------			
46	L3	AR1232-B			----------NA----------			
47	L3	AR1232-C			----------NA----------			
48	L3	AR1232-D			----------NA----------			
49	L3	AR1232-E			----------NA----------			
50	L3	AR1232-F			----------NA----------			
51	L4	AR1242-A			----------NA----------			
52	L4	AR1242-B			----------NA----------			
53	L4	AR1242-C			----------NA----------			
54	L4	AR1242-D			----------NA----------			
55	L4	AR1242-E			----------NA----------			
56	L4	AR1242-F			----------NA----------			
57	L5	AR1248-A			----------NA----------			
58	L5	AR1248-B			----------NA----------			
59	L5	AR1248-C			----------NA----------			
60	L5	AR1248-D			----------NA----------			
61	L5	AR1248-E			----------NA----------			
62	L5	AR1248-F			----------NA----------			
63	L6	AR1254-A			----------NA----------			
64	L6	AR1254-B			----------NA----------			
65	L6	AR1254-C			----------NA----------			
66	L6	AR1254-D			----------NA----------			
67	L6	AR1254-E			----------NA----------			
68	L6	AR1254-F			----------NA----------			
69	L7	AR1260-A			----------NA----------			
70	L7	AR1260-B			----------NA----------			
71	L7	AR1260-C			----------NA----------			
72	L7	AR1260-D			----------NA----------			
73	L7	AR1260-E			----------NA----------			
74	L7	AR1260-F			----------NA----------			
75	L8	AR1262-A			----------NA----------			
76	L8	AR1262-B			----------NA----------			
77	L8	AR1262-C			----------NA----------			
78	L8	AR1262-D			----------NA----------			
79	L8	AR1262-E			----------NA----------			
80	L8	AR1262-F			----------NA----------			
81	L9	AR1268-A			----------NA----------			
82	L9	AR1268-B			----------NA----------			
83	L9	AR1268-C			----------NA----------			
84	L9	AR1268-D			----------NA----------			
85	L9	AR1268-E			----------NA----------			
86	L9	AR1268-F			----------NA----------			
87	S	Decachlorobiphenyl	40.000	44.005	-10.0	108	0.00	6.60- 6.66
*****		Signal #2 *****						
89	S	Tetrachloro-m-xylene #	40.000	40.911	-2.3	105	0.00	2.05- 2.11
90		Hexachlorobenzene #2			----------NA----------			
91		alpha-BHC #2			----------NA----------			
92		gamma-BHC (Lindane) #2			----------NA----------			
93		beta-BHC #2			----------NA----------			
94		Heptachlor #2			----------NA----------			
95		Chlorothalonil #2			----------NA----------			
96		delta-BHC #2			----------NA----------			
97		Aldrin #2			----------NA----------			
98		Dacthal #2			----------NA----------			
99		Heptachlor Epoxide #2			----------NA----------			

Continuing Calibration Summary

Job Number: TC52720 **Sample:** GNN1456-CC1445
Account: RFWTXHO Weston Solutions **Lab FileID:** NN175438.D
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

100		gamma-Chlordane #2			----------NA----------			
101		alpha-Chlordane #2			----------NA----------			
102		Endosulfan I #2			----------NA----------			
103		4,4'-DDE #2			----------NA----------			
104		Dieldrin #2			----------NA----------			
105		Endrin #2			----------NA----------			
106		4,4'-DDD #2			----------NA----------			
107		Endosulfan II #2			----------NA----------			
108		4,4'-DDT #2			----------NA----------			
109		Endrin Aldehyde #2			----------NA----------			
110		Endosulfan Sulfate #2			----------NA----------			
111		Methoxychlor #2			----------NA----------			
112		Endrin Ketone #2			----------NA----------			
113	L1	Chlordane-A #2	200.000	197.868	1.1	99	-0.01	2.84- 2.90
114	L1	Chlordane-B #2	200.000	197.480	1.3	99	-0.01	2.90- 2.96
115	L1	Chlordane-C #2	200.000	194.219	2.9	97	-0.01	3.21- 3.27
116	L1	Chlordane-D #2	200.000	207.690	-3.8	104	-0.02	3.67- 3.73
117	L1	Chlordane-E #2	200.000	207.191	-3.6	104	-0.02	3.77- 3.83
118	L1	Chlordane-F #2	200.000	200.218	-0.1	100	-0.02	4.38- 4.44
119	H	Toxaphene #2			----------NA----------			
120		Mirex #2			----------NA----------			
121		Dicofol #2			----------NA----------			
122	L1	AR1016-A #2			----------NA----------			
123	L1	AR1016-B #2			----------NA----------			
124	L1	AR1016-C #2			----------NA----------			
125	L1	AR1016-D #2			----------NA----------			
126	L1	AR1016-E #2			----------NA----------			
127	L1	AR1016-F #2			----------NA----------			
128	L2	AR1221-A #2			----------NA----------			
129	L2	AR1221-B #2			----------NA----------			
130	L2	AR1221-C #2			----------NA----------			
131	L2	AR1221-D #2			----------NA----------			
132	L2	AR1221-E #2			----------NA----------			
133	L3	AR1232-A #2			----------NA----------			
134	L3	AR1232-B #2			----------NA----------			
135	L3	AR1232-C #2			----------NA----------			
136	L3	AR1232-D #2			----------NA----------			
137	L3	AR1232-E #2			----------NA----------			
138	L3	AR1232-F #2			----------NA----------			
139	L4	AR1242-A #2			----------NA----------			
140	L4	AR1242-B #2			----------NA----------			
141	L4	AR1242-C #2			----------NA----------			
142	L4	AR1242-D #2			----------NA----------			
143	L4	AR1242-E #2			----------NA----------			
144	L4	AR1242-F #2			----------NA----------			
145	L5	AR1248-A #2			----------NA----------			
146	L5	AR1248-B #2			----------NA----------			
147	L5	AR1248-C #2			----------NA----------			
148	L5	AR1248-D #2			----------NA----------			
149	L5	AR1248-E #2			----------NA----------			
150	L5	AR1248-F #2			----------NA----------			
151	L6	AR1254-A #2			----------NA----------			
152	L6	AR1254-B #2			----------NA----------			
153	L6	AR1254-C #2			----------NA----------			
154	L6	AR1254-D #2			----------NA----------			
155	L6	AR1254-E #2			----------NA----------			
156	L6	AR1254-F #2			----------NA----------			
157	L7	AR1260-A #2			----------NA----------			
158	L7	AR1260-B #2			----------NA----------			
159	L7	AR1260-C #2			----------NA----------			

Continuing Calibration Summary

Job Number: TC52720 **Sample:** GNN1456-CC1445
Account: RFWTXHO Weston Solutions **Lab FileID:** NN175438.D
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

```
160 L7  AR1260-D #2                          ----------NA----------
161 L7  AR1260-E #2                          ----------NA----------
162 L7  AR1260-F #2                          ----------NA----------
163 L8  AR1262-A #2                          ----------NA----------
164 L8  AR1262-B #2                          ----------NA----------
165 L8  AR1262-C #2                          ----------NA----------
166 L8  AR1262-D #2                          ----------NA----------
167 L8  AR1262-E #2                          ----------NA----------
168 L8  AR1262-F #2                          ----------NA----------
169 L9  AR1268-A #2                          ----------NA----------
170 L9  AR1268-B #2                          ----------NA----------
171 L9  AR1268-C #2                          ----------NA----------
172 L9  AR1268-D #2                          ----------NA----------
173 L9  AR1268-E #2                          ----------NA----------
174 L9  AR1268-F #2                          ----------NA----------
175 S   Decachlorobiphenyl #2   40.000  40.647     -1.6  100   0.00    5.93- 5.99
 ---------------------------------------------------------------------------
 ---------------------------------------------------------------------------

    (#) = Out of Range              SPCC's out = 0  CCC's out = 0
     NN175115.D 608Q1445.M       Fri Aug 08 14:03:57 2014
```

8.9.9

8

Continuing Calibration Summary

Job Number: TC52720 **Sample:** GNN1456-CC1445
Account: RFWTXHO Weston Solutions **Lab FileID:** NN175439.D
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Evaluate Continuing Calibration Report

```
Signal #1 : C:\MSDCHEM\1\DATA\GNN1456\NN175439.D\ECD1A.CH Vial: 12
Signal #2 : C:\MSDCHEM\1\DATA\GNN1456\NN175439.D\ECD2B.CH
Acq On    : 08 Aug 2014  10:27 am                    Operator: almar
Sample    : cc1445-200,tox                           Inst    : GCNN
Misc      : op33313,gnn1456                          Multiplr: 1.00
IntFile Signal #1: EVENTS.E     IntFile Signal #2: events2.e

Method       : C:\MSDCHEM\1\METHODS\608Q1445.M (Chemstation Integrator)
Title        : Pesticides by 608 or 8081
Last Update  : Fri Aug 08 13:58:42 2014
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  15%     Max. Rel. Area : 150%
```

		Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	S	Tetrachloro-m-xylene	40.000	48.413	-21.0#	124	0.00	2.27- 2.33
2		Hexachlorobenzene		----------NA----------				
3		alpha-BHC		----------NA----------				
4		gamma-BHC (Lindane)		----------NA----------				
5		Heptachlor		----------NA----------				
6		Aldrin		----------NA----------				
7		Chlorothalonil		----------NA----------				
8		beta-BHC		----------NA----------				
9		Dacthal		----------NA----------				
10		Delta-BHC		----------NA----------				
11		Heptachlor Epoxide		----------NA----------				
12		Endosulfan I		----------NA----------				
13		gamma-Chlordane		----------NA----------				
14		alpha-Chlordane		----------NA----------				
15		4,4'-DDE		----------NA----------				
16		Dieldrin		----------NA----------				
17		Endrin		----------NA----------				
18		4,4'-DDD		----------NA----------				
19		Endosulfan II		----------NA----------				
20		4,4'-DDT		----------NA----------				
21		Endrin Aldehyde		----------NA----------				
22		Methoxychlor		----------NA----------				
23		Endosulfan Sulfate		----------NA----------				
24		Endrin Ketone		----------NA----------				
25	L1	Chlordane-A		----------NA----------				
26	L1	Chlordane-B		----------NA----------				
27	L1	Chlordane-C		----------NA----------				
28	L1	Chlordane-D		----------NA----------				
29	L1	Chlordane-E		----------NA----------				
30	L1	Chlordane-F		----------NA----------				
31	H	Toxaphene	200.000	208.462	-4.2	104	0.00	4.75- 6.55
32		Mirex		----------NA----------				
33		Dicofol		----------NA----------				
34	L1	AR1016-A		----------NA----------				
35	L1	AR1016-B		----------NA----------				
36	L1	AR1016-C		----------NA----------				
37	L1	AR1016-D		----------NA----------				
38	L1	AR1016-E		----------NA----------				
39	L1	AR1016-F		----------NA----------				
40	L2	AR1221-A		----------NA----------				
41	L2	AR1221-B		----------NA----------				

Continuing Calibration Summary

Job Number: TC52720 **Sample:** GNN1456-CC1445
Account: RFWTXHO Weston Solutions **Lab FileID:** NN175439.D
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

42	L2	AR1221-C			----------NA----------			
43	L2	AR1221-D			----------NA----------			
44	L2	AR1221-E			----------NA----------			
45	L3	AR1232-A			----------NA----------			
46	L3	AR1232-B			----------NA----------			
47	L3	AR1232-C			----------NA----------			
48	L3	AR1232-D			----------NA----------			
49	L3	AR1232-E			----------NA----------			
50	L3	AR1232-F			----------NA----------			
51	L4	AR1242-A			----------NA----------			
52	L4	AR1242-B			----------NA----------			
53	L4	AR1242-C			----------NA----------			
54	L4	AR1242-D			----------NA----------			
55	L4	AR1242-E			----------NA----------			
56	L4	AR1242-F			----------NA----------			
57	L5	AR1248-A			----------NA----------			
58	L5	AR1248-B			----------NA----------			
59	L5	AR1248-C			----------NA----------			
60	L5	AR1248-D			----------NA----------			
61	L5	AR1248-E			----------NA----------			
62	L5	AR1248-F			----------NA----------			
63	L6	AR1254-A			----------NA----------			
64	L6	AR1254-B			----------NA----------			
65	L6	AR1254-C			----------NA----------			
66	L6	AR1254-D			----------NA----------			
67	L6	AR1254-E			----------NA----------			
68	L6	AR1254-F			----------NA----------			
69	L7	AR1260-A			----------NA----------			
70	L7	AR1260-B			----------NA----------			
71	L7	AR1260-C			----------NA----------			
72	L7	AR1260-D			----------NA----------			
73	L7	AR1260-E			----------NA----------			
74	L7	AR1260-F			----------NA----------			
75	L8	AR1262-A			----------NA----------			
76	L8	AR1262-B			----------NA----------			
77	L8	AR1262-C			----------NA----------			
78	L8	AR1262-D			----------NA----------			
79	L8	AR1262-E			----------NA----------			
80	L8	AR1262-F			----------NA----------			
81	L9	AR1268-A			----------NA----------			
82	L9	AR1268-B			----------NA----------			
83	L9	AR1268-C			----------NA----------			
84	L9	AR1268-D			----------NA----------			
85	L9	AR1268-E			----------NA----------			
86	L9	AR1268-F			----------NA----------			
87	S	Decachlorobiphenyl	40.000	46.483	-16.2#	115	0.00	6.60- 6.66
*****		Signal #2 *****						
89	S	Tetrachloro-m-xylene #	40.000	44.350	-10.9	113	0.00	2.05- 2.11
90		Hexachlorobenzene #2			----------NA----------			
91		alpha-BHC #2			----------NA----------			
92		gamma-BHC (Lindane) #2			----------NA----------			
93		beta-BHC #2			----------NA----------			
94		Heptachlor #2			----------NA----------			
95		Chlorothalonil #2			----------NA----------			
96		delta-BHC #2			----------NA----------			
97		Aldrin #2			----------NA----------			
98		Dacthal #2			----------NA----------			
99		Heptachlor Epoxide #2			----------NA----------			

Continuing Calibration Summary

Job Number: TC52720 **Sample:** GNN1456-CC1445
Account: RFWTXHO Weston Solutions **Lab FileID:** NN175439.D
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

100		gamma-Chlordane #2			----------NA----------			
101		alpha-Chlordane #2			----------NA----------			
102		Endosulfan I #2			----------NA----------			
103		4,4'-DDE #2			----------NA----------			
104		Dieldrin #2			----------NA----------			
105		Endrin #2			----------NA----------			
106		4,4'-DDD #2			----------NA----------			
107		Endosulfan II #2			----------NA----------			
108		4,4'-DDT #2			----------NA----------			
109		Endrin Aldehyde #2			----------NA----------			
110		Endosulfan Sulfate #2			----------NA----------			
111		Methoxychlor #2			----------NA----------			
112		Endrin Ketone #2			----------NA----------			
113	L1	Chlordane-A #2			----------NA----------			
114	L1	Chlordane-B #2			----------NA----------			
115	L1	Chlordane-C #2			----------NA----------			
116	L1	Chlordane-D #2			----------NA----------			
117	L1	Chlordane-E #2			----------NA----------			
118	L1	Chlordane-F #2			----------NA----------			
119	H	Toxaphene #2	200.000	204.460	-2.2	102	0.00	4.14- 5.96
120		Mirex #2			----------NA----------			
121		Dicofol #2			----------NA----------			
122	L1	AR1016-A #2			----------NA----------			
123	L1	AR1016-B #2			----------NA----------			
124	L1	AR1016-C #2			----------NA----------			
125	L1	AR1016-D #2			----------NA----------			
126	L1	AR1016-E #2			----------NA----------			
127	L1	AR1016-F #2			----------NA----------			
128	L2	AR1221-A #2			----------NA----------			
129	L2	AR1221-B #2			----------NA----------			
130	L2	AR1221-C #2			----------NA----------			
131	L2	AR1221-D #2			----------NA----------			
132	L2	AR1221-E #2			----------NA----------			
133	L3	AR1232-A #2			----------NA----------			
134	L3	AR1232-B #2			----------NA----------			
135	L3	AR1232-C #2			----------NA----------			
136	L3	AR1232-D #2			----------NA----------			
137	L3	AR1232-E #2			----------NA----------			
138	L3	AR1232-F #2			----------NA----------			
139	L4	AR1242-A #2			----------NA----------			
140	L4	AR1242-B #2			----------NA----------			
141	L4	AR1242-C #2			----------NA----------			
142	L4	AR1242-D #2			----------NA----------			
143	L4	AR1242-E #2			----------NA----------			
144	L4	AR1242-F #2			----------NA----------			
145	L5	AR1248-A #2			----------NA----------			
146	L5	AR1248-B #2			----------NA----------			
147	L5	AR1248-C #2			----------NA----------			
148	L5	AR1248-D #2			----------NA----------			
149	L5	AR1248-E #2			----------NA----------			
150	L5	AR1248-F #2			----------NA----------			
151	L6	AR1254-A #2			----------NA----------			
152	L6	AR1254-B #2			----------NA----------			
153	L6	AR1254-C #2			----------NA----------			
154	L6	AR1254-D #2			----------NA----------			
155	L6	AR1254-E #2			----------NA----------			
156	L6	AR1254-F #2			----------NA----------			
157	L7	AR1260-A #2			----------NA----------			
158	L7	AR1260-B #2			----------NA----------			
159	L7	AR1260-C #2			----------NA----------			

Continuing Calibration Summary

Job Number: TC52720 **Sample:** GNN1456-CC1445
Account: RFWTXHO Weston Solutions **Lab FileID:** NN175439.D
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

```
160 L7  AR1260-D #2                          ----------NA----------
161 L7  AR1260-E #2                          ----------NA----------
162 L7  AR1260-F #2                          ----------NA----------
163 L8  AR1262-A #2                          ----------NA----------
164 L8  AR1262-B #2                          ----------NA----------
165 L8  AR1262-C #2                          ----------NA----------
166 L8  AR1262-D #2                          ----------NA----------
167 L8  AR1262-E #2                          ----------NA----------
168 L8  AR1262-F #2                          ----------NA----------
169 L9  AR1268-A #2                          ----------NA----------
170 L9  AR1268-B #2                          ----------NA----------
171 L9  AR1268-C #2                          ----------NA----------
172 L9  AR1268-D #2                          ----------NA----------
173 L9  AR1268-E #2                          ----------NA----------
174 L9  AR1268-F #2                          ----------NA----------
175 S   Decachlorobiphenyl #2   40.000  43.342     -8.4  107   0.00    5.93- 5.99
 ---------------------------------------------------------------------------
 ---------------------------------------------------------------------------

    (#) = Out of Range              SPCC's out = 0  CCC's out = 0
     NN175115.D 608Q1445.M       Fri Aug 08 14:03:58 2014
```

8.9.10

8

Continuing Calibration Summary

Job Number: TC52720
Account: RFWTXHO Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Sample: GNN1456-CC1445
Lab FileID: NN175451.D

Evaluate Continuing Calibration Report

```
Signal #1 : C:\MSDCHEM\1\DATA\GNN1456\NN175451.D\ECD1A.CH Vial: 24
Signal #2 : C:\MSDCHEM\1\DATA\GNN1456\NN175451.D\ECD2B.CH
Acq On    : 8-8-2014 01:14:22 PM                    Operator: almar
Sample    : cc1445-300,pest                         Inst    : GCNN
Misc      : op33468,gnn1456                         Multiplr: 1.00
IntFile Signal #1: EVENTS.E     IntFile Signal #2: events2.e

Method       : C:\MSDCHEM\1\METHODS\608Q1445.M (Chemstation Integrator)
Title        : Pesticides by 608 or 8081
Last Update  : Fri Aug 08 13:58:42 2014
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  15%     Max. Rel. Area : 150%
```

		Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	S	Tetrachloro-m-xylene	60.000	64.178	-7.0	109	0.00	2.27- 2.33
2		Hexachlorobenzene	60.000	60.995	-1.7	101	0.00	2.59- 2.65
3		alpha-BHC	30.000	31.953	-6.5	103	0.00	2.68- 2.74
4		gamma-BHC (Lindane)	30.000	32.013	-6.7	104	0.00	2.95- 3.01
5		Heptachlor	30.000	32.113	-7.0	106	0.00	3.30- 3.36
6		Aldrin	30.000	31.918	-6.4	104	0.00	3.57- 3.63
7		Chlorothalonil	60.000	64.447	-7.4	106	0.00	3.40- 3.46
8		beta-BHC	30.000	30.562	-1.9	100	0.00	3.01- 3.07
9		Dacthal	60.000	61.608	-2.7	102	0.00	3.85- 3.91
10		Delta-BHC	30.000	32.439	-8.1	106	0.00	3.25- 3.31
11		Heptachlor Epoxide	30.000	31.954	-6.5	105	0.00	4.06- 4.12
12		Endosulfan I	30.000	31.327	-4.4	104	0.00	4.38- 4.44
13		gamma-Chlordane	30.000	30.520	-1.7	102	0.00	4.22- 4.28
14		alpha-Chlordane	30.000	31.164	-3.9	104	0.00	4.34- 4.40
15		4,4'-DDE	60.000	62.074	-3.5	102	0.00	4.48- 4.54
16		Dieldrin	60.000	62.820	-4.7	104	0.00	4.60- 4.66
17		Endrin	60.000	62.804	-4.7	105	0.00	4.83- 4.89
18		4,4'-DDD	60.000	62.698	-4.5	104	0.00	4.92- 4.98
19		Endosulfan II	60.000	61.691	-2.8	104	0.00	4.99- 5.05
20		4,4'-DDT	60.000	62.415	-4.0	104	0.00	5.15- 5.21
21		Endrin Aldehyde	60.000	62.570	-4.3	105	0.00	5.24- 5.30
22		Methoxychlor	300.000	314.897	-5.0	105	0.00	5.64- 5.70
23		Endosulfan Sulfate	60.000	62.869	-4.8	104	0.00	5.43- 5.49
24		Endrin Ketone	60.000	63.563	-5.9	106	0.00	5.80- 5.86
25	L1	Chlordane-A		----------NA----------				
26	L1	Chlordane-B		----------NA----------				
27	L1	Chlordane-C		----------NA----------				
28	L1	Chlordane-D		----------NA----------				
29	L1	Chlordane-E		----------NA----------				
30	L1	Chlordane-F		----------NA----------				
31	H	Toxaphene		----------NA----------				
32		Mirex		----------NA----------				
33		Dicofol		----------NA----------				
34	L1	AR1016-A		----------NA----------				
35	L1	AR1016-B		----------NA----------				
36	L1	AR1016-C		----------NA----------				
37	L1	AR1016-D		----------NA----------				
38	L1	AR1016-E		----------NA----------				
39	L1	AR1016-F		----------NA----------				
40	L2	AR1221-A		----------NA----------				
41	L2	AR1221-B		----------NA----------				

Continuing Calibration Summary

Job Number: TC52720 **Sample:** GNN1456-CC1445
Account: RFWTXHO Weston Solutions **Lab FileID:** NN175451.D
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

42	L2	AR1221-C	----------NA----------					
43	L2	AR1221-D	----------NA----------					
44	L2	AR1221-E	----------NA----------					
45	L3	AR1232-A	----------NA----------					
46	L3	AR1232-B	----------NA----------					
47	L3	AR1232-C	----------NA----------					
48	L3	AR1232-D	----------NA----------					
49	L3	AR1232-E	----------NA----------					
50	L3	AR1232-F	----------NA----------					
51	L4	AR1242-A	----------NA----------					
52	L4	AR1242-B	----------NA----------					
53	L4	AR1242-C	----------NA----------					
54	L4	AR1242-D	----------NA----------					
55	L4	AR1242-E	----------NA----------					
56	L4	AR1242-F	----------NA----------					
57	L5	AR1248-A	----------NA----------					
58	L5	AR1248-B	----------NA----------					
59	L5	AR1248-C	----------NA----------					
60	L5	AR1248-D	----------NA----------					
61	L5	AR1248-E	----------NA----------					
62	L5	AR1248-F	----------NA----------					
63	L6	AR1254-A	----------NA----------					
64	L6	AR1254-B	----------NA----------					
65	L6	AR1254-C	----------NA----------					
66	L6	AR1254-D	----------NA----------					
67	L6	AR1254-E	----------NA----------					
68	L6	AR1254-F	----------NA----------					
69	L7	AR1260-A	----------NA----------					
70	L7	AR1260-B	----------NA----------					
71	L7	AR1260-C	----------NA----------					
72	L7	AR1260-D	----------NA----------					
73	L7	AR1260-E	----------NA----------					
74	L7	AR1260-F	----------NA----------					
75	L8	AR1262-A	----------NA----------					
76	L8	AR1262-B	----------NA----------					
77	L8	AR1262-C	----------NA----------					
78	L8	AR1262-D	----------NA----------					
79	L8	AR1262-E	----------NA----------					
80	L8	AR1262-F	----------NA----------					
81	L9	AR1268-A	----------NA----------					
82	L9	AR1268-B	----------NA----------					
83	L9	AR1268-C	----------NA----------					
84	L9	AR1268-D	----------NA----------					
85	L9	AR1268-E	----------NA----------					
86	L9	AR1268-F	----------NA----------					
87	S	Decachlorobiphenyl	60.000	60.293	-0.5	104	0.00	6.60- 6.66
*****		Signal #2 *****						
89	S	Tetrachloro-m-xylene #	60.000	56.986	5.0	97	0.00	2.05- 2.11
90		Hexachlorobenzene #2	60.000	53.800	10.3	90	0.00	2.28- 2.34
91		alpha-BHC #2	30.000	28.905	3.6	94	0.00	2.37- 2.43
92		gamma-BHC (Lindane) #2	30.000	29.078	3.1	95	0.00	2.57- 2.63
93		beta-BHC #2	30.000	28.124	6.3	92	0.00	2.63- 2.69
94		Heptachlor #2	30.000	28.486	5.0	94	0.00	2.88- 2.94
95		Chlorothalonil #2	60.000	60.220	-0.4	95	0.00	3.14- 3.20
96		delta-BHC #2	30.000	28.336	5.5	92	0.00	2.74- 2.80
97		Aldrin #2	30.000	28.768	4.1	94	0.00	3.10- 3.16
98		Dacthal #2	60.000	58.959	1.7	96	0.00	3.53- 3.59
99		Heptachlor Epoxide #2	30.000	27.321	8.9	92	0.00	3.55- 3.61

Continuing Calibration Summary

Job Number: TC52720 **Sample:** GNN1456-CC1445
Account: RFWTXHO Weston Solutions **Lab FileID:** NN175451.D
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

100		gamma-Chlordane #2	30.000	27.326	8.9	93	0.00	3.65- 3.71
101		alpha-Chlordane #2	30.000	27.679	7.7	94	0.00	3.76- 3.82
102		Endosulfan I #2	30.000	26.527	11.6	91	0.00	3.87- 3.93
103		4,4'-DDE #2	60.000	57.867	3.6	94	0.00	3.84- 3.90
104		Dieldrin #2	60.000	57.217	4.6	95	0.00	4.06- 4.12
105		Endrin #2	60.000	57.855	3.6	96	0.00	4.24- 4.30
106		4,4'-DDD #2	60.000	56.892	5.2	94	0.00	4.32- 4.38
107		Endosulfan II #2	60.000	57.418	4.3	96	0.00	4.42- 4.48
108		4,4'-DDT #2	60.000	57.432	4.3	94	0.00	4.53- 4.59
109		Endrin Aldehyde #2	60.000	58.287	2.9	98	0.00	4.73- 4.79
110		Endosulfan Sulfate #2	60.000	58.220	3.0	98	0.00	5.04- 5.10
111		Methoxychlor #2	300.000	284.483	5.2	95	0.00	4.91- 4.97
112		Endrin Ketone #2	60.000	58.005	3.3	97	0.00	5.24- 5.30
113	L1	Chlordane-A #2		----------NA----------				
114	L1	Chlordane-B #2		----------NA----------				
115	L1	Chlordane-C #2		----------NA----------				
116	L1	Chlordane-D #2		----------NA----------				
117	L1	Chlordane-E #2		----------NA----------				
118	L1	Chlordane-F #2		----------NA----------				
119	H	Toxaphene #2		----------NA----------				
120		Mirex #2		----------NA----------				
121		Dicofol #2		----------NA----------				
122	L1	AR1016-A #2		----------NA----------				
123	L1	AR1016-B #2		----------NA----------				
124	L1	AR1016-C #2		----------NA----------				
125	L1	AR1016-D #2		----------NA----------				
126	L1	AR1016-E #2		----------NA----------				
127	L1	AR1016-F #2		----------NA----------				
128	L2	AR1221-A #2		----------NA----------				
129	L2	AR1221-B #2		----------NA----------				
130	L2	AR1221-C #2		----------NA----------				
131	L2	AR1221-D #2		----------NA----------				
132	L2	AR1221-E #2		----------NA----------				
133	L3	AR1232-A #2		----------NA----------				
134	L3	AR1232-B #2		----------NA----------				
135	L3	AR1232-C #2		----------NA----------				
136	L3	AR1232-D #2		----------NA----------				
137	L3	AR1232-E #2		----------NA----------				
138	L3	AR1232-F #2		----------NA----------				
139	L4	AR1242-A #2		----------NA----------				
140	L4	AR1242-B #2		----------NA----------				
141	L4	AR1242-C #2		----------NA----------				
142	L4	AR1242-D #2		----------NA----------				
143	L4	AR1242-E #2		----------NA----------				
144	L4	AR1242-F #2		----------NA----------				
145	L5	AR1248-A #2		----------NA----------				
146	L5	AR1248-B #2		----------NA----------				
147	L5	AR1248-C #2		----------NA----------				
148	L5	AR1248-D #2		----------NA----------				
149	L5	AR1248-E #2		----------NA----------				
150	L5	AR1248-F #2		----------NA----------				
151	L6	AR1254-A #2		----------NA----------				
152	L6	AR1254-B #2		----------NA----------				
153	L6	AR1254-C #2		----------NA----------				
154	L6	AR1254-D #2		----------NA----------				
155	L6	AR1254-E #2		----------NA----------				
156	L6	AR1254-F #2		----------NA----------				
157	L7	AR1260-A #2		----------NA----------				
158	L7	AR1260-B #2		----------NA----------				
159	L7	AR1260-C #2		----------NA----------				

Continuing Calibration Summary

Job Number: TC52720 **Sample:** GNN1456-CC1445
Account: RFWTXHO Weston Solutions **Lab FileID:** NN175451.D
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

```
160 L7  AR1260-D #2                          ----------NA----------
161 L7  AR1260-E #2                          ----------NA----------
162 L7  AR1260-F #2                          ----------NA----------
163 L8  AR1262-A #2                          ----------NA----------
164 L8  AR1262-B #2                          ----------NA----------
165 L8  AR1262-C #2                          ----------NA----------
166 L8  AR1262-D #2                          ----------NA----------
167 L8  AR1262-E #2                          ----------NA----------
168 L8  AR1262-F #2                          ----------NA----------
169 L9  AR1268-A #2                          ----------NA----------
170 L9  AR1268-B #2                          ----------NA----------
171 L9  AR1268-C #2                          ----------NA----------
172 L9  AR1268-D #2                          ----------NA----------
173 L9  AR1268-E #2                          ----------NA----------
174 L9  AR1268-F #2                          ----------NA----------
175 S   Decachlorobiphenyl #2   60.000  55.803      7.0   97   0.00    5.93- 5.99
 ---------------------------------------------------------------------------
 ---------------------------------------------------------------------------

    (#) = Out of Range              SPCC's out = 0  CCC's out = 0
     NN175116.D 608Q1445.M       Fri Aug 08 14:04:33 2014
```

8.9.11

8

Continuing Calibration Summary

Job Number: TC52720
Account: RFWTXHO Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX
Sample: GNN1458-CC1445
Lab FileID: NN175497.D

Evaluate Continuing Calibration Report

```
Signal #2 : C:\MSDCHEM\1\DATA\GNN1458\NN175497.D\ECD1A.CH Vial: 6
Signal #1 : C:\MSDCHEM\1\DATA\GNN1458\NN175497.D\ECD2B.CH
Acq On    : 11 Aug 2014  10:25 am                    Operator: almar
Sample    : cc1445-200,pest                          Inst    : GCNN
Misc      : op33313,gnn1458                          Multiplr: 1.00
IntFile Signal #2: EVENTS.E     IntFile Signal #1: events2.e

Method       : C:\MSDCHEM\1\METHODS\608Q1445.M (Chemstation Integrator)
Title        : Pesticides by 608 or 8081
Last Update  : Fri Aug 08 13:58:42 2014
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  15%     Max. Rel. Area : 150%
```

		Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	S	Tetrachloro-m-xylene	40.000	44.186	-10.5	113	0.00	2.27- 2.33
2		Hexachlorobenzene	40.000	42.545	-6.4	102	0.00	2.59- 2.65
3		alpha-BHC	20.000	21.422	-7.1	103	0.00	2.68- 2.74
4		gamma-BHC (Lindane)	20.000	21.897	-9.5	105	0.00	2.95- 3.01
5		Heptachlor	20.000	22.475	-12.4	108	0.00	3.30- 3.36
6		Aldrin	20.000	22.313	-11.6	109	0.00	3.57- 3.63
7		Chlorothalonil	40.000	44.023	-10.1	105	0.00	3.40- 3.46
8		beta-BHC	20.000	21.584	-7.9	102	0.00	3.01- 3.07
9		Dacthal	40.000	44.368	-10.9	106	0.00	3.85- 3.91
10		Delta-BHC	20.000	21.993	-10.0	107	0.00	3.25- 3.31
11		Heptachlor Epoxide	20.000	22.537	-12.7	107	0.00	4.06- 4.12
12		Endosulfan I	20.000	22.229	-11.1	106	0.00	4.38- 4.44
13		gamma-Chlordane	20.000	21.792	-9.0	106	0.00	4.22- 4.28
14		alpha-Chlordane	20.000	22.159	-10.8	106	0.00	4.34- 4.40
15		4,4'-DDE	40.000	44.331	-10.8	108	0.00	4.48- 4.54
16		Dieldrin	40.000	44.024	-10.1	106	0.00	4.60- 4.66
17		Endrin	40.000	43.486	-8.7	105	0.00	4.83- 4.89
18		4,4'-DDD	40.000	44.606	-11.5	107	0.00	4.92- 4.98
19		Endosulfan II	40.000	43.728	-9.3	104	0.00	4.99- 5.05
20		4,4'-DDT	40.000	44.429	-11.1	108	0.00	5.15- 5.21
21		Endrin Aldehyde	40.000	43.873	-9.7	106	0.00	5.24- 5.30
22		Methoxychlor	200.000	226.056	-13.0	108	0.00	5.64- 5.70
23		Endosulfan Sulfate	40.000	44.074	-10.2	107	0.00	5.43- 5.49
24		Endrin Ketone	40.000	43.367	-8.4	103	0.00	5.80- 5.86
25	L1	Chlordane-A		----------NA----------				
26	L1	Chlordane-B		----------NA----------				
27	L1	Chlordane-C		----------NA----------				
28	L1	Chlordane-D		----------NA----------				
29	L1	Chlordane-E		----------NA----------				
30	L1	Chlordane-F		----------NA----------				
31	H	Toxaphene		----------NA----------				
32		Mirex		----------NA----------				
33		Dicofol		----------NA----------				
34	L1	AR1016-A		----------NA----------				
35	L1	AR1016-B		----------NA----------				
36	L1	AR1016-C		----------NA----------				
37	L1	AR1016-D		----------NA----------				
38	L1	AR1016-E		----------NA----------				
39	L1	AR1016-F		----------NA----------				
40	L2	AR1221-A		----------NA----------				
41	L2	AR1221-B		----------NA----------				

Continuing Calibration Summary

Job Number: TC52720 **Sample:** GNN1458-CC1445
Account: RFWTXHO Weston Solutions **Lab FileID:** NN175497.D
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

42	L2	AR1221-C	----------NA----------					
43	L2	AR1221-D	----------NA----------					
44	L2	AR1221-E	----------NA----------					
45	L3	AR1232-A	----------NA----------					
46	L3	AR1232-B	----------NA----------					
47	L3	AR1232-C	----------NA----------					
48	L3	AR1232-D	----------NA----------					
49	L3	AR1232-E	----------NA----------					
50	L3	AR1232-F	----------NA----------					
51	L4	AR1242-A	----------NA----------					
52	L4	AR1242-B	----------NA----------					
53	L4	AR1242-C	----------NA----------					
54	L4	AR1242-D	----------NA----------					
55	L4	AR1242-E	----------NA----------					
56	L4	AR1242-F	----------NA----------					
57	L5	AR1248-A	----------NA----------					
58	L5	AR1248-B	----------NA----------					
59	L5	AR1248-C	----------NA----------					
60	L5	AR1248-D	----------NA----------					
61	L5	AR1248-E	----------NA----------					
62	L5	AR1248-F	----------NA----------					
63	L6	AR1254-A	----------NA----------					
64	L6	AR1254-B	----------NA----------					
65	L6	AR1254-C	----------NA----------					
66	L6	AR1254-D	----------NA----------					
67	L6	AR1254-E	----------NA----------					
68	L6	AR1254-F	----------NA----------					
69	L7	AR1260-A	----------NA----------					
70	L7	AR1260-B	----------NA----------					
71	L7	AR1260-C	----------NA----------					
72	L7	AR1260-D	----------NA----------					
73	L7	AR1260-E	----------NA----------					
74	L7	AR1260-F	----------NA----------					
75	L8	AR1262-A	----------NA----------					
76	L8	AR1262-B	----------NA----------					
77	L8	AR1262-C	----------NA----------					
78	L8	AR1262-D	----------NA----------					
79	L8	AR1262-E	----------NA----------					
80	L8	AR1262-F	----------NA----------					
81	L9	AR1268-A	----------NA----------					
82	L9	AR1268-B	----------NA----------					
83	L9	AR1268-C	----------NA----------					
84	L9	AR1268-D	----------NA----------					
85	L9	AR1268-E	----------NA----------					
86	L9	AR1268-F	----------NA----------					
87	S	Decachlorobiphenyl	40.000	44.804	-12.0	110	0.00	6.60- 6.66
*****		Signal #1 *****						
89	S	Tetrachloro-m-xylene #	40.000	40.245	-0.6	103	0.00	2.05- 2.11
90		Hexachlorobenzene #2	40.000	37.907	5.2	91	0.00	2.28- 2.34
91		alpha-BHC #2	20.000	19.839	0.8	94	0.00	2.37- 2.43
92		gamma-BHC (Lindane) #2	20.000	20.184	-0.9	97	0.00	2.57- 2.63
93		beta-BHC #2	20.000	20.015	-0.1	98	0.00	2.63- 2.69
94		Heptachlor #2	20.000	20.040	-0.2	97	0.01	2.88- 2.94
95		Chlorothalonil #2	40.000	42.443	-6.1	103	0.01	3.14- 3.20
96		delta-BHC #2	20.000	19.708	1.5	99	0.01	2.74- 2.80
97		Aldrin #2	20.000	20.283	-1.4	98	0.01	3.10- 3.16
98		Dacthal #2	40.000	43.042	-7.6	104	0.02	3.53- 3.59
99		Heptachlor Epoxide #2	20.000	18.463	7.7	85	0.01	3.55- 3.61

Continuing Calibration Summary

Job Number: TC52720 **Sample:** GNN1458-CC1445
Account: RFWTXHO Weston Solutions **Lab FileID:** NN175497.D
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

100		gamma-Chlordane #2	20.000	19.742	1.3	94	0.02	3.65- 3.71
101		alpha-Chlordane #2	20.000	20.150	-0.7	97	0.02	3.76- 3.82
102		Endosulfan I #2	20.000	18.651	6.7	85	0.02	3.87- 3.93
103		4,4'-DDE #2	40.000	43.072	-7.7	110	0.02	3.84- 3.90
104		Dieldrin #2	40.000	40.715	-1.8	98	0.02	4.06- 4.12
105		Endrin #2	40.000	40.634	-1.6	98	0.02	4.24- 4.30
106		4,4'-DDD #2	40.000	41.143	-2.9	100	0.02	4.32- 4.38
107		Endosulfan II #2	40.000	40.237	-0.6	96	0.02	4.42- 4.48
108		4,4'-DDT #2	40.000	41.565	-3.9	100	0.02	4.53- 4.59
109		Endrin Aldehyde #2	40.000	41.624	-4.1	99	0.02	4.73- 4.79
110		Endosulfan Sulfate #2	40.000	41.322	-3.3	98	0.02	5.04- 5.10
111		Methoxychlor #2	200.000	206.068	-3.0	98	0.02	4.91- 4.97
112		Endrin Ketone #2	40.000	41.268	-3.2	98	0.02	5.24- 5.30
113	L1	Chlordane-A #2		----------NA----------				
114	L1	Chlordane-B #2		----------NA----------				
115	L1	Chlordane-C #2		----------NA----------				
116	L1	Chlordane-D #2		----------NA----------				
117	L1	Chlordane-E #2		----------NA----------				
118	L1	Chlordane-F #2		----------NA----------				
119	H	Toxaphene #2		----------NA----------				
120		Mirex #2		----------NA----------				
121		Dicofol #2		----------NA----------				
122	L1	AR1016-A #2		----------NA----------				
123	L1	AR1016-B #2		----------NA----------				
124	L1	AR1016-C #2		----------NA----------				
125	L1	AR1016-D #2		----------NA----------				
126	L1	AR1016-E #2		----------NA----------				
127	L1	AR1016-F #2		----------NA----------				
128	L2	AR1221-A #2		----------NA----------				
129	L2	AR1221-B #2		----------NA----------				
130	L2	AR1221-C #2		----------NA----------				
131	L2	AR1221-D #2		----------NA----------				
132	L2	AR1221-E #2		----------NA----------				
133	L3	AR1232-A #2		----------NA----------				
134	L3	AR1232-B #2		----------NA----------				
135	L3	AR1232-C #2		----------NA----------				
136	L3	AR1232-D #2		----------NA----------				
137	L3	AR1232-E #2		----------NA----------				
138	L3	AR1232-F #2		----------NA----------				
139	L4	AR1242-A #2		----------NA----------				
140	L4	AR1242-B #2		----------NA----------				
141	L4	AR1242-C #2		----------NA----------				
142	L4	AR1242-D #2		----------NA----------				
143	L4	AR1242-E #2		----------NA----------				
144	L4	AR1242-F #2		----------NA----------				
145	L5	AR1248-A #2		----------NA----------				
146	L5	AR1248-B #2		----------NA----------				
147	L5	AR1248-C #2		----------NA----------				
148	L5	AR1248-D #2		----------NA----------				
149	L5	AR1248-E #2		----------NA----------				
150	L5	AR1248-F #2		----------NA----------				
151	L6	AR1254-A #2		----------NA----------				
152	L6	AR1254-B #2		----------NA----------				
153	L6	AR1254-C #2		----------NA----------				
154	L6	AR1254-D #2		----------NA----------				
155	L6	AR1254-E #2		----------NA----------				
156	L6	AR1254-F #2		----------NA----------				
157	L7	AR1260-A #2		----------NA----------				
158	L7	AR1260-B #2		----------NA----------				
159	L7	AR1260-C #2		----------NA----------				

Continuing Calibration Summary

Job Number: TC52720 **Sample:** GNN1458-CC1445
Account: RFWTXHO Weston Solutions **Lab FileID:** NN175497.D
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

```
160 L7  AR1260-D #2                          ----------NA----------
161 L7  AR1260-E #2                          ----------NA----------
162 L7  AR1260-F #2                          ----------NA----------
163 L8  AR1262-A #2                          ----------NA----------
164 L8  AR1262-B #2                          ----------NA----------
165 L8  AR1262-C #2                          ----------NA----------
166 L8  AR1262-D #2                          ----------NA----------
167 L8  AR1262-E #2                          ----------NA----------
168 L8  AR1262-F #2                          ----------NA----------
169 L9  AR1268-A #2                          ----------NA----------
170 L9  AR1268-B #2                          ----------NA----------
171 L9  AR1268-C #2                          ----------NA----------
172 L9  AR1268-D #2                          ----------NA----------
173 L9  AR1268-E #2                          ----------NA----------
174 L9  AR1268-F #2                          ----------NA----------
175 S   Decachlorobiphenyl #2   40.000  42.697     -6.7  105   0.02    5.93- 5.99
 ---------------------------------------------------------------------------
 ---------------------------------------------------------------------------

    (#) = Out of Range              SPCC's out = 0  CCC's out = 0
     NN175115.D 608Q1445.M       Tue Aug 12 10:51:51 2014
```

8.9.12

8

Continuing Calibration Summary

Job Number: TC52720 **Sample:** GNN1458-CC1445
Account: RFWTXHO Weston Solutions **Lab FileID:** NN175498.D
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Evaluate Continuing Calibration Report

```
Signal #2 : C:\MSDCHEM\1\DATA\GNN1458\NN175498.D\ECD1A.CH Vial: 7
Signal #1 : C:\MSDCHEM\1\DATA\GNN1458\NN175498.D\ECD2B.CH
Acq On    : 11 Aug 2014  10:40 am                    Operator: almar
Sample    : cc1445-200,chlor                         Inst    : GCNN
Misc      : op33313,gnn1458                          Multiplr: 1.00
IntFile Signal #2: EVENTS.E     IntFile Signal #1: events2.e

Method       : C:\MSDCHEM\1\METHODS\608Q1445.M (Chemstation Integrator)
Title        : Pesticides by 608 or 8081
Last Update  : Fri Aug 08 13:58:42 2014
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  15%     Max. Rel. Area : 150%
```

		Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	S	Tetrachloro-m-xylene	40.000	45.307	-13.3	116	0.00	2.27- 2.33
2		Hexachlorobenzene		----------NA----------				
3		alpha-BHC		----------NA----------				
4		gamma-BHC (Lindane)		----------NA----------				
5		Heptachlor		----------NA----------				
6		Aldrin		----------NA----------				
7		Chlorothalonil		----------NA----------				
8		beta-BHC		----------NA----------				
9		Dacthal		----------NA----------				
10		Delta-BHC		----------NA----------				
11		Heptachlor Epoxide		----------NA----------				
12		Endosulfan I		----------NA----------				
13		gamma-Chlordane		----------NA----------				
14		alpha-Chlordane		----------NA----------				
15		4,4'-DDE		----------NA----------				
16		Dieldrin		----------NA----------				
17		Endrin		----------NA----------				
18		4,4'-DDD		----------NA----------				
19		Endosulfan II		----------NA----------				
20		4,4'-DDT		----------NA----------				
21		Endrin Aldehyde		----------NA----------				
22		Methoxychlor		----------NA----------				
23		Endosulfan Sulfate		----------NA----------				
24		Endrin Ketone		----------NA----------				
25	L1	Chlordane-A	200.000	214.324	-7.2	107	0.00	3.18- 3.24
26	L1	Chlordane-B	200.000	226.752	-13.4	113	0.00	3.30- 3.36
27	L1	Chlordane-C	200.000	225.697	-12.8	113	0.00	3.70- 3.76
28	L1	Chlordane-D	200.000	227.747	-13.9	114	0.00	4.22- 4.28
29	L1	Chlordane-E	200.000	224.910	-12.5	112	0.00	4.34- 4.40
30	L1	Chlordane-F	200.000	225.547	-12.8	113	0.00	5.03- 5.09
31	H	Toxaphene		----------NA----------				
32		Mirex		----------NA----------				
33		Dicofol		----------NA----------				
34	L1	AR1016-A		----------NA----------				
35	L1	AR1016-B		----------NA----------				
36	L1	AR1016-C		----------NA----------				
37	L1	AR1016-D		----------NA----------				
38	L1	AR1016-E		----------NA----------				
39	L1	AR1016-F		----------NA----------				
40	L2	AR1221-A		----------NA----------				
41	L2	AR1221-B		----------NA----------				

Continuing Calibration Summary

Job Number: TC52720 **Sample:** GNN1458-CC1445
Account: RFWTXHO Weston Solutions **Lab FileID:** NN175498.D
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

42	L2	AR1221-C			----------NA----------			
43	L2	AR1221-D			----------NA----------			
44	L2	AR1221-E			----------NA----------			
45	L3	AR1232-A			----------NA----------			
46	L3	AR1232-B			----------NA----------			
47	L3	AR1232-C			----------NA----------			
48	L3	AR1232-D			----------NA----------			
49	L3	AR1232-E			----------NA----------			
50	L3	AR1232-F			----------NA----------			
51	L4	AR1242-A			----------NA----------			
52	L4	AR1242-B			----------NA----------			
53	L4	AR1242-C			----------NA----------			
54	L4	AR1242-D			----------NA----------			
55	L4	AR1242-E			----------NA----------			
56	L4	AR1242-F			----------NA----------			
57	L5	AR1248-A			----------NA----------			
58	L5	AR1248-B			----------NA----------			
59	L5	AR1248-C			----------NA----------			
60	L5	AR1248-D			----------NA----------			
61	L5	AR1248-E			----------NA----------			
62	L5	AR1248-F			----------NA----------			
63	L6	AR1254-A			----------NA----------			
64	L6	AR1254-B			----------NA----------			
65	L6	AR1254-C			----------NA----------			
66	L6	AR1254-D			----------NA----------			
67	L6	AR1254-E			----------NA----------			
68	L6	AR1254-F			----------NA----------			
69	L7	AR1260-A			----------NA----------			
70	L7	AR1260-B			----------NA----------			
71	L7	AR1260-C			----------NA----------			
72	L7	AR1260-D			----------NA----------			
73	L7	AR1260-E			----------NA----------			
74	L7	AR1260-F			----------NA----------			
75	L8	AR1262-A			----------NA----------			
76	L8	AR1262-B			----------NA----------			
77	L8	AR1262-C			----------NA----------			
78	L8	AR1262-D			----------NA----------			
79	L8	AR1262-E			----------NA----------			
80	L8	AR1262-F			----------NA----------			
81	L9	AR1268-A			----------NA----------			
82	L9	AR1268-B			----------NA----------			
83	L9	AR1268-C			----------NA----------			
84	L9	AR1268-D			----------NA----------			
85	L9	AR1268-E			----------NA----------			
86	L9	AR1268-F			----------NA----------			
87	S	Decachlorobiphenyl	40.000	44.246	-10.6	109	0.02	6.60- 6.66
*****		Signal #1 *****						
89	S	Tetrachloro-m-xylene #	40.000	40.859	-2.1	105	0.00	2.05- 2.11
90		Hexachlorobenzene #2			----------NA----------			
91		alpha-BHC #2			----------NA----------			
92		gamma-BHC (Lindane) #2			----------NA----------			
93		beta-BHC #2			----------NA----------			
94		Heptachlor #2			----------NA----------			
95		Chlorothalonil #2			----------NA----------			
96		delta-BHC #2			----------NA----------			
97		Aldrin #2			----------NA----------			
98		Dacthal #2			----------NA----------			
99		Heptachlor Epoxide #2			----------NA----------			

Continuing Calibration Summary

Job Number: TC52720 **Sample:** GNN1458-CC1445
Account: RFWTXHO Weston Solutions **Lab FileID:** NN175498.D
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

100		gamma-Chlordane #2			----------NA----------			
101		alpha-Chlordane #2			----------NA----------			
102		Endosulfan I #2			----------NA----------			
103		4,4'-DDE #2			----------NA----------			
104		Dieldrin #2			----------NA----------			
105		Endrin #2			----------NA----------			
106		4,4'-DDD #2			----------NA----------			
107		Endosulfan II #2			----------NA----------			
108		4,4'-DDT #2			----------NA----------			
109		Endrin Aldehyde #2			----------NA----------			
110		Endosulfan Sulfate #2			----------NA----------			
111		Methoxychlor #2			----------NA----------			
112		Endrin Ketone #2			----------NA----------			
113	L1	Chlordane-A #2	200.000	204.809	-2.4	102	0.00	2.84- 2.90
114	L1	Chlordane-B #2	200.000	206.474	-3.2	103	0.00	2.90- 2.96
115	L1	Chlordane-C #2	200.000	203.049	-1.5	102	0.00	3.21- 3.27
116	L1	Chlordane-D #2	200.000	218.484	-9.2	109	0.00	3.67- 3.73
117	L1	Chlordane-E #2	200.000	219.130	-9.6	110	0.00	3.77- 3.83
118	L1	Chlordane-F #2	200.000	213.145	-6.6	107	0.00	4.38- 4.44
119	H	Toxaphene #2			----------NA----------			
120		Mirex #2			----------NA----------			
121		Dicofol #2			----------NA----------			
122	L1	AR1016-A #2			----------NA----------			
123	L1	AR1016-B #2			----------NA----------			
124	L1	AR1016-C #2			----------NA----------			
125	L1	AR1016-D #2			----------NA----------			
126	L1	AR1016-E #2			----------NA----------			
127	L1	AR1016-F #2			----------NA----------			
128	L2	AR1221-A #2			----------NA----------			
129	L2	AR1221-B #2			----------NA----------			
130	L2	AR1221-C #2			----------NA----------			
131	L2	AR1221-D #2			----------NA----------			
132	L2	AR1221-E #2			----------NA----------			
133	L3	AR1232-A #2			----------NA----------			
134	L3	AR1232-B #2			----------NA----------			
135	L3	AR1232-C #2			----------NA----------			
136	L3	AR1232-D #2			----------NA----------			
137	L3	AR1232-E #2			----------NA----------			
138	L3	AR1232-F #2			----------NA----------			
139	L4	AR1242-A #2			----------NA----------			
140	L4	AR1242-B #2			----------NA----------			
141	L4	AR1242-C #2			----------NA----------			
142	L4	AR1242-D #2			----------NA----------			
143	L4	AR1242-E #2			----------NA----------			
144	L4	AR1242-F #2			----------NA----------			
145	L5	AR1248-A #2			----------NA----------			
146	L5	AR1248-B #2			----------NA----------			
147	L5	AR1248-C #2			----------NA----------			
148	L5	AR1248-D #2			----------NA----------			
149	L5	AR1248-E #2			----------NA----------			
150	L5	AR1248-F #2			----------NA----------			
151	L6	AR1254-A #2			----------NA----------			
152	L6	AR1254-B #2			----------NA----------			
153	L6	AR1254-C #2			----------NA----------			
154	L6	AR1254-D #2			----------NA----------			
155	L6	AR1254-E #2			----------NA----------			
156	L6	AR1254-F #2			----------NA----------			
157	L7	AR1260-A #2			----------NA----------			
158	L7	AR1260-B #2			----------NA----------			
159	L7	AR1260-C #2			----------NA----------			

Continuing Calibration Summary

Job Number: TC52720 **Sample:** GNN1458-CC1445
Account: RFWTXHO Weston Solutions **Lab FileID:** NN175498.D
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

```
160 L7  AR1260-D #2                          ----------NA----------
161 L7  AR1260-E #2                          ----------NA----------
162 L7  AR1260-F #2                          ----------NA----------
163 L8  AR1262-A #2                          ----------NA----------
164 L8  AR1262-B #2                          ----------NA----------
165 L8  AR1262-C #2                          ----------NA----------
166 L8  AR1262-D #2                          ----------NA----------
167 L8  AR1262-E #2                          ----------NA----------
168 L8  AR1262-F #2                          ----------NA----------
169 L9  AR1268-A #2                          ----------NA----------
170 L9  AR1268-B #2                          ----------NA----------
171 L9  AR1268-C #2                          ----------NA----------
172 L9  AR1268-D #2                          ----------NA----------
173 L9  AR1268-E #2                          ----------NA----------
174 L9  AR1268-F #2                          ----------NA----------
175 S   Decachlorobiphenyl #2   40.000  45.710    -14.3  113   0.02    5.93- 5.99
 ---------------------------------------------------------------------------
 ---------------------------------------------------------------------------

    (#) = Out of Range              SPCC's out = 0  CCC's out = 0
     NN175115.D 608Q1445.M       Tue Aug 12 10:52:40 2014
```

8.9.13

8

Continuing Calibration Summary

Job Number: TC52720 **Sample:** GNN1458-CC1445
Account: RFWTXHO Weston Solutions **Lab FileID:** NN175499.D
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Evaluate Continuing Calibration Report

```
Signal #2 : C:\MSDCHEM\1\DATA\GNN1458\NN175499.D\ECD1A.CH Vial: 8
Signal #1 : C:\MSDCHEM\1\DATA\GNN1458\NN175499.D\ECD2B.CH
Acq On    : 11 Aug 2014  10:54 am                    Operator: almar
Sample    : cc1445-200,tox                           Inst    : GCNN
Misc      : op33313,gnn1458                          Multiplr: 1.00
IntFile Signal #2: EVENTS.E     IntFile Signal #1: events2.e

Method       : C:\MSDCHEM\1\METHODS\608Q1445.M (Chemstation Integrator)
Title        : Pesticides by 608 or 8081
Last Update  : Fri Aug 08 13:58:42 2014
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  15%     Max. Rel. Area : 150%
```

		Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	S	Tetrachloro-m-xylene	40.000	47.445	-18.6#	122	0.00	2.27- 2.33
2		Hexachlorobenzene		----------NA----------				
3		alpha-BHC		----------NA----------				
4		gamma-BHC (Lindane)		----------NA----------				
5		Heptachlor		----------NA----------				
6		Aldrin		----------NA----------				
7		Chlorothalonil		----------NA----------				
8		beta-BHC		----------NA----------				
9		Dacthal		----------NA----------				
10		Delta-BHC		----------NA----------				
11		Heptachlor Epoxide		----------NA----------				
12		Endosulfan I		----------NA----------				
13		gamma-Chlordane		----------NA----------				
14		alpha-Chlordane		----------NA----------				
15		4,4'-DDE		----------NA----------				
16		Dieldrin		----------NA----------				
17		Endrin		----------NA----------				
18		4,4'-DDD		----------NA----------				
19		Endosulfan II		----------NA----------				
20		4,4'-DDT		----------NA----------				
21		Endrin Aldehyde		----------NA----------				
22		Methoxychlor		----------NA----------				
23		Endosulfan Sulfate		----------NA----------				
24		Endrin Ketone		----------NA----------				
25	L1	Chlordane-A		----------NA----------				
26	L1	Chlordane-B		----------NA----------				
27	L1	Chlordane-C		----------NA----------				
28	L1	Chlordane-D		----------NA----------				
29	L1	Chlordane-E		----------NA----------				
30	L1	Chlordane-F		----------NA----------				
31	H	Toxaphene	200.000	208.748	-4.4	104	0.00	4.75- 6.55
32		Mirex		----------NA----------				
33		Dicofol		----------NA----------				
34	L1	AR1016-A		----------NA----------				
35	L1	AR1016-B		----------NA----------				
36	L1	AR1016-C		----------NA----------				
37	L1	AR1016-D		----------NA----------				
38	L1	AR1016-E		----------NA----------				
39	L1	AR1016-F		----------NA----------				
40	L2	AR1221-A		----------NA----------				
41	L2	AR1221-B		----------NA----------				

Continuing Calibration Summary

Job Number: TC52720 **Sample:** GNN1458-CC1445
Account: RFWTXHO Weston Solutions **Lab FileID:** NN175499.D
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

42	L2	AR1221-C			----------NA----------				
43	L2	AR1221-D			----------NA----------				
44	L2	AR1221-E			----------NA----------				
45	L3	AR1232-A			----------NA----------				
46	L3	AR1232-B			----------NA----------				
47	L3	AR1232-C			----------NA----------				
48	L3	AR1232-D			----------NA----------				
49	L3	AR1232-E			----------NA----------				
50	L3	AR1232-F			----------NA----------				
51	L4	AR1242-A			----------NA----------				
52	L4	AR1242-B			----------NA----------				
53	L4	AR1242-C			----------NA----------				
54	L4	AR1242-D			----------NA----------				
55	L4	AR1242-E			----------NA----------				
56	L4	AR1242-F			----------NA----------				
57	L5	AR1248-A			----------NA----------				
58	L5	AR1248-B			----------NA----------				
59	L5	AR1248-C			----------NA----------				
60	L5	AR1248-D			----------NA----------				
61	L5	AR1248-E			----------NA----------				
62	L5	AR1248-F			----------NA----------				
63	L6	AR1254-A			----------NA----------				
64	L6	AR1254-B			----------NA----------				
65	L6	AR1254-C			----------NA----------				
66	L6	AR1254-D			----------NA----------				
67	L6	AR1254-E			----------NA----------				
68	L6	AR1254-F			----------NA----------				
69	L7	AR1260-A			----------NA----------				
70	L7	AR1260-B			----------NA----------				
71	L7	AR1260-C			----------NA----------				
72	L7	AR1260-D			----------NA----------				
73	L7	AR1260-E			----------NA----------				
74	L7	AR1260-F			----------NA----------				
75	L8	AR1262-A			----------NA----------				
76	L8	AR1262-B			----------NA----------				
77	L8	AR1262-C			----------NA----------				
78	L8	AR1262-D			----------NA----------				
79	L8	AR1262-E			----------NA----------				
80	L8	AR1262-F			----------NA----------				
81	L9	AR1268-A			----------NA----------				
82	L9	AR1268-B			----------NA----------				
83	L9	AR1268-C			----------NA----------				
84	L9	AR1268-D			----------NA----------				
85	L9	AR1268-E			----------NA----------				
86	L9	AR1268-F			----------NA----------				
87	S	Decachlorobiphenyl	40.000	43.413	-8.5	107	0.01	6.60- 6.66	
*****		Signal #1 *****							
89	S	Tetrachloro-m-xylene #	40.000	42.517	-6.3	109	0.00	2.05- 2.11	
90		Hexachlorobenzene #2			----------NA----------				
91		alpha-BHC #2			----------NA----------				
92		gamma-BHC (Lindane) #2			----------NA----------				
93		beta-BHC #2			----------NA----------				
94		Heptachlor #2			----------NA----------				
95		Chlorothalonil #2			----------NA----------				
96		delta-BHC #2			----------NA----------				
97		Aldrin #2			----------NA----------				
98		Dacthal #2			----------NA----------				
99		Heptachlor Epoxide #2			----------NA----------				

Continuing Calibration Summary

Job Number: TC52720 **Sample:** GNN1458-CC1445
Account: RFWTXHO Weston Solutions **Lab FileID:** NN175499.D
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

100		gamma-Chlordane #2			----------NA----------			
101		alpha-Chlordane #2			----------NA----------			
102		Endosulfan I #2			----------NA----------			
103		4,4'-DDE #2			----------NA----------			
104		Dieldrin #2			----------NA----------			
105		Endrin #2			----------NA----------			
106		4,4'-DDD #2			----------NA----------			
107		Endosulfan II #2			----------NA----------			
108		4,4'-DDT #2			----------NA----------			
109		Endrin Aldehyde #2			----------NA----------			
110		Endosulfan Sulfate #2			----------NA----------			
111		Methoxychlor #2			----------NA----------			
112		Endrin Ketone #2			----------NA----------			
113	L1	Chlordane-A #2			----------NA----------			
114	L1	Chlordane-B #2			----------NA----------			
115	L1	Chlordane-C #2			----------NA----------			
116	L1	Chlordane-D #2			----------NA----------			
117	L1	Chlordane-E #2			----------NA----------			
118	L1	Chlordane-F #2			----------NA----------			
119	H	Toxaphene #2	200.000	206.289	-3.1	103	0.00	4.14- 5.96
120		Mirex #2			----------NA----------			
121		Dicofol #2			----------NA----------			
122	L1	AR1016-A #2			----------NA----------			
123	L1	AR1016-B #2			----------NA----------			
124	L1	AR1016-C #2			----------NA----------			
125	L1	AR1016-D #2			----------NA----------			
126	L1	AR1016-E #2			----------NA----------			
127	L1	AR1016-F #2			----------NA----------			
128	L2	AR1221-A #2			----------NA----------			
129	L2	AR1221-B #2			----------NA----------			
130	L2	AR1221-C #2			----------NA----------			
131	L2	AR1221-D #2			----------NA----------			
132	L2	AR1221-E #2			----------NA----------			
133	L3	AR1232-A #2			----------NA----------			
134	L3	AR1232-B #2			----------NA----------			
135	L3	AR1232-C #2			----------NA----------			
136	L3	AR1232-D #2			----------NA----------			
137	L3	AR1232-E #2			----------NA----------			
138	L3	AR1232-F #2			----------NA----------			
139	L4	AR1242-A #2			----------NA----------			
140	L4	AR1242-B #2			----------NA----------			
141	L4	AR1242-C #2			----------NA----------			
142	L4	AR1242-D #2			----------NA----------			
143	L4	AR1242-E #2			----------NA----------			
144	L4	AR1242-F #2			----------NA----------			
145	L5	AR1248-A #2			----------NA----------			
146	L5	AR1248-B #2			----------NA----------			
147	L5	AR1248-C #2			----------NA----------			
148	L5	AR1248-D #2			----------NA----------			
149	L5	AR1248-E #2			----------NA----------			
150	L5	AR1248-F #2			----------NA----------			
151	L6	AR1254-A #2			----------NA----------			
152	L6	AR1254-B #2			----------NA----------			
153	L6	AR1254-C #2			----------NA----------			
154	L6	AR1254-D #2			----------NA----------			
155	L6	AR1254-E #2			----------NA----------			
156	L6	AR1254-F #2			----------NA----------			
157	L7	AR1260-A #2			----------NA----------			
158	L7	AR1260-B #2			----------NA----------			
159	L7	AR1260-C #2			----------NA----------			

Continuing Calibration Summary

Job Number: TC52720 **Sample:** GNN1458-CC1445
Account: RFWTXHO Weston Solutions **Lab FileID:** NN175499.D
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

```
160 L7  AR1260-D #2                          ----------NA----------
161 L7  AR1260-E #2                          ----------NA----------
162 L7  AR1260-F #2                          ----------NA----------
163 L8  AR1262-A #2                          ----------NA----------
164 L8  AR1262-B #2                          ----------NA----------
165 L8  AR1262-C #2                          ----------NA----------
166 L8  AR1262-D #2                          ----------NA----------
167 L8  AR1262-E #2                          ----------NA----------
168 L8  AR1262-F #2                          ----------NA----------
169 L9  AR1268-A #2                          ----------NA----------
170 L9  AR1268-B #2                          ----------NA----------
171 L9  AR1268-C #2                          ----------NA----------
172 L9  AR1268-D #2                          ----------NA----------
173 L9  AR1268-E #2                          ----------NA----------
174 L9  AR1268-F #2                          ----------NA----------
175 S   Decachlorobiphenyl #2   40.000  47.826    -19.6# 118   0.02    5.93- 5.99
 ---------------------------------------------------------------------------
 ---------------------------------------------------------------------------

    (#) = Out of Range               SPCC's out = 0  CCC's out = 0
     NN175115.D 608Q1445.M       Tue Aug 12 10:51:53 2014
```

8.9.14

8

Continuing Calibration Summary

Job Number: TC52720
Account: RFWTXHO Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX
Sample: GNN1458-ECC1445
Lab FileID: NN175511.D

Evaluate Continuing Calibration Report

```
Signal #2 : C:\MSDCHEM\1\DATA\GNN1458\NN175511.D\ECD1A.CH Vial: 20
Signal #1 : C:\MSDCHEM\1\DATA\GNN1458\NN175511.D\ECD2B.CH
Acq On    : 8-11-2014 01:42:22 PM                    Operator: almar
Sample    : ecc1445-300,pest                         Inst    : GCNN
Misc      : op33468,gnn1458                          Multiplr: 1.00
IntFile Signal #2: EVENTS.E     IntFile Signal #1: events2.e

Method       : C:\MSDCHEM\1\METHODS\608Q1445.M (Chemstation Integrator)
Title        : Pesticides by 608 or 8081
Last Update  : Fri Aug 08 13:58:42 2014
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  15%     Max. Rel. Area : 150%
```

		Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	S	Tetrachloro-m-xylene	60.000	63.104	-5.2	107	0.00	2.27- 2.33
2		Hexachlorobenzene	60.000	60.467	-0.8	100	0.00	2.59- 2.65
3		alpha-BHC	30.000	31.238	-4.1	100	0.00	2.68- 2.74
4		gamma-BHC (Lindane)	30.000	31.669	-5.6	103	0.00	2.95- 3.01
5		Heptachlor	30.000	31.058	-3.5	103	0.00	3.30- 3.36
6		Aldrin	30.000	31.200	-4.0	102	0.00	3.57- 3.63
7		Chlorothalonil	60.000	64.472	-7.5	106	0.00	3.40- 3.46
8		beta-BHC	30.000	30.340	-1.1	99	0.00	3.01- 3.07
9		Dacthal	60.000	62.127	-3.5	103	0.00	3.85- 3.91
10		Delta-BHC	30.000	32.934	-9.8	107	0.00	3.25- 3.31
11		Heptachlor Epoxide	30.000	32.262	-7.5	106	0.00	4.06- 4.12
12		Endosulfan I	30.000	32.378	-7.9	108	0.00	4.38- 4.44
13		gamma-Chlordane	30.000	31.644	-5.5	106	0.00	4.22- 4.28
14		alpha-Chlordane	30.000	31.992	-6.6	107	0.00	4.34- 4.40
15		4,4'-DDE	60.000	66.175	-10.3	109	0.00	4.48- 4.54
16		Dieldrin	60.000	64.837	-8.1	107	0.00	4.60- 4.66
17		Endrin	60.000	64.240	-7.1	108	0.00	4.83- 4.89
18		4,4'-DDD	60.000	72.969	-21.6#	122	0.00	4.92- 4.98
19		Endosulfan II	60.000	65.924	-9.9	111	0.00	4.99- 5.05
20		4,4'-DDT	60.000	54.641	8.9	91	0.00	5.15- 5.21
21		Endrin Aldehyde	60.000	62.505	-4.2	105	0.00	5.24- 5.30
22		Methoxychlor	300.000	288.121	4.0	96	0.00	5.64- 5.70
23		Endosulfan Sulfate	60.000	64.542	-7.6	107	0.00	5.43- 5.49
24		Endrin Ketone	60.000	63.714	-6.2	106	0.00	5.80- 5.86
25	L1	Chlordane-A		----------NA----------				
26	L1	Chlordane-B		----------NA----------				
27	L1	Chlordane-C		----------NA----------				
28	L1	Chlordane-D		----------NA----------				
29	L1	Chlordane-E		----------NA----------				
30	L1	Chlordane-F		----------NA----------				
31	H	Toxaphene		----------NA----------				
32		Mirex		----------NA----------				
33		Dicofol		----------NA----------				
34	L1	AR1016-A		----------NA----------				
35	L1	AR1016-B		----------NA----------				
36	L1	AR1016-C		----------NA----------				
37	L1	AR1016-D		----------NA----------				
38	L1	AR1016-E		----------NA----------				
39	L1	AR1016-F		----------NA----------				
40	L2	AR1221-A		----------NA----------				
41	L2	AR1221-B		----------NA----------				

Continuing Calibration Summary

Job Number: TC52720 **Sample:** GNN1458-ECC1445
Account: RFWTXHO Weston Solutions **Lab FileID:** NN175511.D
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

42	L2	AR1221-C	----------NA----------					
43	L2	AR1221-D	----------NA----------					
44	L2	AR1221-E	----------NA----------					
45	L3	AR1232-A	----------NA----------					
46	L3	AR1232-B	----------NA----------					
47	L3	AR1232-C	----------NA----------					
48	L3	AR1232-D	----------NA----------					
49	L3	AR1232-E	----------NA----------					
50	L3	AR1232-F	----------NA----------					
51	L4	AR1242-A	----------NA----------					
52	L4	AR1242-B	----------NA----------					
53	L4	AR1242-C	----------NA----------					
54	L4	AR1242-D	----------NA----------					
55	L4	AR1242-E	----------NA----------					
56	L4	AR1242-F	----------NA----------					
57	L5	AR1248-A	----------NA----------					
58	L5	AR1248-B	----------NA----------					
59	L5	AR1248-C	----------NA----------					
60	L5	AR1248-D	----------NA----------					
61	L5	AR1248-E	----------NA----------					
62	L5	AR1248-F	----------NA----------					
63	L6	AR1254-A	----------NA----------					
64	L6	AR1254-B	----------NA----------					
65	L6	AR1254-C	----------NA----------					
66	L6	AR1254-D	----------NA----------					
67	L6	AR1254-E	----------NA----------					
68	L6	AR1254-F	----------NA----------					
69	L7	AR1260-A	----------NA----------					
70	L7	AR1260-B	----------NA----------					
71	L7	AR1260-C	----------NA----------					
72	L7	AR1260-D	----------NA----------					
73	L7	AR1260-E	----------NA----------					
74	L7	AR1260-F	----------NA----------					
75	L8	AR1262-A	----------NA----------					
76	L8	AR1262-B	----------NA----------					
77	L8	AR1262-C	----------NA----------					
78	L8	AR1262-D	----------NA----------					
79	L8	AR1262-E	----------NA----------					
80	L8	AR1262-F	----------NA----------					
81	L9	AR1268-A	----------NA----------					
82	L9	AR1268-B	----------NA----------					
83	L9	AR1268-C	----------NA----------					
84	L9	AR1268-D	----------NA----------					
85	L9	AR1268-E	----------NA----------					
86	L9	AR1268-F	----------NA----------					
87	S	Decachlorobiphenyl	60.000	60.057	-0.1	104	0.00	6.60- 6.66
*****		Signal #1 *****						
89	S	Tetrachloro-m-xylene #	60.000	57.687	3.9	98	0.00	2.05- 2.11
90		Hexachlorobenzene #2	60.000	54.874	8.5	92	0.00	2.28- 2.34
91		alpha-BHC #2	30.000	28.906	3.6	94	0.00	2.37- 2.43
92		gamma-BHC (Lindane) #2	30.000	30.107	-0.4	98	0.00	2.57- 2.63
93		beta-BHC #2	30.000	29.696	1.0	97	0.00	2.63- 2.69
94		Heptachlor #2	30.000	28.527	4.9	94	0.00	2.88- 2.94
95		Chlorothalonil #2	60.000	64.936	-8.2	103	0.00	3.14- 3.20
96		delta-BHC #2	30.000	30.742	-2.5	99	0.00	2.74- 2.80
97		Aldrin #2	30.000	29.719	0.9	97	0.01	3.10- 3.16
98		Dacthal #2	60.000	65.320	-8.9	107	0.01	3.53- 3.59
99		Heptachlor Epoxide #2	30.000	26.045	13.2	88	0.01	3.55- 3.61

Continuing Calibration Summary

Job Number: TC52720 **Sample:** GNN1458-ECC1445
Account: RFWTXHO Weston Solutions **Lab FileID:** NN175511.D
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

100		gamma-Chlordane #2	30.000	28.830	3.9	98	0.01	3.65- 3.71
101		alpha-Chlordane #2	30.000	29.511	1.6	100	0.01	3.76- 3.82
102		Endosulfan I #2	30.000	24.046	19.8#	83	0.01	3.87- 3.93
103		4,4'-DDE #2	60.000	69.664	-16.1#	113	0.01	3.84- 3.90
104		Dieldrin #2	60.000	60.924	-1.5	101	0.02	4.06- 4.12
105		Endrin #2	60.000	60.507	-0.8	100	0.02	4.24- 4.30
106		4,4'-DDD #2	60.000	70.146	-16.9#	115	0.01	4.32- 4.38
107		Endosulfan II #2	60.000	60.628	-1.0	101	0.01	4.42- 4.48
108		4,4'-DDT #2	60.000	52.017	13.3	85	0.01	4.53- 4.59
109		Endrin Aldehyde #2	60.000	59.956	0.1	101	0.02	4.73- 4.79
110		Endosulfan Sulfate #2	60.000	61.439	-2.4	103	0.02	5.04- 5.10
111		Methoxychlor #2	300.000	272.785	9.1	91	0.02	4.91- 4.97
112		Endrin Ketone #2	60.000	61.032	-1.7	102	0.02	5.24- 5.30
113	L1	Chlordane-A #2		----------NA----------				
114	L1	Chlordane-B #2		----------NA----------				
115	L1	Chlordane-C #2		----------NA----------				
116	L1	Chlordane-D #2		----------NA----------				
117	L1	Chlordane-E #2		----------NA----------				
118	L1	Chlordane-F #2		----------NA----------				
119	H	Toxaphene #2		----------NA----------				
120		Mirex #2		----------NA----------				
121		Dicofol #2		----------NA----------				
122	L1	AR1016-A #2		----------NA----------				
123	L1	AR1016-B #2		----------NA----------				
124	L1	AR1016-C #2		----------NA----------				
125	L1	AR1016-D #2		----------NA----------				
126	L1	AR1016-E #2		----------NA----------				
127	L1	AR1016-F #2		----------NA----------				
128	L2	AR1221-A #2		----------NA----------				
129	L2	AR1221-B #2		----------NA----------				
130	L2	AR1221-C #2		----------NA----------				
131	L2	AR1221-D #2		----------NA----------				
132	L2	AR1221-E #2		----------NA----------				
133	L3	AR1232-A #2		----------NA----------				
134	L3	AR1232-B #2		----------NA----------				
135	L3	AR1232-C #2		----------NA----------				
136	L3	AR1232-D #2		----------NA----------				
137	L3	AR1232-E #2		----------NA----------				
138	L3	AR1232-F #2		----------NA----------				
139	L4	AR1242-A #2		----------NA----------				
140	L4	AR1242-B #2		----------NA----------				
141	L4	AR1242-C #2		----------NA----------				
142	L4	AR1242-D #2		----------NA----------				
143	L4	AR1242-E #2		----------NA----------				
144	L4	AR1242-F #2		----------NA----------				
145	L5	AR1248-A #2		----------NA----------				
146	L5	AR1248-B #2		----------NA----------				
147	L5	AR1248-C #2		----------NA----------				
148	L5	AR1248-D #2		----------NA----------				
149	L5	AR1248-E #2		----------NA----------				
150	L5	AR1248-F #2		----------NA----------				
151	L6	AR1254-A #2		----------NA----------				
152	L6	AR1254-B #2		----------NA----------				
153	L6	AR1254-C #2		----------NA----------				
154	L6	AR1254-D #2		----------NA----------				
155	L6	AR1254-E #2		----------NA----------				
156	L6	AR1254-F #2		----------NA----------				
157	L7	AR1260-A #2		----------NA----------				
158	L7	AR1260-B #2		----------NA----------				
159	L7	AR1260-C #2		----------NA----------				

Continuing Calibration Summary

Job Number: TC52720 **Sample:** GNN1458-ECC1445
Account: RFWTXHO Weston Solutions **Lab FileID:** NN175511.D
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

```
160 L7  AR1260-D #2                          ----------NA----------
161 L7  AR1260-E #2                          ----------NA----------
162 L7  AR1260-F #2                          ----------NA----------
163 L8  AR1262-A #2                          ----------NA----------
164 L8  AR1262-B #2                          ----------NA----------
165 L8  AR1262-C #2                          ----------NA----------
166 L8  AR1262-D #2                          ----------NA----------
167 L8  AR1262-E #2                          ----------NA----------
168 L8  AR1262-F #2                          ----------NA----------
169 L9  AR1268-A #2                          ----------NA----------
170 L9  AR1268-B #2                          ----------NA----------
171 L9  AR1268-C #2                          ----------NA----------
172 L9  AR1268-D #2                          ----------NA----------
173 L9  AR1268-E #2                          ----------NA----------
174 L9  AR1268-F #2                          ----------NA----------
175 S   Decachlorobiphenyl #2   60.000  62.456     -4.1  109   0.02    5.93- 5.99
 ---------------------------------------------------------------------------
 ---------------------------------------------------------------------------

    (#) = Out of Range              SPCC's out = 0  CCC's out = 0
     NN175116.D 608Q1445.M       Tue Aug 12 10:51:25 2014
```

8.9.15

8

Continuing Calibration Summary

Job Number: TC52720
Account: RFWTXHO Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX
Sample: GNN1459-CC1445
Lab FileID: NN175532.D

Evaluate Continuing Calibration Report

```
Signal #1 : C:\MSDCHEM\1\DATA\GNN1459\NN175532.D\ECD1A.CH Vial: 17
Signal #2 : C:\MSDCHEM\1\DATA\GNN1459\NN175532.D\ECD2B.CH
Acq On    : 8-11-2014 08:51:38 PM                    Operator: almar
Sample    : cc1445-200,pest                          Inst    : GCNN
Misc      : op33313,gnn1459                          Multiplr: 1.00
IntFile Signal #1: EVENTS.E     IntFile Signal #2: events2.e

Method       : C:\MSDCHEM\1\METHODS\608Q1445.M (Chemstation Integrator)
Title        : Pesticides by 608 or 8081
Last Update  : Fri Aug 08 13:58:42 2014
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  15%     Max. Rel. Area : 150%
```

		Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	S	Tetrachloro-m-xylene	40.000	42.899	-7.2	110	0.00	2.27- 2.33
2		Hexachlorobenzene	40.000	41.672	-4.2	100	0.00	2.59- 2.65
3		alpha-BHC	20.000	20.969	-4.8	100	0.00	2.68- 2.74
4		gamma-BHC (Lindane)	20.000	21.573	-7.9	104	0.00	2.95- 3.01
5		Heptachlor	20.000	22.547	-12.7	108	0.00	3.30- 3.36
6		Aldrin	20.000	22.050	-10.3	108	0.00	3.57- 3.63
7		Chlorothalonil	40.000	44.114	-10.3	106	0.00	3.40- 3.46
8		beta-BHC	20.000	21.028	-5.1	99	0.00	3.01- 3.07
9		Dacthal	40.000	44.198	-10.5	105	0.00	3.85- 3.91
10		Delta-BHC	20.000	21.788	-8.9	106	0.00	3.25- 3.31
11		Heptachlor Epoxide	20.000	22.869	-14.3	109	0.00	4.06- 4.12
12		Endosulfan I	20.000	22.529	-12.6	107	0.00	4.38- 4.44
13		gamma-Chlordane	20.000	22.444	-12.2	109	0.00	4.22- 4.28
14		alpha-Chlordane	20.000	22.617	-13.1	109	0.00	4.34- 4.40
15		4,4'-DDE	40.000	45.296	-13.2	110	0.00	4.48- 4.54
16		Dieldrin	40.000	44.820	-12.1	108	0.00	4.60- 4.66
17		Endrin	40.000	45.115	-12.8	109	0.00	4.83- 4.89
18		4,4'-DDD	40.000	45.998	-15.0	111	0.00	4.92- 4.98
19		Endosulfan II	40.000	44.955	-12.4	107	0.00	4.99- 5.05
20		4,4'-DDT	40.000	46.138	-15.3#	112	0.00	5.15- 5.21
21		Endrin Aldehyde	40.000	44.919	-12.3	109	0.00	5.24- 5.30
22		Methoxychlor	200.000	240.131	-20.1#	114	0.00	5.64- 5.70
23		Endosulfan Sulfate	40.000	45.312	-13.3	110	0.00	5.43- 5.49
24		Endrin Ketone	40.000	45.694	-14.2	109	0.00	5.80- 5.86
25	L1	Chlordane-A		----------NA----------				
26	L1	Chlordane-B		----------NA----------				
27	L1	Chlordane-C		----------NA----------				
28	L1	Chlordane-D		----------NA----------				
29	L1	Chlordane-E		----------NA----------				
30	L1	Chlordane-F		----------NA----------				
31	H	Toxaphene		----------NA----------				
32		Mirex		----------NA----------				
33		Dicofol		----------NA----------				
34	L1	AR1016-A		----------NA----------				
35	L1	AR1016-B		----------NA----------				
36	L1	AR1016-C		----------NA----------				
37	L1	AR1016-D		----------NA----------				
38	L1	AR1016-E		----------NA----------				
39	L1	AR1016-F		----------NA----------				
40	L2	AR1221-A		----------NA----------				
41	L2	AR1221-B		----------NA----------				

Continuing Calibration Summary

Job Number: TC52720 **Sample:** GNN1459-CC1445
Account: RFWTXHO Weston Solutions **Lab FileID:** NN175532.D
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

42	L2	AR1221-C	----------NA----------					
43	L2	AR1221-D	----------NA----------					
44	L2	AR1221-E	----------NA----------					
45	L3	AR1232-A	----------NA----------					
46	L3	AR1232-B	----------NA----------					
47	L3	AR1232-C	----------NA----------					
48	L3	AR1232-D	----------NA----------					
49	L3	AR1232-E	----------NA----------					
50	L3	AR1232-F	----------NA----------					
51	L4	AR1242-A	----------NA----------					
52	L4	AR1242-B	----------NA----------					
53	L4	AR1242-C	----------NA----------					
54	L4	AR1242-D	----------NA----------					
55	L4	AR1242-E	----------NA----------					
56	L4	AR1242-F	----------NA----------					
57	L5	AR1248-A	----------NA----------					
58	L5	AR1248-B	----------NA----------					
59	L5	AR1248-C	----------NA----------					
60	L5	AR1248-D	----------NA----------					
61	L5	AR1248-E	----------NA----------					
62	L5	AR1248-F	----------NA----------					
63	L6	AR1254-A	----------NA----------					
64	L6	AR1254-B	----------NA----------					
65	L6	AR1254-C	----------NA----------					
66	L6	AR1254-D	----------NA----------					
67	L6	AR1254-E	----------NA----------					
68	L6	AR1254-F	----------NA----------					
69	L7	AR1260-A	----------NA----------					
70	L7	AR1260-B	----------NA----------					
71	L7	AR1260-C	----------NA----------					
72	L7	AR1260-D	----------NA----------					
73	L7	AR1260-E	----------NA----------					
74	L7	AR1260-F	----------NA----------					
75	L8	AR1262-A	----------NA----------					
76	L8	AR1262-B	----------NA----------					
77	L8	AR1262-C	----------NA----------					
78	L8	AR1262-D	----------NA----------					
79	L8	AR1262-E	----------NA----------					
80	L8	AR1262-F	----------NA----------					
81	L9	AR1268-A	----------NA----------					
82	L9	AR1268-B	----------NA----------					
83	L9	AR1268-C	----------NA----------					
84	L9	AR1268-D	----------NA----------					
85	L9	AR1268-E	----------NA----------					
86	L9	AR1268-F	----------NA----------					
87	S	Decachlorobiphenyl	40.000	45.996	-15.0	113	0.00	6.60- 6.66
*****		Signal #2 *****						
89	S	Tetrachloro-m-xylene #	40.000	38.906	2.7	100	0.00	2.05- 2.11
90		Hexachlorobenzene #2	40.000	37.651	5.9	90	0.00	2.28- 2.34
91		alpha-BHC #2	20.000	19.365	3.2	92	0.00	2.37- 2.43
92		gamma-BHC (Lindane) #2	20.000	20.097	-0.5	97	0.00	2.57- 2.63
93		beta-BHC #2	20.000	19.885	0.6	97	0.00	2.63- 2.69
94		Heptachlor #2	20.000	20.325	-1.6	99	0.01	2.88- 2.94
95		Chlorothalonil #2	40.000	42.478	-6.2	103	0.00	3.14- 3.20
96		delta-BHC #2	20.000	19.833	0.8	99	0.00	2.74- 2.80
97		Aldrin #2	20.000	20.310	-1.5	98	0.01	3.10- 3.16
98		Dacthal #2	40.000	44.271	-10.7	107	0.01	3.53- 3.59
99		Heptachlor Epoxide #2	20.000	18.932	5.3	87	0.01	3.55- 3.61

Continuing Calibration Summary

Job Number: TC52720 **Sample:** GNN1459-CC1445
Account: RFWTXHO Weston Solutions **Lab FileID:** NN175532.D
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

100		gamma-Chlordane #2	20.000	19.983	0.1	95	0.01	3.65- 3.71
101		alpha-Chlordane #2	20.000	20.480	-2.4	99	0.02	3.76- 3.82
102		Endosulfan I #2	20.000	18.822	5.9	86	0.01	3.87- 3.93
103		4,4'-DDE #2	40.000	44.661	-11.7	114	0.01	3.84- 3.90
104		Dieldrin #2	40.000	41.633	-4.1	100	0.02	4.06- 4.12
105		Endrin #2	40.000	42.082	-5.2	102	0.02	4.24- 4.30
106		4,4'-DDD #2	40.000	42.927	-7.3	105	0.01	4.32- 4.38
107		Endosulfan II #2	40.000	42.309	-5.8	100	0.02	4.42- 4.48
108		4,4'-DDT #2	40.000	43.548	-8.9	105	0.02	4.53- 4.59
109		Endrin Aldehyde #2	40.000	43.214	-8.0	103	0.02	4.73- 4.79
110		Endosulfan Sulfate #2	40.000	43.194	-8.0	103	0.02	5.04- 5.10
111		Methoxychlor #2	200.000	222.176	-11.1	106	0.02	4.91- 4.97
112		Endrin Ketone #2	40.000	43.369	-8.4	103	0.02	5.24- 5.30
113	L1	Chlordane-A #2		----------NA----------				
114	L1	Chlordane-B #2		----------NA----------				
115	L1	Chlordane-C #2		----------NA----------				
116	L1	Chlordane-D #2		----------NA----------				
117	L1	Chlordane-E #2		----------NA----------				
118	L1	Chlordane-F #2		----------NA----------				
119	H	Toxaphene #2		----------NA----------				
120		Mirex #2		----------NA----------				
121		Dicofol #2		----------NA----------				
122	L1	AR1016-A #2		----------NA----------				
123	L1	AR1016-B #2		----------NA----------				
124	L1	AR1016-C #2		----------NA----------				
125	L1	AR1016-D #2		----------NA----------				
126	L1	AR1016-E #2		----------NA----------				
127	L1	AR1016-F #2		----------NA----------				
128	L2	AR1221-A #2		----------NA----------				
129	L2	AR1221-B #2		----------NA----------				
130	L2	AR1221-C #2		----------NA----------				
131	L2	AR1221-D #2		----------NA----------				
132	L2	AR1221-E #2		----------NA----------				
133	L3	AR1232-A #2		----------NA----------				
134	L3	AR1232-B #2		----------NA----------				
135	L3	AR1232-C #2		----------NA----------				
136	L3	AR1232-D #2		----------NA----------				
137	L3	AR1232-E #2		----------NA----------				
138	L3	AR1232-F #2		----------NA----------				
139	L4	AR1242-A #2		----------NA----------				
140	L4	AR1242-B #2		----------NA----------				
141	L4	AR1242-C #2		----------NA----------				
142	L4	AR1242-D #2		----------NA----------				
143	L4	AR1242-E #2		----------NA----------				
144	L4	AR1242-F #2		----------NA----------				
145	L5	AR1248-A #2		----------NA----------				
146	L5	AR1248-B #2		----------NA----------				
147	L5	AR1248-C #2		----------NA----------				
148	L5	AR1248-D #2		----------NA----------				
149	L5	AR1248-E #2		----------NA----------				
150	L5	AR1248-F #2		----------NA----------				
151	L6	AR1254-A #2		----------NA----------				
152	L6	AR1254-B #2		----------NA----------				
153	L6	AR1254-C #2		----------NA----------				
154	L6	AR1254-D #2		----------NA----------				
155	L6	AR1254-E #2		----------NA----------				
156	L6	AR1254-F #2		----------NA----------				
157	L7	AR1260-A #2		----------NA----------				
158	L7	AR1260-B #2		----------NA----------				
159	L7	AR1260-C #2		----------NA----------				

Continuing Calibration Summary

Job Number: TC52720 **Sample:** GNN1459-CC1445
Account: RFWTXHO Weston Solutions **Lab FileID:** NN175532.D
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

```
160 L7  AR1260-D #2                          ----------NA----------
161 L7  AR1260-E #2                          ----------NA----------
162 L7  AR1260-F #2                          ----------NA----------
163 L8  AR1262-A #2                          ----------NA----------
164 L8  AR1262-B #2                          ----------NA----------
165 L8  AR1262-C #2                          ----------NA----------
166 L8  AR1262-D #2                          ----------NA----------
167 L8  AR1262-E #2                          ----------NA----------
168 L8  AR1262-F #2                          ----------NA----------
169 L9  AR1268-A #2                          ----------NA----------
170 L9  AR1268-B #2                          ----------NA----------
171 L9  AR1268-C #2                          ----------NA----------
172 L9  AR1268-D #2                          ----------NA----------
173 L9  AR1268-E #2                          ----------NA----------
174 L9  AR1268-F #2                          ----------NA----------
175 S   Decachlorobiphenyl #2   40.000  43.824     -9.6  108   0.02    5.93- 5.99
 ---------------------------------------------------------------------------
 ---------------------------------------------------------------------------

    (#) = Out of Range              SPCC's out = 0  CCC's out = 0
     NN175115.D 608Q1445.M       Tue Aug 12 09:29:16 2014
```

8.9.16

8

Continuing Calibration Summary

Job Number: TC52720 **Sample:** GNN1459-CC1445
Account: RFWTXHO Weston Solutions **Lab FileID:** NN175533.D
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Evaluate Continuing Calibration Report

```
Signal #1 : C:\MSDCHEM\1\DATA\GNN1459\NN175533.D\ECD1A.CH Vial: 18
Signal #2 : C:\MSDCHEM\1\DATA\GNN1459\NN175533.D\ECD2B.CH
Acq On    : 8-11-2014 09:05:44 PM                    Operator: almar
Sample    : cc1445-200,chlor                         Inst    : GCNN
Misc      : op33313,gnn1459                          Multiplr: 1.00
IntFile Signal #1: EVENTS.E     IntFile Signal #2: events2.e

Method       : C:\MSDCHEM\1\METHODS\608Q1445.M (Chemstation Integrator)
Title        : Pesticides by 608 or 8081
Last Update  : Fri Aug 08 13:58:42 2014
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  15%     Max. Rel. Area : 150%
```

		Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	S	Tetrachloro-m-xylene	40.000	44.193	-10.5	113	0.00	2.27- 2.33
2		Hexachlorobenzene		----------NA----------				
3		alpha-BHC		----------NA----------				
4		gamma-BHC (Lindane)		----------NA----------				
5		Heptachlor		----------NA----------				
6		Aldrin		----------NA----------				
7		Chlorothalonil		----------NA----------				
8		beta-BHC		----------NA----------				
9		Dacthal		----------NA----------				
10		Delta-BHC		----------NA----------				
11		Heptachlor Epoxide		----------NA----------				
12		Endosulfan I		----------NA----------				
13		gamma-Chlordane		----------NA----------				
14		alpha-Chlordane		----------NA----------				
15		4,4'-DDE		----------NA----------				
16		Dieldrin		----------NA----------				
17		Endrin		----------NA----------				
18		4,4'-DDD		----------NA----------				
19		Endosulfan II		----------NA----------				
20		4,4'-DDT		----------NA----------				
21		Endrin Aldehyde		----------NA----------				
22		Methoxychlor		----------NA----------				
23		Endosulfan Sulfate		----------NA----------				
24		Endrin Ketone		----------NA----------				
25	L1	Chlordane-A	200.000	217.800	-8.9	109	0.00	3.18- 3.24
26	L1	Chlordane-B	200.000	229.050	-14.5	115	0.00	3.30- 3.36
27	L1	Chlordane-C	200.000	227.476	-13.7	114	0.00	3.70- 3.76
28	L1	Chlordane-D	200.000	224.519	-12.3	112	0.00	4.22- 4.28
29	L1	Chlordane-E	200.000	228.063	-14.0	114	0.00	4.34- 4.40
30	L1	Chlordane-F	200.000	223.886	-11.9	112	0.00	5.03- 5.09
31	H	Toxaphene		----------NA----------				
32		Mirex		----------NA----------				
33		Dicofol		----------NA----------				
34	L1	AR1016-A		----------NA----------				
35	L1	AR1016-B		----------NA----------				
36	L1	AR1016-C		----------NA----------				
37	L1	AR1016-D		----------NA----------				
38	L1	AR1016-E		----------NA----------				
39	L1	AR1016-F		----------NA----------				
40	L2	AR1221-A		----------NA----------				
41	L2	AR1221-B		----------NA----------				

Continuing Calibration Summary

Job Number: TC52720 **Sample:** GNN1459-CC1445
Account: RFWTXHO Weston Solutions **Lab FileID:** NN175533.D
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

42	L2	AR1221-C			----------NA----------			
43	L2	AR1221-D			----------NA----------			
44	L2	AR1221-E			----------NA----------			
45	L3	AR1232-A			----------NA----------			
46	L3	AR1232-B			----------NA----------			
47	L3	AR1232-C			----------NA----------			
48	L3	AR1232-D			----------NA----------			
49	L3	AR1232-E			----------NA----------			
50	L3	AR1232-F			----------NA----------			
51	L4	AR1242-A			----------NA----------			
52	L4	AR1242-B			----------NA----------			
53	L4	AR1242-C			----------NA----------			
54	L4	AR1242-D			----------NA----------			
55	L4	AR1242-E			----------NA----------			
56	L4	AR1242-F			----------NA----------			
57	L5	AR1248-A			----------NA----------			
58	L5	AR1248-B			----------NA----------			
59	L5	AR1248-C			----------NA----------			
60	L5	AR1248-D			----------NA----------			
61	L5	AR1248-E			----------NA----------			
62	L5	AR1248-F			----------NA----------			
63	L6	AR1254-A			----------NA----------			
64	L6	AR1254-B			----------NA----------			
65	L6	AR1254-C			----------NA----------			
66	L6	AR1254-D			----------NA----------			
67	L6	AR1254-E			----------NA----------			
68	L6	AR1254-F			----------NA----------			
69	L7	AR1260-A			----------NA----------			
70	L7	AR1260-B			----------NA----------			
71	L7	AR1260-C			----------NA----------			
72	L7	AR1260-D			----------NA----------			
73	L7	AR1260-E			----------NA----------			
74	L7	AR1260-F			----------NA----------			
75	L8	AR1262-A			----------NA----------			
76	L8	AR1262-B			----------NA----------			
77	L8	AR1262-C			----------NA----------			
78	L8	AR1262-D			----------NA----------			
79	L8	AR1262-E			----------NA----------			
80	L8	AR1262-F			----------NA----------			
81	L9	AR1268-A			----------NA----------			
82	L9	AR1268-B			----------NA----------			
83	L9	AR1268-C			----------NA----------			
84	L9	AR1268-D			----------NA----------			
85	L9	AR1268-E			----------NA----------			
86	L9	AR1268-F			----------NA----------			
87	S	Decachlorobiphenyl	40.000	48.335	-20.8#	119	0.00	6.60- 6.66
*****		Signal #2 *****						
89	S	Tetrachloro-m-xylene #	40.000	40.858	-2.1	105	0.00	2.05- 2.11
90		Hexachlorobenzene #2			----------NA----------			
91		alpha-BHC #2			----------NA----------			
92		gamma-BHC (Lindane) #2			----------NA----------			
93		beta-BHC #2			----------NA----------			
94		Heptachlor #2			----------NA----------			
95		Chlorothalonil #2			----------NA----------			
96		delta-BHC #2			----------NA----------			
97		Aldrin #2			----------NA----------			
98		Dacthal #2			----------NA----------			
99		Heptachlor Epoxide #2			----------NA----------			

Continuing Calibration Summary

Job Number: TC52720 **Sample:** GNN1459-CC1445
Account: RFWTXHO Weston Solutions **Lab FileID:** NN175533.D
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

100		gamma-Chlordane #2			----------NA----------			
101		alpha-Chlordane #2			----------NA----------			
102		Endosulfan I #2			----------NA----------			
103		4,4'-DDE #2			----------NA----------			
104		Dieldrin #2			----------NA----------			
105		Endrin #2			----------NA----------			
106		4,4'-DDD #2			----------NA----------			
107		Endosulfan II #2			----------NA----------			
108		4,4'-DDT #2			----------NA----------			
109		Endrin Aldehyde #2			----------NA----------			
110		Endosulfan Sulfate #2			----------NA----------			
111		Methoxychlor #2			----------NA----------			
112		Endrin Ketone #2			----------NA----------			
113	L1	Chlordane-A #2	200.000	203.379	-1.7	102	0.00	2.84- 2.90
114	L1	Chlordane-B #2	200.000	206.078	-3.0	103	0.00	2.90- 2.96
115	L1	Chlordane-C #2	200.000	201.900	-1.0	101	0.00	3.21- 3.27
116	L1	Chlordane-D #2	200.000	220.280	-10.1	110	0.00	3.67- 3.73
117	L1	Chlordane-E #2	200.000	222.103	-11.1	111	0.00	3.77- 3.83
118	L1	Chlordane-F #2	200.000	214.224	-7.1	107	0.00	4.38- 4.44
119	H	Toxaphene #2			----------NA----------			
120		Mirex #2			----------NA----------			
121		Dicofol #2			----------NA----------			
122	L1	AR1016-A #2			----------NA----------			
123	L1	AR1016-B #2			----------NA----------			
124	L1	AR1016-C #2			----------NA----------			
125	L1	AR1016-D #2			----------NA----------			
126	L1	AR1016-E #2			----------NA----------			
127	L1	AR1016-F #2			----------NA----------			
128	L2	AR1221-A #2			----------NA----------			
129	L2	AR1221-B #2			----------NA----------			
130	L2	AR1221-C #2			----------NA----------			
131	L2	AR1221-D #2			----------NA----------			
132	L2	AR1221-E #2			----------NA----------			
133	L3	AR1232-A #2			----------NA----------			
134	L3	AR1232-B #2			----------NA----------			
135	L3	AR1232-C #2			----------NA----------			
136	L3	AR1232-D #2			----------NA----------			
137	L3	AR1232-E #2			----------NA----------			
138	L3	AR1232-F #2			----------NA----------			
139	L4	AR1242-A #2			----------NA----------			
140	L4	AR1242-B #2			----------NA----------			
141	L4	AR1242-C #2			----------NA----------			
142	L4	AR1242-D #2			----------NA----------			
143	L4	AR1242-E #2			----------NA----------			
144	L4	AR1242-F #2			----------NA----------			
145	L5	AR1248-A #2			----------NA----------			
146	L5	AR1248-B #2			----------NA----------			
147	L5	AR1248-C #2			----------NA----------			
148	L5	AR1248-D #2			----------NA----------			
149	L5	AR1248-E #2			----------NA----------			
150	L5	AR1248-F #2			----------NA----------			
151	L6	AR1254-A #2			----------NA----------			
152	L6	AR1254-B #2			----------NA----------			
153	L6	AR1254-C #2			----------NA----------			
154	L6	AR1254-D #2			----------NA----------			
155	L6	AR1254-E #2			----------NA----------			
156	L6	AR1254-F #2			----------NA----------			
157	L7	AR1260-A #2			----------NA----------			
158	L7	AR1260-B #2			----------NA----------			
159	L7	AR1260-C #2			----------NA----------			

Continuing Calibration Summary

Job Number: TC52720 **Sample:** GNN1459-CC1445
Account: RFWTXHO Weston Solutions **Lab FileID:** NN175533.D
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

```
160 L7  AR1260-D #2                          ----------NA----------
161 L7  AR1260-E #2                          ----------NA----------
162 L7  AR1260-F #2                          ----------NA----------
163 L8  AR1262-A #2                          ----------NA----------
164 L8  AR1262-B #2                          ----------NA----------
165 L8  AR1262-C #2                          ----------NA----------
166 L8  AR1262-D #2                          ----------NA----------
167 L8  AR1262-E #2                          ----------NA----------
168 L8  AR1262-F #2                          ----------NA----------
169 L9  AR1268-A #2                          ----------NA----------
170 L9  AR1268-B #2                          ----------NA----------
171 L9  AR1268-C #2                          ----------NA----------
172 L9  AR1268-D #2                          ----------NA----------
173 L9  AR1268-E #2                          ----------NA----------
174 L9  AR1268-F #2                          ----------NA----------
175 S   Decachlorobiphenyl #2   40.000  45.557    -13.9  112   0.02    5.93- 5.99
 ---------------------------------------------------------------------------
 ---------------------------------------------------------------------------

    (#) = Out of Range              SPCC's out = 0  CCC's out = 0
     NN175115.D 608Q1445.M       Tue Aug 12 09:29:17 2014
```

8.9.17

8

Continuing Calibration Summary

Job Number: TC52720
Account: RFWTXHO Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX
Sample: GNN1459-CC1445
Lab FileID: NN175534.D

Evaluate Continuing Calibration Report

```
Signal #1 : C:\MSDCHEM\1\DATA\GNN1459\NN175534.D\ECD1A.CH Vial: 19
Signal #2 : C:\MSDCHEM\1\DATA\GNN1459\NN175534.D\ECD2B.CH
Acq On    : 8-11-2014 09:20:03 PM                    Operator: almar
Sample    : cc1445-200,tox                           Inst    : GCNN
Misc      : op33313,gnn1459                          Multiplr: 1.00
IntFile Signal #1: EVENTS.E     IntFile Signal #2: events2.e

Method       : C:\MSDCHEM\1\METHODS\608Q1445.M (Chemstation Integrator)
Title        : Pesticides by 608 or 8081
Last Update  : Fri Aug 08 13:58:42 2014
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  15%     Max. Rel. Area : 150%
```

		Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	S	Tetrachloro-m-xylene	40.000	46.981	-17.5#	121	0.00	2.27- 2.33
2		Hexachlorobenzene		----------NA----------				
3		alpha-BHC		----------NA----------				
4		gamma-BHC (Lindane)		----------NA----------				
5		Heptachlor		----------NA----------				
6		Aldrin		----------NA----------				
7		Chlorothalonil		----------NA----------				
8		beta-BHC		----------NA----------				
9		Dacthal		----------NA----------				
10		Delta-BHC		----------NA----------				
11		Heptachlor Epoxide		----------NA----------				
12		Endosulfan I		----------NA----------				
13		gamma-Chlordane		----------NA----------				
14		alpha-Chlordane		----------NA----------				
15		4,4'-DDE		----------NA----------				
16		Dieldrin		----------NA----------				
17		Endrin		----------NA----------				
18		4,4'-DDD		----------NA----------				
19		Endosulfan II		----------NA----------				
20		4,4'-DDT		----------NA----------				
21		Endrin Aldehyde		----------NA----------				
22		Methoxychlor		----------NA----------				
23		Endosulfan Sulfate		----------NA----------				
24		Endrin Ketone		----------NA----------				
25	L1	Chlordane-A		----------NA----------				
26	L1	Chlordane-B		----------NA----------				
27	L1	Chlordane-C		----------NA----------				
28	L1	Chlordane-D		----------NA----------				
29	L1	Chlordane-E		----------NA----------				
30	L1	Chlordane-F		----------NA----------				
31	H	Toxaphene	200.000	226.230	-13.1	113	0.00	4.75- 6.55
32		Mirex		----------NA----------				
33		Dicofol		----------NA----------				
34	L1	AR1016-A		----------NA----------				
35	L1	AR1016-B		----------NA----------				
36	L1	AR1016-C		----------NA----------				
37	L1	AR1016-D		----------NA----------				
38	L1	AR1016-E		----------NA----------				
39	L1	AR1016-F		----------NA----------				
40	L2	AR1221-A		----------NA----------				
41	L2	AR1221-B		----------NA----------				

Continuing Calibration Summary

Job Number: TC52720 **Sample:** GNN1459-CC1445
Account: RFWTXHO Weston Solutions **Lab FileID:** NN175534.D
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

42	L2	AR1221-C			----------NA----------			
43	L2	AR1221-D			----------NA----------			
44	L2	AR1221-E			----------NA----------			
45	L3	AR1232-A			----------NA----------			
46	L3	AR1232-B			----------NA----------			
47	L3	AR1232-C			----------NA----------			
48	L3	AR1232-D			----------NA----------			
49	L3	AR1232-E			----------NA----------			
50	L3	AR1232-F			----------NA----------			
51	L4	AR1242-A			----------NA----------			
52	L4	AR1242-B			----------NA----------			
53	L4	AR1242-C			----------NA----------			
54	L4	AR1242-D			----------NA----------			
55	L4	AR1242-E			----------NA----------			
56	L4	AR1242-F			----------NA----------			
57	L5	AR1248-A			----------NA----------			
58	L5	AR1248-B			----------NA----------			
59	L5	AR1248-C			----------NA----------			
60	L5	AR1248-D			----------NA----------			
61	L5	AR1248-E			----------NA----------			
62	L5	AR1248-F			----------NA----------			
63	L6	AR1254-A			----------NA----------			
64	L6	AR1254-B			----------NA----------			
65	L6	AR1254-C			----------NA----------			
66	L6	AR1254-D			----------NA----------			
67	L6	AR1254-E			----------NA----------			
68	L6	AR1254-F			----------NA----------			
69	L7	AR1260-A			----------NA----------			
70	L7	AR1260-B			----------NA----------			
71	L7	AR1260-C			----------NA----------			
72	L7	AR1260-D			----------NA----------			
73	L7	AR1260-E			----------NA----------			
74	L7	AR1260-F			----------NA----------			
75	L8	AR1262-A			----------NA----------			
76	L8	AR1262-B			----------NA----------			
77	L8	AR1262-C			----------NA----------			
78	L8	AR1262-D			----------NA----------			
79	L8	AR1262-E			----------NA----------			
80	L8	AR1262-F			----------NA----------			
81	L9	AR1268-A			----------NA----------			
82	L9	AR1268-B			----------NA----------			
83	L9	AR1268-C			----------NA----------			
84	L9	AR1268-D			----------NA----------			
85	L9	AR1268-E			----------NA----------			
86	L9	AR1268-F			----------NA----------			
87	S	Decachlorobiphenyl	40.000	46.139	-15.3#	114	0.00	6.60- 6.66
*****		Signal #2 *****						
89	S	Tetrachloro-m-xylene #	40.000	42.459	-6.1	109	0.00	2.05- 2.11
90		Hexachlorobenzene #2			----------NA----------			
91		alpha-BHC #2			----------NA----------			
92		gamma-BHC (Lindane) #2			----------NA----------			
93		beta-BHC #2			----------NA----------			
94		Heptachlor #2			----------NA----------			
95		Chlorothalonil #2			----------NA----------			
96		delta-BHC #2			----------NA----------			
97		Aldrin #2			----------NA----------			
98		Dacthal #2			----------NA----------			
99		Heptachlor Epoxide #2			----------NA----------			

Continuing Calibration Summary

Job Number: TC52720 **Sample:** GNN1459-CC1445
Account: RFWTXHO Weston Solutions **Lab FileID:** NN175534.D
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

100		gamma-Chlordane #2			----------NA----------			
101		alpha-Chlordane #2			----------NA----------			
102		Endosulfan I #2			----------NA----------			
103		4,4'-DDE #2			----------NA----------			
104		Dieldrin #2			----------NA----------			
105		Endrin #2			----------NA----------			
106		4,4'-DDD #2			----------NA----------			
107		Endosulfan II #2			----------NA----------			
108		4,4'-DDT #2			----------NA----------			
109		Endrin Aldehyde #2			----------NA----------			
110		Endosulfan Sulfate #2			----------NA----------			
111		Methoxychlor #2			----------NA----------			
112		Endrin Ketone #2			----------NA----------			
113	L1	Chlordane-A #2			----------NA----------			
114	L1	Chlordane-B #2			----------NA----------			
115	L1	Chlordane-C #2			----------NA----------			
116	L1	Chlordane-D #2			----------NA----------			
117	L1	Chlordane-E #2			----------NA----------			
118	L1	Chlordane-F #2			----------NA----------			
119	H	Toxaphene #2	200.000	220.424	-10.2	110	0.00	4.14- 5.96
120		Mirex #2			----------NA----------			
121		Dicofol #2			----------NA----------			
122	L1	AR1016-A #2			----------NA----------			
123	L1	AR1016-B #2			----------NA----------			
124	L1	AR1016-C #2			----------NA----------			
125	L1	AR1016-D #2			----------NA----------			
126	L1	AR1016-E #2			----------NA----------			
127	L1	AR1016-F #2			----------NA----------			
128	L2	AR1221-A #2			----------NA----------			
129	L2	AR1221-B #2			----------NA----------			
130	L2	AR1221-C #2			----------NA----------			
131	L2	AR1221-D #2			----------NA----------			
132	L2	AR1221-E #2			----------NA----------			
133	L3	AR1232-A #2			----------NA----------			
134	L3	AR1232-B #2			----------NA----------			
135	L3	AR1232-C #2			----------NA----------			
136	L3	AR1232-D #2			----------NA----------			
137	L3	AR1232-E #2			----------NA----------			
138	L3	AR1232-F #2			----------NA----------			
139	L4	AR1242-A #2			----------NA----------			
140	L4	AR1242-B #2			----------NA----------			
141	L4	AR1242-C #2			----------NA----------			
142	L4	AR1242-D #2			----------NA----------			
143	L4	AR1242-E #2			----------NA----------			
144	L4	AR1242-F #2			----------NA----------			
145	L5	AR1248-A #2			----------NA----------			
146	L5	AR1248-B #2			----------NA----------			
147	L5	AR1248-C #2			----------NA----------			
148	L5	AR1248-D #2			----------NA----------			
149	L5	AR1248-E #2			----------NA----------			
150	L5	AR1248-F #2			----------NA----------			
151	L6	AR1254-A #2			----------NA----------			
152	L6	AR1254-B #2			----------NA----------			
153	L6	AR1254-C #2			----------NA----------			
154	L6	AR1254-D #2			----------NA----------			
155	L6	AR1254-E #2			----------NA----------			
156	L6	AR1254-F #2			----------NA----------			
157	L7	AR1260-A #2			----------NA----------			
158	L7	AR1260-B #2			----------NA----------			
159	L7	AR1260-C #2			----------NA----------			

Continuing Calibration Summary

Job Number: TC52720 **Sample:** GNN1459-CC1445
Account: RFWTXHO Weston Solutions **Lab FileID:** NN175534.D
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

```
160 L7  AR1260-D #2                          ----------NA----------
161 L7  AR1260-E #2                          ----------NA----------
162 L7  AR1260-F #2                          ----------NA----------
163 L8  AR1262-A #2                          ----------NA----------
164 L8  AR1262-B #2                          ----------NA----------
165 L8  AR1262-C #2                          ----------NA----------
166 L8  AR1262-D #2                          ----------NA----------
167 L8  AR1262-E #2                          ----------NA----------
168 L8  AR1262-F #2                          ----------NA----------
169 L9  AR1268-A #2                          ----------NA----------
170 L9  AR1268-B #2                          ----------NA----------
171 L9  AR1268-C #2                          ----------NA----------
172 L9  AR1268-D #2                          ----------NA----------
173 L9  AR1268-E #2                          ----------NA----------
174 L9  AR1268-F #2                          ----------NA----------
175 S   Decachlorobiphenyl #2   40.000  49.010    -22.5# 121   0.02    5.93- 5.99
 ---------------------------------------------------------------------------
 ---------------------------------------------------------------------------

    (#) = Out of Range               SPCC's out = 0  CCC's out = 0
     NN175115.D 608Q1445.M       Tue Aug 12 09:29:18 2014
```

8.9.18

8

Continuing Calibration Summary

Job Number: TC52720
Account: RFWTXHO Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX
Sample: GNN1459-ECC1445
Lab FileID: NN175546.D

Evaluate Continuing Calibration Report

```
Signal #1 : C:\MSDCHEM\1\DATA\GNN1459\NN175546.D\ECD1A.CH Vial: 31
Signal #2 : C:\MSDCHEM\1\DATA\GNN1459\NN175546.D\ECD2B.CH
Acq On    : 12 Aug 2014  12:08 am                    Operator: almar
Sample    : ecc1445-300,pest                         Inst    : GCNN
Misc      : op33468,gnn1459                          Multiplr: 1.00
IntFile Signal #1: EVENTS.E     IntFile Signal #2: events2.e

Method       : C:\MSDCHEM\1\METHODS\608Q1445.M (Chemstation Integrator)
Title        : Pesticides by 608 or 8081
Last Update  : Fri Aug 08 13:58:42 2014
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  15%     Max. Rel. Area : 150%
```

		Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	S	Tetrachloro-m-xylene	60.000	61.921	-3.2	105	0.00	2.27- 2.33
2		Hexachlorobenzene	60.000	59.241	1.3	98	0.00	2.59- 2.65
3		alpha-BHC	30.000	30.869	-2.9	99	0.00	2.68- 2.74
4		gamma-BHC (Lindane)	30.000	31.538	-5.1	103	0.00	2.95- 3.01
5		Heptachlor	30.000	31.964	-6.5	106	0.00	3.30- 3.36
6		Aldrin	30.000	31.749	-5.8	104	0.00	3.57- 3.63
7		Chlorothalonil	60.000	66.071	-10.1	108	0.00	3.40- 3.46
8		beta-BHC	30.000	31.490	-5.0	103	0.00	3.01- 3.07
9		Dacthal	60.000	63.064	-5.1	105	0.00	3.85- 3.91
10		Delta-BHC	30.000	33.119	-10.4	108	0.00	3.25- 3.31
11		Heptachlor Epoxide	30.000	32.564	-8.5	107	0.00	4.06- 4.12
12		Endosulfan I	30.000	32.278	-7.6	107	0.00	4.38- 4.44
13		gamma-Chlordane	30.000	31.966	-6.6	107	0.00	4.22- 4.28
14		alpha-Chlordane	30.000	31.167	-3.9	104	0.00	4.34- 4.40
15		4,4'-DDE	60.000	65.659	-9.4	108	0.00	4.48- 4.54
16		Dieldrin	60.000	64.419	-7.4	107	0.00	4.60- 4.66
17		Endrin	60.000	63.130	-5.2	106	0.00	4.83- 4.89
18		4,4'-DDD	60.000	69.287	-15.5#	115	0.00	4.92- 4.98
19		Endosulfan II	60.000	64.382	-7.3	108	0.00	4.99- 5.05
20		4,4'-DDT	60.000	56.193	6.3	94	0.00	5.15- 5.21
21		Endrin Aldehyde	60.000	63.606	-6.0	107	0.00	5.24- 5.30
22		Methoxychlor	300.000	288.395	3.9	96	0.00	5.64- 5.70
23		Endosulfan Sulfate	60.000	64.675	-7.8	107	0.00	5.43- 5.49
24		Endrin Ketone	60.000	61.872	-3.1	103	0.00	5.80- 5.86
25	L1	Chlordane-A		----------NA----------				
26	L1	Chlordane-B		----------NA----------				
27	L1	Chlordane-C		----------NA----------				
28	L1	Chlordane-D		----------NA----------				
29	L1	Chlordane-E		----------NA----------				
30	L1	Chlordane-F		----------NA----------				
31	H	Toxaphene		----------NA----------				
32		Mirex		----------NA----------				
33		Dicofol		----------NA----------				
34	L1	AR1016-A		----------NA----------				
35	L1	AR1016-B		----------NA----------				
36	L1	AR1016-C		----------NA----------				
37	L1	AR1016-D		----------NA----------				
38	L1	AR1016-E		----------NA----------				
39	L1	AR1016-F		----------NA----------				
40	L2	AR1221-A		----------NA----------				
41	L2	AR1221-B		----------NA----------				

Continuing Calibration Summary

Job Number: TC52720 **Sample:** GNN1459-ECC1445
Account: RFWTXHO Weston Solutions **Lab FileID:** NN175546.D
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

42	L2	AR1221-C	----------NA----------					
43	L2	AR1221-D	----------NA----------					
44	L2	AR1221-E	----------NA----------					
45	L3	AR1232-A	----------NA----------					
46	L3	AR1232-B	----------NA----------					
47	L3	AR1232-C	----------NA----------					
48	L3	AR1232-D	----------NA----------					
49	L3	AR1232-E	----------NA----------					
50	L3	AR1232-F	----------NA----------					
51	L4	AR1242-A	----------NA----------					
52	L4	AR1242-B	----------NA----------					
53	L4	AR1242-C	----------NA----------					
54	L4	AR1242-D	----------NA----------					
55	L4	AR1242-E	----------NA----------					
56	L4	AR1242-F	----------NA----------					
57	L5	AR1248-A	----------NA----------					
58	L5	AR1248-B	----------NA----------					
59	L5	AR1248-C	----------NA----------					
60	L5	AR1248-D	----------NA----------					
61	L5	AR1248-E	----------NA----------					
62	L5	AR1248-F	----------NA----------					
63	L6	AR1254-A	----------NA----------					
64	L6	AR1254-B	----------NA----------					
65	L6	AR1254-C	----------NA----------					
66	L6	AR1254-D	----------NA----------					
67	L6	AR1254-E	----------NA----------					
68	L6	AR1254-F	----------NA----------					
69	L7	AR1260-A	----------NA----------					
70	L7	AR1260-B	----------NA----------					
71	L7	AR1260-C	----------NA----------					
72	L7	AR1260-D	----------NA----------					
73	L7	AR1260-E	----------NA----------					
74	L7	AR1260-F	----------NA----------					
75	L8	AR1262-A	----------NA----------					
76	L8	AR1262-B	----------NA----------					
77	L8	AR1262-C	----------NA----------					
78	L8	AR1262-D	----------NA----------					
79	L8	AR1262-E	----------NA----------					
80	L8	AR1262-F	----------NA----------					
81	L9	AR1268-A	----------NA----------					
82	L9	AR1268-B	----------NA----------					
83	L9	AR1268-C	----------NA----------					
84	L9	AR1268-D	----------NA----------					
85	L9	AR1268-E	----------NA----------					
86	L9	AR1268-F	----------NA----------					
87	S	Decachlorobiphenyl	60.000	53.370	11.1	92	0.00	6.60- 6.66
*****		Signal #2 *****						
89	S	Tetrachloro-m-xylene #	60.000	56.079	6.5	95	0.00	2.05- 2.11
90		Hexachlorobenzene #2	60.000	53.955	10.1	90	0.00	2.28- 2.34
91		alpha-BHC #2	30.000	28.288	5.7	92	0.00	2.37- 2.43
92		gamma-BHC (Lindane) #2	30.000	29.703	1.0	97	0.00	2.57- 2.63
93		beta-BHC #2	30.000	29.266	2.4	96	0.00	2.63- 2.69
94		Heptachlor #2	30.000	29.036	3.2	96	0.01	2.88- 2.94
95		Chlorothalonil #2	60.000	65.681	-9.5	104	0.00	3.14- 3.20
96		delta-BHC #2	30.000	30.371	-1.2	98	0.00	2.74- 2.80
97		Aldrin #2	30.000	29.590	1.4	96	0.01	3.10- 3.16
98		Dacthal #2	60.000	66.270	-10.4	108	0.01	3.53- 3.59
99		Heptachlor Epoxide #2	30.000	25.996	13.3	88	0.01	3.55- 3.61

Continuing Calibration Summary

Job Number: TC52720 **Sample:** GNN1459-ECC1445
Account: RFWTXHO Weston Solutions **Lab FileID:** NN175546.D
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

100		gamma-Chlordane #2	30.000	28.912	3.6	98	0.01	3.65- 3.71
101		alpha-Chlordane #2	30.000	29.601	1.3	100	0.01	3.76- 3.82
102		Endosulfan I #2	30.000	25.129	16.2#	86	0.01	3.87- 3.93
103		4,4'-DDE #2	60.000	69.953	-16.6#	114	0.01	3.84- 3.90
104		Dieldrin #2	60.000	60.549	-0.9	100	0.01	4.06- 4.12
105		Endrin #2	60.000	61.060	-1.8	101	0.01	4.24- 4.30
106		4,4'-DDD #2	60.000	70.396	-17.3#	116	0.01	4.32- 4.38
107		Endosulfan II #2	60.000	60.186	-0.3	100	0.01	4.42- 4.48
108		4,4'-DDT #2	60.000	52.636	12.3	86	0.01	4.53- 4.59
109		Endrin Aldehyde #2	60.000	61.004	-1.7	103	0.01	4.73- 4.79
110		Endosulfan Sulfate #2	60.000	62.626	-4.4	105	0.01	5.04- 5.10
111		Methoxychlor #2	300.000	285.050	5.0	95	0.01	4.91- 4.97
112		Endrin Ketone #2	60.000	59.736	0.4	99	0.01	5.24- 5.30
113	L1	Chlordane-A #2		----------NA----------				
114	L1	Chlordane-B #2		----------NA----------				
115	L1	Chlordane-C #2		----------NA----------				
116	L1	Chlordane-D #2		----------NA----------				
117	L1	Chlordane-E #2		----------NA----------				
118	L1	Chlordane-F #2		----------NA----------				
119	H	Toxaphene #2		----------NA----------				
120		Mirex #2		----------NA----------				
121		Dicofol #2		----------NA----------				
122	L1	AR1016-A #2		----------NA----------				
123	L1	AR1016-B #2		----------NA----------				
124	L1	AR1016-C #2		----------NA----------				
125	L1	AR1016-D #2		----------NA----------				
126	L1	AR1016-E #2		----------NA----------				
127	L1	AR1016-F #2		----------NA----------				
128	L2	AR1221-A #2		----------NA----------				
129	L2	AR1221-B #2		----------NA----------				
130	L2	AR1221-C #2		----------NA----------				
131	L2	AR1221-D #2		----------NA----------				
132	L2	AR1221-E #2		----------NA----------				
133	L3	AR1232-A #2		----------NA----------				
134	L3	AR1232-B #2		----------NA----------				
135	L3	AR1232-C #2		----------NA----------				
136	L3	AR1232-D #2		----------NA----------				
137	L3	AR1232-E #2		----------NA----------				
138	L3	AR1232-F #2		----------NA----------				
139	L4	AR1242-A #2		----------NA----------				
140	L4	AR1242-B #2		----------NA----------				
141	L4	AR1242-C #2		----------NA----------				
142	L4	AR1242-D #2		----------NA----------				
143	L4	AR1242-E #2		----------NA----------				
144	L4	AR1242-F #2		----------NA----------				
145	L5	AR1248-A #2		----------NA----------				
146	L5	AR1248-B #2		----------NA----------				
147	L5	AR1248-C #2		----------NA----------				
148	L5	AR1248-D #2		----------NA----------				
149	L5	AR1248-E #2		----------NA----------				
150	L5	AR1248-F #2		----------NA----------				
151	L6	AR1254-A #2		----------NA----------				
152	L6	AR1254-B #2		----------NA----------				
153	L6	AR1254-C #2		----------NA----------				
154	L6	AR1254-D #2		----------NA----------				
155	L6	AR1254-E #2		----------NA----------				
156	L6	AR1254-F #2		----------NA----------				
157	L7	AR1260-A #2		----------NA----------				
158	L7	AR1260-B #2		----------NA----------				
159	L7	AR1260-C #2		----------NA----------				

Continuing Calibration Summary

Job Number: TC52720 **Sample:** GNN1459-ECC1445
Account: RFWTXHO Weston Solutions **Lab FileID:** NN175546.D
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

```
160 L7  AR1260-D #2                          ----------NA----------
161 L7  AR1260-E #2                          ----------NA----------
162 L7  AR1260-F #2                          ----------NA----------
163 L8  AR1262-A #2                          ----------NA----------
164 L8  AR1262-B #2                          ----------NA----------
165 L8  AR1262-C #2                          ----------NA----------
166 L8  AR1262-D #2                          ----------NA----------
167 L8  AR1262-E #2                          ----------NA----------
168 L8  AR1262-F #2                          ----------NA----------
169 L9  AR1268-A #2                          ----------NA----------
170 L9  AR1268-B #2                          ----------NA----------
171 L9  AR1268-C #2                          ----------NA----------
172 L9  AR1268-D #2                          ----------NA----------
173 L9  AR1268-E #2                          ----------NA----------
174 L9  AR1268-F #2                          ----------NA----------
175 S   Decachlorobiphenyl #2   60.000  60.485     -0.8  105   0.01    5.93- 5.99
 ---------------------------------------------------------------------------
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    (#) = Out of Range               SPCC's out = 0  CCC's out = 0
     NN175116.D 608Q1445.M       Tue Aug 12 09:30:11 2014
```

8.9.19

8

Initial Calibration Summary

Job Number: TC52720
Account: RFWTXHO Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Sample: GOO505-ICC505
Lab FileID: OO30783.D

Response Factor Report GCOO

Method : C:\msdchem\1\METHODS\pcbq505.m (ChemStation Integrator)
Title : PCB by 608 / 8082.
Last Update : Wed Aug 06 09:08:42 2014
Response via : Initial Calibration

Calibration Files
1 =OO30781.D 2 =OO30782.D 3 =OO30783.D 4 =OO30784.D
5 =OO30785.D 6 =OO30786.D 7 =OO30787.D

Compound	1	2	3	4	5	6	7	Avg	%RSD
1)S Tetrachloro-m-xyl	1.208	1.138	1.129	1.092	1.097	1.080	1.027	1.110 E7	5.06
2)L1AR1016-A	5.324	4.818	4.817	4.422	4.301	4.126	3.778	4.512 E5	11.40
3)L1AR1016-B	9.702	9.018	9.006	8.594	8.629	8.472	8.139	8.794 E5	5.72
4)L1AR1016-C	4.167	3.863	3.844	3.596	3.554	3.460	3.247	3.676 E5	8.29
5)L1AR1016-D	2.854	2.645	2.684	2.521	2.485	2.428	2.295	2.559 E5	7.20
6)L1AR1016-E	5.395	5.253	5.115	4.686	4.604	4.441	4.098	4.799 E5	9.82
7)L1AR1016-F	4.045	3.858	3.770	3.471	3.416	3.307	3.084	3.564 E5	9.49
8)L2AR1221-A			9.725					9.725 E4	0.00
9)L2AR1221-B			1.716					1.716 E5	0.00
10)L2AR1221-C			1.140					1.140 E5	0.00
11)L2AR1221-D			3.374					3.374 E5	0.00
12)L2AR1221-E								0.000	-1.00
13)L3AR1232-A			2.667					2.667 E5	0.00
14)L3AR1232-B			2.717					2.717 E5	0.00
15)L3AR1232-C			4.183					4.183 E5	0.00
16)L3AR1232-D			1.911					1.911 E5	0.00
17)L3AR1232-E			1.355					1.355 E5	0.00
18)L3AR1232-F			1.922					1.922 E5	0.00
19)L4AR1242-A			4.782					4.782 E5	0.00
20)L4AR1242-B			8.864					8.864 E5	0.00
21)L4AR1242-C			3.824					3.824 E5	0.00
22)L4AR1242-D			2.670					2.670 E5	0.00
23)L4AR1242-E			5.289					5.289 E5	0.00
24)L4AR1242-F			3.846					3.846 E5	0.00
25)L5AR1248-A			4.676					4.676 E5	0.00
26)L5AR1248-B			3.582					3.582 E5	0.00
27)L5AR1248-C			5.804					5.804 E5	0.00
28)L5AR1248-D			4.595					4.595 E5	0.00
29)L5AR1248-E			5.413					5.413 E5	0.00
30)L5AR1248-F			4.755					4.755 E5	0.00
31)L6AR1254-A			5.394					5.394 E5	0.00
32)L6AR1254-B			9.701					9.701 E5	0.00
33)L6AR1254-C			9.366					9.366 E5	0.00
34)L6AR1254-D			1.002					1.002 E6	0.00
35)L6AR1254-E			9.841					9.841 E5	0.00
36)L6AR1254-F			9.316					9.316 E5	0.00
37)L7AR1260-A	7.722	6.987	7.020	6.522	6.335	6.194	5.754	6.648 E5	9.76
38)L7AR1260-B	1.172	1.023	1.006	0.953	0.925	0.915	0.859	0.979 E6	10.38
39)L7AR1260-C	6.852	6.010	5.983	5.668	5.580	5.556	5.105	5.822 E5	9.38
40)L7AR1260-D	7.111	6.285	6.194	5.927	5.758	5.710	5.397	6.055 E5	9.16
41)L7AR1260-E	1.646	1.448	1.460	1.429	1.398	1.403	1.346	1.447 E6	6.60
42)L7AR1260-F	8.578	7.450	7.786	7.223	7.059	7.038	6.718	7.407 E5	8.33
43)L8AR1262-A			1.130					1.130 E4	0.00
44)L8AR1262-B			2.191					2.191 E4	0.00
45)L8AR1262-C			1.997					1.997 E4	0.00
46)L8AR1262-D			2.110					2.110 E4	0.00
47)L8AR1262-E			8.306					8.306 E3	0.00

Initial Calibration Summary

Job Number: TC52720 **Sample:** GOO505-ICC505
Account: RFWTXHO Weston Solutions **Lab FileID:** OO30783.D
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

48)L8AR1262-F			1.853					1.853	E4	0.00
49)L9AR1268-A			4.617					4.617	E5	0.00
50)L9AR1268-B			4.797					4.797	E5	0.00
51)L9AR1268-C			1.954					1.954	E6	0.00
52)L9AR1268-D			2.037					2.037	E6	0.00
53)L9AR1268-E			1.520					1.520	E6	0.00
54)L9AR1268-F			6.503					6.503	E5	0.00
55)S Decachlorobipheny	1.419	1.305	1.253	1.238	1.213	1.214	1.159	1.257	E7	6.66

Signal #2

1)S Tetrachloro-m-xyl	1.405	1.329	1.322	1.289	1.302	1.280	1.236	1.309	E7	3.98
2)L1AR1016-A	6.351	5.491	5.435	5.082	4.952	4.773	4.367	5.207	E5	12.18
3)L1AR1016-B	1.278	1.135	1.107	1.053	1.041	1.020	0.965	1.086	E6	9.33
4)L1AR1016-C	6.252	5.311	5.077	4.646	4.524	4.343	3.965	4.874	E5	15.47
5)L1AR1016-D	4.545	3.656	3.435	3.154	3.051	2.960	2.710	3.359	E5	18.10
6)L1AR1016-E	6.762	6.034	6.332	5.681	5.512	5.280	4.771	5.767	E5	11.59
7)L1AR1016-F	5.145	4.654	4.860	4.394	4.298	4.148	3.645	4.449	E5	11.08
8)L2AR1221-A			1.376					1.376	E5	0.00
9)L2AR1221-B			2.063					2.063	E5	0.00
10)L2AR1221-C			3.596					3.596	E5	0.00
11)L2AR1221-D			1.305					1.305	E5	0.00
12)L2AR1221-E								0.000		-1.00
13)L3AR1232-A			1.211					1.211	E4	0.00
14)L3AR1232-B			2.884					2.884	E5	0.00
15)L3AR1232-C			5.329					5.329	E5	0.00
16)L3AR1232-D			2.700					2.700	E5	0.00
17)L3AR1232-E			1.862					1.862	E5	0.00
18)L3AR1232-F			2.839					2.839	E5	0.00
19)L4AR1242-A			5.382					5.382	E5	0.00
20)L4AR1242-B			1.085					1.085	E6	0.00
21)L4AR1242-C			4.952					4.952	E5	0.00
22)L4AR1242-D			3.370					3.370	E5	0.00
23)L4AR1242-E			6.391					6.391	E5	0.00
24)L4AR1242-F			5.114					5.114	E5	0.00
25)L5AR1248-A			5.914					5.914	E5	0.00
26)L5AR1248-B			4.418					4.418	E5	0.00
27)L5AR1248-C			7.056					7.056	E5	0.00
28)L5AR1248-D			5.962					5.962	E5	0.00
29)L5AR1248-E			5.996					5.996	E5	0.00
30)L5AR1248-F			6.790					6.790	E5	0.00
31)L6AR1254-A			5.517					5.517	E5	0.00
32)L6AR1254-B			7.034					7.034	E5	0.00
33)L6AR1254-C			1.165					1.165	E6	0.00
34)L6AR1254-D			1.213					1.213	E6	0.00
35)L6AR1254-E			9.387					9.387	E5	0.00
36)L6AR1254-F			1.099					1.099	E6	0.00
37)L7AR1260-A	8.932	7.867	7.322	7.101	7.077	6.951	6.423	7.382	E5	10.95
38)L7AR1260-B	1.103	0.941	0.901	0.881	0.879	0.861	0.789	0.908	E6	10.73
39)L7AR1260-C	7.632	6.708	6.616	6.328	6.122	6.088	5.750	6.464	E5	9.44
40)L7AR1260-D	8.867	7.774	7.307	7.070	6.829	6.821	6.434	7.300	E5	11.09
41)L7AR1260-E	1.814	1.600	1.601	1.533	1.541	1.553	1.458	1.586	E6	7.03
42)L7AR1260-F	1.236	1.122	1.076	1.054	1.017	1.024	0.987	1.074	E6	7.83
43)L8AR1262-A			1.361					1.361	E4	0.00
44)L8AR1262-B			1.429					1.429	E4	0.00
45)L8AR1262-C			1.236					1.236	E4	0.00
46)L8AR1262-D			2.961					2.961	E4	0.00
47)L8AR1262-E			8.273					8.273	E3	0.00
48)L8AR1262-F			2.134					2.134	E4	0.00
49)L9AR1268-A			4.745					4.745	E5	0.00

Initial Calibration Summary

Job Number: TC52720 **Sample:** GOO505-ICC505
Account: RFWTXHO Weston Solutions **Lab FileID:** OO30783.D
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

```
50)L9AR1268-B                      5.660                          5.660 E5   0.00
51)L9AR1268-C                      2.126                          2.126 E6   0.00
52)L9AR1268-D                      2.251                          2.251 E6   0.00
53)L9AR1268-E                      1.693                          1.693 E6   0.00
54)L9AR1268-F                      7.305                          7.305 E5   0.00
55)S Decachlorobipheny 1.551 1.408 1.315 1.304 1.265 1.280 1.231 1.336 E7   8.22
---------------------------------------------------------------------------
(#) = Out of Range

          pcbq505.m         Wed Aug 06 09:28:00 2014
```

Initial Calibration Verification

Job Number: TC52720
Account: RFWTXHO Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX
Sample: GOO505-ICV505
Lab FileID: OO30788.D

Evaluate Continuing Calibration Report

```
Signal #1 : C:\msdchem\1\DATA\GOO505\OO30788.D\ECD1A.CH  Vial: 27
Signal #2 : C:\msdchem\1\DATA\GOO505\OO30788.D\ECD2B.CH
Acq On    : 05-Aug-14, 22:47:24                      Operator: almar
Sample    : icv505-200,1016/1260                     Inst    : GCOO
Misc      : op33431,goo505                           Multiplr: 1.00
IntFile Signal #1: events.e     IntFile Signal #2: events2.e

Method       : C:\msdchem\1\METHODS\pcbq505.m (ChemStation Integrator)
Title        : PCB by 608 / 8082.
Last Update  : Wed Aug 06 09:08:42 2014
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  15%     Max. Rel. Area : 150%
```

		Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	S	Tetrachloro-m-xylene		----------NA----------				
2	L1	AR1016-A	200.000	175.139	12.4	82	0.00	2.12- 2.18
3	L1	AR1016-B	200.000	170.306	14.8	83	0.00	2.59- 2.65
4	L1	AR1016-C	200.000	176.584	11.7	84	0.00	2.70- 2.76
5	L1	AR1016-D	200.000	179.311	10.3	85	0.00	2.79- 2.85
6	L1	AR1016-E	200.000	172.900	13.5	81	0.00	3.23- 3.29
7	L1	AR1016-F	200.000	179.666	10.2	85	0.00	3.37- 3.43
8	L2	AR1221-A		----------NA----------				
9	L2	AR1221-B		----------NA----------				
10	L2	AR1221-C		----------NA----------				
11	L2	AR1221-D		----------NA----------				
12	L2	AR1221-E		----------NA----------				
13	L3	AR1232-A		----------NA----------				
14	L3	AR1232-B		----------NA----------				
15	L3	AR1232-C		----------NA----------				
16	L3	AR1232-D		----------NA----------				
17	L3	AR1232-E		----------NA----------				
18	L3	AR1232-F		----------NA----------				
19	L4	AR1242-A		----------NA----------				
20	L4	AR1242-B		----------NA----------				
21	L4	AR1242-C		----------NA----------				
22	L4	AR1242-D		----------NA----------				
23	L4	AR1242-E		----------NA----------				
24	L4	AR1242-F		----------NA----------				
25	L5	AR1248-A		----------NA----------				
26	L5	AR1248-B		----------NA----------				
27	L5	AR1248-C		----------NA----------				
28	L5	AR1248-D		----------NA----------				
29	L5	AR1248-E		----------NA----------				
30	L5	AR1248-F		----------NA----------				
31	L6	AR1254-A		----------NA----------				
32	L6	AR1254-B		----------NA----------				
33	L6	AR1254-C		----------NA----------				
34	L6	AR1254-D		----------NA----------				
35	L6	AR1254-E		----------NA----------				
36	L6	AR1254-F		----------NA----------				
37	L7	AR1260-A	200.000	184.808	7.6	88	0.00	4.85- 4.91
38	L7	AR1260-B	200.000	181.599	9.2	88	0.00	5.19- 5.25
39	L7	AR1260-C	200.000	179.512	10.2	87	0.00	5.77- 5.83
40	L7	AR1260-D	200.000	186.648	6.7	91	0.00	6.08- 6.14
41	L7	AR1260-E	200.000	175.831	12.1	87	0.00	6.46- 6.52

Initial Calibration Verification

Job Number: TC52720 **Sample:** GOO505-ICV505
Account: RFWTXHO Weston Solutions **Lab FileID:** OO30788.D
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

42	L7	AR1260-F	200.000	182.260	8.9	87	0.00	6.85- 6.91
43	L8	AR1262-A		----------NA----------				
44	L8	AR1262-B		----------NA----------				
45	L8	AR1262-C		----------NA----------				
46	L8	AR1262-D		----------NA----------				
47	L8	AR1262-E		----------NA----------				
48	L8	AR1262-F		----------NA----------				
49	L9	AR1268-A		----------NA----------				
50	L9	AR1268-B		----------NA----------				
51	L9	AR1268-C		----------NA----------				
52	L9	AR1268-D		----------NA----------				
53	L9	AR1268-E		----------NA----------				
54	L9	AR1268-F		----------NA----------				
55	S	Decachlorobiphenyl		----------NA----------				

***** Signal #2 *****

1	S	Tetrachloro-m-xylene		----------NA----------				
2	L1	AR1016-A	200.000	177.495	11.3	85	0.00	2.97- 3.03
3	L1	AR1016-B	200.000	183.734	8.1	90	0.00	3.49- 3.55
4	L1	AR1016-C	200.000	192.978	3.5	93	0.00	3.68- 3.74
5	L1	AR1016-D	200.000	191.238	4.4	94	0.00	3.84- 3.90
6	L1	AR1016-E	200.000	182.340	8.8	83	0.00	4.33- 4.39
7	L1	AR1016-F	200.000	175.072	12.5	80	0.00	4.50- 4.56
8	L2	AR1221-A		----------NA----------				
9	L2	AR1221-B		----------NA----------				
10	L2	AR1221-C		----------NA----------				
11	L2	AR1221-D		----------NA----------				
12	L2	AR1221-E		----------NA----------				
13	L3	AR1232-A		----------NA----------				
14	L3	AR1232-B		----------NA----------				
15	L3	AR1232-C		----------NA----------				
16	L3	AR1232-D		----------NA----------				
17	L3	AR1232-E		----------NA----------				
18	L3	AR1232-F		----------NA----------				
19	L4	AR1242-A		----------NA----------				
20	L4	AR1242-B		----------NA----------				
21	L4	AR1242-C		----------NA----------				
22	L4	AR1242-D		----------NA----------				
23	L4	AR1242-E		----------NA----------				
24	L4	AR1242-F		----------NA----------				
25	L5	AR1248-A		----------NA----------				
26	L5	AR1248-B		----------NA----------				
27	L5	AR1248-C		----------NA----------				
28	L5	AR1248-D		----------NA----------				
29	L5	AR1248-E		----------NA----------				
30	L5	AR1248-F		----------NA----------				
31	L6	AR1254-A		----------NA----------				
32	L6	AR1254-B		----------NA----------				
33	L6	AR1254-C		----------NA----------				
34	L6	AR1254-D		----------NA----------				
35	L6	AR1254-E		----------NA----------				
36	L6	AR1254-F		----------NA----------				
37	L7	AR1260-A	200.000	185.972	7.0	94	-0.02	6.04- 6.10
38	L7	AR1260-B	200.000	178.278	10.9	90	-0.02	6.24- 6.30
39	L7	AR1260-C	200.000	188.884	5.6	92	-0.02	6.89- 6.95
40	L7	AR1260-D	200.000	180.310	9.8	90	-0.03	7.35- 7.41
41	L7	AR1260-E	200.000	175.298	12.4	87	-0.03	7.62- 7.68
42	L7	AR1260-F	200.000	179.256	10.4	89	-0.02	8.20- 8.26
43	L8	AR1262-A		----------NA----------				

Initial Calibration Verification

Job Number: TC52720
Account: RFWTXHO Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Sample: GOO505-ICV505
Lab FileID: OO30788.D

```
44 L8  AR1262-B                          ----------NA----------
45 L8  AR1262-C                          ----------NA----------
46 L8  AR1262-D                          ----------NA----------
47 L8  AR1262-E                          ----------NA----------
48 L8  AR1262-F                          ----------NA----------
49 L9  AR1268-A                          ----------NA----------
50 L9  AR1268-B                          ----------NA----------
51 L9  AR1268-C                          ----------NA----------
52 L9  AR1268-D                          ----------NA----------
53 L9  AR1268-E                          ----------NA----------
54 L9  AR1268-F                          ----------NA----------
55 S   Decachlorobiphenyl                ----------NA----------
--------------------------------------------------------------------------
--------------------------------------------------------------------------

   (#) = Out of Range              SPCC's out = 0  CCC's out = 0
    OO30783.D  pcbq505.m        Wed Aug 06 09:27:28 2014
```

8.9.21

8

Continuing Calibration Summary

Job Number: TC52720
Account: RFWTXHO Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX
Sample: GOO507-CC505
Lab FileID: OO30844.D

Evaluate Continuing Calibration Report

```
Signal #1 : C:\msdchem\1\DATA\GOO507\OO30844.D\ECD1A.CH  Vial: 16
Signal #2 : C:\msdchem\1\DATA\GOO507\OO30844.D\ECD2B.CH
Acq On    : 07-Aug-14, 14:56:50                      Operator: almar
Sample    : cc505-300,1016/1260                      Inst    : GCOO
Misc      : op33462,goo507                           Multiplr: 1.00
IntFile Signal #1: events.e     IntFile Signal #2: events2.e

Method       : C:\msdchem\1\METHODS\pcbq505.m (ChemStation Integrator)
Title        : PCB by 608 / 8082.
Last Update  : Wed Aug 06 09:08:42 2014
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  15%     Max. Rel. Area : 150%
```

		Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	S	Tetrachloro-m-xylene	60.000	57.639	3.9	98	0.00	1.42- 1.48
2	L1	AR1016-A	300.000	304.634	-1.5	104	0.00	2.12- 2.18
3	L1	AR1016-B	300.000	302.735	-0.9	103	0.00	2.59- 2.65
4	L1	AR1016-C	300.000	302.978	-1.0	103	0.00	2.70- 2.76
5	L1	AR1016-D	300.000	303.773	-1.3	103	0.00	2.79- 2.85
6	L1	AR1016-E	300.000	302.388	-0.8	103	0.00	3.23- 3.29
7	L1	AR1016-F	300.000	298.600	0.5	102	0.00	3.37- 3.43
8	L2	AR1221-A		----------NA----------				
9	L2	AR1221-B		----------NA----------				
10	L2	AR1221-C		----------NA----------				
11	L2	AR1221-D		----------NA----------				
12	L2	AR1221-E		----------NA----------				
13	L3	AR1232-A		----------NA----------				
14	L3	AR1232-B		----------NA----------				
15	L3	AR1232-C		----------NA----------				
16	L3	AR1232-D		----------NA----------				
17	L3	AR1232-E		----------NA----------				
18	L3	AR1232-F		----------NA----------				
19	L4	AR1242-A		----------NA----------				
20	L4	AR1242-B		----------NA----------				
21	L4	AR1242-C		----------NA----------				
22	L4	AR1242-D		----------NA----------				
23	L4	AR1242-E		----------NA----------				
24	L4	AR1242-F		----------NA----------				
25	L5	AR1248-A		----------NA----------				
26	L5	AR1248-B		----------NA----------				
27	L5	AR1248-C		----------NA----------				
28	L5	AR1248-D		----------NA----------				
29	L5	AR1248-E		----------NA----------				
30	L5	AR1248-F		----------NA----------				
31	L6	AR1254-A		----------NA----------				
32	L6	AR1254-B		----------NA----------				
33	L6	AR1254-C		----------NA----------				
34	L6	AR1254-D		----------NA----------				
35	L6	AR1254-E		----------NA----------				
36	L6	AR1254-F		----------NA----------				
37	L7	AR1260-A	300.000	290.385	3.2	99	0.00	4.85- 4.91
38	L7	AR1260-B	300.000	286.605	4.5	98	0.00	5.19- 5.25
39	L7	AR1260-C	300.000	301.768	-0.6	103	0.00	5.77- 5.83
40	L7	AR1260-D	300.000	289.405	3.5	99	-0.01	6.08- 6.14
41	L7	AR1260-E	300.000	294.291	1.9	99	-0.01	6.46- 6.52

Continuing Calibration Summary

Job Number: TC52720 **Sample:** GOO507-CC505
Account: RFWTXHO Weston Solutions **Lab FileID:** OO30844.D
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

42	L7	AR1260-F	300.000	301.775	-0.6	103	0.00	6.85- 6.91
43	L8	AR1262-A		----------NA----------				
44	L8	AR1262-B		----------NA----------				
45	L8	AR1262-C		----------NA----------				
46	L8	AR1262-D		----------NA----------				
47	L8	AR1262-E		----------NA----------				
48	L8	AR1262-F		----------NA----------				
49	L9	AR1268-A		----------NA----------				
50	L9	AR1268-B		----------NA----------				
51	L9	AR1268-C		----------NA----------				
52	L9	AR1268-D		----------NA----------				
53	L9	AR1268-E		----------NA----------				
54	L9	AR1268-F		----------NA----------				
55	S	Decachlorobiphenyl	60.000	59.197	1.3	100	-0.01	8.58- 8.64

***** Signal #2 *****

1	S	Tetrachloro-m-xylene	60.000	61.657	-2.8	104	0.00	1.81- 1.87
2	L1	AR1016-A	300.000	302.000	-0.7	103	0.00	2.97- 3.03
3	L1	AR1016-B	300.000	300.528	-0.2	103	0.00	3.49- 3.55
4	L1	AR1016-C	300.000	290.945	3.0	102	0.00	3.68- 3.74
5	L1	AR1016-D	300.000	286.293	4.6	102	0.00	3.84- 3.90
6	L1	AR1016-E	300.000	300.884	-0.3	102	0.00	4.33- 4.39
7	L1	AR1016-F	300.000	311.056	-3.7	105	0.00	4.50- 4.56
8	L2	AR1221-A		----------NA----------				
9	L2	AR1221-B		----------NA----------				
10	L2	AR1221-C		----------NA----------				
11	L2	AR1221-D		----------NA----------				
12	L2	AR1221-E		----------NA----------				
13	L3	AR1232-A		----------NA----------				
14	L3	AR1232-B		----------NA----------				
15	L3	AR1232-C		----------NA----------				
16	L3	AR1232-D		----------NA----------				
17	L3	AR1232-E		----------NA----------				
18	L3	AR1232-F		----------NA----------				
19	L4	AR1242-A		----------NA----------				
20	L4	AR1242-B		----------NA----------				
21	L4	AR1242-C		----------NA----------				
22	L4	AR1242-D		----------NA----------				
23	L4	AR1242-E		----------NA----------				
24	L4	AR1242-F		----------NA----------				
25	L5	AR1248-A		----------NA----------				
26	L5	AR1248-B		----------NA----------				
27	L5	AR1248-C		----------NA----------				
28	L5	AR1248-D		----------NA----------				
29	L5	AR1248-E		----------NA----------				
30	L5	AR1248-F		----------NA----------				
31	L6	AR1254-A		----------NA----------				
32	L6	AR1254-B		----------NA----------				
33	L6	AR1254-C		----------NA----------				
34	L6	AR1254-D		----------NA----------				
35	L6	AR1254-E		----------NA----------				
36	L6	AR1254-F		----------NA----------				
37	L7	AR1260-A	300.000	297.162	0.9	103	-0.02	6.04- 6.10
38	L7	AR1260-B	300.000	297.409	0.9	102	-0.03	6.24- 6.30
39	L7	AR1260-C	300.000	293.177	2.3	100	-0.03	6.89- 6.95
40	L7	AR1260-D	300.000	290.058	3.3	100	-0.03	7.35- 7.41
41	L7	AR1260-E	300.000	300.795	-0.3	104	-0.03	7.62- 7.68
42	L7	AR1260-F	300.000	296.583	1.1	101	-0.03	8.20- 8.26
43	L8	AR1262-A		----------NA----------				

Continuing Calibration Summary

Job Number: TC52720
Account: RFWTXHO Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Sample: GOO507-CC505
Lab FileID: OO30844.D

```
44 L8  AR1262-B                          ----------NA----------
45 L8  AR1262-C                          ----------NA----------
46 L8  AR1262-D                          ----------NA----------
47 L8  AR1262-E                          ----------NA----------
48 L8  AR1262-F                          ----------NA----------
49 L9  AR1268-A                          ----------NA----------
50 L9  AR1268-B                          ----------NA----------
51 L9  AR1268-C                          ----------NA----------
52 L9  AR1268-D                          ----------NA----------
53 L9  AR1268-E                          ----------NA----------
54 L9  AR1268-F                          ----------NA----------
55 S   Decachlorobiphenyl      60.000  59.356      1.1  101   0.00    9.79- 9.85
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------

   (#) = Out of Range              SPCC's out = 0  CCC's out = 0
    OO30784.D  pcbq505.m        Thu Aug 07 15:15:50 2014
```

8.9.22

8

Continuing Calibration Summary

Job Number: TC52720
Account: RFWTXHO Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX
Sample: GOO507-ECC505
Lab FileID: OO30854.D

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\GOO507\OO30854.D\ECD1A.CH  Vial: 26
Acq On    : 07-Aug-14, 18:17:24                          Operator: almar
Sample    : ecc505-200,1016/1260                         Inst    : GCOO
Misc      : op33467,goo507                               Multiplr: 1.00
IntFile   : events.e

Data File : C:\msdchem\1\DATA\GOO507\OO30854.D\ECD2B.CH  Vial: 0
Acq On    : 07-Aug-14, 18:17:24                          Operator: almar
Sample    : cc505-200,1016/1260                          Inst    : GCOO
Misc      : op33467,goo507                               Multiplr: 1.00
IntFile   : events2.e

Method       : C:\msdchem\1\METHODS\pcbq505.m (ChemStation Integrator)
Title        : PCB by 608 / 8082.
Last Update  : Wed Aug 06 09:08:42 2014
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  15%     Max. Rel. Area : 150%
```

		Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	S	Tetrachloro-m-xylene	40.000	38.209	4.5	94	0.00	1.42- 1.48
2	L1	AR1016-A	200.000	200.571	-0.3	94	0.00	2.12- 2.18
3	L1	AR1016-B	200.000	194.583	2.7	95	0.00	2.59- 2.65
4	L1	AR1016-C	200.000	195.441	2.3	93	0.00	2.70- 2.76
5	L1	AR1016-D	200.000	191.638	4.2	91	0.00	2.79- 2.85
6	L1	AR1016-E	200.000	190.473	4.8	89	0.00	3.23- 3.29
7	L1	AR1016-F	200.000	191.036	4.5	90	0.00	3.37- 3.43
8	L2	AR1221-A		----------NA----------				
9	L2	AR1221-B		----------NA----------				
10	L2	AR1221-C		----------NA----------				
11	L2	AR1221-D		----------NA----------				
12	L2	AR1221-E		----------NA----------				
13	L3	AR1232-A		----------NA----------				
14	L3	AR1232-B		----------NA----------				
15	L3	AR1232-C		----------NA----------				
16	L3	AR1232-D		----------NA----------				
17	L3	AR1232-E		----------NA----------				
18	L3	AR1232-F		----------NA----------				
19	L4	AR1242-A		----------NA----------				
20	L4	AR1242-B		----------NA----------				
21	L4	AR1242-C		----------NA----------				
22	L4	AR1242-D		----------NA----------				
23	L4	AR1242-E		----------NA----------				
24	L4	AR1242-F		----------NA----------				
25	L5	AR1248-A		----------NA----------				
26	L5	AR1248-B		----------NA----------				
27	L5	AR1248-C		----------NA----------				
28	L5	AR1248-D		----------NA----------				
29	L5	AR1248-E		----------NA----------				
30	L5	AR1248-F		----------NA----------				
31	L6	AR1254-A		----------NA----------				
32	L6	AR1254-B		----------NA----------				
33	L6	AR1254-C		----------NA----------				
34	L6	AR1254-D		----------NA----------				
35	L6	AR1254-E		----------NA----------				
36	L6	AR1254-F		----------NA----------				

Continuing Calibration Summary

Job Number: TC52720 **Sample:** GOO507-ECC505
Account: RFWTXHO Weston Solutions **Lab FileID:** OO30854.D
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

37	L7	AR1260-A	200.000	208.885	-4.4	99	0.00	4.85- 4.91
38	L7	AR1260-B	200.000	202.164	-1.1	98	0.00	5.19- 5.25
39	L7	AR1260-C	200.000	214.840	-7.4	105	0.00	5.77- 5.83
40	L7	AR1260-D	200.000	205.055	-2.5	100	0.00	6.08- 6.14
41	L7	AR1260-E	200.000	203.263	-1.6	101	0.00	6.46- 6.52
42	L7	AR1260-F	200.000	209.481	-4.7	100	0.00	6.85- 6.91
43	L8	AR1262-A		----------NA----------				
44	L8	AR1262-B		----------NA----------				
45	L8	AR1262-C		----------NA----------				
46	L8	AR1262-D		----------NA----------				
47	L8	AR1262-E		----------NA----------				
48	L8	AR1262-F		----------NA----------				
49	L9	AR1268-A		----------NA----------				
50	L9	AR1268-B		----------NA----------				
51	L9	AR1268-C		----------NA----------				
52	L9	AR1268-D		----------NA----------				
53	L9	AR1268-E		----------NA----------				
54	L9	AR1268-F		----------NA----------				
55	S	Decachlorobiphenyl	40.000	40.306	-0.8	101	-0.01	8.58- 8.64

***** Signal #2 *****

1	S	Tetrachloro-m-xylene	40.000	40.679	-1.7	101	0.00	1.81- 1.87
2	L1	AR1016-A	200.000	201.214	-0.6	96	0.00	2.97- 3.03
3	L1	AR1016-B	200.000	205.278	-2.6	101	0.00	3.49- 3.55
4	L1	AR1016-C	200.000	209.275	-4.6	100	0.00	3.68- 3.74
5	L1	AR1016-D	200.000	204.096	-2.0	100	0.00	3.84- 3.90
6	L1	AR1016-E	200.000	191.997	4.0	87	0.00	4.33- 4.39
7	L1	AR1016-F	200.000	194.014	3.0	89	0.00	4.50- 4.56
8	L2	AR1221-A		----------NA----------				
9	L2	AR1221-B		----------NA----------				
10	L2	AR1221-C		----------NA----------				
11	L2	AR1221-D		----------NA----------				
12	L2	AR1221-E		----------NA----------				
13	L3	AR1232-A		----------NA----------				
14	L3	AR1232-B		----------NA----------				
15	L3	AR1232-C		----------NA----------				
16	L3	AR1232-D		----------NA----------				
17	L3	AR1232-E		----------NA----------				
18	L3	AR1232-F		----------NA----------				
19	L4	AR1242-A		----------NA----------				
20	L4	AR1242-B		----------NA----------				
21	L4	AR1242-C		----------NA----------				
22	L4	AR1242-D		----------NA----------				
23	L4	AR1242-E		----------NA----------				
24	L4	AR1242-F		----------NA----------				
25	L5	AR1248-A		----------NA----------				
26	L5	AR1248-B		----------NA----------				
27	L5	AR1248-C		----------NA----------				
28	L5	AR1248-D		----------NA----------				
29	L5	AR1248-E		----------NA----------				
30	L5	AR1248-F		----------NA----------				
31	L6	AR1254-A		----------NA----------				
32	L6	AR1254-B		----------NA----------				
33	L6	AR1254-C		----------NA----------				
34	L6	AR1254-D		----------NA----------				
35	L6	AR1254-E		----------NA----------				
36	L6	AR1254-F		----------NA----------				
37	L7	AR1260-A	200.000	202.510	-1.3	102	-0.03	6.04- 6.10
38	L7	AR1260-B	200.000	202.172	-1.1	102	-0.03	6.24- 6.30

Continuing Calibration Summary

Job Number: TC52720 **Sample:** GOO507-ECC505
Account: RFWTXHO Weston Solutions **Lab FileID:** OO30854.D
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

39	L7	AR1260-C	200.000	204.946	-2.5	100	-0.03	6.89- 6.95
40	L7	AR1260-D	200.000	202.441	-1.2	101	-0.03	7.35- 7.41
41	L7	AR1260-E	200.000	197.831	1.1	98	-0.03	7.62- 7.68
42	L7	AR1260-F	200.000	201.929	-1.0	101	-0.03	8.20- 8.26
43	L8	AR1262-A	----------NA----------					
44	L8	AR1262-B	----------NA----------					
45	L8	AR1262-C	----------NA----------					
46	L8	AR1262-D	----------NA----------					
47	L8	AR1262-E	----------NA----------					
48	L8	AR1262-F	----------NA----------					
49	L9	AR1268-A	----------NA----------					
50	L9	AR1268-B	----------NA----------					
51	L9	AR1268-C	----------NA----------					
52	L9	AR1268-D	----------NA----------					
53	L9	AR1268-E	----------NA----------					
54	L9	AR1268-F	----------NA----------					
55	S	Decachlorobiphenyl	40.000	40.074	-0.2	102	0.00	9.79- 9.85

(#) = Out of Range SPCC's out = 0 CCC's out = 0
OO30783.D pcbq505.m Fri Aug 08 11:21:05 2014

8.9.23

8

Continuing Calibration Summary

Job Number: TC52720 **Sample:** GOO508-CC505
Account: RFWTXHO Weston Solutions **Lab FileID:** OO30861.D
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Evaluate Continuing Calibration Report

```
Signal #1 : C:\msdchem\1\DATA\GOO508\OO30861.D\ECD1A.CH  Vial: 5
Signal #2 : C:\msdchem\1\DATA\GOO508\OO30861.D\ECD2B.CH
Acq On    : 08-Aug-14, 10:12:40                      Operator: almar
Sample    : cc505-200,1016/1260                      Inst    : GCOO
Misc      : op33462,goo508                           Multiplr: 1.00
IntFile Signal #1: events.e     IntFile Signal #2: events2.e

Method       : C:\msdchem\1\METHODS\pcbq505.m (ChemStation Integrator)
Title        : PCB by 608 / 8082.
Last Update  : Wed Aug 06 09:08:42 2014
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  15%     Max. Rel. Area : 150%
```

		Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	S	Tetrachloro-m-xylene	40.000	38.606	3.5	95	0.00	1.42- 1.48
2	L1	AR1016-A	200.000	194.677	2.7	91	0.00	2.12- 2.18
3	L1	AR1016-B	200.000	193.542	3.2	94	0.00	2.59- 2.65
4	L1	AR1016-C	200.000	193.692	3.2	93	0.00	2.70- 2.76
5	L1	AR1016-D	200.000	192.342	3.8	92	0.00	2.79- 2.85
6	L1	AR1016-E	200.000	191.671	4.2	90	0.00	3.23- 3.29
7	L1	AR1016-F	200.000	191.631	4.2	91	0.00	3.37- 3.43
8	L2	AR1221-A		----------NA----------				
9	L2	AR1221-B		----------NA----------				
10	L2	AR1221-C		----------NA----------				
11	L2	AR1221-D		----------NA----------				
12	L2	AR1221-E		----------NA----------				
13	L3	AR1232-A		----------NA----------				
14	L3	AR1232-B		----------NA----------				
15	L3	AR1232-C		----------NA----------				
16	L3	AR1232-D		----------NA----------				
17	L3	AR1232-E		----------NA----------				
18	L3	AR1232-F		----------NA----------				
19	L4	AR1242-A		----------NA----------				
20	L4	AR1242-B		----------NA----------				
21	L4	AR1242-C		----------NA----------				
22	L4	AR1242-D		----------NA----------				
23	L4	AR1242-E		----------NA----------				
24	L4	AR1242-F		----------NA----------				
25	L5	AR1248-A		----------NA----------				
26	L5	AR1248-B		----------NA----------				
27	L5	AR1248-C		----------NA----------				
28	L5	AR1248-D		----------NA----------				
29	L5	AR1248-E		----------NA----------				
30	L5	AR1248-F		----------NA----------				
31	L6	AR1254-A		----------NA----------				
32	L6	AR1254-B		----------NA----------				
33	L6	AR1254-C		----------NA----------				
34	L6	AR1254-D		----------NA----------				
35	L6	AR1254-E		----------NA----------				
36	L6	AR1254-F		----------NA----------				
37	L7	AR1260-A	200.000	207.618	-3.8	98	0.00	4.85- 4.91
38	L7	AR1260-B	200.000	201.161	-0.6	98	0.00	5.19- 5.25
39	L7	AR1260-C	200.000	213.416	-6.7	104	0.00	5.77- 5.83
40	L7	AR1260-D	200.000	203.678	-1.8	100	0.00	6.08- 6.14
41	L7	AR1260-E	200.000	204.375	-2.2	101	0.00	6.46- 6.52

Continuing Calibration Summary

Job Number: TC52720 **Sample:** GOO508-CC505
Account: RFWTXHO Weston Solutions **Lab FileID:** OO30861.D
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

42	L7	AR1260-F	200.000	207.191	-3.6	99	0.00	6.85- 6.91
43	L8	AR1262-A		----------NA----------				
44	L8	AR1262-B		----------NA----------				
45	L8	AR1262-C		----------NA----------				
46	L8	AR1262-D		----------NA----------				
47	L8	AR1262-E		----------NA----------				
48	L8	AR1262-F		----------NA----------				
49	L9	AR1268-A		----------NA----------				
50	L9	AR1268-B		----------NA----------				
51	L9	AR1268-C		----------NA----------				
52	L9	AR1268-D		----------NA----------				
53	L9	AR1268-E		----------NA----------				
54	L9	AR1268-F		----------NA----------				
55	S	Decachlorobiphenyl	40.000	40.261	-0.7	101	-0.01	8.58- 8.64

***** Signal #2 *****

1	S	Tetrachloro-m-xylene	40.000	39.790	0.5	98	0.00	1.81- 1.87
2	L1	AR1016-A	200.000	195.647	2.2	94	0.00	2.97- 3.03
3	L1	AR1016-B	200.000	195.537	2.2	96	0.00	3.49- 3.55
4	L1	AR1016-C	200.000	195.225	2.4	94	0.00	3.68- 3.74
5	L1	AR1016-D	200.000	190.615	4.7	93	0.00	3.84- 3.90
6	L1	AR1016-E	200.000	194.224	2.9	88	0.00	4.33- 4.39
7	L1	AR1016-F	200.000	201.328	-0.7	92	0.00	4.50- 4.56
8	L2	AR1221-A		----------NA----------				
9	L2	AR1221-B		----------NA----------				
10	L2	AR1221-C		----------NA----------				
11	L2	AR1221-D		----------NA----------				
12	L2	AR1221-E		----------NA----------				
13	L3	AR1232-A		----------NA----------				
14	L3	AR1232-B		----------NA----------				
15	L3	AR1232-C		----------NA----------				
16	L3	AR1232-D		----------NA----------				
17	L3	AR1232-E		----------NA----------				
18	L3	AR1232-F		----------NA----------				
19	L4	AR1242-A		----------NA----------				
20	L4	AR1242-B		----------NA----------				
21	L4	AR1242-C		----------NA----------				
22	L4	AR1242-D		----------NA----------				
23	L4	AR1242-E		----------NA----------				
24	L4	AR1242-F		----------NA----------				
25	L5	AR1248-A		----------NA----------				
26	L5	AR1248-B		----------NA----------				
27	L5	AR1248-C		----------NA----------				
28	L5	AR1248-D		----------NA----------				
29	L5	AR1248-E		----------NA----------				
30	L5	AR1248-F		----------NA----------				
31	L6	AR1254-A		----------NA----------				
32	L6	AR1254-B		----------NA----------				
33	L6	AR1254-C		----------NA----------				
34	L6	AR1254-D		----------NA----------				
35	L6	AR1254-E		----------NA----------				
36	L6	AR1254-F		----------NA----------				
37	L7	AR1260-A	200.000	200.685	-0.3	101	-0.03	6.04- 6.10
38	L7	AR1260-B	200.000	201.109	-0.6	101	-0.03	6.24- 6.30
39	L7	AR1260-C	200.000	209.939	-5.0	103	-0.03	6.89- 6.95
40	L7	AR1260-D	200.000	207.616	-3.8	104	-0.03	7.35- 7.41
41	L7	AR1260-E	200.000	208.867	-4.4	103	-0.03	7.62- 7.68
42	L7	AR1260-F	200.000	207.107	-3.6	103	-0.03	8.20- 8.26
43	L8	AR1262-A		----------NA----------				

Continuing Calibration Summary

Job Number: TC52720
Account: RFWTXHO Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Sample: GOO508-CC505
Lab FileID: OO30861.D

```
44 L8  AR1262-B                          ----------NA----------
45 L8  AR1262-C                          ----------NA----------
46 L8  AR1262-D                          ----------NA----------
47 L8  AR1262-E                          ----------NA----------
48 L8  AR1262-F                          ----------NA----------
49 L9  AR1268-A                          ----------NA----------
50 L9  AR1268-B                          ----------NA----------
51 L9  AR1268-C                          ----------NA----------
52 L9  AR1268-D                          ----------NA----------
53 L9  AR1268-E                          ----------NA----------
54 L9  AR1268-F                          ----------NA----------
55 S   Decachlorobiphenyl      40.000  40.719     -1.8  103   0.00    9.79- 9.85
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------

   (#) = Out of Range              SPCC's out = 0  CCC's out = 0
    OO30783.D  pcbq505.m        Mon Aug 11 14:53:28 2014
```

8.9.24

8

Continuing Calibration Summary

Job Number: TC52720 **Sample:** GOO508-CC505
Account: RFWTXHO Weston Solutions **Lab FileID:** OO30862.D
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Evaluate Continuing Calibration Report

```
Signal #1 : C:\msdchem\1\DATA\GOO508\OO30862.D\ECD1A.CH  Vial: 6
Signal #2 : C:\msdchem\1\DATA\GOO508\OO30862.D\ECD2B.CH
Acq On    : 08-Aug-14, 10:33:01                      Operator: almar
Sample    : cc505-200,1221/1254                      Inst    : GCOO
Misc      : op33462,goo508                           Multiplr: 1.00
IntFile Signal #1: events.e     IntFile Signal #2: events2.e

Method       : C:\msdchem\1\METHODS\pcbq505.m (ChemStation Integrator)
Title        : PCB by 608 / 8082.
Last Update  : Wed Aug 06 09:08:42 2014
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  15%     Max. Rel. Area : 150%
```

		Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	S	Tetrachloro-m-xylene	40.000	41.334	-3.3	102	0.00	1.42- 1.48
2	L1	AR1016-A		----------NA----------				
3	L1	AR1016-B		----------NA----------				
4	L1	AR1016-C		----------NA----------				
5	L1	AR1016-D		----------NA----------				
6	L1	AR1016-E		----------NA----------				
7	L1	AR1016-F		----------NA----------				
8	L2	AR1221-A	200.000	201.005	-0.5	101	0.00	1.02- 1.08
9	L2	AR1221-B	200.000	206.881	-3.4	103	0.00	1.59- 1.65
10	L2	AR1221-C	200.000	205.446	-2.7	103	0.00	1.68- 1.74
11	L2	AR1221-D	200.000	201.111	-0.6	101	0.00	1.73- 1.79
12	L2	AR1221-E		----------NA----------				
13	L3	AR1232-A		----------NA----------				
14	L3	AR1232-B		----------NA----------				
15	L3	AR1232-C		----------NA----------				
16	L3	AR1232-D		----------NA----------				
17	L3	AR1232-E		----------NA----------				
18	L3	AR1232-F		----------NA----------				
19	L4	AR1242-A		----------NA----------				
20	L4	AR1242-B		----------NA----------				
21	L4	AR1242-C		----------NA----------				
22	L4	AR1242-D		----------NA----------				
23	L4	AR1242-E		----------NA----------				
24	L4	AR1242-F		----------NA----------				
25	L5	AR1248-A		----------NA----------				
26	L5	AR1248-B		----------NA----------				
27	L5	AR1248-C		----------NA----------				
28	L5	AR1248-D		----------NA----------				
29	L5	AR1248-E		----------NA----------				
30	L5	AR1248-F		----------NA----------				
31	L6	AR1254-A	200.000	200.331	-0.2	100	0.00	3.77- 3.83
32	L6	AR1254-B	200.000	201.968	-1.0	101	0.00	4.06- 4.12
33	L6	AR1254-C	200.000	200.220	-0.1	100	0.00	4.53- 4.59
34	L6	AR1254-D	200.000	201.136	-0.6	101	0.00	4.87- 4.93
35	L6	AR1254-E	200.000	200.866	-0.4	100	0.00	5.21- 5.27
36	L6	AR1254-F	200.000	200.888	-0.4	100	0.00	5.55- 5.61
37	L7	AR1260-A		----------NA----------				
38	L7	AR1260-B		----------NA----------				
39	L7	AR1260-C		----------NA----------				
40	L7	AR1260-D		----------NA----------				
41	L7	AR1260-E		----------NA----------				

Continuing Calibration Summary

Job Number: TC52720 **Sample:** GOO508-CC505
Account: RFWTXHO Weston Solutions **Lab FileID:** OO30862.D
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

42	L7	AR1260-F			----------NA----------			
43	L8	AR1262-A			----------NA----------			
44	L8	AR1262-B			----------NA----------			
45	L8	AR1262-C			----------NA----------			
46	L8	AR1262-D			----------NA----------			
47	L8	AR1262-E			----------NA----------			
48	L8	AR1262-F			----------NA----------			
49	L9	AR1268-A			----------NA----------			
50	L9	AR1268-B			----------NA----------			
51	L9	AR1268-C			----------NA----------			
52	L9	AR1268-D			----------NA----------			
53	L9	AR1268-E			----------NA----------			
54	L9	AR1268-F			----------NA----------			
55	S	Decachlorobiphenyl	40.000	43.188	-8.0	108	0.00	8.58- 8.64
*****		Signal #2 *****						
1	S	Tetrachloro-m-xylene	40.000	41.947	-4.9	104	0.00	1.81- 1.87
2	L1	AR1016-A			----------NA----------			
3	L1	AR1016-B			----------NA----------			
4	L1	AR1016-C			----------NA----------			
5	L1	AR1016-D			----------NA----------			
6	L1	AR1016-E			----------NA----------			
7	L1	AR1016-F			----------NA----------			
8	L2	AR1221-A	200.000	201.517	-0.8	101	0.00	1.47- 1.53
9	L2	AR1221-B	200.000	208.071	-4.0	104	0.00	2.22- 2.28
10	L2	AR1221-C	200.000	205.386	-2.7	103	0.00	2.46- 2.52
11	L2	AR1221-D	200.000	197.863	1.1	99	0.00	2.97- 3.03
12	L2	AR1221-E			----------NA----------			
13	L3	AR1232-A			----------NA----------			
14	L3	AR1232-B			----------NA----------			
15	L3	AR1232-C			----------NA----------			
16	L3	AR1232-D			----------NA----------			
17	L3	AR1232-E			----------NA----------			
18	L3	AR1232-F			----------NA----------			
19	L4	AR1242-A			----------NA----------			
20	L4	AR1242-B			----------NA----------			
21	L4	AR1242-C			----------NA----------			
22	L4	AR1242-D			----------NA----------			
23	L4	AR1242-E			----------NA----------			
24	L4	AR1242-F			----------NA----------			
25	L5	AR1248-A			----------NA----------			
26	L5	AR1248-B			----------NA----------			
27	L5	AR1248-C			----------NA----------			
28	L5	AR1248-D			----------NA----------			
29	L5	AR1248-E			----------NA----------			
30	L5	AR1248-F			----------NA----------			
31	L6	AR1254-A	200.000	204.553	-2.3	102	-0.02	4.93- 4.99
32	L6	AR1254-B	200.000	203.614	-1.8	102	-0.02	5.09- 5.15
33	L6	AR1254-C	200.000	198.755	0.6	99	-0.03	5.77- 5.83
34	L6	AR1254-D	200.000	206.173	-3.1	103	-0.02	6.01- 6.07
35	L6	AR1254-E	200.000	214.392	-7.2	107	-0.03	6.55- 6.61
36	L6	AR1254-F	200.000	210.198	-5.1	105	-0.03	6.79- 6.85
37	L7	AR1260-A			----------NA----------			
38	L7	AR1260-B			----------NA----------			
39	L7	AR1260-C			----------NA----------			
40	L7	AR1260-D			----------NA----------			
41	L7	AR1260-E			----------NA----------			
42	L7	AR1260-F			----------NA----------			
43	L8	AR1262-A			----------NA----------			

Continuing Calibration Summary

Job Number: TC52720
Account: RFWTXHO Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Sample: GOO508-CC505
Lab FileID: OO30862.D

```
44 L8  AR1262-B                          ----------NA----------
45 L8  AR1262-C                          ----------NA----------
46 L8  AR1262-D                          ----------NA----------
47 L8  AR1262-E                          ----------NA----------
48 L8  AR1262-F                          ----------NA----------
49 L9  AR1268-A                          ----------NA----------
50 L9  AR1268-B                          ----------NA----------
51 L9  AR1268-C                          ----------NA----------
52 L9  AR1268-D                          ----------NA----------
53 L9  AR1268-E                          ----------NA----------
54 L9  AR1268-F                          ----------NA----------
55 S   Decachlorobiphenyl      40.000  43.917     -9.8  112   0.00    9.79- 9.85
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------

   (#) = Out of Range              SPCC's out = 0  CCC's out = 0
    OO30783.D  pcbq505.m        Mon Aug 11 14:53:30 2014
```

8.9.25

8

Continuing Calibration Summary

Job Number: TC52720 **Sample:** GOO508-CC505
Account: RFWTXHO Weston Solutions **Lab FileID:** OO30863.D
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Evaluate Continuing Calibration Report

```
Signal #1 : C:\msdchem\1\DATA\GOO508\OO30863.D\ECD1A.CH  Vial: 7
Signal #2 : C:\msdchem\1\DATA\GOO508\OO30863.D\ECD2B.CH
Acq On    : 08-Aug-14, 10:53:14                      Operator: almar
Sample    : cc505-200,1232/1268                      Inst    : GCOO
Misc      : op33462,goo508                           Multiplr: 1.00
IntFile Signal #1: events.e     IntFile Signal #2: events2.e

Method       : C:\msdchem\1\METHODS\pcbq505.m (ChemStation Integrator)
Title        : PCB by 608 / 8082.
Last Update  : Wed Aug 06 09:08:42 2014
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  15%     Max. Rel. Area : 150%
```

		Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	S	Tetrachloro-m-xylene	40.000	43.508	-8.8	107	0.00	1.42- 1.48
2	L1	AR1016-A		----------NA----------				
3	L1	AR1016-B		----------NA----------				
4	L1	AR1016-C		----------NA----------				
5	L1	AR1016-D		----------NA----------				
6	L1	AR1016-E		----------NA----------				
7	L1	AR1016-F		----------NA----------				
8	L2	AR1221-A		----------NA----------				
9	L2	AR1221-B		----------NA----------				
10	L2	AR1221-C		----------NA----------				
11	L2	AR1221-D		----------NA----------				
12	L2	AR1221-E		----------NA----------				
13	L3	AR1232-A	200.000	203.736	-1.9	102	0.00	1.73- 1.79
14	L3	AR1232-B	200.000	209.888	-4.9	105	0.00	2.12- 2.18
15	L3	AR1232-C	200.000	204.192	-2.1	102	0.00	2.59- 2.65
16	L3	AR1232-D	200.000	210.150	-5.1	105	0.00	2.70- 2.76
17	L3	AR1232-E	200.000	211.953	-6.0	106	0.00	2.79- 2.85
18	L3	AR1232-F	200.000	213.947	-7.0	107	0.00	3.37- 3.43
19	L4	AR1242-A		----------NA----------				
20	L4	AR1242-B		----------NA----------				
21	L4	AR1242-C		----------NA----------				
22	L4	AR1242-D		----------NA----------				
23	L4	AR1242-E		----------NA----------				
24	L4	AR1242-F		----------NA----------				
25	L5	AR1248-A		----------NA----------				
26	L5	AR1248-B		----------NA----------				
27	L5	AR1248-C		----------NA----------				
28	L5	AR1248-D		----------NA----------				
29	L5	AR1248-E		----------NA----------				
30	L5	AR1248-F		----------NA----------				
31	L6	AR1254-A		----------NA----------				
32	L6	AR1254-B		----------NA----------				
33	L6	AR1254-C		----------NA----------				
34	L6	AR1254-D		----------NA----------				
35	L6	AR1254-E		----------NA----------				
36	L6	AR1254-F		----------NA----------				
37	L7	AR1260-A		----------NA----------				
38	L7	AR1260-B		----------NA----------				
39	L7	AR1260-C		----------NA----------				
40	L7	AR1260-D		----------NA----------				
41	L7	AR1260-E		----------NA----------				

Continuing Calibration Summary

Job Number: TC52720 **Sample:** GOO508-CC505
Account: RFWTXHO Weston Solutions **Lab FileID:** OO30863.D
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

42	L7	AR1260-F			----------NA----------			
43	L8	AR1262-A			----------NA----------			
44	L8	AR1262-B			----------NA----------			
45	L8	AR1262-C			----------NA----------			
46	L8	AR1262-D			----------NA----------			
47	L8	AR1262-E			----------NA----------			
48	L8	AR1262-F			----------NA----------			
49	L9	AR1268-A	200.000	192.369	3.8	96	-0.01	5.78- 5.84
50	L9	AR1268-B	200.000	199.749	0.1	100	0.00	6.20- 6.26
51	L9	AR1268-C	200.000	199.179	0.4	100	-0.01	6.97- 7.03
52	L9	AR1268-D	200.000	203.288	-1.6	102	-0.01	7.03- 7.09
53	L9	AR1268-E	200.000	203.029	-1.5	102	-0.01	7.41- 7.47
54	L9	AR1268-F	200.000	207.076	-3.5	104	0.00	7.70- 7.76
55	S	Decachlorobiphenyl	40.000	57.092	-42.7#	143	-0.01	8.58- 8.64

***** Signal #2 *****

1	S	Tetrachloro-m-xylene	40.000	44.399	-11.0	110	0.00	1.81- 1.87
2	L1	AR1016-A			----------NA----------			
3	L1	AR1016-B			----------NA----------			
4	L1	AR1016-C			----------NA----------			
5	L1	AR1016-D			----------NA----------			
6	L1	AR1016-E			----------NA----------			
7	L1	AR1016-F			----------NA----------			
8	L2	AR1221-A			----------NA----------			
9	L2	AR1221-B			----------NA----------			
10	L2	AR1221-C			----------NA----------			
11	L2	AR1221-D			----------NA----------			
12	L2	AR1221-E			----------NA----------			
13	L3	AR1232-A	200.000	207.753	-3.9	104	-0.01	2.47- 2.53
14	L3	AR1232-B	200.000	209.740	-4.9	105	-0.02	2.99- 3.05
15	L3	AR1232-C	200.000	210.088	-5.0	105	-0.02	3.50- 3.56
16	L3	AR1232-D	200.000	220.069	-10.0	110	-0.02	3.69- 3.75
17	L3	AR1232-E	200.000	216.224	-8.1	108	-0.02	3.85- 3.91
18	L3	AR1232-F	200.000	210.697	-5.3	105	-0.03	4.53- 4.59
19	L4	AR1242-A			----------NA----------			
20	L4	AR1242-B			----------NA----------			
21	L4	AR1242-C			----------NA----------			
22	L4	AR1242-D			----------NA----------			
23	L4	AR1242-E			----------NA----------			
24	L4	AR1242-F			----------NA----------			
25	L5	AR1248-A			----------NA----------			
26	L5	AR1248-B			----------NA----------			
27	L5	AR1248-C			----------NA----------			
28	L5	AR1248-D			----------NA----------			
29	L5	AR1248-E			----------NA----------			
30	L5	AR1248-F			----------NA----------			
31	L6	AR1254-A			----------NA----------			
32	L6	AR1254-B			----------NA----------			
33	L6	AR1254-C			----------NA----------			
34	L6	AR1254-D			----------NA----------			
35	L6	AR1254-E			----------NA----------			
36	L6	AR1254-F			----------NA----------			
37	L7	AR1260-A			----------NA----------			
38	L7	AR1260-B			----------NA----------			
39	L7	AR1260-C			----------NA----------			
40	L7	AR1260-D			----------NA----------			
41	L7	AR1260-E			----------NA----------			
42	L7	AR1260-F			----------NA----------			
43	L8	AR1262-A			----------NA----------			

Continuing Calibration Summary

Job Number: TC52720 **Sample:** GOO508-CC505
Account: RFWTXHO Weston Solutions **Lab FileID:** OO30863.D
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

44	L8	AR1262-B			----------NA----------			
45	L8	AR1262-C			----------NA----------			
46	L8	AR1262-D			----------NA----------			
47	L8	AR1262-E			----------NA----------			
48	L8	AR1262-F			----------NA----------			
49	L9	AR1268-A	200.000	203.238	-1.6	102	-0.03	6.89- 6.95
50	L9	AR1268-B	200.000	209.421	-4.7	105	-0.03	7.34- 7.40
51	L9	AR1268-C	200.000	184.499	7.8	92	-0.03	8.14- 8.20
52	L9	AR1268-D	200.000	202.276	-1.1	101	-0.03	8.20- 8.26
53	L9	AR1268-E	200.000	207.188	-3.6	104	-0.03	8.60- 8.66
54	L9	AR1268-F	200.000	207.149	-3.6	104	-0.03	8.94- 9.00
55	S	Decachlorobiphenyl	40.000	58.263	-45.7#	148	0.00	9.79- 9.85

(#) = Out of Range SPCC's out = 0 CCC's out = 0
OO30783.D pcbq505.m Mon Aug 11 14:53:32 2014

8.9.26

8

Continuing Calibration Summary

Job Number: TC52720
Account: RFWTXHO Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Sample: GOO508-CC505
Lab FileID: OO30864.D

Evaluate Continuing Calibration Report

```
Signal #1 : C:\msdchem\1\DATA\GOO508\OO30864.D\ECD1A.CH  Vial: 8
Signal #2 : C:\msdchem\1\DATA\GOO508\OO30864.D\ECD2B.CH
Acq On    : 08-Aug-14, 11:13:26                      Operator: almar
Sample    : cc505-200,1242/1262                      Inst    : GCOO
Misc      : op33462,goo508                           Multiplr: 1.00
IntFile Signal #1: events.e     IntFile Signal #2: events2.e

Method       : C:\msdchem\1\METHODS\pcbq505.m (ChemStation Integrator)
Title        : PCB by 608 / 8082.
Last Update  : Wed Aug 06 09:08:42 2014
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  15%     Max. Rel. Area : 150%
```

		Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	S	Tetrachloro-m-xylene	40.000	45.863	-14.7	113	0.00	1.42- 1.48
2	L1	AR1016-A		----------NA----------				
3	L1	AR1016-B		----------NA----------				
4	L1	AR1016-C		----------NA----------				
5	L1	AR1016-D		----------NA----------				
6	L1	AR1016-E		----------NA----------				
7	L1	AR1016-F		----------NA----------				
8	L2	AR1221-A		----------NA----------				
9	L2	AR1221-B		----------NA----------				
10	L2	AR1221-C		----------NA----------				
11	L2	AR1221-D		----------NA----------				
12	L2	AR1221-E		----------NA----------				
13	L3	AR1232-A		----------NA----------				
14	L3	AR1232-B		----------NA----------				
15	L3	AR1232-C		----------NA----------				
16	L3	AR1232-D		----------NA----------				
17	L3	AR1232-E		----------NA----------				
18	L3	AR1232-F		----------NA----------				
19	L4	AR1242-A	200.000	203.015	-1.5	102	0.00	2.12- 2.18
20	L4	AR1242-B	200.000	201.859	-0.9	101	0.00	2.59- 2.65
21	L4	AR1242-C	200.000	203.089	-1.5	102	0.00	2.70- 2.76
22	L4	AR1242-D	200.000	203.496	-1.7	102	0.00	2.79- 2.85
23	L4	AR1242-E	200.000	204.575	-2.3	102	0.00	3.23- 3.29
24	L4	AR1242-F	200.000	202.883	-1.4	101	0.00	3.37- 3.43
25	L5	AR1248-A		----------NA----------				
26	L5	AR1248-B		----------NA----------				
27	L5	AR1248-C		----------NA----------				
28	L5	AR1248-D		----------NA----------				
29	L5	AR1248-E		----------NA----------				
30	L5	AR1248-F		----------NA----------				
31	L6	AR1254-A		----------NA----------				
32	L6	AR1254-B		----------NA----------				
33	L6	AR1254-C		----------NA----------				
34	L6	AR1254-D		----------NA----------				
35	L6	AR1254-E		----------NA----------				
36	L6	AR1254-F		----------NA----------				
37	L7	AR1260-A		----------NA----------				
38	L7	AR1260-B		----------NA----------				
39	L7	AR1260-C		----------NA----------				
40	L7	AR1260-D		----------NA----------				
41	L7	AR1260-E		----------NA----------				

Continuing Calibration Summary

Job Number: TC52720 **Sample:** GOO508-CC505
Account: RFWTXHO Weston Solutions **Lab FileID:** OO30864.D
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

42	L7	AR1260-F			----------NA----------				
43	L8	AR1262-A	200.000	211.556	-5.8	106	0.00	5.84- 5.90	
44	L8	AR1262-B	200.000	205.371	-2.7	103	0.00	6.08- 6.14	
45	L8	AR1262-C	200.000	209.048	-4.5	105	0.00	6.97- 7.03	
46	L8	AR1262-D	200.000	208.048	-4.0	104	0.00	7.04- 7.10	
47	L8	AR1262-E	200.000	218.122	-9.1	109	-0.01	7.43- 7.49	
48	L8	AR1262-F	200.000	205.800	-2.9	103	0.00	7.70- 7.76	
49	L9	AR1268-A			----------NA----------				
50	L9	AR1268-B			----------NA----------				
51	L9	AR1268-C			----------NA----------				
52	L9	AR1268-D			----------NA----------				
53	L9	AR1268-E			----------NA----------				
54	L9	AR1268-F			----------NA----------				
55	S	Decachlorobiphenyl	40.000	47.137	-17.8#	118	-0.01	8.58- 8.64	

***** Signal #2 *****

1	S	Tetrachloro-m-xylene	40.000	46.994	-17.5#	116	0.00	1.81- 1.87	
2	L1	AR1016-A			----------NA----------				
3	L1	AR1016-B			----------NA----------				
4	L1	AR1016-C			----------NA----------				
5	L1	AR1016-D			----------NA----------				
6	L1	AR1016-E			----------NA----------				
7	L1	AR1016-F			----------NA----------				
8	L2	AR1221-A			----------NA----------				
9	L2	AR1221-B			----------NA----------				
10	L2	AR1221-C			----------NA----------				
11	L2	AR1221-D			----------NA----------				
12	L2	AR1221-E			----------NA----------				
13	L3	AR1232-A			----------NA----------				
14	L3	AR1232-B			----------NA----------				
15	L3	AR1232-C			----------NA----------				
16	L3	AR1232-D			----------NA----------				
17	L3	AR1232-E			----------NA----------				
18	L3	AR1232-F			----------NA----------				
19	L4	AR1242-A	200.000	207.046	-3.5	104	0.00	2.97- 3.03	
20	L4	AR1242-B	200.000	206.138	-3.1	103	0.00	3.49- 3.55	
21	L4	AR1242-C	200.000	211.107	-5.6	106	0.00	3.68- 3.74	
22	L4	AR1242-D	200.000	207.998	-4.0	104	0.00	3.84- 3.90	
23	L4	AR1242-E	200.000	207.391	-3.7	104	0.00	4.33- 4.39	
24	L4	AR1242-F	200.000	203.998	-2.0	102	0.00	4.50- 4.56	
25	L5	AR1248-A			----------NA----------				
26	L5	AR1248-B			----------NA----------				
27	L5	AR1248-C			----------NA----------				
28	L5	AR1248-D			----------NA----------				
29	L5	AR1248-E			----------NA----------				
30	L5	AR1248-F			----------NA----------				
31	L6	AR1254-A			----------NA----------				
32	L6	AR1254-B			----------NA----------				
33	L6	AR1254-C			----------NA----------				
34	L6	AR1254-D			----------NA----------				
35	L6	AR1254-E			----------NA----------				
36	L6	AR1254-F			----------NA----------				
37	L7	AR1260-A			----------NA----------				
38	L7	AR1260-B			----------NA----------				
39	L7	AR1260-C			----------NA----------				
40	L7	AR1260-D			----------NA----------				
41	L7	AR1260-E			----------NA----------				
42	L7	AR1260-F			----------NA----------				
43	L8	AR1262-A	200.000	212.269	-6.1	106	-0.03	5.81- 5.87	

Continuing Calibration Summary

Job Number: TC52720 **Sample:** GOO508-CC505
Account: RFWTXHO Weston Solutions **Lab FileID:** OO30864.D
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

44	L8	AR1262-B	200.000	208.685	-4.3	104	-0.03	6.74- 6.80
45	L8	AR1262-C	200.000	215.169	-7.6	108	-0.03	6.97- 7.03
46	L8	AR1262-D	200.000	209.339	-4.7	105	-0.03	8.20- 8.26
47	L8	AR1262-E	200.000	208.966	-4.5	104	-0.03	8.80- 8.86
48	L8	AR1262-F	200.000	207.443	-3.7	104	-0.03	8.94- 9.00
49	L9	AR1268-A		----------NA----------				
50	L9	AR1268-B		----------NA----------				
51	L9	AR1268-C		----------NA----------				
52	L9	AR1268-D		----------NA----------				
53	L9	AR1268-E		----------NA----------				
54	L9	AR1268-F		----------NA----------				
55	S	Decachlorobiphenyl	40.000	46.462	-16.2#	118	0.00	9.79- 9.85

(#) = Out of Range SPCC's out = 0 CCC's out = 0
OO30783.D pcbq505.m Mon Aug 11 14:53:34 2014

8.9.27

8

Continuing Calibration Summary

Job Number: TC52720
Account: RFWTXHO Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Sample: GOO508-CC505
Lab FileID: OO30865.D

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\GOO508\OO30865.D\ECD1A.CH  Vial: 9
Acq On    : 08-Aug-14, 11:32:59                       Operator: almar
Sample    : cc505-200,1248                            Inst    : GCOO
Misc      : op33462,goo508                            Multiplr: 1.00
IntFile   : events.e

Data File : C:\msdchem\1\DATA\GOO508\OO30865.D\ECD2B.CH  Vial: 0
Acq On    : 08-Aug-14, 11:33:00                       Operator: almar
Sample    : cc505-200,1248                            Inst    : GCOO
Misc      : op33462,goo508                            Multiplr: 1.00
IntFile   : events2.e

Method       : C:\msdchem\1\METHODS\pcbq505.m (ChemStation Integrator)
Title        : PCB by 608 / 8082.
Last Update  : Wed Aug 06 09:08:42 2014
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  15%     Max. Rel. Area : 150%
```

		Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	S	Tetrachloro-m-xylene	40.000	44.900	-12.2	110	0.00	1.42- 1.48
2	L1	AR1016-A		----------NA----------				
3	L1	AR1016-B		----------NA----------				
4	L1	AR1016-C		----------NA----------				
5	L1	AR1016-D		----------NA----------				
6	L1	AR1016-E		----------NA----------				
7	L1	AR1016-F		----------NA----------				
8	L2	AR1221-A		----------NA----------				
9	L2	AR1221-B		----------NA----------				
10	L2	AR1221-C		----------NA----------				
11	L2	AR1221-D		----------NA----------				
12	L2	AR1221-E		----------NA----------				
13	L3	AR1232-A		----------NA----------				
14	L3	AR1232-B		----------NA----------				
15	L3	AR1232-C		----------NA----------				
16	L3	AR1232-D		----------NA----------				
17	L3	AR1232-E		----------NA----------				
18	L3	AR1232-F		----------NA----------				
19	L4	AR1242-A		----------NA----------				
20	L4	AR1242-B		----------NA----------				
21	L4	AR1242-C		----------NA----------				
22	L4	AR1242-D		----------NA----------				
23	L4	AR1242-E		----------NA----------				
24	L4	AR1242-F		----------NA----------				
25	L5	AR1248-A	200.000	206.592	-3.3	103	0.00	2.59- 2.65
26	L5	AR1248-B	200.000	209.808	-4.9	105	0.00	2.99- 3.05
27	L5	AR1248-C	200.000	207.066	-3.5	104	0.00	3.23- 3.29
28	L5	AR1248-D	200.000	207.849	-3.9	104	0.00	3.38- 3.44
29	L5	AR1248-E	200.000	206.299	-3.1	103	0.00	3.76- 3.82
30	L5	AR1248-F	200.000	205.878	-2.9	103	0.00	3.97- 4.03
31	L6	AR1254-A		----------NA----------				
32	L6	AR1254-B		----------NA----------				
33	L6	AR1254-C		----------NA----------				
34	L6	AR1254-D		----------NA----------				
35	L6	AR1254-E		----------NA----------				
36	L6	AR1254-F		----------NA----------				

Continuing Calibration Summary

Job Number: TC52720 **Sample:** GOO508-CC505
Account: RFWTXHO Weston Solutions **Lab FileID:** OO30865.D
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

37	L7	AR1260-A		----------NA----------				
38	L7	AR1260-B		----------NA----------				
39	L7	AR1260-C		----------NA----------				
40	L7	AR1260-D		----------NA----------				
41	L7	AR1260-E		----------NA----------				
42	L7	AR1260-F		----------NA----------				
43	L8	AR1262-A		----------NA----------				
44	L8	AR1262-B		----------NA----------				
45	L8	AR1262-C		----------NA----------				
46	L8	AR1262-D		----------NA----------				
47	L8	AR1262-E		----------NA----------				
48	L8	AR1262-F		----------NA----------				
49	L9	AR1268-A		----------NA----------				
50	L9	AR1268-B		----------NA----------				
51	L9	AR1268-C		----------NA----------				
52	L9	AR1268-D		----------NA----------				
53	L9	AR1268-E		----------NA----------				
54	L9	AR1268-F		----------NA----------				
55	S	Decachlorobiphenyl	40.000	45.859	-14.6	115	-0.01	8.58- 8.64
*****		Signal #2 *****						
1	S	Tetrachloro-m-xylene	40.000	47.269	-18.2#	117	0.00	1.81- 1.87
2	L1	AR1016-A		----------NA----------				
3	L1	AR1016-B		----------NA----------				
4	L1	AR1016-C		----------NA----------				
5	L1	AR1016-D		----------NA----------				
6	L1	AR1016-E		----------NA----------				
7	L1	AR1016-F		----------NA----------				
8	L2	AR1221-A		----------NA----------				
9	L2	AR1221-B		----------NA----------				
10	L2	AR1221-C		----------NA----------				
11	L2	AR1221-D		----------NA----------				
12	L2	AR1221-E		----------NA----------				
13	L3	AR1232-A		----------NA----------				
14	L3	AR1232-B		----------NA----------				
15	L3	AR1232-C		----------NA----------				
16	L3	AR1232-D		----------NA----------				
17	L3	AR1232-E		----------NA----------				
18	L3	AR1232-F		----------NA----------				
19	L4	AR1242-A		----------NA----------				
20	L4	AR1242-B		----------NA----------				
21	L4	AR1242-C		----------NA----------				
22	L4	AR1242-D		----------NA----------				
23	L4	AR1242-E		----------NA----------				
24	L4	AR1242-F		----------NA----------				
25	L5	AR1248-A	200.000	211.812	-5.9	106	-0.02	3.50- 3.56
26	L5	AR1248-B	200.000	207.497	-3.7	104	-0.02	3.96- 4.02
27	L5	AR1248-C	200.000	206.990	-3.5	103	-0.02	4.35- 4.41
28	L5	AR1248-D	200.000	207.493	-3.7	104	0.00	4.51- 4.57
29	L5	AR1248-E	200.000	204.441	-2.2	102	-0.02	4.78- 4.84
30	L5	AR1248-F	200.000	198.762	0.6	99	-0.02	5.19- 5.25
31	L6	AR1254-A		----------NA----------				
32	L6	AR1254-B		----------NA----------				
33	L6	AR1254-C		----------NA----------				
34	L6	AR1254-D		----------NA----------				
35	L6	AR1254-E		----------NA----------				
36	L6	AR1254-F		----------NA----------				
37	L7	AR1260-A		----------NA----------				
38	L7	AR1260-B		----------NA----------				

Continuing Calibration Summary

Job Number: TC52720 **Sample:** GOO508-CC505
Account: RFWTXHO Weston Solutions **Lab FileID:** OO30865.D
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

```
39 L7  AR1260-C                          ----------NA----------
40 L7  AR1260-D                          ----------NA----------
41 L7  AR1260-E                          ----------NA----------
42 L7  AR1260-F                          ----------NA----------
43 L8  AR1262-A                          ----------NA----------
44 L8  AR1262-B                          ----------NA----------
45 L8  AR1262-C                          ----------NA----------
46 L8  AR1262-D                          ----------NA----------
47 L8  AR1262-E                          ----------NA----------
48 L8  AR1262-F                          ----------NA----------
49 L9  AR1268-A                          ----------NA----------
50 L9  AR1268-B                          ----------NA----------
51 L9  AR1268-C                          ----------NA----------
52 L9  AR1268-D                          ----------NA----------
53 L9  AR1268-E                          ----------NA----------
54 L9  AR1268-F                          ----------NA----------
55 S   Decachlorobiphenyl      40.000  46.464    -16.2# 118   0.00    9.79- 9.85
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------

   (#) = Out of Range              SPCC's out = 0  CCC's out = 0
    OO30783.D  pcbq505.m        Mon Aug 11 14:53:36 2014
```

8.9.28

8

Continuing Calibration Summary

Job Number: TC52720 **Sample:** GOO508-CC505
Account: RFWTXHO Weston Solutions **Lab FileID:** OO30877.D
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Evaluate Continuing Calibration Report

```
Signal #1 : C:\msdchem\1\DATA\GOO508\OO30877.D\ECD1A.CH  Vial: 21
Signal #2 : C:\msdchem\1\DATA\GOO508\OO30877.D\ECD2B.CH
Acq On    : 08-Aug-14, 15:55:14                      Operator: almar
Sample    : cc505-300,16/60                          Inst    : GCOO
Misc      : op33480,goo508                           Multiplr: 1.00
IntFile Signal #1: events.e     IntFile Signal #2: events2.e

Method       : C:\msdchem\1\METHODS\pcbq505.m (ChemStation Integrator)
Title        : PCB by 608 / 8082.
Last Update  : Wed Aug 06 09:08:42 2014
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  15%     Max. Rel. Area : 150%
```

		Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	S	Tetrachloro-m-xylene	60.000	59.959	0.1	102	0.00	1.42- 1.48
2	L1	AR1016-A	300.000	299.306	0.2	102	0.00	2.12- 2.18
3	L1	AR1016-B	300.000	299.913	0.0	102	0.00	2.59- 2.65
4	L1	AR1016-C	300.000	300.972	-0.3	103	0.00	2.70- 2.76
5	L1	AR1016-D	300.000	302.945	-1.0	102	0.00	2.79- 2.85
6	L1	AR1016-E	300.000	300.222	-0.1	102	0.00	3.23- 3.29
7	L1	AR1016-F	300.000	298.563	0.5	102	0.00	3.37- 3.43
8	L2	AR1221-A		----------NA----------				
9	L2	AR1221-B		----------NA----------				
10	L2	AR1221-C		----------NA----------				
11	L2	AR1221-D		----------NA----------				
12	L2	AR1221-E		----------NA----------				
13	L3	AR1232-A		----------NA----------				
14	L3	AR1232-B		----------NA----------				
15	L3	AR1232-C		----------NA----------				
16	L3	AR1232-D		----------NA----------				
17	L3	AR1232-E		----------NA----------				
18	L3	AR1232-F		----------NA----------				
19	L4	AR1242-A		----------NA----------				
20	L4	AR1242-B		----------NA----------				
21	L4	AR1242-C		----------NA----------				
22	L4	AR1242-D		----------NA----------				
23	L4	AR1242-E		----------NA----------				
24	L4	AR1242-F		----------NA----------				
25	L5	AR1248-A		----------NA----------				
26	L5	AR1248-B		----------NA----------				
27	L5	AR1248-C		----------NA----------				
28	L5	AR1248-D		----------NA----------				
29	L5	AR1248-E		----------NA----------				
30	L5	AR1248-F		----------NA----------				
31	L6	AR1254-A		----------NA----------				
32	L6	AR1254-B		----------NA----------				
33	L6	AR1254-C		----------NA----------				
34	L6	AR1254-D		----------NA----------				
35	L6	AR1254-E		----------NA----------				
36	L6	AR1254-F		----------NA----------				
37	L7	AR1260-A	300.000	301.179	-0.4	102	0.00	4.85- 4.91
38	L7	AR1260-B	300.000	301.085	-0.4	103	0.00	5.19- 5.25
39	L7	AR1260-C	300.000	315.170	-5.1	108	0.00	5.77- 5.83
40	L7	AR1260-D	300.000	303.096	-1.0	103	0.00	6.08- 6.14
41	L7	AR1260-E	300.000	313.478	-4.5	106	0.00	6.46- 6.52

Continuing Calibration Summary

Job Number: TC52720 **Sample:** GOO508-CC505
Account: RFWTXHO Weston Solutions **Lab FileID:** OO30877.D
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

42	L7	AR1260-F	300.000	314.894	-5.0	108	0.00	6.85- 6.91
43	L8	AR1262-A		----------NA----------				
44	L8	AR1262-B		----------NA----------				
45	L8	AR1262-C		----------NA----------				
46	L8	AR1262-D		----------NA----------				
47	L8	AR1262-E		----------NA----------				
48	L8	AR1262-F		----------NA----------				
49	L9	AR1268-A		----------NA----------				
50	L9	AR1268-B		----------NA----------				
51	L9	AR1268-C		----------NA----------				
52	L9	AR1268-D		----------NA----------				
53	L9	AR1268-E		----------NA----------				
54	L9	AR1268-F		----------NA----------				
55	S	Decachlorobiphenyl	60.000	62.731	-4.6	106	-0.01	8.58- 8.64

***** Signal #2 *****

1	S	Tetrachloro-m-xylene	60.000	60.837	-1.4	103	0.00	1.81- 1.87
2	L1	AR1016-A	300.000	293.583	2.1	100	0.00	2.97- 3.03
3	L1	AR1016-B	300.000	296.135	1.3	102	0.00	3.49- 3.55
4	L1	AR1016-C	300.000	285.292	4.9	100	0.00	3.68- 3.74
5	L1	AR1016-D	300.000	278.257	7.2	99	0.00	3.84- 3.90
6	L1	AR1016-E	300.000	293.745	2.1	99	0.00	4.33- 4.39
7	L1	AR1016-F	300.000	302.640	-0.9	102	0.00	4.50- 4.56
8	L2	AR1221-A		----------NA----------				
9	L2	AR1221-B		----------NA----------				
10	L2	AR1221-C		----------NA----------				
11	L2	AR1221-D		----------NA----------				
12	L2	AR1221-E		----------NA----------				
13	L3	AR1232-A		----------NA----------				
14	L3	AR1232-B		----------NA----------				
15	L3	AR1232-C		----------NA----------				
16	L3	AR1232-D		----------NA----------				
17	L3	AR1232-E		----------NA----------				
18	L3	AR1232-F		----------NA----------				
19	L4	AR1242-A		----------NA----------				
20	L4	AR1242-B		----------NA----------				
21	L4	AR1242-C		----------NA----------				
22	L4	AR1242-D		----------NA----------				
23	L4	AR1242-E		----------NA----------				
24	L4	AR1242-F		----------NA----------				
25	L5	AR1248-A		----------NA----------				
26	L5	AR1248-B		----------NA----------				
27	L5	AR1248-C		----------NA----------				
28	L5	AR1248-D		----------NA----------				
29	L5	AR1248-E		----------NA----------				
30	L5	AR1248-F		----------NA----------				
31	L6	AR1254-A		----------NA----------				
32	L6	AR1254-B		----------NA----------				
33	L6	AR1254-C		----------NA----------				
34	L6	AR1254-D		----------NA----------				
35	L6	AR1254-E		----------NA----------				
36	L6	AR1254-F		----------NA----------				
37	L7	AR1260-A	300.000	298.269	0.6	103	-0.03	6.04- 6.10
38	L7	AR1260-B	300.000	297.442	0.9	102	-0.02	6.24- 6.30
39	L7	AR1260-C	300.000	300.954	-0.3	102	-0.03	6.89- 6.95
40	L7	AR1260-D	300.000	293.890	2.0	101	-0.03	7.35- 7.41
41	L7	AR1260-E	300.000	305.621	-1.9	105	-0.03	7.62- 7.68
42	L7	AR1260-F	300.000	303.739	-1.2	103	-0.03	8.20- 8.26
43	L8	AR1262-A		----------NA----------				

Continuing Calibration Summary

Job Number: TC52720
Account: RFWTXHO Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Sample: GOO508-CC505
Lab FileID: OO30877.D

```
44 L8  AR1262-B                          ----------NA----------
45 L8  AR1262-C                          ----------NA----------
46 L8  AR1262-D                          ----------NA----------
47 L8  AR1262-E                          ----------NA----------
48 L8  AR1262-F                          ----------NA----------
49 L9  AR1268-A                          ----------NA----------
50 L9  AR1268-B                          ----------NA----------
51 L9  AR1268-C                          ----------NA----------
52 L9  AR1268-D                          ----------NA----------
53 L9  AR1268-E                          ----------NA----------
54 L9  AR1268-F                          ----------NA----------
55 S   Decachlorobiphenyl      60.000  61.941     -3.2  106   0.00    9.79- 9.85
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------

   (#) = Out of Range              SPCC's out = 0  CCC's out = 0
    OO30784.D  pcbq505.m        Mon Aug 11 14:54:15 2014
```

8.9.29

8

Initial Calibration Summary

Job Number: TC52720
Account: RFWTXHO Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX
Sample: GVB323-ICC323
Lab FileID: VB13901.D

Response Factor Report GC VV

Method : C:\msdchem\1\METHODS\gvb323.m (ChemStation Integrator)
Title : TPH by TX1005
Last Update : Fri Aug 01 14:16:26 2014
Response via : Initial Calibration

Calibration Files
25 =VB13909.D 50 =VB13907.D 200 =VB13905.D 400 =VB13903.D
1000=VB13901.D 2000=VB13899.D 5000=VB13897.D

Compound	25	50	200	400	1000	2000	5000	Avg	%RSD
1)S aaa-Trifluorotolu	4.484	4.315	4.692	4.835	4.893	4.646	4.763	4.661 E4	4.35
2)H TPH (C6-C12)	7.918	6.666	7.090	6.878	6.888	6.626	6.869	6.991 E4	6.25
3)S o-Terphenyl	1.157	1.238	1.365	1.419	1.348	1.386	1.440	1.336 E5	7.67
4)H TPH (>C12-C28)	8.909	8.197	8.197	7.908	7.706	7.911	8.324	8.165 E4	4.80
5)H TPH (>C28-C35)	8.909	8.197	8.197	7.908	7.706	7.911	8.324	8.165 E4	4.80

(#) = Out of Range

gvb323.m Mon Aug 04 07:42:52 2014

8.9.30

8

Initial Calibration Verification

Job Number: TC52720
Account: RFWTXHO Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX
Sample: GVB323-ICV323
Lab FileID: VB13911.D

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\GVV323.SEC\VB13911.D       Vial: 19
Acq On    :  1 Aug 2014   1:42 pm                    Operator: rudenv
Sample    : icv323-1000                              Inst    : GC VV
Misc      : op33206,gvb323                           Multiplr: 1.00
IntFile   : events.e

Method       : C:\msdchem\1\METHODS\gvb323.m (ChemStation Integrator)
Title        : TPH by TX1005
Last Update  : Fri Aug 01 14:16:26 2014
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  25%     Max. Rel. Area : 150%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	S	aaa-Trifluorotoluene		----------NA----------				
2	H	TPH (C6-C12)	69.908	59.905 E3	14.3	87	0.00	1.94- 7.30
3	S	o-Terphenyl		----------NA----------				
4	H	TPH (>C12-C28)	81.647	73.711 E3	9.7	96	0.00	7.30-13.19
5	H	TPH (>C28-C35)		----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
VB13901.D gvb323.m Mon Aug 04 07:42:19 2014

8.9.31

8

Continuing Calibration Summary

Job Number: TC52720 **Sample:** GVB328-CC323
Account: RFWTXHO Weston Solutions **Lab FileID:** VB14063.D
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\GVV328.SEC\VB14063.D       Vial: 29
Acq On    :  6 Aug 2014   9:54 pm                    Operator: rudenv
Sample    : cc323-1000                               Inst    : GC VV
Misc      : op33452,gvb328                           Multiplr: 1.00
IntFile   : events.e

Method       : C:\msdchem\1\METHODS\gvb323.m (ChemStation Integrator)
Title        : TPH by TX1005
Last Update  : Fri Aug 01 14:16:26 2014
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  25%     Max. Rel. Area : 150%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	S	aaa-Trifluorotoluene	46.611	51.081 E3	-9.6	104	0.00	2.71- 2.81
2	H	TPH (C6-C12)	69.908	73.757 E3	-5.5	107	0.00	1.94- 7.30
3	S	o-Terphenyl	133.613	140.279 E3	-5.0	104	0.00	10.30-10.40
4	H	TPH (>C12-C28)	81.647	81.481 E3	0.2	106	0.00	7.30-13.19
5	H	TPH (>C28-C35)		----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
VB13901.D gvb323.m Thu Aug 07 09:38:45 2014

8.9.32

8

Continuing Calibration Summary

Job Number: TC52720 **Sample:** GVB329-CC323
Account: RFWTXHO Weston Solutions **Lab FileID:** VB14073.D
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\GVV329.SEC\VB14073.D       Vial: 5
Acq On    :  7 Aug 2014  10:35 am                    Operator: rudenv
Sample    : cc323-400                                Inst    : GC VV
Misc      : op33456,gvb329                           Multiplr: 1.00
IntFile   : events.e

Method       : C:\msdchem\1\METHODS\gvb323.m (ChemStation Integrator)
Title        : TPH by TX1005
Last Update  : Fri Aug 01 14:16:26 2014
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  25%     Max. Rel. Area : 150%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	S	aaa-Trifluorotoluene	46.611	50.085 E3	-7.5	104	0.00	2.71- 2.81
2	H	TPH (C6-C12)	69.908	75.860 E3	-8.5	110	0.00	1.94- 7.30
3	S	o-Terphenyl	133.613	145.586 E3	-9.0	103	0.00	10.30-10.40
4	H	TPH (>C12-C28)	81.647	88.480 E3	-8.4	112	0.00	7.30-13.19
5	H	TPH (>C28-C35)		----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
VB13903.D gvb323.m Thu Aug 07 16:26:19 2014

8.9.33

8

Continuing Calibration Summary

Job Number: TC52720 **Sample:** GVB329-CC323
Account: RFWTXHO Weston Solutions **Lab FileID:** VB14097.D
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\GVV329.SEC\VB14097.D       Vial: 29
Acq On    :  7 Aug 2014   3:21 pm                    Operator: rudenv
Sample    : cc323-1000                               Inst    : GC VV
Misc      : op33456,gvb329                           Multiplr: 1.00
IntFile   : events.e

Method       : C:\msdchem\1\METHODS\gvb323.m (ChemStation Integrator)
Title        : TPH by TX1005
Last Update  : Fri Aug 01 14:16:26 2014
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  25%     Max. Rel. Area : 150%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	S	aaa-Trifluorotoluene	46.611	48.959 E3	-5.0	100	0.00	2.71- 2.81
2	H	TPH (C6-C12)	69.908	73.538 E3	-5.2	107	0.00	1.94- 7.30
3	S	o-Terphenyl	133.613	141.983 E3	-6.3	105	0.00	10.30-10.40
4	H	TPH (>C12-C28)	81.647	83.223 E3	-1.9	108	0.00	7.30-13.19
5	H	TPH (>C28-C35)		----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
VB13901.D gvb323.m Thu Aug 07 16:26:32 2014

8.9.34

8

Initial Calibration Summary

Job Number: TC52720
Account: RFWTXHO Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX
Sample: GVF323-ICC323
Lab FileID: VF13902.D

Response Factor Report GC VV

```
Method       : C:\msdchem\1\METHODS\gvf323.m (ChemStation Integrator)
Title        : TPH by TX1005
Last Update  : Wed Jul 09 14:36:13 2014
Response via : Initial Calibration

Calibration Files
25  =VF13910.D   50  =VF13908.D   200 =VF13906.D   400 =VF13904.D
1000=VF13902.D   2000=VF13900.D   5000=VF13898.D
```

Compound	25	50	200	400	1000	2000	5000	Avg	%RSD
1)S aaa-Trifluorotolu	5.985	6.600	6.726	6.068	6.413	5.929	5.889	6.230 E4	5.52
2)H TPH (C6-C12)	1.139	0.961	0.913	0.893	0.924	0.842	0.839	0.930 E5	10.97
3)S o-Terphenyl	1.464	1.637	1.788	1.814	1.679	1.656	1.776	1.688 E5	7.16
4)H TPH (>C12-C28)	1.033	1.071	1.139	1.090	0.999	0.976	1.052	1.051 E5	5.27
5)H TPH (>C28-C35)	1.033	1.071	1.139	1.090	0.999	0.976	1.052	1.051 E5	5.27

(#) = Out of Range

gvf323.m Mon Aug 04 07:27:44 2014

8.9.35

8

Initial Calibration Verification

Job Number: TC52720
Account: RFWTXHO Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX
Sample: GVF323-ICV323
Lab FileID: VF13912.D

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\GVV323\VF13912.D          Vial: 20
Acq On    :  1 Aug 2014   1:42 pm                   Operator: rudenv
Sample    : icv323-1000                             Inst    : GC VV
Misc      : op33206,gvf323                          Multiplr: 1.00
IntFile   : events.e

Method       : C:\msdchem\1\METHODS\gvf323.m (ChemStation Integrator)
Title        : TPH by TX1005
Last Update  : Wed Jul 09 14:36:13 2014
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  25%     Max. Rel. Area : 150%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	S	aaa-Trifluorotoluene		----------NA----------				
2	H	TPH (C6-C12)	93.022	91.594 E3	1.5	99	0.00	1.85- 7.25
3	S	o-Terphenyl		----------NA----------				
4	H	TPH (>C12-C28)	105.143	101.360 E3	3.6	102	0.00	7.25-13.18
5	H	TPH (>C28-C35)		----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
VF13902.D gvf323.m Mon Aug 04 07:27:18 2014

8.9.36

8

Continuing Calibration Summary

Job Number: TC52720 **Sample:** GVF328-CC323
Account: RFWTXHO Weston Solutions **Lab FileID:** VF14064.D
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\GVV328\VF14064.D          Vial: 30
Acq On    :  6 Aug 2014   9:54 pm                   Operator: rudenv
Sample    : cc323-1000                              Inst    : GC VV
Misc      : op33452,gvf328                          Multiplr: 1.00
IntFile   : events.e

Method       : C:\msdchem\1\METHODS\gvf323.m (ChemStation Integrator)
Title        : TPH by TX1005
Last Update  : Wed Jul 09 14:36:13 2014
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  25%     Max. Rel. Area : 150%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	S	aaa-Trifluorotoluene	62.298	59.809 E3	4.0	93	0.00	2.57- 2.67
2	H	TPH (C6-C12)	93.022	93.186 E3	-0.2	101	0.00	1.85- 7.25
3	S	o-Terphenyl	168.772	185.003 E3	-9.6	110	0.00	10.27-10.37
4	H	TPH (>C12-C28)	105.143	109.014 E3	-3.7	109	0.00	7.25-13.18
5	H	TPH (>C28-C35)		----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
VF13902.D gvf323.m Thu Aug 07 09:16:25 2014

8.9.37

8

Continuing Calibration Summary

Job Number: TC52720 **Sample:** GVF329-CC323
Account: RFWTXHO Weston Solutions **Lab FileID:** VF14074.D
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\GVV329\VF14074.D          Vial: 6
Acq On    :  7 Aug 2014  10:35 am                   Operator: rudenv
Sample    : cc323-400                               Inst    : GC VV
Misc      : op33456,gvf329                          Multiplr: 1.00
IntFile   : events.e

Method       : C:\msdchem\1\METHODS\gvf323.m (ChemStation Integrator)
Title        : TPH by TX1005
Last Update  : Wed Jul 09 14:36:13 2014
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  25%     Max. Rel. Area : 150%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	S	aaa-Trifluorotoluene	62.298	62.678 E3	-0.6	103	0.00	2.57- 2.67
2	H	TPH (C6-C12)	93.022	104.495 E3	-12.3	117	0.00	1.85- 7.25
3	S	o-Terphenyl	168.772	176.432 E3	-4.5	97	0.00	10.27-10.37
4	H	TPH (>C12-C28)	105.143	105.184 E3	-0.0	97	0.00	7.25-13.18
5	H	TPH (>C28-C35)		----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
VF13904.D gvf323.m Thu Aug 07 16:25:00 2014

8.9.38

8

Continuing Calibration Summary

Job Number: TC52720 **Sample:** GVF329-CC323
Account: RFWTXHO Weston Solutions **Lab FileID:** VF14098.D
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\GVV329\VF14098.D          Vial: 30
Acq On    :  7 Aug 2014   3:21 pm                   Operator: rudenv
Sample    : cc323-1000                              Inst    : GC VV
Misc      : op33456,gvf329                          Multiplr: 1.00
IntFile   : events.e

Method       : C:\msdchem\1\METHODS\gvf323.m (ChemStation Integrator)
Title        : TPH by TX1005
Last Update  : Wed Jul 09 14:36:13 2014
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  25%     Max. Rel. Area : 150%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	S	aaa-Trifluorotoluene	62.298	60.592 E3	2.7	94	0.00	2.57- 2.67
2	H	TPH (C6-C12)	93.022	93.391 E3	-0.4	101	0.00	1.85- 7.25
3	S	o-Terphenyl	168.772	184.081 E3	-9.1	110	0.00	10.27-10.37
4	H	TPH (>C12-C28)	105.143	106.860 E3	-1.6	107	0.00	7.25-13.18
5	H	TPH (>C28-C35)		----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
VF13902.D gvf323.m Thu Aug 07 16:25:13 2014

8.9.39

8

Gulf Coast ACCUTEST LABORATORIES

Metals Analysis

QC Data Summaries

Includes the following where applicable:

- Instrument Runlogs
- Initial and Continuing Calibration Blanks
- Initial and Continuing Calibration Checks
- High and Low Check Standards
- Interfering Element Check Standards
- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries

Accutest Laboratories Instrument Runlog
Inorganics Analyses

Login Number: TC52720
Account: RFWTXHO - Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

File ID: H2080614S3.PRN Date Analyzed: 08/07/14 Methods: SW846 7471A
Analyst: CC Run ID: MA10010
Parameters: Hg

Time	Sample Description	Dilution Factor	PS Recov	Comments
12:44	MA10010-STD1	1		STD01REP1
12:46	MA10010-STD2	1		STD02REP1
12:48	MA10010-STD3	1		STD03REP1
12:50	MA10010-STD4	1		STD04REP1
12:52	MA10010-STD5	1		STD05REP1
12:54	MA10010-STD6	1		STD06REP1
13:02	MA10010-ICV1	1		
13:04	MA10010-ICB1	1		
13:07	MA10010-CRI1	1		
13:09	MA10010-CCV1	1		
13:11	MA10010-CCB1	1		
14:07	MP23971-MB	1		
14:09	MP23971-LC	20		
14:17	ZZZZZZ	1		
14:19	ZZZZZZ	1		
14:20	ZZZZZZ	1		
14:22	ZZZZZZ	1		
14:24	ZZZZZZ	1		
14:26	MA10010-CCV2	1		
14:28	MA10010-CCB2	1		
14:30	ZZZZZZ	1		
14:32	TC52720-1	1		
14:34	TC52720-2	1		
14:36	TC52720-3	1		
14:38	TC52720-4	1		
14:40	TC52720-5	1		
14:42	ZZZZZZ	1		
14:44	ZZZZZZ	1		
14:46	ZZZZZZ	1		
14:47	ZZZZZZ	1		
14:51	MA10010-CCV3	1		
14:52	MA10010-CCB3	1		
14:54	ZZZZZZ	1		

Accutest Laboratories Instrument Runlog
Inorganics Analyses

Login Number: TC52720
Account: RFWTXHO - Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

File ID: H2080614S3.PRN Date Analyzed: 08/07/14 Methods: SW846 7471A
Analyst: CC Run ID: MA10010
Parameters: Hg

	Time	Sample Description	Dilution Factor	PS Recov	Comments
	15:01	TC52743-1	20		(sample used for QC only; not part of login TC52720)
	15:03	MP23971-S1	20		
	15:05	MP23971-S2	20		
---------->	Last reportable sample/prep for job TC52720				
	15:09	ZZZZZZ	1		
	15:13	MA10010-CCV4	1		
	15:15	MA10010-CCB4	1		
---------->	Last reportable CCB for job TC52720				

Refer to raw data for calibration curve and standards.

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: TC52720
Account: RFWTXHO - Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

File ID: H2080614S3.PRN Date Analyzed: 08/07/14 Methods: SW846 7471A
QC Limits: result < RL Run ID: MA10010 Units: ug/l

Time:			13:04		13:11		14:28		14:52	
Sample ID:			ICB1		CCB1		CCB2		CCB3	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Mercury	0.20	.049	-0.021	<0.20	0.011	<0.20	0.049	<0.20	-0.015	<0.20

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: TC52720
Account: RFWTXHO - Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

File ID: H2080614S3.PRN Date Analyzed: 08/07/14 Methods: SW846 7471A
QC Limits: result < RL Run ID: MA10010 Units: ug/l

Time:			15:15	
Sample ID:			CCB4	
Metal	RL	IDL	raw	final
Mercury	0.20	.049	0.019	<0.20

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: TC52720
Account: RFWTXHO - Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

File ID: H2080614S3.PRN Date Analyzed: 08/07/14 Methods: SW846 7471A
QC Limits: 90 to 110 % Recovery Run ID: MA10010 Units: ug/l

Time:		13:02			13:09			14:26	
Sample ID:	ICV	ICV1		CCV	CCV1		CCV	CCV2	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Mercury	3	2.7	90.0	3	2.7	90.0	3	2.5	83.3

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: TC52720
Account: RFWTXHO - Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

File ID: H2080614S3.PRN Date Analyzed: 08/07/14 Methods: SW846 7471A
QC Limits: 90 to 110 % Recovery Run ID: MA10010 Units: ug/l

Time:		14:51			15:13	
Sample ID:	CCV	CCV3		CCV	CCV4	
Metal	True	Results	% Rec	True	Results	% Rec
Mercury	3	2.5	83.3	3.0	3.0	100.0

(*) Outside of QC limits
(anr) Analyte not requested

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: TC52720
Account: RFWTXHO - Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

File ID: H2080614S3.PRN Date Analyzed: 08/07/14 Methods: SW846 7471A
QC Limits: 50 to 150 % Recovery Run ID: MA10010 Units: ug/l

Time:			13:07	
Sample ID:	CRI	CRIA	CRI1	
Metal	True	True	Results	% Rec
Mercury	0.20		0.21	105.0

(*) Outside of QC limits
(anr) Analyte not requested

Accutest Laboratories Instrument Runlog
Inorganics Analyses

Login Number: TC52720
Account: RFWTXHO - Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

File ID: SB080814.ICP Date Analyzed: 08/08/14 Methods: EPA 200.7, SW846 6010B
Analyst: EG Run ID: MA10018
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
15:35	MA10018-STD1	1		STDA
15:42	MA10018-STD2	1		STDB
15:49	MA10018-STD3	1		STDC
15:55	MA10018-ICV1	1		
16:02	MA10018-ICB1	1		
16:09	MA10018-CRI1	1		
16:15	ZZZZZZ	1		
16:22	MA10018-ICSA1	1		
16:29	MA10018-ICSAB1	1		
16:35	MA10018-CCV1	1		
16:42	MA10018-CCB1	1		
16:49	ZZZZZZ	1		
16:56	ZZZZZZ	1		
17:02	ZZZZZZ	1		
17:09	ZZZZZZ	1		
17:16	ZZZZZZ	1		
17:22	ZZZZZZ	1		
17:29	ZZZZZZ	1		
17:36	ZZZZZZ	1		
17:42	MA10018-CCV2	1		
17:49	MA10018-CCB2	1		
17:56	ZZZZZZ	1		
18:02	ZZZZZZ	1		
18:09	ZZZZZZ	1		
18:15	ZZZZZZ	1		
18:22	ZZZZZZ	5		
18:29	ZZZZZZ	5		
18:35	MA10018-CCV3	1		
18:42	MA10018-CCB3	1		
18:49	MP23969-MB1	1		
18:55	MP23969-B1	1		
19:02	TC52798-1A	1		(sample used for QC only; not part of login TC52720)
19:08	MP23969-SD1	5		YTR-1,-2,-3,Ind out see re-run.

Accutest Laboratories Instrument Runlog
Inorganics Analyses

Login Number: TC52720
Account: RFWTXHO - Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

File ID: SB080814.ICP Date Analyzed: 08/08/14 Methods: EPA 200.7, SW846 6010B
Analyst: EG Run ID: MA10018
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
19:15	MP23969-S1	1		
19:22	MP23969-S2	1		
19:28	ZZZZZZ	1		
19:35	MA10018-CCV4	1		
19:41	MA10018-CCB4	1		
19:48	MP23976-MB1	1		
19:55	MP23976-LC1	1		
20:01	TC52824-1A	1		(sample used for QC only; not part of login TC52720)
20:08	MP23976-SD1	5		
20:15	MP23976-S1	1		
20:21	MP23976-S2	1		
20:28	TC52824-1A	5		(sample used for QC only; not part of login TC52720)
20:35	MP23976-SD1	25		Not needed
20:41	MP23976-S1	5		Not needed
20:48	MP23976-S2	5		Not needed
20:54	MA10018-CCV5	1		
21:01	MA10018-CCB5	1		
21:07	ZZZZZZ	1		
21:14	ZZZZZZ	5		
21:21	ZZZZZZ	1		
21:27	ZZZZZZ	5		
21:34	MA10018-CCV6	1		
21:41	MA10018-CCB6	1		
21:47	MA10018-CRI2	1		
21:54	ZZZZZZ	1		
22:01	MA10018-ICSA2	1		
22:07	MA10018-ICSAB2	1		
22:14	MA10018-CCV7	1		
22:21	MA10018-CCB7	1		
22:27	MP23968-MB1	1		
22:34	MP23968-LC1	1		
22:41	TC52779-1	1		(sample used for QC only; not part of login TC52720)
22:48	MP23968-SD1	5		

Accutest Laboratories Instrument Runlog
Inorganics Analyses

Login Number: TC52720
Account: RFWTXHO - Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

File ID: SB080814.ICP Date Analyzed: 08/08/14 Methods: EPA 200.7, SW846 6010B
Analyst: EG Run ID: MA10018
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
22:54	MP23968-S1	1		
23:01	MP23968-S2	1		
23:08	TC52779-1	5		(sample used for QC only; not part of login TC52720)
23:15	MP23968-SD1	25		Al,As,Ca,Cd,Na,Pb,Se.
23:21	MP23968-S1	5		Al,As,Ca,Cd,Na,Pb,Se.
23:28	MP23968-S2	5		Al,As,Ca,Cd,Na,Pb,Se.
23:35	MA10018-CCV8	1		
23:41	MA10018-CCB8	1		
23:48	ZZZZZZ	5		
23:55	ZZZZZZ	25		
00:01	ZZZZZZ	1		
00:08	ZZZZZZ	5		
00:15	ZZZZZZ	1		
00:22	ZZZZZZ	5		
00:28	ZZZZZZ	1		
00:35	ZZZZZZ	5		
00:42	ZZZZZZ	1		
00:49	ZZZZZZ	5		
00:55	MA10018-CCV9	1		
01:02	MA10018-CCB9	1		
01:08	ZZZZZZ	1		
01:15	ZZZZZZ	5		
01:22	ZZZZZZ	1		
01:29	ZZZZZZ	5		
01:36	ZZZZZZ	5		
01:42	ZZZZZZ	25		
01:49	MA10018-CCV10	1		
01:56	MA10018-CCB10	1		
02:02	MP23965-MB1	1		
02:09	MP23965-LC1	1		
02:16	TC52720-1	1		Ca HH re-run Al,Sb,As,Ca,Pb,Se
02:22	MP23965-SD1	5		
02:29	MP23965-S1	1		

Accutest Laboratories Instrument Runlog
Inorganics Analyses

Login Number: TC52720
Account: RFWTXHO - Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

File ID: SB080814.ICP Date Analyzed: 08/08/14 Methods: EPA 200.7, SW846 6010B
Analyst: EG Run ID: MA10018
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
02:36	MP23965-S2	1		
02:43	TC52720-1	5		Al,Sb,As,Cd,Ca,Pb,Se
02:49	MP23965-SD1	25		Al,Sb,As,Cd,Ca,Pb,Se
02:56	MP23965-S1	5		Al,Sb,As,Cd,Ca,Pb,Se
03:03	MP23965-S2	5		Al,Sb,As,Cd,Ca,Pb,Se
03:09	MA10018-CCV11	1		
03:16	MA10018-CCB11	1		
03:22	TC52720-2	1		Ca HH re-run Al,Sb,As,Cd,Pb,Se,Ca,Tl
03:29	TC52720-2	5		Al,Sb,As,Cd,Ca,Pb,Se,Tl
03:36	TC52720-3	1		
03:43	TC52720-3	5		Not needed
03:49	TC52720-4	1		
03:56	TC52720-4	5		Not needed
04:02	TC52720-5	1		TL see dil
04:09	TC52720-5	5		TL
---------->	Last reportable sample/prep for job TC52720			
04:16	ZZZZZZ	1		
04:22	ZZZZZZ	5		
04:29	MA10018-CCV12	1		
04:35	MA10018-CCB12	1		
04:42	ZZZZZZ	1		
04:49	ZZZZZZ	5		
04:55	ZZZZZZ	1		
05:02	ZZZZZZ	5		
05:09	ZZZZZZ	1		
05:15	ZZZZZZ	5		
05:22	MA10018-CCV13	1		
05:29	MA10018-CCB13	1		
05:35	ZZZZZZ	1		
05:42	MA10018-CRI3	1		
05:49	MA10018-ICSA3	1		
05:55	MA10018-ICSAB3	1		
06:02	MA10018-CCV14	1		
06:09	MA10018-CCB14	1		
---------->	Last reportable CCB for job TC52720			

Refer to raw data for calibration curve and standards.

INTERNAL STANDARD SUMMARY

Login Number: TC52720
Account: RFWTXHO - Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

File ID: SB080814.ICP Date Analyzed: 08/08/14 Methods: EPA 200.7, SW846 6010B
Analyst: EG Run ID: MA10018
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
15:35	MA10018-STD1	4268 R	194920 R	17006 R	881 R
15:42	MA10018-STD2	4055	182410	16833	785
15:49	MA10018-STD3	3994	178650	16623	756
15:55	MA10018-ICV1	4241	191850	17248	843
16:02	MA10018-ICB1	4416	201190	17524	927
16:09	MA10018-CRI1	4368	196400	17335	898
16:15	ZZZZZZ	4363	196580	17296	896
16:22	MA10018-ICSA1	3759	169010	16358	713
16:29	MA10018-ICSAB1	3749	168480	16393	710
16:35	MA10018-CCV1	4150	185590	17142	802
16:42	MA10018-CCB1	4428	201220	17526	934
16:49	ZZZZZZ	4220	177040	17770	768
16:56	ZZZZZZ	3703	167070	16202	709
17:02	ZZZZZZ	4224	191160	17282	949
17:09	ZZZZZZ	4336	201550	17637	844
17:16	ZZZZZZ	4393	201500	17562	922
17:22	ZZZZZZ	4315	198310	17401	901
17:29	ZZZZZZ	4287	196510	17313	902
17:36	ZZZZZZ	4335	198590	17478	904
17:42	MA10018-CCV2	4088	184280	16874	793
17:49	MA10018-CCB2	4310	197200	17277	913
17:56	ZZZZZZ	4333	200250	17785	914
18:02	ZZZZZZ	4268	197770	17661	906
18:09	ZZZZZZ	3996	183080	17190	784
18:15	ZZZZZZ	4078	186520	17328	837
18:22	ZZZZZZ	3646	160270	16398	676
18:29	ZZZZZZ	3131	135420	15439	552
18:35	MA10018-CCV3	4080	184270	16927	790
18:42	MA10018-CCB3	4313	196260	17155	903
18:49	MP23969-MB1	4289	197840	17712	905
18:55	MP23969-B1	4007	182890	17312	788
19:02	TC52798-1A	3806	172740	17098	729
19:08	MP23969-SD1	24890 !a	874570 !a	27835 !a	4719 !a

INTERNAL STANDARD SUMMARY

Login Number: TC52720
Account: RFWTXHO - Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

File ID: SB080814.ICP Date Analyzed: 08/08/14 Methods: EPA 200.7, SW846 6010B
Analyst: EG Run ID: MA10018
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
19:15	MP23969-S1	3772	170690	16807	700
19:22	MP23969-S2	3628	169440	16979	675
19:28	ZZZZZZ	4113	188660	17466	833
19:35	MA10018-CCV4	3973	181750	16791	771
19:41	MA10018-CCB4	4295	196760	17109	902
19:48	MP23976-MB1	4305	198840	17289	905
19:55	MP23976-LC1	4700	211880	19586	811
20:01	TC52824-1A	4910	219380	20274	864
20:08	MP23976-SD1	4451	200080	17729	883
20:15	MP23976-S1	4620	206360	19307	796
20:21	MP23976-S2	4483	198890	18633	792
20:28	TC52824-1A	4469	201050	17693	887
20:35	MP23976-SD1	4414	198660	17268	908
20:41	MP23976-S1	4395	196040	17484	866
20:48	MP23976-S2	4378	195280	17287	862
20:54	MA10018-CCV5	4177	186500	16867	803
21:01	MA10018-CCB5	4388	198310	16932	921
21:07	ZZZZZZ	4204	189040	18149	738
21:14	ZZZZZZ	4229	190580	17114	832
21:21	ZZZZZZ	4037	181930	16878	754
21:27	ZZZZZZ	4218	191100	16929	849
21:34	MA10018-CCV6	4139	186690	16846	800
21:41	MA10018-CCB6	4377	198430	16893	911
21:47	MA10018-CRI2	4340	196250	16987	888
21:54	ZZZZZZ	4291	195240	16965	880
22:01	MA10018-ICSA2	3754	167720	15933	712
22:07	MA10018-ICSAB2	3727	166250	15789	700
22:14	MA10018-CCV7	4311	190830	16991	827
22:21	MA10018-CCB7	4483	200800	16766	936
22:27	MP23968-MB1	4412	201080	16900	926
22:34	MP23968-LC1	4808	213240	19118	827
22:41	TC52779-1	3725	169010	16549	605
22:48	MP23968-SD1	4065	182270	16530	772

INTERNAL STANDARD SUMMARY

Login Number: TC52720
Account: RFWTXHO - Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

File ID: SB080814.ICP Date Analyzed: 08/08/14 Methods: EPA 200.7, SW846 6010B
Analyst: EG Run ID: MA10018
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
22:54	MP23968-S1	3717	167720	16411	611
23:01	MP23968-S2	3813	173680	17061	593
23:08	TC52779-1	4031	181490	16410	759
23:15	MP23968-SD1	4256	191570	16621	856
23:21	MP23968-S1	4032	181610	16469	762
23:28	MP23968-S2	4063	182920	16527	760
23:35	MA10018-CCV8	4221	189170	16753	815
23:41	MA10018-CCB8	4375	199110	16663	912
23:48	ZZZZZZ	3869	177790	16126	907
23:55	ZZZZZZ	4213	190270	16508	902
00:01	ZZZZZZ	4027	180800	17407	660
00:08	ZZZZZZ	4114	185170	16582	785
00:15	ZZZZZZ	3973	178850	17213	671
00:22	ZZZZZZ	4114	185640	16533	796
00:28	ZZZZZZ	4271	191590	18081	704
00:35	ZZZZZZ	4189	189150	16817	812
00:42	ZZZZZZ	4638	208650	18417	833
00:49	ZZZZZZ	4447	201450	17203	898
00:55	MA10018-CCV9	4204	187560	16394	813
01:02	MA10018-CCB9	4397	199830	16676	923
01:08	ZZZZZZ	3728	172990	17083	610
01:15	ZZZZZZ	4002	181350	16413	754
01:22	ZZZZZZ	4310	193770	18243	715
01:29	ZZZZZZ	4223	190490	16916	809
01:36	ZZZZZZ	4030	184850	16297	896
01:42	ZZZZZZ	4270	194590	16647	903
01:49	MA10018-CCV10	4193	187750	16524	814
01:56	MA10018-CCB10	4373	200520	16699	921
02:02	MP23965-MB1	4398	203940	17037	925
02:09	MP23965-LC1	4832	213660	18497	828
02:16	TC52720-1	4644	205840	18979	709
02:22	MP23965-SD1	4315	193110	16761	812
02:29	MP23965-S1	4494	200810	18898	672

INTERNAL STANDARD SUMMARY

Login Number: TC52720
Account: RFWTXHO - Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

File ID: SB080814.ICP Date Analyzed: 08/08/14 Methods: EPA 200.7, SW846 6010B
Analyst: EG Run ID: MA10018
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
02:36	MP23965-S2	4497	200780	18825	682
02:43	TC52720-1	4298	192790	16871	808
02:49	MP23965-SD1	4334	194550	16479	875
02:56	MP23965-S1	4247	190370	16777	789
03:03	MP23965-S2	4222	190310	16840	790
03:09	MA10018-CCV11	4156	185820	16099	801
03:16	MA10018-CCB11	4380	199390	16376	915
03:22	TC52720-2	4063	181880	17152	703
03:29	TC52720-2	4119	185830	16409	795
03:36	TC52720-3	4745	211980	19387	791
03:43	TC52720-3	4376	196700	17041	850
03:49	TC52720-4	4506	201490	18430	787
03:56	TC52720-4	4397	196650	16957	871
04:02	TC52720-5	4993	221930	20626	767
04:09	TC52720-5	4416	200110	17468	852
04:16	ZZZZZZ	4707	211120	19787	760
04:22	ZZZZZZ	4327	195570	17191	840
04:29	MA10018-CCV12	4099	185760	16257	796
04:35	MA10018-CCB12	4310	197690	16463	908
04:42	ZZZZZZ	4487	202010	19034	759
04:49	ZZZZZZ	4259	193040	16988	837
04:55	ZZZZZZ	4728	211360	19608	794
05:02	ZZZZZZ	4328	195560	17190	846
05:09	ZZZZZZ	4671	208140	19466	780
05:15	ZZZZZZ	4318	195380	17145	849
05:22	MA10018-CCV13	4093	184630	16299	796
05:29	MA10018-CCB13	4293	196360	16497	907
05:35	ZZZZZZ	4263	194370	16580	887
05:42	MA10018-CRI3	4264	194410	16620	888
05:49	MA10018-ICSA3	3680	166440	15635	710
05:55	MA10018-ICSAB3	3680	166740	15704	703
06:02	MA10018-CCV14	4049	183510	16283	787
06:09	MA10018-CCB14	4284	196500	16575	903

R = Reference for ISTD limits. ! = Outside limits.

INTERNAL STANDARD SUMMARY

Login Number: TC52720
Account: RFWTXHO - Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

File ID: SB080814.ICP Date Analyzed: 08/08/14 Methods: EPA 200.7, SW846 6010B
Analyst: EG Run ID: MA10018
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4

LEGEND:

Istd#	Parameter	Limits
Istd#1	Yttrium (2243)	60-125 %
Istd#2	Yttrium (3710)	60-125 %
Istd#3	Yttrium (3710-2)	60-125 %
Istd#4	Indium	60-125 %

(a) No elements associated with this internal standard were reported.

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: TC52720
Account: RFWTXHO - Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

File ID: SB080814.ICP Date Analyzed: 08/08/14 Methods: EPA 200.7, SW846 6010B
QC Limits: result < RL Run ID: MA10018 Units: ug/l

Time: / Sample ID:			16:02 ICB1		16:42 CCB1		17:49 CCB2		18:42 CCB3	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	200	6.9	-0.97	<200	1.8	<200	1.6	<200	1.2	<200
Antimony	5.0	.56	0.99	<5.0	0.71	<5.0	1.2	<5.0	0.39	<5.0
Arsenic	5.0	1	2.1	<5.0	-3.2	<5.0	-0.93	<5.0	-1.0	<5.0
Barium	200	.16	-0.10	<200	-0.10	<200	-0.11	<200	-0.050	<200
Beryllium	4.0	.1	-0.010	<4.0	-0.010	<4.0	0.040	<4.0	0.020	<4.0
Boron	100	.39								
Cadmium	4.0	.15	0.060	<4.0	-0.070	<4.0	0.020	<4.0	0.060	<4.0
Calcium	5000	4	-0.87	<5000	0.51	<5000	1.5	<5000	1.1	<5000
Chromium	10	.22	-0.060	<10	0.010	<10	-0.11	<10	-0.28	<10
Cobalt	50	.25	0.21	<50	0.040	<50	0.14	<50	0.24	<50
Copper	20	.24	0.060	<20	0.24	<20	0.39	<20	0.49	<20
Iron	100	4.6	-0.28	<100	0.34	<100	0.74	<100	-0.10	<100
Lead	3.0	.65	0.050	<3.0	-0.56	<3.0	0.010	<3.0	-0.36	<3.0
Lithium	300	.65								
Magnesium	5000	7.7	4.5	<5000	2.4	<5000	7.1	<5000	6.0	<5000
Manganese	15	.09	0.030	<15	0.0	<15	0.010	<15	-0.010	<15
Molybdenum	10	.62	anr							
Nickel	40	.22	-0.24	<40	-0.060	<40	0.040	<40	0.050	<40
Potassium	5000	7.6	24.5	<5000	26.0	<5000	13.5	<5000	2.1	<5000
Selenium	5.0	1.2	0.99	<5.0	1.7	<5.0	0.99	<5.0	-0.43	<5.0
Silver	10	.2	-0.060	<10	-0.010	<10	0.0	<10	-0.080	<10
Sodium	5000	5.7	-1.3	<5000	-4.8	<5000	-7.1	<5000	157	<5000
Strontium	10	.07								
Thallium	10	.83	-0.070	<10	0.090	<10	0.050	<10	2.2	<10
Tin	50	.67								
Titanium	20	.19								
Vanadium	50	.18	0.21	<50	0.0	<50	0.12	<50	0.21	<50
Zinc	20	.13	-0.030	<20	-0.13	<20	-0.12	<20	-0.060	<20
Sulfur	50									

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: TC52720
Account: RFWTXHO - Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

File ID: SB080814.ICP Date Analyzed: 08/08/14 Methods: EPA 200.7, SW846 6010B
QC Limits: result < RL Run ID: MA10018 Units: ug/l

Time:			19:41		21:01		21:41		22:21	
Sample ID:			CCB4		CCB5		CCB6		CCB7	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	200	6.9	2.5	<200	0.37	<200	0.61	<200	1.8	<200
Antimony	5.0	.56	0.77	<5.0	1.1	<5.0	0.82	<5.0	1.5	<5.0
Arsenic	5.0	1	1.5	<5.0	1.3	<5.0	2.2	<5.0	-0.97	<5.0
Barium	200	.16	-0.090	<200	-0.070	<200	-0.020	<200	-0.030	<200
Beryllium	4.0	.1	-0.030	<4.0	-0.040	<4.0	-0.050	<4.0	-0.090	<4.0
Boron	100	.39								
Cadmium	4.0	.15	0.12	<4.0	-0.020	<4.0	0.040	<4.0	0.030	<4.0
Calcium	5000	4	0.74	<5000	3.9	<5000	7.4	<5000	25.4	<5000
Chromium	10	.22	-0.26	<10	-0.080	<10	-0.13	<10	-0.060	<10
Cobalt	50	.25	-0.11	<50	0.13	<50	0.16	<50	0.090	<50
Copper	20	.24	0.23	<20	0.15	<20	0.13	<20	0.22	<20
Iron	100	4.6	0.29	<100	0.12	<100	0.31	<100	1.8	<100
Lead	3.0	.65	-0.19	<3.0	-0.69	<3.0	-0.39	<3.0	-0.020	<3.0
Lithium	300	.65								
Magnesium	5000	7.7	1.3	<5000	8.7	<5000	1.4	<5000	1.1	<5000
Manganese	15	.09	0.010	<15	0.010	<15	0.0	<15	0.020	<15
Molybdenum	10	.62	anr							
Nickel	40	.22	-0.070	<40	0.11	<40	-0.090	<40	0.080	<40
Potassium	5000	7.6	51.6	<5000	16.2	<5000	33.0	<5000	13.6	<5000
Selenium	5.0	1.2	1.4	<5.0	0.45	<5.0	2.0	<5.0	0.50	<5.0
Silver	10	.2	-0.040	<10	-0.11	<10	-0.24	<10	0.10	<10
Sodium	5000	5.7	25.4	<5000	2.6	<5000	0.95	<5000	1.7	<5000
Strontium	10	.07								
Thallium	10	.83	1.0	<10	-0.070	<10	0.63	<10	0.89	<10
Tin	50	.67								
Titanium	20	.19								
Vanadium	50	.18	0.010	<50	0.070	<50	0.050	<50	-0.010	<50
Zinc	20	.13	-0.10	<20	0.030	<20	-0.10	<20	0.11	<20
Sulfur	50									

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: TC52720
Account: RFWTXHO - Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

File ID: SB080814.ICP Date Analyzed: 08/08/14 Methods: EPA 200.7, SW846 6010B
QC Limits: result < RL Run ID: MA10018 Units: ug/l

Time:			23:41		01:02		01:56		03:16	
Sample ID:			CCB8		CCB9		CCB10		CCB11	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	200	6.9	0.25	<200	1.5	<200	0.24	<200	-0.030	<200
Antimony	5.0	.56	0.80	<5.0	1.4	<5.0	1.3	<5.0	1.4	<5.0
Arsenic	5.0	1	1.1	<5.0	1.7	<5.0	-2.4	<5.0	2.2	<5.0
Barium	200	.16	-0.060	<200	-0.050	<200	-0.070	<200	-0.020	<200
Beryllium	4.0	.1	-0.10	<4.0	-0.090	<4.0	-0.15	<4.0	-0.21	<4.0
Boron	100	.39								
Cadmium	4.0	.15	0.020	<4.0	0.030	<4.0	0.11	<4.0	0.10	<4.0
Calcium	5000	4	3.2	<5000	4.2	<5000	3.1	<5000	1.6	<5000
Chromium	10	.22	-0.050	<10	-0.15	<10	-0.15	<10	-0.12	<10
Cobalt	50	.25	0.18	<50	0.16	<50	0.10	<50	0.17	<50
Copper	20	.24	0.13	<20	0.10	<20	-0.10	<20	-0.22	<20
Iron	100	4.6	0.85	<100	0.75	<100	0.69	<100	0.62	<100
Lead	3.0	.65	-0.040	<3.0	-0.99	<3.0	0.29	<3.0	-0.75	<3.0
Lithium	300	.65								
Magnesium	5000	7.7	-1.1	<5000	-5.8	<5000	9.6	<5000	0.45	<5000
Manganese	15	.09	-0.020	<15	0.020	<15	-0.010	<15	-0.010	<15
Molybdenum	10	.62	anr							
Nickel	40	.22	0.22	<40	0.090	<40	-0.12	<40	0.11	<40
Potassium	5000	7.6	12.5	<5000	8.8	<5000	12.5	<5000	-0.050	<5000
Selenium	5.0	1.2	1.2	<5.0	1.4	<5.0	0.48	<5.0	1.7	<5.0
Silver	10	.2	-0.030	<10	0.14	<10	-0.21	<10	-0.19	<10
Sodium	5000	5.7	6.0	<5000	2.2	<5000	-5.8	<5000	-6.4	<5000
Strontium	10	.07								
Thallium	10	.83	-0.31	<10	0.78	<10	0.96	<10	0.17	<10
Tin	50	.67								
Titanium	20	.19								
Vanadium	50	.18	0.080	<50	-0.080	<50	0.040	<50	0.020	<50
Zinc	20	.13	-0.060	<20	-0.10	<20	-0.070	<20	-0.10	<20
Sulfur	50									

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: TC52720
Account: RFWTXHO - Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

File ID: SB080814.ICP Date Analyzed: 08/08/14 Methods: EPA 200.7, SW846 6010B
QC Limits: result < RL Run ID: MA10018 Units: ug/l

Time:			04:35		05:29		06:09	
Sample ID:			CCB12		CCB13		CCB14	
Metal	RL	IDL	raw	final	raw	final	raw	final
Aluminum	200	6.9	0.23	<200	4.2	<200	1.1	<200
Antimony	5.0	.56	0.45	<5.0	0.050	<5.0	1.4	<5.0
Arsenic	5.0	1	1.0	<5.0	-1.1	<5.0	-0.18	<5.0
Barium	200	.16	-0.030	<200	-0.080	<200	-0.010	<200
Beryllium	4.0	.1	-0.20	<4.0	-0.17	<4.0	-0.15	<4.0
Boron	100	.39						
Cadmium	4.0	.15	0.13	<4.0	0.050	<4.0	0.13	<4.0
Calcium	5000	4	3.4	<5000	0.56	<5000	2.8	<5000
Chromium	10	.22	0.0	<10	-0.13	<10	-0.11	<10
Cobalt	50	.25	0.19	<50	0.15	<50	0.17	<50
Copper	20	.24	-0.29	<20	-0.20	<20	0.0	<20
Iron	100	4.6	0.080	<100	0.74	<100	1.3	<100
Lead	3.0	.65	-0.43	<3.0	0.060	<3.0	-0.17	<3.0
Lithium	300	.65						
Magnesium	5000	7.7	6.3	<5000	7.5	<5000	2.7	<5000
Manganese	15	.09	-0.020	<15	0.0	<15	0.0	<15
Molybdenum	10	.62	anr					
Nickel	40	.22	-0.070	<40	0.22	<40	0.23	<40
Potassium	5000	7.6	1.9	<5000	-1.4	<5000	-8.8	<5000
Selenium	5.0	1.2	2.0	<5.0	0.68	<5.0	0.13	<5.0
Silver	10	.2	-0.19	<10	-0.18	<10	-0.17	<10
Sodium	5000	5.7	-13	<5000	-21	<5000	-18	<5000
Strontium	10	.07						
Thallium	10	.83	0.0	<10	-0.010	<10	1.1	<10
Tin	50	.67						
Titanium	20	.19						
Vanadium	50	.18	-0.15	<50	0.19	<50	0.0	<50
Zinc	20	.13	-0.080	<20	-0.10	<20	-0.090	<20
Sulfur	50							

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: TC52720
Account: RFWTXHO - Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

File ID: SB080814.ICP Date Analyzed: 08/08/14 Methods: EPA 200.7, SW846 6010B
QC Limits: 90 to 110 % Recovery Run ID: MA10018 Units: ug/l

Time:		15:55			16:35			17:42	
Sample ID:	ICV	ICV1		CCV	CCV1		CCV	CCV2	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	5000	4930	98.6	40000	38700	96.8	40000	38800	97.0
Antimony	3000	2940	98.0	2000	1980	99.0	2000	1980	99.0
Arsenic	3000	2920	97.3	2000	1940	97.0	2000	1920	96.0
Barium	3000	2980	99.3	2000	1940	97.0	2000	1930	96.5
Beryllium	3000	2960	98.7	2000	1980	99.0	2000	1950	97.5
Boron									
Cadmium	3000	2930	97.7	2000	1970	98.5	2000	1960	98.0
Calcium	5000	5080	101.6	40000	38800	97.0	40000	38400	96.0
Chromium	3000	2990	99.7	2000	1950	97.5	2000	1930	96.5
Cobalt	3000	3140	104.7	2000	1970	98.5	2000	1940	97.0
Copper	3000	2990	99.7	2000	1950	97.5	2000	1960	98.0
Iron	5000	5000	100.0	40000	39000	97.5	40000	38700	96.8
Lead	3000	3030	101.0	2000	1980	99.0	2000	1950	97.5
Lithium									
Magnesium	5000	4780	95.6	40000	38700	96.8	40000	38500	96.3
Manganese	3000	3040	101.3	2000	1980	99.0	2000	1980	99.0
Molybdenum	anr								
Nickel	3000	3050	101.7	2000	1970	98.5	2000	1960	98.0
Potassium	5000	5010	100.2	40000	38900	97.3	40000	38900	97.3
Selenium	3000	2930	97.7	2000	1960	98.0	2000	1950	97.5
Silver	500	514	102.8	250	241	96.4	250	240	96.0
Sodium	5000	5060	101.2	40000	39300	98.3	40000	39400	98.5
Strontium									
Thallium	3000	3080	102.7	2000	2010	100.5	2000	2020	101.0
Tin									
Titanium									
Vanadium	3000	2940	98.0	2000	1950	97.5	2000	1950	97.5
Zinc	3000	3000	100.0	2000	1980	99.0	2000	1970	98.5
Sulfur									

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: TC52720
Account: RFWTXHO - Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

File ID: SB080814.ICP Date Analyzed: 08/08/14 Methods: EPA 200.7, SW846 6010B
QC Limits: 90 to 110 % Recovery Run ID: MA10018 Units: ug/l

Time:		18:35			19:35			20:54	
Sample ID:	CCV	CCV3		CCV	CCV4		CCV	CCV5	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	40000	38300	95.8	40000	38800	97.0	40000	38800	97.0
Antimony	2000	1960	98.0	2000	2020	101.0	2000	1950	97.5
Arsenic	2000	1920	96.0	2000	1980	99.0	2000	1900	95.0
Barium	2000	1920	96.0	2000	1950	97.5	2000	1940	97.0
Beryllium	2000	1930	96.5	2000	1970	98.5	2000	1970	98.5
Boron									
Cadmium	2000	1950	97.5	2000	2010	100.5	2000	1950	97.5
Calcium	40000	38300	95.8	40000	38900	97.3	40000	38800	97.0
Chromium	2000	1880	94.0	2000	1920	96.0	2000	1950	97.5
Cobalt	2000	1950	97.5	2000	2020	101.0	2000	1950	97.5
Copper	2000	1970	98.5	2000	2010	100.5	2000	1930	96.5
Iron	40000	38300	95.8	40000	38800	97.0	40000	38800	97.0
Lead	2000	1970	98.5	2000	2020	101.0	2000	1970	98.5
Lithium									
Magnesium	40000	37900	94.8	40000	38400	96.0	40000	38800	97.0
Manganese	2000	1970	98.5	2000	2010	100.5	2000	1980	99.0
Molybdenum	anr								
Nickel	2000	1950	97.5	2000	2010	100.5	2000	1970	98.5
Potassium	40000	39000	97.5	40000	39800	99.5	40000	39100	97.8
Selenium	2000	1960	98.0	2000	2010	100.5	2000	1920	96.0
Silver	250	239	95.6	250	244	97.6	250	240	96.0
Sodium	40000	37500	93.8	40000	39700	99.3	40000	39500	98.8
Strontium									
Thallium	2000	1990	99.5	2000	2050	102.5	2000	2000	100.0
Tin									
Titanium									
Vanadium	2000	1950	97.5	2000	1980	99.0	2000	1950	97.5
Zinc	2000	1970	98.5	2000	2030	101.5	2000	1970	98.5
Sulfur									

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: TC52720
Account: RFWTXHO - Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

File ID: SB080814.ICP Date Analyzed: 08/08/14 Methods: EPA 200.7, SW846 6010B
QC Limits: 90 to 110 % Recovery Run ID: MA10018 Units: ug/l

Time:		21:34			22:14			23:35	
Sample ID:	CCV	CCV6		CCV	CCV7		CCV	CCV8	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	40000	38700	96.8	40000	38200	95.5	40000	38200	95.5
Antimony	2000	1970	98.5	2000	1910	95.5	2000	1920	96.0
Arsenic	2000	1920	96.0	2000	1870	93.5	2000	1880	94.0
Barium	2000	1950	97.5	2000	1910	95.5	2000	1920	96.0
Beryllium	2000	1980	99.0	2000	1950	97.5	2000	1960	98.0
Boron									
Cadmium	2000	1970	98.5	2000	1920	96.0	2000	1930	96.5
Calcium	40000	38800	97.0	40000	38600	96.5	40000	38600	96.5
Chromium	2000	1940	97.0	2000	1940	97.0	2000	1920	96.0
Cobalt	2000	1970	98.5	2000	1920	96.0	2000	1940	97.0
Copper	2000	1930	96.5	2000	1900	95.0	2000	1910	95.5
Iron	40000	38800	97.0	40000	38500	96.3	40000	39000	97.5
Lead	2000	1980	99.0	2000	1950	97.5	2000	1950	97.5
Lithium									
Magnesium	40000	38700	96.8	40000	38600	96.5	40000	38800	97.0
Manganese	2000	1980	99.0	2000	1980	99.0	2000	1960	98.0
Molybdenum	anr								
Nickel	2000	1970	98.5	2000	1950	97.5	2000	1940	97.0
Potassium	40000	39300	98.3	40000	38800	97.0	40000	39300	98.3
Selenium	2000	1940	97.0	2000	1880	94.0	2000	1900	95.0
Silver	250	240	96.0	250	238	95.2	250	238	95.2
Sodium	40000	39600	99.0	40000	39100	97.8	40000	39500	98.8
Strontium									
Thallium	2000	2010	100.5	2000	1990	99.5	2000	1980	99.0
Tin									
Titanium									
Vanadium	2000	1940	97.0	2000	1930	96.5	2000	1920	96.0
Zinc	2000	1980	99.0	2000	1940	97.0	2000	1940	97.0
Sulfur									

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: TC52720
Account: RFWTXHO - Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

File ID: SB080814.ICP Date Analyzed: 08/08/14 Methods: EPA 200.7, SW846 6010B
QC Limits: 90 to 110 % Recovery Run ID: MA10018 Units: ug/l

Time:		00:55			01:49			03:09	
Sample ID:	CCV	CCV9		CCV	CCV10		CCV	CCV11	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	40000	38800	97.0	40000	38500	96.3	40000	38700	96.8
Antimony	2000	1940	97.0	2000	1920	96.0	2000	1920	96.0
Arsenic	2000	1890	94.5	2000	1920	96.0	2000	1940	97.0
Barium	2000	1940	97.0	2000	1950	97.5	2000	1950	97.5
Beryllium	2000	1970	98.5	2000	1990	99.5	2000	2060	103.0
Boron									
Cadmium	2000	1940	97.0	2000	1940	97.0	2000	1950	97.5
Calcium	40000	39500	98.8	40000	39600	99.0	40000	40400	101.0
Chromium	2000	1940	97.0	2000	1940	97.0	2000	1970	98.5
Cobalt	2000	1950	97.5	2000	1980	99.0	2000	2030	101.5
Copper	2000	1930	96.5	2000	1920	96.0	2000	1910	95.5
Iron	40000	40200	100.5	40000	40300	100.8	40000	40700	101.8
Lead	2000	1960	98.0	2000	1960	98.0	2000	2010	100.5
Lithium									
Magnesium	40000	40000	100.0	40000	39800	99.5	40000	40400	101.0
Manganese	2000	1980	99.0	2000	1970	98.5	2000	2000	100.0
Molybdenum	anr								
Nickel	2000	1950	97.5	2000	1940	97.0	2000	1980	99.0
Potassium	40000	40000	100.0	40000	40000	100.0	40000	40100	100.3
Selenium	2000	1920	96.0	2000	1920	96.0	2000	1940	97.0
Silver	250	241	96.4	250	240	96.0	250	240	96.0
Sodium	40000	40100	100.3	40000	39900	99.8	40000	39800	99.5
Strontium									
Thallium	2000	2000	100.0	2000	1980	99.0	2000	2010	100.5
Tin									
Titanium									
Vanadium	2000	1950	97.5	2000	1940	97.0	2000	1960	98.0
Zinc	2000	1950	97.5	2000	1960	98.0	2000	1970	98.5
Sulfur									

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: TC52720
Account: RFWTXHO - Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

File ID: SB080814.ICP Date Analyzed: 08/08/14 Methods: EPA 200.7, SW846 6010B
QC Limits: 90 to 110 % Recovery Run ID: MA10018 Units: ug/l

Time:		04:29			05:22			06:02	
Sample ID:	CCV	CCV12		CCV	CCV13		CCV	CCV14	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	40000	38700	96.8	40000	38700	96.8	40000	38900	97.3
Antimony	2000	1930	96.5	2000	1930	96.5	2000	1960	98.0
Arsenic	2000	1940	97.0	2000	1940	97.0	2000	1930	96.5
Barium	2000	1940	97.0	2000	1940	97.0	2000	1940	97.0
Beryllium	2000	2040	102.0	2000	2030	101.5	2000	2020	101.0
Boron									
Cadmium	2000	1960	98.0	2000	1950	97.5	2000	1970	98.5
Calcium	40000	40100	100.3	40000	39800	99.5	40000	39900	99.8
Chromium	2000	1940	97.0	2000	1940	97.0	2000	1960	98.0
Cobalt	2000	2030	101.5	2000	2010	100.5	2000	2010	100.5
Copper	2000	1910	95.5	2000	1920	96.0	2000	1940	97.0
Iron	40000	40200	100.5	40000	39800	99.5	40000	39700	99.3
Lead	2000	1990	99.5	2000	1980	99.0	2000	1980	99.0
Lithium									
Magnesium	40000	39800	99.5	40000	39600	99.0	40000	39700	99.3
Manganese	2000	1970	98.5	2000	1970	98.5	2000	1990	99.5
Molybdenum	anr								
Nickel	2000	1960	98.0	2000	1950	97.5	2000	1960	98.0
Potassium	40000	39700	99.3	40000	39500	98.8	40000	39300	98.3
Selenium	2000	1940	97.0	2000	1950	97.5	2000	1950	97.5
Silver	250	238	95.2	250	238	95.2	250	240	96.0
Sodium	40000	39600	99.0	40000	39500	98.8	40000	39500	98.8
Strontium									
Thallium	2000	1980	99.0	2000	1980	99.0	2000	1990	99.5
Tin									
Titanium									
Vanadium	2000	1950	97.5	2000	1950	97.5	2000	1960	98.0
Zinc	2000	1970	98.5	2000	1960	98.0	2000	1980	99.0
Sulfur									

(*) Outside of QC limits
(anr) Analyte not requested

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: TC52720
Account: RFWTXHO - Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

File ID: SB080814.ICP Date Analyzed: 08/08/14 Methods: EPA 200.7, SW846 6010B
QC Limits: 50 to 150 % Recovery Run ID: MA10018 Units: ug/l

Time:			16:09		21:47		05:42	
Sample ID:	CRI	CRIA	CRI1		CRI2		CRI3	
Metal	True	True	Results	% Rec	Results	% Rec	Results	% Rec
Aluminum	200	400	202	101.0	201	100.5	203	101.5
Antimony	5.0	10	4.9	98.0	4.6	92.0	4.6	92.0
Arsenic	5.0	10	5.2	104.0	4.2	84.0	5.3	106.0
Barium	200	400	197	98.5	197	98.5	196	98.0
Beryllium	4.0	4.0	4.0	100.0	4.0	100.0	3.9	97.5
Boron	100	200						
Cadmium	4.0	4.0	4.4	110.0	4.4	110.0	4.3	107.5
Calcium	5000	10000	4990	99.8	5000	100.0	5100	102.0
Chromium	10	10	10.3	103.0	10.3	103.0	10.2	102.0
Cobalt	50	10	52.3	104.6	51.6	103.2	53.6	107.2
Copper	20	20	19.9	99.5	20.0	100.0	20.0	100.0
Iron	100	200	102	102.0	102	102.0	103	103.0
Lead	3.0	6.0	2.8	93.3	2.3	76.7	3.2	106.7
Lithium	300	600						
Magnesium	5000	10000	5000	100.0	5060	101.2	5150	103.0
Manganese	15	30	15.9	106.0	15.9	106.0	16.2	108.0
Molybdenum	10	20	anr					
Nickel	40	20	39.4	98.5	39.5	98.8	39.4	98.5
Potassium	5000	10000	5000	100.0	5050	101.0	5090	101.8
Selenium	5.0	10	6.0	120.0	5.0	100.0	4.0	80.0
Silver	10	4.0	9.8	98.0	9.9	99.0	9.8	98.0
Sodium	5000	10000	5030	100.6	5120	102.4	5080	101.6
Strontium	20	20						
Thallium	10	4.0	8.7	87.0	9.9	99.0	11.4	114.0
Tin	20	20						
Titanium	20	20						
Vanadium	50	100	49.9	99.8	50.1	100.2	50.4	100.8
Zinc	20	10	22.3	111.5	22.4	112.0	23.6	118.0
Sulfur	50	50						

(*) Outside of QC limits
(anr) Analyte not requested

INTERFERING ELEMENT CHECK STANDARDS SUMMARY
Part 1 - ICSA and ICSAB Standards

Login Number: TC52720
Account: RFWTXHO - Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

File ID: SB080814.ICP Date Analyzed: 08/08/14 Methods: EPA 200.7, SW846 6010B
QC Limits: 80 to 120 % Recovery Run ID: MA10018 Units: ug/l

Time:			16:22		16:29		22:01		22:07	
Sample ID:	ICSA	ICSAB	ICSA1		ICSAB1		ICSA2		ICSAB2	
Metal	True	True	Results	% Rec	Results	% Rec	Results	% Rec	Results	% Rec
Aluminum	500000	500000	500000	100.0	501000	100.2	492000	98.4	516000	103.2
Antimony		1000	0.35		1020	102.0	1.3		1040	104.0
Arsenic		1000	4.0		966	96.6	-0.18		971	97.1
Barium		500	4.5		497	99.4	4.4		507	101.4
Beryllium		500	0.050		490	98.0	0.010		506	101.2
Boron			3.0		-0.44		2.1		0.13	
Cadmium		1000	-0.12		1040	104.0	0.030		1060	106.0
Calcium	500000	500000	453000	90.6	455000	91.0	446000	89.2	467000	93.4
Chromium		500	0.0		466	93.2	-0.43		473	94.6
Cobalt		500	-1.8		457	91.4	-1.8		465	93.0
Copper		500	0.24		523	104.6	0.20		533	106.6
Iron	200000	200000	177000	88.5	178000	89.0	173000	86.5	182000	91.0
Lead		1000	1.9		917	91.7	0.67		940	94.0
Lithium			6.3		6.3		6.8		6.7	
Magnesium	500000	500000	495000	99.0	499000	99.8	486000	97.2	511000	102.2
Manganese		500	1.9		482	96.4	1.9		491	98.2
Molybdenum		500	-1.5		480	96.0	-1.9		489	97.8
Nickel		1000	-0.020		923	92.3	-0.32		945	94.5
Potassium			129		43.2		108		68.3	
Selenium		1000	1.6		986	98.6	0.70		987	98.7
Silver		1000	-1.8		1130	113.0	-1.7		1150	115.0
Sodium			6.0		3.6		4.0		11.1	
Strontium			2.4		2.4		2.4		2.4	
Thallium		1000	-6.9		901	90.1	-5.4		925	92.5
Tin			-4.5		-6.1		-5.9		-5.3	
Titanium			3.5		3.4		3.4		3.3	
Vanadium		500	2.0		475	95.0	1.7		483	96.6
Zinc		1000	-7.6		999	99.9	-7.2		1020	102.0
Sulfur			-1.9		-9.5		-1.1		-6.3	

(*) Outside of QC limits
(anr) Analyte not requested

INTERFERING ELEMENT CHECK STANDARDS SUMMARY
Part 1 - ICSA and ICSAB Standards

Login Number: TC52720
Account: RFWTXHO - Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

File ID: SB080814.ICP Date Analyzed: 08/08/14 Methods: EPA 200.7, SW846 6010B
QC Limits: 80 to 120 % Recovery Run ID: MA10018 Units: ug/l

Time:			05:49		05:55	
Sample ID:	ICSA	ICSAB	ICSA3		ICSAB3	
Metal	True	True	Results	% Rec	Results	% Rec
Aluminum	500000	500000	496000	99.2	507000	101.4
Antimony		1000	2.0		1010	101.0
Arsenic		1000	5.0		963	96.3
Barium		500	4.7		490	98.0
Beryllium		500	-0.080		502	100.4
Boron			2.1		0.76	
Cadmium		1000	0.040		1050	105.0
Calcium	500000	500000	463000	92.6	466000	93.2
Chromium		500	0.22		463	92.6
Cobalt		500	-2.0		473	94.6
Copper		500	0.93		519	103.8
Iron	200000	200000	178000	89.0	180000	90.0
Lead		1000	1.8		925	92.5
Lithium			6.9		6.5	
Magnesium	500000	500000	499000	99.8	504000	100.8
Manganese		500	1.8		479	95.8
Molybdenum		500	-1.5		485	97.0
Nickel		1000	0.21		921	92.1
Potassium			55.5		8.5	
Selenium		1000	-1.7		987	98.7
Silver		1000	-2.2		1130	113.0
Sodium			-30		-33	
Strontium			2.4		2.4	
Thallium		1000	-8.5		894	89.4
Tin			-3.7		-6.0	
Titanium			3.5		3.4	
Vanadium		500	1.6		472	94.4
Zinc		1000	-5.2		1000	100.0
Sulfur			-4.9		-9.8	

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: TC52720
Account: RFWTXHO - Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

QC Batch ID: MP23965
Matrix Type: SOLID

Methods: SW846 6010B
Units: mg/kg

Prep Date: 08/06/14

Metal	RL	IDL	MDL	MB raw	final
Aluminum	10	.35	1.2	0.87	<10
Antimony	0.25	.028	.09	0.014	<0.25
Arsenic	0.25	.05	.087	0.11	<0.25
Barium	10	.008	.013	0.0090	<10
Beryllium	0.20	.005	.034	-0.0075	<0.20
Boron	5.0	.02	.29		
Cadmium	0.20	.0075	.013	0.0060	<0.20
Calcium	250	.2	.39	2.3	<250
Chromium	0.50	.011	.07	0.036	<0.50
Cobalt	2.5	.013	.02	0.0	<2.5
Copper	1.0	.012	.11	0.011	<1.0
Iron	5.0	.23	.72	2.1	<5.0
Lead	0.15	.033	.11	-0.038	<0.15
Lithium	15	.033	.074		
Magnesium	250	.38	1.4	0.89	<250
Manganese	0.75	.0045	.02	0.032	<0.75
Molybdenum	0.50	.031	.026		
Nickel	2.0	.011	.038	0.027	<2.0
Potassium	250	.38	2.1	0.59	<250
Selenium	0.25	.06	.094	0.038	<0.25
Silver	0.50	.01	.035	-0.0075	<0.50
Sodium	250	.29	.77	0.17	<250
Sulfur	2.5		.41		
Strontium	0.50	.0035	.006		
Thallium	0.50	.042	.12	-0.025	<0.50
Tin	2.5	.034	.38		
Titanium	1.0	.0095	.034		
Vanadium	2.5	.009	.021	0.0020	<2.5
Zinc	1.0	.0065	.28	0.14	<1.0

Associated samples MP23965: TC52720-1, TC52720-2, TC52720-3, TC52720-4, TC52720-5

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: TC52720
Account: RFWTXHO - Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

QC Batch ID: MP23965
Matrix Type: SOLID

Methods: SW846 6010B
Units: mg/kg

Prep Date: 08/06/14

Metal	TC52720-1 Original	MS	Spikelot MPTW11	% Rec	QC Limits
Aluminum	18800	22000	4920	65.1N	75-125
Antimony	1.4	16.7	39.3	40.1N(a)	75-125
Arsenic	6.8	40.5	39.3	90.3	75-125
Barium	432	492	39.3	152.5(b)	75-125
Beryllium	2.7	35.6	39.3	83.6	75-125
Boron					
Cadmium	0.85	34.1	39.3	84.5	75-125
Calcium	121000	133000	4920	718.0(b)	75-125
Chromium	34.2	64.6	39.3	77.3	75-125
Cobalt	6.1	36.0	39.3	76.0	75-125
Copper	48.4	83.9	39.3	90.3	75-125
Iron	12800	17100	4920	87.5	75-125
Lead	69.9	109	39.3	99.4	75-125
Lithium					
Magnesium	2710	6840	4920	84.0	75-125
Manganese	288	331	39.3	109.3	75-125
Molybdenum					
Nickel	95.9	130	39.3	86.7	75-125
Potassium	1950	6240	4920	87.3	75-125
Selenium	1.9	33.0	39.3	79.1	75-125
Silver	0.094	36.1	39.3	91.5	75-125
Sodium	465	4680	4920	85.7	75-125
Sulfur					
Strontium					
Thallium	0.0	34.8	39.3	88.5	75-125
Tin					
Titanium					
Vanadium	32.8	64.9	39.3	81.6	75-125
Zinc	354	409	39.3	139.8(b)	75-125

Associated samples MP23965: TC52720-1, TC52720-2, TC52720-3, TC52720-4, TC52720-5

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested
(a) Spike recovery indicates possible matrix interference or sample non-homogeneity.
(b) Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: TC52720
Account: RFWTXHO - Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

QC Batch ID: MP23965
Matrix Type: SOLID

Methods: SW846 6010B
Units: mg/kg

Prep Date: 08/06/14

Metal	TC52720-1 Original MS	Spikelot MPTW11	% Rec	QC Limits

information.

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: TC52720
Account: RFWTXHO - Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

QC Batch ID: MP23965
Matrix Type: SOLID

Methods: SW846 6010B
Units: mg/kg

Prep Date: 08/06/14

Metal	TC52720-1 Original	MSD	Spikelot MPTW11	% Rec	MSD RPD	QC Limit
Aluminum	18800	20600	4920	36.6N	6.6	20
Antimony	1.4	18.0	39.4	43.4N(a)	6.3	20
Arsenic	6.8	40.7	39.4	90.7	1.9	20
Barium	432	470	39.4	96.5	4.6	20
Beryllium	2.7	35.5	39.4	83.3	0.3	20
Boron						
Cadmium	0.85	33.8	39.4	83.7	0.9	20
Calcium	121000	127000	4920	595.4(b)	3.8	20
Chromium	34.2	62.5	39.4	71.9N	3.3	20
Cobalt	6.1	35.6	39.4	74.9N	1.1	20
Copper	48.4	83.9	39.4	90.2	0.0	20
Iron	12800	16600	4920	77.2	3.0	20
Lead	69.9	106	39.4	91.7	2.8	20
Lithium						
Magnesium	2710	6650	4920	80.1	2.8	20
Manganese	288	311	39.4	58.4 (b)	6.2	20
Molybdenum						
Nickel	95.9	125	39.4	73.9N	3.9	20
Potassium	1950	6030	4920	82.9	3.4	20
Selenium	1.9	32.8	39.4	78.5	0.6	20
Silver	0.094	35.8	39.4	90.7	0.8	20
Sodium	465	4650	4920	85.0	0.6	20
Sulfur						
Strontium						
Thallium	0.0	34.1	39.4	86.6	2.0	20
Tin						
Titanium						
Vanadium	32.8	64.3	39.4	80.0	0.9	20
Zinc	354	391	39.4	94.0	4.5	20

Associated samples MP23965: TC52720-1, TC52720-2, TC52720-3, TC52720-4, TC52720-5

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested
(a) Spike recovery indicates possible matrix interference or sample non-homogeneity.
(b) Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: TC52720
Account: RFWTXHO - Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

QC Batch ID: MP23965
Matrix Type: SOLID

Methods: SW846 6010B
Units: mg/kg

Prep Date: 08/06/14

Metal	TC52720-1 Original MSD	Spikelot MPTW11	% Rec	MSD RPD	QC Limit

information.

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: TC52720
Account: RFWTXHO - Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

QC Batch ID: MP23965
Matrix Type: SOLID

Methods: SW846 6010B
Units: mg/kg

Prep Date: 08/06/14

Metal	LCS Result	Spikelot MPLCD064	% Rec	QC Limits
Aluminum	8460	8100	104.4	51-148
Antimony	72.7	45.9	158.4	0-532
Arsenic	106	122	86.9	78-122
Barium	147	167	88.0	82-117
Beryllium	49.2	54.3	90.6	82-118
Boron				
Cadmium	77.0	88	87.5	82-118
Calcium	5310	5920	89.7	82-118
Chromium	91.0	102	89.2	79-121
Cobalt	89.8	99.4	90.3	83-117
Copper	70.0	78	89.7	80-120
Iron	13400	15100	88.7	47-153
Lead	92.7	94.5	98.1	81-119
Lithium				
Magnesium	2890	3020	95.7	75-124
Manganese	364	401	90.8	81-119
Molybdenum				
Nickel	57.2	56.3	101.6	82-118
Potassium	2430	2490	97.6	70-130
Selenium	133	157	84.7	77-122
Silver	31.0	34.2	90.6	74-125
Sodium	242	246	98.4	70-130
Sulfur				
Strontium				
Thallium	110	116	94.8	78-122
Tin				
Titanium				
Vanadium	62.0	67.1	92.4	65-135
Zinc	183	207	88.4	80-121

Associated samples MP23965: TC52720-1, TC52720-2, TC52720-3, TC52720-4, TC52720-5

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: TC52720
Account: RFWTXHO - Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

QC Batch ID: MP23965
Matrix Type: SOLID

Methods: SW846 6010B
Units: ug/l

Prep Date: 08/06/14

Metal	TC52720-1 Original	SDL 1:5	%DIF	QC Limits
Aluminum	172000	192000	12.1*	0-10
Antimony	13.8	0.00	100.0(a)	0-10
Arsenic	50.8	201	295.1*(b	0-10
Barium	4390	5070	15.5*	0-10
Beryllium	31.5	31.5	15.4*	0-10
Boron				
Cadmium	7.88	8.98	14.0*	0-10
Calcium	993000	1240000	25.2*	0-10
Chromium	348	414	19.1*	0-10
Cobalt	62.0	76.4	23.3*	0-10
Copper	493	545	10.7*	0-10
Iron	156000	157000	20.8*	0-10
Lead	711	711	1.4	0-10
Lithium				
Magnesium	27500	32400	17.5*	0-10
Manganese	2930	3490	19.3*	0-10
Molybdenum				
Nickel	976	975	0.1	0-10
Potassium	22000	22200	12.2*	0-10
Selenium	19.5	11.9	236.5(a)	0-10
Silver	0.960	0.00	100.0(a)	0-10
Sodium	5280	5340	12.9*	0-10
Sulfur				
Strontium				
Thallium	0.00	0.00	NC	0-10
Tin				
Titanium				
Vanadium	394	393	17.7*	0-10
Zinc	3600	4150	15.4*	0-10

Associated samples MP23965: TC52720-1, TC52720-2, TC52720-3, TC52720-4, TC52720-5

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested
(a) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).
(b) Serial dilution indicates possible matrix interference.

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: TC52720
Account: RFWTXHO - Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

QC Batch ID: MP23971
Matrix Type: SOLID

Methods: SW846 7471A
Units: mg/kg

Prep Date: 08/07/14

Metal	RL	IDL	MDL	MB raw	final
Mercury	0.031	.0075	.012	0.0074	<0.031

Associated samples MP23971: TC52720-1, TC52720-2, TC52720-3, TC52720-4, TC52720-5

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: TC52720
Account: RFWTXHO - Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

QC Batch ID: MP23971 Methods: SW846 7471A
Matrix Type: SOLID Units: mg/kg

Prep Date: 08/07/14

Metal	TC52743-1 Original	MS	Spikelot HGTXWS1	% Rec	QC Limits
Mercury	2.1	3.3	0.46	260.9(a)	75-125

Associated samples MP23971: TC52720-1, TC52720-2, TC52720-3, TC52720-4, TC52720-5

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested
(a) Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: TC52720
Account: RFWTXHO - Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

QC Batch ID: MP23971 Methods: SW846 7471A
Matrix Type: SOLID Units: mg/kg

Prep Date: 08/07/14

Metal	TC52743-1 Original	MSD	Spikelot HGTXWS1	% Rec	MSD RPD	QC Limit
Mercury	2.1	3.4	0.459	283.1(a)	3.0	20

Associated samples MP23971: TC52720-1, TC52720-2, TC52720-3, TC52720-4, TC52720-5

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested
(a) Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: TC52720
Account: RFWTXHO - Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

QC Batch ID: MP23971
Matrix Type: SOLID

Methods: SW846 7471A
Units: mg/kg

Prep Date: 08/07/14

Metal	LCS Result	Spikelot HGLCD064	% Rec	QC Limits
Mercury	3.4	3.98	85.4	75-126

Associated samples MP23971: TC52720-1, TC52720-2, TC52720-3, TC52720-4, TC52720-5

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

Gulf Coast ACCUTEST LABORATORIES

General Chemistry

QC Data Summaries

Includes the following where applicable:

- Percent Solids Raw Data Summary

Percent Solids Raw Data Summary

Job Number: TC52720
Account: RFWTXHO Weston Solutions
Project: CES- Chemical Spill/4904 Griggs, Houston, TX

Sample: TC52720-1 **Analyzed:** 06-AUG-14 by PA **Method:** SM 2540 G
ClientID: CES-CS-01-51

Wet Weight (Total)	10.56	g
Tare Weight	1.03	g
Dry Weight (Total)	5.88	g
Solids, Percent	50.9	%

Sample: TC52720-2 **Analyzed:** 06-AUG-14 by PA **Method:** SM 2540 G
ClientID: CES-CS-02-51

Wet Weight (Total)	10.38	g
Tare Weight	1.03	g
Dry Weight (Total)	9.21	g
Solids, Percent	87.5	%

Sample: TC52720-3 **Analyzed:** 06-AUG-14 by PA **Method:** SM 2540 G
ClientID: CES-CS-03-51

Wet Weight (Total)	10.49	g
Tare Weight	1.03	g
Dry Weight (Total)	7.75	g
Solids, Percent	71	%

Sample: TC52720-4 **Analyzed:** 06-AUG-14 by PA **Method:** SM 2540 G
ClientID: CES-CS-04-51

Wet Weight (Total)	10.74	g
Tare Weight	1.03	g
Dry Weight (Total)	7.83	g
Solids, Percent	70	%

Sample: TC52720-5 **Analyzed:** 06-AUG-14 by PA **Method:** SM 2540 G
ClientID: CES-CS-05-51

Wet Weight (Total)	11.06	g
Tare Weight	1.03	g
Dry Weight (Total)	8.72	g
Solids, Percent	76.7	%