

18 April 2013

Mr. Mohsen Kourehdar, P.E.
Washington State Department of Ecology
Southwest Regional Office, Toxics Cleanup Program
PO Box 47775
Olympia, WA 98504-7775

SUBJECT: 4th Quarter Sampling Report and Request for Site Closure
Fiberglass Debris Landfill, Hytec-Littlerock Site
Consent Decree No. 10-2-01899-6

Mohsen,

Enclosed is the 4th Quarter Sampling Report for the Fiberglass Debris Landfill of the Hytec-Littlerock Site. The final Hytec Fiberglass Debris Landfill Remedial Action Report was previously submitted in December 2012 and this appendix is intended to be added to the binder for that report.

With this submittal the project has:

- 1) Completed the remedial actions and monitoring requirements in accordance with the Cleanup Action Plan (CAP) and the approved Remedial Action Work Plan.
- 2) All of the sampling results have been uploaded to the Ecology EIM database (all results for confirmational sampling of soil have met applicable criteria; the first quarter of groundwater monitoring showed two wells (HLMW-4A and HLMW-5B) above MTCA Method B criteria for bis(2-Ethylhexyl)phthalate; the following three quarters of groundwater monitoring met all applicable criteria for all analytes; MTCA Method B criteria for unrestricted land use listed in the CAP).

Based on the work described above we request that Ecology prepare a letter confirming that the requirements of the CAP and approved Remedial Action Work Plan have been completed and that the requirements of the Consent Decree have been fully satisfied.

Ecology should request that the assigned Assistant Attorney General contact counsel for Mr. Lufkin and Hytec to prepare the necessary filings to dismiss the Consent Decree. Please let us know if there is any additional administrative actions that are required thereafter to remove the Site from the Hazardous Sites List.

If you have questions regarding this report or the site closure request, please call me at (425) 241-8449.

Sincerely,

Tom McKeon

Tom McKeon, P.E.
CALIBRE Systems, Inc.

Enclosed:
1 hard copy, with electronic copy sent via email

CC:
Mike Mayberry
John Houlihan

Appendix H
Quarterly Monitoring Report Addendum
Fiberglass Debris Landfill, Hytec-Littlerock Site
January 2013 Sampling

1.0 INTRODUCTION

Results from the January 2013 fourth quarter sampling event are summarized in this Appendix as an addendum to the Fiberglass Debris Landfill Remedial Action Report (CALIBRE 2013). The site Cleanup Action Plan (CAP) required quarterly groundwater sampling for four quarters after completion of the landfill removal action. The sampling described in this report was completed in accordance with the compliance monitoring plan. The monitoring wells sampled include HLMW-1A, HLMW-2A, HLMW-3A, HLMW-4A, HLMW-5B, HLMW-6B, Morgan's well, Spears' well, and Pavlicek's well. The location of all site wells is shown in Figure 1. The Morgan, Spears and Pavlicek wells are supply wells (used for 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 as follows:

- Introduction and objectives (Section 1);
- Summary of Groundwater Monitoring Performed during January 2013 (Section 2);
- Analytical Results (Section 3);
- Summary (Section 4); and
- References (Section 5).

Additional information included as attachments include Well Sample Data Sheets (with field parameters measured) and the Laboratory Analytical Report.

2.0 SUMMARY OF GROUNDWATER MONITORING EVENT

Groundwater was sampled from nine wells on 31 January 2013 and 1 March 2013. 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. 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 2013). 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. Two of the samples (HLMW-2A

and HLMW-3A) were significantly more turbid than the other samples. Well sample data sheets and the complete laboratory analytical reports are included at the end of this addendum.

During the January 2013 sampling, the Ecology Project Manager (PM) was onsite to collect a split sample from well HLMW-05B. The split sample was 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 field quality assurance/quality control (QA/QC) samples were collected during the January sampling: one trip blank and one field duplicate sample. The field duplicate sample was collected from well HLMW-2A (the duplicate sample was labeled as Dup1). Additional QA samples included method blank analysis (by Fremont Analytical following the applicable procedures for each analytical method) and one equipment rinseate sample (collected in the field).

All samples were received at the laboratory within the recommended temperature range and analyzed within the required holding times (as established for each specific analytical method). Results from the field trip blank and duplicate sample were reviewed and all results were acceptable (meeting the QAPP requirements). The method blank analysis and the equipment rinseate sample identified trace levels of SVOCs. The analytes detected in these blank samples are shown in Table 2-2. The SVOCs detected in these 2 QA samples (all of which are common lab contaminants and are reported at levels less than applicable MTCA criteria) were used in the data evaluation of the site samples. The data is considered usable except where noted below. Similarly, the method blank sample reported by Manchester Environmental Laboratory also reported trace levels of similar compounds (sample ID B13B008-BLK1).

3.0 SAMPLING RESULTS

Two analytes were detected at low levels in the EPA method 8260C analysis (for VOCs); trichlorofluoromethane and naphthalene. All other VOC analytes (from the 8260C analysis) are reported as less than the method detection limits (non-detect). All reported concentrations are below the Model Toxics Control Act (MTCA) Method B criteria (the MTCA criteria is based on use as a potable water supply). Trichlorofluoromethane was detected at low levels in six of the wells (HLMW-02A, HLMW-03A, HLMW-04A, HLMW-06B, PAWE, and SPWE). The highest concentration reported is from well HLMW-04A at 1.75 ug/L. The MTCA Method B criterion for trichlorofluoromethane is 2,400 ug/L; all of the detected levels are well below this criterion (the highest level detected is 3 orders-of-magnitude lower). Naphthalene was detected at a trace level in one well (HLMW-06B) with a concentration reported at 0.48 ug/L. The MTCA Method B criterion for naphthalene is 160 ug/L; the single value reported is well below the MTCA criterion.

Table 3-1 shows the analytical results for VOCs. The detections of trichlorofluoromethane (also known as CFC-11) are reported as "J" flagged by the laboratory (noted as above the method detection limit [MDL], but below the reporting limit [RL]). Similarly the single detection of naphthalene is also "J" flagged.

Table 3-2 presents the analytical results for SVOCs from the January 2013 samples. Five SVOCs were detected at low levels during the January 2013 sampling event (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]).

Four of the five SVOCs were also detected in the method blank analysis reported by the laboratory (method blank sample identification MB-4030, 2/4/13). These SVOC compounds are common laboratory contaminants at low 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 "B" flagged (for blank contamination), and non-detect ("U" flagged at an elevated reporting limit, after a 10x factor was applied to the detections observed in the method blank). The reported lab results are included in the data table with appropriate data quality flags.

The highest detection of bis(2-ethylhexyl) phthalate was 3.39 ug/L from well HLMW-01A (below the MTCA Method B criterion of 6 ug/L). The highest detection of dibutyl phthalate was 0.155 ug/L from HLMW-04A (below the MTCA Method B criterion of 1,600 ug/L). The highest detection of diethyl phthalate was 0.19 ug/L from HLMW-05B (below the MTCA Method B criterion of 12,800 ug/L). The highest detection of naphthalene was 0.0533 ug/L from HLMW-01A (below the MCTA Method B criterion of 160 ug/L). The highest detection of phenanthrene was 0.0434 ug/L from Morgan's well; this compound does not have a MTCA cleanup level or EPA MCL because no toxicity data has been published in IRIS by EPA.

The split sample collected by Ecology and analyzed at MEL for SVOCs showed all results below the reporting limit as well.

As part of the field sampling, CALIBRE also collected an equipment rinseate sample to provide a QA check on field procedures as a possible source of contamination. A total of four SVOCs (bis(2-ethylhexyl) phthalate, dibutyl phthalate, diethylphthalate, and phenanthrene) were detected in the rinseate sample (and also in the lab method blank). The detections reported in the field samples, the rinseate blank, and the method blank are of similar concentration (and all are below the respective MTCA Method B criteria).

Analyses for total metals showed detections for antimony, arsenic, beryllium, cadmium, chromium, copper, lead, nickel, and zinc. None of the detections (as total metals) exceeded MTCA Method B criteria. Analytical results for total metals are presented in Table 3-3.

4.0 SUMMARY

This report (an addendum to the Fiberglass Debris Landfill Remedial Action Report) presents the results for the fourth quarter of sampling at the Fiberglass Debris Landfill area of the Hytec-Littlerock Site. The sampling has been completed in accordance with the Cleanup Action Plan (CAP).

With this submittal, all of the monitoring requirements from the CAP and approved Remedial Action Work Plan have been met thereby fulfilling the requirements of the Consent Decree (all required confirmation sampling is complete and four quarters of groundwater sampling is complete). All of the sampling results have met all applicable criteria (MTCA Method B criteria listed in the CAP). Based on these actions and confirmational sampling results, the remedial actions are complete per the approved Remedial Action Work Plan.

We recommend that Ecology close the site and request that Ecology prepare a letter confirming that the requirements of the CAP approved Remedial Action Work Plan have been completed.

5.0 REFERENCES

CALIBRE 2013, Fiberglass Debris Landfill Remedial Action Report, Hytec – Littlerock Site, Halo-Kuntux Lane, Littlerock, Washington. January 2013.

TABLES

Table 2-1 Water Quality Parameters - January 2013

Parameter	HLMW-01A	HLMW-02A	HLMW-03A	HLMW-04A	HLMW-05B**	HLMW-06B	MOWE*	PAWE*	SPWE
Depth To Water (Ft)	11.49	30.66	35.92	21.07	39.21	32.3			34.41
Vol. Purged (gal)	2	2	2	2		4			3.5
pH	5.46	4.83	5.43	4.93		8.46			6.36
Conductivity (μmhos/cm)	0.057	0.060	0.093	0.091		0.259			0.199
Turbidity (NTU)	57.3	486	>999	26.5		83.9			20.9
D.O. (mg/ L)	4.14	4.62	4.8	4.46		1.52			0.73
Temperature (°C)	6.8	8.13	6.89	8.25		7.04			8.42
ORP	292	331	286	322		183			256

* Samples taken at tap nearest to well, water quality parameters not taken.

** Water quality parameters not taken.

Table 2-2 QA Samples SVOCs - January 2013

Analyte (ug/L)	Method Blank-4030		Equipment Rinsate	
Bis(2-Ethylhexyl)				
Phthalate	0.386	J	0.87	J
Dibutyl phthalate	0.127	J	0.107	J
Diethyl phthalate	0.18	J	0.157	J
Phenanthrene	0.0297	J	0.0257	J

Qualifiers:

J Above the method detection limit (MDL) but below the reporting limit (RL).

Table 3-1 VOCs - January 2013

Analyte (ug/L)	Reporting Limit (PQL)	Detection Limit (MDL)	HLMW-01A	HLMW-02A	HLMW-03A	HLMW-04A	HLMW-05B	HLMW-06B	MOWE	PAWE	SPWE	
1,1,1,2-Tetrachloroethane	1	0.064	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	
1,1,1-Trichloroethane	1	0.032	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	
1,1,2,2-Tetrachloroethane	1	0.108	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	
1,1,2-Trichloroethane	1	0.12	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	
1,1-Dichloroethane	1	0.027	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	
1,1-Dichloroethene	1	0.047	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	
1,1-Dichloropropene	1	0.039	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	
1,2,3-Trichlorobenzene	4	0.147	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	
1,2,3-Trichloropropane	1	0.13	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	
1,2,4-Trichlorobenzene	2	0.099	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	
1,2,4-Trimethylbenzene	1	0.02	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	
1,2-Dibromo-3-Chloropropane	1	0.315	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	
1,2-Dichlorobenzene	1	0.046	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	
1,2-Dichloroethane	1	0.035	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	
1,2-Dichloropropane	1	0.047	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	
1,3,5-Trimethylbenzene	1	0.03	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	
1,3-Dichlorobenzene	1	0.029	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	
1,3-Dichloropropane	1	0.053	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	
1,4-Dichlorobenzene	1	0.026	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	
2,2-Dichloropropane	2	0.046	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	
2-Chlorotoluene	1	0.032	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	
4-Chlorotoluene	1	0.037	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	
Benzene	1	0.025	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	
Bromobenzene	1	0.055	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	
Bromoform	1	0.115	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	
Bromomethane	1	0.121	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	
Carbon Tetrachloride	1	0.032	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	
CFC-11	1	0.034	1 U	0.89 J	1.4	1.75		1 U	0.45 J	1 U	0.43 J	0.37 J
CFC-12	1	0.03	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chlorobenzene	1	0.024	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloroethane	1	0.059	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloroform	1	0.032	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloromethane	1	0.047	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Cis-1,2-Dichloroethene	1	0.019	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Cis-1,3-Dichloropropene	1	0.043	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Cumene	1	0.018	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Dibromochloromethane	1	0.044	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Dibromomethane	1	0.115	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Dichlorobromomethane	1	0.06	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Ethylbenzene	1	0.017	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Ethylene dibromide	0.01	0.0065	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U

Table 3-1 VOCs - January 2013

Analyte (ug/L)	Reporting Limit (PQL)	Detection Limit (MDL)	HLMW-01A	HLMW-02A	HLMW-03A	HLMW-04A	HLMW-05B	HLMW-06B	MOWE	PAWE	SPWE
Hexachlorobutadiene	4	0.154	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U
m, p-Xylene	1	0.041	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methyl t-butyl ether	1	0.026	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methylene Chloride	1	0.052	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Naphthalene	1	0.094	1 U	1 U	1 U	1 U	1 U	1 U	0.48 J	1 U	1 U
n-Butylbenzene	1	0.02	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
n-Propylbenzene	1	0.033	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
o-Xylene	1	0.034	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
p-Isopropyltoluene	1	0.036	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Sec-Butylbenzene	1	0.023	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Styrene	1	0.023	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Tert-Butylbenzene	1	0.036	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Tetrachloroethene	1	0.035	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Toluene	1	0.033	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trans-1,2-Dichloroethene	1	0.037	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trans-1,3-Dichloropropene	1	0.042	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trichloroethene	1	0.04	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Vinyl Chloride	0.2	0.053	0.2 U	0.2 U	0.2 U	0.2 U					

Qualifiers:

U Non-detect, below the reporting limit (RL/PQL).

J Above the method detection limit (MDL) but below the reporting limit (RL).

Table 3-2 SVOCs - January 2013

Analyte (ug/L)	Reporting Limit (PQL)	Detection Limit (MDL)	HLMW-01A		HLMW-02A		HLMW-03A		HLMW-04A		HLMW-05B		HLMW-06B		MOWE		PAWE		SPWE	
1,2,4-Trichlorobenzene	1	0.0194	1 U		1 U		1 U		1 U		1 U		1 U		1 U		1 U		1 U	
1,2-Dichlorobenzene	1	0.0232	1 U		1 U		1 U		1 U		1 U		1 U		1 U		1 U		1 U	
1,3-Dichlorobenzene	1	0.0161	1 U		1 U		1 U		1 U		1 U		1 U		1 U		1 U		1 U	
1,4-Dichlorobenzene	1	0.0241	1 U		1 U		1 U		1 U		1 U		1 U		1 U		1 U		1 U	
1-Methylnaphthalene	0.5	0.0214	0.5 U		0.5 U		0.5 U		0.5 U		0.5 U		0.5 U		0.5 U		0.5 U		0.5 U	
2,4,5-Trichlorophenol	2	0.0339	2 U		2 U		2 U		2 U		2 U		2 U		2 U		2 U		2 U	
2,4,6-Trichlorophenol	2	0.021	2 U		2 U		2 U		2 U		2 U		2 U		2 U		2 U		2 U	
2,4-Dichlorophenol	2	0.0188	2 U		2 U		2 U		2 U		2 U		2 U		2 U		2 U		2 U	
2,4-Dimethylphenol	1	0.0376	1 U		1 U		1 U		1 U		1 U		1 U		1 U		1 U		1 U	
2,4-Dinitrophenol	2	0.689	2 U		2 U		2 U		2 U		2 U		2 U		2 U		2 U		2 U	
2,4-Dinitrotoluene	1	0.0701	1 U		1 U		1 U		1 U		1 U		1 U		1 U		1 U		1 U	
2,6-Dinitrotoluene	1	0.0269	1 U		1 U		1 U		1 U		1 U		1 U		1 U		1 U		1 U	
2-Chloronaphthalene	1	0.0143	1 U		1 U		1 U		1 U		1 U		1 U		1 U		1 U		1 U	
2-Chlorophenol	1	0.0132	1 U		1 U		1 U		1 U		1 U		1 U		1 U		1 U		1 U	
2-Methylnaphthalene	0.5	0.0252	0.5 U		0.5 U		0.5 U		0.5 U		0.5 U		0.5 U		0.5 U		0.5 U		0.5 U	
2-Nitroaniline	5	0.071	5 U		5 U		5 U		5 U		5 U		5 U		5 U		5 U		5 U	
2-Nitrophenol	2	0.0912	2 U		2 U		2 U		2 U		2 U		2 U		2 U		2 U		2 U	
4,6-Dinitro-2-Methylphenol	5	0.487	5 U		5 U		5 U		5 U		5 U		5 U		5 U		5 U		5 U	
4-Bromophenyl phenyl ether	1	0.0241	1 U		1 U		1 U		1 U		1 U		1 U		1 U		1 U		1 U	
4-Chloro-3-Methylphenol	5	0.0687	5 U		5 U		5 U		5 U		5 U		5 U		5 U		5 U		5 U	
4-Chloroaniline	5	0.018	5 U		5 U		5 U		5 U		5 U		5 U		5 U		5 U		5 U	
4-Chlorophenyl-Phenylether	1	0.0199	1 U		1 U		1 U		1 U		1 U		1 U		1 U		1 U		1 U	
4-Nitrophenol	5	0.431	5 U		5 U		5 U		5 U		5 U		5 U		5 U		5 U		5 U	
Acenaphthene	0.5	0.0139	0.5 U		0.5 U		0.5 U		0.5 U		0.5 U		0.5 U		0.5 U		0.5 U		0.5 U	
Acenaphthylene	0.5	0.00613	0.5 U		0.5 U		0.5 U		0.5 U		0.5 U		0.5 U		0.5 U		0.5 U		0.5 U	
Anthracene	0.5	0.0167	0.5 U		0.5 U		0.5 U		0.5 U		0.5 U		0.5 U		0.5 U		0.5 U		0.5 U	
Benz[a]anthracene	0.5	0.0123	0.5 U		0.5 U		0.5 U		0.5 U		0.5 U		0.5 U		0.5 U		0.5 U		0.5 U	
Benzo(a)pyrene	0.5	0.0304	0.5 U		0.5 U		0.5 U		0.5 U		0.5 U		0.5 U		0.5 U		0.5 U		0.5 U	
Benzo(b)fluoranthene	0.5	0.0259	0.5 U		0.5 U		0.5 U		0.5 U		0.5 U		0.5 U		0.5 U		0.5 U		0.5 U	
Benzo(ghi)perylene	0.5	0.0378	0.5 U		0.5 U		0.5 U		0.5 U		0.5 U		0.5 U		0.5 U		0.5 U		0.5 U	
Benzo(k)fluoranthene	0.5	0.0341	0.5 U		0.5 U		0.5 U		0.5 U		0.5 U		0.5 U		0.5 U		0.5 U		0.5 U	
Benzyl Alcohol	1	0.0371	1 U		1 U		1 U		1 U		1 U		1 U		1 U		1 U		1 U	
Bis(2-Chloroethoxy)Methane	1	0.0337	1 U		1 U		1 U		1 U		1 U		1 U		1 U		1 U		1 U	
Bis(2-Chloroethyl)Ether	2	0.0294	2 U		2 U		2 U		2 U		2 U		2 U		2 U		2 U		2 U	
		<3.86		<3.86		<3.86		<3.86		<3.86		<3.86		<3.86		<3.86		<3.86		
Bis(2-Ethylhexyl) Phthalate	1	0.0316 (3.39*)	UB	(0.328*)	UJB	(0.26*)	UJB	(0.226*)	UJB	(0.189*)	UJB	(0.121*)	UJB	(0.248*)	UJB	(0.365*)	UJB	(0.247*)	UJB	
Butyl benzyl phthalate	1	0.0552	1 U		1 U		1 U		1 U		1 U		1 U		1 U		1 U		1 U	
Carbazole	5	0.0553	5 U		5 U		5 U		5 U		5 U		5 U		5 U		5 U		5 U	
Chrysene	0.5	0.0126	0.5 U		0.5 U		0.5 U		0.5 U		0.5 U		0.5 U		0.5 U		0.5 U		0.5 U	
Dibenzo(a,h)anthracene	0.5	0.0366	0.5 U		0.5 U		0.5 U		0.5 U		0.5 U		0.5 U		0.5 U		0.5 U		0.5 U	
Dibenzofuran	1	0.0131	1 U		1 U		1 U		1 U		1 U		1 U		1 U		1 U		1 U	
Dibutyl phthalate	1	0.0268 (0.0978*)	UJB	(0.0775*)	UJB	(0.0678*)	UJB	(0.155*)	UJB	(0.0909*)	UJB	(0.112*)	UJB	(0.123*)	UJB	(0.0989*)	UJB	(0.074*)	UJB	
Diethyl phthalate	1	0.0144 (0.147*)	UJB	(0.149*)	UJB	(0.144*)	UJB	(0.146*)	UJB	(0.19*)	UJB	(0.157*)	UJB	(0.144*)	UJB	(0.145*)	UJB	(0.141*)	UJB	

Table 3-2 SVOCs - January 2013

Analyte (ug/L)	Reporting Limit (PQL)	Detection Limit (MDL)	HLMW-01A	HLMW-02A	HLMW-03A	HLMW-04A	HLMW-05B	HLMW-06B	MOWE	PAWE	SPWE
Dimethyl phthalate	1	0.0347	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Di-N-Octyl Phthalate	1	0.0258	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Fluoranthene	0.5	0.0112	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Fluorene	0.5	0.0164	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Hexachlorobenzene	1	0.0264	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Hexachlorobutadiene	1	0.039	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Hexachlorocyclopentadiene	1	0.0313	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Hexachloroethane	1	0.0653	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Hexanedioic Acid, Bis(2-Ethylhexyl) Ester	1	0.0443	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Indeno(1,2,3-cd)pyrene	0.5	0.0673	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Isophorone	1	0.0205	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Naphthalene	0.5	0.0123	0.0533 J	0.0348 J	0.0355 J	0.0412 J	0.5 U	0.5 U	0.036 J	0.0376 J	0.0251 J
Nitrobenzene	2	0.0392	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
N-Nitrosodi-n-propylamine	1	0.0642	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
o-Cresol	1	0.0245	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
p-Cresol	1	0.0563	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Pentachlorophenol	2	0.0344	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Phenanthrene	0.5	0.013	0.5 UB	0.5 UB	0.5 UB	(0.0361*) UJB	(0.0397*) UJB	0.5 UB	(0.0434*) UJB	0.5 UB	0.5 UB
Phenol	2	0.0401	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Pyrene	0.5	0.0146	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U

Qualifiers:

U Non-detect, below the reporting limit (RL/PQL).

J Above the method detection limit (MDL) but below the reporting limit (RL).

B Analyte detected in associated Method Blank.

<"3.86" Elevated reporting limit based on 10x factor applied to the detection observed in the method blank.

* "U" flagged, indicates compound found as a lab contaminant and reported number is less than the reporting limit.

Note When a UJB or a UB is applied (i.e., it is detected in the method blank) a 10x factor is applied to establish an elevated reporting limit (method blank detection x 10).

Table 3-3 Total Metals - January 2013

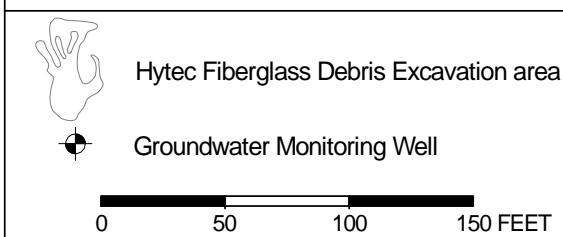
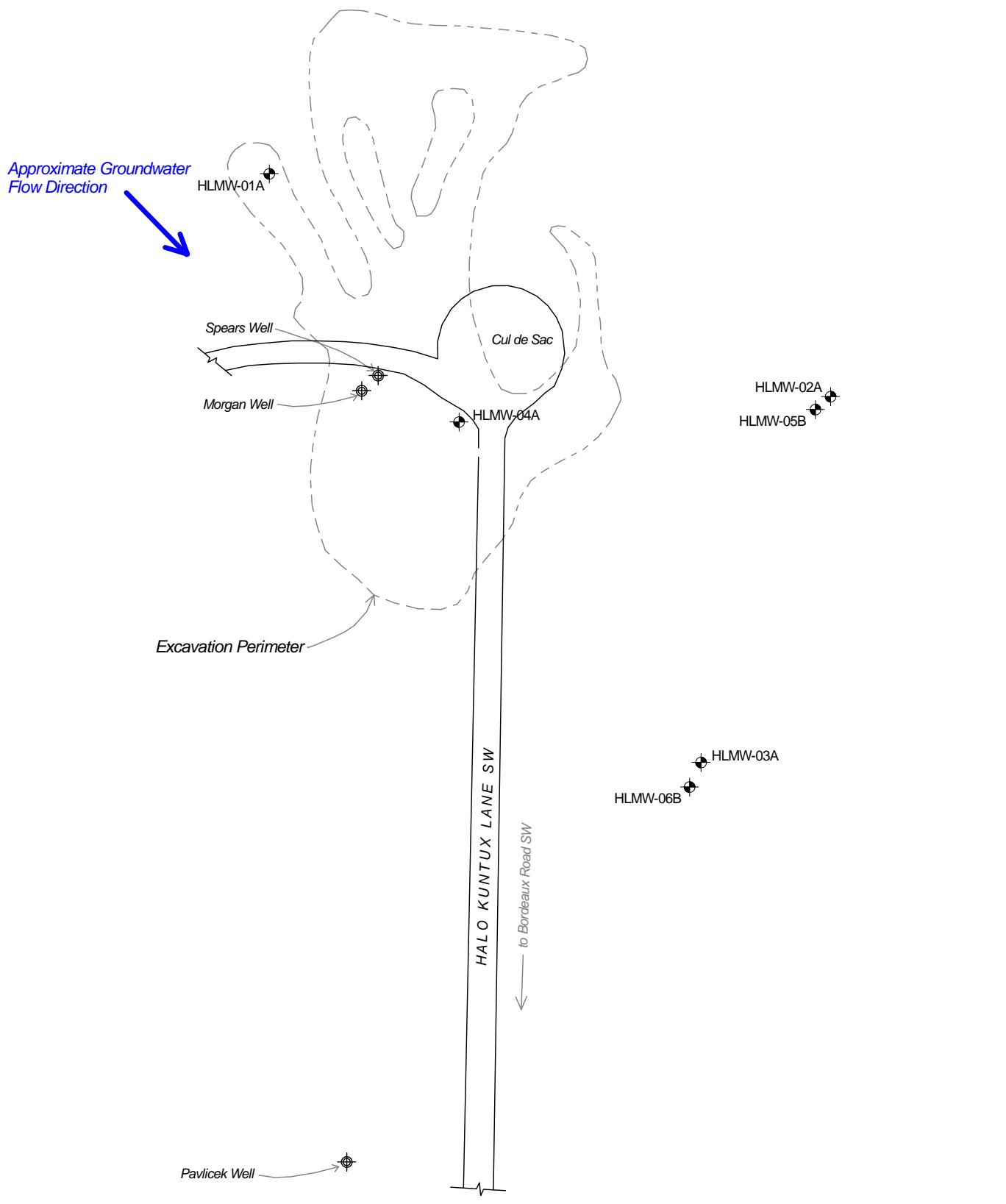
Analyte (ug/L)	HLMW-01A	HLMW-02A	HLMW-03A	HLMW-04A	HLMW-05B	HLMW-06B	MOWE	PAWE	SPWE									
Antimony	0.0115	J	0.0415	J	0.017	J	0.0065	J	0.047	J	0.198	J	0.2	U	0.0105	J	0.286	
Arsenic	1	U	1	U	1	U	1	U	0.458	J	1.12		1	U	1	U	1	U
Beryllium	0.2	U	0.2	U	0.189	J	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
Cadmium	0.071	J	0.0275	J	0.106	J	0.026	J	0.2	U	0.149	J	0.2	U	0.2	U	0.2	U
Chromium	0.955		0.694		2.06		0.587		1.17		2.01		0.5	U	0.164	J	2.25	
Copper	0.5	U	1.68		16.6		0.5	U	0.5	U	6.88		0.5	U	0.722		0.5	U
Lead	1	U	1	U	1	U	1	U	0.29	J	0.354	J	1	U	0.906	J	2.49	
Nickel	0.627		0.935		5.59		0.509		1.02		2.62		0.242	J	0.31	J	1.16	
Zinc	12.9		13.4		20.5		11.7		10.5		21.6		10.1		15.2		13.3	

Qualifiers:

U Non-detect, below the reporting limit (RL/PQL).

J Above the method detection limit (MDL) but below the reporting limit (RL).

FIGURE



CALIBRE

REVISION NO.: 0	DATE: 1/3/2013	ACAD FILE: Fig1_HLFD_Excavat_Sample_20120329.SKF
Hytec Fiberglass Debris Landfill Site Confirmation Monitoring Sample Locations/Depths		
DES'D: MM	LOCATION: Littlerock, WA	PROJECT NO.: K0308000
CHK'D: JD		FIGURE: 1

**LABORATORY ANALYTICAL REPORT
AND
WELL SAMPLE DATA SHEETS**



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/Bordeaux

Lab ID: 1302006

February 11, 2013

Attention Tom McKeon:

Fremont Analytical, Inc. received 13 sample(s) on 2/1/2013 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,

A handwritten signature in black ink, appearing to read "Michael Dee".

Michael Dee
Sr. Chemist / Principal



Date: 02/11/2013

CLIENT: Calibre
Project: Hytec/Bordeaux
Lab Order: 1302006

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
1302006-001	HLMW-07A-013113	01/31/2013 8:49 AM	02/01/2013 3:36 PM
1302006-002	HLMW-06B-013113	01/31/2013 9:31 AM	02/01/2013 3:36 PM
1302006-003	HLMW-03A-013113	01/31/2013 10:03 AM	02/01/2013 3:36 PM
1302006-004	HLMW-02A-013113	01/31/2013 10:40 AM	02/01/2013 3:36 PM
1302006-005	HLMW-04A-013113	01/31/2013 11:29 AM	02/01/2013 3:36 PM
1302006-006	SPWE-013113	01/31/2013 12:49 PM	02/01/2013 3:36 PM
1302006-007	HLMW-01A-013113	01/31/2013 1:36 PM	02/01/2013 3:36 PM
1302006-008	MOWE-013113	01/31/2013 1:56 PM	02/01/2013 3:36 PM
1302006-009	PAWE-013113	01/31/2013 2:25 PM	02/01/2013 3:36 PM
1302006-010	Dup1-013113	01/31/2013 8:00 AM	02/01/2013 3:36 PM
1302006-011	HLMW-05B-020113	02/01/2013 12:15 PM	02/01/2013 3:36 PM
1302006-012	Equipment Rinsate-020113	02/01/2013 1:10 PM	02/01/2013 3:36 PM
1302006-013	Trip Blank	01/29/2013 4:00 PM	02/01/2013 3:36 PM

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



Case Narrative

WO#: 1302006

Date: 2/11/2013

CLIENT: Calibre
Project: Hytec/Bordeaux

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 1302006-012A: Foamy Sample



Analytical Report

WO#: 1302006

Date Reported: 2/11/2013

Client: Calibre

Collection Date: 1/31/2013 8:49:00 AM

Project: Hytec/Bordeaux

Lab ID: 1302006-001

Matrix: Groundwater

Client Sample ID: HLMW-07A-013113

Analyses	Result	MDL	Qual	Units	DF	Date Analyzed
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Semi-Volatile Organic Compounds by EPA Method 8270				Batch ID: 4030	Analyst: PH	
Phenol	ND	0.0401	µg/L	1	2/8/2013 2:26:00 AM	
2-Chlorophenol	ND	0.0132	µg/L	1	2/8/2013 2:26:00 AM	
1,3-Dichlorobenzene	ND	0.0161	µg/L	1	2/8/2013 2:26:00 AM	
1,4-Dichlorobenzene	ND	0.0241	µg/L	1	2/8/2013 2:26:00 AM	
1,2-Dichlorobenzene	ND	0.0232	µg/L	1	2/8/2013 2:26:00 AM	
Benzyl alcohol	ND	0.0371	µg/L	1	2/8/2013 2:26:00 AM	
Bis(2-chloroethyl) ether	ND	0.0294	µg/L	1	2/8/2013 2:26:00 AM	
2-Methylphenol (o-cresol)	ND	0.0245	µg/L	1	2/8/2013 2:26:00 AM	
Hexachloroethane	ND	0.0653	µg/L	1	2/8/2013 2:26:00 AM	
N-Nitrosodi-n-propylamine	ND	0.0642	µg/L	1	2/8/2013 2:26:00 AM	
Nitrobenzene	ND	0.0392	µg/L	1	2/8/2013 2:26:00 AM	
Isophorone	ND	0.0205	µg/L	1	2/8/2013 2:26:00 AM	
4-Methylphenol (p-cresol)	ND	0.0563	µg/L	1	2/8/2013 2:26:00 AM	
2-Nitrophenol	ND	0.0912	µg/L	1	2/8/2013 2:26:00 AM	
2,4-Dimethylphenol	ND	0.0376	µg/L	1	2/8/2013 2:26:00 AM	
Bis(2-chloroethoxy)methane	ND	0.0337	µg/L	1	2/8/2013 2:26:00 AM	
2,4-Dichlorophenol	ND	0.0188	µg/L	1	2/8/2013 2:26:00 AM	
1,2,4-Trichlorobenzene	ND	0.0194	µg/L	1	2/8/2013 2:26:00 AM	
Naphthalene	ND	0.0123	µg/L	1	2/8/2013 2:26:00 AM	
4-Chloroaniline	ND	0.0180	µg/L	1	2/8/2013 2:26:00 AM	
Hexachlorobutadiene	ND	0.0390	µg/L	1	2/8/2013 2:26:00 AM	
4-Chloro-3-methylphenol	ND	0.0687	µg/L	1	2/8/2013 2:26:00 AM	
2-Methylnaphthalene	ND	0.0252	µg/L	1	2/8/2013 2:26:00 AM	
1-Methylnaphthalene	ND	0.0214	µg/L	1	2/8/2013 2:26:00 AM	
Hexachlorocyclopentadiene	ND	0.0313	µg/L	1	2/8/2013 2:26:00 AM	
2,4,6-Trichlorophenol	ND	0.0210	µg/L	1	2/8/2013 2:26:00 AM	
2,4,5-Trichlorophenol	ND	0.0339	µg/L	1	2/8/2013 2:26:00 AM	
2-Chloronaphthalene	ND	0.0143	µg/L	1	2/8/2013 2:26:00 AM	
2-Nitroaniline	ND	0.0710	µg/L	1	2/8/2013 2:26:00 AM	
Acenaphthene	ND	0.0139	µg/L	1	2/8/2013 2:26:00 AM	
Dimethylphthalate	ND	0.0347	µg/L	1	2/8/2013 2:26:00 AM	
2,6-Dinitrotoluene	ND	0.0269	µg/L	1	2/8/2013 2:26:00 AM	
Acenaphthylene	ND	0.00613	µg/L	1	2/8/2013 2:26:00 AM	
2,4-Dinitrophenol	ND	0.689	µg/L	1	2/8/2013 2:26:00 AM	
Dibenzofuran	ND	0.0131	µg/L	1	2/8/2013 2:26:00 AM	

Qualifiers: B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
RL Reporting Limit

D Dilution was required
H Holding times for preparation or analysis exceeded
ND Not detected at the Reporting Limit
S Spike recovery outside accepted recovery limits



Analytical Report

WO#: 1302006

Date Reported: 2/11/2013

Client: Calibre

Collection Date: 1/31/2013 8:49:00 AM

Project: Hytec/Bordeaux

Lab ID: 1302006-001

Matrix: Groundwater

Client Sample ID: HLMW-07A-013113

Analyses	Result	MDL	Qual	Units	DF	Date Analyzed
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Semi-Volatile Organic Compounds by EPA Method 8270				Batch ID: 4030	Analyst: PH
2,4-Dinitrotoluene	ND	0.0701		µg/L	1
4-Nitrophenol	ND	0.431		µg/L	1
Fluorene	ND	0.0164		µg/L	1
4-Chlorophenyl phenyl ether	ND	0.0199		µg/L	1
Diethylphthalate	0.156	0.0144	J	µg/L	1
4,6-Dinitro-2-methylphenol	ND	0.487		µg/L	1
4-Bromophenyl phenyl ether	ND	0.0241		µg/L	1
Hexachlorobenzene	ND	0.0264		µg/L	1
Pentachlorophenol	ND	0.0344		µg/L	1
Phenanthrene	0.117	0.0130	J	µg/L	1
Anthracene	ND	0.0167		µg/L	1
Carbazole	ND	0.0553		µg/L	1
Di-n-butyl phthalate	0.135	0.0268	J	µg/L	1
Fluoranthene	ND	0.0112		µg/L	1
Pyrene	ND	0.0146		µg/L	1
Benzyl Butylphthalate	ND	0.0552		µg/L	1
bis(2-Ethylhexyl)adipate	ND	0.0443		µg/L	1
Benz[a]anthracene	ND	0.0123		µg/L	1
Chrysene	ND	0.0126		µg/L	1
Bis(2-ethylhexyl) phthalate	0.714	0.0316	J	µg/L	1
Di-n-octyl phthalate	ND	0.0258		µg/L	1
Benzo (b) fluoranthene	ND	0.0259		µg/L	1
Benzo (k) fluoranthene	ND	0.0341		µg/L	1
Benzo[a]pyrene	ND	0.0304		µg/L	1
Indeno (1,2,3-cd) pyrene	ND	0.0673		µg/L	1
Dibenzo (a,h) anthracene	ND	0.0366		µg/L	1
Benzo (g,h,i) perylene	ND	0.0378		µg/L	1
Surr: 2,4,6-Tribromophenol	99.7	24-138		%REC	1
Surr: 2-Fluorobiphenyl	75.3	38.6-138		%REC	1
Surr: Nitrobenzene-d5	74.3	31.7-140		%REC	1
Surr: Phenol-d6	26.5	15-116		%REC	1
Surr: p-Terphenyl	103	49-156		%REC	1

Qualifiers: B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
RL Reporting Limit

D Dilution was required
H Holding times for preparation or analysis exceeded
ND Not detected at the Reporting Limit
S Spike recovery outside accepted recovery limits



Analytical Report

WO#: 1302006

Date Reported: 2/11/2013

Client: Calibre

Collection Date: 1/31/2013 8:49:00 AM

Project: Hytec/Bordeaux

Lab ID: 1302006-001

Matrix: Groundwater

Client Sample ID: HLMW-07A-013113

Analyses	Result	MDL	Qual	Units	DF	Date Analyzed
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Total Metals by EPA Method 200.8

Batch ID: 4031

Analyst: MC

Antimony	0.264	0.00300		µg/L	1	2/4/2013 8:03:49 PM
Arsenic	0.748	0.266	J	µg/L	1	2/4/2013 8:03:49 PM
Beryllium	ND	0.0680		µg/L	1	2/4/2013 8:03:49 PM
Cadmium	0.0410	0.0160	J	µg/L	1	2/4/2013 8:03:49 PM
Chromium	0.766	0.0810		µg/L	1	2/4/2013 8:03:49 PM
Copper	2.41	0.0930		µg/L	1	2/4/2013 8:03:49 PM
Lead	0.328	0.0750	J	µg/L	1	2/4/2013 8:03:49 PM
Nickel	1.35	0.110		µg/L	1	2/4/2013 8:03:49 PM
Zinc	13.5	0.121		µg/L	1	2/4/2013 8:03:49 PM

Qualifiers: B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
RL Reporting Limit

D Dilution was required
H Holding times for preparation or analysis exceeded
ND Not detected at the Reporting Limit
S Spike recovery outside accepted recovery limits



Analytical Report

WO#: 1302006

Date Reported: 2/11/2013

Client: Calibre

Collection Date: 1/31/2013 9:31:00 AM

Project: Hytec/Bordeaux

Lab ID: 1302006-002

Matrix: Groundwater

Client Sample ID: HLMW-06B-013113

Analyses	Result	MDL	Qual	Units	DF	Date Analyzed
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Semi-Volatile Organic Compounds by EPA Method 8270				Batch ID: 4030	Analyst: PH
Phenol	ND	0.0401	µg/L	1	2/8/2013 2:51:00 AM
2-Chlorophenol	ND	0.0132	µg/L	1	2/8/2013 2:51:00 AM
1,3-Dichlorobenzene	ND	0.0161	µg/L	1	2/8/2013 2:51:00 AM
1,4-Dichlorobenzene	ND	0.0241	µg/L	1	2/8/2013 2:51:00 AM
1,2-Dichlorobenzene	ND	0.0232	µg/L	1	2/8/2013 2:51:00 AM
Benzyl alcohol	ND	0.0371	µg/L	1	2/8/2013 2:51:00 AM
Bis(2-chloroethyl) ether	ND	0.0294	µg/L	1	2/8/2013 2:51:00 AM
2-Methylphenol (o-cresol)	ND	0.0245	µg/L	1	2/8/2013 2:51:00 AM
Hexachloroethane	ND	0.0653	µg/L	1	2/8/2013 2:51:00 AM
N-Nitrosodi-n-propylamine	ND	0.0642	µg/L	1	2/8/2013 2:51:00 AM
Nitrobenzene	ND	0.0392	µg/L	1	2/8/2013 2:51:00 AM
Isophorone	ND	0.0205	µg/L	1	2/8/2013 2:51:00 AM
4-Methylphenol (p-cresol)	ND	0.0563	µg/L	1	2/8/2013 2:51:00 AM
2-Nitrophenol	ND	0.0912	µg/L	1	2/8/2013 2:51:00 AM
2,4-Dimethylphenol	ND	0.0376	µg/L	1	2/8/2013 2:51:00 AM
Bis(2-chloroethoxy)methane	ND	0.0337	µg/L	1	2/8/2013 2:51:00 AM
2,4-Dichlorophenol	ND	0.0188	µg/L	1	2/8/2013 2:51:00 AM
1,2,4-Trichlorobenzene	ND	0.0194	µg/L	1	2/8/2013 2:51:00 AM
Naphthalene	ND	0.0123	µg/L	1	2/8/2013 2:51:00 AM
4-Chloroaniline	ND	0.0180	µg/L	1	2/8/2013 2:51:00 AM
Hexachlorobutadiene	ND	0.0390	µg/L	1	2/8/2013 2:51:00 AM
4-Chloro-3-methylphenol	ND	0.0687	µg/L	1	2/8/2013 2:51:00 AM
2-Methylnaphthalene	ND	0.0252	µg/L	1	2/8/2013 2:51:00 AM
1-Methylnaphthalene	ND	0.0214	µg/L	1	2/8/2013 2:51:00 AM
Hexachlorocyclopentadiene	ND	0.0313	µg/L	1	2/8/2013 2:51:00 AM
2,4,6-Trichlorophenol	ND	0.0210	µg/L	1	2/8/2013 2:51:00 AM
2,4,5-Trichlorophenol	ND	0.0339	µg/L	1	2/8/2013 2:51:00 AM
2-Chloronaphthalene	ND	0.0143	µg/L	1	2/8/2013 2:51:00 AM
2-Nitroaniline	ND	0.0710	µg/L	1	2/8/2013 2:51:00 AM
Acenaphthene	ND	0.0139	µg/L	1	2/8/2013 2:51:00 AM
Dimethylphthalate	ND	0.0347	µg/L	1	2/8/2013 2:51:00 AM
2,6-Dinitrotoluene	ND	0.0269	µg/L	1	2/8/2013 2:51:00 AM
Acenaphthylene	ND	0.00613	µg/L	1	2/8/2013 2:51:00 AM
2,4-Dinitrophenol	ND	0.689	µg/L	1	2/8/2013 2:51:00 AM
Dibenzofuran	ND	0.0131	µg/L	1	2/8/2013 2:51:00 AM

Qualifiers: B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
RL Reporting Limit

D Dilution was required
H Holding times for preparation or analysis exceeded
ND Not detected at the Reporting Limit
S Spike recovery outside accepted recovery limits



Analytical Report

WO#: 1302006

Date Reported: 2/11/2013

Client: Calibre**Collection Date:** 1/31/2013 9:31:00 AM**Project:** Hytec/Bordeaux**Lab ID:** 1302006-002**Matrix:** Groundwater**Client Sample ID:** HLMW-06B-013113**Analyses** **Result** **MDL** **Qual** **Units** **DF** **Date Analyzed**

<u>Semi-Volatile Organic Compounds by EPA Method 8270</u>				Batch ID: 4030	Analyst: PH	
2,4-Dinitrotoluene	ND	0.0701	µg/L	1	2/8/2013 2:51:00 AM	
4-Nitrophenol	ND	0.431	µg/L	1	2/8/2013 2:51:00 AM	
Fluorene	ND	0.0164	µg/L	1	2/8/2013 2:51:00 AM	
4-Chlorophenyl phenyl ether	ND	0.0199	µg/L	1	2/8/2013 2:51:00 AM	
Diethylphthalate	0.157	0.0144	J	µg/L	1	2/8/2013 2:51:00 AM
4,6-Dinitro-2-methylphenol	ND	0.487	µg/L	1	2/8/2013 2:51:00 AM	
4-Bromophenyl phenyl ether	ND	0.0241	µg/L	1	2/8/2013 2:51:00 AM	
Hexachlorobenzene	ND	0.0264	µg/L	1	2/8/2013 2:51:00 AM	
Pentachlorophenol	ND	0.0344	µg/L	1	2/8/2013 2:51:00 AM	
Phenanthrene	ND	0.0130	µg/L	1	2/8/2013 2:51:00 AM	
Anthracene	ND	0.0167	µg/L	1	2/8/2013 2:51:00 AM	
Carbazole	ND	0.0553	µg/L	1	2/8/2013 2:51:00 AM	
Di-n-butyl phthalate	0.112	0.0268	J	µg/L	1	2/8/2013 2:51:00 AM
Fluoranthene	ND	0.0112	µg/L	1	2/8/2013 2:51:00 AM	
Pyrene	ND	0.0146	µg/L	1	2/8/2013 2:51:00 AM	
Benzyl Butylphthalate	ND	0.0552	µg/L	1	2/8/2013 2:51:00 AM	
bis(2-Ethylhexyl)adipate	ND	0.0443	µg/L	1	2/8/2013 2:51:00 AM	
Benz[a]anthracene	ND	0.0123	µg/L	1	2/8/2013 2:51:00 AM	
Chrysene	ND	0.0126	µg/L	1	2/8/2013 2:51:00 AM	
Bis(2-ethylhexyl) phthalate	1.12	0.0316	µg/L	1	2/8/2013 2:51:00 AM	
Di-n-octyl phthalate	ND	0.0258	µg/L	1	2/8/2013 2:51:00 AM	
Benzo (b) fluoranthene	ND	0.0259	µg/L	1	2/8/2013 2:51:00 AM	
Benzo (k) fluoranthene	ND	0.0341	µg/L	1	2/8/2013 2:51:00 AM	
Benzo[a]pyrene	ND	0.0304	µg/L	1	2/8/2013 2:51:00 AM	
Indeno (1,2,3-cd) pyrene	ND	0.0673	µg/L	1	2/8/2013 2:51:00 AM	
Dibenzo (a,h) anthracene	ND	0.0366	µg/L	1	2/8/2013 2:51:00 AM	
Benzo (g,h,i) perylene	ND	0.0378	µg/L	1	2/8/2013 2:51:00 AM	
Surr: 2,4,6-Tribromophenol	99.0	24-138	%REC	1	2/8/2013 2:51:00 AM	
Surr: 2-Fluorobiphenyl	75.1	38.6-138	%REC	1	2/8/2013 2:51:00 AM	
Surr: Nitrobenzene-d5	72.9	31.7-140	%REC	1	2/8/2013 2:51:00 AM	
Surr: Phenol-d6	25.2	15-116	%REC	1	2/8/2013 2:51:00 AM	
Surr: p-Terphenyl	104	49-156	%REC	1	2/8/2013 2:51:00 AM	

Qualifiers: B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
RL Reporting Limit

D Dilution was required
H Holding times for preparation or analysis exceeded
ND Not detected at the Reporting Limit
S Spike recovery outside accepted recovery limits



Analytical Report

WO#: 1302006

Date Reported: 2/11/2013

Client: Calibre**Collection Date:** 1/31/2013 9:31:00 AM**Project:** Hytec/Bordeaux**Lab ID:** 1302006-002**Matrix:** Groundwater**Client Sample ID:** HLMW-06B-013113**Analyses** **Result** **MDL** **Qual** **Units** **DF** **Date Analyzed**

Volatile Organic Compounds by EPA Method 8260				Batch ID: R7380	Analyst: EM	
Dichlorodifluoromethane (CFC-12)	ND	0.0300	µg/L	1	2/8/2013 3:11:00 AM	
Chloromethane	ND	0.0470	µg/L	1	2/8/2013 3:11:00 AM	
Vinyl chloride	ND	0.0530	µg/L	1	2/8/2013 3:11:00 AM	
Bromomethane	ND	0.121	µg/L	1	2/8/2013 3:11:00 AM	
Trichlorofluoromethane (CFC-11)	0.450	0.0340	J	µg/L	1	2/8/2013 3:11:00 AM
Chloroethane	ND	0.0590	µg/L	1	2/8/2013 3:11:00 AM	
1,1-Dichloroethene	ND	0.0470	µg/L	1	2/8/2013 3:11:00 AM	
Methylene chloride	ND	0.0520	µg/L	1	2/8/2013 3:11:00 AM	
trans-1,2-Dichloroethene	ND	0.0370	µg/L	1	2/8/2013 3:11:00 AM	
Methyl tert-butyl ether (MTBE)	ND	0.0260	µg/L	1	2/8/2013 3:11:00 AM	
1,1-Dichloroethane	ND	0.0270	µg/L	1	2/8/2013 3:11:00 AM	
2,2-Dichloropropane	ND	0.0460	µg/L	1	2/8/2013 3:11:00 AM	
cis-1,2-Dichloroethene	ND	0.0190	µg/L	1	2/8/2013 3:11:00 AM	
Chloroform	ND	0.0320	µg/L	1	2/8/2013 3:11:00 AM	
1,1,1-Trichloroethane (TCA)	ND	0.0320	µg/L	1	2/8/2013 3:11:00 AM	
1,1-Dichloropropene	ND	0.0390	µg/L	1	2/8/2013 3:11:00 AM	
Carbon tetrachloride	ND	0.0320	µg/L	1	2/8/2013 3:11:00 AM	
1,2-Dichloroethane (EDC)	ND	0.0350	µg/L	1	2/8/2013 3:11:00 AM	
Benzene	ND	0.0250	µg/L	1	2/8/2013 3:11:00 AM	
Trichloroethene (TCE)	ND	0.0400	µg/L	1	2/8/2013 3:11:00 AM	
1,2-Dichloropropane	ND	0.0470	µg/L	1	2/8/2013 3:11:00 AM	
Bromodichloromethane	ND	0.0600	µg/L	1	2/8/2013 3:11:00 AM	
Dibromomethane	ND	0.115	µg/L	1	2/8/2013 3:11:00 AM	
cis-1,3-Dichloropropene	ND	0.0430	µg/L	1	2/8/2013 3:11:00 AM	
Toluene	ND	0.0330	µg/L	1	2/8/2013 3:11:00 AM	
trans-1,3-Dichloropropene	ND	0.0420	µg/L	1	2/8/2013 3:11:00 AM	
1,1,2-Trichloroethane	ND	0.120	µg/L	1	2/8/2013 3:11:00 AM	
1,3-Dichloropropane	ND	0.0530	µg/L	1	2/8/2013 3:11:00 AM	
Tetrachloroethene (PCE)	ND	0.0350	µg/L	1	2/8/2013 3:11:00 AM	
Dibromochloromethane	ND	0.0440	µg/L	1	2/8/2013 3:11:00 AM	
1,2-Dibromoethane (EDB)	ND	0.00650	µg/L	1	2/8/2013 3:11:00 AM	
Chlorobenzene	ND	0.0240	µg/L	1	2/8/2013 3:11:00 AM	
1,1,1,2-Tetrachloroethane	ND	0.0640	µg/L	1	2/8/2013 3:11:00 AM	
Ethylbenzene	ND	0.0170	µg/L	1	2/8/2013 3:11:00 AM	
m,p-Xylene	ND	0.0410	µg/L	1	2/8/2013 3:11:00 AM	

Qualifiers: B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
RL Reporting Limit

D Dilution was required
H Holding times for preparation or analysis exceeded
ND Not detected at the Reporting Limit
S Spike recovery outside accepted recovery limits



Analytical Report

WO#: 1302006

Date Reported: 2/11/2013

Client: Calibre

Collection Date: 1/31/2013 9:31:00 AM

Project: Hytec/Bordeaux

Lab ID: 1302006-002

Matrix: Groundwater

Client Sample ID: HLMW-06B-013113

Analyses	Result	MDL	Qual	Units	DF	Date Analyzed
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Volatile Organic Compounds by EPA Method 8260

Batch ID: R7380

Analyst: EM

o-Xylene	ND	0.0340		µg/L	1	2/8/2013 3:11:00 AM
Styrene	ND	0.0230		µg/L	1	2/8/2013 3:11:00 AM
Isopropylbenzene	ND	0.0180		µg/L	1	2/8/2013 3:11:00 AM
Bromoform	ND	0.115		µg/L	1	2/8/2013 3:11:00 AM
1,1,2,2-Tetrachloroethane	ND	0.108		µg/L	1	2/8/2013 3:11:00 AM
n-Propylbenzene	ND	0.0330		µg/L	1	2/8/2013 3:11:00 AM
Bromobenzene	ND	0.0550		µg/L	1	2/8/2013 3:11:00 AM
1,3,5-Trimethylbenzene	ND	0.0300		µg/L	1	2/8/2013 3:11:00 AM
2-Chlorotoluene	ND	0.0320		µg/L	1	2/8/2013 3:11:00 AM
4-Chlorotoluene	ND	0.0370		µg/L	1	2/8/2013 3:11:00 AM
tert-Butylbenzene	ND	0.0360		µg/L	1	2/8/2013 3:11:00 AM
1,2,3-Trichloropropane	ND	0.130		µg/L	1	2/8/2013 3:11:00 AM
1,2,4-Trichlorobenzene	ND	0.0990		µg/L	1	2/8/2013 3:11:00 AM
sec-Butylbenzene	ND	0.0230		µg/L	1	2/8/2013 3:11:00 AM
4-Isopropyltoluene	ND	0.0360		µg/L	1	2/8/2013 3:11:00 AM
1,3-Dichlorobenzene	ND	0.0290		µg/L	1	2/8/2013 3:11:00 AM
1,4-Dichlorobenzene	ND	0.0260		µg/L	1	2/8/2013 3:11:00 AM
n-Butylbenzene	ND	0.0200		µg/L	1	2/8/2013 3:11:00 AM
1,2-Dichlorobenzene	ND	0.0460		µg/L	1	2/8/2013 3:11:00 AM
1,2-Dibromo-3-chloropropane	ND	0.315		µg/L	1	2/8/2013 3:11:00 AM
1,2,4-Trimethylbenzene	ND	0.0200		µg/L	1	2/8/2013 3:11:00 AM
Hexachlorobutadiene	ND	0.154		µg/L	1	2/8/2013 3:11:00 AM
Naphthalene	0.480	0.0940	J	µg/L	1	2/8/2013 3:11:00 AM
1,2,3-Trichlorobenzene	ND	0.147		µg/L	1	2/8/2013 3:11:00 AM
Surr: 1-Bromo-4-fluorobenzene	92.8	82.6-120		%REC	1	2/8/2013 3:11:00 AM
Surr: Dibromofluoromethane	97.2	72.1-122		%REC	1	2/8/2013 3:11:00 AM
Surr: Toluene-d8	98.4	83.5-108		%REC	1	2/8/2013 3:11:00 AM

Total Metals by EPA Method 200.8

Batch ID: 4031

Analyst: MC

Antimony	0.198	0.00300	J	µg/L	1	2/4/2013 8:59:22 PM
Arsenic	1.12	0.266		µg/L	1	2/4/2013 8:59:22 PM
Beryllium	ND	0.0680		µg/L	1	2/4/2013 8:59:22 PM
Cadmium	0.149	0.0160	J	µg/L	1	2/4/2013 8:59:22 PM
Chromium	2.01	0.0810		µg/L	1	2/4/2013 8:59:22 PM

Qualifiers: B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
RL Reporting Limit

D Dilution was required
H Holding times for preparation or analysis exceeded
ND Not detected at the Reporting Limit
S Spike recovery outside accepted recovery limits



Analytical Report

WO#: 1302006

Date Reported: 2/11/2013

Client: Calibre

Collection Date: 1/31/2013 9:31:00 AM

Project: Hytec/Bordeaux

Lab ID: 1302006-002

Matrix: Groundwater

Client Sample ID: HLMW-06B-013113

Analyses	Result	MDL	Qual	Units	DF	Date Analyzed
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Total Metals by EPA Method 200.8 Batch ID: 4031 Analyst: MC

Copper	6.88	0.0930		µg/L	1	2/4/2013 8:59:22 PM
Lead	0.354	0.0750	J	µg/L	1	2/4/2013 8:59:22 PM
Nickel	2.62	0.110		µg/L	1	2/4/2013 8:59:22 PM
Zinc	21.6	0.121		µg/L	1	2/4/2013 8:59:22 PM

Qualifiers: B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
RL Reporting Limit

D Dilution was required
H Holding times for preparation or analysis exceeded
ND Not detected at the Reporting Limit
S Spike recovery outside accepted recovery limits



Analytical Report

WO#: 1302006

Date Reported: 2/11/2013

Client: Calibre

Collection Date: 1/31/2013 10:03:00 AM

Project: Hytec/Bordeaux

Lab ID: 1302006-003

Matrix: Groundwater

Client Sample ID: HLMW-03A-013113

Analyses	Result	MDL	Qual	Units	DF	Date Analyzed
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Semi-Volatile Organic Compounds by EPA Method 8270				Batch ID: 4030	Analyst: PH	
Phenol	ND	0.0401		µg/L	1	2/8/2013 3:15:00 AM
2-Chlorophenol	ND	0.0132		µg/L	1	2/8/2013 3:15:00 AM
1,3-Dichlorobenzene	ND	0.0161		µg/L	1	2/8/2013 3:15:00 AM
1,4-Dichlorobenzene	ND	0.0241		µg/L	1	2/8/2013 3:15:00 AM
1,2-Dichlorobenzene	ND	0.0232		µg/L	1	2/8/2013 3:15:00 AM
Benzyl alcohol	ND	0.0371		µg/L	1	2/8/2013 3:15:00 AM
Bis(2-chloroethyl) ether	ND	0.0294		µg/L	1	2/8/2013 3:15:00 AM
2-Methylphenol (o-cresol)	ND	0.0245		µg/L	1	2/8/2013 3:15:00 AM
Hexachloroethane	ND	0.0653		µg/L	1	2/8/2013 3:15:00 AM
N-Nitrosodi-n-propylamine	ND	0.0642		µg/L	1	2/8/2013 3:15:00 AM
Nitrobenzene	ND	0.0392		µg/L	1	2/8/2013 3:15:00 AM
Isophorone	ND	0.0205		µg/L	1	2/8/2013 3:15:00 AM
4-Methylphenol (p-cresol)	ND	0.0563		µg/L	1	2/8/2013 3:15:00 AM
2-Nitrophenol	ND	0.0912		µg/L	1	2/8/2013 3:15:00 AM
2,4-Dimethylphenol	ND	0.0376		µg/L	1	2/8/2013 3:15:00 AM
Bis(2-chloroethoxy)methane	ND	0.0337		µg/L	1	2/8/2013 3:15:00 AM
2,4-Dichlorophenol	ND	0.0188		µg/L	1	2/8/2013 3:15:00 AM
1,2,4-Trichlorobenzene	ND	0.0194		µg/L	1	2/8/2013 3:15:00 AM
Naphthalene	0.0355	0.0123	J	µg/L	1	2/8/2013 3:15:00 AM
4-Chloroaniline	ND	0.0180		µg/L	1	2/8/2013 3:15:00 AM
Hexachlorobutadiene	ND	0.0390		µg/L	1	2/8/2013 3:15:00 AM
4-Chloro-3-methylphenol	ND	0.0687		µg/L	1	2/8/2013 3:15:00 AM
2-Methylnaphthalene	ND	0.0252		µg/L	1	2/8/2013 3:15:00 AM
1-Methylnaphthalene	ND	0.0214		µg/L	1	2/8/2013 3:15:00 AM
Hexachlorocyclopentadiene	ND	0.0313		µg/L	1	2/8/2013 3:15:00 AM
2,4,6-Trichlorophenol	ND	0.0210		µg/L	1	2/8/2013 3:15:00 AM
2,4,5-Trichlorophenol	ND	0.0339		µg/L	1	2/8/2013 3:15:00 AM
2-Chloronaphthalene	ND	0.0143		µg/L	1	2/8/2013 3:15:00 AM
2-Nitroaniline	ND	0.0710		µg/L	1	2/8/2013 3:15:00 AM
Acenaphthene	ND	0.0139		µg/L	1	2/8/2013 3:15:00 AM
Dimethylphthalate	ND	0.0347		µg/L	1	2/8/2013 3:15:00 AM
2,6-Dinitrotoluene	ND	0.0269		µg/L	1	2/8/2013 3:15:00 AM
Acenaphthylene	ND	0.00613		µg/L	1	2/8/2013 3:15:00 AM
2,4-Dinitrophenol	ND	0.689		µg/L	1	2/8/2013 3:15:00 AM
Dibenzofuran	ND	0.0131		µg/L	1	2/8/2013 3:15:00 AM

Qualifiers: B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
RL Reporting Limit

D Dilution was required
H Holding times for preparation or analysis exceeded
ND Not detected at the Reporting Limit
S Spike recovery outside accepted recovery limits



Analytical Report

WO#: 1302006

Date Reported: 2/11/2013

Client: Calibre**Collection Date:** 1/31/2013 10:03:00 AM**Project:** Hytec/Bordeaux**Lab ID:** 1302006-003**Matrix:** Groundwater**Client Sample ID:** HLMW-03A-013113

Analyses	Result	MDL	Qual	Units	DF	Date Analyzed
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Semi-Volatile Organic Compounds by EPA Method 8270				Batch ID: 4030	Analyst: PH
2,4-Dinitrotoluene	ND	0.0701		µg/L	1
4-Nitrophenol	ND	0.431		µg/L	1
Fluorene	ND	0.0164		µg/L	1
4-Chlorophenyl phenyl ether	ND	0.0199		µg/L	1
Diethylphthalate	0.144	0.0144	J	µg/L	1
4,6-Dinitro-2-methylphenol	ND	0.487		µg/L	1
4-Bromophenyl phenyl ether	ND	0.0241		µg/L	1
Hexachlorobenzene	ND	0.0264		µg/L	1
Pentachlorophenol	ND	0.0344		µg/L	1
Phenanthrene	ND	0.0130		µg/L	1
Anthracene	ND	0.0167		µg/L	1
Carbazole	ND	0.0553		µg/L	1
Di-n-butyl phthalate	0.0678	0.0268	J	µg/L	1
Fluoranthene	ND	0.0112		µg/L	1
Pyrene	ND	0.0146		µg/L	1
Benzyl Butylphthalate	ND	0.0552		µg/L	1
bis(2-Ethylhexyl)adipate	ND	0.0443		µg/L	1
Benz[a]anthracene	ND	0.0123		µg/L	1
Chrysene	ND	0.0126		µg/L	1
Bis(2-ethylhexyl) phthalate	0.260	0.0316	J	µg/L	1
Di-n-octyl phthalate	ND	0.0258		µg/L	1
Benzo (b) fluoranthene	ND	0.0259		µg/L	1
Benzo (k) fluoranthene	ND	0.0341		µg/L	1
Benzo[a]pyrene	ND	0.0304		µg/L	1
Indeno (1,2,3-cd) pyrene	ND	0.0673		µg/L	1
Dibenzo (a,h) anthracene	ND	0.0366		µg/L	1
Benzo (g,h,i) perylene	ND	0.0378		µg/L	1
Surr: 2,4,6-Tribromophenol	88.3	24-138		%REC	1
Surr: 2-Fluorobiphenyl	70.3	38.6-138		%REC	1
Surr: Nitrobenzene-d5	67.9	31.7-140		%REC	1
Surr: Phenol-d6	24.3	15-116		%REC	1
Surr: p-Terphenyl	100	49-156		%REC	1

Qualifiers: B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
RL Reporting Limit

D Dilution was required
H Holding times for preparation or analysis exceeded
ND Not detected at the Reporting Limit
S Spike recovery outside accepted recovery limits



Analytical Report

WO#: 1302006

Date Reported: 2/11/2013

Client: Calibre**Collection Date:** 1/31/2013 10:03:00 AM**Project:** Hytec/Bordeaux**Lab ID:** 1302006-003**Matrix:** Groundwater**Client Sample ID:** HLMW-03A-013113

Analyses	Result	MDL	Qual	Units	DF	Date Analyzed
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Volatile Organic Compounds by EPA Method 8260				Batch ID: R7380	Analyst: EM
Dichlorodifluoromethane (CFC-12)	ND	0.0300	µg/L	1	2/8/2013 3:41:00 AM
Chloromethane	ND	0.0470	µg/L	1	2/8/2013 3:41:00 AM
Vinyl chloride	ND	0.0530	µg/L	1	2/8/2013 3:41:00 AM
Bromomethane	ND	0.121	µg/L	1	2/8/2013 3:41:00 AM
Trichlorofluoromethane (CFC-11)	1.40	0.0340	µg/L	1	2/8/2013 3:41:00 AM
Chloroethane	ND	0.0590	µg/L	1	2/8/2013 3:41:00 AM
1,1-Dichloroethene	ND	0.0470	µg/L	1	2/8/2013 3:41:00 AM
Methylene chloride	ND	0.0520	µg/L	1	2/8/2013 3:41:00 AM
trans-1,2-Dichloroethene	ND	0.0370	µg/L	1	2/8/2013 3:41:00 AM
Methyl tert-butyl ether (MTBE)	ND	0.0260	µg/L	1	2/8/2013 3:41:00 AM
1,1-Dichloroethane	ND	0.0270	µg/L	1	2/8/2013 3:41:00 AM
2,2-Dichloropropane	ND	0.0460	µg/L	1	2/8/2013 3:41:00 AM
cis-1,2-Dichloroethene	ND	0.0190	µg/L	1	2/8/2013 3:41:00 AM
Chloroform	ND	0.0320	µg/L	1	2/8/2013 3:41:00 AM
1,1,1-Trichloroethane (TCA)	ND	0.0320	µg/L	1	2/8/2013 3:41:00 AM
1,1-Dichloropropene	ND	0.0390	µg/L	1	2/8/2013 3:41:00 AM
Carbon tetrachloride	ND	0.0320	µg/L	1	2/8/2013 3:41:00 AM
1,2-Dichloroethane (EDC)	ND	0.0350	µg/L	1	2/8/2013 3:41:00 AM
Benzene	ND	0.0250	µg/L	1	2/8/2013 3:41:00 AM
Trichloroethene (TCE)	ND	0.0400	µg/L	1	2/8/2013 3:41:00 AM
1,2-Dichloropropane	ND	0.0470	µg/L	1	2/8/2013 3:41:00 AM
Bromodichloromethane	ND	0.0600	µg/L	1	2/8/2013 3:41:00 AM
Dibromomethane	ND	0.115	µg/L	1	2/8/2013 3:41:00 AM
cis-1,3-Dichloropropene	ND	0.0430	µg/L	1	2/8/2013 3:41:00 AM
Toluene	ND	0.0330	µg/L	1	2/8/2013 3:41:00 AM
trans-1,3-Dichloropropene	ND	0.0420	µg/L	1	2/8/2013 3:41:00 AM
1,1,2-Trichloroethane	ND	0.120	µg/L	1	2/8/2013 3:41:00 AM
1,3-Dichloropropane	ND	0.0530	µg/L	1	2/8/2013 3:41:00 AM
Tetrachloroethene (PCE)	ND	0.0350	µg/L	1	2/8/2013 3:41:00 AM
Dibromochloromethane	ND	0.0440	µg/L	1	2/8/2013 3:41:00 AM
1,2-Dibromoethane (EDB)	ND	0.00650	µg/L	1	2/8/2013 3:41:00 AM
Chlorobenzene	ND	0.0240	µg/L	1	2/8/2013 3:41:00 AM
1,1,1,2-Tetrachloroethane	ND	0.0640	µg/L	1	2/8/2013 3:41:00 AM
Ethylbenzene	ND	0.0170	µg/L	1	2/8/2013 3:41:00 AM
m,p-Xylene	ND	0.0410	µg/L	1	2/8/2013 3:41:00 AM

Qualifiers: B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
RL Reporting Limit

D Dilution was required
H Holding times for preparation or analysis exceeded
ND Not detected at the Reporting Limit
S Spike recovery outside accepted recovery limits



Analytical Report

WO#: 1302006

Date Reported: 2/11/2013

Client: Calibre

Collection Date: 1/31/2013 10:03:00 AM

Project: Hytec/Bordeaux

Lab ID: 1302006-003

Matrix: Groundwater

Client Sample ID: HLMW-03A-013113

Analyses	Result	MDL	Qual	Units	DF	Date Analyzed
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Volatile Organic Compounds by EPA Method 8260

Batch ID: R7380

Analyst: EM

o-Xylene	ND	0.0340		µg/L	1	2/8/2013 3:41:00 AM
Styrene	ND	0.0230		µg/L	1	2/8/2013 3:41:00 AM
Isopropylbenzene	ND	0.0180		µg/L	1	2/8/2013 3:41:00 AM
Bromoform	ND	0.115		µg/L	1	2/8/2013 3:41:00 AM
1,1,2,2-Tetrachloroethane	ND	0.108		µg/L	1	2/8/2013 3:41:00 AM
n-Propylbenzene	ND	0.0330		µg/L	1	2/8/2013 3:41:00 AM
Bromobenzene	ND	0.0550		µg/L	1	2/8/2013 3:41:00 AM
1,3,5-Trimethylbenzene	ND	0.0300		µg/L	1	2/8/2013 3:41:00 AM
2-Chlorotoluene	ND	0.0320		µg/L	1	2/8/2013 3:41:00 AM
4-Chlorotoluene	ND	0.0370		µg/L	1	2/8/2013 3:41:00 AM
tert-Butylbenzene	ND	0.0360		µg/L	1	2/8/2013 3:41:00 AM
1,2,3-Trichloropropane	ND	0.130		µg/L	1	2/8/2013 3:41:00 AM
1,2,4-Trichlorobenzene	ND	0.0990		µg/L	1	2/8/2013 3:41:00 AM
sec-Butylbenzene	ND	0.0230		µg/L	1	2/8/2013 3:41:00 AM
4-Isopropyltoluene	ND	0.0360		µg/L	1	2/8/2013 3:41:00 AM
1,3-Dichlorobenzene	ND	0.0290		µg/L	1	2/8/2013 3:41:00 AM
1,4-Dichlorobenzene	ND	0.0260		µg/L	1	2/8/2013 3:41:00 AM
n-Butylbenzene	ND	0.0200		µg/L	1	2/8/2013 3:41:00 AM
1,2-Dichlorobenzene	ND	0.0460		µg/L	1	2/8/2013 3:41:00 AM
1,2-Dibromo-3-chloropropane	ND	0.315		µg/L	1	2/8/2013 3:41:00 AM
1,2,4-Trimethylbenzene	ND	0.0200		µg/L	1	2/8/2013 3:41:00 AM
Hexachlorobutadiene	ND	0.154		µg/L	1	2/8/2013 3:41:00 AM
Naphthalene	ND	0.0940		µg/L	1	2/8/2013 3:41:00 AM
1,2,3-Trichlorobenzene	ND	0.147		µg/L	1	2/8/2013 3:41:00 AM
Surr: 1-Bromo-4-fluorobenzene	94.8	82.6-120		%REC	1	2/8/2013 3:41:00 AM
Surr: Dibromofluoromethane	97.7	72.1-122		%REC	1	2/8/2013 3:41:00 AM
Surr: Toluene-d8	99.5	83.5-108		%REC	1	2/8/2013 3:41:00 AM

Total Metals by EPA Method 200.8

Batch ID: 4031

Analyst: MC

Antimony	0.0170	0.00300	J	µg/L	1	2/5/2013 10:49:54 AM
Arsenic	ND	0.266		µg/L	1	2/5/2013 10:49:54 AM
Beryllium	0.189	0.0680	J	µg/L	1	2/5/2013 10:49:54 AM
Cadmium	0.106	0.0160	J	µg/L	1	2/5/2013 10:49:54 AM
Chromium	2.06	0.0810		µg/L	1	2/5/2013 10:49:54 AM

Qualifiers: B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
RL Reporting Limit

D Dilution was required
H Holding times for preparation or analysis exceeded
ND Not detected at the Reporting Limit
S Spike recovery outside accepted recovery limits



Analytical Report

WO#: 1302006

Date Reported: 2/11/2013

Client: Calibre

Collection Date: 1/31/2013 10:03:00 AM

Project: Hytec/Bordeaux

Lab ID: 1302006-003

Matrix: Groundwater

Client Sample ID: HLMW-03A-013113

Analyses	Result	MDL	Qual	Units	DF	Date Analyzed
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Total Metals by EPA Method 200.8 Batch ID: 4031 Analyst: MC

Copper	16.6	0.0930	µg/L	1	2/5/2013 10:49:54 AM
Lead	ND	0.0750	µg/L	1	2/5/2013 10:49:54 AM
Nickel	5.59	0.110	µg/L	1	2/5/2013 10:49:54 AM
Zinc	20.5	0.121	µg/L	1	2/5/2013 10:49:54 AM

Qualifiers: B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
RL Reporting Limit

D Dilution was required
H Holding times for preparation or analysis exceeded
ND Not detected at the Reporting Limit
S Spike recovery outside accepted recovery limits



Analytical Report

WO#: 1302006

Date Reported: 2/11/2013

Client: Calibre**Collection Date:** 1/31/2013 10:40:00 AM**Project:** Hytec/Bordeaux**Lab ID:** 1302006-004**Matrix:** Groundwater**Client Sample ID:** HLMW-02A-013113

Analyses	Result	MDL	Qual	Units	DF	Date Analyzed
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Semi-Volatile Organic Compounds by EPA Method 8270				Batch ID: 4030	Analyst: PH	
Phenol	ND	0.0401		µg/L	1	2/8/2013 3:39:00 AM
2-Chlorophenol	ND	0.0132		µg/L	1	2/8/2013 3:39:00 AM
1,3-Dichlorobenzene	ND	0.0161		µg/L	1	2/8/2013 3:39:00 AM
1,4-Dichlorobenzene	ND	0.0241		µg/L	1	2/8/2013 3:39:00 AM
1,2-Dichlorobenzene	ND	0.0232		µg/L	1	2/8/2013 3:39:00 AM
Benzyl alcohol	ND	0.0371		µg/L	1	2/8/2013 3:39:00 AM
Bis(2-chloroethyl) ether	ND	0.0294		µg/L	1	2/8/2013 3:39:00 AM
2-Methylphenol (o-cresol)	ND	0.0245		µg/L	1	2/8/2013 3:39:00 AM
Hexachloroethane	ND	0.0653		µg/L	1	2/8/2013 3:39:00 AM
N-Nitrosodi-n-propylamine	ND	0.0642		µg/L	1	2/8/2013 3:39:00 AM
Nitrobenzene	ND	0.0392		µg/L	1	2/8/2013 3:39:00 AM
Isophorone	ND	0.0205		µg/L	1	2/8/2013 3:39:00 AM
4-Methylphenol (p-cresol)	ND	0.0563		µg/L	1	2/8/2013 3:39:00 AM
2-Nitrophenol	ND	0.0912		µg/L	1	2/8/2013 3:39:00 AM
2,4-Dimethylphenol	ND	0.0376		µg/L	1	2/8/2013 3:39:00 AM
Bis(2-chloroethoxy)methane	ND	0.0337		µg/L	1	2/8/2013 3:39:00 AM
2,4-Dichlorophenol	ND	0.0188		µg/L	1	2/8/2013 3:39:00 AM
1,2,4-Trichlorobenzene	ND	0.0194		µg/L	1	2/8/2013 3:39:00 AM
Naphthalene	0.0348	0.0123	J	µg/L	1	2/8/2013 3:39:00 AM
4-Chloroaniline	ND	0.0180		µg/L	1	2/8/2013 3:39:00 AM
Hexachlorobutadiene	ND	0.0390		µg/L	1	2/8/2013 3:39:00 AM
4-Chloro-3-methylphenol	ND	0.0687		µg/L	1	2/8/2013 3:39:00 AM
2-Methylnaphthalene	ND	0.0252		µg/L	1	2/8/2013 3:39:00 AM
1-Methylnaphthalene	ND	0.0214		µg/L	1	2/8/2013 3:39:00 AM
Hexachlorocyclopentadiene	ND	0.0313		µg/L	1	2/8/2013 3:39:00 AM
2,4,6-Trichlorophenol	ND	0.0210		µg/L	1	2/8/2013 3:39:00 AM
2,4,5-Trichlorophenol	ND	0.0339		µg/L	1	2/8/2013 3:39:00 AM
2-Chloronaphthalene	ND	0.0143		µg/L	1	2/8/2013 3:39:00 AM
2-Nitroaniline	ND	0.0710		µg/L	1	2/8/2013 3:39:00 AM
Acenaphthene	ND	0.0139		µg/L	1	2/8/2013 3:39:00 AM
Dimethylphthalate	ND	0.0347		µg/L	1	2/8/2013 3:39:00 AM
2,6-Dinitrotoluene	ND	0.0269		µg/L	1	2/8/2013 3:39:00 AM
Acenaphthylene	ND	0.00613		µg/L	1	2/8/2013 3:39:00 AM
2,4-Dinitrophenol	ND	0.689		µg/L	1	2/8/2013 3:39:00 AM
Dibenzofuran	ND	0.0131		µg/L	1	2/8/2013 3:39:00 AM

Qualifiers: B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
RL Reporting Limit

D Dilution was required
H Holding times for preparation or analysis exceeded
ND Not detected at the Reporting Limit
S Spike recovery outside accepted recovery limits



Analytical Report

WO#: 1302006

Date Reported: 2/11/2013

Client: Calibre**Collection Date:** 1/31/2013 10:40:00 AM**Project:** Hytec/Bordeaux**Lab ID:** 1302006-004**Matrix:** Groundwater**Client Sample ID:** HLMW-02A-013113**Analyses** **Result** **MDL** **Qual** **Units** **DF** **Date Analyzed**

<u>Semi-Volatile Organic Compounds by EPA Method 8270</u>				Batch ID: 4030	Analyst: PH	
2,4-Dinitrotoluene	ND	0.0701	µg/L	1	2/8/2013 3:39:00 AM	
4-Nitrophenol	ND	0.431	µg/L	1	2/8/2013 3:39:00 AM	
Fluorene	ND	0.0164	µg/L	1	2/8/2013 3:39:00 AM	
4-Chlorophenyl phenyl ether	ND	0.0199	µg/L	1	2/8/2013 3:39:00 AM	
Diethylphthalate	0.149	0.0144	J	µg/L	1	2/8/2013 3:39:00 AM
4,6-Dinitro-2-methylphenol	ND	0.487	µg/L	1	2/8/2013 3:39:00 AM	
4-Bromophenyl phenyl ether	ND	0.0241	µg/L	1	2/8/2013 3:39:00 AM	
Hexachlorobenzene	ND	0.0264	µg/L	1	2/8/2013 3:39:00 AM	
Pentachlorophenol	ND	0.0344	µg/L	1	2/8/2013 3:39:00 AM	
Phenanthrene	ND	0.0130	µg/L	1	2/8/2013 3:39:00 AM	
Anthracene	ND	0.0167	µg/L	1	2/8/2013 3:39:00 AM	
Carbazole	ND	0.0553	µg/L	1	2/8/2013 3:39:00 AM	
Di-n-butyl phthalate	0.0775	0.0268	J	µg/L	1	2/8/2013 3:39:00 AM
Fluoranthene	ND	0.0112	µg/L	1	2/8/2013 3:39:00 AM	
Pyrene	ND	0.0146	µg/L	1	2/8/2013 3:39:00 AM	
Benzyl Butylphthalate	ND	0.0552	µg/L	1	2/8/2013 3:39:00 AM	
bis(2-Ethylhexyl)adipate	ND	0.0443	µg/L	1	2/8/2013 3:39:00 AM	
Benz[a]anthracene	ND	0.0123	µg/L	1	2/8/2013 3:39:00 AM	
Chrysene	ND	0.0126	µg/L	1	2/8/2013 3:39:00 AM	
Bis(2-ethylhexyl) phthalate	0.328	0.0316	J	µg/L	1	2/8/2013 3:39:00 AM
Di-n-octyl phthalate	ND	0.0258	µg/L	1	2/8/2013 3:39:00 AM	
Benzo (b) fluoranthene	ND	0.0259	µg/L	1	2/8/2013 3:39:00 AM	
Benzo (k) fluoranthene	ND	0.0341	µg/L	1	2/8/2013 3:39:00 AM	
Benzo[a]pyrene	ND	0.0304	µg/L	1	2/8/2013 3:39:00 AM	
Indeno (1,2,3-cd) pyrene	ND	0.0673	µg/L	1	2/8/2013 3:39:00 AM	
Dibenzo (a,h) anthracene	ND	0.0366	µg/L	1	2/8/2013 3:39:00 AM	
Benzo (g,h,i) perylene	ND	0.0378	µg/L	1	2/8/2013 3:39:00 AM	
Surrogate: 2,4,6-Tribromophenol	90.6	24-138	%REC	1	2/8/2013 3:39:00 AM	
Surrogate: 2-Fluorobiphenyl	65.5	38.6-138	%REC	1	2/8/2013 3:39:00 AM	
Surrogate: Nitrobenzene-d5	61.1	31.7-140	%REC	1	2/8/2013 3:39:00 AM	
Surrogate: Phenol-d6	24.0	15-116	%REC	1	2/8/2013 3:39:00 AM	
Surrogate: p-Terphenyl	100	49-156	%REC	1	2/8/2013 3:39:00 AM	

Qualifiers: B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
RL Reporting Limit

D Dilution was required
H Holding times for preparation or analysis exceeded
ND Not detected at the Reporting Limit
S Spike recovery outside accepted recovery limits



Analytical Report

WO#: 1302006

Date Reported: 2/11/2013

Client: Calibre**Collection Date:** 1/31/2013 10:40:00 AM**Project:** Hytec/Bordeaux**Lab ID:** 1302006-004**Matrix:** Groundwater**Client Sample ID:** HLMW-02A-013113

Analyses	Result	MDL	Qual	Units	DF	Date Analyzed
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Volatile Organic Compounds by EPA Method 8260				Batch ID: R7380	Analyst: EM
Dichlorodifluoromethane (CFC-12)	ND	0.0300		µg/L	1
Chloromethane	ND	0.0470		µg/L	1
Vinyl chloride	ND	0.0530		µg/L	1
Bromomethane	ND	0.121		µg/L	1
Trichlorodifluoromethane (CFC-11)	0.890	0.0340	J	µg/L	1
Chloroethane	ND	0.0590		µg/L	1
1,1-Dichloroethene	ND	0.0470		µg/L	1
Methylene chloride	ND	0.0520		µg/L	1
trans-1,2-Dichloroethene	ND	0.0370		µg/L	1
Methyl tert-butyl ether (MTBE)	ND	0.0260		µg/L	1
1,1-Dichloroethane	ND	0.0270		µg/L	1
2,2-Dichloropropane	ND	0.0460		µg/L	1
cis-1,2-Dichloroethene	ND	0.0190		µg/L	1
Chloroform	ND	0.0320		µg/L	1
1,1,1-Trichloroethane (TCA)	ND	0.0320		µg/L	1
1,1-Dichloropropene	ND	0.0390		µg/L	1
Carbon tetrachloride	ND	0.0320		µg/L	1
1,2-Dichloroethane (EDC)	ND	0.0350		µg/L	1
Benzene	ND	0.0250		µg/L	1
Trichloroethene (TCE)	ND	0.0400		µg/L	1
1,2-Dichloropropane	ND	0.0470		µg/L	1
Bromodichloromethane	ND	0.0600		µg/L	1
Dibromomethane	ND	0.115		µg/L	1
cis-1,3-Dichloropropene	ND	0.0430		µg/L	1
Toluene	ND	0.0330		µg/L	1
trans-1,3-Dichloropropene	ND	0.0420		µg/L	1
1,1,2-Trichloroethane	ND	0.120		µg/L	1
1,3-Dichloropropane	ND	0.0530		µg/L	1
Tetrachloroethene (PCE)	ND	0.0350		µg/L	1
Dibromochloromethane	ND	0.0440		µg/L	1
1,2-Dibromoethane (EDB)	ND	0.00650		µg/L	1
Chlorobenzene	ND	0.0240		µg/L	1
1,1,1,2-Tetrachloroethane	ND	0.0640		µg/L	1
Ethylbenzene	ND	0.0170		µg/L	1
m,p-Xylene	ND	0.0410		µg/L	1

Qualifiers: B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
RL Reporting Limit

D Dilution was required
H Holding times for preparation or analysis exceeded
ND Not detected at the Reporting Limit
S Spike recovery outside accepted recovery limits



Analytical Report

WO#: 1302006

Date Reported: 2/11/2013

Client: Calibre

Collection Date: 1/31/2013 10:40:00 AM

Project: Hytec/Bordeaux

Lab ID: 1302006-004

Matrix: Groundwater

Client Sample ID: HLMW-02A-013113

Analyses	Result	MDL	Qual	Units	DF	Date Analyzed
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Volatile Organic Compounds by EPA Method 8260

Batch ID: R7380

Analyst: EM

o-Xylene	ND	0.0340		µg/L	1	2/8/2013 4:11:00 AM
Styrene	ND	0.0230		µg/L	1	2/8/2013 4:11:00 AM
Isopropylbenzene	ND	0.0180		µg/L	1	2/8/2013 4:11:00 AM
Bromoform	ND	0.115		µg/L	1	2/8/2013 4:11:00 AM
1,1,2,2-Tetrachloroethane	ND	0.108		µg/L	1	2/8/2013 4:11:00 AM
n-Propylbenzene	ND	0.0330		µg/L	1	2/8/2013 4:11:00 AM
Bromobenzene	ND	0.0550		µg/L	1	2/8/2013 4:11:00 AM
1,3,5-Trimethylbenzene	ND	0.0300		µg/L	1	2/8/2013 4:11:00 AM
2-Chlorotoluene	ND	0.0320		µg/L	1	2/8/2013 4:11:00 AM
4-Chlorotoluene	ND	0.0370		µg/L	1	2/8/2013 4:11:00 AM
tert-Butylbenzene	ND	0.0360		µg/L	1	2/8/2013 4:11:00 AM
1,2,3-Trichloropropane	ND	0.130		µg/L	1	2/8/2013 4:11:00 AM
1,2,4-Trichlorobenzene	ND	0.0990		µg/L	1	2/8/2013 4:11:00 AM
sec-Butylbenzene	ND	0.0230		µg/L	1	2/8/2013 4:11:00 AM
4-Isopropyltoluene	ND	0.0360		µg/L	1	2/8/2013 4:11:00 AM
1,3-Dichlorobenzene	ND	0.0290		µg/L	1	2/8/2013 4:11:00 AM
1,4-Dichlorobenzene	ND	0.0260		µg/L	1	2/8/2013 4:11:00 AM
n-Butylbenzene	ND	0.0200		µg/L	1	2/8/2013 4:11:00 AM
1,2-Dichlorobenzene	ND	0.0460		µg/L	1	2/8/2013 4:11:00 AM
1,2-Dibromo-3-chloropropane	ND	0.315		µg/L	1	2/8/2013 4:11:00 AM
1,2,4-Trimethylbenzene	ND	0.0200		µg/L	1	2/8/2013 4:11:00 AM
Hexachlorobutadiene	ND	0.154		µg/L	1	2/8/2013 4:11:00 AM
Naphthalene	ND	0.0940		µg/L	1	2/8/2013 4:11:00 AM
1,2,3-Trichlorobenzene	ND	0.147		µg/L	1	2/8/2013 4:11:00 AM
Surr: 1-Bromo-4-fluorobenzene	92.0	82.6-120		%REC	1	2/8/2013 4:11:00 AM
Surr: Dibromofluoromethane	99.7	72.1-122		%REC	1	2/8/2013 4:11:00 AM
Surr: Toluene-d8	102	83.5-108		%REC	1	2/8/2013 4:11:00 AM

Total Metals by EPA Method 200.8

Batch ID: 4031

Analyst: MC

Antimony	0.0415	0.00300	J	µg/L	1	2/5/2013 11:00:14 AM
Arsenic	ND	0.266		µg/L	1	2/5/2013 11:00:14 AM
Beryllium	ND	0.0680		µg/L	1	2/5/2013 11:00:14 AM
Cadmium	0.0275	0.0160	J	µg/L	1	2/5/2013 11:00:14 AM
Chromium	0.694	0.0810		µg/L	1	2/5/2013 11:00:14 AM

Qualifiers: B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
RL Reporting Limit

D Dilution was required
H Holding times for preparation or analysis exceeded
ND Not detected at the Reporting Limit
S Spike recovery outside accepted recovery limits



Analytical Report

WO#: 1302006

Date Reported: 2/11/2013

Client: Calibre

Collection Date: 1/31/2013 10:40:00 AM

Project: Hytec/Bordeaux

Lab ID: 1302006-004

Matrix: Groundwater

Client Sample ID: HLMW-02A-013113

Analyses	Result	MDL	Qual	Units	DF	Date Analyzed
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Total Metals by EPA Method 200.8			Batch ID: 4031	Analyst: MC		
Copper	1.68	0.0930	µg/L	1	2/5/2013 11:00:14 AM	
Lead	ND	0.0750	µg/L	1	2/5/2013 11:00:14 AM	
Nickel	0.935	0.110	µg/L	1	2/5/2013 11:00:14 AM	
Zinc	13.4	0.121	µg/L	1	2/5/2013 11:00:14 AM	

Qualifiers: B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
RL Reporting Limit

D Dilution was required
H Holding times for preparation or analysis exceeded
ND Not detected at the Reporting Limit
S Spike recovery outside accepted recovery limits



Analytical Report

WO#: 1302006

Date Reported: 2/11/2013

Client: Calibre**Collection Date:** 1/31/2013 11:29:00 AM**Project:** Hytec/Bordeaux**Lab ID:** 1302006-005**Matrix:** Groundwater**Client Sample ID:** HLMW-04A-013113

Analyses	Result	MDL	Qual	Units	DF	Date Analyzed
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Semi-Volatile Organic Compounds by EPA Method 8270				Batch ID: 4030	Analyst: PH	
Phenol	ND	0.0401		µg/L	1	2/8/2013 4:04:00 AM
2-Chlorophenol	ND	0.0132		µg/L	1	2/8/2013 4:04:00 AM
1,3-Dichlorobenzene	ND	0.0161		µg/L	1	2/8/2013 4:04:00 AM
1,4-Dichlorobenzene	ND	0.0241		µg/L	1	2/8/2013 4:04:00 AM
1,2-Dichlorobenzene	ND	0.0232		µg/L	1	2/8/2013 4:04:00 AM
Benzyl alcohol	ND	0.0371		µg/L	1	2/8/2013 4:04:00 AM
Bis(2-chloroethyl) ether	ND	0.0294		µg/L	1	2/8/2013 4:04:00 AM
2-Methylphenol (o-cresol)	ND	0.0245		µg/L	1	2/8/2013 4:04:00 AM
Hexachloroethane	ND	0.0653		µg/L	1	2/8/2013 4:04:00 AM
N-Nitrosodi-n-propylamine	ND	0.0642		µg/L	1	2/8/2013 4:04:00 AM
Nitrobenzene	ND	0.0392		µg/L	1	2/8/2013 4:04:00 AM
Isophorone	ND	0.0205		µg/L	1	2/8/2013 4:04:00 AM
4-Methylphenol (p-cresol)	ND	0.0563		µg/L	1	2/8/2013 4:04:00 AM
2-Nitrophenol	ND	0.0912		µg/L	1	2/8/2013 4:04:00 AM
2,4-Dimethylphenol	ND	0.0376		µg/L	1	2/8/2013 4:04:00 AM
Bis(2-chloroethoxy)methane	ND	0.0337		µg/L	1	2/8/2013 4:04:00 AM
2,4-Dichlorophenol	ND	0.0188		µg/L	1	2/8/2013 4:04:00 AM
1,2,4-Trichlorobenzene	ND	0.0194		µg/L	1	2/8/2013 4:04:00 AM
Naphthalene	0.0412	0.0123	J	µg/L	1	2/8/2013 4:04:00 AM
4-Chloroaniline	ND	0.0180		µg/L	1	2/8/2013 4:04:00 AM
Hexachlorobutadiene	ND	0.0390		µg/L	1	2/8/2013 4:04:00 AM
4-Chloro-3-methylphenol	ND	0.0687		µg/L	1	2/8/2013 4:04:00 AM
2-Methylnaphthalene	ND	0.0252		µg/L	1	2/8/2013 4:04:00 AM
1-Methylnaphthalene	ND	0.0214		µg/L	1	2/8/2013 4:04:00 AM
Hexachlorocyclopentadiene	ND	0.0313		µg/L	1	2/8/2013 4:04:00 AM
2,4,6-Trichlorophenol	ND	0.0210		µg/L	1	2/8/2013 4:04:00 AM
2,4,5-Trichlorophenol	ND	0.0339		µg/L	1	2/8/2013 4:04:00 AM
2-Chloronaphthalene	ND	0.0143		µg/L	1	2/8/2013 4:04:00 AM
2-Nitroaniline	ND	0.0710		µg/L	1	2/8/2013 4:04:00 AM
Acenaphthene	ND	0.0139		µg/L	1	2/8/2013 4:04:00 AM
Dimethylphthalate	ND	0.0347		µg/L	1	2/8/2013 4:04:00 AM
2,6-Dinitrotoluene	ND	0.0269		µg/L	1	2/8/2013 4:04:00 AM
Acenaphthylene	ND	0.00613		µg/L	1	2/8/2013 4:04:00 AM
2,4-Dinitrophenol	ND	0.689		µg/L	1	2/8/2013 4:04:00 AM
Dibenzofuran	ND	0.0131		µg/L	1	2/8/2013 4:04:00 AM

Qualifiers: B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
RL Reporting Limit

D Dilution was required
H Holding times for preparation or analysis exceeded
ND Not detected at the Reporting Limit
S Spike recovery outside accepted recovery limits



Analytical Report

WO#: 1302006

Date Reported: 2/11/2013

Client: Calibre**Collection Date:** 1/31/2013 11:29:00 AM**Project:** Hytec/Bordeaux**Lab ID:** 1302006-005**Matrix:** Groundwater**Client Sample ID:** HLMW-04A-013113

Analyses	Result	MDL	Qual	Units	DF	Date Analyzed
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Semi-Volatile Organic Compounds by EPA Method 8270				Batch ID: 4030	Analyst: PH
2,4-Dinitrotoluene	ND	0.0701		µg/L	1
4-Nitrophenol	ND	0.431		µg/L	1
Fluorene	ND	0.0164		µg/L	1
4-Chlorophenyl phenyl ether	ND	0.0199		µg/L	1
Diethylphthalate	0.146	0.0144	J	µg/L	1
4,6-Dinitro-2-methylphenol	ND	0.487		µg/L	1
4-Bromophenyl phenyl ether	ND	0.0241		µg/L	1
Hexachlorobenzene	ND	0.0264		µg/L	1
Pentachlorophenol	ND	0.0344		µg/L	1
Phenanthrene	0.0361	0.0130	J	µg/L	1
Anthracene	ND	0.0167		µg/L	1
Carbazole	ND	0.0553		µg/L	1
Di-n-butyl phthalate	0.155	0.0268	J	µg/L	1
Fluoranthene	ND	0.0112		µg/L	1
Pyrene	ND	0.0146		µg/L	1
Benzyl Butylphthalate	ND	0.0552		µg/L	1
bis(2-Ethylhexyl)adipate	ND	0.0443		µg/L	1
Benz[a]anthracene	ND	0.0123		µg/L	1
Chrysene	ND	0.0126		µg/L	1
Bis(2-ethylhexyl) phthalate	0.226	0.0316	J	µg/L	1
Di-n-octyl phthalate	ND	0.0258		µg/L	1
Benzo (b) fluoranthene	ND	0.0259		µg/L	1
Benzo (k) fluoranthene	ND	0.0341		µg/L	1
Benzo[a]pyrene	ND	0.0304		µg/L	1
Indeno (1,2,3-cd) pyrene	ND	0.0673		µg/L	1
Dibenzo (a,h) anthracene	ND	0.0366		µg/L	1
Benzo (g,h,i) perylene	ND	0.0378		µg/L	1
Surr: 2,4,6-Tribromophenol	93.0	24-138		%REC	1
Surr: 2-Fluorobiphenyl	71.1	38.6-138		%REC	1
Surr: Nitrobenzene-d5	68.8	31.7-140		%REC	1
Surr: Phenol-d6	24.9	15-116		%REC	1
Surr: p-Terphenyl	107	49-156		%REC	1

Qualifiers: B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
RL Reporting Limit

D Dilution was required
H Holding times for preparation or analysis exceeded
ND Not detected at the Reporting Limit
S Spike recovery outside accepted recovery limits



Analytical Report

WO#: 1302006

Date Reported: 2/11/2013

Client: Calibre**Collection Date:** 1/31/2013 11:29:00 AM**Project:** Hytec/Bordeaux**Lab ID:** 1302006-005**Matrix:** Groundwater**Client Sample ID:** HLMW-04A-013113

Analyses	Result	MDL	Qual	Units	DF	Date Analyzed
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Volatile Organic Compounds by EPA Method 8260				Batch ID: R7380	Analyst: EM
Dichlorodifluoromethane (CFC-12)	ND	0.0300	µg/L	1	2/8/2013 4:41:00 AM
Chloromethane	ND	0.0470	µg/L	1	2/8/2013 4:41:00 AM
Vinyl chloride	ND	0.0530	µg/L	1	2/8/2013 4:41:00 AM
Bromomethane	ND	0.121	µg/L	1	2/8/2013 4:41:00 AM
Trichlorofluoromethane (CFC-11)	1.75	0.0340	µg/L	1	2/8/2013 4:41:00 AM
Chloroethane	ND	0.0590	µg/L	1	2/8/2013 4:41:00 AM
1,1-Dichloroethene	ND	0.0470	µg/L	1	2/8/2013 4:41:00 AM
Methylene chloride	ND	0.0520	µg/L	1	2/8/2013 4:41:00 AM
trans-1,2-Dichloroethene	ND	0.0370	µg/L	1	2/8/2013 4:41:00 AM
Methyl tert-butyl ether (MTBE)	ND	0.0260	µg/L	1	2/8/2013 4:41:00 AM
1,1-Dichloroethane	ND	0.0270	µg/L	1	2/8/2013 4:41:00 AM
2,2-Dichloropropane	ND	0.0460	µg/L	1	2/8/2013 4:41:00 AM
cis-1,2-Dichloroethene	ND	0.0190	µg/L	1	2/8/2013 4:41:00 AM
Chloroform	ND	0.0320	µg/L	1	2/8/2013 4:41:00 AM
1,1,1-Trichloroethane (TCA)	ND	0.0320	µg/L	1	2/8/2013 4:41:00 AM
1,1-Dichloropropene	ND	0.0390	µg/L	1	2/8/2013 4:41:00 AM
Carbon tetrachloride	ND	0.0320	µg/L	1	2/8/2013 4:41:00 AM
1,2-Dichloroethane (EDC)	ND	0.0350	µg/L	1	2/8/2013 4:41:00 AM
Benzene	ND	0.0250	µg/L	1	2/8/2013 4:41:00 AM
Trichloroethene (TCE)	ND	0.0400	µg/L	1	2/8/2013 4:41:00 AM
1,2-Dichloropropane	ND	0.0470	µg/L	1	2/8/2013 4:41:00 AM
Bromodichloromethane	ND	0.0600	µg/L	1	2/8/2013 4:41:00 AM
Dibromomethane	ND	0.115	µg/L	1	2/8/2013 4:41:00 AM
cis-1,3-Dichloropropene	ND	0.0430	µg/L	1	2/8/2013 4:41:00 AM
Toluene	ND	0.0330	µg/L	1	2/8/2013 4:41:00 AM
trans-1,3-Dichloropropene	ND	0.0420	µg/L	1	2/8/2013 4:41:00 AM
1,1,2-Trichloroethane	ND	0.120	µg/L	1	2/8/2013 4:41:00 AM
1,3-Dichloropropane	ND	0.0530	µg/L	1	2/8/2013 4:41:00 AM
Tetrachloroethene (PCE)	ND	0.0350	µg/L	1	2/8/2013 4:41:00 AM
Dibromochloromethane	ND	0.0440	µg/L	1	2/8/2013 4:41:00 AM
1,2-Dibromoethane (EDB)	ND	0.00650	µg/L	1	2/8/2013 4:41:00 AM
Chlorobenzene	ND	0.0240	µg/L	1	2/8/2013 4:41:00 AM
1,1,1,2-Tetrachloroethane	ND	0.0640	µg/L	1	2/8/2013 4:41:00 AM
Ethylbenzene	ND	0.0170	µg/L	1	2/8/2013 4:41:00 AM
m,p-Xylene	ND	0.0410	µg/L	1	2/8/2013 4:41:00 AM

Qualifiers: B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
RL Reporting Limit

D Dilution was required
H Holding times for preparation or analysis exceeded
ND Not detected at the Reporting Limit
S Spike recovery outside accepted recovery limits



Analytical Report

WO#: 1302006

Date Reported: 2/11/2013

Client: Calibre

Collection Date: 1/31/2013 11:29:00 AM

Project: Hytec/Bordeaux

Lab ID: 1302006-005

Matrix: Groundwater

Client Sample ID: HLMW-04A-013113

Analyses	Result	MDL	Qual	Units	DF	Date Analyzed
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Volatile Organic Compounds by EPA Method 8260

Batch ID: R7380

Analyst: EM

o-Xylene	ND	0.0340		µg/L	1	2/8/2013 4:41:00 AM
Styrene	ND	0.0230		µg/L	1	2/8/2013 4:41:00 AM
Isopropylbenzene	ND	0.0180		µg/L	1	2/8/2013 4:41:00 AM
Bromoform	ND	0.115		µg/L	1	2/8/2013 4:41:00 AM
1,1,2,2-Tetrachloroethane	ND	0.108		µg/L	1	2/8/2013 4:41:00 AM
n-Propylbenzene	ND	0.0330		µg/L	1	2/8/2013 4:41:00 AM
Bromobenzene	ND	0.0550		µg/L	1	2/8/2013 4:41:00 AM
1,3,5-Trimethylbenzene	ND	0.0300		µg/L	1	2/8/2013 4:41:00 AM
2-Chlorotoluene	ND	0.0320		µg/L	1	2/8/2013 4:41:00 AM
4-Chlorotoluene	ND	0.0370		µg/L	1	2/8/2013 4:41:00 AM
tert-Butylbenzene	ND	0.0360		µg/L	1	2/8/2013 4:41:00 AM
1,2,3-Trichloropropane	ND	0.130		µg/L	1	2/8/2013 4:41:00 AM
1,2,4-Trichlorobenzene	ND	0.0990		µg/L	1	2/8/2013 4:41:00 AM
sec-Butylbenzene	ND	0.0230		µg/L	1	2/8/2013 4:41:00 AM
4-Isopropyltoluene	ND	0.0360		µg/L	1	2/8/2013 4:41:00 AM
1,3-Dichlorobenzene	ND	0.0290		µg/L	1	2/8/2013 4:41:00 AM
1,4-Dichlorobenzene	ND	0.0260		µg/L	1	2/8/2013 4:41:00 AM
n-Butylbenzene	ND	0.0200		µg/L	1	2/8/2013 4:41:00 AM
1,2-Dichlorobenzene	ND	0.0460		µg/L	1	2/8/2013 4:41:00 AM
1,2-Dibromo-3-chloropropane	ND	0.315		µg/L	1	2/8/2013 4:41:00 AM
1,2,4-Trimethylbenzene	ND	0.0200		µg/L	1	2/8/2013 4:41:00 AM
Hexachlorobutadiene	ND	0.154		µg/L	1	2/8/2013 4:41:00 AM
Naphthalene	ND	0.0940		µg/L	1	2/8/2013 4:41:00 AM
1,2,3-Trichlorobenzene	ND	0.147		µg/L	1	2/8/2013 4:41:00 AM
Surr: 1-Bromo-4-fluorobenzene	94.8	82.6-120		%REC	1	2/8/2013 4:41:00 AM
Surr: Dibromofluoromethane	98.9	72.1-122		%REC	1	2/8/2013 4:41:00 AM
Surr: Toluene-d8	101	83.5-108		%REC	1	2/8/2013 4:41:00 AM

Total Metals by EPA Method 200.8

Batch ID: 4031

Analyst: MC

Antimony	0.00650	0.00300	J	µg/L	1	2/5/2013 11:10:35 AM
Arsenic	ND	0.266		µg/L	1	2/5/2013 11:10:35 AM
Beryllium	ND	0.0680		µg/L	1	2/5/2013 11:10:35 AM
Cadmium	0.0260	0.0160	J	µg/L	1	2/5/2013 11:10:35 AM
Chromium	0.587	0.0810		µg/L	1	2/5/2013 11:10:35 AM

Qualifiers: B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
RL Reporting Limit

D Dilution was required
H Holding times for preparation or analysis exceeded
ND Not detected at the Reporting Limit
S Spike recovery outside accepted recovery limits



Analytical Report

WO#: 1302006

Date Reported: 2/11/2013

Client: Calibre

Collection Date: 1/31/2013 11:29:00 AM

Project: Hytec/Bordeaux

Lab ID: 1302006-005

Matrix: Groundwater

Client Sample ID: HLMW-04A-013113

Analyses	Result	MDL	Qual	Units	DF	Date Analyzed
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Total Metals by EPA Method 200.8 Batch ID: 4031 Analyst: MC

Copper	ND	0.0930	µg/L	1	2/5/2013 11:10:35 AM
Lead	ND	0.0750	µg/L	1	2/5/2013 11:10:35 AM
Nickel	0.509	0.110	µg/L	1	2/5/2013 11:10:35 AM
Zinc	11.7	0.121	µg/L	1	2/5/2013 11:10:35 AM

Qualifiers: B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
RL Reporting Limit

D Dilution was required
H Holding times for preparation or analysis exceeded
ND Not detected at the Reporting Limit
S Spike recovery outside accepted recovery limits



Analytical Report

WO#: 1302006

Date Reported: 2/11/2013

Client: Calibre

Collection Date: 1/31/2013 12:49:00 PM

Project: Hytec/Bordeaux

Lab ID: 1302006-006

Matrix: Groundwater

Client Sample ID: SPWE-013113

Analyses	Result	MDL	Qual	Units	DF	Date Analyzed
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<u>Semi-Volatile Organic Compounds by EPA Method 8270</u>				Batch ID: 4030	Analyst: PH	
Phenol	ND	0.0401		µg/L	1	2/8/2013 4:28:00 AM
2-Chlorophenol	ND	0.0132		µg/L	1	2/8/2013 4:28:00 AM
1,3-Dichlorobenzene	ND	0.0161		µg/L	1	2/8/2013 4:28:00 AM
1,4-Dichlorobenzene	ND	0.0241		µg/L	1	2/8/2013 4:28:00 AM
1,2-Dichlorobenzene	ND	0.0232		µg/L	1	2/8/2013 4:28:00 AM
Benzyl alcohol	ND	0.0371		µg/L	1	2/8/2013 4:28:00 AM
Bis(2-chloroethyl) ether	ND	0.0294		µg/L	1	2/8/2013 4:28:00 AM
2-Methylphenol (o-cresol)	ND	0.0245		µg/L	1	2/8/2013 4:28:00 AM
Hexachloroethane	ND	0.0653		µg/L	1	2/8/2013 4:28:00 AM
N-Nitrosodi-n-propylamine	ND	0.0642		µg/L	1	2/8/2013 4:28:00 AM
Nitrobenzene	ND	0.0392		µg/L	1	2/8/2013 4:28:00 AM
Isophorone	ND	0.0205		µg/L	1	2/8/2013 4:28:00 AM
4-Methylphenol (p-cresol)	ND	0.0563		µg/L	1	2/8/2013 4:28:00 AM
2-Nitrophenol	ND	0.0912		µg/L	1	2/8/2013 4:28:00 AM
2,4-Dimethylphenol	ND	0.0376		µg/L	1	2/8/2013 4:28:00 AM
Bis(2-chloroethoxy)methane	ND	0.0337		µg/L	1	2/8/2013 4:28:00 AM
2,4-Dichlorophenol	ND	0.0188		µg/L	1	2/8/2013 4:28:00 AM
1,2,4-Trichlorobenzene	ND	0.0194		µg/L	1	2/8/2013 4:28:00 AM
Naphthalene	0.0251	0.0123	J	µg/L	1	2/8/2013 4:28:00 AM
4-Chloroaniline	ND	0.0180		µg/L	1	2/8/2013 4:28:00 AM
Hexachlorobutadiene	ND	0.0390		µg/L	1	2/8/2013 4:28:00 AM
4-Chloro-3-methylphenol	ND	0.0687		µg/L	1	2/8/2013 4:28:00 AM
2-Methylnaphthalene	ND	0.0252		µg/L	1	2/8/2013 4:28:00 AM
1-Methylnaphthalene	ND	0.0214		µg/L	1	2/8/2013 4:28:00 AM
Hexachlorocyclopentadiene	ND	0.0313		µg/L	1	2/8/2013 4:28:00 AM
2,4,6-Trichlorophenol	ND	0.0210		µg/L	1	2/8/2013 4:28:00 AM
2,4,5-Trichlorophenol	ND	0.0339		µg/L	1	2/8/2013 4:28:00 AM
2-Chloronaphthalene	ND	0.0143		µg/L	1	2/8/2013 4:28:00 AM
2-Nitroaniline	ND	0.0710		µg/L	1	2/8/2013 4:28:00 AM
Acenaphthene	ND	0.0139		µg/L	1	2/8/2013 4:28:00 AM
Dimethylphthalate	ND	0.0347		µg/L	1	2/8/2013 4:28:00 AM
2,6-Dinitrotoluene	ND	0.0269		µg/L	1	2/8/2013 4:28:00 AM
Acenaphthylene	ND	0.00613		µg/L	1	2/8/2013 4:28:00 AM
2,4-Dinitrophenol	ND	0.689		µg/L	1	2/8/2013 4:28:00 AM
Dibenzofuran	ND	0.0131		µg/L	1	2/8/2013 4:28:00 AM

Qualifiers: B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
RL Reporting Limit

D Dilution was required
H Holding times for preparation or analysis exceeded
ND Not detected at the Reporting Limit
S Spike recovery outside accepted recovery limits



Analytical Report

WO#: 1302006

Date Reported: 2/11/2013

Client: Calibre**Collection Date:** 1/31/2013 12:49:00 PM**Project:** Hytec/Bordeaux**Lab ID:** 1302006-006**Matrix:** Groundwater**Client Sample ID:** SPWE-013113**Analyses** **Result** **MDL** **Qual** **Units** **DF** **Date Analyzed**

<u>Semi-Volatile Organic Compounds by EPA Method 8270</u>				Batch ID:	4030	Analyst:	PH
2,4-Dinitrotoluene	ND	0.0701		µg/L	1	2/8/2013 4:28:00 AM	
4-Nitrophenol	ND	0.431		µg/L	1	2/8/2013 4:28:00 AM	
Fluorene	ND	0.0164		µg/L	1	2/8/2013 4:28:00 AM	
4-Chlorophenyl phenyl ether	ND	0.0199		µg/L	1	2/8/2013 4:28:00 AM	
Diethylphthalate	0.141	0.0144	J	µg/L	1	2/8/2013 4:28:00 AM	
4,6-Dinitro-2-methylphenol	ND	0.487		µg/L	1	2/8/2013 4:28:00 AM	
4-Bromophenyl phenyl ether	ND	0.0241		µg/L	1	2/8/2013 4:28:00 AM	
Hexachlorobenzene	ND	0.0264		µg/L	1	2/8/2013 4:28:00 AM	
Pentachlorophenol	ND	0.0344		µg/L	1	2/8/2013 4:28:00 AM	
Phenanthrene	ND	0.0130		µg/L	1	2/8/2013 4:28:00 AM	
Anthracene	ND	0.0167		µg/L	1	2/8/2013 4:28:00 AM	
Carbazole	ND	0.0553		µg/L	1	2/8/2013 4:28:00 AM	
Di-n-butyl phthalate	0.0740	0.0268	J	µg/L	1	2/8/2013 4:28:00 AM	
Fluoranthene	ND	0.0112		µg/L	1	2/8/2013 4:28:00 AM	
Pyrene	ND	0.0146		µg/L	1	2/8/2013 4:28:00 AM	
Benzyl Butylphthalate	ND	0.0552		µg/L	1	2/8/2013 4:28:00 AM	
bis(2-Ethylhexyl)adipate	ND	0.0443		µg/L	1	2/8/2013 4:28:00 AM	
Benz[a]anthracene	ND	0.0123		µg/L	1	2/8/2013 4:28:00 AM	
Chrysene	ND	0.0126		µg/L	1	2/8/2013 4:28:00 AM	
Bis(2-ethylhexyl) phthalate	0.247	0.0316	J	µg/L	1	2/8/2013 4:28:00 AM	
Di-n-octyl phthalate	ND	0.0258		µg/L	1	2/8/2013 4:28:00 AM	
Benzo (b) fluoranthene	ND	0.0259		µg/L	1	2/8/2013 4:28:00 AM	
Benzo (k) fluoranthene	ND	0.0341		µg/L	1	2/8/2013 4:28:00 AM	
Benzo[a]pyrene	ND	0.0304		µg/L	1	2/8/2013 4:28:00 AM	
Indeno (1,2,3-cd) pyrene	ND	0.0673		µg/L	1	2/8/2013 4:28:00 AM	
Dibenzo (a,h) anthracene	ND	0.0366		µg/L	1	2/8/2013 4:28:00 AM	
Benzo (g,h,l) perylene	ND	0.0378		µg/L	1	2/8/2013 4:28:00 AM	
Surrogate: 2,4,6-Tribromophenol	108	24-138		%REC	1	2/8/2013 4:28:00 AM	
Surrogate: 2-Fluorobiphenyl	79.6	38.6-138		%REC	1	2/8/2013 4:28:00 AM	
Surrogate: Nitrobenzene-d5	77.3	31.7-140		%REC	1	2/8/2013 4:28:00 AM	
Surrogate: Phenol-d6	27.1	15-116		%REC	1	2/8/2013 4:28:00 AM	
Surrogate: p-Terphenyl	104	49-156		%REC	1	2/8/2013 4:28:00 AM	

Qualifiers: B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
RL Reporting Limit

D Dilution was required
H Holding times for preparation or analysis exceeded
ND Not detected at the Reporting Limit
S Spike recovery outside accepted recovery limits



Analytical Report

WO#: 1302006

Date Reported: 2/11/2013

Client: Calibre**Collection Date:** 1/31/2013 12:49:00 PM**Project:** Hytec/Bordeaux**Lab ID:** 1302006-006**Matrix:** Groundwater**Client Sample ID:** SPWE-013113**Analyses** **Result** **MDL** **Qual** **Units** **DF** **Date Analyzed**

Volatile Organic Compounds by EPA Method 8260				Batch ID: R7380	Analyst: EM	
Dichlorodifluoromethane (CFC-12)	ND	0.0300	µg/L	1	2/8/2013 5:41:00 AM	
Chloromethane	ND	0.0470	µg/L	1	2/8/2013 5:41:00 AM	
Vinyl chloride	ND	0.0530	µg/L	1	2/8/2013 5:41:00 AM	
Bromomethane	ND	0.121	µg/L	1	2/8/2013 5:41:00 AM	
Trichlorofluoromethane (CFC-11)	0.370	0.0340	J	µg/L	1	2/8/2013 5:41:00 AM
Chloroethane	ND	0.0590	µg/L	1	2/8/2013 5:41:00 AM	
1,1-Dichloroethene	ND	0.0470	µg/L	1	2/8/2013 5:41:00 AM	
Methylene chloride	ND	0.0520	µg/L	1	2/8/2013 5:41:00 AM	
trans-1,2-Dichloroethene	ND	0.0370	µg/L	1	2/8/2013 5:41:00 AM	
Methyl tert-butyl ether (MTBE)	ND	0.0260	µg/L	1	2/8/2013 5:41:00 AM	
1,1-Dichloroethane	ND	0.0270	µg/L	1	2/8/2013 5:41:00 AM	
2,2-Dichloropropane	ND	0.0460	µg/L	1	2/8/2013 5:41:00 AM	
cis-1,2-Dichloroethene	ND	0.0190	µg/L	1	2/8/2013 5:41:00 AM	
Chloroform	ND	0.0320	µg/L	1	2/8/2013 5:41:00 AM	
1,1,1-Trichloroethane (TCA)	ND	0.0320	µg/L	1	2/8/2013 5:41:00 AM	
1,1-Dichloropropene	ND	0.0390	µg/L	1	2/8/2013 5:41:00 AM	
Carbon tetrachloride	ND	0.0320	µg/L	1	2/8/2013 5:41:00 AM	
1,2-Dichloroethane (EDC)	ND	0.0350	µg/L	1	2/8/2013 5:41:00 AM	
Benzene	ND	0.0250	µg/L	1	2/8/2013 5:41:00 AM	
Trichloroethene (TCE)	ND	0.0400	µg/L	1	2/8/2013 5:41:00 AM	
1,2-Dichloropropane	ND	0.0470	µg/L	1	2/8/2013 5:41:00 AM	
Bromodichloromethane	ND	0.0600	µg/L	1	2/8/2013 5:41:00 AM	
Dibromomethane	ND	0.115	µg/L	1	2/8/2013 5:41:00 AM	
cis-1,3-Dichloropropene	ND	0.0430	µg/L	1	2/8/2013 5:41:00 AM	
Toluene	ND	0.0330	µg/L	1	2/8/2013 5:41:00 AM	
trans-1,3-Dichloropropene	ND	0.0420	µg/L	1	2/8/2013 5:41:00 AM	
1,1,2-Trichloroethane	ND	0.120	µg/L	1	2/8/2013 5:41:00 AM	
1,3-Dichloropropane	ND	0.0530	µg/L	1	2/8/2013 5:41:00 AM	
Tetrachloroethene (PCE)	ND	0.0350	µg/L	1	2/8/2013 5:41:00 AM	
Dibromochloromethane	ND	0.0440	µg/L	1	2/8/2013 5:41:00 AM	
1,2-Dibromoethane (EDB)	ND	0.00650	µg/L	1	2/8/2013 5:41:00 AM	
Chlorobenzene	ND	0.0240	µg/L	1	2/8/2013 5:41:00 AM	
1,1,1,2-Tetrachloroethane	ND	0.0640	µg/L	1	2/8/2013 5:41:00 AM	
Ethylbenzene	ND	0.0170	µg/L	1	2/8/2013 5:41:00 AM	
m,p-Xylene	ND	0.0410	µg/L	1	2/8/2013 5:41:00 AM	

Qualifiers: B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
RL Reporting Limit

D Dilution was required
H Holding times for preparation or analysis exceeded
ND Not detected at the Reporting Limit
S Spike recovery outside accepted recovery limits



Analytical Report

WO#: 1302006

Date Reported: 2/11/2013

Client: Calibre

Collection Date: 1/31/2013 12:49:00 PM

Project: Hytec/Bordeaux

Lab ID: 1302006-006

Matrix: Groundwater

Client Sample ID: SPWE-013113

Analyses	Result	MDL	Qual	Units	DF	Date Analyzed
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Volatile Organic Compounds by EPA Method 8260

Batch ID: R7380

Analyst: EM

o-Xylene	ND	0.0340	µg/L	1	2/8/2013 5:41:00 AM
Styrene	ND	0.0230	µg/L	1	2/8/2013 5:41:00 AM
Isopropylbenzene	ND	0.0180	µg/L	1	2/8/2013 5:41:00 AM
Bromoform	ND	0.115	µg/L	1	2/8/2013 5:41:00 AM
1,1,2,2-Tetrachloroethane	ND	0.108	µg/L	1	2/8/2013 5:41:00 AM
n-Propylbenzene	ND	0.0330	µg/L	1	2/8/2013 5:41:00 AM
Bromobenzene	ND	0.0550	µg/L	1	2/8/2013 5:41:00 AM
1,3,5-Trimethylbenzene	ND	0.0300	µg/L	1	2/8/2013 5:41:00 AM
2-Chlorotoluene	ND	0.0320	µg/L	1	2/8/2013 5:41:00 AM
4-Chlorotoluene	ND	0.0370	µg/L	1	2/8/2013 5:41:00 AM
tert-Butylbenzene	ND	0.0360	µg/L	1	2/8/2013 5:41:00 AM
1,2,3-Trichloropropane	ND	0.130	µg/L	1	2/8/2013 5:41:00 AM
1,2,4-Trichlorobenzene	ND	0.0990	µg/L	1	2/8/2013 5:41:00 AM
sec-Butylbenzene	ND	0.0230	µg/L	1	2/8/2013 5:41:00 AM
4-Isopropyltoluene	ND	0.0360	µg/L	1	2/8/2013 5:41:00 AM
1,3-Dichlorobenzene	ND	0.0290	µg/L	1	2/8/2013 5:41:00 AM
1,4-Dichlorobenzene	ND	0.0260	µg/L	1	2/8/2013 5:41:00 AM
n-Butylbenzene	ND	0.0200	µg/L	1	2/8/2013 5:41:00 AM
1,2-Dichlorobenzene	ND	0.0460	µg/L	1	2/8/2013 5:41:00 AM
1,2-Dibromo-3-chloropropane	ND	0.315	µg/L	1	2/8/2013 5:41:00 AM
1,2,4-Trimethylbenzene	ND	0.0200	µg/L	1	2/8/2013 5:41:00 AM
Hexachlorobutadiene	ND	0.154	µg/L	1	2/8/2013 5:41:00 AM
Naphthalene	ND	0.0940	µg/L	1	2/8/2013 5:41:00 AM
1,2,3-Trichlorobenzene	ND	0.147	µg/L	1	2/8/2013 5:41:00 AM
Surr: 1-Bromo-4-fluorobenzene	92.6	82.6-120	%REC	1	2/8/2013 5:41:00 AM
Surr: Dibromofluoromethane	99.2	72.1-122	%REC	1	2/8/2013 5:41:00 AM
Surr: Toluene-d8	100	83.5-108	%REC	1	2/8/2013 5:41:00 AM

Total Metals by EPA Method 200.8

Batch ID: 4031

Analyst: MC

Antimony	0.286	0.00300	µg/L	1	2/5/2013 11:20:58 AM
Arsenic	ND	0.266	µg/L	1	2/5/2013 11:20:58 AM
Beryllium	ND	0.0680	µg/L	1	2/5/2013 11:20:58 AM
Cadmium	ND	0.0160	µg/L	1	2/5/2013 11:20:58 AM
Chromium	2.25	0.0810	µg/L	1	2/5/2013 11:20:58 AM

Qualifiers: B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
RL Reporting Limit

D Dilution was required
H Holding times for preparation or analysis exceeded
ND Not detected at the Reporting Limit
S Spike recovery outside accepted recovery limits



Analytical Report

WO#: 1302006

Date Reported: 2/11/2013

Client: Calibre

Collection Date: 1/31/2013 12:49:00 PM

Project: Hytec/Bordeaux

Lab ID: 1302006-006

Matrix: Groundwater

Client Sample ID: SPWE-013113

Analyses	Result	MDL	Qual	Units	DF	Date Analyzed
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Total Metals by EPA Method 200.8 Batch ID: 4031 Analyst: MC

Copper	ND	0.0930	µg/L	1	2/5/2013 11:20:58 AM
Lead	2.49	0.0750	µg/L	1	2/5/2013 11:20:58 AM
Nickel	1.16	0.110	µg/L	1	2/5/2013 11:20:58 AM
Zinc	13.3	0.121	µg/L	1	2/5/2013 11:20:58 AM

Qualifiers: B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
RL Reporting Limit

D Dilution was required
H Holding times for preparation or analysis exceeded
ND Not detected at the Reporting Limit
S Spike recovery outside accepted recovery limits



Analytical Report

WO#: 1302006

Date Reported: 2/11/2013

Client: Calibre

Collection Date: 1/31/2013 1:36:00 PM

Project: Hytec/Bordeaux

Lab ID: 1302006-007

Matrix: Groundwater

Client Sample ID: HLMW-01A-013113

Analyses	Result	MDL	Qual	Units	DF	Date Analyzed
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Semi-Volatile Organic Compounds by EPA Method 8270				Batch ID: 4030	Analyst: PH	
Phenol	ND	0.0401		µg/L	1	2/8/2013 4:53:00 AM
2-Chlorophenol	ND	0.0132		µg/L	1	2/8/2013 4:53:00 AM
1,3-Dichlorobenzene	ND	0.0161		µg/L	1	2/8/2013 4:53:00 AM
1,4-Dichlorobenzene	ND	0.0241		µg/L	1	2/8/2013 4:53:00 AM
1,2-Dichlorobenzene	ND	0.0232		µg/L	1	2/8/2013 4:53:00 AM
Benzyl alcohol	ND	0.0371		µg/L	1	2/8/2013 4:53:00 AM
Bis(2-chloroethyl) ether	ND	0.0294		µg/L	1	2/8/2013 4:53:00 AM
2-Methylphenol (o-cresol)	ND	0.0245		µg/L	1	2/8/2013 4:53:00 AM
Hexachloroethane	ND	0.0653		µg/L	1	2/8/2013 4:53:00 AM
N-Nitrosodi-n-propylamine	ND	0.0642		µg/L	1	2/8/2013 4:53:00 AM
Nitrobenzene	ND	0.0392		µg/L	1	2/8/2013 4:53:00 AM
Isophorone	ND	0.0205		µg/L	1	2/8/2013 4:53:00 AM
4-Methylphenol (p-cresol)	ND	0.0563		µg/L	1	2/8/2013 4:53:00 AM
2-Nitrophenol	ND	0.0912		µg/L	1	2/8/2013 4:53:00 AM
2,4-Dimethylphenol	ND	0.0376		µg/L	1	2/8/2013 4:53:00 AM
Bis(2-chloroethoxy)methane	ND	0.0337		µg/L	1	2/8/2013 4:53:00 AM
2,4-Dichlorophenol	ND	0.0188		µg/L	1	2/8/2013 4:53:00 AM
1,2,4-Trichlorobenzene	ND	0.0194		µg/L	1	2/8/2013 4:53:00 AM
Naphthalene	0.0533	0.0123	J	µg/L	1	2/8/2013 4:53:00 AM
4-Chloroaniline	ND	0.0180		µg/L	1	2/8/2013 4:53:00 AM
Hexachlorobutadiene	ND	0.0390		µg/L	1	2/8/2013 4:53:00 AM
4-Chloro-3-methylphenol	ND	0.0687		µg/L	1	2/8/2013 4:53:00 AM
2-Methylnaphthalene	ND	0.0252		µg/L	1	2/8/2013 4:53:00 AM
1-Methylnaphthalene	ND	0.0214		µg/L	1	2/8/2013 4:53:00 AM
Hexachlorocyclopentadiene	ND	0.0313		µg/L	1	2/8/2013 4:53:00 AM
2,4,6-Trichlorophenol	ND	0.0210		µg/L	1	2/8/2013 4:53:00 AM
2,4,5-Trichlorophenol	ND	0.0339		µg/L	1	2/8/2013 4:53:00 AM
2-Chloronaphthalene	ND	0.0143		µg/L	1	2/8/2013 4:53:00 AM
2-Nitroaniline	ND	0.0710		µg/L	1	2/8/2013 4:53:00 AM
Acenaphthene	ND	0.0139		µg/L	1	2/8/2013 4:53:00 AM
Dimethylphthalate	ND	0.0347		µg/L	1	2/8/2013 4:53:00 AM
2,6-Dinitrotoluene	ND	0.0269		µg/L	1	2/8/2013 4:53:00 AM
Acenaphthylene	ND	0.00613		µg/L	1	2/8/2013 4:53:00 AM
2,4-Dinitrophenol	ND	0.689		µg/L	1	2/8/2013 4:53:00 AM
Dibenzofuran	ND	0.0131		µg/L	1	2/8/2013 4:53:00 AM

Qualifiers: B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
RL Reporting Limit

D Dilution was required
H Holding times for preparation or analysis exceeded
ND Not detected at the Reporting Limit
S Spike recovery outside accepted recovery limits



Analytical Report

WO#: 1302006

Date Reported: 2/11/2013

Client: Calibre**Collection Date:** 1/31/2013 1:36:00 PM**Project:** Hytec/Bordeaux**Lab ID:** 1302006-007**Matrix:** Groundwater**Client Sample ID:** HLMW-01A-013113**Analyses** **Result** **MDL** **Qual** **Units** **DF** **Date Analyzed**

<u>Semi-Volatile Organic Compounds by EPA Method 8270</u>				Batch ID:	4030	Analyst:	PH
2,4-Dinitrotoluene	ND	0.0701		µg/L	1	2/8/2013 4:53:00 AM	
4-Nitrophenol	ND	0.431		µg/L	1	2/8/2013 4:53:00 AM	
Fluorene	ND	0.0164		µg/L	1	2/8/2013 4:53:00 AM	
4-Chlorophenyl phenyl ether	ND	0.0199		µg/L	1	2/8/2013 4:53:00 AM	
Diethylphthalate	0.147	0.0144	J	µg/L	1	2/8/2013 4:53:00 AM	
4,6-Dinitro-2-methylphenol	ND	0.487		µg/L	1	2/8/2013 4:53:00 AM	
4-Bromophenyl phenyl ether	ND	0.0241		µg/L	1	2/8/2013 4:53:00 AM	
Hexachlorobenzene	ND	0.0264		µg/L	1	2/8/2013 4:53:00 AM	
Pentachlorophenol	ND	0.0344		µg/L	1	2/8/2013 4:53:00 AM	
Phenanthrene	ND	0.0130		µg/L	1	2/8/2013 4:53:00 AM	
Anthracene	ND	0.0167		µg/L	1	2/8/2013 4:53:00 AM	
Carbazole	ND	0.0553		µg/L	1	2/8/2013 4:53:00 AM	
Di-n-butyl phthalate	0.0978	0.0268	J	µg/L	1	2/8/2013 4:53:00 AM	
Fluoranthene	ND	0.0112		µg/L	1	2/8/2013 4:53:00 AM	
Pyrene	ND	0.0146		µg/L	1	2/8/2013 4:53:00 AM	
Benzyl Butylphthalate	ND	0.0552		µg/L	1	2/8/2013 4:53:00 AM	
bis(2-Ethylhexyl)adipate	ND	0.0443		µg/L	1	2/8/2013 4:53:00 AM	
Benz[a]anthracene	ND	0.0123		µg/L	1	2/8/2013 4:53:00 AM	
Chrysene	ND	0.0126		µg/L	1	2/8/2013 4:53:00 AM	
Bis(2-ethylhexyl) phthalate	3.39	0.0316		µg/L	1	2/8/2013 4:53:00 AM	
Di-n-octyl phthalate	ND	0.0258		µg/L	1	2/8/2013 4:53:00 AM	
Benzo (b) fluoranthene	ND	0.0259		µg/L	1	2/8/2013 4:53:00 AM	
Benzo (k) fluoranthene	ND	0.0341		µg/L	1	2/8/2013 4:53:00 AM	
Benzo[a]pyrene	ND	0.0304		µg/L	1	2/8/2013 4:53:00 AM	
Indeno (1,2,3-cd) pyrene	ND	0.0673		µg/L	1	2/8/2013 4:53:00 AM	
Dibenzo (a,h) anthracene	ND	0.0366		µg/L	1	2/8/2013 4:53:00 AM	
Benzo (g,h,l) perylene	ND	0.0378		µg/L	1	2/8/2013 4:53:00 AM	
Surrogate: 2,4,6-Tribromophenol	97.0	24-138		%REC	1	2/8/2013 4:53:00 AM	
Surrogate: 2-Fluorobiphenyl	74.7	38.6-138		%REC	1	2/8/2013 4:53:00 AM	
Surrogate: Nitrobenzene-d5	70.8	31.7-140		%REC	1	2/8/2013 4:53:00 AM	
Surrogate: Phenol-d6	23.8	15-116		%REC	1	2/8/2013 4:53:00 AM	
Surrogate: p-Terphenyl	99.6	49-156		%REC	1	2/8/2013 4:53:00 AM	

Qualifiers: B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
RL Reporting Limit

D Dilution was required
H Holding times for preparation or analysis exceeded
ND Not detected at the Reporting Limit
S Spike recovery outside accepted recovery limits



Analytical Report

WO#: 1302006

Date Reported: 2/11/2013

Client: Calibre**Collection Date:** 1/31/2013 1:36:00 PM**Project:** Hytec/Bordeaux**Lab ID:** 1302006-007**Matrix:** Groundwater**Client Sample ID:** HLMW-01A-013113**Analyses** **Result** **MDL** **Qual** **Units** **DF** **Date Analyzed**

Volatile Organic Compounds by EPA Method 8260				Batch ID: R7380		Analyst: EM
Dichlorodifluoromethane (CFC-12)	ND	0.0300	µg/L	1	2/8/2013 7:10:00 AM	
Chloromethane	ND	0.0470	µg/L	1	2/8/2013 7:10:00 AM	
Vinyl chloride	ND	0.0530	µg/L	1	2/8/2013 7:10:00 AM	
Bromomethane	ND	0.121	µg/L	1	2/8/2013 7:10:00 AM	
Trichlorodifluoromethane (CFC-11)	ND	0.0340	µg/L	1	2/8/2013 7:10:00 AM	
Chloroethane	ND	0.0590	µg/L	1	2/8/2013 7:10:00 AM	
1,1-Dichloroethene	ND	0.0470	µg/L	1	2/8/2013 7:10:00 AM	
Methylene chloride	ND	0.0520	µg/L	1	2/8/2013 7:10:00 AM	
trans-1,2-Dichloroethene	ND	0.0370	µg/L	1	2/8/2013 7:10:00 AM	
Methyl tert-butyl ether (MTBE)	ND	0.0260	µg/L	1	2/8/2013 7:10:00 AM	
1,1-Dichloroethane	ND	0.0270	µg/L	1	2/8/2013 7:10:00 AM	
2,2-Dichloropropane	ND	0.0460	µg/L	1	2/8/2013 7:10:00 AM	
cis-1,2-Dichloroethene	ND	0.0190	µg/L	1	2/8/2013 7:10:00 AM	
Chloroform	ND	0.0320	µg/L	1	2/8/2013 7:10:00 AM	
1,1,1-Trichloroethane (TCA)	ND	0.0320	µg/L	1	2/8/2013 7:10:00 AM	
1,1-Dichloropropene	ND	0.0390	µg/L	1	2/8/2013 7:10:00 AM	
Carbon tetrachloride	ND	0.0320	µg/L	1	2/8/2013 7:10:00 AM	
1,2-Dichloroethane (EDC)	ND	0.0350	µg/L	1	2/8/2013 7:10:00 AM	
Benzene	ND	0.0250	µg/L	1	2/8/2013 7:10:00 AM	
Trichloroethene (TCE)	ND	0.0400	µg/L	1	2/8/2013 7:10:00 AM	
1,2-Dichloropropane	ND	0.0470	µg/L	1	2/8/2013 7:10:00 AM	
Bromodichloromethane	ND	0.0600	µg/L	1	2/8/2013 7:10:00 AM	
Dibromomethane	ND	0.115	µg/L	1	2/8/2013 7:10:00 AM	
cis-1,3-Dichloropropene	ND	0.0430	µg/L	1	2/8/2013 7:10:00 AM	
Toluene	ND	0.0330	µg/L	1	2/8/2013 7:10:00 AM	
trans-1,3-Dichloropropene	ND	0.0420	µg/L	1	2/8/2013 7:10:00 AM	
1,1,2-Trichloroethane	ND	0.120	µg/L	1	2/8/2013 7:10:00 AM	
1,3-Dichloropropane	ND	0.0530	µg/L	1	2/8/2013 7:10:00 AM	
Tetrachloroethene (PCE)	ND	0.0350	µg/L	1	2/8/2013 7:10:00 AM	
Dibromochloromethane	ND	0.0440	µg/L	1	2/8/2013 7:10:00 AM	
1,2-Dibromoethane (EDB)	ND	0.00650	µg/L	1	2/8/2013 7:10:00 AM	
Chlorobenzene	ND	0.0240	µg/L	1	2/8/2013 7:10:00 AM	
1,1,1,2-Tetrachloroethane	ND	0.0640	µg/L	1	2/8/2013 7:10:00 AM	
Ethylbenzene	ND	0.0170	µg/L	1	2/8/2013 7:10:00 AM	
m,p-Xylene	ND	0.0410	µg/L	1	2/8/2013 7:10:00 AM	

Qualifiers: B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
RL Reporting Limit

D Dilution was required
H Holding times for preparation or analysis exceeded
ND Not detected at the Reporting Limit
S Spike recovery outside accepted recovery limits



Analytical Report

WO#: 1302006

Date Reported: 2/11/2013

Client: Calibre

Collection Date: 1/31/2013 1:36:00 PM

Project: Hytec/Bordeaux

Lab ID: 1302006-007

Matrix: Groundwater

Client Sample ID: HLMW-01A-013113

Analyses	Result	MDL	Qual	Units	DF	Date Analyzed
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Volatile Organic Compounds by EPA Method 8260

Batch ID: R7380

Analyst: EM

o-Xylene	ND	0.0340		µg/L	1	2/8/2013 7:10:00 AM
Styrene	ND	0.0230		µg/L	1	2/8/2013 7:10:00 AM
Isopropylbenzene	ND	0.0180		µg/L	1	2/8/2013 7:10:00 AM
Bromoform	ND	0.115		µg/L	1	2/8/2013 7:10:00 AM
1,1,2,2-Tetrachloroethane	ND	0.108		µg/L	1	2/8/2013 7:10:00 AM
n-Propylbenzene	ND	0.0330		µg/L	1	2/8/2013 7:10:00 AM
Bromobenzene	ND	0.0550		µg/L	1	2/8/2013 7:10:00 AM
1,3,5-Trimethylbenzene	ND	0.0300		µg/L	1	2/8/2013 7:10:00 AM
2-Chlorotoluene	ND	0.0320		µg/L	1	2/8/2013 7:10:00 AM
4-Chlorotoluene	ND	0.0370		µg/L	1	2/8/2013 7:10:00 AM
tert-Butylbenzene	ND	0.0360		µg/L	1	2/8/2013 7:10:00 AM
1,2,3-Trichloropropane	ND	0.130		µg/L	1	2/8/2013 7:10:00 AM
1,2,4-Trichlorobenzene	ND	0.0990		µg/L	1	2/8/2013 7:10:00 AM
sec-Butylbenzene	ND	0.0230		µg/L	1	2/8/2013 7:10:00 AM
4-Isopropyltoluene	ND	0.0360		µg/L	1	2/8/2013 7:10:00 AM
1,3-Dichlorobenzene	ND	0.0290		µg/L	1	2/8/2013 7:10:00 AM
1,4-Dichlorobenzene	ND	0.0260		µg/L	1	2/8/2013 7:10:00 AM
n-Butylbenzene	ND	0.0200		µg/L	1	2/8/2013 7:10:00 AM
1,2-Dichlorobenzene	ND	0.0460		µg/L	1	2/8/2013 7:10:00 AM
1,2-Dibromo-3-chloropropane	ND	0.315		µg/L	1	2/8/2013 7:10:00 AM
1,2,4-Trimethylbenzene	ND	0.0200		µg/L	1	2/8/2013 7:10:00 AM
Hexachlorobutadiene	ND	0.154		µg/L	1	2/8/2013 7:10:00 AM
Naphthalene	ND	0.0940		µg/L	1	2/8/2013 7:10:00 AM
1,2,3-Trichlorobenzene	ND	0.147		µg/L	1	2/8/2013 7:10:00 AM
Surr: 1-Bromo-4-fluorobenzene	94.9	82.6-120		%REC	1	2/8/2013 7:10:00 AM
Surr: Dibromofluoromethane	99.7	72.1-122		%REC	1	2/8/2013 7:10:00 AM
Surr: Toluene-d8	102	83.5-108		%REC	1	2/8/2013 7:10:00 AM

Total Metals by EPA Method 200.8

Batch ID: 4031

Analyst: MC

Antimony	0.0115	0.00300	J	µg/L	1	2/5/2013 11:31:20 AM
Arsenic	ND	0.266		µg/L	1	2/5/2013 11:31:20 AM
Beryllium	ND	0.0680		µg/L	1	2/5/2013 11:31:20 AM
Cadmium	0.0710	0.0160	J	µg/L	1	2/5/2013 11:31:20 AM
Chromium	0.955	0.0810		µg/L	1	2/5/2013 11:31:20 AM

Qualifiers: B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
RL Reporting Limit

D Dilution was required
H Holding times for preparation or analysis exceeded
ND Not detected at the Reporting Limit
S Spike recovery outside accepted recovery limits



Analytical Report

WO#: 1302006

Date Reported: 2/11/2013

Client: Calibre

Collection Date: 1/31/2013 1:36:00 PM

Project: Hytec/Bordeaux

Lab ID: 1302006-007

Matrix: Groundwater

Client Sample ID: HLMW-01A-013113

Analyses	Result	MDL	Qual	Units	DF	Date Analyzed
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Total Metals by EPA Method 200.8				Batch ID: 4031	Analyst: MC	
Copper	ND	0.0930		µg/L	1	2/5/2013 11:31:20 AM
Lead	ND	0.0750		µg/L	1	2/5/2013 11:31:20 AM
Nickel	0.627	0.110		µg/L	1	2/5/2013 11:31:20 AM
Zinc	12.9	0.121		µg/L	1	2/5/2013 11:31:20 AM

Qualifiers: B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
RL Reporting Limit

D Dilution was required
H Holding times for preparation or analysis exceeded
ND Not detected at the Reporting Limit
S Spike recovery outside accepted recovery limits



Analytical Report

WO#: 1302006

Date Reported: 2/11/2013

Client: Calibre**Collection Date:** 1/31/2013 1:56:00 PM**Project:** Hytec/Bordeaux**Lab ID:** 1302006-008**Matrix:** Groundwater**Client Sample ID:** MOWE-013113

Analyses	Result	MDL	Qual	Units	DF	Date Analyzed
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Semi-Volatile Organic Compounds by EPA Method 8270				Batch ID: 4030	Analyst: PH	
Phenol	ND	0.0401		µg/L	1	2/8/2013 5:17:00 AM
2-Chlorophenol	ND	0.0132		µg/L	1	2/8/2013 5:17:00 AM
1,3-Dichlorobenzene	ND	0.0161		µg/L	1	2/8/2013 5:17:00 AM
1,4-Dichlorobenzene	ND	0.0241		µg/L	1	2/8/2013 5:17:00 AM
1,2-Dichlorobenzene	ND	0.0232		µg/L	1	2/8/2013 5:17:00 AM
Benzyl alcohol	ND	0.0371		µg/L	1	2/8/2013 5:17:00 AM
Bis(2-chloroethyl) ether	ND	0.0294		µg/L	1	2/8/2013 5:17:00 AM
2-Methylphenol (o-cresol)	ND	0.0245		µg/L	1	2/8/2013 5:17:00 AM
Hexachloroethane	ND	0.0653		µg/L	1	2/8/2013 5:17:00 AM
N-Nitrosodi-n-propylamine	ND	0.0642		µg/L	1	2/8/2013 5:17:00 AM
Nitrobenzene	ND	0.0392		µg/L	1	2/8/2013 5:17:00 AM
Isophorone	ND	0.0205		µg/L	1	2/8/2013 5:17:00 AM
4-Methylphenol (p-cresol)	ND	0.0563		µg/L	1	2/8/2013 5:17:00 AM
2-Nitrophenol	ND	0.0912		µg/L	1	2/8/2013 5:17:00 AM
2,4-Dimethylphenol	ND	0.0376		µg/L	1	2/8/2013 5:17:00 AM
Bis(2-chloroethoxy)methane	ND	0.0337		µg/L	1	2/8/2013 5:17:00 AM
2,4-Dichlorophenol	ND	0.0188		µg/L	1	2/8/2013 5:17:00 AM
1,2,4-Trichlorobenzene	ND	0.0194		µg/L	1	2/8/2013 5:17:00 AM
Naphthalene	0.0360	0.0123	J	µg/L	1	2/8/2013 5:17:00 AM
4-Chloroaniline	ND	0.0180		µg/L	1	2/8/2013 5:17:00 AM
Hexachlorobutadiene	ND	0.0390		µg/L	1	2/8/2013 5:17:00 AM
4-Chloro-3-methylphenol	ND	0.0687		µg/L	1	2/8/2013 5:17:00 AM
2-Methylnaphthalene	ND	0.0252		µg/L	1	2/8/2013 5:17:00 AM
1-Methylnaphthalene	ND	0.0214		µg/L	1	2/8/2013 5:17:00 AM
Hexachlorocyclopentadiene	ND	0.0313		µg/L	1	2/8/2013 5:17:00 AM
2,4,6-Trichlorophenol	ND	0.0210		µg/L	1	2/8/2013 5:17:00 AM
2,4,5-Trichlorophenol	ND	0.0339		µg/L	1	2/8/2013 5:17:00 AM
2-Chloronaphthalene	ND	0.0143		µg/L	1	2/8/2013 5:17:00 AM
2-Nitroaniline	ND	0.0710		µg/L	1	2/8/2013 5:17:00 AM
Acenaphthene	ND	0.0139		µg/L	1	2/8/2013 5:17:00 AM
Dimethylphthalate	ND	0.0347		µg/L	1	2/8/2013 5:17:00 AM
2,6-Dinitrotoluene	ND	0.0269		µg/L	1	2/8/2013 5:17:00 AM
Acenaphthylene	ND	0.00613		µg/L	1	2/8/2013 5:17:00 AM
2,4-Dinitrophenol	ND	0.689		µg/L	1	2/8/2013 5:17:00 AM
Dibenzofuran	ND	0.0131		µg/L	1	2/8/2013 5:17:00 AM

Qualifiers: B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
RL Reporting Limit

D Dilution was required
H Holding times for preparation or analysis exceeded
ND Not detected at the Reporting Limit
S Spike recovery outside accepted recovery limits



Analytical Report

WO#: 1302006

Date Reported: 2/11/2013

Client: Calibre**Collection Date:** 1/31/2013 1:56:00 PM**Project:** Hytec/Bordeaux**Lab ID:** 1302006-008**Matrix:** Groundwater**Client Sample ID:** MOWE-013113**Analyses** **Result** **MDL** **Qual** **Units** **DF** **Date Analyzed**

<u>Semi-Volatile Organic Compounds by EPA Method 8270</u>				Batch ID:	4030	Analyst:	PH
2,4-Dinitrotoluene	ND	0.0701		µg/L	1	2/8/2013 5:17:00 AM	
4-Nitrophenol	ND	0.431		µg/L	1	2/8/2013 5:17:00 AM	
Fluorene	ND	0.0164		µg/L	1	2/8/2013 5:17:00 AM	
4-Chlorophenyl phenyl ether	ND	0.0199		µg/L	1	2/8/2013 5:17:00 AM	
Diethylphthalate	0.144	0.0144	J	µg/L	1	2/8/2013 5:17:00 AM	
4,6-Dinitro-2-methylphenol	ND	0.487		µg/L	1	2/8/2013 5:17:00 AM	
4-Bromophenyl phenyl ether	ND	0.0241		µg/L	1	2/8/2013 5:17:00 AM	
Hexachlorobenzene	ND	0.0264		µg/L	1	2/8/2013 5:17:00 AM	
Pentachlorophenol	ND	0.0344		µg/L	1	2/8/2013 5:17:00 AM	
Phenanthrene	0.0434	0.0130	J	µg/L	1	2/8/2013 5:17:00 AM	
Anthracene	ND	0.0167		µg/L	1	2/8/2013 5:17:00 AM	
Carbazole	ND	0.0553		µg/L	1	2/8/2013 5:17:00 AM	
Di-n-butyl phthalate	0.123	0.0268	J	µg/L	1	2/8/2013 5:17:00 AM	
Fluoranthene	ND	0.0112		µg/L	1	2/8/2013 5:17:00 AM	
Pyrene	ND	0.0146		µg/L	1	2/8/2013 5:17:00 AM	
Benzyl Butylphthalate	ND	0.0552		µg/L	1	2/8/2013 5:17:00 AM	
bis(2-Ethylhexyl)adipate	ND	0.0443		µg/L	1	2/8/2013 5:17:00 AM	
Benz[a]anthracene	ND	0.0123		µg/L	1	2/8/2013 5:17:00 AM	
Chrysene	ND	0.0126		µg/L	1	2/8/2013 5:17:00 AM	
Bis(2-ethylhexyl) phthalate	0.248	0.0316	J	µg/L	1	2/8/2013 5:17:00 AM	
Di-n-octyl phthalate	ND	0.0258		µg/L	1	2/8/2013 5:17:00 AM	
Benzo (b) fluoranthene	ND	0.0259		µg/L	1	2/8/2013 5:17:00 AM	
Benzo (k) fluoranthene	ND	0.0341		µg/L	1	2/8/2013 5:17:00 AM	
Benzo[a]pyrene	ND	0.0304		µg/L	1	2/8/2013 5:17:00 AM	
Indeno (1,2,3-cd) pyrene	ND	0.0673		µg/L	1	2/8/2013 5:17:00 AM	
Dibenzo (a,h) anthracene	ND	0.0366		µg/L	1	2/8/2013 5:17:00 AM	
Benzo (g,h,l) perylene	ND	0.0378		µg/L	1	2/8/2013 5:17:00 AM	
Surr: 2,4,6-Tribromophenol	87.6	24-138		%REC	1	2/8/2013 5:17:00 AM	
Surr: 2-Fluorobiphenyl	68.4	38.6-138		%REC	1	2/8/2013 5:17:00 AM	
Surr: Nitrobenzene-d5	65.9	31.7-140		%REC	1	2/8/2013 5:17:00 AM	
Surr: Phenol-d6	24.2	15-116		%REC	1	2/8/2013 5:17:00 AM	
Surr: p-Terphenyl	99.3	49-156		%REC	1	2/8/2013 5:17:00 AM	

Qualifiers: B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
RL Reporting Limit

D Dilution was required
H Holding times for preparation or analysis exceeded
ND Not detected at the Reporting Limit
S Spike recovery outside accepted recovery limits



Analytical Report

WO#: 1302006

Date Reported: 2/11/2013

Client: Calibre

Collection Date: 1/31/2013 1:56:00 PM

Project: Hytec/Bordeaux

Lab ID: 1302006-008

Matrix: Groundwater

Client Sample ID: MOWE-013113

Analyses	Result	MDL	Qual	Units	DF	Date Analyzed
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Volatile Organic Compounds by EPA Method 8260				Batch ID: R7380	Analyst: EM
Dichlorodifluoromethane (CFC-12)	ND	0.0300	µg/L	1	2/8/2013 7:40:00 AM
Chloromethane	ND	0.0470	µg/L	1	2/8/2013 7:40:00 AM
Vinyl chloride	ND	0.0530	µg/L	1	2/8/2013 7:40:00 AM
Bromomethane	ND	0.121	µg/L	1	2/8/2013 7:40:00 AM
Trichlorofluoromethane (CFC-11)	ND	0.0340	µg/L	1	2/8/2013 7:40:00 AM
Chloroethane	ND	0.0590	µg/L	1	2/8/2013 7:40:00 AM
1,1-Dichloroethene	ND	0.0470	µg/L	1	2/8/2013 7:40:00 AM
Methylene chloride	ND	0.0520	µg/L	1	2/8/2013 7:40:00 AM
trans-1,2-Dichloroethene	ND	0.0370	µg/L	1	2/8/2013 7:40:00 AM
Methyl tert-butyl ether (MTBE)	ND	0.0260	µg/L	1	2/8/2013 7:40:00 AM
1,1-Dichloroethane	ND	0.0270	µg/L	1	2/8/2013 7:40:00 AM
2,2-Dichloropropane	ND	0.0460	µg/L	1	2/8/2013 7:40:00 AM
cis-1,2-Dichloroethene	ND	0.0190	µg/L	1	2/8/2013 7:40:00 AM
Chloroform	ND	0.0320	µg/L	1	2/8/2013 7:40:00 AM
1,1,1-Trichloroethane (TCA)	ND	0.0320	µg/L	1	2/8/2013 7:40:00 AM
1,1-Dichloropropene	ND	0.0390	µg/L	1	2/8/2013 7:40:00 AM
Carbon tetrachloride	ND	0.0320	µg/L	1	2/8/2013 7:40:00 AM
1,2-Dichloroethane (EDC)	ND	0.0350	µg/L	1	2/8/2013 7:40:00 AM
Benzene	ND	0.0250	µg/L	1	2/8/2013 7:40:00 AM
Trichloroethene (TCE)	ND	0.0400	µg/L	1	2/8/2013 7:40:00 AM
1,2-Dichloropropane	ND	0.0470	µg/L	1	2/8/2013 7:40:00 AM
Bromodichloromethane	ND	0.0600	µg/L	1	2/8/2013 7:40:00 AM
Dibromomethane	ND	0.115	µg/L	1	2/8/2013 7:40:00 AM
cis-1,3-Dichloropropene	ND	0.0430	µg/L	1	2/8/2013 7:40:00 AM
Toluene	ND	0.0330	µg/L	1	2/8/2013 7:40:00 AM
trans-1,3-Dichloropropene	ND	0.0420	µg/L	1	2/8/2013 7:40:00 AM
1,1,2-Trichloroethane	ND	0.120	µg/L	1	2/8/2013 7:40:00 AM
1,3-Dichloropropane	ND	0.0530	µg/L	1	2/8/2013 7:40:00 AM
Tetrachloroethene (PCE)	ND	0.0350	µg/L	1	2/8/2013 7:40:00 AM
Dibromochloromethane	ND	0.0440	µg/L	1	2/8/2013 7:40:00 AM
1,2-Dibromoethane (EDB)	ND	0.00650	µg/L	1	2/8/2013 7:40:00 AM
Chlorobenzene	ND	0.0240	µg/L	1	2/8/2013 7:40:00 AM
1,1,1,2-Tetrachloroethane	ND	0.0640	µg/L	1	2/8/2013 7:40:00 AM
Ethylbenzene	ND	0.0170	µg/L	1	2/8/2013 7:40:00 AM
m,p-Xylene	ND	0.0410	µg/L	1	2/8/2013 7:40:00 AM

Qualifiers: B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
RL Reporting Limit

D Dilution was required
H Holding times for preparation or analysis exceeded
ND Not detected at the Reporting Limit
S Spike recovery outside accepted recovery limits



Analytical Report

WO#: 1302006

Date Reported: 2/11/2013

Client: Calibre

Collection Date: 1/31/2013 1:56:00 PM

Project: Hytec/Bordeaux

Lab ID: 1302006-008

Matrix: Groundwater

Client Sample ID: MOWE-013113

Analyses	Result	MDL	Qual	Units	DF	Date Analyzed
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Volatile Organic Compounds by EPA Method 8260

Batch ID: R7380

Analyst: EM

o-Xylene	ND	0.0340	µg/L	1	2/8/2013 7:40:00 AM
Styrene	ND	0.0230	µg/L	1	2/8/2013 7:40:00 AM
Isopropylbenzene	ND	0.0180	µg/L	1	2/8/2013 7:40:00 AM
Bromoform	ND	0.115	µg/L	1	2/8/2013 7:40:00 AM
1,1,2,2-Tetrachloroethane	ND	0.108	µg/L	1	2/8/2013 7:40:00 AM
n-Propylbenzene	ND	0.0330	µg/L	1	2/8/2013 7:40:00 AM
Bromobenzene	ND	0.0550	µg/L	1	2/8/2013 7:40:00 AM
1,3,5-Trimethylbenzene	ND	0.0300	µg/L	1	2/8/2013 7:40:00 AM
2-Chlorotoluene	ND	0.0320	µg/L	1	2/8/2013 7:40:00 AM
4-Chlorotoluene	ND	0.0370	µg/L	1	2/8/2013 7:40:00 AM
tert-Butylbenzene	ND	0.0360	µg/L	1	2/8/2013 7:40:00 AM
1,2,3-Trichloropropane	ND	0.130	µg/L	1	2/8/2013 7:40:00 AM
1,2,4-Trichlorobenzene	ND	0.0990	µg/L	1	2/8/2013 7:40:00 AM
sec-Butylbenzene	ND	0.0230	µg/L	1	2/8/2013 7:40:00 AM
4-Isopropyltoluene	ND	0.0360	µg/L	1	2/8/2013 7:40:00 AM
1,3-Dichlorobenzene	ND	0.0290	µg/L	1	2/8/2013 7:40:00 AM
1,4-Dichlorobenzene	ND	0.0260	µg/L	1	2/8/2013 7:40:00 AM
n-Butylbenzene	ND	0.0200	µg/L	1	2/8/2013 7:40:00 AM
1,2-Dichlorobenzene	ND	0.0460	µg/L	1	2/8/2013 7:40:00 AM
1,2-Dibromo-3-chloropropane	ND	0.315	µg/L	1	2/8/2013 7:40:00 AM
1,2,4-Trimethylbenzene	ND	0.0200	µg/L	1	2/8/2013 7:40:00 AM
Hexachlorobutadiene	ND	0.154	µg/L	1	2/8/2013 7:40:00 AM
Naphthalene	ND	0.0940	µg/L	1	2/8/2013 7:40:00 AM
1,2,3-Trichlorobenzene	ND	0.147	µg/L	1	2/8/2013 7:40:00 AM
Surr: 1-Bromo-4-fluorobenzene	92.2	82.6-120	%REC	1	2/8/2013 7:40:00 AM
Surr: Dibromofluoromethane	99.0	72.1-122	%REC	1	2/8/2013 7:40:00 AM
Surr: Toluene-d8	102	83.5-108	%REC	1	2/8/2013 7:40:00 AM

Total Metals by EPA Method 200.8

Batch ID: 4031

Analyst: MC

Antimony	ND	0.00300	µg/L	1	2/5/2013 11:41:42 AM
Arsenic	ND	0.266	µg/L	1	2/5/2013 11:41:42 AM
Beryllium	ND	0.0680	µg/L	1	2/5/2013 11:41:42 AM
Cadmium	ND	0.0160	µg/L	1	2/5/2013 11:41:42 AM
Chromium	ND	0.0810	µg/L	1	2/5/2013 11:41:42 AM

Qualifiers: B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
RL Reporting Limit

D Dilution was required
H Holding times for preparation or analysis exceeded
ND Not detected at the Reporting Limit
S Spike recovery outside accepted recovery limits



Analytical Report

WO#: 1302006

Date Reported: 2/11/2013

Client: Calibre

Collection Date: 1/31/2013 1:56:00 PM

Project: Hytec/Bordeaux

Lab ID: 1302006-008

Matrix: Groundwater

Client Sample ID: MOWE-013113

Analyses	Result	MDL	Qual	Units	DF	Date Analyzed
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Total Metals by EPA Method 200.8 Batch ID: 4031 Analyst: MC

Copper	ND	0.0930		µg/L	1	2/5/2013 11:41:42 AM
Lead	ND	0.0750		µg/L	1	2/5/2013 11:41:42 AM
Nickel	0.242	0.110	J	µg/L	1	2/5/2013 11:41:42 AM
Zinc	10.1	0.121		µg/L	1	2/5/2013 11:41:42 AM

Qualifiers: B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
RL Reporting Limit

D Dilution was required
H Holding times for preparation or analysis exceeded
ND Not detected at the Reporting Limit
S Spike recovery outside accepted recovery limits



Analytical Report

WO#: 1302006

Date Reported: 2/11/2013

Client: Calibre

Collection Date: 1/31/2013 2:25:00 PM

Project: Hytec/Bordeaux

Lab ID: 1302006-009

Matrix: Groundwater

Client Sample ID: PAWE-013113

Analyses	Result	MDL	Qual	Units	DF	Date Analyzed
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Semi-Volatile Organic Compounds by EPA Method 8270				Batch ID: 4030	Analyst: PH	
Phenol	ND	0.0401		µg/L	1	2/8/2013 5:42:00 AM
2-Chlorophenol	ND	0.0132		µg/L	1	2/8/2013 5:42:00 AM
1,3-Dichlorobenzene	ND	0.0161		µg/L	1	2/8/2013 5:42:00 AM
1,4-Dichlorobenzene	ND	0.0241		µg/L	1	2/8/2013 5:42:00 AM
1,2-Dichlorobenzene	ND	0.0232		µg/L	1	2/8/2013 5:42:00 AM
Benzyl alcohol	ND	0.0371		µg/L	1	2/8/2013 5:42:00 AM
Bis(2-chloroethyl) ether	ND	0.0294		µg/L	1	2/8/2013 5:42:00 AM
2-Methylphenol (o-cresol)	ND	0.0245		µg/L	1	2/8/2013 5:42:00 AM
Hexachloroethane	ND	0.0653		µg/L	1	2/8/2013 5:42:00 AM
N-Nitrosodi-n-propylamine	ND	0.0642		µg/L	1	2/8/2013 5:42:00 AM
Nitrobenzene	ND	0.0392		µg/L	1	2/8/2013 5:42:00 AM
Isophorone	ND	0.0205		µg/L	1	2/8/2013 5:42:00 AM
4-Methylphenol (p-cresol)	ND	0.0563		µg/L	1	2/8/2013 5:42:00 AM
2-Nitrophenol	ND	0.0912		µg/L	1	2/8/2013 5:42:00 AM
2,4-Dimethylphenol	ND	0.0376		µg/L	1	2/8/2013 5:42:00 AM
Bis(2-chloroethoxy)methane	ND	0.0337		µg/L	1	2/8/2013 5:42:00 AM
2,4-Dichlorophenol	ND	0.0188		µg/L	1	2/8/2013 5:42:00 AM
1,2,4-Trichlorobenzene	ND	0.0194		µg/L	1	2/8/2013 5:42:00 AM
Naphthalene	0.0376	0.0123	J	µg/L	1	2/8/2013 5:42:00 AM
4-Chloroaniline	ND	0.0180		µg/L	1	2/8/2013 5:42:00 AM
Hexachlorobutadiene	ND	0.0390		µg/L	1	2/8/2013 5:42:00 AM
4-Chloro-3-methylphenol	ND	0.0687		µg/L	1	2/8/2013 5:42:00 AM
2-Methylnaphthalene	ND	0.0252		µg/L	1	2/8/2013 5:42:00 AM
1-Methylnaphthalene	ND	0.0214		µg/L	1	2/8/2013 5:42:00 AM
Hexachlorocyclopentadiene	ND	0.0313		µg/L	1	2/8/2013 5:42:00 AM
2,4,6-Trichlorophenol	ND	0.0210		µg/L	1	2/8/2013 5:42:00 AM
2,4,5-Trichlorophenol	ND	0.0339		µg/L	1	2/8/2013 5:42:00 AM
2-Chloronaphthalene	ND	0.0143		µg/L	1	2/8/2013 5:42:00 AM
2-Nitroaniline	ND	0.0710		µg/L	1	2/8/2013 5:42:00 AM
Acenaphthene	ND	0.0139		µg/L	1	2/8/2013 5:42:00 AM
Dimethylphthalate	ND	0.0347		µg/L	1	2/8/2013 5:42:00 AM
2,6-Dinitrotoluene	ND	0.0269		µg/L	1	2/8/2013 5:42:00 AM
Acenaphthylene	ND	0.00613		µg/L	1	2/8/2013 5:42:00 AM
2,4-Dinitrophenol	ND	0.689		µg/L	1	2/8/2013 5:42:00 AM
Dibenzofuran	ND	0.0131		µg/L	1	2/8/2013 5:42:00 AM

Qualifiers: B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
RL Reporting Limit

D Dilution was required
H Holding times for preparation or analysis exceeded
ND Not detected at the Reporting Limit
S Spike recovery outside accepted recovery limits



Analytical Report

WO#: 1302006

Date Reported: 2/11/2013

Client: Calibre**Collection Date:** 1/31/2013 2:25:00 PM**Project:** Hytec/Bordeaux**Lab ID:** 1302006-009**Matrix:** Groundwater**Client Sample ID:** PAWE-013113**Analyses** **Result** **MDL** **Qual** **Units** **DF** **Date Analyzed**

<u>Semi-Volatile Organic Compounds by EPA Method 8270</u>				Batch ID:	4030	Analyst:	PH
2,4-Dinitrotoluene	ND	0.0701		µg/L	1	2/8/2013 5:42:00 AM	
4-Nitrophenol	ND	0.431		µg/L	1	2/8/2013 5:42:00 AM	
Fluorene	ND	0.0164		µg/L	1	2/8/2013 5:42:00 AM	
4-Chlorophenyl phenyl ether	ND	0.0199		µg/L	1	2/8/2013 5:42:00 AM	
Diethylphthalate	0.145	0.0144	J	µg/L	1	2/8/2013 5:42:00 AM	
4,6-Dinitro-2-methylphenol	ND	0.487		µg/L	1	2/8/2013 5:42:00 AM	
4-Bromophenyl phenyl ether	ND	0.0241		µg/L	1	2/8/2013 5:42:00 AM	
Hexachlorobenzene	ND	0.0264		µg/L	1	2/8/2013 5:42:00 AM	
Pentachlorophenol	ND	0.0344		µg/L	1	2/8/2013 5:42:00 AM	
Phenanthrene	ND	0.0130		µg/L	1	2/8/2013 5:42:00 AM	
Anthracene	ND	0.0167		µg/L	1	2/8/2013 5:42:00 AM	
Carbazole	ND	0.0553		µg/L	1	2/8/2013 5:42:00 AM	
Di-n-butyl phthalate	0.0989	0.0268	J	µg/L	1	2/8/2013 5:42:00 AM	
Fluoranthene	ND	0.0112		µg/L	1	2/8/2013 5:42:00 AM	
Pyrene	ND	0.0146		µg/L	1	2/8/2013 5:42:00 AM	
Benzyl Butylphthalate	ND	0.0552		µg/L	1	2/8/2013 5:42:00 AM	
bis(2-Ethylhexyl)adipate	ND	0.0443		µg/L	1	2/8/2013 5:42:00 AM	
Benz[a]anthracene	ND	0.0123		µg/L	1	2/8/2013 5:42:00 AM	
Chrysene	ND	0.0126		µg/L	1	2/8/2013 5:42:00 AM	
Bis(2-ethylhexyl) phthalate	0.365	0.0316	J	µg/L	1	2/8/2013 5:42:00 AM	
Di-n-octyl phthalate	ND	0.0258		µg/L	1	2/8/2013 5:42:00 AM	
Benzo (b) fluoranthene	ND	0.0259		µg/L	1	2/8/2013 5:42:00 AM	
Benzo (k) fluoranthene	ND	0.0341		µg/L	1	2/8/2013 5:42:00 AM	
Benzo[a]pyrene	ND	0.0304		µg/L	1	2/8/2013 5:42:00 AM	
Indeno (1,2,3-cd) pyrene	ND	0.0673		µg/L	1	2/8/2013 5:42:00 AM	
Dibenzo (a,h) anthracene	ND	0.0366		µg/L	1	2/8/2013 5:42:00 AM	
Benzo (g,h,l) perylene	ND	0.0378		µg/L	1	2/8/2013 5:42:00 AM	
Surr: 2,4,6-Tribromophenol	89.7	24-138		%REC	1	2/8/2013 5:42:00 AM	
Surr: 2-Fluorobiphenyl	67.9	38.6-138		%REC	1	2/8/2013 5:42:00 AM	
Surr: Nitrobenzene-d5	68.4	31.7-140		%REC	1	2/8/2013 5:42:00 AM	
Surr: Phenol-d6	24.9	15-116		%REC	1	2/8/2013 5:42:00 AM	
Surr: p-Terphenyl	99.4	49-156		%REC	1	2/8/2013 5:42:00 AM	

Qualifiers: B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
RL Reporting Limit

D Dilution was required
H Holding times for preparation or analysis exceeded
ND Not detected at the Reporting Limit
S Spike recovery outside accepted recovery limits



Analytical Report

WO#: 1302006

Date Reported: 2/11/2013

Client: Calibre

Collection Date: 1/31/2013 2:25:00 PM

Project: Hytec/Bordeaux

Lab ID: 1302006-009

Matrix: Groundwater

Client Sample ID: PAWE-013113

Analyses	Result	MDL	Qual	Units	DF	Date Analyzed
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Volatile Organic Compounds by EPA Method 8260				Batch ID: R7380	Analyst: EM
Dichlorodifluoromethane (CFC-12)	ND	0.0300		µg/L	1
Chloromethane	ND	0.0470		µg/L	1
Vinyl chloride	ND	0.0530		µg/L	1
Bromomethane	ND	0.121		µg/L	1
Trichlorodifluoromethane (CFC-11)	0.430	0.0340	J	µg/L	1
Chloroethane	ND	0.0590		µg/L	1
1,1-Dichloroethene	ND	0.0470		µg/L	1
Methylene chloride	ND	0.0520		µg/L	1
trans-1,2-Dichloroethene	ND	0.0370		µg/L	1
Methyl tert-butyl ether (MTBE)	ND	0.0260		µg/L	1
1,1-Dichloroethane	ND	0.0270		µg/L	1
2,2-Dichloropropane	ND	0.0460		µg/L	1
cis-1,2-Dichloroethene	ND	0.0190		µg/L	1
Chloroform	ND	0.0320		µg/L	1
1,1,1-Trichloroethane (TCA)	ND	0.0320		µg/L	1
1,1-Dichloropropene	ND	0.0390		µg/L	1
Carbon tetrachloride	ND	0.0320		µg/L	1
1,2-Dichloroethane (EDC)	ND	0.0350		µg/L	1
Benzene	ND	0.0250		µg/L	1
Trichloroethene (TCE)	ND	0.0400		µg/L	1
1,2-Dichloropropane	ND	0.0470		µg/L	1
Bromodichloromethane	ND	0.0600		µg/L	1
Dibromomethane	ND	0.115		µg/L	1
cis-1,3-Dichloropropene	ND	0.0430		µg/L	1
Toluene	ND	0.0330		µg/L	1
trans-1,3-Dichloropropene	ND	0.0420		µg/L	1
1,1,2-Trichloroethane	ND	0.120		µg/L	1
1,3-Dichloropropane	ND	0.0530		µg/L	1
Tetrachloroethene (PCE)	ND	0.0350		µg/L	1
Dibromochloromethane	ND	0.0440		µg/L	1
1,2-Dibromoethane (EDB)	ND	0.00650		µg/L	1
Chlorobenzene	ND	0.0240		µg/L	1
1,1,1,2-Tetrachloroethane	ND	0.0640		µg/L	1
Ethylbenzene	ND	0.0170		µg/L	1
m,p-Xylene	ND	0.0410		µg/L	1

Qualifiers: B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
RL Reporting Limit

D Dilution was required
H Holding times for preparation or analysis exceeded
ND Not detected at the Reporting Limit
S Spike recovery outside accepted recovery limits



Analytical Report

WO#: 1302006

Date Reported: 2/11/2013

Client: Calibre

Collection Date: 1/31/2013 2:25:00 PM

Project: Hytec/Bordeaux

Lab ID: 1302006-009

Matrix: Groundwater

Client Sample ID: PAWE-013113

Analyses	Result	MDL	Qual	Units	DF	Date Analyzed
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Volatile Organic Compounds by EPA Method 8260

Batch ID: R7380

Analyst: EM

o-Xylene	ND	0.0340		µg/L	1	2/8/2013 8:10:00 AM
Styrene	ND	0.0230		µg/L	1	2/8/2013 8:10:00 AM
Isopropylbenzene	ND	0.0180		µg/L	1	2/8/2013 8:10:00 AM
Bromoform	ND	0.115		µg/L	1	2/8/2013 8:10:00 AM
1,1,2,2-Tetrachloroethane	ND	0.108		µg/L	1	2/8/2013 8:10:00 AM
n-Propylbenzene	ND	0.0330		µg/L	1	2/8/2013 8:10:00 AM
Bromobenzene	ND	0.0550		µg/L	1	2/8/2013 8:10:00 AM
1,3,5-Trimethylbenzene	ND	0.0300		µg/L	1	2/8/2013 8:10:00 AM
2-Chlorotoluene	ND	0.0320		µg/L	1	2/8/2013 8:10:00 AM
4-Chlorotoluene	ND	0.0370		µg/L	1	2/8/2013 8:10:00 AM
tert-Butylbenzene	ND	0.0360		µg/L	1	2/8/2013 8:10:00 AM
1,2,3-Trichloropropane	ND	0.130		µg/L	1	2/8/2013 8:10:00 AM
1,2,4-Trichlorobenzene	ND	0.0990		µg/L	1	2/8/2013 8:10:00 AM
sec-Butylbenzene	ND	0.0230		µg/L	1	2/8/2013 8:10:00 AM
4-Isopropyltoluene	ND	0.0360		µg/L	1	2/8/2013 8:10:00 AM
1,3-Dichlorobenzene	ND	0.0290		µg/L	1	2/8/2013 8:10:00 AM
1,4-Dichlorobenzene	ND	0.0260		µg/L	1	2/8/2013 8:10:00 AM
n-Butylbenzene	ND	0.0200		µg/L	1	2/8/2013 8:10:00 AM
1,2-Dichlorobenzene	ND	0.0460		µg/L	1	2/8/2013 8:10:00 AM
1,2-Dibromo-3-chloropropane	ND	0.315		µg/L	1	2/8/2013 8:10:00 AM
1,2,4-Trimethylbenzene	ND	0.0200		µg/L	1	2/8/2013 8:10:00 AM
Hexachlorobutadiene	ND	0.154		µg/L	1	2/8/2013 8:10:00 AM
Naphthalene	ND	0.0940		µg/L	1	2/8/2013 8:10:00 AM
1,2,3-Trichlorobenzene	ND	0.147		µg/L	1	2/8/2013 8:10:00 AM
Surr: 1-Bromo-4-fluorobenzene	91.9	82.6-120		%REC	1	2/8/2013 8:10:00 AM
Surr: Dibromofluoromethane	97.6	72.1-122		%REC	1	2/8/2013 8:10:00 AM
Surr: Toluene-d8	101	83.5-108		%REC	1	2/8/2013 8:10:00 AM

Total Metals by EPA Method 200.8

Batch ID: 4031

Analyst: MC

Antimony	0.0105	0.00300	J	µg/L	1	2/5/2013 12:21:51 PM
Arsenic	ND	0.266		µg/L	1	2/5/2013 12:21:51 PM
Beryllium	ND	0.0680		µg/L	1	2/5/2013 12:21:51 PM
Cadmium	ND	0.0160		µg/L	1	2/5/2013 12:21:51 PM
Chromium	0.164	0.0810	J	µg/L	1	2/5/2013 12:21:51 PM

Qualifiers: B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
RL Reporting Limit

D Dilution was required
H Holding times for preparation or analysis exceeded
ND Not detected at the Reporting Limit
S Spike recovery outside accepted recovery limits



Analytical Report

WO#: 1302006

Date Reported: 2/11/2013

Client: Calibre

Collection Date: 1/31/2013 2:25:00 PM

Project: Hytec/Bordeaux

Lab ID: 1302006-009

Matrix: Groundwater

Client Sample ID: PAWE-013113

Analyses	Result	MDL	Qual	Units	DF	Date Analyzed
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Total Metals by EPA Method 200.8 Batch ID: 4031 Analyst: MC

Copper	0.722	0.0930		µg/L	1	2/5/2013 12:21:51 PM
Lead	0.906	0.0750	J	µg/L	1	2/5/2013 12:21:51 PM
Nickel	0.310	0.110	J	µg/L	1	2/5/2013 12:21:51 PM
Zinc	15.2	0.121		µg/L	1	2/5/2013 12:21:51 PM

Qualifiers: B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
RL Reporting Limit

D Dilution was required
H Holding times for preparation or analysis exceeded
ND Not detected at the Reporting Limit
S Spike recovery outside accepted recovery limits



Analytical Report

WO#: 1302006

Date Reported: 2/11/2013

Client: Calibre**Collection Date:** 1/31/2013 8:00:00 AM**Project:** Hytec/Bordeaux**Lab ID:** 1302006-010**Matrix:** Groundwater**Client Sample ID:** Dup1-013113**Analyses** **Result** **MDL** **Qual** **Units** **DF** **Date Analyzed**

Volatile Organic Compounds by EPA Method 8260				Batch ID: R7380	Analyst: EM	
Dichlorodifluoromethane (CFC-12)	ND	0.0300	µg/L	1	2/8/2013 8:40:00 AM	
Chloromethane	ND	0.0470	µg/L	1	2/8/2013 8:40:00 AM	
Vinyl chloride	ND	0.0530	µg/L	1	2/8/2013 8:40:00 AM	
Bromomethane	ND	0.121	µg/L	1	2/8/2013 8:40:00 AM	
Trichlorofluoromethane (CFC-11)	0.970	0.0340	J	µg/L	1	2/8/2013 8:40:00 AM
Chloroethane	ND	0.0590	µg/L	1	2/8/2013 8:40:00 AM	
1,1-Dichloroethene	ND	0.0470	µg/L	1	2/8/2013 8:40:00 AM	
Methylene chloride	ND	0.0520	µg/L	1	2/8/2013 8:40:00 AM	
trans-1,2-Dichloroethene	ND	0.0370	µg/L	1	2/8/2013 8:40:00 AM	
Methyl tert-butyl ether (MTBE)	ND	0.0260	µg/L	1	2/8/2013 8:40:00 AM	
1,1-Dichloroethane	ND	0.0270	µg/L	1	2/8/2013 8:40:00 AM	
2,2-Dichloropropane	ND	0.0460	µg/L	1	2/8/2013 8:40:00 AM	
cis-1,2-Dichloroethene	ND	0.0190	µg/L	1	2/8/2013 8:40:00 AM	
Chloroform	ND	0.0320	µg/L	1	2/8/2013 8:40:00 AM	
1,1,1-Trichloroethane (TCA)	ND	0.0320	µg/L	1	2/8/2013 8:40:00 AM	
1,1-Dichloropropene	ND	0.0390	µg/L	1	2/8/2013 8:40:00 AM	
Carbon tetrachloride	ND	0.0320	µg/L	1	2/8/2013 8:40:00 AM	
1,2-Dichloroethane (EDC)	ND	0.0350	µg/L	1	2/8/2013 8:40:00 AM	
Benzene	ND	0.0250	µg/L	1	2/8/2013 8:40:00 AM	
Trichloroethene (TCE)	ND	0.0400	µg/L	1	2/8/2013 8:40:00 AM	
1,2-Dichloropropane	ND	0.0470	µg/L	1	2/8/2013 8:40:00 AM	
Bromodichloromethane	ND	0.0600	µg/L	1	2/8/2013 8:40:00 AM	
Dibromomethane	ND	0.115	µg/L	1	2/8/2013 8:40:00 AM	
cis-1,3-Dichloropropene	ND	0.0430	µg/L	1	2/8/2013 8:40:00 AM	
Toluene	ND	0.0330	µg/L	1	2/8/2013 8:40:00 AM	
trans-1,3-Dichloropropene	ND	0.0420	µg/L	1	2/8/2013 8:40:00 AM	
1,1,2-Trichloroethane	ND	0.120	µg/L	1	2/8/2013 8:40:00 AM	
1,3-Dichloropropane	ND	0.0530	µg/L	1	2/8/2013 8:40:00 AM	
Tetrachloroethene (PCE)	ND	0.0350	µg/L	1	2/8/2013 8:40:00 AM	
Dibromochloromethane	ND	0.0440	µg/L	1	2/8/2013 8:40:00 AM	
1,2-Dibromoethane (EDB)	ND	0.00650	µg/L	1	2/8/2013 8:40:00 AM	
Chlorobenzene	ND	0.0240	µg/L	1	2/8/2013 8:40:00 AM	
1,1,1,2-Tetrachloroethane	ND	0.0640	µg/L	1	2/8/2013 8:40:00 AM	
Ethylbenzene	ND	0.0170	µg/L	1	2/8/2013 8:40:00 AM	
m,p-Xylene	ND	0.0410	µg/L	1	2/8/2013 8:40:00 AM	

Qualifiers: B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
RL Reporting Limit

D Dilution was required
H Holding times for preparation or analysis exceeded
ND Not detected at the Reporting Limit
S Spike recovery outside accepted recovery limits



Analytical Report

WO#: 1302006

Date Reported: 2/11/2013

Client: Calibre**Collection Date:** 1/31/2013 8:00:00 AM**Project:** Hytec/Bordeaux**Lab ID:** 1302006-010**Matrix:** Groundwater**Client Sample ID:** Dup1-013113

Analyses	Result	MDL	Qual	Units	DF	Date Analyzed
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Volatile Organic Compounds by EPA Method 8260				Batch ID: R7380	Analyst: EM
o-Xylene	ND	0.0340	µg/L	1	2/8/2013 8:40:00 AM
Styrene	ND	0.0230	µg/L	1	2/8/2013 8:40:00 AM
Isopropylbenzene	ND	0.0180	µg/L	1	2/8/2013 8:40:00 AM
Bromoform	ND	0.115	µg/L	1	2/8/2013 8:40:00 AM
1,1,2,2-Tetrachloroethane	ND	0.108	µg/L	1	2/8/2013 8:40:00 AM
n-Propylbenzene	ND	0.0330	µg/L	1	2/8/2013 8:40:00 AM
Bromobenzene	ND	0.0550	µg/L	1	2/8/2013 8:40:00 AM
1,3,5-Trimethylbenzene	ND	0.0300	µg/L	1	2/8/2013 8:40:00 AM
2-Chlorotoluene	ND	0.0320	µg/L	1	2/8/2013 8:40:00 AM
4-Chlorotoluene	ND	0.0370	µg/L	1	2/8/2013 8:40:00 AM
tert-Butylbenzene	ND	0.0360	µg/L	1	2/8/2013 8:40:00 AM
1,2,3-Trichloropropane	ND	0.130	µg/L	1	2/8/2013 8:40:00 AM
1,2,4-Trichlorobenzene	ND	0.0990	µg/L	1	2/8/2013 8:40:00 AM
sec-Butylbenzene	ND	0.0230	µg/L	1	2/8/2013 8:40:00 AM
4-Isopropyltoluene	ND	0.0360	µg/L	1	2/8/2013 8:40:00 AM
1,3-Dichlorobenzene	ND	0.0290	µg/L	1	2/8/2013 8:40:00 AM
1,4-Dichlorobenzene	ND	0.0260	µg/L	1	2/8/2013 8:40:00 AM
n-Butylbenzene	ND	0.0200	µg/L	1	2/8/2013 8:40:00 AM
1,2-Dichlorobenzene	ND	0.0460	µg/L	1	2/8/2013 8:40:00 AM
1,2-Dibromo-3-chloropropane	ND	0.315	µg/L	1	2/8/2013 8:40:00 AM
1,2,4-Trimethylbenzene	ND	0.0200	µg/L	1	2/8/2013 8:40:00 AM
Hexachlorobutadiene	ND	0.154	µg/L	1	2/8/2013 8:40:00 AM
Naphthalene	ND	0.0940	µg/L	1	2/8/2013 8:40:00 AM
1,2,3-Trichlorobenzene	ND	0.147	µg/L	1	2/8/2013 8:40:00 AM
Surr: 1-Bromo-4-fluorobenzene	94.6	82.6-120	%REC	1	2/8/2013 8:40:00 AM
Surr: Dibromofluoromethane	101	72.1-122	%REC	1	2/8/2013 8:40:00 AM
Surr: Toluene-d8	102	83.5-108	%REC	1	2/8/2013 8:40:00 AM

Qualifiers: B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
RL Reporting Limit

D Dilution was required
H Holding times for preparation or analysis exceeded
ND Not detected at the Reporting Limit
S Spike recovery outside accepted recovery limits



Analytical Report

WO#: 1302006

Date Reported: 2/11/2013

Client: Calibre

Collection Date: 2/1/2013 12:15:00 PM

Project: Hytec/Bordeaux

Lab ID: 1302006-011

Matrix: Groundwater

Client Sample ID: HLMW-05B-020113

Analyses	Result	MDL	Qual	Units	DF	Date Analyzed
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<u>Semi-Volatile Organic Compounds by EPA Method 8270</u>				Batch ID: 4030	Analyst: PH
Phenol	ND	0.0401	µg/L	1	2/8/2013 12:48:00 AM
2-Chlorophenol	ND	0.0132	µg/L	1	2/8/2013 12:48:00 AM
1,3-Dichlorobenzene	ND	0.0161	µg/L	1	2/8/2013 12:48:00 AM
1,4-Dichlorobenzene	ND	0.0241	µg/L	1	2/8/2013 12:48:00 AM
1,2-Dichlorobenzene	ND	0.0232	µg/L	1	2/8/2013 12:48:00 AM
Benzyl alcohol	ND	0.0371	µg/L	1	2/8/2013 12:48:00 AM
Bis(2-chloroethyl) ether	ND	0.0294	µg/L	1	2/8/2013 12:48:00 AM
2-Methylphenol (o-cresol)	ND	0.0245	µg/L	1	2/8/2013 12:48:00 AM
Hexachloroethane	ND	0.0653	µg/L	1	2/8/2013 12:48:00 AM
N-Nitrosodi-n-propylamine	ND	0.0642	µg/L	1	2/8/2013 12:48:00 AM
Nitrobenzene	ND	0.0392	µg/L	1	2/8/2013 12:48:00 AM
Isophorone	ND	0.0205	µg/L	1	2/8/2013 12:48:00 AM
4-Methylphenol (p-cresol)	ND	0.0563	µg/L	1	2/8/2013 12:48:00 AM
2-Nitrophenol	ND	0.0912	µg/L	1	2/8/2013 12:48:00 AM
2,4-Dimethylphenol	ND	0.0376	µg/L	1	2/8/2013 12:48:00 AM
Bis(2-chloroethoxy)methane	ND	0.0337	µg/L	1	2/8/2013 12:48:00 AM
2,4-Dichlorophenol	ND	0.0188	µg/L	1	2/8/2013 12:48:00 AM
1,2,4-Trichlorobenzene	ND	0.0194	µg/L	1	2/8/2013 12:48:00 AM
Naphthalene	ND	0.0123	µg/L	1	2/8/2013 12:48:00 AM
4-Chloroaniline	ND	0.0180	µg/L	1	2/8/2013 12:48:00 AM
Hexachlorobutadiene	ND	0.0390	µg/L	1	2/8/2013 12:48:00 AM
4-Chloro-3-methylphenol	ND	0.0687	µg/L	1	2/8/2013 12:48:00 AM
2-Methylnaphthalene	ND	0.0252	µg/L	1	2/8/2013 12:48:00 AM
1-Methylnaphthalene	ND	0.0214	µg/L	1	2/8/2013 12:48:00 AM
Hexachlorocyclopentadiene	ND	0.0313	µg/L	1	2/8/2013 12:48:00 AM
2,4,6-Trichlorophenol	ND	0.0210	µg/L	1	2/8/2013 12:48:00 AM
2,4,5-Trichlorophenol	ND	0.0339	µg/L	1	2/8/2013 12:48:00 AM
2-Chloronaphthalene	ND	0.0143	µg/L	1	2/8/2013 12:48:00 AM
2-Nitroaniline	ND	0.0710	µg/L	1	2/8/2013 12:48:00 AM
Acenaphthene	ND	0.0139	µg/L	1	2/8/2013 12:48:00 AM
Dimethylphthalate	ND	0.0347	µg/L	1	2/8/2013 12:48:00 AM
2,6-Dinitrotoluene	ND	0.0269	µg/L	1	2/8/2013 12:48:00 AM
Acenaphthylene	ND	0.00613	µg/L	1	2/8/2013 12:48:00 AM
2,4-Dinitrophenol	ND	0.689	µg/L	1	2/8/2013 12:48:00 AM
Dibenzofuran	ND	0.0131	µg/L	1	2/8/2013 12:48:00 AM

Qualifiers: B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
RL Reporting Limit

D Dilution was required
H Holding times for preparation or analysis exceeded
ND Not detected at the Reporting Limit
S Spike recovery outside accepted recovery limits



Analytical Report

WO#: 1302006

Date Reported: 2/11/2013

Client: Calibre**Collection Date:** 2/1/2013 12:15:00 PM**Project:** Hytec/Bordeaux**Lab ID:** 1302006-011**Matrix:** Groundwater**Client Sample ID:** HLMW-05B-020113**Analyses** **Result** **MDL** **Qual** **Units** **DF** **Date Analyzed**

<u>Semi-Volatile Organic Compounds by EPA Method 8270</u>				Batch ID: 4030	Analyst: PH	
2,4-Dinitrotoluene	ND	0.0701	µg/L	1	2/8/2013 12:48:00 AM	
4-Nitrophenol	ND	0.431	µg/L	1	2/8/2013 12:48:00 AM	
Fluorene	ND	0.0164	µg/L	1	2/8/2013 12:48:00 AM	
4-Chlorophenyl phenyl ether	ND	0.0199	µg/L	1	2/8/2013 12:48:00 AM	
Diethylphthalate	0.190	0.0144	J	µg/L	1	2/8/2013 12:48:00 AM
4,6-Dinitro-2-methylphenol	ND	0.487	µg/L	1	2/8/2013 12:48:00 AM	
4-Bromophenyl phenyl ether	ND	0.0241	µg/L	1	2/8/2013 12:48:00 AM	
Hexachlorobenzene	ND	0.0264	µg/L	1	2/8/2013 12:48:00 AM	
Pentachlorophenol	ND	0.0344	µg/L	1	2/8/2013 12:48:00 AM	
Phenanthrene	0.0397	0.0130	J	µg/L	1	2/8/2013 12:48:00 AM
Anthracene	ND	0.0167	µg/L	1	2/8/2013 12:48:00 AM	
Carbazole	ND	0.0553	µg/L	1	2/8/2013 12:48:00 AM	
Di-n-butyl phthalate	0.0909	0.0268	J	µg/L	1	2/8/2013 12:48:00 AM
Fluoranthene	ND	0.0112	µg/L	1	2/8/2013 12:48:00 AM	
Pyrene	ND	0.0146	µg/L	1	2/8/2013 12:48:00 AM	
Benzyl Butylphthalate	ND	0.0552	µg/L	1	2/8/2013 12:48:00 AM	
bis(2-Ethylhexyl)adipate	ND	0.0443	µg/L	1	2/8/2013 12:48:00 AM	
Benz[a]anthracene	ND	0.0123	µg/L	1	2/8/2013 12:48:00 AM	
Chrysene	ND	0.0126	µg/L	1	2/8/2013 12:48:00 AM	
Bis(2-ethylhexyl) phthalate	0.189	0.0316	J	µg/L	1	2/8/2013 12:48:00 AM
Di-n-octyl phthalate	ND	0.0258	µg/L	1	2/8/2013 12:48:00 AM	
Benzo (b) fluoranthene	ND	0.0259	µg/L	1	2/8/2013 12:48:00 AM	
Benzo (k) fluoranthene	ND	0.0341	µg/L	1	2/8/2013 12:48:00 AM	
Benzo[a]pyrene	ND	0.0304	µg/L	1	2/8/2013 12:48:00 AM	
Indeno (1,2,3-cd) pyrene	ND	0.0673	µg/L	1	2/8/2013 12:48:00 AM	
Dibenzo (a,h) anthracene	ND	0.0366	µg/L	1	2/8/2013 12:48:00 AM	
Benzo (g,h,i) perylene	ND	0.0378	µg/L	1	2/8/2013 12:48:00 AM	
Surr: 2,4,6-Tribromophenol	92.9	24-138	%REC	1	2/8/2013 12:48:00 AM	
Surr: 2-Fluorobiphenyl	75.1	38.6-138	%REC	1	2/8/2013 12:48:00 AM	
Surr: Nitrobenzene-d5	69.1	31.7-140	%REC	1	2/8/2013 12:48:00 AM	
Surr: Phenol-d6	26.7	15-116	%REC	1	2/8/2013 12:48:00 AM	
Surr: p-Terphenyl	102	49-156	%REC	1	2/8/2013 12:48:00 AM	

Qualifiers: B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
RL Reporting Limit

D Dilution was required
H Holding times for preparation or analysis exceeded
ND Not detected at the Reporting Limit
S Spike recovery outside accepted recovery limits



Analytical Report

WO#: 1302006

Date Reported: 2/11/2013

Client: Calibre**Collection Date:** 2/1/2013 12:15:00 PM**Project:** Hytec/Bordeaux**Lab ID:** 1302006-011**Matrix:** Groundwater**Client Sample ID:** HLMW-05B-020113

Analyses	Result	MDL	Qual	Units	DF	Date Analyzed
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Volatile Organic Compounds by EPA Method 8260				Batch ID: R7380	Analyst: EM
Dichlorodifluoromethane (CFC-12)	ND	0.0300	µg/L	1	2/8/2013 9:10:00 AM
Chloromethane	ND	0.0470	µg/L	1	2/8/2013 9:10:00 AM
Vinyl chloride	ND	0.0530	µg/L	1	2/8/2013 9:10:00 AM
Bromomethane	ND	0.121	µg/L	1	2/8/2013 9:10:00 AM
Trichlorofluoromethane (CFC-11)	ND	0.0340	µg/L	1	2/8/2013 9:10:00 AM
Chloroethane	ND	0.0590	µg/L	1	2/8/2013 9:10:00 AM
1,1-Dichloroethene	ND	0.0470	µg/L	1	2/8/2013 9:10:00 AM
Methylene chloride	ND	0.0520	µg/L	1	2/8/2013 9:10:00 AM
trans-1,2-Dichloroethene	ND	0.0370	µg/L	1	2/8/2013 9:10:00 AM
Methyl tert-butyl ether (MTBE)	ND	0.0260	µg/L	1	2/8/2013 9:10:00 AM
1,1-Dichloroethane	ND	0.0270	µg/L	1	2/8/2013 9:10:00 AM
2,2-Dichloropropane	ND	0.0460	µg/L	1	2/8/2013 9:10:00 AM
cis-1,2-Dichloroethene	ND	0.0190	µg/L	1	2/8/2013 9:10:00 AM
Chloroform	ND	0.0320	µg/L	1	2/8/2013 9:10:00 AM
1,1,1-Trichloroethane (TCA)	ND	0.0320	µg/L	1	2/8/2013 9:10:00 AM
1,1-Dichloropropene	ND	0.0390	µg/L	1	2/8/2013 9:10:00 AM
Carbon tetrachloride	ND	0.0320	µg/L	1	2/8/2013 9:10:00 AM
1,2-Dichloroethane (EDC)	ND	0.0350	µg/L	1	2/8/2013 9:10:00 AM
Benzene	ND	0.0250	µg/L	1	2/8/2013 9:10:00 AM
Trichloroethene (TCE)	ND	0.0400	µg/L	1	2/8/2013 9:10:00 AM
1,2-Dichloropropane	ND	0.0470	µg/L	1	2/8/2013 9:10:00 AM
Bromodichloromethane	ND	0.0600	µg/L	1	2/8/2013 9:10:00 AM
Dibromomethane	ND	0.115	µg/L	1	2/8/2013 9:10:00 AM
cis-1,3-Dichloropropene	ND	0.0430	µg/L	1	2/8/2013 9:10:00 AM
Toluene	ND	0.0330	µg/L	1	2/8/2013 9:10:00 AM
trans-1,3-Dichloropropene	ND	0.0420	µg/L	1	2/8/2013 9:10:00 AM
1,1,2-Trichloroethane	ND	0.120	µg/L	1	2/8/2013 9:10:00 AM
1,3-Dichloropropane	ND	0.0530	µg/L	1	2/8/2013 9:10:00 AM
Tetrachloroethene (PCE)	ND	0.0350	µg/L	1	2/8/2013 9:10:00 AM
Dibromochloromethane	ND	0.0440	µg/L	1	2/8/2013 9:10:00 AM
1,2-Dibromoethane (EDB)	ND	0.00650	µg/L	1	2/8/2013 9:10:00 AM
Chlorobenzene	ND	0.0240	µg/L	1	2/8/2013 9:10:00 AM
1,1,1,2-Tetrachloroethane	ND	0.0640	µg/L	1	2/8/2013 9:10:00 AM
Ethylbenzene	ND	0.0170	µg/L	1	2/8/2013 9:10:00 AM
m,p-Xylene	ND	0.0410	µg/L	1	2/8/2013 9:10:00 AM

Qualifiers: B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
RL Reporting Limit

D Dilution was required
H Holding times for preparation or analysis exceeded
ND Not detected at the Reporting Limit
S Spike recovery outside accepted recovery limits



Analytical Report

WO#: 1302006

Date Reported: 2/11/2013

Client: Calibre

Collection Date: 2/1/2013 12:15:00 PM

Project: Hytec/Bordeaux

Lab ID: 1302006-011

Matrix: Groundwater

Client Sample ID: HLMW-05B-020113

Analyses	Result	MDL	Qual	Units	DF	Date Analyzed
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Volatile Organic Compounds by EPA Method 8260

Batch ID: R7380

Analyst: EM

o-Xylene	ND	0.0340		µg/L	1	2/8/2013 9:10:00 AM
Styrene	ND	0.0230		µg/L	1	2/8/2013 9:10:00 AM
Isopropylbenzene	ND	0.0180		µg/L	1	2/8/2013 9:10:00 AM
Bromoform	ND	0.115		µg/L	1	2/8/2013 9:10:00 AM
1,1,2,2-Tetrachloroethane	ND	0.108		µg/L	1	2/8/2013 9:10:00 AM
n-Propylbenzene	ND	0.0330		µg/L	1	2/8/2013 9:10:00 AM
Bromobenzene	ND	0.0550		µg/L	1	2/8/2013 9:10:00 AM
1,3,5-Trimethylbenzene	ND	0.0300		µg/L	1	2/8/2013 9:10:00 AM
2-Chlorotoluene	ND	0.0320		µg/L	1	2/8/2013 9:10:00 AM
4-Chlorotoluene	ND	0.0370		µg/L	1	2/8/2013 9:10:00 AM
tert-Butylbenzene	ND	0.0360		µg/L	1	2/8/2013 9:10:00 AM
1,2,3-Trichloropropane	ND	0.130		µg/L	1	2/8/2013 9:10:00 AM
1,2,4-Trichlorobenzene	ND	0.0990		µg/L	1	2/8/2013 9:10:00 AM
sec-Butylbenzene	ND	0.0230		µg/L	1	2/8/2013 9:10:00 AM
4-Isopropyltoluene	ND	0.0360		µg/L	1	2/8/2013 9:10:00 AM
1,3-Dichlorobenzene	ND	0.0290		µg/L	1	2/8/2013 9:10:00 AM
1,4-Dichlorobenzene	ND	0.0260		µg/L	1	2/8/2013 9:10:00 AM
n-Butylbenzene	ND	0.0200		µg/L	1	2/8/2013 9:10:00 AM
1,2-Dichlorobenzene	ND	0.0460		µg/L	1	2/8/2013 9:10:00 AM
1,2-Dibromo-3-chloropropane	ND	0.315		µg/L	1	2/8/2013 9:10:00 AM
1,2,4-Trimethylbenzene	ND	0.0200		µg/L	1	2/8/2013 9:10:00 AM
Hexachlorobutadiene	ND	0.154		µg/L	1	2/8/2013 9:10:00 AM
Naphthalene	ND	0.0940		µg/L	1	2/8/2013 9:10:00 AM
1,2,3-Trichlorobenzene	ND	0.147		µg/L	1	2/8/2013 9:10:00 AM
Surr: 1-Bromo-4-fluorobenzene	94.3	82.6-120		%REC	1	2/8/2013 9:10:00 AM
Surr: Dibromofluoromethane	98.9	72.1-122		%REC	1	2/8/2013 9:10:00 AM
Surr: Toluene-d8	99.4	83.5-108		%REC	1	2/8/2013 9:10:00 AM

Total Metals by EPA Method 200.8

Batch ID: 4031

Analyst: MC

Antimony	0.0470	0.00300	J	µg/L	1	2/5/2013 12:32:12 PM
Arsenic	0.458	0.266	J	µg/L	1	2/5/2013 12:32:12 PM
Beryllium	ND	0.0680		µg/L	1	2/5/2013 12:32:12 PM
Cadmium	ND	0.0160		µg/L	1	2/5/2013 12:32:12 PM
Chromium	1.17	0.0810		µg/L	1	2/5/2013 12:32:12 PM

Qualifiers: B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
RL Reporting Limit

D Dilution was required
H Holding times for preparation or analysis exceeded
ND Not detected at the Reporting Limit
S Spike recovery outside accepted recovery limits



Analytical Report

WO#: 1302006

Date Reported: 2/11/2013

Client: Calibre

Collection Date: 2/1/2013 12:15:00 PM

Project: Hytec/Bordeaux

Lab ID: 1302006-011

Matrix: Groundwater

Client Sample ID: HLMW-05B-020113

Analyses	Result	MDL	Qual	Units	DF	Date Analyzed
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Total Metals by EPA Method 200.8 Batch ID: 4031 Analyst: MC

Copper	ND	0.0930		µg/L	1	2/5/2013 12:32:12 PM
Lead	0.290	0.0750	J	µg/L	1	2/5/2013 12:32:12 PM
Nickel	1.02	0.110		µg/L	1	2/5/2013 12:32:12 PM
Zinc	10.5	0.121		µg/L	1	2/5/2013 12:32:12 PM

Qualifiers: B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
RL Reporting Limit

D Dilution was required
H Holding times for preparation or analysis exceeded
ND Not detected at the Reporting Limit
S Spike recovery outside accepted recovery limits



Analytical Report

WO#: 1302006

Date Reported: 2/11/2013

Client: Calibre

Collection Date: 2/1/2013 1:10:00 PM

Project: Hytec/Bordeaux

Lab ID: 1302006-012

Matrix: Groundwater

Client Sample ID: Equipment Rinsate-020113

Analyses	Result	MDL	Qual	Units	DF	Date Analyzed
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Semi-Volatile Organic Compounds by EPA Method 8270				Batch ID: 4030	Analyst: PH	
Phenol	ND	0.0401	µg/L	1	2/8/2013 6:06:00 AM	
2-Chlorophenol	ND	0.0132	µg/L	1	2/8/2013 6:06:00 AM	
1,3-Dichlorobenzene	ND	0.0161	µg/L	1	2/8/2013 6:06:00 AM	
1,4-Dichlorobenzene	ND	0.0241	µg/L	1	2/8/2013 6:06:00 AM	
1,2-Dichlorobenzene	ND	0.0232	µg/L	1	2/8/2013 6:06:00 AM	
Benzyl alcohol	ND	0.0371	µg/L	1	2/8/2013 6:06:00 AM	
Bis(2-chloroethyl) ether	ND	0.0294	µg/L	1	2/8/2013 6:06:00 AM	
2-Methylphenol (o-cresol)	ND	0.0245	µg/L	1	2/8/2013 6:06:00 AM	
Hexachloroethane	ND	0.0653	µg/L	1	2/8/2013 6:06:00 AM	
N-Nitrosodi-n-propylamine	ND	0.0642	µg/L	1	2/8/2013 6:06:00 AM	
Nitrobenzene	ND	0.0392	µg/L	1	2/8/2013 6:06:00 AM	
Isophorone	ND	0.0205	µg/L	1	2/8/2013 6:06:00 AM	
4-Methylphenol (p-cresol)	ND	0.0563	µg/L	1	2/8/2013 6:06:00 AM	
2-Nitrophenol	ND	0.0912	µg/L	1	2/8/2013 6:06:00 AM	
2,4-Dimethylphenol	ND	0.0376	µg/L	1	2/8/2013 6:06:00 AM	
Bis(2-chloroethoxy)methane	ND	0.0337	µg/L	1	2/8/2013 6:06:00 AM	
2,4-Dichlorophenol	ND	0.0188	µg/L	1	2/8/2013 6:06:00 AM	
1,2,4-Trichlorobenzene	ND	0.0194	µg/L	1	2/8/2013 6:06:00 AM	
Naphthalene	ND	0.0123	µg/L	1	2/8/2013 6:06:00 AM	
4-Chloroaniline	ND	0.0180	µg/L	1	2/8/2013 6:06:00 AM	
Hexachlorobutadiene	ND	0.0390	µg/L	1	2/8/2013 6:06:00 AM	
4-Chloro-3-methylphenol	ND	0.0687	µg/L	1	2/8/2013 6:06:00 AM	
2-Methylnaphthalene	ND	0.0252	µg/L	1	2/8/2013 6:06:00 AM	
1-Methylnaphthalene	ND	0.0214	µg/L	1	2/8/2013 6:06:00 AM	
Hexachlorocyclopentadiene	ND	0.0313	µg/L	1	2/8/2013 6:06:00 AM	
2,4,6-Trichlorophenol	ND	0.0210	µg/L	1	2/8/2013 6:06:00 AM	
2,4,5-Trichlorophenol	ND	0.0339	µg/L	1	2/8/2013 6:06:00 AM	
2-Chloronaphthalene	ND	0.0143	µg/L	1	2/8/2013 6:06:00 AM	
2-Nitroaniline	ND	0.0710	µg/L	1	2/8/2013 6:06:00 AM	
Acenaphthene	ND	0.0139	µg/L	1	2/8/2013 6:06:00 AM	
Dimethylphthalate	ND	0.0347	µg/L	1	2/8/2013 6:06:00 AM	
2,6-Dinitrotoluene	ND	0.0269	µg/L	1	2/8/2013 6:06:00 AM	
Acenaphthylene	ND	0.00613	µg/L	1	2/8/2013 6:06:00 AM	
2,4-Dinitrophenol	ND	0.689	µg/L	1	2/8/2013 6:06:00 AM	
Dibenzofuran	ND	0.0131	µg/L	1	2/8/2013 6:06:00 AM	

Qualifiers: B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
RL Reporting Limit

D Dilution was required
H Holding times for preparation or analysis exceeded
ND Not detected at the Reporting Limit
S Spike recovery outside accepted recovery limits



Analytical Report

WO#: 1302006

Date Reported: 2/11/2013

Client: Calibre**Collection Date:** 2/1/2013 1:10:00 PM**Project:** Hytec/Bordeaux**Lab ID:** 1302006-012**Matrix:** Groundwater**Client Sample ID:** Equipment Rinsate-020113**Analyses** **Result** **MDL** **Qual** **Units** **DF** **Date Analyzed**

<u>Semi-Volatile Organic Compounds by EPA Method 8270</u>						Batch ID: 4030	Analyst: PH
2,4-Dinitrotoluene	ND	0.0701		µg/L	1	2/8/2013 6:06:00 AM	
4-Nitrophenol	ND	0.431		µg/L	1	2/8/2013 6:06:00 AM	
Fluorene	ND	0.0164		µg/L	1	2/8/2013 6:06:00 AM	
4-Chlorophenyl phenyl ether	ND	0.0199		µg/L	1	2/8/2013 6:06:00 AM	
Diethylphthalate	0.157	0.0144	J	µg/L	1	2/8/2013 6:06:00 AM	
4,6-Dinitro-2-methylphenol	ND	0.487		µg/L	1	2/8/2013 6:06:00 AM	
4-Bromophenyl phenyl ether	ND	0.0241		µg/L	1	2/8/2013 6:06:00 AM	
Hexachlorobenzene	ND	0.0264		µg/L	1	2/8/2013 6:06:00 AM	
Pentachlorophenol	ND	0.0344		µg/L	1	2/8/2013 6:06:00 AM	
Phenanthrene	0.0257	0.0130	J	µg/L	1	2/8/2013 6:06:00 AM	
Anthracene	ND	0.0167		µg/L	1	2/8/2013 6:06:00 AM	
Carbazole	ND	0.0553		µg/L	1	2/8/2013 6:06:00 AM	
Di-n-butyl phthalate	0.107	0.0268	J	µg/L	1	2/8/2013 6:06:00 AM	
Fluoranthene	ND	0.0112		µg/L	1	2/8/2013 6:06:00 AM	
Pyrene	ND	0.0146		µg/L	1	2/8/2013 6:06:00 AM	
Benzyl Butylphthalate	ND	0.0552		µg/L	1	2/8/2013 6:06:00 AM	
bis(2-Ethylhexyl)adipate	ND	0.0443		µg/L	1	2/8/2013 6:06:00 AM	
Benz[a]anthracene	ND	0.0123		µg/L	1	2/8/2013 6:06:00 AM	
Chrysene	ND	0.0126		µg/L	1	2/8/2013 6:06:00 AM	
Bis(2-ethylhexyl) phthalate	0.870	0.0316	J	µg/L	1	2/8/2013 6:06:00 AM	
Di-n-octyl phthalate	ND	0.0258		µg/L	1	2/8/2013 6:06:00 AM	
Benzo (b) fluoranthene	ND	0.0259		µg/L	1	2/8/2013 6:06:00 AM	
Benzo (k) fluoranthene	ND	0.0341		µg/L	1	2/8/2013 6:06:00 AM	
Benzo[a]pyrene	ND	0.0304		µg/L	1	2/8/2013 6:06:00 AM	
Indeno (1,2,3-cd) pyrene	ND	0.0673		µg/L	1	2/8/2013 6:06:00 AM	
Dibenzo (a,h) anthracene	ND	0.0366		µg/L	1	2/8/2013 6:06:00 AM	
Benzo (g,h,i) perylene	ND	0.0378		µg/L	1	2/8/2013 6:06:00 AM	
Surr: 2,4,6-Tribromophenol	87.0	24-138		%REC	1	2/8/2013 6:06:00 AM	
Surr: 2-Fluorobiphenyl	59.6	38.6-138		%REC	1	2/8/2013 6:06:00 AM	
Surr: Nitrobenzene-d5	50.2	31.7-140		%REC	1	2/8/2013 6:06:00 AM	
Surr: Phenol-d6	22.1	15-116		%REC	1	2/8/2013 6:06:00 AM	
Surr: p-Terphenyl	92.6	49-156		%REC	1	2/8/2013 6:06:00 AM	

Qualifiers: B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
RL Reporting Limit

D Dilution was required
H Holding times for preparation or analysis exceeded
ND Not detected at the Reporting Limit
S Spike recovery outside accepted recovery limits



Analytical Report

WO#: 1302006

Date Reported: 2/11/2013

Client: Calibre

Collection Date: 1/29/2013 4:00:00 PM

Project: Hytec/Bordeaux

Lab ID: 1302006-013

Matrix: Groundwater

Client Sample ID: Trip Blank

Analyses	Result	MDL	Qual	Units	DF	Date Analyzed
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Volatile Organic Compounds by EPA Method 8260				Batch ID: R7380	Analyst: EM	
Dichlorodifluoromethane (CFC-12)	ND	0.0300	µg/L	1	2/8/2013 9:41:00 AM	
Chloromethane	ND	0.0470	µg/L	1	2/8/2013 9:41:00 AM	
Vinyl chloride	ND	0.0530	µg/L	1	2/8/2013 9:41:00 AM	
Bromomethane	ND	0.121	µg/L	1	2/8/2013 9:41:00 AM	
Trichlorofluoromethane (CFC-11)	ND	0.0340	µg/L	1	2/8/2013 9:41:00 AM	
Chloroethane	ND	0.0590	µg/L	1	2/8/2013 9:41:00 AM	
1,1-Dichloroethene	ND	0.0470	µg/L	1	2/8/2013 9:41:00 AM	
Methylene chloride	ND	0.0520	µg/L	1	2/8/2013 9:41:00 AM	
trans-1,2-Dichloroethene	ND	0.0370	µg/L	1	2/8/2013 9:41:00 AM	
Methyl tert-butyl ether (MTBE)	ND	0.0260	µg/L	1	2/8/2013 9:41:00 AM	
1,1-Dichloroethane	ND	0.0270	µg/L	1	2/8/2013 9:41:00 AM	
2,2-Dichloropropane	ND	0.0460	µg/L	1	2/8/2013 9:41:00 AM	
cis-1,2-Dichloroethene	ND	0.0190	µg/L	1	2/8/2013 9:41:00 AM	
Chloroform	ND	0.0320	µg/L	1	2/8/2013 9:41:00 AM	
1,1,1-Trichloroethane (TCA)	ND	0.0320	µg/L	1	2/8/2013 9:41:00 AM	
1,1-Dichloropropene	ND	0.0390	µg/L	1	2/8/2013 9:41:00 AM	
Carbon tetrachloride	ND	0.0320	µg/L	1	2/8/2013 9:41:00 AM	
1,2-Dichloroethane (EDC)	ND	0.0350	µg/L	1	2/8/2013 9:41:00 AM	
Benzene	ND	0.0250	µg/L	1	2/8/2013 9:41:00 AM	
Trichloroethene (TCE)	ND	0.0400	µg/L	1	2/8/2013 9:41:00 AM	
1,2-Dichloropropane	ND	0.0470	µg/L	1	2/8/2013 9:41:00 AM	
Bromodichloromethane	ND	0.0600	µg/L	1	2/8/2013 9:41:00 AM	
Dibromomethane	ND	0.115	µg/L	1	2/8/2013 9:41:00 AM	
cis-1,3-Dichloropropene	ND	0.0430	µg/L	1	2/8/2013 9:41:00 AM	
Toluene	ND	0.0330	µg/L	1	2/8/2013 9:41:00 AM	
trans-1,3-Dichloropropene	ND	0.0420	µg/L	1	2/8/2013 9:41:00 AM	
1,1,2-Trichloroethane	ND	0.120	µg/L	1	2/8/2013 9:41:00 AM	
1,3-Dichloropropane	ND	0.0530	µg/L	1	2/8/2013 9:41:00 AM	
Tetrachloroethene (PCE)	ND	0.0350	µg/L	1	2/8/2013 9:41:00 AM	
Dibromochloromethane	ND	0.0440	µg/L	1	2/8/2013 9:41:00 AM	
1,2-Dibromoethane (EDB)	ND	0.00650	µg/L	1	2/8/2013 9:41:00 AM	
Chlorobenzene	ND	0.0240	µg/L	1	2/8/2013 9:41:00 AM	
1,1,1,2-Tetrachloroethane	ND	0.0640	µg/L	1	2/8/2013 9:41:00 AM	
Ethylbenzene	ND	0.0170	µg/L	1	2/8/2013 9:41:00 AM	
m,p-Xylene	ND	0.0410	µg/L	1	2/8/2013 9:41:00 AM	

Qualifiers: B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
RL Reporting Limit

D Dilution was required
H Holding times for preparation or analysis exceeded
ND Not detected at the Reporting Limit
S Spike recovery outside accepted recovery limits



Analytical Report

WO#: 1302006

Date Reported: 2/11/2013

Client: Calibre

Collection Date: 1/29/2013 4:00:00 PM

Project: Hytec/Bordeaux

Lab ID: 1302006-013

Matrix: Groundwater

Client Sample ID: Trip Blank

Analyses	Result	MDL	Qual	Units	DF	Date Analyzed
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Volatile Organic Compounds by EPA Method 8260				Batch ID: R7380	Analyst: EM
o-Xylene	ND	0.0340	µg/L	1	2/8/2013 9:41:00 AM
Styrene	ND	0.0230	µg/L	1	2/8/2013 9:41:00 AM
Isopropylbenzene	ND	0.0180	µg/L	1	2/8/2013 9:41:00 AM
Bromoform	ND	0.115	µg/L	1	2/8/2013 9:41:00 AM
1,1,2,2-Tetrachloroethane	ND	0.108	µg/L	1	2/8/2013 9:41:00 AM
n-Propylbenzene	ND	0.0330	µg/L	1	2/8/2013 9:41:00 AM
Bromobenzene	ND	0.0550	µg/L	1	2/8/2013 9:41:00 AM
1,3,5-Trimethylbenzene	ND	0.0300	µg/L	1	2/8/2013 9:41:00 AM
2-Chlorotoluene	ND	0.0320	µg/L	1	2/8/2013 9:41:00 AM
4-Chlorotoluene	ND	0.0370	µg/L	1	2/8/2013 9:41:00 AM
tert-Butylbenzene	ND	0.0360	µg/L	1	2/8/2013 9:41:00 AM
1,2,3-Trichloropropane	ND	0.130	µg/L	1	2/8/2013 9:41:00 AM
1,2,4-Trichlorobenzene	ND	0.0990	µg/L	1	2/8/2013 9:41:00 AM
sec-Butylbenzene	ND	0.0230	µg/L	1	2/8/2013 9:41:00 AM
4-Isopropyltoluene	ND	0.0360	µg/L	1	2/8/2013 9:41:00 AM
1,3-Dichlorobenzene	ND	0.0290	µg/L	1	2/8/2013 9:41:00 AM
1,4-Dichlorobenzene	ND	0.0260	µg/L	1	2/8/2013 9:41:00 AM
n-Butylbenzene	ND	0.0200	µg/L	1	2/8/2013 9:41:00 AM
1,2-Dichlorobenzene	ND	0.0460	µg/L	1	2/8/2013 9:41:00 AM
1,2-Dibromo-3-chloropropane	ND	0.315	µg/L	1	2/8/2013 9:41:00 AM
1,2,4-Trimethylbenzene	ND	0.0200	µg/L	1	2/8/2013 9:41:00 AM
Hexachlorobutadiene	ND	0.154	µg/L	1	2/8/2013 9:41:00 AM
Naphthalene	ND	0.0940	µg/L	1	2/8/2013 9:41:00 AM
1,2,3-Trichlorobenzene	ND	0.147	µg/L	1	2/8/2013 9:41:00 AM
Surr: 1-Bromo-4-fluorobenzene	95.0	82.6-120	%REC	1	2/8/2013 9:41:00 AM
Surr: Dibromofluoromethane	98.7	72.1-122	%REC	1	2/8/2013 9:41:00 AM
Surr: Toluene-d8	98.7	83.5-108	%REC	1	2/8/2013 9:41:00 AM

Qualifiers: B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
RL Reporting Limit

D Dilution was required
H Holding times for preparation or analysis exceeded
ND Not detected at the Reporting Limit
S Spike recovery outside accepted recovery limits



Date: 2/11/2013

Work Order: 1302006

CLIENT: Calibre

Project: Hytec/Bordeaux

QC SUMMARY REPORT

Total Metals by EPA Method 200.8

Sample ID: MBL-4031	SampType: MBLK	Units: µg/L			Prep Date: 2/4/2013			RunNo: 7350			
Client ID: MBLKW	Batch ID: 4031				Analysis Date: 2/4/2013			SeqNo: 144988			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Antimony	0.0158	0.200									J
Arsenic	ND	1.00									
Beryllium	ND	0.200									
Cadmium	ND	0.200									
Chromium	ND	0.500									
Copper	0.286	0.500									J
Lead	ND	1.00									
Nickel	ND	0.500									
Zinc	0.127	1.50									J

Sample ID: LCS-4031	SampType: LCS	Units: µg/L			Prep Date: 2/4/2013			RunNo: 7350			
Client ID: LCSW	Batch ID: 4031				Analysis Date: 2/4/2013			SeqNo: 144989			
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	99.7	1.00	100.0	0	99.7	85	115				
Beryllium	4.90	0.200	5.000	0	98.1	85	115				
Cadmium	5.22	0.200	5.000	0	104	85	115				
Chromium	105	0.500	100.0	0	105	85	115				
Copper	103	0.500	100.0	0	103	85	115				
Lead	50.0	1.00	50.00	0	99.9	85	115				
Nickel	101	0.500	100.0	0	101	85	115				
Zinc	101	1.50	100.0	0	101	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: 2/11/2013

Work Order: 1302006

CLIENT: Calibre

Project: Hytec/Bordeaux

QC SUMMARY REPORT

Total Metals by EPA Method 200.8

Sample ID:	1302006-001BDUP	SampType:	DUP	Units:	µg/L	Prep Date:	2/4/2013	RunNo:	7350		
Client ID:	HLMW-07A-013113	Batch ID:	4031			Analysis Date:	2/4/2013	SeqNo:	144992		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	0.171	0.200						0.2640	42.8	30	JR
Arsenic	0.532	1.00						0.7480	33.8	30	JR
Beryllium	ND	0.200						0	0	30	
Cadmium	0.0400	0.200						0.04100	2.47	30	J
Chromium	0.803	0.500						0.7665	4.65	30	
Copper	3.14	0.500						2.414	26.2	30	
Lead	0.330	1.00						0.3280	0.608	30	J
Nickel	1.39	0.500						1.353	2.88	30	
Zinc	17.7	1.50						13.54	26.8	30	

NOTES:

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

Sample ID:	1302006-001BMS	SampType:	MS	Units:	µg/L	Prep Date:	2/4/2013	RunNo:	7350		
Client ID:	HLMW-07A-013113	Batch ID:	4031			Analysis Date:	2/4/2013	SeqNo:	144993		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	25.0	0.200	25.00	0.2640	98.9	70	130				
Arsenic	505	1.00	500.0	0.7480	101	70	130				
Beryllium	25.9	0.200	25.00	0	104	70	130				
Cadmium	25.4	0.200	25.00	0.04100	101	70	130				
Chromium	498	0.500	500.0	0.7665	99.5	70	130				
Copper	501	0.500	500.0	2.414	99.8	70	130				
Lead	251	1.00	250.0	0.3280	100	70	130				
Nickel	501	0.500	500.0	1.353	99.8	70	130				
Zinc	499	1.50	500.0	13.54	97.1	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: 2/11/2013

Work Order: 1302006

CLIENT: Calibre

Project: Hytec/Bordeaux

QC SUMMARY REPORT

Total Metals by EPA Method 200.8

Sample ID: 1302006-001BMSD	SampType: MSD	Units: $\mu\text{g/L}$			Prep Date: 2/4/2013			RunNo: 7350			
Client ID: HLMW-07A-013113	Batch ID: 4031				Analysis Date: 2/4/2013			SeqNo: 144994			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	25.4	0.200	25.00	0.2640	101	70	130	24.98	1.76	30	
Arsenic	518	1.00	500.0	0.7480	103	70	130	504.7	2.64	30	
Beryllium	25.8	0.200	25.00	0	103	70	130	25.94	0.601	30	
Cadmium	25.8	0.200	25.00	0.04100	103	70	130	25.37	1.74	30	
Chromium	500	0.500	500.0	0.7665	99.9	70	130	498.2	0.394	30	
Copper	516	0.500	500.0	2.414	103	70	130	501.2	2.98	30	
Lead	253	1.00	250.0	0.3280	101	70	130	250.7	1.09	30	
Nickel	513	0.500	500.0	1.353	102	70	130	500.6	2.39	30	
Zinc	507	1.50	500.0	13.54	98.7	70	130	498.9	1.58	30	

Qualifiers: B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits

D Dilution was required
J Analyte detected below quantitation limits
RL Reporting Limit

E Value above quantitation range
ND Not detected at the Reporting Limit
S Spike recovery outside accepted recovery limits



Date: 2/11/2013

Work Order: 1302006

CLIENT: Calibre

Project: Hytec/Bordeaux

QC SUMMARY REPORT

Semi-Volatile Organic Compounds by EPA Method 8270

Sample ID: MBLK-4030	SampType: MBLK	Units: µg/L		Prep Date: 2/4/2013		RunNo: 7398					
Client ID: MBLKW	Batch ID: 4030			Analysis Date: 2/7/2013		SeqNo: 145824					
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



Date: 2/11/2013

Work Order: 1302006

CLIENT: Calibre

Project: Hytec/Bordeaux

QC SUMMARY REPORT

Semi-Volatile Organic Compounds by EPA Method 8270

Sample ID: MBL-4030	SampType: MBLK	Units: µg/L		Prep Date: 2/4/2013		RunNo: 7398					
Client ID: MBLKW	Batch ID: 4030			Analysis Date: 2/7/2013		SeqNo: 145824					
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	0.180	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	0.0297	0.500									J
Anthracene	ND	0.500									
Carbazole	ND	5.00									
Di-n-butyl phthalate	0.127	1.00									J
Fluoranthene	ND	0.500									
Pyrene	ND	0.500									
Benzyl Butylphthalate	ND	1.00									
bis(2-Ethylhexyl)adipate	ND	1.00									
Benz[a]anthracene	ND	0.500									
Chrysene	ND	0.500									
Bis(2-ethylhexyl) phthalate	0.386	1.00									J
Di-n-octyl phthalate	ND	1.00									
Benzo (b) fluoranthene	ND	0.500									
Benzo (k) fluoranthene	ND	0.500									

Qualifiers: B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits

D Dilution was required
J Analyte detected below quantitation limits
RL Reporting Limit

E Value above quantitation range
ND Not detected at the Reporting Limit
S Spike recovery outside accepted recovery limits



Date: 2/11/2013

Work Order: 1302006

CLIENT: Calibre

Project: Hytec/Bordeaux

QC SUMMARY REPORT

Semi-Volatile Organic Compounds by EPA Method 8270

Sample ID: MBL-4030	SampType: MBLK	Units: µg/L			Prep Date: 2/4/2013			RunNo: 7398			
Client ID: MBLKW	Batch ID: 4030				Analysis Date: 2/7/2013			SeqNo: 145824			
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									
Surrogate: 2,4,6-Tribromophenol	3.26		4.000		81.5	24	138				
Surrogate: 2-Fluorobiphenyl	1.45		2.000		72.7	38.6	138				
Surrogate: Nitrobenzene-d5	1.35		2.000		67.3	31.7	140				
Surrogate: Phenol-d6	0.751		4.000		18.8	15	116				
Surrogate: p-Terphenyl	2.08		2.000		104	49	156				

Sample ID: LCS-4030	SampType: LCS	Units: µg/L			Prep Date: 2/4/2013			RunNo: 7398			
Client ID: LCSW	Batch ID: 4030				Analysis Date: 2/8/2013			SeqNo: 145825			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Phenol	1.87	2.00	8.000	0	23.4	20	86.2				
2-Chlorophenol	3.29	1.00	8.000	0	41.1	25	112				
1,3-Dichlorobenzene	3.47	1.00	8.000	0	43.4	25	108				
1,4-Dichlorobenzene	3.54	1.00	8.000	0	44.3	25	110				
1,2-Dichlorobenzene	3.67	1.00	8.000	0	45.8	25	109				
Benzyl alcohol	2.59	1.00	8.000	0	32.4	20	96.5				
Bis(2-chloroethyl) ether	4.16	2.00	8.000	0	52.1	25	111				
2-Methylphenol (o-cresol)	3.40	1.00	8.000	0	42.4	25	101				
Hexachloroethane	3.38	1.00	8.000	0	42.3	25	109				
N-Nitrosodi-n-propylamine	4.55	1.00	8.000	0	56.9	25	122				
Nitrobenzene	4.11	2.00	8.000	0	51.4	25	110				
Isophorone	4.85	1.00	8.000	0	60.6	25	126				
4-Methylphenol (p-cresol)	3.42	1.00	8.000	0	42.8	25	113				
2-Nitrophenol	4.25	2.00	8.000	0	53.2	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



Date: 2/11/2013

Work Order: 1302006

CLIENT: Calibre

Project: Hytec/Bordeaux

QC SUMMARY REPORT

Semi-Volatile Organic Compounds by EPA Method 8270

Sample ID: LCS-4030	SampType: LCS	Units: µg/L			Prep Date: 2/4/2013			RunNo: 7398			
Client ID: LCSW	Batch ID: 4030				Analysis Date: 2/8/2013			SeqNo: 145825			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
2,4-Dimethylphenol	4.36	1.00	8.000	0	54.5	25	124				
Bis(2-chloroethoxy)methane	4.52	1.00	8.000	0	56.5	25	121				
2,4-Dichlorophenol	4.76	2.00	8.000	0	59.5	29.1	110				
1,2,4-Trichlorobenzene	3.63	1.00	8.000	0	45.3	25	113				
Naphthalene	4.04	0.500	8.000	0	50.5	25	115				
4-Chloroaniline	2.09	5.00	8.000	0	26.1	25	136				
Hexachlorobutadiene	3.61	1.00	8.000	0	45.1	25	111				
4-Chloro-3-methylphenol	5.71	5.00	8.000	0	71.4	32.3	122				
2-Methylnaphthalene	4.40	0.500	8.000	0	55.0	25	119				
1-Methylnaphthalene	4.38	0.500	8.000	0	54.7	25	117				
Hexachlorocyclopentadiene	3.43	1.00	8.000	0	42.9	25	125				
2,4,6-Trichlorophenol	5.35	2.00	8.000	0	66.8	25	133				
2,4,5-Trichlorophenol	5.84	2.00	8.000	0	73.0	25	125				
2-Chloronaphthalene	4.66	1.00	8.000	0	58.3	25	121				
2-Nitroaniline	2.48	5.00	8.000	0	31.0	25	121				
Acenaphthene	5.03	0.500	8.000	0	62.8	25	120				
Dimethylphthalate	6.28	1.00	8.000	0	78.5	25	133				
2,6-Dinitrotoluene	6.20	1.00	8.000	0	77.6	25	131				
Acenaphthylene	5.14	0.500	8.000	0	64.2	25	128				
2,4-Dinitrophenol	6.67	2.00	8.000	0	83.4	39.2	124				
Dibenzofuran	5.50	1.00	8.000	0	68.8	25	121				
2,4-Dinitrotoluene	6.99	1.00	8.000	0	87.4	25	132				
4-Nitrophenol	2.52	5.00	8.000	0	31.5	20	106				
Fluorene	5.99	0.500	8.000	0	74.8	25	127				
4-Chlorophenyl phenyl ether	5.79	1.00	8.000	0	72.4	25	124				
Diethylphthalate	7.23	1.00	8.000	0	90.3	31.3	142				
4,6-Dinitro-2-methylphenol	7.74	5.00	8.000	0	96.7	25	139				
4-Bromophenyl phenyl ether	6.27	1.00	8.000	0	78.3	25	130				
Hexachlorobenzene	6.41	1.00	8.000	0	80.1	29	120				

Qualifiers: B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits

D Dilution was required
J Analyte detected below quantitation limits
RL Reporting Limit

E Value above quantitation range
ND Not detected at the Reporting Limit
S Spike recovery outside accepted recovery limits



Date: 2/11/2013

Work Order: 1302006

CLIENT: Calibre

Project: Hytec/Bordeaux

QC SUMMARY REPORT

Semi-Volatile Organic Compounds by EPA Method 8270

Sample ID: LCS-4030	SampType: LCS	Units: µg/L			Prep Date: 2/4/2013			RunNo: 7398			
Client ID: LCSW	Batch ID: 4030				Analysis Date: 2/8/2013			SeqNo: 145825			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Pentachlorophenol	7.44	2.00	8.000	0	93.0	20	137				
Phenanthrene	6.72	0.500	8.000	0	84.0	34	125				
Anthracene	7.04	0.500	8.000	0	87.9	27.7	134				
Carbazole	7.89	5.00	8.000	0	98.6	27.9	150				
Di-n-butyl phthalate	8.82	1.00	8.000	0	110	62	158				
Fluoranthene	7.80	0.500	8.000	0	97.5	34.8	143				
Pyrene	7.91	0.500	8.000	0	98.9	35.5	140				
Benzyl Butylphthalate	8.12	1.00	8.000	0	102	51.4	144				
bis(2-Ethylhexyl)adipate	8.26	1.00	8.000	0	103	51.3	144				
Benz[a]anthracene	8.13	0.500	8.000	0	102	27.2	132				
Chrysene	7.45	0.500	8.000	0	93.1	39.5	123				
Bis(2-ethylhexyl) phthalate	8.28	1.00	8.000	0	104	44.7	180				
Di-n-octyl phthalate	8.24	1.00	8.000	0	103	52.8	164				
Benzo (b) fluoranthene	7.65	0.500	8.000	0	95.6	37.8	123				
Benzo (k) fluoranthene	7.07	0.500	8.000	0	88.4	25	144				
Benzo[a]pyrene	8.16	0.500	8.000	0	102	24.9	125				
Indeno (1,2,3-cd) pyrene	8.65	0.500	8.000	0	108	25	127				
Dibenzo (a,h) anthracene	7.91	0.500	8.000	0	98.9	25	132				
Benzo (g,h,i) perylene	8.16	0.500	8.000	0	102	25	133				
Surr: 2,4,6-Tribromophenol	3.85		4.000		96.4	24	138				
Surr: 2-Fluorobiphenyl	1.22		2.000		61.2	38.6	138				
Surr: Nitrobenzene-d5	1.08		2.000		54.2	31.7	140				
Surr: Phenol-d6	0.801		4.000		20.0	15	116				
Surr: p-Terphenyl	2.03		2.000		101	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



Date: 2/11/2013

Work Order: 1302006

CLIENT: Calibre

Project: Hytec/Bordeaux

QC SUMMARY REPORT

Semi-Volatile Organic Compounds by EPA Method 8270

Sample ID: 1302006-011BDUP	SampType: DUP	Units: µg/L			Prep Date: 2/4/2013			RunNo: 7398			
Client ID: HLMW-05B-020113	Batch ID: 4030				Analysis Date: 2/8/2013			SeqNo: 145827			
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
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits

D Dilution was required
J Analyte detected below quantitation limits
RL Reporting Limit

E Value above quantitation range
ND Not detected at the Reporting Limit
S Spike recovery outside accepted recovery limits



Date: 2/11/2013

Work Order: 1302006

CLIENT: Calibre

Project: Hytec/Bordeaux

QC SUMMARY REPORT

Semi-Volatile Organic Compounds by EPA Method 8270

Sample ID:	1302006-011BDUP	SampType:	DUP	Units:	µg/L	Prep Date:	2/4/2013	RunNo:	7398			
Client ID:	HLMW-05B-020113	Batch ID:	4030			Analysis Date:	2/8/2013	SeqNo:	145827			
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		0.180	1.00				0.1898		5.47	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		0.0990	0.500				0.03968		85.5	50	JR	
Anthracene		ND	0.500						0	0	50	
Carbazole		ND	5.00						0	0	50	
Di-n-butyl phthalate		0.175	1.00				0.09086		63.3	50	JR	
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		ND	1.00						0	0	50	
Benz[a]anthracene		ND	0.500						0	0	50	
Chrysene		ND	0.500						0	0	50	
Bis(2-ethylhexyl) phthalate		0.344	1.00				0.1886		58.3	50	JR	
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
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits

D Dilution was required
J Analyte detected below quantitation limits
RL Reporting Limit

E Value above quantitation range
ND Not detected at the Reporting Limit
S Spike recovery outside accepted recovery limits



Date: 2/11/2013

Work Order: 1302006

CLIENT: Calibre

Project: Hytec/Bordeaux

QC SUMMARY REPORT

Semi-Volatile Organic Compounds by EPA Method 8270

Sample ID: 1302006-011BDUP	SampType: DUP	Units: µg/L			Prep Date: 2/4/2013			RunNo: 7398			
Client ID: HLMW-05B-020113	Batch ID: 4030				Analysis Date: 2/8/2013			SeqNo: 145827			
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
Surrogate: 2,4,6-Tribromophenol	3.85		4.000		96.3	24	138		0	
Surrogate: 2-Fluorobiphenyl	3.18		4.000		79.5	38.6	138		0	
Surrogate: Nitrobenzene-d5	3.12		4.000		78.0	31.7	140		0	
Surrogate: Phenol-d6	1.15		4.000		28.7	15	116		0	
Surrogate: p-Terphenyl	4.25		4.000		106	49	156		0	

NOTES:

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

Sample ID: 1302006-011BMS	SampType: MS	Units: µg/L			Prep Date: 2/4/2013			RunNo: 7398			
Client ID: HLMW-05B-020113	Batch ID: 4030				Analysis Date: 2/8/2013			SeqNo: 145828			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Phenol	1.66	2.00	8.000	0	20.7	20	78.2			
2-Chlorophenol	4.29	1.00	8.000	0	53.7	25	106			
1,3-Dichlorobenzene	4.85	1.00	8.000	0	60.6	25.5	103			
1,4-Dichlorobenzene	4.81	1.00	8.000	0	60.2	25.6	104			
1,2-Dichlorobenzene	5.11	1.00	8.000	0	63.9	26.1	105			
Benzyl alcohol	1.67	1.00	8.000	0	20.9	20	96.8			
Bis(2-chloroethyl) ether	5.52	2.00	8.000	0	69.0	25	110			
2-Methylphenol (o-cresol)	4.10	1.00	8.000	0	51.3	25.1	95.8			
Hexachloroethane	4.74	1.00	8.000	0	59.3	25	106			
N-Nitrosodi-n-propylamine	6.23	1.00	8.000	0	77.9	25.5	116			
Nitrobenzene	5.62	2.00	8.000	0	70.2	30.5	105			
Isophorone	6.50	1.00	8.000	0	81.3	25	121			
4-Methylphenol (p-cresol)	3.61	1.00	8.000	0	45.2	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: 2/11/2013

Work Order: 1302006

CLIENT: Calibre

Project: Hytec/Bordeaux

QC SUMMARY REPORT

Semi-Volatile Organic Compounds by EPA Method 8270

Sample ID: 1302006-011BMS	SampType: MS	Units: µg/L			Prep Date: 2/4/2013			RunNo: 7398			
Client ID: HLMW-05B-020113	Batch ID: 4030				Analysis Date: 2/8/2013			SeqNo: 145828			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
2-Nitrophenol	5.75	2.00	8.000	0	71.9	25	123				
2,4-Dimethylphenol	5.51	1.00	8.000	0	68.9	25	123				
Bis(2-chloroethoxy)methane	6.17	1.00	8.000	0	77.2	25.4	116				
2,4-Dichlorophenol	6.25	2.00	8.000	0	78.2	34.3	110				
1,2,4-Trichlorobenzene	5.13	1.00	8.000	0	64.1	25	110				
Naphthalene	5.41	0.500	8.000	0	67.7	25	131				
4-Chloroaniline	1.23	5.00	8.000	0	15.4	25	130				S
Hexachlorobutadiene	4.86	1.00	8.000	0	60.7	25	105				
4-Chloro-3-methylphenol	6.33	5.00	8.000	0	79.2	36.3	120				
2-Methylnaphthalene	5.74	0.500	8.000	0	71.7	25	119				
1-Methylnaphthalene	5.79	0.500	8.000	0	72.4	25.3	117				
Hexachlorocyclopentadiene	4.85	1.00	8.000	0	60.6	25	114				
2,4,6-Trichlorophenol	6.23	2.00	8.000	0	77.9	25	131				
2,4,5-Trichlorophenol	6.76	2.00	8.000	0	84.5	25	122				
2-Chloronaphthalene	5.67	1.00	8.000	0	70.9	27.3	115				
2-Nitroaniline	2.80	5.00	8.000	0	35.0	27.9	114				
Acenaphthene	6.08	0.500	8.000	0	76.0	25	136				
Dimethylphthalate	6.90	1.00	8.000	0	86.3	31	128				
2,6-Dinitrotoluene	6.83	1.00	8.000	0	85.3	26.9	125				
Acenaphthylene	6.18	0.500	8.000	0	77.3	26.8	122				
2,4-Dinitrophenol	7.83	2.00	8.000	0	97.9	25	148				
Dibenzofuran	6.24	1.00	8.000	0	78.0	27.8	116				
2,4-Dinitrotoluene	7.24	1.00	8.000	0	90.5	25	123				
4-Nitrophenol	2.54	5.00	8.000	0	31.7	20	109				
Fluorene	6.57	0.500	8.000	0	82.2	25	131				
4-Chlorophenyl phenyl ether	6.35	1.00	8.000	0	79.3	28.9	119				
Diethylphthalate	7.18	1.00	8.000	0.1898	87.4	36.6	136				
4,6-Dinitro-2-methylphenol	7.54	5.00	8.000	0	94.2	25	136				
4-Bromophenyl phenyl ether	6.75	1.00	8.000	0	84.3	30.2	124				

Qualifiers: B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits

D Dilution was required
J Analyte detected below quantitation limits
RL Reporting Limit

E Value above quantitation range
ND Not detected at the Reporting Limit
S Spike recovery outside accepted recovery limits



Date: 2/11/2013

Work Order: 1302006

CLIENT: Calibre

Project: Hytec/Bordeaux

QC SUMMARY REPORT

Semi-Volatile Organic Compounds by EPA Method 8270

Sample ID: 1302006-011BMS	SampType: MS	Units: µg/L			Prep Date: 2/4/2013			RunNo: 7398			
Client ID: HLMW-05B-020113	Batch ID: 4030				Analysis Date: 2/8/2013			SeqNo: 145828			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexachlorobenzene	6.67	1.00	8.000	0	83.4	34.6	114				
Pentachlorophenol	7.49	2.00	8.000	0	93.6	25	145				
Phenanthrene	6.83	0.500	8.000	0.03968	84.9	26	139				
Anthracene	7.03	0.500	8.000	0	87.9	34.5	129				
Carbazole	7.24	5.00	8.000	0	90.5	36.7	143				
Di-n-butyl phthalate	8.56	1.00	8.000	0.09086	106	39.7	149				
Fluoranthene	7.59	0.500	8.000	0	94.9	39.3	141				
Pyrene	7.47	0.500	8.000	0	93.4	40.9	137				
Benzyl Butylphthalate	8.03	1.00	8.000	0	100	50.5	139				
bis(2-Ethylhexyl)adipate	7.20	1.00	8.000	0	90.0	36.6	145				
Benz[a]anthracene	7.65	0.500	8.000	0	95.6	34.2	124				
Chrysene	6.97	0.500	8.000	0	87.1	44.6	116				
Bis(2-ethylhexyl) phthalate	7.50	1.00	8.000	0.1886	91.4	39.9	143				
Di-n-octyl phthalate	7.42	1.00	8.000	0	92.8	37.5	163				
Benzo (b) fluoranthene	7.12	0.500	8.000	0	89.1	40.7	116				
Benzo (k) fluoranthene	6.49	0.500	8.000	0	81.1	25.5	135				
Benzo[a]pyrene	7.52	0.500	8.000	0	94.0	25	120				
Indeno (1,2,3-cd) pyrene	8.04	0.500	8.000	0	100	25	121				
Dibenzo (a,h) anthracene	7.37	0.500	8.000	0	92.2	25	125				
Benzo (g,h,i) perylene	7.54	0.500	8.000	0	94.3	25	124				
Surr: 2,4,6-Tribromophenol	3.86		4.000		96.5	24	138				
Surr: 2-Fluorobiphenyl	1.52		2.000		76.0	38.6	138				
Surr: Nitrobenzene-d5	1.56		2.000		77.8	31.7	140				
Surr: Phenol-d6	1.03		4.000		25.7	15	116				
Surr: p-Terphenyl	2.00		2.000		99.8	49	156				

NOTES:

S - Outlying spike recovery for 4-Chloroaniline was observed. The method is in control as indicated by the laboratory control sample (LCS).

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: 2/11/2013

Work Order: 1302006

CLIENT: Calibre

Project: Hytec/Bordeaux

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260

Sample ID: 1302006-005ADUP	SampType: DUP	Units: µg/L			Prep Date: 2/8/2013			RunNo: 7380			
Client ID: HLMW-04A-013113	Batch ID: R7380				Analysis Date: 2/8/2013			SeqNo: 145507			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	ND	1.00						0	0	30	
Chloromethane	ND	1.00						0	0	30	
Vinyl chloride	ND	0.200						0	0	30	
Bromomethane	ND	1.00						0	0	30	
Trichlorofluoromethane (CFC-11)	1.48	1.00						1.750	16.7	30	
Chloroethane	ND	1.00						0	0	30	
1,1-Dichloroethene	ND	1.00						0	0	30	
Methylene chloride	ND	1.00						0	0	30	
trans-1,2-Dichloroethene	ND	1.00						0	0	30	
Methyl tert-butyl ether (MTBE)	ND	1.00						0	0	30	
1,1-Dichloroethane	ND	1.00						0	0	30	
2,2-Dichloropropane	ND	2.00						0	0	30	
cis-1,2-Dichloroethene	ND	1.00						0	0	30	
Chloroform	ND	1.00						0	0	30	
1,1,1-Trichloroethane (TCA)	ND	1.00						0	0	30	
1,1-Dichloropropene	ND	1.00						0	0	30	
Carbon tetrachloride	ND	1.00						0	0	30	
1,2-Dichloroethane (EDC)	ND	1.00						0	0	30	
Benzene	ND	1.00						0	0	30	
Trichloroethene (TCE)	ND	1.00						0	0	30	
1,2-Dichloropropane	ND	1.00						0	0	30	
Bromodichloromethane	ND	1.00						0	0	30	
Dibromomethane	ND	1.00						0	0	30	
cis-1,3-Dichloropropene	ND	1.00						0	0	30	
Toluene	ND	1.00						0	0	30	
trans-1,3-Dichloropropene	ND	1.00						0	0	30	
1,1,2-Trichloroethane	ND	1.00						0	0	30	
1,3-Dichloropropane	ND	1.00						0	0	30	
Tetrachloroethene (PCE)	ND	1.00						0	0	30	

Qualifiers: B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits

D Dilution was required
J Analyte detected below quantitation limits
RL Reporting Limit

E Value above quantitation range
ND Not detected at the Reporting Limit
S Spike recovery outside accepted recovery limits



Date: 2/11/2013

Work Order: 1302006

CLIENT: Calibre

Project: Hytec/Bordeaux

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260

Sample ID: 1302006-005ADUP	SampType: DUP	Units: µg/L			Prep Date: 2/8/2013			RunNo: 7380			
Client ID: HLMW-04A-013113	Batch ID: R7380				Analysis Date: 2/8/2013			SeqNo: 145507			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dibromochloromethane	ND	1.00						0	0	30	
1,2-Dibromoethane (EDB)	ND	0.0100						0	0	30	
Chlorobenzene	ND	1.00						0	0	30	
1,1,1,2-Tetrachloroethane	ND	1.00						0	0	30	
Ethylbenzene	ND	1.00						0	0	30	
m,p-Xylene	ND	1.00						0	0	30	
o-Xylene	ND	1.00						0	0	30	
Styrene	ND	1.00						0	0	30	
Isopropylbenzene	ND	1.00						0	0	30	
Bromoform	ND	1.00						0	0	30	
1,1,2,2-Tetrachloroethane	ND	1.00						0	0	30	
n-Propylbenzene	ND	1.00						0	0	30	
Bromobenzene	ND	1.00						0	0	30	
1,3,5-Trimethylbenzene	ND	1.00						0	0	30	
2-Chlorotoluene	ND	1.00						0	0	30	
4-Chlorotoluene	ND	1.00						0	0	30	
tert-Butylbenzene	ND	1.00						0	0	30	
1,2,3-Trichloropropane	ND	1.00						0	0	30	
1,2,4-Trichlorobenzene	ND	2.00						0	0	30	
sec-Butylbenzene	ND	1.00						0	0	30	
4-Isopropyltoluene	ND	1.00						0	0	30	
1,3-Dichlorobenzene	ND	1.00						0	0	30	
1,4-Dichlorobenzene	ND	1.00						0	0	30	
n-Butylbenzene	ND	1.00						0	0	30	
1,2-Dichlorobenzene	ND	1.00						0	0	30	
1,2-Dibromo-3-chloropropane	ND	1.00						0	0	30	
1,2,4-Trimethylbenzene	ND	1.00						0	0	30	
Hexachlorobutadiene	ND	4.00						0	0	30	
Naphthalene	ND	1.00						0	0	30	

Qualifiers: B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits

D Dilution was required
J Analyte detected below quantitation limits
RL Reporting Limit

E Value above quantitation range
ND Not detected at the Reporting Limit
S Spike recovery outside accepted recovery limits



Date: 2/11/2013

Work Order: 1302006

CLIENT: Calibre

Project: Hytec/Bordeaux

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260

Sample ID: 1302006-005ADUP	SampType: DUP	Units: µg/L			Prep Date: 2/8/2013			RunNo: 7380			
Client ID: HLMW-04A-013113	Batch ID: R7380				Analysis Date: 2/8/2013			SeqNo: 145507			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2,3-Trichlorobenzene	ND	4.00							0	0	30
Surr: 1-Bromo-4-fluorobenzene	9.21		10.00		92.1	82.6	120			0	
Surr: Dibromofluoromethane	9.66		10.00		96.6	72.1	122			0	
Surr: Toluene-d8	10.0		10.00		100	83.5	108			0	

Sample ID: 1302006-006AMS	SampType: MS	Units: µg/L			Prep Date: 2/8/2013			RunNo: 7380			
Client ID: SPWE-013113	Batch ID: R7380				Analysis Date: 2/8/2013			SeqNo: 145509			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	26.7	1.00	20.00	0	134	33.3	122				S
Chloromethane	25.2	1.00	20.00	0	126	48.2	145				
Vinyl chloride	23.8	0.200	20.00	0	119	45.6	149				
Bromomethane	16.5	1.00	20.00	0	82.6	31.5	135				
Trichlorofluoromethane (CFC-11)	21.8	1.00	20.00	0.3700	107	54.7	138				
Chloroethane	17.7	1.00	20.00	0	88.7	52.7	140				
1,1-Dichloroethene	20.2	1.00	20.00	0	101	58.2	146				
Methylene chloride	19.2	1.00	20.00	0	95.8	65.1	127				
trans-1,2-Dichloroethene	21.0	1.00	20.00	0	105	69	132				
Methyl tert-butyl ether (MTBE)	18.4	1.00	20.00	0	92.2	70	130				
1,1-Dichloroethane	19.5	1.00	20.00	0	97.6	74.7	133				
2,2-Dichloropropane	16.1	2.00	20.00	0	80.4	31.5	121				
cis-1,2-Dichloroethene	20.6	1.00	20.00	0	103	67.1	123				
Chloroform	20.6	1.00	20.00	0	103	58.6	123				
1,1,1-Trichloroethane (TCA)	20.7	1.00	20.00	0	104	64.2	146				
1,1-Dichloropropene	20.1	1.00	20.00	0	100	73.8	136				
Carbon tetrachloride	20.8	1.00	20.00	0	104	69.2	141				
1,2-Dichloroethane (EDC)	19.2	1.00	20.00	0	95.9	62.3	130				
Benzene	20.1	1.00	20.00	0	101	68.7	132				

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: 2/11/2013

Work Order: 1302006

CLIENT: Calibre

Project: Hytec/Bordeaux

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260

Sample ID: 1302006-006AMS	SampType: MS	Units: µg/L			Prep Date: 2/8/2013			RunNo: 7380			
Client ID: SPWE-013113	Batch ID: R7380				Analysis Date: 2/8/2013			SeqNo: 145509			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Trichloroethene (TCE)	19.9	1.00	20.00	0	99.7	65.7	133				
1,2-Dichloropropane	19.9	1.00	20.00	0	99.3	70	130				
Bromodichloromethane	19.7	1.00	20.00	0	98.6	59.4	139				
Dibromomethane	20.0	1.00	20.00	0	100	65.5	130				
cis-1,3-Dichloropropene	18.4	1.00	20.00	0	92.2	63.3	124				
Toluene	20.7	1.00	20.00	0	103	68.4	133				
trans-1,3-Dichloropropene	18.4	1.00	20.00	0	91.8	57.7	125				
1,1,2-Trichloroethane	19.1	1.00	20.00	0	95.6	59.4	127				
1,3-Dichloropropane	19.2	1.00	20.00	0	96.2	68.2	134				
Tetrachloroethene (PCE)	13.1	1.00	20.00	0	65.4	51.5	109				
Dibromochloromethane	19.2	1.00	20.00	0	96.0	66.2	138				
1,2-Dibromoethane (EDB)	19.5	0.0100	20.00	0	97.5	68.9	124				
Chlorobenzene	20.0	1.00	20.00	0	100	68.9	128				
1,1,1,2-Tetrachloroethane	19.8	1.00	20.00	0	98.8	67.3	135				
Ethylbenzene	20.0	1.00	20.00	0	99.9	67.3	135				
m,p-Xylene	39.7	1.00	40.00	0	99.2	63.3	135				
o-Xylene	21.5	1.00	20.00	0	107	67.8	131				
Styrene	23.9	1.00	20.00	0	119	67.2	123				
Isopropylbenzene	19.1	1.00	20.00	0	95.6	56	147				
Bromoform	18.5	1.00	20.00	0	92.7	61.4	136				
1,1,2,2-Tetrachloroethane	19.7	1.00	20.00	0	98.4	59.1	137				
n-Propylbenzene	19.2	1.00	20.00	0	95.8	57.6	142				
Bromobenzene	19.0	1.00	20.00	0	94.8	63.6	130				
1,3,5-Trimethylbenzene	19.2	1.00	20.00	0	96.1	59.9	136				
2-Chlorotoluene	19.1	1.00	20.00	0	95.6	63.4	134				
4-Chlorotoluene	19.8	1.00	20.00	0	99.0	58.4	134				
tert-Butylbenzene	21.9	1.00	20.00	0	109	74.2	141				
1,2,3-Trichloropropane	17.3	1.00	20.00	0	86.4	62.4	129				
1,2,4-Trichlorobenzene	18.4	2.00	20.00	0	92.2	53.7	120				

Qualifiers: B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits

D Dilution was required
J Analyte detected below quantitation limits
RL Reporting Limit

E Value above quantitation range
ND Not detected at the Reporting Limit
S Spike recovery outside accepted recovery limits



Date: 2/11/2013

Work Order: 1302006

CLIENT: Calibre

Project: Hytec/Bordeaux

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260

Sample ID: 1302006-006AMS	SampType: MS	Units: µg/L			Prep Date: 2/8/2013			RunNo: 7380			
Client ID: SPWE-013113	Batch ID: R7380				Analysis Date: 2/8/2013			SeqNo: 145509			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
sec-Butylbenzene	18.8	1.00	20.00	0	94.1	56	146				
4-Isopropyltoluene	18.4	1.00	20.00	0	92.2	62.4	134				
1,3-Dichlorobenzene	19.4	1.00	20.00	0	97.0	58.2	128				
1,4-Dichlorobenzene	19.3	1.00	20.00	0	96.5	60.1	123				
n-Butylbenzene	19.8	1.00	20.00	0	98.8	54.6	135				
1,2-Dichlorobenzene	20.7	1.00	20.00	0	104	62.6	124				
1,2-Dibromo-3-chloropropane	18.3	1.00	20.00	0	91.4	51.8	142				
1,2,4-Trimethylbenzene	18.4	1.00	20.00	0	92.0	63.7	132				
Hexachlorobutadiene	18.8	4.00	20.00	0	94.1	62.1	121				
Naphthalene	19.4	1.00	20.00	0	96.9	58.7	119				
1,2,3-Trichlorobenzene	20.0	4.00	20.00	0	100	50.7	113				
Surr: 1-Bromo-4-fluorobenzene	10.2		10.00		102	82.6	120				
Surr: Dibromofluoromethane	9.97		10.00		99.7	72.1	122				
Surr: Toluene-d8	10.1		10.00		101	83.5	108				

NOTES:

S - Outlying QC recoveries were observed for Dichlorodifluoromethane (high bias). The method is in control as indicated by the LCS.

Sample ID: LCS-R7380	SampType: LCS	Units: µg/L			Prep Date: 2/8/2013			RunNo: 7380			
Client ID: LCSW	Batch ID: R7380				Analysis Date: 2/8/2013			SeqNo: 145515			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	16.9	1.00	20.00	0	84.6	43.1	127				
Chloromethane	19.9	1.00	20.00	0	99.7	42.5	131				
Vinyl chloride	19.9	0.200	20.00	0	99.4	56.2	130				
Bromomethane	17.6	1.00	20.00	0	87.8	45.4	138				
Trichlorofluoromethane (CFC-11)	19.5	1.00	20.00	0	97.5	64.7	129				
Chloroethane	17.4	1.00	20.00	0	87.1	62.5	123				
1,1-Dichloroethene	18.7	1.00	20.00	0	93.7	60.7	146				
Methylene chloride	19.5	1.00	20.00	0	97.6	60.3	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



Date: 2/11/2013

Work Order: 1302006

CLIENT: Calibre

Project: Hytec/Bordeaux

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260

Sample ID: LCS-R7380	SampType: LCS	Units: µg/L			Prep Date: 2/8/2013			RunNo: 7380			
Client ID: LCSW	Batch ID: R7380				Analysis Date: 2/8/2013			SeqNo: 145515			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
trans-1,2-Dichloroethene	20.3	1.00	20.00	0	102	71.3	129				
Methyl tert-butyl ether (MTBE)	18.7	1.00	20.00	0	93.5	75.4	123				
1,1-Dichloroethane	19.7	1.00	20.00	0	98.4	71.3	129				
2,2-Dichloropropane	17.5	2.00	20.00	0	87.5	37.8	132				
cis-1,2-Dichloroethene	19.8	1.00	20.00	0	99.0	67.5	127				
Chloroform	20.2	1.00	20.00	0	101	70.3	123				
1,1,1-Trichloroethane (TCA)	20.0	1.00	20.00	0	100	67.9	134				
1,1-Dichloropropene	19.7	1.00	20.00	0	98.6	72.1	133				
Carbon tetrachloride	19.8	1.00	20.00	0	98.9	68	136				
1,2-Dichloroethane (EDC)	19.6	1.00	20.00	0	97.8	65.8	126				
Benzene	19.6	1.00	20.00	0	97.8	75.2	124				
Trichloroethene (TCE)	20.3	1.00	20.00	0	101	71.9	130				
1,2-Dichloropropane	19.5	1.00	20.00	0	97.3	71.9	131				
Bromodichloromethane	19.8	1.00	20.00	0	99.2	70	130				
Dibromomethane	19.9	1.00	20.00	0	99.6	74.2	125				
cis-1,3-Dichloropropene	19.2	1.00	20.00	0	96.0	62.8	135				
Toluene	19.7	1.00	20.00	0	98.5	75.2	129				
trans-1,3-Dichloropropene	18.4	1.00	20.00	0	91.9	58.1	138				
1,1,2-Trichloroethane	19.2	1.00	20.00	0	95.8	65.4	128				
1,3-Dichloropropane	19.1	1.00	20.00	0	95.6	71.9	131				
Tetrachloroethene (PCE)	21.0	1.00	20.00	0	105	52.4	140				
Dibromochloromethane	19.1	1.00	20.00	0	95.7	68.7	139				
1,2-Dibromoethane (EDB)	19.4	0.0100	20.00	0	97.0	71.2	129				
Chlorobenzene	20.4	1.00	20.00	0	102	77.2	122				
1,1,1,2-Tetrachloroethane	19.3	1.00	20.00	0	96.3	76.2	130				
Ethylbenzene	20.2	1.00	20.00	0	101	78	127				
m,p-Xylene	40.4	1.00	40.00	0	101	77.5	130				
o-Xylene	22.1	1.00	20.00	0	110	77.6	126				
Styrene	25.1	1.00	20.00	0	126	66.8	137				

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: 2/11/2013

Work Order: 1302006

CLIENT: Calibre

Project: Hytec/Bordeaux

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260

Sample ID: LCS-R7380	SampType: LCS	Units: µg/L			Prep Date: 2/8/2013			RunNo: 7380			
Client ID: LCSW	Batch ID: R7380				Analysis Date: 2/8/2013			SeqNo: 145515			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Isopropylbenzene	19.4	1.00	20.00	0	96.9	75.9	133				
Bromoform	18.8	1.00	20.00	0	94.2	69.9	142				
1,1,2,2-Tetrachloroethane	18.2	1.00	20.00	0	90.9	68	134				
n-Propylbenzene	19.0	1.00	20.00	0	95.2	77.1	133				
Bromobenzene	19.0	1.00	20.00	0	95.2	71.1	131				
1,3,5-Trimethylbenzene	19.5	1.00	20.00	0	97.4	76.2	133				
2-Chlorotoluene	19.2	1.00	20.00	0	96.0	67.1	137				
4-Chlorotoluene	19.7	1.00	20.00	0	98.3	70.7	132				
tert-Butylbenzene	18.7	1.00	20.00	0	93.3	71.3	139				
1,2,3-Trichloropropane	18.4	1.00	20.00	0	91.8	70.8	132				
1,2,4-Trichlorobenzene	19.8	2.00	20.00	0	99.0	61.4	139				
sec-Butylbenzene	19.2	1.00	20.00	0	96.2	77.4	136				
4-Isopropyltoluene	19.0	1.00	20.00	0	95.2	78.1	131				
1,3-Dichlorobenzene	19.7	1.00	20.00	0	98.6	73.5	125				
1,4-Dichlorobenzene	19.8	1.00	20.00	0	98.8	71.4	125				
n-Butylbenzene	20.0	1.00	20.00	0	99.9	69.8	138				
1,2-Dichlorobenzene	20.9	1.00	20.00	0	104	74.2	123				
1,2-Dibromo-3-chloropropane	18.6	1.00	20.00	0	93.2	66.1	138				
1,2,4-Trimethylbenzene	19.3	1.00	20.00	0	96.7	72.3	133				
Hexachlorobutadiene	18.9	4.00	20.00	0	94.6	60.9	141				
Naphthalene	19.7	1.00	20.00	0	98.3	58.2	140				
1,2,3-Trichlorobenzene	20.2	4.00	20.00	0	101	61.3	133				
Surr: 1-Bromo-4-fluorobenzene	9.95		10.00		99.5	82.6	120				
Surr: Dibromofluoromethane	9.88		10.00		98.8	72.1	122				
Surr: Toluene-d8	9.95		10.00		99.5	83.5	108				

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: 2/11/2013

Work Order: 1302006

CLIENT: Calibre

Project: Hytec/Bordeaux

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260

Sample ID: MBL-R7380	SampType: MBLK	Units: µg/L			Prep Date: 2/8/2013		RunNo: 7380				
Client ID: MBLKW	Batch ID: R7380				Analysis Date: 2/8/2013		SeqNo: 145516				
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	1.00									
Vinyl chloride	ND	0.200									
Bromomethane	ND	1.00									
Trichlorofluoromethane (CFC-11)	ND	1.00									
Chloroethane	ND	1.00									
1,1-Dichloroethene	ND	1.00									
Methylene chloride	ND	1.00									
trans-1,2-Dichloroethene	ND	1.00									
Methyl tert-butyl ether (MTBE)	ND	1.00									
1,1-Dichloroethane	ND	1.00									
2,2-Dichloropropane	ND	2.00									
cis-1,2-Dichloroethene	ND	1.00									
Chloroform	ND	1.00									
1,1,1-Trichloroethane (TCA)	ND	1.00									
1,1-Dichloropropene	ND	1.00									
Carbon tetrachloride	ND	1.00									
1,2-Dichloroethane (EDC)	ND	1.00									
Benzene	ND	1.00									
Trichloroethene (TCE)	ND	1.00									
1,2-Dichloropropane	ND	1.00									
Bromodichloromethane	ND	1.00									
Dibromomethane	ND	1.00									
cis-1,3-Dichloropropene	ND	1.00									
Toluene	ND	1.00									
trans-1,3-Dichloropropene	ND	1.00									
1,1,2-Trichloroethane	ND	1.00									
1,3-Dichloropropane	ND	1.00									
Tetrachloroethene (PCE)	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



Date: 2/11/2013

Work Order: 1302006

CLIENT: Calibre

Project: Hytec/Bordeaux

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260

Sample ID: MBL-R7380	SampType: MBLK	Units: µg/L			Prep Date: 2/8/2013		RunNo: 7380				
Client ID: MBLKW	Batch ID: R7380				Analysis Date: 2/8/2013		SeqNo: 145516				
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dibromochloromethane	ND	1.00									
1,2-Dibromoethane (EDB)	ND	0.0100									
Chlorobenzene	ND	1.00									
1,1,1,2-Tetrachloroethane	ND	1.00									
Ethylbenzene	ND	1.00									
m,p-Xylene	ND	1.00									
o-Xylene	ND	1.00									
Styrene	ND	1.00									
Isopropylbenzene	ND	1.00									
Bromoform	ND	1.00									
1,1,2,2-Tetrachloroethane	ND	1.00									
n-Propylbenzene	ND	1.00									
Bromobenzene	ND	1.00									
1,3,5-Trimethylbenzene	ND	1.00									
2-Chlorotoluene	ND	1.00									
4-Chlorotoluene	ND	1.00									
tert-Butylbenzene	ND	1.00									
1,2,3-Trichloropropane	ND	1.00									
1,2,4-Trichlorobenzene	ND	2.00									
sec-Butylbenzene	ND	1.00									
4-Isopropyltoluene	ND	1.00									
1,3-Dichlorobenzene	ND	1.00									
1,4-Dichlorobenzene	ND	1.00									
n-Butylbenzene	ND	1.00									
1,2-Dichlorobenzene	ND	1.00									
1,2-Dibromo-3-chloropropane	ND	1.00									
1,2,4-Trimethylbenzene	ND	1.00									
Hexachlorobutadiene	ND	4.00									
Naphthalene	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



Date: 2/11/2013

Work Order: 1302006

CLIENT: Calibre

Project: Hytec/Bordeaux

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260

Sample ID: MBL-R7380	SampType: MBLK	Units: µg/L			Prep Date: 2/8/2013			RunNo: 7380			
Client ID: MBLKW	Batch ID: R7380				Analysis Date: 2/8/2013			SeqNo: 145516			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2,3-Trichlorobenzene	ND	4.00									
Surr: 1-Bromo-4-fluorobenzene	9.22		10.00		92.2	82.6	120				
Surr: Dibromofluoromethane	9.94		10.00		99.4	72.1	122				
Surr: Toluene-d8	10.0		10.00		100	83.5	108				

Qualifiers: B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits

D Dilution was required
J Analyte detected below quantitation limits
RL Reporting Limit

E Value above quantitation range
ND Not detected at the Reporting Limit
S Spike recovery outside accepted recovery limits



Sample Log-In Check List

Client Name: CLBRE
Logged by: Clare Griggs

Work Order Number: 1302006
Date Received: 2/1/2013 3:36:00 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:	<input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> In Person
Regarding:			
Client Instructions:			

18. Additional remarks/Discrepancies

Item Information

Item #	Temp °C	Condition
Cooler 1	7.9	Good
Cooler 2	5.6	Good
Tmp Blk 1	1.3	Good
Tmp Blk 2	4.3	Good

Fremont



3600 Fremont Ave N.
Seattle, WA 98103

Tel: 206-352-3750
Fax: 206-352-7178

CALIBRE

Address:
City, State, Zip

Reports To (PM): Tom Alleson

Fax:

Laboratory/Physical Address (internal):

Date: 2-1-13

Date: _____

Date: _____

Project Name:
Location:

Collected by:

Email: Tom.Alleson@calibre.com

Comments/Region:

Sample Name:

Sample Date:

Sample Time:

Sample Type (Barrel):

Comments:

Sample Name:

Sample Date:

Sample Time:

Sample Type (Barrel):

Comments:

Sample Name:

Sample Date:

Sample Time:

Sample Type (Barrel):

Comments:

Sample Name:

Sample Date:

Sample Time:

Sample Type (Barrel):

Comments:

Sample Name:

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Sample Time:

Sample Type (Barrel):

Comments:

Sample Name:

Sample Date:

Sample Time:

Sample Type (Barrel):

Comments:

Sample Name:

Sample Date:

Sample Time:

Sample Type (Barrel):

Comments:

Sample Name:

Sample Date:

Sample Time:

Sample Type (Barrel):

Comments:

Institution: White - Lab; Yellow - File; Pink - Originator

www.fremontanalytical.com

Well Sampling Data Sheet

Date	1/31/13	Site Location	Hytex
Samplers	TM & CG	Well ID	HLMW-06B
Casing Material	Steel	Constructed Depth	
Casing Diameter		Condition of Well	

Field Measurements:

Time	0908	Depth Measured From:	
Depth to Water	32.3'	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	0911	0916	0921	0926	0931		
pH	5.59	6.97	8.14	8.15	8.46		
Conductivity	0.248	0.265	0.264	0.263	0.259		
Turbidity	14.9	14.7	11.0	35.4	83.9		
D.O.	12.32	3.25	2.15	1.77	1.52		
Temperature	60.83	60.95	60.91	60.98	70.09		
ORP	273	208	199	192	183		
Purge Rate	-	-	-	-	-		
Gallons Purged	0	1.0	2.0	3.0	4.0		

Sampling Data:

Time	0931	Sample ID	HLMW-06B-013113
pH	8.46	Duplicates	
Conductivity	0.259	QA/QC Volumes	
Turbidity	83.9		
D.O.	1.52		
Temperature	70.04		
ORP	183		

Sampling Device:

PVC Bailer	SS Bailer	Dedicated Pump	Teflon Bailer	
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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	X	RSK-175 (methane, ethane, ethene)	
Dissolved Metals	X		Total Organic Carbon 415.1		Other	

Sampling Notes:

Dissolved M. Sample

taken

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 Dia² x
0.0408 = 1 Well Volume

Well Sampling Data Sheet

Date	1/31/2013	Site Location	Hytec
Samplers	JN + CG	Well ID	HLMW-03A
Casing Material	PVC	Constructed Depth	57'
Casing Diameter	2"	Condition of Well	Good

Field Measurements:

Time	0940	Depth Measured From:	
Depth to Water	35.92		Top of access port
		X	Mark on PVC casing
			Mark of protective casing
			Other

Purging Information:

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

Water Monitoring Conditions:

Time	0943	0948	0953	0958	1003		
pH	8.35	7.30	6.71	5.65	5.43		
Conductivity	0.197	0.106	0.094	0.094	0.093		
Turbidity	108	7999	7999	7999	7999		
D.O.	3.39	4.53	4.75	4.81	4.80		
Temperature	6.75	6.82	6.85	6.87	6.89		
ORP	187	198	220	270	284		
Purge Rate	—	—	—	—	—		
Gallons Purged	0	0.5	1.0	1.5	2.0		

Sampling Data:

Time	1003	Sample ID	HLMW-03A-013113
pH	5.43	Duplicates	
Conductivity	0.093	QA/QC Volumes	
Turbidity	7999		
D.O.	4.80		
Temperature	6.89		
ORP	284		

Sampling Device:

PVC Bailer	SS Bailer	Dedicated Pump	Teflon Bailer
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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	X	RSK-175 (methane, ethane, ethene)	
Dissolved Metals			Total Organic Carbon 415.1		Other	

Sampling Notes:

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	1/13/2013	Site Location	Hgtec
Samplers	JN + CG	Well ID	HLMW-02A
Casing Material	PVC	Constructed Depth	39'
Casing Diameter	2"	Condition of Well	good

Field Measurements:

Time	100-1017	Depth Measured From:	
Depth to Water	30.06		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	1020	1025	1030	1035	1040	
pH	6.25	4.99	4.93	4.93	4.83	
Conductivity	0.002	0.001	0.001	0.000	0.000	
Turbidity	304	7444	2999	854	486	
D.O.	7.410	5.37	5.19	4.82	4.62	
Temperature	6.89	7.48	8.02	8.09	8.13	
ORP	245	321	324	324	331	
Purge Rate	-	-	-	-	-	
Gallons Purged	0	0.5	100	1.5	2.0	

Sampling Data:

Time	1040	Sample ID	HLMW-024- 013113 013113
pH	4.83	Duplicates	Dup 1 @ 0800
Conductivity	0.060	QA/QC Volumes	
Turbidity	4.86 486		
D.O.	4.62		
Temperature	8.13		
ORP	331		

Sampling Device:

PVC Bailer	SS Bailer	Dedicated Pump	Teflon Bailer
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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:

DM sample taken
Dup 1 @ 0800

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	11/31/2012	Site Location	Hytec
Samplers	JN + CG	Well ID	HLMW-04A
Casing Material	PVC	Constructed Depth	30.5'
Casing Diameter	2"	Condition of Well	Good

Field Measurements:

Time	11:00	Depth Measured From:	
Depth to Water	21.07'		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	11:09	11:14	11:19	11:24	11:29		
pH	5.15	4.82	4.81	4.89	4.93		
Conductivity	0.095	0.092	0.091	0.091	0.091		
Turbidity	451	69.1	49.8	31.4	26.5		
D.O.	12.75	4.37	4.69	4.46	4.44		
Temperature	7.64	8.17	8.19	8.21	8.25		
ORP	305	324	325	324	322		
Purge Rate	—	—	—	—	—		
Gallons Purged	0	0.5	1.0	1.5	2.0		

Sampling Data:

Time	11:29	Sample ID	HLMW-04A-013113
pH	4.93	Duplicates	
Conductivity	6.091	QA/QC Volumes	
Turbidity	26.5		
D.O.	4.46		
Temperature	8.25		
ORP	322		

Sampling Device:

PVC Bailer	SS Bailer	Dedicated Pump	Teflon Bailer	
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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:

DM sample taken

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	1/31/13	Site Location	by creek
Samplers	JN + C4	Well ID	SPWE
Casing Material	Steel	Constructed Depth	
Casing Diameter	8"	Condition of Well	good

Field Measurements:

Time	12:19	Depth Measured From:	
Depth to Water	34.41'	↗	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	1229	1234	1239	1244	1249		
pH	5.53	5.86	6.10	6.18	6.36		
Conductivity	0.200	0.197	0.198	0.198	0.199		
Turbidity	171	33.4	27.0	23.7	20.9		
D.O.	5.97	3.79	1.27	0.96	0.73		
Temperature	8.13	8.17	8.30	8.34	8.42		
ORP	308	241	274	269	256		
Purge Rate	—	—	—	—	—		
Gallons Purged	5	0.5	1.5	2.5	3.5		

Sampling Data:

Time	1249	Sample ID	SPWE-013113
pH	6.36	Duplicates	
Conductivity	0.199	QA/QC Volumes	
Turbidity	20.9		
D.O.	0.73		
Temperature	8.42		
ORP	256		

Sampling Device:

PVC Bailer	SS Bailer	Dedicated Pump	Teflon Bailer	
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Analyses to be Performed:

Volatile Organics	X	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:

DM Sample taken

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	1/31/2013	Site Location	by tee
Samplers	JN & CG	Well ID	HLMW-01A
Casing Material	PVC	Constructed Depth	23'
Casing Diameter	2"	Condition of Well	good

Field Measurements:

Time	13:04	Depth Measured From:	
Depth to Water	11.49'		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	13:04	13:11	13:16	13:21	13:26		
pH	7.09	5.80	5.39	5.50	5.46		
Conductivity	0.115	0.065	0.058	0.058	0.057		
Turbidity	437	188	125	80.0	57.3		
D.O.	6.84	6.84	4.77	4.45	4.14		
Temperature	7.18	7.01	6.86	6.83	6.80		
ORP	221	272	291	290	292		
Purge Rate	~	—	—	—	—		
Gallons Purged	0	0.5	1.0	1.5	2.0		

Sampling Data:

Time	13:34	Sample ID	HLMW-01A - 013113
pH	5.46	Duplicates	
Conductivity	0.057	QA/QC Volumes	
Turbidity	57.3		
D.O.	4.14		
Temperature	6.80		
ORP	292		

Sampling Device:

PVC Bailer	SS Bailer	Dedicated Pump	Teflon Bailer
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Analyses to be Performed:

Volatile Organics	<input checked="" type="checkbox"/>	VOCs 8260B	SVOCs by 8270C	<input checked="" type="checkbox"/>	Sulfate 375.2	
Total Metals	<input checked="" type="checkbox"/>	RCRA 8 or Priority Pollutants	SVOCs by 8270C/SIM		RSK-175 (methane, ethane, ethene)	
Dissolved Metals			Total Organic Carbon 415.1		Other	

Sampling Notes:

DM sample taken

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	1/31/2013	Site Location	Hytec
Samplers	JNCS	Well ID	MOWE
Casing Material	/	Constructed Depth	
Casing Diameter	/	Condition of Well	good

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	1336	Purge End Time	1356
Approximate Gallons Purged			

Water Monitoring Conditions:

Time							
pH							
Conductivity							
Turbidity							
D.O.							
Temperature							
ORP							
Purge Rate							
Gallons Purged							

Sampling Data:

Time	1356	Sample ID	MOWE-013113
pH		Duplicates	
Conductivity		QA/QC Volumes	
Turbidity			
D.O.			
Temperature			
ORP			

Sampling Device:

PVC Bailer	SS Bailer	Dedicated Pump	Teflon Bailer	
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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:

Sample take at
faucet closest to
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	1/13/2013	Site Location	Wykes
Samplers	JN & CS	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	1405	Purge End Time	1425
Approximate Gallons Purged			

Water Monitoring Conditions:

Time						
pH						
Conductivity						
Turbidity						
D.O.						
Temperature						
ORP						
Purge Rate						
Gallons Purged						

Sampling Data:

Time	1425	Sample ID	PAWE-01313
pH		Duplicates	
Conductivity		QA/QC Volumes	
Turbidity			
D.O.			
Temperature			
ORP			

Sampling Device:

PVC Bailer	SS Bailer	Dedicated Pump	Teflon Bailer
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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:

DM sample taken
sample @
1425

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	2/1/2013	Site Location	Hytec
Samplers	JN RCG	Well ID	HLMW-05B
Casing Material	Steel	Constructed Depth	241'
Casing Diameter	6"-4"	Condition of Well	

Field Measurements:

Time	0941	Depth Measured From:	
Depth to Water	39.21'		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	1000	Purge End Time	1130
Approximate Gallons Purged			

Water Monitoring Conditions:

Time						
pH						
Conductivity						
Turbidity						
D.O.						
Temperature						
ORP						
Purge Rate						
Gallons Purged						

Sampling Data:

Time		Sample ID	HLMW-05B - 020113
pH		Duplicates	
Conductivity		QA/QC Volumes	
Turbidity			
D.O.			
Temperature			
ORP			

Sampling Device:

PVC Bailer	SS Bailer	Dedicated Pump	Teflon Bailer
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Analyses to be Performed:

Volatile Organics	<input checked="" type="checkbox"/>	VOCs 8260B	SVOCs by 8270C	<input checked="" type="checkbox"/>	Sulfate 375.2	
Total Metals	<input checked="" type="checkbox"/>	RCRA 8 or Priority	SVOCs by 8270C/SIM		RSK-175 (methane, ethane, ethene)	
Dissolved Metals		Pollutants	Total Organic Carbon 415.1		Other	

Sampling Notes: *pm sample taken
sample at
12:15 min sample
equipment @ 1310*

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	

Manchester Environmental Laboratory

7411 Beach Dr E, Port Orchard, Washington 98366

Case Narrative

February 25, 2013

Project: Hy Tec-Fiberglass Landfill

Laboratory Sample No(s): 1301063-01

Project Manager: Mohsen Kourehdar

By: Dickey Huntamer *DH*

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. 4-Chloraniline was already qualified.

The BC for Bisphenol A, 3B-coprostanol, Triclosan, and 4-nitroaniline were outside the limits. Qualifiers were added as shown in, Table 1.

Table 1

Compound	Sample IDs	Qual
3-Nitroaniline	1301063-01, B13B008-BLK1	UJ
4-Nitroaniline		
3B-Coprostanol		
Triclosan		
Carbazole		
Bisphenol A	B13B008-BLK1	J
	1301063-01	

Continuing Calibration

The continuing calibration verifications (CCVs) were within QC limits with the following exceptions. Both 2-chlorophenol and benzyl alcohol were low and coprostanol and cholesterol were biased high. Benzyl alcohol was qualified for other reasons. Coprostanol and cholesterol were not detected. Qualifiers were added as shown in, Table 2.

Table 2

Compound	Sample IDs	Qual
2-Chlorophenol	1301063-01, B13B008-BLK1	UJ

Internal Standards

All internal standards were within QC limits.

Method Blank(s)

Di-N-butylphthalate and bis(2-ethylhexyl) phthalate were detected in the laboratory blank B13B008-BLK1.

The amount of di-N-butylphthalate and bis(2-ethylhexyl) phthalate 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. Qualifiers were added as shown in, Table 3.

Table 3

Compound	Sample IDs	Qual
Di-N-butylphthalate	1301063-01	UJ
Bis(2-ethylhexyl) phthalate		

Laboratory Control Samples

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

Benzyl alcohol was less than 10% in B13B008-BS1 and acceptable in B13B008-BSD1. The Relative Percent Differences (RPD) were within QC limits except for benzyl alcohol. Qualifiers were added as shown in, Table 4.

Table 4.

Compound	Sample IDs	Qual
Benzyl Alcohol	1301063-01, B13B0086-BLK1	REJ

Surrogates

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

4-Chloroaniline-D4 was less than 10% in sample 1301063-01. 4-Chloroaniline was also low in the QC samples, B3B008- BLK1 and BSD1. Qualifiers were added as shown in, Table 5.

Table 5

Compound	Sample IDs	Qual
4-Chloroaniline	1301063-01	REJ
	B13B008-BLK1	UJ

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: 01

Work Order: 1301063

Lab ID #: 1301063-01

Batch ID: B13B008

Project Officer: Kourehdar, Mohsen

Collected: 2/1/2013

Prepared: 2/4/2013

Initial Vol: 3125 mL

Prep Method: SW3510C

Analyzed: 2/7/2013

Final Vol: 1 mL

Analysis Method: SW8270

Matrix: Water

Units: ug/L

CAS#	Analyte	Result	Qualifier	RL	MDL
120-82-1	1,2,4-Trichlorobenzene	0.080	U	0.080	0.020
95-50-1	1,2-Dichlorobenzene	0.080	U	0.080	0.019
122-66-7	1,2-Diphenylhydrazine	0.080	U	0.080	0.051
541-73-1	1,3-Dichlorobenzene	0.080	U	0.080	0.016
106-46-7	1,4-Dichlorobenzene	0.080	U	0.080	0.018
90-12-0	1-Methylnaphthalene	0.080	U	0.080	0.052
95-95-4	2,4,5-Trichlorophenol	0.80	U	0.80	0.063
88-06-2	2,4,6-Trichlorophenol	0.32	U	0.32	0.048
120-83-2	2,4-Dichlorophenol	0.80	U	0.80	0.042
105-67-9	2,4-Dimethylphenol	0.80	U	0.80	0.047
51-28-5	2,4-Dinitrophenol	0.80	U	0.80	
121-14-2	2,4-Dinitrotoluene	0.32	U	0.32	0.045
606-20-2	2,6-Dinitrotoluene	0.32	U	0.32	0.054
91-58-7	2-Chloronaphthalene	0.16	U	0.16	0.051
95-57-8	2-Chlorophenol	0.32	UJ	0.32	0.042
91-57-6	2-Methylnaphthalene	0.080	U	0.080	0.048
95-48-7	2-Methylphenol	0.80	U	0.80	0.040
88-74-4	2-Nitroaniline	1.6	U	1.6	0.053
88-75-5	2-Nitrophenol	0.32	U	0.32	0.036
91-94-1	3,3'-Dichlorobenzidine	0.32	U	0.32	0.016
360-68-9	3B-Coprostanol	1.6	UJ	1.6	0.024
99-09-2	3-Nitroaniline	0.32	UJ	0.32	0.046
534-52-1	4,6-Dinitro-2-Methylphenol	1.6	U	1.6	0.53
101-55-3	4-Bromophenyl phenyl ether	0.16	U	0.16	0.072
59-50-7	4-Chloro-3-Methylphenol	0.80	U	0.80	0.063
106-47-8	4-Chloroaniline		REJ	3.2	0.13
7005-72-3	4-Chlorophenyl-Phenylether	0.080	U	0.080	0.071
106-44-5	4-Methylphenol	0.80	U	0.80	0.040
100-01-6	4-Nitroaniline	0.80	UJ	0.80	
100-02-7	4-Nitrophenol	0.80	U	0.80	0.016
104-40-5	4-nonylphenol	0.32	U	0.32	0.032
83-32-9	Acenaphthene	0.080	U	0.080	0.078
208-96-8	Acenaphthylene	0.080	U	0.080	0.061
120-12-7	Anthracene	0.16	U	0.16	0.082
56-55-3	Benz[a]anthracene	0.16	U	0.16	0.092
50-32-8	Benzo(a)pyrene	0.080	U	0.080	0.039
205-99-2	Benzo(b)fluoranthene	0.080	U	0.080	0.037
191-24-2	Benzo(ghi)perylene	0.16	U	0.16	0.082
207-08-9	Benzo(k)fluoranthene	0.080	U	0.080	0.077
65-85-0	Benzoic Acid	1.6	U	1.6	
100-51-6	Benzyl Alcohol		REJ	0.80	0.028
108-60-1	Bis(2-chloro-1-methylethyl) ether	0.080	U	0.080	0.053
111-91-1	Bis(2-Chloroethoxy)Methane	0.080	U	0.080	0.066
111-44-4	Bis(2-Chloroethyl)Ether	0.16	U	0.16	0.046
117-81-7	Bis(2-Ethylhexyl) Phthalate	0.66	UJ	0.32	0.048
80-05-7	Bisphenol A	0.46	J	0.32	0.032
85-68-7	Butyl benzyl phthalate	0.32	U	0.32	0.037
58-08-2	Caffeine	0.16	U	0.16	0.062
86-74-8	Carbazole	0.16	UJ	0.16	0.0082

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

Project: HyTec-Fiberglass Landfill

Field ID: 01

Work Order: 1301063

Lab ID #: 1301063-01

Batch ID: B13B008

Project Officer: Kourehdar, Mohsen

Collected: 2/1/2013

Prepared: 2/4/2013

Initial Vol: 3125 mL

Prep Method: SW3510C

Analyzed: 2/7/2013

Final Vol: 1 mL

Analysis Method: SW8270

Matrix: Water

Units: ug/L

CAS#	Analyte	Result	Qualifier	RL	MDL
57-88-5	Cholesterol	1.6	U	1.6	0.076
218-01-9	Chrysene	0.16	U	0.16	0.095
53-70-3	Dibenzo(a,h)anthracene	0.080	U	0.080	0.075
132-64-9	Dibenzofuran	0.16	U	0.16	0.071
84-66-2	Diethyl phthalate	0.16	U	0.16	0.079
131-11-3	Dimethyl phthalate	0.16	U	0.16	0.069
84-74-2	Di-N-Butylphthalate	0.20	UJ	0.080	0.058
117-84-0	Di-N-Octyl Phthalate	1.6	U	1.6	0.071
206-44-0	Fluoranthene	0.16	U	0.16	0.098
86-73-7	Fluorene	0.080	U	0.080	0.078
118-74-1	Hexachlorobenzene	0.080	U	0.080	0.039
87-68-3	Hexachlorobutadiene	0.080	U	0.080	0.012
77-47-4	Hexachlorocyclopentadiene	0.32	U	0.32	0.010
67-72-1	Hexachloroethane	0.080	U	0.080	0.019
193-39-5	Indeno(1,2,3-cd)pyrene	0.080	U	0.080	0.076
78-59-1	Isophorone	1.6	U	1.6	0.074
91-20-3	Naphthalene	0.080	U	0.080	0.045
98-95-3	Nitrobenzene	0.080	U	0.080	0.066
621-64-7	N-Nitrosodi-n-propylamine	0.080	U	0.080	0.071
86-30-6	N-Nitrosodiphenylamine	0.16	U	0.16	0.034
87-86-5	Pentachlorophenol	0.080	U	0.080	
85-01-8	Phenanthrene	0.16	U	0.16	0.086
108-95-2	Phenol	0.32	U	0.32	0.025
129-00-0	Pyrene	0.16	U	0.16	0.11
483-65-8	Retene	0.16	U	0.16	0.088
3380-34-5	Triclosan	0.16	UJ	0.16	0.032
77-93-0	Triethyl citrate	0.32	U	0.32	0.032
115-96-8	Tris(2-chloroethyl) phosphate (TCEP)	0.080	U	0.080	0.032

Surrogate Recovery:

CAS#	Analyte	Result	Spike Level	% Rec.	% Rec. Limits
2199-69-1	1,2-Dichlorobenzene-D4	1.43	2.56	56	15-98
93951-74-7	2,4-Dichlorophenol-D3	1.90	2.56	74	50-150
93951-73-6	2-Chlorophenol-D4	2.17	2.56	85	44-112
321-60-8	2-Fluorobiphenyl	1.56	2.56	61	19-116
367-12-4	2-Fluorophenol	1.16	2.56	45	10-91
93951-78-1	2-Nitrophenol-D4	2.12	2.56	83	20-120
93951-76-9	4,6-Dinitro-2-methylphenol-D2	1.87	2.56	73	50-150
191656-33-4	4-Chloroaniline-D4	0.116	2.56	5	20-120
190780-66-6	4-Methylphenol-D8	1.29	2.56	50	50-150
93951-79-2	4-Nitrophenol-D4	0.576	2.56	23	20-120
93951-97-4	Acenaphthylene-D8	1.93	2.56	75	50-150
1719-06-8	Anthracene-D10	2.13	2.56	83	50-150
63466-71-7	Benzo(a)pyrene-D12	2.12	2.56	83	50-150
93952-02-4	Bis(2-Chloroethyl)Ether-D8	2.07	2.56	81	50-150
85448-30-2	Dimethylphthalate-D6	2.14	2.56	84	50-150
81103-79-9	Fluorene-D10	1.98	2.56	77	50-150
4165-60-0	Nitrobenzene-D5	2.13	2.56	83	50-118

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

Project: HyTec-Fiberglass Landfill

Field ID: 01

Work Order: 1301063
Project Officer: Kourehdar, Mohsen
Initial Vol: 3125 mL
Final Vol: 1 mL

Lab ID #: 1301063-01
Collected: 2/1/2013
Prep Method: SW3510C
Analysis Method: SW8270

Batch ID: B13B008
Prepared: 2/4/2013
Analyzed: 2/7/2013
Matrix: Water
Units: ug/L

Surrogate Recovery:

CAS#	Analyte	Result	Spike Level	% Rec.	% Rec. Limits
4165-62-2	Phenol-D5	0.597	2.56	23	10-66
1718-52-1	Pyrene-D10	2.41	2.56	94	57-134
1718-51-0	Terphenyl-D14	2.42	2.56	95	42-145

Authorized by: _____

 Release Date: 3/7/13

Printed:
3/7/2013

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

Project: HyTec-Fiberglass Landfill

QC Type : Method Blank

Work Order: 1301063

Project Officer: Kourehdar, Mohsen

Initial Vol: 3000 mL

Final Vol: 1 mL

Lab ID #: B13B008-BLK1

Prep Method: SW3510C

Analysis Method: SW8270

Source Field ID: Blank

Batch ID: B13B008

Prepared: 2/4/2013

Analyzed: 2/7/2013

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	UJ	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	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	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	U	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	0.081
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	U	1.7	
100-51-6	Benzyl Alcohol		REJ	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	0.12	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	0.17	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: 1301063

Project Officer: Kourehdar, Mohsen

Initial Vol: 3000 mL

Final Vol: 1 mL

Lab ID #: B13B008-BLK1

Prep Method: SW3510C

Analysis Method: SW8270

Source Field ID: Blank

Batch ID: B13B008

Prepared: 2/4/2013

Analyzed: 2/7/2013

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	U	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	U	0.17	0.082
131-11-3	Dimethyl phthalate	0.17	U	0.17	0.072
84-74-2	Di-N-Butylphthalate	0.39		0.083	0.061
117-84-0	Di-N-Octyl Phthalate	1.7	U	1.7	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	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	0.083	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	U	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	2.04	2.67	76	15-98
93951-74-7	2,4-Dichlorophenol-D3	1.89	2.67	71	50-150
93951-73-6	2-Chlorophenol-D4	2.46	2.67	92	44-112
321-60-8	2-Fluorobiphenyl	2.14	2.67	80	19-116
367-12-4	2-Fluorophenol	2.11	2.67	79	10-91
93951-78-1	2-Nitrophenol-D4	2.21	2.67	83	20-120
93951-76-9	4,6-Dinitro-2-methylphenol-D2	1.85	2.67	70	50-150
191656-33-4	4-Chloroaniline-D4	0.492	2.67	18	20-120
190780-66-6	4-Methylphenol-D8	2.08	2.67	78	50-150
93951-79-2	4-Nitrophenol-D4	1.47	2.67	55	20-120
93951-97-4	Acenaphthylene-D8	2.17	2.67	81	50-150
1719-06-8	Anthracene-D10	2.36	2.67	88	50-150
63466-71-7	Benzo(a)pyrene-D12	2.27	2.67	85	50-150
93952-02-4	Bis(2-Chloroethyl)Ether-D8	2.26	2.67	85	50-150
85448-30-2	Dimethylphthalate-D6	2.25	2.67	84	50-150
81103-79-9	Fluorene-D10	2.16	2.67	81	50-150
4165-60-0	Nitrobenzene-D5	2.21	2.67	83	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: 1301063

Project Officer: Kourehdar, Mohsen

Initial Vol: 3000 mL

Final Vol: 1 mL

Lab ID #: B13B008-BLK1

Prep Method: SW3510C

Analysis Method: SW8270

Source Field ID: Blank

Batch ID: B13B008

Prepared: 2/4/2013

Analyzed: 2/7/2013

Matrix: Water

Units: ug/L

Surrogate Recovery:

CAS#	Analyte	Result	Spike Level	% Rec.	% Rec. Limits
4165-62-2	Phenol-D5	1.54	2.67	58	10-66
1718-52-1	Pyrene-D10	2.70	2.67	101	57-134
1718-51-0	Terphenyl-D14	2.75	2.67	103	42-145

Authorized by: _____

Release Date: _____

3/7/13

Printed:
3/7/2013

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

Project: HyTec-Fiberglass Landfill

QC Type : LCS

Work Order: 1301063	Lab ID #: B13B008-BS1	Batch ID: B13B008
Project Officer: Kourehdar, Mohsen	Prep Method: SW3510C	Prepared: 2/4/2013
Initial Vol: 3000 mL	Analysis Method: SW8270	Analyzed: 2/7/2013
Final Vol: 1 mL	Source Field ID: LCS	Matrix: Water
		Units: ug/L

Analyte	Result	Spike Level	RL	%Rec	%Rec Limits
1,2,4-Trichlorobenzene	1.82	3.33	0.083	55	16-92
1,2-Dichlorobenzene	1.98	3.33	0.083	59	19-90
1,2-Diphenylhydrazine	2.95	3.33	0.083	88	50-150
1,3-Dichlorobenzene	1.78	3.33	0.083	53	13-90
1,4-Dichlorobenzene	1.86	3.33	0.083	56	14-92
1-Methylnaphthalene	2.40	3.33	0.083	72	33-110
2,4,5-Trichlorophenol	2.92	3.33	0.83	88	46-141
2,4,6-Trichlorophenol	2.81	3.33	0.33	84	51-141
2,4-Dichlorophenol	2.77	3.33	0.83	83	66-115
2,4-Dimethylphenol	2.33	3.33	0.83	70	59-127
2,4-Dinitrophenol	2.74	3.33	0.83	82	42-135
2,4-Dinitrotoluene	2.93	3.33	0.33	88	64-136
2,6-Dinitrotoluene	2.96	3.33	0.33	89	65-131
2-Chloronaphthalene	2.42	3.33	0.17	72	21-127
2-Chlorophenol	2.94	3.33	0.33	88	66-109
2-Methylnaphthalene	2.35	3.33	0.083	71	29-112
2-Methylphenol	2.77	3.33	0.83	83	55-117
2-Nitroaniline	2.94	3.33	1.7	88	64-136
2-Nitrophenol	2.82	3.33	0.33	85	64-115
3,3'-Dichlorobenzidine	3.21	3.33	0.33	96	10-178
3B-Coprostanol	7.05	6.67	1.7	106	10-154
3-Nitroaniline	3.17	3.33	0.33	95	10-393
4,6-Dinitro-2-Methylphenol	2.89	3.33	1.7	87	67-133
4-Bromophenyl phenyl ether	2.61	3.33	0.17	78	47-113
4-Chloro-3-Methylphenol	3.03	3.33	0.83	91	60-129
4-Chloroaniline	0.845	3.33	3.3	25	10-150
4-Chlorophenyl-Phenylether	2.44	3.33	0.083	73	47-113
4-Methylphenol	2.72	3.33	0.83	82	43-127
4-Nitroaniline	3.31	3.33	0.83	99	14-299
4-Nitrophenol	1.97	3.33	0.83	59	10-134
4-nonylphenol	3.13	3.33	0.33	94	77-215
Acenaphthene	2.62	3.33	0.083	78	17-169
Acenaphthylene	2.71	3.33	0.083	81	46-118
Anthracene	2.95	3.33	0.17	89	66-121
Benz[a]anthracene	3.14	3.33	0.17	94	84-130
Benzo(a)pyrene	2.86	3.33	0.083	86	70-145
Benzo(b)fluoranthene	2.83	3.33	0.083	85	71-140
Benzo(ghi)perylene	3.01	3.33	0.17	90	61-141
Benzo(k)fluoranthene	2.88	3.33	0.083	87	73-141
Benzoic Acid	2.14	6.67	1.7	32	10-96
Benzyl Alcohol	0.226	3.33	0.83	7	10-97
Bis(2-chloro-1-methylethyl) ether	2.74	3.33	0.083	82	63-105
Bis(2-Chloroethoxy)Methane	2.76	3.33	0.083	83	65-116
Bis(2-Chloroethyl)Ether	2.86	3.33	0.17	86	65-110
Bis(2-Ethylhexyl) Phthalate	3.18	3.33	0.33	95	80-128
Bisphenol A	3.80	3.33	0.33	114	11-203
Butyl benzyl phthalate	3.28	3.33	0.33	98	23-183
Caffeine	2.40	3.33	0.17	72	62-114
Carbazole	3.03	3.33	0.17	91	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: 1301063

Project Officer: Kourehdar, Mohsen

Initial Vol: 3000 mL

Final Vol: 1 mL

Lab ID #: B13B008-BS1

Prep Method: SW3510C

Analysis Method: SW8270

Source Field ID: LCS

Batch ID: B13B008

Prepared: 2/4/2013

Analyzed: 2/7/2013

Matrix: Water

Units: ug/L

Analyte	Result	Spike Level	RL	%Rec	%Rec Limits
Cholesterol	5.79	6.67	1.7	87	10-140
Chrysene	3.26	3.33	0.17	98	82-128
Dibenzo(a,h)anthracene	3.11	3.33	0.083	93	65-130
Dibenzofuran	2.68	3.33	0.17	80	47-126
Diethyl phthalate	2.96	3.33	0.17	89	77-123
Dimethyl phthalate	2.98	3.33	0.17	89	74-122
Di-N-Butylphthalate	3.31	3.33	0.083	99	70-156
Di-N-Octyl Phthalate	2.95	3.33	1.7	88	75-135
Fluoranthene	2.93	3.33	0.17	88	72-124
Fluorene	2.72	3.33	0.083	82	50-134
Hexachlorobenzene	2.76	3.33	0.083	83	53-114
Hexachlorobutadiene	1.31	3.33	0.083	39	10-90
Hexachlorocyclopentadiene	1.19	3.33	0.33	36	10-76
Hexachloroethane	1.50	3.33	0.083	45	12-79
Indeno(1,2,3-cd)pyrene	2.75	3.33	0.083	83	61-139
Isophorone	2.68	3.33	1.7	80	50-103
Naphthalene	2.44	3.33	0.083	73	34-114
Nitrobenzene	2.87	3.33	0.083	86	67-108
N-Nitrosodi-n-propylamine	2.86	3.33	0.083	86	60-128
N-Nitrosodiphenylamine	3.09	3.33	0.17	93	10-209
Pentachlorophenol	2.18	3.33	0.083	65	64-140
Phenanthrene	2.90	3.33	0.17	87	63-126
Phenol	1.79	3.33	0.33	54	41-81
Pyrene	3.14	3.33	0.17	94	64-140
Retene	3.19	3.33	0.17	96	75-135
Triclosan	2.66	3.33	0.17	80	54-126
Triethyl citrate	3.07	3.33	0.33	92	27-123
Tris(2-chloroethyl) phosphate (TCEP)	2.98	3.33	0.083	89	50-150

Surrogate Recovery:

CAS#	Analyte	Result	Spike Level	% Rec.	Limits
2199-69-1	1,2-Dichlorobenzene-D4	2.10	2.67	79	15-98
93951-74-7	2,4-Dichlorophenol-D3	2.34	2.67	88	50-150
93951-73-6	2-Chlorophenol-D4	2.62	2.67	98	44-112
321-60-8	2-Fluorobiphenyl	2.18	2.67	82	19-116
367-12-4	2-Fluorophenol	2.25	2.67	84	10-91
93951-78-1	2-Nitrophenol-D4	2.33	2.67	87	20-120
93951-76-9	4,6-Dinitro-2-methylphenol-D2	2.27	2.67	85	50-150
191656-33-4	4-Chloroaniline-D4	0.648	2.67	24	20-120
190780-66-6	4-Methylphenol-D8	2.25	2.67	84	50-150
93951-79-2	4-Nitrophenol-D4	1.07	2.67	40	20-120
93951-97-4	Acenaphthylene-D8	2.28	2.67	86	50-150
1719-06-8	Anthracene-D10	2.46	2.67	92	50-150
63466-71-7	Benzo(a)pyrene-D12	2.30	2.67	86	50-150
93952-02-4	Bis(2-Chloroethyl)Ether-D8	2.35	2.67	88	50-150
85448-30-2	Dimethylphthalate-D6	2.38	2.67	89	50-150
81103-79-9	Fluorene-D10	2.28	2.67	85	50-150
4165-60-0	Nitrobenzene-D5	2.33	2.67	87	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: 1301063
Project Officer: Kourehdar, Mohsen
Initial Vol: 3000 mL
Final Vol: 1 mL

Lab ID #: B13B008-BS1
Prep Method: SW3510C
Analysis Method: SW8270
Source Field ID: LCS

Batch ID: B13B008
Prepared: 2/4/2013
Analyzed: 2/7/2013
Matrix: Water
Units: ug/L

Surrogate Recovery:

CAS#	Analyte	Result	Spike Level	% Rec.	% Rec. Limits
4165-62-2	Phenol-D5	1.64	2.67	62	10-66
1718-52-1	Pyrene-D10	2.61	2.67	98	57-134
1718-51-0	Terphenyl-D14	2.60	2.67	98	42-145

Authorized by: _____

Release Date: _____

3/7/13

Printed:
3/7/2013

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

Project: HyTec-Fiberglass Landfill

QC Type : LCS Dup

Work Order: 1301063	Lab ID #: B13B008-BSD1	Batch ID: B13B008				
Project Officer: Kourehdar, Mohsen	Prep Method: SW3510C	Prepared: 2/4/2013				
Initial Vol: 3000 mL	Analysis Method: SW8270	Analyzed: 2/7/2013				
Final Vol: 1 mL	Source Field ID: LCS Dup	Matrix: Water				
		Units: ug/L				
Analyte	Sample Result	Spike Level	%Rec	RPD	%Rec Limits	RPD Limit
1,2,4-Trichlorobenzene	1.94	3.33	58	6	16-92	40
1,2-Dichlorobenzene	2.06	3.33	62	4	19-90	40
1,2-Diphenylhydrazine	2.93	3.33	88	0.6	50-150	40
1,3-Dichlorobenzene	1.90	3.33	57	6	13-90	40
1,4-Dichlorobenzene	1.96	3.33	59	5	14-92	40
1-Methylnaphthalene	2.38	3.33	71	0.8	33-110	40
2,4,5-Trichlorophenol	2.79	3.33	84	5	46-141	40
2,4,6-Trichlorophenol	2.76	3.33	83	2	51-141	40
2,4-Dichlorophenol	2.69	3.33	81	3	66-115	40
2,4-Dimethylphenol	2.35	3.33	71	1	59-127	40
2,4-Dinitrophenol	2.74	3.33	82	0.1	42-135	40
2,4-Dinitrotoluene	3.02	3.33	91	3	64-136	40
2,6-Dinitrotoluene	2.99	3.33	90	1	65-131	40
2-Choronaphthalene	2.40	3.33	72	0.6	21-127	40
2-Chlorophenol	2.83	3.33	85	4	66-109	40
2-Methylnaphthalene	2.34	3.33	70	0.3	29-112	40
2-Methylphenol	2.64	3.33	79	5	55-117	40
2-Nitroaniline	2.96	3.33	89	0.6	64-136	40
2-Nitrophenol	2.76	3.33	83	2	64-115	40
3,3'-Dichlorobenzidine	3.52	3.33	105	9	10-178	40
3B-Coprostanol	7.44	6.67	112	5	10-154	40
3-Nitroaniline	3.20	3.33	96	0.9	10-393	40
4,6-Dinitro-2-Methylphenol	3.00	3.33	90	4	67-133	40
4-Bromophenyl phenyl ether	2.61	3.33	78	0.09	47-113	40
4-Chloro-3-Methylphenol	2.93	3.33	88	3	60-129	40
4-Chloroaniline	0.654	3.33	20	NC	10-150	40
4-Chlorophenyl-Phenylether	2.50	3.33	75	3	47-113	40
4-Methylphenol	2.60	3.33	78	5	43-127	40
4-Nitroaniline	3.58	3.33	107	8	14-299	40
4-Nitrophenol	1.85	3.33	55	6	10-134	40
4-nonylphenol	3.15	3.33	95	0.7	77-215	40
Acenaphthene	2.58	3.33	77	1	17-169	40
Acenaphthylene	2.64	3.33	79	3	46-118	40
Anthracene	3.00	3.33	90	2	66-121	40
Benz[a]anthracene	3.20	3.33	96	2	84-130	40
Benzo(a)pyrene	2.95	3.33	89	3	70-145	40
Benzo(b)fluoranthene	2.93	3.33	88	3	71-140	40
Benzo(ghi)perylene	3.14	3.33	94	4	61-141	40
Benzo(k)fluoranthene	3.01	3.33	90	4	73-141	40
Benzoic Acid	2.17	6.67	33	1	10-96	40
Benzyl Alcohol	0.929	3.33	28	122	10-97	40
Bis(2-chloro-1-methylethyl) ether	2.67	3.33	80	3	63-105	40
Bis(2-Chloroethoxy)Methane	2.68	3.33	80	3	65-116	40
Bis(2-Chloroethyl)Ether	2.76	3.33	83	4	65-110	40
Bis(2-Ethylhexyl) Phthalate	3.24	3.33	97	2	80-128	40
Bisphenol A	4.01	3.33	120	5	11-203	40
Butyl benzyl phthalate	3.32	3.33	99	1	23-183	40
Caffeine	2.39	3.33	72	0.5	62-114	40
Carbazole	3.13	3.33	94	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: 1301063	Lab ID #: B13B008-BSD1	Batch ID: B13B008
Project Officer: Kourehdar, Mohsen	Prep Method: SW3510C	Prepared: 2/4/2013
Initial Vol: 3000 mL	Analysis Method: SW8270	Analyzed: 2/7/2013
Final Vol: 1 mL	Source Field ID: LCS Dup	Matrix: Water Units: ug/L

Analyte	Sample Result	Spike Level	%Rec	RPD	%Rec Limits	RPD Limit
Cholesterol	5.64	6.67	85	3	10-140	40
Chrysene	3.36	3.33	101	3	82-128	40
Dibenzo(a,h)anthracene	3.25	3.33	98	4	65-130	40
Dibenzofuran	2.67	3.33	80	0.3	47-126	40
Diethyl phthalate	3.09	3.33	93	5	77-123	40
Dimethyl phthalate	3.07	3.33	92	3	74-122	40
Di-N-Butylphthalate	3.18	3.33	95	4	70-156	40
Di-N-Octyl Phthalate	2.96	3.33	89	0.4	75-135	40
Fluoranthene	2.95	3.33	88	0.6	72-124	40
Fluorene	2.76	3.33	83	1	50-134	40
Hexachlorobenzene	2.82	3.33	85	2	53-114	40
Hexachlorobutadiene	1.51	3.33	45	14	10-90	40
Hexachlorocyclopentadiene	1.34	3.33	40	12	10-76	40
Hexachloroethane	1.67	3.33	50	11	12-79	40
Indeno(1,2,3-cd)pyrene	2.89	3.33	87	5	61-139	40
Isophorone	2.62	3.33	79	2	50-103	40
Naphthalene	2.47	3.33	74	0.9	34-114	40
Nitrobenzene	2.79	3.33	84	3	67-108	40
N-Nitrosodi-n-propylamine	2.74	3.33	82	4	60-128	40
N-Nitrosodiphenylamine	3.07	3.33	92	0.8	10-209	40
Pentachlorophenol	2.32	3.33	70	6	64-140	40
Phenanthrene	2.93	3.33	88	0.9	63-126	40
Phenol	1.72	3.33	52	4	41-81	40
Pyrene	3.30	3.33	99	5	64-140	40
Retene	3.32	3.33	100	4	75-135	40
Triclosan	2.58	3.33	77	3	54-126	40
Triethyl citrate	2.85	3.33	85	7	27-123	40
Tris(2-chloroethyl) phosphate (TCEP)	2.99	3.33	90	0.3	50-150	40

Surrogate Recovery:

CAS#	Analyte	Result	Spike Level	% Rec.	Limits
2199-69-1	1,2-Dichlorobenzene-D4	2.16	2.67	81	15-98
93951-74-7	2,4-Dichlorophenol-D3	2.25	2.67	84	50-150
93951-73-6	2-Chlorophenol-D4	2.50	2.67	94	44-112
321-60-8	2-Fluorobiphenyl	2.14	2.67	80	19-116
367-12-4	2-Fluorophenol	2.10	2.67	79	10-91
93951-78-1	2-Nitrophenol-D4	2.28	2.67	86	20-120
93951-76-9	4,6-Dinitro-2-methylphenol-D2	2.34	2.67	88	50-150
191656-33-4	4-Chloroaniline-D4	0.505	2.67	19	20-120
190780-66-6	4-Methylphenol-D8	2.13	2.67	80	50-150
93951-79-2	4-Nitrophenol-D4	1.21	2.67	45	20-120
93951-97-4	Acenaphthylene-D8	2.24	2.67	84	50-150
1719-06-8	Anthracene-D10	2.44	2.67	92	50-150
63466-71-7	Benzo(a)pyrene-D12	2.33	2.67	88	50-150
93952-02-4	Bis(2-Chloroethyl)Ether-D8	2.25	2.67	84	50-150
85448-30-2	Dimethylphthalate-D6	2.41	2.67	90	50-150
81103-79-9	Fluorene-D10	2.29	2.67	86	50-150
4165-60-0	Nitrobenzene-D5	2.27	2.67	85	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: 1301063
Project Officer: Kourehdar, Mohsen
Initial Vol: 3000 mL
Final Vol: 1 mL

Lab ID #: B13B008-BSD1
Prep Method: SW3510C
Analysis Method: SW8270
Source Field ID: LCS Dup

Batch ID: B13B008
Prepared: 2/4/2013
Analyzed: 2/7/2013
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	2.65	2.67	100	57-134
1718-51-0	Terphenyl-D14	2.67	2.67	100	42-145

Authorized by: _____



Release Date:

3/7/13

Printed:
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