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January 17, 2012

Mr. Jason Moeller
Hydrogeologist – Northeast Region Spills Coordinator
Wisconsin Department of Natural Resources
2984 Shawano Avenue
Green Bay, WI 54313-6727

Subject: 2011 Groundwater Sampling Results
SpecialtyChem Spills Monitoring
Ansul Site - Marinette, Wisconsin
(WDNR BRRTS #02-38-000186)

Dear Mr. Moeller:

On behalf of ChemDesign/SpecialtyChem Products Corporation (SpecialtyChem), TRC Environmental Corporation (TRC) is submitting groundwater data collected on October 25, 2011, at the SpecialtyChem areas within the Ansul facility at 2 Stanton Street, Marinette, Wisconsin. This letter report includes an evaluation and discussion of the previous data collected by RMT, Inc. (RMT). The environmental consulting division of RMT was acquired by TRC in June 2011. Please be informed that subsequent activity regarding this project will be conducted by TRC.

Objective

TRC collected groundwater samples from wells located in the vicinity of historic spills as designated in the spill evaluation report submitted by RMT to the WDNR on July 13, 2005 (RMT, 2005). The objective of the groundwater sampling activities was to determine if concentrations of the relevant SpecialtyChem spill constituents are stable-to-declining in the groundwater near the reported spill locations and to provide data in support of closure for these historic spills. This, and previous sampling conducted by RMT, were conducted in response to WDNR denial letter for closure of these spills dated November 15, 2004. The reason for denial cited incomplete data and data evaluation of the impact of the spills. This report is the seventh round of groundwater sampling conducted in response to the denial letter.

Summary of Groundwater Sampling Activities

Groundwater samples were collected from six monitoring wells (MW-41S, MW-41M, MW-44S, MW-44M, MW-45S, MW-45M, and TW-1) in the vicinity of the spill sites on October 25, 2011 (Figure 1). For administrative reasons, the samples were collected by staff of CH2M Hill (a subcontractor to Ansul) with the samples immediately given to a

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TRC representative. The TRC representative maintained sample custody at all times. In the past, up to nine wells were sampled to monitor these spill sites. One of the well nests (MW-10S/-10M) was abandoned during construction of a sheet pile wall near the well. One of two temporary wells (TW-2) installed by RMT in 2006 was also covered or destroyed during those construction activities.

Water levels were recorded at each monitoring location. Field parameters (pH, conductivity, oxidation/reduction potential (ORP), dissolved oxygen (DO) and temperature) were measured to document adequate purging of the wells, however two separate meters malfunctioned and the values of pH, ORP and DO were unreliable for this event. A TRC representative was on site to observe and document the sampling to ensure the sampling was conducted according to proper protocols, provide pre-cleaned sample bottles, and prepare and ship the samples to Pace Analytical (Pace) in Green Bay, Wisconsin.

Groundwater samples were analyzed for volatile organic compounds (VOCs) by EPA Method 8260 by Pace. The groundwater analytical results, select field parameters, and a summary of the historical data are provided in Tables 1 through 3. Attachment A provides a summary of the concentrations of all VOCs that were detected in the sampled wells. Attachment B contains graphs of constituents of concern over time. The laboratory reports are provided in Attachment C. The laboratory reports include a composite sample (WC2011) collected from the drum of purge water removed from the wells. The purpose of that sample was to provide analysis for safe disposal of the purge water. That sample was analyzed for metals, semivolatiles, and pesticides in addition to VOCs.

Groundwater Data Evaluation

The groundwater constituents of concern are derived from documented spills of volatile organic compounds, including methylene chloride (Spills No. 5, 6, and 18); 1,2-dichlorobenzene and 1,4-dichlorobenzene (Spill No. 21); and xylenes (Spills No. 2, 9, 19, 22, 24, and 26). An evaluation of the groundwater data collected by TRC is provided below, including a comparison to the previous data. The text references to “well nests” refer to shallow wells (with the “S” suffix) in proximity to a well of moderate depth—referred to as a “mid-level” well (“M” suffix) in Table 1. Graphs of VOC concentrations from 2001 to 2011 are contained in Attachment B.

Areas H and I – Still Building

The SpecialtyChem spill constituents for this area are methylene chloride (Spill No. 6) and xylenes (Spills No. 9, 19, 22, 24, and 26). The MW-41 and MW-45 well nests and TW-1 are located downgradient of these spill locations (Figure 1). Concentration trends are plotted on Figures B-1 and B-2 and summarized in Table 1.



- **Methylene chloride (Figure B-1)** – Concentrations of methylene chloride remained above the Wisconsin Department of Natural Resources (WDNR) Enforcement Standard (ES) of 5 µg/L at all wells used to monitor these spills in 2011. Overall, the methylene chloride concentrations in the shallow wells (MW-41S, MW-45S) have decreased markedly since 2000 (from 560 µg/L at MW-41S in 2000 to 57.3 µg/L and from 560 µg/L to 85.7 µg/L at MW-45S). Concentrations in mid-level wells MW-41M (111 µg/L) and MW-45M (98.9 µg/L) have decreased from 2008 concentrations and continue to fluctuate. TW-1 has never had a detection of methylene chloride.
- **Xylenes (Figure B-2)** – Xylene concentrations continue to fluctuate in the shallow wells and remain above the ES in MW-41 (14,640 µg/L). Concentrations of xylenes continue to increase in TW-1. The temporary well contained approximately one inch of black, oily, light non-aqueous phase liquid (LNAPL) on the water surface. This is the first time that LNAPL has been detected in any of the wells monitored by RMT/TRC. Xylenes are typically below detectable concentrations in the mid-level wells (MW-41M and MW-45M).

Area N – Building 69

The SpecialtyChem spill constituent at this location is methylene chloride (Spills No. 5 and 18). The MW-44 well nest is located downgradient of this spill location (Figure 1). Analytical results clearly indicate that methylene chloride is no longer of concern from this historic spill. Table 2 summarizes the analytical results.

- **Methylene chloride (Figure B-3)** – The groundwater concentrations of methylene chloride in MW-44M (1.4J µg/L) has stabilized, with concentrations consistently below the ES, but slightly above the Preventive Action Limit (PAL). Methylene chloride has not been detected at MW-44S (<0.43 µg/L) since 2000.

Areas P&Q – Building 52

The SpecialtyChem spill constituents are 1,2-dichlorobenzene and 1,4-dichlorobenzene (Spill No. 21); methylene chloride (Spills No. 5 and 18); and xylenes (Spill No. 2). The MW-10 well nest and TW-2 were located downgradient of these spill locations (Figure 1). The MW-10 nest has been removed and TW-2 could not be located and is presumed to be buried. However, historic data indicate the constituents of concern at this site have diminished below levels of regulatory concern or are nearing that level. In addition, extraction well EW-4 is in close proximity to these spills and the well should be close enough to capture groundwater in the vicinity. The chemical concentrations over time are plotted on Figures B-4 to B-6 and summarized in Table 3.

- **1,2-Dichlorobenzene and 1,4-dichlorobenzene** – The concentration of 1,2-dichlorobenzene in MW-10S consistently decreased since 2000, but remained well



above the ES in 2009. 1,2-dichlorobenzene was detected at MW-10M, while the concentration at TW-2, was below the detection limit. Values at both locations are below the PAL. 1,4-dichlorobenzene also remained at concentrations below the ES, but above the PAL at MW-10S, and was typically not detected at MW-10M or TW-2. 1,4-dichlorobenzene was typically not detected at TW-2.

- **Methylene chloride** – Methylene chloride was historically detected above the ES at MW-10S and slightly below the ES at MW-10M. Methylene chloride was not detected at TW-2, but the detection limit was elevated due to interferences with other organics.
- **Xylenes (Figure B-6)** – Concentrations of xylenes in groundwater at MW-10S decreased since 2000, while concentrations in MW-10M were just above the level of detection. Xylene concentrations in TW-2 were variable, ranging from 2.5 times the ES in 2007 (25,500 µg/L) to below the PAL in 2008 (410 µg/L).

Field Parameters (all sites)

Field parameters collected at the sites include pH, DO, and ORP. These parameters can give a general understanding of the groundwater geochemistry at the site. These parameters, however, are highly sensitive to sampling biases and equipment so the data must be used qualitatively. The field instruments malfunctioned for the October 2011 sampling event and the readings are not reported. The pH of the groundwater is typically between 6 and 8, indicating it is within the expected range for groundwater. DO is generally less than 1.0 mg/L, indicating the groundwater is slightly anoxic. ORP is almost always negative. These results suggest that anaerobic biota are active in the groundwater at the site, however enough oxygen is available to degrade the aromatic compounds that are of primary concern. The presence of cis-1,2-dichloroethene (DCE) in groundwater (detected at MW-41S, MW-41M, MW-45S, and MW-45M) is direct evidence that microbial reductive dechlorination is occurring.

Discussion and Recommendations

The findings from ongoing analysis of the data are summarized in Table 4. Groundwater contamination caused by the spills associated with operations by SpecialtyChem in the late 1980s and early 1990s likely have attenuated or migrated off site. In the areas where concentration trends are increasing, such as xylenes at TW-1 and methylene chloride at MW-45M, the increase is probably related to other, unknown sources. The prevalence of chlorinated solvents and their degradation products (i.e. trichloroethene (TCE), cis-1,2 DCE, and vinyl chloride), and fuel-related aromatics (benzene, toluene, ethylbenzene) in groundwater also suggest sources of groundwater contamination other than those associated with the SpecialtyChem spills exist at the facility. Residual contamination in the groundwater poses no imminent threat to human health or the environment in this industrial setting. Remedial actions (e.g. phytoremediation and groundwater pump-and-



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treat) are ongoing at the facility that control groundwater migration and remove contaminated groundwater. For these reasons, we recommend that the 21 liquid spill sites and 7 air releases attributed to SpecialtyChem be closed from further consideration in accordance with NR726. We also recommend that TW-1 be abandoned as it is damaged and was neither intended nor constructed to serve as a long term monitoring well.

In our site meeting on October 26, 2010, WDNR requested that monitoring should continue to determine the impact of groundwater extraction on concentrations of VOCs in groundwater. Kristin DuFresne was most helpful in keeping me apprised of activity conducted by Ansul during 2011. I was particularly interested in reviewing data to support that groundwater extraction is successfully maintaining water levels several feet below the ground surface. To date, no such data are available, but are expected when the Ansul issues remediation progress reports in mid-2012. However, we see no need to delay closure any further as we await these data.

Once you have reviewed this report please contact me, at your convenience (jwedekind@trcsolutions.com or 608-826-3666) to discuss the status of these spills and what (if any) steps should be taken before we re-issue the spill closure request.

Sincerely,

TRC Environmental Corporation


James Wedekind, P.G.
Project Manager

Attachments: Tables 1 through 4

Figure 1

Attachment A: Summary of Detected Volatile Organic Compounds (VOCs)

Attachment B: Time Series Graphs of Specific Volatile Organic Compounds (VOCs)

Attachment C: Laboratory Analytical Reports for Data Collected by TRC in 2011

cc: Cyndi Fink – LANXESS Corporation
Dave Mielke – ChemDesign/SpecialtyChem Products Corporation
Steve Gerritsen – SE Technologies



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References

RMT, Inc. 2007. Groundwater investigation data, SpecialtyChem, Marinette, Wisconsin.

RMT, Inc. 2005. Evaluation of information related to reported spills at the SpecialtyChem site, Marinette, Wisconsin. July 13, 2005.



Tables

Table 1
Concentrations of SpecialtyChem Spill Constituents and Natural Attenuation Parameters in Groundwater
Areas H&I - Still Building (Building 62)/Drum Storage Area/Building 38
SpecialtyChem, Marinette, Wisconsin

CONSTITUENT (µg/L)	ES	PAL	SAMPLING DATE	MW-41		MW-45		TW-1
				SHALLOW	MID	SHALLOW	MID	SHALLOW
Areas H&I - Still Building (Building 62)/Drum Storage Area/Building 38								
Methylene chloride	5	0.5	9/21/2000	560	2.1	560	91	NS
			6/7 - 6/8/2006	160 Q	33 Q	190	71 Q	< 2.2
			11/29/2006	220 Q	38	190	74	<43
			8/30/2007	120 Q	55	120	69	<43
			5/5/2008	33.7 Q	113 Q	128	140 Q	< 53.8
			10/29/2009	51.7	83.4	194	90.2	<43.0
			10/26/2010	52.7Q	107	99.6	94.5	NS
10/25/2011	57.3Q	111	85.7	98.9Q	<172			
Xylenes (total)	10,000	1,000	9/21/2000	5,000	7.7	990	< 11.7	NS
			6/7 - 6/8/2006	13,000	< 132	5,700	< 132	1,200
			11/29/2006	13,600	< 13.1	5,400	< 26.3	21,900
			8/30/2007	11,700	< 2.63	5,800	< 13.1	27,700
			5/5/2008	8,770	< 263	7,440	< 263	22,330
			10/29/2009	11,010	<13.2	6,690	2.8	49,500
			10/26/2010	13,080	<26.3	7,990	<17.3	NS
10/25/2011	14,640	<13.2	7,240	7.3	65,400			
pH	NA	NA	6/7 - 6/8/2006	7.07	8.54	7.59	7.94	6.59
			11/29/2006	7.28	7.82	6.78	7.75	5.88
			8/30/2007	6.90	7.91	7.55	7.86	6.48
			5/5/2008	7.17	7.8	7.6	7.73	6.37
			10/29/2009	6.90	7.59	7.2	7.62	6.43
			10/26/2010	6.80	7.51	7.16	7.63	NM
10/25/2011	NM	NM	NM	NM	NM			
Dissolved oxygen (mg/L)	NA	NA	6/7 - 6/8/2006	0.1	1.0	0.8	NM	0.8
			11/29/2006	0.08 J	0.05 J	0.13 J	1.14 J	1.12 J
			8/30/2007	0.1	0.8	0.2	0.6	NM
			5/5/2008	0.8	0.6	0.4	1.0	0.6
			10/29/2009	0.2	0.95	1.1	0.0	0.19
			10/26/2010	0.6	1.15	0.5	1.9	NM
10/25/2011	NM	NM	NM	NM	NM			
Oxidation/Reduction potential (mv)	NA	NA	6/7 - 6/8/2006	-114	-112	-150	-181	-82
			11/29/2006	-116	-80	-131	-75	-139
			8/30/2007	-86	-48	-119	-123	-40
			5/5/2008	-84	-87	-160	-95	-99
			10/29/2009	-134	-169	-178	-172	-75
			10/26/2010	-112	-194	-213	-202	NM
10/25/2011	NM	NM	NM	NM	NM			
Water levels (feet above NGVD)	NA	NA	Top of Casing ⁽¹⁾	583.53	583.56	583.27	583.31	583.48
			6/7 - 6/8/2006	580.12	580.09	580.13	579.99	580.65
			11/29/2006	579.99	579.52	580.32	579.69	580.9
			8/30/2007	579.85	579.52	579.89	579.68	580.48
			5/5/2008	580.22	579.97	580.28	580.01	580.85
			10/29/2009	581.27	580.74	580.95	580.41	581.13
			10/26/2010	580.58	580.71	580.9	581.08	NM
10/25/2011	580.19	579.64	580.3	580.81	580.62			

Notes:

Data collected in 2000 were part of the Ansul RCRA Facility Investigation (URS, 2001).

NM = not measured.

NS = not sampled.

J = dissolved oxygen probe out of range during check at the end of the day.

Q = the analyte was detected between the Limit of Detection (LOD) and the Limit of Quantitation (LOQ).

Bold = concentration exceeds WDNR Enforcement Standards (ESs).

PAL = WDNR Preventive Action Limit.

ES = Wisconsin Department of Natural Resources (WDNR) Enforcement Standard.

⁽¹⁾ The top-of-casing elevations for Ansul's existing monitoring wells were provided to RMT by EarthTech on November 28, 2006. The top-of-casing elevations for TW-1 and TW-2 were surveyed by RMT on June 7 and 8, 2006, by using a level to determine elevations relative to Ansul's existing monitoring wells.

Table 2
Concentrations of SpecialtyChem Spill Constituents and Natural Attenuation Parameters in Groundwater
Area N - South and West of Building 69
SpecialtyChem, Marinette, Wisconsin

CONSTITUENT (µg/L)	ES	PAL	SAMPLING DATE	MW-44	
				SHALLOW	MID
Area N - South and West of Building 69					
Methylene chloride	5	0.5	9/27/2000	0.33	15
			6/7/2006	< 0.43	1.6
			11/29/2006	< 0.43	2.0
			8/30/2007	< 0.43	1.8
			5/5/2008	< 0.43	1.7
			10/29/2009	<0.43	1.5
			10/26/2010	<0.43	1.8
			10/25/2011	<0.43	1.4J
pH	NA	NA	6/7/2006	7.40	7.12
			11/29/2006	7.58	7.34
			8/30/2007	7.23	7.00
			5/5/2008	8.30	7.17
			10/29/2009	7.42	6.97
			10/26/2010	7.51	6.97
			10/25/2011	NM	NM
Dissolved oxygen (mg/L)	NA	NA	6/7/2006	0.3	1.0
			11/29/2006	0.10 J	0.14 J
			8/30/2007	2.0	0.3
			5/5/2008	0.3	0.8
			10/29/2009	0.01	6.6
			10/26/2010	0.6	0.6
			10/25/2011	NM	NM
Oxidation/Reduction potential (mv)	NA	NA	6/7/2006	-68	-85
			11/29/2006	-120	-87
			8/30/2007	17	-67
			5/5/2008	-132	-62
			10/29/2009	-112	-130
			10/26/2010	-138	-110
			10/25/2011	NM	NM
Water levels (feet above NGVD)	NA	NA	Top of Casing ⁽¹⁾	584.77	584.75
			6/7 - 6/8/2006	583.1	582.81
			11/29/2006	582.86	582.58
			8/30/2007	582.01	581.71
			5/5/2008	583.74	583.42
			10/29/2009	583.36	583.01
			10/26/2010	582.67	582.65
			10/25/2011	582.27	581.96

Notes:

Data collected in 2000 were part of the Ansul RCRA Facility Investigation (URS, 2001).

NA = not applicable.

J = dissolved oxygen probe out of range during check at the end of the day.

Bold = concentration exceeds WDNR Enforcement Standards (ESs).

PAL = WDNR Preventive Action Limit.

ES = Wisconsin Department of Natural Resources (WDNR) Enforcement Standard.

⁽¹⁾ The top-of-casing elevations for Ansul's existing monitoring wells were provided to RMT by EarthTech on November 28, 2006.

Table 3
Concentrations of SpecialtyChem Spill Constituents and Natural Attenuation Parameters in Groundwater
Areas P & Q - North and East of Building 52
SpecialtyChem, Marinette, Wisconsin

CONSTITUENT (µg/L)	ES	PAL	SAMPLING DATE	MW-10		TW-2
				SHALLOW	MID	SHALLOW
Areas P & Q - North and East of Building 52						
1,2-Dichlorobenzene	600	60	9/13/2000	2,900	35	NS
			6/7 - 6/8/2006	2,200	6.5	< 83
			11/29/2006	2,300	21	< 4.1
			8/30/2007	1,900	16	< 83
			5/5/2008	1,780	12	1.1 Q
			10/29/2009	1,450	17.2	<20.8
			10/26/2010	NS	NS	NS
			10/25/2011	NS	NS	NS
1,4-Dichlorobenzene	75	15	9/13/2000	59	< 1.3	NS
			6/7 - 6/8/2006	< 19	< 0.95	< 95
			11/29/2006	42 Q	< 0.95	< 4.8
			8/30/2007	30 Q	< 0.95	< 95
			5/5/2008	41.3 Q	< 0.95	1.4 Q
			10/29/2009	26.0	<0.95	<23.8
			10/26/2010	NS	NS	NS
			10/25/2011	NS	NS	NS
Methylene chloride	5	0.5	9/13/2000	46	9.2	NS
			6/7 - 6/8/2006	13	2.0	< 43
			11/29/2006	10	7.6	< 2.2
			8/30/2007	< 11	5.2	< 43
			5/5/2008	< 8.6	4.1	< 0.43
			10/29/2009	11.6 Q	4.9	<10.8
			10/26/2010	NS	NS	NS
			10/25/2011	NS	NS	NS
Xylenes	10,000	1,000	9/13/2000	2,020	8.5	NS
			6/7 - 6/8/2006	1,510	< 2.63	14,400
			11/29/2006	1,350	3.7	1,280
			8/30/2007	1,730	2.4 Q	25,500
			5/5/2008	863	2.4 Q	410
			10/29/2009	1,205	5.5	3,211
			10/26/2010	NS	NS	NS
			10/25/2011	NS	NS	NS
pH	NA	NA	6/7 - 6/8/2006	7.02	7.68	6.57
			11/29/2006	6.92	8.02	7.04
			8/30/2007	7.05	8.04	6.54
			5/5/2008	7.07	7.73	7.18
			10/29/2009	6.79	8.09	6.76
			10/26/2010	NS	NS	NS
			10/25/2011	NS	NS	NS
			Dissolved oxygen (mg/L)	NA	NA	6/7 - 6/8/2006
11/29/2006	0.35 J	0.36 J				0.43 J
8/30/2007	0.1	1.0				0.6
5/5/2008	0.1	0.6				1.0
10/29/2009	1.1	0.13				1.8
10/26/2010	NS	NS				NS
10/25/2011	NS	NS				NS
Oxidation/Reduction potential (mv)	NA	NA				6/7 - 6/8/2006
			11/29/2006	-96	-82	-62
			8/30/2007	-75	-35	-39
			5/5/2008	-89	-54	-85
			10/29/2009	-130	-184	-122
			10/26/2010	NS	NS	NS
			10/25/2011	NS	NS	NS

Table 3 (continued)
Concentrations of SpecialtyChem Spill Constituents and Natural Attenuation Parameters in Groundwater
Areas P & Q - North and East of Building 52
SpecialtyChem, Marinette, Wisconsin

CONSTITUENT (µg/L)	ES	PAL	SAMPLING DATE	MW-10		TW-2
				SHALLOW	MID	SHALLOW
Water levels (feet above NGVD)	NA	NA	Top of Casing ⁽¹⁾	586.91	587.02	583.80
			6/7 - 6/8/2006	580.77	580.90	581.10
			11/29/2006	580.45	580.37	581.39
			8/30/2007	580.07	580.08	580.42
			5/5/2008	580.79	580.92	581.89
			10/29/2009	581.25	581.51	581.80
			10/26/2010	NS	NS	NS
			10/25/2011	NS	NS	NS

Notes:

Data collected in 2000 were part of the Ansul RCRA Facility Investigation (URS, 2001).

NS = not sampled.

NA = not applicable.

J = dissolved oxygen probe out of range during check at the end of the day.

Q = the analyte was detected between the Limit of Detection (LOD) and the Limit of Quantitation (LOQ).

Bold = concentration exceeds WDNR Enforcement Standards (ESs).

PAL = WDNR Preventive Action Limit.

ES = Wisconsin Department of Natural Resources (WDNR) Enforcement Standard.

⁽¹⁾ The top-of-casing elevations for Ansul's existing monitoring wells were provided to RMT by EarthTech on November 28, 2006.
The top-of-casing elevations for TW-1 and TW-2 were surveyed by RMT on June 7 and 8, 2006.

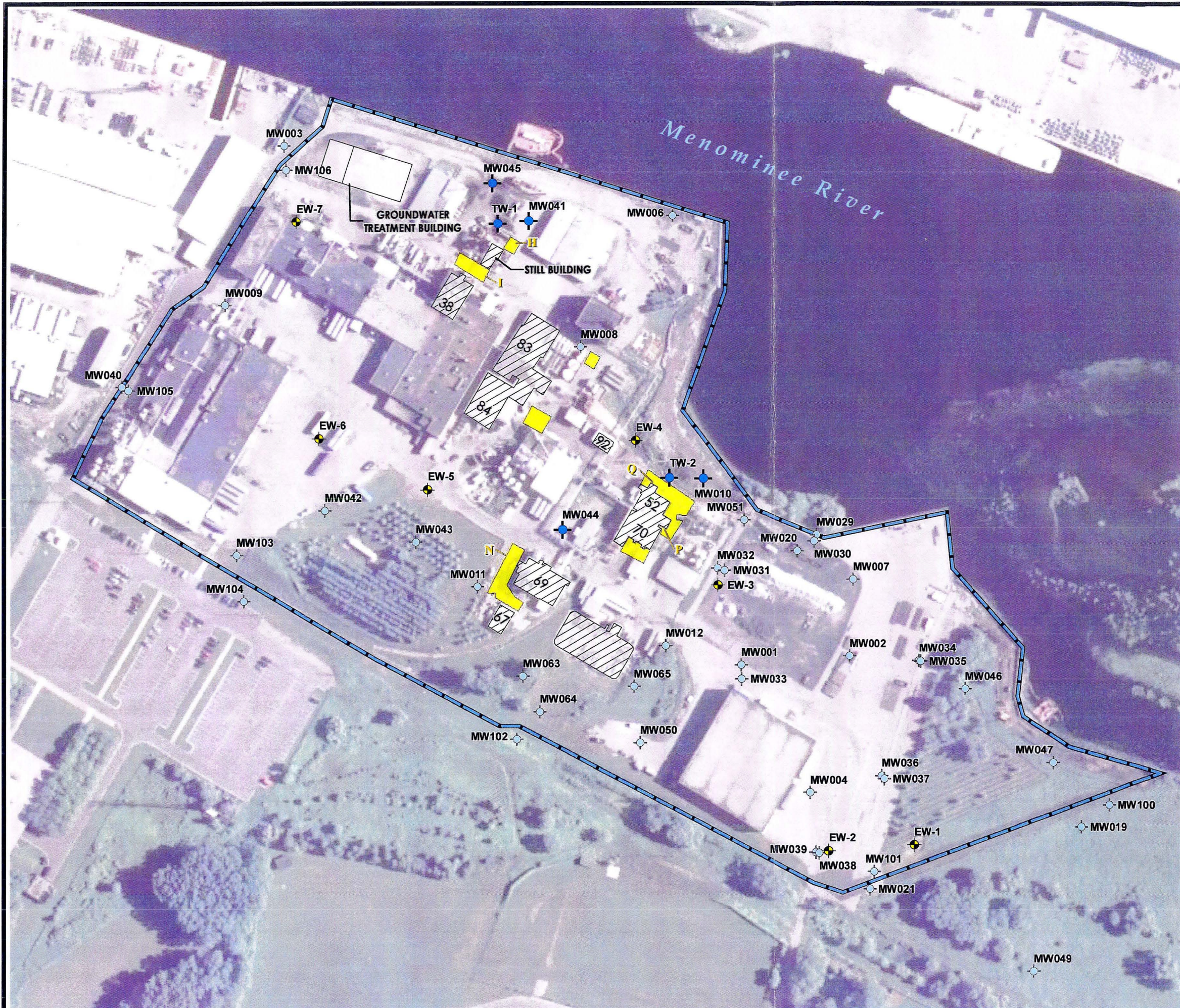
Table 4
Summary of Concentration Trends
All Areas
SpecialtyChem, Marinette, Wisconsin

RCRA AREA	SPILL CONSTITUENT OF CONCERN				RECOMMENDATIONS
	METHYLENE CHLORIDE	XYLENES	1,2-DICHLOROBENZENE	1,4-DICHLOROBENZENE	
AREAS H and I STILL BUILDING	<p>MW-41S/45S - decreasing/stable concentrations, remains above the ES</p> <p>MW-41M/45M - fluctuating to increasing concentrations; above ES</p> <p>TW-1 - below detection limits</p>	<p>MW-41S - variable concentration; currently above the ES</p> <p>MW-45S - currently below the ES</p> <p>MW-41M/45M - near or below detection limits</p> <p>TW-1 - increasing concentrations; above ES; increasing trend unlikely a result of historical spill</p>	NA - documented spill did not include this constituent	NA - documented spill did not include this constituent	Historical spills over 20 years ago; should be eligible for closure.
AREA N BUILDING 69	<p>MW-44S - below detection limits</p> <p>MW-44M - below the ES</p>	NA - documented spill did not include this constituent	NA - documented spill did not include this constituent	NA - documented spill did not include this constituent	Site should be eligible for closure.
AREAS P and Q BUILDING S-2	<p>MW-10S - decreasing trend; above ES</p> <p>MW-10M - near detection limit</p> <p>TW-2 - Below ES</p>	<p>MW-10S - decreasing concentrations; below the ES</p> <p>MW-10M - below detection limits</p> <p>TW-2 - variable concentrations. Most recently below the ES.</p>	<p>MW-10S - decreasing concentrations; above the ES.</p> <p>MW-10M - detections below the PAL</p>	<p>MW-10S - detections below the ES</p> <p>MW-10M - below detection limits</p> <p>TW-2 - one detection, well below the PAL</p>	Historical spills over 19 years ago; should be eligible for closure.

Notes:

NA = Not applicable - not a constituent of concern

Figure

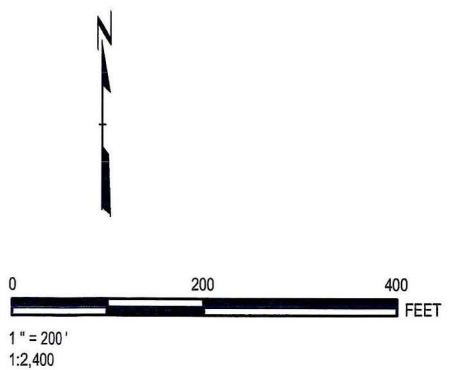


LEGEND

- WELL NEST LOCATION USED FOR SPECIALTY CHEM SITES
- EXTRACTION WELL
- OTHER WELL LOCATION
- APPROXIMATE CONTAINMENT WALL LOCATION
- SPECIALTY CHEM OPERATIONS BUILDING
- SPILL AREA

NOTES

1. BASE MAP IMAGERY FROM USDA - NATIONAL AGRICULTURE IMAGERY PROGRAM; PHOTOGRAPHY DATE 17 JULY 2010.



PROJECT:		LANXESS - SPECIALTY CHEM MARINETTE, WISCONSIN	
SHEET TITLE:		SITE MAP	
DRAWN BY:	PAPEZ J	SCALE:	PROJ. NO. 02000.04.001
CHECKED BY:	WEDEKIND J	AS NOTED	FILE NO. 020000401.mxd
APPROVED BY:	MARTIN S	DATE PRINTED:	FIGURE 1
DATE:	DECEMBER 2011	JAN 17 2012	
		708 Heartland Trail Suite 3000 Madison, WI 53717 Phone: 608.826.3600 Fax: 608.826.3941 www.trcsolutions.com	

E:\RMT_DATA\02000\04\020000401.mxd
 Printed By: jpepez on 12/21/2011, 16:32 PM

Attachment A

Summary of Detected Volatile Organic Compounds (VOCs)

Table A-1
 Summary of Detected Volatile Organic Compounds (VOCs)
 SpecialtyChem, Marinette, Wisconsin
 TRC Project No. 004114

CONSTITUENT (µg/L)	ES (µg/L)	PAL (µg/L)	MW-10S (ABANDONED IN 2010)						MW-10M (ABANDONED IN 2010)					
			9/13/2000	6/7/2006	11/29/2006	8/30/2007	5/5/2008	10/29/2009	9/13/2000	6/7/2006	11/29/2006	8/30/2007	5/5/2008	10/29/2009
1,2,4-Trimethylbenzene	480	96	NA	< 19	<19	< 24	< 19.4	<19.4	NA	< 0.97	<0.97	< 0.97	< 0.97	<0.97
1,2-Dichlorobenzene	600	60	2,900	2,200	2,300	1,900	1,780	1,450	35	6.5	21	16	11.6	17.2
1,4-Dichlorobenzene	75	15	59	< 19	42 Q	30 Q	41.3 Q	26	< 1.3	< 0.95	<0.95	< 0.95	< 0.95	<0.95
Benzene	5	0.5	40 J	9.7 Q	12 Q	< 10	19.3 Q	<8.2	5.2 J	1.3 Q	4.7	2.7	2.5	5
Chlorobenzene	100	20	730	470	260	220	1,120	173	66	11	34	22	18.3	27.3
Chloromethane	3	0.3	< 12	100	<4.8	< 6.0	100	301	1.3 J	8.1	0.48 Q	13	9.2	0.79 J
cis-1,2-Dichloroethene	70	7	NA	< 17	<17	< 21	< 16.6	<16.6	NA	< 0.83	<0.83	< 0.83	< 0.83	<0.83
Ethylbenzene	700	140	100	120	100	150	112	113	< 1.2	< 0.54	<0.54	< 0.54	< 0.54	<0.54
Methylene chloride	5	0.5	46 J	13 Q	10 Q	< 11	< 8.6	11.6J	9.2	2.0	7.6	5.2	4.1	4.9
Methyl-tert-butyl-ether	60	12	NA	< 12	<12	< 15	< 12.2	<12.2	NA	< 0.61	<0.61	< 0.61	< 0.61	<0.61
Naphthalene	40	8	610	450	520	290	327	340	2.9 J	3.2	0.75	2.0 Q	< 0.74	<0.89
Toluene	1,000	200	440	190	160	190	61.3	123	6.9	1.4 Q	5.9	4.4	4.8	10.5
Trichloroethene	5	0.5	< 16	< 9.6	<9.6	< 12	< 9.6	<9.6	< 1.6	< 0.48	<0.48	< 0.48	< 0.48	<0.48
Vinyl chloride	0.2	0.02	< 14	< 3.6	<3.6	< 4.5	< 3.6	<3.6	< 1.4	< 0.18	<0.18	< 0.18	< 0.18	<0.18
Xylene, o	--	--	1,400	980	860	1100	493	754	5.7	< 0.83	3.7	2.4 Q	2.3 Q	5.5
Xylene, m + p	--	--	620	530	490	630	370	451	2.8 J	< 1.8	<1.8	< 1.8	< 1.8	<1.8
Xylene, total	10,000	1,000	2,020	1,510	1,350	1,730	863	1,205	8.5	<2.63	3.7	2.4 Q	2.4 Q	5.5

Notes:

(1) 4-methyl-2-pentanone; Synonym: methyl isobutyl ketone (MIBK).

(2) Laboratory qualifier - sample pH was greater than 2.

Q = the analyte was detected between the Limit of Detection (LOD) and the Limit of Quantitation (LOQ).

C = elevated detection limit.

R = URS validation flag (URS, 2001).

J = Estimated concentration above the adjusted method detection limit and the adjusted reporting limit.

NA = not analyzed.

-- = not available.

Bold = Indicates that the detected value exceeds the Enforcement Standard (ES).

PAL = WDNR Preventive Action Limit.

ES = Wisconsin Department of Natural Resources (WDNR) Enforcement Standard.

Z3 = Methylene chloride is a common laboratory contaminant. Results should be considered an estimate unless they are 3 to 5 times higher than those found in the method blank.

Table A-1 (continued)
 Summary of Detected Volatile Organic Compounds (VOCs)
 SpecialtyChem, Marinette, Wisconsin
 TRC Project No. 004114

CONSTITUENT (µg/L)	ES (µg/L)	PAL (µg/L)	MW-41S								MW-41M							
			9/21/2000	6/7/2006	11/29/2006	8/30/2007 ⁽²⁾	5/5/2008	10/29/2009	10/26/2010	10/25/2011	9/21/2000	6/7/2006	11/29/2006	8/30/2007	5/5/2008	10/29/2009	10/26/2010	10/25/2011
1,2,4-Trimethylbenzene	480	96	NA	< 120	<190	< 97	< 38.8	<38.8	<97	<97	NA	< 48 C	<4.8 C	< 0.97	< 97.0	<4.8	<9.7	<4.8
1,2-Dichlorobenzene	600	60	270	480	730	520	283	224	419	427	< 0.35 J	< 42 C	<4.1 C	< 0.83	< 83.0	<4.2	<8.3	<4.2
1,4-Dichlorobenzene	75	15	< 38	< 120	<190	< 95	< 38.0	<38.0	<95	<95	< 0.38 R	< 48	<4.8 C	< 0.95	< 95.0	<4.8	<9.5	<4.8
Benzene	5	0.5	< 37	< 51	<82	< 41	38.2 Q	25.6J	45.6J	<41	0.59 J	< 20 C	2.3 QC	2.5	< 41.0	3.3J	4.7	4.1
Chlorobenzene	100	20	440	880	1200	1,000	1,170	658	1,280	997	< 0.38 R	< 20 C	<2.0 C	< 0.41	< 41.0	<2.0	<4.1	<2.0
Chloromethane	3	0.3	< 36	< 30	<48	< 24	< 9.6	<9.6	<24	<24	< 0.36 R	< 12 C	<1.2 C	< 0.24	< 24.0	<1.2	<2.4	<1.2
cis-1,2-Dichloroethene	70	7	NA	120 Q	<170	< 83	321	<33.2	116	<83	NA	< 42 C	12 QC	14	< 83.0	18.1	23.9	27
Ethylbenzene	700	140	1,100	2,200	2,200	1,800	2,080	1,860	2,030	2,270	< 0.43 R	< 27 C	<2.7 C	< 0.54	< 54.0	<2.7	<5.4	<2.7
Methylene chloride	5	0.5	560	160 Q	220 Q	120 Q	33.7 Q	51.7	52.7J	57.3 JZ3	2.1 J	33 QC	38 C	55	113 Q	83.4	107	111
Methyl-tert-butyl-ether	60	12	NA	< 76	<120	< 61	< 24.4	<24.4	<61	<61	NA	< 30 C	<3.0 C	< 0.61	< 61.0	<3.0	<6.1	<3.0
Naphthalene	40	8	< 58	< 92	<150	160 Q	< 29.6	<35.6	<89	<89	< 0.58 R	< 37 C	<3.7 C	< 0.74	< 74.0	<4.4	<89	<4.4
Toluene	1,000	200	6,600	12,000	16,000	12,000	4,360	4,300	4,120	5,300	1.7 J	< 34 C	4.6 C	3.8	< 67.0	11.4	20.9	31.3
Trichloroethene	5	0.5	170	110Q	190 Q	110 Q	26.3 Q	31.2J	<48	59	< 0.33 R	< 24 C	4.9 C	8.2	< 48.0	17.2	27.3	38.4
Vinyl chloride	0.2	0.02	40 J	< 22	<36	< 18	36.6	<7.2	<18	<18	1.7 J	< 9.0 C	4.0 C	5.7	< 18.0	9.4	10.8	9.2
Xylene, o	—	—	1,200	4,500	6,400	5,500	1,810	2,570	2,980	4,760	< 0.39 R	< 42 C	<4.1 C	< 0.83	< 83.0	<4.2	<8.3	<4.2
Xylene, m + p	—	—	3,800	8,500	7,200	6,200	6,960	8,440	10,100	9,880	7.7 J	< 90 C	<9.0 C	< 1.8	< 180	<9.0	<18	<9.0
Xylene, total	10,000	1,000	5,000	13,000	13,600	11,700	8,770	11,010	13,080	14,640	7.7	< 132	<13.1 C	< 2.63	< 263	<13.2	<26.3	<13.2

Notes:

⁽¹⁾ 4-methyl-2-pentanone; Synonym: methyl isobutyl ketone (MIBK).

⁽²⁾ Laboratory qualifier - sample pH was greater than 2.

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Entered by: JW, 12/30/11

Checked by:

Table A-1 (continued)
 Summary of Detected Volatile Organic Compounds (VOCs)
 SpecialtyChem, Marinette, Wisconsin
 TRC Project No. 004114

CONSTITUENT (µg/L)	ES (µg/L)	PAL (µg/L)	MW-44S								MW-44M							
			9/27/2000	6/7/2006	11/29/2006	8/30/2007	5/5/2008	10/29/2009	10/26/2010	10/25/2011	9/27/2000	6/7/2006	11/29/2006	8/30/2007	5/5/2008	10/29/2009	10/26/2010	10/25/2011
1,2,4-Trimethylbenzene	480	96	NA	< 0.97	< 0.97	< 0.97	< 0.97	< 0.97	< 0.97	< 0.97	NA	1.2 Q	< 0.97	< 0.97	< 0.97	< 0.97	< 0.97	< 0.97
1,2-Dichlorobenzene	600	60	0.46 J	< 0.83	< 0.83	< 0.83	< 0.83	< 0.83	< 0.83	< 0.83	9.7 J	6.1	7.4	7.0	7.2	9	11.6	11.3
1,4-Dichlorobenzene	75	15	< 0.19	< 0.95	< 0.95	< 0.95	< 0.95	< 0.95	< 0.95	< 0.95	< 4.7	< 0.95	< 0.95	< 0.95	< 0.95	< 0.95	< 0.95	< 0.95
Benzene	5	0.5	< 0.18	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	10 J	13	12	5.9	3.8	1.1	0.92	0.72J
Chlorobenzene	100	20	< 0.19	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	310	100	90	72	78.3	33.3	35.4	38.3
Chloromethane	3	0.3	< 0.18	25	< 0.24	0.83	3.5	5	1.2	< 0.24	< 4.5	< 0.24	< 0.24	< 0.24	1.7	< 0.24	0.44J	< 0.24
cis-1,2-Dichloroethene	70	7	NA	< 0.83	< 0.83	< 0.83	< 0.83	< 0.83	< 0.83	< 0.83	NA	< 0.83	< 0.83	< 0.83	< 0.83	< 0.83	< 0.83	< 0.83
Ethylbenzene	700	140	< 0.21	< 0.54	< 0.54	< 0.54	< 0.54	< 0.54	< 0.54	< 0.54	17 J	0.76 Q	1.0 Q	0.6 Q	0.54 Q	< 0.54	0.57J	< 0.54
Methylene chloride	5	0.5	0.33 J	< 0.43	< 0.43	< 0.43	< 0.43	< 0.43	< 0.43	< 0.43	15	1.6	2.0	1.8	1.7	1.5	1.8	1.4 Z3
Methyl-tert-butyl-ether	60	12	NA	< 0.61	< 0.61	< 0.61	< 0.61	< 0.61	< 0.61	< 0.61	NA	5.5	7.0	2.3	2.6	< 0.61	0.82	0.65J
Naphthalene	40	8	0.34 J	< 0.74	< 0.74	< 0.74	< 0.74	< 0.74	< 0.89	< 0.89	< 0.89	< 0.89	< 0.89	< 0.89	< 0.89	< 0.89	< 0.89	< 0.89
Toluene	1,000	200	< 0.44 UJ	< 0.67	< 0.67	< 0.67	< 0.67	< 0.67	< 0.67	< 0.67	19	< 0.67	< 0.67	< 0.67	< 0.67	< 0.67	< 0.67	< 0.67
Trichloroethene	5	0.5	< 0.17	< 0.48	< 0.48	< 0.48	< 0.48	< 0.48	< 0.48	< 0.48	< 4.2	< 0.48	< 0.48	< 0.48	< 0.48	< 0.48	< 0.48	< 0.48
Vinyl chloride	0.2	0.02	< 0.15	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 3.8	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18
Xylene, o	--	--	0.37 J	< 0.83	< 0.83	< 0.83	< 0.83	< 0.83	< 0.83	< 0.83	< 4.9	< 0.83	< 0.83	< 0.83	< 0.83	< 0.83	< 0.83	< 0.83
Xylene, m + p	--	--	< 0.39	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	18 J	< 1.8	3.0 Q	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8
Xylene, total	10,000	1,000	0.37	< 2.63	< 2.63	< 2.63	< 2.63	< 2.63	< 2.63	< 2.63	18	< 2.63	3.0 Q	< 2.63	< 2.63	< 2.63	< 2.63	< 2.63

Notes:

(1) 4-methyl-2-pentanone; Synonym: methyl isobutyl ketone (MIBK).

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Entered by: JW, 12/30/11

Checked by:

Table A-1 (continued)
 Summary of Detected Volatile Organic Compounds (VOCs)
 SpecialtyChem, Marinette, Wisconsin
 TRC Project No. 004114

CONSTITUENT (µg/L)	ES (µg/L)	PAL (µg/L)	MW-45S								MW-45M							
			9/21/2000	6/7/2006	11/29/2006	8/30/2007	5/5/2008	10/29/2009	10/26/2010	10/25/2011	9/21/2000	6/7/2006	11/29/2006 ⁽²⁾	8/30/2007	5/5/2008	10/29/2009	10/26/2010	10/25/2011
1,2,4-Trimethylbenzene	480	96	NA	< 48	<48	< 39	< 24.2	<38.8	<48.5	<48.5	NA	< 48 C	<9.7	< 4.8	< 97.0	<2.4	<9.7	<4.8
1,2-Dichlorobenzene	600	60	1,400	2,100	2,200	2,100	2,130	1,940	2,350	2,670	15	< 42 C	13 Q	8.9 Q	< 83.0	10.1	13.7	41.9
1,4-Dichlorobenzene	75	15	46 J	< 48	80 Q	53 Q	70.7 Q	74.7	86.5	89.3	< 3.8	< 48	<9.5	<4.8	< 95.0	<2.4	<9.5	<4.8
Benzene	5	0.5	45 J	51 Q	61 Q	41 Q	48.8	58.5	76.8	89.9	5.2 J	< 20 C	8.8 Q	6.4 Q	< 41.0	10.1	10.9	12.8
Chlorobenzene	100	20	950	2,800	2,900	2,900	3,300	3,120	4,010	3,980	15	< 20 C	18	17	< 41.0	24.5	33	66.7
Chloromethane	3	0.3	< 18	< 12	<12	< 9.6	18.6 Q	<9.6	<12	<12	< 3.6	< 12 C	<2.4	< 1.2	< 24.0	<0.60	<2.4	< 1.2
cis-1,2-Dichloroethene	70	7	NA	470	420	290	346	454	491	560	NA	87 QC	130	110	138 Q	160	164	214
Ethylbenzene	700	140	300	880	870	840	1,070	960	1,130	953	< 4.3	< 27 C	<5.4	< 2.7	< 54.0	1.6J	<5.4	3.4J
Methylene chloride	5	0.5	560	190	190	120	128	194	99.6	85.7	91	71 QC	74	69	140 Q	90.2	94.5	98.9 Z3
Methyl-tert-butyl-ether	60	12	NA	< 30	<30	< 24	< 15.2	<24.4	<30.5	<30.5	NA	< 30 C	<6.1	< 3.0	< 61.0	<1.5	<6.1	< 3.0
Naphthalene	40	8	< 29	170	<37	< 30	< 18.5	<35.6	<44.5	<44.5	< 5.8	< 37 C	<7.4	< 3.7	< 74.0	<2.2	<8.9	<4.4
Toluene	1,000	200	2,500	7,000	5,800	4,600	4,750	4,770	3,860	3,050	36	< 34 C	38	33	< 67.0	49.2	61.6	86.2
Trichloroethene	5	0.5	380	560	600	470	469	204	254	209	250	380 C	500	480	667	673	804	1,030
Vinyl chloride	0.2	0.02	37 J	39	37	18 Q	31.1	32.3J	40.7	30.6	17	14 QC	20	17	< 18.0	37.7	41.4	45.1
Xylene, o	--	--	270	2,900	2,700	3,000	3,930	3,630	4,300	3,860	< 3.9	< 42 C	<8.3	< 4.1	< 83.0	2.8	<8.3	7.3
Xylene, m + p	--	--	720	2,800	2,700	2,800	3,510	3,060	3,690	3,380	< 7.8	< 90 C	<18	< 9.0	< 180	<4.5	<9	<9
Xylene, total	10,000	1,000	990	5,700	5,400	5,800	7,440	6,690	7,990	7,240	< 11.7	< 132	<26.3	< 13.1	< 263	2.8	<17.3	7.3

Notes:

⁽¹⁾ 4-methyl-2-pentanone; Synonym: methyl isobutyl ketone (MIBK).

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Entered by: JW, 12/30/11

Checked by:

Table A-1 (continued)
 Summary of Detected Volatile Organic Compounds (VOCs)
 SpecialtyChem, Marinette, Wisconsin
 TRC Project No. 004114

CONSTITUENT (µg/L)	ES (µg/L)	PAL (µg/L)	TW-1						TW-2 (WELL LOST OR COVERED IN 2010)				
			6/8/2006	11/29/2006	8/30/2007	5/5/2008	10/29/2009	10/25/2011	6/8/2006	11/29/2006	8/30/2007	5/5/2008	10/29/2009
1,2,4-Trimethylbenzene	480	96	< 4.8	< 97	< 97	< 121	<97.0	<388	< 97	< 4.8	< 97	< 0.97	<24.2
1,2-Dichlorobenzene	600	60	< 4.1	< 83	< 83	< 104	<83.0	<332	< 83	< 4.1	< 83	1.1 Q	<20.8
1,4-Dichlorobenzene	75	15	< 4.8	< 95	< 95	< 119	<95.0	<380	< 95	< 4.8	< 95	1.4 Q	<23.8
Benzene	5	0.5	17	< 41	< 41	< 51.2	<41.0	<164	< 41	< 2.0	< 41	< 0.41	<10.2
Chlorobenzene	100	20	< 2.0	< 41	< 1	< 51.2	<41.0	<164	1,900	180	3,900	90.2	1,010.0
Chloromethane	3	0.3	25	< 24	< 24	< 30	<24.0	<96	< 24	< 1.2	< 24	2.7	12.1 J
cis-1,2-Dichloroethene	70	7	< 4.1	< 83	< 83	< 104	<83.0	<332	< 83	< 4.1	< 83	< 0.83	<20.8
Ethylbenzene	700	140	260	6,900	7,400	5,700	13,100	15,700	1,000	100	2,000	47.3	328.0
Methylene chloride	5	0.5	< 2.2	< 43	< 43	< 53.8	<43	<172	< 43	< 2.2	< 43	< 0.43	<10.8
Methyl-tert-butyl-ether	60	12	< 3.0	< 61	< 61	< 76.2	<61	<244	< 61	< 3.0	< 61	< 0.61	<15.2
Naphthalene	40	8	< 3.7	< 74	< 74	< 92.5	<89	<356	< 74	< 3.7	< 74	< 0.74	<22.2
Toluene	1,000	200	< 3.4	2,700	5,100	14,200	11,200	4,600	240	22	3,900	< 0.67	<16.8
Trichloroethene	5	0.5	< 2.4	< 48	< 48	< 60.0	<48	<192	< 48	< 2.4	< 48	< 0.48	<12.0
Vinyl chloride	0.2	0.02	< 0.90	< 18	< 18	< 22.5	<18	<72	< 18	< 0.90	< 18	< 0.18	<4.5
Xylene, o	--	--	< 4.1	2,900	4,700	5,430	10,400	11,500	9,900	890	18,000	250	2,240
Xylene, m + p	--	--	1,200	19,000	23,000	16,900	39,100	53,900	4,500	390	7,500	160	971
Xylene, total	10,000	1,000	1,200	21,900	27,700	22,330	49,500	65,400	14,400	1,280	25,500	410	3,211

Notes:

(1) 4-methyl-2-pentanone; Synonym: methyl isobutyl ketone (MIBK).

(2) Laboratory qualifier - sample pH was greater than 2.

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-- = not available.

Bold = Indicates that the detected value exceeds the Enforcement Standard (ES).

PAL = WDNR Preventive Action Limit.

ES = Wisconsin Department of Natural Resources (WDNR) Enforcement Standard.

Z3 = Methylene chloride is a common laboratory contaminant. Results should be considered an estimate unless they are 3 to 5 times higher than those found in the method blank.

Entered by: JW, 12/30/11

Checked by:

Attachment B

Time Series Graphs of Specific Volatile Organic Compounds (VOCs)

Figure B-1
Areas H & I Methylene Chloride Concentrations over Time

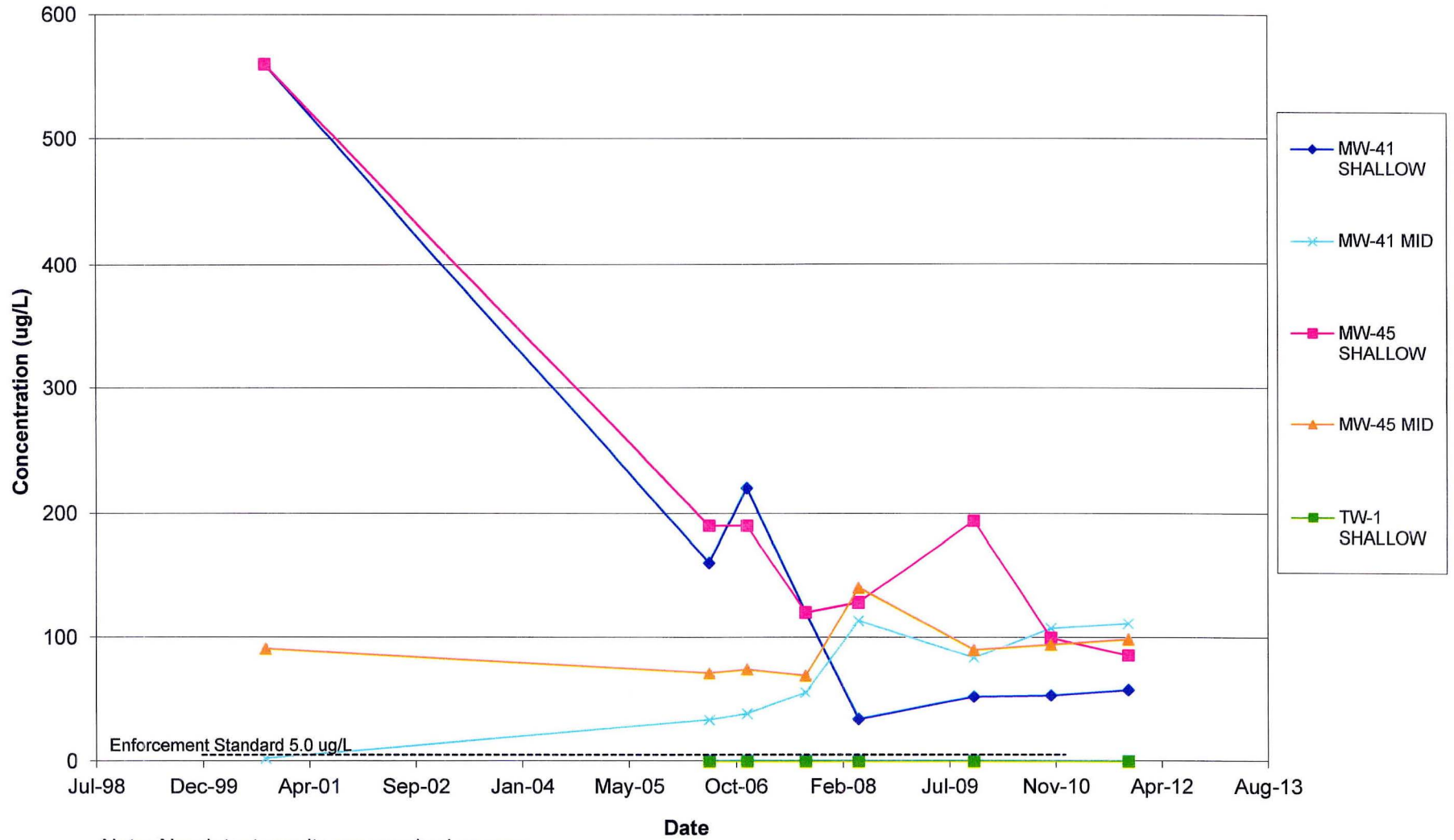
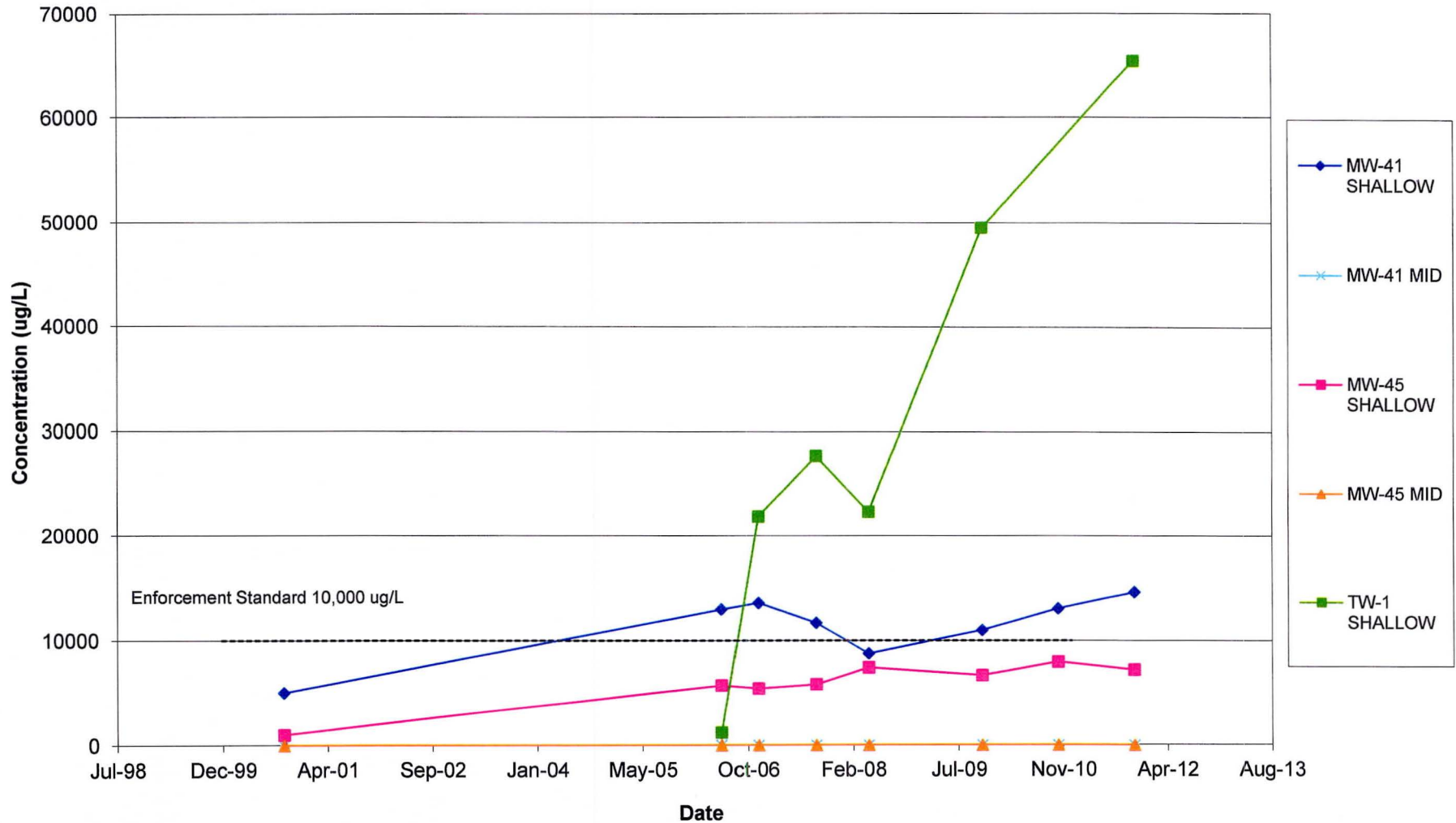
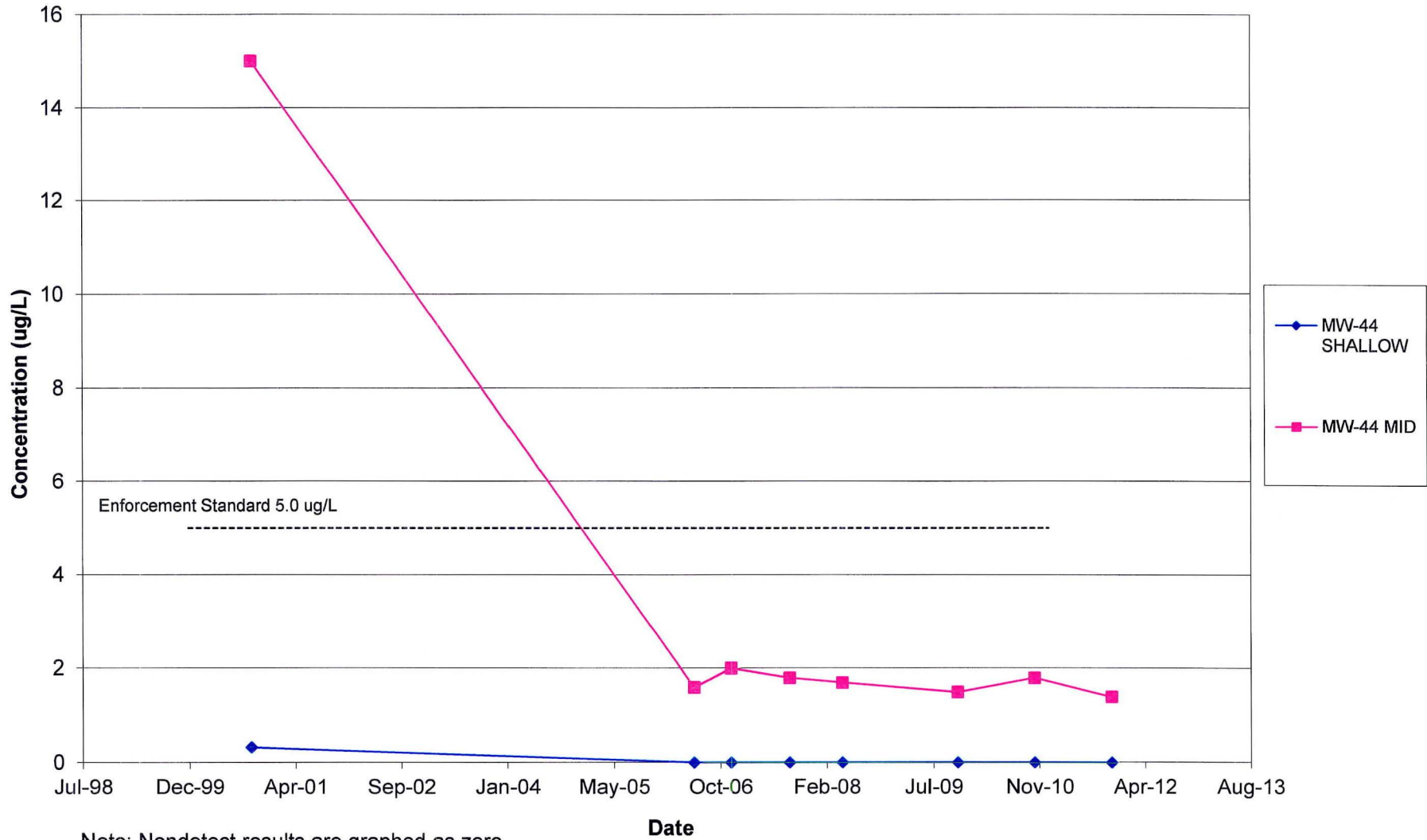


Figure B-2
Areas H & I Xylene Concentrations over Time



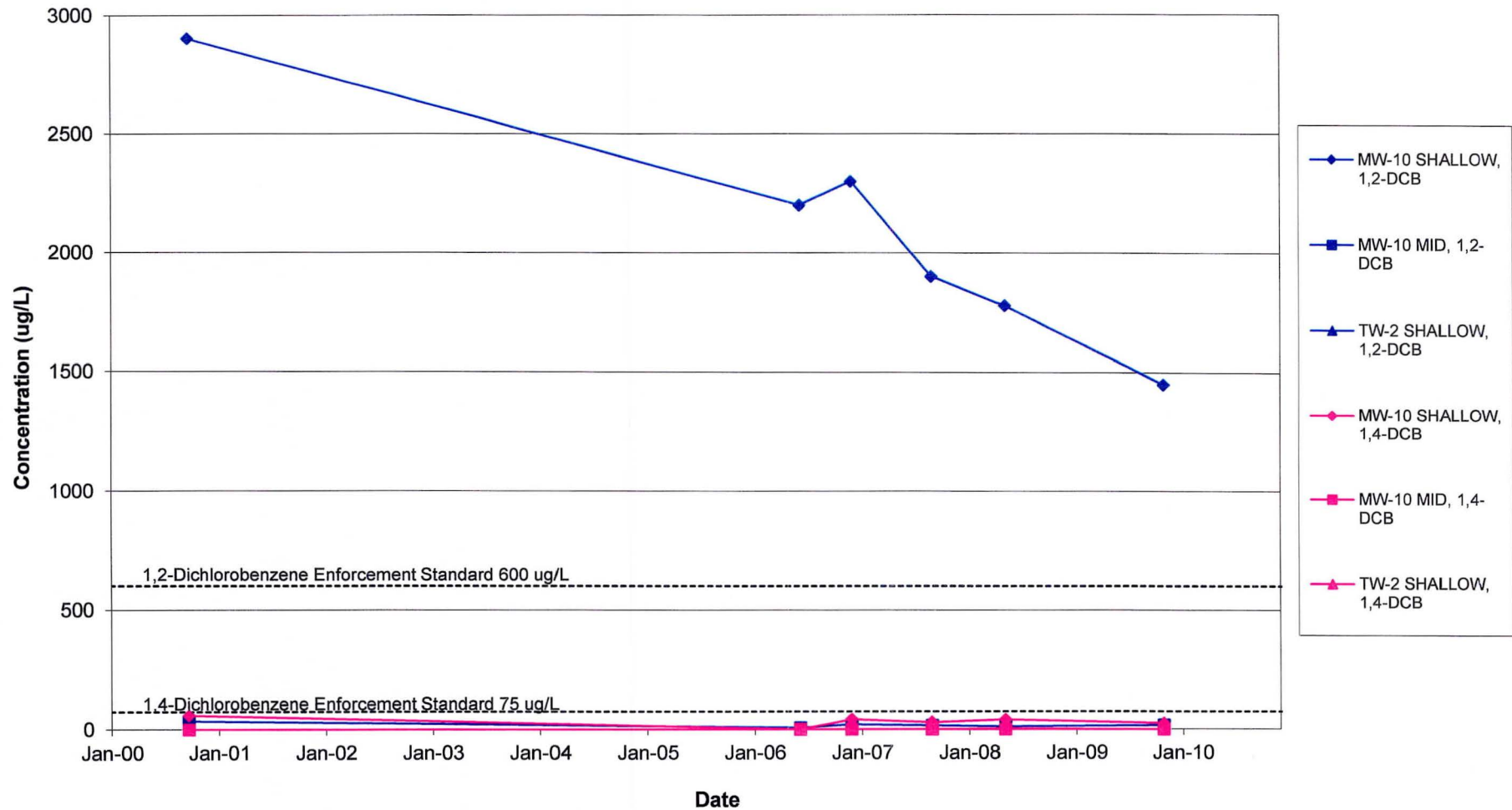
Note: Nondetect results are graphed as zero. All xylene results at MW-41 MID and MW-45 MID are nondetect.

Figure B-3
Area N Methylene Chloride Concentrations over Time



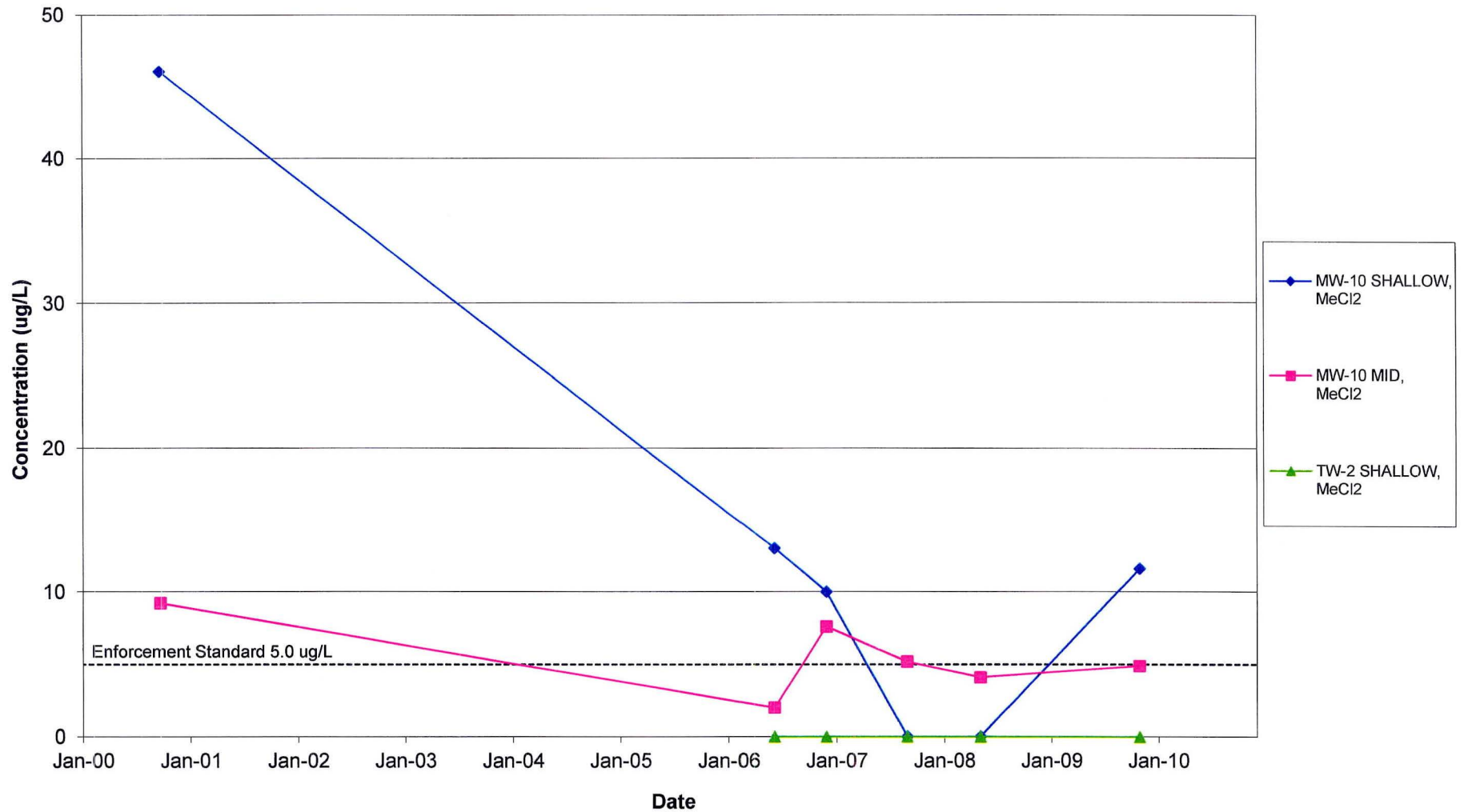
Note: Nondetect results are graphed as zero.

**Figure B-4
Areas P & Q 1,2-Dichlorobenzene and
1,4-Dichlorobenzene Concentrations over Time**



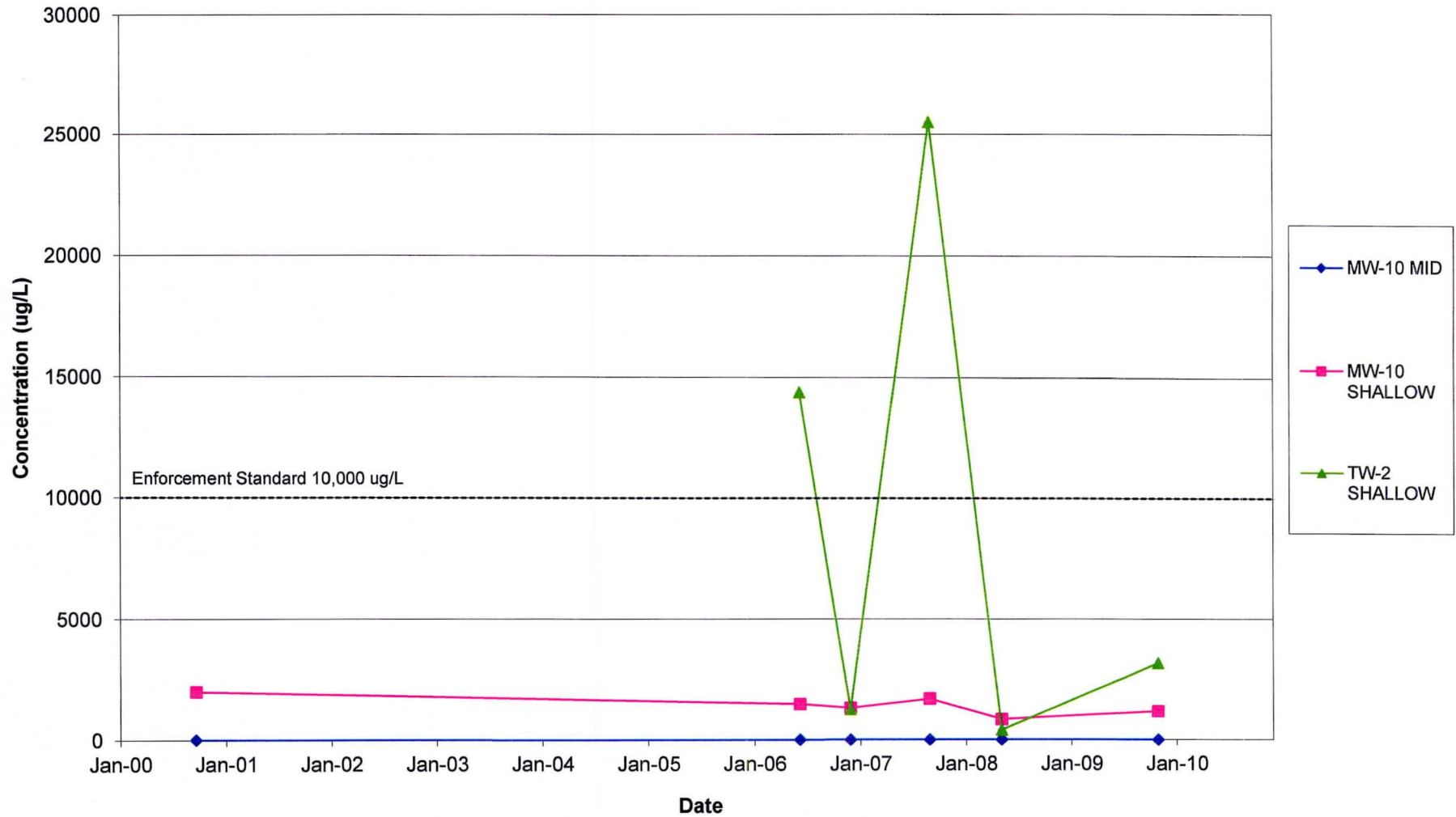
Note: Nondetect results are graphed as zero.

Figure B-5
Areas P & Q Methylene Chloride Concentrations over Time



Note: Nondetect results are graphed as zero.

Figure B-6
Areas P & Q Xylene Concentrations over Time



Note: Nondetect results are graphed as zero.

Figure B-7
Areas P & Q 1,2-Dichlorobenzene Concentrations over Time



Attachment C

Laboratory Analytical Reports for Data Collected by TRC in 2011

November 08, 2011

JAMES WEDEKIND
TRC - MADISON
744 HEARTLAND TRAIL
Madison, WI 53717

RE: Project: 004114.0000 SPECIALTY CHEM
Pace Project No.: 4052834

Dear JAMES WEDEKIND:

Enclosed are the analytical results for sample(s) received by the laboratory on October 27, 2011. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Brian Basten

brian.basten@pacelabs.com
Project Manager

Enclosures

cc: Nate Keller, TRC - MADISON



REPORT OF LABORATORY ANALYSIS

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without the written consent of Pace Analytical Services, Inc..



Pace Analytical Services, Inc.
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

CERTIFICATIONS

Project: 004114.0000 SPECIALTY CHEM
Pace Project No.: 4052834

Green Bay Certification IDs

1241 Bellevue Street, Green Bay, WI 54302
Florida/NELAP Certification #: E87948
Illinois Certification #: 200050
Kentucky Certification #: 82
Louisiana Certification #: 04168
Minnesota Certification #: 055-999-334
New York Certification #: 11888

North Carolina Certification #: 503
North Dakota Certification #: R-150
South Carolina Certification #: 83006001
US Dept of Agriculture #: S-76505
Wisconsin Certification #: 405132750
Wisconsin DATCP Certification #: 105-444

REPORT OF LABORATORY ANALYSIS

Page 2 of 50

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without the written consent of Pace Analytical Services, Inc..

SAMPLE SUMMARY

Project: 004114.0000 SPECIALTY CHEM
Pace Project No.: 4052834

Lab ID	Sample ID	Matrix	Date Collected	Date Received
4052834001	WC2011	Water	10/25/11 16:15	10/27/11 09:00
4052834002	TW-1	Water	10/25/11 15:53	10/27/11 09:00
4052834003	MW041S	Water	10/25/11 12:50	10/27/11 09:00
4052834004	MW044M	Water	10/25/11 15:24	10/27/11 09:00
4052834005	MW044S	Water	10/25/11 15:10	10/27/11 09:00
4052834006	MW041M	Water	10/25/11 13:24	10/27/11 09:00
4052834007	MW045M	Water	10/25/11 12:05	10/27/11 09:00
4052834008	MW045S	Water	10/25/11 11:18	10/27/11 09:00
4052834009	TRIP BLANK	Water	10/25/11 00:00	10/27/11 09:00
4052834011	MW044S DUP	Water	10/25/11 00:00	10/27/11 09:00

REPORT OF LABORATORY ANALYSIS



SAMPLE ANALYTE COUNT

Project: 004114.0000 SPECIALTY CHEM
 Pace Project No.: 4052834

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
4052834001	WC2011	EPA 8081	DMH	24	PASI-G
		EPA 8082	BDS	10	PASI-G
		EPA 6010	DLB	7	PASI-G
		EPA 7470	CMS	1	PASI-G
		EPA 8270	RJN	70	PASI-G
		EPA 8260	SMT	64	PASI-G
4052834002	TW-1	EPA 8260	SMT	64	PASI-G
4052834003	MW041S	EPA 8260	SMT	64	PASI-G
4052834004	MW044M	EPA 8260	SMT	64	PASI-G
4052834005	MW044S	EPA 8260	SMT	72	PASI-G
4052834006	MW041M	EPA 8260	SMT	64	PASI-G
4052834007	MW045M	EPA 8260	SMT	64	PASI-G
4052834008	MW045S	EPA 8260	SMT	64	PASI-G
4052834009	TRIP BLANK	EPA 8260	SMT	64	PASI-G
4052834011	MW044S DUP	EPA 8260	SMT	64	PASI-G

REPORT OF LABORATORY ANALYSIS

PROJECT NARRATIVE

Project: 004114.0000 SPECIALTY CHEM
Pace Project No.: 4052834

Method: EPA 8081
Description: 8081 GCS Pesticides
Client: TRC - MADISON
Date: November 08, 2011

General Information:

1 sample was analyzed for EPA 8081. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:

The samples were prepared in accordance with EPA 3510 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Surrogates:

All surrogates were within QC limits with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

Batch Comments:

Mid-point calibration check standard was >15% difference on the confirmation column. The quantitation column was within QC criteria. Results were reported from the quantitation column only.

- QC Batch: GCSV / 6776

REPORT OF LABORATORY ANALYSIS

PROJECT NARRATIVE

Project: 004114.0000 SPECIALTY CHEM
Pace Project No.: 4052834

Method: EPA 8082
Description: 8082 GCS PCB
Client: TRC - MADISON
Date: November 08, 2011

General Information:

1 sample was analyzed for EPA 8082. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:

The samples were prepared in accordance with EPA 3510 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Surrogates:

All surrogates were within QC limits with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

REPORT OF LABORATORY ANALYSIS

PROJECT NARRATIVE

Project: 004114.0000 SPECIALTY CHEM
Pace Project No.: 4052834

Method: EPA 6010
Description: 6010 MET ICP
Client: TRC - MADISON
Date: November 08, 2011

General Information:

1 sample was analyzed for EPA 6010. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:

The samples were prepared in accordance with EPA 3010 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

REPORT OF LABORATORY ANALYSIS

PROJECT NARRATIVE

Project: 004114.0000 SPECIALTY CHEM
Pace Project No.: 4052834

Method: EPA 7470
Description: 7470 Mercury
Client: TRC - MADISON
Date: November 08, 2011

General Information:

1 sample was analyzed for EPA 7470. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:

The samples were prepared in accordance with EPA 7470 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

REPORT OF LABORATORY ANALYSIS

PROJECT NARRATIVE

Project: 004114.0000 SPECIALTY CHEM
Pace Project No.: 4052834

Method: EPA 8270
Description: 8270 MSSV Semivolatile Organic
Client: TRC - MADISON
Date: November 08, 2011

General Information:

1 sample was analyzed for EPA 8270. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:

The samples were prepared in accordance with EPA 3510 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Internal Standards:

All internal standards were within QC limits with any exceptions noted below.

Surrogates:

All surrogates were within QC limits with any exceptions noted below.

QC Batch: OEXT/13075

S4: Surrogate recovery not evaluated against control limits due to sample dilution.

- WC2011 (Lab ID: 4052834001)
 - 2,4,6-Tribromophenol (S)
 - 2-Fluorobiphenyl (S)
 - 2-Fluorophenol (S)
 - Nitrobenzene-d5 (S)
 - Phenol-d6 (S)
 - Terphenyl-d14 (S)

Method Blank:

All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: MSSV/4034

A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

REPORT OF LABORATORY ANALYSIS

PROJECT NARRATIVE

Project: 004114.0000 SPECIALTY CHEM
Pace Project No.: 4052834

Method: EPA 8270
Description: 8270 MSSV Semivolatile Organic
Client: TRC - MADISON
Date: November 08, 2011

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

Analyte Comments:

QC Batch: OEXT/13075

D3: Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.

- WC2011 (Lab ID: 4052834001)
- Phenol

PROJECT NARRATIVE

Project: 004114.0000 SPECIALTY CHEM
Pace Project No.: 4052834

Method: EPA 8260
Description: 8260 MSV
Client: TRC - MADISON
Date: November 08, 2011

General Information:

10 samples were analyzed for EPA 8260. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Internal Standards:

All internal standards were within QC limits with any exceptions noted below.

Surrogates:

All surrogates were within QC limits with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

QC Batch: MSV/13142

L0: Analyte recovery in the laboratory control sample (LCS) was outside QC limits.

- LCS (Lab ID: 525883)
 - Acetone
- LCSD (Lab ID: 525884)
 - Acetone

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

Analyte Comments:

QC Batch: MSV/13142

D3: Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.

- MW041M (Lab ID: 4052834006)
 - Dibromofluoromethane (S)

REPORT OF LABORATORY ANALYSIS

PROJECT NARRATIVE

Project: 004114.0000 SPECIALTY CHEM
Pace Project No.: 4052834

Method: EPA 8260
Description: 8260 MSV
Client: TRC - MADISON
Date: November 08, 2011

This data package has been reviewed for quality and completeness and is approved for release.

ANALYTICAL RESULTS

Project: 004114.0000 SPECIALTY CHEM
Pace Project No.: 4052834

Sample: WC2011 **Lab ID: 4052834001** Collected: 10/25/11 16:15 Received: 10/27/11 09:00 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8081 GCS Pesticides Analytical Method: EPA 8081 Preparation Method: EPA 3510									
Aldrin	<0.011	ug/L	0.047	0.011	1	10/31/11 12:00	11/04/11 23:04	309-00-2	
alpha-BHC	<0.0058	ug/L	0.047	0.0058	1	10/31/11 12:00	11/04/11 23:04	319-84-6	
beta-BHC	<0.012	ug/L	0.047	0.012	1	10/31/11 12:00	11/04/11 23:04	319-85-7	
delta-BHC	<0.0088	ug/L	0.047	0.0088	1	10/31/11 12:00	11/04/11 23:04	319-86-8	
gamma-BHC (Lindane)	<0.0075	ug/L	0.047	0.0075	1	10/31/11 12:00	11/04/11 23:04	58-89-9	
Chlordane (Technical)	<0.17	ug/L	0.94	0.17	1	10/31/11 12:00	11/04/11 23:04	57-74-9	
alpha-Chlordane	<0.0094	ug/L	0.047	0.0094	1	10/31/11 12:00	11/04/11 23:04	5103-71-9	
gamma-Chlordane	<0.012	ug/L	0.047	0.012	1	10/31/11 12:00	11/04/11 23:04	5103-74-2	
4,4'-DDD	<0.022	ug/L	0.094	0.022	1	10/31/11 12:00	11/04/11 23:04	72-54-8	
4,4'-DDE	<0.022	ug/L	0.094	0.022	1	10/31/11 12:00	11/04/11 23:04	72-55-9	
4,4'-DDT	<0.025	ug/L	0.094	0.025	1	10/31/11 12:00	11/04/11 23:04	50-29-3	
Dieldrin	<0.017	ug/L	0.094	0.017	1	10/31/11 12:00	11/04/11 23:04	60-57-1	
Endosulfan I	<0.010	ug/L	0.047	0.010	1	10/31/11 12:00	11/04/11 23:04	959-98-8	
Endosulfan II	<0.022	ug/L	0.094	0.022	1	10/31/11 12:00	11/04/11 23:04	33213-65-9	
Endosulfan sulfate	<0.016	ug/L	0.094	0.016	1	10/31/11 12:00	11/04/11 23:04	1031-07-8	
Endrin	<0.023	ug/L	0.094	0.023	1	10/31/11 12:00	11/04/11 23:04	72-20-8	
Endrin aldehyde	<0.018	ug/L	0.094	0.018	1	10/31/11 12:00	11/04/11 23:04	7421-93-4	
Endrin ketone	<0.015	ug/L	0.094	0.015	1	10/31/11 12:00	11/04/11 23:04	53494-70-5	
Heptachlor	<0.0086	ug/L	0.047	0.0086	1	10/31/11 12:00	11/04/11 23:04	76-44-8	
Heptachlor epoxide	<0.0079	ug/L	0.047	0.0079	1	10/31/11 12:00	11/04/11 23:04	1024-57-3	
Methoxychlor	0.11J	ug/L	0.47	0.084	1	10/31/11 12:00	11/04/11 23:04	72-43-5	
Toxaphene	<0.46	ug/L	2.8	0.46	1	10/31/11 12:00	11/04/11 23:04	8001-35-2	
Tetrachloro-m-xylene (S)	52 %		31-130		1	10/31/11 12:00	11/04/11 23:04	877-09-8	
Decachlorobiphenyl (S)	56 %		26-130		1	10/31/11 12:00	11/04/11 23:04	2051-24-3	
8082 GCS PCB Analytical Method: EPA 8082 Preparation Method: EPA 3510									
PCB-1016 (Aroclor 1016)	<0.29	ug/L	0.94	0.29	1	10/28/11 12:00	11/05/11 03:05	12674-11-2	
PCB-1221 (Aroclor 1221)	<0.29	ug/L	0.94	0.29	1	10/28/11 12:00	11/05/11 03:05	11104-28-2	
PCB-1232 (Aroclor 1232)	<0.29	ug/L	0.94	0.29	1	10/28/11 12:00	11/05/11 03:05	11141-16-5	
PCB-1242 (Aroclor 1242)	<0.29	ug/L	0.94	0.29	1	10/28/11 12:00	11/05/11 03:05	53469-21-9	
PCB-1248 (Aroclor 1248)	<0.29	ug/L	0.94	0.29	1	10/28/11 12:00	11/05/11 03:05	12672-29-6	
PCB-1254 (Aroclor 1254)	<0.29	ug/L	0.94	0.29	1	10/28/11 12:00	11/05/11 03:05	11097-69-1	
PCB-1260 (Aroclor 1260)	<0.29	ug/L	0.94	0.29	1	10/28/11 12:00	11/05/11 03:05	11096-82-5	
PCB, Total	<0.29	ug/L	0.94	0.29	1	10/28/11 12:00	11/05/11 03:05	1336-36-3	
Tetrachloro-m-xylene (S)	71 %		10-173		1	10/28/11 12:00	11/05/11 03:05	877-09-8	
Decachlorobiphenyl (S)	66 %		31-130		1	10/28/11 12:00	11/05/11 03:05	2051-24-3	
6010 MET ICP Analytical Method: EPA 6010 Preparation Method: EPA 3010									
Arsenic	356000	ug/L	200	17.6	10	11/01/11 09:30	11/03/11 11:26	7440-38-2	
Barium	169	ug/L	5.0	0.12	1	11/01/11 09:30	11/02/11 13:56	7440-39-3	
Cadmium	1220	ug/L	50.0	2.8	10	11/01/11 09:30	11/03/11 11:26	7440-43-9	
Chromium	5.8	ug/L	5.0	0.79	1	11/01/11 09:30	11/02/11 13:56	7440-47-3	
Lead	4.2J	ug/L	7.5	1.3	1	11/01/11 09:30	11/02/11 13:56	7439-92-1	
Selenium	9.4J	ug/L	20.0	2.2	1	11/01/11 09:30	11/02/11 13:56	7782-49-2	
Silver	<0.69	ug/L	10.0	0.69	1	11/01/11 09:30	11/02/11 13:56	7440-22-4	

ANALYTICAL RESULTS

Project: 004114.0000 SPECIALTY CHEM
Pace Project No.: 4052834

Sample: **WC2011** Lab ID: **4052834001** Collected: 10/25/11 16:15 Received: 10/27/11 09:00 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
7470 Mercury Analytical Method: EPA 7470 Preparation Method: EPA 7470									
Mercury	<0.10	ug/L	0.20	0.10	1	10/31/11 11:43	11/01/11 11:26	7439-97-6	
8270 MSSV Semivolatile Organic Analytical Method: EPA 8270 Preparation Method: EPA 3510									
Acenaphthene	<225	ug/L	1180	225	250	11/01/11 12:00	11/03/11 13:01	83-32-9	
Acenaphthylene	<235	ug/L	1180	235	250	11/01/11 12:00	11/03/11 13:01	208-96-8	
Anthracene	<148	ug/L	1180	148	250	11/01/11 12:00	11/03/11 13:01	120-12-7	
Benzo(a)anthracene	<144	ug/L	1180	144	250	11/01/11 12:00	11/03/11 13:01	56-55-3	
Benzo(a)pyrene	<228	ug/L	1180	228	250	11/01/11 12:00	11/03/11 13:01	50-32-8	
Benzo(b)fluoranthene	<340	ug/L	1180	340	250	11/01/11 12:00	11/03/11 13:01	205-99-2	
Benzo(g,h,i)perylene	<182	ug/L	1180	182	250	11/01/11 12:00	11/03/11 13:01	191-24-2	
Benzo(k)fluoranthene	<242	ug/L	1180	242	250	11/01/11 12:00	11/03/11 13:01	207-08-9	
4-Bromophenylphenyl ether	<307	ug/L	1180	307	250	11/01/11 12:00	11/03/11 13:01	101-55-3	
Butylbenzylphthalate	<256	ug/L	1180	256	250	11/01/11 12:00	11/03/11 13:01	85-68-7	
Carbazole	<164	ug/L	1180	164	250	11/01/11 12:00	11/03/11 13:01	86-74-8	
4-Chloro-3-methylphenol	<238	ug/L	1180	238	250	11/01/11 12:00	11/03/11 13:01	59-50-7	
4-Chloroaniline	<191	ug/L	1180	191	250	11/01/11 12:00	11/03/11 13:01	106-47-8	
bis(2-Chloroethoxy)methane	<282	ug/L	1180	282	250	11/01/11 12:00	11/03/11 13:01	111-91-1	
bis(2-Chloroethyl) ether	<155	ug/L	1180	155	250	11/01/11 12:00	11/03/11 13:01	111-44-4	
2-Chloronaphthalene	<199	ug/L	1180	199	250	11/01/11 12:00	11/03/11 13:01	91-58-7	
2-Chlorophenol	<165	ug/L	1180	165	250	11/01/11 12:00	11/03/11 13:01	95-57-8	
4-Chlorophenylphenyl ether	<280	ug/L	1180	280	250	11/01/11 12:00	11/03/11 13:01	7005-72-3	
Chrysene	<184	ug/L	1180	184	250	11/01/11 12:00	11/03/11 13:01	218-01-9	
Dibenz(a,h)anthracene	<326	ug/L	1180	326	250	11/01/11 12:00	11/03/11 13:01	53-70-3	
Dibenzofuran	<250	ug/L	1180	250	250	11/01/11 12:00	11/03/11 13:01	132-64-9	
1,2-Dichlorobenzene	348J	ug/L	1180	167	250	11/01/11 12:00	11/03/11 13:01	95-50-1	
1,3-Dichlorobenzene	<195	ug/L	1180	195	250	11/01/11 12:00	11/03/11 13:01	541-73-1	
1,4-Dichlorobenzene	<203	ug/L	1180	203	250	11/01/11 12:00	11/03/11 13:01	106-46-7	
3,3'-Dichlorobenzidine	<262	ug/L	1180	262	250	11/01/11 12:00	11/03/11 13:01	91-94-1	
2,4-Dichlorophenol	<271	ug/L	1180	271	250	11/01/11 12:00	11/03/11 13:01	120-83-2	
Diethylphthalate	<318	ug/L	1180	318	250	11/01/11 12:00	11/03/11 13:01	84-66-2	
2,4-Dimethylphenol	<266	ug/L	1180	266	250	11/01/11 12:00	11/03/11 13:01	105-67-9	
Dimethylphthalate	<246	ug/L	1180	246	250	11/01/11 12:00	11/03/11 13:01	131-11-3	
Di-n-butylphthalate	<211	ug/L	1180	211	250	11/01/11 12:00	11/03/11 13:01	84-74-2	
4,6-Dinitro-2-methylphenol	<176	ug/L	1180	176	250	11/01/11 12:00	11/03/11 13:01	534-52-1	
2,4-Dinitrophenol	<485	ug/L	2360	485	250	11/01/11 12:00	11/03/11 13:01	51-28-5	
2,4-Dinitrotoluene	<190	ug/L	1180	190	250	11/01/11 12:00	11/03/11 13:01	121-14-2	
2,6-Dinitrotoluene	<253	ug/L	1180	253	250	11/01/11 12:00	11/03/11 13:01	606-20-2	
Di-n-octylphthalate	<360	ug/L	1180	360	250	11/01/11 12:00	11/03/11 13:01	117-84-0	
bis(2-Ethylhexyl)phthalate	<613	ug/L	1180	613	250	11/01/11 12:00	11/03/11 13:01	117-81-7	
Fluoranthene	<215	ug/L	1180	215	250	11/01/11 12:00	11/03/11 13:01	206-44-0	
Fluorene	<269	ug/L	1180	269	250	11/01/11 12:00	11/03/11 13:01	86-73-7	
Hexachloro-1,3-butadiene	<155	ug/L	2360	155	250	11/01/11 12:00	11/03/11 13:01	87-68-3	
Hexachlorobenzene	<262	ug/L	1180	262	250	11/01/11 12:00	11/03/11 13:01	118-74-1	
Hexachlorocyclopentadiene	<258	ug/L	1180	258	250	11/01/11 12:00	11/03/11 13:01	77-47-4	
Hexachloroethane	<137	ug/L	1180	137	250	11/01/11 12:00	11/03/11 13:01	67-72-1	
Indeno(1,2,3-cd)pyrene	<158	ug/L	1180	158	250	11/01/11 12:00	11/03/11 13:01	193-39-5	

ANALYTICAL RESULTS

Project: 004114.0000 SPECIALTY CHEM
Pace Project No.: 4052834

Sample: WC2011 Lab ID: 4052834001 Collected: 10/25/11 16:15 Received: 10/27/11 09:00 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV Semivolatile Organic		Analytical Method: EPA 8270 Preparation Method: EPA 3510							
Isophorone	<322	ug/L	1180	322	250	11/01/11 12:00	11/03/11 13:01	78-59-1	
2-Methylnaphthalene	<319	ug/L	1180	319	250	11/01/11 12:00	11/03/11 13:01	91-57-6	
2-Methylphenol(o-Cresol)	<230	ug/L	1180	230	250	11/01/11 12:00	11/03/11 13:01	95-48-7	
3&4-Methylphenol(m&p Cresol)	<181	ug/L	1180	181	250	11/01/11 12:00	11/03/11 13:01		
Naphthalene	<166	ug/L	1180	166	250	11/01/11 12:00	11/03/11 13:01	91-20-3	
2-Nitroaniline	<197	ug/L	1180	197	250	11/01/11 12:00	11/03/11 13:01	88-74-4	
3-Nitroaniline	<228	ug/L	1180	228	250	11/01/11 12:00	11/03/11 13:01	99-09-2	
4-Nitroaniline	<259	ug/L	1180	259	250	11/01/11 12:00	11/03/11 13:01	100-01-6	
Nitrobenzene	<322	ug/L	1180	322	250	11/01/11 12:00	11/03/11 13:01	98-95-3	
2-Nitrophenol	<321	ug/L	1180	321	250	11/01/11 12:00	11/03/11 13:01	88-75-5	
4-Nitrophenol	<206	ug/L	2360	206	250	11/01/11 12:00	11/03/11 13:01	100-02-7	
N-Nitroso-di-n-propylamine	<251	ug/L	1180	251	250	11/01/11 12:00	11/03/11 13:01	621-64-7	
N-Nitrosodiphenylamine	<579	ug/L	2360	579	250	11/01/11 12:00	11/03/11 13:01	86-30-6	
2,2'-Oxybis(1-chloropropane)	<194	ug/L	1180	194	250	11/01/11 12:00	11/03/11 13:01	108-60-1	
Pentachlorophenol	<254	ug/L	2360	254	250	11/01/11 12:00	11/03/11 13:01	87-86-5	
Phenanthrene	<149	ug/L	1180	149	250	11/01/11 12:00	11/03/11 13:01	85-01-8	
Phenol	742J	ug/L	1180	244	250	11/01/11 12:00	11/03/11 13:01	108-95-2	D3
Pyrene	<379	ug/L	1180	379	250	11/01/11 12:00	11/03/11 13:01	129-00-0	
1,2,4-Trichlorobenzene	<205	ug/L	1180	205	250	11/01/11 12:00	11/03/11 13:01	120-82-1	
2,4,5-Trichlorophenol	<235	ug/L	1180	235	250	11/01/11 12:00	11/03/11 13:01	95-95-4	
2,4,6-Trichlorophenol	<252	ug/L	1180	252	250	11/01/11 12:00	11/03/11 13:01	88-06-2	
Nitrobenzene-d5 (S)	0 %		41-130		250	11/01/11 12:00	11/03/11 13:01	4165-60-0	S4
2-Fluorobiphenyl (S)	0 %		51-130		250	11/01/11 12:00	11/03/11 13:01	321-60-8	S4
Terphenyl-d14 (S)	0 %		38-130		250	11/01/11 12:00	11/03/11 13:01	1718-51-0	S4
Phenol-d6 (S)	0 %		13-130		250	11/01/11 12:00	11/03/11 13:01	13127-88-3	S4
2-Fluorophenol (S)	0 %		24-130		250	11/01/11 12:00	11/03/11 13:01	367-12-4	S4
2,4,6-Tribromophenol (S)	0 %		38-130		250	11/01/11 12:00	11/03/11 13:01	118-79-6	S4
8260 MSV		Analytical Method: EPA 8260							
Benzene	18.3J	ug/L	20.0	8.2	20		10/31/11 12:59	71-43-2	
Bromobenzene	<16.4	ug/L	20.0	16.4	20		10/31/11 12:59	108-86-1	
Bromochloromethane	<19.4	ug/L	20.0	19.4	20		10/31/11 12:59	74-97-5	
Bromodichloromethane	<11.2	ug/L	20.0	11.2	20		10/31/11 12:59	75-27-4	
Bromoform	<18.8	ug/L	20.0	18.8	20		10/31/11 12:59	75-25-2	
Bromomethane	<18.2	ug/L	20.0	18.2	20		10/31/11 12:59	74-83-9	
n-Butylbenzene	<18.6	ug/L	20.0	18.6	20		10/31/11 12:59	104-51-8	
sec-Butylbenzene	<17.8	ug/L	100	17.8	20		10/31/11 12:59	135-98-8	
tert-Butylbenzene	<19.4	ug/L	20.0	19.4	20		10/31/11 12:59	98-06-6	
Carbon tetrachloride	<9.8	ug/L	20.0	9.8	20		10/31/11 12:59	56-23-5	
Chlorobenzene	649	ug/L	20.0	8.2	20		10/31/11 12:59	108-90-7	
Chloroethane	<19.4	ug/L	20.0	19.4	20		10/31/11 12:59	75-00-3	
Chloroform	<26.0	ug/L	100	26.0	20		10/31/11 12:59	67-66-3	
Chloromethane	<4.8	ug/L	20.0	4.8	20		10/31/11 12:59	74-87-3	
2-Chlorotoluene	<17.0	ug/L	20.0	17.0	20		10/31/11 12:59	95-49-8	
4-Chlorotoluene	<14.8	ug/L	20.0	14.8	20		10/31/11 12:59	106-43-4	
1,2-Dibromo-3-chloropropane	<33.6	ug/L	100	33.6	20		10/31/11 12:59	96-12-8	

ANALYTICAL RESULTS

Project: 004114.0000 SPECIALTY CHEM
Pace Project No.: 4052834

Sample: WC2011 Lab ID: 4052834001 Collected: 10/25/11 16:15 Received: 10/27/11 09:00 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV									
Analytical Method: EPA 8260									
Dibromochloromethane	<16.2	ug/L	20.0	16.2	20		10/31/11 12:59	124-48-1	
1,2-Dibromoethane (EDB)	<11.2	ug/L	20.0	11.2	20		10/31/11 12:59	106-93-4	
Dibromomethane	<12.0	ug/L	20.0	12.0	20		10/31/11 12:59	74-95-3	
1,2-Dichlorobenzene	338	ug/L	20.0	16.6	20		10/31/11 12:59	95-50-1	
1,3-Dichlorobenzene	<17.4	ug/L	20.0	17.4	20		10/31/11 12:59	541-73-1	
1,4-Dichlorobenzene	<19.0	ug/L	20.0	19.0	20		10/31/11 12:59	106-46-7	
Dichlorodifluoromethane	<19.8	ug/L	20.0	19.8	20		10/31/11 12:59	75-71-8	
1,1-Dichloroethane	<15.0	ug/L	20.0	15.0	20		10/31/11 12:59	75-34-3	
1,2-Dichloroethane	<7.2	ug/L	20.0	7.2	20		10/31/11 12:59	107-06-2	
1,1-Dichloroethene	<11.4	ug/L	20.0	11.4	20		10/31/11 12:59	75-35-4	
cis-1,2-Dichloroethene	128	ug/L	20.0	16.6	20		10/31/11 12:59	156-59-2	
trans-1,2-Dichloroethene	<17.8	ug/L	20.0	17.8	20		10/31/11 12:59	156-60-5	
1,2-Dichloropropane	<9.8	ug/L	20.0	9.8	20		10/31/11 12:59	78-87-5	
1,3-Dichloropropane	<12.2	ug/L	20.0	12.2	20		10/31/11 12:59	142-28-9	
2,2-Dichloropropane	<12.4	ug/L	20.0	12.4	20		10/31/11 12:59	594-20-7	
1,1-Dichloropropene	<15.0	ug/L	20.0	15.0	20		10/31/11 12:59	563-58-6	
cis-1,3-Dichloropropene	<4.0	ug/L	20.0	4.0	20		10/31/11 12:59	10061-01-5	
trans-1,3-Dichloropropene	<3.8	ug/L	20.0	3.8	20		10/31/11 12:59	10061-02-6	
Diisopropyl ether	<15.2	ug/L	20.0	15.2	20		10/31/11 12:59	108-20-3	
Ethylbenzene	973	ug/L	20.0	10.8	20		10/31/11 12:59	100-41-4	
Hexachloro-1,3-butadiene	<13.4	ug/L	100	13.4	20		10/31/11 12:59	87-68-3	
Isopropylbenzene (Cumene)	<11.8	ug/L	20.0	11.8	20		10/31/11 12:59	98-82-8	
p-Isopropyltoluene	<13.4	ug/L	20.0	13.4	20		10/31/11 12:59	99-87-6	
Methylene Chloride	44.6	ug/L	20.0	8.6	20		10/31/11 12:59	75-09-2	Z3
Methyl-tert-butyl ether	<12.2	ug/L	20.0	12.2	20		10/31/11 12:59	1634-04-4	
Naphthalene	<17.8	ug/L	100	17.8	20		10/31/11 12:59	91-20-3	
n-Propylbenzene	<16.2	ug/L	20.0	16.2	20		10/31/11 12:59	103-65-1	
Styrene	<17.2	ug/L	20.0	17.2	20		10/31/11 12:59	100-42-5	
1,1,1,2-Tetrachloroethane	<18.4	ug/L	20.0	18.4	20		10/31/11 12:59	630-20-6	
1,1,2,2-Tetrachloroethane	<4.0	ug/L	20.0	4.0	20		10/31/11 12:59	79-34-5	
Tetrachloroethene	<9.0	ug/L	20.0	9.0	20		10/31/11 12:59	127-18-4	
Toluene	808	ug/L	20.0	13.4	20		10/31/11 12:59	108-88-3	
1,2,3-Trichlorobenzene	<14.8	ug/L	20.0	14.8	20		10/31/11 12:59	87-61-6	
1,2,4-Trichlorobenzene	<19.4	ug/L	100	19.4	20		10/31/11 12:59	120-82-1	
1,1,1-Trichloroethane	<18.0	ug/L	20.0	18.0	20		10/31/11 12:59	71-55-6	
1,1,2-Trichloroethane	<8.4	ug/L	20.0	8.4	20		10/31/11 12:59	79-00-5	
Trichloroethene	110	ug/L	20.0	9.6	20		10/31/11 12:59	79-01-6	
Trichlorofluoromethane	<15.8	ug/L	20.0	15.8	20		10/31/11 12:59	75-69-4	
1,2,3-Trichloropropane	<19.8	ug/L	20.0	19.8	20		10/31/11 12:59	96-18-4	
1,2,4-Trimethylbenzene	<19.4	ug/L	20.0	19.4	20		10/31/11 12:59	95-63-6	
1,3,5-Trimethylbenzene	<16.6	ug/L	20.0	16.6	20		10/31/11 12:59	108-67-8	
Vinyl chloride	9.3J	ug/L	20.0	3.6	20		10/31/11 12:59	75-01-4	
m&p-Xylene	3520	ug/L	40.0	36.0	20		10/31/11 12:59	179601-23-1	
o-Xylene	1220	ug/L	20.0	16.6	20		10/31/11 12:59	95-47-6	
4-Bromofluorobenzene (S)	94	%	70-130		20		10/31/11 12:59	460-00-4	
Dibromofluoromethane (S)	104	%	70-130		20		10/31/11 12:59	1868-53-7	

ANALYTICAL RESULTS

Project: 004114.0000 SPECIALTY CHEM
Pace Project No.: 4052834

Sample: WC2011 **Lab ID: 4052834001** Collected: 10/25/11 16:15 Received: 10/27/11 09:00 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
Toluene-d8 (S)	95 %.		70-130		20		10/31/11 12:59	2037-26-5	

ANALYTICAL RESULTS

Project: 004114.0000 SPECIALTY CHEM
Pace Project No.: 4052834

Sample: TW-1 Lab ID: 4052834002 Collected: 10/25/11 15:53 Received: 10/27/11 09:00 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV		Analytical Method: EPA 8260							
Benzene	<164	ug/L	400	164	400		10/31/11 13:21	71-43-2	
Bromobenzene	<328	ug/L	400	328	400		10/31/11 13:21	108-86-1	
Bromochloromethane	<388	ug/L	400	388	400		10/31/11 13:21	74-97-5	
Bromodichloromethane	<224	ug/L	400	224	400		10/31/11 13:21	75-27-4	
Bromoform	<376	ug/L	400	376	400		10/31/11 13:21	75-25-2	
Bromomethane	<364	ug/L	400	364	400		10/31/11 13:21	74-83-9	
n-Butylbenzene	<372	ug/L	400	372	400		10/31/11 13:21	104-51-8	
sec-Butylbenzene	<356	ug/L	2000	356	400		10/31/11 13:21	135-98-8	
tert-Butylbenzene	<388	ug/L	400	388	400		10/31/11 13:21	98-06-6	
Carbon tetrachloride	<196	ug/L	400	196	400		10/31/11 13:21	56-23-5	
Chlorobenzene	<164	ug/L	400	164	400		10/31/11 13:21	108-90-7	
Chloroethane	<388	ug/L	400	388	400		10/31/11 13:21	75-00-3	
Chloroform	<520	ug/L	2000	520	400		10/31/11 13:21	67-66-3	
Chloromethane	<96.0	ug/L	400	96.0	400		10/31/11 13:21	74-87-3	
2-Chlorotoluene	<340	ug/L	400	340	400		10/31/11 13:21	95-49-8	
4-Chlorotoluene	<296	ug/L	400	296	400		10/31/11 13:21	106-43-4	
1,2-Dibromo-3-chloropropane	<672	ug/L	2000	672	400		10/31/11 13:21	96-12-8	
Dibromochloromethane	<324	ug/L	400	324	400		10/31/11 13:21	124-48-1	
1,2-Dibromoethane (EDB)	<224	ug/L	400	224	400		10/31/11 13:21	106-93-4	
Dibromomethane	<240	ug/L	400	240	400		10/31/11 13:21	74-95-3	
1,2-Dichlorobenzene	<332	ug/L	400	332	400		10/31/11 13:21	95-50-1	
1,3-Dichlorobenzene	<348	ug/L	400	348	400		10/31/11 13:21	541-73-1	
1,4-Dichlorobenzene	<380	ug/L	400	380	400		10/31/11 13:21	106-46-7	
Dichlorodifluoromethane	<396	ug/L	400	396	400		10/31/11 13:21	75-71-8	
1,1-Dichloroethane	<300	ug/L	400	300	400		10/31/11 13:21	75-34-3	
1,2-Dichloroethane	<144	ug/L	400	144	400		10/31/11 13:21	107-06-2	
1,1-Dichloroethene	<228	ug/L	400	228	400		10/31/11 13:21	75-35-4	
cis-1,2-Dichloroethene	<332	ug/L	400	332	400		10/31/11 13:21	156-59-2	
trans-1,2-Dichloroethene	<356	ug/L	400	356	400		10/31/11 13:21	156-60-5	
1,2-Dichloropropane	<196	ug/L	400	196	400		10/31/11 13:21	78-87-5	
1,3-Dichloropropane	<244	ug/L	400	244	400		10/31/11 13:21	142-28-9	
2,2-Dichloropropane	<248	ug/L	400	248	400		10/31/11 13:21	594-20-7	
1,1-Dichloropropene	<300	ug/L	400	300	400		10/31/11 13:21	563-58-6	
cis-1,3-Dichloropropene	<80.0	ug/L	400	80.0	400		10/31/11 13:21	10061-01-5	
trans-1,3-Dichloropropene	<76.0	ug/L	400	76.0	400		10/31/11 13:21	10061-02-6	
Diisopropyl ether	<304	ug/L	400	304	400		10/31/11 13:21	108-20-3	
Ethylbenzene	15700	ug/L	400	216	400		10/31/11 13:21	100-41-4	
Hexachloro-1,3-butadiene	<268	ug/L	2000	268	400		10/31/11 13:21	87-68-3	
Isopropylbenzene (Cumene)	<236	ug/L	400	236	400		10/31/11 13:21	98-82-8	
p-Isopropyltoluene	<268	ug/L	400	268	400		10/31/11 13:21	99-87-6	
Methylene Chloride	<172	ug/L	400	172	400		10/31/11 13:21	75-09-2	
Methyl-tert-butyl ether	<244	ug/L	400	244	400		10/31/11 13:21	1634-04-4	
Naphthalene	<356	ug/L	2000	356	400		10/31/11 13:21	91-20-3	
n-Propylbenzene	<324	ug/L	400	324	400		10/31/11 13:21	103-65-1	
Styrene	<344	ug/L	400	344	400		10/31/11 13:21	100-42-5	
1,1,1,2-Tetrachloroethane	<368	ug/L	400	368	400		10/31/11 13:21	630-20-6	

ANALYTICAL RESULTS

Project: 004114.0000 SPECIALTY CHEM
Pace Project No.: 4052834

Sample: TW-1 **Lab ID: 4052834002** Collected: 10/25/11 15:53 Received: 10/27/11 09:00 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV		Analytical Method: EPA 8260							
1,1,2,2-Tetrachloroethane	<80.0	ug/L	400	80.0	400		10/31/11 13:21	79-34-5	
Tetrachloroethene	<180	ug/L	400	180	400		10/31/11 13:21	127-18-4	
Toluene	4600	ug/L	400	268	400		10/31/11 13:21	108-88-3	
1,2,3-Trichlorobenzene	<296	ug/L	400	296	400		10/31/11 13:21	87-61-6	
1,2,4-Trichlorobenzene	<388	ug/L	2000	388	400		10/31/11 13:21	120-82-1	
1,1,1-Trichloroethane	<360	ug/L	400	360	400		10/31/11 13:21	71-55-6	
1,1,2-Trichloroethane	<168	ug/L	400	168	400		10/31/11 13:21	79-00-5	
Trichloroethene	<192	ug/L	400	192	400		10/31/11 13:21	79-01-6	
Trichlorofluoromethane	<316	ug/L	400	316	400		10/31/11 13:21	75-69-4	
1,2,3-Trichloropropane	<396	ug/L	400	396	400		10/31/11 13:21	96-18-4	
1,2,4-Trimethylbenzene	<388	ug/L	400	388	400		10/31/11 13:21	95-63-6	
1,3,5-Trimethylbenzene	<332	ug/L	400	332	400		10/31/11 13:21	108-67-8	
Vinyl chloride	<72.0	ug/L	400	72.0	400		10/31/11 13:21	75-01-4	
m&p-Xylene	53900	ug/L	800	720	400		10/31/11 13:21	179601-23-1	
o-Xylene	11500	ug/L	400	332	400		10/31/11 13:21	95-47-6	
4-Bromofluorobenzene (S)	94	%	70-130		400		10/31/11 13:21	460-00-4	
Dibromofluoromethane (S)	106	%	70-130		400		10/31/11 13:21	1868-53-7	
Toluene-d8 (S)	93	%	70-130		400		10/31/11 13:21	2037-26-5	

ANALYTICAL RESULTS

Project: 004114.0000 SPECIALTY CHEM
Pace Project No.: 4052834

Sample: MW041S Lab ID: 4052834003 Collected: 10/25/11 12:50 Received: 10/27/11 09:00 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV									
Analytical Method: EPA 8260									
Benzene	<41.0	ug/L	100	41.0	100		10/31/11 13:44	71-43-2	
Bromobenzene	<82.0	ug/L	100	82.0	100		10/31/11 13:44	108-86-1	
Bromochloromethane	<97.0	ug/L	100	97.0	100		10/31/11 13:44	74-97-5	
Bromodichloromethane	<56.0	ug/L	100	56.0	100		10/31/11 13:44	75-27-4	
Bromoform	<94.0	ug/L	100	94.0	100		10/31/11 13:44	75-25-2	
Bromomethane	<91.0	ug/L	100	91.0	100		10/31/11 13:44	74-83-9	
n-Butylbenzene	<93.0	ug/L	100	93.0	100		10/31/11 13:44	104-51-8	
sec-Butylbenzene	<89.0	ug/L	500	89.0	100		10/31/11 13:44	135-98-8	
tert-Butylbenzene	<97.0	ug/L	100	97.0	100		10/31/11 13:44	98-06-6	
Carbon tetrachloride	<49.0	ug/L	100	49.0	100		10/31/11 13:44	56-23-5	
Chlorobenzene	997	ug/L	100	41.0	100		10/31/11 13:44	108-90-7	
Chloroethane	<97.0	ug/L	100	97.0	100		10/31/11 13:44	75-00-3	
Chloroform	<130	ug/L	500	130	100		10/31/11 13:44	67-66-3	
Chloromethane	<24.0	ug/L	100	24.0	100		10/31/11 13:44	74-87-3	
2-Chlorotoluene	<85.0	ug/L	100	85.0	100		10/31/11 13:44	95-49-8	
4-Chlorotoluene	<74.0	ug/L	100	74.0	100		10/31/11 13:44	106-43-4	
1,2-Dibromo-3-chloropropane	<168	ug/L	500	168	100		10/31/11 13:44	96-12-8	
Dibromochloromethane	<81.0	ug/L	100	81.0	100		10/31/11 13:44	124-48-1	
1,2-Dibromoethane (EDB)	<56.0	ug/L	100	56.0	100		10/31/11 13:44	106-93-4	
Dibromomethane	<60.0	ug/L	100	60.0	100		10/31/11 13:44	74-95-3	
1,2-Dichlorobenzene	427	ug/L	100	83.0	100		10/31/11 13:44	95-50-1	
1,3-Dichlorobenzene	<87.0	ug/L	100	87.0	100		10/31/11 13:44	541-73-1	
1,4-Dichlorobenzene	<95.0	ug/L	100	95.0	100		10/31/11 13:44	106-46-7	
Dichlorodifluoromethane	<99.0	ug/L	100	99.0	100		10/31/11 13:44	75-71-8	
1,1-Dichloroethane	<75.0	ug/L	100	75.0	100		10/31/11 13:44	75-34-3	
1,2-Dichloroethane	<36.0	ug/L	100	36.0	100		10/31/11 13:44	107-06-2	
1,1-Dichloroethene	<57.0	ug/L	100	57.0	100		10/31/11 13:44	75-35-4	
cis-1,2-Dichloroethene	<83.0	ug/L	100	83.0	100		10/31/11 13:44	156-59-2	
trans-1,2-Dichloroethene	<89.0	ug/L	100	89.0	100		10/31/11 13:44	156-60-5	
1,2-Dichloropropane	<49.0	ug/L	100	49.0	100		10/31/11 13:44	78-87-5	
1,3-Dichloropropane	<61.0	ug/L	100	61.0	100		10/31/11 13:44	142-28-9	
2,2-Dichloropropane	<62.0	ug/L	100	62.0	100		10/31/11 13:44	594-20-7	
1,1-Dichloropropene	<75.0	ug/L	100	75.0	100		10/31/11 13:44	563-58-6	
cis-1,3-Dichloropropene	<20.0	ug/L	100	20.0	100		10/31/11 13:44	10061-01-5	
trans-1,3-Dichloropropene	<19.0	ug/L	100	19.0	100		10/31/11 13:44	10061-02-6	
Diisopropyl ether	<76.0	ug/L	100	76.0	100		10/31/11 13:44	108-20-3	
Ethylbenzene	2270	ug/L	100	54.0	100		10/31/11 13:44	100-41-4	
Hexachloro-1,3-butadiene	<67.0	ug/L	500	67.0	100		10/31/11 13:44	87-68-3	
Isopropylbenzene (Cumene)	<59.0	ug/L	100	59.0	100		10/31/11 13:44	98-82-8	
p-Isopropyltoluene	<67.0	ug/L	100	67.0	100		10/31/11 13:44	99-87-6	
Methylene Chloride	57.3J	ug/L	100	43.0	100		10/31/11 13:44	75-09-2	Z3
Methyl-tert-butyl ether	<61.0	ug/L	100	61.0	100		10/31/11 13:44	1634-04-4	
Naphthalene	<89.0	ug/L	500	89.0	100		10/31/11 13:44	91-20-3	
n-Propylbenzene	<81.0	ug/L	100	81.0	100		10/31/11 13:44	103-65-1	
Styrene	<86.0	ug/L	100	86.0	100		10/31/11 13:44	100-42-5	
1,1,1,2-Tetrachloroethane	<92.0	ug/L	100	92.0	100		10/31/11 13:44	630-20-6	

ANALYTICAL RESULTS

Project: 004114.0000 SPECIALTY CHEM
Pace Project No.: 4052834

Sample: MW041S **Lab ID: 4052834003** Collected: 10/25/11 12:50 Received: 10/27/11 09:00 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV		Analytical Method: EPA 8260							
1,1,2,2-Tetrachloroethane	<20.0	ug/L	100	20.0	100		10/31/11 13:44	79-34-5	
Tetrachloroethene	<45.0	ug/L	100	45.0	100		10/31/11 13:44	127-18-4	
Toluene	5300	ug/L	100	67.0	100		10/31/11 13:44	108-88-3	
1,2,3-Trichlorobenzene	<74.0	ug/L	100	74.0	100		10/31/11 13:44	87-61-6	
1,2,4-Trichlorobenzene	<97.0	ug/L	500	97.0	100		10/31/11 13:44	120-82-1	
1,1,1-Trichloroethane	<90.0	ug/L	100	90.0	100		10/31/11 13:44	71-55-6	
1,1,2-Trichloroethane	<42.0	ug/L	100	42.0	100		10/31/11 13:44	79-00-5	
Trichloroethene	59.0J	ug/L	100	48.0	100		10/31/11 13:44	79-01-6	
Trichlorofluoromethane	<79.0	ug/L	100	79.0	100		10/31/11 13:44	75-69-4	
1,2,3-Trichloropropane	<99.0	ug/L	100	99.0	100		10/31/11 13:44	96-18-4	
1,2,4-Trimethylbenzene	<97.0	ug/L	100	97.0	100		10/31/11 13:44	95-63-6	
1,3,5-Trimethylbenzene	<83.0	ug/L	100	83.0	100		10/31/11 13:44	108-67-8	
Vinyl chloride	<18.0	ug/L	100	18.0	100		10/31/11 13:44	75-01-4	
m&p-Xylene	9880	ug/L	200	180	100		10/31/11 13:44	179601-23-1	
o-Xylene	4760	ug/L	100	83.0	100		10/31/11 13:44	95-47-6	
4-Bromofluorobenzene (S)	94 %		70-130		100		10/31/11 13:44	460-00-4	
Dibromofluoromethane (S)	104 %		70-130		100		10/31/11 13:44	1868-53-7	
Toluene-d8 (S)	91 %		70-130		100		10/31/11 13:44	2037-26-5	

ANALYTICAL RESULTS

Project: 004114.0000 SPECIALTY CHEM
Pace Project No.: 4052834

Sample: MW044M Lab ID: 4052834004 Collected: 10/25/11 15:24 Received: 10/27/11 09:00 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV		Analytical Method: EPA 8260							
Benzene	0.72J	ug/L	1.0	0.41	1		10/31/11 12:37	71-43-2	
Bromobenzene	<0.82	ug/L	1.0	0.82	1		10/31/11 12:37	108-86-1	
Bromochloromethane	<0.97	ug/L	1.0	0.97	1		10/31/11 12:37	74-97-5	
Bromodichloromethane	<0.56	ug/L	1.0	0.56	1		10/31/11 12:37	75-27-4	
Bromoform	<0.94	ug/L	1.0	0.94	1		10/31/11 12:37	75-25-2	
Bromomethane	<0.91	ug/L	1.0	0.91	1		10/31/11 12:37	74-83-9	
n-Butylbenzene	<0.93	ug/L	1.0	0.93	1		10/31/11 12:37	104-51-8	
sec-Butylbenzene	<0.89	ug/L	5.0	0.89	1		10/31/11 12:37	135-98-8	
tert-Butylbenzene	<0.97	ug/L	1.0	0.97	1		10/31/11 12:37	98-06-6	
Carbon tetrachloride	<0.49	ug/L	1.0	0.49	1		10/31/11 12:37	56-23-5	
Chlorobenzene	38.3	ug/L	1.0	0.41	1		10/31/11 12:37	108-90-7	
Chloroethane	<0.97	ug/L	1.0	0.97	1		10/31/11 12:37	75-00-3	
Chloroform	<1.3	ug/L	5.0	1.3	1		10/31/11 12:37	67-66-3	
Chloromethane	<0.24	ug/L	1.0	0.24	1		10/31/11 12:37	74-87-3	
2-Chlorotoluene	<0.85	ug/L	1.0	0.85	1		10/31/11 12:37	95-49-8	
4-Chlorotoluene	<0.74	ug/L	1.0	0.74	1		10/31/11 12:37	106-43-4	
1,2-Dibromo-3-chloropropane	<1.7	ug/L	5.0	1.7	1		10/31/11 12:37	96-12-8	
Dibromochloromethane	<0.81	ug/L	1.0	0.81	1		10/31/11 12:37	124-48-1	
1,2-Dibromoethane (EDB)	<0.56	ug/L	1.0	0.56	1		10/31/11 12:37	106-93-4	
Dibromomethane	<0.60	ug/L	1.0	0.60	1		10/31/11 12:37	74-95-3	
1,2-Dichlorobenzene	11.3	ug/L	1.0	0.83	1		10/31/11 12:37	95-50-1	
1,3-Dichlorobenzene	<0.87	ug/L	1.0	0.87	1		10/31/11 12:37	541-73-1	
1,4-Dichlorobenzene	<0.95	ug/L	1.0	0.95	1		10/31/11 12:37	106-46-7	
Dichlorodifluoromethane	<0.99	ug/L	1.0	0.99	1		10/31/11 12:37	75-71-8	
1,1-Dichloroethane	<0.75	ug/L	1.0	0.75	1		10/31/11 12:37	75-34-3	
1,2-Dichloroethane	<0.36	ug/L	1.0	0.36	1		10/31/11 12:37	107-06-2	
1,1-Dichloroethene	<0.57	ug/L	1.0	0.57	1		10/31/11 12:37	75-35-4	
cis-1,2-Dichloroethene	<0.83	ug/L	1.0	0.83	1		10/31/11 12:37	156-59-2	
trans-1,2-Dichloroethene	<0.89	ug/L	1.0	0.89	1		10/31/11 12:37	156-60-5	
1,2-Dichloropropane	<0.49	ug/L	1.0	0.49	1		10/31/11 12:37	78-87-5	
1,3-Dichloropropane	<0.61	ug/L	1.0	0.61	1		10/31/11 12:37	142-28-9	
2,2-Dichloropropane	<0.62	ug/L	1.0	0.62	1		10/31/11 12:37	594-20-7	
1,1-Dichloropropene	<0.75	ug/L	1.0	0.75	1		10/31/11 12:37	563-58-6	
cis-1,3-Dichloropropene	<0.20	ug/L	1.0	0.20	1		10/31/11 12:37	10061-01-5	
trans-1,3-Dichloropropene	<0.19	ug/L	1.0	0.19	1		10/31/11 12:37	10061-02-6	
Diisopropyl ether	<0.76	ug/L	1.0	0.76	1		10/31/11 12:37	108-20-3	
Ethylbenzene	<0.54	ug/L	1.0	0.54	1		10/31/11 12:37	100-41-4	
Hexachloro-1,3-butadiene	<0.67	ug/L	5.0	0.67	1		10/31/11 12:37	87-68-3	
Isopropylbenzene (Cumene)	<0.59	ug/L	1.0	0.59	1		10/31/11 12:37	98-82-8	
p-Isopropyltoluene	<0.67	ug/L	1.0	0.67	1		10/31/11 12:37	99-87-6	
Methylene Chloride	1.4	ug/L	1.0	0.43	1		10/31/11 12:37	75-09-2	Z3
Methyl-tert-butyl ether	0.65J	ug/L	1.0	0.61	1		10/31/11 12:37	1634-04-4	
Naphthalene	<0.89	ug/L	5.0	0.89	1		10/31/11 12:37	91-20-3	
n-Propylbenzene	<0.81	ug/L	1.0	0.81	1		10/31/11 12:37	103-65-1	
Styrene	<0.86	ug/L	1.0	0.86	1		10/31/11 12:37	100-42-5	
1,1,1,2-Tetrachloroethane	<0.92	ug/L	1.0	0.92	1		10/31/11 12:37	630-20-6	

ANALYTICAL RESULTS

Project: 004114.0000 SPECIALTY CHEM

Pace Project No.: 4052834

Sample: MW044M **Lab ID: 4052834004** Collected: 10/25/11 15:24 Received: 10/27/11 09:00 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV		Analytical Method: EPA 8260							
1,1,2,2-Tetrachloroethane	<0.20	ug/L	1.0	0.20	1		10/31/11 12:37	79-34-5	
Tetrachloroethene	<0.45	ug/L	1.0	0.45	1		10/31/11 12:37	127-18-4	
Toluene	<0.67	ug/L	1.0	0.67	1		10/31/11 12:37	108-88-3	
1,2,3-Trichlorobenzene	<0.74	ug/L	1.0	0.74	1		10/31/11 12:37	87-61-6	
1,2,4-Trichlorobenzene	<0.97	ug/L	5.0	0.97	1		10/31/11 12:37	120-82-1	
1,1,1-Trichloroethane	<0.90	ug/L	1.0	0.90	1		10/31/11 12:37	71-55-6	
1,1,2-Trichloroethane	<0.42	ug/L	1.0	0.42	1		10/31/11 12:37	79-00-5	
Trichloroethene	<0.48	ug/L	1.0	0.48	1		10/31/11 12:37	79-01-6	
Trichlorofluoromethane	<0.79	ug/L	1.0	0.79	1		10/31/11 12:37	75-69-4	
1,2,3-Trichloropropane	<0.99	ug/L	1.0	0.99	1		10/31/11 12:37	96-18-4	
1,2,4-Trimethylbenzene	<0.97	ug/L	1.0	0.97	1		10/31/11 12:37	95-63-6	
1,3,5-Trimethylbenzene	<0.83	ug/L	1.0	0.83	1		10/31/11 12:37	108-67-8	
Vinyl chloride	<0.18	ug/L	1.0	0.18	1		10/31/11 12:37	75-01-4	
m&p-Xylene	<1.8	ug/L	2.0	1.8	1		10/31/11 12:37	179601-23-1	
o-Xylene	<0.83	ug/L	1.0	0.83	1		10/31/11 12:37	95-47-6	
4-Bromofluorobenzene (S)	90 %		70-130		1		10/31/11 12:37	460-00-4	
Dibromofluoromethane (S)	104 %		70-130		1		10/31/11 12:37	1868-53-7	
Toluene-d8 (S)	91 %		70-130		1		10/31/11 12:37	2037-26-5	

ANALYTICAL RESULTS

Project: 004114.0000 SPECIALTY CHEM

Pace Project No.: 4052834

Sample: MW044S Lab ID: 4052834005 Collected: 10/25/11 15:10 Received: 10/27/11 09:00 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV		Analytical Method: EPA 8260							
Acetone	<5.0	ug/L	20.0	5.0	1		10/31/11 09:56	67-64-1	
Allyl chloride	<2.0	ug/L	5.0	2.0	1		10/31/11 09:56	107-05-1	
Benzene	<0.41	ug/L	1.0	0.41	1		10/31/11 09:56	71-43-2	
Bromobenzene	<0.82	ug/L	1.0	0.82	1		10/31/11 09:56	108-86-1	
Bromochloromethane	<0.97	ug/L	1.0	0.97	1		10/31/11 09:56	74-97-5	
Bromodichloromethane	<0.56	ug/L	1.0	0.56	1		10/31/11 09:56	75-27-4	
Bromoform	<0.94	ug/L	1.0	0.94	1		10/31/11 09:56	75-25-2	
Bromomethane	<0.91	ug/L	1.0	0.91	1		10/31/11 09:56	74-83-9	
2-Butanone (MEK)	<4.3	ug/L	20.0	4.3	1		10/31/11 09:56	78-93-3	
n-Butylbenzene	<0.93	ug/L	1.0	0.93	1		10/31/11 09:56	104-51-8	
sec-Butylbenzene	<0.89	ug/L	5.0	0.89	1		10/31/11 09:56	135-98-8	
tert-Butylbenzene	<0.97	ug/L	1.0	0.97	1		10/31/11 09:56	98-06-6	
Carbon tetrachloride	<0.49	ug/L	1.0	0.49	1		10/31/11 09:56	56-23-5	
Chlorobenzene	<0.41	ug/L	1.0	0.41	1		10/31/11 09:56	108-90-7	
Chloroethane	<0.97	ug/L	1.0	0.97	1		10/31/11 09:56	75-00-3	
Chloroform	<1.3	ug/L	5.0	1.3	1		10/31/11 09:56	67-66-3	
Chloromethane	<0.24	ug/L	1.0	0.24	1		10/31/11 09:56	74-87-3	
2-Chlorotoluene	<0.85	ug/L	1.0	0.85	1		10/31/11 09:56	95-49-8	
4-Chlorotoluene	<0.74	ug/L	1.0	0.74	1		10/31/11 09:56	106-43-4	
1,2-Dibromo-3-chloropropane	<1.7	ug/L	5.0	1.7	1		10/31/11 09:56	96-12-8	
Dibromochloromethane	<0.81	ug/L	1.0	0.81	1		10/31/11 09:56	124-48-1	
1,2-Dibromoethane (EDB)	<0.56	ug/L	1.0	0.56	1		10/31/11 09:56	106-93-4	
Dibromomethane	<0.60	ug/L	1.0	0.60	1		10/31/11 09:56	74-95-3	
1,2-Dichlorobenzene	<0.83	ug/L	1.0	0.83	1		10/31/11 09:56	95-50-1	
1,3-Dichlorobenzene	<0.87	ug/L	1.0	0.87	1		10/31/11 09:56	541-73-1	
1,4-Dichlorobenzene	<0.95	ug/L	1.0	0.95	1		10/31/11 09:56	106-46-7	
Dichlorodifluoromethane	<0.99	ug/L	1.0	0.99	1		10/31/11 09:56	75-71-8	
1,1-Dichloroethane	<0.75	ug/L	1.0	0.75	1		10/31/11 09:56	75-34-3	
1,2-Dichloroethane	<0.36	ug/L	1.0	0.36	1		10/31/11 09:56	107-06-2	
1,1-Dichloroethene	<0.57	ug/L	1.0	0.57	1		10/31/11 09:56	75-35-4	
cis-1,2-Dichloroethene	<0.83	ug/L	1.0	0.83	1		10/31/11 09:56	156-59-2	
trans-1,2-Dichloroethene	<0.89	ug/L	1.0	0.89	1		10/31/11 09:56	156-60-5	
Dichlorofluoromethane	<0.88	ug/L	1.0	0.88	1		10/31/11 09:56	75-43-4	
1,2-Dichloropropane	<0.49	ug/L	1.0	0.49	1		10/31/11 09:56	78-87-5	
1,3-Dichloropropane	<0.61	ug/L	1.0	0.61	1		10/31/11 09:56	142-28-9	
2,2-Dichloropropane	<0.62	ug/L	1.0	0.62	1		10/31/11 09:56	594-20-7	
1,1-Dichloropropene	<0.75	ug/L	1.0	0.75	1		10/31/11 09:56	563-58-6	
cis-1,3-Dichloropropene	<0.20	ug/L	1.0	0.20	1		10/31/11 09:56	10061-01-5	
trans-1,3-Dichloropropene	<0.19	ug/L	1.0	0.19	1		10/31/11 09:56	10061-02-6	
Diethyl ether (Ethyl ether)	<0.98	ug/L	1.0	0.98	1		10/31/11 09:56	60-29-7	
Diisopropyl ether	<0.76	ug/L	1.0	0.76	1		10/31/11 09:56	108-20-3	
Ethylbenzene	<0.54	ug/L	1.0	0.54	1		10/31/11 09:56	100-41-4	
Hexachloro-1,3-butadiene	<0.67	ug/L	5.0	0.67	1		10/31/11 09:56	87-68-3	
Isopropylbenzene (Cumene)	<0.59	ug/L	1.0	0.59	1		10/31/11 09:56	98-82-8	
p-Isopropyltoluene	<0.67	ug/L	1.0	0.67	1		10/31/11 09:56	99-87-6	
Methylene Chloride	<0.43	ug/L	1.0	0.43	1		10/31/11 09:56	75-09-2	

ANALYTICAL RESULTS

Project: 004114.0000 SPECIALTY CHEM
Pace Project No.: 4052834

Sample: MW044S **Lab ID: 4052834005** Collected: 10/25/11 15:10 Received: 10/27/11 09:00 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV		Analytical Method: EPA 8260							
4-Methyl-2-pentanone (MIBK)	<1.2	ug/L	5.0	1.2	1		10/31/11 09:56	108-10-1	
Methyl-tert-butyl ether	<0.61	ug/L	1.0	0.61	1		10/31/11 09:56	1634-04-4	
Naphthalene	<0.89	ug/L	5.0	0.89	1		10/31/11 09:56	91-20-3	
n-Propylbenzene	<0.81	ug/L	1.0	0.81	1		10/31/11 09:56	103-65-1	
Styrene	<0.86	ug/L	1.0	0.86	1		10/31/11 09:56	100-42-5	
1,1,1,2-Tetrachloroethane	<0.92	ug/L	1.0	0.92	1		10/31/11 09:56	630-20-6	
1,1,1,2,2-Tetrachloroethane	<0.20	ug/L	1.0	0.20	1		10/31/11 09:56	79-34-5	
Tetrachloroethene	<0.45	ug/L	1.0	0.45	1		10/31/11 09:56	127-18-4	
Tetrahydrofuran	<1.7	ug/L	5.0	1.7	1		10/31/11 09:56	109-99-9	
Toluene	<0.67	ug/L	1.0	0.67	1		10/31/11 09:56	108-88-3	
1,2,3-Trichlorobenzene	<0.74	ug/L	1.0	0.74	1		10/31/11 09:56	87-61-6	
1,2,4-Trichlorobenzene	<0.97	ug/L	5.0	0.97	1		10/31/11 09:56	120-82-1	
1,1,1-Trichloroethane	<0.90	ug/L	1.0	0.90	1		10/31/11 09:56	71-55-6	
1,1,2-Trichloroethane	<0.42	ug/L	1.0	0.42	1		10/31/11 09:56	79-00-5	
Trichloroethene	<0.48	ug/L	1.0	0.48	1		10/31/11 09:56	79-01-6	
Trichlorofluoromethane	<0.79	ug/L	1.0	0.79	1		10/31/11 09:56	75-69-4	
1,2,3-Trichloropropane	<0.99	ug/L	1.0	0.99	1		10/31/11 09:56	96-18-4	
1,1,2-Trichlorotrifluoroethane	<1.3	ug/L	5.0	1.3	1		10/31/11 09:56	76-13-1	
1,2,4-Trimethylbenzene	<0.97	ug/L	1.0	0.97	1		10/31/11 09:56	95-63-6	
1,3,5-Trimethylbenzene	<0.83	ug/L	1.0	0.83	1		10/31/11 09:56	108-67-8	
Vinyl chloride	<0.18	ug/L	1.0	0.18	1		10/31/11 09:56	75-01-4	
m&p-Xylene	<1.8	ug/L	2.0	1.8	1		10/31/11 09:56	179601-23-1	
o-Xylene	<0.83	ug/L	1.0	0.83	1		10/31/11 09:56	95-47-6	
4-Bromofluorobenzene (S)	87 %.		70-130		1		10/31/11 09:56	460-00-4	
Dibromofluoromethane (S)	103 %.		70-130		1		10/31/11 09:56	1868-53-7	
Toluene-d8 (S)	93 %.		70-130		1		10/31/11 09:56	2037-26-5	

ANALYTICAL RESULTS

Project: 004114.0000 SPECIALTY CHEM
Pace Project No.: 4052834

Sample: MW041M Lab ID: 4052834006 Collected: 10/25/11 13:24 Received: 10/27/11 09:00 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV									
Analytical Method: EPA 8260									
Benzene	4.1J	ug/L	5.0	2.0	5		10/31/11 15:36	71-43-2	
Bromobenzene	<4.1	ug/L	5.0	4.1	5		10/31/11 15:36	108-86-1	
Bromochloromethane	<4.8	ug/L	5.0	4.8	5		10/31/11 15:36	74-97-5	
Bromodichloromethane	<2.8	ug/L	5.0	2.8	5		10/31/11 15:36	75-27-4	
Bromoform	<4.7	ug/L	5.0	4.7	5		10/31/11 15:36	75-25-2	
Bromomethane	<4.6	ug/L	5.0	4.6	5		10/31/11 15:36	74-83-9	
n-Butylbenzene	<4.6	ug/L	5.0	4.6	5		10/31/11 15:36	104-51-8	
sec-Butylbenzene	<4.4	ug/L	25.0	4.4	5		10/31/11 15:36	135-98-8	
tert-Butylbenzene	<4.8	ug/L	5.0	4.8	5		10/31/11 15:36	98-06-6	
Carbon tetrachloride	<2.4	ug/L	5.0	2.4	5		10/31/11 15:36	56-23-5	
Chlorobenzene	<2.0	ug/L	5.0	2.0	5		10/31/11 15:36	108-90-7	
Chloroethane	<4.8	ug/L	5.0	4.8	5		10/31/11 15:36	75-00-3	
Chloroform	<6.5	ug/L	25.0	6.5	5		10/31/11 15:36	67-66-3	
Chloromethane	<1.2	ug/L	5.0	1.2	5		10/31/11 15:36	74-87-3	
2-Chlorotoluene	<4.2	ug/L	5.0	4.2	5		10/31/11 15:36	95-49-8	
4-Chlorotoluene	<3.7	ug/L	5.0	3.7	5		10/31/11 15:36	106-43-4	
1,2-Dibromo-3-chloropropane	<8.4	ug/L	25.0	8.4	5		10/31/11 15:36	96-12-8	
Dibromochloromethane	<4.0	ug/L	5.0	4.0	5		10/31/11 15:36	124-48-1	
1,2-Dibromoethane (EDB)	<2.8	ug/L	5.0	2.8	5		10/31/11 15:36	106-93-4	
Dibromomethane	<3.0	ug/L	5.0	3.0	5		10/31/11 15:36	74-95-3	
1,2-Dichlorobenzene	<4.2	ug/L	5.0	4.2	5		10/31/11 15:36	95-50-1	
1,3-Dichlorobenzene	<4.4	ug/L	5.0	4.4	5		10/31/11 15:36	541-73-1	
1,4-Dichlorobenzene	<4.8	ug/L	5.0	4.8	5		10/31/11 15:36	106-46-7	
Dichlorodifluoromethane	<5.0	ug/L	5.0	5.0	5		10/31/11 15:36	75-71-8	
1,1-Dichloroethane	<3.8	ug/L	5.0	3.8	5		10/31/11 15:36	75-34-3	
1,2-Dichloroethane	<1.8	ug/L	5.0	1.8	5		10/31/11 15:36	107-06-2	
1,1-Dichloroethene	<2.8	ug/L	5.0	2.8	5		10/31/11 15:36	75-35-4	
cis-1,2-Dichloroethene	27.0	ug/L	5.0	4.2	5		10/31/11 15:36	156-59-2	
trans-1,2-Dichloroethene	<4.4	ug/L	5.0	4.4	5		10/31/11 15:36	156-60-5	
1,2-Dichloropropane	<2.4	ug/L	5.0	2.4	5		10/31/11 15:36	78-87-5	
1,3-Dichloropropane	<3.0	ug/L	5.0	3.0	5		10/31/11 15:36	142-28-9	
2,2-Dichloropropane	<3.1	ug/L	5.0	3.1	5		10/31/11 15:36	594-20-7	
1,1-Dichloropropene	<3.8	ug/L	5.0	3.8	5		10/31/11 15:36	563-58-6	
cis-1,3-Dichloropropene	<1.0	ug/L	5.0	1.0	5		10/31/11 15:36	10061-01-5	
trans-1,3-Dichloropropene	<0.95	ug/L	5.0	0.95	5		10/31/11 15:36	10061-02-6	
Diisopropyl ether	<3.8	ug/L	5.0	3.8	5		10/31/11 15:36	108-20-3	
Ethylbenzene	<2.7	ug/L	5.0	2.7	5		10/31/11 15:36	100-41-4	
Hexachloro-1,3-butadiene	<3.4	ug/L	25.0	3.4	5		10/31/11 15:36	87-68-3	
Isopropylbenzene (Cumene)	<3.0	ug/L	5.0	3.0	5		10/31/11 15:36	98-82-8	
p-Isopropyltoluene	<3.4	ug/L	5.0	3.4	5		10/31/11 15:36	99-87-6	
Methylene Chloride	111	ug/L	5.0	2.2	5		10/31/11 15:36	75-09-2	Z3
Methyl-tert-butyl ether	<3.0	ug/L	5.0	3.0	5		10/31/11 15:36	1634-04-4	
Naphthalene	<4.4	ug/L	25.0	4.4	5		10/31/11 15:36	91-20-3	
n-Propylbenzene	<4.0	ug/L	5.0	4.0	5		10/31/11 15:36	103-65-1	
Styrene	<4.3	ug/L	5.0	4.3	5		10/31/11 15:36	100-42-5	
1,1,1,2-Tetrachloroethane	<4.6	ug/L	5.0	4.6	5		10/31/11 15:36	630-20-6	

ANALYTICAL RESULTS

Project: 004114.0000 SPECIALTY CHEM
Pace Project No.: 4052834

Sample: MW041M **Lab ID: 4052834006** Collected: 10/25/11 13:24 Received: 10/27/11 09:00 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV		Analytical Method: EPA 8260							
1,1,2,2-Tetrachloroethane	<1.0	ug/L	5.0	1.0	5		10/31/11 15:36	79-34-5	
Tetrachloroethene	<2.2	ug/L	5.0	2.2	5		10/31/11 15:36	127-18-4	
Toluene	31.3	ug/L	5.0	3.4	5		10/31/11 15:36	108-88-3	
1,2,3-Trichlorobenzene	<3.7	ug/L	5.0	3.7	5		10/31/11 15:36	87-61-6	
1,2,4-Trichlorobenzene	<4.8	ug/L	25.0	4.8	5		10/31/11 15:36	120-82-1	
1,1,1-Trichloroethane	<4.5	ug/L	5.0	4.5	5		10/31/11 15:36	71-55-6	
1,1,2-Trichloroethane	<2.1	ug/L	5.0	2.1	5		10/31/11 15:36	79-00-5	
Trichloroethene	38.4	ug/L	5.0	2.4	5		10/31/11 15:36	79-01-6	
Trichlorofluoromethane	<4.0	ug/L	5.0	4.0	5		10/31/11 15:36	75-69-4	
1,2,3-Trichloropropane	<5.0	ug/L	5.0	5.0	5		10/31/11 15:36	96-18-4	
1,2,4-Trimethylbenzene	<4.8	ug/L	5.0	4.8	5		10/31/11 15:36	95-63-6	
1,3,5-Trimethylbenzene	<4.2	ug/L	5.0	4.2	5		10/31/11 15:36	108-67-8	
Vinyl chloride	9.2	ug/L	5.0	0.90	5		10/31/11 15:36	75-01-4	
m&p-Xylene	<9.0	ug/L	10.0	9.0	5		10/31/11 15:36	179601-23-1	
o-Xylene	<4.2	ug/L	5.0	4.2	5		10/31/11 15:36	95-47-6	
4-Bromofluorobenzene (S)	91	%	70-130		5		10/31/11 15:36	460-00-4	
Dibromofluoromethane (S)	102	%	70-130		5		10/31/11 15:36	1868-53-7	D3
Toluene-d8 (S)	97	%	70-130		5		10/31/11 15:36	2037-26-5	



ANALYTICAL RESULTS

Project: 004114.0000 SPECIALTY CHEM
 Pace Project No.: 4052834

Sample: MW045M Lab ID: 4052834007 Collected: 10/25/11 12:05 Received: 10/27/11 09:00 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Analytical Method: EPA 8260									
Benzene	12.8	ug/L	5.0	2.0	5		10/31/11 15:59	71-43-2	
Bromobenzene	<4.1	ug/L	5.0	4.1	5		10/31/11 15:59	108-86-1	
Bromochloromethane	<4.8	ug/L	5.0	4.8	5		10/31/11 15:59	74-97-5	
Bromodichloromethane	<2.8	ug/L	5.0	2.8	5		10/31/11 15:59	75-27-4	
Bromoform	<4.7	ug/L	5.0	4.7	5		10/31/11 15:59	75-25-2	
Bromomethane	<4.6	ug/L	5.0	4.6	5		10/31/11 15:59	74-83-9	
n-Butylbenzene	<4.6	ug/L	5.0	4.6	5		10/31/11 15:59	104-51-8	
sec-Butylbenzene	<4.4	ug/L	25.0	4.4	5		10/31/11 15:59	135-98-8	
tert-Butylbenzene	<4.8	ug/L	5.0	4.8	5		10/31/11 15:59	98-06-6	
Carbon tetrachloride	<2.4	ug/L	5.0	2.4	5		10/31/11 15:59	56-23-5	
Chlorobenzene	66.7	ug/L	5.0	2.0	5		10/31/11 15:59	108-90-7	
Chloroethane	<4.8	ug/L	5.0	4.8	5		10/31/11 15:59	75-00-3	
Chloroform	<6.5	ug/L	25.0	6.5	5		10/31/11 15:59	67-66-3	
Chloromethane	<1.2	ug/L	5.0	1.2	5		10/31/11 15:59	74-87-3	
2-Chlorotoluene	<4.2	ug/L	5.0	4.2	5		10/31/11 15:59	95-49-8	
4-Chlorotoluene	<3.7	ug/L	5.0	3.7	5		10/31/11 15:59	106-43-4	
1,2-Dibromo-3-chloropropane	<8.4	ug/L	25.0	8.4	5		10/31/11 15:59	96-12-8	
Dibromochloromethane	<4.0	ug/L	5.0	4.0	5		10/31/11 15:59	124-48-1	
1,2-Dibromoethane (EDB)	<2.8	ug/L	5.0	2.8	5		10/31/11 15:59	106-93-4	
Dibromomethane	<3.0	ug/L	5.0	3.0	5		10/31/11 15:59	74-95-3	
1,2-Dichlorobenzene	41.9	ug/L	5.0	4.2	5		10/31/11 15:59	95-50-1	
1,3-Dichlorobenzene	<4.4	ug/L	5.0	4.4	5		10/31/11 15:59	541-73-1	
1,4-Dichlorobenzene	<4.8	ug/L	5.0	4.8	5		10/31/11 15:59	106-46-7	
Dichlorodifluoromethane	<5.0	ug/L	5.0	5.0	5		10/31/11 15:59	75-71-8	
1,1-Dichloroethane	4.5J	ug/L	5.0	3.8	5		10/31/11 15:59	75-34-3	
1,2-Dichloroethane	<1.8	ug/L	5.0	1.8	5		10/31/11 15:59	107-06-2	
1,1-Dichloroethene	3.6J	ug/L	5.0	2.8	5		10/31/11 15:59	75-35-4	
cis-1,2-Dichloroethene	214	ug/L	5.0	4.2	5		10/31/11 15:59	156-59-2	
trans-1,2-Dichloroethene	<4.4	ug/L	5.0	4.4	5		10/31/11 15:59	156-60-5	
1,2-Dichloropropane	<2.4	ug/L	5.0	2.4	5		10/31/11 15:59	78-87-5	
1,3-Dichloropropane	<3.0	ug/L	5.0	3.0	5		10/31/11 15:59	142-28-9	
2,2-Dichloropropane	<3.1	ug/L	5.0	3.1	5		10/31/11 15:59	594-20-7	
1,1-Dichloropropene	<3.8	ug/L	5.0	3.8	5		10/31/11 15:59	563-58-6	
cis-1,3-Dichloropropene	<1.0	ug/L	5.0	1.0	5		10/31/11 15:59	10061-01-5	
trans-1,3-Dichloropropene	<0.95	ug/L	5.0	0.95	5		10/31/11 15:59	10061-02-6	
Diisopropyl ether	<3.8	ug/L	5.0	3.8	5		10/31/11 15:59	108-20-3	
Ethylbenzene	3.4J	ug/L	5.0	2.7	5		10/31/11 15:59	100-41-4	
Hexachloro-1,3-butadiene	<3.4	ug/L	25.0	3.4	5		10/31/11 15:59	87-68-3	
Isopropylbenzene (Cumene)	<3.0	ug/L	5.0	3.0	5		10/31/11 15:59	98-82-8	
p-Isopropyltoluene	<3.4	ug/L	5.0	3.4	5		10/31/11 15:59	99-87-6	
Methylene Chloride	98.9	ug/L	5.0	2.2	5		10/31/11 15:59	75-09-2	Z3
Methyl-tert-butyl ether	<3.0	ug/L	5.0	3.0	5		10/31/11 15:59	1634-04-4	
Naphthalene	<4.4	ug/L	25.0	4.4	5		10/31/11 15:59	91-20-3	
n-Propylbenzene	<4.0	ug/L	5.0	4.0	5		10/31/11 15:59	103-65-1	
Styrene	<4.3	ug/L	5.0	4.3	5		10/31/11 15:59	100-42-5	
1,1,1,2-Tetrachloroethane	<4.6	ug/L	5.0	4.6	5		10/31/11 15:59	630-20-6	

ANALYTICAL RESULTS

Project: 004114.0000 SPECIALTY CHEM

Pace Project No.: 4052834

Sample: MW045M **Lab ID:** 4052834007 Collected: 10/25/11 12:05 Received: 10/27/11 09:00 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV		Analytical Method: EPA 8260							
1,1,2,2-Tetrachloroethane	<1.0	ug/L	5.0	1.0	5		10/31/11 15:59	79-34-5	
Tetrachloroethene	<2.2	ug/L	5.0	2.2	5		10/31/11 15:59	127-18-4	
Toluene	86.2	ug/L	5.0	3.4	5		10/31/11 15:59	108-88-3	
1,2,3-Trichlorobenzene	<3.7	ug/L	5.0	3.7	5		10/31/11 15:59	87-61-6	
1,2,4-Trichlorobenzene	<4.8	ug/L	25.0	4.8	5		10/31/11 15:59	120-82-1	
1,1,1-Trichloroethane	<4.5	ug/L	5.0	4.5	5		10/31/11 15:59	71-55-6	
1,1,2-Trichloroethane	<2.1	ug/L	5.0	2.1	5		10/31/11 15:59	79-00-5	
Trichloroethene	1030	ug/L	5.0	2.4	5		10/31/11 15:59	79-01-6	
Trichlorofluoromethane	<4.0	ug/L	5.0	4.0	5		10/31/11 15:59	75-69-4	
1,2,3-Trichloropropane	<5.0	ug/L	5.0	5.0	5		10/31/11 15:59	96-18-4	
1,2,4-Trimethylbenzene	<4.8	ug/L	5.0	4.8	5		10/31/11 15:59	95-63-6	
1,3,5-Trimethylbenzene	<4.2	ug/L	5.0	4.2	5		10/31/11 15:59	108-67-8	
Vinyl chloride	45.1	ug/L	5.0	0.90	5		10/31/11 15:59	75-01-4	
m&p-Xylene	<9.0	ug/L	10.0	9.0	5		10/31/11 15:59	179601-23-1	
o-Xylene	7.3	ug/L	5.0	4.2	5		10/31/11 15:59	95-47-6	
4-Bromofluorobenzene (S)	89	%	70-130		5		10/31/11 15:59	460-00-4	
Dibromofluoromethane (S)	106	%	70-130		5		10/31/11 15:59	1868-53-7	
Toluene-d8 (S)	95	%	70-130		5		10/31/11 15:59	2037-26-5	

ANALYTICAL RESULTS

Project: 004114.0000 SPECIALTY CHEM
Pace Project No.: 4052834

Sample: MW045S Lab ID: 4052834008 Collected: 10/25/11 11:18 Received: 10/27/11 09:00 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV		Analytical Method: EPA 8260							
Benzene	89.9	ug/L	50.0	20.5	50		10/31/11 16:21	71-43-2	
Bromobenzene	<41.0	ug/L	50.0	41.0	50		10/31/11 16:21	108-86-1	
Bromochloromethane	<48.5	ug/L	50.0	48.5	50		10/31/11 16:21	74-97-5	
Bromodichloromethane	<28.0	ug/L	50.0	28.0	50		10/31/11 16:21	75-27-4	
Bromoform	<47.0	ug/L	50.0	47.0	50		10/31/11 16:21	75-25-2	
Bromomethane	<45.5	ug/L	50.0	45.5	50		10/31/11 16:21	74-83-9	
n-Butylbenzene	<46.5	ug/L	50.0	46.5	50		10/31/11 16:21	104-51-8	
sec-Butylbenzene	<44.5	ug/L	250	44.5	50		10/31/11 16:21	135-98-8	
tert-Butylbenzene	<48.5	ug/L	50.0	48.5	50		10/31/11 16:21	98-06-6	
Carbon tetrachloride	<24.5	ug/L	50.0	24.5	50		10/31/11 16:21	56-23-5	
Chlorobenzene	3980	ug/L	50.0	20.5	50		10/31/11 16:21	108-90-7	
Chloroethane	<48.5	ug/L	50.0	48.5	50		10/31/11 16:21	75-00-3	
Chloroform	<65.0	ug/L	250	65.0	50		10/31/11 16:21	67-66-3	
Chloromethane	<12.0	ug/L	50.0	12.0	50		10/31/11 16:21	74-87-3	
2-Chlorotoluene	<42.5	ug/L	50.0	42.5	50		10/31/11 16:21	95-49-8	
4-Chlorotoluene	<37.0	ug/L	50.0	37.0	50		10/31/11 16:21	106-43-4	
1,2-Dibromo-3-chloropropane	<84.0	ug/L	250	84.0	50		10/31/11 16:21	96-12-8	
Dibromochloromethane	<40.5	ug/L	50.0	40.5	50		10/31/11 16:21	124-48-1	
1,2-Dibromoethane (EDB)	<28.0	ug/L	50.0	28.0	50		10/31/11 16:21	106-93-4	
Dibromomethane	<30.0	ug/L	50.0	30.0	50		10/31/11 16:21	74-95-3	
1,2-Dichlorobenzene	2670	ug/L	50.0	41.5	50		10/31/11 16:21	95-50-1	
1,3-Dichlorobenzene	<43.5	ug/L	50.0	43.5	50		10/31/11 16:21	541-73-1	
1,4-Dichlorobenzene	89.3	ug/L	50.0	47.5	50		10/31/11 16:21	106-46-7	
Dichlorodifluoromethane	<49.5	ug/L	50.0	49.5	50		10/31/11 16:21	75-71-8	
1,1-Dichloroethane	<37.5	ug/L	50.0	37.5	50		10/31/11 16:21	75-34-3	
1,2-Dichloroethane	<18.0	ug/L	50.0	18.0	50		10/31/11 16:21	107-06-2	
1,1-Dichloroethene	<28.5	ug/L	50.0	28.5	50		10/31/11 16:21	75-35-4	
cis-1,2-Dichloroethene	560	ug/L	50.0	41.5	50		10/31/11 16:21	156-59-2	
trans-1,2-Dichloroethene	<44.5	ug/L	50.0	44.5	50		10/31/11 16:21	156-60-5	
1,2-Dichloropropane	<24.5	ug/L	50.0	24.5	50		10/31/11 16:21	78-87-5	
1,3-Dichloropropane	<30.5	ug/L	50.0	30.5	50		10/31/11 16:21	142-28-9	
2,2-Dichloropropane	<31.0	ug/L	50.0	31.0	50		10/31/11 16:21	594-20-7	
1,1-Dichloropropene	<37.5	ug/L	50.0	37.5	50		10/31/11 16:21	563-58-6	
cis-1,3-Dichloropropene	<10.0	ug/L	50.0	10.0	50		10/31/11 16:21	10061-01-5	
trans-1,3-Dichloropropene	<9.5	ug/L	50.0	9.5	50		10/31/11 16:21	10061-02-6	
Diisopropyl ether	<38.0	ug/L	50.0	38.0	50		10/31/11 16:21	108-20-3	
Ethylbenzene	953	ug/L	50.0	27.0	50		10/31/11 16:21	100-41-4	
Hexachloro-1,3-butadiene	<33.5	ug/L	250	33.5	50		10/31/11 16:21	87-68-3	
Isopropylbenzene (Cumene)	<29.5	ug/L	50.0	29.5	50		10/31/11 16:21	98-82-8	
p-Isopropyltoluene	<33.5	ug/L	50.0	33.5	50		10/31/11 16:21	99-87-6	
Methylene Chloride	85.7	ug/L	50.0	21.5	50		10/31/11 16:21	75-09-2	Z3
Methyl-tert-butyl ether	<30.5	ug/L	50.0	30.5	50		10/31/11 16:21	1634-04-4	
Naphthalene	<44.5	ug/L	250	44.5	50		10/31/11 16:21	91-20-3	
n-Propylbenzene	<40.5	ug/L	50.0	40.5	50		10/31/11 16:21	103-65-1	
Styrene	<43.0	ug/L	50.0	43.0	50		10/31/11 16:21	100-42-5	
1,1,1,2-Tetrachloroethane	<46.0	ug/L	50.0	46.0	50		10/31/11 16:21	630-20-6	

ANALYTICAL RESULTS

Project: 004114.0000 SPECIALTY CHEM

Pace Project No.: 4052834

Sample: MW045S **Lab ID: 4052834008** Collected: 10/25/11 11:18 Received: 10/27/11 09:00 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV		Analytical Method: EPA 8260							
1,1,2,2-Tetrachloroethane	<10.0	ug/L	50.0	10.0	50		10/31/11 16:21	79-34-5	
Tetrachloroethene	<22.5	ug/L	50.0	22.5	50		10/31/11 16:21	127-18-4	
Toluene	3050	ug/L	50.0	33.5	50		10/31/11 16:21	108-88-3	
1,2,3-Trichlorobenzene	<37.0	ug/L	50.0	37.0	50		10/31/11 16:21	87-61-6	
1,2,4-Trichlorobenzene	<48.5	ug/L	250	48.5	50		10/31/11 16:21	120-82-1	
1,1,1-Trichloroethane	<45.0	ug/L	50.0	45.0	50		10/31/11 16:21	71-55-6	
1,1,2-Trichloroethane	<21.0	ug/L	50.0	21.0	50		10/31/11 16:21	79-00-5	
Trichloroethene	209	ug/L	50.0	24.0	50		10/31/11 16:21	79-01-6	
Trichlorofluoromethane	<39.5	ug/L	50.0	39.5	50		10/31/11 16:21	75-69-4	
1,2,3-Trichloropropane	<49.5	ug/L	50.0	49.5	50		10/31/11 16:21	96-18-4	
1,2,4-Trimethylbenzene	<48.5	ug/L	50.0	48.5	50		10/31/11 16:21	95-63-6	
1,3,5-Trimethylbenzene	<41.5	ug/L	50.0	41.5	50		10/31/11 16:21	108-67-8	
Vinyl chloride	30.6J	ug/L	50.0	9.0	50		10/31/11 16:21	75-01-4	
m&p-Xylene	3380	ug/L	100	90.0	50		10/31/11 16:21	179601-23-1	
o-Xylene	3860	ug/L	50.0	41.5	50		10/31/11 16:21	95-47-6	
4-Bromofluorobenzene (S)	91	%	70-130		50		10/31/11 16:21	460-00-4	
Dibromofluoromethane (S)	102	%	70-130		50		10/31/11 16:21	1868-53-7	
Toluene-d8 (S)	91	%	70-130		50		10/31/11 16:21	2037-26-5	

ANALYTICAL RESULTS

Project: 004114.0000 SPECIALTY CHEM
Pace Project No.: 4052834

Sample: TRIP BLANK Lab ID: 4052834009 Collected: 10/25/11 00:00 Received: 10/27/11 09:00 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV		Analytical Method: EPA 8260							
Benzene	<0.41	ug/L	1.0	0.41	1		10/31/11 09:34	71-43-2	
Bromobenzene	<0.82	ug/L	1.0	0.82	1		10/31/11 09:34	108-86-1	
Bromochloromethane	<0.97	ug/L	1.0	0.97	1		10/31/11 09:34	74-97-5	
Bromodichloromethane	<0.56	ug/L	1.0	0.56	1		10/31/11 09:34	75-27-4	
Bromoform	<0.94	ug/L	1.0	0.94	1		10/31/11 09:34	75-25-2	
Bromomethane	<0.91	ug/L	1.0	0.91	1		10/31/11 09:34	74-83-9	
n-Butylbenzene	<0.93	ug/L	1.0	0.93	1		10/31/11 09:34	104-51-8	
sec-Butylbenzene	<0.89	ug/L	5.0	0.89	1		10/31/11 09:34	135-98-8	
tert-Butylbenzene	<0.97	ug/L	1.0	0.97	1		10/31/11 09:34	98-06-6	
Carbon tetrachloride	<0.49	ug/L	1.0	0.49	1		10/31/11 09:34	56-23-5	
Chlorobenzene	<0.41	ug/L	1.0	0.41	1		10/31/11 09:34	108-90-7	
Chloroethane	<0.97	ug/L	1.0	0.97	1		10/31/11 09:34	75-00-3	
Chloroform	<1.3	ug/L	5.0	1.3	1		10/31/11 09:34	67-66-3	
Chloromethane	<0.24	ug/L	1.0	0.24	1		10/31/11 09:34	74-87-3	
2-Chlorotoluene	<0.85	ug/L	1.0	0.85	1		10/31/11 09:34	95-49-8	
4-Chlorotoluene	<0.74	ug/L	1.0	0.74	1		10/31/11 09:34	106-43-4	
1,2-Dibromo-3-chloropropane	<1.7	ug/L	5.0	1.7	1		10/31/11 09:34	96-12-8	
Dibromochloromethane	<0.81	ug/L	1.0	0.81	1		10/31/11 09:34	124-48-1	
1,2-Dibromoethane (EDB)	<0.56	ug/L	1.0	0.56	1		10/31/11 09:34	106-93-4	
Dibromomethane	<0.60	ug/L	1.0	0.60	1		10/31/11 09:34	74-95-3	
1,2-Dichlorobenzene	<0.83	ug/L	1.0	0.83	1		10/31/11 09:34	95-50-1	
1,3-Dichlorobenzene	<0.87	ug/L	1.0	0.87	1		10/31/11 09:34	541-73-1	
1,4-Dichlorobenzene	<0.95	ug/L	1.0	0.95	1		10/31/11 09:34	106-46-7	
Dichlorodifluoromethane	<0.99	ug/L	1.0	0.99	1		10/31/11 09:34	75-71-8	
1,1-Dichloroethane	<0.75	ug/L	1.0	0.75	1		10/31/11 09:34	75-34-3	
1,2-Dichloroethane	<0.36	ug/L	1.0	0.36	1		10/31/11 09:34	107-06-2	
1,1-Dichloroethene	<0.57	ug/L	1.0	0.57	1		10/31/11 09:34	75-35-4	
cis-1,2-Dichloroethene	<0.83	ug/L	1.0	0.83	1		10/31/11 09:34	156-59-2	
trans-1,2-Dichloroethene	<0.89	ug/L	1.0	0.89	1		10/31/11 09:34	156-60-5	
1,2-Dichloropropane	<0.49	ug/L	1.0	0.49	1		10/31/11 09:34	78-87-5	
1,3-Dichloropropane	<0.61	ug/L	1.0	0.61	1		10/31/11 09:34	142-28-9	
2,2-Dichloropropane	<0.62	ug/L	1.0	0.62	1		10/31/11 09:34	594-20-7	
1,1-Dichloropropene	<0.75	ug/L	1.0	0.75	1		10/31/11 09:34	563-58-6	
cis-1,3-Dichloropropene	<0.20	ug/L	1.0	0.20	1		10/31/11 09:34	10061-01-5	
trans-1,3-Dichloropropene	<0.19	ug/L	1.0	0.19	1		10/31/11 09:34	10061-02-6	
Diisopropyl ether	<0.76	ug/L	1.0	0.76	1		10/31/11 09:34	108-20-3	
Ethylbenzene	<0.54	ug/L	1.0	0.54	1		10/31/11 09:34	100-41-4	
Hexachloro-1,3-butadiene	<0.67	ug/L	5.0	0.67	1		10/31/11 09:34	87-68-3	
Isopropylbenzene (Cumene)	<0.59	ug/L	1.0	0.59	1		10/31/11 09:34	98-82-8	
p-Isopropyltoluene	<0.67	ug/L	1.0	0.67	1		10/31/11 09:34	99-87-6	
Methylene Chloride	<0.43	ug/L	1.0	0.43	1		10/31/11 09:34	75-09-2	
Methyl-tert-butyl ether	<0.61	ug/L	1.0	0.61	1		10/31/11 09:34	1634-04-4	
Naphthalene	<0.89	ug/L	5.0	0.89	1		10/31/11 09:34	91-20-3	
n-Propylbenzene	<0.81	ug/L	1.0	0.81	1		10/31/11 09:34	103-65-1	
Styrene	<0.86	ug/L	1.0	0.86	1		10/31/11 09:34	100-42-5	
1,1,1,2-Tetrachloroethane	<0.92	ug/L	1.0	0.92	1		10/31/11 09:34	630-20-6	

ANALYTICAL RESULTS

Project: 004114.0000 SPECIALTY CHEM
Pace Project No.: 4052834

Sample: TRIP BLANK **Lab ID: 4052834009** Collected: 10/25/11 00:00 Received: 10/27/11 09:00 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV		Analytical Method: EPA 8260							
1,1,2,2-Tetrachloroethane	<0.20	ug/L	1.0	0.20	1		10/31/11 09:34	79-34-5	
Tetrachloroethene	<0.45	ug/L	1.0	0.45	1		10/31/11 09:34	127-18-4	
Toluene	<0.67	ug/L	1.0	0.67	1		10/31/11 09:34	108-88-3	
1,2,3-Trichlorobenzene	<0.74	ug/L	1.0	0.74	1		10/31/11 09:34	87-61-6	
1,2,4-Trichlorobenzene	<0.97	ug/L	5.0	0.97	1		10/31/11 09:34	120-82-1	
1,1,1-Trichloroethane	<0.90	ug/L	1.0	0.90	1		10/31/11 09:34	71-55-6	
1,1,2-Trichloroethane	<0.42	ug/L	1.0	0.42	1		10/31/11 09:34	79-00-5	
Trichloroethene	<0.48	ug/L	1.0	0.48	1		10/31/11 09:34	79-01-6	
Trichlorofluoromethane	<0.79	ug/L	1.0	0.79	1		10/31/11 09:34	75-69-4	
1,2,3-Trichloropropane	<0.99	ug/L	1.0	0.99	1		10/31/11 09:34	96-18-4	
1,2,4-Trimethylbenzene	<0.97	ug/L	1.0	0.97	1		10/31/11 09:34	95-63-6	
1,3,5-Trimethylbenzene	<0.83	ug/L	1.0	0.83	1		10/31/11 09:34	108-67-8	
Vinyl chloride	<0.18	ug/L	1.0	0.18	1		10/31/11 09:34	75-01-4	
m&p-Xylene	<1.8	ug/L	2.0	1.8	1		10/31/11 09:34	179601-23-1	
o-Xylene	<0.83	ug/L	1.0	0.83	1		10/31/11 09:34	95-47-6	
4-Bromofluorobenzene (S)	90 %		70-130		1		10/31/11 09:34	460-00-4	
Dibromofluoromethane (S)	102 %		70-130		1		10/31/11 09:34	1868-53-7	
Toluene-d8 (S)	93 %		70-130		1		10/31/11 09:34	2037-26-5	

ANALYTICAL RESULTS

Project: 004114.0000 SPECIALTY CHEM
Pace Project No.: 4052834

Sample: MW044S DUP Lab ID: 4052834011 Collected: 10/25/11 00:00 Received: 10/27/11 09:00 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV		Analytical Method: EPA 8260							
Benzene	<0.41	ug/L	1.0	0.41	1		10/31/11 10:18	71-43-2	
Bromobenzene	<0.82	ug/L	1.0	0.82	1		10/31/11 10:18	108-86-1	
Bromochloromethane	<0.97	ug/L	1.0	0.97	1		10/31/11 10:18	74-97-5	
Bromodichloromethane	<0.56	ug/L	1.0	0.56	1		10/31/11 10:18	75-27-4	
Bromoform	<0.94	ug/L	1.0	0.94	1		10/31/11 10:18	75-25-2	
Bromomethane	<0.91	ug/L	1.0	0.91	1		10/31/11 10:18	74-83-9	
n-Butylbenzene	<0.93	ug/L	1.0	0.93	1		10/31/11 10:18	104-51-8	
sec-Butylbenzene	<0.89	ug/L	5.0	0.89	1		10/31/11 10:18	135-98-8	
tert-Butylbenzene	<0.97	ug/L	1.0	0.97	1		10/31/11 10:18	98-06-6	
Carbon tetrachloride	<0.49	ug/L	1.0	0.49	1		10/31/11 10:18	56-23-5	
Chlorobenzene	<0.41	ug/L	1.0	0.41	1		10/31/11 10:18	108-90-7	
Chloroethane	<0.97	ug/L	1.0	0.97	1		10/31/11 10:18	75-00-3	
Chloroform	<1.3	ug/L	5.0	1.3	1		10/31/11 10:18	67-66-3	
Chloromethane	<0.24	ug/L	1.0	0.24	1		10/31/11 10:18	74-87-3	
2-Chlorotoluene	<0.85	ug/L	1.0	0.85	1		10/31/11 10:18	95-49-8	
4-Chlorotoluene	<0.74	ug/L	1.0	0.74	1		10/31/11 10:18	106-43-4	
1,2-Dibromo-3-chloropropane	<1.7	ug/L	5.0	1.7	1		10/31/11 10:18	96-12-8	
Dibromochloromethane	<0.81	ug/L	1.0	0.81	1		10/31/11 10:18	124-48-1	
1,2-Dibromoethane (EDB)	<0.56	ug/L	1.0	0.56	1		10/31/11 10:18	106-93-4	
Dibromomethane	<0.60	ug/L	1.0	0.60	1		10/31/11 10:18	74-95-3	
1,2-Dichlorobenzene	<0.83	ug/L	1.0	0.83	1		10/31/11 10:18	95-50-1	
1,3-Dichlorobenzene	<0.87	ug/L	1.0	0.87	1		10/31/11 10:18	541-73-1	
1,4-Dichlorobenzene	<0.95	ug/L	1.0	0.95	1		10/31/11 10:18	106-46-7	
Dichlorodifluoromethane	<0.99	ug/L	1.0	0.99	1		10/31/11 10:18	75-71-8	
1,1-Dichloroethane	<0.75	ug/L	1.0	0.75	1		10/31/11 10:18	75-34-3	
1,2-Dichloroethane	<0.36	ug/L	1.0	0.36	1		10/31/11 10:18	107-06-2	
1,1-Dichloroethene	<0.57	ug/L	1.0	0.57	1		10/31/11 10:18	75-35-4	
cis-1,2-Dichloroethene	<0.83	ug/L	1.0	0.83	1		10/31/11 10:18	156-59-2	
trans-1,2-Dichloroethene	<0.89	ug/L	1.0	0.89	1		10/31/11 10:18	156-60-5	
1,2-Dichloropropane	<0.49	ug/L	1.0	0.49	1		10/31/11 10:18	78-87-5	
1,3-Dichloropropane	<0.61	ug/L	1.0	0.61	1		10/31/11 10:18	142-28-9	
2,2-Dichloropropane	<0.62	ug/L	1.0	0.62	1		10/31/11 10:18	594-20-7	
1,1-Dichloropropene	<0.75	ug/L	1.0	0.75	1		10/31/11 10:18	563-58-6	
cis-1,3-Dichloropropene	<0.20	ug/L	1.0	0.20	1		10/31/11 10:18	10061-01-5	
trans-1,3-Dichloropropene	<0.19	ug/L	1.0	0.19	1		10/31/11 10:18	10061-02-6	
Diisopropyl ether	<0.76	ug/L	1.0	0.76	1		10/31/11 10:18	108-20-3	
Ethylbenzene	<0.54	ug/L	1.0	0.54	1		10/31/11 10:18	100-41-4	
Hexachloro-1,3-butadiene	<0.67	ug/L	5.0	0.67	1		10/31/11 10:18	87-68-3	
Isopropylbenzene (Cumene)	<0.59	ug/L	1.0	0.59	1		10/31/11 10:18	98-82-8	
p-Isopropyltoluene	<0.67	ug/L	1.0	0.67	1		10/31/11 10:18	99-87-6	
Methylene Chloride	<0.43	ug/L	1.0	0.43	1		10/31/11 10:18	75-09-2	
Methyl-tert-butyl ether	<0.61	ug/L	1.0	0.61	1		10/31/11 10:18	1634-04-4	
Naphthalene	<0.89	ug/L	5.0	0.89	1		10/31/11 10:18	91-20-3	
n-Propylbenzene	<0.81	ug/L	1.0	0.81	1		10/31/11 10:18	103-65-1	
Styrene	<0.86	ug/L	1.0	0.86	1		10/31/11 10:18	100-42-5	
1,1,1,2-Tetrachloroethane	<0.92	ug/L	1.0	0.92	1		10/31/11 10:18	630-20-6	

ANALYTICAL RESULTS

Project: 004114.0000 SPECIALTY CHEM
Pace Project No.: 4052834

Sample: MW044S DUP **Lab ID: 4052834011** Collected: 10/25/11 00:00 Received: 10/27/11 09:00 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV		Analytical Method: EPA 8260							
1,1,2,2-Tetrachloroethane	<0.20	ug/L	1.0	0.20	1		10/31/11 10:18	79-34-5	
Tetrachloroethene	<0.45	ug/L	1.0	0.45	1		10/31/11 10:18	127-18-4	
Toluene	<0.67	ug/L	1.0	0.67	1		10/31/11 10:18	108-88-3	
1,2,3-Trichlorobenzene	<0.74	ug/L	1.0	0.74	1		10/31/11 10:18	87-61-6	
1,2,4-Trichlorobenzene	<0.97	ug/L	5.0	0.97	1		10/31/11 10:18	120-82-1	
1,1,1-Trichloroethane	<0.90	ug/L	1.0	0.90	1		10/31/11 10:18	71-55-6	
1,1,2-Trichloroethane	<0.42	ug/L	1.0	0.42	1		10/31/11 10:18	79-00-5	
Trichloroethene	<0.48	ug/L	1.0	0.48	1		10/31/11 10:18	79-01-6	
Trichlorofluoromethane	<0.79	ug/L	1.0	0.79	1		10/31/11 10:18	75-69-4	
1,2,3-Trichloropropane	<0.99	ug/L	1.0	0.99	1		10/31/11 10:18	96-18-4	
1,2,4-Trimethylbenzene	<0.97	ug/L	1.0	0.97	1		10/31/11 10:18	95-63-6	
1,3,5-Trimethylbenzene	<0.83	ug/L	1.0	0.83	1		10/31/11 10:18	108-67-8	
Vinyl chloride	<0.18	ug/L	1.0	0.18	1		10/31/11 10:18	75-01-4	
m&p-Xylene	<1.8	ug/L	2.0	1.8	1		10/31/11 10:18	179601-23-1	
o-Xylene	<0.83	ug/L	1.0	0.83	1		10/31/11 10:18	95-47-6	
4-Bromofluorobenzene (S)	89 %		70-130		1		10/31/11 10:18	460-00-4	
Dibromofluoromethane (S)	106 %		70-130		1		10/31/11 10:18	1868-53-7	
Toluene-d8 (S)	93 %		70-130		1		10/31/11 10:18	2037-26-5	

QUALITY CONTROL DATA

Project: 004114.0000 SPECIALTY CHEM
Pace Project No.: 4052834

QC Batch: OEXT/13055 Analysis Method: EPA 8081
QC Batch Method: EPA 3510 Analysis Description: 8081 GCS Pesticides
Associated Lab Samples: 4052834001

METHOD BLANK: 527165 Matrix: Water
Associated Lab Samples: 4052834001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
4,4'-DDD	ug/L	<0.023	0.10	11/04/11 16:54	
4,4'-DDE	ug/L	<0.023	0.10	11/04/11 16:54	
4,4'-DDT	ug/L	<0.026	0.10	11/04/11 16:54	
Aldrin	ug/L	<0.012	0.050	11/04/11 16:54	
alpha-BHC	ug/L	<0.0062	0.050	11/04/11 16:54	
alpha-Chlordane	ug/L	<0.010	0.050	11/04/11 16:54	
beta-BHC	ug/L	<0.013	0.050	11/04/11 16:54	
Chlordane (Technical)	ug/L	<0.18	1.0	11/04/11 16:54	
delta-BHC	ug/L	<0.0093	0.050	11/04/11 16:54	
Dieldrin	ug/L	<0.018	0.10	11/04/11 16:54	
Endosulfan I	ug/L	<0.011	0.050	11/04/11 16:54	
Endosulfan II	ug/L	<0.023	0.10	11/04/11 16:54	
Endosulfan sulfate	ug/L	<0.017	0.10	11/04/11 16:54	
Endrin	ug/L	<0.024	0.10	11/04/11 16:54	
Endrin aldehyde	ug/L	<0.019	0.10	11/04/11 16:54	
Endrin ketone	ug/L	<0.016	0.10	11/04/11 16:54	
gamma-BHC (Lindane)	ug/L	<0.0080	0.050	11/04/11 16:54	
gamma-Chlordane	ug/L	<0.013	0.050	11/04/11 16:54	
Heptachlor	ug/L	<0.0091	0.050	11/04/11 16:54	
Heptachlor epoxide	ug/L	<0.0084	0.050	11/04/11 16:54	
Methoxychlor	ug/L	<0.089	0.50	11/04/11 16:54	
Toxaphene	ug/L	<0.49	3.0	11/04/11 16:54	
Decachlorobiphenyl (S)	%	70	26-130	11/04/11 16:54	
Tetrachloro-m-xylene (S)	%	71	31-130	11/04/11 16:54	

LABORATORY CONTROL SAMPLE: 527166

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
4,4'-DDD	ug/L	.8	0.65	81	57-145	
4,4'-DDE	ug/L	.8	0.63	79	51-146	
4,4'-DDT	ug/L	.8	0.68	85	55-148	
Aldrin	ug/L	.4	0.33	82	46-139	
alpha-BHC	ug/L	.4	0.29	73	48-137	
alpha-Chlordane	ug/L	.4	0.30	76	53-143	
beta-BHC	ug/L	.4	0.33	83	57-130	
Chlordane (Technical)	ug/L		<0.18			
delta-BHC	ug/L	.4	0.18	46	28-141	
Dieldrin	ug/L	.8	0.64	80	58-136	
Endosulfan I	ug/L	.4	0.32	80	47-135	
Endosulfan II	ug/L	.8	0.61	76	51-139	
Endosulfan sulfate	ug/L	.8	0.56	70	48-132	

QUALITY CONTROL DATA

Project: 004114.0000 SPECIALTY CHEM
Pace Project No.: 4052834

LABORATORY CONTROL SAMPLE: 527166

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Endrin	ug/L	.8	0.72	90	55-142	
Endrin aldehyde	ug/L	.8	0.56	70	47-134	
Endrin ketone	ug/L	.8	0.60	75	53-137	
gamma-BHC (Lindane)	ug/L	.4	0.29	74	54-131	
gamma-Chlordane	ug/L	.4	0.29	73	53-130	
Heptachlor	ug/L	.4	0.35	87	54-130	
Heptachlor epoxide	ug/L	.4	0.34	85	57-130	
Methoxychlor	ug/L	4	3.1	78	49-130	
Toxaphene	ug/L		<0.49			
Decachlorobiphenyl (S)	%			65	26-130	
Tetrachloro-m-xylene (S)	%			69	31-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 527167 527168

Parameter	Units	4052910006		MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual
		Result	Conc.	Spike Conc.	MS Result	MSD Result						
4,4'-DDD	ug/L	ND	.78	.79	0.66	0.76	84	96	57-145	14	20	
4,4'-DDE	ug/L	ND	.78	.79	0.64	0.72	81	91	51-146	13	22	
4,4'-DDT	ug/L	ND	.78	.79	0.73	0.84	93	106	55-148	14	22	
Aldrin	ug/L	ND	.39	.4	0.28	0.31	71	78	46-139	11	20	
alpha-BHC	ug/L	ND	.39	.4	0.29	0.31	74	79	48-137	8	21	
alpha-Chlordane	ug/L	ND	.39	.4	0.30	0.33	76	84	53-143	11	20	
beta-BHC	ug/L	ND	.39	.4	0.31	0.32	79	80	57-130	3	37	
Chlordane (Technical)	ug/L	ND			<0.18	<0.18					20	
delta-BHC	ug/L	ND	.39	.4	0.21	0.21	53	54	28-141	3	22	
Dieldrin	ug/L	ND	.78	.79	0.64	0.71	81	89	58-136	10	20	
Endosulfan I	ug/L	ND	.39	.4	0.27	0.31	70	78	47-135	12	20	
Endosulfan II	ug/L	ND	.78	.79	0.61	0.70	78	88	51-139	13	23	
Endosulfan sulfate	ug/L	ND	.78	.79	0.58	0.67	74	85	48-132	14	28	
Endrin	ug/L	ND	.78	.79	0.76	0.87	97	110	55-142	13	23	
Endrin aldehyde	ug/L	ND	.78	.79	0.57	0.64	73	81	47-134	11	28	
Endrin ketone	ug/L	ND	.78	.79	0.62	0.71	80	90	53-137	13	21	
gamma-BHC (Lindane)	ug/L	ND	.39	.4	0.31	0.34	80	86	54-131	8	35	
gamma-Chlordane	ug/L	ND	.39	.4	0.27	0.30	68	75	53-130	11	20	
Heptachlor	ug/L	ND	.39	.4	0.32	0.34	83	85	54-130	4	20	
Heptachlor epoxide	ug/L	ND			0.33	0.36				9	20	
Methoxychlor	ug/L	ND	3.9	4	3.4	3.8	87	97	49-130	12	20	
Toxaphene	ug/L	ND			<0.48	<0.49					20	
Decachlorobiphenyl (S)	%						63	68	26-130			
Tetrachloro-m-xylene (S)	%						66	70	31-130			

QUALITY CONTROL DATA

Project: 004114.0000 SPECIALTY CHEM
Pace Project No.: 4052834

QC Batch: OEXT/13031 Analysis Method: EPA 8082
QC Batch Method: EPA 3510 Analysis Description: 8082 GCS PCB
Associated Lab Samples: 4052834001

METHOD BLANK: 525926 Matrix: Water
Associated Lab Samples: 4052834001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
PCB-1016 (Aroclor 1016)	ug/L	<0.30	1.0	11/03/11 02:03	
PCB-1221 (Aroclor 1221)	ug/L	<0.30	1.0	11/03/11 02:03	
PCB-1232 (Aroclor 1232)	ug/L	<0.30	1.0	11/03/11 02:03	
PCB-1242 (Aroclor 1242)	ug/L	<0.30	1.0	11/03/11 02:03	
PCB-1248 (Aroclor 1248)	ug/L	<0.30	1.0	11/03/11 02:03	
PCB-1254 (Aroclor 1254)	ug/L	<0.30	1.0	11/03/11 02:03	
PCB-1260 (Aroclor 1260)	ug/L	<0.30	1.0	11/03/11 02:03	
Decachlorobiphenyl (S)	%	91	31-130	11/03/11 02:03	
Tetrachloro-m-xylene (S)	%	74	10-173	11/03/11 02:03	

LABORATORY CONTROL SAMPLE: 525927

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
PCB-1016 (Aroclor 1016)	ug/L		<0.30			
PCB-1221 (Aroclor 1221)	ug/L		<0.30			
PCB-1232 (Aroclor 1232)	ug/L		<0.30			
PCB-1242 (Aroclor 1242)	ug/L	5	5.1	102	51-142	
PCB-1248 (Aroclor 1248)	ug/L		<0.30			
PCB-1254 (Aroclor 1254)	ug/L		<0.30			
PCB-1260 (Aroclor 1260)	ug/L		<0.30			
Decachlorobiphenyl (S)	%			84	31-130	
Tetrachloro-m-xylene (S)	%			69	10-173	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 525928 525929

Parameter	Units	4052825006		MS	MSD	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	RPD	Qual
		Result	Conc.	Spike Conc.	Spike Conc.								
PCB-1016 (Aroclor 1016)	ug/L	ND				<0.29	<0.29						29
PCB-1221 (Aroclor 1221)	ug/L	ND				<0.29	<0.29						29
PCB-1232 (Aroclor 1232)	ug/L	ND				<0.29	<0.29						29
PCB-1242 (Aroclor 1242)	ug/L	ND	4.9	4.9		5.6	4.9	115	102	10-156	12		29
PCB-1248 (Aroclor 1248)	ug/L	ND				<0.29	<0.29						29
PCB-1254 (Aroclor 1254)	ug/L	ND				<0.29	<0.29						29
PCB-1260 (Aroclor 1260)	ug/L	ND				<0.29	<0.29						29
Decachlorobiphenyl (S)	%							83	82	31-130			
Tetrachloro-m-xylene (S)	%							78	75	10-173			

QUALITY CONTROL DATA

Project: 004114.0000 SPECIALTY CHEM
Pace Project No.: 4052834

QC Batch: MPRP/6161 Analysis Method: EPA 6010
QC Batch Method: EPA 3010 Analysis Description: 6010 MET
Associated Lab Samples: 4052834001

METHOD BLANK: 527700 Matrix: Water
Associated Lab Samples: 4052834001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Arsenic	ug/L	<1.8	20.0	11/02/11 11:16	
Barium	ug/L	<0.12	5.0	11/02/11 11:16	
Cadmium	ug/L	<0.28	5.0	11/02/11 11:16	
Chromium	ug/L	<0.79	5.0	11/02/11 11:16	
Lead	ug/L	<1.3	7.5	11/02/11 11:16	
Selenium	ug/L	<2.2	20.0	11/02/11 11:16	
Silver	ug/L	<0.69	10.0	11/02/11 11:16	

LABORATORY CONTROL SAMPLE: 527701

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic	ug/L	500	475	95	80-120	
Barium	ug/L	500	471	94	80-120	
Cadmium	ug/L	500	473	95	80-120	
Chromium	ug/L	500	486	97	80-120	
Lead	ug/L	500	478	96	80-120	
Selenium	ug/L	500	477	95	80-120	
Silver	ug/L	250	232	93	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 527702 527703

Parameter	Units	4052811001		MS	MSD	MS	MSD	MS	MSD	% Rec	Max	Qual
		Result	Conc.	Spike Conc.	Spike Conc.	Result	Result	% Rec	% Rec	Limits	RPD	
Arsenic	ug/L	ND	500	500	495	470	99	94	75-125	5	20	
Barium	ug/L	70.9	500	500	545	538	95	93	75-125	1	20	
Cadmium	ug/L	ND	500	500	492	470	98	94	75-125	5	20	
Chromium	ug/L	5.6	500	500	480	482	95	95	75-125	.4	20	
Lead	ug/L	ND	500	500	481	468	96	93	75-125	3	20	
Selenium	ug/L	ND	500	500	493	471	98	94	75-125	5	20	
Silver	ug/L	ND	250	250	232	235	93	94	75-125	1	20	

QUALITY CONTROL DATA

Project: 004114.0000 SPECIALTY CHEM
Pace Project No.: 4052834

QC Batch: MERP/2773 Analysis Method: EPA 7470
QC Batch Method: EPA 7470 Analysis Description: 7470 Mercury
Associated Lab Samples: 4052834001

METHOD BLANK: 527421 Matrix: Water
Associated Lab Samples: 4052834001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	ug/L	<0.10	0.20	11/01/11 10:46	

LABORATORY CONTROL SAMPLE: 527422

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	5	4.3	85	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 527423 527424

Parameter	Units	4052825006 Result	MS	MSD	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max		Qual
			Spike Conc.	Spike Conc.						RPD	RPD	
Mercury	ug/L	ND	5	5	4.4	4.5	88	89	85-115	2	20	

QUALITY CONTROL DATA

Project: 004114.0000 SPECIALTY CHEM
Pace Project No.: 4052834

QC Batch: OEXT/13075 Analysis Method: EPA 8270
QC Batch Method: EPA 3510 Analysis Description: 8270 Water MSSV
Associated Lab Samples: 4052834001

METHOD BLANK: 527558 Matrix: Water
Associated Lab Samples: 4052834001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,2,4-Trichlorobenzene	ug/L	<0.87	5.0	11/02/11 13:31	
1,2-Dichlorobenzene	ug/L	<0.71	5.0	11/02/11 13:31	
1,3-Dichlorobenzene	ug/L	<0.83	5.0	11/02/11 13:31	
1,4-Dichlorobenzene	ug/L	<0.86	5.0	11/02/11 13:31	
2,2'-Oxybis(1-chloropropane)	ug/L	<0.82	5.0	11/02/11 13:31	
2,4,5-Trichlorophenol	ug/L	<1.0	5.0	11/02/11 13:31	
2,4,6-Trichlorophenol	ug/L	<1.1	5.0	11/02/11 13:31	
2,4-Dichlorophenol	ug/L	<1.1	5.0	11/02/11 13:31	
2,4-Dimethylphenol	ug/L	<1.1	5.0	11/02/11 13:31	
2,4-Dinitrophenol	ug/L	<2.1	10.0	11/02/11 13:31	
2,4-Dinitrotoluene	ug/L	<0.80	5.0	11/02/11 13:31	
2,6-Dinitrotoluene	ug/L	<1.1	5.0	11/02/11 13:31	
2-Chloronaphthalene	ug/L	<0.84	5.0	11/02/11 13:31	
2-Chlorophenol	ug/L	<0.70	5.0	11/02/11 13:31	
2-Methylnaphthalene	ug/L	<1.4	5.0	11/02/11 13:31	
2-Methylphenol(o-Cresol)	ug/L	<0.97	5.0	11/02/11 13:31	
2-Nitroaniline	ug/L	<0.84	5.0	11/02/11 13:31	
2-Nitrophenol	ug/L	<1.4	5.0	11/02/11 13:31	
3&4-Methylphenol(m&p Cresol)	ug/L	<0.77	5.0	11/02/11 13:31	
3,3'-Dichlorobenzidine	ug/L	<1.1	5.0	11/02/11 13:31	
3-Nitroaniline	ug/L	<0.97	5.0	11/02/11 13:31	
4,6-Dinitro-2-methylphenol	ug/L	<0.75	5.0	11/02/11 13:31	
4-Bromophenylphenyl ether	ug/L	<1.3	5.0	11/02/11 13:31	
4-Chloro-3-methylphenol	ug/L	<1.0	5.0	11/02/11 13:31	
4-Chloroaniline	ug/L	<0.81	5.0	11/02/11 13:31	
4-Chlorophenylphenyl ether	ug/L	<1.2	5.0	11/02/11 13:31	
4-Nitroaniline	ug/L	<1.1	5.0	11/02/11 13:31	
4-Nitrophenol	ug/L	<0.87	10.0	11/02/11 13:31	
Acenaphthene	ug/L	<0.95	5.0	11/02/11 13:31	
Acenaphthylene	ug/L	<1.0	5.0	11/02/11 13:31	
Anthracene	ug/L	<0.63	5.0	11/02/11 13:31	
Benzo(a)anthracene	ug/L	<0.61	5.0	11/02/11 13:31	
Benzo(a)pyrene	ug/L	<0.97	5.0	11/02/11 13:31	
Benzo(b)fluoranthene	ug/L	<1.4	5.0	11/02/11 13:31	
Benzo(g,h,i)perylene	ug/L	<0.77	5.0	11/02/11 13:31	
Benzo(k)fluoranthene	ug/L	<1.0	5.0	11/02/11 13:31	
bis(2-Chloroethoxy)methane	ug/L	<1.2	5.0	11/02/11 13:31	
bis(2-Chloroethyl) ether	ug/L	<0.66	5.0	11/02/11 13:31	
bis(2-Ethylhexyl)phthalate	ug/L	<2.6	5.0	11/02/11 13:31	
Butylbenzylphthalate	ug/L	<1.1	5.0	11/02/11 13:31	
Carbazole	ug/L	<0.69	5.0	11/02/11 13:31	
Chrysene	ug/L	<0.78	5.0	11/02/11 13:31	
Di-n-butylphthalate	ug/L	<0.90	5.0	11/02/11 13:31	

Date: 11/08/2011 09:24 AM

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QUALITY CONTROL DATA

Project: 004114.0000 SPECIALTY CHEM
Pace Project No.: 4052834

METHOD BLANK: 527558 Matrix: Water
Associated Lab Samples: 4052834001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Di-n-octylphthalate	ug/L	<1.5	5.0	11/02/11 13:31	
Dibenz(a,h)anthracene	ug/L	<1.4	5.0	11/02/11 13:31	
Dibenzofuran	ug/L	<1.1	5.0	11/02/11 13:31	
Diethylphthalate	ug/L	<1.3	5.0	11/02/11 13:31	
Dimethylphthalate	ug/L	<1.0	5.0	11/02/11 13:31	
Fluoranthene	ug/L	<0.91	5.0	11/02/11 13:31	
Fluorene	ug/L	<1.1	5.0	11/02/11 13:31	
Hexachloro-1,3-butadiene	ug/L	<0.66	10.0	11/02/11 13:31	
Hexachlorobenzene	ug/L	<1.1	5.0	11/02/11 13:31	
Hexachlorocyclopentadiene	ug/L	<1.1	5.0	11/02/11 13:31	
Hexachloroethane	ug/L	<0.58	5.0	11/02/11 13:31	
Indeno(1,2,3-cd)pyrene	ug/L	<0.67	5.0	11/02/11 13:31	
Isophorone	ug/L	<1.4	5.0	11/02/11 13:31	
N-Nitroso-di-n-propylamine	ug/L	<1.1	5.0	11/02/11 13:31	
N-Nitrosodiphenylamine	ug/L	<2.5	10.0	11/02/11 13:31	
Naphthalene	ug/L	<0.70	5.0	11/02/11 13:31	
Nitrobenzene	ug/L	<1.4	5.0	11/02/11 13:31	
Pentachlorophenol	ug/L	<1.1	10.0	11/02/11 13:31	
Phenanthrene	ug/L	<0.63	5.0	11/02/11 13:31	
Phenol	ug/L	<1.0	5.0	11/02/11 13:31	
Pyrene	ug/L	<1.6	5.0	11/02/11 13:31	
2,4,6-Tribromophenol (S)	%	72	38-130	11/02/11 13:31	
2-Fluorobiphenyl (S)	%	82	51-130	11/02/11 13:31	
2-Fluorophenol (S)	%	46	24-130	11/02/11 13:31	
Nitrobenzene-d5 (S)	%	81	41-130	11/02/11 13:31	
Phenol-d6 (S)	%	32	13-130	11/02/11 13:31	
Terphenyl-d14 (S)	%	82	38-130	11/02/11 13:31	

LABORATORY CONTROL SAMPLE & LCSD: 527559

527560

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
1,2,4-Trichlorobenzene	ug/L	50	38.6	37.8	77	76	53-130	2	22	
1,2-Dichlorobenzene	ug/L	50	36.4	36.8	73	74	41-130	1	34	
1,3-Dichlorobenzene	ug/L	50	34.6	35.1	69	70	35-130	1	40	
1,4-Dichlorobenzene	ug/L	50	35.0	35.8	70	72	36-130	2	38	
2,2'-Oxybis(1-chloropropane)	ug/L	50	45.4	44.7	91	89	54-130	2	20	
2,4,5-Trichlorophenol	ug/L	50	48.0	47.0	96	94	65-130	2	20	
2,4,6-Trichlorophenol	ug/L	50	50.3	47.5	101	95	60-130	6	20	
2,4-Dichlorophenol	ug/L	50	46.6	44.8	93	90	63-130	4	20	
2,4-Dimethylphenol	ug/L	50	34.7	25.1	69	50	17-130	32	27	D6
2,4-Dinitrophenol	ug/L	50	41.2	41.7	82	83	23-130	1	33	
2,4-Dinitrotoluene	ug/L	50	48.6	46.9	97	94	58-131	4	20	
2,6-Dinitrotoluene	ug/L	50	49.3	47.2	99	94	65-130	4	20	
2-Chloronaphthalene	ug/L	50	44.2	42.6	88	85	64-130	4	20	
2-Chlorophenol	ug/L	50	43.2	41.1	86	82	49-130	5	20	

QUALITY CONTROL DATA

Project: 004114.0000 SPECIALTY CHEM
Pace Project No.: 4052834

LABORATORY CONTROL SAMPLE & LCSD: 527559		527560								
Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
2-Methylnaphthalene	ug/L	50	42.8	41.9	86	84	66-130	2	20	
2-Methylphenol(o-Cresol)	ug/L	50	41.0	38.0	82	76	36-130	8	21	
2-Nitroaniline	ug/L	50	56.7	55.0	113	110	66-130	3	20	
2-Nitrophenol	ug/L	50	46.1	45.8	92	92	48-130	.6	20	
3&4-Methylphenol(m&p Cresol)	ug/L	50	35.2	32.9	70	66	34-130	7	20	
3,3'-Dichlorobenzidine	ug/L	50	48.5	42.2	97	84	43-130	14	28	
3-Nitroaniline	ug/L	50	47.7	46.5	95	93	53-130	2	21	
4,6-Dinitro-2-methylphenol	ug/L	50	40.1	38.9	80	78	41-133	3	21	
4-Bromophenylphenyl ether	ug/L	50	47.2	45.5	94	91	70-130	4	20	
4-Chloro-3-methylphenol	ug/L	50	47.4	45.2	95	90	42-130	5	20	
4-Chloroaniline	ug/L	50	46.3	44.4	93	89	48-130	4	29	
4-Chlorophenylphenyl ether	ug/L	50	45.3	44.3	91	89	67-130	2	20	
4-Nitroaniline	ug/L	50	47.1	47.8	94	96	46-130	2	21	
4-Nitrophenol	ug/L	50	21.0	18.8	42	38	14-130	11	38	
Acenaphthene	ug/L	50	46.6	45.2	93	90	70-130	3	20	
Acenaphthylene	ug/L	50	45.6	44.4	91	89	70-130	3	20	
Anthracene	ug/L	50	46.6	44.9	93	90	70-130	4	20	
Benzo(a)anthracene	ug/L	50	47.0	45.4	94	91	70-130	3	20	
Benzo(a)pyrene	ug/L	50	42.3	42.1	85	84	65-130	.5	20	
Benzo(b)fluoranthene	ug/L	50	41.9	42.1	84	84	56-130	.3	20	
Benzo(g,h,i)perylene	ug/L	50	45.0	46.1	90	92	49-136	2	36	
Benzo(k)fluoranthene	ug/L	50	47.5	46.6	95	93	62-130	2	23	
bis(2-Chloroethoxy)methane	ug/L	50	48.4	47.6	97	95	66-130	2	20	
bis(2-Chloroethyl) ether	ug/L	50	45.3	44.6	91	89	58-130	2	20	
bis(2-Ethylhexyl)phthalate	ug/L	50	45.0	45.2	90	90	58-138	.4	20	
Butylbenzylphthalate	ug/L	50	47.0	45.3	94	91	44-152	4	20	
Carbazole	ug/L	50	47.8	47.1	96	94	68-130	1	20	
Chrysene	ug/L	50	46.8	45.2	94	90	70-130	4	20	
Di-n-butylphthalate	ug/L	50	43.6	44.2	87	88	66-130	1	20	
Di-n-octylphthalate	ug/L	50	47.9	47.0	96	94	64-134	2	20	
Dibenz(a,h)anthracene	ug/L	50	43.6	45.9	87	92	50-131	5	33	
Dibenzofuran	ug/L	50	45.5	43.7	91	87	67-130	4	20	
Diethylphthalate	ug/L	50	45.2	45.1	90	90	61-130	.2	20	
Dimethylphthalate	ug/L	50	46.5	46.3	93	93	61-130	.5	20	
Fluoranthene	ug/L	50	44.9	45.4	90	91	59-130	1	20	
Fluorene	ug/L	50	47.0	45.4	94	91	70-130	3	20	
Hexachloro-1,3-butadiene	ug/L	50	35.4	37.6	71	75	40-130	6	38	
Hexachlorobenzene	ug/L	50	44.8	43.5	90	87	67-130	3	20	
Hexachlorocyclopentadiene	ug/L	50	19.7	19.1	39	38	10-130	3	50	
Hexachloroethane	ug/L	50	32.9	35.5	66	71	28-130	8	47	
Indeno(1,2,3-cd)pyrene	ug/L	50	43.0	43.8	86	88	41-132	2	36	
Isophorone	ug/L	50	45.8	45.1	92	90	40-130	2	20	
N-Nitroso-di-n-propylamine	ug/L	50	49.7	47.9	99	96	57-130	4	20	
N-Nitrosodiphenylamine	ug/L	50	45.1	58.8	90	118	59-144	26	42	
Naphthalene	ug/L	50	43.2	42.4	86	85	64-130	2	20	
Nitrobenzene	ug/L	50	46.0	44.7	92	89	59-130	3	20	
Pentachlorophenol	ug/L	50	43.0	42.1	86	84	45-130	2	27	
Phenanthrene	ug/L	50	46.3	45.4	93	91	70-130	2	20	

QUALITY CONTROL DATA

Project: 004114.0000 SPECIALTY CHEM
Pace Project No.: 4052834

LABORATORY CONTROL SAMPLE & LCSD: 527559		527560								
Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Phenol	ug/L	50	22.6	20.8	45	42	26-130	8	22	
Pyrene	ug/L	50	49.2	46.5	98	93	51-130	6	23	
2,4,6-Tribromophenol (S)	%				89	86	38-130			
2-Fluorobiphenyl (S)	%				90	84	51-130			
2-Fluorophenol (S)	%				56	50	24-130			
Nitrobenzene-d5 (S)	%				89	84	41-130			
Phenol-d6 (S)	%				38	35	13-130			
Terphenyl-d14 (S)	%				87	82	38-130			

QUALITY CONTROL DATA

Project: 004114.0000 SPECIALTY CHEM
Pace Project No.: 4052834

QC Batch: MSV/13142 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV
Associated Lab Samples: 4052834001, 4052834002, 4052834003, 4052834004, 4052834005, 4052834006, 4052834007, 4052834008, 4052834009, 4052834011

METHOD BLANK: 525882 Matrix: Water
Associated Lab Samples: 4052834001, 4052834002, 4052834003, 4052834004, 4052834005, 4052834006, 4052834007, 4052834008, 4052834009, 4052834011

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	<0.92	1.0	10/31/11 05:56	
1,1,1-Trichloroethane	ug/L	<0.90	1.0	10/31/11 05:56	
1,1,2,2-Tetrachloroethane	ug/L	<0.20	1.0	10/31/11 05:56	
1,1,2-Trichloroethane	ug/L	<0.42	1.0	10/31/11 05:56	
1,1,2-Trichlorotrifluoroethane	ug/L	<1.3	5.0	10/31/11 05:56	
1,1-Dichloroethane	ug/L	<0.75	1.0	10/31/11 05:56	
1,1-Dichloroethene	ug/L	<0.57	1.0	10/31/11 05:56	
1,1-Dichloropropene	ug/L	<0.75	1.0	10/31/11 05:56	
1,2,3-Trichlorobenzene	ug/L	<0.74	1.0	10/31/11 05:56	
1,2,3-Trichloropropane	ug/L	<0.99	1.0	10/31/11 05:56	
1,2,4-Trichlorobenzene	ug/L	<0.97	5.0	10/31/11 05:56	
1,2,4-Trimethylbenzene	ug/L	<0.97	1.0	10/31/11 05:56	
1,2-Dibromo-3-chloropropane	ug/L	<1.7	5.0	10/31/11 05:56	
1,2-Dibromoethane (EDB)	ug/L	<0.56	1.0	10/31/11 05:56	
1,2-Dichlorobenzene	ug/L	<0.83	1.0	10/31/11 05:56	
1,2-Dichloroethane	ug/L	<0.36	1.0	10/31/11 05:56	
1,2-Dichloropropane	ug/L	<0.49	1.0	10/31/11 05:56	
1,3,5-Trimethylbenzene	ug/L	<0.83	1.0	10/31/11 05:56	
1,3-Dichlorobenzene	ug/L	<0.87	1.0	10/31/11 05:56	
1,3-Dichloropropane	ug/L	<0.61	1.0	10/31/11 05:56	
1,4-Dichlorobenzene	ug/L	<0.95	1.0	10/31/11 05:56	
2,2-Dichloropropane	ug/L	<0.62	1.0	10/31/11 05:56	
2-Butanone (MEK)	ug/L	<4.3	20.0	10/31/11 05:56	
2-Chlorotoluene	ug/L	<0.85	1.0	10/31/11 05:56	
4-Chlorotoluene	ug/L	<0.74	1.0	10/31/11 05:56	
4-Methyl-2-pentanone (MIBK)	ug/L	<1.2	5.0	10/31/11 05:56	
Acetone	ug/L	<5.0	20.0	10/31/11 05:56	
Allyl chloride	ug/L	<2.0	5.0	10/31/11 05:56	
Benzene	ug/L	<0.41	1.0	10/31/11 05:56	
Bromobenzene	ug/L	<0.82	1.0	10/31/11 05:56	
Bromochloromethane	ug/L	<0.97	1.0	10/31/11 05:56	
Bromodichloromethane	ug/L	<0.56	1.0	10/31/11 05:56	
Bromoform	ug/L	<0.94	1.0	10/31/11 05:56	
Bromomethane	ug/L	<0.91	1.0	10/31/11 05:56	
Carbon tetrachloride	ug/L	<0.49	1.0	10/31/11 05:56	
Chlorobenzene	ug/L	<0.41	1.0	10/31/11 05:56	
Chloroethane	ug/L	<0.97	1.0	10/31/11 05:56	
Chloroform	ug/L	<1.3	5.0	10/31/11 05:56	
Chloromethane	ug/L	<0.24	1.0	10/31/11 05:56	
cis-1,2-Dichloroethene	ug/L	<0.83	1.0	10/31/11 05:56	
cis-1,3-Dichloropropene	ug/L	<0.20	1.0	10/31/11 05:56	

QUALITY CONTROL DATA

Project: 004114.0000 SPECIALTY CHEM
Pace Project No.: 4052834

METHOD BLANK: 525882 Matrix: Water
Associated Lab Samples: 4052834001, 4052834002, 4052834003, 4052834004, 4052834005, 4052834006, 4052834007, 4052834008, 4052834009, 4052834011

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Dibromochloromethane	ug/L	<0.81	1.0	10/31/11 05:56	
Dibromomethane	ug/L	<0.60	1.0	10/31/11 05:56	
Dichlorodifluoromethane	ug/L	<0.99	1.0	10/31/11 05:56	
Dichlorofluoromethane	ug/L	<0.88	1.0	10/31/11 05:56	
Diethyl ether (Ethyl ether)	ug/L	<0.98	1.0	10/31/11 05:56	
Diisopropyl ether	ug/L	<0.76	1.0	10/31/11 05:56	
Ethylbenzene	ug/L	<0.54	1.0	10/31/11 05:56	
Hexachloro-1,3-butadiene	ug/L	<0.67	5.0	10/31/11 05:56	
Isopropylbenzene (Cumene)	ug/L	<0.59	1.0	10/31/11 05:56	
m&p-Xylene	ug/L	<1.8	2.0	10/31/11 05:56	
Methyl-tert-butyl ether	ug/L	<0.61	1.0	10/31/11 05:56	
Methylene Chloride	ug/L	<0.43	1.0	10/31/11 05:56	
n-Butylbenzene	ug/L	<0.93	1.0	10/31/11 05:56	
n-Propylbenzene	ug/L	<0.81	1.0	10/31/11 05:56	
Naphthalene	ug/L	<0.89	5.0	10/31/11 05:56	
o-Xylene	ug/L	<0.83	1.0	10/31/11 05:56	
p-Isopropyltoluene	ug/L	<0.67	1.0	10/31/11 05:56	
sec-Butylbenzene	ug/L	<0.89	5.0	10/31/11 05:56	
Styrene	ug/L	<0.86	1.0	10/31/11 05:56	
tert-Butylbenzene	ug/L	<0.97	1.0	10/31/11 05:56	
Tetrachloroethene	ug/L	<0.45	1.0	10/31/11 05:56	
Tetrahydrofuran	ug/L	<1.7	5.0	10/31/11 05:56	
Toluene	ug/L	<0.67	1.0	10/31/11 05:56	
trans-1,2-Dichloroethene	ug/L	<0.89	1.0	10/31/11 05:56	
trans-1,3-Dichloropropene	ug/L	<0.19	1.0	10/31/11 05:56	
Trichloroethene	ug/L	<0.48	1.0	10/31/11 05:56	
Trichlorofluoromethane	ug/L	<0.79	1.0	10/31/11 05:56	
Vinyl chloride	ug/L	<0.18	1.0	10/31/11 05:56	
4-Bromofluorobenzene (S)	%	89	70-130	10/31/11 05:56	
Dibromofluoromethane (S)	%	104	70-130	10/31/11 05:56	
Toluene-d8 (S)	%	92	70-130	10/31/11 05:56	

LABORATORY CONTROL SAMPLE & LCSD: 525883		525884								
Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
1,1,1-Trichloroethane	ug/L	50	54.3	55.5	109	111	70-133	2	20	
1,1,2,2-Tetrachloroethane	ug/L	50	42.7	42.1	85	84	70-130	1	20	
1,1,2-Trichloroethane	ug/L	50	47.8	47.6	96	95	70-130	.3	20	
1,1,2-Trichlorotrifluoroethane	ug/L	50	49.6	50.4	99	101	50-150	2	20	
1,1-Dichloroethane	ug/L	50	41.6	41.3	83	83	70-130	.6	20	
1,1-Dichloroethene	ug/L	50	48.8	49.4	98	99	70-130	1	20	
1,2,4-Trichlorobenzene	ug/L	50	48.2	48.7	96	97	70-130	1	20	
1,2-Dibromo-3-chloropropane	ug/L	50	39.3	37.3	79	75	50-150	5	20	
1,2-Dibromoethane (EDB)	ug/L	50	49.9	50.0	100	100	70-130	.1	20	



QUALITY CONTROL DATA

Project: 004114.0000 SPECIALTY CHEM
 Pace Project No.: 4052834

LABORATORY CONTROL SAMPLE & LCSD:		525883	525884									
Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers		
1,2-Dichlorobenzene	ug/L	50	49.4	48.3	99	97	70-130	2	20			
1,2-Dichloroethane	ug/L	50	47.7	46.8	95	94	70-145	2	20			
1,2-Dichloropropane	ug/L	50	48.6	49.9	97	100	70-130	3	20			
1,3-Dichlorobenzene	ug/L	50	47.8	48.1	96	96	70-130	.5	20			
1,4-Dichlorobenzene	ug/L	50	47.4	46.7	95	93	70-130	1	20			
2-Butanone (MEK)	ug/L	50	65.2	56.1	130	112	50-150	15	20			
4-Methyl-2-pentanone (MIBK)	ug/L	50	44.5	44.9	89	90	50-150	1	20			
Acetone	ug/L	50	84.0	83.9	168	168	50-150	.05	20	LO		
Benzene	ug/L	50	49.6	49.8	99	100	70-130	.5	20			
Bromodichloromethane	ug/L	50	51.8	52.3	104	105	70-130	.9	20			
Bromoform	ug/L	50	49.7	50.9	99	102	70-130	2	20			
Bromomethane	ug/L	50	36.8	40.1	74	80	52-155	8	20			
Carbon tetrachloride	ug/L	50	60.5	60.8	121	122	70-153	.6	20			
Chlorobenzene	ug/L	50	50.3	50.2	101	100	70-130	.3	20			
Chloroethane	ug/L	50	48.2	48.6	96	97	70-130	.7	20			
Chloroform	ug/L	50	52.9	52.9	106	106	70-130	.07	20			
Chloromethane	ug/L	50	47.2	48.9	94	98	50-130	3	20			
cis-1,2-Dichloroethene	ug/L	50	47.2	43.7	94	87	70-130	8	20			
cis-1,3-Dichloropropene	ug/L	50	47.3	48.0	95	96	70-130	1	20			
Dibromochloromethane	ug/L	50	55.5	56.5	111	113	70-130	2	20			
Dichlorodifluoromethane	ug/L	50	43.2	44.5	86	89	50-150	3	20			
Ethylbenzene	ug/L	50	49.5	50.4	99	101	70-130	2	20			
Isopropylbenzene (Cumene)	ug/L	50	50.7	50.5	101	101	70-130	.2	20			
m&p-Xylene	ug/L	100	98.8	102	99	102	70-130	3	20			
Methyl-tert-butyl ether	ug/L	50	42.0	43.1	84	86	70-130	3	20			
Methylene Chloride	ug/L	50	48.9	49.7	98	99	70-130	2	20			
o-Xylene	ug/L	50	49.7	50.1	99	100	70-130	.9	20			
Styrene	ug/L	50	49.6	50.2	99	100	70-130	1	20			
Tetrachloroethene	ug/L	50	53.9	54.2	108	108	70-130	.5	20			
Toluene	ug/L	50	49.7	50.8	99	102	70-130	2	20			
trans-1,2-Dichloroethene	ug/L	50	46.3	47.3	93	95	70-130	2	20			
trans-1,3-Dichloropropene	ug/L	50	45.5	46.5	91	93	70-130	2	20			
Trichloroethene	ug/L	50	53.9	53.9	108	108	70-130	.0003	20			
Trichlorofluoromethane	ug/L	50	51.3	52.2	103	104	50-150	2	20			
Vinyl chloride	ug/L	50	46.8	47.5	94	95	66-130	2	20			
4-Bromofluorobenzene (S)	%				95	96	70-130					
Dibromofluoromethane (S)	%				100	99	70-130					
Toluene-d8 (S)	%				94	94	70-130					

MATRIX SPIKE & MATRIX SPIKE DUPLICATE:		526091	526092										
Parameter	Units	4052834005		MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		1,1,1-Trichloroethane	ug/L	<0.90	50	50	58.9	55.2	118	110	70-133	7	20
1,1,2,2-Tetrachloroethane	ug/L	<0.20	50	50	41.7	44.7	83	89	70-130	7	20		
1,1,2-Trichloroethane	ug/L	<0.42	50	50	47.8	48.3	96	97	70-130	1	20		
1,1,2-Trichlorotrifluoroethane	ug/L	<1.3	50	50	51.8	50.7	104	101	50-150	2	20		

Date: 11/08/2011 09:24 AM

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 004114.0000 SPECIALTY CHEM
Pace Project No.: 4052834

Parameter	Units	4052834005		MS	MSD	MS	MSD	MS	MSD	% Rec	Max	Qual
		Result	Conc.	Spike Conc.	Spike Conc.	Result	Result	% Rec	% Rec	Limits	RPD	
1,1-Dichloroethane	ug/L	<0.75	50	50	44.3	41.4	89	83	70-133	7	20	
1,1-Dichloroethene	ug/L	<0.57	50	50	51.6	49.2	103	98	70-130	5	20	
1,2,4-Trichlorobenzene	ug/L	<0.97	50	50	50.0	49.8	100	100	70-130	.5	20	
1,2-Dibromo-3-chloropropane	ug/L	<1.7	50	50	38.0	42.8	76	86	50-150	12	20	
1,2-Dibromoethane (EDB)	ug/L	<0.56	50	50	48.8	51.5	98	103	70-130	5	20	
1,2-Dichlorobenzene	ug/L	<0.83	50	50	49.4	49.9	99	100	70-130	1	20	
1,2-Dichloroethane	ug/L	<0.36	50	50	51.7	47.6	103	95	70-145	8	20	
1,2-Dichloropropane	ug/L	<0.49	50	50	51.9	48.1	104	96	70-130	8	20	
1,3-Dichlorobenzene	ug/L	<0.87	50	50	49.0	48.5	98	97	70-130	1	20	
1,4-Dichlorobenzene	ug/L	<0.95	50	50	47.2	46.8	94	94	70-130	.9	20	
2-Butanone (MEK)	ug/L	<4.3	50	50	73.4	75.0	147	150	50-150	2	20	
4-Methyl-2-pentanone (MIBK)	ug/L	<1.2	50	50	47.8	50.5	96	101	50-150	6	20	
Acetone	ug/L	<5.0	50	50	102	103	204	207	50-150	1	20	
Benzene	ug/L	<0.41	50	50	54.4	50.0	109	100	70-130	8	20	
Bromodichloromethane	ug/L	<0.56	50	50	51.8	51.3	104	103	70-130	.9	20	
Bromoform	ug/L	<0.94	50	50	49.5	51.3	99	103	70-130	4	20	
Bromomethane	ug/L	<0.91	50	50	45.7	41.1	91	82	52-155	11	20	
Carbon tetrachloride	ug/L	<0.49	50	50	65.2	60.6	130	121	70-158	7	20	
Chlorobenzene	ug/L	<0.41	50	50	49.9	50.5	100	101	70-130	1	20	
Chloroethane	ug/L	<0.97	50	50	52.7	48.1	105	96	70-130	9	20	
Chloroform	ug/L	<1.3	50	50	55.5	51.5	111	103	70-130	7	20	
Chloromethane	ug/L	<0.24	50	50	52.4	47.1	105	94	46-130	11	20	
cis-1,2-Dichloroethene	ug/L	<0.83	50	50	49.5	47.0	99	94	70-130	5	20	
cis-1,3-Dichloropropene	ug/L	<0.20	50	50	49.6	47.9	99	96	70-130	4	20	
Dibromochloromethane	ug/L	<0.81	50	50	55.6	57.0	111	114	70-130	3	20	
Dichlorodifluoromethane	ug/L	<0.99	50	50	45.0	41.4	90	83	50-150	8	20	
Ethylbenzene	ug/L	<0.54	50	50	51.6	50.1	103	100	70-130	3	20	
Isopropylbenzene (Cumene)	ug/L	<0.59	50	50	51.9	51.2	104	102	70-130	1	20	
m&p-Xylene	ug/L	<1.8	100	100	101	101	101	101	70-130	.04	20	
Methyl-tert-butyl ether	ug/L	<0.61	50	50	45.6	43.5	91	87	70-130	5	20	
Methylene Chloride	ug/L	<0.43	50	50	51.4	49.0	103	98	70-130	5	20	
o-Xylene	ug/L	<0.83	50	50	50.7	50.2	101	100	70-130	1	20	
Styrene	ug/L	<0.86	50	50	50.9	50.4	102	101	19-157	1	20	
Tetrachloroethene	ug/L	<0.45	50	50	52.2	54.9	104	110	70-130	5	20	
Toluene	ug/L	<0.67	50	50	50.4	50.6	101	101	70-130	.4	20	
trans-1,2-Dichloroethene	ug/L	<0.89	50	50	49.5	46.9	99	94	70-130	5	20	
trans-1,3-Dichloropropene	ug/L	<0.19	50	50	48.0	47.5	96	95	70-130	1	20	
Trichloroethene	ug/L	<0.48	50	50	53.7	53.9	107	108	70-130	.4	20	
Trichlorofluoromethane	ug/L	<0.79	50	50	55.6	51.4	111	103	50-150	8	20	
Vinyl chloride	ug/L	<0.18	50	50	51.3	46.5	103	93	62-130	10	20	
4-Bromofluorobenzene (S)	%						98	96	70-130			
Dibromofluoromethane (S)	%						105	102	70-130			
Toluene-d8 (S)	%						93	94	70-130			

QUALIFIERS

Project: 004114.0000 SPECIALTY CHEM
Pace Project No.: 4052834

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

LABORATORIES

PASI-G Pace Analytical Services - Green Bay

BATCH QUALIFIERS

Batch: GCSV/6776

[1] Mid-point calibration check standard was >15% difference on the confirmation column. The quantitation column was within QC criteria. Results were reported from the quantitation column only.

Batch: MSSV/4034

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

ANALYTE QUALIFIERS

D3 Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.

D6 The relative percent difference (RPD) between the sample and sample duplicate exceeded laboratory control limits.

L0 Analyte recovery in the laboratory control sample (LCS) was outside QC limits.

S4 Surrogate recovery not evaluated against control limits due to sample dilution.

Z3 Methylene chloride is a common laboratory contaminant. Results for this analyte should be considered estimated unless the amount found in the sample is 3 to 5 times higher than that found in the method blank.



QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 004114.0000 SPECIALTY CHEM
Pace Project No.: 4052834

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
4052834001	WC2011	EPA 3510	OEXT/13055	EPA 8081	GCSV/6776
4052834001	WC2011	EPA 3510	OEXT/13031	EPA 8082	GCSV/6762
4052834001	WC2011	EPA 3010	MPRP/6161	EPA 6010	ICP/5224
4052834001	WC2011	EPA 7470	MERP/2773	EPA 7470	MERC/2915
4052834001	WC2011	EPA 3510	OEXT/13075	EPA 8270	MSSV/4034
4052834001	WC2011	EPA 8260	MSV/13142		
4052834002	TW-1	EPA 8260	MSV/13142		
4052834003	MW041S	EPA 8260	MSV/13142		
4052834004	MW044M	EPA 8260	MSV/13142		
4052834005	MW044S	EPA 8260	MSV/13142		
4052834006	MW041M	EPA 8260	MSV/13142		
4052834007	MW045M	EPA 8260	MSV/13142		
4052834008	MW045S	EPA 8260	MSV/13142		
4052834009	TRIP BLANK	EPA 8260	MSV/13142		
4052834011	MW044S DUP	EPA 8260	MSV/13142		

(Please Print Clearly)

UPPER MIDWEST REGION

MN: 612-607-1700 WI: 920-469-2436

Page 1 of

4052834



JKF

Company Name: TRC
 Branch/Location: MADISON
 Project Contact: WEDEKIND
 Phone: 608-228-826-3666
 Project Number: 00004114.0000
 Project Name: SPECIALTY CHEM
 Project State: WI
 Sampled By (Print): James Wedekind
 Sampled By (Sign): *[Signature]*
 PO #: *[Blank]* Regulatory Program: *[Blank]*

CHAIN OF CUSTODY

***Preservation Codes**
 A=None B=HCL C=H2SO4 D=HNO3 E=DI Water F=Methanol G=NaOH
 H=Sodium Bisulfate Solution I=Sodium Thiosulfate J=Other

FILTERED?
(YES/NO)
 PRESERVATION
(CODE)*

Y/N	Pick Letter	Matrix Codes	Analysis Requested
Y	A	YOCs	YOCs SVOCs Metals Pesticide/Resid
Y	A	SVOCs	
Y	D	Metals	
Y	A	Pesticide/Resid	

Quote #:
 Mail To Contact:
 Mail To Company:
 Mail To Address:
 Invoice To Contact:
 Invoice To Company:
 Invoice To Address:
 Invoice To Phone:

Data Package Options (billable)
 EPA Level III
 EPA Level IV

MS/MSD
 On your sample (billable)
 NOT needed on your sample

Matrix Codes
 A = Air W = Water
 B = Biota DW = Drinking Water
 C = Charcoal GW = Ground Water
 O = Oil SW = Surface Water
 S = Soil WW = Waste Water
 SI = Sludge WP = Wipe

PACE LAB #	CLIENT FIELD ID	COLLECTION		MATRIX	Analysis Requested	YOCs	SVOCs	Metals	Pesticide/Resid	CLIENT COMMENTS	LAB COMMENTS (Lab Use Only)	Profile #
		DATE	TIME									
001	WC2011	10/25	1615	W		3	2	1	1	3-1 bag, 1-250ml P, 3-40ml A		
002	TW-1	10/25	1553	W		3					High PID	
003	MW041\$		1250	W		3						
004	MW044M		1524	W		3						
005	MW044\$		1510	W		3				6-40ml A		
006	MW041M		1324	W		3				3-40ml A		
007	MW045M		1205	W		3						
008	MW045\$		1118	W		3						
009	TRIP BLANK					3				HCL		
010	TW-1I	10/25	1536			3				HOLD-HIGH LEVEL	Cancelled per	
011	MW044\$ Dup	10/25										

Rush Turnaround Time Requested - Prelims (Rush TAT subject to approval/surcharge)
 Date Needed: *[Blank]*

Transmit Prelim Rush Results by (complete what you want):

Relinquished By: <i>[Signature]</i> Date/Time: 10/26/11 0900	Received By: <i>[Signature]</i> Date/Time: 10/26/11 0930
Relinquished By: <i>[Signature]</i> Date/Time: 10/26/11	Received By: <i>[Signature]</i> Date/Time: 10/26/11
Relinquished By: <i>[Signature]</i> Date/Time: 10/27/11 900	Received By: <i>[Signature]</i> Date/Time: 10/27/11 900
Relinquished By: <i>[Blank]</i> Date/Time: <i>[Blank]</i>	Received By: <i>[Blank]</i> Date/Time: <i>[Blank]</i>

PACE Project No. 4052834
 Receipt Temp = Rot °C
 Sample Receipt pH (OK) Adjusted
 Cooler Custody Seal Present / Not Present Intact / Not Intact



Sample Condition Upon Receipt

Client Name: TRC Project # 4052834

Courier: Fed Ex UPS USPS Client Commercial Pace Other _____

Tracking #: _____

Custody Seal on Cooler/Box Present: yes no Seals intact: yes no

Custody Seal on Samples Present: yes no Seals intact: yes no

Packing Material: Bubble Wrap Bubble Bags None Other _____

Thermometer Used NA Type of Ice: Ice Blue Dry None Samples on ice, cooling process has begun.

Cooler Temperature 201 Biological Tissue is Frozen: yes no

Temp Blank Present: yes no

Temp should be above freezing to 6°C for all sample except Biota.
Biota Samples should be received ≤ 0°C.

Person examining contents:
Date: 10/27/11
Initials: JK

Comments:

Chain of Custody Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody Filled Out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody Relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler Name & Signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples Arrived within Hold Time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Short Hold Time Analysis (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	6.
Rush Turn Around Time Requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	7.
Sufficient Volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8.
Correct Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
-Pace Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Containers Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	10.
Filtered volume received for Dissolved tests	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	11.
Sample Labels match COC:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	12.
-Includes date/time/ID/Analysis Matrix: <u>W</u>		
All containers needing preservation have been checked.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	13.
All containers needing preservation are found to be in compliance with EPA recommendation.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
exceptions: VOA, coliform, TOC, O&G, WI-DRO (water)	<input type="checkbox"/> Yes <input type="checkbox"/> No	Initial when completed <u>JK</u> Lot # of added preservative
Samples checked for dechlorination:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	14.
Headspace in VOA Vials (>6mm):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	15.
Trip Blank Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	16.
Trip Blank Custody Seals Present	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	
Pace Trip Blank Lot # (if purchased):		

Client Notification/ Resolution:

Field Data Required? Y N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution:

3 extra samples for MW 0448, also had "D" in the table but they do match - JK 10/27/11 515 labeled as MW0448 Dup. Labeled as -011 per JW 10-27-11

Project Manager Review: _____

Date: 10-27-11

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)