Appendix G

Quarterly Monitoring Report Addendum

September 2012

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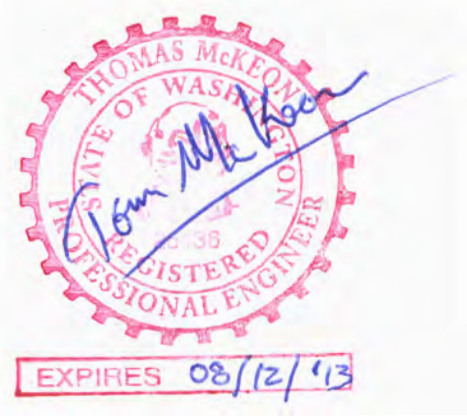
This report describes the remedial action conducted at the Fiberglass Debris Landfill area of the Hytec-Littlerock site. The remedial action has been conducted in substantial compliance with the Remedial Action Plan (CALIBRE 2011a) and the Cleanup Action Plan for the Fiberglass Debris Landfill (Ecology 2010).

Tom McKeon, Professional Engineer



Quarterly Monitoring Report Addendum
Fiberglass Debris Landfill, Hytec-Littlerock Site
September 2012 Sampling

1.0 INTRODUCTION

Results from the September 2012 quarterly sampling event are summarized in this Appendix as an addendum to the Fiberglass Debris Landfill Remedial Action Report (CALIBRE 2012). Groundwater sampling is being conducted on a quarterly basis in accordance with the Cleanup Action Plan (CAP) compliance monitoring plan. The monitoring wells sampled include HLMW-1A, HLMW-2A, HLMW-3A, HLMW-4A, Morgan's well, Spears' well, Pavlicek's well, and two new deep wells that were installed in the bed rock, wells HLMW-5B, HLMW-6B. The location of all site wells is shown in Figure 1. The Morgan, Spears and Pavlicek wells are supply wells (used as potable water supply); permission from the owners was obtained prior to collecting water samples from these supply wells.

The information presented in this addendum is organized in the following categories:

- Introduction and objectives (Section 1);
- Summary of Groundwater Monitoring Performed during September, October and November 2012 (Section 2);
- Results of Groundwater Monitoring (Section 3);
- Summary (Section 4);
- References (Section 5);
- Well Sample Data Sheets; and
- Laboratory Analytical Reports.

2.0 SUMMARY OF GROUNDWATER MONITORING EVENT

Groundwater was sampled from nine wells on 27 September 2012. The wells sampled included monitoring wells HLMW-1A, HLMW-2A, HLMW-3A, HLMW-4A, HLMW-5B, HLMW-6B, the Morgan supply well, the Spears supply well, and the Pavlicek supply well. Based on various factors, groundwater was re-sampled from HLMW-3A on 10 October 2012 and from HLMW-5B on 09 November 2012. Sampling was conducted using a Waterra pump with dedicated tubing and a foot valve or submersible pump, except the Morgan well and the Pavlicek well where the sample was collected from the nearest tap from the wellhead. A construction summary of these sampled wells is presented in Appendix D of the Hytec Remedial Action Report (CALIBRE 2012). Depth-to-water measurements are presented in Table 2-1.

Water quality parameters were measured during well purging and recorded at five minute intervals. Purging continued until the water quality parameters had stabilized. The final water quality parameters are presented in Table 2-1.

Water samples were submitted to Fremont Analytical and analyzed for Volatile Organic Compounds (VOCs) by EPA method 8260C, Semi-Volatile Organic Compounds (SVOCs) by EPA method 8270D, and total metals by EPA method 200.8. Four of the samples (HLMW-1A, HLMW-2A, HLMW-3A and HLMW-5B) were significantly more turbid. Selected samples were filtered (by the laboratory from a separate sample bottle collected) and analyzed for dissolved metals by EPA method 200.8. Well sample data sheets and the complete laboratory analytical reports are included at the end of this addendum.

During the September 2012 sampling, the Department of Ecology Project Manager (PM) was onsite to collect split samples from selected wells. These split samples were delivered by the Ecology PM to the Manchester Environmental Laboratory (MEL) for analysis.

Samples were collected and delivered to the laboratory under chain-of-custody procedures specified in the project Quality Assurance Project Plan (QAPP). Two quality assurance/quality control (QA/QC) water samples were collected during the September round of sampling: one trip blank and one field duplicate sample. The field duplicate sample was collected from well HLMW-4A (the duplicate sample was labeled as HLMW-4B). All samples were received at the laboratory within the recommended temperature range and analyzed within the method-specific required holding time. The field trip blank and duplicate data were reviewed and all results were acceptable (meeting the QAPP requirements). The data is considered usable except where noted below.

One of the sample bottles from the September 2012 sampling, the SVOC sample from HLMW-3A, was broken in transport to the laboratory. Based on discussions with the Ecology PM, this well was re-sampled on 10 October 2012 (a new sample was collected from this single well to be analyzed for SVOCs).

A discrepancy was identified in the split-sample results for SVOCs (comparing the MEL results and the Fremont Analytical results from the September sampling, for one analyte from one well). Based on those results and discussions with the Ecology PM, this well was re-sampled on 09 November 2012 (a new sample was collected from this single well and analyzed for SVOCs, with Ecology also collecting a new split sample).

3.0 SAMPLING RESULTS

Trichlorofluoromethane (Freon 11) was the only VOC detected and all concentrations were below the Model Toxics Control Act (MTCA) Method B criterion (based on use as a potable water supply). Trichlorofluoromethane was found in four of the wells (HLMW-2A, HLMW-3A, HLMW-4A, HLMW-6B) with the highest concentration found in well HLMW-4A at 9.20 ug/L. All of the detected levels are significantly below the MTCA Method B criteria of 2,400 ug/L. Table 2-2 shows the analytical results for VOCs detected in groundwater samples.

During the September 2012 sampling event ten SVOCs were detected at trace levels (all sample detections were less than their respective maximum contaminant level [MCL] or MTCA Method B criteria). These detections were reported as “J” flagged by the laboratory (noted as above the method detection limit [MDL], but below the reporting limit [RL]). Nine of the ten SVOCs were also detected in the method blank analysis reported by the laboratory (sample identification MB-3344, 10/3/12). These SVOC compounds are common laboratory contaminants at trace levels and the method blank sample indicated concentrations similar to (and sometimes exceeding) the groundwater samples for these compounds. The sampling

results for these specific analytes are therefore reported as non-detect ("ND" flagged, after a 10x factor was applied to the detections observed in the method blank), but the results are still described in this report for completeness.

The highest detection of bis(2-ethylhexyl) phthalate was 3.04 ug/L from HLMW-6B (below the MCL/MTCA Method B criterion of 6 ug/L). The highest detection of benzyl butyl phthalate was 0.836 ug/L from the Morgan well (below the MTCA Method B criterion of 46 ug/L). The highest detection of bis(2-ethylhexyl)adipate was 0.894 ug/L from HLMW-3A (below the MTCA Method B criterion of 73 ug/L). The highest detection of di-n-butyl phthalate was 1.80 ug/L from the Morgan well (below the MTCA Method B criterion of 1,600 ug/L). The highest detection of diethylphthalate was 1.04 ug/L (below the MTCA Method B criterion of 12,800 ug/L). The highest detection of fluoranthene was 0.0604 ug/L from HLMW-4A (below the MTCA Method B criterion of 640 ug/L). The highest detection of phenol was 0.350 ug/L from HLMW-4A (below the MTCA Method B criterion of 2,400 ug/L). Dimethylphthalate was detected at 0.0985 ug/L from well HLMW-5B; di-n-octyl phthalate was detected at 11.7 ug/L from the Pavlicek well; phenanthrene was detected at 0.186 ug/L from well HLMW-4A; these compounds do not have a MTCA cleanup level or EPA MCL because no toxicity data has been published in IRIS by EPA.

Other public health agencies (e.g., ATSDR[1]) have reviewed the toxicity data related to di-n-octyl phthalate (ATDSR 2012) and published a minimal risk level (MRL) of 0.4 mg/kg/dy (for di-n-octyl phthalate). MRLs are published by ATSDR to serve as a screening tool to help public health professionals evaluate sites and are not intended as a cleanup standard. Using the standard MTCA risk based formulas, an MRL of 0.4 mg/kg/dy would correspond with a drinking water screening level of 6,400 ug/L (for di-n-octyl phthalate, using a body weight of 16 kg [for a child] and a drinking water ingestion rate of 1 L/dy).

The single well re-sampled in October 2012 (re-sampling from well HLMW-3A due to a prior broken bottle) showed a similar trend with five SVOCs detected in the sample (HLMW-3A) and six SVOCs detected in the method blank (MB-3454, 10/16/12). The analytes detected were bis(2-ethylhexyl) phthalate, benzyl butyl phthalate, bis(2-ethylhexyl)adipate, di-n-butyl phthalate, diethylphthalate and all were below the respective MCL or MTCA Method B criteria. Since these five analytes were also detected in the method blank they are therefore reported as non-detect ("ND" flagged, after a 10x factor was applied to the detections observed in the method blank),

[1] CERCLA requires that the Agency for Toxic Substances and Disease Registry (ATSDR) and EPA develop a list of substances most commonly found at CERCLA sites and prepare toxicological profiles for each substance to ascertain significant human exposure levels and associated health effects. ATSDR Minimal Risk Levels (MRLs) were developed as a response to this mandate and ATSDR has adopted a practice similar to EPA's Reference Dose (RfD) and Reference Concentration (RfC) for deriving substance-specific health guidance levels. An ATSDR MRL is an estimate of the "daily human exposure to a substance that is likely to be without appreciable risk of adverse health effects over a specified duration of exposure." ATSDR uses a conservative (i.e., protective) approach to address inherent uncertainties consistent with the public health principle of prevention. These substance-specific estimates, which are intended to serve as screening levels, are used by ATSDR health assessors to identify contaminants and potential health effects that may be of concern at sites. ATSDR guidance notes that MRLs are not intended to define clean up or action levels. The MRLs are set below levels that might cause adverse health effects in the people most sensitive to such substance-induced effects. MRLs are generally based on the most sensitive substance-induced end point considered to be of relevance to humans. Exposure to a level above the MRL does not mean that adverse health effects will occur. MRLs often must be based on animal studies because sufficient/relevant human studies are lacking and in the absence of evidence to the contrary, ATSDR assumes that humans are more sensitive than animals to the effects of hazardous substances and that certain persons may be particularly sensitive. As a consequence the resulting MRL may commonly be as much as a hundredfold below levels shown to be nontoxic in laboratory animals.

but the results are still described in this report for completeness. Table 2-3 shows the analytical results for SVOCs detected in groundwater samples from September and October 2012.

Analyses for total metals showed detections for antimony, arsenic, beryllium, cadmium, chromium, copper, lead, nickel, and zinc. None of the total metals detections exceeded MCLs (or MTCA Method B criteria) except for arsenic and lead in well HLMW-2A and arsenic in HLMW-3A (both were turbid samples) which exceeded the arsenic MCL of 10 ug/L and the lead MCL of 15 ug/L. Total metals results from HLMW-2A showed 14.6 ug/L arsenic and 16.1 ug/L lead while HLMW3A showed 12.1 ug/L of arsenic. Both samples were run for the dissolved metals analysis which resulted in levels below the MCL and MTCA Method B criteria. HLMW2-a showed non-detect for arsenic and 0.738 ug/L for lead while HLMW-3A showed 0.912 ug/L for arsenic. Analytical results for metals (total and dissolved are presented in Table 2-4). The complete laboratory analytical reports can be found at the end of this addendum.

With one exception, all of the MEL results (for VOCs and all other SVOCs) were consistent with the results from Fremont Analytical. The MEL results (from the September sampling) for one single analyte, bis(2-ethylhexyl) phthalate, from the split sample taken at HLMW-5B differed significantly from the results of Fremont Analytical (and similarly, was also different from all historical monitoring data from the site). This same sample (reported by MEL) also used 40:1 dilution before analysis. This analyte, bis(2-ethylhexyl) phthalate is common in plastics and a common lab contaminant that is frequently identified in method blanks. The lab results from the regular lab used on the project (Fremont Analytical) did identify and report bis(2-ethylhexyl) phthalate at 1.51 ug/L in the method blank. Fremont Analytical did not use a 40:1 dilution on the sample.

After discussion of these results with the Ecology PM (the split sample comparison), it was ultimately decided to re-sample this well. Re-sampling was completed on 09 November 2012, CALIBRE and Ecology were on site to collect a new SVOC sample from HLMW-5B. In the results from this re-sampling event, both labs (MEL and Fremont Analytical) reported bis(2-ethylhexyl) phthalate as non-detect.

While on site CALIBRE also collected an equipment rinsate sample to provide a QA check on field procedures as a possible source of contamination. A total of five SVOCs (bis(2-ethylhexyl) phthalate, bis(2-ethylhexyl)adipate, di-n-butyl phthalate, diethylphthalate, and phenanthrene) were detected in the HLMW-5B sample. These same five SVOCs as well as benzyl butylphthalate and di-n-octyl-phthalate were detected in the rinsate sample and the lab method blank. The detections reported (in the field sample from HLMW5B, the rinsate blank, and the method blank) are of similar concentration (and all are below the respective MCL or MTCA Method B criteria). Since these five analytes were also detected in the method blank they are therefore reported as non-detect (“ND” flagged, after a 10x factor was applied to the detections observed in the method blank), but the results are still described in this report for completeness. The split sample collected by Ecology and analyzed at MEL showed all results below the reporting limit as well. Table 2-5 shows the analytical results for SVOCs detected in HLMW-5B and the rinsate sample from November 2012.

4.0 SUMMARY

The third quarterly sampling results indicate all VOCs and all SVOCs meet all MCL/MTCA Method B criteria at all wells.

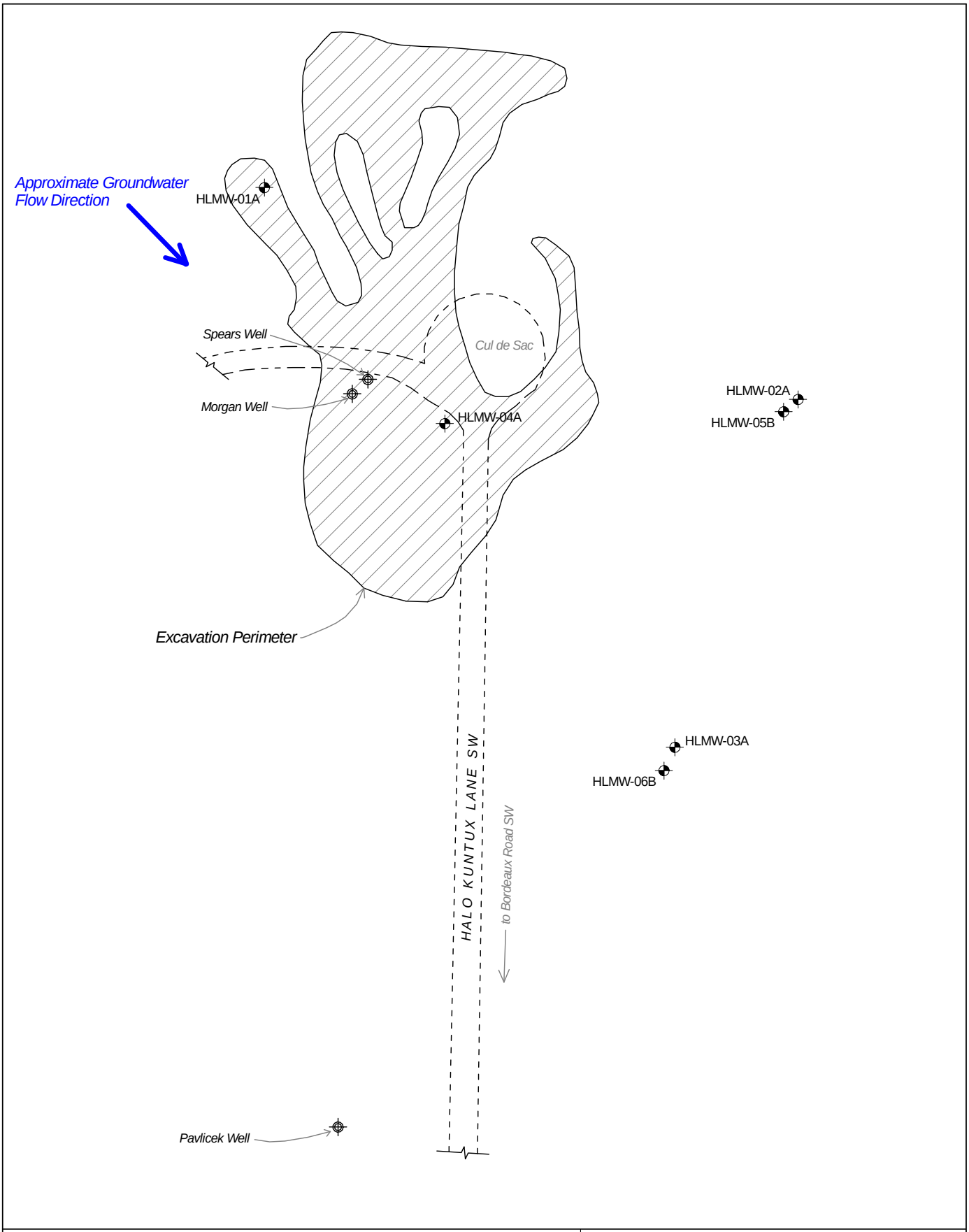
Results from two wells indicated metals (as total metals) that slightly exceeded MCLs (wells HLMW-2A and HLMW-3A). These wells had concentrations of arsenic and lead above the MCL in the total metals analysis; however the samples were extremely turbid and the dissolved metals analysis showed these two compounds at levels that were either non detect or below the MCL. The infrequent detections of total metals in 2 samples at concentrations that exceed Method B criteria are the result of turbid groundwater samples which include soil particles that contain naturally occurring metals. Dissolved metal analyses were all below all MTCA criteria for all analytes. Consistent with the MTCA objectives and requirements listed in *WAC 173-340-720 Ground water cleanup standards (9) Compliance monitoring,* the filtered samples provide a more representative measure of ground water quality.

The fourth quarterly sampling event is scheduled to take place in January 2012.

5.0 REFERENCES

ATSDR 2012. Minimal Risk Levels (MRLs), Agency for Toxic Substances and Disease Registry, February 2012.

CALIBRE 2012, Fiberglass Debris Landfill Remedial Action Report, Hytec – Littlerock Site, Halo-Kuntux Lane, Littlerock, Washington. December 2012.



Groundwater Monitoring Well

0 50 100 150 FEET

N

CALIBRE

Calibre Systems
16935 SE 39th St
Bellevue, WA 98008

REVISION NO.:	DATE:	ACAD FILE:
0	1/3/2013	Fig3_HLFD_Excavat_Sample_20120329.SKF

Hytec Fiberglass Debris Landfill Site
Confirmational Monitoring Sample Locations/Depths

DES'D:	LOCATION:	PROJECT NO.:
MM	Littlerock, WA	K0308000
CHK'D: JD		FIGURE: 1

Table 2-1 Depth to Water and Field Water Quality Parameters, Fiberglass Debris Landfill
September, October and November 2012 Sampling Event

Well	Sampling Date	Depth to Water* 9/27/12 (feet)	Top of Casing Elevation* (feet)	pH	DO (mg/L)	Conductivity (mS/cm)	Temperature (oC)	eH/ORP (m/V)	Turbidity (NTU)	Volume Purged (gallons)
HLMW-1A	9/27/2012	14.86	234	5.32	7.54	0.116	9.8	187	667	2
HLMW-2A	9/27/2012	33.61	231.81	4.72	10.16	0.047	8.62	213	>999	3
HLMW-3A	9/27/2012	52.87	229.64	4.98	11.44	0.097	7.78	232	536	4.5
HLMW-3A	10/10/2012	53.21	229.64	5.73	5.83	0.093	7.03	210	549	3
HLMW-4A	9/27/2012	25.36	230.99	4.86	4.54	0.096	11.83	202	14.6	3
HLMW-5B	9/27/2012	52.42	NA	6.79	8.37	0.188	10.49	11	98.6	1.5
HLMW-5B	11/9/2012	50	NA	6.04	1.91	0.212	8.55	161	46.5	125
HLMW-6B	9/27/2012	53.45	NA	7.19	10.59	0.225	9.3	149	8.4	6
Pavlicek	9/27/2012	NA	NA	5.64	12.28	0.084	7.71	177	3	150
Spears	9/27/2012	52.42	NA	6.39	2.37	0.195	9.08	125	10.7	2
Morgan	9/27/2012	NA	230.6	7.55	12.05	0.217	9.52	84	2.9	150

NOTES:

* Depth to water measurements from top of casing (TOC)

Field measured water quality parameters presented in this table are the last readings recorded before sample collection.

All field measured water quality parameters collected during purging are presented in the Well Sampling Data Sheets.

All elevations are in feet referenced to NGVD 29

mg/L = milligrams per liter

mS/cm = millisiemens per centimeter

°C = degrees centigrade

m/V = millivolts

NTU = Nephelometric Turbidity Units

NA = not available

Table 2-2 VOCs Detected in Groundwater, Fiberglass Debris Landfill
September 2012 Sampling Event
(All concentrations in ug/L)

Well	Sampling Date	Trichlorofluoromethane (Freon 11)
HLMW-1A	9/27/2012	ND
HLMW-2A	9/27/2012	1.41
HLMW-3A	9/27/2012	3.76
HLMW-4A*	9/27/2012	9.20/8.39
HLMW-5B	9/27/2012	ND
HLMW-6B	9/27/2012	1.17
Morgan	9/27/2012	ND
Spears	9/27/2012	ND
Pavlicek	9/27/2012	ND
Lab Method Blank (MB-R5936)	*10/1/2012*	*ND*
HLMW4A**	9/27/2012	8.8
*Lab Method Blank (B12J070-BLK1)***	*10/5/2012*	*2.0 U*
MTCA Method B Criteria		2,400

Notes:
The data listed above include results from 2 analytical labs (Fremont Analytical and Manchester Environmental Lab [MEL]), the 2 labs use different data quality flags for non-detect, see below and attached lab reports

ND = non detect, & U = non detect
* = a field duplicate sample was collected from HLMW-04, both primary and duplicate results are presented

All other VOCs (from the EPA method 8260C analyte list) were less than the method detection limit (non-detect)
** = Ecology split-sample results from MEL

Table 2-3 SVOCs Detected in Groundwater, Fiberglass Debris Landfill
September and October 2012 Sampling
(all concentrations in ug/L)

Well	Sampling Date	bis(2-Ethylhexyl) phthalate	Benzyl Butyl phthalate	bis(2-Ethylhexyl) adipate	Di-n-butyl phthalate	Diethyl phthalate	Dimethyl phthalate	Di-n-octyl phthalate	Fluoranthene	Phenanthrene	Phenol
HLMW-1A	9/27/2012	1.31 BND	0.287 JND	0.165 JND	0.940 JND	0.357 JND	ND	0.145 JND	ND	0.0534 JND	ND
HLMW-2A	9/27/2012	1.13 BND	0.383 JND	0.477 JND	1.22 BND	0.456 JND	ND	0.171 JND	ND	ND	ND
HLMW-3A	10/10/2012	0.968 JND	0.528 JND	0.894 JND	0.606 JND	0.152 JND	ND	ND	ND	ND	ND
HLMW-4A*	9/27/2012	0.776 JND/ 0.908 JND	0.267 JND/ 0.290 JND	0.317 JND/ 0.278 JND	1.16 BND/ 1.27 BND	0.377 JND/ 0.419 JND	ND/ ND	0.199 JND/ 0.530 JND	0.0604 JND/ ND	0.186 JND/ 0.0619 JND	0.350 JND/ ND
HLMW-5B	9/27/2012	1.04 BND	0.216 JND	0.225 JND	1.54 BND	1.04 ND	0.0985 J	0.107 JND	ND	0.155 JND	ND
HLMW-6B	9/27/2012	3.04 BND	0.313 JND	0.432 JND	1.09 BND	0.316 JND	ND	0.469 JND	ND	0.0683 JND	ND
Morgan	9/27/2012	0.928 JND	0.836 JND	0.224 JND	1.80 BND	0.681 JND	ND	0.115 JND	ND	0.135 JND	ND
Spears	9/27/2012	0.588 JND	0.160 JND	0.132 JND	0.822 JND	0.210 JND	ND	ND	ND	ND	ND
Pavlicek	9/27/2012	1.04 BND	0.482 JND	0.263 JND	0.897 JND	0.280 JND	ND	11.7	ND	0.0617 JND	ND
Method Blank (MB-3344)	*10/3/2012*	*1.51*	*0.903 J*	*0.662 J*	*1.83*	*0.637 J*	*ND*	*0.182 J*	*0.105 J*	*0.159 J*	*0.543 J*
Method Blank (MB-3454)	*10/16/2012*	*0.294 J*	*0.121 J*	*0.643 J*	*0.465 J*	*0.110 J*	*ND*	*0.0576 J*	*ND*	*ND*	*ND*
HLMW-5B**	9/27/2012	78 J **(R)**	0.35 U	-	0.31 UJ	0.17 U	0.17 U	0.87 UJ	0.17 U	0.17 U	0.35 U
HLMW-4A**	9/27/2012	0.33 U	0.33 U	-	0.29 UJ	0.17 U	0.17 U	0.83 UJ	0.17 U	0.17 U	0.33 U
*Method Blank (B12I267-BLK1) ** *	*9/28/2012*	*0.33 U*	*0.33 U*	-	*0.35*	*0.17 U*	*0.17 U*	*0.83 UJ*	*0.17 U*	*0.17 U*	*0.33 U*
MTCA Method B Criteria		6	46	73	1,600	12,800	NV	NV	640	NV	2,400
EPA MCL (or other, if no MCL exists)		6	NV	400	NV	30,000 DWEL	NV	NV	NV	NV	NV

Notes:

The data listed above include results from 2 analytical labs (Fremont Analytical and Manchester Environmental Lab [MEL]), the 2 labs use different data quality flags for non-detect, see below and attached lab reports

ND = non detect, & U = non detect

J = Analyte detected below quantitation limits

B = Analyte detected in the associated Method Blank

JND/BND = Analyte observed as non-detect after 10x factor was applied to the detections observed in the Method Blank

NV = no value (no regulatory criteria was identified)

R = Rejected data

All other SVOCs (from the EPA method 8270D analyte list) were less than the method detection limit (non-detect).

DWEL= Drinking Water Equivalent Level ; A lifetime exposure concentration protective of adverse, noncarcinogenic health effects, that assumes all of the exposure to a contaminant is from drinking water. (US EPA)

* = a field duplicate sample was collected from HLMW-04, both primary and duplicate results are presented

** = Ecology split-sample results from MEL

Table 2-4 Metals Detected in Groundwater, Fiberglass Debris Landfill
September 2012 Sampling

Well	Sampling Date	Antimony		Arsenic		Beryllium		Cadmium		Chromium	
		Total	Diss.	Total	Diss.	Total	Diss.	Total	Diss.	Total	Diss.
HLMW-1A	9/27/2012	0.0695 J	0.0995 J	1.44	1.23	0.119 J	ND	0.0445 J	ND	12.5	2.8
HLMW-2A	9/27/2012	0.256	NT	14.6	ND	1.44	NT	0.389	NT	62.1	NT
HLMW-3A	9/27/2012	0.275	0.0415 J	12.1	0.912 J	0.624	ND	0.699	ND	30	1.93
HLMW-4A*	9/27/2012	ND/ND	NT	0.509 J/ 0.501 J	NT	ND/ND	NT	ND/ND	NT	2.13/ 1.96	NT
HLMW-5B	9/27/2012	0.392	0.29	1.67	1.79	ND	ND	0.512	0.0615 J	3.43	1.98
HLMW-6B	9/27/2012	0.251	NT	2.59	NT	ND	NT	0.138 J	NT	2.33	NT
Morgan	9/27/2012	ND	NT	0.909 J	NT	ND	NT	ND	NT	1.44	NT
Spears	9/27/2012	0.636	NT	2.46	NT	ND	NT	0.0295 J	NT	3.29	NT
Pavlicek	9/27/2012	0.159 J	NT	0.854 J	NT	ND	NT	ND	NT	1.89	NT
Method Blank (MB-3326 Total; MB-3335 Dissolved)	*10/2/2012*	*ND*	*0.00480 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.273 J*	*0.278 J*
MTCA Method B Criteria		6		10		4		5		100	
EPA MCL (ug/L)		6		10		4		5		100	

Notes:

ND = non-detect
NT = not tested, the dissolved analysis only completed if sample appeared turbid and/or total metals analysis excceded a regulatory criteria
NV = no value
Diss. = dissolved
SMCL = Secondary Maximum Contaminant Level
MTCA Regulatory Limit* = MTCA Method B
* = a field duplicate sample was collected from HLMW-04, both primary and duplicate results are presented

Table 2-4 continued
September 2012 Sampling
(all concentrations in ug/L)

Well	Sampling Date	Copper		Lead		Nickel		Zinc	
		Total	**Diss.**	**Total**	**Diss.**	**Total**	**Diss.**	**Total**	**Diss.**
HLMW-1A	9/27/2012	12.3	4.09	0.989 J	ND	9.78	0.804	47.6	23.6
HLMW-2A	9/27/2012	112	NT	16.1	0.738 J	97.6	NT	237	NT
HLMW-3A	9/27/2012	62.1	ND	6.42	ND	59.3	1.37	125	50.3
HLMW-4A*	9/27/2012	0.663/ 0.626	NT	0.116 J/ ND	NT	0.898/ 1.2	NT	45.3/ 41.4	NT
HLMW-5B	9/27/2012	4.37	ND	0.879 J	0.181 J	5.91	3.44	69	64.3
HLMW-6B	9/27/2012	ND	NT	0.622 J	NT	1.7	NT	41.7	NT
Morgan	9/27/2012	ND	NT	0.276 J	NT	ND	NT	33.1	NT
Spears	9/27/2012	ND	NT	2.45	NT	1.05	NT	30.1	NT
Pavlicek	9/27/2012	4.57	NT	0.352 J	NT	0.545 ND*	NT	30.6	NT
Method Blank (MB-3326 Total, MB-3335 Dissolved)	*10/2/2012*	*ND*	*ND*	*ND*	*ND*	*0.112 J*	*ND*	*0.996 J*	*0.820 J*
MTCA Method B Criteria		1,300		15		100		4,800	
EPA MCLs (ug/L)		1300 (Action Level)		15 (Action Level)		100 (proposed)		5,000 (SMCL)	

Notes:

ND = non-detect
ND* = Analyte noted as non-detect after 5x factor was applied to the detections observed in the Method Blank
NT = not tested, the dissolved analysis only completed if sample appeared turbid and/or total metals analysis excceded a regulatory criteria
NV = no value
Diss. = dissolved
SMCL = Secondary Maximum Contaminant Level
MTCA Regulatory Limit* = MTCA Method B
* = a field duplicate sample was collected from HLMW-04, both primary and duplicate results are presented

Table 2-5 SVOCs Detected in Groundwater, Fiberglass Debris Landfill

November 2012 Sampling

(all concentrations in ug/L)

Well	Sampling Date	bis(2-Ethylhexyl) phthalate	Benzyl Butyl phthalate	bis(2-Ethylhexyl) adipate	Di-n-butyl phthalate	Diethyl phthalate	Dimethyl phthalate	Di-n-octyl phthalate	Fluoranthene	Phenanthrene	Phenol
HLMW-5B	11/9/2012	0.221 JND	ND	0.0895 JND	0.261 JND	0.0625 JND	ND	ND	ND	0.0428 JND	ND
Equipment Rinsate Sample	11/9/2012	0.367 JND	0.103 J	0.0931 JND	0.343 JND	0.0623 JND	ND	0.0274 JND	ND	ND	ND
Lab Method Blank(MB-3640)	*11/14/2012*	*0.170 J*	*ND*	*0.0596 J*	*0.235 J*	*0.0439 J*	*ND*	*0.0295 J*	*ND*	*0.0275 J*	*ND*
HLMW-5B**	11/9/2012	0.31 UJ	0.31 U	-	0.077 UJ	0.15 UJ	0.15 UJ	1.5 U	0.15 UJ	0.15 UJ	0.31 U
*Method Blank (B12K086-BLK1)***	*11/13/2012*	*0.11 J*	*0.33 U*	*-*	*0.31 J*	*0.17 UJ*	*0.17 UJ*	*1.7 U*	*0.17 UJ*	*0.17 UJ*	*0.33 U*
MTCA Method B Criteria		6	46	73	1,600	12,800	NV	NV	640	NV	2,400
EPA MCL (or other, if no MCL exists)		6	NV	400	NV	30,000 DWEL	NV	NV	NV	NV	NV

Notes:

The data listed above include results from 2 analytical labs (Fremont Analytical and Manchester Environmental Lab [MEL]), the 2 labs use different data quality flags for non-detect, see below and attached lab reports

ND = non detect, & U = non detect

J = Analyte detected below quantitation limits

B = Analyte detected in the associated Method Blank

JND/BND = Analyte observed as non-detect after 10x factor was applied to the detections observed in the Method Blank

NV = no value (no regulatory criteria was identified)

All other SVOCs (from the EPA method 8270D analyte list) were less than the method detection limit (non-detect).

DWEL= Drinking Water Equivalent Level ; A lifetime exposure concentration protective of adverse, noncarcinogenic health effects, that assumes all of the exposure to a contaminant is from drinking water. (US EPA)

**= Ecology split-sample results from MEL

September 2012

Well Sample Data Sheets and Laboratory Analytical Reports

Well Sampling Data Sheet

Date	09 / 27 /2012	Site Location	Hytec
Samplers	JD + CG	Well ID	PAWE
Casing Material		Constructed Depth	
Casing Diameter		Condition of Well	

Field Measurements:

Time	—	Depth Measured From:	
Depth to Water	—		Top of access port
			Mark on PVC casing
			Mark of protective casing
			Other

Purging Information:

Pump:		Dedicated		Non-dedicated			
Bailer:		PVC		Stainless Steel		Other:	
Purge Start Time		Purge End Time					
Approximate Gallons Purged							

Water Monitoring Conditions:

Time	0938	0943	0948	0953			
pH	7.31	6.41	6.01	5.64			
Conductivity	0.109	0.105	0.100	0.084			
Turbidity	3.4	2.7	2.8	3.0			
D.O.	16.34	11.30	7.07	12.28			
Temperature	9.21	8.37	7.93	7.71			
ORP	124	157	167	177			
Purge Rate	10gal/min	"	"	"			
Gallons Purged	0	50	100	150			

Sampling Data:

Time	0953	Sample ID	PAWE-92712
pH	5.64	Duplicates	
Conductivity	0.084	QA/QC Volumes	
Turbidity	3.0		
D.O.	12.28		
Temperature	7.71		
ORP	177		

Sampling Device:

PVC Bailer		SS Bailer		Dedicated Pump		Teflon Bailer	

Analyses to be Performed:

Volatile Organics	X	VOCs 8260B	SVOCs by 8270C	X	Sulfate 375.2		
Total Metals	X	RCRA 8 or Priority Pollutants	SVOCs by 8270C/SIM		RSK-175 (methane, ethane, ethene)		
Dissolved Metals			Total Organic Carbon 415.1		Other		

Sampling Notes:

Well Diameter	Well Volume (Gal/ft)
1 inch	0.041
2 inch	0.163
4 inch	0.653
6 inch	1.469

Or:(total depth(ft) - DTW(ft)) x Well Dia^2 x 0.0408 = 1 Well Volume

Well Sampling Data Sheet

Date	9 / 27 /2012	Site Location	Hytec
Samplers	JD + CG	Well ID	HLMW-01A
Casing Material	PVC	Constructed Depth	23'
Casing Diameter	2"	Condition of Well	

Field Measurements:

Time	0736	Depth Measured From:	
Depth to Water	14.86		Top of access port
		X	Mark on PVC casing
			Mark of protective casing
			Other

Purging Information:

Pump:		Dedicated		Non-dedicated			
Bailer:		PVC		Stainless Steel		Other:	
Purge Start Time			Purge End Time				
Approximate Gallons Purged							

Water Monitoring Conditions:

Time	0740	0745	0750	0755	0800		
pH	5.63	5.41	5.38	5.35	5.32		
Conductivity	0.109	0.117	0.117	0.116	0.116		
Turbidity	588	622	7999	870	667		
D.O.	11.02	8.42	8.02	7.97	7.59		
Temperature	10.01	10.18	10.03	9.85	9.80		
ORP	173	165	175	182	187		
Purge Rate							
Gallons Purged	0	0.4	0.8	1.2	2.0		

Sampling Data:

Time	0800	Sample ID	HLMW-01A-92712
pH	5.32	Duplicates	
Conductivity	0.116	QA/QC Volumes	
Turbidity	667		
D.O.	7.54		
Temperature	9.80		
ORP	187		

Sampling Device:

PVC Bailer		SS Bailer		Dedicated Pump		Teflon Bailer	

Analyses to be Performed:

Volatile Organics	+	VOCs 8260B	SVOCs by 8270C	+	Sulfate 375.2		
Total Metals	+	RCRA 8 or Priority Pollutants	SVOCs by 8270C/SIM		RSK-175 (methane, ethane, ethene)		
Dissolved Metals	+		Total Organic Carbon 415.1		Other		

Sampling Notes:

Well Diameter	Well Volume (Gal/ft)
1 inch	0.041
2 inch	0.163
4 inch	0.653
6 inch	1.469

Or:(total depth(ft) - DTW(ft)) x Well Dia^2 x 0.0408 = 1 Well Volume

Well Sampling Data Sheet

Date	09/27/2012	Site Location	Hytec
Samplers	JD+CG	Well ID	HLMW-02A
Casing Material	PVC	Constructed Depth	39'
Casing Diameter	2"	Condition of Well	

Field Measurements:

Time	1016	Depth Measured From:	
Depth to Water	33.61		Top of access port
		X	Mark on PVC casing
			Mark of protective casing
			Other

Purging Information:

Pump:		Dedicated		Non-dedicated			
Bailer:		PVC		Stainless Steel		Other:	
Purge Start Time		Purge End Time					
Approximate Gallons Purged							

Water Monitoring Conditions: 1044 1049 1054 1059

Time	1024	~~1024~~	~~1034~~	1054			
pH	5.64	4.55	4.78	4.78	4.72		
Conductivity	0.056	0.047	0.058	0.055	0.047		
Turbidity	7999	971	7999	7999	7999		
D.O.	12.74	11.62	10.06	10.04	10.16		
Temperature	9.10	10.44	8.58	8.55	8.62		
ORP	205	243	174	192	213		
Purge Rate	—	—		—	—		
Gallons Purged	0	0.2	2.0	2.5	3.0		

Sampling Data:

Time	1059	Sample ID	HLMW-02A-92712
pH	4.72	Duplicates	
Conductivity	0.047	QA/QC Volumes	
Turbidity	7999		
D.O.	10.16		
Temperature	8.62		
ORP	213		

Sampling Device:

PVC Bailer		SS Bailer		Dedicated Pump		Teflon Bailer	

Analyses to be Performed:

Volatile Organics	+	VOCs 8260B	SVOCs by 8270C	+	Sulfate 375.2		
Total Metals	+	RCRA 8 or Priority Pollutants	SVOCs by 8270C/SIM		RSK-175 (methane, ethane, ethene)		
Dissolved Metals			Total Organic Carbon 415.1		Other		

Sampling Notes:

Very turbid water

Well Diameter	Well Volume (Gal/ft)
1 inch	0.041
2 inch	0.163
4 inch	0.653
6 inch	1.469

Or:(total depth(ft) - DTW(ft)) x Well Dia^2 x 0.0408 = 1 Well Volume

Well Sampling Data Sheet

Date	9 / 27 /2012	Site Location	Hytec
Samplers	JD + CG	Well ID	HLMW-03A
Casing Material	PVC	Constructed Depth	57'
Casing Diameter	2"	Condition of Well	

Field Measurements:

Time	1528	Depth Measured From:	
Depth to Water	52.87		Top of access port
		X	Mark on PVC casing
			Mark of protective casing
			Other

Purging Information:

Pump:		Dedicated		Non-dedicated			
Bailer:		PVC		Stainless Steel		Other:	
Purge Start Time			Purge End Time				
Approximate Gallons Purged							

Water Monitoring Conditions:

Time	1541	1546	1551	1556			
pH	7.38	5.58	5.11	4.98			
Conductivity	0.094	0.103	0.096	~~0.097~~	0.097		
Turbidity	304	~~0.07999~~	7999	536			
D.O.	10.99	11.09	11.52	11.47			
Temperature	12.02	7.84	7.81	7.78			
ORP	152	214	229	232			
Purge Rate							
Gallons Purged	0	1.5	2.5	4.5			

Sampling Data:

Time	1556	Sample ID	HLMW-03A-92712
pH	4.98	Duplicates	
Conductivity	0.097	QA/QC Volumes	
Turbidity	536		
D.O.	11.47		
Temperature	7.78		
ORP	232		

Sampling Device:

PVC Bailer		SS Bailer		Dedicated Pump		Teflon Bailer	

Analyses to be Performed:

Volatile Organics	X	VOCs 8260B	SVOCs by 8270C	X	Sulfate 375.2		
Total Metals	X	RCRA 8 or Priority Pollutants	SVOCs by 8270C/SIM		RSK-175 (methane, ethane, ethene)		
Dissolved Metals			Total Organic Carbon 415.1		Other		

Sampling Notes:

~~very~~ turbidity is high

Well Diameter	Well Volume (Gal/ft)
1 inch	0.041
2 inch	0.163
4 inch	0.653
6 inch	1.469

Or:(total depth(ft) - DTW(ft)) x Well Dia^2 x 0.0408 = 1 Well Volume

Well Sampling Data Sheet

Date	9/27/2012	Site Location	Hytec
Samplers	JD + CG	Well ID	HLMW-04A
Casing Material	PVC	Constructed Depth	30.5'
Casing Diameter	2"	Condition of Well	

Field Measurements:

Time	1247	Depth Measured From:	
Depth to Water	25.36		Top of access port
			Mark on PVC casing
			Mark of protective casing
			Other

Purging Information:

Pump:		Dedicated		Non-dedicated			
Bailer:		PVC		Stainless Steel		Other:	
Purge Start Time		Purge End Time					
Approximate Gallons Purged							

Water Monitoring Conditions:

Time	1252	1257	1302	1307			
pH	6.54	5.14	4.92	4.86			
Conductivity	0.099	0.095	0.095	0.096			
Turbidity	392	36.3	20.2	14.6			
D.O.	5.79	4.73	4.40	4.54			
Temperature	13.36	11.83	11.77	11.83			
ORP	136	180	144	202			
Purge Rate	-	-	-	-			
Gallons Purged	0	1.0	2.0	3.0			

Sampling Data:

Time	1307	Sample ID	HLMW-04A-92712
pH	4.86	Duplicates	HLMW-04B-92712 time 0700
Conductivity	0.096	QA/QC Volumes	
Turbidity	14.6		
D.O.	4.54		
Temperature	11.83		
ORP	202		

Sampling Device:

PVC Bailer		SS Bailer		Dedicated Pump		Teflon Bailer	

Analyses to be Performed:

Volatile Organics	X	VOCs 8260B	SVOCs by 8270C	X	Sulfate 375.2	
Total Metals	X	RCRA 8 or Priority Pollutants	SVOCs by 8270C/SIM		RSK-175 (methane, ethane, ethene)	
Dissolved Metals	//		Total Organic Carbon 415.1		Other	

Sampling Notes:

~~Dissolved unfiltered~~ CG
NO Dissolved
total only

Well Diameter	Well Volume (Gal/ft)
1 inch	0.041
2 inch	0.163
4 inch	0.653
6 inch	1.469

Or:(total depth(ft) - DTW(ft)) x Well Dia^2 x 0.0408 = 1 Well Volume

Well Sampling Data Sheet

Date	9/27/2012	Site Location	Hytec
Samplers	JD + CG	Well ID	HLMW-05B
Casing Material	Steel	Constructed Depth	241'
Casing Diameter	6"-4"	Condition of Well	

Field Measurements:

Time	1117	Depth Measured From:	
Depth to Water	52.421		Top of access port
			Mark on PVC casing
			Mark of protective casing
			Other

Purging Information:

Pump:		Dedicated		Non-dedicated			
Bailer:		PVC		Stainless Steel		Other:	
Purge Start Time		Purge End Time					
Approximate Gallons Purged							

Water Monitoring Conditions:

Time	1127	1132	1137	1142			
pH	5.32	5.86	6.43	6.79			
Conductivity	0.180	0.185	0.187	0.188			
Turbidity	331	218	111	98.4			
D.O.	11.08	11.21	9.73	8.37			
Temperature	11.33	10.62	10.50	10.49			
ORP	140	91	30	11			
Purge Rate		-	-	-			
Gallons Purged	0	0.2	1.0	1.5			

Sampling Data:

Time	1142	Sample ID	HLMW-05B-92712
pH	6.79	Duplicates	
Conductivity	0.188	QA/QC Volumes	
Turbidity	98.6		
D.O.	8.37		
Temperature	10.49		
ORP	11		

Sampling Device:

PVC Bailer		SS Bailer		Dedicated Pump		Teflon Bailer	

Analyses to be Performed:

Volatile Organics	X	VOCs 8260B	SVOCs by 8270C	X	Sulfate 375.2		
Total Metals	X	RCRA 8 or Priority Pollutants	SVOCs by 8270C/SIM		RSK-175 (methane, ethane, ethene)		
Dissolved Metals	X		Total Organic Carbon 415.1		Other		

Sampling Notes:

foot valve came off at bottom of well

Well Diameter	Well Volume (Gal/ft)
1 inch	0.041
2 inch	0.163
4 inch	0.653
6 inch	1.469

Or:(total depth(ft) - DTW(ft)) x Well Dia^2 x 0.0408 = 1 Well Volume

Well Sampling Data Sheet

Date	9/27/2012	Site Location	Hytec
Samplers	JD+CG	Well ID	HLMW-06B
Casing Material	Steel	Constructed Depth	183"
Casing Diameter	6"-4"	Condition of Well	

Field Measurements:

Time	1506	Depth Measured From:	
Depth to Water	53.45	X	Top of access port
			Mark on PVC casing
			Mark of protective casing
			Other

Purging Information:

Pump:		Dedicated		Non-dedicated			
Bailer:		PVC		Stainless Steel		Other:	
Purge Start Time			Purge End Time				
Approximate Gallons Purged							

Water Monitoring Conditions:

Time	1509	1514	1519	1524			
pH	5.45	6.66	7.03	7.19			
Conductivity	0.062	0.224	0.227	0.225			
Turbidity	732	54.1	45.9	8.4			
D.O.	12.03	12.45	11.88	10.59			
Temperature	12.14	7.68	Not 7.76	9.30			
ORP	216	179	161	149			
Purge Rate	—						
Gallons Purged	0	2.5	4.4				

Sampling Data:

Time	1524	Sample ID	HLMW-06B-92712
pH	7.19	Duplicates	
Conductivity	0.225	QA/QC Volumes	
Turbidity	8.4		
D.O.	10.59		
Temperature	9.30		
ORP	149		

Sampling Device:

PVC Bailer		SS Bailer		Dedicated Pump		Teflon Bailer	

Analyses to be Performed:

Volatile Organics	X	VOCs 8260B	SVOCs by 8270C	X	Sulfate 375.2		
Total Metals	X	RCRA 8 or Priority Pollutants	SVOCs by 8270C/SIM		RSK-175 (methane, ethane, ethene)		
Dissolved Metals			Total Organic Carbon 415.1		Other		

Sampling Notes:

Well Diameter	Well Volume (Gal/ft)
1 inch	0.041
2 inch	0.163
4 inch	0.653
6 inch	1.469

Or:(total depth(ft) - DTW(ft)) x Well Dia^2 x 0.0408 = 1 Well Volume

Well Sampling Data Sheet

Date	9 / 27 /2012	Site Location	Hytec
Samplers	JD + CG	Well ID	MOWE
Casing Material		Constructed Depth	
Casing Diameter		Condition of Well	

Field Measurements:

Time		Depth Measured From:	
Depth to Water			Top of access port
			Mark on PVC casing
			Mark of protective casing
			Other

Purging Information:

Pump:		Dedicated		Non-dedicated			
Bailer:		PVC		Stainless Steel		Other:	
Purge Start Time		Purge End Time					
Approximate Gallons Purged							

Water Monitoring Conditions:

Time	0900	0905	0910	0915			
pH	6.61	7.12	7.46	7.55			
Conductivity	0.234	0.220	0.217	0.217			
Turbidity	28.4	13.1	1.9	2.4			
D.O.	10.81	12.42	6.62	12.05			
Temperature	11.93	10.43	9.70	9.52			
ORP	127	102	89	84			
Purge Rate	10gal/min	"	"	"			
Gallons Purged	0	50	100	150			

Sampling Data:

Time	0915	Sample ID	MW-MOWE-92712
pH	7.55	Duplicates	
Conductivity	0.217	QA/QC Volumes	MS/MSD
Turbidity	2.9		
D.O.	12.05		
Temperature	9.52		
ORP	84		

Sampling Device:

PVC Bailer		SS Bailer		Dedicated Pump		Teflon Bailer	

Analyses to be Performed:

Volatile Organics	+	VOCs 8260B	SVOCs by 8270C	+	Sulfate 375.2		
Total Metals	+	RCRA 8 or Priority Pollutants	SVOCs by 8270C/SIM		RSK-175 (methane, ethane, ethene)		
Dissolved Metals			Total Organic Carbon 415.1		Other		

Sampling Notes:

Well Diameter	Well Volume (Gal/ft)
1 inch	0.041
2 inch	0.163
4 inch	0.653
6 inch	1.469

Or:(total depth(ft) - DTW(ft)) x Well Dia^2 x 0.0408 = 1 Well Volume

Well Sampling Data Sheet

Date	09/27/2012	Site Location	Hytec
Samplers	JDTCG	Well ID	SPWE
Casing Material		Constructed Depth	
Casing Diameter		Condition of Well	

Field Measurements:

Time	0825	Depth Measured From:	
Depth to Water	52.42'	X	Top of access port
			Mark on PVC casing
			Mark of protective casing
			Other

Purging Information:

Pump:		Dedicated		Non-dedicated			
Bailer:		PVC		Stainless Steel		Other:	
Purge Start Time		Purge End Time					
Approximate Gallons Purged							

Water Monitoring Conditions:

Time	0830	0835	0840	0845			
pH	5.50	6.01	6.29	6.39			
Conductivity	0.214	0.196	0.194	0.195			
Turbidity	389	16.2	11.7	10.7			
D.O.	8.51	3.37	2.48	2.37			
Temperature	8.96	9.06	9.08	9.08			
ORP	175	150	132	125			
Purge Rate							
Gallons Purged	0	0.5	1.5	2.0			

Sampling Data:

Time	0845	Sample ID	SPWE-92712
pH	6.39	Duplicates	
Conductivity	0.195	QA/QC Volumes	
Turbidity	10.7		
D.O.	2.37		
Temperature	9.08		
ORP	125		

Sampling Device:

PVC Bailer		SS Bailer		Dedicated Pump		Teflon Bailer	

Analyses to be Performed:

Volatile Organics	X	VOCs 8260B	SVOCs by 8270C	X	Sulfate 375.2		
Total Metals	X	RCRA 8 or Priority Pollutants	SVOCs by 8270C/SIM		RSK-175 (methane, ethane, ethene)		
Dissolved Metals			Total Organic Carbon 415.1		Other		

Sampling Notes:

Well Diameter	Well Volume (Gal/ft)
1 inch	0.041
2 inch	0.163
4 inch	0.653
6 inch	1.469

Or:(total depth(ft) - DTW(ft)) x Well Dia^2 x 0.0408 = 1 Well Volume

Well Sampling Data Sheet

Date	10/10/2012	Site Location	Hytec
Samplers	C.G.	Well ID	HLMW-03A
Casing Material		Constructed Depth	
Casing Diameter		Condition of Well	

Field Measurements:

Time	0927	Depth Measured From:	
Depth to Water	53.21		Top of access port
		X	Mark on PVC casing
			Mark of protective casing
			Other

Purging Information:

Pump:		Dedicated		Non-dedicated			
Bailer:		PVC		Stainless Steel		Other:	
Purge Start Time			Purge End Time				
Approximate Gallons Purged							

Water Monitoring Conditions:

Time	0932	0937	0942	0947			
pH	7.55	6.00	5.81	5.75			
Conductivity	0.103	0.095	0.093	0.093			
Turbidity	>999	7999	7999	549			
D.O.	6.80	5.59	5.76	5.83			
Temperature	7.41	7.05	7.06	7.03			
ORP	108	178	200	210			
Purge Rate							
Gallons Purged	0	1.0	2.0	3.0			

Sampling Data:

Time	0947	Sample ID	HLMW-03A-101012
pH	5.75	Duplicates	
Conductivity	0.093	QA/QC Volumes	
Turbidity	549		
D.O.	5.83		
Temperature	7.03		
ORP	210		

Sampling Device:

PVC Bailer		SS Bailer		Dedicated Pump		Teflon Bailer	

Analyses to be Performed:

Volatile Organics		VOCs 8260B	SVOCs by 8270C	X	Sulfate 375.2		
Total Metals		RCRA 8 or Priority Pollutants	SVOCs by 8270C/SIM		RSK-175 (methane, ethane, ethene)		
Dissolved Metals			Total Organic Carbon 415.1		Other		

Sampling Notes:

very turbid.

taking 2 1L SVOC samples.

Well Diameter	Well Volume (Gal/ft)
1 inch	0.041
2 inch	0.163
4 inch	0.653
6 inch	1.469

Or:(total depth(ft) - DTW(ft)) x Well Dia^2 x 0.0408 = 1 Well Volume

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Calibre
Tom McKeon
16935 SE 39th St.
Bellevue, Washington 98008

RE: Hytec-Lufkin
Lab ID: 1209186

December 29, 2012

Attention Tom McKeon:

Fremont Analytical, Inc. received 12 sample(s) on 9/28/2012 for the analyses presented in the following report.

Dissolved Metals by EPA Method 200.8
Semi-Volatile Organic Compounds by EPA Method 8270
Total Metals by EPA Method 200.8
Volatile Organic Compounds by EPA Method 8260

This report consists of the following:

- Case Narrative
- Analytical Results
- Applicable Quality Control Summary Reports
- Chain of Custody

All analyses were performed consistent with the Quality Assurance program of Fremont Analytical, Inc. Please contact the laboratory if you should have any questions about the results.

Thank you for using Fremont Analytical.

Sincerely,

Michael Dee
Sr. Chemist / Principal

CC:
Grant Dawson
Justin Neste

Date: *12/29/2012*

CLIENT: Calibre
Project: Hytec-Lufkin
Lab Order: 1209186

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
1209186-001	HLMW-01A-92712	09/27/2012 8:00 AM	09/28/2012 11:36 AM
1209186-002	HLMW-02A-92712	09/27/2012 10:59 AM	09/28/2012 11:36 AM
1209186-003	HLMW-03A-92712	09/27/2012 3:56 PM	09/28/2012 11:36 AM
1209186-004	HLMW-04A-92712	09/27/2012 1:07 PM	09/28/2012 11:36 AM
1209186-005	HLMW-04B-92712	09/27/2012 7:00 AM	09/28/2012 11:36 AM
1209186-006	HLMW-05B-92712	09/27/2012 11:42 AM	09/28/2012 11:36 AM
1209186-007	HLMW-06B-92712	09/27/2012 3:24 PM	09/28/2012 11:36 AM
1209186-008	MOWE-92712	09/27/2012 9:15 AM	09/28/2012 11:36 AM
1209186-009	SPWE-92712	09/27/2012 8:45 AM	09/28/2012 11:36 AM
1209186-010	Trip Blank	09/27/2012 6:00 AM	09/28/2012 11:36 AM
1209186-011	HLMW-07A-92712	09/27/2012 2:41 PM	09/28/2012 11:36 AM
1209186-012	PAWE-92712	09/27/2012 9:53 AM	09/28/2012 11:36 AM

Note: If no "Time Collected" is supplied, a default of 12:00AM is assigned

Case Narrative

WO#: **1209186**

Date: **12/29/2012**

CLIENT: Calibre
Project: Hytec-Lufkin

I. SAMPLE RECEIPT:
All samples were received intact. The internal ice chest temperatures were measured on receipt and are recorded on the attached Sample Receipt Checklist.

II. GENERAL REPORTING COMMENTS:
Results are reported on a wet weight basis unless dry-weight correction is denoted in the units field on the analytical report ("mg/kg-dry" or "ug/kg-dry").

Matrix Spike (MS) and MS Duplicate (MSD) samples are tested from an analytical batch of "like" matrix to check for possible matrix effect. The MS and MSD will provide site specific matrix data only for those samples which are spiked by the laboratory. The sample chosen for spike purposes may or may not have been a sample submitted in this sample delivery group. The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The LCS and the MB are processed with the samples and the MS/MSD to ensure method criteria are achieved throughout the entire analytical process.

III. ANALYSES AND EXCEPTIONS:
Exceptions associated with this report will be footnoted in the analytical results page(s) or the quality control summary page(s) and/or noted below.

Analytical Report

WO#: **1209186**

Date Reported: **12/29/2012**

Client: Calibre **Collection Date:** 9/27/2012 8:00:00 AM

Project: Hytec-Lufkin

Lab ID: 1209186-001 **Matrix:** Water

Client Sample ID: HLMW-01A-92712

Semi-Volatile Organic Compounds by EPA Method 8270 Batch ID: 3344 Analyst: PH

Analyses	Result	MDL	Qual	Units	DF	Date Analyzed
Phenol	ND	0.0401		µg/L	1	10/5/2012 5:50:00 PM
2-Chlorophenol	ND	0.0132		µg/L	1	10/5/2012 5:50:00 PM
1,3-Dichlorobenzene	ND	0.0161		µg/L	1	10/5/2012 5:50:00 PM
1,4-Dichlorobenzene	ND	0.0241		µg/L	1	10/5/2012 5:50:00 PM
1,2-Dichlorobenzene	ND	0.0232		µg/L	1	10/5/2012 5:50:00 PM
Benzyl alcohol	ND	0.0371		µg/L	1	10/5/2012 5:50:00 PM
Bis(2-chloroethyl) ether	ND	0.0294		µg/L	1	10/5/2012 5:50:00 PM
2-Methylphenol (o-cresol)	ND	0.0245		µg/L	1	10/5/2012 5:50:00 PM
Hexachloroethane	ND	0.0653		µg/L	1	10/5/2012 5:50:00 PM
N-Nitrosodi-n-propylamine	ND	0.0642		µg/L	1	10/5/2012 5:50:00 PM
Nitrobenzene	ND	0.0392		µg/L	1	10/5/2012 5:50:00 PM
Isophorone	ND	0.0205		µg/L	1	10/5/2012 5:50:00 PM
4-Methylphenol (p-cresol)	ND	0.0563		µg/L	1	10/5/2012 5:50:00 PM
2-Nitrophenol	ND	0.0912		µg/L	1	10/5/2012 5:50:00 PM
2,4-Dimethylphenol	ND	0.0376		µg/L	1	10/5/2012 5:50:00 PM
Bis(2-chloroethoxy)methane	ND	0.0337		µg/L	1	10/5/2012 5:50:00 PM
2,4-Dichlorophenol	ND	0.0188		µg/L	1	10/5/2012 5:50:00 PM
1,2,4-Trichlorobenzene	ND	0.0194		µg/L	1	10/5/2012 5:50:00 PM
Naphthalene	ND	0.0123		µg/L	1	10/5/2012 5:50:00 PM
4-Chloroaniline	ND	0.0180		µg/L	1	10/5/2012 5:50:00 PM
Hexachlorobutadiene	ND	0.0390		µg/L	1	10/5/2012 5:50:00 PM
4-Chloro-3-methylphenol	ND	0.0687		µg/L	1	10/5/2012 5:50:00 PM
2-Methylnaphthalene	ND	0.0252		µg/L	1	10/5/2012 5:50:00 PM
1-Methylnaphthalene	ND	0.0214		µg/L	1	10/5/2012 5:50:00 PM
Hexachlorocyclopentadiene	ND	0.0313		µg/L	1	10/5/2012 5:50:00 PM
2,4,6-Trichlorophenol	ND	0.0210		µg/L	1	10/5/2012 5:50:00 PM
2,4,5-Trichlorophenol	ND	0.0339		µg/L	1	10/5/2012 5:50:00 PM
2-Chloronaphthalene	ND	0.0143		µg/L	1	10/5/2012 5:50:00 PM
2-Nitroaniline	ND	0.0710		µg/L	1	10/5/2012 5:50:00 PM
Acenaphthene	ND	0.0139		µg/L	1	10/5/2012 5:50:00 PM
Dimethylphthalate	ND	0.0347		µg/L	1	10/5/2012 5:50:00 PM
2,6-Dinitrotoluene	ND	0.0269		µg/L	1	10/5/2012 5:50:00 PM
Acenaphthylene	ND	0.00613		µg/L	1	10/5/2012 5:50:00 PM
2,4-Dinitrophenol	ND	0.689		µg/L	1	10/5/2012 5:50:00 PM
Dibenzofuran	ND	0.0131		µg/L	1	10/5/2012 5:50:00 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	D	Dilution was required
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

Analytical Report

WO#: **1209186**

Date Reported: **12/29/2012**

Client: Calibre **Collection Date:** 9/27/2012 8:00:00 AM

Project: Hytec-Lufkin

Lab ID: 1209186-001 **Matrix:** Water

Client Sample ID: HLMW-01A-92712

Semi-Volatile Organic Compounds by EPA Method 8270

Batch ID: 3344 Analyst: PH

Analyses	Result	MDL	Qual	Units	DF	Date Analyzed
2,4-Dinitrotoluene	ND	0.0701		µg/L	1	10/5/2012 5:50:00 PM
4-Nitrophenol	ND	0.431		µg/L	1	10/5/2012 5:50:00 PM
Fluorene	ND	0.0164		µg/L	1	10/5/2012 5:50:00 PM
4-Chlorophenyl phenyl ether	ND	0.0199		µg/L	1	10/5/2012 5:50:00 PM
Diethylphthalate	0.357	0.0144	J ND	µg/L	1	10/5/2012 5:50:00 PM
4,6-Dinitro-2-methylphenol	ND	0.487		µg/L	1	10/5/2012 5:50:00 PM
4-Bromophenyl phenyl ether	ND	0.0241		µg/L	1	10/5/2012 5:50:00 PM
Hexachlorobenzene	ND	0.0264		µg/L	1	10/5/2012 5:50:00 PM
Pentachlorophenol	ND	0.0344		µg/L	1	10/5/2012 5:50:00 PM
Phenanthrene	0.0534	0.0130	J ND	µg/L	1	10/5/2012 5:50:00 PM
Anthracene	ND	0.0167		µg/L	1	10/5/2012 5:50:00 PM
Carbazole	ND	0.0553		µg/L	1	10/5/2012 5:50:00 PM
Di-n-butyl phthalate	0.940	0.0268	J ND	µg/L	1	10/5/2012 5:50:00 PM
Fluoranthene	ND	0.0112		µg/L	1	10/5/2012 5:50:00 PM
Pyrene	ND	0.0146		µg/L	1	10/5/2012 5:50:00 PM
Benzyl Butylphthalate	0.287	0.0552	J ND	µg/L	1	10/5/2012 5:50:00 PM
bis(2-Ethylhexyl)adipate	0.165	0.0443	J ND	µg/L	1	10/5/2012 5:50:00 PM
Benz[a]anthracene	ND	0.0123		µg/L	1	10/5/2012 5:50:00 PM
Chrysene	ND	0.0126		µg/L	1	10/5/2012 5:50:00 PM
Bis(2-ethylhexyl) phthalate	1.31	0.0316	B ND	µg/L	1	10/5/2012 5:50:00 PM
Di-n-octyl phthalate	0.145	0.0258	J ND	µg/L	1	10/5/2012 5:50:00 PM
Benzo (b) fluoranthene	ND	0.0259		µg/L	1	10/5/2012 5:50:00 PM
Benzo (k) fluoranthene	ND	0.0341		µg/L	1	10/5/2012 5:50:00 PM
Benzo[a]pyrene	ND	0.0304		µg/L	1	10/5/2012 5:50:00 PM
Indeno (1,2,3-cd) pyrene	ND	0.0673		µg/L	1	10/5/2012 5:50:00 PM
Dibenzo (a,h) anthracene	ND	0.0366		µg/L	1	10/5/2012 5:50:00 PM
Benzo (g,h,I) perylene	ND	0.0378		µg/L	1	10/5/2012 5:50:00 PM
Surr: 2,4,6-Tribromophenol	86.0	24-138		%REC	1	10/5/2012 5:50:00 PM
Surr: 2-Fluorobiphenyl	60.9	38.6-138		%REC	1	10/5/2012 5:50:00 PM
Surr: Nitrobenzene-d5	68.7	31.7-140		%REC	1	10/5/2012 5:50:00 PM
Surr: Phenol-d6	31.7	15-116		%REC	1	10/5/2012 5:50:00 PM
Surr: p-Terphenyl	90.2	49-156		%REC	1	10/5/2012 5:50:00 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	D	Dilution was required
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

Analytical Report

WO#: **1209186**

Date Reported: **12/29/2012**

Client: Calibre **Collection Date:** 9/27/2012 8:00:00 AM

Project: Hytec-Lufkin

Lab ID: 1209186-001 **Matrix:** Water

Client Sample ID: HLMW-01A-92712

Volatile Organic Compounds by EPA Method 8260

Batch ID: R5936 Analyst: EM

Analyses	Result	MDL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	0.0300		µg/L	1	10/1/2012 3:09:00 PM
Chloromethane	ND	0.0470		µg/L	1	10/1/2012 3:09:00 PM
Vinyl chloride	ND	0.0530		µg/L	1	10/1/2012 3:09:00 PM
Bromomethane	ND	0.121		µg/L	1	10/1/2012 3:09:00 PM
Trichlorofluoromethane (CFC-11)	ND	0.0340		µg/L	1	10/1/2012 3:09:00 PM
Chloroethane	ND	0.0590		µg/L	1	10/1/2012 3:09:00 PM
1,1-Dichloroethene	ND	0.0470		µg/L	1	10/1/2012 3:09:00 PM
Methylene chloride	ND	0.0520		µg/L	1	10/1/2012 3:09:00 PM
trans-1,2-Dichloroethene	ND	0.0370		µg/L	1	10/1/2012 3:09:00 PM
Methyl tert-butyl ether (MTBE)	ND	0.0260		µg/L	1	10/1/2012 3:09:00 PM
1,1-Dichloroethane	ND	0.0270		µg/L	1	10/1/2012 3:09:00 PM
2,2-Dichloropropane	ND	0.0460		µg/L	1	10/1/2012 3:09:00 PM
cis-1,2-Dichloroethene	ND	0.0190		µg/L	1	10/1/2012 3:09:00 PM
Chloroform	ND	0.0320		µg/L	1	10/1/2012 3:09:00 PM
1,1,1-Trichloroethane (TCA)	ND	0.0320		µg/L	1	10/1/2012 3:09:00 PM
1,1-Dichloropropene	ND	0.0390		µg/L	1	10/1/2012 3:09:00 PM
Carbon tetrachloride	ND	0.0320		µg/L	1	10/1/2012 3:09:00 PM
1,2-Dichloroethane (EDC)	ND	0.0350		µg/L	1	10/1/2012 3:09:00 PM
Benzene	ND	0.0250		µg/L	1	10/1/2012 3:09:00 PM
Trichloroethene (TCE)	ND	0.0400		µg/L	1	10/1/2012 3:09:00 PM
1,2-Dichloropropane	ND	0.0470		µg/L	1	10/1/2012 3:09:00 PM
Bromodichloromethane	ND	0.0600		µg/L	1	10/1/2012 3:09:00 PM
Dibromomethane	ND	0.115		µg/L	1	10/1/2012 3:09:00 PM
cis-1,3-Dichloropropene	ND	0.0430		µg/L	1	10/1/2012 3:09:00 PM
Toluene	ND	0.0330		µg/L	1	10/1/2012 3:09:00 PM
trans-1,3-Dichloropropene	ND	0.0420		µg/L	1	10/1/2012 3:09:00 PM
1,1,2-Trichloroethane	ND	0.120		µg/L	1	10/1/2012 3:09:00 PM
1,3-Dichloropropane	ND	0.0530		µg/L	1	10/1/2012 3:09:00 PM
Tetrachloroethene (PCE)	ND	0.0350		µg/L	1	10/1/2012 3:09:00 PM
Dibromochloromethane	ND	0.0440		µg/L	1	10/1/2012 3:09:00 PM
1,2-Dibromoethane (EDB)	ND	0.00650		µg/L	1	10/1/2012 3:09:00 PM
Chlorobenzene	ND	0.0240		µg/L	1	10/1/2012 3:09:00 PM
1,1,1,2-Tetrachloroethane	ND	0.0640		µg/L	1	10/1/2012 3:09:00 PM
Ethylbenzene	ND	0.0170		µg/L	1	10/1/2012 3:09:00 PM
m,p-Xylene	ND	0.0410		µg/L	1	10/1/2012 3:09:00 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	D	Dilution was required
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

Analytical Report

WO#: **1209186**

Date Reported: **12/29/2012**

Client: Calibre **Collection Date:** 9/27/2012 8:00:00 AM

Project: Hytec-Lufkin

Lab ID: 1209186-001 **Matrix:** Water

Client Sample ID: HLMW-01A-92712

Analyses	Result	MDL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260				Batch ID: R5936		Analyst: EM
o-Xylene	ND	0.0340		µg/L	1	10/1/2012 3:09:00 PM
Styrene	ND	0.0230		µg/L	1	10/1/2012 3:09:00 PM
Isopropylbenzene	ND	0.0180		µg/L	1	10/1/2012 3:09:00 PM
Bromoform	ND	0.115		µg/L	1	10/1/2012 3:09:00 PM
1,1,2,2-Tetrachloroethane	ND	0.108		µg/L	1	10/1/2012 3:09:00 PM
n-Propylbenzene	ND	0.0330		µg/L	1	10/1/2012 3:09:00 PM
Bromobenzene	ND	0.0550		µg/L	1	10/1/2012 3:09:00 PM
1,3,5-Trimethylbenzene	ND	0.0300		µg/L	1	10/1/2012 3:09:00 PM
2-Chlorotoluene	ND	0.0320		µg/L	1	10/1/2012 3:09:00 PM
4-Chlorotoluene	ND	0.0370		µg/L	1	10/1/2012 3:09:00 PM
tert-Butylbenzene	ND	0.0360		µg/L	1	10/1/2012 3:09:00 PM
1,2,3-Trichloropropane	ND	0.130		µg/L	1	10/1/2012 3:09:00 PM
1,2,4-Trichlorobenzene	ND	0.0990		µg/L	1	10/1/2012 3:09:00 PM
sec-Butylbenzene	ND	0.0230		µg/L	1	10/1/2012 3:09:00 PM
4-Isopropyltoluene	ND	0.0360		µg/L	1	10/1/2012 3:09:00 PM
1,3-Dichlorobenzene	ND	0.0290		µg/L	1	10/1/2012 3:09:00 PM
1,4-Dichlorobenzene	ND	0.0260		µg/L	1	10/1/2012 3:09:00 PM
n-Butylbenzene	ND	0.0200		µg/L	1	10/1/2012 3:09:00 PM
1,2-Dichlorobenzene	ND	0.0460		µg/L	1	10/1/2012 3:09:00 PM
1,2-Dibromo-3-chloropropane	ND	0.315		µg/L	1	10/1/2012 3:09:00 PM
1,2,4-Trimethylbenzene	ND	0.0200		µg/L	1	10/1/2012 3:09:00 PM
Hexachlorobutadiene	ND	0.154		µg/L	1	10/1/2012 3:09:00 PM
Naphthalene	ND	0.0940		µg/L	1	10/1/2012 3:09:00 PM
1,2,3-Trichlorobenzene	ND	0.147		µg/L	1	10/1/2012 3:09:00 PM
Surr: 1-Bromo-4-fluorobenzene	99.3	79.2-120		%REC	1	10/1/2012 3:09:00 PM
Surr: Dibromofluoromethane	101	76-114		%REC	1	10/1/2012 3:09:00 PM
Surr: Toluene-d8	99.9	86.8-119		%REC	1	10/1/2012 3:09:00 PM
Dissolved Metals by EPA Method 200.8				Batch ID: 3335		Analyst: SG
Antimony	0.0995	0.00300	J	µg/L	1	10/3/2012 7:15:02 PM
Arsenic	1.23	0.266		µg/L	1	10/3/2012 7:15:02 PM
Beryllium	ND	0.0680		µg/L	1	10/3/2012 7:15:02 PM
Cadmium	ND	0.0160		µg/L	1	10/3/2012 7:15:02 PM
Chromium	2.80	0.0810		µg/L	1	10/3/2012 7:15:02 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	D	Dilution was required
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

Analytical Report

WO#: **1209186**

Date Reported: **12/29/2012**

Client: Calibre **Collection Date:** 9/27/2012 8:00:00 AM

Project: Hytec-Lufkin

Lab ID: 1209186-001 **Matrix:** Water

Client Sample ID: HLMW-01A-92712

Analyses	Result	MDL	Qual	Units	DF	Date Analyzed
Dissolved Metals by EPA Method 200.8				Batch ID: 3335		Analyst: SG
Copper	4.09	0.0930		µg/L	1	10/3/2012 7:15:02 PM
Lead	ND	0.0750		µg/L	1	10/3/2012 7:15:02 PM
Nickel	0.804	0.110		µg/L	1	10/3/2012 7:15:02 PM
Zinc	23.6	0.121		µg/L	1	10/3/2012 7:15:02 PM
Total Metals by EPA Method 200.8				Batch ID: 3326		Analyst: SG
Antimony	0.0695	0.00300	J	µg/L	1	10/3/2012 9:39:15 PM
Arsenic	1.44	0.266		µg/L	1	10/3/2012 9:39:15 PM
Beryllium	0.119	0.0680	J	µg/L	1	10/3/2012 9:39:15 PM
Cadmium	0.0445	0.0160	J	µg/L	1	10/3/2012 9:39:15 PM
Chromium	12.5	0.0810		µg/L	1	10/3/2012 9:39:15 PM
Copper	12.3	0.0930		µg/L	1	10/3/2012 9:39:15 PM
Lead	0.989	0.0750	J	µg/L	1	10/3/2012 9:39:15 PM
Nickel	9.78	0.110		µg/L	1	10/3/2012 9:39:15 PM
Zinc	47.6	0.121		µg/L	1	10/3/2012 9:39:15 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	D	Dilution was required
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

Analytical Report

WO#: **1209186**

Date Reported: **12/29/2012**

Client: Calibre **Collection Date:** 9/27/2012 10:59:00 AM

Project: Hytec-Lufkin

Lab ID: 1209186-002 **Matrix:** Water

Client Sample ID: HLMW-02A-92712

Semi-Volatile Organic Compounds by EPA Method 8270 Batch ID: 3344 Analyst: PH

Analyses	Result	MDL	Qual	Units	DF	Date Analyzed
Phenol	ND	0.0401		µg/L	1	10/5/2012 6:16:00 PM
2-Chlorophenol	ND	0.0132		µg/L	1	10/5/2012 6:16:00 PM
1,3-Dichlorobenzene	ND	0.0161		µg/L	1	10/5/2012 6:16:00 PM
1,4-Dichlorobenzene	ND	0.0241		µg/L	1	10/5/2012 6:16:00 PM
1,2-Dichlorobenzene	ND	0.0232		µg/L	1	10/5/2012 6:16:00 PM
Benzyl alcohol	ND	0.0371		µg/L	1	10/5/2012 6:16:00 PM
Bis(2-chloroethyl) ether	ND	0.0294		µg/L	1	10/5/2012 6:16:00 PM
2-Methylphenol (o-cresol)	ND	0.0245		µg/L	1	10/5/2012 6:16:00 PM
Hexachloroethane	ND	0.0653		µg/L	1	10/5/2012 6:16:00 PM
N-Nitrosodi-n-propylamine	ND	0.0642		µg/L	1	10/5/2012 6:16:00 PM
Nitrobenzene	ND	0.0392		µg/L	1	10/5/2012 6:16:00 PM
Isophorone	ND	0.0205		µg/L	1	10/5/2012 6:16:00 PM
4-Methylphenol (p-cresol)	ND	0.0563		µg/L	1	10/5/2012 6:16:00 PM
2-Nitrophenol	ND	0.0912		µg/L	1	10/5/2012 6:16:00 PM
2,4-Dimethylphenol	ND	0.0376		µg/L	1	10/5/2012 6:16:00 PM
Bis(2-chloroethoxy)methane	ND	0.0337		µg/L	1	10/5/2012 6:16:00 PM
2,4-Dichlorophenol	ND	0.0188		µg/L	1	10/5/2012 6:16:00 PM
1,2,4-Trichlorobenzene	ND	0.0194		µg/L	1	10/5/2012 6:16:00 PM
Naphthalene	ND	0.0123		µg/L	1	10/5/2012 6:16:00 PM
4-Chloroaniline	ND	0.0180		µg/L	1	10/5/2012 6:16:00 PM
Hexachlorobutadiene	ND	0.0390		µg/L	1	10/5/2012 6:16:00 PM
4-Chloro-3-methylphenol	ND	0.0687		µg/L	1	10/5/2012 6:16:00 PM
2-Methylnaphthalene	ND	0.0252		µg/L	1	10/5/2012 6:16:00 PM
1-Methylnaphthalene	ND	0.0214		µg/L	1	10/5/2012 6:16:00 PM
Hexachlorocyclopentadiene	ND	0.0313		µg/L	1	10/5/2012 6:16:00 PM
2,4,6-Trichlorophenol	ND	0.0210		µg/L	1	10/5/2012 6:16:00 PM
2,4,5-Trichlorophenol	ND	0.0339		µg/L	1	10/5/2012 6:16:00 PM
2-Chloronaphthalene	ND	0.0143		µg/L	1	10/5/2012 6:16:00 PM
2-Nitroaniline	ND	0.0710		µg/L	1	10/5/2012 6:16:00 PM
Acenaphthene	ND	0.0139		µg/L	1	10/5/2012 6:16:00 PM
Dimethylphthalate	ND	0.0347		µg/L	1	10/5/2012 6:16:00 PM
2,6-Dinitrotoluene	ND	0.0269		µg/L	1	10/5/2012 6:16:00 PM
Acenaphthylene	ND	0.00613		µg/L	1	10/5/2012 6:16:00 PM
2,4-Dinitrophenol	ND	0.689		µg/L	1	10/5/2012 6:16:00 PM
Dibenzofuran	ND	0.0131		µg/L	1	10/5/2012 6:16:00 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	D	Dilution was required
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

Analytical Report

WO#: **1209186**

Date Reported: **12/29/2012**

Client: Calibre **Collection Date:** 9/27/2012 10:59:00 AM

Project: Hytec-Lufkin

Lab ID: 1209186-002 **Matrix:** Water

Client Sample ID: HLMW-02A-92712

Semi-Volatile Organic Compounds by EPA Method 8270

Batch ID: 3344 Analyst: PH

Analyses	Result	MDL	Qual	Units	DF	Date Analyzed
2,4-Dinitrotoluene	ND	0.0701		µg/L	1	10/5/2012 6:16:00 PM
4-Nitrophenol	ND	0.431		µg/L	1	10/5/2012 6:16:00 PM
Fluorene	ND	0.0164		µg/L	1	10/5/2012 6:16:00 PM
4-Chlorophenyl phenyl ether	ND	0.0199		µg/L	1	10/5/2012 6:16:00 PM
Diethylphthalate	0.456	0.0144	J ND	µg/L	1	10/5/2012 6:16:00 PM
4,6-Dinitro-2-methylphenol	ND	0.487		µg/L	1	10/5/2012 6:16:00 PM
4-Bromophenyl phenyl ether	ND	0.0241		µg/L	1	10/5/2012 6:16:00 PM
Hexachlorobenzene	ND	0.0264		µg/L	1	10/5/2012 6:16:00 PM
Pentachlorophenol	ND	0.0344		µg/L	1	10/5/2012 6:16:00 PM
Phenanthrene	ND	0.0130		µg/L	1	10/5/2012 6:16:00 PM
Anthracene	ND	0.0167		µg/L	1	10/5/2012 6:16:00 PM
Carbazole	ND	0.0553		µg/L	1	10/5/2012 6:16:00 PM
Di-n-butyl phthalate	1.22	0.0268	B ND	µg/L	1	10/5/2012 6:16:00 PM
Fluoranthene	ND	0.0112		µg/L	1	10/5/2012 6:16:00 PM
Pyrene	ND	0.0146		µg/L	1	10/5/2012 6:16:00 PM
Benzyl Butylphthalate	0.383	0.0552	J ND	µg/L	1	10/5/2012 6:16:00 PM
bis(2-Ethylhexyl)adipate	0.477	0.0443	J ND	µg/L	1	10/5/2012 6:16:00 PM
Benz[a]anthracene	ND	0.0123		µg/L	1	10/5/2012 6:16:00 PM
Chrysene	ND	0.0126		µg/L	1	10/5/2012 6:16:00 PM
Bis(2-ethylhexyl) phthalate	1.13	0.0316	B ND	µg/L	1	10/5/2012 6:16:00 PM
Di-n-octyl phthalate	0.171	0.0258	J ND	µg/L	1	10/5/2012 6:16:00 PM
Benzo (b) fluoranthene	ND	0.0259		µg/L	1	10/5/2012 6:16:00 PM
Benzo (k) fluoranthene	ND	0.0341		µg/L	1	10/5/2012 6:16:00 PM
Benzo[a]pyrene	ND	0.0304		µg/L	1	10/5/2012 6:16:00 PM
Indeno (1,2,3-cd) pyrene	ND	0.0673		µg/L	1	10/5/2012 6:16:00 PM
Dibenzo (a,h) anthracene	ND	0.0366		µg/L	1	10/5/2012 6:16:00 PM
Benzo (g,h,I) perylene	ND	0.0378		µg/L	1	10/5/2012 6:16:00 PM
Surr: 2,4,6-Tribromophenol	75.4	24-138		%REC	1	10/5/2012 6:16:00 PM
Surr: 2-Fluorobiphenyl	58.8	38.6-138		%REC	1	10/5/2012 6:16:00 PM
Surr: Nitrobenzene-d5	63.9	31.7-140		%REC	1	10/5/2012 6:16:00 PM
Surr: Phenol-d6	29.7	15-116		%REC	1	10/5/2012 6:16:00 PM
Surr: p-Terphenyl	89.2	49-156		%REC	1	10/5/2012 6:16:00 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	D	Dilution was required
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

Analytical Report

WO#: **1209186**

Date Reported: **12/29/2012**

Client: Calibre **Collection Date:** 9/27/2012 10:59:00 AM

Project: Hytec-Lufkin

Lab ID: 1209186-002 **Matrix:** Water

Client Sample ID: HLMW-02A-92712

Volatile Organic Compounds by EPA Method 8260

Batch ID: R5936 Analyst: EM

Analyses	Result	MDL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	0.0300		µg/L	1	10/1/2012 3:39:00 PM
Chloromethane	ND	0.0470		µg/L	1	10/1/2012 3:39:00 PM
Vinyl chloride	ND	0.0530		µg/L	1	10/1/2012 3:39:00 PM
Bromomethane	ND	0.121		µg/L	1	10/1/2012 3:39:00 PM
Trichlorofluoromethane (CFC-11)	1.41	0.0340		µg/L	1	10/1/2012 3:39:00 PM
Chloroethane	ND	0.0590		µg/L	1	10/1/2012 3:39:00 PM
1,1-Dichloroethene	ND	0.0470		µg/L	1	10/1/2012 3:39:00 PM
Methylene chloride	ND	0.0520		µg/L	1	10/1/2012 3:39:00 PM
trans-1,2-Dichloroethene	ND	0.0370		µg/L	1	10/1/2012 3:39:00 PM
Methyl tert-butyl ether (MTBE)	ND	0.0260		µg/L	1	10/1/2012 3:39:00 PM
1,1-Dichloroethane	ND	0.0270		µg/L	1	10/1/2012 3:39:00 PM
2,2-Dichloropropane	ND	0.0460		µg/L	1	10/1/2012 3:39:00 PM
cis-1,2-Dichloroethene	ND	0.0190		µg/L	1	10/1/2012 3:39:00 PM
Chloroform	ND	0.0320		µg/L	1	10/1/2012 3:39:00 PM
1,1,1-Trichloroethane (TCA)	ND	0.0320		µg/L	1	10/1/2012 3:39:00 PM
1,1-Dichloropropene	ND	0.0390		µg/L	1	10/1/2012 3:39:00 PM
Carbon tetrachloride	ND	0.0320		µg/L	1	10/1/2012 3:39:00 PM
1,2-Dichloroethane (EDC)	ND	0.0350		µg/L	1	10/1/2012 3:39:00 PM
Benzene	ND	0.0250		µg/L	1	10/1/2012 3:39:00 PM
Trichloroethene (TCE)	ND	0.0400		µg/L	1	10/1/2012 3:39:00 PM
1,2-Dichloropropane	ND	0.0470		µg/L	1	10/1/2012 3:39:00 PM
Bromodichloromethane	ND	0.0600		µg/L	1	10/1/2012 3:39:00 PM
Dibromomethane	ND	0.115		µg/L	1	10/1/2012 3:39:00 PM
cis-1,3-Dichloropropene	ND	0.0430		µg/L	1	10/1/2012 3:39:00 PM
Toluene	ND	0.0330		µg/L	1	10/1/2012 3:39:00 PM
trans-1,3-Dichloropropene	ND	0.0420		µg/L	1	10/1/2012 3:39:00 PM
1,1,2-Trichloroethane	ND	0.120		µg/L	1	10/1/2012 3:39:00 PM
1,3-Dichloropropane	ND	0.0530		µg/L	1	10/1/2012 3:39:00 PM
Tetrachloroethene (PCE)	ND	0.0350		µg/L	1	10/1/2012 3:39:00 PM
Dibromochloromethane	ND	0.0440		µg/L	1	10/1/2012 3:39:00 PM
1,2-Dibromoethane (EDB)	ND	0.00650		µg/L	1	10/1/2012 3:39:00 PM
Chlorobenzene	ND	0.0240		µg/L	1	10/1/2012 3:39:00 PM
1,1,1,2-Tetrachloroethane	ND	0.0640		µg/L	1	10/1/2012 3:39:00 PM
Ethylbenzene	ND	0.0170		µg/L	1	10/1/2012 3:39:00 PM
m,p-Xylene	ND	0.0410		µg/L	1	10/1/2012 3:39:00 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	D	Dilution was required
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

Analytical Report

WO#: **1209186**

Date Reported: **12/29/2012**

Client: Calibre **Collection Date:** 9/27/2012 10:59:00 AM

Project: Hytec-Lufkin

Lab ID: 1209186-002 **Matrix:** Water

Client Sample ID: HLMW-02A-92712

Analyses	Result	MDL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260				Batch ID: R5936		Analyst: EM
o-Xylene	ND	0.0340		µg/L	1	10/1/2012 3:39:00 PM
Styrene	ND	0.0230		µg/L	1	10/1/2012 3:39:00 PM
Isopropylbenzene	ND	0.0180		µg/L	1	10/1/2012 3:39:00 PM
Bromoform	ND	0.115		µg/L	1	10/1/2012 3:39:00 PM
1,1,2,2-Tetrachloroethane	ND	0.108		µg/L	1	10/1/2012 3:39:00 PM
n-Propylbenzene	ND	0.0330		µg/L	1	10/1/2012 3:39:00 PM
Bromobenzene	ND	0.0550		µg/L	1	10/1/2012 3:39:00 PM
1,3,5-Trimethylbenzene	ND	0.0300		µg/L	1	10/1/2012 3:39:00 PM
2-Chlorotoluene	ND	0.0320		µg/L	1	10/1/2012 3:39:00 PM
4-Chlorotoluene	ND	0.0370		µg/L	1	10/1/2012 3:39:00 PM
tert-Butylbenzene	ND	0.0360		µg/L	1	10/1/2012 3:39:00 PM
1,2,3-Trichloropropane	ND	0.130		µg/L	1	10/1/2012 3:39:00 PM
1,2,4-Trichlorobenzene	ND	0.0990		µg/L	1	10/1/2012 3:39:00 PM
sec-Butylbenzene	ND	0.0230		µg/L	1	10/1/2012 3:39:00 PM
4-Isopropyltoluene	ND	0.0360		µg/L	1	10/1/2012 3:39:00 PM
1,3-Dichlorobenzene	ND	0.0290		µg/L	1	10/1/2012 3:39:00 PM
1,4-Dichlorobenzene	ND	0.0260		µg/L	1	10/1/2012 3:39:00 PM
n-Butylbenzene	ND	0.0200		µg/L	1	10/1/2012 3:39:00 PM
1,2-Dichlorobenzene	ND	0.0460		µg/L	1	10/1/2012 3:39:00 PM
1,2-Dibromo-3-chloropropane	ND	0.315		µg/L	1	10/1/2012 3:39:00 PM
1,2,4-Trimethylbenzene	ND	0.0200		µg/L	1	10/1/2012 3:39:00 PM
Hexachlorobutadiene	ND	0.154		µg/L	1	10/1/2012 3:39:00 PM
Naphthalene	ND	0.0940		µg/L	1	10/1/2012 3:39:00 PM
1,2,3-Trichlorobenzene	ND	0.147		µg/L	1	10/1/2012 3:39:00 PM
Surr: 1-Bromo-4-fluorobenzene	101	79.2-120		%REC	1	10/1/2012 3:39:00 PM
Surr: Dibromofluoromethane	102	76-114		%REC	1	10/1/2012 3:39:00 PM
Surr: Toluene-d8	100	86.8-119		%REC	1	10/1/2012 3:39:00 PM
Dissolved Metals by EPA Method 200.8				Batch ID: 3486		Analyst: SG
Arsenic	ND	0.266		µg/L	1	10/20/2012 12:04:02 AM
Lead	0.738	0.0750	J	µg/L	1	10/20/2012 12:04:02 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	D	Dilution was required
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

Analytical Report

WO#: **1209186**

Date Reported: **12/29/2012**

Client: Calibre **Collection Date:** 9/27/2012 10:59:00 AM

Project: Hytec-Lufkin

Lab ID: 1209186-002 **Matrix:** Water

Client Sample ID: HLMW-02A-92712

Analyses	Result	MDL	Qual	Units	DF	Date Analyzed
Total Metals by EPA Method 200.8				Batch ID: 3326		Analyst: SG
Antimony	0.256	0.00300		µg/L	1	10/3/2012 9:48:51 PM
Arsenic	14.6	0.266		µg/L	1	10/3/2012 9:48:51 PM
Beryllium	1.44	0.0680		µg/L	1	10/3/2012 9:48:51 PM
Cadmium	0.389	0.0160		µg/L	1	10/3/2012 9:48:51 PM
Chromium	62.1	0.0810		µg/L	1	10/3/2012 9:48:51 PM
Copper	112	0.0930		µg/L	1	10/3/2012 9:48:51 PM
Lead	16.1	0.0750		µg/L	1	10/3/2012 9:48:51 PM
Nickel	97.6	0.110		µg/L	1	10/3/2012 9:48:51 PM
Zinc	237	0.121		µg/L	1	10/3/2012 9:48:51 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	D	Dilution was required
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

Analytical Report

WO#: **1209186**

Date Reported: **12/29/2012**

Client: Calibre **Collection Date:** 9/27/2012 3:56:00 PM

Project: Hytec-Lufkin

Lab ID: 1209186-003 **Matrix:** Water

Client Sample ID: HLMW-03A-92712

Analyses	Result	MDL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260				Batch ID: R5936		Analyst: EM
Dichlorodifluoromethane (CFC-12)	ND	0.0300		µg/L	1	10/1/2012 4:10:00 PM
Chloromethane	ND	0.0470		µg/L	1	10/1/2012 4:10:00 PM
Vinyl chloride	ND	0.0530		µg/L	1	10/1/2012 4:10:00 PM
Bromomethane	ND	0.121		µg/L	1	10/1/2012 4:10:00 PM
Trichlorofluoromethane (CFC-11)	3.76	0.0340		µg/L	1	10/1/2012 4:10:00 PM
Chloroethane	ND	0.0590		µg/L	1	10/1/2012 4:10:00 PM
1,1-Dichloroethene	ND	0.0470		µg/L	1	10/1/2012 4:10:00 PM
Methylene chloride	ND	0.0520		µg/L	1	10/1/2012 4:10:00 PM
trans-1,2-Dichloroethene	ND	0.0370		µg/L	1	10/1/2012 4:10:00 PM
Methyl tert-butyl ether (MTBE)	ND	0.0260		µg/L	1	10/1/2012 4:10:00 PM
1,1-Dichloroethane	ND	0.0270		µg/L	1	10/1/2012 4:10:00 PM
2,2-Dichloropropane	ND	0.0460		µg/L	1	10/1/2012 4:10:00 PM
cis-1,2-Dichloroethene	ND	0.0190		µg/L	1	10/1/2012 4:10:00 PM
Chloroform	ND	0.0320		µg/L	1	10/1/2012 4:10:00 PM
1,1,1-Trichloroethane (TCA)	ND	0.0320		µg/L	1	10/1/2012 4:10:00 PM
1,1-Dichloropropene	ND	0.0390		µg/L	1	10/1/2012 4:10:00 PM
Carbon tetrachloride	ND	0.0320		µg/L	1	10/1/2012 4:10:00 PM
1,2-Dichloroethane (EDC)	ND	0.0350		µg/L	1	10/1/2012 4:10:00 PM
Benzene	ND	0.0250		µg/L	1	10/1/2012 4:10:00 PM
Trichloroethene (TCE)	ND	0.0400		µg/L	1	10/1/2012 4:10:00 PM
1,2-Dichloropropane	ND	0.0470		µg/L	1	10/1/2012 4:10:00 PM
Bromodichloromethane	ND	0.0600		µg/L	1	10/1/2012 4:10:00 PM
Dibromomethane	ND	0.115		µg/L	1	10/1/2012 4:10:00 PM
cis-1,3-Dichloropropene	ND	0.0430		µg/L	1	10/1/2012 4:10:00 PM
Toluene	ND	0.0330		µg/L	1	10/1/2012 4:10:00 PM
trans-1,3-Dichloropropene	ND	0.0420		µg/L	1	10/1/2012 4:10:00 PM
1,1,2-Trichloroethane	ND	0.120		µg/L	1	10/1/2012 4:10:00 PM
1,3-Dichloropropane	ND	0.0530		µg/L	1	10/1/2012 4:10:00 PM
Tetrachloroethene (PCE)	ND	0.0350		µg/L	1	10/1/2012 4:10:00 PM
Dibromochloromethane	ND	0.0440		µg/L	1	10/1/2012 4:10:00 PM
1,2-Dibromoethane (EDB)	ND	0.00650		µg/L	1	10/1/2012 4:10:00 PM
Chlorobenzene	ND	0.0240		µg/L	1	10/1/2012 4:10:00 PM
1,1,1,2-Tetrachloroethane	ND	0.0640		µg/L	1	10/1/2012 4:10:00 PM
Ethylbenzene	ND	0.0170		µg/L	1	10/1/2012 4:10:00 PM
m,p-Xylene	ND	0.0410		µg/L	1	10/1/2012 4:10:00 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	D	Dilution was required
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

Analytical Report

WO#: **1209186**

Date Reported: **12/29/2012**

Client: Calibre **Collection Date:** 9/27/2012 3:56:00 PM

Project: Hytec-Lufkin

Lab ID: 1209186-003 **Matrix:** Water

Client Sample ID: HLMW-03A-92712

Analyses	Result	MDL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260				Batch ID: R5936		Analyst: EM
o-Xylene	ND	0.0340		µg/L	1	10/1/2012 4:10:00 PM
Styrene	ND	0.0230		µg/L	1	10/1/2012 4:10:00 PM
Isopropylbenzene	ND	0.0180		µg/L	1	10/1/2012 4:10:00 PM
Bromoform	ND	0.115		µg/L	1	10/1/2012 4:10:00 PM
1,1,2,2-Tetrachloroethane	ND	0.108		µg/L	1	10/1/2012 4:10:00 PM
n-Propylbenzene	ND	0.0330		µg/L	1	10/1/2012 4:10:00 PM
Bromobenzene	ND	0.0550		µg/L	1	10/1/2012 4:10:00 PM
1,3,5-Trimethylbenzene	ND	0.0300		µg/L	1	10/1/2012 4:10:00 PM
2-Chlorotoluene	ND	0.0320		µg/L	1	10/1/2012 4:10:00 PM
4-Chlorotoluene	ND	0.0370		µg/L	1	10/1/2012 4:10:00 PM
tert-Butylbenzene	ND	0.0360		µg/L	1	10/1/2012 4:10:00 PM
1,2,3-Trichloropropane	ND	0.130		µg/L	1	10/1/2012 4:10:00 PM
1,2,4-Trichlorobenzene	ND	0.0990		µg/L	1	10/1/2012 4:10:00 PM
sec-Butylbenzene	ND	0.0230		µg/L	1	10/1/2012 4:10:00 PM
4-Isopropyltoluene	ND	0.0360		µg/L	1	10/1/2012 4:10:00 PM
1,3-Dichlorobenzene	ND	0.0290		µg/L	1	10/1/2012 4:10:00 PM
1,4-Dichlorobenzene	ND	0.0260		µg/L	1	10/1/2012 4:10:00 PM
n-Butylbenzene	ND	0.0200		µg/L	1	10/1/2012 4:10:00 PM
1,2-Dichlorobenzene	ND	0.0460		µg/L	1	10/1/2012 4:10:00 PM
1,2-Dibromo-3-chloropropane	ND	0.315		µg/L	1	10/1/2012 4:10:00 PM
1,2,4-Trimethylbenzene	ND	0.0200		µg/L	1	10/1/2012 4:10:00 PM
Hexachlorobutadiene	ND	0.154		µg/L	1	10/1/2012 4:10:00 PM
Naphthalene	ND	0.0940		µg/L	1	10/1/2012 4:10:00 PM
1,2,3-Trichlorobenzene	ND	0.147		µg/L	1	10/1/2012 4:10:00 PM
Surr: 1-Bromo-4-fluorobenzene	96.2	79.2-120		%REC	1	10/1/2012 4:10:00 PM
Surr: Dibromofluoromethane	99.4	76-114		%REC	1	10/1/2012 4:10:00 PM
Surr: Toluene-d8	100	86.8-119		%REC	1	10/1/2012 4:10:00 PM
Dissolved Metals by EPA Method 200.8				Batch ID: 3335		Analyst: SG
Antimony	0.0415	0.00300	J	µg/L	1	10/3/2012 7:24:39 PM
Arsenic	0.912	0.266	J	µg/L	1	10/3/2012 7:24:39 PM
Beryllium	ND	0.0680		µg/L	1	10/3/2012 7:24:39 PM
Cadmium	ND	0.0160		µg/L	1	10/3/2012 7:24:39 PM
Chromium	1.93	0.0810		µg/L	1	10/3/2012 7:24:39 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	D	Dilution was required
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

Analytical Report

WO#: **1209186**

Date Reported: **12/29/2012**

Client: Calibre **Collection Date:** 9/27/2012 3:56:00 PM

Project: Hytec-Lufkin

Lab ID: 1209186-003 **Matrix:** Water

Client Sample ID: HLMW-03A-92712

Analyses	Result	MDL	Qual	Units	DF	Date Analyzed
Dissolved Metals by EPA Method 200.8				Batch ID: 3335		Analyst: SG
Copper	ND	0.0930		µg/L	1	10/3/2012 7:24:39 PM
Lead	ND	0.0750		µg/L	1	10/3/2012 7:24:39 PM
Nickel	1.37	0.110		µg/L	1	10/3/2012 7:24:39 PM
Zinc	50.3	0.121		µg/L	1	10/3/2012 7:24:39 PM
Total Metals by EPA Method 200.8				Batch ID: 3326		Analyst: SG
Antimony	0.275	0.00300		µg/L	1	10/3/2012 9:58:29 PM
Arsenic	12.1	0.266		µg/L	1	10/3/2012 9:58:29 PM
Beryllium	0.624	0.0680		µg/L	1	10/3/2012 9:58:29 PM
Cadmium	0.699	0.0160		µg/L	1	10/3/2012 9:58:29 PM
Chromium	30.0	0.0810		µg/L	1	10/3/2012 9:58:29 PM
Copper	62.1	0.0930		µg/L	1	10/3/2012 9:58:29 PM
Lead	6.42	0.0750		µg/L	1	10/3/2012 9:58:29 PM
Nickel	59.3	0.110		µg/L	1	10/3/2012 9:58:29 PM
Zinc	125	0.121		µg/L	1	10/3/2012 9:58:29 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	D	Dilution was required
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

Analytical Report

WO#: **1209186**

Date Reported: **12/29/2012**

Client: Calibre **Collection Date:** 9/27/2012 1:07:00 PM

Project: Hytec-Lufkin

Lab ID: 1209186-004 **Matrix:** Water

Client Sample ID: HLMW-04A-92712

Semi-Volatile Organic Compounds by EPA Method 8270

Batch ID: 3344 Analyst: PH

Analyses	Result	MDL	Qual	Units	DF	Date Analyzed
Phenol	0.350	0.0401	J ND	µg/L	1	10/5/2012 7:07:00 PM
2-Chlorophenol	ND	0.0132		µg/L	1	10/5/2012 7:07:00 PM
1,3-Dichlorobenzene	ND	0.0161		µg/L	1	10/5/2012 7:07:00 PM
1,4-Dichlorobenzene	ND	0.0241		µg/L	1	10/5/2012 7:07:00 PM
1,2-Dichlorobenzene	ND	0.0232		µg/L	1	10/5/2012 7:07:00 PM
Benzyl alcohol	ND	0.0371		µg/L	1	10/5/2012 7:07:00 PM
Bis(2-chloroethyl) ether	ND	0.0294		µg/L	1	10/5/2012 7:07:00 PM
2-Methylphenol (o-cresol)	ND	0.0245		µg/L	1	10/5/2012 7:07:00 PM
Hexachloroethane	ND	0.0653		µg/L	1	10/5/2012 7:07:00 PM
N-Nitrosodi-n-propylamine	ND	0.0642		µg/L	1	10/5/2012 7:07:00 PM
Nitrobenzene	ND	0.0392		µg/L	1	10/5/2012 7:07:00 PM
Isophorone	ND	0.0205		µg/L	1	10/5/2012 7:07:00 PM
4-Methylphenol (p-cresol)	ND	0.0563		µg/L	1	10/5/2012 7:07:00 PM
2-Nitrophenol	ND	0.0912		µg/L	1	10/5/2012 7:07:00 PM
2,4-Dimethylphenol	ND	0.0376		µg/L	1	10/5/2012 7:07:00 PM
Bis(2-chloroethoxy)methane	ND	0.0337		µg/L	1	10/5/2012 7:07:00 PM
2,4-Dichlorophenol	ND	0.0188		µg/L	1	10/5/2012 7:07:00 PM
1,2,4-Trichlorobenzene	ND	0.0194		µg/L	1	10/5/2012 7:07:00 PM
Naphthalene	ND	0.0123		µg/L	1	10/5/2012 7:07:00 PM
4-Chloroaniline	ND	0.0180		µg/L	1	10/5/2012 7:07:00 PM
Hexachlorobutadiene	ND	0.0390		µg/L	1	10/5/2012 7:07:00 PM
4-Chloro-3-methylphenol	ND	0.0687		µg/L	1	10/5/2012 7:07:00 PM
2-Methylnaphthalene	ND	0.0252		µg/L	1	10/5/2012 7:07:00 PM
1-Methylnaphthalene	ND	0.0214		µg/L	1	10/5/2012 7:07:00 PM
Hexachlorocyclopentadiene	ND	0.0313		µg/L	1	10/5/2012 7:07:00 PM
2,4,6-Trichlorophenol	ND	0.0210		µg/L	1	10/5/2012 7:07:00 PM
2,4,5-Trichlorophenol	ND	0.0339		µg/L	1	10/5/2012 7:07:00 PM
2-Chloronaphthalene	ND	0.0143		µg/L	1	10/5/2012 7:07:00 PM
2-Nitroaniline	ND	0.0710		µg/L	1	10/5/2012 7:07:00 PM
Acenaphthene	ND	0.0139		µg/L	1	10/5/2012 7:07:00 PM
Dimethylphthalate	ND	0.0347		µg/L	1	10/5/2012 7:07:00 PM
2,6-Dinitrotoluene	ND	0.0269		µg/L	1	10/5/2012 7:07:00 PM
Acenaphthylene	ND	0.00613		µg/L	1	10/5/2012 7:07:00 PM
2,4-Dinitrophenol	ND	0.689		µg/L	1	10/5/2012 7:07:00 PM
Dibenzofuran	ND	0.0131		µg/L	1	10/5/2012 7:07:00 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	D	Dilution was required
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

Analytical Report

WO#: **1209186**

Date Reported: **12/29/2012**

Client: Calibre **Collection Date:** 9/27/2012 1:07:00 PM

Project: Hytec-Lufkin

Lab ID: 1209186-004 **Matrix:** Water

Client Sample ID: HLMW-04A-92712

Semi-Volatile Organic Compounds by EPA Method 8270

Batch ID: 3344 Analyst: PH

Analyses	Result	MDL	Qual	Units	DF	Date Analyzed
2,4-Dinitrotoluene	ND	0.0701		µg/L	1	10/5/2012 7:07:00 PM
4-Nitrophenol	ND	0.431		µg/L	1	10/5/2012 7:07:00 PM
Fluorene	ND	0.0164		µg/L	1	10/5/2012 7:07:00 PM
4-Chlorophenyl phenyl ether	ND	0.0199		µg/L	1	10/5/2012 7:07:00 PM
Diethylphthalate	0.377	0.0144	J ND	µg/L	1	10/5/2012 7:07:00 PM
4,6-Dinitro-2-methylphenol	ND	0.487		µg/L	1	10/5/2012 7:07:00 PM
4-Bromophenyl phenyl ether	ND	0.0241		µg/L	1	10/5/2012 7:07:00 PM
Hexachlorobenzene	ND	0.0264		µg/L	1	10/5/2012 7:07:00 PM
Pentachlorophenol	ND	0.0344		µg/L	1	10/5/2012 7:07:00 PM
Phenanthrene	0.186	0.0130	J ND	µg/L	1	10/5/2012 7:07:00 PM
Anthracene	ND	0.0167		µg/L	1	10/5/2012 7:07:00 PM
Carbazole	ND	0.0553		µg/L	1	10/5/2012 7:07:00 PM
Di-n-butyl phthalate	1.16	0.0268	B ND	µg/L	1	10/5/2012 7:07:00 PM
Fluoranthene	0.0604	0.0112	J ND	µg/L	1	10/5/2012 7:07:00 PM
Pyrene	ND	0.0146		µg/L	1	10/5/2012 7:07:00 PM
Benzyl Butylphthalate	0.267	0.0552	J ND	µg/L	1	10/5/2012 7:07:00 PM
bis(2-Ethylhexyl)adipate	0.317	0.0443	J ND	µg/L	1	10/5/2012 7:07:00 PM
Benz[a]anthracene	ND	0.0123		µg/L	1	10/5/2012 7:07:00 PM
Chrysene	ND	0.0126		µg/L	1	10/5/2012 7:07:00 PM
Bis(2-ethylhexyl) phthalate	0.776	0.0316	J ND	µg/L	1	10/5/2012 7:07:00 PM
Di-n-octyl phthalate	0.199	0.0258	J ND	µg/L	1	10/5/2012 7:07:00 PM
Benzo (b) fluoranthene	ND	0.0259		µg/L	1	10/5/2012 7:07:00 PM
Benzo (k) fluoranthene	ND	0.0341		µg/L	1	10/5/2012 7:07:00 PM
Benzo[a]pyrene	ND	0.0304		µg/L	1	10/5/2012 7:07:00 PM
Indeno (1,2,3-cd) pyrene	ND	0.0673		µg/L	1	10/5/2012 7:07:00 PM
Dibenzo (a,h) anthracene	ND	0.0366		µg/L	1	10/5/2012 7:07:00 PM
Benzo (g,h,I) perylene	ND	0.0378		µg/L	1	10/5/2012 7:07:00 PM
Surr: 2,4,6-Tribromophenol	69.4	24-138		%REC	1	10/5/2012 7:07:00 PM
Surr: 2-Fluorobiphenyl	53.4	38.6-138		%REC	1	10/5/2012 7:07:00 PM
Surr: Nitrobenzene-d5	56.7	31.7-140		%REC	1	10/5/2012 7:07:00 PM
Surr: Phenol-d6	39.4	15-116		%REC	1	10/5/2012 7:07:00 PM
Surr: p-Terphenyl	81.0	49-156		%REC	1	10/5/2012 7:07:00 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	D	Dilution was required
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

Analytical Report

WO#: **1209186**

Date Reported: **12/29/2012**

Client: Calibre **Collection Date:** 9/27/2012 1:07:00 PM

Project: Hytec-Lufkin

Lab ID: 1209186-004 **Matrix:** Water

Client Sample ID: HLMW-04A-92712

Volatile Organic Compounds by EPA Method 8260

Batch ID: R5936 Analyst: EM

Analyses	Result	MDL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	0.0300		µg/L	1	10/1/2012 4:40:00 PM
Chloromethane	ND	0.0470		µg/L	1	10/1/2012 4:40:00 PM
Vinyl chloride	ND	0.0530		µg/L	1	10/1/2012 4:40:00 PM
Bromomethane	ND	0.121		µg/L	1	10/1/2012 4:40:00 PM
Trichlorofluoromethane (CFC-11)	9.20	0.0340		µg/L	1	10/1/2012 4:40:00 PM
Chloroethane	ND	0.0590		µg/L	1	10/1/2012 4:40:00 PM
1,1-Dichloroethene	ND	0.0470		µg/L	1	10/1/2012 4:40:00 PM
Methylene chloride	ND	0.0520		µg/L	1	10/1/2012 4:40:00 PM
trans-1,2-Dichloroethene	ND	0.0370		µg/L	1	10/1/2012 4:40:00 PM
Methyl tert-butyl ether (MTBE)	ND	0.0260		µg/L	1	10/1/2012 4:40:00 PM
1,1-Dichloroethane	ND	0.0270		µg/L	1	10/1/2012 4:40:00 PM
2,2-Dichloropropane	ND	0.0460		µg/L	1	10/1/2012 4:40:00 PM
cis-1,2-Dichloroethene	ND	0.0190		µg/L	1	10/1/2012 4:40:00 PM
Chloroform	ND	0.0320		µg/L	1	10/1/2012 4:40:00 PM
1,1,1-Trichloroethane (TCA)	ND	0.0320		µg/L	1	10/1/2012 4:40:00 PM
1,1-Dichloropropene	ND	0.0390		µg/L	1	10/1/2012 4:40:00 PM
Carbon tetrachloride	ND	0.0320		µg/L	1	10/1/2012 4:40:00 PM
1,2-Dichloroethane (EDC)	ND	0.0350		µg/L	1	10/1/2012 4:40:00 PM
Benzene	ND	0.0250		µg/L	1	10/1/2012 4:40:00 PM
Trichloroethene (TCE)	ND	0.0400		µg/L	1	10/1/2012 4:40:00 PM
1,2-Dichloropropane	ND	0.0470		µg/L	1	10/1/2012 4:40:00 PM
Bromodichloromethane	ND	0.0600		µg/L	1	10/1/2012 4:40:00 PM
Dibromomethane	ND	0.115		µg/L	1	10/1/2012 4:40:00 PM
cis-1,3-Dichloropropene	ND	0.0430		µg/L	1	10/1/2012 4:40:00 PM
Toluene	ND	0.0330		µg/L	1	10/1/2012 4:40:00 PM
trans-1,3-Dichloropropene	ND	0.0420		µg/L	1	10/1/2012 4:40:00 PM
1,1,2-Trichloroethane	ND	0.120		µg/L	1	10/1/2012 4:40:00 PM
1,3-Dichloropropane	ND	0.0530		µg/L	1	10/1/2012 4:40:00 PM
Tetrachloroethene (PCE)	ND	0.0350		µg/L	1	10/1/2012 4:40:00 PM
Dibromochloromethane	ND	0.0440		µg/L	1	10/1/2012 4:40:00 PM
1,2-Dibromoethane (EDB)	ND	0.00650		µg/L	1	10/1/2012 4:40:00 PM
Chlorobenzene	ND	0.0240		µg/L	1	10/1/2012 4:40:00 PM
1,1,1,2-Tetrachloroethane	ND	0.0640		µg/L	1	10/1/2012 4:40:00 PM
Ethylbenzene	ND	0.0170		µg/L	1	10/1/2012 4:40:00 PM
m,p-Xylene	ND	0.0410		µg/L	1	10/1/2012 4:40:00 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	D	Dilution was required
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

Analytical Report

WO#: **1209186**

Date Reported: **12/29/2012**

Client: Calibre **Collection Date:** 9/27/2012 1:07:00 PM

Project: Hytec-Lufkin

Lab ID: 1209186-004 **Matrix:** Water

Client Sample ID: HLMW-04A-92712

Analyses	Result	MDL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260				Batch ID: R5936		Analyst: EM
o-Xylene	ND	0.0340		µg/L	1	10/1/2012 4:40:00 PM
Styrene	ND	0.0230		µg/L	1	10/1/2012 4:40:00 PM
Isopropylbenzene	ND	0.0180		µg/L	1	10/1/2012 4:40:00 PM
Bromoform	ND	0.115		µg/L	1	10/1/2012 4:40:00 PM
1,1,2,2-Tetrachloroethane	ND	0.108		µg/L	1	10/1/2012 4:40:00 PM
n-Propylbenzene	ND	0.0330		µg/L	1	10/1/2012 4:40:00 PM
Bromobenzene	ND	0.0550		µg/L	1	10/1/2012 4:40:00 PM
1,3,5-Trimethylbenzene	ND	0.0300		µg/L	1	10/1/2012 4:40:00 PM
2-Chlorotoluene	ND	0.0320		µg/L	1	10/1/2012 4:40:00 PM
4-Chlorotoluene	ND	0.0370		µg/L	1	10/1/2012 4:40:00 PM
tert-Butylbenzene	ND	0.0360		µg/L	1	10/1/2012 4:40:00 PM
1,2,3-Trichloropropane	ND	0.130		µg/L	1	10/1/2012 4:40:00 PM
1,2,4-Trichlorobenzene	ND	0.0990		µg/L	1	10/1/2012 4:40:00 PM
sec-Butylbenzene	ND	0.0230		µg/L	1	10/1/2012 4:40:00 PM
4-Isopropyltoluene	ND	0.0360		µg/L	1	10/1/2012 4:40:00 PM
1,3-Dichlorobenzene	ND	0.0290		µg/L	1	10/1/2012 4:40:00 PM
1,4-Dichlorobenzene	ND	0.0260		µg/L	1	10/1/2012 4:40:00 PM
n-Butylbenzene	ND	0.0200		µg/L	1	10/1/2012 4:40:00 PM
1,2-Dichlorobenzene	ND	0.0460		µg/L	1	10/1/2012 4:40:00 PM
1,2-Dibromo-3-chloropropane	ND	0.315		µg/L	1	10/1/2012 4:40:00 PM
1,2,4-Trimethylbenzene	ND	0.0200		µg/L	1	10/1/2012 4:40:00 PM
Hexachlorobutadiene	ND	0.154		µg/L	1	10/1/2012 4:40:00 PM
Naphthalene	ND	0.0940		µg/L	1	10/1/2012 4:40:00 PM
1,2,3-Trichlorobenzene	ND	0.147		µg/L	1	10/1/2012 4:40:00 PM
Surr: 1-Bromo-4-fluorobenzene	96.0	79.2-120		%REC	1	10/1/2012 4:40:00 PM
Surr: Dibromofluoromethane	96.8	76-114		%REC	1	10/1/2012 4:40:00 PM
Surr: Toluene-d8	96.2	86.8-119		%REC	1	10/1/2012 4:40:00 PM
Total Metals by EPA Method 200.8				Batch ID: 3326		Analyst: SG
Antimony	ND	0.00300		µg/L	1	10/3/2012 10:08:06 PM
Arsenic	0.509	0.266	J	µg/L	1	10/3/2012 10:08:06 PM
Beryllium	ND	0.0680		µg/L	1	10/3/2012 10:08:06 PM
Cadmium	ND	0.0160		µg/L	1	10/3/2012 10:08:06 PM
Chromium	2.13	0.0810		µg/L	1	10/3/2012 10:08:06 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	D	Dilution was required
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

Analytical Report

WO#: **1209186**

Date Reported: **12/29/2012**

Client: Calibre **Collection Date:** 9/27/2012 1:07:00 PM

Project: Hytec-Lufkin

Lab ID: 1209186-004 **Matrix:** Water

Client Sample ID: HLMW-04A-92712

Analyses	Result	MDL	Qual	Units	DF	Date Analyzed
Total Metals by EPA Method 200.8				Batch ID: 3326		Analyst: SG
Copper	0.663	0.0930		µg/L	1	10/3/2012 10:08:06 PM
Lead	0.116	0.0750	J	µg/L	1	10/3/2012 10:08:06 PM
Nickel	0.898	0.110		µg/L	1	10/3/2012 10:08:06 PM
Zinc	45.3	0.121		µg/L	1	10/3/2012 10:08:06 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	D	Dilution was required
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

Analytical Report

WO#: **1209186**

Date Reported: **12/29/2012**

Client: Calibre **Collection Date:** 9/27/2012 7:00:00 AM

Project: Hytec-Lufkin

Lab ID: 1209186-005 **Matrix:** Water

Client Sample ID: HLMW-04B-92712

Semi-Volatile Organic Compounds by EPA Method 8270 Batch ID: 3344 Analyst: PH

Analyses	Result	MDL	Qual	Units	DF	Date Analyzed
Phenol	ND	0.0401		µg/L	1	10/5/2012 7:33:00 PM
2-Chlorophenol	ND	0.0132		µg/L	1	10/5/2012 7:33:00 PM
1,3-Dichlorobenzene	ND	0.0161		µg/L	1	10/5/2012 7:33:00 PM
1,4-Dichlorobenzene	ND	0.0241		µg/L	1	10/5/2012 7:33:00 PM
1,2-Dichlorobenzene	ND	0.0232		µg/L	1	10/5/2012 7:33:00 PM
Benzyl alcohol	ND	0.0371		µg/L	1	10/5/2012 7:33:00 PM
Bis(2-chloroethyl) ether	ND	0.0294		µg/L	1	10/5/2012 7:33:00 PM
2-Methylphenol (o-cresol)	ND	0.0245		µg/L	1	10/5/2012 7:33:00 PM
Hexachloroethane	ND	0.0653		µg/L	1	10/5/2012 7:33:00 PM
N-Nitrosodi-n-propylamine	ND	0.0642		µg/L	1	10/5/2012 7:33:00 PM
Nitrobenzene	ND	0.0392		µg/L	1	10/5/2012 7:33:00 PM
Isophorone	ND	0.0205		µg/L	1	10/5/2012 7:33:00 PM
4-Methylphenol (p-cresol)	ND	0.0563		µg/L	1	10/5/2012 7:33:00 PM
2-Nitrophenol	ND	0.0912		µg/L	1	10/5/2012 7:33:00 PM
2,4-Dimethylphenol	ND	0.0376		µg/L	1	10/5/2012 7:33:00 PM
Bis(2-chloroethoxy)methane	ND	0.0337		µg/L	1	10/5/2012 7:33:00 PM
2,4-Dichlorophenol	ND	0.0188		µg/L	1	10/5/2012 7:33:00 PM
1,2,4-Trichlorobenzene	ND	0.0194		µg/L	1	10/5/2012 7:33:00 PM
Naphthalene	ND	0.0123		µg/L	1	10/5/2012 7:33:00 PM
4-Chloroaniline	ND	0.0180		µg/L	1	10/5/2012 7:33:00 PM
Hexachlorobutadiene	ND	0.0390		µg/L	1	10/5/2012 7:33:00 PM
4-Chloro-3-methylphenol	ND	0.0687		µg/L	1	10/5/2012 7:33:00 PM
2-Methylnaphthalene	ND	0.0252		µg/L	1	10/5/2012 7:33:00 PM
1-Methylnaphthalene	ND	0.0214		µg/L	1	10/5/2012 7:33:00 PM
Hexachlorocyclopentadiene	ND	0.0313		µg/L	1	10/5/2012 7:33:00 PM
2,4,6-Trichlorophenol	ND	0.0210		µg/L	1	10/5/2012 7:33:00 PM
2,4,5-Trichlorophenol	ND	0.0339		µg/L	1	10/5/2012 7:33:00 PM
2-Chloronaphthalene	ND	0.0143		µg/L	1	10/5/2012 7:33:00 PM
2-Nitroaniline	ND	0.0710		µg/L	1	10/5/2012 7:33:00 PM
Acenaphthene	ND	0.0139		µg/L	1	10/5/2012 7:33:00 PM
Dimethylphthalate	ND	0.0347		µg/L	1	10/5/2012 7:33:00 PM
2,6-Dinitrotoluene	ND	0.0269		µg/L	1	10/5/2012 7:33:00 PM
Acenaphthylene	ND	0.00613		µg/L	1	10/5/2012 7:33:00 PM
2,4-Dinitrophenol	ND	0.689		µg/L	1	10/5/2012 7:33:00 PM
Dibenzofuran	ND	0.0131		µg/L	1	10/5/2012 7:33:00 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	D	Dilution was required
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

Analytical Report

WO#: **1209186**

Date Reported: **12/29/2012**

Client: Calibre **Collection Date:** 9/27/2012 7:00:00 AM

Project: Hytec-Lufkin

Lab ID: 1209186-005 **Matrix:** Water

Client Sample ID: HLMW-04B-92712

Semi-Volatile Organic Compounds by EPA Method 8270

Batch ID: 3344 Analyst: PH

Analyses	Result	MDL	Qual	Units	DF	Date Analyzed
2,4-Dinitrotoluene	ND	0.0701		µg/L	1	10/5/2012 7:33:00 PM
4-Nitrophenol	ND	0.431		µg/L	1	10/5/2012 7:33:00 PM
Fluorene	ND	0.0164		µg/L	1	10/5/2012 7:33:00 PM
4-Chlorophenyl phenyl ether	ND	0.0199		µg/L	1	10/5/2012 7:33:00 PM
Diethylphthalate	0.419	0.0144	J ND	µg/L	1	10/5/2012 7:33:00 PM
4,6-Dinitro-2-methylphenol	ND	0.487		µg/L	1	10/5/2012 7:33:00 PM
4-Bromophenyl phenyl ether	ND	0.0241		µg/L	1	10/5/2012 7:33:00 PM
Hexachlorobenzene	ND	0.0264		µg/L	1	10/5/2012 7:33:00 PM
Pentachlorophenol	ND	0.0344		µg/L	1	10/5/2012 7:33:00 PM
Phenanthrene	0.0619	0.0130	J ND	µg/L	1	10/5/2012 7:33:00 PM
Anthracene	ND	0.0167		µg/L	1	10/5/2012 7:33:00 PM
Carbazole	ND	0.0553		µg/L	1	10/5/2012 7:33:00 PM
Di-n-butyl phthalate	1.27	0.0268	B ND	µg/L	1	10/5/2012 7:33:00 PM
Fluoranthene	ND	0.0112		µg/L	1	10/5/2012 7:33:00 PM
Pyrene	ND	0.0146		µg/L	1	10/5/2012 7:33:00 PM
Benzyl Butylphthalate	0.290	0.0552	J ND	µg/L	1	10/5/2012 7:33:00 PM
bis(2-Ethylhexyl)adipate	0.278	0.0443	J ND	µg/L	1	10/5/2012 7:33:00 PM
Benz[a]anthracene	ND	0.0123		µg/L	1	10/5/2012 7:33:00 PM
Chrysene	ND	0.0126		µg/L	1	10/5/2012 7:33:00 PM
Bis(2-ethylhexyl) phthalate	0.908	0.0316	J ND	µg/L	1	10/5/2012 7:33:00 PM
Di-n-octyl phthalate	0.530	0.0258	J ND	µg/L	1	10/5/2012 7:33:00 PM
Benzo (b) fluoranthene	ND	0.0259		µg/L	1	10/5/2012 7:33:00 PM
Benzo (k) fluoranthene	ND	0.0341		µg/L	1	10/5/2012 7:33:00 PM
Benzo[a]pyrene	ND	0.0304		µg/L	1	10/5/2012 7:33:00 PM
Indeno (1,2,3-cd) pyrene	ND	0.0673		µg/L	1	10/5/2012 7:33:00 PM
Dibenzo (a,h) anthracene	ND	0.0366		µg/L	1	10/5/2012 7:33:00 PM
Benzo (g,h,I) perylene	ND	0.0378		µg/L	1	10/5/2012 7:33:00 PM
Surr: 2,4,6-Tribromophenol	83.7	24-138		%REC	1	10/5/2012 7:33:00 PM
Surr: 2-Fluorobiphenyl	61.8	38.6-138		%REC	1	10/5/2012 7:33:00 PM
Surr: Nitrobenzene-d5	68.3	31.7-140		%REC	1	10/5/2012 7:33:00 PM
Surr: Phenol-d6	31.2	15-116		%REC	1	10/5/2012 7:33:00 PM
Surr: p-Terphenyl	82.8	49-156		%REC	1	10/5/2012 7:33:00 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	D	Dilution was required
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

Analytical Report

WO#: **1209186**

Date Reported: **12/29/2012**

Client: Calibre **Collection Date:** 9/27/2012 7:00:00 AM

Project: Hytec-Lufkin

Lab ID: 1209186-005 **Matrix:** Water

Client Sample ID: HLMW-04B-92712

Analyses	Result	MDL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260				Batch ID: R5936		Analyst: EM
Dichlorodifluoromethane (CFC-12)	ND	0.0300		µg/L	1	10/1/2012 5:11:00 PM
Chloromethane	ND	0.0470		µg/L	1	10/1/2012 5:11:00 PM
Vinyl chloride	ND	0.0530		µg/L	1	10/1/2012 5:11:00 PM
Bromomethane	ND	0.121		µg/L	1	10/1/2012 5:11:00 PM
Trichlorofluoromethane (CFC-11)	8.39	0.0340		µg/L	1	10/1/2012 5:11:00 PM
Chloroethane	ND	0.0590		µg/L	1	10/1/2012 5:11:00 PM
1,1-Dichloroethene	ND	0.0470		µg/L	1	10/1/2012 5:11:00 PM
Methylene chloride	ND	0.0520		µg/L	1	10/1/2012 5:11:00 PM
trans-1,2-Dichloroethene	ND	0.0370		µg/L	1	10/1/2012 5:11:00 PM
Methyl tert-butyl ether (MTBE)	ND	0.0260		µg/L	1	10/1/2012 5:11:00 PM
1,1-Dichloroethane	ND	0.0270		µg/L	1	10/1/2012 5:11:00 PM
2,2-Dichloropropane	ND	0.0460		µg/L	1	10/1/2012 5:11:00 PM
cis-1,2-Dichloroethene	ND	0.0190		µg/L	1	10/1/2012 5:11:00 PM
Chloroform	ND	0.0320		µg/L	1	10/1/2012 5:11:00 PM
1,1,1-Trichloroethane (TCA)	ND	0.0320		µg/L	1	10/1/2012 5:11:00 PM
1,1-Dichloropropene	ND	0.0390		µg/L	1	10/1/2012 5:11:00 PM
Carbon tetrachloride	ND	0.0320		µg/L	1	10/1/2012 5:11:00 PM
1,2-Dichloroethane (EDC)	ND	0.0350		µg/L	1	10/1/2012 5:11:00 PM
Benzene	ND	0.0250		µg/L	1	10/1/2012 5:11:00 PM
Trichloroethene (TCE)	ND	0.0400		µg/L	1	10/1/2012 5:11:00 PM
1,2-Dichloropropane	ND	0.0470		µg/L	1	10/1/2012 5:11:00 PM
Bromodichloromethane	ND	0.0600		µg/L	1	10/1/2012 5:11:00 PM
Dibromomethane	ND	0.115		µg/L	1	10/1/2012 5:11:00 PM
cis-1,3-Dichloropropene	ND	0.0430		µg/L	1	10/1/2012 5:11:00 PM
Toluene	ND	0.0330		µg/L	1	10/1/2012 5:11:00 PM
trans-1,3-Dichloropropene	ND	0.0420		µg/L	1	10/1/2012 5:11:00 PM
1,1,2-Trichloroethane	ND	0.120		µg/L	1	10/1/2012 5:11:00 PM
1,3-Dichloropropane	ND	0.0530		µg/L	1	10/1/2012 5:11:00 PM
Tetrachloroethene (PCE)	ND	0.0350		µg/L	1	10/1/2012 5:11:00 PM
Dibromochloromethane	ND	0.0440		µg/L	1	10/1/2012 5:11:00 PM
1,2-Dibromoethane (EDB)	ND	0.00650		µg/L	1	10/1/2012 5:11:00 PM
Chlorobenzene	ND	0.0240		µg/L	1	10/1/2012 5:11:00 PM
1,1,1,2-Tetrachloroethane	ND	0.0640		µg/L	1	10/1/2012 5:11:00 PM
Ethylbenzene	ND	0.0170		µg/L	1	10/1/2012 5:11:00 PM
m,p-Xylene	ND	0.0410		µg/L	1	10/1/2012 5:11:00 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	D	Dilution was required
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

Analytical Report

WO#: **1209186**

Date Reported: **12/29/2012**

Client: Calibre **Collection Date:** 9/27/2012 7:00:00 AM

Project: Hytec-Lufkin

Lab ID: 1209186-005 **Matrix:** Water

Client Sample ID: HLMW-04B-92712

Analyses	Result	MDL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260				Batch ID: R5936		Analyst: EM
o-Xylene	ND	0.0340		µg/L	1	10/1/2012 5:11:00 PM
Styrene	ND	0.0230		µg/L	1	10/1/2012 5:11:00 PM
Isopropylbenzene	ND	0.0180		µg/L	1	10/1/2012 5:11:00 PM
Bromoform	ND	0.115		µg/L	1	10/1/2012 5:11:00 PM
1,1,2,2-Tetrachloroethane	ND	0.108		µg/L	1	10/1/2012 5:11:00 PM
n-Propylbenzene	ND	0.0330		µg/L	1	10/1/2012 5:11:00 PM
Bromobenzene	ND	0.0550		µg/L	1	10/1/2012 5:11:00 PM
1,3,5-Trimethylbenzene	ND	0.0300		µg/L	1	10/1/2012 5:11:00 PM
2-Chlorotoluene	ND	0.0320		µg/L	1	10/1/2012 5:11:00 PM
4-Chlorotoluene	ND	0.0370		µg/L	1	10/1/2012 5:11:00 PM
tert-Butylbenzene	ND	0.0360		µg/L	1	10/1/2012 5:11:00 PM
1,2,3-Trichloropropane	ND	0.130		µg/L	1	10/1/2012 5:11:00 PM
1,2,4-Trichlorobenzene	ND	0.0990		µg/L	1	10/1/2012 5:11:00 PM
sec-Butylbenzene	ND	0.0230		µg/L	1	10/1/2012 5:11:00 PM
4-Isopropyltoluene	ND	0.0360		µg/L	1	10/1/2012 5:11:00 PM
1,3-Dichlorobenzene	ND	0.0290		µg/L	1	10/1/2012 5:11:00 PM
1,4-Dichlorobenzene	ND	0.0260		µg/L	1	10/1/2012 5:11:00 PM
n-Butylbenzene	ND	0.0200		µg/L	1	10/1/2012 5:11:00 PM
1,2-Dichlorobenzene	ND	0.0460		µg/L	1	10/1/2012 5:11:00 PM
1,2-Dibromo-3-chloropropane	ND	0.315		µg/L	1	10/1/2012 5:11:00 PM
1,2,4-Trimethylbenzene	ND	0.0200		µg/L	1	10/1/2012 5:11:00 PM
Hexachlorobutadiene	ND	0.154		µg/L	1	10/1/2012 5:11:00 PM
Naphthalene	ND	0.0940		µg/L	1	10/1/2012 5:11:00 PM
1,2,3-Trichlorobenzene	ND	0.147		µg/L	1	10/1/2012 5:11:00 PM
Surr: 1-Bromo-4-fluorobenzene	95.1	79.2-120		%REC	1	10/1/2012 5:11:00 PM
Surr: Dibromofluoromethane	98.3	76-114		%REC	1	10/1/2012 5:11:00 PM
Surr: Toluene-d8	97.1	86.8-119		%REC	1	10/1/2012 5:11:00 PM
Total Metals by EPA Method 200.8				Batch ID: 3326		Analyst: SG
Antimony	ND	0.00300		µg/L	1	10/3/2012 10:17:44 PM
Arsenic	0.501	0.266	J	µg/L	1	10/3/2012 10:17:44 PM
Beryllium	ND	0.0680		µg/L	1	10/3/2012 10:17:44 PM
Cadmium	ND	0.0160		µg/L	1	10/3/2012 10:17:44 PM
Chromium	1.96	0.0810		µg/L	1	10/3/2012 10:17:44 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	D	Dilution was required
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

Analytical Report

WO#: **1209186**

Date Reported: **12/29/2012**

Client: Calibre **Collection Date:** 9/27/2012 7:00:00 AM

Project: Hytec-Lufkin

Lab ID: 1209186-005 **Matrix:** Water

Client Sample ID: HLMW-04B-92712

Analyses	Result	MDL	Qual	Units	DF	Date Analyzed
Total Metals by EPA Method 200.8				Batch ID: 3326		Analyst: SG
Copper	0.626	0.0930		µg/L	1	10/3/2012 10:17:44 PM
Lead	ND	0.0750		µg/L	1	10/3/2012 10:17:44 PM
Nickel	1.20	0.110		µg/L	1	10/3/2012 10:17:44 PM
Zinc	41.4	0.121		µg/L	1	10/3/2012 10:17:44 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	D	Dilution was required
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

Analytical Report

WO#: **1209186**

Date Reported: **12/29/2012**

Client: Calibre **Collection Date:** 9/27/2012 11:42:00 AM

Project: Hytec-Lufkin

Lab ID: 1209186-006 **Matrix:** Water

Client Sample ID: HLMW-05B-92712

Semi-Volatile Organic Compounds by EPA Method 8270 Batch ID: 3344 Analyst: PH

Analyses	Result	MDL	Qual	Units	DF	Date Analyzed
Phenol	ND	0.0401		µg/L	1	10/5/2012 7:59:00 PM
2-Chlorophenol	ND	0.0132		µg/L	1	10/5/2012 7:59:00 PM
1,3-Dichlorobenzene	ND	0.0161		µg/L	1	10/5/2012 7:59:00 PM
1,4-Dichlorobenzene	ND	0.0241		µg/L	1	10/5/2012 7:59:00 PM
1,2-Dichlorobenzene	ND	0.0232		µg/L	1	10/5/2012 7:59:00 PM
Benzyl alcohol	ND	0.0371		µg/L	1	10/5/2012 7:59:00 PM
Bis(2-chloroethyl) ether	ND	0.0294		µg/L	1	10/5/2012 7:59:00 PM
2-Methylphenol (o-cresol)	ND	0.0245		µg/L	1	10/5/2012 7:59:00 PM
Hexachloroethane	ND	0.0653		µg/L	1	10/5/2012 7:59:00 PM
N-Nitrosodi-n-propylamine	ND	0.0642		µg/L	1	10/5/2012 7:59:00 PM
Nitrobenzene	ND	0.0392		µg/L	1	10/5/2012 7:59:00 PM
Isophorone	ND	0.0205		µg/L	1	10/5/2012 7:59:00 PM
4-Methylphenol (p-cresol)	ND	0.0563		µg/L	1	10/5/2012 7:59:00 PM
2-Nitrophenol	ND	0.0912		µg/L	1	10/5/2012 7:59:00 PM
2,4-Dimethylphenol	ND	0.0376		µg/L	1	10/5/2012 7:59:00 PM
Bis(2-chloroethoxy)methane	ND	0.0337		µg/L	1	10/5/2012 7:59:00 PM
2,4-Dichlorophenol	ND	0.0188		µg/L	1	10/5/2012 7:59:00 PM
1,2,4-Trichlorobenzene	ND	0.0194		µg/L	1	10/5/2012 7:59:00 PM
Naphthalene	ND	0.0123		µg/L	1	10/5/2012 7:59:00 PM
4-Chloroaniline	ND	0.0180		µg/L	1	10/5/2012 7:59:00 PM
Hexachlorobutadiene	ND	0.0390		µg/L	1	10/5/2012 7:59:00 PM
4-Chloro-3-methylphenol	ND	0.0687		µg/L	1	10/5/2012 7:59:00 PM
2-Methylnaphthalene	ND	0.0252		µg/L	1	10/5/2012 7:59:00 PM
1-Methylnaphthalene	ND	0.0214		µg/L	1	10/5/2012 7:59:00 PM
Hexachlorocyclopentadiene	ND	0.0313		µg/L	1	10/5/2012 7:59:00 PM
2,4,6-Trichlorophenol	ND	0.0210		µg/L	1	10/5/2012 7:59:00 PM
2,4,5-Trichlorophenol	ND	0.0339		µg/L	1	10/5/2012 7:59:00 PM
2-Chloronaphthalene	ND	0.0143		µg/L	1	10/5/2012 7:59:00 PM
2-Nitroaniline	ND	0.0710		µg/L	1	10/5/2012 7:59:00 PM
Acenaphthene	ND	0.0139		µg/L	1	10/5/2012 7:59:00 PM
Dimethylphthalate	0.0985	0.0347	J	µg/L	1	10/5/2012 7:59:00 PM
2,6-Dinitrotoluene	ND	0.0269		µg/L	1	10/5/2012 7:59:00 PM
Acenaphthylene	ND	0.00613		µg/L	1	10/5/2012 7:59:00 PM
2,4-Dinitrophenol	ND	0.689		µg/L	1	10/5/2012 7:59:00 PM
Dibenzofuran	ND	0.0131		µg/L	1	10/5/2012 7:59:00 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	D	Dilution was required
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

Analytical Report

WO#: **1209186**

Date Reported: **12/29/2012**

Client: Calibre **Collection Date:** 9/27/2012 11:42:00 AM

Project: Hytec-Lufkin

Lab ID: 1209186-006 **Matrix:** Water

Client Sample ID: HLMW-05B-92712

Semi-Volatile Organic Compounds by EPA Method 8270

Batch ID: 3344 Analyst: PH

Analyses	Result	MDL	Qual	Units	DF	Date Analyzed
2,4-Dinitrotoluene	ND	0.0701		µg/L	1	10/5/2012 7:59:00 PM
4-Nitrophenol	ND	0.431		µg/L	1	10/5/2012 7:59:00 PM
Fluorene	ND	0.0164		µg/L	1	10/5/2012 7:59:00 PM
4-Chlorophenyl phenyl ether	ND	0.0199		µg/L	1	10/5/2012 7:59:00 PM
Diethylphthalate	1.04	0.0144	ND	µg/L	1	10/5/2012 7:59:00 PM
4,6-Dinitro-2-methylphenol	ND	0.487		µg/L	1	10/5/2012 7:59:00 PM
4-Bromophenyl phenyl ether	ND	0.0241		µg/L	1	10/5/2012 7:59:00 PM
Hexachlorobenzene	ND	0.0264		µg/L	1	10/5/2012 7:59:00 PM
Pentachlorophenol	ND	0.0344		µg/L	1	10/5/2012 7:59:00 PM
Phenanthrene	0.155	0.0130	J ND	µg/L	1	10/5/2012 7:59:00 PM
Anthracene	ND	0.0167		µg/L	1	10/5/2012 7:59:00 PM
Carbazole	ND	0.0553		µg/L	1	10/5/2012 7:59:00 PM
Di-n-butyl phthalate	1.54	0.0268	B ND	µg/L	1	10/5/2012 7:59:00 PM
Fluoranthene	ND	0.0112		µg/L	1	10/5/2012 7:59:00 PM
Pyrene	ND	0.0146		µg/L	1	10/5/2012 7:59:00 PM
Benzyl Butylphthalate	0.216	0.0552	J ND	µg/L	1	10/5/2012 7:59:00 PM
bis(2-Ethylhexyl)adipate	0.225	0.0443	J ND	µg/L	1	10/5/2012 7:59:00 PM
Benz[a]anthracene	ND	0.0123		µg/L	1	10/5/2012 7:59:00 PM
Chrysene	ND	0.0126		µg/L	1	10/5/2012 7:59:00 PM
Bis(2-ethylhexyl) phthalate	1.04	0.0316	B ND	µg/L	1	10/5/2012 7:59:00 PM
Di-n-octyl phthalate	0.107	0.0258	J ND	µg/L	1	10/5/2012 7:59:00 PM
Benzo (b) fluoranthene	ND	0.0259		µg/L	1	10/5/2012 7:59:00 PM
Benzo (k) fluoranthene	ND	0.0341		µg/L	1	10/5/2012 7:59:00 PM
Benzo[a]pyrene	ND	0.0304		µg/L	1	10/5/2012 7:59:00 PM
Indeno (1,2,3-cd) pyrene	ND	0.0673		µg/L	1	10/5/2012 7:59:00 PM
Dibenzo (a,h) anthracene	ND	0.0366		µg/L	1	10/5/2012 7:59:00 PM
Benzo (g,h,I) perylene	ND	0.0378		µg/L	1	10/5/2012 7:59:00 PM
Surr: 2,4,6-Tribromophenol	88.8	24-138		%REC	1	10/5/2012 7:59:00 PM
Surr: 2-Fluorobiphenyl	65.2	38.6-138		%REC	1	10/5/2012 7:59:00 PM
Surr: Nitrobenzene-d5	79.2	31.7-140		%REC	1	10/5/2012 7:59:00 PM
Surr: Phenol-d6	35.7	15-116		%REC	1	10/5/2012 7:59:00 PM
Surr: p-Terphenyl	91.6	49-156		%REC	1	10/5/2012 7:59:00 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	D	Dilution was required
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

Analytical Report

WO#: **1209186**

Date Reported: **12/29/2012**

Client: Calibre **Collection Date:** 9/27/2012 11:42:00 AM

Project: Hytec-Lufkin

Lab ID: 1209186-006 **Matrix:** Water

Client Sample ID: HLMW-05B-92712

Volatile Organic Compounds by EPA Method 8260

Batch ID: R5936 Analyst: EM

Analyses	Result	MDL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	0.0300		µg/L	1	10/1/2012 5:42:00 PM
Chloromethane	ND	0.0470		µg/L	1	10/1/2012 5:42:00 PM
Vinyl chloride	ND	0.0530		µg/L	1	10/1/2012 5:42:00 PM
Bromomethane	ND	0.121		µg/L	1	10/1/2012 5:42:00 PM
Trichlorofluoromethane (CFC-11)	ND	0.0340		µg/L	1	10/1/2012 5:42:00 PM
Chloroethane	ND	0.0590		µg/L	1	10/1/2012 5:42:00 PM
1,1-Dichloroethene	ND	0.0470		µg/L	1	10/1/2012 5:42:00 PM
Methylene chloride	ND	0.0520		µg/L	1	10/1/2012 5:42:00 PM
trans-1,2-Dichloroethene	ND	0.0370		µg/L	1	10/1/2012 5:42:00 PM
Methyl tert-butyl ether (MTBE)	ND	0.0260		µg/L	1	10/1/2012 5:42:00 PM
1,1-Dichloroethane	ND	0.0270		µg/L	1	10/1/2012 5:42:00 PM
2,2-Dichloropropane	ND	0.0460		µg/L	1	10/1/2012 5:42:00 PM
cis-1,2-Dichloroethene	ND	0.0190		µg/L	1	10/1/2012 5:42:00 PM
Chloroform	ND	0.0320		µg/L	1	10/1/2012 5:42:00 PM
1,1,1-Trichloroethane (TCA)	ND	0.0320		µg/L	1	10/1/2012 5:42:00 PM
1,1-Dichloropropene	ND	0.0390		µg/L	1	10/1/2012 5:42:00 PM
Carbon tetrachloride	ND	0.0320		µg/L	1	10/1/2012 5:42:00 PM
1,2-Dichloroethane (EDC)	ND	0.0350		µg/L	1	10/1/2012 5:42:00 PM
Benzene	ND	0.0250		µg/L	1	10/1/2012 5:42:00 PM
Trichloroethene (TCE)	ND	0.0400		µg/L	1	10/1/2012 5:42:00 PM
1,2-Dichloropropane	ND	0.0470		µg/L	1	10/1/2012 5:42:00 PM
Bromodichloromethane	ND	0.0600		µg/L	1	10/1/2012 5:42:00 PM
Dibromomethane	ND	0.115		µg/L	1	10/1/2012 5:42:00 PM
cis-1,3-Dichloropropene	ND	0.0430		µg/L	1	10/1/2012 5:42:00 PM
Toluene	ND	0.0330		µg/L	1	10/1/2012 5:42:00 PM
trans-1,3-Dichloropropene	ND	0.0420		µg/L	1	10/1/2012 5:42:00 PM
1,1,2-Trichloroethane	ND	0.120		µg/L	1	10/1/2012 5:42:00 PM
1,3-Dichloropropane	ND	0.0530		µg/L	1	10/1/2012 5:42:00 PM
Tetrachloroethene (PCE)	ND	0.0350		µg/L	1	10/1/2012 5:42:00 PM
Dibromochloromethane	ND	0.0440		µg/L	1	10/1/2012 5:42:00 PM
1,2-Dibromoethane (EDB)	ND	0.00650		µg/L	1	10/1/2012 5:42:00 PM
Chlorobenzene	ND	0.0240		µg/L	1	10/1/2012 5:42:00 PM
1,1,1,2-Tetrachloroethane	ND	0.0640		µg/L	1	10/1/2012 5:42:00 PM
Ethylbenzene	ND	0.0170		µg/L	1	10/1/2012 5:42:00 PM
m,p-Xylene	ND	0.0410		µg/L	1	10/1/2012 5:42:00 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	D	Dilution was required
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

Analytical Report

WO#: **1209186**

Date Reported: **12/29/2012**

Client: Calibre **Collection Date:** 9/27/2012 11:42:00 AM

Project: Hytec-Lufkin

Lab ID: 1209186-006 **Matrix:** Water

Client Sample ID: HLMW-05B-92712

Analyses	Result	MDL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260				Batch ID: R5936		Analyst: EM
o-Xylene	ND	0.0340		µg/L	1	10/1/2012 5:42:00 PM
Styrene	ND	0.0230		µg/L	1	10/1/2012 5:42:00 PM
Isopropylbenzene	ND	0.0180		µg/L	1	10/1/2012 5:42:00 PM
Bromoform	ND	0.115		µg/L	1	10/1/2012 5:42:00 PM
1,1,2,2-Tetrachloroethane	ND	0.108		µg/L	1	10/1/2012 5:42:00 PM
n-Propylbenzene	ND	0.0330		µg/L	1	10/1/2012 5:42:00 PM
Bromobenzene	ND	0.0550		µg/L	1	10/1/2012 5:42:00 PM
1,3,5-Trimethylbenzene	ND	0.0300		µg/L	1	10/1/2012 5:42:00 PM
2-Chlorotoluene	ND	0.0320		µg/L	1	10/1/2012 5:42:00 PM
4-Chlorotoluene	ND	0.0370		µg/L	1	10/1/2012 5:42:00 PM
tert-Butylbenzene	ND	0.0360		µg/L	1	10/1/2012 5:42:00 PM
1,2,3-Trichloropropane	ND	0.130		µg/L	1	10/1/2012 5:42:00 PM
1,2,4-Trichlorobenzene	ND	0.0990		µg/L	1	10/1/2012 5:42:00 PM
sec-Butylbenzene	ND	0.0230		µg/L	1	10/1/2012 5:42:00 PM
4-Isopropyltoluene	ND	0.0360		µg/L	1	10/1/2012 5:42:00 PM
1,3-Dichlorobenzene	ND	0.0290		µg/L	1	10/1/2012 5:42:00 PM
1,4-Dichlorobenzene	ND	0.0260		µg/L	1	10/1/2012 5:42:00 PM
n-Butylbenzene	ND	0.0200		µg/L	1	10/1/2012 5:42:00 PM
1,2-Dichlorobenzene	ND	0.0460		µg/L	1	10/1/2012 5:42:00 PM
1,2-Dibromo-3-chloropropane	ND	0.315		µg/L	1	10/1/2012 5:42:00 PM
1,2,4-Trimethylbenzene	ND	0.0200		µg/L	1	10/1/2012 5:42:00 PM
Hexachlorobutadiene	ND	0.154		µg/L	1	10/1/2012 5:42:00 PM
Naphthalene	ND	0.0940		µg/L	1	10/1/2012 5:42:00 PM
1,2,3-Trichlorobenzene	ND	0.147		µg/L	1	10/1/2012 5:42:00 PM
Surr: 1-Bromo-4-fluorobenzene	103	79.2-120		%REC	1	10/1/2012 5:42:00 PM
Surr: Dibromofluoromethane	101	76-114		%REC	1	10/1/2012 5:42:00 PM
Surr: Toluene-d8	103	86.8-119		%REC	1	10/1/2012 5:42:00 PM
Dissolved Metals by EPA Method 200.8				Batch ID: 3335		Analyst: SG
Antimony	0.290	0.00300		µg/L	1	10/3/2012 7:34:16 PM
Arsenic	1.79	0.266		µg/L	1	10/3/2012 7:34:16 PM
Beryllium	ND	0.0680		µg/L	1	10/3/2012 7:34:16 PM
Cadmium	0.0615	0.0160	J	µg/L	1	10/3/2012 7:34:16 PM
Chromium	1.98	0.0810		µg/L	1	10/3/2012 7:34:16 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	D	Dilution was required
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

Analytical Report

WO#: **1209186**

Date Reported: **12/29/2012**

Client: Calibre **Collection Date:** 9/27/2012 11:42:00 AM

Project: Hytec-Lufkin

Lab ID: 1209186-006 **Matrix:** Water

Client Sample ID: HLMW-05B-92712

Analyses	Result	MDL	Qual	Units	DF	Date Analyzed
Dissolved Metals by EPA Method 200.8				Batch ID: 3335		Analyst: SG
Copper	ND	0.0930		µg/L	1	10/3/2012 7:34:16 PM
Lead	0.181	0.0750	J	µg/L	1	10/3/2012 7:34:16 PM
Nickel	3.44	0.110		µg/L	1	10/3/2012 7:34:16 PM
Zinc	64.3	0.121		µg/L	1	10/3/2012 7:34:16 PM
Total Metals by EPA Method 200.8				Batch ID: 3326		Analyst: SG
Antimony	0.392	0.00300		µg/L	1	10/3/2012 10:27:20 PM
Arsenic	1.67	0.266		µg/L	1	10/3/2012 10:27:20 PM
Beryllium	ND	0.0680		µg/L	1	10/3/2012 10:27:20 PM
Cadmium	0.512	0.0160		µg/L	1	10/3/2012 10:27:20 PM
Chromium	3.43	0.0810		µg/L	1	10/3/2012 10:27:20 PM
Copper	4.37	0.0930		µg/L	1	10/3/2012 10:27:20 PM
Lead	0.879	0.0750	J	µg/L	1	10/3/2012 10:27:20 PM
Nickel	5.91	0.110		µg/L	1	10/3/2012 10:27:20 PM
Zinc	69.0	0.121		µg/L	1	10/3/2012 10:27:20 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	D	Dilution was required
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

Analytical Report

WO#: **1209186**

Date Reported: **12/29/2012**

Client: Calibre **Collection Date:** 9/27/2012 3:24:00 PM

Project: Hytec-Lufkin

Lab ID: 1209186-007 **Matrix:** Water

Client Sample ID: HLMW-06B-92712

Semi-Volatile Organic Compounds by EPA Method 8270 Batch ID: 3344 Analyst: PH

Analyses	Result	MDL	Qual	Units	DF	Date Analyzed
Phenol	ND	0.0401		µg/L	1	10/5/2012 8:24:00 PM
2-Chlorophenol	ND	0.0132		µg/L	1	10/5/2012 8:24:00 PM
1,3-Dichlorobenzene	ND	0.0161		µg/L	1	10/5/2012 8:24:00 PM
1,4-Dichlorobenzene	ND	0.0241		µg/L	1	10/5/2012 8:24:00 PM
1,2-Dichlorobenzene	ND	0.0232		µg/L	1	10/5/2012 8:24:00 PM
Benzyl alcohol	ND	0.0371		µg/L	1	10/5/2012 8:24:00 PM
Bis(2-chloroethyl) ether	ND	0.0294		µg/L	1	10/5/2012 8:24:00 PM
2-Methylphenol (o-cresol)	ND	0.0245		µg/L	1	10/5/2012 8:24:00 PM
Hexachloroethane	ND	0.0653		µg/L	1	10/5/2012 8:24:00 PM
N-Nitrosodi-n-propylamine	ND	0.0642		µg/L	1	10/5/2012 8:24:00 PM
Nitrobenzene	ND	0.0392		µg/L	1	10/5/2012 8:24:00 PM
Isophorone	ND	0.0205		µg/L	1	10/5/2012 8:24:00 PM
4-Methylphenol (p-cresol)	ND	0.0563		µg/L	1	10/5/2012 8:24:00 PM
2-Nitrophenol	ND	0.0912		µg/L	1	10/5/2012 8:24:00 PM
2,4-Dimethylphenol	ND	0.0376		µg/L	1	10/5/2012 8:24:00 PM
Bis(2-chloroethoxy)methane	ND	0.0337		µg/L	1	10/5/2012 8:24:00 PM
2,4-Dichlorophenol	ND	0.0188		µg/L	1	10/5/2012 8:24:00 PM
1,2,4-Trichlorobenzene	ND	0.0194		µg/L	1	10/5/2012 8:24:00 PM
Naphthalene	ND	0.0123		µg/L	1	10/5/2012 8:24:00 PM
4-Chloroaniline	ND	0.0180		µg/L	1	10/5/2012 8:24:00 PM
Hexachlorobutadiene	ND	0.0390		µg/L	1	10/5/2012 8:24:00 PM
4-Chloro-3-methylphenol	ND	0.0687		µg/L	1	10/5/2012 8:24:00 PM
2-Methylnaphthalene	ND	0.0252		µg/L	1	10/5/2012 8:24:00 PM
1-Methylnaphthalene	ND	0.0214		µg/L	1	10/5/2012 8:24:00 PM
Hexachlorocyclopentadiene	ND	0.0313		µg/L	1	10/5/2012 8:24:00 PM
2,4,6-Trichlorophenol	ND	0.0210		µg/L	1	10/5/2012 8:24:00 PM
2,4,5-Trichlorophenol	ND	0.0339		µg/L	1	10/5/2012 8:24:00 PM
2-Chloronaphthalene	ND	0.0143		µg/L	1	10/5/2012 8:24:00 PM
2-Nitroaniline	ND	0.0710		µg/L	1	10/5/2012 8:24:00 PM
Acenaphthene	ND	0.0139		µg/L	1	10/5/2012 8:24:00 PM
Dimethylphthalate	ND	0.0347		µg/L	1	10/5/2012 8:24:00 PM
2,6-Dinitrotoluene	ND	0.0269		µg/L	1	10/5/2012 8:24:00 PM
Acenaphthylene	ND	0.00613		µg/L	1	10/5/2012 8:24:00 PM
2,4-Dinitrophenol	ND	0.689		µg/L	1	10/5/2012 8:24:00 PM
Dibenzofuran	ND	0.0131		µg/L	1	10/5/2012 8:24:00 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	D	Dilution was required
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

Analytical Report

WO#: **1209186**

Date Reported: **12/29/2012**

Client: Calibre **Collection Date:** 9/27/2012 3:24:00 PM

Project: Hytec-Lufkin

Lab ID: 1209186-007 **Matrix:** Water

Client Sample ID: HLMW-06B-92712

Semi-Volatile Organic Compounds by EPA Method 8270

Batch ID: 3344 Analyst: PH

Analyses	Result	MDL	Qual	Units	DF	Date Analyzed
2,4-Dinitrotoluene	ND	0.0701		µg/L	1	10/5/2012 8:24:00 PM
4-Nitrophenol	ND	0.431		µg/L	1	10/5/2012 8:24:00 PM
Fluorene	ND	0.0164		µg/L	1	10/5/2012 8:24:00 PM
4-Chlorophenyl phenyl ether	ND	0.0199		µg/L	1	10/5/2012 8:24:00 PM
Diethylphthalate	0.316	0.0144	J ND	µg/L	1	10/5/2012 8:24:00 PM
4,6-Dinitro-2-methylphenol	ND	0.487		µg/L	1	10/5/2012 8:24:00 PM
4-Bromophenyl phenyl ether	ND	0.0241		µg/L	1	10/5/2012 8:24:00 PM
Hexachlorobenzene	ND	0.0264		µg/L	1	10/5/2012 8:24:00 PM
Pentachlorophenol	ND	0.0344		µg/L	1	10/5/2012 8:24:00 PM
Phenanthrene	0.0683	0.0130	J ND	µg/L	1	10/5/2012 8:24:00 PM
Anthracene	ND	0.0167		µg/L	1	10/5/2012 8:24:00 PM
Carbazole	ND	0.0553		µg/L	1	10/5/2012 8:24:00 PM
Di-n-butyl phthalate	1.09	0.0268	B ND	µg/L	1	10/5/2012 8:24:00 PM
Fluoranthene	ND	0.0112		µg/L	1	10/5/2012 8:24:00 PM
Pyrene	ND	0.0146		µg/L	1	10/5/2012 8:24:00 PM
Benzyl Butylphthalate	0.313	0.0552	J ND	µg/L	1	10/5/2012 8:24:00 PM
bis(2-Ethylhexyl)adipate	0.432	0.0443	J ND	µg/L	1	10/5/2012 8:24:00 PM
Benz[a]anthracene	ND	0.0123		µg/L	1	10/5/2012 8:24:00 PM
Chrysene	ND	0.0126		µg/L	1	10/5/2012 8:24:00 PM
Bis(2-ethylhexyl) phthalate	3.04	0.0316	B ND	µg/L	1	10/5/2012 8:24:00 PM
Di-n-octyl phthalate	0.469	0.0258	J ND	µg/L	1	10/5/2012 8:24:00 PM
Benzo (b) fluoranthene	ND	0.0259		µg/L	1	10/5/2012 8:24:00 PM
Benzo (k) fluoranthene	ND	0.0341		µg/L	1	10/5/2012 8:24:00 PM
Benzo[a]pyrene	ND	0.0304		µg/L	1	10/5/2012 8:24:00 PM
Indeno (1,2,3-cd) pyrene	ND	0.0673		µg/L	1	10/5/2012 8:24:00 PM
Dibenzo (a,h) anthracene	ND	0.0366		µg/L	1	10/5/2012 8:24:00 PM
Benzo (g,h,I) perylene	ND	0.0378		µg/L	1	10/5/2012 8:24:00 PM
Surr: 2,4,6-Tribromophenol	98.0	24-138		%REC	1	10/5/2012 8:24:00 PM
Surr: 2-Fluorobiphenyl	70.1	38.6-138		%REC	1	10/5/2012 8:24:00 PM
Surr: Nitrobenzene-d5	79.6	31.7-140		%REC	1	10/5/2012 8:24:00 PM
Surr: Phenol-d6	34.1	15-116		%REC	1	10/5/2012 8:24:00 PM
Surr: p-Terphenyl	97.0	49-156		%REC	1	10/5/2012 8:24:00 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	D	Dilution was required
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

Analytical Report

WO#: **1209186**

Date Reported: **12/29/2012**

Client: Calibre **Collection Date:** 9/27/2012 3:24:00 PM

Project: Hytec-Lufkin

Lab ID: 1209186-007 **Matrix:** Water

Client Sample ID: HLMW-06B-92712

Analyses	Result	MDL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260				Batch ID: R5936		Analyst: EM
Dichlorodifluoromethane (CFC-12)	ND	0.0300		µg/L	1	10/1/2012 6:13:00 PM
Chloromethane	ND	0.0470		µg/L	1	10/1/2012 6:13:00 PM
Vinyl chloride	ND	0.0530		µg/L	1	10/1/2012 6:13:00 PM
Bromomethane	ND	0.121		µg/L	1	10/1/2012 6:13:00 PM
Trichlorofluoromethane (CFC-11)	1.17	0.0340		µg/L	1	10/1/2012 6:13:00 PM
Chloroethane	ND	0.0590		µg/L	1	10/1/2012 6:13:00 PM
1,1-Dichloroethene	ND	0.0470		µg/L	1	10/1/2012 6:13:00 PM
Methylene chloride	ND	0.0520		µg/L	1	10/1/2012 6:13:00 PM
trans-1,2-Dichloroethene	ND	0.0370		µg/L	1	10/1/2012 6:13:00 PM
Methyl tert-butyl ether (MTBE)	ND	0.0260		µg/L	1	10/1/2012 6:13:00 PM
1,1-Dichloroethane	ND	0.0270		µg/L	1	10/1/2012 6:13:00 PM
2,2-Dichloropropane	ND	0.0460		µg/L	1	10/1/2012 6:13:00 PM
cis-1,2-Dichloroethene	ND	0.0190		µg/L	1	10/1/2012 6:13:00 PM
Chloroform	ND	0.0320		µg/L	1	10/1/2012 6:13:00 PM
1,1,1-Trichloroethane (TCA)	ND	0.0320		µg/L	1	10/1/2012 6:13:00 PM
1,1-Dichloropropene	ND	0.0390		µg/L	1	10/1/2012 6:13:00 PM
Carbon tetrachloride	ND	0.0320		µg/L	1	10/1/2012 6:13:00 PM
1,2-Dichloroethane (EDC)	ND	0.0350		µg/L	1	10/1/2012 6:13:00 PM
Benzene	ND	0.0250		µg/L	1	10/1/2012 6:13:00 PM
Trichloroethene (TCE)	ND	0.0400		µg/L	1	10/1/2012 6:13:00 PM
1,2-Dichloropropane	ND	0.0470		µg/L	1	10/1/2012 6:13:00 PM
Bromodichloromethane	ND	0.0600		µg/L	1	10/1/2012 6:13:00 PM
Dibromomethane	ND	0.115		µg/L	1	10/1/2012 6:13:00 PM
cis-1,3-Dichloropropene	ND	0.0430		µg/L	1	10/1/2012 6:13:00 PM
Toluene	ND	0.0330		µg/L	1	10/1/2012 6:13:00 PM
trans-1,3-Dichloropropene	ND	0.0420		µg/L	1	10/1/2012 6:13:00 PM
1,1,2-Trichloroethane	ND	0.120		µg/L	1	10/1/2012 6:13:00 PM
1,3-Dichloropropane	ND	0.0530		µg/L	1	10/1/2012 6:13:00 PM
Tetrachloroethene (PCE)	ND	0.0350		µg/L	1	10/1/2012 6:13:00 PM
Dibromochloromethane	ND	0.0440		µg/L	1	10/1/2012 6:13:00 PM
1,2-Dibromoethane (EDB)	ND	0.00650		µg/L	1	10/1/2012 6:13:00 PM
Chlorobenzene	ND	0.0240		µg/L	1	10/1/2012 6:13:00 PM
1,1,1,2-Tetrachloroethane	ND	0.0640		µg/L	1	10/1/2012 6:13:00 PM
Ethylbenzene	ND	0.0170		µg/L	1	10/1/2012 6:13:00 PM
m,p-Xylene	ND	0.0410		µg/L	1	10/1/2012 6:13:00 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	D	Dilution was required
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

Analytical Report

WO#: **1209186**

Date Reported: **12/29/2012**

Client: Calibre **Collection Date:** 9/27/2012 3:24:00 PM

Project: Hytec-Lufkin

Lab ID: 1209186-007 **Matrix:** Water

Client Sample ID: HLMW-06B-92712

Analyses	Result	MDL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260				Batch ID: R5936		Analyst: EM
o-Xylene	ND	0.0340		µg/L	1	10/1/2012 6:13:00 PM
Styrene	ND	0.0230		µg/L	1	10/1/2012 6:13:00 PM
Isopropylbenzene	ND	0.0180		µg/L	1	10/1/2012 6:13:00 PM
Bromoform	ND	0.115		µg/L	1	10/1/2012 6:13:00 PM
1,1,2,2-Tetrachloroethane	ND	0.108		µg/L	1	10/1/2012 6:13:00 PM
n-Propylbenzene	ND	0.0330		µg/L	1	10/1/2012 6:13:00 PM
Bromobenzene	ND	0.0550		µg/L	1	10/1/2012 6:13:00 PM
1,3,5-Trimethylbenzene	ND	0.0300		µg/L	1	10/1/2012 6:13:00 PM
2-Chlorotoluene	ND	0.0320		µg/L	1	10/1/2012 6:13:00 PM
4-Chlorotoluene	ND	0.0370		µg/L	1	10/1/2012 6:13:00 PM
tert-Butylbenzene	ND	0.0360		µg/L	1	10/1/2012 6:13:00 PM
1,2,3-Trichloropropane	ND	0.130		µg/L	1	10/1/2012 6:13:00 PM
1,2,4-Trichlorobenzene	ND	0.0990		µg/L	1	10/1/2012 6:13:00 PM
sec-Butylbenzene	ND	0.0230		µg/L	1	10/1/2012 6:13:00 PM
4-Isopropyltoluene	ND	0.0360		µg/L	1	10/1/2012 6:13:00 PM
1,3-Dichlorobenzene	ND	0.0290		µg/L	1	10/1/2012 6:13:00 PM
1,4-Dichlorobenzene	ND	0.0260		µg/L	1	10/1/2012 6:13:00 PM
n-Butylbenzene	ND	0.0200		µg/L	1	10/1/2012 6:13:00 PM
1,2-Dichlorobenzene	ND	0.0460		µg/L	1	10/1/2012 6:13:00 PM
1,2-Dibromo-3-chloropropane	ND	0.315		µg/L	1	10/1/2012 6:13:00 PM
1,2,4-Trimethylbenzene	ND	0.0200		µg/L	1	10/1/2012 6:13:00 PM
Hexachlorobutadiene	ND	0.154		µg/L	1	10/1/2012 6:13:00 PM
Naphthalene	ND	0.0940		µg/L	1	10/1/2012 6:13:00 PM
1,2,3-Trichlorobenzene	ND	0.147		µg/L	1	10/1/2012 6:13:00 PM
Surr: 1-Bromo-4-fluorobenzene	100	79.2-120		%REC	1	10/1/2012 6:13:00 PM
Surr: Dibromofluoromethane	99.7	76-114		%REC	1	10/1/2012 6:13:00 PM
Surr: Toluene-d8	99.5	86.8-119		%REC	1	10/1/2012 6:13:00 PM
Total Metals by EPA Method 200.8				Batch ID: 3326		Analyst: SG
Antimony	0.251	0.00300		µg/L	1	10/3/2012 10:56:06 PM
Arsenic	2.59	0.266		µg/L	1	10/3/2012 10:56:06 PM
Beryllium	ND	0.0680		µg/L	1	10/3/2012 10:56:06 PM
Cadmium	0.138	0.0160	J	µg/L	1	10/3/2012 10:56:06 PM
Chromium	2.33	0.0810		µg/L	1	10/3/2012 10:56:06 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	D	Dilution was required
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

Analytical Report

WO#: **1209186**

Date Reported: **12/29/2012**

Client: Calibre **Collection Date:** 9/27/2012 3:24:00 PM

Project: Hytec-Lufkin

Lab ID: 1209186-007 **Matrix:** Water

Client Sample ID: HLMW-06B-92712

Analyses	Result	MDL	Qual	Units	DF	Date Analyzed
Total Metals by EPA Method 200.8				Batch ID: 3326		Analyst: SG
Copper	ND	0.0930		µg/L	1	10/3/2012 10:56:06 PM
Lead	0.622	0.0750	J	µg/L	1	10/3/2012 10:56:06 PM
Nickel	1.70	0.110		µg/L	1	10/3/2012 10:56:06 PM
Zinc	41.7	0.121		µg/L	1	10/3/2012 10:56:06 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	D	Dilution was required
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

Analytical Report

WO#: **1209186**

Date Reported: **12/29/2012**

Client: Calibre **Collection Date:** 9/27/2012 9:15:00 AM

Project: Hytec-Lufkin

Lab ID: 1209186-008 **Matrix:** Water

Client Sample ID: MOWE-92712

Analyses	Result	MDL	Qual	Units	DF	Date Analyzed
Semi-Volatile Organic Compounds by EPA Method 8270				Batch ID: 3344		Analyst: PH
Phenol	ND	0.0401		µg/L	1	10/6/2012 7:17:00 AM
2-Chlorophenol	ND	0.0132		µg/L	1	10/6/2012 7:17:00 AM
1,3-Dichlorobenzene	ND	0.0161		µg/L	1	10/6/2012 7:17:00 AM
1,4-Dichlorobenzene	ND	0.0241		µg/L	1	10/6/2012 7:17:00 AM
1,2-Dichlorobenzene	ND	0.0232		µg/L	1	10/6/2012 7:17:00 AM
Benzyl alcohol	ND	0.0371		µg/L	1	10/6/2012 7:17:00 AM
Bis(2-chloroethyl) ether	ND	0.0294		µg/L	1	10/6/2012 7:17:00 AM
2-Methylphenol (o-cresol)	ND	0.0245		µg/L	1	10/6/2012 7:17:00 AM
Hexachloroethane	ND	0.0653		µg/L	1	10/6/2012 7:17:00 AM
N-Nitrosodi-n-propylamine	ND	0.0642		µg/L	1	10/6/2012 7:17:00 AM
Nitrobenzene	ND	0.0392		µg/L	1	10/6/2012 7:17:00 AM
Isophorone	ND	0.0205		µg/L	1	10/6/2012 7:17:00 AM
4-Methylphenol (p-cresol)	ND	0.0563		µg/L	1	10/6/2012 7:17:00 AM
2-Nitrophenol	ND	0.0912		µg/L	1	10/6/2012 7:17:00 AM
2,4-Dimethylphenol	ND	0.0376		µg/L	1	10/6/2012 7:17:00 AM
Bis(2-chloroethoxy)methane	ND	0.0337		µg/L	1	10/6/2012 7:17:00 AM
2,4-Dichlorophenol	ND	0.0188		µg/L	1	10/6/2012 7:17:00 AM
1,2,4-Trichlorobenzene	ND	0.0194		µg/L	1	10/6/2012 7:17:00 AM
Naphthalene	ND	0.0123		µg/L	1	10/6/2012 7:17:00 AM
4-Chloroaniline	ND	0.0180		µg/L	1	10/6/2012 7:17:00 AM
Hexachlorobutadiene	ND	0.0390		µg/L	1	10/6/2012 7:17:00 AM
4-Chloro-3-methylphenol	ND	0.0687		µg/L	1	10/6/2012 7:17:00 AM
2-Methylnaphthalene	ND	0.0252		µg/L	1	10/6/2012 7:17:00 AM
1-Methylnaphthalene	ND	0.0214		µg/L	1	10/6/2012 7:17:00 AM
Hexachlorocyclopentadiene	ND	0.0313		µg/L	1	10/6/2012 7:17:00 AM
2,4,6-Trichlorophenol	ND	0.0210		µg/L	1	10/6/2012 7:17:00 AM
2,4,5-Trichlorophenol	ND	0.0339		µg/L	1	10/6/2012 7:17:00 AM
2-Chloronaphthalene	ND	0.0143		µg/L	1	10/6/2012 7:17:00 AM
2-Nitroaniline	ND	0.0710		µg/L	1	10/6/2012 7:17:00 AM
Acenaphthene	ND	0.0139		µg/L	1	10/6/2012 7:17:00 AM
Dimethylphthalate	ND	0.0347		µg/L	1	10/6/2012 7:17:00 AM
2,6-Dinitrotoluene	ND	0.0269		µg/L	1	10/6/2012 7:17:00 AM
Acenaphthylene	ND	0.00613		µg/L	1	10/6/2012 7:17:00 AM
2,4-Dinitrophenol	ND	0.689		µg/L	1	10/6/2012 7:17:00 AM
Dibenzofuran	ND	0.0131		µg/L	1	10/6/2012 7:17:00 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	D	Dilution was required
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

Analytical Report

WO#: **1209186**

Date Reported: **12/29/2012**

Client: Calibre **Collection Date:** 9/27/2012 9:15:00 AM

Project: Hytec-Lufkin

Lab ID: 1209186-008 **Matrix:** Water

Client Sample ID: MOWE-92712

Semi-Volatile Organic Compounds by EPA Method 8270

Batch ID: 3344 Analyst: PH

Analyses	Result	MDL	Qual	Units	DF	Date Analyzed
2,4-Dinitrotoluene	ND	0.0701		µg/L	1	10/6/2012 7:17:00 AM
4-Nitrophenol	ND	0.431		µg/L	1	10/6/2012 7:17:00 AM
Fluorene	ND	0.0164		µg/L	1	10/6/2012 7:17:00 AM
4-Chlorophenyl phenyl ether	ND	0.0199		µg/L	1	10/6/2012 7:17:00 AM
Diethylphthalate	0.681	0.0144	J ND	µg/L	1	10/6/2012 7:17:00 AM
4,6-Dinitro-2-methylphenol	ND	0.487		µg/L	1	10/6/2012 7:17:00 AM
4-Bromophenyl phenyl ether	ND	0.0241		µg/L	1	10/6/2012 7:17:00 AM
Hexachlorobenzene	ND	0.0264		µg/L	1	10/6/2012 7:17:00 AM
Pentachlorophenol	ND	0.0344		µg/L	1	10/6/2012 7:17:00 AM
Phenanthrene	0.135	0.0130	J ND	µg/L	1	10/6/2012 7:17:00 AM
Anthracene	ND	0.0167		µg/L	1	10/6/2012 7:17:00 AM
Carbazole	ND	0.0553		µg/L	1	10/6/2012 7:17:00 AM
Di-n-butyl phthalate	1.80	0.0268	B ND	µg/L	1	10/6/2012 7:17:00 AM
Fluoranthene	ND	0.0112		µg/L	1	10/6/2012 7:17:00 AM
Pyrene	ND	0.0146		µg/L	1	10/6/2012 7:17:00 AM
Benzyl Butylphthalate	0.836	0.0552	J ND	µg/L	1	10/6/2012 7:17:00 AM
bis(2-Ethylhexyl)adipate	0.224	0.0443	J ND	µg/L	1	10/6/2012 7:17:00 AM
Benz[a]anthracene	ND	0.0123		µg/L	1	10/6/2012 7:17:00 AM
Chrysene	ND	0.0126		µg/L	1	10/6/2012 7:17:00 AM
Bis(2-ethylhexyl) phthalate	0.928	0.0316	J ND	µg/L	1	10/6/2012 7:17:00 AM
Di-n-octyl phthalate	0.115	0.0258	J ND	µg/L	1	10/6/2012 7:17:00 AM
Benzo (b) fluoranthene	ND	0.0259		µg/L	1	10/6/2012 7:17:00 AM
Benzo (k) fluoranthene	ND	0.0341		µg/L	1	10/6/2012 7:17:00 AM
Benzo[a]pyrene	ND	0.0304		µg/L	1	10/6/2012 7:17:00 AM
Indeno (1,2,3-cd) pyrene	ND	0.0673		µg/L	1	10/6/2012 7:17:00 AM
Dibenzo (a,h) anthracene	ND	0.0366		µg/L	1	10/6/2012 7:17:00 AM
Benzo (g,h,I) perylene	ND	0.0378		µg/L	1	10/6/2012 7:17:00 AM
Surr: 2,4,6-Tribromophenol	94.9	24-138		%REC	1	10/6/2012 7:17:00 AM
Surr: 2-Fluorobiphenyl	68.9	38.6-138		%REC	1	10/6/2012 7:17:00 AM
Surr: Nitrobenzene-d5	75.7	31.7-140		%REC	1	10/6/2012 7:17:00 AM
Surr: Phenol-d6	35.2	15-116		%REC	1	10/6/2012 7:17:00 AM
Surr: p-Terphenyl	101	49-156		%REC	1	10/6/2012 7:17:00 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	D	Dilution was required
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

Analytical Report

WO#: **1209186**

Date Reported: **12/29/2012**

Client: Calibre **Collection Date:** 9/27/2012 9:15:00 AM

Project: Hytec-Lufkin

Lab ID: 1209186-008 **Matrix:** Water

Client Sample ID: MOWE-92712

Analyses	Result	MDL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260				Batch ID: R5936		Analyst: EM
Dichlorodifluoromethane (CFC-12)	ND	0.0300		µg/L	1	10/1/2012 11:11:00 AM
Chloromethane	ND	0.0470		µg/L	1	10/1/2012 11:11:00 AM
Vinyl chloride	ND	0.0530		µg/L	1	10/1/2012 11:11:00 AM
Bromomethane	ND	0.121		µg/L	1	10/1/2012 11:11:00 AM
Trichlorofluoromethane (CFC-11)	ND	0.0340		µg/L	1	10/1/2012 11:11:00 AM
Chloroethane	ND	0.0590		µg/L	1	10/1/2012 11:11:00 AM
1,1-Dichloroethene	ND	0.0470		µg/L	1	10/1/2012 11:11:00 AM
Methylene chloride	ND	0.0520		µg/L	1	10/1/2012 11:11:00 AM
trans-1,2-Dichloroethene	ND	0.0370		µg/L	1	10/1/2012 11:11:00 AM
Methyl tert-butyl ether (MTBE)	ND	0.0260		µg/L	1	10/1/2012 11:11:00 AM
1,1-Dichloroethane	ND	0.0270		µg/L	1	10/1/2012 11:11:00 AM
2,2-Dichloropropane	ND	0.0460		µg/L	1	10/1/2012 11:11:00 AM
cis-1,2-Dichloroethene	ND	0.0190		µg/L	1	10/1/2012 11:11:00 AM
Chloroform	ND	0.0320		µg/L	1	10/1/2012 11:11:00 AM
1,1,1-Trichloroethane (TCA)	ND	0.0320		µg/L	1	10/1/2012 11:11:00 AM
1,1-Dichloropropene	ND	0.0390		µg/L	1	10/1/2012 11:11:00 AM
Carbon tetrachloride	ND	0.0320		µg/L	1	10/1/2012 11:11:00 AM
1,2-Dichloroethane (EDC)	ND	0.0350		µg/L	1	10/1/2012 11:11:00 AM
Benzene	ND	0.0250		µg/L	1	10/1/2012 11:11:00 AM
Trichloroethene (TCE)	ND	0.0400		µg/L	1	10/1/2012 11:11:00 AM
1,2-Dichloropropane	ND	0.0470		µg/L	1	10/1/2012 11:11:00 AM
Bromodichloromethane	ND	0.0600		µg/L	1	10/1/2012 11:11:00 AM
Dibromomethane	ND	0.115		µg/L	1	10/1/2012 11:11:00 AM
cis-1,3-Dichloropropene	ND	0.0430		µg/L	1	10/1/2012 11:11:00 AM
Toluene	ND	0.0330		µg/L	1	10/1/2012 11:11:00 AM
trans-1,3-Dichloropropene	ND	0.0420		µg/L	1	10/1/2012 11:11:00 AM
1,1,2-Trichloroethane	ND	0.120		µg/L	1	10/1/2012 11:11:00 AM
1,3-Dichloropropane	ND	0.0530		µg/L	1	10/1/2012 11:11:00 AM
Tetrachloroethene (PCE)	ND	0.0350		µg/L	1	10/1/2012 11:11:00 AM
Dibromochloromethane	ND	0.0440		µg/L	1	10/1/2012 11:11:00 AM
1,2-Dibromoethane (EDB)	ND	0.00650		µg/L	1	10/1/2012 11:11:00 AM
Chlorobenzene	ND	0.0240		µg/L	1	10/1/2012 11:11:00 AM
1,1,1,2-Tetrachloroethane	ND	0.0640		µg/L	1	10/1/2012 11:11:00 AM
Ethylbenzene	ND	0.0170		µg/L	1	10/1/2012 11:11:00 AM
m,p-Xylene	ND	0.0410		µg/L	1	10/1/2012 11:11:00 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	D	Dilution was required
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

Analytical Report

WO#: **1209186**

Date Reported: **12/29/2012**

Client: Calibre **Collection Date:** 9/27/2012 9:15:00 AM

Project: Hytec-Lufkin

Lab ID: 1209186-008 **Matrix:** Water

Client Sample ID: MOWE-92712

Analyses	Result	MDL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260				Batch ID: R5936		Analyst: EM
o-Xylene	ND	0.0340		µg/L	1	10/1/2012 11:11:00 AM
Styrene	ND	0.0230		µg/L	1	10/1/2012 11:11:00 AM
Isopropylbenzene	ND	0.0180		µg/L	1	10/1/2012 11:11:00 AM
Bromoform	ND	0.115		µg/L	1	10/1/2012 11:11:00 AM
1,1,2,2-Tetrachloroethane	ND	0.108		µg/L	1	10/1/2012 11:11:00 AM
n-Propylbenzene	ND	0.0330		µg/L	1	10/1/2012 11:11:00 AM
Bromobenzene	ND	0.0550		µg/L	1	10/1/2012 11:11:00 AM
1,3,5-Trimethylbenzene	ND	0.0300		µg/L	1	10/1/2012 11:11:00 AM
2-Chlorotoluene	ND	0.0320		µg/L	1	10/1/2012 11:11:00 AM
4-Chlorotoluene	ND	0.0370		µg/L	1	10/1/2012 11:11:00 AM
tert-Butylbenzene	ND	0.0360		µg/L	1	10/1/2012 11:11:00 AM
1,2,3-Trichloropropane	ND	0.130		µg/L	1	10/1/2012 11:11:00 AM
1,2,4-Trichlorobenzene	ND	0.0990		µg/L	1	10/1/2012 11:11:00 AM
sec-Butylbenzene	ND	0.0230		µg/L	1	10/1/2012 11:11:00 AM
4-Isopropyltoluene	ND	0.0360		µg/L	1	10/1/2012 11:11:00 AM
1,3-Dichlorobenzene	ND	0.0290		µg/L	1	10/1/2012 11:11:00 AM
1,4-Dichlorobenzene	ND	0.0260		µg/L	1	10/1/2012 11:11:00 AM
n-Butylbenzene	ND	0.0200		µg/L	1	10/1/2012 11:11:00 AM
1,2-Dichlorobenzene	ND	0.0460		µg/L	1	10/1/2012 11:11:00 AM
1,2-Dibromo-3-chloropropane	ND	0.315		µg/L	1	10/1/2012 11:11:00 AM
1,2,4-Trimethylbenzene	ND	0.0200		µg/L	1	10/1/2012 11:11:00 AM
Hexachlorobutadiene	ND	0.154		µg/L	1	10/1/2012 11:11:00 AM
Naphthalene	ND	0.0940		µg/L	1	10/1/2012 11:11:00 AM
1,2,3-Trichlorobenzene	ND	0.147		µg/L	1	10/1/2012 11:11:00 AM
Surr: 1-Bromo-4-fluorobenzene	94.5	79.2-120		%REC	1	10/1/2012 11:11:00 AM
Surr: Dibromofluoromethane	105	76-114		%REC	1	10/1/2012 11:11:00 AM
Surr: Toluene-d8	101	86.8-119		%REC	1	10/1/2012 11:11:00 AM
Total Metals by EPA Method 200.8				Batch ID: 3326		Analyst: SG
Antimony	ND	0.00300		µg/L	1	10/3/2012 11:15:19 PM
Arsenic	0.909	0.266	J	µg/L	1	10/3/2012 11:15:19 PM
Beryllium	ND	0.0680		µg/L	1	10/3/2012 11:15:19 PM
Cadmium	ND	0.0160		µg/L	1	10/3/2012 11:15:19 PM
Chromium	1.44	0.0810		µg/L	1	10/3/2012 11:15:19 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	D	Dilution was required
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

Analytical Report

WO#: **1209186**

Date Reported: **12/29/2012**

Client: Calibre **Collection Date:** 9/27/2012 9:15:00 AM

Project: Hytec-Lufkin

Lab ID: 1209186-008 **Matrix:** Water

Client Sample ID: MOWE-92712

Analyses	Result	MDL	Qual	Units	DF	Date Analyzed
Total Metals by EPA Method 200.8				Batch ID: 3326		Analyst: SG
Copper	ND	0.0930		µg/L	1	10/3/2012 11:15:19 PM
Lead	0.276	0.0750	J	µg/L	1	10/3/2012 11:15:19 PM
Nickel	ND	0.110		µg/L	1	10/3/2012 11:15:19 PM
Zinc	33.1	0.121		µg/L	1	10/3/2012 11:15:19 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	D	Dilution was required
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

Analytical Report

WO#: **1209186**

Date Reported: **12/29/2012**

Client: Calibre **Collection Date:** 9/27/2012 8:45:00 AM

Project: Hytec-Lufkin

Lab ID: 1209186-009 **Matrix:** Water

Client Sample ID: SPWE-92712

Analyses	Result	MDL	Qual	Units	DF	Date Analyzed
Semi-Volatile Organic Compounds by EPA Method 8270				Batch ID: 3344		Analyst: PH
Phenol	ND	0.0401		µg/L	1	10/6/2012 8:31:00 AM
2-Chlorophenol	ND	0.0132		µg/L	1	10/6/2012 8:31:00 AM
1,3-Dichlorobenzene	ND	0.0161		µg/L	1	10/6/2012 8:31:00 AM
1,4-Dichlorobenzene	ND	0.0241		µg/L	1	10/6/2012 8:31:00 AM
1,2-Dichlorobenzene	ND	0.0232		µg/L	1	10/6/2012 8:31:00 AM
Benzyl alcohol	ND	0.0371		µg/L	1	10/6/2012 8:31:00 AM
Bis(2-chloroethyl) ether	ND	0.0294		µg/L	1	10/6/2012 8:31:00 AM
2-Methylphenol (o-cresol)	ND	0.0245		µg/L	1	10/6/2012 8:31:00 AM
Hexachloroethane	ND	0.0653		µg/L	1	10/6/2012 8:31:00 AM
N-Nitrosodi-n-propylamine	ND	0.0642		µg/L	1	10/6/2012 8:31:00 AM
Nitrobenzene	ND	0.0392		µg/L	1	10/6/2012 8:31:00 AM
Isophorone	ND	0.0205		µg/L	1	10/6/2012 8:31:00 AM
4-Methylphenol (p-cresol)	ND	0.0563		µg/L	1	10/6/2012 8:31:00 AM
2-Nitrophenol	ND	0.0912		µg/L	1	10/6/2012 8:31:00 AM
2,4-Dimethylphenol	ND	0.0376		µg/L	1	10/6/2012 8:31:00 AM
Bis(2-chloroethoxy)methane	ND	0.0337		µg/L	1	10/6/2012 8:31:00 AM
2,4-Dichlorophenol	ND	0.0188		µg/L	1	10/6/2012 8:31:00 AM
1,2,4-Trichlorobenzene	ND	0.0194		µg/L	1	10/6/2012 8:31:00 AM
Naphthalene	ND	0.0123		µg/L	1	10/6/2012 8:31:00 AM
4-Chloroaniline	ND	0.0180		µg/L	1	10/6/2012 8:31:00 AM
Hexachlorobutadiene	ND	0.0390		µg/L	1	10/6/2012 8:31:00 AM
4-Chloro-3-methylphenol	ND	0.0687		µg/L	1	10/6/2012 8:31:00 AM
2-Methylnaphthalene	ND	0.0252		µg/L	1	10/6/2012 8:31:00 AM
1-Methylnaphthalene	ND	0.0214		µg/L	1	10/6/2012 8:31:00 AM
Hexachlorocyclopentadiene	ND	0.0313		µg/L	1	10/6/2012 8:31:00 AM
2,4,6-Trichlorophenol	ND	0.0210		µg/L	1	10/6/2012 8:31:00 AM
2,4,5-Trichlorophenol	ND	0.0339		µg/L	1	10/6/2012 8:31:00 AM
2-Chloronaphthalene	ND	0.0143		µg/L	1	10/6/2012 8:31:00 AM
2-Nitroaniline	ND	0.0710		µg/L	1	10/6/2012 8:31:00 AM
Acenaphthene	ND	0.0139		µg/L	1	10/6/2012 8:31:00 AM
Dimethylphthalate	ND	0.0347		µg/L	1	10/6/2012 8:31:00 AM
2,6-Dinitrotoluene	ND	0.0269		µg/L	1	10/6/2012 8:31:00 AM
Acenaphthylene	ND	0.00613		µg/L	1	10/6/2012 8:31:00 AM
2,4-Dinitrophenol	ND	0.689		µg/L	1	10/6/2012 8:31:00 AM
Dibenzofuran	ND	0.0131		µg/L	1	10/6/2012 8:31:00 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	D	Dilution was required
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

Analytical Report

WO#: **1209186**

Date Reported: **12/29/2012**

Client: Calibre **Collection Date:** 9/27/2012 8:45:00 AM

Project: Hytec-Lufkin

Lab ID: 1209186-009 **Matrix:** Water

Client Sample ID: SPWE-92712

Semi-Volatile Organic Compounds by EPA Method 8270

Batch ID: 3344 Analyst: PH

Analyses	Result	MDL	Qual	Units	DF	Date Analyzed
2,4-Dinitrotoluene	ND	0.0701		µg/L	1	10/6/2012 8:31:00 AM
4-Nitrophenol	ND	0.431		µg/L	1	10/6/2012 8:31:00 AM
Fluorene	ND	0.0164		µg/L	1	10/6/2012 8:31:00 AM
4-Chlorophenyl phenyl ether	ND	0.0199		µg/L	1	10/6/2012 8:31:00 AM
Diethylphthalate	0.210	0.0144	J ND	µg/L	1	10/6/2012 8:31:00 AM
4,6-Dinitro-2-methylphenol	ND	0.487		µg/L	1	10/6/2012 8:31:00 AM
4-Bromophenyl phenyl ether	ND	0.0241		µg/L	1	10/6/2012 8:31:00 AM
Hexachlorobenzene	ND	0.0264		µg/L	1	10/6/2012 8:31:00 AM
Pentachlorophenol	ND	0.0344		µg/L	1	10/6/2012 8:31:00 AM
Phenanthrene	ND	0.0130		µg/L	1	10/6/2012 8:31:00 AM
Anthracene	ND	0.0167		µg/L	1	10/6/2012 8:31:00 AM
Carbazole	ND	0.0553		µg/L	1	10/6/2012 8:31:00 AM
Di-n-butyl phthalate	0.822	0.0268	J ND	µg/L	1	10/6/2012 8:31:00 AM
Fluoranthene	ND	0.0112		µg/L	1	10/6/2012 8:31:00 AM
Pyrene	ND	0.0146		µg/L	1	10/6/2012 8:31:00 AM
Benzyl Butylphthalate	0.160	0.0552	J ND	µg/L	1	10/6/2012 8:31:00 AM
bis(2-Ethylhexyl)adipate	0.132	0.0443	J ND	µg/L	1	10/6/2012 8:31:00 AM
Benz[a]anthracene	ND	0.0123		µg/L	1	10/6/2012 8:31:00 AM
Chrysene	ND	0.0126		µg/L	1	10/6/2012 8:31:00 AM
Bis(2-ethylhexyl) phthalate	0.588	0.0316	J ND	µg/L	1	10/6/2012 8:31:00 AM
Di-n-octyl phthalate	ND	0.0258		µg/L	1	10/6/2012 8:31:00 AM
Benzo (b) fluoranthene	ND	0.0259		µg/L	1	10/6/2012 8:31:00 AM
Benzo (k) fluoranthene	ND	0.0341		µg/L	1	10/6/2012 8:31:00 AM
Benzo[a]pyrene	ND	0.0304		µg/L	1	10/6/2012 8:31:00 AM
Indeno (1,2,3-cd) pyrene	ND	0.0673		µg/L	1	10/6/2012 8:31:00 AM
Dibenzo (a,h) anthracene	ND	0.0366		µg/L	1	10/6/2012 8:31:00 AM
Benzo (g,h,I) perylene	ND	0.0378		µg/L	1	10/6/2012 8:31:00 AM
Surr: 2,4,6-Tribromophenol	99.6	24-138		%REC	1	10/6/2012 8:31:00 AM
Surr: 2-Fluorobiphenyl	73.8	38.6-138		%REC	1	10/6/2012 8:31:00 AM
Surr: Nitrobenzene-d5	80.2	31.7-140		%REC	1	10/6/2012 8:31:00 AM
Surr: Phenol-d6	36.7	15-116		%REC	1	10/6/2012 8:31:00 AM
Surr: p-Terphenyl	101	49-156		%REC	1	10/6/2012 8:31:00 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	D	Dilution was required
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

Analytical Report

WO#: **1209186**

Date Reported: **12/29/2012**

Client: Calibre **Collection Date:** 9/27/2012 8:45:00 AM

Project: Hytec-Lufkin

Lab ID: 1209186-009 **Matrix:** Water

Client Sample ID: SPWE-92712

Analyses	Result	MDL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260				Batch ID: R5936		Analyst: EM
Dichlorodifluoromethane (CFC-12)	ND	0.0300		µg/L	1	10/1/2012 6:43:00 PM
Chloromethane	ND	0.0470		µg/L	1	10/1/2012 6:43:00 PM
Vinyl chloride	ND	0.0530		µg/L	1	10/1/2012 6:43:00 PM
Bromomethane	ND	0.121		µg/L	1	10/1/2012 6:43:00 PM
Trichlorofluoromethane (CFC-11)	ND	0.0340		µg/L	1	10/1/2012 6:43:00 PM
Chloroethane	ND	0.0590		µg/L	1	10/1/2012 6:43:00 PM
1,1-Dichloroethene	ND	0.0470		µg/L	1	10/1/2012 6:43:00 PM
Methylene chloride	ND	0.0520		µg/L	1	10/1/2012 6:43:00 PM
trans-1,2-Dichloroethene	ND	0.0370		µg/L	1	10/1/2012 6:43:00 PM
Methyl tert-butyl ether (MTBE)	ND	0.0260		µg/L	1	10/1/2012 6:43:00 PM
1,1-Dichloroethane	ND	0.0270		µg/L	1	10/1/2012 6:43:00 PM
2,2-Dichloropropane	ND	0.0460		µg/L	1	10/1/2012 6:43:00 PM
cis-1,2-Dichloroethene	ND	0.0190		µg/L	1	10/1/2012 6:43:00 PM
Chloroform	ND	0.0320		µg/L	1	10/1/2012 6:43:00 PM
1,1,1-Trichloroethane (TCA)	ND	0.0320		µg/L	1	10/1/2012 6:43:00 PM
1,1-Dichloropropene	ND	0.0390		µg/L	1	10/1/2012 6:43:00 PM
Carbon tetrachloride	ND	0.0320		µg/L	1	10/1/2012 6:43:00 PM
1,2-Dichloroethane (EDC)	ND	0.0350		µg/L	1	10/1/2012 6:43:00 PM
Benzene	ND	0.0250		µg/L	1	10/1/2012 6:43:00 PM
Trichloroethene (TCE)	ND	0.0400		µg/L	1	10/1/2012 6:43:00 PM
1,2-Dichloropropane	ND	0.0470		µg/L	1	10/1/2012 6:43:00 PM
Bromodichloromethane	ND	0.0600		µg/L	1	10/1/2012 6:43:00 PM
Dibromomethane	ND	0.115		µg/L	1	10/1/2012 6:43:00 PM
cis-1,3-Dichloropropene	ND	0.0430		µg/L	1	10/1/2012 6:43:00 PM
Toluene	ND	0.0330		µg/L	1	10/1/2012 6:43:00 PM
trans-1,3-Dichloropropene	ND	0.0420		µg/L	1	10/1/2012 6:43:00 PM
1,1,2-Trichloroethane	ND	0.120		µg/L	1	10/1/2012 6:43:00 PM
1,3-Dichloropropane	ND	0.0530		µg/L	1	10/1/2012 6:43:00 PM
Tetrachloroethene (PCE)	ND	0.0350		µg/L	1	10/1/2012 6:43:00 PM
Dibromochloromethane	ND	0.0440		µg/L	1	10/1/2012 6:43:00 PM
1,2-Dibromoethane (EDB)	ND	0.00650		µg/L	1	10/1/2012 6:43:00 PM
Chlorobenzene	ND	0.0240		µg/L	1	10/1/2012 6:43:00 PM
1,1,1,2-Tetrachloroethane	ND	0.0640		µg/L	1	10/1/2012 6:43:00 PM
Ethylbenzene	ND	0.0170		µg/L	1	10/1/2012 6:43:00 PM
m,p-Xylene	ND	0.0410		µg/L	1	10/1/2012 6:43:00 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	D	Dilution was required
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

Analytical Report

WO#: **1209186**

Date Reported: **12/29/2012**

Client: Calibre **Collection Date:** 9/27/2012 8:45:00 AM

Project: Hytec-Lufkin

Lab ID: 1209186-009 **Matrix:** Water

Client Sample ID: SPWE-92712

Analyses	Result	MDL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260				Batch ID: R5936		Analyst: EM
o-Xylene	ND	0.0340		µg/L	1	10/1/2012 6:43:00 PM
Styrene	ND	0.0230		µg/L	1	10/1/2012 6:43:00 PM
Isopropylbenzene	ND	0.0180		µg/L	1	10/1/2012 6:43:00 PM
Bromoform	ND	0.115		µg/L	1	10/1/2012 6:43:00 PM
1,1,2,2-Tetrachloroethane	ND	0.108		µg/L	1	10/1/2012 6:43:00 PM
n-Propylbenzene	ND	0.0330		µg/L	1	10/1/2012 6:43:00 PM
Bromobenzene	ND	0.0550		µg/L	1	10/1/2012 6:43:00 PM
1,3,5-Trimethylbenzene	ND	0.0300		µg/L	1	10/1/2012 6:43:00 PM
2-Chlorotoluene	ND	0.0320		µg/L	1	10/1/2012 6:43:00 PM
4-Chlorotoluene	ND	0.0370		µg/L	1	10/1/2012 6:43:00 PM
tert-Butylbenzene	ND	0.0360		µg/L	1	10/1/2012 6:43:00 PM
1,2,3-Trichloropropane	ND	0.130		µg/L	1	10/1/2012 6:43:00 PM
1,2,4-Trichlorobenzene	ND	0.0990		µg/L	1	10/1/2012 6:43:00 PM
sec-Butylbenzene	ND	0.0230		µg/L	1	10/1/2012 6:43:00 PM
4-Isopropyltoluene	ND	0.0360		µg/L	1	10/1/2012 6:43:00 PM
1,3-Dichlorobenzene	ND	0.0290		µg/L	1	10/1/2012 6:43:00 PM
1,4-Dichlorobenzene	ND	0.0260		µg/L	1	10/1/2012 6:43:00 PM
n-Butylbenzene	ND	0.0200		µg/L	1	10/1/2012 6:43:00 PM
1,2-Dichlorobenzene	ND	0.0460		µg/L	1	10/1/2012 6:43:00 PM
1,2-Dibromo-3-chloropropane	ND	0.315		µg/L	1	10/1/2012 6:43:00 PM
1,2,4-Trimethylbenzene	ND	0.0200		µg/L	1	10/1/2012 6:43:00 PM
Hexachlorobutadiene	ND	0.154		µg/L	1	10/1/2012 6:43:00 PM
Naphthalene	ND	0.0940		µg/L	1	10/1/2012 6:43:00 PM
1,2,3-Trichlorobenzene	ND	0.147		µg/L	1	10/1/2012 6:43:00 PM
Surr: 1-Bromo-4-fluorobenzene	102	79.2-120		%REC	1	10/1/2012 6:43:00 PM
Surr: Dibromofluoromethane	101	76-114		%REC	1	10/1/2012 6:43:00 PM
Surr: Toluene-d8	91.1	86.8-119		%REC	1	10/1/2012 6:43:00 PM
Total Metals by EPA Method 200.8				Batch ID: 3326		Analyst: SG
Antimony	0.636	0.00300		µg/L	1	10/3/2012 11:44:08 PM
Arsenic	2.46	0.266		µg/L	1	10/3/2012 11:44:08 PM
Beryllium	ND	0.0680		µg/L	1	10/3/2012 11:44:08 PM
Cadmium	0.0295	0.0160	J	µg/L	1	10/3/2012 11:44:08 PM
Chromium	3.29	0.0810		µg/L	1	10/3/2012 11:44:08 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	D	Dilution was required
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

Analytical Report

WO#: **1209186**

Date Reported: **12/29/2012**

Client: Calibre **Collection Date:** 9/27/2012 8:45:00 AM

Project: Hytec-Lufkin

Lab ID: 1209186-009 **Matrix:** Water

Client Sample ID: SPWE-92712

Analyses	Result	MDL	Qual	Units	DF	Date Analyzed
Total Metals by EPA Method 200.8				Batch ID: 3326		Analyst: SG
Copper	ND	0.0930		µg/L	1	10/3/2012 11:44:08 PM
Lead	2.45	0.0750		µg/L	1	10/3/2012 11:44:08 PM
Nickel	1.05	0.110		µg/L	1	10/3/2012 11:44:08 PM
Zinc	30.1	0.121		µg/L	1	10/3/2012 11:44:08 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	D	Dilution was required
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

Analytical Report

WO#: **1209186**

Date Reported: **12/29/2012**

Client: Calibre **Collection Date:** 9/27/2012 6:00:00 AM

Project: Hytec-Lufkin

Lab ID: 1209186-010 **Matrix:** Water

Client Sample ID: Trip Blank

Volatile Organic Compounds by EPA Method 8260

Batch ID: R5936 Analyst: EM

Analyses	Result	MDL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	0.0300		µg/L	1	10/1/2012 2:39:00 PM
Chloromethane	ND	0.0470		µg/L	1	10/1/2012 2:39:00 PM
Vinyl chloride	ND	0.0530		µg/L	1	10/1/2012 2:39:00 PM
Bromomethane	ND	0.121		µg/L	1	10/1/2012 2:39:00 PM
Trichlorofluoromethane (CFC-11)	ND	0.0340		µg/L	1	10/1/2012 2:39:00 PM
Chloroethane	ND	0.0590		µg/L	1	10/1/2012 2:39:00 PM
1,1-Dichloroethene	ND	0.0470		µg/L	1	10/1/2012 2:39:00 PM
Methylene chloride	ND	0.0520		µg/L	1	10/1/2012 2:39:00 PM
trans-1,2-Dichloroethene	ND	0.0370		µg/L	1	10/1/2012 2:39:00 PM
Methyl tert-butyl ether (MTBE)	ND	0.0260		µg/L	1	10/1/2012 2:39:00 PM
1,1-Dichloroethane	ND	0.0270		µg/L	1	10/1/2012 2:39:00 PM
2,2-Dichloropropane	ND	0.0460		µg/L	1	10/1/2012 2:39:00 PM
cis-1,2-Dichloroethene	ND	0.0190		µg/L	1	10/1/2012 2:39:00 PM
Chloroform	ND	0.0320		µg/L	1	10/1/2012 2:39:00 PM
1,1,1-Trichloroethane (TCA)	ND	0.0320		µg/L	1	10/1/2012 2:39:00 PM
1,1-Dichloropropene	ND	0.0390		µg/L	1	10/1/2012 2:39:00 PM
Carbon tetrachloride	ND	0.0320		µg/L	1	10/1/2012 2:39:00 PM
1,2-Dichloroethane (EDC)	ND	0.0350		µg/L	1	10/1/2012 2:39:00 PM
Benzene	ND	0.0250		µg/L	1	10/1/2012 2:39:00 PM
Trichloroethene (TCE)	ND	0.0400		µg/L	1	10/1/2012 2:39:00 PM
1,2-Dichloropropane	ND	0.0470		µg/L	1	10/1/2012 2:39:00 PM
Bromodichloromethane	ND	0.0600		µg/L	1	10/1/2012 2:39:00 PM
Dibromomethane	ND	0.115		µg/L	1	10/1/2012 2:39:00 PM
cis-1,3-Dichloropropene	ND	0.0430		µg/L	1	10/1/2012 2:39:00 PM
Toluene	ND	0.0330		µg/L	1	10/1/2012 2:39:00 PM
trans-1,3-Dichloropropene	ND	0.0420		µg/L	1	10/1/2012 2:39:00 PM
1,1,2-Trichloroethane	ND	0.120		µg/L	1	10/1/2012 2:39:00 PM
1,3-Dichloropropane	ND	0.0530		µg/L	1	10/1/2012 2:39:00 PM
Tetrachloroethene (PCE)	ND	0.0350		µg/L	1	10/1/2012 2:39:00 PM
Dibromochloromethane	ND	0.0440		µg/L	1	10/1/2012 2:39:00 PM
1,2-Dibromoethane (EDB)	ND	0.00650		µg/L	1	10/1/2012 2:39:00 PM
Chlorobenzene	ND	0.0240		µg/L	1	10/1/2012 2:39:00 PM
1,1,1,2-Tetrachloroethane	ND	0.0640		µg/L	1	10/1/2012 2:39:00 PM
Ethylbenzene	ND	0.0170		µg/L	1	10/1/2012 2:39:00 PM
m,p-Xylene	ND	0.0410		µg/L	1	10/1/2012 2:39:00 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	D	Dilution was required
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

Analytical Report

WO#: **1209186**

Date Reported: **12/29/2012**

Client: Calibre **Collection Date:** 9/27/2012 6:00:00 AM

Project: Hytec-Lufkin

Lab ID: 1209186-010 **Matrix:** Water

Client Sample ID: Trip Blank

Analyses	Result	MDL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260				Batch ID: R5936		Analyst: EM
o-Xylene	ND	0.0340		µg/L	1	10/1/2012 2:39:00 PM
Styrene	ND	0.0230		µg/L	1	10/1/2012 2:39:00 PM
Isopropylbenzene	ND	0.0180		µg/L	1	10/1/2012 2:39:00 PM
Bromoform	ND	0.115		µg/L	1	10/1/2012 2:39:00 PM
1,1,2,2-Tetrachloroethane	ND	0.108		µg/L	1	10/1/2012 2:39:00 PM
n-Propylbenzene	ND	0.0330		µg/L	1	10/1/2012 2:39:00 PM
Bromobenzene	ND	0.0550		µg/L	1	10/1/2012 2:39:00 PM
1,3,5-Trimethylbenzene	ND	0.0300		µg/L	1	10/1/2012 2:39:00 PM
2-Chlorotoluene	ND	0.0320		µg/L	1	10/1/2012 2:39:00 PM
4-Chlorotoluene	ND	0.0370		µg/L	1	10/1/2012 2:39:00 PM
tert-Butylbenzene	ND	0.0360		µg/L	1	10/1/2012 2:39:00 PM
1,2,3-Trichloropropane	ND	0.130		µg/L	1	10/1/2012 2:39:00 PM
1,2,4-Trichlorobenzene	ND	0.0990		µg/L	1	10/1/2012 2:39:00 PM
sec-Butylbenzene	ND	0.0230		µg/L	1	10/1/2012 2:39:00 PM
4-Isopropyltoluene	ND	0.0360		µg/L	1	10/1/2012 2:39:00 PM
1,3-Dichlorobenzene	ND	0.0290		µg/L	1	10/1/2012 2:39:00 PM
1,4-Dichlorobenzene	ND	0.0260		µg/L	1	10/1/2012 2:39:00 PM
n-Butylbenzene	ND	0.0200		µg/L	1	10/1/2012 2:39:00 PM
1,2-Dichlorobenzene	ND	0.0460		µg/L	1	10/1/2012 2:39:00 PM
1,2-Dibromo-3-chloropropane	ND	0.315		µg/L	1	10/1/2012 2:39:00 PM
1,2,4-Trimethylbenzene	ND	0.0200		µg/L	1	10/1/2012 2:39:00 PM
Hexachlorobutadiene	ND	0.154		µg/L	1	10/1/2012 2:39:00 PM
Naphthalene	ND	0.0940		µg/L	1	10/1/2012 2:39:00 PM
1,2,3-Trichlorobenzene	ND	0.147		µg/L	1	10/1/2012 2:39:00 PM
Surr: 1-Bromo-4-fluorobenzene	101	79.2-120		%REC	1	10/1/2012 2:39:00 PM
Surr: Dibromofluoromethane	101	76-114		%REC	1	10/1/2012 2:39:00 PM
Surr: Toluene-d8	101	86.8-119		%REC	1	10/1/2012 2:39:00 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	D	Dilution was required
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

Analytical Report

WO#: **1209186**

Date Reported: **12/29/2012**

Client: Calibre **Collection Date:** 9/27/2012 9:53:00 AM

Project: Hytec-Lufkin

Lab ID: 1209186-012 **Matrix:** Water

Client Sample ID: PAWE-92712

Semi-Volatile Organic Compounds by EPA Method 8270 Batch ID: 3344 Analyst: PH

Analyses	Result	MDL	Qual	Units	DF	Date Analyzed
Phenol	ND	0.0401		µg/L	1	10/6/2012 9:20:00 AM
2-Chlorophenol	ND	0.0132		µg/L	1	10/6/2012 9:20:00 AM
1,3-Dichlorobenzene	ND	0.0161		µg/L	1	10/6/2012 9:20:00 AM
1,4-Dichlorobenzene	ND	0.0241		µg/L	1	10/6/2012 9:20:00 AM
1,2-Dichlorobenzene	ND	0.0232		µg/L	1	10/6/2012 9:20:00 AM
Benzyl alcohol	ND	0.0371		µg/L	1	10/6/2012 9:20:00 AM
Bis(2-chloroethyl) ether	ND	0.0294		µg/L	1	10/6/2012 9:20:00 AM
2-Methylphenol (o-cresol)	ND	0.0245		µg/L	1	10/6/2012 9:20:00 AM
Hexachloroethane	ND	0.0653		µg/L	1	10/6/2012 9:20:00 AM
N-Nitrosodi-n-propylamine	ND	0.0642		µg/L	1	10/6/2012 9:20:00 AM
Nitrobenzene	ND	0.0392		µg/L	1	10/6/2012 9:20:00 AM
Isophorone	ND	0.0205		µg/L	1	10/6/2012 9:20:00 AM
4-Methylphenol (p-cresol)	ND	0.0563		µg/L	1	10/6/2012 9:20:00 AM
2-Nitrophenol	ND	0.0912		µg/L	1	10/6/2012 9:20:00 AM
2,4-Dimethylphenol	ND	0.0376		µg/L	1	10/6/2012 9:20:00 AM
Bis(2-chloroethoxy)methane	ND	0.0337		µg/L	1	10/6/2012 9:20:00 AM
2,4-Dichlorophenol	ND	0.0188		µg/L	1	10/6/2012 9:20:00 AM
1,2,4-Trichlorobenzene	ND	0.0194		µg/L	1	10/6/2012 9:20:00 AM
Naphthalene	ND	0.0123		µg/L	1	10/6/2012 9:20:00 AM
4-Chloroaniline	ND	0.0180		µg/L	1	10/6/2012 9:20:00 AM
Hexachlorobutadiene	ND	0.0390		µg/L	1	10/6/2012 9:20:00 AM
4-Chloro-3-methylphenol	ND	0.0687		µg/L	1	10/6/2012 9:20:00 AM
2-Methylnaphthalene	ND	0.0252		µg/L	1	10/6/2012 9:20:00 AM
1-Methylnaphthalene	ND	0.0214		µg/L	1	10/6/2012 9:20:00 AM
Hexachlorocyclopentadiene	ND	0.0313		µg/L	1	10/6/2012 9:20:00 AM
2,4,6-Trichlorophenol	ND	0.0210		µg/L	1	10/6/2012 9:20:00 AM
2,4,5-Trichlorophenol	ND	0.0339		µg/L	1	10/6/2012 9:20:00 AM
2-Chloronaphthalene	ND	0.0143		µg/L	1	10/6/2012 9:20:00 AM
2-Nitroaniline	ND	0.0710		µg/L	1	10/6/2012 9:20:00 AM
Acenaphthene	ND	0.0139		µg/L	1	10/6/2012 9:20:00 AM
Dimethylphthalate	ND	0.0347		µg/L	1	10/6/2012 9:20:00 AM
2,6-Dinitrotoluene	ND	0.0269		µg/L	1	10/6/2012 9:20:00 AM
Acenaphthylene	ND	0.00613		µg/L	1	10/6/2012 9:20:00 AM
2,4-Dinitrophenol	ND	0.689		µg/L	1	10/6/2012 9:20:00 AM
Dibenzofuran	ND	0.0131		µg/L	1	10/6/2012 9:20:00 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	D	Dilution was required
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

Analytical Report

WO#: **1209186**

Date Reported: **12/29/2012**

Client: Calibre **Collection Date:** 9/27/2012 9:53:00 AM

Project: Hytec-Lufkin

Lab ID: 1209186-012 **Matrix:** Water

Client Sample ID: PAWE-92712

Semi-Volatile Organic Compounds by EPA Method 8270

Batch ID: 3344 Analyst: PH

Analyses	Result	MDL	Qual	Units	DF	Date Analyzed
2,4-Dinitrotoluene	ND	0.0701		µg/L	1	10/6/2012 9:20:00 AM
4-Nitrophenol	ND	0.431		µg/L	1	10/6/2012 9:20:00 AM
Fluorene	ND	0.0164		µg/L	1	10/6/2012 9:20:00 AM
4-Chlorophenyl phenyl ether	ND	0.0199		µg/L	1	10/6/2012 9:20:00 AM
Diethylphthalate	0.280	0.0144	J ND	µg/L	1	10/6/2012 9:20:00 AM
4,6-Dinitro-2-methylphenol	ND	0.487		µg/L	1	10/6/2012 9:20:00 AM
4-Bromophenyl phenyl ether	ND	0.0241		µg/L	1	10/6/2012 9:20:00 AM
Hexachlorobenzene	ND	0.0264		µg/L	1	10/6/2012 9:20:00 AM
Pentachlorophenol	ND	0.0344		µg/L	1	10/6/2012 9:20:00 AM
Phenanthrene	0.0617	0.0130	J ND	µg/L	1	10/6/2012 9:20:00 AM
Anthracene	ND	0.0167		µg/L	1	10/6/2012 9:20:00 AM
Carbazole	ND	0.0553		µg/L	1	10/6/2012 9:20:00 AM
Di-n-butyl phthalate	0.897	0.0268	J ND	µg/L	1	10/6/2012 9:20:00 AM
Fluoranthene	ND	0.0112		µg/L	1	10/6/2012 9:20:00 AM
Pyrene	ND	0.0146		µg/L	1	10/6/2012 9:20:00 AM
Benzyl Butylphthalate	0.482	0.0552	J ND	µg/L	1	10/6/2012 9:20:00 AM
bis(2-Ethylhexyl)adipate	0.263	0.0443	J ND	µg/L	1	10/6/2012 9:20:00 AM
Benz[a]anthracene	ND	0.0123		µg/L	1	10/6/2012 9:20:00 AM
Chrysene	ND	0.0126		µg/L	1	10/6/2012 9:20:00 AM
Bis(2-ethylhexyl) phthalate	1.04	0.0316	B ND	µg/L	1	10/6/2012 9:20:00 AM
Di-n-octyl phthalate	11.7	0.0258		µg/L	1	10/6/2012 9:20:00 AM
Benzo (b) fluoranthene	ND	0.0259		µg/L	1	10/6/2012 9:20:00 AM
Benzo (k) fluoranthene	ND	0.0341		µg/L	1	10/6/2012 9:20:00 AM
Benzo[a]pyrene	ND	0.0304		µg/L	1	10/6/2012 9:20:00 AM
Indeno (1,2,3-cd) pyrene	ND	0.0673		µg/L	1	10/6/2012 9:20:00 AM
Dibenzo (a,h) anthracene	ND	0.0366		µg/L	1	10/6/2012 9:20:00 AM
Benzo (g,h,I) perylene	ND	0.0378		µg/L	1	10/6/2012 9:20:00 AM
Surr: 2,4,6-Tribromophenol	77.2	24-138		%REC	1	10/6/2012 9:20:00 AM
Surr: 2-Fluorobiphenyl	57.6	38.6-138		%REC	1	10/6/2012 9:20:00 AM
Surr: Nitrobenzene-d5	52.4	31.7-140		%REC	1	10/6/2012 9:20:00 AM
Surr: Phenol-d6	24.8	15-116		%REC	1	10/6/2012 9:20:00 AM
Surr: p-Terphenyl	77.1	49-156		%REC	1	10/6/2012 9:20:00 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	D	Dilution was required
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

Analytical Report

WO#: **1209186**

Date Reported: **12/29/2012**

Client: Calibre **Collection Date:** 9/27/2012 9:53:00 AM

Project: Hytec-Lufkin

Lab ID: 1209186-012 **Matrix:** Water

Client Sample ID: PAWE-92712

Analyses	Result	MDL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260				Batch ID: R5936		Analyst: EM
Dichlorodifluoromethane (CFC-12)	ND	0.0300		µg/L	1	10/1/2012 7:45:00 PM
Chloromethane	ND	0.0470		µg/L	1	10/1/2012 7:45:00 PM
Vinyl chloride	ND	0.0530		µg/L	1	10/1/2012 7:45:00 PM
Bromomethane	ND	0.121		µg/L	1	10/1/2012 7:45:00 PM
Trichlorofluoromethane (CFC-11)	ND	0.0340		µg/L	1	10/1/2012 7:45:00 PM
Chloroethane	ND	0.0590		µg/L	1	10/1/2012 7:45:00 PM
1,1-Dichloroethene	ND	0.0470		µg/L	1	10/1/2012 7:45:00 PM
Methylene chloride	ND	0.0520		µg/L	1	10/1/2012 7:45:00 PM
trans-1,2-Dichloroethene	ND	0.0370		µg/L	1	10/1/2012 7:45:00 PM
Methyl tert-butyl ether (MTBE)	ND	0.0260		µg/L	1	10/1/2012 7:45:00 PM
1,1-Dichloroethane	ND	0.0270		µg/L	1	10/1/2012 7:45:00 PM
2,2-Dichloropropane	ND	0.0460		µg/L	1	10/1/2012 7:45:00 PM
cis-1,2-Dichloroethene	ND	0.0190		µg/L	1	10/1/2012 7:45:00 PM
Chloroform	ND	0.0320		µg/L	1	10/1/2012 7:45:00 PM
1,1,1-Trichloroethane (TCA)	ND	0.0320		µg/L	1	10/1/2012 7:45:00 PM
1,1-Dichloropropene	ND	0.0390		µg/L	1	10/1/2012 7:45:00 PM
Carbon tetrachloride	ND	0.0320		µg/L	1	10/1/2012 7:45:00 PM
1,2-Dichloroethane (EDC)	ND	0.0350		µg/L	1	10/1/2012 7:45:00 PM
Benzene	ND	0.0250		µg/L	1	10/1/2012 7:45:00 PM
Trichloroethene (TCE)	ND	0.0400		µg/L	1	10/1/2012 7:45:00 PM
1,2-Dichloropropane	ND	0.0470		µg/L	1	10/1/2012 7:45:00 PM
Bromodichloromethane	ND	0.0600		µg/L	1	10/1/2012 7:45:00 PM
Dibromomethane	ND	0.115		µg/L	1	10/1/2012 7:45:00 PM
cis-1,3-Dichloropropene	ND	0.0430		µg/L	1	10/1/2012 7:45:00 PM
Toluene	ND	0.0330		µg/L	1	10/1/2012 7:45:00 PM
trans-1,3-Dichloropropene	ND	0.0420		µg/L	1	10/1/2012 7:45:00 PM
1,1,2-Trichloroethane	ND	0.120		µg/L	1	10/1/2012 7:45:00 PM
1,3-Dichloropropane	ND	0.0530		µg/L	1	10/1/2012 7:45:00 PM
Tetrachloroethene (PCE)	ND	0.0350		µg/L	1	10/1/2012 7:45:00 PM
Dibromochloromethane	ND	0.0440		µg/L	1	10/1/2012 7:45:00 PM
1,2-Dibromoethane (EDB)	ND	0.00650		µg/L	1	10/1/2012 7:45:00 PM
Chlorobenzene	ND	0.0240		µg/L	1	10/1/2012 7:45:00 PM
1,1,1,2-Tetrachloroethane	ND	0.0640		µg/L	1	10/1/2012 7:45:00 PM
Ethylbenzene	ND	0.0170		µg/L	1	10/1/2012 7:45:00 PM
m,p-Xylene	ND	0.0410		µg/L	1	10/1/2012 7:45:00 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	D	Dilution was required
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

Analytical Report

WO#: **1209186**

Date Reported: **12/29/2012**

Client: Calibre **Collection Date:** 9/27/2012 9:53:00 AM

Project: Hytec-Lufkin

Lab ID: 1209186-012 **Matrix:** Water

Client Sample ID: PAWE-92712

Analyses	Result	MDL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260				Batch ID: R5936		Analyst: EM
o-Xylene	ND	0.0340		µg/L	1	10/1/2012 7:45:00 PM
Styrene	ND	0.0230		µg/L	1	10/1/2012 7:45:00 PM
Isopropylbenzene	ND	0.0180		µg/L	1	10/1/2012 7:45:00 PM
Bromoform	ND	0.115		µg/L	1	10/1/2012 7:45:00 PM
1,1,2,2-Tetrachloroethane	ND	0.108		µg/L	1	10/1/2012 7:45:00 PM
n-Propylbenzene	ND	0.0330		µg/L	1	10/1/2012 7:45:00 PM
Bromobenzene	ND	0.0550		µg/L	1	10/1/2012 7:45:00 PM
1,3,5-Trimethylbenzene	ND	0.0300		µg/L	1	10/1/2012 7:45:00 PM
2-Chlorotoluene	ND	0.0320		µg/L	1	10/1/2012 7:45:00 PM
4-Chlorotoluene	ND	0.0370		µg/L	1	10/1/2012 7:45:00 PM
tert-Butylbenzene	ND	0.0360		µg/L	1	10/1/2012 7:45:00 PM
1,2,3-Trichloropropane	ND	0.130		µg/L	1	10/1/2012 7:45:00 PM
1,2,4-Trichlorobenzene	ND	0.0990		µg/L	1	10/1/2012 7:45:00 PM
sec-Butylbenzene	ND	0.0230		µg/L	1	10/1/2012 7:45:00 PM
4-Isopropyltoluene	ND	0.0360		µg/L	1	10/1/2012 7:45:00 PM
1,3-Dichlorobenzene	ND	0.0290		µg/L	1	10/1/2012 7:45:00 PM
1,4-Dichlorobenzene	ND	0.0260		µg/L	1	10/1/2012 7:45:00 PM
n-Butylbenzene	ND	0.0200		µg/L	1	10/1/2012 7:45:00 PM
1,2-Dichlorobenzene	ND	0.0460		µg/L	1	10/1/2012 7:45:00 PM
1,2-Dibromo-3-chloropropane	ND	0.315		µg/L	1	10/1/2012 7:45:00 PM
1,2,4-Trimethylbenzene	ND	0.0200		µg/L	1	10/1/2012 7:45:00 PM
Hexachlorobutadiene	ND	0.154		µg/L	1	10/1/2012 7:45:00 PM
Naphthalene	ND	0.0940		µg/L	1	10/1/2012 7:45:00 PM
1,2,3-Trichlorobenzene	ND	0.147		µg/L	1	10/1/2012 7:45:00 PM
Surr: 1-Bromo-4-fluorobenzene	102	79.2-120		%REC	1	10/1/2012 7:45:00 PM
Surr: Dibromofluoromethane	101	76-114		%REC	1	10/1/2012 7:45:00 PM
Surr: Toluene-d8	101	86.8-119		%REC	1	10/1/2012 7:45:00 PM
Total Metals by EPA Method 200.8				Batch ID: 3326		Analyst: SG
Antimony	0.159	0.00300	J	µg/L	1	10/4/2012 12:03:22 AM
Arsenic	0.854	0.266	J	µg/L	1	10/4/2012 12:03:22 AM
Beryllium	ND	0.0680		µg/L	1	10/4/2012 12:03:22 AM
Cadmium	ND	0.0160		µg/L	1	10/4/2012 12:03:22 AM
Chromium	1.89	0.0810		µg/L	1	10/4/2012 12:03:22 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	D	Dilution was required
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

Analytical Report

WO#: **1209186**

Date Reported: **12/29/2012**

Client: Calibre **Collection Date:** 9/27/2012 9:53:00 AM

Project: Hytec-Lufkin

Lab ID: 1209186-012 **Matrix:** Water

Client Sample ID: PAWE-92712

Analyses	Result	MDL	Qual	Units	DF	Date Analyzed
Total Metals by EPA Method 200.8				Batch ID: 3326		Analyst: SG
Copper	4.57	0.0930		µg/L	1	10/4/2012 12:03:22 AM
Lead	0.352	0.0750	J	µg/L	1	10/4/2012 12:03:22 AM
Nickel	0.545	0.110	ND	µg/L	1	10/4/2012 12:03:22 AM
Zinc	30.6	0.121		µg/L	1	10/4/2012 12:03:22 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	D	Dilution was required
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

Date: *12/29/2012*

Work Order: 1209186
CLIENT: Calibre
Project: Hytec-Lufkin

QC SUMMARY REPORT

Dissolved Metals by EPA Method 200.8

Sample ID: **MB-3335** SampType: **MBLK** Units: **µg/L** Prep Date: **10/2/2012** RunNo: **5982**
Client ID: **MBLKW** Batch ID: **3335** Analysis Date: **10/3/2012** SeqNo: **118474**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	0.00480	0.200									J
Arsenic	ND	1.00									
Beryllium	ND	0.200									
Cadmium	ND	0.200									
Chromium	0.278	0.500									J
Copper	ND	0.500									
Lead	ND	1.00									
Nickel	ND	0.500									
Zinc	0.820	1.50									J

Sample ID: **LCS-3335** SampType: **LCS** Units: **µg/L** Prep Date: **10/2/2012** RunNo: **5982**
Client ID: **LCSW** Batch ID: **3335** Analysis Date: **10/3/2012** SeqNo: **118475**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	4.92	0.200	5.000	0	98.4	85	115				
Arsenic	100	1.00	100.0	0	100	85	115				
Beryllium	5.13	0.200	5.000	0	103	85	115				
Cadmium	5.01	0.200	5.000	0	100	85	115				
Chromium	102	0.500	100.0	0	102	85	115				
Copper	103	0.500	100.0	0	103	85	115				
Lead	48.2	1.00	50.00	0	96.5	85	115				
Nickel	102	0.500	100.0	0	102	85	115				
Zinc	115	1.50	100.0	0	115	85	115				

Qualifiers:

B	Analyte detected in the associated Method Blank	D	Dilution was required	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

Date: *12/29/2012*

Work Order: 1209186
CLIENT: Calibre
Project: Hytec-Lufkin

QC SUMMARY REPORT

Dissolved Metals by EPA Method 200.8

Sample ID: **1209157-001BMS** SampType: **MS** Units: **µg/L** Prep Date: **10/2/2012** RunNo: **5982**
Client ID: **BATCH** Batch ID: **3335** Analysis Date: **10/3/2012** SeqNo: **118478**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	24.4	0.200	25.00	0.7445	94.5	70	130				
Arsenic	514	1.00	500.0	3.784	102	70	130				
Beryllium	25.3	0.200	25.00	0	101	70	130				
Cadmium	25.1	0.200	25.00	0.06800	100	70	130				
Chromium	420	0.500	500.0	1.354	83.7	70	130				
Copper	490	0.500	500.0	0	98.1	70	130				
Lead	235	1.00	250.0	0.2155	94.0	70	130				
Nickel	511	0.500	500.0	5.834	101	70	130				
Zinc	581	1.50	500.0	19.77	112	70	130				

Sample ID: **1209157-001BMSD** SampType: **MSD** Units: **µg/L** Prep Date: **10/2/2012** RunNo: **5982**
Client ID: **BATCH** Batch ID: **3335** Analysis Date: **10/3/2012** SeqNo: **118479**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	24.1	0.200	25.00	0.7445	93.5	70	130	24.38	1.02	30	
Arsenic	513	1.00	500.0	3.784	102	70	130	514.3	0.252	30	
Beryllium	24.9	0.200	25.00	0	99.6	70	130	25.34	1.72	30	
Cadmium	24.9	0.200	25.00	0.06800	99.1	70	130	25.14	1.18	30	
Chromium	412	0.500	500.0	1.354	82.1	70	130	420.0	1.91	30	
Copper	492	0.500	500.0	0	98.4	70	130	490.4	0.371	30	
Lead	227	1.00	250.0	0.2155	90.8	70	130	235.3	3.44	30	
Nickel	508	0.500	500.0	5.834	100	70	130	511.0	0.563	30	
Zinc	560	1.50	500.0	19.77	108	70	130	581.0	3.70	30	

Qualifiers:

B	Analyte detected in the associated Method Blank	D	Dilution was required	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

Work Order: 1209186
CLIENT: Calibre
Project: Hytec-Lufkin

QC SUMMARY REPORT

Dissolved Metals by EPA Method 200.8

Sample ID: **1210008-004BDUP** SampType: **DUP** Units: **µg/L** Prep Date: **10/2/2012** RunNo: **5982**
Client ID: **BATCH** Batch ID: **3335** Analysis Date: **10/3/2012** SeqNo: **118592**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	0.0310	0.200						0.06100	65.2	30	JR
Arsenic	10.2	1.00						10.51	2.59	30	
Beryllium	0.0990	0.200						0.1170	16.7	30	J
Cadmium	ND	0.200						0.01700	200	30	R
Chromium	4.70	0.500						4.882	3.92	30	
Copper	ND	0.500						0	0	30	
Lead	0.760	1.00						1.273	50.5	30	JR
Nickel	18.0	0.500						18.66	3.66	30	
Zinc	13.1	1.50						15.53	17.1	30	

NOTES:
R - High RPD due to low analyte concentration. In this range, high RPD's may be expected.

Sample ID: **MB-3486** SampType: **MBLK** Units: **µg/L** Prep Date: **10/19/2012** RunNo: **6238**
Client ID: **MBLKW** Batch ID: **3486** Analysis Date: **10/19/2012** SeqNo: **123939**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	1.00									
Lead	ND	1.00									

Sample ID: **LCS-3486** SampType: **LCS** Units: **µg/L** Prep Date: **10/19/2012** RunNo: **6238**
Client ID: **LCSW** Batch ID: **3486** Analysis Date: **10/19/2012** SeqNo: **123940**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	98.7	1.00	100.0	0	98.7	85	115				
Lead	51.8	1.00	50.00	0	104	85	115				

Qualifiers:

B	Analyte detected in the associated Method Blank	D	Dilution was required	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

Work Order: 1209186
CLIENT: Calibre
Project: Hytec-Lufkin

QC SUMMARY REPORT

Dissolved Metals by EPA Method 200.8

Sample ID: **1209186-002DDUP** SampType: **DUP** Units: **µg/L** Prep Date: **10/19/2012** RunNo: **6238**
Client ID: **HLMW-02A-92712** Batch ID: **3486** Analysis Date: **10/20/2012** SeqNo: **123942**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	1.00						0	0	30	
Lead	0.408	1.00						0.7375	57.6	30	JR

NOTES:
R - High RPD due to low analyte concentration. In this range, high RPD's may be expected.

Sample ID: **1209186-002DMS** SampType: **MS** Units: **µg/L** Prep Date: **10/19/2012** RunNo: **6238**
Client ID: **HLMW-02A-92712** Batch ID: **3486** Analysis Date: **10/20/2012** SeqNo: **123943**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	501	1.00	500.0	0	100	70	130				
Lead	258	1.00	250.0	0.7375	103	70	130				

Sample ID: **1209186-002DMSD** SampType: **MSD** Units: **µg/L** Prep Date: **10/19/2012** RunNo: **6238**
Client ID: **HLMW-02A-92712** Batch ID: **3486** Analysis Date: **10/20/2012** SeqNo: **123944**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	512	1.00	500.0	0	102	70	130	501.4	2.09	30	
Lead	258	1.00	250.0	0.7375	103	70	130	258.0	0.148	30	

Qualifiers:

B	Analyte detected in the associated Method Blank	D	Dilution was required	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

Work Order: 1209186
CLIENT: Calibre
Project: Hytec-Lufkin

QC SUMMARY REPORT

Total Metals by EPA Method 200.8

Sample ID: **MB-3326** SampType: **MBLK** Units: **µg/L** Prep Date: **10/2/2012** RunNo: **5977**
Client ID: **MBLKW** Batch ID: **3326** Analysis Date: **10/3/2012** SeqNo: **118406**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	ND	0.200									
Arsenic	ND	1.00									
Beryllium	ND	0.200									
Cadmium	ND	0.200									
Chromium	0.273	0.500									J
Copper	ND	0.500									
Lead	ND	1.00									
Nickel	0.112	0.500									J
Zinc	0.996	1.50									J

Sample ID: **LCS-3326** SampType: **LCS** Units: **µg/L** Prep Date: **10/2/2012** RunNo: **5977**
Client ID: **LCSW** Batch ID: **3326** Analysis Date: **10/3/2012** SeqNo: **118407**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	4.86	0.200	5.000	0	97.2	85	115				
Arsenic	99.1	1.00	100.0	0	99.1	85	115				
Beryllium	4.91	0.200	5.000	0	98.2	85	115				
Cadmium	5.01	0.200	5.000	0	100	85	115				
Chromium	96.5	0.500	100.0	0	96.5	85	115				
Copper	100	0.500	100.0	0	100	85	115				
Lead	49.1	1.00	50.00	0	98.2	85	115				
Nickel	99.0	0.500	100.0	0	99.0	85	115				
Zinc	112	1.50	100.0	0	112	85	115				

Qualifiers:

B	Analyte detected in the associated Method Blank	D	Dilution was required	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

Date: *12/29/2012*

Work Order: 1209186
CLIENT: Calibre
Project: Hytec-Lufkin

QC SUMMARY REPORT

Total Metals by EPA Method 200.8

Sample ID: **1209186-007CDUP** SampType: **DUP** Units: **µg/L** Prep Date: **10/2/2012** RunNo: **5977**
Client ID: **HLMW-06B-92712** Batch ID: **3326** Analysis Date: **10/3/2012** SeqNo: **118550**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	0.202	0.200						0.2510	21.6	30	
Arsenic	1.56	1.00						2.589	49.4	30	R
Beryllium	ND	0.200						0	0	30	
Cadmium	0.117	0.200						0.1375	16.1	30	J
Chromium	2.04	0.500						2.333	13.4	30	
Copper	ND	0.500						0	0	30	
Lead	0.619	1.00						0.6215	0.403	30	J
Nickel	1.33	0.500						1.699	24.2	30	
Zinc	43.7	1.50						41.70	4.63	30	

NOTES:
R - High RPD due to low analyte concentration. In this range, high RPD's may be expected.

Sample ID: **1209186-008CMS** SampType: **MS** Units: **µg/L** Prep Date: **10/2/2012** RunNo: **5977**
Client ID: **MOWE-92712** Batch ID: **3326** Analysis Date: **10/3/2012** SeqNo: **118552**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	23.1	0.200	25.00	0	92.3	70	130				
Arsenic	499	1.00	500.0	0.9090	99.6	70	130				
Beryllium	24.0	0.200	25.00	0	95.8	70	130				
Cadmium	23.7	0.200	25.00	0	94.8	70	130				
Chromium	436	0.500	500.0	1.444	86.8	70	130				
Copper	474	0.500	500.0	0	94.7	70	130				
Lead	224	1.00	250.0	0.2755	89.5	70	130				
Nickel	494	0.500	500.0	0	98.9	70	130				
Zinc	507	1.50	500.0	33.05	94.8	70	130				

Qualifiers:

B	Analyte detected in the associated Method Blank	D	Dilution was required	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

Date: *12/29/2012*

Work Order: 1209186
CLIENT: Calibre
Project: Hytec-Lufkin

QC SUMMARY REPORT

Total Metals by EPA Method 200.8

Sample ID: **1209186-008CMSD** SampType: **MSD** Units: **µg/L** Prep Date: **10/2/2012** RunNo: **5977**
Client ID: **MOWE-92712** Batch ID: **3326** Analysis Date: **10/3/2012** SeqNo: **118553**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	24.3	0.200	25.00	0	97.1	70	130	23.08	5.03	30	
Arsenic	518	1.00	500.0	0.9090	103	70	130	498.8	3.71	30	
Beryllium	25.2	0.200	25.00	0	101	70	130	23.96	5.22	30	
Cadmium	24.7	0.200	25.00	0	98.9	70	130	23.71	4.19	30	
Chromium	457	0.500	500.0	1.444	91.1	70	130	435.6	4.80	30	
Copper	516	0.500	500.0	0	103	70	130	473.5	8.62	30	
Lead	233	1.00	250.0	0.2755	93.0	70	130	224.1	3.78	30	
Nickel	509	0.500	500.0	0	102	70	130	494.5	2.93	30	
Zinc	541	1.50	500.0	33.05	102	70	130	507.2	6.39	30	

Qualifiers:

B	Analyte detected in the associated Method Blank	D	Dilution was required	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

Work Order: 1209186
CLIENT: Calibre
Project: Hytec-Lufkin

QC SUMMARY REPORT

Semi-Volatile Organic Compounds by EPA Method 8270

Sample ID: **ICV-3344** SampType: **ICV** Units: **µg/L** Prep Date: **10/5/2012** RunNo: **6112**
Client ID: **ICV** Batch ID: **3344** Analysis Date: **10/5/2012** SeqNo: **121414**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
2,4-Dinitrophenol	773	2.00	1,000	0	77.3	70	130				
4,6-Dinitro-2-methylphenol	782	5.00	1,000	0	78.2	70	130				
Surr: 2,4,6-Tribromophenol	1,050		1,000		105	24	138				
Surr: 2-Fluorobiphenyl	489		500.0		97.9	38.6	138				
Surr: Nitrobenzene-d5	488		500.0		97.6	31.7	140				
Surr: Phenol-d6	958		1,000		95.8	15	116				
Surr: p-Terphenyl	494		500.0		98.9	49	156				

Sample ID: **MB-3344** SampType: **MBLK** Units: **µg/L** Prep Date: **10/3/2012** RunNo: **6112**
Client ID: **MBLKW** Batch ID: **3344** Analysis Date: **10/5/2012** SeqNo: **121416**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phenol	0.543	2.00									J
2-Chlorophenol	ND	1.00									
1,3-Dichlorobenzene	ND	1.00									
1,4-Dichlorobenzene	ND	1.00									
1,2-Dichlorobenzene	ND	1.00									
Benzyl alcohol	ND	1.00									
Bis(2-chloroethyl) ether	ND	2.00									
2-Methylphenol (o-cresol)	ND	1.00									
Hexachloroethane	ND	1.00									
N-Nitrosodi-n-propylamine	ND	1.00									
Nitrobenzene	ND	2.00									
Isophorone	ND	1.00									
4-Methylphenol (p-cresol)	ND	1.00									
2-Nitrophenol	ND	2.00									
2,4-Dimethylphenol	ND	1.00									
Bis(2-chloroethoxy)methane	ND	1.00									

Qualifiers:

B	Analyte detected in the associated Method Blank	D	Dilution was required	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

Work Order: 1209186
CLIENT: Calibre
Project: Hytec-Lufkin

QC SUMMARY REPORT

Semi-Volatile Organic Compounds by EPA Method 8270

Sample ID: **MB-3344** SampType: **MBLK** Units: **µg/L** Prep Date: **10/3/2012** RunNo: **6112**
Client ID: **MBLKW** Batch ID: **3344** Analysis Date: **10/5/2012** SeqNo: **121416**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
2,4-Dichlorophenol	ND	2.00									
1,2,4-Trichlorobenzene	ND	1.00									
Naphthalene	ND	0.500									
4-Chloroaniline	ND	5.00									
Hexachlorobutadiene	ND	1.00									
4-Chloro-3-methylphenol	ND	5.00									
2-Methylnaphthalene	ND	0.500									
1-Methylnaphthalene	ND	0.500									
Hexachlorocyclopentadiene	ND	1.00									
2,4,6-Trichlorophenol	ND	2.00									
2,4,5-Trichlorophenol	ND	2.00									
2-Chloronaphthalene	ND	1.00									
2-Nitroaniline	ND	5.00									
Acenaphthene	ND	0.500									
Dimethylphthalate	ND	1.00									
2,6-Dinitrotoluene	ND	1.00									
Acenaphthylene	ND	0.500									
2,4-Dinitrophenol	ND	2.00									
Dibenzofuran	ND	1.00									
2,4-Dinitrotoluene	ND	1.00									
4-Nitrophenol	ND	5.00									
Fluorene	ND	0.500									
4-Chlorophenyl phenyl ether	ND	1.00									
Diethylphthalate	0.637	1.00									J
4,6-Dinitro-2-methylphenol	ND	5.00									
4-Bromophenyl phenyl ether	ND	1.00									
Hexachlorobenzene	ND	1.00									
Pentachlorophenol	ND	2.00									
Phenanthrene	0.159	0.500									J

Qualifiers:

B	Analyte detected in the associated Method Blank	D	Dilution was required	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

Work Order: 1209186
CLIENT: Calibre
Project: Hytec-Lufkin

QC SUMMARY REPORT

Semi-Volatile Organic Compounds by EPA Method 8270

Sample ID: **MB-3344** SampType: **MBLK** Units: **µg/L** Prep Date: **10/3/2012** RunNo: **6112**
Client ID: **MBLKW** Batch ID: **3344** Analysis Date: **10/5/2012** SeqNo: **121416**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Anthracene	ND	0.500									
Carbazole	ND	5.00									
Di-n-butyl phthalate	1.83	1.00									
Fluoranthene	0.105	0.500									J
Pyrene	ND	0.500									
Benzyl Butylphthalate	0.903	1.00									J
bis(2-Ethylhexyl)adipate	0.662	1.00									J
Benz[a]anthracene	ND	0.500									
Chrysene	ND	0.500									
Bis(2-ethylhexyl) phthalate	1.51	1.00									
Di-n-octyl phthalate	0.182	1.00									J
Benzo (b) fluoranthene	ND	0.500									
Benzo (k) fluoranthene	ND	0.500									
Benzo[a]pyrene	ND	0.500									
Indeno (1,2,3-cd) pyrene	ND	0.500									
Dibenzo (a,h) anthracene	ND	0.500									
Benzo (g,h,I) perylene	ND	0.500									
Surr: 2,4,6-Tribromophenol	3.21		4.000		80.3	24	138				
Surr: 2-Fluorobiphenyl	1.30		2.000		65.2	38.6	138				
Surr: Nitrobenzene-d5	1.31		2.000		65.5	31.7	140				
Surr: Phenol-d6	1.74		4.000		43.4	15	116				
Surr: p-Terphenyl	2.00		2.000		100	49	156				

Sample ID: **LCS-3344** SampType: **LCS** Units: **µg/L** Prep Date: **10/3/2012** RunNo: **6112**
Client ID: **LCSW** Batch ID: **3344** Analysis Date: **10/5/2012** SeqNo: **121417**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phenol	1.90	2.00	8.000	0	23.8	20	86.2				

Qualifiers:

B	Analyte detected in the associated Method Blank	D	Dilution was required	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

Work Order: 1209186
CLIENT: Calibre
Project: Hytec-Lufkin

QC SUMMARY REPORT

Semi-Volatile Organic Compounds by EPA Method 8270

Sample ID: **LCS-3344** SampType: **LCS** Units: **µg/L** Prep Date: **10/3/2012** RunNo: **6112**
Client ID: **LCSW** Batch ID: **3344** Analysis Date: **10/5/2012** SeqNo: **121417**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
2-Chlorophenol	3.53	1.00	8.000	0	44.1	25	112				
1,3-Dichlorobenzene	3.56	1.00	8.000	0	44.5	25	108				
1,4-Dichlorobenzene	3.54	1.00	8.000	0	44.3	25	110				
1,2-Dichlorobenzene	3.59	1.00	8.000	0	44.9	25	109				
Benzyl alcohol	3.22	1.00	8.000	0	40.2	20	96.5				
Bis(2-chloroethyl) ether	3.83	2.00	8.000	0	47.9	25	111				
2-Methylphenol (o-cresol)	3.27	1.00	8.000	0	40.8	25	101				
Hexachloroethane	3.57	1.00	8.000	0	44.6	25	109				
N-Nitrosodi-n-propylamine	3.78	1.00	8.000	0	47.2	25	122				
Nitrobenzene	3.78	2.00	8.000	0	47.3	25	110				
Isophorone	3.84	1.00	8.000	0	48.0	25	126				
4-Methylphenol (p-cresol)	3.08	1.00	8.000	0	38.5	25	113				
2-Nitrophenol	3.55	2.00	8.000	0	44.3	25	126				
2,4-Dimethylphenol	3.81	1.00	8.000	0	47.6	25	124				
Bis(2-chloroethoxy)methane	3.76	1.00	8.000	0	47.0	25	121				
2,4-Dichlorophenol	3.87	2.00	8.000	0	48.4	29.1	110				
1,2,4-Trichlorobenzene	3.71	1.00	8.000	0	46.4	25	113				
Naphthalene	3.72	0.500	8.000	0	46.5	25	115				
4-Chloroaniline	3.32	5.00	8.000	0	41.4	25	136				
Hexachlorobutadiene	3.71	1.00	8.000	0	46.4	25	111				
4-Chloro-3-methylphenol	4.21	5.00	8.000	0	52.7	32.3	122				
2-Methylnaphthalene	4.02	0.500	8.000	0	50.2	25	119				
1-Methylnaphthalene	3.81	0.500	8.000	0	47.6	25	117				
Hexachlorocyclopentadiene	2.38	1.00	8.000	0	29.7	25	125				
2,4,6-Trichlorophenol	3.60	2.00	8.000	0	45.1	25	133				
2,4,5-Trichlorophenol	4.05	2.00	8.000	0	50.6	25	125				
2-Chloronaphthalene	3.95	1.00	8.000	0	49.3	25	121				
2-Nitroaniline	3.90	5.00	8.000	0	48.8	25	121				
Acenaphthene	4.08	0.500	8.000	0	51.0	25	120				

Qualifiers:

B	Analyte detected in the associated Method Blank	D	Dilution was required	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

Work Order: 1209186
CLIENT: Calibre
Project: Hytec-Lufkin

QC SUMMARY REPORT

Semi-Volatile Organic Compounds by EPA Method 8270

Sample ID: **LCS-3344** SampType: **LCS** Units: **µg/L** Prep Date: **10/3/2012** RunNo: **6112**
Client ID: **LCSW** Batch ID: **3344** Analysis Date: **10/5/2012** SeqNo: **121417**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dimethylphthalate	4.34	1.00	8.000	0	54.3	25	133				
2,6-Dinitrotoluene	4.36	1.00	8.000	0	54.5	25	131				
Acenaphthylene	4.13	0.500	8.000	0	51.7	25	128				
2,4-Dinitrophenol	2.18	2.00	8.000	0	27.3	39.2	124				S
Dibenzofuran	4.01	1.00	8.000	0	50.2	25	121				
2,4-Dinitrotoluene	3.97	1.00	8.000	0	49.7	25	132				
4-Nitrophenol	2.10	5.00	8.000	0	26.3	20	106				
Fluorene	4.25	0.500	8.000	0	53.1	25	127				
4-Chlorophenyl phenyl ether	4.15	1.00	8.000	0	51.8	25	124				
Diethylphthalate	4.78	1.00	8.000	0	59.8	31.3	142				
4,6-Dinitro-2-methylphenol	1.94	5.00	8.000	0	24.3	25	139				S
4-Bromophenyl phenyl ether	4.32	1.00	8.000	0	54.0	25	130				
Hexachlorobenzene	4.10	1.00	8.000	0	51.2	29	120				
Pentachlorophenol	3.05	2.00	8.000	0	38.1	20	137				
Phenanthrene	4.27	0.500	8.000	0	53.4	34	125				
Anthracene	4.37	0.500	8.000	0	54.6	27.7	134				
Carbazole	4.61	5.00	8.000	0	57.7	27.9	150				
Di-n-butyl phthalate	5.23	1.00	8.000	0	65.4	62	158				B
Fluoranthene	4.66	0.500	8.000	0	58.2	34.8	143				
Pyrene	4.56	0.500	8.000	0	56.9	35.5	140				
Benzyl Butylphthalate	4.99	1.00	8.000	0	62.4	51.4	144				
bis(2-Ethylhexyl)adipate	4.95	1.00	8.000	0	61.9	51.3	144				
Benz[a]anthracene	4.03	0.500	8.000	0	50.4	27.2	132				
Chrysene	4.16	0.500	8.000	0	52.0	39.5	123				
Bis(2-ethylhexyl) phthalate	5.43	1.00	8.000	0	67.9	44.7	180				B
Di-n-octyl phthalate	5.22	1.00	8.000	0	65.3	52.8	164				
Benzo (b) fluoranthene	3.89	0.500	8.000	0	48.7	37.8	123				
Benzo (k) fluoranthene	3.46	0.500	8.000	0	43.2	25	144				
Benzo[a]pyrene	3.52	0.500	8.000	0	44.1	24.9	125				

Qualifiers:

B	Analyte detected in the associated Method Blank	D	Dilution was required	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

Work Order: 1209186
CLIENT: Calibre
Project: Hytec-Lufkin

QC SUMMARY REPORT

Semi-Volatile Organic Compounds by EPA Method 8270

Sample ID: **LCS-3344** SampType: **LCS** Units: **µg/L** Prep Date: **10/3/2012** RunNo: **6112**
Client ID: **LCSW** Batch ID: **3344** Analysis Date: **10/5/2012** SeqNo: **121417**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Indeno (1,2,3-cd) pyrene	3.01	0.500	8.000	0	37.6	25	127				
Dibenzo (a,h) anthracene	3.05	0.500	8.000	0	38.1	25	132				
Benzo (g,h,I) perylene	2.93	0.500	8.000	0	36.6	25	133				
Surr: 2,4,6-Tribromophenol	2.55		4.000		63.8	24	138				
Surr: 2-Fluorobiphenyl	0.976		2.000		48.8	38.6	138				
Surr: Nitrobenzene-d5	1.10		2.000		55.1	31.7	140				
Surr: Phenol-d6	1.24		4.000		30.9	15	116				
Surr: p-Terphenyl	1.34		2.000		66.8	49	156				

NOTES:
S - Outlying spike recoveryies for 2,4-Dinitrophenol and 4,6-Dinitro-2-methylphenol were observed. The method is in control as indicated by the Initial Calibration Verification (second source).

Sample ID: **1209186-008BDUP** SampType: **DUP** Units: **µg/L** Prep Date: **10/3/2012** RunNo: **6112**
Client ID: **MOWE-92712** Batch ID: **3344** Analysis Date: **10/6/2012** SeqNo: **121426**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phenol	ND	2.00						0	0	50	
2-Chlorophenol	ND	1.00						0	0	50	
1,3-Dichlorobenzene	ND	1.00						0	0	50	
1,4-Dichlorobenzene	ND	1.00						0	0	50	
1,2-Dichlorobenzene	ND	1.00						0	0	50	
Benzyl alcohol	ND	1.00						0	0	50	
Bis(2-chloroethyl) ether	ND	2.00						0	0	50	
2-Methylphenol (o-cresol)	ND	1.00						0	0	50	
Hexachloroethane	ND	1.00						0	0	50	
N-Nitrosodi-n-propylamine	ND	1.00						0	0	50	
Nitrobenzene	ND	2.00						0	0	50	
Isophorone	ND	1.00						0	0	50	
4-Methylphenol (p-cresol)	ND	1.00						0	0	50	
2-Nitrophenol	ND	2.00						0	0	50	

Qualifiers:

B	Analyte detected in the associated Method Blank	D	Dilution was required	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

Work Order: 1209186
CLIENT: Calibre
Project: Hytec-Lufkin

QC SUMMARY REPORT

Semi-Volatile Organic Compounds by EPA Method 8270

Sample ID: **1209186-008BDUP** SampType: **DUP** Units: **µg/L** Prep Date: **10/3/2012** RunNo: **6112**
Client ID: **MOWE-92712** Batch ID: **3344** Analysis Date: **10/6/2012** SeqNo: **121426**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
2,4-Dimethylphenol	ND	1.00						0	0	50	
Bis(2-chloroethoxy)methane	ND	1.00						0	0	50	
2,4-Dichlorophenol	ND	2.00						0	0	50	
1,2,4-Trichlorobenzene	ND	1.00						0	0	50	
Naphthalene	ND	0.500						0	0	50	
4-Chloroaniline	ND	5.00						0	0	50	
Hexachlorobutadiene	ND	1.00						0	0	50	
4-Chloro-3-methylphenol	ND	5.00						0	0	50	
2-Methylnaphthalene	ND	0.500						0	0	50	
1-Methylnaphthalene	ND	0.500						0	0	50	
Hexachlorocyclopentadiene	ND	1.00						0	0	50	
2,4,6-Trichlorophenol	ND	2.00						0	0	50	
2,4,5-Trichlorophenol	ND	2.00						0	0	50	
2-Chloronaphthalene	ND	1.00						0	0	50	
2-Nitroaniline	ND	5.00						0	0	50	
Acenaphthene	ND	0.500						0	0	50	
Dimethylphthalate	ND	1.00						0	0	50	
2,6-Dinitrotoluene	ND	1.00						0	0	50	
Acenaphthylene	ND	0.500						0	0	50	
2,4-Dinitrophenol	ND	2.00						0	0	50	
Dibenzofuran	ND	1.00						0	0	50	
2,4-Dinitrotoluene	ND	1.00						0	0	50	
4-Nitrophenol	ND	5.00						0	0	50	
Fluorene	ND	0.500						0	0	50	
4-Chlorophenyl phenyl ether	ND	1.00						0	0	50	
Diethylphthalate	0.507	1.00						0.6810	29.2	50	J
4,6-Dinitro-2-methylphenol	ND	5.00						0	0	50	
4-Bromophenyl phenyl ether	ND	1.00						0	0	50	
Hexachlorobenzene	ND	1.00						0	0	50	

Qualifiers:

B	Analyte detected in the associated Method Blank	D	Dilution was required	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

Work Order: 1209186
CLIENT: Calibre
Project: Hytec-Lufkin

QC SUMMARY REPORT

Semi-Volatile Organic Compounds by EPA Method 8270

Sample ID: **1209186-008BDUP** SampType: **DUP** Units: **µg/L** Prep Date: **10/3/2012** RunNo: **6112**
Client ID: **MOWE-92712** Batch ID: **3344** Analysis Date: **10/6/2012** SeqNo: **121426**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Pentachlorophenol	ND	2.00						0	0	50	
Phenanthrene	0.106	0.500						0.1350	24.1	50	J
Anthracene	ND	0.500						0	0	50	
Carbazole	ND	5.00						0	0	50	
Di-n-butyl phthalate	1.43	1.00						1.796	22.6	50	B
Fluoranthene	ND	0.500						0	0	50	
Pyrene	ND	0.500						0	0	50	
Benzyl Butylphthalate	0.740	1.00						0.8360	12.1	50	J
bis(2-Ethylhexyl)adipate	0.322	1.00						0.2244	35.8	50	J
Benz[a]anthracene	ND	0.500						0	0	50	
Chrysene	ND	0.500						0	0	50	
Bis(2-ethylhexyl) phthalate	0.666	1.00						0.9282	33.0	50	J
Di-n-octyl phthalate	0.106	1.00						0.1148	7.52	50	J
Benzo (b) fluoranthene	ND	0.500						0	0	50	
Benzo (k) fluoranthene	ND	0.500						0	0	50	
Benzo[a]pyrene	ND	0.500						0	0	50	
Indeno (1,2,3-cd) pyrene	ND	0.500						0	0	50	
Dibenzo (a,h) anthracene	ND	0.500						0	0	50	
Benzo (g,h,I) perylene	ND	0.500						0	0	50	
Surr: 2,4,6-Tribromophenol	3.81		4.000		95.3	24	138		0		
Surr: 2-Fluorobiphenyl	1.39		2.000		69.3	38.6	138		0		
Surr: Nitrobenzene-d5	1.60		2.000		80.2	31.7	140		0		
Surr: Phenol-d6	1.49		4.000		37.3	15	116		0		
Surr: p-Terphenyl	1.90		2.000		95.0	49	156		0		

Qualifiers:

B	Analyte detected in the associated Method Blank	D	Dilution was required	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

Work Order: 1209186
CLIENT: Calibre
Project: Hytec-Lufkin

QC SUMMARY REPORT

Semi-Volatile Organic Compounds by EPA Method 8270

Sample ID: **1209186-008BMS** SampType: **MS** Units: **µg/L** Prep Date: **10/3/2012** RunNo: **6112**
Client ID: **MOWE-92712** Batch ID: **3344** Analysis Date: **10/6/2012** SeqNo: **121427**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phenol	2.62	2.00	8.000	0	32.7	20	78.2				
2-Chlorophenol	4.99	1.00	8.000	0	62.4	25	106				
1,3-Dichlorobenzene	5.17	1.00	8.000	0	64.6	25.5	103				
1,4-Dichlorobenzene	5.11	1.00	8.000	0	63.8	25.6	104				
1,2-Dichlorobenzene	5.22	1.00	8.000	0	65.2	26.1	105				
Benzyl alcohol	4.77	1.00	8.000	0	59.6	20	96.8				
Bis(2-chloroethyl) ether	5.17	2.00	8.000	0	64.6	25	110				
2-Methylphenol (o-cresol)	4.83	1.00	8.000	0	60.3	25.1	95.8				
Hexachloroethane	5.24	1.00	8.000	0	65.4	25	106				
N-Nitrosodi-n-propylamine	5.42	1.00	8.000	0	67.7	25.5	116				
Nitrobenzene	5.37	2.00	8.000	0	67.2	30.5	105				
Isophorone	5.43	1.00	8.000	0	67.8	25	121				
4-Methylphenol (p-cresol)	4.64	1.00	8.000	0	57.9	25	106				
2-Nitrophenol	5.40	2.00	8.000	0	67.5	25	123				
2,4-Dimethylphenol	4.55	1.00	8.000	0	56.8	25	123				
Bis(2-chloroethoxy)methane	5.23	1.00	8.000	0	65.4	25.4	116				
2,4-Dichlorophenol	5.74	2.00	8.000	0	71.8	34.3	110				
1,2,4-Trichlorobenzene	5.27	1.00	8.000	0	65.9	25	110				
Naphthalene	5.34	0.500	8.000	0	66.8	25	131				
4-Chloroaniline	4.59	5.00	8.000	0	57.4	25	130				
Hexachlorobutadiene	5.11	1.00	8.000	0	63.9	25	105				
4-Chloro-3-methylphenol	5.34	5.00	8.000	0	66.7	36.3	120				
2-Methylnaphthalene	5.35	0.500	8.000	0	66.9	25	119				
1-Methylnaphthalene	5.27	0.500	8.000	0	65.9	25.3	117				
Hexachlorocyclopentadiene	3.15	1.00	8.000	0	39.4	25	114				
2,4,6-Trichlorophenol	5.27	2.00	8.000	0	65.8	25	131				
2,4,5-Trichlorophenol	5.52	2.00	8.000	0	68.9	25	122				
2-Chloronaphthalene	5.25	1.00	8.000	0	65.6	27.3	115				
2-Nitroaniline	5.56	5.00	8.000	0	69.5	27.9	114				

Qualifiers:

B	Analyte detected in the associated Method Blank	D	Dilution was required	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

Work Order: 1209186
CLIENT: Calibre
Project: Hytec-Lufkin

QC SUMMARY REPORT

Semi-Volatile Organic Compounds by EPA Method 8270

Sample ID: **1209186-008BMS** SampType: **MS** Units: **µg/L** Prep Date: **10/3/2012** RunNo: **6112**
Client ID: **MOWE-92712** Batch ID: **3344** Analysis Date: **10/6/2012** SeqNo: **121427**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Acenaphthene	5.14	0.500	8.000	0	64.2	25	136				
Dimethylphthalate	5.60	1.00	8.000	0	70.0	31	128				
2,6-Dinitrotoluene	5.48	1.00	8.000	0	68.5	26.9	125				
Acenaphthylene	5.39	0.500	8.000	0	67.4	26.8	122				
2,4-Dinitrophenol	4.63	2.00	8.000	0	57.8	25	148				
Dibenzofuran	4.99	1.00	8.000	0	62.4	27.8	116				
2,4-Dinitrotoluene	5.50	1.00	8.000	0	68.8	25	123				
4-Nitrophenol	4.63	5.00	8.000	0	57.9	20	109				
Fluorene	5.19	0.500	8.000	0	64.9	25	131				
4-Chlorophenyl phenyl ether	4.96	1.00	8.000	0	62.0	28.9	119				
Diethylphthalate	6.13	1.00	8.000	0.6810	68.2	36.6	136				
4,6-Dinitro-2-methylphenol	4.61	5.00	8.000	0	57.7	25	136				
4-Bromophenyl phenyl ether	5.35	1.00	8.000	0	66.9	30.2	124				
Hexachlorobenzene	5.06	1.00	8.000	0	63.3	34.6	114				
Pentachlorophenol	5.40	2.00	8.000	0	67.6	25	145				
Phenanthrene	5.64	0.500	8.000	0.1350	68.8	26	139				
Anthracene	5.85	0.500	8.000	0	73.2	34.5	129				
Carbazole	6.61	5.00	8.000	0	82.6	36.7	143				
Di-n-butyl phthalate	6.99	1.00	8.000	1.796	64.9	39.7	149				B
Fluoranthene	6.58	0.500	8.000	0	82.2	39.3	141				
Pyrene	6.45	0.500	8.000	0	80.6	40.9	137				
Benzyl Butylphthalate	7.13	1.00	8.000	0.8360	78.7	50.5	139				
bis(2-Ethylhexyl)adipate	6.40	1.00	8.000	0.2244	77.2	36.6	145				
Benz[a]anthracene	5.81	0.500	8.000	0	72.6	34.2	124				
Chrysene	5.98	0.500	8.000	0	74.8	44.6	116				
Bis(2-ethylhexyl) phthalate	6.85	1.00	8.000	0.9282	74.0	39.9	143				B
Di-n-octyl phthalate	6.79	1.00	8.000	0.1148	83.4	37.5	163				
Benzo (b) fluoranthene	5.76	0.500	8.000	0	72.0	40.7	116				
Benzo (k) fluoranthene	5.30	0.500	8.000	0	66.3	25.5	135				

Qualifiers:

B	Analyte detected in the associated Method Blank	D	Dilution was required	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

Work Order: 1209186
CLIENT: Calibre
Project: Hytec-Lufkin

QC SUMMARY REPORT

Semi-Volatile Organic Compounds by EPA Method 8270

Sample ID: **1209186-008BMS** SampType: **MS** Units: **µg/L** Prep Date: **10/3/2012** RunNo: **6112**
Client ID: **MOWE-92712** Batch ID: **3344** Analysis Date: **10/6/2012** SeqNo: **121427**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzo[a]pyrene	5.34	0.500	8.000	0	66.7	25	120				
Indeno (1,2,3-cd) pyrene	4.75	0.500	8.000	0	59.4	25	121				
Dibenzo (a,h) anthracene	4.83	0.500	8.000	0	60.4	25	125				
Benzo (g,h,I) perylene	4.62	0.500	8.000	0	57.7	25	124				
Surr: 2,4,6-Tribromophenol	3.42		4.000		85.4	24	138				
Surr: 2-Fluorobiphenyl	1.25		2.000		62.4	38.6	138				
Surr: Nitrobenzene-d5	1.51		2.000		75.7	31.7	140				
Surr: Phenol-d6	1.41		4.000		35.2	15	116				
Surr: p-Terphenyl	1.81		2.000		90.5	49	156				

Qualifiers:

B	Analyte detected in the associated Method Blank	D	Dilution was required	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

Work Order: 1209186
CLIENT: Calibre
Project: Hytec-Lufkin

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260

Sample ID: **1209186-008AMS** SampType: **MS** Units: **µg/L** Prep Date: **10/1/2012** RunNo: **5936**
Client ID: **MOWE-92712** Batch ID: **R5936** Analysis Date: **10/1/2012** SeqNo: **117477**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	17.7	1.00	20.00	0	88.6	33.3	122				
Chloromethane	17.3	0.500	20.00	0	86.3	48.2	145				
Vinyl chloride	16.7	0.200	20.00	0	83.3	45.6	149				
Bromomethane	18.1	0.500	20.00	0	90.4	31.5	135				
Trichlorofluoromethane (CFC-11)	20.9	0.500	20.00	0	105	54.7	138				
Chloroethane	19.2	0.500	20.00	0	95.9	52.7	140				
1,1-Dichloroethene	20.0	0.500	20.00	0	99.8	58.2	146				
Methylene chloride	18.8	0.500	20.00	0	94.1	65.1	127				
trans-1,2-Dichloroethene	21.4	0.500	20.00	0	107	69	132				
Methyl tert-butyl ether (MTBE)	19.6	1.00	20.00	0	98.1	70	130				
1,1-Dichloroethane	20.6	0.500	20.00	0	103	74.7	133				
2,2-Dichloropropane	7.68	1.00	20.00	0	38.4	31.5	121				
cis-1,2-Dichloroethene	19.3	0.500	20.00	0	96.5	67.1	123				
Chloroform	20.0	1.00	20.00	0	100	58.6	123				
1,1,1-Trichloroethane (TCA)	20.9	0.500	20.00	0	104	64.2	146				
1,1-Dichloropropene	19.1	0.500	20.00	0	95.4	73.8	136				
Carbon tetrachloride	25.0	1.00	20.00	0	125	69.2	141				
1,2-Dichloroethane (EDC)	18.2	0.500	20.00	0	91.2	62.3	130				
Benzene	19.7	0.500	20.00	0	98.4	68.7	132				
Trichloroethene (TCE)	21.1	0.500	20.00	0	106	65.7	133				
1,2-Dichloropropane	19.7	0.500	20.00	0	98.4	70	130				
Bromodichloromethane	21.4	0.500	20.00	0	107	59.4	139				
Dibromomethane	20.9	0.500	20.00	0	105	65.5	130				
cis-1,3-Dichloropropene	16.6	0.500	20.00	0	83.3	63.3	124				
Toluene	20.9	0.500	20.00	0	104	68.4	133				
trans-1,3-Dichloropropene	16.6	0.500	20.00	0	83.3	57.7	125				
1,1,2-Trichloroethane	19.6	0.500	20.00	0	98.0	59.4	127				
1,3-Dichloropropane	19.9	0.500	20.00	0	99.4	68.2	134				
Tetrachloroethene (PCE)	16.9	0.500	20.00	0	84.4	51.5	109				

Qualifiers:

B	Analyte detected in the associated Method Blank	D	Dilution was required	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

Work Order: 1209186
CLIENT: Calibre
Project: Hytec-Lufkin

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260

Sample ID: **1209186-008AMS** SampType: **MS** Units: **µg/L** Prep Date: **10/1/2012** RunNo: **5936**
Client ID: **MOWE-92712** Batch ID: **R5936** Analysis Date: **10/1/2012** SeqNo: **117477**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dibromochloromethane	21.8	0.500	20.00	0	109	66.2	138				
1,2-Dibromoethane (EDB)	20.1	0.200	20.00	0	100	68.9	124				
Chlorobenzene	20.2	0.500	20.00	0	101	68.9	128				
1,1,1,2-Tetrachloroethane	20.4	0.500	20.00	0	102	67.3	135				
Ethylbenzene	20.2	0.500	20.00	0	101	67.3	135				
m,p-Xylene	40.1	0.500	40.00	0	100	63.3	135				
o-Xylene	20.2	0.500	20.00	0	101	67.8	131				
Styrene	19.7	0.500	20.00	0	98.5	67.2	123				
Isopropylbenzene	19.9	1.00	20.00	0	99.5	56	147				
Bromoform	21.7	0.500	20.00	0	108	61.4	136				
1,1,2,2-Tetrachloroethane	19.6	0.500	20.00	0	98.0	59.1	137				
n-Propylbenzene	18.9	0.500	20.00	0	94.5	57.6	142				
Bromobenzene	19.2	0.500	20.00	0	95.8	63.6	130				
1,3,5-Trimethylbenzene	18.8	0.500	20.00	0	94.2	59.9	136				
2-Chlorotoluene	19.9	0.500	20.00	0	99.6	63.4	134				
4-Chlorotoluene	18.8	0.500	20.00	0	94.3	58.4	134				
tert-Butylbenzene	20.4	0.500	20.00	0	102	74.2	141				
1,2,3-Trichloropropane	19.6	0.500	20.00	0	97.8	62.4	129				
1,2,4-Trichlorobenzene	17.2	1.00	20.00	0	86.0	53.7	120				
sec-Butylbenzene	18.2	0.500	20.00	0	91.1	56	146				
4-Isopropyltoluene	17.9	0.500	20.00	0	89.6	62.4	134				
1,3-Dichlorobenzene	18.3	0.500	20.00	0	91.3	58.2	128				
1,4-Dichlorobenzene	19.3	0.500	20.00	0	96.5	60.1	123				
n-Butylbenzene	16.2	0.500	20.00	0	81.2	54.6	135				
1,2-Dichlorobenzene	19.1	0.500	20.00	0	95.4	62.6	124				
1,2-Dibromo-3-chloropropane	18.4	0.500	20.00	0	92.0	51.8	142				
1,2,4-Trimethylbenzene	18.9	0.500	20.00	0	94.4	63.7	132				
Hexachlorobutadiene	13.1	2.00	20.00	0	65.4	62.1	121				
Naphthalene	17.3	2.00	20.00	0	86.3	58.7	119				

Qualifiers:

B	Analyte detected in the associated Method Blank	D	Dilution was required	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

Work Order: 1209186
CLIENT: Calibre
Project: Hytec-Lufkin

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260

Sample ID: **1209186-008AMS** SampType: **MS** Units: **µg/L** Prep Date: **10/1/2012** RunNo: **5936**
Client ID: **MOWE-92712** Batch ID: **R5936** Analysis Date: **10/1/2012** SeqNo: **117477**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2,3-Trichlorobenzene	17.8	2.00	20.00	0	89.0	50.7	113				
Surr: 1-Bromo-4-fluorobenzene	10.3		10.00		103	79.2	120				
Surr: Dibromofluoromethane	9.75		10.00		97.5	76	114				
Surr: Toluene-d8	10.4		10.00		104	86.8	119				

Sample ID: **MB-R5936** SampType: **MBLK** Units: **µg/L** Prep Date: **10/1/2012** RunNo: **5936**
Client ID: **MBLKW** Batch ID: **R5936** Analysis Date: **10/1/2012** SeqNo: **117480**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	ND	1.00									
Chloromethane	ND	0.500									
Vinyl chloride	ND	0.200									
Bromomethane	ND	0.500									
Trichlorofluoromethane (CFC-11)	ND	0.500									
Chloroethane	ND	0.500									
1,1-Dichloroethene	ND	0.500									
Methylene chloride	ND	0.500									
trans-1,2-Dichloroethene	ND	0.500									
Methyl tert-butyl ether (MTBE)	ND	1.00									
1,1-Dichloroethane	ND	0.500									
2,2-Dichloropropane	ND	1.00									
cis-1,2-Dichloroethene	ND	0.500									
Chloroform	ND	1.00									
1,1,1-Trichloroethane (TCA)	ND	0.500									
1,1-Dichloropropene	ND	0.500									
Carbon tetrachloride	ND	1.00									
1,2-Dichloroethane (EDC)	ND	0.500									
Benzene	ND	0.500									

Qualifiers:

B	Analyte detected in the associated Method Blank	D	Dilution was required	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

Work Order: 1209186
CLIENT: Calibre
Project: Hytec-Lufkin

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260

Sample ID: **MB-R5936** SampType: **MBLK** Units: **µg/L** Prep Date: **10/1/2012** RunNo: **5936**
Client ID: **MBLKW** Batch ID: **R5936** Analysis Date: **10/1/2012** SeqNo: **117480**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Trichloroethene (TCE)	ND	0.500									
1,2-Dichloropropane	ND	0.500									
Bromodichloromethane	ND	0.500									
Dibromomethane	ND	0.500									
cis-1,3-Dichloropropene	ND	0.500									
Toluene	ND	0.500									
trans-1,3-Dichloropropene	ND	0.500									
1,1,2-Trichloroethane	ND	0.500									
1,3-Dichloropropane	ND	0.500									
Tetrachloroethene (PCE)	ND	0.500									
Dibromochloromethane	ND	0.500									
1,2-Dibromoethane (EDB)	ND	0.200									
Chlorobenzene	ND	0.500									
1,1,1,2-Tetrachloroethane	ND	0.500									
Ethylbenzene	ND	0.500									
m,p-Xylene	ND	0.500									
o-Xylene	ND	0.500									
Styrene	ND	0.500									
Isopropylbenzene	ND	1.00									
Bromoform	ND	0.500									
1,1,2,2-Tetrachloroethane	ND	0.500									
n-Propylbenzene	ND	0.500									
Bromobenzene	ND	0.500									
1,3,5-Trimethylbenzene	ND	0.500									
2-Chlorotoluene	ND	0.500									
4-Chlorotoluene	ND	0.500									
tert-Butylbenzene	ND	0.500									
1,2,3-Trichloropropane	ND	0.500									
1,2,4-Trichlorobenzene	ND	1.00									

Qualifiers:

B	Analyte detected in the associated Method Blank	D	Dilution was required	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

Work Order: 1209186
CLIENT: Calibre
Project: Hytec-Lufkin

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260

Sample ID: **MB-R5936** SampType: **MBLK** Units: **µg/L** Prep Date: **10/1/2012** RunNo: **5936**
Client ID: **MBLKW** Batch ID: **R5936** Analysis Date: **10/1/2012** SeqNo: **117480**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
sec-Butylbenzene	ND	0.500									
4-Isopropyltoluene	ND	0.500									
1,3-Dichlorobenzene	ND	0.500									
1,4-Dichlorobenzene	ND	0.500									
n-Butylbenzene	ND	0.500									
1,2-Dichlorobenzene	ND	0.500									
1,2-Dibromo-3-chloropropane	ND	0.500									
1,2,4-Trimethylbenzene	ND	0.500									
Hexachlorobutadiene	ND	2.00									
Naphthalene	ND	2.00									
1,2,3-Trichlorobenzene	ND	2.00									
Surr: 1-Bromo-4-fluorobenzene	9.79		10.00		97.9	79.2	120				
Surr: Dibromofluoromethane	10.2		10.00		102	76	114				
Surr: Toluene-d8	10.0		10.00		100	86.8	119				

Sample ID: **LCS-R5936** SampType: **LCS** Units: **µg/L** Prep Date: **10/1/2012** RunNo: **5936**
Client ID: **LCSW** Batch ID: **R5936** Analysis Date: **10/1/2012** SeqNo: **117481**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	16.2	1.00	20.00	0	81.2	45.1	121				
Chloromethane	15.9	0.500	20.00	0	79.7	42.5	131				
Vinyl chloride	14.6	0.200	20.00	0	73.2	56.2	130				
Bromomethane	16.3	0.500	20.00	0	81.4	45.4	138				
Trichlorofluoromethane (CFC-11)	18.8	0.500	20.00	0	93.9	64.7	129				
Chloroethane	17.7	0.500	20.00	0	88.6	62.5	123				
1,1-Dichloroethene	18.0	0.500	20.00	0	89.8	60.7	146				
Methylene chloride	18.7	0.500	20.00	0	93.7	60.3	135				
trans-1,2-Dichloroethene	19.7	0.500	20.00	0	98.3	71.3	129				

Qualifiers:

B	Analyte detected in the associated Method Blank	D	Dilution was required	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

Work Order: 1209186
CLIENT: Calibre
Project: Hytec-Lufkin

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260

Sample ID: **LCS-R5936** SampType: **LCS** Units: **µg/L** Prep Date: **10/1/2012** RunNo: **5936**
Client ID: **LCSW** Batch ID: **R5936** Analysis Date: **10/1/2012** SeqNo: **117481**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	18.4	1.00	20.00	0	91.9	75.4	123				
1,1-Dichloroethane	19.2	0.500	20.00	0	96.2	71.3	129				
2,2-Dichloropropane	17.1	1.00	20.00	0	85.4	37.8	132				
cis-1,2-Dichloroethene	18.2	0.500	20.00	0	90.8	67.5	127				
Chloroform	19.7	1.00	20.00	0	98.6	70.3	123				
1,1,1-Trichloroethane (TCA)	20.2	0.500	20.00	0	101	67.9	134				
1,1-Dichloropropene	19.0	0.500	20.00	0	94.8	72.1	133				
Carbon tetrachloride	24.5	1.00	20.00	0	122	68	136				
1,2-Dichloroethane (EDC)	19.0	0.500	20.00	0	94.8	65.8	126				
Benzene	19.5	0.500	20.00	0	97.6	75.2	124				
Trichloroethene (TCE)	21.3	0.500	20.00	0	107	71.9	130				
1,2-Dichloropropane	18.8	0.500	20.00	0	94.0	71.9	131				
Bromodichloromethane	20.3	0.500	20.00	0	101	70	130				
Dibromomethane	19.9	0.500	20.00	0	99.3	74.2	125				
cis-1,3-Dichloropropene	15.8	0.500	20.00	0	78.8	62.8	135				
Toluene	19.8	0.500	20.00	0	99.2	75.2	129				
trans-1,3-Dichloropropene	16.0	0.500	20.00	0	79.8	58.1	138				
1,1,2-Trichloroethane	18.7	0.500	20.00	0	93.4	65.4	128				
1,3-Dichloropropane	18.6	0.500	20.00	0	93.2	71.9	131				
Tetrachloroethene (PCE)	28.0	0.500	20.00	0	140	52.4	140				
Dibromochloromethane	19.2	0.500	20.00	0	96.0	68.7	139				
1,2-Dibromoethane (EDB)	18.9	0.200	20.00	0	94.4	71.2	129				
Chlorobenzene	20.0	0.500	20.00	0	100	77.2	122				
1,1,1,2-Tetrachloroethane	20.5	0.500	20.00	0	102	76.2	130				
Ethylbenzene	20.3	0.500	20.00	0	101	78	127				
m,p-Xylene	40.4	0.500	40.00	0	101	77.5	130				
o-Xylene	21.0	0.500	20.00	0	105	77.6	126				
Styrene	19.6	0.500	20.00	0	97.9	66.8	137				
Isopropylbenzene	19.6	1.00	20.00	0	98.1	75.9	133				

Qualifiers:

B	Analyte detected in the associated Method Blank	D	Dilution was required	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

Work Order: 1209186
CLIENT: Calibre
Project: Hytec-Lufkin

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260

Sample ID: **LCS-R5936** SampType: **LCS** Units: **µg/L** Prep Date: **10/1/2012** RunNo: **5936**
Client ID: **LCSW** Batch ID: **R5936** Analysis Date: **10/1/2012** SeqNo: **117481**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Bromoform	21.6	0.500	20.00	0	108	69.9	142				
1,1,2,2-Tetrachloroethane	17.0	0.500	20.00	0	85.0	68	134				
n-Propylbenzene	19.0	0.500	20.00	0	95.1	77.1	133				
Bromobenzene	19.0	0.500	20.00	0	94.8	71.1	131				
1,3,5-Trimethylbenzene	19.5	0.500	20.00	0	97.3	76.2	133				
2-Chlorotoluene	20.0	0.500	20.00	0	100	67.1	137				
4-Chlorotoluene	19.8	0.500	20.00	0	99.0	70.7	132				
tert-Butylbenzene	16.4	0.500	20.00	0	81.8	71.3	139				
1,2,3-Trichloropropane	19.8	0.500	20.00	0	99.0	70.8	132				
1,2,4-Trichlorobenzene	17.1	1.00	20.00	0	85.5	61.4	139				
sec-Butylbenzene	18.6	0.500	20.00	0	93.0	77.4	136				
4-Isopropyltoluene	18.3	0.500	20.00	0	91.7	78.1	131				
1,3-Dichlorobenzene	19.4	0.500	20.00	0	97.1	73.5	125				
1,4-Dichlorobenzene	19.3	0.500	20.00	0	96.4	71.4	125				
n-Butylbenzene	16.8	0.500	20.00	0	83.9	69.8	138				
1,2-Dichlorobenzene	19.5	0.500	20.00	0	97.6	74.2	123				
1,2-Dibromo-3-chloropropane	14.7	0.500	20.00	0	73.3	66.1	138				
1,2,4-Trimethylbenzene	18.7	0.500	20.00	0	93.6	72.3	133				
Hexachlorobutadiene	14.6	2.00	20.00	0	73.2	60.9	141				
Naphthalene	16.5	2.00	20.00	0	82.6	58.2	140				
1,2,3-Trichlorobenzene	18.2	2.00	20.00	0	91.2	61.3	133				
Surr: 1-Bromo-4-fluorobenzene	10.1		10.00		101	79.2	120				
Surr: Dibromofluoromethane	10.0		10.00		100	76	114				
Surr: Toluene-d8	9.96		10.00		99.6	86.8	119				

Qualifiers:

B	Analyte detected in the associated Method Blank	D	Dilution was required	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

Work Order: 1209186
CLIENT: Calibre
Project: Hytec-Lufkin

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260

Sample ID: **1209186-008AMSD** SampType: **MSD** Units: **µg/L** Prep Date: **10/1/2012** RunNo: **5936**
Client ID: **MOWE-92712** Batch ID: **R5936** Analysis Date: **10/1/2012** SeqNo: **118710**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	16.3	1.00	20.00	0	81.4	33.3	122	17.72	8.41	30	
Chloromethane	15.8	0.500	20.00	0	79.2	48.2	145	17.26	8.64	30	
Vinyl chloride	15.4	0.200	20.00	0	76.8	45.6	149	16.66	8.18	30	
Bromomethane	17.2	0.500	20.00	0	86.2	31.5	135	18.07	4.76	30	
Trichlorofluoromethane (CFC-11)	21.0	0.500	20.00	0	105	54.7	138	20.92	0.619	30	
Chloroethane	18.1	0.500	20.00	0	90.4	52.7	140	19.17	5.91	30	
1,1-Dichloroethene	18.8	0.500	20.00	0	93.8	58.2	146	19.96	6.20	30	
Methylene chloride	18.3	0.500	20.00	0	91.6	65.1	127	18.82	2.75	30	
trans-1,2-Dichloroethene	19.3	0.500	20.00	0	96.5	69	132	21.40	10.3	30	
Methyl tert-butyl ether (MTBE)	18.1	1.00	20.00	0	90.7	70	130	19.62	7.89	30	
1,1-Dichloroethane	18.7	0.500	20.00	0	93.6	74.7	133	20.55	9.27	30	
2,2-Dichloropropane	6.42	1.00	20.00	0	32.1	31.5	121	7.680	17.9	30	
cis-1,2-Dichloroethene	17.9	0.500	20.00	0	89.4	67.1	123	19.29	7.53	30	
Chloroform	19.5	1.00	20.00	0	97.5	58.6	123	19.99	2.53	30	
1,1,1-Trichloroethane (TCA)	21.6	0.500	20.00	0	108	64.2	146	20.87	3.48	30	
1,1-Dichloropropene	19.7	0.500	20.00	0	98.3	73.8	136	19.08	2.99	30	
Carbon tetrachloride	25.5	1.00	20.00	0	128	69.2	141	24.99	2.10	30	
1,2-Dichloroethane (EDC)	18.8	0.500	20.00	0	94.2	62.3	130	18.25	3.18	30	
Benzene	19.9	0.500	20.00	0	99.7	68.7	132	19.67	1.31	30	
Trichloroethene (TCE)	20.2	0.500	20.00	0	101	65.7	133	21.13	4.45	30	
1,2-Dichloropropane	18.8	0.500	20.00	0	93.8	70	130	19.69	4.78	30	
Bromodichloromethane	20.3	0.500	20.00	0	102	59.4	139	21.35	4.94	30	
Dibromomethane	20.1	0.500	20.00	0	100	65.5	130	20.91	4.05	30	
cis-1,3-Dichloropropene	15.9	0.500	20.00	0	79.6	63.3	124	16.65	4.48	30	
Toluene	20.3	0.500	20.00	0	101	68.4	133	20.86	2.77	30	
trans-1,3-Dichloropropene	15.9	0.500	20.00	0	79.6	57.7	125	16.65	4.42	30	
1,1,2-Trichloroethane	19.0	0.500	20.00	0	95.2	59.4	127	19.59	2.90	30	
1,3-Dichloropropane	19.4	0.500	20.00	0	96.8	68.2	134	19.88	2.65	30	
Tetrachloroethene (PCE)	15.6	0.500	20.00	0	77.9	51.5	109	16.87	7.95	30	

Qualifiers:

B	Analyte detected in the associated Method Blank	D	Dilution was required	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

Work Order: 1209186
CLIENT: Calibre
Project: Hytec-Lufkin

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260

Sample ID: **1209186-008AMSD** SampType: **MSD** Units: **µg/L** Prep Date: **10/1/2012** RunNo: **5936**
Client ID: **MOWE-92712** Batch ID: **R5936** Analysis Date: **10/1/2012** SeqNo: **118710**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dibromochloromethane	20.7	0.500	20.00	0	104	66.2	138	21.83	5.31	30	
1,2-Dibromoethane (EDB)	20.0	0.200	20.00	0	100	68.9	124	20.07	0.249	30	
Chlorobenzene	19.9	0.500	20.00	0	99.6	68.9	128	20.15	1.15	30	
1,1,1,2-Tetrachloroethane	20.4	0.500	20.00	0	102	67.3	135	20.41	0.147	30	
Ethylbenzene	19.7	0.500	20.00	0	98.6	67.3	135	20.24	2.65	30	
m,p-Xylene	38.6	0.500	40.00	0	96.6	63.3	135	40.06	3.61	30	
o-Xylene	20.0	0.500	20.00	0	99.8	67.8	131	20.20	1.15	30	
Styrene	19.2	0.500	20.00	0	96.2	67.2	123	19.70	2.41	30	
Isopropylbenzene	19.6	1.00	20.00	0	98.2	56	147	19.90	1.32	30	
Bromoform	21.4	0.500	20.00	0	107	61.4	136	21.69	1.11	30	
1,1,2,2-Tetrachloroethane	19.2	0.500	20.00	0	95.9	59.1	137	19.61	2.27	30	
n-Propylbenzene	18.0	0.500	20.00	0	90.2	57.6	142	18.90	4.66	30	
Bromobenzene	18.7	0.500	20.00	0	93.7	63.6	130	19.15	2.16	30	
1,3,5-Trimethylbenzene	18.5	0.500	20.00	0	92.4	59.9	136	18.84	1.93	30	
2-Chlorotoluene	19.2	0.500	20.00	0	95.8	63.4	134	19.92	3.89	30	
4-Chlorotoluene	18.2	0.500	20.00	0	91.2	58.4	134	18.85	3.23	30	
tert-Butylbenzene	19.6	0.500	20.00	0	98.2	74.2	141	20.37	3.65	30	
1,2,3-Trichloropropane	19.9	0.500	20.00	0	99.4	62.4	129	19.56	1.57	30	
1,2,4-Trichlorobenzene	15.4	1.00	20.00	0	77.0	53.7	120	17.19	11.0	30	
sec-Butylbenzene	17.8	0.500	20.00	0	88.8	56	146	18.21	2.45	30	
4-Isopropyltoluene	16.2	0.500	20.00	0	81.0	62.4	134	17.92	10.0	30	
1,3-Dichlorobenzene	18.6	0.500	20.00	0	93.2	58.2	128	18.26	2.06	30	
1,4-Dichlorobenzene	18.7	0.500	20.00	0	93.6	60.1	123	19.29	2.95	30	
n-Butylbenzene	15.3	0.500	20.00	0	76.7	54.6	135	16.25	5.83	30	
1,2-Dichlorobenzene	19.1	0.500	20.00	0	95.5	62.6	124	19.07	0.157	30	
1,2-Dibromo-3-chloropropane	14.9	0.500	20.00	0	74.7	51.8	142	18.40	20.8	30	
1,2,4-Trimethylbenzene	18.1	0.500	20.00	0	90.3	63.7	132	18.88	4.44	30	
Hexachlorobutadiene	11.7	2.00	20.00	0	58.7	62.1	121	13.07	10.7	30	S
Naphthalene	17.7	2.00	20.00	0	88.7	58.7	119	17.26	2.74	30	

Qualifiers:

B	Analyte detected in the associated Method Blank	D	Dilution was required	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

Work Order: 1209186
CLIENT: Calibre
Project: Hytec-Lufkin

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260

Sample ID: **1209186-008AMSD** SampType: **MSD** Units: **µg/L** Prep Date: **10/1/2012** RunNo: **5936**
Client ID: **MOWE-92712** Batch ID: **R5936** Analysis Date: **10/1/2012** SeqNo: **118710**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2,3-Trichlorobenzene	17.1	2.00	20.00	0	85.4	50.7	113	17.80	4.07	30	
Surr: 1-Bromo-4-fluorobenzene	10.2		10.00		102	79.2	120		0	0	
Surr: Dibromofluoromethane	10.1		10.00		101	76	114		0	0	
Surr: Toluene-d8	10.1		10.00		101	86.8	119		0	0	

NOTES:
S - Outlying QC recoveries were associated with this sample. The method is in control as indicated by the LCS and the MS.

Sample Log-In Check List

Client Name: **CLBRE**	Work Order Number: **1209186**
Logged by: **Clare Griggs**	Date Received: **9/28/2012 11:36:00 AM**

Chain of Custody

1.	Were custodial seals present?	Yes	☐	No	☐	Not Required	☑
2.	Is Chain of Custody complete?	Yes	☑	No	☐	Not Present	☐
3.	How was the sample delivered?	Client					

Log In

4.	Coolers are present?	Yes	☑	No	☐	NA	☐
5.	Was an attempt made to cool the samples?	Yes	☑	No	☐	NA	☐
6.	Were all coolers received at a temperature of >0° C to 10.0°C	Yes	☑	No	☐	NA	☐
7.	Sample(s) in proper container(s)?	Yes	☑	No	☐		
8.	Sufficient sample volume for indicated test(s)?	Yes	☑	No	☐		
9.	Are samples properly preserved?	Yes	☑	No	☐		
10.	Was preservative added to bottles?	Yes	☐	No	☑	NA	☐
11.	Is there headspace present in VOA vials?	Yes	☐	No	☑	NA	☐
12.	Did all sample containers arrive in good condition?(unbroken)	Yes	☐	No	☑		
13.	Does paperwork match bottle labels?	Yes	☑	No	☐		
14.	Are matrices correctly identified on Chain of Custody?	Yes	☑	No	☐		
15.	Is it clear what analyses were requested?	Yes	☑	No	☐		
16.	Were all holding times able to be met?	Yes	☑	No	☐		

Special Handling (if applicable)

17.	Was client notified of all discrepancies with this order?	Yes	☐	No	☐	NA	☑

Person Notified: _____ Date: _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

18. Additional remarks/Disrepancies

Semi Vol 1L amber for sample HLMW-01A-92712 was broken during transportation, transferred partial volume from Total metals bottle to 250 ml amber for possible Semi Vol analysis.

Item Information

Item #	Temp ºC	Condition
Cooler 1	4.0	Good
Cooler 2	5.4	Good

Fremont Analytical

Chain of Custody Record

1311 N. 35th Street
Seattle, WA 98103
Tel: 206-352-3790
Fax: 206-352-7178

Laboratory Project No (internal): 1209186
Page: 1 of: 1
Date: 09/27/2012

Client: CALIBRE Systems
Address: 24315 148th Ave E
City, State, Zip: Graham, WA, 98338 Tel: (253)-278-2841
Reports To (PM): Tom McKeon Fax:

Project Name: Hytec - Lufkin
Location: Littlerock, WA
Collected by: Jeff Dawson and Chris Gallagher
Email: Tom.McKeon@calibresys.com
Project No: KC3080000-003

	Sample Name	Sample Date	Sample Time	Sample Type (Matrix)	VOC (EPA 8260)	GX/BTEX by EPA 8021b	BTEX by 8260	Gasoline Range Organics	Hydrocarbon Identification (NWTPH)	Diesel/Heavy Oil Range Organics	SIM VOC (EPA 8270)	PAH (EPA 8270 - SIM)	PCBs (EPA 8082)	Pesticides (EPA 8081)	Herbicides (EPA 8151A)	Metals* (6020 / 200.8)	Total (T) & Dissolved (D)	Anions (IC)**	Comments/Depth
1	HLMW-01A-92712	9/27	0800	aqueous	X					X						T	D		
2	HLMW-02A-92712	9/27	1059	aqueous	X					X						T			
3	HLMW-03A-92712	9/27	1554	aqueous	X					X	CG					T	D		Bottle broke during transportation
4	HLMW-04A-92712	9/27	1307	aqueous	X					X						T			
5	HLMW-04B-92712	9/27	0700	aqueous	X					X						T			
6	HLMW-05B-92712	9/27	1142	aqueous	X					X						T	D		
7	HLMW-06B-92712	9/27	1524	aqueous	X					X						T			
8	MOWE-92712	9/27	0915	aqueous	X					X						T			
9	SPWE-92712	9/27	0845	aqueous	X					X						T			
10	trip blank	9/27	0700	aqueous	X					X	CG								

*Metals Analysis (Circle): VTCA-5 RCRA-8 Priority Pollutants TAL Individual: Ag Al As B Ba Be Ca Cd Co Cr Cu Fe Hg K Mg Mn Mo Na Ni Pb Sb Se Si Sn Sr Ti Tl U V Zn

**Anions (Circle): Nitrate Nitrite Chloride Sulfate Bromide O-Phosphate Fluoride Nitrate-Nitrite

Sample Disposal: Return to Client Disposal by Lab (Archive Requested if samples are retained for 10 days)

Special Remarks: Dissolved samples (metals) were field filtered

Relinquished	Date/Time	Received	Date/Time
[signature]	1136 09/28/12	[signature]	9.28.12 1134
Relinquished	Date/Time	Received	Date/Time

TAT--> Next Day 2 Day 3 Day (STD)

Distribution: White - Lab, Yellow - File, Pink - Originator

www.fremontanalytical.com

Fremont Analytical

1311 N. 35th Street
Seattle, WA 98103
Tel: 206-352-3790
Fax: 206-352-7178

Chain of Custody Record

Laboratory Project No (internal): ______

Date: 09-27-12

Page: 1 of: 1

Client: CALIBRE Systems

Address: 24315 148th Ave E

City, State, Zip: Graham, WA, 98338

Tel: (253) 278-2811

Reports To (PM): Tom McKeon

Fax:

Project Name: Bordeaux Dump

Location: Littlerock, WA

Collected by: Jeff Dawson + Chris Gallagher

Email: Tom.McKeon@calibresys.com

Project No: KO308000-006

	Sample Name	Sample Date	Sample Time	Sample Type (Matrix)	VOC (EPA 8260)	GX/BTEX by EPA 8021B	BTEX by 8260	Gasoline Range Organics	Hydrocarbon Identification (HCID)	Diesel/Heavy Oil Range Organics	SVOC (EPA 8270)	PAH (EPA 8270 SIM)	PCBs (EPA 8082)	Cl Pesticides (EPA 8081)	Cl Herbicides (EPA 8151A)	Metals* (6020 / 200.8)	Total (T) / Dissolved (D)	Anions (IC)**			Comments/Depth
1	HCMW-074-92712	9/27	1441	aqueous	X						X					T					
2	PAWE-92712	9/27	0953	aqueous	X						X					T					
3																					
4																					
5																					
6																					
7																					
8																					
9																					
10																					

*Metals Analysis (Circle): MTCA-5 RCRA-8 Priority Pollutants TAL Individual: Ag Al As B Ba Be Ca Cd Co Cr Cu Fe Hg K Mg Mn Mo Na Ni Pb Sb Se Sr Sn Ti Tl U V Zn

**Anions (Circle): Nitrate Nitrite Chloride Sulfate Bromide O-Phosphate Fluoride Nitrate+Nitrite

Sample Disposal: ☐ Return to Client ☐ Disposal by Lab (A fee may be assessed if samples are retained after 30 days.)

Special Remarks:

Relinquished	Date/Time	Received	Date/Time
x [signature]	1136 09/28/12	x [signature]	9/28/12 1136
Relinquished x	Date/Time	Received x	Date/Time

TAT --> Next Day 3 Day 5 Day STD

Distribution: White - Lab, Yellow - File, Pink - Originator

www.fremontanalytical.com

September 2012

Department of Ecology Laboratory Analytical Reports

*The SVOC data for Bis(2-Ethylhexyl) Phthalate taken from HLMW-5B during this sampling event has been rejected. New samples were obtained in November 2012 and those results are considered usable for this report.

Manchester Environmental Laboratory

7411 Beach Dr E, Port Orchard, Washington 98366

Case Narrative

October 08, 2012

Subject: HyTec-Fiberglass Landfill

Samples: 1209107-01

Officer: Mohsen Kourehdar

By: Dolores Montgomery

VOA

Analytical Method

The samples were analyzed following a modification of EPA Method 8260C.

Holding Times

All samples were received in good condition, within the proper temperature <6° C and were prepared and analyzed within method holding times.

Instrument Tuning

Calibration against BFB is acceptable for the initial calibration, continuing calibrations and all associated samples.

Initial Calibration

The initial calibration (ICAL), Initial Calibration Verification (ICV) and back calculations (BC) were within QC limits with the following exceptions. The BC for acetone at the reporting level was low. The following qualifiers were applied:

Acetone UJ: B12J070-BLK1, 1209107-01

Continuing Calibration

The sample and all associated QC were analyzed immediately following the initial calibration.

Internal Standards

All internal standard retention times and areas were within QC limits.

Method Blank

No target analytes were detected in the laboratory method blank.

Surrogates

The surrogate percent recoveries were within QC limits.

Laboratory Control Samples

All percent recoveries and RPD's were within QC criteria in spikes B12J070-BS1 / B12J070-BSD1 with the following exceptions.

Tetrachloroethene was recovered high in both spikes. No qualification was necessary since the compound was not detected.

The following compounds were recovered low in both spikes: trans-1,4-dichloro-2-butene, pentachloroethane, and 1,2-dibromo-3-chloropropane. The following qualifiers were applied:

trans-1,4-dichloro-2-butene UJ: B12J070-BLK1, 1209107
pentachloroethane UJ: B12J070-BLK1, 1209107
1,2-dibromo-3-chloropropane UJ: B12J070-BLK1, 1209107

The RPD for pentachloroethane was high. The compound was already qualified based on the low recoveries.

Matrix Spiked Samples

N/A

Qualitative Identification

The spectra of the reported samples were within QC limits and matched the reference spectra.

Comments

There were no other QC concerns.

Data Qualifiers

Code	Definition
E	Reported result is an estimate because it exceeds the calibration range.
G	Value is likely greater than result reported; result is an estimated minimum value.
J	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
N	The analysis indicates the present of an analyte for which there is presumptive evidence to make a "tentative identification".
NJ	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.
NAF	Not analyzed for.
NC	Not calculated.
REJ	The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.
U	The analyte was not detected at or above the reported sample quantitation limit.
UJ	The analyte was not detected at or above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately measure the analyte in the sample.
bold	The analyte was present in the sample. (Visual aid to locate detected compounds on the analytical report.)

Washington State Department of Ecology
Manchester Environmental Laboratory
Final Report for
Volatile Organics Analysis

Project: HyTec-Fiberglass Landfill

Field ID: HLMW4A

Work Order: 1209107
Project Officer: Kourehdar, Mohsen
Initial Vol: 5 mL
Final Vol: 5 mL

Lab ID #: 1209107-02
Collected: 9/27/2012
Prep Method: SW5030B
Analysis Method: SW8260

Batch ID: B12J070
Prepared: 10/5/2012
Analyzed: 10/5/2012
Matrix: Water
Units: ug/L

CAS#	Analyte	Result	Qualifier	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	2.0	U	2.0	0.21
71-55-6	1,1,1-Trichloroethane	2.0	U	2.0	0.20
79-34-5	1,1,2,2-Tetrachloroethane	2.0	U	2.0	0.16
79-00-5	1,1,2-Trichloroethane	2.0	U	2.0	0.13
76-13-1	1,1,2-Trichlorotrifluoroethane	2.0	U	2.0	0.38
75-34-3	1,1-Dichloroethane	2.0	U	2.0	0.10
75-35-4	1,1-Dichloroethene	2.0	U	2.0	0.20
563-58-6	1,1-Dichloropropene	2.0	U	2.0	0.26
87-61-6	1,2,3-Trichlorobenzene	2.0	U	2.0	0.15
96-18-4	1,2,3-Trichloropropane	2.0	U	2.0	0.23
120-82-1	1,2,4-Trichlorobenzene	2.0	U	2.0	0.14
95-63-6	1,2,4-Trimethylbenzene	2.0	U	2.0	0.16
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	UJ	2.0	0.22
106-93-4	1,2-Dibromoethane (EDB)	2.0	U	2.0	0.12
95-50-1	1,2-Dichlorobenzene	2.0	U	2.0	0.13
107-06-2	1,2-Dichloroethane	2.0	U	2.0	0.14
78-87-5	1,2-Dichloropropane	2.0	U	2.0	0.17
108-67-8	1,3,5-Trimethylbenzene	2.0	U	2.0	0.14
541-73-1	1,3-Dichlorobenzene	2.0	U	2.0	0.12
142-28-9	1,3-Dichloropropane	2.0	U	2.0	0.14
106-46-7	1,4-Dichlorobenzene	2.0	U	2.0	0.15
594-20-7	2,2-Dichloropropane	2.0	U	2.0	0.29
78-93-3	2-Butanone	2.0	U	2.0	0.33
95-49-8	2-Chlorotoluene	2.0	U	2.0	0.13
591-78-6	2-Hexanone	2.0	U	2.0	0.21
106-43-4	4-Chlorotoluene	2.0	U	2.0	0.13
108-10-1	4-Methyl-2-pentanone	2.0	U	2.0	0.18
67-64-1	Acetone	2.0	UJ	2.0	0.59
71-43-2	Benzene	2.0	U	2.0	0.14
108-86-1	Bromobenzene	2.0	U	2.0	0.12
74-97-5	Bromochloromethane	2.0	U	2.0	0.19
75-27-4	Bromodichloromethane	2.0	U	2.0	0.14
75-25-2	Bromoform	2.0	U	2.0	0.29
74-83-9	Bromomethane	2.0	U	2.0	0.24
75-15-0	Carbon Disulfide	2.0	U	2.0	0.23
56-23-5	Carbon Tetrachloride	2.0	U	2.0	0.26
108-90-7	Chlorobenzene	2.0	U	2.0	0.09
75-00-3	Chloroethane	2.0	U	2.0	0.72
67-66-3	Chloroform	2.0	U	2.0	0.08
74-87-3	Chloromethane	2.0	U	2.0	0.24
156-59-2	Cis-1,2-Dichloroethene	2.0	U	2.0	0.17
10061-01-5	Cis-1,3-Dichloropropene	2.0	U	2.0	0.11
124-48-1	Dibromochloromethane	2.0	U	2.0	0.11
74-95-3	Dibromomethane	2.0	U	2.0	0.20
75-71-8	Dichlorodifluoromethane	2.0	U	2.0	0.78
60-29-7	Ethyl Ether	2.0	U	2.0	0.17
100-41-4	Ethylbenzene	2.0	U	2.0	0.12
87-68-3	Hexachlorobutadiene	2.0	U	2.0	0.29
67-72-1	Hexachloroethane	2.0	U	2.0	0.22

Washington State Department of Ecology
Manchester Environmental Laboratory
Final Report for
Volatile Organics Analysis

Project: HyTec-Fiberglass Landfill

Field ID: HLMW4A

Work Order: 1209107
Project Officer: Kourehdar, Mohsen
Initial Vol: 5 mL
Final Vol: 5 mL

Lab ID #: 1209107-02
Collected: 9/27/2012
Prep Method: SW5030B
Analysis Method: SW8260

Batch ID: B12J070
Prepared: 10/5/2012
Analyzed: 10/5/2012
Matrix: Water
Units: ug/L

CAS#	Analyte	Result	Qualifier	RL	MDL
98-82-8	Isopropylbenzene (Cumene)	2.0	U	2.0	0.12
179601-23-1	m,p-Xylene	4.0	U	4.0	0.30
74-88-4	Methyl Iodide	2.0	U	2.0	0.12
1634-04-4	Methyl t-butyl ether	2.0	U	2.0	0.18
75-09-2	Methylene Chloride	2.0	U	2.0	0.14
91-20-3	Naphthalene	2.0	U	2.0	0.16
104-51-8	n-Butylbenzene	2.0	U	2.0	0.20
103-65-1	n-Propylbenzene	2.0	U	2.0	0.12
95-47-6	o-Xylene	2.0	U	2.0	0.18
76-01-7	Pentachloroethane	2.0	UJ	2.0	0.43
99-87-6	p-Isopropyltoluene	2.0	U	2.0	0.10
135-98-8	Sec-Butylbenzene	2.0	U	2.0	0.19
100-42-5	Styrene	2.0	U	2.0	0.15
98-06-6	Tert-Butylbenzene	2.0	U	2.0	0.19
127-18-4	Tetrachloroethene	2.0	U	2.0	0.43
109-99-9	Tetrahydrofuran	2.0	U	2.0	0.50
108-88-3	Toluene	2.0	U	2.0	0.16
156-60-5	Trans-1,2-Dichloroethene	2.0	U	2.0	0.21
10061-02-6	Trans-1,3-Dichloropropene	2.0	U	2.0	0.13
110-57-6	Trans-1,4-Dichloro-2-butene	2.0	UJ	2.0	0.21
79-01-6	Trichloroethene	2.0	U	2.0	0.24
75-69-4	**Trichlorofluoromethane**	**8.8**		2.0	0.94
75-01-4	Vinyl Chloride	2.0	U	2.0	0.22

Surrogate Recovery:

CAS#	Analyte	Result	Spike Level	% Rec.	% Rec. Limits
2199-69-1	**1,2-Dichlorobenzene-D4**	**10.8**	10.0	**108**	80-120
17060-07-0	**1,2-Dichloroethane-D4**	**10.5**	10.0	**105**	80-120
540-36-3	**1,4-Difluorobenzene**	**10.5**	10.0	**105**	80-120
460-00-4	**p-Bromofluorobenzene**	**8.62**	10.0	**86**	80-120
2037-26-5	**Toluene-D8**	**9.77**	10.0	**98**	80-120

Authorized by: _____ **Release Date:** 10/09/12 Printed: 10/9/2012

Washington State Department of Ecology
Manchester Environmental Laboratory
Final Report for
Volatile Organics Analysis

Project: HyTec-Fiberglass Landfill

QC Type : Method Blank

Work Order: 1209107
Project Officer: Kourehdar, Mohsen
Initial Vol: 5 mL
Final Vol: 5 mL

Lab ID #: B12J070-BLK1
Prep Method: SW5030B
Analysis Method: SW8260
Source Field ID: Blank

Batch ID: B12J070
Prepared: 10/5/2012
Analyzed: 10/5/2012
Matrix: Water
Units: ug/L

CAS#	Analyte	Result	Qualifier	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	2.0	U	2.0	0.21
71-55-6	1,1,1-Trichloroethane	2.0	U	2.0	0.20
79-34-5	1,1,2,2-Tetrachloroethane	2.0	U	2.0	0.16
79-00-5	1,1,2-Trichloroethane	2.0	U	2.0	0.13
76-13-1	1,1,2-Trichlorotrifluoroethane	2.0	U	2.0	0.38
75-34-3	1,1-Dichloroethane	2.0	U	2.0	0.10
75-35-4	1,1-Dichloroethene	2.0	U	2.0	0.20
563-58-6	1,1-Dichloropropene	2.0	U	2.0	0.26
87-61-6	1,2,3-Trichlorobenzene	2.0	U	2.0	0.15
96-18-4	1,2,3-Trichloropropane	2.0	U	2.0	0.23
120-82-1	1,2,4-Trichlorobenzene	2.0	U	2.0	0.14
95-63-6	1,2,4-Trimethylbenzene	2.0	U	2.0	0.16
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	UJ	2.0	0.22
106-93-4	1,2-Dibromoethane (EDB)	2.0	U	2.0	0.12
95-50-1	1,2-Dichlorobenzene	2.0	U	2.0	0.13
107-06-2	1,2-Dichloroethane	2.0	U	2.0	0.14
78-87-5	1,2-Dichloropropane	2.0	U	2.0	0.17
108-67-8	1,3,5-Trimethylbenzene	2.0	U	2.0	0.14
541-73-1	1,3-Dichlorobenzene	2.0	U	2.0	0.12
142-28-9	1,3-Dichloropropane	2.0	U	2.0	0.14
106-46-7	1,4-Dichlorobenzene	2.0	U	2.0	0.15
594-20-7	2,2-Dichloropropane	2.0	U	2.0	0.29
78-93-3	2-Butanone	2.0	U	2.0	0.33
95-49-8	2-Chlorotoluene	2.0	U	2.0	0.13
591-78-6	2-Hexanone	2.0	U	2.0	0.21
106-43-4	4-Chlorotoluene	2.0	U	2.0	0.13
108-10-1	4-Methyl-2-pentanone	2.0	U	2.0	0.18
67-64-1	Acetone	2.0	UJ	2.0	0.59
71-43-2	Benzene	2.0	U	2.0	0.14
108-86-1	Bromobenzene	2.0	U	2.0	0.12
74-97-5	Bromochloromethane	2.0	U	2.0	0.19
75-27-4	Bromodichloromethane	2.0	U	2.0	0.14
75-25-2	Bromoform	2.0	U	2.0	0.29
74-83-9	Bromomethane	2.0	U	2.0	0.24
75-15-0	Carbon Disulfide	2.0	U	2.0	0.23
56-23-5	Carbon Tetrachloride	2.0	U	2.0	0.26
108-90-7	Chlorobenzene	2.0	U	2.0	0.09
75-00-3	Chloroethane	2.0	U	2.0	0.72
67-66-3	Chloroform	2.0	U	2.0	0.08
74-87-3	Chloromethane	2.0	U	2.0	0.24
156-59-2	Cis-1,2-Dichloroethene	2.0	U	2.0	0.17
10061-01-5	Cis-1,3-Dichloropropene	2.0	U	2.0	0.11
124-48-1	Dibromochloromethane	2.0	U	2.0	0.11
74-95-3	Dibromomethane	2.0	U	2.0	0.20
75-71-8	Dichlorodifluoromethane	2.0	U	2.0	0.78
60-29-7	Ethyl Ether	2.0	U	2.0	0.17
100-41-4	Ethylbenzene	2.0	U	2.0	0.12
87-68-3	Hexachlorobutadiene	2.0	U	2.0	0.29
67-72-1	Hexachloroethane	2.0	U	2.0	0.22

Washington State Department of Ecology
Manchester Environmental Laboratory
Final Report for
Volatile Organics Analysis

Project: HyTec-Fiberglass Landfill

QC Type : Method Blank

Work Order: 1209107
Project Officer: Kourehdar, Mohsen
Initial Vol: 5 mL
Final Vol: 5 mL

Lab ID #: B12J070-BLK1
Prep Method: SW5030B
Analysis Method: SW8260
Source Field ID: Blank

Batch ID: B12J070
Prepared: 10/5/2012
Analyzed: 10/5/2012
Matrix: Water
Units: ug/L

CAS#	Analyte	Result	Qualifier	RL	MDL
98-82-8	Isopropylbenzene (Cumene)	2.0	U	2.0	0.12
179601-23-1	m,p-Xylene	4.0	U	4.0	0.30
74-88-4	Methyl Iodide	2.0	U	2.0	0.12
1634-04-4	Methyl t-butyl ether	2.0	U	2.0	0.18
75-09-2	Methylene Chloride	2.0	U	2.0	0.14
91-20-3	Naphthalene	2.0	U	2.0	0.16
104-51-8	n-Butylbenzene	2.0	U	2.0	0.20
103-65-1	n-Propylbenzene	2.0	U	2.0	0.12
95-47-6	o-Xylene	2.0	U	2.0	0.18
76-01-7	Pentachloroethane	2.0	UJ	2.0	0.43
99-87-6	p-Isopropyltoluene	2.0	U	2.0	0.10
135-98-8	Sec-Butylbenzene	2.0	U	2.0	0.19
100-42-5	Styrene	2.0	U	2.0	0.15
98-06-6	Tert-Butylbenzene	2.0	U	2.0	0.19
127-18-4	Tetrachloroethene	2.0	U	2.0	0.43
109-99-9	Tetrahydrofuran	2.0	U	2.0	0.50
108-88-3	Toluene	2.0	U	2.0	0.16
156-60-5	Trans-1,2-Dichloroethene	2.0	U	2.0	0.21
10061-02-6	Trans-1,3-Dichloropropene	2.0	U	2.0	0.13
110-57-6	Trans-1,4-Dichloro-2-butene	2.0	UJ	2.0	0.21
79-01-6	Trichloroethene	2.0	U	2.0	0.24
75-69-4	Trichlorofluoromethane	2.0	U	2.0	0.94
75-01-4	Vinyl Chloride	2.0	U	2.0	0.22

Surrogate Recovery:

CAS#	Analyte	Result	Spike Level	% Rec.	% Rec. Limits
2199-69-1	**1,2-Dichlorobenzene-D4**	**10.6**	10.0	**106**	80-120
17060-07-0	**1,2-Dichloroethane-D4**	**10.3**	10.0	**103**	80-120
540-36-3	**1,4-Difluorobenzene**	**10.4**	10.0	**104**	80-120
460-00-4	**p-Bromofluorobenzene**	**8.65**	10.0	**87**	80-120
2037-26-5	**Toluene-D8**	**9.76**	10.0	**98**	80-120

Authorized by: _____ **Release Date:** 10/09/12 Printed: 10/9/2012

Washington State Department of Ecology
Manchester Environmental Laboratory
Final Report for
Volatile Organics Analysis

Project: HyTec-Fiberglass Landfill

QC Type : LCS

Work Order: 1209107
Project Officer: Kourehdar, Mohsen
Initial Vol: 5 mL
Final Vol: 5 mL

Lab ID #: B12J070-BS1
Prep Method: SW5030B
Analysis Method: SW8260
Source Field ID: LCS

Batch ID: B12J070
Prepared: 10/5/2012
Analyzed: 10/5/2012
Matrix: Water
Units: ug/L

Analyte	Result	Spike Level	RL	%Rec	%Rec Limits
1,1,1,2-Tetrachloroethane	8.4	10.0	2.0	84	75-125
1,1,1-Trichloroethane	9.9	10.0	2.0	99	75-125
1,1,2,2-Tetrachloroethane	8.4	10.0	2.0	84	75-125
1,1,2-Trichloroethane	9.0	10.0	2.0	90	75-125
1,1,2-Trichlorotrifluoroethane	10.5	10.0	2.0	105	75-125
1,1-Dichloroethane	9.5	10.0	2.0	95	75-125
1,1-Dichloroethene	10.1	10.0	2.0	101	75-125
1,1-Dichloropropene	10.1	10.0	2.0	101	75-125
1,2,3-Trichlorobenzene	8.4	10.0	2.0	84	75-125
1,2,3-Trichloropropane	8.4	10.0	2.0	84	75-125
1,2,4-Trichlorobenzene	8.3	10.0	2.0	83	75-125
1,2,4-Trimethylbenzene	9.2	10.0	2.0	92	75-125
1,2-Dibromo-3-Chloropropane	7.4	10.0	2.0	74	75-125
1,2-Dibromoethane (EDB)	8.8	10.0	2.0	88	75-125
1,2-Dichlorobenzene	8.9	10.0	2.0	89	75-125
1,2-Dichloroethane	8.9	10.0	2.0	89	75-125
1,2-Dichloropropane	9.3	10.0	2.0	93	75-125
1,3,5-Trimethylbenzene	9.5	10.0	2.0	95	75-125
1,3-Dichlorobenzene	9.0	10.0	2.0	90	75-125
1,3-Dichloropropane	9.0	10.0	2.0	90	75-125
1,4-Dichlorobenzene	8.8	10.0	2.0	88	75-125
2,2-Dichloropropane	10.9	10.0	2.0	109	75-125
2-Butanone	10.0	10.0	2.0	100	60-140
2-Chlorotoluene	9.2	10.0	2.0	92	75-125
2-Hexanone	9.5	10.0	2.0	95	60-140
4-Chlorotoluene	9.1	10.0	2.0	91	60-140
4-Methyl-2-pentanone	8.7	10.0	2.0	87	60-140
Acetone	9.8	10.0	2.0	98	60-140
Benzene	9.5	10.0	2.0	95	75-125
Bromobenzene	8.9	10.0	2.0	89	75-125
Bromochloromethane	9.0	10.0	2.0	90	75-125
Bromodichloromethane	8.6	10.0	2.0	86	75-125
Bromoform	7.8	10.0	2.0	78	75-125
Bromomethane	10.8	10.0	2.0	108	60-140
Carbon Disulfide	9.9	10.0	2.0	99	75-125
Carbon Tetrachloride	9.7	10.0	2.0	97	75-125
Chlorobenzene	9.1	10.0	2.0	91	75-125
Chloroethane	9.8	10.0	2.0	98	75-125
Chloroform	9.2	10.0	2.0	92	75-125
Chloromethane	9.9	10.0	2.0	99	60-140
Cis-1,2-Dichloroethene	9.0	10.0	2.0	90	75-125
Cis-1,3-Dichloropropene	8.2	10.0	2.0	82	75-125
Dibromochloromethane	8.0	10.0	2.0	80	75-125
Dibromomethane	8.9	10.0	2.0	89	75-125
Dichlorodifluoromethane	9.8	10.0	2.0	98	60-140
Ethyl Ether	8.8	10.0	2.0	88	75-125
Ethylbenzene	9.5	10.0	2.0	95	75-125
Hexachlorobutadiene	9.5	10.0	2.0	95	75-125
Hexachloroethane	8.2	10.0	2.0	82	75-125

Washington State Department of Ecology
Manchester Environmental Laboratory
Final Report for
Volatile Organics Analysis

Project: HyTec-Fiberglass Landfill

QC Type : LCS

Work Order: 1209107
Project Officer: Kourehdar, Mohsen
Initial Vol: 5 mL
Final Vol: 5 mL

Lab ID #: B12J070-BS1
Prep Method: SW5030B
Analysis Method: SW8260
Source Field ID: LCS

Batch ID: B12J070
Prepared: 10/5/2012
Analyzed: 10/5/2012
Matrix: Water
Units: ug/L

Analyte	Result	Spike Level	RL	%Rec	%Rec Limits
Isopropylbenzene (Cumene)	9.3	10.0	2.0	93	75-125
m,p-Xylene	19.1	20.0	4.0	95	75-125
Methyl Iodide	9.2	10.0	2.0	92	75-125
Methyl t-butyl ether	9.9	10.0	2.0	99	75-125
Methylene Chloride	8.9	10.0	2.0	89	60-140
Naphthalene	7.7	10.0	2.0	77	75-125
n-Butylbenzene	9.3	10.0	2.0	93	75-125
n-Propylbenzene	9.8	10.0	2.0	98	75-125
o-Xylene	9.2	10.0	2.0	92	75-125
Pentachloroethane	3.9	10.0	2.0	39	75-125
p-Isopropyltoluene	9.6	10.0	2.0	96	75-125
Sec-Butylbenzene	9.4	10.0	2.0	94	75-125
Styrene	9.0	10.0	2.0	90	75-125
Tert-Butylbenzene	10.1	10.0	2.0	101	75-125
Tetrachloroethene	13.6	10.0	2.0	136	75-125
Tetrahydrofuran	8.7	10.0	2.0	87	75-125
Toluene	9.4	10.0	2.0	94	75-125
Trans-1,2-Dichloroethene	9.6	10.0	2.0	96	75-125
Trans-1,3-Dichloropropene	8.8	10.0	2.0	88	75-125
Trans-1,4-Dichloro-2-butene	7.4	10.0	2.0	74	75-125
Trichloroethene	9.2	10.0	2.0	92	75-125
Trichlorofluoromethane	10.2	10.0	2.0	102	75-125
Vinyl Chloride	9.8	10.0	2.0	98	60-140

Surrogate Recovery:

CAS#	Analyte	Result	Spike Level	% Rec.	% Rec. Limits
2199-69-1	1,2-Dichlorobenzene-D4	9.97	10.0	100	80-120
17060-07-0	1,2-Dichloroethane-D4	10.0	10.0	100	80-120
540-36-3	1,4-Difluorobenzene	10.0	10.0	100	80-120
460-00-4	p-Bromofluorobenzene	9.95	10.0	99	80-120
2037-26-5	Toluene-D8	10.2	10.0	102	80-120

Authorized by: _____ Release Date: 10/09/12 Printed: 10/9/2012

Washington State Department of Ecology
Manchester Environmental Laboratory
Final Report for
Volatile Organics Analysis

Project: HyTec-Fiberglass Landfill

QC Type : LCS Dup

Work Order: 1209107
Project Officer: Kourehdar, Mohsen
Initial Vol: 5 mL
Final Vol: 5 mL

Lab ID #: B12J070-BSD1
Prep Method: SW5030B
Analysis Method: SW8260
Source Field ID: LCS Dup

Batch ID: B12J070
Prepared: 10/5/2012
Analyzed: 10/5/2012
Matrix: Water
Units: ug/L

Analyte	Sample Result	Spike Level	%Rec	RPD	%Rec Limits	RPD Limit
1,1,1,2-Tetrachloroethane	8.2	10.0	82	3	75-125	30
1,1,1-Trichloroethane	9.2	10.0	92	7	75-125	30
1,1,2,2-Tetrachloroethane	8.3	10.0	83	2	75-125	30
1,1,2-Trichloroethane	8.7	10.0	87	3	75-125	30
1,1,2-Trichlorotrifluoroethane	9.6	10.0	96	10	75-125	30
1,1-Dichloroethane	9.2	10.0	92	3	75-125	30
1,1-Dichloroethene	9.2	10.0	92	9	75-125	30
1,1-Dichloropropene	9.2	10.0	92	9	75-125	30
1,2,3-Trichlorobenzene	8.5	10.0	85	0.6	75-125	30
1,2,3-Trichloropropane	8.4	10.0	84	0.5	75-125	30
1,2,4-Trichlorobenzene	8.3	10.0	83	0.5	75-125	30
1,2,4-Trimethylbenzene	9.1	10.0	91	1	75-125	30
1,2-Dibromo-3-Chloropropane	7.4	10.0	74	0.008	75-125	30
1,2-Dibromoethane (EDB)	8.8	10.0	88	0.5	75-125	30
1,2-Dichlorobenzene	8.9	10.0	89	0.2	75-125	30
1,2-Dichloroethane	8.9	10.0	89	0.8	75-125	30
1,2-Dichloropropane	9.0	10.0	90	3	75-125	30
1,3,5-Trimethylbenzene	9.2	10.0	92	3	75-125	30
1,3-Dichlorobenzene	9.0	10.0	90	0.3	75-125	30
1,3-Dichloropropane	8.9	10.0	89	0.6	75-125	30
1,4-Dichlorobenzene	8.9	10.0	89	0.7	75-125	30
2,2-Dichloropropane	10.5	10.0	105	3	75-125	30
2-Butanone	9.8	10.0	98	2	60-140	40
2-Chlorotoluene	9.1	10.0	91	1	75-125	30
2-Hexanone	9.5	10.0	95	0.7	60-140	40
4-Chlorotoluene	9.1	10.0	91	0.6	60-140	40
4-Methyl-2-pentanone	8.6	10.0	86	0.08	60-140	40
Acetone	9.7	10.0	97	1	60-140	40
Benzene	9.2	10.0	92	3	75-125	30
Bromobenzene	8.9	10.0	89	0.1	75-125	30
Bromochloromethane	8.8	10.0	88	1	75-125	30
Bromodichloromethane	8.4	10.0	84	2	75-125	30
Bromoform	7.7	10.0	77	1	75-125	30
Bromomethane	10.6	10.0	106	2	60-140	40
Carbon Disulfide	9.3	10.0	93	6	75-125	30
Carbon Tetrachloride	9.0	10.0	90	8	75-125	30
Chlorobenzene	8.9	10.0	89	2	75-125	30
Chloroethane	9.4	10.0	94	5	75-125	30
Chloroform	9.0	10.0	90	3	75-125	30
Chloromethane	9.7	10.0	97	2	60-140	40
Cis-1,2-Dichloroethene	9.0	10.0	90	0.3	75-125	30
Cis-1,3-Dichloropropene	8.2	10.0	82	0.07	75-125	30
Dibromochloromethane	7.8	10.0	78	2	75-125	30
Dibromomethane	8.8	10.0	88	0.9	75-125	30
Dichlorodifluoromethane	9.4	10.0	94	4	60-140	40
Ethyl Ether	8.7	10.0	87	0.4	75-125	30
Ethylbenzene	9.0	10.0	90	5	75-125	30
Hexachlorobutadiene	9.2	10.0	92	3	75-125	30
Hexachloroethane	8.0	10.0	80	3	75-125	30

Washington State Department of Ecology
Manchester Environmental Laboratory
Final Report for
Volatile Organics Analysis

Project: HyTec-Fiberglass Landfill

QC Type : LCS Dup

Work Order: 1209107
Project Officer: Kourehdar, Mohsen
Initial Vol: 5 mL
Final Vol: 5 mL

Lab ID #: B12J070-BSD1
Prep Method: SW5030B
Analysis Method: SW8260
Source Field ID: LCS Dup

Batch ID: B12J070
Prepared: 10/5/2012
Analyzed: 10/5/2012
Matrix: Water
Units: ug/L

Analyte	Sample Result	Spike Level	%Rec	RPD	%Rec Limits	RPD Limit
Isopropylbenzene (Cumene)	8.9	10.0	89	4	75-125	30
m,p-Xylene	18.2	20.0	91	5	75-125	30
Methyl Iodide	9.3	10.0	93	1	75-125	30
Methyl t-butyl ether	10.1	10.0	101	2	75-125	30
Methylene Chloride	8.7	10.0	87	2	60-140	40
Naphthalene	7.8	10.0	78	1	75-125	30
n-Butylbenzene	8.9	10.0	89	4	75-125	30
n-Propylbenzene	9.4	10.0	94	4	75-125	30
o-Xylene	9.0	10.0	90	2	75-125	30
Pentachloroethane	2.6	10.0	26	40	75-125	30
p-Isopropyltoluene	9.3	10.0	93	3	75-125	30
Sec-Butylbenzene	9.0	10.0	90	4	75-125	30
Styrene	8.9	10.0	89	2	75-125	30
Tert-Butylbenzene	9.3	10.0	93	9	75-125	30
Tetrachloroethene	14.1	10.0	141	3	75-125	30
Tetrahydrofuran	8.8	10.0	88	1	75-125	30
Toluene	9.0	10.0	90	4	75-125	30
Trans-1,2-Dichloroethene	9.2	10.0	92	5	75-125	30
Trans-1,3-Dichloropropene	8.7	10.0	87	0.7	75-125	30
Trans-1,4-Dichloro-2-butene	7.3	10.0	73	0.7	75-125	30
Trichloroethene	8.8	10.0	88	5	75-125	30
Trichlorofluoromethane	9.3	10.0	93	10	75-125	30
Vinyl Chloride	9.2	10.0	92	6	60-140	40

Surrogate Recovery:

CAS#	Analyte	Result	Spike Level	% Rec.	% Rec. Limits
2199-69-1	1,2-Dichlorobenzene-D4	9.96	10.0	100	80-120
17060-07-0	1,2-Dichloroethane-D4	10.1	10.0	101	80-120
540-36-3	1,4-Difluorobenzene	10.0	10.0	100	80-120
460-00-4	p-Bromofluorobenzene	9.99	10.0	100	80-120
2037-26-5	Toluene-D8	10.1	10.0	101	80-120

Authorized by: _____ Release Date: 10/09/12 Printed: 10/9/2012

Manchester Environmental Laboratory

7411 Beach Dr E, Port Orchard, Washington 98366

Case Narrative

October 11, 2012
Revised October 30, 2012

Project:	Hy Tec-Fiberglass Landfill
Laboratory Sample No(s):	1209107-01, 03
Project Manager:	Mohsen Kourehdar
By:	Dickey Huntamer

Semivolatiles

BNA

Analytical Method(s)

These samples extracted with methylene chloride following a modification of EPA Method 3510. The extracts were analyzed following a modification of EPA Method 8270D

Holding Times

All samples were received in good condition, within the proper temperature <6° C and were prepared and analyzed within method holding times.

Instrument Tuning

Calibration against DFTPP is acceptable for the initial calibration, continuing calibration, and all associated sample analyses.

Initial Calibration

The initial calibration (ICAL), Initial Calibration Verification (ICV), and back calculations (BC) were within QC limits with the following exceptions.

The ICAL RSD was greater than 15% for 4-nitroaniline, 4-chloroaniline, carbazole, 3, 3'-dichlorobenzidine, and 3-nitroaniline. 4-Nitroaniline used a 3 point curve.

The ICV was low for 4-chloroaniline, 3-nitroaniline, and carbazole.

The BC for 4-chloroaniline, 3-nitroaniline, 4-nitroanline, carbazole, dibenzo(a,h)anthracene, and di-N-octyl phthalate were outside the limits. 4-Chloroaniline was qualified for other reasons. Qualifiers were added as shown in, Table 1.

Table 1

Compound	Sample IDs	Qual
4-Nitroaniline	1209107-01, 03, B12I267-BLK1	UJ
3-Nitroaniline		
Carbazole		
Di-N-octyl phthalate		
Dibenzo(a,h)anthracene		

Continuing Calibration

The continuing calibration verifications (CCVs) were within QC limits with the following exceptions.

4-Chloroaniline, bis (2-chloro-1-methylethyl) ether, 2-nitroaniline, 1, 2-diphenylhydrazine, 4-methylphenol, 3-nitroaniline, N-nitrosodi-n-propylamine, butylbenzylphthalate, bis (2-ethylhexyl) phthalate and di-N-octyl phthalate were high. These compounds were not detected or were already qualified so no qualifiers were added.

Hexachlorocyclopentadiene, pentachlorophenol, benzoic acid, 3B-coprostanol, and cholesterol were low. Qualifiers were added as shown in, Table 2.

Table 2

Compound	Sample IDs	Qual
Pentachlorophenol	1209107-01, 03, B12I267-BLK1	UJ
Hexachlorocyclopentadiene		
Benzoic acid		
3B-Coprostanol		
Cholesterol		

Internal Standards

All internal standards were within QC limits.

Method Blank(s)

Di-N-butylphthalate and 4-nonylphenol were detected in the laboratory blank B12G010-BLK1.

4-Nonylphenol was not detected in the samples. The amount of di-N-butylphthalate in the sample was less than 10 times the blank amount in the samples. Therefore results were qualified UJ at the amount detected. Qualifiers were added as shown in, Table 3.

Table 3

Compound	Sample IDs	Qual
Di-N-butylphthalate	1209107-01, 03	UJ

Laboratory Control Samples

The spike recoveries were within QC limits with the following exceptions.

Bis(2-chloro-1-methylethyl) ether was high in both LCS samples and bis(2-ethylhexyl) phthalate and benzyl alcohol were high in the duplicate LCS. The Relative Percent Differences (RPD) were within QC limits. Neither bis(2-chloro-1-methylethyl) ether or benzyl alcohol were detected so no qualifiers were added. Qualifiers were added as shown in, Table 4.

Table 4.

Compound	Sample IDs	Qual
Bis-(2-ethylhexyl) Phthalate	1209107-01	J

Surrogates

All surrogate recoveries were within QC limits with the following exceptions.

4-Chloroaniline–D4 was less than 10% in samples 1209107-01, 03 and low in QC samples B12I267-BLK1, BS1, and BSD1. 4-Chloroaniline was rejected in the samples and qualified UJ in the blank. Phenol-D5 was high in QC samples B12I267-BLK1, BS1, BSD1. Phenol was not detected so no qualifiers were added. Qualifiers were added as shown in, Table 5.

Table 5

Compound	Sample IDs	Qual
4-chloroaniline	1209107-01, 03	REJ
	B12I267-BLK1	UJ

Matrix Spikes

No matrix spikes using these samples were analyzed. One matrix spike, B12I267-MS1, using another projects sample, 1209076-34 as the source sample was run with these samples. Bis(2-chloro-1-methylethyl) ether was high but not detected. 4-Chloroaniline and 3,3'-dichlorobenzidine were less than 10%. No qualifiers were added to these samples.

Duplicates

No duplicates were run with these samples.

Qualitative Identification

The spectra of the reported compounds were within QC limits.

Comments

There were no other QC concerns.

Data Qualifier Codes

U	-	The analyte was analyzed for, but was not detected above the reported quantitation limit.
J	-	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
UJ	-	The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary and precisely measure the analyte sample.
REJ	-	The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.
N	-	The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification".
NJ	-	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.
NC	-	Not Calculated
NAF	-	Not analyzed for.
E	-	This qualifier is used when the concentration of the associated value exceeds the known calibration range. Use the dilution value for this analysis when available.
Bold	-	The analyte was detected in the sample. (Visual Aid to locate detected compounds on report sheet.)

Washington State Department of Ecology
Manchester Environmental Laboratory
Final Report for
Base/Neutral/Acids

Project: HyTec-Fiberglass Landfill

Field ID: HLMW5B

Work Order: 1209107
Project Officer: Kourehdar, Mohsen
Initial Vol: 2875 mL
Final Vol: 1 mL

Lab ID #: 1209107-01
Collected: 9/27/2012
Prep Method: SW3510C
Analysis Method: SW8270

Batch ID: B12I267
Prepared: 9/28/2012
Analyzed: 10/1/2012
Matrix: Water
Units: ug/L

CAS#	Analyte	Result	Qualifier	RL	MDL
120-82-1	1,2,4-Trichlorobenzene	0.087	U	0.087	0.021
95-50-1	1,2-Dichlorobenzene	0.087	U	0.087	0.021
122-66-7	1,2-Diphenylhydrazine	0.087	U	0.087	0.055
541-73-1	1,3-Dichlorobenzene	0.087	U	0.087	0.018
106-46-7	1,4-Dichlorobenzene	0.087	U	0.087	0.019
90-12-0	1-Methylnaphthalene	0.087	U	0.087	0.056
95-95-4	2,4,5-Trichlorophenol	0.87	U	0.87	0.069
88-06-2	2,4,6-Trichlorophenol	0.35	U	0.35	0.053
120-83-2	2,4-Dichlorophenol	0.87	U	0.87	0.045
105-67-9	2,4-Dimethylphenol	0.87	U	0.87	0.051
51-28-5	2,4-Dinitrophenol	0.87	U	0.87	
121-14-2	2,4-Dinitrotoluene	0.35	U	0.35	0.049
606-20-2	2,6-Dinitrotoluene	0.35	U	0.35	0.059
91-58-7	2-Chloronaphthalene	0.17	U	0.17	0.055
95-57-8	2-Chlorophenol	0.35	U	0.35	0.045
91-57-6	2-Methylnaphthalene	0.087	U	0.087	0.052
95-48-7	2-Methylphenol	0.87	U	0.87	0.044
88-74-4	2-Nitroaniline	1.7	U	1.7	0.058
88-75-5	2-Nitrophenol	0.35	U	0.35	0.039
91-94-1	3,3'-Dichlorobenzidine	0.35	UJ	0.35	0.017
360-68-9	3B-Coprostanol	1.7	UJ	1.7	0.027
99-09-2	3-Nitroaniline	0.35	UJ	0.35	0.050
534-52-1	4,6-Dinitro-2-Methylphenol	1.7	U	1.7	0.58
101-55-3	4-Bromophenyl phenyl ether	0.17	U	0.17	0.078
59-50-7	4-Chloro-3-Methylphenol	0.87	U	0.87	0.069
106-47-8	4-Chloroaniline		REJ	3.5	0.14
7005-72-3	4-Chlorophenyl-Phenylether	0.087	U	0.087	0.078
106-44-5	4-Methylphenol	0.87	U	0.87	0.043
100-01-6	4-Nitroaniline	0.87	UJ	0.87	
100-02-7	4-Nitrophenol	0.87	UJ	0.87	0.018
104-40-5	4-nonylphenol	0.35	U	0.35	0.035
83-32-9	Acenaphthene	0.087	U	0.087	0.085
208-96-8	Acenaphthylene	0.087	U	0.087	0.066
120-12-7	Anthracene	0.17	U	0.17	0.089
56-55-3	Benz[a]anthracene	0.17	U	0.17	0.10
50-32-8	Benzo(a)pyrene	0.087	U	0.087	0.042
205-99-2	Benzo(b)fluoranthene	0.087	U	0.087	0.040
191-24-2	Benzo(ghi)perylene	0.17	U	0.17	0.089
207-08-9	Benzo(k)fluoranthene	0.087	U	0.087	0.084
65-85-0	Benzoic Acid	1.7	UJ	1.7	
100-51-6	Benzyl Alcohol	0.87	U	0.87	0.031
108-60-1	Bis(2-chloro-1-methylethyl) ether	0.087	U	0.087	0.058
111-91-1	Bis(2-Chloroethoxy)Methane	0.087	U	0.087	0.072
111-44-4	Bis(2-Chloroethyl)Ether	0.17	U	0.17	0.050
117-81-7	**Bis(2-Ethylhexyl) Phthalate**	**78**	**J**	14	2.1
80-05-7	Bisphenol A	0.35	U	0.35	0.035
85-68-7	Butyl benzyl phthalate	0.35	U	0.35	0.041
58-08-2	Caffeine	0.17	U	0.17	0.067
86-74-8	Carbazole	0.17	UJ	0.17	0.0089

Washington State Department of Ecology
Manchester Environmental Laboratory
Final Report for
Base/Neutral/Acids

Project: HyTec-Fiberglass Landfill

Field ID: HLMW5B

Work Order: 1209107
Project Officer: Kourehdar, Mohsen
Initial Vol: 2875 mL
Final Vol: 1 mL

Lab ID #: 1209107-01
Collected: 9/27/2012
Prep Method: SW3510C
Analysis Method: SW8270

Batch ID: B12I267
Prepared: 9/28/2012
Analyzed: 10/1/2012
Matrix: Water
Units: ug/L

CAS#	Analyte	Result	Qualifier	RL	MDL
57-88-5	Cholesterol	1.7	UJ	1.7	0.083
218-01-9	Chrysene	0.17	U	0.17	0.10
53-70-3	Dibenzo(a,h)anthracene	0.087	UJ	0.087	0.082
132-64-9	Dibenzofuran	0.17	U	0.17	0.078
84-66-2	Diethyl phthalate	0.17	U	0.17	0.086
131-11-3	Dimethyl phthalate	0.17	U	0.17	0.075
84-74-2	Di-N-Butylphthalate	0.31	UJ	0.087	0.064
117-84-0	Di-N-Octyl Phthalate	0.87	UJ	0.87	0.077
206-44-0	Fluoranthene	0.17	U	0.17	0.11
86-73-7	Fluorene	0.087	U	0.087	0.084
118-74-1	Hexachlorobenzene	0.087	U	0.087	0.043
87-68-3	Hexachlorobutadiene	0.087	U	0.087	0.013
77-47-4	Hexachlorocyclopentadiene	0.35	UJ	0.35	0.011
67-72-1	Hexachloroethane	0.087	U	0.087	0.020
193-39-5	Indeno(1,2,3-cd)pyrene	0.087	U	0.087	0.083
78-59-1	Isophorone	1.7	U	1.7	0.080
91-20-3	Naphthalene	0.087	U	0.087	0.049
98-95-3	Nitrobenzene	0.087	U	0.087	0.072
621-64-7	N-Nitrosodi-n-propylamine	0.087	U	0.087	0.077
86-30-6	N-Nitrosodiphenylamine	0.17	U	0.17	0.036
87-86-5	Pentachlorophenol	0.087	UJ	0.087	
85-01-8	Phenanthrene	0.17	U	0.17	0.094
108-95-2	Phenol	0.35	U	0.35	0.028
129-00-0	Pyrene	0.17	U	0.17	0.12
483-65-8	Retene	0.17	U	0.17	0.095
3380-34-5	Triclosan	0.17	U	0.17	0.035
77-93-0	Triethyl citrate	0.35	U	0.35	0.035
115-96-8	Tris(2-chloroethyl) phosphate (TCEP)	0.087	U	0.087	0.035

Surrogate Recovery:

CAS#	Analyte	Result	Spike Level	% Rec.	% Rec. Limits
2199-69-1	1,2-Dichlorobenzene-D4	1.85	2.78	67	15-98
93951-74-7	2,4-Dichlorophenol-D3	2.14	2.78	77	50-150
93951-73-6	2-Chlorophenol-D4	2.33	2.78	84	44-112
321-60-8	2-Fluorobiphenyl	2.01	2.78	72	19-116
367-12-4	2-Fluorophenol	1.17	2.78	42	10-91
93951-78-1	2-Nitrophenol-D4	2.32	2.78	83	20-120
93951-76-9	4,6-Dinitro-2-methylphenol-D2	2.25	2.78	81	50-150
191656-33-4	4-Chloroaniline-D4	0.0435	2.78	2	20-120
190780-66-6	4-Methylphenol-D8	1.88	2.78	68	50-150
93951-79-2	4-Nitrophenol-D4	0.831	2.78	30	20-120
93951-97-4	Acenaphthylene-D8	2.23	2.78	80	50-150
1719-06-8	Anthracene-D10	2.78	2.78	100	50-150
63466-71-7	Benzo(a)pyrene-D12	2.52	2.78	90	50-150
93952-02-4	Bis(2-Chloroethyl)Ether-D8	2.48	2.78	89	50-150
85448-30-2	Dimethylphthalate-D6	2.42	2.78	87	50-150
81103-79-9	Fluorene-D10	2.37	2.78	85	50-150
4165-60-0	Nitrobenzene-D5	2.28	2.78	82	50-118

Washington State Department of Ecology
Manchester Environmental Laboratory
Final Report for
Base/Neutral/Acids

Project: HyTec-Fiberglass Landfill **Field ID: HLMW5B**

Work Order: 1209107
Project Officer: Kourehdar, Mohsen
Initial Vol: 2875 mL
Final Vol: 1 mL

Lab ID #: 1209107-01
Collected: 9/27/2012
Prep Method: SW3510C
Analysis Method: SW8270

Batch ID: B12I267
Prepared: 9/28/2012
Analyzed: 10/1/2012
Matrix: Water
Units: ug/L

Surrogate Recovery:

CAS#	Analyte	Result	Spike Level	% Rec.	% Rec. Limits
4165-62-2	Phenol-D5	0.660	2.78	24	10-66
1718-52-1	Pyrene-D10	3.59	2.78	129	57-134
1718-51-0	Terphenyl-D14	3.34	2.78	120	42-145

Authorized by: _____ Release Date: 10/16/12

Printed: 10/16/2012

Washington State Department of Ecology
Manchester Environmental Laboratory
Final Report for
Base/Neutral/Acids

Project: HyTec-Fiberglass Landfill

Field ID: HLMW4A

Work Order: 1209107
Project Officer: Kourehdar, Mohsen
Initial Vol: 3025 mL
Final Vol: 1 mL

Lab ID #: 1209107-03
Collected: 9/27/2012
Prep Method: SW3510C
Analysis Method: SW8270

Batch ID: B12I267
Prepared: 9/28/2012
Analyzed: 10/1/2012
Matrix: Water
Units: ug/L

CAS#	Analyte	Result	Qualifier	RL	MDL
120-82-1	1,2,4-Trichlorobenzene	0.083	U	0.083	0.020
95-50-1	1,2-Dichlorobenzene	0.083	U	0.083	0.020
122-66-7	1,2-Diphenylhydrazine	0.083	U	0.083	0.053
541-73-1	1,3-Dichlorobenzene	0.083	U	0.083	0.017
106-46-7	1,4-Dichlorobenzene	0.083	U	0.083	0.018
90-12-0	1-Methylnaphthalene	0.083	U	0.083	0.053
95-95-4	2,4,5-Trichlorophenol	0.83	U	0.83	0.065
88-06-2	2,4,6-Trichlorophenol	0.33	U	0.33	0.050
120-83-2	2,4-Dichlorophenol	0.83	U	0.83	0.043
105-67-9	2,4-Dimethylphenol	0.83	U	0.83	0.049
51-28-5	2,4-Dinitrophenol	0.83	U	0.83	
121-14-2	2,4-Dinitrotoluene	0.33	U	0.33	0.047
606-20-2	2,6-Dinitrotoluene	0.33	U	0.33	0.056
91-58-7	2-Chloronaphthalene	0.17	U	0.17	0.052
95-57-8	2-Chlorophenol	0.33	U	0.33	0.043
91-57-6	2-Methylnaphthalene	0.083	U	0.083	0.049
95-48-7	2-Methylphenol	0.83	U	0.83	0.042
88-74-4	2-Nitroaniline	1.7	U	1.7	0.055
88-75-5	2-Nitrophenol	0.33	U	0.33	0.037
91-94-1	3,3'-Dichlorobenzidine	0.33	UJ	0.33	0.016
360-68-9	3B-Coprostanol	1.7	UJ	1.7	0.025
99-09-2	3-Nitroaniline	0.33	UJ	0.33	0.047
534-52-1	4,6-Dinitro-2-Methylphenol	1.7	U	1.7	0.55
101-55-3	4-Bromophenyl phenyl ether	0.17	U	0.17	0.074
59-50-7	4-Chloro-3-Methylphenol	0.83	U	0.83	0.065
106-47-8	4-Chloroaniline		REJ	3.3	0.13
7005-72-3	4-Chlorophenyl-Phenylether	0.083	U	0.083	0.074
106-44-5	4-Methylphenol	0.83	U	0.83	0.041
100-01-6	4-Nitroaniline	0.83	UJ	0.83	
100-02-7	4-Nitrophenol	0.83	UJ	0.83	0.017
104-40-5	4-nonylphenol	0.33	U	0.33	0.033
83-32-9	Acenaphthene	0.083	U	0.083	0.080
208-96-8	Acenaphthylene	0.083	U	0.083	0.063
120-12-7	Anthracene	0.17	U	0.17	0.085
56-55-3	Benz[a]anthracene	0.17	U	0.17	0.096
50-32-8	Benzo(a)pyrene	0.083	U	0.083	0.040
205-99-2	Benzo(b)fluoranthene	0.083	U	0.083	0.038
191-24-2	Benzo(ghi)perylene	0.17	U	0.17	0.085
207-08-9	Benzo(k)fluoranthene	0.083	U	0.083	0.079
65-85-0	Benzoic Acid	1.7	UJ	1.7	
100-51-6	Benzyl Alcohol	0.83	U	0.83	0.029
108-60-1	Bis(2-chloro-1-methylethyl) ether	0.083	U	0.083	0.055
111-91-1	Bis(2-Chloroethoxy)Methane	0.083	U	0.083	0.069
111-44-4	Bis(2-Chloroethyl)Ether	0.17	U	0.17	0.047
117-81-7	Bis(2-Ethylhexyl) Phthalate	0.33	U	0.33	0.050
80-05-7	Bisphenol A	0.33	U	0.33	0.033
85-68-7	Butyl benzyl phthalate	0.33	U	0.33	0.039
58-08-2	Caffeine	0.17	U	0.17	0.064
86-74-8	Carbazole	0.17	UJ	0.17	0.0085

Washington State Department of Ecology
Manchester Environmental Laboratory
Final Report for
Base/Neutral/Acids

Project: HyTec-Fiberglass Landfill

Field ID: HLMW4A

Work Order: 1209107
Project Officer: Kourehdar, Mohsen
Initial Vol: 3025 mL
Final Vol: 1 mL

Lab ID #: 1209107-03
Collected: 9/27/2012
Prep Method: SW3510C
Analysis Method: SW8270

Batch ID: B12I267
Prepared: 9/28/2012
Analyzed: 10/1/2012
Matrix: Water
Units: ug/L

CAS#	Analyte	Result	Qualifier	RL	MDL
57-88-5	Cholesterol	1.7	UJ	1.7	0.078
218-01-9	Chrysene	0.17	U	0.17	0.098
53-70-3	Dibenzo(a,h)anthracene	0.083	UJ	0.083	0.078
132-64-9	Dibenzofuran	0.17	U	0.17	0.074
84-66-2	Diethyl phthalate	0.17	U	0.17	0.081
131-11-3	Dimethyl phthalate	0.17	U	0.17	0.071
84-74-2	Di-N-Butylphthalate	0.29	UJ	0.083	0.060
117-84-0	Di-N-Octyl Phthalate	0.83	UJ	0.83	0.074
206-44-0	Fluoranthene	0.17	U	0.17	0.10
86-73-7	Fluorene	0.083	U	0.083	0.080
118-74-1	Hexachlorobenzene	0.083	U	0.083	0.041
87-68-3	Hexachlorobutadiene	0.083	U	0.083	0.013
77-47-4	Hexachlorocyclopentadiene	0.33	UJ	0.33	0.010
67-72-1	Hexachloroethane	0.083	U	0.083	0.019
193-39-5	Indeno(1,2,3-cd)pyrene	0.083	U	0.083	0.078
78-59-1	Isophorone	1.7	U	1.7	0.076
91-20-3	Naphthalene	0.083	U	0.083	0.046
98-95-3	Nitrobenzene	0.083	U	0.083	0.068
621-64-7	N-Nitrosodi-n-propylamine	0.083	U	0.083	0.073
86-30-6	N-Nitrosodiphenylamine	0.17	U	0.17	0.035
87-86-5	Pentachlorophenol	0.083	UJ	0.083	
85-01-8	Phenanthrene	0.17	U	0.17	0.089
108-95-2	Phenol	0.33	U	0.33	0.026
129-00-0	Pyrene	0.17	U	0.17	0.11
483-65-8	Retene	0.17	U	0.17	0.091
3380-34-5	Triclosan	0.17	U	0.17	0.033
77-93-0	Triethyl citrate	0.33	U	0.33	0.033
115-96-8	Tris(2-chloroethyl) phosphate (TCEP)	0.083	U	0.083	0.033

Surrogate Recovery:

CAS#	Analyte	Result	Spike Level	% Rec.	% Rec. Limits
2199-69-1	1,2-Dichlorobenzene-D4	2.38	2.64	90	15-98
93951-74-7	2,4-Dichlorophenol-D3	2.31	2.64	88	50-150
93951-73-6	2-Chlorophenol-D4	2.57	2.64	97	44-112
321-60-8	2-Fluorobiphenyl	2.38	2.64	90	19-116
367-12-4	2-Fluorophenol	1.27	2.64	48	10-91
93951-78-1	2-Nitrophenol-D4	2.62	2.64	99	20-120
93951-76-9	4,6-Dinitro-2-methylphenol-D2	2.10	2.64	79	50-150
191656-33-4	4-Chloroaniline-D4	0.0596	2.64	2	20-120
190780-66-6	4-Methylphenol-D8	1.96	2.64	74	50-150
93951-79-2	4-Nitrophenol-D4	0.740	2.64	28	20-120
93951-97-4	Acenaphthylene-D8	2.39	2.64	90	50-150
1719-06-8	Anthracene-D10	2.61	2.64	99	50-150
63466-71-7	Benzo(a)pyrene-D12	2.39	2.64	90	50-150
93952-02-4	Bis(2-Chloroethyl)Ether-D8	2.77	2.64	105	50-150
85448-30-2	Dimethylphthalate-D6	2.42	2.64	91	50-150
81103-79-9	Fluorene-D10	2.39	2.64	91	50-150
4165-60-0	Nitrobenzene-D5	2.59	2.64	98	50-118

Washington State Department of Ecology
Manchester Environmental Laboratory
Final Report for
Base/Neutral/Acids

Project: HyTec-Fiberglass Landfill **Field ID: HLMW4A**

Work Order: 1209107
Project Officer: Kourehdar, Mohsen
Initial Vol: 3025 mL
Final Vol: 1 mL

Lab ID #: 1209107-03
Collected: 9/27/2012
Prep Method: SW3510C
Analysis Method: SW8270

Batch ID: B12I267
Prepared: 9/28/2012
Analyzed: 10/1/2012
Matrix: Water
Units: ug/L

Surrogate Recovery:

CAS#	Analyte	Result	Spike Level	% Rec.	% Rec. Limits
4165-62-2	Phenol-D5	0.684	2.64	26	10-66
1718-52-1	Pyrene-D10	3.11	2.64	118	57-134
1718-51-0	Terphenyl-D14	3.02	2.64	114	42-145

Authorized by: _____ Release Date: 10/16/12

Printed: 10/16/2012

Washington State Department of Ecology
Manchester Environmental Laboratory
Final Report for
Base/Neutral/Acids

Project: HyTec-Fiberglass Landfill

QC Type : Method Blank

Work Order: 1209107
Project Officer: Kourehdar, Mohsen
Initial Vol: 3000 mL
Final Vol: 1 mL

Lab ID #: B12I267-BLK1
Prep Method: SW3510C
Analysis Method: SW8270
Source Field ID: Blank

Batch ID: B12I267
Prepared: 9/28/2012
Analyzed: 10/1/2012
Matrix: Water
Units: ug/L

CAS#	Analyte	Result	Qualifier	RL	MDL
120-82-1	1,2,4-Trichlorobenzene	0.083	U	0.083	0.021
95-50-1	1,2-Dichlorobenzene	0.083	U	0.083	0.020
122-66-7	1,2-Diphenylhydrazine	0.083	U	0.083	0.053
541-73-1	1,3-Dichlorobenzene	0.083	U	0.083	0.017
106-46-7	1,4-Dichlorobenzene	0.083	U	0.083	0.018
90-12-0	1-Methylnaphthalene	0.083	U	0.083	0.054
95-95-4	2,4,5-Trichlorophenol	0.83	U	0.83	0.066
88-06-2	2,4,6-Trichlorophenol	0.33	U	0.33	0.050
120-83-2	2,4-Dichlorophenol	0.83	U	0.83	0.044
105-67-9	2,4-Dimethylphenol	0.83	U	0.83	0.049
51-28-5	2,4-Dinitrophenol	0.83	U	0.83	
121-14-2	2,4-Dinitrotoluene	0.33	U	0.33	0.047
606-20-2	2,6-Dinitrotoluene	0.33	U	0.33	0.057
91-58-7	2-Chloronaphthalene	0.17	U	0.17	0.053
95-57-8	2-Chlorophenol	0.33	U	0.33	0.043
91-57-6	2-Methylnaphthalene	0.083	U	0.083	0.050
95-48-7	2-Methylphenol	0.83	U	0.83	0.042
88-74-4	2-Nitroaniline	1.7	U	1.7	0.056
88-75-5	2-Nitrophenol	0.33	U	0.33	0.037
91-94-1	3,3'-Dichlorobenzidine	0.33	UJ	0.33	0.017
360-68-9	3B-Coprostanol	1.7	UJ	1.7	0.025
99-09-2	3-Nitroaniline	0.33	UJ	0.33	0.048
534-52-1	4,6-Dinitro-2-Methylphenol	1.7	U	1.7	0.56
101-55-3	4-Bromophenyl phenyl ether	0.17	U	0.17	0.075
59-50-7	4-Chloro-3-Methylphenol	0.83	U	0.83	0.066
106-47-8	4-Chloroaniline	3.3	UJ	3.3	0.13
7005-72-3	4-Chlorophenyl-Phenylether	0.083	U	0.083	0.074
106-44-5	4-Methylphenol	0.83	U	0.83	0.041
100-01-6	4-Nitroaniline	0.83	UJ	0.83	
100-02-7	4-Nitrophenol	0.83	UJ	0.83	0.017
104-40-5	**4-nonylphenol**	**0.057**	**J**	0.33	0.033
83-32-9	Acenaphthene	0.083	U	0.083	0.081
208-96-8	Acenaphthylene	0.083	U	0.083	0.063
120-12-7	Anthracene	0.17	U	0.17	0.085
56-55-3	Benz[a]anthracene	0.17	U	0.17	0.096
50-32-8	Benzo(a)pyrene	0.083	U	0.083	0.041
205-99-2	Benzo(b)fluoranthene	0.083	U	0.083	0.039
191-24-2	Benzo(ghi)perylene	0.17	U	0.17	0.086
207-08-9	Benzo(k)fluoranthene	0.083	U	0.083	0.080
65-85-0	Benzoic Acid	1.7	UJ	1.7	
100-51-6	Benzyl Alcohol	0.83	U	0.83	0.029
108-60-1	Bis(2-chloro-1-methylethyl) ether	0.083	U	0.083	0.056
111-91-1	Bis(2-Chloroethoxy)Methane	0.083	U	0.083	0.069
111-44-4	Bis(2-Chloroethyl)Ether	0.17	U	0.17	0.048
117-81-7	Bis(2-Ethylhexyl) Phthalate	0.33	U	0.33	0.050
80-05-7	Bisphenol A	0.33	U	0.33	0.033
85-68-7	Butyl benzyl phthalate	0.33	U	0.33	0.039
58-08-2	Caffeine	0.17	U	0.17	0.065
86-74-8	Carbazole	0.17	UJ	0.17	0.0085

Washington State Department of Ecology
Manchester Environmental Laboratory
Final Report for
Base/Neutral/Acids

Project: HyTec-Fiberglass Landfill

QC Type : Method Blank

Work Order: 1209107
Project Officer: Kourehdar, Mohsen
Initial Vol: 3000 mL
Final Vol: 1 mL

Lab ID #: B12I267-BLK1
Prep Method: SW3510C
Analysis Method: SW8270
Source Field ID: Blank

Batch ID: B12I267
Prepared: 9/28/2012
Analyzed: 10/1/2012
Matrix: Water
Units: ug/L

CAS#	Analyte	Result	Qualifier	RL	MDL
57-88-5	Cholesterol	1.7	UJ	1.7	0.079
218-01-9	Chrysene	0.17	U	0.17	0.099
53-70-3	Dibenzo(a,h)anthracene	0.083	UJ	0.083	0.078
132-64-9	Dibenzofuran	0.17	U	0.17	0.074
84-66-2	Diethyl phthalate	0.17	U	0.17	0.082
131-11-3	Dimethyl phthalate	0.17	U	0.17	0.072
84-74-2	**Di-N-Butylphthalate**	**0.35**		0.083	0.061
117-84-0	Di-N-Octyl Phthalate	0.83	UJ	0.83	0.074
206-44-0	Fluoranthene	0.17	U	0.17	0.10
86-73-7	Fluorene	0.083	U	0.083	0.081
118-74-1	Hexachlorobenzene	0.083	U	0.083	0.041
87-68-3	Hexachlorobutadiene	0.083	U	0.083	0.013
77-47-4	Hexachlorocyclopentadiene	0.33	UJ	0.33	0.010
67-72-1	Hexachloroethane	0.083	U	0.083	0.019
193-39-5	Indeno(1,2,3-cd)pyrene	0.083	U	0.083	0.079
78-59-1	Isophorone	1.7	U	1.7	0.077
91-20-3	Naphthalene	0.083	U	0.083	0.046
98-95-3	Nitrobenzene	0.083	U	0.083	0.069
621-64-7	N-Nitrosodi-n-propylamine	0.083	U	0.083	0.074
86-30-6	N-Nitrosodiphenylamine	0.17	U	0.17	0.035
87-86-5	Pentachlorophenol	0.083	UJ	0.083	
85-01-8	Phenanthrene	0.17	U	0.17	0.090
108-95-2	Phenol	0.33	U	0.33	0.026
129-00-0	Pyrene	0.17	U	0.17	0.11
483-65-8	Retene	0.17	U	0.17	0.091
3380-34-5	Triclosan	0.17	U	0.17	0.033
77-93-0	Triethyl citrate	0.33	U	0.33	0.033
115-96-8	Tris(2-chloroethyl) phosphate (TCEP)	0.083	U	0.083	0.033

Surrogate Recovery:

CAS#	Analyte	Result	Spike Level	% Rec.	% Rec. Limits
2199-69-1	**1,2-Dichlorobenzene-D4**	**1.85**	2.67	**69**	15-98
93951-74-7	**2,4-Dichlorophenol-D3**	**2.25**	2.67	**84**	50-150
93951-73-6	**2-Chlorophenol-D4**	**2.74**	2.67	**103**	44-112
321-60-8	**2-Fluorobiphenyl**	**2.06**	2.67	**77**	19-116
367-12-4	**2-Fluorophenol**	**2.23**	2.67	**84**	10-91
93951-78-1	**2-Nitrophenol-D4**	**2.56**	2.67	**96**	20-120
93951-76-9	**4,6-Dinitro-2-methylphenol-D2**	**2.12**	2.67	**79**	50-150
191656-33-4	**4-Chloroaniline-D4**	**0.438**	2.67	**16**	20-120
190780-66-6	**4-Methylphenol-D8**	**2.84**	2.67	**106**	50-150
93951-79-2	**4-Nitrophenol-D4**	**1.76**	2.67	**66**	20-120
93951-97-4	**Acenaphthylene-D8**	**2.29**	2.67	**86**	50-150
1719-06-8	**Anthracene-D10**	**2.53**	2.67	**95**	50-150
63466-71-7	**Benzo(a)pyrene-D12**	**2.46**	2.67	**92**	50-150
93952-02-4	**Bis(2-Chloroethyl)Ether-D8**	**2.75**	2.67	**103**	50-150
85448-30-2	**Dimethylphthalate-D6**	**2.53**	2.67	**95**	50-150
81103-79-9	**Fluorene-D10**	**2.32**	2.67	**87**	50-150
4165-60-0	**Nitrobenzene-D5**	**2.59**	2.67	**97**	50-118

Washington State Department of Ecology
Manchester Environmental Laboratory
Final Report for
Base/Neutral/Acids

Project: HyTec-Fiberglass Landfill — **QC Type : Method Blank**

Work Order: 1209107
Project Officer: Kourehdar, Mohsen
Initial Vol: 3000 mL
Final Vol: 1 mL

Lab ID #: B12I267-BLK1
Prep Method: SW3510C
Analysis Method: SW8270
Source Field ID: Blank

Batch ID: B12I267
Prepared: 9/28/2012
Analyzed: 10/1/2012
Matrix: Water
Units: ug/L

Surrogate Recovery:

CAS#	Analyte	Result	Spike Level	% Rec.	% Rec. Limits
4165-62-2	Phenol-D5	1.88	2.67	70	10-66
1718-52-1	Pyrene-D10	3.02	2.67	113	57-134
1718-51-0	Terphenyl-D14	2.96	2.67	111	42-145

Authorized by: _____ Release Date: 10/16/12

Printed: 10/16/2012

Washington State Department of Ecology
Manchester Environmental Laboratory
Final Report for
Base/Neutral/Acids

Project: HyTec-Fiberglass Landfill

QC Type : LCS

Work Order: 1209107
Project Officer: Kourehdar, Mohsen
Initial Vol: 3000 mL
Final Vol: 1 mL

Lab ID #: B12I267-BS1
Prep Method: SW3510C
Analysis Method: SW8270
Source Field ID: LCS

Batch ID: B12I267
Prepared: 9/28/2012
Analyzed: 10/1/2012
Matrix: Water
Units: ug/L

Analyte	Result	Spike Level	RL	%Rec	%Rec Limits
1,2,4-Trichlorobenzene	1.65	3.33	0.083	49	16-92
1,2-Dichlorobenzene	1.85	3.33	0.083	56	19-90
1,2-Diphenylhydrazine	3.90	3.33	0.083	117	50-150
1,3-Dichlorobenzene	1.62	3.33	0.083	49	13-90
1,4-Dichlorobenzene	1.71	3.33	0.083	51	14-92
1-Methylnaphthalene	2.47	3.33	0.083	74	33-110
2,4,5-Trichlorophenol	3.18	3.33	0.83	95	46-141
2,4,6-Trichlorophenol	3.21	3.33	0.33	96	51-141
2,4-Dichlorophenol	3.23	3.33	0.83	97	66-115
2,4-Dimethylphenol	3.25	3.33	0.83	98	59-127
2,4-Dinitrophenol	3.12	3.33	0.83	94	42-135
2,4-Dinitrotoluene	3.29	3.33	0.33	99	64-136
2,6-Dinitrotoluene	3.26	3.33	0.33	98	65-131
2-Chloronaphthalene	2.62	3.33	0.17	79	21-127
2-Chlorophenol	3.43	3.33	0.33	103	66-109
2-Methylnaphthalene	2.39	3.33	0.083	72	29-112
2-Methylphenol	3.50	3.33	0.83	105	55-117
2-Nitroaniline	3.87	3.33	1.7	116	64-136
2-Nitrophenol	3.20	3.33	0.33	96	64-115
3,3'-Dichlorobenzidine	4.41	3.33	0.33	132	10-178
3B-Coprostanol	6.49	6.67	1.7	97	10-154
3-Nitroaniline	4.36	3.33	0.33	131	10-393
4,6-Dinitro-2-Methylphenol	3.31	3.33	1.7	99	67-133
4-Bromophenyl phenyl ether	2.92	3.33	0.17	88	47-113
4-Chloro-3-Methylphenol	3.65	3.33	0.83	110	60-129
4-Chloroaniline	0.817	3.33	3.3	25	10-150
4-Chlorophenyl-Phenylether	2.64	3.33	0.083	79	47-113
4-Methylphenol	3.64	3.33	0.83	109	43-127
4-Nitroaniline	4.46	3.33	0.83	134	14-299
4-Nitrophenol	2.49	3.33	0.83	75	10-134
4-nonylphenol	4.00	3.33	0.33	120	77-215
Acenaphthene	2.80	3.33	0.083	84	17-169
Acenaphthylene	2.91	3.33	0.083	87	46-118
Anthracene	3.34	3.33	0.17	100	66-121
Benz[a]anthracene	3.70	3.33	0.17	111	84-130
Benzo(a)pyrene	3.32	3.33	0.083	99	70-145
Benzo(b)fluoranthene	3.24	3.33	0.083	97	71-140
Benzo(ghi)perylene	3.20	3.33	0.17	96	61-141
Benzo(k)fluoranthene	3.34	3.33	0.083	100	73-141
Benzoic Acid	0.676	6.67	1.7	10	10-96
Benzyl Alcohol	3.18	3.33	0.83	96	10-97
Bis(2-chloro-1-methylethyl) ether	3.69	3.33	0.083	111	63-105
Bis(2-Chloroethoxy)Methane	3.30	3.33	0.083	99	65-116
Bis(2-Chloroethyl)Ether	3.42	3.33	0.17	103	65-110
Bis(2-Ethylhexyl) Phthalate	4.24	3.33	0.33	127	80-128
Bisphenol A	4.48	3.33	0.33	134	11-203
Butyl benzyl phthalate	4.30	3.33	0.33	129	23-183
Caffeine	3.06	3.33	0.17	92	62-114
Carbazole	3.80	3.33	0.17	114	59-139

Washington State Department of Ecology
Manchester Environmental Laboratory
Final Report for
Base/Neutral/Acids

Project: HyTec-Fiberglass Landfill

QC Type : LCS

Work Order: 1209107
Project Officer: Kourehdar, Mohsen
Initial Vol: 3000 mL
Final Vol: 1 mL

Lab ID #: B12I267-BS1
Prep Method: SW3510C
Analysis Method: SW8270
Source Field ID: LCS

Batch ID: B12I267
Prepared: 9/28/2012
Analyzed: 10/1/2012
Matrix: Water
Units: ug/L

Analyte	Result	Spike Level	RL	%Rec	%Rec Limits
Cholesterol	6.06	6.67	1.7	91	10-140
Chrysene	3.62	3.33	0.17	109	82-128
Dibenzo(a,h)anthracene	3.40	3.33	0.083	102	65-130
Dibenzofuran	2.94	3.33	0.17	88	47-126
Diethyl phthalate	3.22	3.33	0.17	97	77-123
Dimethyl phthalate	3.19	3.33	0.17	96	74-122
Di-N-Butylphthalate	4.13	3.33	0.083	124	70-156
Di-N-Octyl Phthalate	3.84	3.33	0.83	115	75-135
Fluoranthene	3.44	3.33	0.17	103	72-124
Fluorene	2.96	3.33	0.083	89	50-134
Hexachlorobenzene	2.64	3.33	0.083	79	53-114
Hexachlorobutadiene	1.11	3.33	0.083	33	10-90
Hexachlorocyclopentadiene	0.691	3.33	0.33	21	10-76
Hexachloroethane	1.31	3.33	0.083	39	12-79
Indeno(1,2,3-cd)pyrene	3.20	3.33	0.083	96	61-139
Isophorone	3.10	3.33	1.7	93	50-103
Naphthalene	2.40	3.33	0.083	72	34-114
Nitrobenzene	3.31	3.33	0.083	99	67-108
N-Nitrosodi-n-propylamine	3.93	3.33	0.083	118	60-128
N-Nitrosodiphenylamine	3.76	3.33	0.17	113	10-209
Pentachlorophenol	2.14	3.33	0.083	64	64-140
Phenanthrene	3.28	3.33	0.17	98	63-126
Phenol	2.38	3.33	0.33	71	41-81
Pyrene	3.95	3.33	0.17	119	64-140
Retene	3.84	3.33	0.17	115	75-135
Triclosan	2.83	3.33	0.17	85	54-126
Triethyl citrate	3.68	3.33	0.33	110	27-123
Tris(2-chloroethyl) phosphate (TCEP)	3.52	3.33	0.083	106	50-150

Surrogate Recovery:

CAS#	Analyte	Result	Spike Level	% Rec.	% Rec. Limits
2199-69-1	1,2-Dichlorobenzene-D4	1.86	2.67	70	15-98
93951-74-7	2,4-Dichlorophenol-D3	2.39	2.67	90	50-150
93951-73-6	2-Chlorophenol-D4	2.65	2.67	100	44-112
321-60-8	2-Fluorobiphenyl	2.14	2.67	80	19-116
367-12-4	2-Fluorophenol	2.19	2.67	82	10-91
93951-78-1	2-Nitrophenol-D4	2.51	2.67	94	20-120
93951-76-9	4,6-Dinitro-2-methylphenol-D2	2.54	2.67	95	50-150
191656-33-4	4-Chloroaniline-D4	0.492	2.67	18	20-120
190780-66-6	4-Methylphenol-D8	2.82	2.67	106	50-150
93951-79-2	4-Nitrophenol-D4	3.11	2.67	117	20-120
93951-97-4	Acenaphthylene-D8	2.30	2.67	86	50-150
1719-06-8	Anthracene-D10	2.61	2.67	98	50-150
63466-71-7	Benzo(a)pyrene-D12	2.39	2.67	90	50-150
93952-02-4	Bis(2-Chloroethyl)Ether-D8	2.71	2.67	102	50-150
85448-30-2	Dimethylphthalate-D6	2.40	2.67	90	50-150
81103-79-9	Fluorene-D10	2.31	2.67	87	50-150
4165-60-0	Nitrobenzene-D5	2.51	2.67	94	50-118

Washington State Department of Ecology
Manchester Environmental Laboratory
Final Report for
Base/Neutral/Acids

Project: HyTec-Fiberglass Landfill — **QC Type : LCS**

Work Order: 1209107
Project Officer: Kourehdar, Mohsen
Initial Vol: 3000 mL
Final Vol: 1 mL

Lab ID #: B12I267-BS1
Prep Method: SW3510C
Analysis Method: SW8270
Source Field ID: LCS

Batch ID: B12I267
Prepared: 9/28/2012
Analyzed: 10/1/2012
Matrix: Water
Units: ug/L

Surrogate Recovery:

CAS#	Analyte	Result	Spike Level	% Rec.	% Rec. Limits
4165-62-2	Phenol-D5	1.82	2.67	68	10-66
1718-52-1	Pyrene-D10	3.03	2.67	113	57-134
1718-51-0	Terphenyl-D14	2.90	2.67	109	42-145

Authorized by: _____ Release Date: 10/16/12

Printed: 10/16/2012

Washington State Department of Ecology
Manchester Environmental Laboratory
Final Report for
Base/Neutral/Acids

Project: HyTec-Fiberglass Landfill — QC Type : LCS Dup

Work Order: 1209107
Project Officer: Kourehdar, Mohsen
Initial Vol: 3000 mL
Final Vol: 1 mL

Lab ID #: B12I267-BSD1
Prep Method: SW3510C
Analysis Method: SW8270
Source Field ID: LCS Dup

Batch ID: B12I267
Prepared: 9/28/2012
Analyzed: 10/1/2012
Matrix: Water
Units: ug/L

Analyte	Sample Result	Spike Level	%Rec	RPD	%Rec Limits	RPD Limit
1,2,4-Trichlorobenzene	1.80	3.33	54	9	16-92	40
1,2-Dichlorobenzene	2.00	3.33	60	8	19-90	40
1,2-Diphenylhydrazine	4.00	3.33	120	2	50-150	40
1,3-Dichlorobenzene	1.75	3.33	53	8	13-90	40
1,4-Dichlorobenzene	1.84	3.33	55	7	14-92	40
1-Methylnaphthalene	2.63	3.33	79	6	33-110	40
2,4,5-Trichlorophenol	3.33	3.33	100	5	46-141	40
2,4,6-Trichlorophenol	3.32	3.33	100	3	51-141	40
2,4-Dichlorophenol	3.32	3.33	100	3	66-115	40
2,4-Dimethylphenol	3.36	3.33	101	3	59-127	40
2,4-Dinitrophenol	3.18	3.33	95	2	42-135	40
2,4-Dinitrotoluene	3.35	3.33	100	2	64-136	40
2,6-Dinitrotoluene	3.35	3.33	101	3	65-131	40
2-Chloronaphthalene	2.80	3.33	84	7	21-127	40
2-Chlorophenol	3.59	3.33	108	5	66-109	40
2-Methylnaphthalene	2.58	3.33	77	8	29-112	40
2-Methylphenol	3.65	3.33	109	4	55-117	40
2-Nitroaniline	3.91	3.33	117	1	64-136	40
2-Nitrophenol	3.33	3.33	100	4	64-115	40
3,3'-Dichlorobenzidine	4.53	3.33	136	3	10-178	40
3B-Coprostanol	6.53	6.67	98	0.6	10-154	40
3-Nitroaniline	4.47	3.33	134	2	10-393	40
4,6-Dinitro-2-Methylphenol	3.40	3.33	102	3	67-133	40
4-Bromophenyl phenyl ether	3.14	3.33	94	7	47-113	40
4-Chloro-3-Methylphenol	3.72	3.33	112	2	60-129	40
4-Chloroaniline	0.875	3.33	26	NC	10-150	40
4-Chlorophenyl-Phenylether	2.82	3.33	85	7	47-113	40
4-Methylphenol	3.77	3.33	113	4	43-127	40
4-Nitroaniline	4.46	3.33	134	0.2	14-299	40
4-Nitrophenol	2.41	3.33	72	3	10-134	40
4-nonylphenol	4.00	3.33	120	0.02	77-215	40
Acenaphthene	2.93	3.33	88	5	17-169	40
Acenaphthylene	3.07	3.33	92	5	46-118	40
Anthracene	3.39	3.33	102	2	66-121	40
Benz[a]anthracene	3.77	3.33	113	2	84-130	40
Benzo(a)pyrene	3.35	3.33	101	1	70-145	40
Benzo(b)fluoranthene	3.24	3.33	97	0.03	71-140	40
Benzo(ghi)perylene	3.24	3.33	97	1	61-141	40
Benzo(k)fluoranthene	3.38	3.33	101	1	73-141	40
Benzoic Acid	0.683	6.67	10	NC	10-96	40
Benzyl Alcohol	3.35	3.33	101	5	10-97	40
Bis(2-chloro-1-methylethyl) ether	3.77	3.33	113	2	63-105	40
Bis(2-Chloroethoxy)Methane	3.44	3.33	103	4	65-116	40
Bis(2-Chloroethyl)Ether	3.54	3.33	106	4	65-110	40
Bis(2-Ethylhexyl) Phthalate	4.28	3.33	129	1	80-128	40
Bisphenol A	4.65	3.33	140	4	11-203	40
Butyl benzyl phthalate	4.28	3.33	129	0.3	23-183	40
Caffeine	3.11	3.33	93	2	62-114	40
Carbazole	3.87	3.33	116	2	59-139	40

Washington State Department of Ecology
Manchester Environmental Laboratory
Final Report for
Base/Neutral/Acids

Project: HyTec-Fiberglass Landfill

QC Type : LCS Dup

Work Order: 1209107
Project Officer: Kourehdar, Mohsen
Initial Vol: 3000 mL
Final Vol: 1 mL

Lab ID #: B12I267-BSD1
Prep Method: SW3510C
Analysis Method: SW8270
Source Field ID: LCS Dup

Batch ID: B12I267
Prepared: 9/28/2012
Analyzed: 10/1/2012
Matrix: Water
Units: ug/L

Analyte	Sample Result	Spike Level	%Rec	RPD	%Rec Limits	RPD Limit
Cholesterol	6.20	6.67	93	2	10-140	40
Chrysene	3.70	3.33	111	2	82-128	40
Dibenzo(a,h)anthracene	3.41	3.33	102	0.2	65-130	40
Dibenzofuran	3.11	3.33	93	6	47-126	40
Diethyl phthalate	3.27	3.33	98	2	77-123	40
Dimethyl phthalate	3.28	3.33	98	3	74-122	40
Di-N-Butylphthalate	4.25	3.33	128	3	70-156	40
Di-N-Octyl Phthalate	3.78	3.33	113	2	75-135	40
Fluoranthene	3.52	3.33	106	2	72-124	40
Fluorene	3.13	3.33	94	6	50-134	40
Hexachlorobenzene	2.77	3.33	83	5	53-114	40
Hexachlorobutadiene	1.13	3.33	34	1	10-90	40
Hexachlorocyclopentadiene	0.742	3.33	22	7	10-76	40
Hexachloroethane	1.38	3.33	41	5	12-79	40
Indeno(1,2,3-cd)pyrene	3.32	3.33	100	4	61-139	40
Isophorone	3.19	3.33	96	3	50-103	40
Naphthalene	2.58	3.33	77	7	34-114	40
Nitrobenzene	3.35	3.33	100	1	67-108	40
N-Nitrosodi-n-propylamine	4.03	3.33	121	3	60-128	40
N-Nitrosodiphenylamine	3.89	3.33	117	3	10-209	40
Pentachlorophenol	2.16	3.33	65	1	64-140	40
Phenanthrene	3.38	3.33	102	3	63-126	40
Phenol	2.50	3.33	75	5	41-81	40
Pyrene	4.09	3.33	123	3	64-140	40
Retene	3.85	3.33	116	0.4	75-135	40
Triclosan	2.91	3.33	87	3	54-126	40
Triethyl citrate	3.72	3.33	112	1	27-123	40
Tris(2-chloroethyl) phosphate (TCEP)	3.57	3.33	107	1	50-150	40

Surrogate Recovery:

CAS#	Analyte	Result	Spike Level	% Rec.	% Rec. Limits
2199-69-1	1,2-Dichlorobenzene-D4	1.97	2.67	74	15-98
93951-74-7	2,4-Dichlorophenol-D3	2.48	2.67	93	50-150
93951-73-6	2-Chlorophenol-D4	2.77	2.67	104	44-112
321-60-8	2-Fluorobiphenyl	2.23	2.67	84	19-116
367-12-4	2-Fluorophenol	2.31	2.67	87	10-91
93951-78-1	2-Nitrophenol-D4	2.62	2.67	98	20-120
93951-76-9	4,6-Dinitro-2-methylphenol-D2	2.62	2.67	98	50-150
191656-33-4	4-Chloroaniline-D4	0.509	2.67	19	20-120
190780-66-6	4-Methylphenol-D8	2.98	2.67	112	50-150
93951-79-2	4-Nitrophenol-D4	3.23	2.67	121	20-120
93951-97-4	Acenaphthylene-D8	2.38	2.67	89	50-150
1719-06-8	Anthracene-D10	2.67	2.67	100	50-150
63466-71-7	Benzo(a)pyrene-D12	2.45	2.67	92	50-150
93952-02-4	Bis(2-Chloroethyl)Ether-D8	2.71	2.67	102	50-150
85448-30-2	Dimethylphthalate-D6	2.49	2.67	93	50-150
81103-79-9	Fluorene-D10	2.42	2.67	91	50-150
4165-60-0	Nitrobenzene-D5	2.58	2.67	97	50-118

Washington State Department of Ecology
Manchester Environmental Laboratory
Final Report for
Base/Neutral/Acids

Project: HyTec-Fiberglass Landfill **QC Type : LCS Dup**

Work Order: 1209107
Project Officer: Kourehdar, Mohsen
Initial Vol: 3000 mL
Final Vol: 1 mL

Lab ID #: B12I267-BSD1
Prep Method: SW3510C
Analysis Method: SW8270
Source Field ID: LCS Dup

Batch ID: B12I267
Prepared: 9/28/2012
Analyzed: 10/1/2012
Matrix: Water
Units: ug/L

Surrogate Recovery:

CAS#	Analyte	Result	Spike Level	% Rec.	% Rec. Limits
4165-62-2	Phenol-D5	2.03	2.67	76	10-66
1718-52-1	Pyrene-D10	3.16	2.67	119	57-134
1718-51-0	Terphenyl-D14	2.97	2.67	112	42-145

Authorized by: _____ Release Date: 10/16/12

Printed: 10/16/2012

October 2012

Well Sample Data Sheet and Laboratory Analytical Report

*This is a resample for SVOCs at HLMW-3A, as the jars collected in September 2012 were broken in the field.

Well Sampling Data Sheet

Date	10/10/2012	Site Location	Hytec
Samplers	C.G.	Well ID	HLMW-03A
Casing Material		Constructed Depth	
Casing Diameter		Condition of Well	

Field Measurements:

Time	0927	Depth Measured From:	
Depth to Water	53.21		Top of access port
		X	Mark on PVC casing
			Mark of protective casing
			Other

Purging Information:

Pump:		Dedicated		Non-dedicated			
Bailer:		PVC		Stainless Steel		Other:	
Purge Start Time		Purge End Time					
Approximate Gallons Purged							

Water Monitoring Conditions:

Time	0932	0937	0942	0947			
pH	7.55	6.00	5.81	5.75			
Conductivity	0.103	0.095	0.093	0.093			
Turbidity	>999	7999	7999	549			
D.O.	6.80	5.59	5.76	5.83			
Temperature	7.41	7.05	7.06	7.03			
ORP	108	178	200	210			
Purge Rate							
Gallons Purged	0	1.0	2.0	3.0			

Sampling Data:

Time	0944	Sample ID	HLMW-03A-101012
pH	5.75	Duplicates	
Conductivity	0.093	QA/QC Volumes	
Turbidity	549		
D.O.	5.83		
Temperature	7.03		
ORP	210		

Sampling Device:

PVC Bailer		SS Bailer		Dedicated Pump		Teflon Bailer	

Analyses to be Performed:

Volatile Organics		VOCs 8260B	SVOCs by 8270C	X	Sulfate 375.2		
Total Metals		RCRA 8 or Priority Pollutants	SVOCs by 8270C/SIM		RSK-175 (methane, ethane, ethene)		
Dissolved Metals			Total Organic Carbon 415.1		Other		

Sampling Notes:

very turbid.

taking 2-1L SVOC Samples.

Well Diameter	Well Volume (Gal/ft)
1 inch	0.041
2 inch	0.163
4 inch	0.653
6 inch	1.469

Or:(total depth(ft) - DTW(ft)) x Well Dia^2 x 0.0408 = 1 Well Volume

1311 N. 35th St.
Seattle, WA 98103
T: (206) 352-3790
F: (206) 352-7178
info@fremontanalytical.com

Calibre
Tom McKeon
16935 SE 39th St.
Bellevue, Washington 98008

RE: Hytec
Lab ID: 1210088

October 19, 2012

Attention Tom McKeon:

Fremont Analytical, Inc. received 1 sample(s) on 10/10/2012 for the analyses presented in the following report.

Semi-Volatile Organic Compounds by EPA Method 8270

This report consists of the following:

- Case Narrative
- Analytical Results
- Applicable Quality Control Summary Reports
- Chain of Custody

All analyses were performed consistent with the Quality Assurance program of Fremont Analytical, Inc. Please contact the laboratory if you should have any questions about the results.

Thank you for using Fremont Analytical.

Sincerely,

Michael Dee
Sr. Chemist / Principal

Date: *10/19/2012*

CLIENT: Calibre
Project: Hytec
Lab Order: 1210088

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
1210088-001	HLMW-03A-101012	10/10/2012 9:47 AM	10/10/2012 1:57 PM

Note: If no "Time Collected" is supplied, a default of 12:00AM is assigned

Case Narrative

WO#: **1210088**
Date: **10/19/2012**

CLIENT: Calibre
Project: Hytec

I. SAMPLE RECEIPT:
All samples were received intact. The internal ice chest temperatures were measured on receipt and are recorded on the attached Sample Receipt Checklist.

II. GENERAL REPORTING COMMENTS:
Results are reported on a wet weight basis unless dry-weight correction is denoted in the units field on the analytical report ("mg/kg-dry" or "ug/kg-dry").

Matrix Spike (MS) and MS Duplicate (MSD) samples are tested from an analytical batch of "like" matrix to check for possible matrix effect. The MS and MSD will provide site specific matrix data only for those samples which are spiked by the laboratory. The sample chosen for spike purposes may or may not have been a sample submitted in this sample delivery group. The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The LCS and the MB are processed with the samples and the MS/MSD to ensure method criteria are achieved throughout the entire analytical process.

III. ANALYSES AND EXCEPTIONS:
Exceptions associated with this report will be footnoted in the analytical results page(s) or the quality control summary page(s) and/or noted below.

Analytical Report

WO#: **1210088**

Date Reported: **10/19/2012**

Client: Calibre **Collection Date:** 10/10/2012 9:47:00 AM

Project: Hytec

Lab ID: 1210088-001 **Matrix:** Water

Client Sample ID: HLMW-03A-101012

Analyses	Result	MDL	Qual	Units	DF	Date Analyzed
Semi-Volatile Organic Compounds by EPA Method 8270				Batch ID: 3454		Analyst: PH
Phenol	ND	0.0401		µg/L	1	10/17/2012 1:13:00 AM
2-Chlorophenol	ND	0.0132		µg/L	1	10/17/2012 1:13:00 AM
1,3-Dichlorobenzene	ND	0.0161		µg/L	1	10/17/2012 1:13:00 AM
1,4-Dichlorobenzene	ND	0.0241		µg/L	1	10/17/2012 1:13:00 AM
1,2-Dichlorobenzene	ND	0.0232		µg/L	1	10/17/2012 1:13:00 AM
Benzyl alcohol	ND	0.0371	*	µg/L	1	10/17/2012 1:13:00 AM
Bis(2-chloroethyl) ether	ND	0.0294		µg/L	1	10/17/2012 1:13:00 AM
2-Methylphenol (o-cresol)	ND	0.0245		µg/L	1	10/17/2012 1:13:00 AM
Hexachloroethane	ND	0.0653		µg/L	1	10/17/2012 1:13:00 AM
N-Nitrosodi-n-propylamine	ND	0.0642		µg/L	1	10/17/2012 1:13:00 AM
Nitrobenzene	ND	0.0392		µg/L	1	10/17/2012 1:13:00 AM
Isophorone	ND	0.0205		µg/L	1	10/17/2012 1:13:00 AM
4-Methylphenol (p-cresol)	ND	0.0563		µg/L	1	10/17/2012 1:13:00 AM
2-Nitrophenol	ND	0.0912		µg/L	1	10/17/2012 1:13:00 AM
2,4-Dimethylphenol	ND	0.0376		µg/L	1	10/17/2012 1:13:00 AM
Bis(2-chloroethoxy)methane	ND	0.0337		µg/L	1	10/17/2012 1:13:00 AM
2,4-Dichlorophenol	ND	0.0188		µg/L	1	10/17/2012 1:13:00 AM
1,2,4-Trichlorobenzene	ND	0.0194		µg/L	1	10/17/2012 1:13:00 AM
Naphthalene	ND	0.0123		µg/L	1	10/17/2012 1:13:00 AM
4-Chloroaniline	ND	0.0180		µg/L	1	10/17/2012 1:13:00 AM
Hexachlorobutadiene	ND	0.0390		µg/L	1	10/17/2012 1:13:00 AM
4-Chloro-3-methylphenol	ND	0.0687		µg/L	1	10/17/2012 1:13:00 AM
2-Methylnaphthalene	ND	0.0252		µg/L	1	10/17/2012 1:13:00 AM
1-Methylnaphthalene	ND	0.0214		µg/L	1	10/17/2012 1:13:00 AM
Hexachlorocyclopentadiene	ND	0.0313		µg/L	1	10/17/2012 1:13:00 AM
2,4,6-Trichlorophenol	ND	0.0210		µg/L	1	10/17/2012 1:13:00 AM
2,4,5-Trichlorophenol	ND	0.0339		µg/L	1	10/17/2012 1:13:00 AM
2-Chloronaphthalene	ND	0.0143		µg/L	1	10/17/2012 1:13:00 AM
2-Nitroaniline	ND	0.0710		µg/L	1	10/17/2012 1:13:00 AM
Acenaphthene	ND	0.0139		µg/L	1	10/17/2012 1:13:00 AM
Dimethylphthalate	ND	0.0347		µg/L	1	10/17/2012 1:13:00 AM
2,6-Dinitrotoluene	ND	0.0269		µg/L	1	10/17/2012 1:13:00 AM
Acenaphthylene	ND	0.00613		µg/L	1	10/17/2012 1:13:00 AM
2,4-Dinitrophenol	ND	0.689	*	µg/L	1	10/17/2012 1:13:00 AM
Dibenzofuran	ND	0.0131		µg/L	1	10/17/2012 1:13:00 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	D	Dilution was required
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

Analytical Report

WO#: **1210088**

Date Reported: **10/19/2012**

Client: Calibre **Collection Date:** 10/10/2012 9:47:00 AM

Project: Hytec

Lab ID: 1210088-001 **Matrix:** Water

Client Sample ID: HLMW-03A-101012

Analyses	Result	MDL	Qual	Units	DF	Date Analyzed
Semi-Volatile Organic Compounds by EPA Method 8270			Batch ID: 3454			Analyst: PH
2,4-Dinitrotoluene	ND	0.0701		µg/L	1	10/17/2012 1:13:00 AM
4-Nitrophenol	ND	0.431		µg/L	1	10/17/2012 1:13:00 AM
Fluorene	ND	0.0164		µg/L	1	10/17/2012 1:13:00 AM
4-Chlorophenyl phenyl ether	ND	0.0199		µg/L	1	10/17/2012 1:13:00 AM
Diethylphthalate	0.152	0.0144	J ND	µg/L	1	10/17/2012 1:13:00 AM
4,6-Dinitro-2-methylphenol	ND	0.487		µg/L	1	10/17/2012 1:13:00 AM
4-Bromophenyl phenyl ether	ND	0.0241		µg/L	1	10/17/2012 1:13:00 AM
Hexachlorobenzene	ND	0.0264		µg/L	1	10/17/2012 1:13:00 AM
Pentachlorophenol	ND	0.0344		µg/L	1	10/17/2012 1:13:00 AM
Phenanthrene	ND	0.0130		µg/L	1	10/17/2012 1:13:00 AM
Anthracene	ND	0.0167		µg/L	1	10/17/2012 1:13:00 AM
Carbazole	ND	0.0553		µg/L	1	10/17/2012 1:13:00 AM
Di-n-butyl phthalate	0.606	0.0268	J ND	µg/L	1	10/17/2012 1:13:00 AM
Fluoranthene	ND	0.0112		µg/L	1	10/17/2012 1:13:00 AM
Pyrene	ND	0.0146		µg/L	1	10/17/2012 1:13:00 AM
Benzyl Butylphthalate	0.528	0.0552	J ND	µg/L	1	10/17/2012 1:13:00 AM
bis(2-Ethylhexyl)adipate	0.894	0.0443	J ND	µg/L	1	10/17/2012 1:13:00 AM
Benz[a]anthracene	ND	0.0123		µg/L	1	10/17/2012 1:13:00 AM
Chrysene	ND	0.0126		µg/L	1	10/17/2012 1:13:00 AM
Bis(2-ethylhexyl) phthalate	0.968	0.0316	J ND	µg/L	1	10/17/2012 1:13:00 AM
Di-n-octyl phthalate	ND	0.0258		µg/L	1	10/17/2012 1:13:00 AM
Benzo (b) fluoranthene	ND	0.0259		µg/L	1	10/17/2012 1:13:00 AM
Benzo (k) fluoranthene	ND	0.0341		µg/L	1	10/17/2012 1:13:00 AM
Benzo[a]pyrene	ND	0.0304		µg/L	1	10/17/2012 1:13:00 AM
Indeno (1,2,3-cd) pyrene	ND	0.0673		µg/L	1	10/17/2012 1:13:00 AM
Dibenzo (a,h) anthracene	ND	0.0366		µg/L	1	10/17/2012 1:13:00 AM
Benzo (g,h,I) perylene	ND	0.0378		µg/L	1	10/17/2012 1:13:00 AM
Surr: 2,4,6-Tribromophenol	71.3	24-138		%REC	1	10/17/2012 1:13:00 AM
Surr: 2-Fluorobiphenyl	67.2	38.6-138		%REC	1	10/17/2012 1:13:00 AM
Surr: Nitrobenzene-d5	70.3	31.7-140		%REC	1	10/17/2012 1:13:00 AM
Surr: Phenol-d6	32.0	15-116		%REC	1	10/17/2012 1:13:00 AM
Surr: p-Terphenyl	105	49-156		%REC	1	10/17/2012 1:13:00 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	D	Dilution was required
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

Work Order: 1210088
CLIENT: Calibre
Project: Hytec

QC SUMMARY REPORT

Semi-Volatile Organic Compounds by EPA Method 8270

Sample ID: **MB-3454** SampType: **MBLK** Units: **µg/L** Prep Date: **10/16/2012** RunNo: **6208**
Client ID: **MBLKW** Batch ID: **3454** Analysis Date: **10/17/2012** SeqNo: **123471**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phenol	ND	2.00									
2-Chlorophenol	ND	1.00									
1,3-Dichlorobenzene	ND	1.00									
1,4-Dichlorobenzene	ND	1.00									
1,2-Dichlorobenzene	ND	1.00									
Benzyl alcohol	ND	1.00									*
Bis(2-chloroethyl) ether	ND	2.00									
2-Methylphenol (o-cresol)	ND	1.00									
Hexachloroethane	ND	1.00									
N-Nitrosodi-n-propylamine	ND	1.00									
Nitrobenzene	ND	2.00									
Isophorone	ND	1.00									
4-Methylphenol (p-cresol)	ND	1.00									
2-Nitrophenol	ND	2.00									
2,4-Dimethylphenol	ND	1.00									
Bis(2-chloroethoxy)methane	ND	1.00									
2,4-Dichlorophenol	ND	2.00									
1,2,4-Trichlorobenzene	ND	1.00									
Naphthalene	ND	0.500									
4-Chloroaniline	ND	5.00									
Hexachlorobutadiene	ND	1.00									
4-Chloro-3-methylphenol	ND	5.00									
2-Methylnaphthalene	ND	0.500									
1-Methylnaphthalene	ND	0.500									
Hexachlorocyclopentadiene	ND	1.00									
2,4,6-Trichlorophenol	ND	2.00									
2,4,5-Trichlorophenol	ND	2.00									
2-Chloronaphthalene	ND	1.00									
2-Nitroaniline	ND	5.00									

Qualifiers:

B	Analyte detected in the associated Method Blank	D	Dilution was required	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

Work Order: 1210088
CLIENT: Calibre
Project: Hytec

QC SUMMARY REPORT

Semi-Volatile Organic Compounds by EPA Method 8270

Sample ID: **MB-3454** SampType: **MBLK** Units: **µg/L** Prep Date: **10/16/2012** RunNo: **6208**
Client ID: **MBLKW** Batch ID: **3454** Analysis Date: **10/17/2012** SeqNo: **123471**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Acenaphthene	ND	0.500									
Dimethylphthalate	ND	1.00									
2,6-Dinitrotoluene	ND	1.00									
Acenaphthylene	ND	0.500									
2,4-Dinitrophenol	ND	2.00									*
Dibenzofuran	ND	1.00									
2,4-Dinitrotoluene	ND	1.00									
4-Nitrophenol	ND	5.00									
Fluorene	ND	0.500									
4-Chlorophenyl phenyl ether	ND	1.00									
Diethylphthalate	0.110	1.00									J
4,6-Dinitro-2-methylphenol	ND	5.00									
4-Bromophenyl phenyl ether	ND	1.00									
Hexachlorobenzene	ND	1.00									
Pentachlorophenol	ND	2.00									
Phenanthrene	ND	0.500									
Anthracene	ND	0.500									
Carbazole	ND	5.00									
Di-n-butyl phthalate	0.465	1.00									J
Fluoranthene	ND	0.500									
Pyrene	ND	0.500									
Benzyl Butylphthalate	0.121	1.00									J
bis(2-Ethylhexyl)adipate	0.643	1.00									J
Benz[a]anthracene	ND	0.500									
Chrysene	ND	0.500									
Bis(2-ethylhexyl) phthalate	0.294	1.00									J
Di-n-octyl phthalate	0.0576	1.00									J
Benzo (b) fluoranthene	ND	0.500									
Benzo (k) fluoranthene	ND	0.500									

Qualifiers:

B	Analyte detected in the associated Method Blank	D	Dilution was required	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

Work Order: 1210088
CLIENT: Calibre
Project: Hytec

QC SUMMARY REPORT

Semi-Volatile Organic Compounds by EPA Method 8270

Sample ID: **MB-3454** SampType: **MBLK** Units: **µg/L** Prep Date: **10/16/2012** RunNo: **6208**
Client ID: **MBLKW** Batch ID: **3454** Analysis Date: **10/17/2012** SeqNo: **123471**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzo[a]pyrene	ND	0.500									
Indeno (1,2,3-cd) pyrene	ND	0.500									
Dibenzo (a,h) anthracene	ND	0.500									
Benzo (g,h,I) perylene	ND	0.500									
Surr: 2,4,6-Tribromophenol	2.18		4.000		54.5	24	138				
Surr: 2-Fluorobiphenyl	1.10		2.000		55.1	38.6	138				
Surr: Nitrobenzene-d5	1.16		2.000		57.9	31.7	140				
Surr: Phenol-d6	0.913		4.000		22.8	15	116				
Surr: p-Terphenyl	2.15		2.000		108	49	156				

Sample ID: **LCS-3454** SampType: **LCS** Units: **µg/L** Prep Date: **10/16/2012** RunNo: **6208**
Client ID: **LCSW** Batch ID: **3454** Analysis Date: **10/17/2012** SeqNo: **123472**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phenol	2.03	2.00	8.000	0	25.4	20	86.2				
2-Chlorophenol	3.51	1.00	8.000	0	43.9	25	112				
1,3-Dichlorobenzene	3.81	1.00	8.000	0	47.6	25	108				
1,4-Dichlorobenzene	3.72	1.00	8.000	0	46.5	25	110				
1,2-Dichlorobenzene	3.86	1.00	8.000	0	48.3	25	109				
Benzyl alcohol	0.721	1.00	8.000	0	9.02	20	96.5				S
Bis(2-chloroethyl) ether	4.16	2.00	8.000	0	52.1	25	111				
2-Methylphenol (o-cresol)	3.81	1.00	8.000	0	47.6	25	101				
Hexachloroethane	3.62	1.00	8.000	0	45.2	25	109				
N-Nitrosodi-n-propylamine	4.45	1.00	8.000	0	55.6	25	122				
Nitrobenzene	3.89	2.00	8.000	0	48.6	25	110				
Isophorone	4.35	1.00	8.000	0	54.3	25	126				
4-Methylphenol (p-cresol)	3.93	1.00	8.000	0	49.1	25	113				
2-Nitrophenol	3.89	2.00	8.000	0	48.6	25	126				

Qualifiers:

B	Analyte detected in the associated Method Blank	D	Dilution was required	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

Work Order: 1210088
CLIENT: Calibre
Project: Hytec

QC SUMMARY REPORT

Semi-Volatile Organic Compounds by EPA Method 8270

Sample ID: **LCS-3454** SampType: **LCS** Units: **µg/L** Prep Date: **10/16/2012** RunNo: **6208**
Client ID: **LCSW** Batch ID: **3454** Analysis Date: **10/17/2012** SeqNo: **123472**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
2,4-Dimethylphenol	4.20	1.00	8.000	0	52.5	25	124				
Bis(2-chloroethoxy)methane	4.23	1.00	8.000	0	52.9	25	121				
2,4-Dichlorophenol	3.77	2.00	8.000	0	47.1	29.1	110				
1,2,4-Trichlorobenzene	3.96	1.00	8.000	0	49.5	25	113				
Naphthalene	4.01	0.500	8.000	0	50.1	25	115				
4-Chloroaniline	3.42	5.00	8.000	0	42.8	25	136				
Hexachlorobutadiene	3.68	1.00	8.000	0	45.9	25	111				
4-Chloro-3-methylphenol	4.34	5.00	8.000	0	54.2	32.3	122				
2-Methylnaphthalene	4.26	0.500	8.000	0	53.3	25	119				
1-Methylnaphthalene	4.19	0.500	8.000	0	52.4	25	117				
Hexachlorocyclopentadiene	2.60	1.00	8.000	0	32.5	25	125				
2,4,6-Trichlorophenol	3.88	2.00	8.000	0	48.5	25	133				
2,4,5-Trichlorophenol	3.61	2.00	8.000	0	45.1	25	125				
2-Chloronaphthalene	4.18	1.00	8.000	0	52.3	25	121				
2-Nitroaniline	4.72	5.00	8.000	0	58.9	25	121				
Acenaphthene	4.31	0.500	8.000	0	53.9	25	120				
Dimethylphthalate	4.97	1.00	8.000	0	62.2	25	133				
2,6-Dinitrotoluene	4.42	1.00	8.000	0	55.2	25	131				
Acenaphthylene	4.52	0.500	8.000	0	56.4	25	128				
2,4-Dinitrophenol	2.52	2.00	8.000	0	31.5	39.2	124				S
Dibenzofuran	4.28	1.00	8.000	0	53.5	25	121				
2,4-Dinitrotoluene	4.13	1.00	8.000	0	51.7	25	132				
4-Nitrophenol	2.14	5.00	8.000	0	26.7	20	106				
Fluorene	4.52	0.500	8.000	0	56.4	25	127				
4-Chlorophenyl phenyl ether	4.24	1.00	8.000	0	53.0	25	124				
Diethylphthalate	5.52	1.00	8.000	0	69.0	31.3	142				
4,6-Dinitro-2-methylphenol	2.88	5.00	8.000	0	36.0	25	139				
4-Bromophenyl phenyl ether	4.59	1.00	8.000	0	57.4	25	130				
Hexachlorobenzene	4.45	1.00	8.000	0	55.7	29	120				

Qualifiers:

B	Analyte detected in the associated Method Blank	D	Dilution was required	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

Work Order: 1210088
CLIENT: Calibre
Project: Hytec

QC SUMMARY REPORT

Semi-Volatile Organic Compounds by EPA Method 8270

Sample ID: **LCS-3454** SampType: **LCS** Units: **µg/L** Prep Date: **10/16/2012** RunNo: **6208**
Client ID: **LCSW** Batch ID: **3454** Analysis Date: **10/17/2012** SeqNo: **123472**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Pentachlorophenol	4.12	2.00	8.000	0	51.5	20	137				
Phenanthrene	4.88	0.500	8.000	0	61.0	34	125				
Anthracene	5.23	0.500	8.000	0	65.4	27.7	134				
Carbazole	6.78	5.00	8.000	0	84.8	27.9	150				
Di-n-butyl phthalate	6.61	1.00	8.000	0	82.6	62	158				
Fluoranthene	6.67	0.500	8.000	0	83.4	34.8	143				
Pyrene	6.65	0.500	8.000	0	83.1	35.5	140				
Benzyl Butylphthalate	7.01	1.00	8.000	0	87.6	51.4	144				
bis(2-Ethylhexyl)adipate	7.05	1.00	8.000	0	88.2	51.3	144				
Benz[a]anthracene	6.58	0.500	8.000	0	82.3	27.2	132				
Chrysene	5.57	0.500	8.000	0	69.7	39.5	123				
Bis(2-ethylhexyl) phthalate	6.72	1.00	8.000	0	84.0	44.7	180				
Di-n-octyl phthalate	6.67	1.00	8.000	0	83.4	52.8	164				
Benzo (b) fluoranthene	4.88	0.500	8.000	0	61.0	37.8	123				
Benzo (k) fluoranthene	5.58	0.500	8.000	0	69.8	25	144				
Benzo[a]pyrene	4.63	0.500	8.000	0	57.9	24.9	125				
Indeno (1,2,3-cd) pyrene	3.89	0.500	8.000	0	48.7	25	127				
Dibenzo (a,h) anthracene	3.81	0.500	8.000	0	47.6	25	132				
Benzo (g,h,I) perylene	4.00	0.500	8.000	0	50.0	25	133				
Surr: 2,4,6-Tribromophenol	2.90		4.000		72.6	24	138				
Surr: 2-Fluorobiphenyl	1.10		2.000		54.8	38.6	138				
Surr: Nitrobenzene-d5	1.24		2.000		62.0	31.7	140				
Surr: Phenol-d6	1.15		4.000		28.8	15	116				
Surr: p-Terphenyl	2.13		2.000		106	49	156				

NOTES:

S - Outlying spike recoveries for Benzyl Alcohol and 2,4-Dinitrophenol were observed (The MS was within range). The Initial Calibration Verification (ICV) was included and was within range. Corresponding analytes are marked with an *

Work Order: 1210088
CLIENT: Calibre
Project: Hytec

QC SUMMARY REPORT

Semi-Volatile Organic Compounds by EPA Method 8270

Sample ID: **1210088-001ADUP** SampType: **DUP** Units: **µg/L** Prep Date: **10/16/2012** RunNo: **6208**
Client ID: **HLMW-03A-101012** Batch ID: **3454** Analysis Date: **10/17/2012** SeqNo: **123474**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phenol	ND	2.00						0	0	50	
2-Chlorophenol	ND	1.00						0	0	50	
1,3-Dichlorobenzene	ND	1.00						0	0	50	
1,4-Dichlorobenzene	ND	1.00						0	0	50	
1,2-Dichlorobenzene	ND	1.00						0	0	50	
Benzyl alcohol	ND	1.00						0	0	50	*
Bis(2-chloroethyl) ether	ND	2.00						0	0	50	
2-Methylphenol (o-cresol)	ND	1.00						0	0	50	
Hexachloroethane	ND	1.00						0	0	50	
N-Nitrosodi-n-propylamine	ND	1.00						0	0	50	
Nitrobenzene	ND	2.00						0	0	50	
Isophorone	ND	1.00						0	0	50	
4-Methylphenol (p-cresol)	ND	1.00						0	0	50	
2-Nitrophenol	ND	2.00						0	0	50	
2,4-Dimethylphenol	ND	1.00						0	0	50	
Bis(2-chloroethoxy)methane	ND	1.00						0	0	50	
2,4-Dichlorophenol	ND	2.00						0	0	50	
1,2,4-Trichlorobenzene	ND	1.00						0	0	50	
Naphthalene	ND	0.500						0	0	50	
4-Chloroaniline	ND	5.00						0	0	50	
Hexachlorobutadiene	ND	1.00						0	0	50	
4-Chloro-3-methylphenol	ND	5.00						0	0	50	
2-Methylnaphthalene	ND	0.500						0	0	50	
1-Methylnaphthalene	ND	0.500						0	0	50	
Hexachlorocyclopentadiene	ND	1.00						0	0	50	
2,4,6-Trichlorophenol	ND	2.00						0	0	50	
2,4,5-Trichlorophenol	ND	2.00						0	0	50	
2-Chloronaphthalene	ND	1.00						0	0	50	
2-Nitroaniline	ND	5.00						0	0	50	

Qualifiers:

B	Analyte detected in the associated Method Blank	D	Dilution was required	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

Work Order: 1210088
CLIENT: Calibre
Project: Hytec

QC SUMMARY REPORT

Semi-Volatile Organic Compounds by EPA Method 8270

Sample ID: **1210088-001ADUP** SampType: **DUP** Units: **µg/L** Prep Date: **10/16/2012** RunNo: **6208**
Client ID: **HLMW-03A-101012** Batch ID: **3454** Analysis Date: **10/17/2012** SeqNo: **123474**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Acenaphthene	ND	0.500						0	0	50	
Dimethylphthalate	ND	1.00						0	0	50	
2,6-Dinitrotoluene	ND	1.00						0	0	50	
Acenaphthylene	ND	0.500						0	0	50	
2,4-Dinitrophenol	ND	2.00						0	0	50	*
Dibenzofuran	ND	1.00						0	0	50	
2,4-Dinitrotoluene	ND	1.00						0	0	50	
4-Nitrophenol	ND	5.00						0	0	50	
Fluorene	ND	0.500						0	0	50	
4-Chlorophenyl phenyl ether	ND	1.00						0	0	50	
Diethylphthalate	0.149	1.00						0.1519	2.05	50	J
4,6-Dinitro-2-methylphenol	ND	5.00						0	0	50	
4-Bromophenyl phenyl ether	ND	1.00						0	0	50	
Hexachlorobenzene	ND	1.00						0	0	50	
Pentachlorophenol	ND	2.00						0	0	50	
Phenanthrene	ND	0.500						0	0	50	
Anthracene	ND	0.500						0	0	50	
Carbazole	ND	5.00						0	0	50	
Di-n-butyl phthalate	0.810	1.00						0.6056	28.9	50	J
Fluoranthene	ND	0.500						0	0	50	
Pyrene	ND	0.500						0	0	50	
Benzyl Butylphthalate	0.183	1.00						0.5278	97.0	50	JR
bis(2-Ethylhexyl)adipate	1.13	1.00						0.8943	23.1	50	
Benz[a]anthracene	ND	0.500						0	0	50	
Chrysene	ND	0.500						0	0	50	
Bis(2-ethylhexyl) phthalate	1.21	1.00						0.9685	22.6	50	
Di-n-octyl phthalate	ND	1.00						0	0	50	
Benzo (b) fluoranthene	ND	0.500						0	0	50	
Benzo (k) fluoranthene	ND	0.500						0	0	50	

Qualifiers:

B	Analyte detected in the associated Method Blank	D	Dilution was required	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

Work Order: 1210088
CLIENT: Calibre
Project: Hytec

QC SUMMARY REPORT

Semi-Volatile Organic Compounds by EPA Method 8270

Sample ID: **1210088-001ADUP** SampType: **DUP** Units: **µg/L** Prep Date: **10/16/2012** RunNo: **6208**
Client ID: **HLMW-03A-101012** Batch ID: **3454** Analysis Date: **10/17/2012** SeqNo: **123474**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzo[a]pyrene	ND	0.500						0	0	50	
Indeno (1,2,3-cd) pyrene	ND	0.500						0	0	50	
Dibenzo (a,h) anthracene	ND	0.500						0	0	50	
Benzo (g,h,I) perylene	ND	0.500						0	0	50	
Surr: 2,4,6-Tribromophenol	2.90		4.000		72.4	24	138		0		
Surr: 2-Fluorobiphenyl	1.23		2.000		61.4	38.6	138		0		
Surr: Nitrobenzene-d5	1.32		2.000		65.8	31.7	140		0		
Surr: Phenol-d6	1.23		4.000		30.8	15	116		0		
Surr: p-Terphenyl	2.09		2.000		105	49	156		0		

NOTES:
R - High RPD due to low analyte concentration. In this range, high RPD's may be expected.

Sample ID: **1210088-001AMS** SampType: **MS** Units: **µg/L** Prep Date: **10/16/2012** RunNo: **6208**
Client ID: **HLMW-03A-101012** Batch ID: **3454** Analysis Date: **10/17/2012** SeqNo: **123475**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phenol	2.81	2.00	8.000	0	35.1	20	78.2				
2-Chlorophenol	4.79	1.00	8.000	0	59.9	25	106				
1,3-Dichlorobenzene	4.74	1.00	8.000	0	59.3	25.5	103				
1,4-Dichlorobenzene	4.69	1.00	8.000	0	58.6	25.6	104				
1,2-Dichlorobenzene	4.84	1.00	8.000	0	60.4	26.1	105				
Benzyl alcohol	1.74	1.00	8.000	0	21.8	20	96.8				*
Bis(2-chloroethyl) ether	4.98	2.00	8.000	0	62.2	25	110				
2-Methylphenol (o-cresol)	4.83	1.00	8.000	0	60.3	25.1	95.8				
Hexachloroethane	4.61	1.00	8.000	0	57.6	25	106				
N-Nitrosodi-n-propylamine	5.56	1.00	8.000	0	69.4	25.5	116				
Nitrobenzene	4.79	2.00	8.000	0	59.9	30.5	105				
Isophorone	5.33	1.00	8.000	0	66.7	25	121				
4-Methylphenol (p-cresol)	5.05	1.00	8.000	0	63.1	25	106				

Qualifiers:

B	Analyte detected in the associated Method Blank	D	Dilution was required	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

Date: *10/19/2012*

Work Order: 1210088
CLIENT: Calibre
Project: Hytec

QC SUMMARY REPORT

Semi-Volatile Organic Compounds by EPA Method 8270

Sample ID: **1210088-001AMS** SampType: **MS** Units: **µg/L** Prep Date: **10/16/2012** RunNo: **6208**
Client ID: **HLMW-03A-101012** Batch ID: **3454** Analysis Date: **10/17/2012** SeqNo: **123475**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
2-Nitrophenol	5.42	2.00	8.000	0	67.8	25	123				
2,4-Dimethylphenol	5.78	1.00	8.000	0	72.2	25	123				
Bis(2-chloroethoxy)methane	5.24	1.00	8.000	0	65.4	25.4	116				
2,4-Dichlorophenol	5.53	2.00	8.000	0	69.1	34.3	110				
1,2,4-Trichlorobenzene	4.91	1.00	8.000	0	61.3	25	110				
Naphthalene	4.95	0.500	8.000	0	61.8	25	131				
4-Chloroaniline	4.45	5.00	8.000	0	55.6	25	130				
Hexachlorobutadiene	4.55	1.00	8.000	0	56.8	25	105				
4-Chloro-3-methylphenol	5.56	5.00	8.000	0	69.5	36.3	120				
2-Methylnaphthalene	5.25	0.500	8.000	0	65.7	25	119				
1-Methylnaphthalene	5.20	0.500	8.000	0	65.0	25.3	117				
Hexachlorocyclopentadiene	3.46	1.00	8.000	0	43.3	25	114				
2,4,6-Trichlorophenol	5.41	2.00	8.000	0	67.7	25	131				
2,4,5-Trichlorophenol	5.44	2.00	8.000	0	68.0	25	122				
2-Chloronaphthalene	5.10	1.00	8.000	0	63.7	27.3	115				
2-Nitroaniline	5.64	5.00	8.000	0	70.5	27.9	114				
Acenaphthene	5.20	0.500	8.000	0	65.0	25	136				
Dimethylphthalate	5.55	1.00	8.000	0	69.3	31	128				
2,6-Dinitrotoluene	5.47	1.00	8.000	0	68.4	26.9	125				
Acenaphthylene	5.54	0.500	8.000	0	69.2	26.8	122				
2,4-Dinitrophenol	2.10	2.00	8.000	0	26.3	25	148				*
Dibenzofuran	5.14	1.00	8.000	0	64.2	27.8	116				
2,4-Dinitrotoluene	4.80	1.00	8.000	0	60.0	25	123				
4-Nitrophenol	2.81	5.00	8.000	0	35.1	20	109				
Fluorene	5.46	0.500	8.000	0	68.3	25	131				
4-Chlorophenyl phenyl ether	5.11	1.00	8.000	0	63.9	28.9	119				
Diethylphthalate	6.12	1.00	8.000	0.1519	74.7	36.6	136				
4,6-Dinitro-2-methylphenol	2.05	5.00	8.000	0	25.6	25	136				
4-Bromophenyl phenyl ether	5.56	1.00	8.000	0	69.5	30.2	124				

Qualifiers:

B	Analyte detected in the associated Method Blank	D	Dilution was required	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

Work Order: 1210088
CLIENT: Calibre
Project: Hytec

QC SUMMARY REPORT

Semi-Volatile Organic Compounds by EPA Method 8270

Sample ID: **1210088-001AMS** SampType: **MS** Units: **µg/L** Prep Date: **10/16/2012** RunNo: **6208**
Client ID: **HLMW-03A-101012** Batch ID: **3454** Analysis Date: **10/17/2012** SeqNo: **123475**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexachlorobenzene	5.15	1.00	8.000	0	64.4	34.6	114				
Pentachlorophenol	3.13	2.00	8.000	0	39.2	25	145				
Phenanthrene	5.47	0.500	8.000	0	68.4	26	139				
Anthracene	5.87	0.500	8.000	0	73.3	34.5	129				
Carbazole	6.80	5.00	8.000	0	85.1	36.7	143				
Di-n-butyl phthalate	6.77	1.00	8.000	0.6056	77.1	39.7	149				
Fluoranthene	6.71	0.500	8.000	0	83.9	39.3	141				
Pyrene	6.67	0.500	8.000	0	83.4	40.9	137				
Benzyl Butylphthalate	7.25	1.00	8.000	0.5278	84.0	50.5	139				
bis(2-Ethylhexyl)adipate	5.97	1.00	8.000	0.8943	63.5	36.6	145				
Benz[a]anthracene	6.69	0.500	8.000	0	83.7	34.2	124				
Chrysene	5.41	0.500	8.000	0	67.6	44.6	116				
Bis(2-ethylhexyl) phthalate	6.38	1.00	8.000	0.9685	67.6	39.9	143				
Di-n-octyl phthalate	5.50	1.00	8.000	0	68.8	37.5	163				
Benzo (b) fluoranthene	5.66	0.500	8.000	0	70.8	40.7	116				
Benzo (k) fluoranthene	6.06	0.500	8.000	0	75.8	25.5	135				
Benzo[a]pyrene	2.37	0.500	8.000	0	29.7	25	120				
Indeno (1,2,3-cd) pyrene	4.10	0.500	8.000	0	51.2	25	121				
Dibenzo (a,h) anthracene	4.37	0.500	8.000	0	54.6	25	125				
Benzo (g,h,I) perylene	3.33	0.500	8.000	0	41.7	25	124				
Surr: 2,4,6-Tribromophenol	4.12		4.000		103	24	138				
Surr: 2-Fluorobiphenyl	1.39		2.000		69.3	38.6	138				
Surr: Nitrobenzene-d5	1.55		2.000		77.7	31.7	140				
Surr: Phenol-d6	1.51		4.000		37.7	15	116				
Surr: p-Terphenyl	2.09		2.000		105	49	156				

Qualifiers:

B	Analyte detected in the associated Method Blank	D	Dilution was required	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

Sample Log-In Check List

Client Name: **CLBRE**	Work Order Number: **1210088**
Logged by: **Troy Zehr**	Date Received: **10/10/2012 1:57:00 PM**

Chain of Custody

1.	Were custodial seals present?	Yes	☐	No	☐	Not Required	☑
2.	Is Chain of Custody complete?	Yes	☑	No	☐	Not Present	☐
3.	How was the sample delivered?	Client					

Log In

4.	Coolers are present?	Yes	☑	No	☐	NA	☐
5.	Was an attempt made to cool the samples?	Yes	☑	No	☐	NA	☐
6.	Were all coolers received at a temperature of >0° C to 10.0°C	Yes	☑	No	☐	NA	☐
7.	Sample(s) in proper container(s)?	Yes	☑	No	☐		
8.	Sufficient sample volume for indicated test(s)?	Yes	☑	No	☐		
9.	Are samples properly preserved?	Yes	☑	No	☐		
10.	Was preservative added to bottles?	Yes	☐	No	☑	NA	☐
11.	Is there headspace present in VOA vials?	Yes	☐	No	☐	NA	☑
12.	Did all sample containers arrive in good condition?(unbroken)	Yes	☑	No	☐		
13.	Does paperwork match bottle labels?	Yes	☑	No	☐		
14.	Are matrices correctly identified on Chain of Custody?	Yes	☑	No	☐		
15.	Is it clear what analyses were requested?	Yes	☑	No	☐		
16.	Were all holding times able to be met?	Yes	☑	No	☐		

Special Handling (if applicable)

17.	Was client notified of all discrepancies with this order?	Yes	☐	No	☐	NA	☑

Person Notified: _____ Date: _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

18. Additional remarks/Disrepancies

Item Information

Item #	Temp ºC	Condition
Cooler	7.2	Good

Fremont Analytical

Chain of Custody Record

1311 N. 35th Street
Seattle, WA 98103
Tel: 206-352-3790
Fax: 206-352-7178

Laboratory Project No (internal): 1210088

Date: 10/10/2012

Page: 1 of: 1

Client: CALIBRE
Address: 24315 148th Ave E
City, State, Zip: Graham, WA, 98338 Tel: 253-278-2841
Reports To (PM): Tom McKeon Fax:

Project Name: Hytec
Location: Littlerock, WA
Collected by: Chris Gallagher
Email: Tom.McKeon@calibre-sys.com
Project No: K0308000-001

	Sample Name	Sample Date	Sample Time	Sample Type (Matrix)	VOC (EPA 8260)	GX/RTEX by EPA 8021b	BTEX by 8260	Gasoline Range Organics	Hydrocarbon Identification (HCID)	Diesel/Heavy Oil Range Organics	Semi VOC (EPA 8270)	PAH (EPA 8270 SIM)	PCBs (EPA 8082)	Pesticides (EPA 8081)	Herbicides (EPA 8151A)	Metals* (6020 / 200.8)	Total (T) \ Dissolved (D)	Anions (IC)**	Comments/Depth
1	HLMW-03A-101012	10/10	09:17	GW						X									
2																			
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			

*Metals Analysis (Circle): MTCA-5 RCRA-8 Priority Pollutants TAL Individual: Ag Al As B Ba Be Ca Cd Co Cr Cu Fe Hg K Mg Mn Mo Na Ni Pb Sb Se Sr Sn Ti Tl U V Zn

**Anions (Circle): Nitrate Nitrite Chloride Sulfate Bromide O-Phosphate Fluoride Nitrate+Nitrite

Sample Disposal: ☐ Return to Client ☒ Disposal by Lab (A fee may be assessed if samples are retained after 30 days)

Special Remarks

Relinquished	Date/Time	Received	Date/Time
x	10/10/12 1357	x	10.10.12 1357
Relinquished	Date/Time	Received	Date/Time
x		x	

TAT --> Next Day 2 Day 3 Day (STD)

Distribution: White - Lab, Yellow - File, Pink - Originator

www.fremontanalytical.com

November 2012

Well Sample Data Sheet and Laboratory Analytical Report

Well Sampling Data Sheet

Date	11/9/2012	Site Location	Hytec
Samplers	GD	Well ID	HLMW-05B
Casing Material	Steel	Constructed Depth	241'
Casing Diameter	6"-4"	Condition of Well	

Field Measurements:

Time	10:30	Depth Measured From:	
Depth to Water	50'	X	Top of access port
			Mark on PVC casing
			Mark of protective casing
			Other

Purging Information:

Pump:		Dedicated		Non-dedicated			
Bailer:		PVC		Stainless Steel		Other:	
Purge Start Time		Purge End Time					
Approximate Gallons Purged	125gal						

Water Monitoring Conditions:

Time	1509	1512	1513				
pH	4.70	6.04	6.04				
Conductivity 0.238	~~227~~	0.212	0.212				
Turbidity	18.4	46.5	46.5				
D.O.	5.38	1.91	1.91				
Temperature	0.09	0.55	0.55				
ORP	227	161	161				
Purge Rate	—	—	—				
Gallons Purged							

Sampling Data:

Time	1513	Sample ID	HLMW-05B-110912
pH	6.04	Duplicates	
Conductivity	0.212	QA/QC Volumes	
Turbidity	46.5		
D.O.	1.91		
Temperature	0.55		
ORP	161		

Sampling Device:

PVC Bailer		SS Bailer		Dedicated Pump		Teflon Bailer	

Analyses to be Performed:

Volatile Organics		VOCs 8260B	SVOCs by 8270C	X	Sulfate 375.2		
Total Metals		RCRA 8 or Priority Pollutants	SVOCs by 8270C/SIM		RSK-175 (methane, ethane, ethene)		
Dissolved Metals			Total Organic Carbon 415.1		Other		

Sampling Notes:

Well Diameter	Well Volume (Gal/ft)
1 inch	0.041
2 inch	0.163
4 inch	0.653
6 inch	1.469

Or:(total depth(ft) - DTW(ft)) x Well Dia^2 x 0.0408 = 1 Well Volume

1311 N. 35th St.
Seattle, WA 98103
T: (206) 352-3790
F: (206) 352-7178
info@fremontanalytical.com

Calibre
Tom McKeon
16935 SE 39th St.
Bellevue, Washington 98008

RE: Hytec
Lab ID: 1211072

November 27, 2012

Attention Tom McKeon:

Fremont Analytical, Inc. received 2 sample(s) on 11/12/2012 for the analyses presented in the following report.

Semi-Volatile Organic Compounds by EPA Method 8270

This report consists of the following:

- Case Narrative
- Analytical Results
- Applicable Quality Control Summary Reports
- Chain of Custody

All analyses were performed consistent with the Quality Assurance program of Fremont Analytical, Inc. Please contact the laboratory if you should have any questions about the results.

Thank you for using Fremont Analytical.

Sincerely,

Michael Dee
Sr. Chemist / Principal

CC:
Grant Dawson
Jeff Dawson
Justin Neste

Date: *11/27/2012*

CLIENT: Calibre
Project: Hytec
Lab Order: 1211072

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
1211072-001	HLMW-05B-110912	11/09/2012 2:20 PM	11/12/2012 10:00 AM
1211072-002	Hytec-EQ-110912	11/09/2012 2:55 AM	11/12/2012 10:00 AM

Note: If no "Time Collected" is supplied, a default of 12:00AM is assigned

Case Narrative

WO#: **1211072**
Date: **11/27/2012**

CLIENT: Calibre
Project: Hytec

I. SAMPLE RECEIPT:
All samples were received intact. The internal ice chest temperatures were measured on receipt and are recorded on the attached Sample Receipt Checklist.

II. GENERAL REPORTING COMMENTS:
Results are reported on a wet weight basis unless dry-weight correction is denoted in the units field on the analytical report ("mg/kg-dry" or "ug/kg-dry").

Matrix Spike (MS) and MS Duplicate (MSD) samples are tested from an analytical batch of "like" matrix to check for possible matrix effect. The MS and MSD will provide site specific matrix data only for those samples which are spiked by the laboratory. The sample chosen for spike purposes may or may not have been a sample submitted in this sample delivery group. The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The LCS and the MB are processed with the samples and the MS/MSD to ensure method criteria are achieved throughout the entire analytical process.

III. ANALYSES AND EXCEPTIONS:
Exceptions associated with this report will be footnoted in the analytical results page(s) or the quality control summary page(s) and/or noted below.

Prep Comments for PREP-SEMI-W, Sample 1211072-002A: Sample produced a lot of foam, possible soap residue.

Analytical Report

WO#: **1211072**

Date Reported: **11/27/2012**

Client: Calibre **Collection Date:** 11/9/2012 2:20:00 PM

Project: Hytec

Lab ID: 1211072-001 **Matrix:** Water

Client Sample ID: HLMW-05B-110912

Analyses	Result	MDL	Qual	Units	DF	Date Analyzed
Semi-Volatile Organic Compounds by EPA Method 8270				Batch ID: 3640		Analyst: PH
Phenol	ND	0.0401		µg/L	1	11/27/2012 3:42:00 AM
2-Chlorophenol	ND	0.0132		µg/L	1	11/27/2012 3:42:00 AM
1,3-Dichlorobenzene	ND	0.0161		µg/L	1	11/27/2012 3:42:00 AM
1,4-Dichlorobenzene	ND	0.0241		µg/L	1	11/27/2012 3:42:00 AM
1,2-Dichlorobenzene	ND	0.0232		µg/L	1	11/27/2012 3:42:00 AM
Benzyl alcohol	ND	0.0371		µg/L	1	11/27/2012 3:42:00 AM
Bis(2-chloroethyl) ether	ND	0.0294		µg/L	1	11/27/2012 3:42:00 AM
2-Methylphenol (o-cresol)	ND	0.0245		µg/L	1	11/27/2012 3:42:00 AM
Hexachloroethane	ND	0.0653		µg/L	1	11/27/2012 3:42:00 AM
N-Nitrosodi-n-propylamine	ND	0.0642		µg/L	1	11/27/2012 3:42:00 AM
Nitrobenzene	ND	0.0392		µg/L	1	11/27/2012 3:42:00 AM
Isophorone	ND	0.0205		µg/L	1	11/27/2012 3:42:00 AM
4-Methylphenol (p-cresol)	ND	0.0563		µg/L	1	11/27/2012 3:42:00 AM
2-Nitrophenol	ND	0.0912		µg/L	1	11/27/2012 3:42:00 AM
2,4-Dimethylphenol	ND	0.0376		µg/L	1	11/27/2012 3:42:00 AM
Bis(2-chloroethoxy)methane	ND	0.0337		µg/L	1	11/27/2012 3:42:00 AM
2,4-Dichlorophenol	ND	0.0188		µg/L	1	11/27/2012 3:42:00 AM
1,2,4-Trichlorobenzene	ND	0.0194		µg/L	1	11/27/2012 3:42:00 AM
Naphthalene	ND	0.0123		µg/L	1	11/27/2012 3:42:00 AM
4-Chloroaniline	ND	0.0180		µg/L	1	11/27/2012 3:42:00 AM
Hexachlorobutadiene	ND	0.0390		µg/L	1	11/27/2012 3:42:00 AM
4-Chloro-3-methylphenol	ND	0.0687		µg/L	1	11/27/2012 3:42:00 AM
2-Methylnaphthalene	ND	0.0252		µg/L	1	11/27/2012 3:42:00 AM
1-Methylnaphthalene	ND	0.0214		µg/L	1	11/27/2012 3:42:00 AM
Hexachlorocyclopentadiene	ND	0.0313		µg/L	1	11/27/2012 3:42:00 AM
2,4,6-Trichlorophenol	ND	0.0210		µg/L	1	11/27/2012 3:42:00 AM
2,4,5-Trichlorophenol	ND	0.0339		µg/L	1	11/27/2012 3:42:00 AM
2-Chloronaphthalene	ND	0.0143		µg/L	1	11/27/2012 3:42:00 AM
2-Nitroaniline	ND	0.0710		µg/L	1	11/27/2012 3:42:00 AM
Acenaphthene	ND	0.0139		µg/L	1	11/27/2012 3:42:00 AM
Dimethylphthalate	ND	0.0347		µg/L	1	11/27/2012 3:42:00 AM
2,6-Dinitrotoluene	ND	0.0269		µg/L	1	11/27/2012 3:42:00 AM
Acenaphthylene	ND	0.00613		µg/L	1	11/27/2012 3:42:00 AM
2,4-Dinitrophenol	ND	0.689		µg/L	1	11/27/2012 3:42:00 AM
Dibenzofuran	ND	0.0131		µg/L	1	11/27/2012 3:42:00 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	D	Dilution was required
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

Analytical Report

WO#: **1211072**

Date Reported: **11/27/2012**

Client: Calibre **Collection Date:** 11/9/2012 2:20:00 PM

Project: Hytec

Lab ID: 1211072-001 **Matrix:** Water

Client Sample ID: HLMW-05B-110912

Semi-Volatile Organic Compounds by EPA Method 8270

Batch ID: 3640 Analyst: PH

Analyses	Result	MDL	Qual	Units	DF	Date Analyzed
2,4-Dinitrotoluene	ND	0.0701		µg/L	1	11/27/2012 3:42:00 AM
4-Nitrophenol	ND	0.431		µg/L	1	11/27/2012 3:42:00 AM
Fluorene	ND	0.0164		µg/L	1	11/27/2012 3:42:00 AM
4-Chlorophenyl phenyl ether	ND	0.0199		µg/L	1	11/27/2012 3:42:00 AM
Diethylphthalate	0.0625	0.0144	J ND	µg/L	1	11/27/2012 3:42:00 AM
4,6-Dinitro-2-methylphenol	ND	0.487		µg/L	1	11/27/2012 3:42:00 AM
4-Bromophenyl phenyl ether	ND	0.0241		µg/L	1	11/27/2012 3:42:00 AM
Hexachlorobenzene	ND	0.0264		µg/L	1	11/27/2012 3:42:00 AM
Pentachlorophenol	ND	0.0344		µg/L	1	11/27/2012 3:42:00 AM
Phenanthrene	0.0428	0.0130	J ND	µg/L	1	11/27/2012 3:42:00 AM
Anthracene	ND	0.0167		µg/L	1	11/27/2012 3:42:00 AM
Carbazole	ND	0.0553		µg/L	1	11/27/2012 3:42:00 AM
Di-n-butyl phthalate	0.261	0.0268	J ND	µg/L	1	11/27/2012 3:42:00 AM
Fluoranthene	ND	0.0112		µg/L	1	11/27/2012 3:42:00 AM
Pyrene	ND	0.0146		µg/L	1	11/27/2012 3:42:00 AM
Benzyl Butylphthalate	ND	0.0552		µg/L	1	11/27/2012 3:42:00 AM
bis(2-Ethylhexyl)adipate	0.0895	0.0443	J ND	µg/L	1	11/27/2012 3:42:00 AM
Benz[a]anthracene	ND	0.0123		µg/L	1	11/27/2012 3:42:00 AM
Chrysene	ND	0.0126		µg/L	1	11/27/2012 3:42:00 AM
Bis(2-ethylhexyl) phthalate	0.221	0.0316	J ND	µg/L	1	11/27/2012 3:42:00 AM
Di-n-octyl phthalate	ND	0.0258		µg/L	1	11/27/2012 3:42:00 AM
Benzo (b) fluoranthene	ND	0.0259		µg/L	1	11/27/2012 3:42:00 AM
Benzo (k) fluoranthene	ND	0.0341		µg/L	1	11/27/2012 3:42:00 AM
Benzo[a]pyrene	ND	0.0304		µg/L	1	11/27/2012 3:42:00 AM
Indeno (1,2,3-cd) pyrene	ND	0.0673		µg/L	1	11/27/2012 3:42:00 AM
Dibenzo (a,h) anthracene	ND	0.0366		µg/L	1	11/27/2012 3:42:00 AM
Benzo (g,h,I) perylene	ND	0.0378		µg/L	1	11/27/2012 3:42:00 AM
Surr: 2,4,6-Tribromophenol	49.7	24-138		%REC	1	11/27/2012 3:42:00 AM
Surr: 2-Fluorobiphenyl	80.8	38.6-138		%REC	1	11/27/2012 3:42:00 AM
Surr: Nitrobenzene-d5	77.6	31.7-140		%REC	1	11/27/2012 3:42:00 AM
Surr: Phenol-d6	29.6	15-116		%REC	1	11/27/2012 3:42:00 AM
Surr: p-Terphenyl	92.4	49-156		%REC	1	11/27/2012 3:42:00 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	D	Dilution was required
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

Analytical Report

WO#: **1211072**

Date Reported: **11/27/2012**

Client: Calibre **Collection Date:** 11/9/2012 2:55:00 AM

Project: Hytec

Lab ID: 1211072-002 **Matrix:** Water

Client Sample ID: Hytec-EQ-110912

Semi-Volatile Organic Compounds by EPA Method 8270 Batch ID: 3640 Analyst: PH

Analyses	Result	MDL	Qual	Units	DF	Date Analyzed
Phenol	ND	0.0401		µg/L	1	11/27/2012 5:20:00 AM
2-Chlorophenol	ND	0.0132		µg/L	1	11/27/2012 5:20:00 AM
1,3-Dichlorobenzene	ND	0.0161		µg/L	1	11/27/2012 5:20:00 AM
1,4-Dichlorobenzene	ND	0.0241		µg/L	1	11/27/2012 5:20:00 AM
1,2-Dichlorobenzene	ND	0.0232		µg/L	1	11/27/2012 5:20:00 AM
Benzyl alcohol	ND	0.0371		µg/L	1	11/27/2012 5:20:00 AM
Bis(2-chloroethyl) ether	ND	0.0294		µg/L	1	11/27/2012 5:20:00 AM
2-Methylphenol (o-cresol)	ND	0.0245		µg/L	1	11/27/2012 5:20:00 AM
Hexachloroethane	ND	0.0653		µg/L	1	11/27/2012 5:20:00 AM
N-Nitrosodi-n-propylamine	ND	0.0642		µg/L	1	11/27/2012 5:20:00 AM
Nitrobenzene	ND	0.0392		µg/L	1	11/27/2012 5:20:00 AM
Isophorone	ND	0.0205		µg/L	1	11/27/2012 5:20:00 AM
4-Methylphenol (p-cresol)	ND	0.0563		µg/L	1	11/27/2012 5:20:00 AM
2-Nitrophenol	ND	0.0912		µg/L	1	11/27/2012 5:20:00 AM
2,4-Dimethylphenol	ND	0.0376		µg/L	1	11/27/2012 5:20:00 AM
Bis(2-chloroethoxy)methane	ND	0.0337		µg/L	1	11/27/2012 5:20:00 AM
2,4-Dichlorophenol	ND	0.0188		µg/L	1	11/27/2012 5:20:00 AM
1,2,4-Trichlorobenzene	ND	0.0194		µg/L	1	11/27/2012 5:20:00 AM
Naphthalene	ND	0.0123		µg/L	1	11/27/2012 5:20:00 AM
4-Chloroaniline	ND	0.0180		µg/L	1	11/27/2012 5:20:00 AM
Hexachlorobutadiene	ND	0.0390		µg/L	1	11/27/2012 5:20:00 AM
4-Chloro-3-methylphenol	ND	0.0687		µg/L	1	11/27/2012 5:20:00 AM
2-Methylnaphthalene	ND	0.0252		µg/L	1	11/27/2012 5:20:00 AM
1-Methylnaphthalene	ND	0.0214		µg/L	1	11/27/2012 5:20:00 AM
Hexachlorocyclopentadiene	ND	0.0313		µg/L	1	11/27/2012 5:20:00 AM
2,4,6-Trichlorophenol	ND	0.0210		µg/L	1	11/27/2012 5:20:00 AM
2,4,5-Trichlorophenol	ND	0.0339		µg/L	1	11/27/2012 5:20:00 AM
2-Chloronaphthalene	ND	0.0143		µg/L	1	11/27/2012 5:20:00 AM
2-Nitroaniline	ND	0.0710		µg/L	1	11/27/2012 5:20:00 AM
Acenaphthene	ND	0.0139		µg/L	1	11/27/2012 5:20:00 AM
Dimethylphthalate	ND	0.0347		µg/L	1	11/27/2012 5:20:00 AM
2,6-Dinitrotoluene	ND	0.0269		µg/L	1	11/27/2012 5:20:00 AM
Acenaphthylene	ND	0.00613		µg/L	1	11/27/2012 5:20:00 AM
2,4-Dinitrophenol	ND	0.689		µg/L	1	11/27/2012 5:20:00 AM
Dibenzofuran	ND	0.0131		µg/L	1	11/27/2012 5:20:00 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	D	Dilution was required
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

Analytical Report

WO#: **1211072**

Date Reported: **11/27/2012**

Client: Calibre **Collection Date:** 11/9/2012 2:55:00 AM

Project: Hytec

Lab ID: 1211072-002 **Matrix:** Water

Client Sample ID: Hytec-EQ-110912

Semi-Volatile Organic Compounds by EPA Method 8270

Batch ID: 3640 Analyst: PH

Analyses	Result	MDL	Qual	Units	DF	Date Analyzed
2,4-Dinitrotoluene	ND	0.0701		µg/L	1	11/27/2012 5:20:00 AM
4-Nitrophenol	ND	0.431		µg/L	1	11/27/2012 5:20:00 AM
Fluorene	ND	0.0164		µg/L	1	11/27/2012 5:20:00 AM
4-Chlorophenyl phenyl ether	ND	0.0199		µg/L	1	11/27/2012 5:20:00 AM
Diethylphthalate	0.0623	0.0144	J ND	µg/L	1	11/27/2012 5:20:00 AM
4,6-Dinitro-2-methylphenol	ND	0.487		µg/L	1	11/27/2012 5:20:00 AM
4-Bromophenyl phenyl ether	ND	0.0241		µg/L	1	11/27/2012 5:20:00 AM
Hexachlorobenzene	ND	0.0264		µg/L	1	11/27/2012 5:20:00 AM
Pentachlorophenol	ND	0.0344		µg/L	1	11/27/2012 5:20:00 AM
Phenanthrene	ND	0.0130		µg/L	1	11/27/2012 5:20:00 AM
Anthracene	ND	0.0167		µg/L	1	11/27/2012 5:20:00 AM
Carbazole	ND	0.0553		µg/L	1	11/27/2012 5:20:00 AM
Di-n-butyl phthalate	0.343	0.0268	J ND	µg/L	1	11/27/2012 5:20:00 AM
Fluoranthene	ND	0.0112		µg/L	1	11/27/2012 5:20:00 AM
Pyrene	ND	0.0146		µg/L	1	11/27/2012 5:20:00 AM
Benzyl Butylphthalate	0.103	0.0552	J	µg/L	1	11/27/2012 5:20:00 AM
bis(2-Ethylhexyl)adipate	0.0931	0.0443	J ND	µg/L	1	11/27/2012 5:20:00 AM
Benz[a]anthracene	ND	0.0123		µg/L	1	11/27/2012 5:20:00 AM
Chrysene	ND	0.0126		µg/L	1	11/27/2012 5:20:00 AM
Bis(2-ethylhexyl) phthalate	0.367	0.0316	J ND	µg/L	1	11/27/2012 5:20:00 AM
Di-n-octyl phthalate	0.0274	0.0258	J ND	µg/L	1	11/27/2012 5:20:00 AM
Benzo (b) fluoranthene	ND	0.0259		µg/L	1	11/27/2012 5:20:00 AM
Benzo (k) fluoranthene	ND	0.0341		µg/L	1	11/27/2012 5:20:00 AM
Benzo[a]pyrene	ND	0.0304		µg/L	1	11/27/2012 5:20:00 AM
Indeno (1,2,3-cd) pyrene	ND	0.0673		µg/L	1	11/27/2012 5:20:00 AM
Dibenzo (a,h) anthracene	ND	0.0366		µg/L	1	11/27/2012 5:20:00 AM
Benzo (g,h,I) perylene	ND	0.0378		µg/L	1	11/27/2012 5:20:00 AM
Surr: 2,4,6-Tribromophenol	36.6	24-138		%REC	1	11/27/2012 5:20:00 AM
Surr: 2-Fluorobiphenyl	54.4	38.6-138		%REC	1	11/27/2012 5:20:00 AM
Surr: Nitrobenzene-d5	43.3	31.7-140		%REC	1	11/27/2012 5:20:00 AM
Surr: Phenol-d6	24.9	15-116		%REC	1	11/27/2012 5:20:00 AM
Surr: p-Terphenyl	62.1	49-156		%REC	1	11/27/2012 5:20:00 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	D	Dilution was required
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

Work Order: 1211072
CLIENT: Calibre
Project: Hytec

QC SUMMARY REPORT

Semi-Volatile Organic Compounds by EPA Method 8270

Sample ID: **MB-3640** SampType: **MBLK** Units: **µg/L** Prep Date: **11/14/2012** RunNo: **6676**
Client ID: **MBLKW** Batch ID: **3640** Analysis Date: **11/27/2012** SeqNo: **133096**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phenol	ND	2.00									
2-Chlorophenol	ND	1.00									
1,3-Dichlorobenzene	ND	1.00									
1,4-Dichlorobenzene	ND	1.00									
1,2-Dichlorobenzene	ND	1.00									
Benzyl alcohol	ND	1.00									
Bis(2-chloroethyl) ether	ND	2.00									
2-Methylphenol (o-cresol)	ND	1.00									
Hexachloroethane	ND	1.00									
N-Nitrosodi-n-propylamine	ND	1.00									
Nitrobenzene	ND	2.00									
Isophorone	ND	1.00									
4-Methylphenol (p-cresol)	ND	1.00									
2-Nitrophenol	ND	2.00									
2,4-Dimethylphenol	ND	1.00									
Bis(2-chloroethoxy)methane	ND	1.00									
2,4-Dichlorophenol	ND	2.00									
1,2,4-Trichlorobenzene	ND	1.00									
Naphthalene	ND	0.500									
4-Chloroaniline	ND	5.00									
Hexachlorobutadiene	ND	1.00									
4-Chloro-3-methylphenol	ND	5.00									
2-Methylnaphthalene	ND	0.500									
1-Methylnaphthalene	ND	0.500									
Hexachlorocyclopentadiene	ND	1.00									
2,4,6-Trichlorophenol	ND	2.00									
2,4,5-Trichlorophenol	ND	2.00									
2-Chloronaphthalene	ND	1.00									
2-Nitroaniline	ND	5.00									

Qualifiers:

B	Analyte detected in the associated Method Blank	D	Dilution was required	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

Work Order: 1211072
CLIENT: Calibre
Project: Hytec

QC SUMMARY REPORT

Semi-Volatile Organic Compounds by EPA Method 8270

Sample ID: **MB-3640** SampType: **MBLK** Units: **µg/L** Prep Date: **11/14/2012** RunNo: **6676**
Client ID: **MBLKW** Batch ID: **3640** Analysis Date: **11/27/2012** SeqNo: **133096**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Acenaphthene	ND	0.500									
Dimethylphthalate	ND	1.00									
2,6-Dinitrotoluene	ND	1.00									
Acenaphthylene	ND	0.500									
2,4-Dinitrophenol	ND	2.00									
Dibenzofuran	ND	1.00									
2,4-Dinitrotoluene	ND	1.00									
4-Nitrophenol	ND	5.00									
Fluorene	ND	0.500									
4-Chlorophenyl phenyl ether	ND	1.00									
Diethylphthalate	0.0439	1.00									J
4,6-Dinitro-2-methylphenol	ND	5.00									
4-Bromophenyl phenyl ether	ND	1.00									
Hexachlorobenzene	ND	1.00									
Pentachlorophenol	ND	2.00									
Phenanthrene	0.0275	0.500									J
Anthracene	ND	0.500									
Carbazole	ND	5.00									
Di-n-butyl phthalate	0.235	1.00									J
Fluoranthene	ND	0.500									
Pyrene	ND	0.500									
Benzyl Butylphthalate	ND	1.00									
bis(2-Ethylhexyl)adipate	0.0596	1.00									J
Benz[a]anthracene	ND	0.500									
Chrysene	ND	0.500									
Bis(2-ethylhexyl) phthalate	0.170	1.00									J
Di-n-octyl phthalate	0.0295	1.00									J
Benzo (b) fluoranthene	ND	0.500									
Benzo (k) fluoranthene	ND	0.500									

Qualifiers:

B	Analyte detected in the associated Method Blank	D	Dilution was required	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

Work Order: 1211072
CLIENT: Calibre
Project: Hytec

QC SUMMARY REPORT

Semi-Volatile Organic Compounds by EPA Method 8270

Sample ID: **MB-3640** SampType: **MBLK** Units: **µg/L** Prep Date: **11/14/2012** RunNo: **6676**
Client ID: **MBLKW** Batch ID: **3640** Analysis Date: **11/27/2012** SeqNo: **133096**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzo[a]pyrene	ND	0.500									
Indeno (1,2,3-cd) pyrene	ND	0.500									
Dibenzo (a,h) anthracene	ND	0.500									
Benzo (g,h,I) perylene	ND	0.500									
Surr: 2,4,6-Tribromophenol	0.954		2.000		47.7	24	138				
Surr: 2-Fluorobiphenyl	0.756		1.000		75.6	38.6	138				
Surr: Nitrobenzene-d5	0.673		1.000		67.3	31.7	140				
Surr: Phenol-d6	0.493		2.000		24.7	15	116				
Surr: p-Terphenyl	0.833		1.000		83.3	49	156				

Sample ID: **LCS-3640** SampType: **LCS** Units: **µg/L** Prep Date: **11/14/2012** RunNo: **6676**
Client ID: **LCSW** Batch ID: **3640** Analysis Date: **11/27/2012** SeqNo: **133097**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phenol	0.968	2.00	4.000	0	24.2	20	86.2				
2-Chlorophenol	2.11	1.00	4.000	0	52.7	25	112				
1,3-Dichlorobenzene	2.63	1.00	4.000	0	65.7	25	108				
1,4-Dichlorobenzene	2.53	1.00	4.000	0	63.1	25	110				
1,2-Dichlorobenzene	2.57	1.00	4.000	0	64.2	25	109				
Benzyl alcohol	1.88	1.00	4.000	0	46.9	20	96.5				
Bis(2-chloroethyl) ether	2.57	2.00	4.000	0	64.2	25	111				
2-Methylphenol (o-cresol)	1.86	1.00	4.000	0	46.6	25	101				
Hexachloroethane	2.43	1.00	4.000	0	60.9	25	109				
N-Nitrosodi-n-propylamine	2.70	1.00	4.000	0	67.6	25	122				
Nitrobenzene	2.67	2.00	4.000	0	66.8	25	110				
Isophorone	2.71	1.00	4.000	0	67.6	25	126				
4-Methylphenol (p-cresol)	1.85	1.00	4.000	0	46.2	25	113				
2-Nitrophenol	2.82	2.00	4.000	0	70.6	25	126				

Qualifiers:

B	Analyte detected in the associated Method Blank	D	Dilution was required	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

Work Order: 1211072
CLIENT: Calibre
Project: Hytec

QC SUMMARY REPORT

Semi-Volatile Organic Compounds by EPA Method 8270

Sample ID: **LCS-3640** SampType: **LCS** Units: **µg/L** Prep Date: **11/14/2012** RunNo: **6676**
Client ID: **LCSW** Batch ID: **3640** Analysis Date: **11/27/2012** SeqNo: **133097**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
2,4-Dimethylphenol	2.51	1.00	4.000	0	62.8	25	124				
Bis(2-chloroethoxy)methane	2.68	1.00	4.000	0	66.9	25	121				
2,4-Dichlorophenol	2.75	2.00	4.000	0	68.7	29.1	110				
1,2,4-Trichlorobenzene	2.63	1.00	4.000	0	65.8	25	113				
Naphthalene	2.58	0.500	4.000	0	64.6	25	115				
4-Chloroaniline	2.38	5.00	4.000	0	59.6	25	136				
Hexachlorobutadiene	2.46	1.00	4.000	0	61.4	25	111				
4-Chloro-3-methylphenol	2.60	5.00	4.000	0	65.0	32.3	122				
2-Methylnaphthalene	2.62	0.500	4.000	0	65.5	25	119				
1-Methylnaphthalene	2.62	0.500	4.000	0	65.5	25	117				
Hexachlorocyclopentadiene	1.91	1.00	4.000	0	47.7	25	125				
2,4,6-Trichlorophenol	2.79	2.00	4.000	0	69.8	25	133				
2,4,5-Trichlorophenol	2.40	2.00	4.000	0	60.1	25	125				
2-Chloronaphthalene	2.60	1.00	4.000	0	64.9	25	121				
2-Nitroaniline	2.78	5.00	4.000	0	69.6	25	121				
Acenaphthene	2.68	0.500	4.000	0	66.9	25	120				
Dimethylphthalate	2.91	1.00	4.000	0	72.8	25	133				
2,6-Dinitrotoluene	2.97	1.00	4.000	0	74.2	25	131				
Acenaphthylene	2.71	0.500	4.000	0	67.7	25	128				
2,4-Dinitrophenol	1.77	2.00	4.000	0	44.2	39.2	124				
Dibenzofuran	2.71	1.00	4.000	0	67.7	25	121				
2,4-Dinitrotoluene	3.18	1.00	4.000	0	79.4	25	132				
4-Nitrophenol	1.55	5.00	4.000	0	38.7	20	106				
Fluorene	2.78	0.500	4.000	0	69.6	25	127				
4-Chlorophenyl phenyl ether	2.69	1.00	4.000	0	67.3	25	124				
Diethylphthalate	3.19	1.00	4.000	0	79.8	31.3	142				
4,6-Dinitro-2-methylphenol	1.56	5.00	4.000	0	39.1	25	139				
4-Bromophenyl phenyl ether	2.87	1.00	4.000	0	71.7	25	130				
Hexachlorobenzene	2.80	1.00	4.000	0	70.1	29	120				

Qualifiers:

B	Analyte detected in the associated Method Blank	D	Dilution was required	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

Work Order: 1211072
CLIENT: Calibre
Project: Hytec

QC SUMMARY REPORT

Semi-Volatile Organic Compounds by EPA Method 8270

Sample ID: **LCS-3640** SampType: **LCS** Units: **µg/L** Prep Date: **11/14/2012** RunNo: **6676**
Client ID: **LCSW** Batch ID: **3640** Analysis Date: **11/27/2012** SeqNo: **133097**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Pentachlorophenol	1.78	2.00	4.000	0	44.5	20	137				
Phenanthrene	3.08	0.500	4.000	0	77.1	34	125				
Anthracene	3.09	0.500	4.000	0	77.2	27.7	134				
Carbazole	4.23	5.00	4.000	0	106	27.9	150				
Di-n-butyl phthalate	4.10	1.00	4.000	0	103	62	158				
Fluoranthene	3.49	0.500	4.000	0	87.2	34.8	143				
Pyrene	3.44	0.500	4.000	0	86.0	35.5	140				
Benzyl Butylphthalate	3.92	1.00	4.000	0	98.1	51.4	144				
bis(2-Ethylhexyl)adipate	3.88	1.00	4.000	0	97.0	51.3	144				
Benz[a]anthracene	3.41	0.500	4.000	0	85.2	27.2	132				
Chrysene	3.37	0.500	4.000	0	84.2	39.5	123				
Bis(2-ethylhexyl) phthalate	4.00	1.00	4.000	0	100	44.7	180				
Di-n-octyl phthalate	3.91	1.00	4.000	0	97.7	52.8	164				
Benzo (b) fluoranthene	2.97	0.500	4.000	0	74.3	37.8	123				
Benzo (k) fluoranthene	3.46	0.500	4.000	0	86.5	25	144				
Benzo[a]pyrene	3.15	0.500	4.000	0	78.8	24.9	125				
Indeno (1,2,3-cd) pyrene	2.73	0.500	4.000	0	68.4	25	127				
Dibenzo (a,h) anthracene	2.82	0.500	4.000	0	70.5	25	132				
Benzo (g,h,I) perylene	2.68	0.500	4.000	0	66.9	25	133				
Surr: 2,4,6-Tribromophenol	1.04		2.000		51.8	24	138				
Surr: 2-Fluorobiphenyl	0.807		1.000		80.7	38.6	138				
Surr: Nitrobenzene-d5	0.725		1.000		72.5	31.7	140				
Surr: Phenol-d6	0.462		2.000		23.1	15	116				
Surr: p-Terphenyl	0.990		1.000		99.0	49	156				

Qualifiers:

B	Analyte detected in the associated Method Blank	D	Dilution was required	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

Work Order: 1211072
CLIENT: Calibre
Project: Hytec

QC SUMMARY REPORT

Semi-Volatile Organic Compounds by EPA Method 8270

Sample ID: **1211072-001ADUP** SampType: **DUP** Units: **µg/L** Prep Date: **11/14/2012** RunNo: **6676**
Client ID: **HLMW-05B-110912** Batch ID: **3640** Analysis Date: **11/27/2012** SeqNo: **133099**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phenol	ND	2.00						0	0	50	
2-Chlorophenol	ND	1.00						0	0	50	
1,3-Dichlorobenzene	ND	1.00						0	0	50	
1,4-Dichlorobenzene	ND	1.00						0	0	50	
1,2-Dichlorobenzene	ND	1.00						0	0	50	
Benzyl alcohol	ND	1.00						0	0	50	
Bis(2-chloroethyl) ether	ND	2.00						0	0	50	
2-Methylphenol (o-cresol)	ND	1.00						0	0	50	
Hexachloroethane	ND	1.00						0	0	50	
N-Nitrosodi-n-propylamine	ND	1.00						0	0	50	
Nitrobenzene	ND	2.00						0	0	50	
Isophorone	ND	1.00						0	0	50	
4-Methylphenol (p-cresol)	ND	1.00						0	0	50	
2-Nitrophenol	ND	2.00						0	0	50	
2,4-Dimethylphenol	ND	1.00						0	0	50	
Bis(2-chloroethoxy)methane	ND	1.00						0	0	50	
2,4-Dichlorophenol	ND	2.00						0	0	50	
1,2,4-Trichlorobenzene	ND	1.00						0	0	50	
Naphthalene	ND	0.500						0	0	50	
4-Chloroaniline	ND	5.00						0	0	50	
Hexachlorobutadiene	ND	1.00						0	0	50	
4-Chloro-3-methylphenol	ND	5.00						0	0	50	
2-Methylnaphthalene	ND	0.500						0	0	50	
1-Methylnaphthalene	ND	0.500						0	0	50	
Hexachlorocyclopentadiene	ND	1.00						0	0	50	
2,4,6-Trichlorophenol	ND	2.00						0	0	50	
2,4,5-Trichlorophenol	ND	2.00						0	0	50	
2-Chloronaphthalene	ND	1.00						0	0	50	
2-Nitroaniline	ND	5.00						0	0	50	

Qualifiers:

B	Analyte detected in the associated Method Blank	D	Dilution was required	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

Work Order: 1211072
CLIENT: Calibre
Project: Hytec

QC SUMMARY REPORT

Semi-Volatile Organic Compounds by EPA Method 8270

Sample ID: **1211072-001ADUP** SampType: **DUP** Units: **µg/L** Prep Date: **11/14/2012** RunNo: **6676**
Client ID: **HLMW-05B-110912** Batch ID: **3640** Analysis Date: **11/27/2012** SeqNo: **133099**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Acenaphthene	ND	0.500						0	0	50	
Dimethylphthalate	ND	1.00						0	0	50	
2,6-Dinitrotoluene	ND	1.00						0	0	50	
Acenaphthylene	ND	0.500						0	0	50	
2,4-Dinitrophenol	ND	2.00						0	0	50	
Dibenzofuran	ND	1.00						0	0	50	
2,4-Dinitrotoluene	ND	1.00						0	0	50	
4-Nitrophenol	ND	5.00						0	0	50	
Fluorene	ND	0.500						0	0	50	
4-Chlorophenyl phenyl ether	ND	1.00						0	0	50	
Diethylphthalate	0.0775	1.00						0.06252	21.4	50	J
4,6-Dinitro-2-methylphenol	ND	5.00						0	0	50	
4-Bromophenyl phenyl ether	ND	1.00						0	0	50	
Hexachlorobenzene	ND	1.00						0	0	50	
Pentachlorophenol	ND	2.00						0	0	50	
Phenanthrene	ND	0.500						0.04276	200	50	R
Anthracene	ND	0.500						0	0	50	
Carbazole	ND	5.00						0	0	50	
Di-n-butyl phthalate	0.269	1.00						0.2609	2.98	50	J
Fluoranthene	ND	0.500						0	0	50	
Pyrene	ND	0.500						0	0	50	
Benzyl Butylphthalate	ND	1.00						0	0	50	
bis(2-Ethylhexyl)adipate	0.0878	1.00						0.08954	1.96	50	J
Benz[a]anthracene	ND	0.500						0	0	50	
Chrysene	ND	0.500						0	0	50	
Bis(2-ethylhexyl) phthalate	0.185	1.00						0.2211	18.0	50	J
Di-n-octyl phthalate	0.0289	1.00						0	200	50	JR
Benzo (b) fluoranthene	ND	0.500						0	0	50	
Benzo (k) fluoranthene	ND	0.500						0	0	50	

Qualifiers:

B	Analyte detected in the associated Method Blank	D	Dilution was required	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

Work Order: 1211072
CLIENT: Calibre
Project: Hytec

QC SUMMARY REPORT

Semi-Volatile Organic Compounds by EPA Method 8270

Sample ID: **1211072-001ADUP** SampType: **DUP** Units: **µg/L** Prep Date: **11/14/2012** RunNo: **6676**
Client ID: **HLMW-05B-110912** Batch ID: **3640** Analysis Date: **11/27/2012** SeqNo: **133099**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzo[a]pyrene	ND	0.500						0	0	50	
Indeno (1,2,3-cd) pyrene	ND	0.500						0	0	50	
Dibenzo (a,h) anthracene	ND	0.500						0	0	50	
Benzo (g,h,I) perylene	ND	0.500						0	0	50	
Surr: 2,4,6-Tribromophenol	0.880		2.000		44.0	24	138		0		
Surr: 2-Fluorobiphenyl	0.791		1.000		79.1	38.6	138		0		
Surr: Nitrobenzene-d5	0.717		1.000		71.7	31.7	140		0		
Surr: Phenol-d6	0.490		2.000		24.5	15	116		0		
Surr: p-Terphenyl	0.924		1.000		92.4	49	156		0		

NOTES:
R - High RPD due to low analyte concentration. In this range, high RPD's may be expected.

Sample ID: **1211072-001AMS** SampType: **MS** Units: **µg/L** Prep Date: **11/14/2012** RunNo: **6676**
Client ID: **HLMW-05B-110912** Batch ID: **3640** Analysis Date: **11/27/2012** SeqNo: **133100**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phenol	1.28	2.00	4.000	0	32.0	20	78.2				
2-Chlorophenol	2.17	1.00	4.000	0	54.4	25	106				
1,3-Dichlorobenzene	2.44	1.00	4.000	0	61.1	25.5	103				
1,4-Dichlorobenzene	2.45	1.00	4.000	0	61.3	25.6	104				
1,2-Dichlorobenzene	2.52	1.00	4.000	0	63.0	26.1	105				
Benzyl alcohol	1.86	1.00	4.000	0	46.5	20	96.8				
Bis(2-chloroethyl) ether	2.60	2.00	4.000	0	65.1	25	110				
2-Methylphenol (o-cresol)	1.95	1.00	4.000	0	48.6	25.1	95.8				
Hexachloroethane	2.42	1.00	4.000	0	60.6	25	106				
N-Nitrosodi-n-propylamine	2.76	1.00	4.000	0	69.0	25.5	116				
Nitrobenzene	2.68	2.00	4.000	0	67.0	30.5	105				
Isophorone	2.72	1.00	4.000	0	68.0	25	121				
4-Methylphenol (p-cresol)	2.01	1.00	4.000	0	50.3	25	106				

Qualifiers:

B	Analyte detected in the associated Method Blank	D	Dilution was required	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

Work Order: 1211072
CLIENT: Calibre
Project: Hytec

QC SUMMARY REPORT

Semi-Volatile Organic Compounds by EPA Method 8270

Sample ID: **1211072-001AMS** SampType: **MS** Units: **µg/L** Prep Date: **11/14/2012** RunNo: **6676**
Client ID: **HLMW-05B-110912** Batch ID: **3640** Analysis Date: **11/27/2012** SeqNo: **133100**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
2-Nitrophenol	2.89	2.00	4.000	0	72.3	25	123				
2,4-Dimethylphenol	2.86	1.00	4.000	0	71.6	25	123				
Bis(2-chloroethoxy)methane	2.70	1.00	4.000	0	67.5	25.4	116				
2,4-Dichlorophenol	2.72	2.00	4.000	0	68.0	34.3	110				
1,2,4-Trichlorobenzene	2.61	1.00	4.000	0	65.2	25	110				
Naphthalene	2.63	0.500	4.000	0	65.8	25	131				
4-Chloroaniline	2.33	5.00	4.000	0	58.3	25	130				
Hexachlorobutadiene	2.54	1.00	4.000	0	63.5	25	105				
4-Chloro-3-methylphenol	2.82	5.00	4.000	0	70.4	36.3	120				
2-Methylnaphthalene	2.71	0.500	4.000	0	67.8	25	119				
1-Methylnaphthalene	2.68	0.500	4.000	0	67.1	25.3	117				
Hexachlorocyclopentadiene	1.88	1.00	4.000	0	47.0	25	114				
2,4,6-Trichlorophenol	2.93	2.00	4.000	0	73.3	25	131				
2,4,5-Trichlorophenol	2.85	2.00	4.000	0	71.2	25	122				
2-Chloronaphthalene	2.75	1.00	4.000	0	68.6	27.3	115				
2-Nitroaniline	2.94	5.00	4.000	0	73.5	27.9	114				
Acenaphthene	2.75	0.500	4.000	0	68.8	25	136				
Dimethylphthalate	2.96	1.00	4.000	0	73.9	31	128				
2,6-Dinitrotoluene	3.05	1.00	4.000	0	76.2	26.9	125				
Acenaphthylene	2.78	0.500	4.000	0	69.5	26.8	122				
2,4-Dinitrophenol	2.17	2.00	4.000	0	54.2	25	148				
Dibenzofuran	2.76	1.00	4.000	0	69.0	27.8	116				
2,4-Dinitrotoluene	3.22	1.00	4.000	0	80.6	25	123				
4-Nitrophenol	1.63	5.00	4.000	0	40.7	20	109				
Fluorene	2.79	0.500	4.000	0	69.8	25	131				
4-Chlorophenyl phenyl ether	2.70	1.00	4.000	0	67.4	28.9	119				
Diethylphthalate	3.16	1.00	4.000	0.06252	77.4	36.6	136				
4,6-Dinitro-2-methylphenol	1.51	5.00	4.000	0	37.8	25	136				
4-Bromophenyl phenyl ether	2.89	1.00	4.000	0	72.1	30.2	124				

Qualifiers:

B	Analyte detected in the associated Method Blank	D	Dilution was required	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

Work Order: 1211072
CLIENT: Calibre
Project: Hytec

QC SUMMARY REPORT

Semi-Volatile Organic Compounds by EPA Method 8270

Sample ID: **1211072-001AMS** SampType: **MS** Units: **µg/L** Prep Date: **11/14/2012** RunNo: **6676**
Client ID: **HLMW-05B-110912** Batch ID: **3640** Analysis Date: **11/27/2012** SeqNo: **133100**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexachlorobenzene	2.85	1.00	4.000	0	71.3	34.6	114				
Pentachlorophenol	2.71	2.00	4.000	0	67.8	25	145				
Phenanthrene	3.07	0.500	4.000	0.04276	75.7	26	139				
Anthracene	3.09	0.500	4.000	0	77.1	34.5	129				
Carbazole	4.09	5.00	4.000	0	102	36.7	143				
Di-n-butyl phthalate	3.81	1.00	4.000	0.2609	88.7	39.7	149				
Fluoranthene	3.45	0.500	4.000	0	86.3	39.3	141				
Pyrene	3.39	0.500	4.000	0	84.7	40.9	137				
Benzyl Butylphthalate	3.89	1.00	4.000	0	97.2	50.5	139				
bis(2-Ethylhexyl)adipate	3.47	1.00	4.000	0.08954	84.4	36.6	145				
Benz[a]anthracene	3.29	0.500	4.000	0	82.4	34.2	124				
Chrysene	3.34	0.500	4.000	0	83.6	44.6	116				
Bis(2-ethylhexyl) phthalate	3.71	1.00	4.000	0.2211	87.2	39.9	143				
Di-n-octyl phthalate	3.59	1.00	4.000	0	89.8	37.5	163				
Benzo (b) fluoranthene	3.19	0.500	4.000	0	79.7	40.7	116				
Benzo (k) fluoranthene	3.28	0.500	4.000	0	82.1	25.5	135				
Benzo[a]pyrene	3.20	0.500	4.000	0	80.0	25	120				
Indeno (1,2,3-cd) pyrene	2.95	0.500	4.000	0	73.9	25	121				
Dibenzo (a,h) anthracene	3.04	0.500	4.000	0	76.0	25	125				
Benzo (g,h,I) perylene	2.95	0.500	4.000	0	73.7	25	124				
Surr: 2,4,6-Tribromophenol	1.12		2.000		56.0	24	138				
Surr: 2-Fluorobiphenyl	0.804		1.000		80.4	38.6	138				
Surr: Nitrobenzene-d5	0.747		1.000		74.7	31.7	140				
Surr: Phenol-d6	0.499		2.000		24.9	15	116				
Surr: p-Terphenyl	0.953		1.000		95.3	49	156				

Qualifiers:

B	Analyte detected in the associated Method Blank	D	Dilution was required	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

Sample Log-In Check List

Client Name: **CLBRE**	Work Order Number: **1211072**
Logged by: **Troy Zehr**	Date Received: **11/12/2012 10:00:00 AM**

Chain of Custody

1.	Were custodial seals present?	Yes	☐	No	☐	Not Required	☑
2.	Is Chain of Custody complete?	Yes	☑	No	☐	Not Present	☐
3.	How was the sample delivered?	Client					

Log In

4.	Coolers are present?	Yes	☑	No	☐	NA	☐
5.	Was an attempt made to cool the samples?	Yes	☑	No	☐	NA	☐
6.	Were all coolers received at a temperature of >0° C to 10.0°C	Yes	☑	No	☐	NA	☐
7.	Sample(s) in proper container(s)?	Yes	☑	No	☐		
8.	Sufficient sample volume for indicated test(s)?	Yes	☑	No	☐		
9.	Are samples properly preserved?	Yes	☑	No	☐		
10.	Was preservative added to bottles?	Yes	☐	No	☑	NA	☐
11.	Is there headspace present in VOA vials?	Yes	☐	No	☐	NA	☑
12.	Did all sample containers arrive in good condition?(unbroken)	Yes	☑	No	☐		
13.	Does paperwork match bottle labels?	Yes	☑	No	☐		
14.	Are matrices correctly identified on Chain of Custody?	Yes	☑	No	☐		
15.	Is it clear what analyses were requested?	Yes	☑	No	☐		
16.	Were all holding times able to be met?	Yes	☑	No	☐		

Special Handling (if applicable)

17.	Was client notified of all discrepancies with this order?	Yes	☐	No	☐	NA	☑

Person Notified: _____ Date: _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

18. Additional remarks/Disrepancies

Item Information

Item #	Temp ºC	Condition
Cooler	1.5	Good
Sample	5.4	Good

Fremont Analytical

Chain of Custody Record

1311 N. 35th Street
Seattle, WA 98103
Tel: 206-352-3790
Fax: 206-352-7178

Laboratory Project No (internal): 1211012

Date: 11/9/12

Page: 1 of: 1

Client: Calibre
Address:
City, State, Zip: Tel:
Reports To (PM): Tom McKeon Fax: Email:

Project Name: Hytec
Location: HLMW-03B
Collected by: GWD
Project No: Hytec/Kustin

Sample Name	Sample Date	Sample Time	Sample Type (Matrix)	VOC (EPA 8260)	GX/BTEX by EPA 8021b	BTEX by 8260	Gasoline Range Organics	Hydrocarbon Identification (HCID)	Diesel/Heavy Oil Range Organics	SilvaGel (EPA 8270)	PAH (EPA 8270 - SIM)	PCBs (EPA 8082)	Cl Pesticides (EPA 8081)	Cl Herbicides (EPA 8151A)	Metals* (6020 / 200.8)	Total (T) / Dissolved (D)	Anions (IC)**	Comments/Depth
1 HLMW-03B-110912	11/9/12	1420	H_2O							X								
2 Hytec-EQ-110912	11/9/12	1455	H_2O							X								
3																		
4																		
5																		
6																		
7																		
8																		
9																		
10																		

*Metals Analysis (Circle): MTCA 5 RCRA-8 Priority Pollutants TAL Individual: Ag Al As B Ba Be Ca Cd Co Cr Cu Fe Hg K Mg Mn Mo Na Ni Pb Sb Se Si Sn Tl Ti U V Zn

**Anions (Circle): Sulfate Nitrite Chloride Sulfate Bromide O-Phosphate Fluoride Nitrate+Nitrite

Sample Disposal: ☐ Return to Client: ☐ Disposal by Lab (A fee may be assessed if samples are not picked up within 30 days)

Special Remarks:

Relinquished	Date/Time	Received	Date/Time
x [signature]	11/12/12 1000	x [signature]	11/12/12 1000
Relinquished	Date/Time	Received	Date/Time
x		x	

TAT: Next Day 1 Day 3 Day STD

Distribution: White - Lab, Yellow - File, Pink - Originator

www.fremontanalytical.com

November 2012

Department of Ecology Laboratory Analytical Report

Manchester Environmental Laboratory

7411 Beach Dr E, Port Orchard, Washington 98366

Case Narrative

December 12, 2012

Project:	Hy Tec-Fiberglass Landfill
Laboratory Sample No(s):	1211040-01
Project Manager:	Mohsen Kourehdar
By:	Dickey Huntamer

Semivolatiles

BNA

Analytical Method(s)

These samples extracted with methylene chloride following a modification of EPA Method 3510. The extracts were analyzed following a modification of EPA Method 8270D

Holding Times

All samples were received in good condition, within the proper temperature <6° C and were prepared and analyzed within method holding times.

Instrument Tuning

Calibration against DFTPP is acceptable for the initial calibration, continuing calibration, and all associated sample analyses.

Initial Calibration

The initial calibration (ICAL), Initial Calibration Verification (ICV), and back calculations (BC) were within QC limits with the following exceptions.

The ICAL RSD was greater than 15% for 3B-coprostanol, and 4-nitroaniline.

The ICV was low for 4-chloroaniline, 3-nitroaniline, 4-nitroaniline, and carbazole. Both 3B-coprostanol and cholesterol were high but were not detected so no qualifiers were added

The BC for Bisphenol A, 3B-coprostanol, and 4-nitroaniline were outside the limits. Qualifiers were added as shown in, Table 1.

Table 1

Compound	Sample IDs	Qual
3-Nitroaniline	1211040-01, B12K086-BLK1	UJ
4-Chloroaniline		
4-Nitroaniline		
3B-Coprostanol		
Bisphenol A		
Carbazole		

Continuing Calibration

The continuing calibration verifications (CCVs) were within QC limits.

Internal Standards

All internal standards were within QC limits.

Method Blank(s)

Di-N-butylphthalate, bis(2-ethylhexyl) phthalate and 4-nonylphenol were detected in the laboratory blank B12K086-BLK1.

4-Nonylphenol was not detected in the sample. The amount of di-N-butylphthalate in the sample was less than 10 times the blank amount and less than the reporting limit. Therefore results were raised to the reporting limit and marked as not detected. Bis(2-ethylhexyl) phthalate was less than 10 times the blank amount but greater than the reporting limit. Qualifiers were added as shown in, Table 2.

Table 2

Compound	Sample IDs	Qual
Bis(2-ethylhexyl) phthalate	1211040-01	UJ

Laboratory Control Samples

The spike recoveries were within QC limits with the following exceptions.

2-Nitroaniline, dimethyl phthalate, 2,6-dinitrotoluene, diethyl phthalate, 4,6-dinitro-2-methylphenol, 4-chlorophenyl-phenyl ether, pentachlorophenol, phenanthrene, anthracene, caffeine, 4-nonylphenol, di-N-butyl phthalate, fluoranthene, retene, benz(a)anthracene, chrysene and bis(2-ethylhexyl) phthalate were low in one or both LCS samples. The Relative Percent Differences (RPD) were within QC limits. Qualifiers were added as shown in, Table 3.

Table 3.

Compound	Sample IDs	Qual
2-Nitroaniline	1211040-01, B12K086-BLK1	UJ
Dimethyl phthalate,		
2,6-Dinitrotoluene		
Diethyl phthalate		
4,6-Dinitro-2-methylphenol		
4-Chlorophenyl-phenyl ether		
Pentachlorophenol		
Phenanthrene		
Anthracene		
Caffeine		
4-Nonylphenol		
Fluoranthene		
Retene		
Benz(a)anthracene		
Chrysene		
Di-N-butyl phthalate	1211040-01	UJ
	B12K086-BLK1	J
Bis(2-ethylhexyl) phthalate	1211040-01	UJ
	B12K086-BLK1	J

Surrogates

All surrogate recoveries were within QC limits with the following exceptions.

4-Chloroaniline–D4 was less than 10% and 4-Nitrophenol-D4 was low in sample 1211040-01. 4-Chloroaniline was low in the QC samples, B12K086-BS1 and BSD1. Qualifiers were added as shown in, Table 4.

Table 4

Compound	Sample IDs	Qual
4-Nitrophenol	1211040-01	UJ
4-chloroaniline	1211040-01	REJ

Matrix Spikes

No matrix spikes using these samples were analyzed.

Duplicates

No duplicates were run with these samples.

Qualitative Identification

The spectra of the reported compounds were within QC limits.

Comments

There were no other QC concerns.

Data Qualifier Codes

U	-	The analyte was analyzed for, but was not detected above the reported quantitation limit.
J	-	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
UJ	-	The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary and precisely measure the analyte sample.
REJ	-	The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.
N	-	The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification".
NJ	-	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.
NC	-	Not Calculated
NAF	-	Not analyzed for.
E	-	This qualifier is used when the concentration of the associated value exceeds the known calibration range. Use the dilution value for this analysis when available.
Bold	-	The analyte was detected in the sample. (Visual Aid to locate detected compounds on report sheet.)

Washington State Department of Ecology
Manchester Environmental Laboratory
Final Report for
Base/Neutral/Acids

Project: HyTec-Fiberglass Landfill

Field ID: HLMW05B

Work Order: 1211040
Project Officer: Kourehdar, Mohsen
Initial Vol: 3250 mL
Final Vol: 1 mL

Lab ID #: 1211040-01
Collected: 11/9/2012
Prep Method: SW3510C
Analysis Method: SW8270

Batch ID: B12K086
Prepared: 11/13/2012
Analyzed: 12/6/2012
Matrix: Water
Units: ug/L

CAS#	Analyte	Result	Qualifier	RL	MDL
120-82-1	1,2,4-Trichlorobenzene	0.077	U	0.077	0.019
95-50-1	1,2-Dichlorobenzene	0.077	U	0.077	0.018
122-66-7	1,2-Diphenylhydrazine	0.077	U	0.077	0.049
541-73-1	1,3-Dichlorobenzene	0.077	U	0.077	0.016
106-46-7	1,4-Dichlorobenzene	0.077	U	0.077	0.017
90-12-0	1-Methylnaphthalene	0.077	U	0.077	0.050
95-95-4	2,4,5-Trichlorophenol	0.77	U	0.77	0.061
88-06-2	2,4,6-Trichlorophenol	0.31	U	0.31	0.047
120-83-2	2,4-Dichlorophenol	0.77	U	0.77	0.040
105-67-9	2,4-Dimethylphenol	0.77	U	0.77	0.045
51-28-5	2,4-Dinitrophenol	0.77	U	0.77	
121-14-2	2,4-Dinitrotoluene	0.31	U	0.31	0.043
606-20-2	2,6-Dinitrotoluene	0.31	UJ	0.31	0.052
91-58-7	2-Chloronaphthalene	0.15	U	0.15	0.049
95-57-8	2-Chlorophenol	0.31	U	0.31	0.040
91-57-6	2-Methylnaphthalene	0.077	U	0.077	0.046
95-48-7	2-Methylphenol	0.77	U	0.77	0.039
88-74-4	2-Nitroaniline	1.5	UJ	1.5	0.051
88-75-5	2-Nitrophenol	0.31	U	0.31	0.035
91-94-1	3,3'-Dichlorobenzidine	0.31	U	0.31	0.015
360-68-9	3B-Coprostanol	1.5	UJ	1.5	0.023
99-09-2	3-Nitroaniline	0.31	UJ	0.31	0.044
534-52-1	4,6-Dinitro-2-Methylphenol	1.5	UJ	1.5	0.51
101-55-3	4-Bromophenyl phenyl ether	0.15	U	0.15	0.069
59-50-7	4-Chloro-3-Methylphenol	0.77	U	0.77	0.061
106-47-8	4-Chloroaniline		REJ	3.1	0.12
7005-72-3	4-Chlorophenyl-Phenylether	0.077	UJ	0.077	0.069
106-44-5	4-Methylphenol	0.77	U	0.77	0.038
100-01-6	4-Nitroaniline	0.77	UJ	0.77	
100-02-7	4-Nitrophenol	0.77	UJ	0.77	0.016
104-40-5	4-nonylphenol	0.31	UJ	0.31	0.031
83-32-9	Acenaphthene	0.077	U	0.077	0.075
208-96-8	Acenaphthylene	0.077	U	0.077	0.058
120-12-7	Anthracene	0.15	UJ	0.15	0.079
56-55-3	Benz[a]anthracene	0.15	UJ	0.15	0.089
50-32-8	Benzo(a)pyrene	0.077	U	0.077	0.037
205-99-2	Benzo(b)fluoranthene	0.077	U	0.077	0.036
191-24-2	Benzo(ghi)perylene	0.15	U	0.15	0.079
207-08-9	Benzo(k)fluoranthene	0.077	U	0.077	0.074
65-85-0	Benzoic Acid	1.5	U	1.5	
100-51-6	Benzyl Alcohol	0.77	U	0.77	0.027
108-60-1	Bis(2-chloro-1-methylethyl) ether	0.077	U	0.077	0.051
111-91-1	Bis(2-Chloroethoxy)Methane	0.077	U	0.077	0.064
111-44-4	Bis(2-Chloroethyl)Ether	0.15	U	0.15	0.044
117-81-7	Bis(2-Ethylhexyl) Phthalate	0.31	UJ	0.31	0.046
80-05-7	Bisphenol A	0.31	UJ	0.31	0.031
85-68-7	Butyl benzyl phthalate	0.31	U	0.31	0.036
58-08-2	Caffeine	0.31	UJ	0.31	0.060
86-74-8	Carbazole	0.15	UJ	0.15	0.0079

Washington State Department of Ecology
Manchester Environmental Laboratory
Final Report for
Base/Neutral/Acids

Project: HyTec-Fiberglass Landfill — Field ID: HLMW05B

Work Order: 1211040
Project Officer: Kourehdar, Mohsen
Initial Vol: 3250 mL
Final Vol: 1 mL

Lab ID #: 1211040-01
Collected: 11/9/2012
Prep Method: SW3510C
Analysis Method: SW8270

Batch ID: B12K086
Prepared: 11/13/2012
Analyzed: 12/6/2012
Matrix: Water
Units: ug/L

CAS#	Analyte	Result	Qualifier	RL	MDL
57-88-5	Cholesterol	1.5	U	1.5	0.073
218-01-9	Chrysene	0.15	UJ	0.15	0.092
53-70-3	Dibenzo(a,h)anthracene	0.077	U	0.077	0.072
132-64-9	Dibenzofuran	0.15	U	0.15	0.069
84-66-2	Diethyl phthalate	0.15	UJ	0.15	0.076
131-11-3	Dimethyl phthalate	0.15	UJ	0.15	0.067
84-74-2	Di-N-Butylphthalate	0.077	UJ	0.077	0.056
117-84-0	Di-N-Octyl Phthalate	1.5	U	1.5	0.068
206-44-0	Fluoranthene	0.15	UJ	0.15	0.094
86-73-7	Fluorene	0.077	U	0.077	0.075
118-74-1	Hexachlorobenzene	0.077	U	0.077	0.038
87-68-3	Hexachlorobutadiene	0.077	U	0.077	0.012
77-47-4	Hexachlorocyclopentadiene	0.31	U	0.31	0.0097
67-72-1	Hexachloroethane	0.077	U	0.077	0.018
193-39-5	Indeno(1,2,3-cd)pyrene	0.077	U	0.077	0.073
78-59-1	Isophorone	1.5	U	1.5	0.071
91-20-3	Naphthalene	0.077	U	0.077	0.043
98-95-3	Nitrobenzene	0.15	U	0.15	0.064
621-64-7	N-Nitrosodi-n-propylamine	0.077	U	0.077	0.068
86-30-6	N-Nitrosodiphenylamine	0.15	U	0.15	0.032
87-86-5	Pentachlorophenol	0.077	UJ	0.077	
85-01-8	Phenanthrene	0.15	UJ	0.15	0.083
108-95-2	Phenol	0.31	U	0.31	0.024
129-00-0	Pyrene	0.15	U	0.15	0.10
483-65-8	Retene	0.15	UJ	0.15	0.084
3380-34-5	Triclosan	0.15	U	0.15	0.031
77-93-0	Triethyl citrate	0.31	U	0.31	0.031
115-96-8	Tris(2-chloroethyl) phosphate (TCEP)	0.077	U	0.077	0.031

Surrogate Recovery:

CAS#	Analyte	Result	Spike Level	% Rec.	% Rec. Limits
2199-69-1	**1,2-Dichlorobenzene-D4**	**1.48**	2.46	**60**	15-98
93951-74-7	**2,4-Dichlorophenol-D3**	**1.71**	2.46	**70**	50-150
93951-73-6	**2-Chlorophenol-D4**	**1.86**	2.46	**76**	44-112
321-60-8	**2-Fluorobiphenyl**	**1.25**	2.46	**51**	19-116
367-12-4	**2-Fluorophenol**	**1.03**	2.46	**42**	10-91
93951-78-1	**2-Nitrophenol-D4**	**1.89**	2.46	**77**	20-120
93951-76-9	**4,6-Dinitro-2-methylphenol-D2**	**1.30**	2.46	**53**	50-150
191656-33-4	**4-Chloroaniline-D4**	**0.212**	2.46	**9**	20-120
190780-66-6	**4-Methylphenol-D8**	**1.27**	2.46	**52**	50-150
93951-79-2	**4-Nitrophenol-D4**	**0.384**	2.46	**16**	20-120
93951-97-4	**Acenaphthylene-D8**	**1.40**	2.46	**57**	50-150
1719-06-8	**Anthracene-D10**	**1.49**	2.46	**61**	50-150
63466-71-7	**Benzo(a)pyrene-D12**	**1.79**	2.46	**73**	50-150
93952-02-4	**Bis(2-Chloroethyl)Ether-D8**	**1.88**	2.46	**76**	50-150
85448-30-2	**Dimethylphthalate-D6**	**1.48**	2.46	**60**	50-150
81103-79-9	**Fluorene-D10**	**1.42**	2.46	**58**	50-150
4165-60-0	**Nitrobenzene-D5**	1.96	2.46	**80**	50-118

Washington State Department of Ecology
Manchester Environmental Laboratory
Final Report for
Base/Neutral/Acids

Project: HyTec-Fiberglass Landfill — Field ID: HLMW05B

Work Order: 1211040
Project Officer: Kourehdar, Mohsen
Initial Vol: 3250 mL
Final Vol: 1 mL

Lab ID #: 1211040-01
Collected: 11/9/2012
Prep Method: SW3510C
Analysis Method: SW8270

Batch ID: B12K086
Prepared: 11/13/2012
Analyzed: 12/6/2012
Matrix: Water
Units: ug/L

Surrogate Recovery:

CAS#	Analyte	Result	Spike Level	% Rec.	% Rec. Limits
4165-62-2	Phenol-D5	0.579	2.46	24	10-66
1718-52-1	Pyrene-D10	1.58	2.46	64	57-134
1718-51-0	Terphenyl-D14	0.798	1.23	65	42-145

Authorized by: _____ Release Date: 12/13/12

Printed: 12/13/2012

Washington State Department of Ecology
Manchester Environmental Laboratory
Final Report for
Base/Neutral/Acids

Project: HyTec-Fiberglass Landfill

QC Type : Method Blank

Work Order: 1211040
Project Officer: Kourehdar, Mohsen
Initial Vol: 3000 mL
Final Vol: 1 mL

Lab ID #: B12K086-BLK1
Prep Method: SW3510C
Analysis Method: SW8270
Source Field ID: Blank

Batch ID: B12K086
Prepared: 11/13/2012
Analyzed: 12/6/2012
Matrix: Water
Units: ug/L

CAS#	Analyte	Result	Qualifier	RL	MDL
120-82-1	1,2,4-Trichlorobenzene	0.083	U	0.083	0.021
95-50-1	1,2-Dichlorobenzene	0.083	U	0.083	0.020
122-66-7	1,2-Diphenylhydrazine	0.083	U	0.083	0.053
541-73-1	1,3-Dichlorobenzene	0.083	U	0.083	0.017
106-46-7	1,4-Dichlorobenzene	0.083	U	0.083	0.018
90-12-0	1-Methylnaphthalene	0.083	U	0.083	0.054
95-95-4	2,4,5-Trichlorophenol	0.83	U	0.83	0.066
88-06-2	2,4,6-Trichlorophenol	0.33	U	0.33	0.050
120-83-2	2,4-Dichlorophenol	0.83	U	0.83	0.044
105-67-9	2,4-Dimethylphenol	0.83	U	0.83	0.049
51-28-5	2,4-Dinitrophenol	0.83	U	0.83	
121-14-2	2,4-Dinitrotoluene	0.33	U	0.33	0.047
606-20-2	2,6-Dinitrotoluene	0.33	UJ	0.33	0.057
91-58-7	2-Chloronaphthalene	0.17	U	0.17	0.053
95-57-8	2-Chlorophenol	0.33	U	0.33	0.043
91-57-6	2-Methylnaphthalene	0.083	U	0.083	0.050
95-48-7	2-Methylphenol	0.83	U	0.83	0.042
88-74-4	2-Nitroaniline	1.7	UJ	1.7	0.056
88-75-5	2-Nitrophenol	0.33	U	0.33	0.037
91-94-1	3,3'-Dichlorobenzidine	0.33	U	0.33	0.017
360-68-9	3B-Coprostanol	1.7	UJ	1.7	0.025
99-09-2	3-Nitroaniline	0.33	UJ	0.33	0.048
534-52-1	4,6-Dinitro-2-Methylphenol	1.7	UJ	1.7	0.56
101-55-3	4-Bromophenyl phenyl ether	0.17	U	0.17	0.075
59-50-7	4-Chloro-3-Methylphenol	0.83	U	0.83	0.066
106-47-8	4-Chloroaniline	3.3	UJ	3.3	0.13
7005-72-3	4-Chlorophenyl-Phenylether	0.083	UJ	0.083	0.074
106-44-5	4-Methylphenol	0.83	U	0.83	0.041
100-01-6	4-Nitroaniline	0.83	UJ	0.83	
100-02-7	4-Nitrophenol	0.83	U	0.83	0.017
104-40-5	**4-nonylphenol**	**0.11**	**J**	0.33	0.033
83-32-9	Acenaphthene	0.083	U	0.083	0.081
208-96-8	Acenaphthylene	0.083	U	0.083	0.063
120-12-7	Anthracene	0.17	UJ	0.17	0.085
56-55-3	Benz[a]anthracene	0.17	UJ	0.17	0.096
50-32-8	Benzo(a)pyrene	0.083	U	0.083	0.041
205-99-2	Benzo(b)fluoranthene	0.083	U	0.083	0.039
191-24-2	Benzo(ghi)perylene	0.17	U	0.17	0.086
207-08-9	Benzo(k)fluoranthene	0.083	U	0.083	0.080
65-85-0	Benzoic Acid	1.7	U	1.7	
100-51-6	Benzyl Alcohol	0.83	U	0.83	0.029
108-60-1	Bis(2-chloro-1-methylethyl) ether	0.083	U	0.083	0.056
111-91-1	Bis(2-Chloroethoxy)Methane	0.083	U	0.083	0.069
111-44-4	Bis(2-Chloroethyl)Ether	0.17	U	0.17	0.048
117-81-7	**Bis(2-Ethylhexyl) Phthalate**	**0.11**	**J**	0.33	0.050
80-05-7	Bisphenol A	0.33	UJ	0.33	0.033
85-68-7	Butyl benzyl phthalate	0.33	U	0.33	0.039
58-08-2	Caffeine	0.33	UJ	0.33	0.065
86-74-8	Carbazole	0.17	UJ	0.17	0.0085

Washington State Department of Ecology
Manchester Environmental Laboratory
Final Report for
Base/Neutral/Acids

Project: HyTec-Fiberglass Landfill

QC Type : Method Blank

Work Order: 1211040
Project Officer: Kourehdar, Mohsen
Initial Vol: 3000 mL
Final Vol: 1 mL

Lab ID #: B12K086-BLK1
Prep Method: SW3510C
Analysis Method: SW8270
Source Field ID: Blank

Batch ID: B12K086
Prepared: 11/13/2012
Analyzed: 12/6/2012
Matrix: Water
Units: ug/L

CAS#	Analyte	Result	Qualifier	RL	MDL
57-88-5	Cholesterol	1.7	U	1.7	0.079
218-01-9	Chrysene	0.17	UJ	0.17	0.099
53-70-3	Dibenzo(a,h)anthracene	0.083	U	0.083	0.078
132-64-9	Dibenzofuran	0.17	U	0.17	0.074
84-66-2	Diethyl phthalate	0.17	UJ	0.17	0.082
131-11-3	Dimethyl phthalate	0.17	UJ	0.17	0.072
84-74-2	**Di-N-Butylphthalate**	**0.31**	**J**	0.083	0.061
117-84-0	Di-N-Octyl Phthalate	1.7	U	1.7	0.074
206-44-0	Fluoranthene	0.17	UJ	0.17	0.10
86-73-7	Fluorene	0.083	U	0.083	0.081
118-74-1	Hexachlorobenzene	0.083	U	0.083	0.041
87-68-3	Hexachlorobutadiene	0.083	U	0.083	0.013
77-47-4	Hexachlorocyclopentadiene	0.33	U	0.33	0.010
67-72-1	Hexachloroethane	0.083	U	0.083	0.019
193-39-5	Indeno(1,2,3-cd)pyrene	0.083	U	0.083	0.079
78-59-1	Isophorone	1.7	U	1.7	0.077
91-20-3	Naphthalene	0.083	U	0.083	0.046
98-95-3	Nitrobenzene	0.17	U	0.17	0.069
621-64-7	N-Nitrosodi-n-propylamine	0.083	U	0.083	0.074
86-30-6	N-Nitrosodiphenylamine	0.17	U	0.17	0.035
87-86-5	Pentachlorophenol	0.083	UJ	0.083	
85-01-8	Phenanthrene	0.17	UJ	0.17	0.090
108-95-2	Phenol	0.33	U	0.33	0.026
129-00-0	Pyrene	0.17	U	0.17	0.11
483-65-8	Retene	0.17	UJ	0.17	0.091
3380-34-5	Triclosan	0.17	U	0.17	0.033
77-93-0	Triethyl citrate	0.33	U	0.33	0.033
115-96-8	Tris(2-chloroethyl) phosphate (TCEP)	0.083	U	0.083	0.033

Surrogate Recovery:

CAS#	Analyte	Result	Spike Level	% Rec.	% Rec. Limits
2199-69-1	**1,2-Dichlorobenzene-D4**	**1.54**	2.67	**58**	15-98
93951-74-7	**2,4-Dichlorophenol-D3**	**1.84**	2.67	**69**	50-150
93951-73-6	**2-Chlorophenol-D4**	**2.22**	2.67	**83**	44-112
321-60-8	**2-Fluorobiphenyl**	**1.42**	2.67	**53**	19-116
367-12-4	**2-Fluorophenol**	**2.00**	2.67	**75**	10-91
93951-78-1	**2-Nitrophenol-D4**	**2.04**	2.67	**77**	20-120
93951-76-9	**4,6-Dinitro-2-methylphenol-D2**	**1.38**	2.67	**52**	50-150
191656-33-4	**4-Chloroaniline-D4**	**0.914**	2.67	**34**	20-120
190780-66-6	**4-Methylphenol-D8**	**2.12**	2.67	**80**	50-150
93951-79-2	**4-Nitrophenol-D4**	**1.10**	2.67	**41**	20-120
93951-97-4	**Acenaphthylene-D8**	**1.56**	2.67	**58**	50-150
1719-06-8	**Anthracene-D10**	**1.66**	2.67	**62**	50-150
63466-71-7	**Benzo(a)pyrene-D12**	**2.05**	2.67	**77**	50-150
93952-02-4	**Bis(2-Chloroethyl)Ether-D8**	**2.11**	2.67	**79**	50-150
85448-30-2	**Dimethylphthalate-D6**	**1.68**	2.67	**63**	50-150
81103-79-9	**Fluorene-D10**	**1.59**	2.67	**60**	50-150
4165-60-0	**Nitrobenzene-D5**	**2.17**	2.67	**81**	50-118

Washington State Department of Ecology
Manchester Environmental Laboratory
Final Report for
Base/Neutral/Acids

Project: HyTec-Fiberglass Landfill

QC Type : Method Blank

Work Order: 1211040
Project Officer: Kourehdar, Mohsen
Initial Vol: 3000 mL
Final Vol: 1 mL

Lab ID #: B12K086-BLK1
Prep Method: SW3510C
Analysis Method: SW8270
Source Field ID: Blank

Batch ID: B12K086
Prepared: 11/13/2012
Analyzed: 12/6/2012
Matrix: Water
Units: ug/L

Surrogate Recovery:

CAS#	Analyte	Result	Spike Level	% Rec.	% Rec. Limits
4165-62-2	Phenol-D5	1.55	2.67	58	10-66
1718-52-1	Pyrene-D10	1.77	2.67	66	57-134
1718-51-0	Terphenyl-D14	0.907	1.33	68	42-145

Authorized by: _____ Release Date: 12/13/12

Printed: 12/13/2012

Washington State Department of Ecology
Manchester Environmental Laboratory
Final Report for
Base/Neutral/Acids

Project: HyTec-Fiberglass Landfill

QC Type : LCS

Work Order: 1211040
Project Officer: Kourehdar, Mohsen
Initial Vol: 3000 mL
Final Vol: 1 mL

Lab ID #: B12K086-BS1
Prep Method: SW3510C
Analysis Method: SW8270
Source Field ID: LCS

Batch ID: B12K086
Prepared: 11/13/2012
Analyzed: 12/6/2012
Matrix: Water
Units: ug/L

Analyte	Result	Spike Level	RL	%Rec	%Rec Limits
1,2,4-Trichlorobenzene	1.56	3.33	0.083	47	16-92
1,2-Dichlorobenzene	1.65	3.33	0.083	50	19-90
1,2-Diphenylhydrazine	2.01	3.33	0.083	60	50-150
1,3-Dichlorobenzene	1.53	3.33	0.083	46	13-90
1,4-Dichlorobenzene	1.57	3.33	0.083	47	14-92
1-Methylnaphthalene	1.99	3.33	0.083	60	33-110
2,4,5-Trichlorophenol	1.97	3.33	0.83	59	46-141
2,4,6-Trichlorophenol	1.96	3.33	0.33	59	51-141
2,4-Dichlorophenol	2.40	3.33	0.83	72	66-115
2,4-Dimethylphenol	2.46	3.33	0.83	74	59-127
2,4-Dinitrophenol	2.06	3.33	0.83	62	42-135
2,4-Dinitrotoluene	2.14	3.33	0.33	64	64-136
2,6-Dinitrotoluene	2.09	3.33	0.33	63	65-131
2-Chloronaphthalene	1.55	3.33	0.17	47	21-127
2-Chlorophenol	2.58	3.33	0.33	77	66-109
2-Methylnaphthalene	1.94	3.33	0.083	58	29-112
2-Methylphenol	2.53	3.33	0.83	76	55-117
2-Nitroaniline	2.06	3.33	1.7	62	64-136
2-Nitrophenol	2.47	3.33	0.33	74	64-115
3,3'-Dichlorobenzidine	2.20	3.33	0.33	66	10-178
3B-Coprostanol	7.79	6.67	1.7	117	10-154
3-Nitroaniline	2.25	3.33	0.33	67	10-393
4,6-Dinitro-2-Methylphenol	2.13	3.33	1.7	64	67-133
4-Bromophenyl phenyl ether	1.66	3.33	0.17	50	47-113
4-Chloro-3-Methylphenol	2.50	3.33	0.83	75	60-129
4-Chloroaniline	0.587	3.33	3.3	18	10-150
4-Chlorophenyl-Phenylether	1.57	3.33	0.083	47	47-113
4-Methylphenol	2.40	3.33	0.83	72	43-127
4-Nitroaniline	2.59	3.33	0.83	78	14-299
4-Nitrophenol	1.50	3.33	0.83	45	10-134
4-nonylphenol	2.09	3.33	0.33	63	77-215
Acenaphthene	1.73	3.33	0.083	52	17-169
Acenaphthylene	1.74	3.33	0.083	52	46-118
Anthracene	2.08	3.33	0.17	62	66-121
Benz[a]anthracene	2.25	3.33	0.17	67	84-130
Benzo(a)pyrene	2.70	3.33	0.083	81	70-145
Benzo(b)fluoranthene	2.69	3.33	0.083	81	71-140
Benzo(ghi)perylene	2.78	3.33	0.17	83	61-141
Benzo(k)fluoranthene	2.74	3.33	0.083	82	73-141
Benzoic Acid	1.70	6.67	1.7	25	10-96
Benzyl Alcohol	2.06	3.33	0.83	62	10-97
Bis(2-chloro-1-methylethyl) ether	2.63	3.33	0.083	79	63-105
Bis(2-Chloroethoxy)Methane	2.53	3.33	0.083	76	65-116
Bis(2-Chloroethyl)Ether	2.61	3.33	0.17	78	65-110
Bis(2-Ethylhexyl) Phthalate	2.21	3.33	0.33	66	80-128
Bisphenol A	2.58	3.33	0.33	77	11-203
Butyl benzyl phthalate	2.29	3.33	0.33	69	23-183
Caffeine	1.85	3.33	0.33	55	62-114
Carbazole	2.23	3.33	0.17	67	59-139

Washington State Department of Ecology
Manchester Environmental Laboratory
Final Report for
Base/Neutral/Acids

Project: HyTec-Fiberglass Landfill — QC Type : LCS

Work Order: 1211040
Project Officer: Kourehdar, Mohsen
Initial Vol: 3000 mL
Final Vol: 1 mL

Lab ID #: B12K086-BS1
Prep Method: SW3510C
Analysis Method: SW8270
Source Field ID: LCS

Batch ID: B12K086
Prepared: 11/13/2012
Analyzed: 12/6/2012
Matrix: Water
Units: ug/L

Analyte	Result	Spike Level	RL	%Rec	%Rec Limits
Cholesterol	7.60	6.67	1.7	114	10-140
Chrysene	2.30	3.33	0.17	69	82-128
Dibenzo(a,h)anthracene	2.96	3.33	0.083	89	65-130
Dibenzofuran	1.77	3.33	0.17	53	47-126
Diethyl phthalate	2.17	3.33	0.17	65	77-123
Dimethyl phthalate	2.15	3.33	0.17	65	74-122
Di-N-Butylphthalate	2.26	3.33	0.083	68	70-156
Di-N-Octyl Phthalate	2.66	3.33	1.7	80	75-135
Fluoranthene	2.15	3.33	0.17	65	72-124
Fluorene	1.83	3.33	0.083	55	50-134
Hexachlorobenzene	1.81	3.33	0.083	54	53-114
Hexachlorobutadiene	1.29	3.33	0.083	39	10-90
Hexachlorocyclopentadiene	0.862	3.33	0.33	26	10-76
Hexachloroethane	1.42	3.33	0.083	43	12-79
Indeno(1,2,3-cd)pyrene	2.59	3.33	0.083	78	61-139
Isophorone	2.30	3.33	1.7	69	50-103
Naphthalene	2.02	3.33	0.083	61	34-114
Nitrobenzene	2.59	3.33	0.17	78	67-108
N-Nitrosodi-n-propylamine	2.61	3.33	0.083	78	60-128
N-Nitrosodiphenylamine	2.07	3.33	0.17	62	10-209
Pentachlorophenol	1.94	3.33	0.083	58	64-140
Phenanthrene	2.00	3.33	0.17	60	63-126
Phenol	1.63	3.33	0.33	49	41-81
Pyrene	2.25	3.33	0.17	67	64-140
Retene	2.22	3.33	0.17	67	75-135
Triclosan	1.92	3.33	0.17	58	54-126
Triethyl citrate	2.19	3.33	0.33	66	27-123
Tris(2-chloroethyl) phosphate (TCEP)	2.16	3.33	0.083	65	50-150

Surrogate Recovery:

CAS#	Analyte	Result	Spike Level	% Rec.	% Rec. Limits
2199-69-1	1,2-Dichlorobenzene-D4	1.70	2.67	64	15-98
93951-74-7	2,4-Dichlorophenol-D3	1.84	2.67	69	50-150
93951-73-6	2-Chlorophenol-D4	2.08	2.67	78	44-112
321-60-8	2-Fluorobiphenyl	1.44	2.67	54	19-116
367-12-4	2-Fluorophenol	1.73	2.67	65	10-91
93951-78-1	2-Nitrophenol-D4	1.95	2.67	73	20-120
93951-76-9	4,6-Dinitro-2-methylphenol-D2	1.65	2.67	62	50-150
191656-33-4	4-Chloroaniline-D4	0.454	2.67	17	20-120
190780-66-6	4-Methylphenol-D8	1.98	2.67	74	50-150
93951-79-2	4-Nitrophenol-D4	1.17	2.67	44	20-120
93951-97-4	Acenaphthylene-D8	1.54	2.67	58	50-150
1719-06-8	Anthracene-D10	1.69	2.67	63	50-150
63466-71-7	Benzo(a)pyrene-D12	2.08	2.67	78	50-150
93952-02-4	Bis(2-Chloroethyl)Ether-D8	2.02	2.67	76	50-150
85448-30-2	Dimethylphthalate-D6	1.68	2.67	63	50-150
81103-79-9	Fluorene-D10	1.54	2.67	58	50-150
4165-60-0	Nitrobenzene-D5	2.03	2.67	76	50-118

Washington State Department of Ecology
Manchester Environmental Laboratory
Final Report for
Base/Neutral/Acids

Project: HyTec-Fiberglass Landfill **QC Type : LCS**

Work Order: 1211040
Project Officer: Kourehdar, Mohsen
Initial Vol: 3000 mL
Final Vol: 1 mL

Lab ID #: B12K086-BS1
Prep Method: SW3510C
Analysis Method: SW8270
Source Field ID: LCS

Batch ID: B12K086
Prepared: 11/13/2012
Analyzed: 12/6/2012
Matrix: Water
Units: ug/L

Surrogate Recovery:

CAS#	Analyte	Result	Spike Level	% Rec.	% Rec. Limits
4165-62-2	Phenol-D5	1.41	2.67	53	10-66
1718-52-1	Pyrene-D10	1.77	2.67	66	57-134
1718-51-0	Terphenyl-D14	0.908	1.33	68	42-145

Authorized by: _____ Release Date: 12/15/12

Printed: 12/13/2012

Washington State Department of Ecology
Manchester Environmental Laboratory
Final Report for
Base/Neutral/Acids

Project: HyTec-Fiberglass Landfill

QC Type : LCS Dup

Work Order: 1211040
Project Officer: Kourehdar, Mohsen
Initial Vol: 3000 mL
Final Vol: 1 mL

Lab ID #: B12K086-BSD1
Prep Method: SW3510C
Analysis Method: SW8270
Source Field ID: LCS Dup

Batch ID: B12K086
Prepared: 11/13/2012
Analyzed: 12/6/2012
Matrix: Water
Units: ug/L

Analyte	Sample Result	Spike Level	%Rec	RPD	%Rec Limits	RPD Limit
1,2,4-Trichlorobenzene	1.42	3.33	43	9	16-92	40
1,2-Dichlorobenzene	1.54	3.33	46	7	19-90	40
1,2-Diphenylhydrazine	2.01	3.33	60	0.4	50-150	40
1,3-Dichlorobenzene	1.37	3.33	41	11	13-90	40
1,4-Dichlorobenzene	1.43	3.33	43	9	14-92	40
1-Methylnaphthalene	1.98	3.33	60	0.5	33-110	40
2,4,5-Trichlorophenol	2.10	3.33	63	6	46-141	40
2,4,6-Trichlorophenol	2.09	3.33	63	7	51-141	40
2,4-Dichlorophenol	2.63	3.33	79	9	66-115	40
2,4-Dimethylphenol	2.73	3.33	82	10	59-127	40
2,4-Dinitrophenol	2.16	3.33	65	5	42-135	40
2,4-Dinitrotoluene	2.14	3.33	64	0.4	64-136	40
2,6-Dinitrotoluene	2.05	3.33	61	2	65-131	40
2-Chloronaphthalene	1.55	3.33	47	0.1	21-127	40
2-Chlorophenol	2.73	3.33	82	6	66-109	40
2-Methylnaphthalene	1.91	3.33	57	2	29-112	40
2-Methylphenol	2.76	3.33	83	8	55-117	40
2-Nitroaniline	2.13	3.33	64	3	64-136	40
2-Nitrophenol	2.59	3.33	78	5	64-115	40
3,3'-Dichlorobenzidine	2.38	3.33	71	8	10-178	40
3B-Coprostanol	8.55	6.67	128	9	10-154	40
3-Nitroaniline	2.31	3.33	69	3	10-393	40
4,6-Dinitro-2-Methylphenol	2.23	3.33	67	4	67-133	40
4-Bromophenyl phenyl ether	1.71	3.33	51	3	47-113	40
4-Chloro-3-Methylphenol	2.73	3.33	82	9	60-129	40
4-Chloroaniline	0.622	3.33	19	NC	10-150	40
4-Chlorophenyl-Phenylether	1.52	3.33	46	3	47-113	40
4-Methylphenol	2.68	3.33	80	11	43-127	40
4-Nitroaniline	2.62	3.33	79	0.9	14-299	40
4-Nitrophenol	1.54	3.33	46	2	10-134	40
4-nonylphenol	2.28	3.33	68	9	77-215	40
Acenaphthene	1.70	3.33	51	1	17-169	40
Acenaphthylene	1.79	3.33	54	3	46-118	40
Anthracene	2.13	3.33	64	3	66-121	40
Benz[a]anthracene	2.29	3.33	69	2	84-130	40
Benzo(a)pyrene	2.80	3.33	84	4	70-145	40
Benzo(b)fluoranthene	2.73	3.33	82	2	71-140	40
Benzo(ghi)perylene	2.80	3.33	84	0.6	61-141	40
Benzo(k)fluoranthene	2.80	3.33	84	2	73-141	40
Benzoic Acid	2.31	6.67	35	30	10-96	40
Benzyl Alcohol	2.39	3.33	72	15	10-97	40
Bis(2-chloro-1-methylethyl) ether	2.66	3.33	80	1	63-105	40
Bis(2-Chloroethoxy)Methane	2.62	3.33	79	4	65-116	40
Bis(2-Chloroethyl)Ether	2.65	3.33	79	2	65-110	40
Bis(2-Ethylhexyl) Phthalate	2.30	3.33	69	4	80-128	40
Bisphenol A	2.59	3.33	78	0.6	11-203	40
Butyl benzyl phthalate	2.34	3.33	70	2	23-183	40
Caffeine	1.94	3.33	58	5	62-114	40
Carbazole	2.30	3.33	69	3	59-139	40

Washington State Department of Ecology
Manchester Environmental Laboratory
Final Report for
Base/Neutral/Acids

Project: HyTec-Fiberglass Landfill

QC Type : LCS Dup

Work Order: 1211040
Project Officer: Kourehdar, Mohsen
Initial Vol: 3000 mL
Final Vol: 1 mL

Lab ID #: B12K086-BSD1
Prep Method: SW3510C
Analysis Method: SW8270
Source Field ID: LCS Dup

Batch ID: B12K086
Prepared: 11/13/2012
Analyzed: 12/6/2012
Matrix: Water
Units: ug/L

Analyte	Sample Result	Spike Level	%Rec	RPD	%Rec Limits	RPD Limit
Cholesterol	8.71	6.67	131	14	10-140	40
Chrysene	2.35	3.33	71	2	82-128	40
Dibenzo(a,h)anthracene	2.97	3.33	89	0.6	65-130	40
Dibenzofuran	1.74	3.33	52	2	47-126	40
Diethyl phthalate	2.14	3.33	64	1	77-123	40
Dimethyl phthalate	2.13	3.33	64	1	74-122	40
Di-N-Butylphthalate	2.98	3.33	89	28	70-156	40
Di-N-Octyl Phthalate	2.70	3.33	81	2	75-135	40
Fluoranthene	2.22	3.33	66	3	72-124	40
Fluorene	1.78	3.33	53	3	50-134	40
Hexachlorobenzene	1.89	3.33	57	4	53-114	40
Hexachlorobutadiene	1.06	3.33	32	20	10-90	40
Hexachlorocyclopentadiene	0.797	3.33	24	8	10-76	40
Hexachloroethane	1.19	3.33	36	18	12-79	40
Indeno(1,2,3-cd)pyrene	2.63	3.33	79	1	61-139	40
Isophorone	2.44	3.33	73	6	50-103	40
Naphthalene	2.05	3.33	62	2	34-114	40
Nitrobenzene	2.68	3.33	81	4	67-108	40
N-Nitrosodi-n-propylamine	2.76	3.33	83	6	60-128	40
N-Nitrosodiphenylamine	2.12	3.33	64	2	10-209	40
Pentachlorophenol	2.00	3.33	60	3	64-140	40
Phenanthrene	2.04	3.33	61	2	63-126	40
Phenol	1.85	3.33	55	12	41-81	40
Pyrene	2.28	3.33	68	1	64-140	40
Retene	2.23	3.33	67	0.4	75-135	40
Triclosan	2.04	3.33	61	6	54-126	40
Triethyl citrate	2.23	3.33	67	2	27-123	40
Tris(2-chloroethyl) phosphate (TCEP)	2.25	3.33	68	4	50-150	40

Surrogate Recovery:

CAS#	Analyte	Result	Spike Level	% Rec.	% Rec. Limits
2199-69-1	1,2-Dichlorobenzene-D4	1.70	2.67	64	15-98
93951-74-7	2,4-Dichlorophenol-D3	2.01	2.67	76	50-150
93951-73-6	2-Chlorophenol-D4	2.16	2.67	81	44-112
321-60-8	2-Fluorobiphenyl	1.46	2.67	55	19-116
367-12-4	2-Fluorophenol	1.95	2.67	73	10-91
93951-78-1	2-Nitrophenol-D4	2.04	2.67	76	20-120
93951-76-9	4,6-Dinitro-2-methylphenol-D2	1.67	2.67	63	50-150
191656-33-4	4-Chloroaniline-D4	0.479	2.67	18	20-120
190780-66-6	4-Methylphenol-D8	2.18	2.67	82	50-150
93951-79-2	4-Nitrophenol-D4	1.17	2.67	44	20-120
93951-97-4	Acenaphthylene-D8	1.56	2.67	58	50-150
1719-06-8	Anthracene-D10	1.69	2.67	63	50-150
63466-71-7	Benzo(a)pyrene-D12	2.08	2.67	78	50-150
93952-02-4	Bis(2-Chloroethyl)Ether-D8	2.04	2.67	77	50-150
85448-30-2	Dimethylphthalate-D6	1.64	2.67	62	50-150
81103-79-9	Fluorene-D10	1.52	2.67	57	50-150
4165-60-0	Nitrobenzene-D5	2.08	2.67	78	50-118

Washington State Department of Ecology
Manchester Environmental Laboratory
Final Report for
Base/Neutral/Acids

Project: HyTec-Fiberglass Landfill

QC Type : LCS Dup

Work Order: 1211040
Project Officer: Kourehdar, Mohsen
Initial Vol: 3000 mL
Final Vol: 1 mL

Lab ID #: B12K086-BSD1
Prep Method: SW3510C
Analysis Method: SW8270
Source Field ID: LCS Dup

Batch ID: B12K086
Prepared: 11/13/2012
Analyzed: 12/6/2012
Matrix: Water
Units: ug/L

Surrogate Recovery:

CAS#	Analyte	Result	Spike Level	% Rec.	% Rec. Limits
4165-62-2	Phenol-D5	1.56	2.67	58	10-66
1718-52-1	Pyrene-D10	1.75	2.67	66	57-134
1718-51-0	Terphenyl-D14	0.899	1.33	67	42-145

Authorized by: _____ Release Date: 12/13/12

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