FINAL

BORDEAUX DUMP REMEDIAL ACTION REPORT
HYTEC- LITTLEROCK SITE
HALO-KUNTUX LANE
LITTLEROCK, WASHINGTON

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

Tom McKeon, Professional Engineer

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LIST OF ACRONYMS AND ABBREVIATIONS

ATSDR	Agency for Toxic Substances and Disease Registry
bgs	Below ground surface
CAP	Cleanup Action Plan
COCs	Chemicals of concern
DNS	Determination of non-significance
Ecology	Washington State Department of Ecology
EPA	Environmental Protection Agency
FS	Feasibility Study
MCL	Maximum contaminant level
mg/kg	Milligrams per kilogram
MRL	Minimal Risk Level
MTCA	Model Toxics Control Act
NOAEL	no observed adverse effect level
ORP	Oxidation/reduction potential
PCBs	Polychlorinated biphenyls
PID	Photo ionization detector
PLP	Potentially Liable Party
PVC	Polyvinylchloride
RAWP	Remedial Action Work Plan
RCRA	Resource Conservation and Recovery Act
RI	Remedial Investigation
SVOC	Semi volatile organic compound
TCLP	Toxic Characteristics Leaching Procedure
ug/L	Micrograms per liter
UF	uncertainty factor
VOC	Volatile organic compound
WAC	Washington Administrative Code

BORDEAUX DUMP AREA REMEDIAL ACTION REPORT

1.0 INTRODUCTION

In accordance with Section VI of Consent Decree No. 10-2-01900-3 and Section 7 of the 2010 Cleanup Action Plan, this report summarizes the remedial action conducted at the "Bordeaux Dump Site" located within the Hytec-Littlerock Site. The Hytec-Littlerock Site is located on property in a rural area of Thurston County southwest of Littlerock, Washington (see Figure 1). The Bordeaux Dump Site is shown in Figures 1 and 2 and is located within property in the East ½ of the NW ¼ of Section 9, Township 16 North, Range 3 West of the Willamette Meridian. The Bordeaux Dump Site area is accessed via Halo-Kuntux Lane, a private gated road connecting to Bordeaux Road on the southern boundary of the property.

Ecology prepared a Cleanup Action Plan (CAP, Ecology 2010a) requiring specific remedial actions at the Bordeaux Dump Site. The remedial actions were initiated at the Bordeaux Dump Site during 2011 including groundwater well installation and monitoring in 2012. The results of the remedial actions are presented in this report.

1.1 Site History

Regulatory History. The Washington Department of Ecology (Ecology) issued Agreed Order No. 2888 requiring the Potentially Liable Persons (PLPs) to perform a Remedial Investigation/Feasibility Study (RI/FS) and to prepare a draft Cleanup Action Plan (CAP) for the Hytec-Littlerock property which, at that time, was defined as a 44-acre parcel. The RI/FS Work Plan was finalized in March 2006 (CALIBRE, 2006a) and the RI/FS Report was finalized in August 2007.

Based on the Site characterization results from the RI/FS Report (CALIBRE 2007), Ecology concluded that there are two distinct smaller "sites" within the 44-acre property. The two sites are the (1) Fiberglass Debris Landfill Site, and (2) the Bordeaux Dump (including an adjacent area with a single rusted drum). This Remedial Action Report is limited to the remedial action conducted at the Bordeaux Dump Site (Site) in accordance with the applicable Bordeaux Dump CAP. The Remedial Action Report for the Fiberglass Debris Landfill Site has been prepared and submitted under separate cover.

An old dump (generally thought to be a small historic disposal area from the Town of Bordeaux, circa 1900-1930) is present on the Site. The location and extent of this suspect area was determined using historical photographs, geophysical studies, and characterization studies conducted during the RI. Also during the investigation, a small adjacent area with a single rusted drum (labeled as the "Rusted Drum area") was identified adjacent to the Bordeaux Dump Site. For the purposes of this remedial action report, the two adjacent areas are combined as

the Bordeaux Dump Site. Figure 2 shows the property and parcel boundaries and the Bordeaux Dump Site layout.

In December 2009 Ecology completed a draft CAP for the Bordeaux Dump Site. The draft CAP was submitted for public comment and a final CAP was issued in August 2010 (Ecology 2010a). Upon completion of the Bordeaux Dump CAP, the PLPs (Chauncey and Elizabeth Lufkin [Lufkins]), signed a consent decree with Ecology regarding implementation of the Bordeaux Dump Site CAP. The consent decree was entered in Thurston County Superior Court on 20 August 2010. Following public notification, Ecology completed a SEPA Determination of non-significance (DNS) for the planned remedial actions (Ecology 2010b).

Based on the final Bordeaux Dump CAP, a Remedial Action Work Plan (RAWP) (CALIBRE 2011a) for the Bordeaux Dump Site was prepared to meet the Model Toxics Control Act (MTCA) requirements listed in Washington Administrative Code (WAC) 173-340-400 (and other related sections of WAC 173-340) and the CAP. The Bordeaux Dump Site RAWP was submitted in November 2010 and approved by Ecology in January 2011 (CALIBRE 2011a).

Site History. The Lufkin's purchased the entire 44-acre parcel in July 1975. The 44-acre parcel was subdivided in 1998 and included four, five-acre parcels on the west side of Halo Kuntux Lane and a 24-acre parcel on the east side Halo Kuntux Lane also including the existing gravel pit along Bordeaux Road. The 24-acre parcel is undeveloped and wooded except for several dirt roads.

Two of the five-acre parcels were purchased by Mr. and Mrs. Pavlicek and two were purchased by Mr. and Mrs. Monte. The Monte's subsequently sold the two northern most 5-acre parcels; one to Ms. Morgan in 2002, and one to Mr. and Mrs. Spears in 2002 (see Figure 2). Two houses are present on the western side of the property, the Morgan home and the Pavlicek home. Groundwater wells have been installed for domestic purposes for both homes. Two wells exist on the Morgan property (only one is in use) and one well exists on the Pavlicek property.

1.2 Organization of This Report

This Remedial Action Report has been prepared to meet the MTCA requirements listed in WAC 173-340-840. The scope and level of detail required for this summary report has been tailored to the site-specific conditions and the nature and complexity of the cleanup actions conducted.

This report is organized as follows:

Section 1: Introduction, Site history, Organization of Report, and Selected Remedial Action Alternative
Section 2: Construction: Remedial Action Goals, Site Characteristics, Excavation, Restoration, and Monitoring Wells

Section 3: Monitoring: Protection Monitoring, and Sampling for Performance Monitoring
Section 4: Recommendations
Section 5: References

Appendix A	Load Sheets and Manifests
Appendix B	Laboratory Data Reports
Appendix C	Burn Permit
Appendix D	Well Construction Logs
Appendix E	Well Sample Data Sheets
Appendix F	Photographs

The following appendix will be added when completed.

Appendix G	Quarterly Monitoring Addendum - January 2013

1.3 Selected Remedial Action Alternative

Five cleanup alternatives for the Site were presented and discussed in the Feasibility Study (FS) (CALIBRE 2007). Alternative 5, Excavation and Off-Site Disposal or Recycling was the remedial action selected by Ecology in the Final CAP for the Bordeaux Dump Site (Ecology 2010a).

2.0 CONSTRUCTION

This section presents a summary of the remedial action goals, site characteristics, a narrative of the construction activities undertaken to achieve the remedial action goals, restoration activities completed after the construction phase was complete, and the installation of the new well.

2.1 Remedial Action Goals

As detailed in the Bordeaux Dump CAP, the goals of the cleanup action were:

1. Remove contaminated fill at the Bordeaux Dump Site and include the adjacent area with a single rusted drum ("the rusted drum area").
2. Remediate the soil to meet MTCA B criteria (through excavation and off-site disposal).
3. Collect additional groundwater monitoring data to verify that site groundwater is not impacted at levels that exceed MTCA B criteria (use as potable water supply).

2.2 Site Characteristics

The general characteristics of the Site are summarized in the RI/FS (CALIBRE 2007) and the CAP (Ecology 2010a). This section presents a brief overview site conditions relevant to the remedial actions implemented; for a more detailed discussion of the site geology and

hydrogeology, see the RI/FS report (CALIBRE 2007). General details for the Bordeaux Dump Site include:

- Filled area, roughly circular shape approximately 100 feet in diameter (about 1/3 acre), depth of debris/discoloration in soil less than 2 feet, samples of fill (mixture of soil and limited debris) exceed MTCA B standards.
- Soil beneath filled area - sampling indicated all soil samples collected beneath the fill to be at concentrations below MTCA B standards (volatile organic compounds (VOCs), semi volatile organic compounds (SVOCs), polychlorinated biphenyls (PCBs), and metals.

Key details of the characterization studies related to the Bordeaux Dump Site groundwater include the following:

- Groundwater in the area of the Site is used as a potable water supply. Three private water-supply wells are in the nearby area. The Morgan and Spears private wells are screened in the bedrock. The third water-supply well (Pavlicek well) is screened in the glacial outwash gravel. All of these water-supply wells are located up-gradient of the Bordeaux Dump Site.
- Groundwater cleanup levels in the CAP are based on the MTCA Method A or Method B criteria. The CAP has compared the Site chemicals of concern (COCs) with the applicable groundwater cleanup levels.
- The RI included sampling of the nearby supply wells (multiple times) and an additional onetime grab sample (direct push probe sampling) directly beneath the filled area. Based on the existing data (i.e., data collected in the RI and historical data collected previously), the concentrations of substances detected in groundwater around and beneath the Bordeaux Dump Site have not exceeded the applicable MTCA cleanup levels (i.e., the groundwater sampling results meet the MTCA standards for use as a potable water supply).

2.3 Excavation

Property access from the property owner (Lufkins) was received for implementing the required remedial actions prior to site mobilization. A utility clearance was performed before operating any equipment at the site. The excavation phase of the project began in July 2011 by clearing and grubbing the Bordeaux Dump Site including an adjacent laydown/staging area. The area cleared (for the Bordeaux Dump Site) was roughly oval shaped approximately 110 feet by 80 feet, the cleared area for the rusted drum was a rectangle approximately 10 feet by 12 feet, and the laydown/staging area was a square approximately 100 feet on a side. All trees, brush, and other surface vegetation was removed and piled in the staging area. The ground surface was leveled in the staging area and a silt fence was erected along the down slope edge of the clearing (topographic slope). Photographs of excavation activities are presented in Appendix F.

All debris and discolored soil down to native soil (based on visual inspection) was excavated from the Bordeaux Dump Site and consolidated in a waste pile staging area. The amount of material removed was approximately 520 cubic yards. All excavated materials were placed on

plastic sheeting in the staging area. An additional six-inch lift of soil was excavated from underneath the initial excavated area where debris and discolored soil were present (and had been removed) and consolidated into a separate pile in the staging area (on visqueen sheeting). The additional excavated soil total was approximately 100 cubic yards. All soil and debris piles in the staging area were covered with visqueen sheeting.

After receiving results from confirmation sampling of the excavation (see Section 3 Monitoring), one grid unit in the Bordeaux Dump Site indicated metals exceeding the cleanup thresholds (for both lead and zinc). Another lift of soil (between 6 and 8 inches thick) was excavated from this grid unit and placed on the debris pile in the staging area.

Sampling and analyses were conducted on the bulk soil/debris pile in the staging area (see Section 3). After analytical results confirmed the material was not hazardous, the soil and debris was loaded on trucks and transported to a permitted landfill located near Castle Rock, WA. In all, 26 truck and trailer loads totaling 862.4 tons were transported to the landfill (see Appendix A for load sheets).

2.4 Restoration

All excavations at the Bordeaux Dump Site were backfilled using material that was excavated from a nearby borrow pit on the 24- acre property. The RI included soil sampling in the borrow area which demonstrated that soils from the borrow pit were clean (meeting MTCA B standards for residential soil). The backfill was moderately compacted at one-foot intervals with a roller.

All trees, brush, and other surface vegetation that were removed during clearing and grubbing activities were burned on site. A burn permit was obtained from the Olympic Region Clean Air Agency (ORCAA) prior to burning activities (see Appendix C).

Following backfill operations, a harrow was used to smooth the surface of all disturbed areas (all areas cleared, excavated and backfilled). These areas were then seeded with a mix of locally adapted grasses and legumes, followed by a second pass with the harrow. Follow-on visual inspections (completed in March, July and September 2012) showed good germination and established vegetation on all restored areas.

2.5 Monitoring Well Installation

On 29 February 2012, one monitoring well (HLMW-07A) was drilled and constructed in the southwest portion of the Bordeaux Dump Site. The well was advanced to a total depth of 59 feet below ground surface (bgs) through the sandy gravel alluvium, bottoming out in a stiff grey clay.

Well construction consisted of 20 feet of capped 20-slot 2-inch polyvinylchloride (PVC) screen with centralizers set at 57 feet bgs inside the 6-inch temporary steel casing, followed by 2-inch

PVC solid pipe topped with a well plug at 2 feet above the ground surface. The filter pack around the screen consisted of 15 bags (50 pound) of Carmeuse 10x20 Colorado silica sand poured into the annular space between the well casing and the temporary steel casing as the temporary casing was being withdrawn to a point 34.5 feet bgs. The filter pack was sealed using 3 buckets (50 pound) of Cetco ¼-inch coated bentonite pellets to 27 feet bgs followed by 7 bags (50 pound) of Perma Plug bentonite granules to 1 foot bgs. A 6-inch steel protective casing with locking cap was placed 2 ½ feet into the ground over the well casing and was filled with silica sand to within 6 inches of the top of the well casing. The well construction log is presented in Appendix E. Three bollards were set around the monitoring well. The static water level was measured at 28 feet bgs at the time of drilling.

The well was developed using a Waterra pump with ¾-inch tubing, foot valve, and surge block attached to the foot valve. This development procedure entails simultaneous pumping and surging to remove fines from the filter pack and nearby formation. Through this development process, 50 gallons were purged from monitoring well HLMW-07A.

3.0 MONITORING

This section describes the compliance monitoring conducted in accordance with the RAWP: protection monitoring for the protection of human health (Section 3.1) and performance monitoring to confirm the cleanup action has attained cleanup standards (Section 3.2); and conformational groundwater monitoring to confirm the long-term effectiveness of the cleanup action (Section 3.3).

3.1 Protection Monitoring

The protection monitoring included use of a photoionization detector (PID) to ensure that workers did not encounter atmosphere with potentially unsafe levels of vapors in the breathing zone (see the Health and Safety plan [CALIBRE 2006b]). The PID was also used to screen the one drum (from the “rusted drum area”) for the presence of volatiles.

Visual monitoring was performed continually to determine when/if levels of airborne dust had increased. When dusty conditions were apparent a water trailer was used for dust suppression/control.

3.2 Sampling for Performance Monitoring

Sampling for performance monitoring has included collecting soil samples to confirm that all contaminated soil and debris had been removed from the excavated area, soil samples taken from the borrow source area to ensure that backfill materials were clean, and groundwater sampling to ensure that the groundwater was not impacted. Additional sampling was completed as a waste characterization step (of the excavated stockpiles and different from the performance monitoring) that was required for the waste disposal decisions/acceptance at the disposal landfill.

3.2.1 Cleanup Levels and Points of Compliance for Soil and Groundwater

For soil cleanup levels based on protection of groundwater, the point of compliance is soil throughout the Site. For soil cleanup levels based on human exposure or ecological exposure (i.e., via direct contact or other exposure pathways where contact with the soil is required), the standard point of compliance is all soil throughout the Site to a depth of fifteen feet bgs. This is based on the estimated depth of soil that could be excavated and distributed at the soil surface as a result of Site development activities. The cleanup levels from the CAP for soils at the Site are presented in Table 3-1.

Groundwater at and around the Site is used as a potable water supply. The property is zoned residential and all cleanup levels for protection of human health are based on residential exposure scenarios (typically the highest frequency of exposure and therefore requiring the lowest cleanup levels). Groundwater cleanup levels are based on the MTCA Method A, or Method B if there is no Method A value for a specific COC. The points of compliance for groundwater are all the groundwater monitoring wells specified in the CAP compliance monitoring plan (HLMW-07A).

Additional information on these Ecology approved cleanup levels and how they were derived are presented in Table 3-1, in the RAWP (CALIBRE 2011a), and in Technical Memorandum Recommended Cleanup Level for Cadmium in Soil at the Hytec Littlerock Site following MTCA Procedures in WAC 173-340-740 and WAC 173-340-747 (CALIBRE 2011b).

The points of compliance for soil sampling in the excavated areas were the most discolored sites within each gridded unit or, as a default, the center of each gridded unit when no discoloration can be discerned. The point of compliance for groundwater sampling was well HLMW-7A. Figure 3 shows the Bordeaux Dump Site compliance monitoring sample locations.

3.2.2 Sampling from Excavation

After excavation of the Bordeaux Dump Site, grab soil samples were collected from each of the 12 grid units marked off in the bottom of the excavation and a single sample, BDX-13-080211, was collected from the bottom of the rusted drum excavation. Figure 3 shows the depths (bgs) at which each sample was taken. The samples were analyzed for total metals by Environmental Protection Agency (EPA) Method 6020. All analytical results were background level and below cleanup thresholds except sample BDX-04-080211 showed lead at 456 mg/kg and zinc at 288 mg/kg. This single grid area was subsequently excavated deeper.

Sample BDX-17-080411 was collected from the bottom of the excavation in the area that had additional soil removed after receiving the original set of analytical results. Analytical results were below the approved cleanup standards in the CAP. Table 3-3 presents all of the analytical

results for the Bordeaux Dump Site. Complete laboratory data reports are contained in Appendix B.

3.2.3 Sampling from Backfill Borrow Source

The Site RI/FS (CALIBRE 2007) included sampling on a grid pattern over the base of the gravel pit and all sample result were below all applicable MTCA Method B standards for all analytes (metals, SVOCs, VOCs, and fuel related compounds). Excavated backfill materials all came from native glacial outwash from the borrow source. The borrow sampling and analytical results from the RI/FS are presented in Appendix B.

3.2.4 Waste Characterization Sampling

Three composite samples were taken from the Bordeaux Dump debris stockpile and three composite samples were taken from the Bordeaux Dump soil stockpile. The three Bordeaux Dump debris stockpile samples were analyzed for Toxic Characteristics Leaching Procedure (TCLP) Resource Conservation and Recovery Act (RCRA) 8 metals using EPA Method 1311 to characterize the waste for disposal. The sampling procedures (i.e., composite samples rather than grab samples), number of samples, and analytes required for analysis were specified by the Landfill in accordance with their procedures and permitting requirements. The three Bordeaux Dump soil stockpile samples were analyzed for total metals by EPA Method 6020. Laboratory analytical results showed all samples acceptable for disposal of the stockpiles in the permitted landfill.

3.3 Confirmational Groundwater Monitoring

Groundwater is being sampled from monitoring well HLMW-7A on a quarterly basis in accordance with the CAP. Results from the first three quarters of groundwater sampling are included in this report. Results from later sampling events will be reported under separate cover as addendums to this remedial action report.

3.3.1 March 2012 Sampling Event

Groundwater was sampled from monitoring well HLMW-7A on 22 March 2012 using a Waterra pump with dedicated tubing and a foot valve. Depth to water was measured at 29.08 feet below the top of the casing. During well purging, water quality parameters were collected at five minute intervals. Purging continued until the water quality parameters had stabilized. The final water quality parameters were:

Volume purged	3.5 gallons
Temperature	7.3^{o} C
Conductivity	0.071 micro Siemens per centimeter
Dissolved oxygen	8.07 milligrams per liter
pH	6.3

Oxidation/reduction potential (ORP)	399 millivolts
Turbidity	104 Nephelometric Turbidity Units

Field notes recorded on the well sample data sheet are presented in Appendix E. The water sample from the well was analyzed for SVOCs by EPA method 8270, total metals by EPA method 200.8, and mercury by EPA method 245.1. The only SVOC detected was bis(2-ethylhexyl) phthalate at 1.89 micrograms per liter (ug/L), which is below the MCL of 6 ug/L. Analyses for total metals showed detections for antimony, arsenic, beryllium, cadmium, chromium, copper, lead, nickel, tin and zinc. None of the total metal detections exceeded MCLs (or MTCA Method B criteria). The laboratory analytical report is presented in Appendix B.

3.3.2 July 2012 Sampling Event

Groundwater was sampled from monitoring well HLMW-7A on 11 July 2012 using a Waterra pump with dedicated tubing and a foot valve. Depth to water was measured at 43.97 feet below the top of the casing. During well purging, water quality parameters were taken at five minute intervals. Purging continued until the water quality parameters had stabilized. Field notes recorded on the well sample data sheet are presented in Appendix E. The final water quality parameters were:

Volume purged	4.5 gallons
Temperature	8.9 ^{o}C
Conductivity	0.061 micro Siemens per centimeter
Dissolved Oxygen	not available
pH	5.7
Oxidation/reduction potential (ORP)	255 millivolts
Turbidity	709 Nephelometric Turbidity Units

The sample from the well was analyzed for SVOCs by EPA method 8270C, total metals by EPA method 200.8, and mercury by EPA method 245.1. The SVOC di-n-butyl phthalate was found at 1.52 ug/L, below the MTCA Method B value of 1,600 ug/L. Butyl benzyl phthalate was also found at a concentration of 1 ug/L, below the MTCA Method B value of 46 ug/L. Analyses for total metals showed detections for antimony, arsenic, beryllium, cadmium, chromium, copper, lead, nickel, tin, and zinc. None of the total metal detections (as total metals) exceeded their respective MCLs (or MTCA Method B criteria). The laboratory analytical report is presented in Appendix B.

3.3.3 September 2012 Sampling Event

Groundwater was sampled from monitoring well HLMW-7A on 27 September 2012 using a Waterra pump with dedicated tubing and a foot valve. Depth to water was measured at 50 feet below the top of the casing. During well purging, water quality parameters were taken at five minute intervals. Purging continued until the water quality parameters had stabilized. Field

notes recorded on the well sample data sheet are presented in Appendix E. The final water quality parameters were:

Volume purged	4.0 gallons
Temperature	8.7 ^{o}C
Conductivity	0.063 micro Siemens per centimeter
Dissolved Oxygen	12.09 milligrams per liter
pH	5.0
Oxidation/reduction potential (ORP)	232 millivolts
Turbidity	>999 Nephelometric Turbidity Units

The sample from the well was analyzed for SVOCs by EPA method 8270C, total metals by EPA method 200.8, and mercury by EPA method 245.1. Analyses for total metals showed detections for antimony, arsenic, beryllium, cadmium, chromium, copper, lead, nickel, and zinc. None of the total metal detections exceeded their respective MCLs (or MTCA Method B criteria). The laboratory analytical report is presented in Appendix B.

A total of six SVOCs were reported as "J" flagged (noted as above the method detection limit [MDL], but below the reporting limit). Bis(2-ethylhexyl) phthalate was reported at 0.246 ug/L which is below the MTCA Method B value of 6 ug/L. Butyl benzyl phthalate was reported at 0.21 ug/L, below the MTCA Method B value of 46 ug/L. Dibutyl phthalate was reported at 0.6 ug/L, below the MTCA Method B value of 1,600 ug/L. Diethyl phthalate was reported at 0.125 ug/L, also below the MTCA Method B value of 13,000 ug/L. Bis(2-ethylhexyl)adipate was reported at 0.0846 ug/L, which is below the EPA MCL of 400ug/L and also below the MTCA Method B criterion of 73 ug/L [this compound, bis(2-ethylhexyl)adipate is also known as di(2-ethylhexyl) adipate and several other synonyms]. Di-n-octyl phthalate was reported at 0.0539 ug/L; this compound does not have a MTCA cleanup level or EPA MCL because no toxicity data have been published in IRIS by EPA. Other public health agencies (e.g., ATSDR[1]) have reviewed the toxicity data related to Di-n-octyl phthalate (ATDSR 2012) and published a minimal risk level (MRL) of 0.4 mg/kg/dy (for Di-n-octyl phthalate). MRLs are published by ATSDR to serve as a

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

screening tool to help public health professionals evaluate sites and are not intended as an a cleanup standard. Using the standard MTCA risk based formulas, an MRL of 0.4 mg/kg/dy would correspond with a drinking water screening level of 6,400 ug/L (for Di-n-octyl phthalate, using a body weight of 16 kg [for a child] and a drinking water ingestion rate of 1 L/dy).

These exact same compounds [bis(2-ethylhexyl) phthalate, butyl benzyl phthalate, dibutyl phthalate, diethyl phthalate, di-n-octyl phthalate, and bis(2-ethylhexyl)adipate] were also detected in the method blank analysis reported by the laboratory (sample identification MB-3545). These compounds are common laboratory contaminants at trace levels and the method blank sample indicated concentrations similar to (and sometimes exceeding) the groundwater sample for these compounds. The sampling results for these six analytes are therefore rejected ("R" flagged) but the results are still described in this report for completeness.

4.0 RECOMMENDATIONS

The remedial action conducted at the Bordeaux Dump Site has been completed in substantial compliance with the Final Remedial Action Plan (CALIBRE 2011a) and the Final Cleanup Action Plan for the Bordeaux Dump Site (Ecology 2010a). Quarterly samples should be taken again in January 2013 from the site well. If the results from this last quarterly sampling event do not show any detections above the MCLs (or other applicable MTCA criteria), then a site closure request should be submitted to Ecology.

5.0 REFERENCES

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

CALIBRE 2006a, Remedial Investigation/Feasibility Study Work Plan, Hytec – Littlerock Site, Halo-Kuntux Lane, Littlerock, Washington. March 2006.

CALIBRE 2006b. Health and Safety Plan, Hytec-Littlerock Site, Olympia, Washington. February 2006.

CALIBRE 2007. Remedial Investigation/Feasibility Study Report, Hytec – Littlerock Site, Halo-Kuntux Lane, Littlerock, Washington. August 2007.

CALIBRE 2011a, Final Remedial Action Plan for Bordeaux Dump Site Landfill, Hytec-Littlerock Site, Halo-Kuntux Lane, Littlerock, Washington. January, 2011.

CALIBRE 2011b. Technical Memorandum Recommended Cleanup Level for Cadmium in Soil at the Hytec Littlerock Site following MTCA Procedures in WAC 173-340-740 and WAC 173-340-747. February 2011.

Ecology 2009. Draft Cleanup Action Plan for Bordeaux Dump Site, Halo-Kuntux Lane, Littlerock Washington. Prepared by: Washington State Department of Ecology, Southwest Regional Office, Toxics Cleanup Program. December 2009.

Ecology 2010a. Final Cleanup Action Plan for Bordeaux Dump Site, Halo-Kuntux Lane, Littlerock Washington. Prepared by: Washington State Department of Ecology, Southwest Regional Office, Toxics Cleanup Program. August 2010.

Ecology 2010b. SEPA Determination of non-significance (DNS), Washington State Department of Ecology, Southwest Regional Office. June 2010.

TABLES

Table 3-1 Soil Cleanup Levels from Cleanup Action Plan, Bordeaux Dump Area

Chemicals of Concern	Highest Concentration Measured (mg/kg)	MTCA Soil Cleanup Level (mg/kg)	90% Natural Background (mg/kg)[3]	Ecological Criteria for Unrestricted Land Use (mg/kg)[4]
Lead	940	250[1]	-	**220**
Copper	110	577[2]	-	**100**
Selenium	9.5	5.2[2]	**3.2**	0.8
Arsenic	7.7	20[1]	-	**20**
Cadmium	4.1	**2.0[5]**	-	25
Zinc	1,200	5,970**[2]**	-	**270**
Antimony	6.1	**5.4[2]**	-	-
Motor Oil (>C24-C36)	2,000	**2,000**		

Values presented in **Bold font** are the applicable soil cleanup levels at the Point of Compliance, unless noted otherwise based on footnotes listed above.

[1] MTCA Methods A or B Soil Cleanup Levels for unrestricted land use.
[2] Soil-to-groundwater values calculated by equation 747-1 in WAC 173-340.
[3] 90% Natural Background, calculated by WAC 173-340-709.
[4] Criteria for unrestricted future use, Table 749-2 of WAC 173-340.
[5] Soil cleanup threshold level from MTCA Method A determined to be most appropriate for the site in Technical Memorandum Recommended Cleanup Level for Cadmium in Soil at the Hytec Littlerock Site following MTCA Procedures in WAC 173-340-740 and WAC 173-340-747 (CALIBRE 2011b).

Table 3-2 Soil Cleanup Levels and Chemicals of Concern, Rusted Drum Area

Chemicals of Concern	Highest Concentration Measured, mg/kg	MTCA Soil Cleanup Level, mg/kg	Ecological Criteria for Unrestricted Land Use, mg/kg[(2)]
Cadmium	3.1	**2.0**[(3)]	25
Zinc	450	5970[(1)]	**270**

Values presented in **Bold font** are the applicable soil cleanup levels at the Point of Compliance, unless noted otherwise based on footnotes listed above.

[(1)] Soil-to-groundwater values calculated by equation 747-1 in the MTCA.
[(2)] Criteria for unrestricted future use, Table 749-2 of the MTCA.
[(3)] Soil cleanup threshold level from MTCA Method A determined to be most appropriate for the site in Technical Memorandum Recommended Cleanup Level for Cadmium in Soil at the Hytec Littlerock Site following MTCA Procedures in WAC 173-340-740 and WAC 173-340-747 (CALIBRE 2011b).

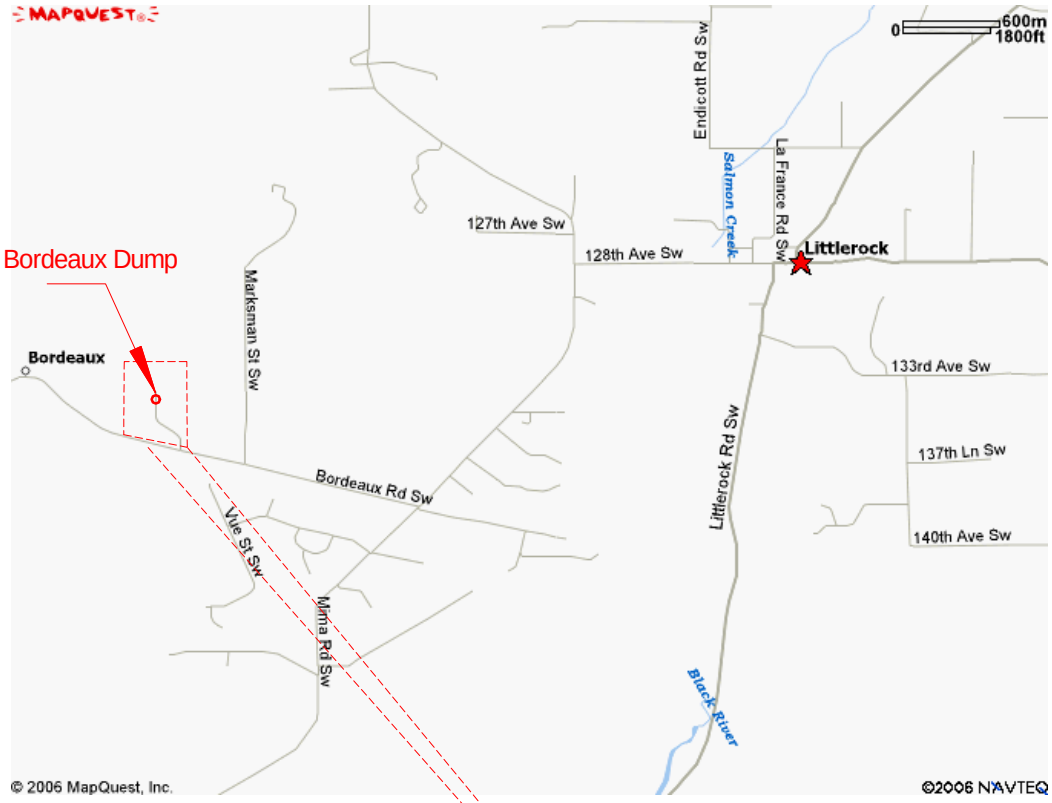
Table 3-3 Bordeaux Dump Site Analytical Data

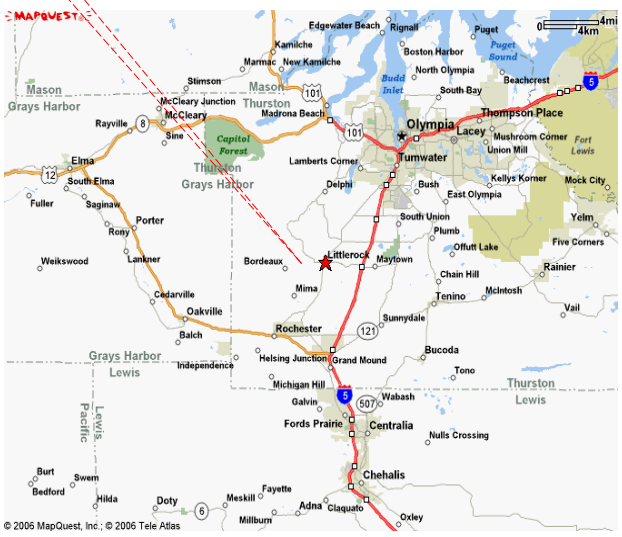
Sample Number	Sample Location	Antimony mg/kg	Arsenic mg/kg	Cadmium mg/kg	Copper mg/kg	Lead mg/kg	Selenium mg/kg	Zinc mg/kg
BDX-01-080211	grid unit 1	ND	1.76	0.207	15.1	2.73	ND	57.1
BDX-02-080211	grid unit 2	ND	1.83	0.357	14.1	3.57	ND	33.2
BDX-03-080211	grid unit 3	ND	2.01	0.271	21.3	2.96	ND	31.2
BDX-04-080211*	grid unit 4	0.598	4.44	1.37	51.7	**456**	ND	**288**
BDX-05-080211	grid unit 5	ND	1.6	0.305	15.7	3.87	ND	25.1
BDX-06-080211	grid unit 6	ND	1.54	0.296	13.7	3.91	ND	25
BDX-07-080211	grid unit 7	ND	2.15	0.458	16.1	39.5	ND	59.1
BDX-08-080211	grid unit 8	ND	1.96	0.313	12.9	10.6	ND	29.4
BDX-09-080211	grid unit 9	ND	1.75	0.23	20.7	14.7	ND	52.7
BDX-10-080211	grid unit 10	ND	1.99	0.206	18.7	7.04	ND	30.4
BDX-11-080211	grid unit 11	ND	1.75	0.512	14.9	4.3	ND	84.3
BDX-12-080211	grid unit 12	0.242	2.66	0.822	25.4	99.3	ND	194
BDX-13-080211	drum area	ND	2.29	0.441	12.1	13.1	ND	67.2
BDX-17-080411**	grid unit 4	ND	1.18	ND	14.6	2.68	ND	19.8
BDX-14-080411	soil stockpile	ND	3.3	0.396	23.6	53.4	ND	167
BDX-15-080411	soil stockpile	ND	2.77	0.235	22.1	7.51	ND	101
BDX-16-080411	soil stockpile	ND	3.73	0.262	26.2	25	ND	84.9
Waste Characterization TCLP Analysis for Disposal mg/L								
			Arsenic mg/L	Cadmium mg/L		Lead mg/L	Selenium mg/L	
BSP 1	debris stockpile		ND	ND		1.42	ND	
BSP 2	debris stockpile		ND	ND		ND	ND	
BSP 3	debris stockpile		ND	ND		ND	ND	

***** Initial sample from grid unit 4, addition excavation was completed in this area after receipt of sampling results

****** Resample of grid unit 4 after added excavation

FIGURES





Scale varies

N

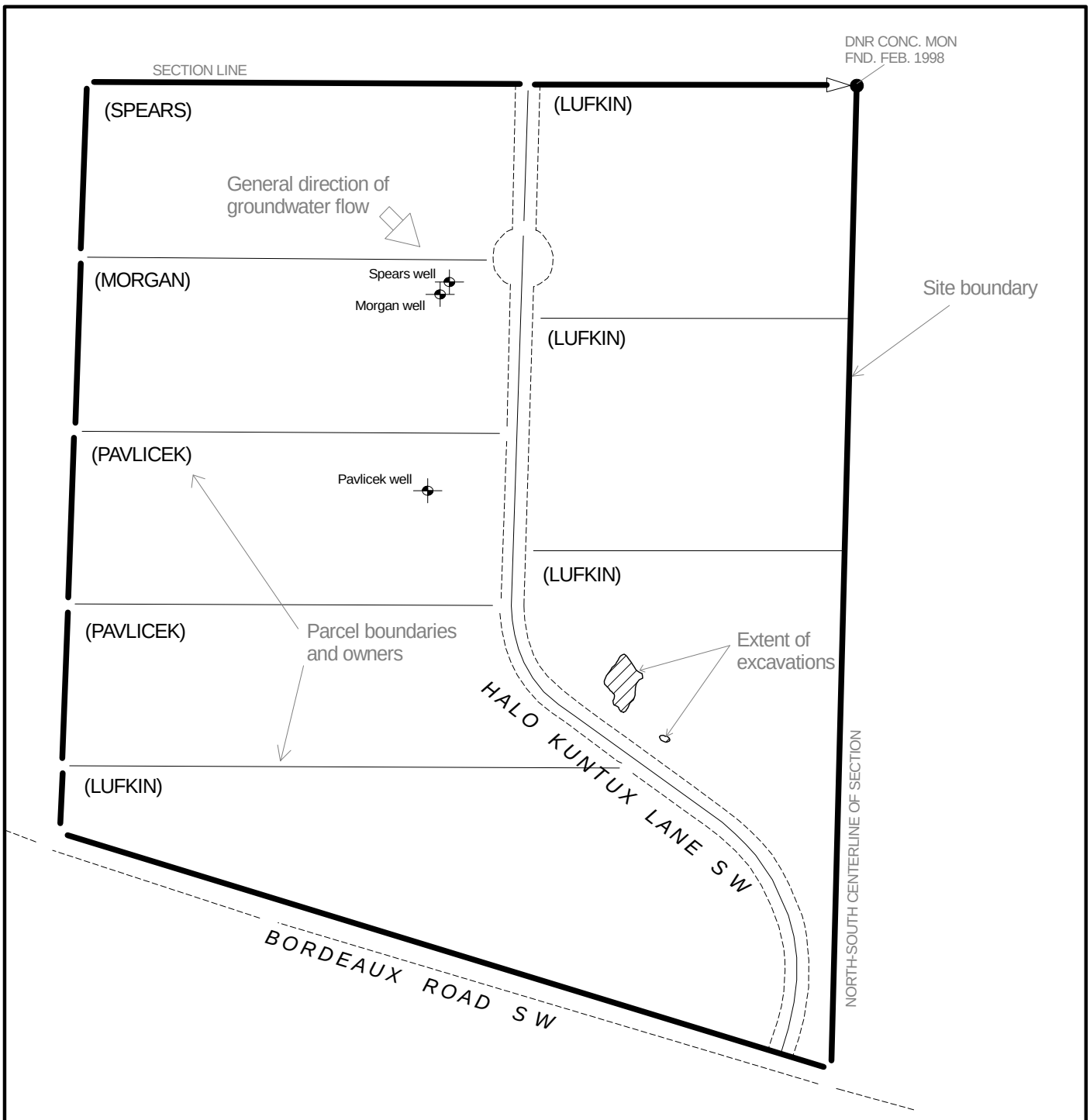
CALIBRE

Calibre Systems
16935 SE 39th St
Bellevue, WA 98008

REVISION NO.:	DATE:	ACAD FILE:
0	11/16/2012	Fig1_BD_Location_20120329.SKF

Bordeaux Dump Site
Location and Vicinity

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



Area Excavated and Sampled

(LUFKIN) Property Owner

0 100 200 300 400 500 FEET

N

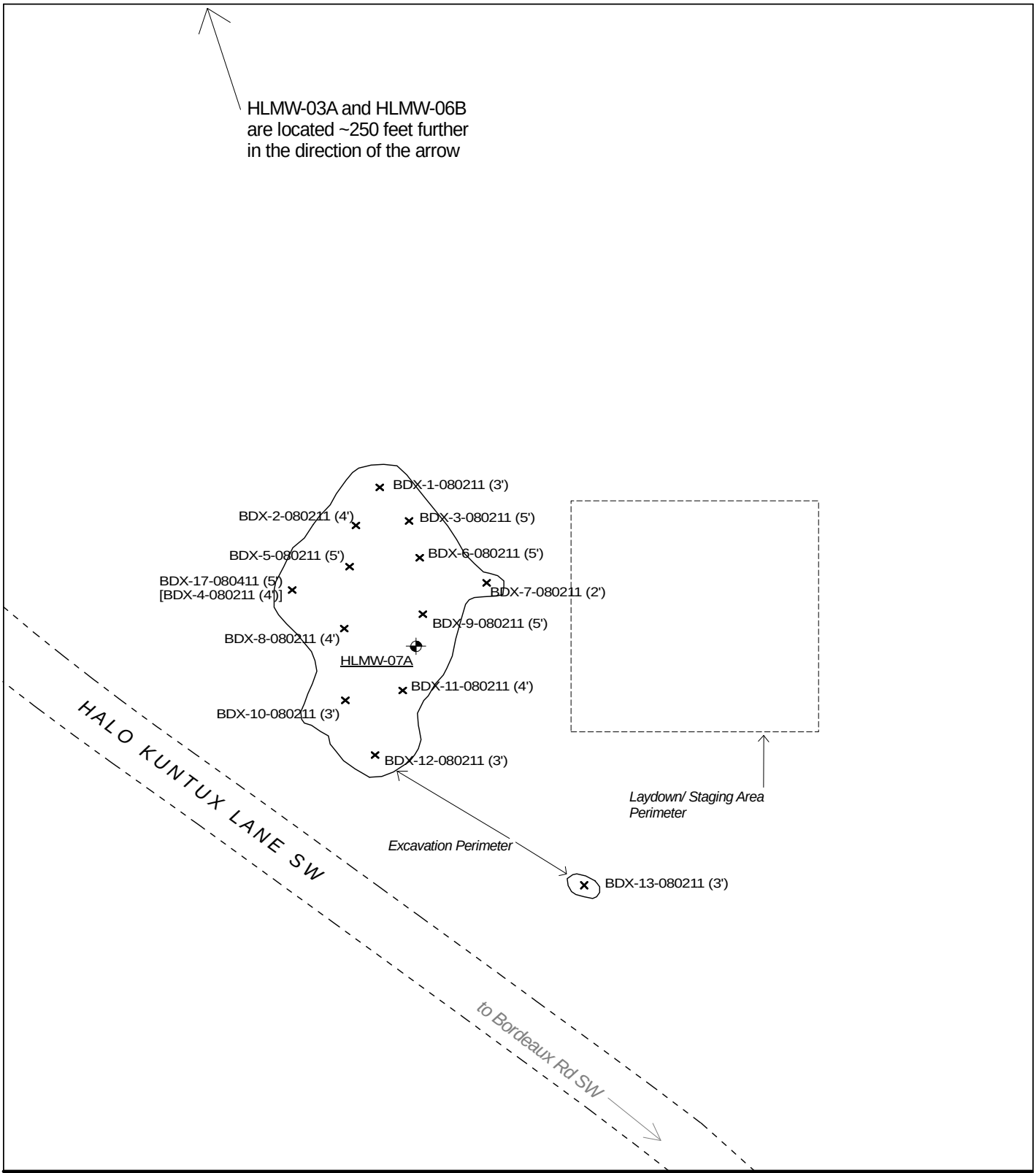
CALIBRE

Calibre Systems
16935 SE 39th St
Bellevue, WA 98008

REVISION NO.:	DATE:	ACAD FILE:
0	3/29/2012	Fig2_BD_Site_Parcels_20120329.SKF

Bordeaux Dump Site
and Property Boundaries

DES'D:	LOCATION:	PROJECT NO.:
MM	Littlerock, WA	K0308000
CHK'D: JD		FIGURE: 2



× Sample Location

(3') Depth of Excavation (ft bgs)

Groundwater Monitoring Well

0 50 100 150 FEET

N

CALIBRE

Calibre Systems
16935 SE 39th St
Bellevue, WA 98008

REVISION NO.:	DATE:	ACAD FILE:
0	11/30/2012	Fig3_BD_Excavat_Sample_20120329.SKF

Bordeaux Dump Site Compliance
Monitoring Sample Locations and Depths

DES'D:	LOCATION:	PROJECT NO.:
MM	Littlerock, WA	K0308000
CHK'D: JD		FIGURE: 3

APPENDIX A

Load Sheets

Gallagher, Chris

From: Heltemes, Lisa <lisa.heltemes@weyerhaeuser.com>
Sent: Monday, August 15, 2011 9:26 AM
To: McKeon, Tom
Subject: Calibre - Thurston County Job Load Summary
Attachments: Calibre Load Summary_Log Sheets 08 08 11 thru 08 12 11.pdf

Tom,

Please see attachment for a load summary and truck log sheet entries for the loads delivered from Calibre – Thurston County Job to Weyerhaeuser Landfill during the week of Aug 8-12.

Thanks,

Lisa Heltemes
Landfill Office Administrator
Weyerhaeuser Co. - Castle Rock, WA
(360) 274-6492

http://www.weyerhaeuser.com/

Weyerhaeuser
The future is growing™

Landfill
3434 South Silver Lake Rd
Castle Rock WA 98611
Tel (360) 274 6492
Fax (360) 274 6393

LOAD SUMMARY

CALIBRE - Thurston County Job

Week of 8/8/2011 thru 8/12/2011

DATE	TIME	CUSTOMER	HAULER, DRIVER, TRUCK#	GROSS WGT (LBS)	TARE WGT (LBS)	NET WGT (LBS)	TICKET #
8/8/2011	10:05A	Calibre	En-Co - Dustin - #23	110,720	37,700	73,020	95114016
8/8/2011	10:05A	Calibre	Barnes - Jamie - #9	101,140	41,200	59,940	95114015
8/8/2011	1:40P	Calibre	En-Co - Dustin - #23	101,340	37,700	63,640	95114032
8/8/2011	1:40P	Calibre	Barnes - Jamie - #9	116,700	41,000	75,700	95114031
8/9/2011	6:00A	Calibre	Barnes - Jamie - #9	107,680	41,000	66,680	95114050
8/9/2011	9:28A	Calibre	Jayme Barnes tru. - #9	101,080	41,000	60,080	95114062
8/9/2011	9:35A	Calibre	En-Co - Dustin - #23	106,100	37,700	68,400	95114063
8/9/2011	10:45A	Calibre	Adventure - Richard - #1	103,100	41,100	62,000	95114071
8/9/2011	12:48P	Calibre	Jayme Barnes tru. - #9	103,540	41,000	62,540	95114075
8/9/2011	1:00P	Calibre	En-Co - #23	105,680	37,700	67,980	95114076
8/9/2011	2:10P	Calibre	Adventure - Richard - #1	101,700	41,100	60,600	95114079
8/10/2011	6:00A	Calibre	En-Co - Dustin - #23	103,900	37,700	66,200	95114085
8/10/2011	6:00A	Calibre	Jayme Barnes tru. - #9	107,560	41,000	66,560	95114084
8/10/2011	8:55A	Calibre	En-Co - Dustin - #23	105,560	37,700	67,860	95114106
8/10/2011	9:00A	Calibre	Jamie Barnes - #9	103,460	41,000	62,460	95114107
8/10/2011	12:30P	Calibre	En-Co - Dustin - #23	106,680	37,700	68,980	95114119
8/10/2011	12:35P	Calibre	Jayme Barnes tru. - #9	113,760	41,000	72,760	95114120
8/11/2011	6:00A	Calibre	Jayme Barnes tru. - #9	108,280	41,000	67,280	95114149
8/11/2011	6:00A	Calibre	En-Co - Dustin - #23	101,180	37,700	63,480	95114135
8/11/2011	9:47A	Calibre	Jayme Barnes tru. - #9	107,420	41,000	66,420	95114158
8/11/2011	9:47A	Calibre	En-Co - Dustin - #23	106,060	37,700	68,360	95114161
8/11/2011	12:21P	Calibre	Jayme Barnes tru. - #9	108,600	41,000	67,600	95114174
8/11/2011	12:21P	Calibre	En-Co - Dustin - #23	103,940	37,700	66,240	95114175
8/12/2011	6:15A	Calibre	En-Co - Dustin - #23	102,240	37,700	64,540	95114190
8/12/2011	10:05A	Calibre	En-Co - Dustin - #23	106,080	37,700	68,380	95114202
8/12/2011	1:40P	Calibre	En-Co - Dustin - #23	104,800	37,700	67,100	951142210

Total Load Count:	**26**	**Total Net Weight (LBS):**	**1,724,800**
		Total Net Weight (TONS):	**862.4**

APPENDIX B

Sample Laboratory Reports

The sample laboratory reports included had originally contained additional information not related to this report, and have been modified to only include information and analyses from the Bordeaux Dump Site.

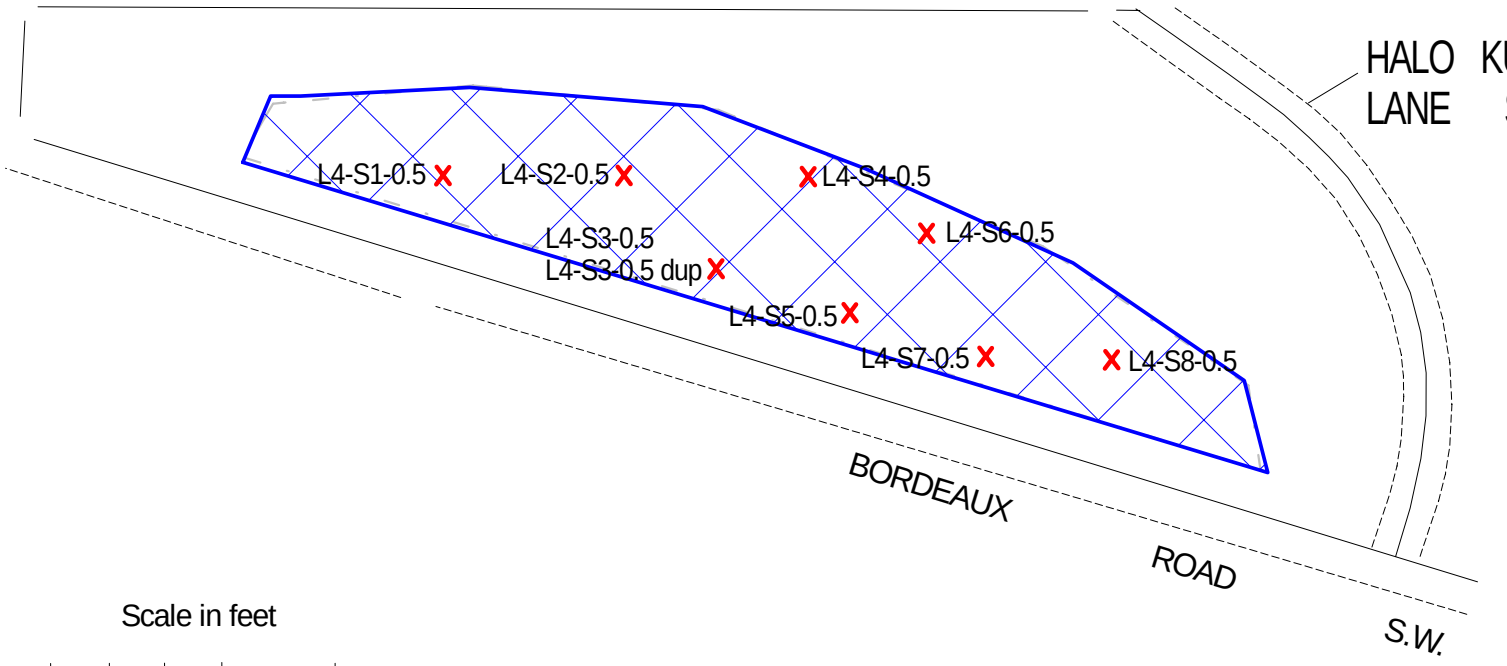
Sampling Results from Gravel Pit Area

All related lab sheets are posted in the Hytec RI/FS

Summary of Field Notes from Gravel Pit (L4) Soil Sampling, Hytec Littlerock Site, February 20, 2007

Location ID	PID Reading (ppmv)	Sample ID(s)	Analyses Requested	Location of Sample	Location (test pit) Description	Comments (all deeper samples were marked as "HOLD - do not analyze")
L4-S1	0.02	L4-S1-0.5 L4-S1-1.5	PP Metals & TPH-HCID	In middle of open space near entry of gravel pit	Gray-brown GW. Gravel to 5" little to no growth of grass, only a bit of moss above	
L4-S2		L4-S2-0.5	PP Metals & TPH-HCID	18' S of tire, 12' S of beginning of slope rise	Gray brown GW w/ thin orange clay layer. Gravel to 6"	Deep sample not collected b/c water table was 1" below the surface.
L4-S3	0.06	L4-S3-0.5 L4-S3-0.5 dup L4-S3-1.0	PP Metals, TPH-HCID, SVOCs, PCBs, & VOCs	At low spot where bushes narrow path through gravel pit (adjacent to south bushes). Puddles nearby drain into hole.		Duplicate collected of sample L4-S3-0.5, analyzed for PP Metals only. Saturated at 6", hole refilled shortly after collecting sample.
L4-S4	0.10	L4-S4-0.5 L4-S4-1.0	PP Metals, TPH-HCID, SVOCs, PCBs, & VOCs	Adjacent to shrubby trees. Can see water level dropped ~ 4' here (based on water staining color on surrounding vegetation).	Dark brown GW top 4", 4" Orange clay layer below & bottom 4" is tan gravel GW. Clay layer appears thicker on N side of hole.	Background PID reading up to 0.08 ppmv
L4-S5	0.11	L4-S5-0.5 L4-S5-1.0	PP Metals, TPH-HCID, SVOCs, PCBs, & VOCs	Adjacent to two large trees in S portion of open area.	Gray brown GW. Gravel rounded.	Background PID reading to 0.1 ppmv
L4-S6	0.10	L4-S6-0.5 L4-S6-1.0	PP Metals & TPH-HCID	At base of 25-30' hill slope, N side of open area. Between shooting targets (~4' SE & 7'W of rusty targets, likely appliances)	Tan/brown gray GW	
L4-S7	0.07	L4-S7-0.5 L4-S7-1.0	PP Metals & TPH-HCID	Adjacent to water stained vegetation on S side of open area. Three feet E of old tire.	Brown sandy gravel. Rounded gravel to 5". Darker brown peat	
L4-S8	0.20	L4-S8-0.5 L4-S8-1.0	PP Metals & TPH-HCID	On old road to gravel pit from east. 25' W of car bodies.	Thick grassy vegetative material covered surface above hole. Roots in top 6" of gravel. Tan gray GW, rounded gravel to 4". <5% fines.	

Collected 16 samples at gravel pit at Hytec from 8 locations. Brief descriptions of all 8 locations and samples collected are provided in above table. After collecting samples, all holes were logged. Site was checked to ensure all materials had been collected, and samples were repacked in cooler with double bagged ice. Samples were taken to STL-Seattle (Fife). Katie at STL collected samples @ 5:15. Ecology was notified before sampling was conducted and after sampling was completed.



Scale in feet

0 50 100 150 250

N

Gravel Pit Soil Sampling Locations, Hytec-Littlerock Remedial Investigation

× Surface/subsurface Soil Sampling Locations

CALIBRE Systems 16935 SE 39th St, Bellevue WA 98008 ph: 423 643 4634

Project: K0088000
File: Gravel Pit Soil Sampling Locations
Hytec-Littlerock Site: 3/16/07

Summary of VOCs Detected in Soils Samples from Gravel Pit
February 2007

Sample ID	Method	Analyte	Result	Unit	Flag	RL	MDL
L4-S3-0.5	8260B	1,2-Dichloropropane	5.5	ug/Kg	J	9.1	2.8
L4-S5-0.5	8260B	1,2-Dichloropropane	3.4	ug/Kg	J	8.2	2.6

	1,2-Dichloropropane	
MTCA method B standard for residental contact	15,000	ug/Kg
MTCA method B standard for leaching to groundwater	26	ug/Kg

all other VOCs at ND
RL is the reporting limit
MDL is the method detection limit
"J" data qualifier flag indicates analyte detected above MDL but less than RL, and is estimated.

Summary of SVOCs Detected in Soils Samples from Gravel Pit
February 2007

Sample ID	Method	Analyte	Result	Unit	Flag	RL	MDL
L4-S3-0.5	8270C	Benzofluoranthene	15	ug/Kg	J	49	12
L4-S3-0.5	8270C	Di-n-butyl phthalate	23	ug/Kg	J	250	16
L4-S3-0.5	8270C	Fluoranthene	8.3	ug/Kg	J	25	3.8
L4-S3-0.5	8270C	Pyrene	10	ug/Kg	J	25	3.3
L4-S4-0.5	8270C	Benzo[a]anthracene	32	ug/Kg		29	7.6
L4-S4-0.5	8270C	Benzo[a]pyrene	41	ug/Kg		35	10
L4-S4-0.5	8270C	Benzo[g,h,i]perylene	32	ug/Kg		29	8.6
L4-S4-0.5	8270C	Benzofluoranthene	60	ug/Kg		47	12
L4-S4-0.5	8270C	Chrysene	39	ug/Kg		29	8.8
L4-S4-0.5	8270C	Dibenz(a,h)anthracene	20	ug/Kg	J	47	14
L4-S4-0.5	8270C	Fluoranthene	47	ug/Kg		23	3.6
L4-S4-0.5	8270C	Indeno[1,2,3-cd]pyrene	35	ug/Kg	J	47	14
L4-S4-0.5	8270C	Phenanthrene	16	ug/Kg	J	23	4.7
L4-S4-0.5	8270C	Pyrene	48	ug/Kg		23	3.2

RL is the reporting limit

MDL is the method detection limit

"J" data qualifier flag indicates analyte detected above MDL but less than RL, and is estimated.

Summary of Metals Detected in Soils Samples from Gravel Pit
February 2007

Sample ID	Method	Analyte	Result	Unit	Flag	RL	MDL
L4-S1-0.5	6010B	Antimony	0.91	mg/Kg	J	2.4	0.12
L4-S1-0.5	6010B	Antimony	1.1	mg/Kg	J	2.5	0.13
L4-S1-0.5	6010B	Arsenic	0.952	mg/Kg	J	2.4	0.21
L4-S1-0.5	6010B	Arsenic	0.87	mg/Kg	J	2.5	0.22
L4-S1-0.5	6010B	Beryllium	0.108	mg/Kg		0.048	0.0012
L4-S1-0.5	6010B	Beryllium	0.11	mg/Kg		0.05	0.0013
L4-S1-0.5	6010B	Cadmium	0.0551	mg/Kg	J	0.24	0.0039
L4-S1-0.5	6010B	Cadmium	0.06	mg/Kg	J	0.25	0.0041
L4-S1-0.5	6010B	Chromium	16.1	mg/Kg		0.48	0.01
L4-S1-0.5	6010B	Chromium	18	mg/Kg		0.5	0.011
L4-S1-0.5	6010B	Copper	26.5	mg/Kg		0.48	0.026
L4-S1-0.5	6010B	Copper	25	mg/Kg		0.5	0.027
L4-S1-0.5	6010B	Lead	3.23	mg/Kg		0.72	0.038
L4-S1-0.5	6010B	Lead	3.9	mg/Kg		0.75	0.039
L4-S1-0.5	7471A	Mercury	0.011	mg/Kg	J	0.02	0.0088
L4-S1-0.5	6010B	Nickel	20.8	mg/Kg		0.48	0.016
L4-S1-0.5	6010B	Nickel	22	mg/Kg		0.5	0.017
L4-S1-0.5	6010B	Selenium	1.65	mg/Kg	J	2.4	0.2
L4-S1-0.5	6010B	Selenium	1.7	mg/Kg	J	2.5	0.21
L4-S1-0.5	6010B	Silver	<0.5	mg/Kg		0.48	0.014
L4-S1-0.5	6010B	Thallium	<2.5	mg/Kg		2.4	0.24
L4-S1-0.5	6010B	Zinc	29	mg/Kg		1.5	0.061
L4-S2-0.5	6010B	Antimony	2.7	mg/Kg	J	3.1	0.16
L4-S2-0.5	6010B	Arsenic	0.8	mg/Kg	J	3.1	0.27
L4-S2-0.5	6010B	Beryllium	0.1	mg/Kg		0.061	0.0016
L4-S2-0.5	6010B	Cadmium	0.078	mg/Kg	J	0.31	0.005
L4-S2-0.5	6010B	Chromium	29	mg/Kg		0.61	0.013
L4-S2-0.5	6010B	Copper	55	mg/Kg		0.61	0.033
L4-S2-0.5	6010B	Lead	83	mg/Kg		0.92	0.048
L4-S2-0.5	7471A	Mercury	0.02	mg/Kg	J	0.022	0.0099
L4-S2-0.5	6010B	Nickel	24	mg/Kg		0.61	0.021
L4-S2-0.5	6010B	Selenium	3.3	mg/Kg		3.1	0.26
L4-S2-0.5	6010B	Zinc	47	mg/Kg		1.8	0.075
L4-S3-0.5	6010B	Antimony	1.3	mg/Kg	J	3	0.15
L4-S3-0.5	6010B	Arsenic	1.8	mg/Kg	J	3	0.26
L4-S3-0.5	6010B	Beryllium	0.15	mg/Kg		0.059	0.0015
L4-S3-0.5	6010B	Cadmium	0.052	mg/Kg	J	0.3	0.0049
L4-S3-0.5	6010B	Chromium	17	mg/Kg		0.59	0.013
L4-S3-0.5	6010B	Copper	43	mg/Kg		0.59	0.032
L4-S3-0.5	6010B	Lead	32	mg/Kg		0.89	0.047
L4-S3-0.5	7471A	Mercury	0.059	mg/Kg		0.018	0.0079
L4-S3-0.5	6010B	Nickel	19	mg/Kg		0.59	0.02
L4-S3-0.5	6010B	Selenium	2	mg/Kg	J	3	0.25
L4-S3-0.5	6010B	Zinc	45	mg/Kg		1.8	0.072
L4-S3-0.5 Dup	6010B	Antimony	1.2	mg/Kg	J	2.6	0.13
L4-S3-0.5 Dup	6010B	Arsenic	1.4	mg/Kg	J	2.6	0.23
L4-S3-0.5 Dup	6010B	Beryllium	0.14	mg/Kg		0.053	0.0014
L4-S3-0.5 Dup	6010B	Cadmium	0.022	mg/Kg	J	0.26	0.0043
L4-S3-0.5 Dup	6010B	Chromium	15	mg/Kg		0.53	0.011

Sample ID	Method	Analyte	Result	Unit	Flag	RL	MDL
L4-S3-0.5 Dup	6010B	Copper	40	mg/Kg		0.53	0.028
L4-S3-0.5 Dup	6010B	Lead	31	mg/Kg		0.79	0.042
L4-S3-0.5 Dup	7471A	Mercury	0.022	mg/Kg	J	0.023	0.01
L4-S3-0.5 Dup	6010B	Nickel	20	mg/Kg		0.53	0.018
L4-S3-0.5 Dup	6010B	Selenium	1.6	mg/Kg	J	2.6	0.22
L4-S3-0.5 Dup	6010B	Zinc	44	mg/Kg		1.6	0.064
L4-S4-0.5	6010B	Antimony	2.1	mg/Kg	J	2.6	0.13
L4-S4-0.5	6010B	Arsenic	2.3	mg/Kg	J	2.6	0.23
L4-S4-0.5	6010B	Beryllium	0.3	mg/Kg		0.052	0.0013
L4-S4-0.5	6010B	Cadmium	0.046	mg/Kg	J	0.26	0.0043
L4-S4-0.5	6010B	Chromium	34	mg/Kg		0.52	0.011
L4-S4-0.5	6010B	Copper	43	mg/Kg		0.52	0.028
L4-S4-0.5	6010B	Lead	45	mg/Kg		0.78	0.041
L4-S4-0.5	7471A	Mercury	0.037	mg/Kg		0.022	0.0099
L4-S4-0.5	6010B	Nickel	26	mg/Kg		0.52	0.017
L4-S4-0.5	6010B	Selenium	3.3	mg/Kg		2.6	0.22
L4-S4-0.5	6010B	Zinc	45	mg/Kg		1.6	0.063
L4-S5-0.5	6010B	Antimony	1.3	mg/Kg	J	2.4	0.12
L4-S5-0.5	6010B	Arsenic	1.8	mg/Kg	J	2.4	0.22
L4-S5-0.5	6010B	Beryllium	0.17	mg/Kg		0.048	0.0012
L4-S5-0.5	6010B	Cadmium	0.018	mg/Kg	J	0.24	0.004
L4-S5-0.5	6010B	Chromium	16	mg/Kg		0.48	0.01
L4-S5-0.5	6010B	Copper	24	mg/Kg		0.48	0.026
L4-S5-0.5	6010B	Lead	9.5	mg/Kg		0.73	0.038
L4-S5-0.5	7471A	Mercury	0.04	mg/Kg		0.016	0.0074
L4-S5-0.5	6010B	Nickel	18	mg/Kg		0.48	0.016
L4-S5-0.5	6010B	Selenium	1.9	mg/Kg	J	2.4	0.2
L4-S5-0.5	6010B	Zinc	31	mg/Kg		1.5	0.059
L4-S6-0.5	6010B	Antimony	1.4	mg/Kg	J	2.3	0.12
L4-S6-0.5	6010B	Arsenic	1.4	mg/Kg	J	2.3	0.21
L4-S6-0.5	6010B	Beryllium	0.1	mg/Kg		0.046	0.0012
L4-S6-0.5	6010B	Cadmium	0.05	mg/Kg	J	0.23	0.0038
L4-S6-0.5	6010B	Chromium	12	mg/Kg		0.46	0.0099
L4-S6-0.5	6010B	Copper	22	mg/Kg		0.46	0.025
L4-S6-0.5	6010B	Lead	130	mg/Kg		0.7	0.036
L4-S6-0.5	6010B	Nickel	17	mg/Kg		0.46	0.016
L4-S6-0.5	6010B	Selenium	1.3	mg/Kg	J	2.3	0.2
L4-S6-0.5	6010B	Zinc	24	mg/Kg		1.4	0.057
L4-S7-0.5	6010B	Antimony	1	mg/Kg	J	1.9	0.098
L4-S7-0.5	6010B	Arsenic	1.8	mg/Kg	J	1.9	0.17
L4-S7-0.5	6010B	Beryllium	0.23	mg/Kg		0.039	0.001
L4-S7-0.5	6010B	Cadmium	0.087	mg/Kg	J	0.19	0.0032
L4-S7-0.5	6010B	Chromium	15	mg/Kg		0.39	0.0083
L4-S7-0.5	6010B	Copper	27	mg/Kg		0.39	0.021
L4-S7-0.5	6010B	Lead	15	mg/Kg		0.58	0.031
L4-S7-0.5	7471A	Mercury	0.024	mg/Kg		0.019	0.0087
L4-S7-0.5	6010B	Nickel	19	mg/Kg		0.39	0.013
L4-S7-0.5	6010B	Selenium	2	mg/Kg		1.9	0.16
L4-S7-0.5	6010B	Zinc	33	mg/Kg		1.2	0.047
L4-S8-0.5	6010B	Antimony	0.68	mg/Kg	J	2.6	0.13
L4-S8-0.5	6010B	Arsenic	0.93	mg/Kg	J	2.6	0.23
L4-S8-0.5	6010B	Beryllium	0.092	mg/Kg		0.052	0.0013

Sample ID	Method	Analyte	Result	Unit	Flag	RL	MDL
L4-S8-0.5	6010B	Cadmium	0.022	mg/Kg	J	0.26	0.0043
L4-S8-0.5	6010B	Chromium	9	mg/Kg		0.52	0.011
L4-S8-0.5	6010B	Copper	16	mg/Kg		0.52	0.028
L4-S8-0.5	6010B	Lead	7.4	mg/Kg		0.78	0.041
L4-S8-0.5	7471A	Mercury	0.028	mg/Kg		0.019	0.0085
L4-S8-0.5	6010B	Nickel	16	mg/Kg		0.52	0.017
L4-S8-0.5	6010B	Selenium	1.1	mg/Kg	J	2.6	0.22
L4-S8-0.5	6010B	Zinc	20	mg/Kg		1.6	0.063

RL is the reporting limit

MDL is the method detection limit

"J" data qualifier flag indicates analyte detected above MDL but less than RL, and is estimated.

"<" indicates the analyte was not detected.

Summary of PCBs in Soils Samples from Gravel Pit
February 2007

Sample ID	Method	Analyte	Result	Unit	Flag	RL	MDL
L4-S3-0.5	8082	PCB-1016	ND	mg/Kg		0.12	0.068
L4-S3-0.5	8082	PCB-1221	ND	mg/Kg		0.12	0.068
L4-S3-0.5	8082	PCB-1232	ND	mg/Kg		0.12	0.068
L4-S3-0.5	8082	PCB-1242	ND	mg/Kg		0.12	0.068
L4-S3-0.5	8082	PCB-1248	ND	mg/Kg		0.12	0.068
L4-S3-0.5	8082	PCB-1254	ND	mg/Kg		0.12	0.018
L4-S3-0.5	8082	PCB-1260	ND	mg/Kg		0.12	0.018
L4-S4-0.5	8082	PCB-1016	ND	mg/Kg		0.11	0.066
L4-S4-0.5	8082	PCB-1221	ND	mg/Kg		0.11	0.066
L4-S4-0.5	8082	PCB-1232	ND	mg/Kg		0.11	0.066
L4-S4-0.5	8082	PCB-1242	ND	mg/Kg		0.11	0.066
L4-S4-0.5	8082	PCB-1248	ND	mg/Kg		0.11	0.066
L4-S4-0.5	8082	PCB-1254	ND	mg/Kg		0.11	0.017
L4-S4-0.5	8082	PCB-1260	ND	mg/Kg		0.11	0.017
L4-S5-0.5	8082	PCB-1016	ND	mg/Kg		0.11	0.062
L4-S5-0.5	8082	PCB-1221	ND	mg/Kg		0.11	0.062
L4-S5-0.5	8082	PCB-1232	ND	mg/Kg		0.11	0.062
L4-S5-0.5	8082	PCB-1242	ND	mg/Kg		0.11	0.062
L4-S5-0.5	8082	PCB-1248	ND	mg/Kg		0.11	0.062
L4-S5-0.5	8082	PCB-1254	ND	mg/Kg		0.11	0.016
L4-S5-0.5	8082	PCB-1260	ND	mg/Kg		0.11	0.016

RL is the reporting limit

MDL is the method detection limit

"ND" indicates the analyte was not detected.

Summary of TPH in Soils Samples from Gravel Pit
February 2007

Sample ID	Method	Analyte	Result	Unit	Flag	RL
L4-S1-0.5	NWTPH-HCID	#2 Diesel (>C12-C24)	ND	mg/Kg		53
L4-S1-0.5	NWTPH-HCID	Gasoline	ND	mg/Kg		21
L4-S1-0.5	NWTPH-HCID	Motor Oil	ND	mg/Kg		110
L4-S2-0.5	NWTPH-HCID	#2 Diesel (>C12-C24)	ND	mg/Kg		57
L4-S2-0.5	NWTPH-HCID	Gasoline	ND	mg/Kg		23
L4-S2-0.5	NWTPH-HCID	Motor Oil	ND	mg/Kg		110
L4-S3-0.5	NWTPH-HCID	#2 Diesel (>C12-C24)	ND	mg/Kg		62
L4-S3-0.5	NWTPH-HCID	Gasoline	ND	mg/Kg		25
L4-S3-0.5	NWTPH-HCID	Motor Oil	ND	mg/Kg		120
L4-S4-0.5	NWTPH-HCID	#2 Diesel (>C12-C24)	ND	mg/Kg		57
L4-S4-0.5	NWTPH-HCID	Gasoline	ND	mg/Kg		23
L4-S4-0.5	NWTPH-HCID	Motor Oil	ND	mg/Kg		110
L4-S5-0.5	NWTPH-HCID	#2 Diesel (>C12-C24)	ND	mg/Kg		54
L4-S5-0.5	NWTPH-HCID	Gasoline	ND	mg/Kg		22
L4-S5-0.5	NWTPH-HCID	Motor Oil	ND	mg/Kg		110
L4-S6-0.5	NWTPH-HCID	#2 Diesel (>C12-C24)	ND	mg/Kg		52
L4-S6-0.5	NWTPH-HCID	Gasoline	ND	mg/Kg		21
L4-S6-0.5	NWTPH-HCID	Motor Oil	ND	mg/Kg		100
L4-S7-0.5	NWTPH-HCID	#2 Diesel (>C12-C24)	ND	mg/Kg		50
L4-S7-0.5	NWTPH-HCID	Gasoline	ND	mg/Kg		20
L4-S7-0.5	NWTPH-HCID	Motor Oil	ND	mg/Kg		100
L4-S8-0.5	NWTPH-HCID	#2 Diesel (>C12-C24)	ND	mg/Kg		52
L4-S8-0.5	NWTPH-HCID	Gasoline	ND	mg/Kg		21
L4-S8-0.5	NWTPH-HCID	Motor Oil	ND	mg/Kg		100

RL is the reporting limit

"ND" indicates the analyte was not detected.

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info@fremontanalytical.com

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

RE: Bordeaux
Lab ID: 1108009

August 05, 2011

Attention Tom McKeon:

Fremont Analytical, Inc. received 13 sample(s) on 8/3/2011 for the analyses presented in the following report.

Total Metals by EPA Method 6020

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,

Michelle Clements
Sr. Chemist / Lab Manager

CC:
Grant Dawson
Justin Neste

Date: *08/05/2011*

CLIENT: Calibre
Project: Bordeaux
Lab Order: 1108009

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
1108009-001	BDX-01-080211	08/02/2011 11:50 AM	08/03/2011 8:30 AM
1108009-002	BDX-02-080211	08/02/2011 11:53 AM	08/03/2011 8:30 AM
1108009-003	BDX-03-080211	08/02/2011 11:56 AM	08/03/2011 8:30 AM
1108009-004	BDX-04-080211	08/02/2011 12:00 PM	08/03/2011 8:30 AM
1108009-005	BDX-05-080211	08/02/2011 12:04 PM	08/03/2011 8:30 AM
1108009-006	BDX-06-080211	08/02/2011 12:08 PM	08/03/2011 8:30 AM
1108009-007	BDX-07-080211	08/02/2011 12:12 PM	08/03/2011 8:30 AM
1108009-008	BDX-08-080211	08/02/2011 12:16 PM	08/03/2011 8:30 AM
1108009-009	BDX-09-080211	08/02/2011 12:20 PM	08/03/2011 8:30 AM
1108009-010	BDX-10-080211	08/02/2011 12:24 PM	08/03/2011 8:30 AM
1108009-011	BDX-11-080211	08/02/2011 12:28 PM	08/03/2011 8:30 AM
1108009-012	BDX-12-080211	08/02/2011 12:30 PM	08/03/2011 8:30 AM
1108009-013	BDX-13-080211	08/02/2011 12:35 PM	08/03/2011 8:30 AM

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

Case Narrative

WO#: **1108009**
Date: **8/5/2011**

CLIENT: Calibre
Project: Bordeaux

I. SAMPLE RECEIPT:
All samples were received intact.

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

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

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

Analytical Report

WO#: **1108009**
Date Reported: **8/5/2011**

Client: Calibre
Collection Date: 8/2/2011 11:50:00 AM
Project: Bordeaux
Lab ID: 1108009-001
Matrix: Soil
Client Sample ID: BDX-01-080211

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Total Metals by EPA Method 6020				Batch ID: 907		Analyst: MC
Antimony	ND	0.164		mg/Kg-dry	1	8/4/2011 2:42:51 PM
Arsenic	1.76	0.0818		mg/Kg-dry	1	8/4/2011 2:42:51 PM
Cadmium	0.207	0.164		mg/Kg-dry	1	8/4/2011 2:42:51 PM
Copper	15.1	0.164		mg/Kg-dry	1	8/4/2011 2:42:51 PM
Lead	2.73	0.164		mg/Kg-dry	1	8/4/2011 2:42:51 PM
Selenium	ND	0.409		mg/Kg-dry	1	8/4/2011 2:42:51 PM
Zinc	57.1	0.327		mg/Kg-dry	1	8/4/2011 2:42:51 PM

Qualifiers:

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

Analytical Report

WO#: **1108009**
Date Reported: **8/5/2011**

Client: Calibre
Collection Date: 8/2/2011 11:53:00 AM
Project: Bordeaux
Lab ID: 1108009-002
Matrix: Soil
Client Sample ID: BDX-02-080211

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Total Metals by EPA Method 6020				Batch ID: 907		Analyst: MC
Antimony	ND	0.155		mg/Kg-dry	1	8/4/2011 2:42:51 PM
Arsenic	1.83	0.0774		mg/Kg-dry	1	8/4/2011 2:42:51 PM
Cadmium	0.357	0.155		mg/Kg-dry	1	8/4/2011 2:42:51 PM
Copper	14.1	0.155		mg/Kg-dry	1	8/4/2011 2:42:51 PM
Lead	3.57	0.155		mg/Kg-dry	1	8/4/2011 2:42:51 PM
Selenium	ND	0.387		mg/Kg-dry	1	8/4/2011 2:42:51 PM
Zinc	33.2	0.309		mg/Kg-dry	1	8/4/2011 2:42:51 PM

Qualifiers:

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

Analytical Report

WO#: **1108009**
Date Reported: **8/5/2011**

Client: Calibre
Collection Date: 8/2/2011 11:56:00 AM
Project: Bordeaux
Lab ID: 1108009-003
Matrix: Soil
Client Sample ID: BDX-03-080211

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Total Metals by EPA Method 6020				Batch ID: 907		Analyst: MC
Antimony	ND	0.162		mg/Kg-dry	1	8/4/2011 2:42:51 PM
Arsenic	2.01	0.0808		mg/Kg-dry	1	8/4/2011 2:42:51 PM
Cadmium	0.271	0.162		mg/Kg-dry	1	8/4/2011 2:42:51 PM
Copper	21.3	0.162		mg/Kg-dry	1	8/4/2011 2:42:51 PM
Lead	2.96	0.162		mg/Kg-dry	1	8/4/2011 2:42:51 PM
Selenium	ND	0.404		mg/Kg-dry	1	8/4/2011 2:42:51 PM
Zinc	31.2	0.323		mg/Kg-dry	1	8/4/2011 2:42:51 PM

Qualifiers:

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

Analytical Report

WO#: **1108009**
Date Reported: **8/5/2011**

Client: Calibre
Collection Date: 8/2/2011 12:00:00 PM
Project: Bordeaux
Lab ID: 1108009-004
Matrix: Soil
Client Sample ID: BDX-04-080211

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Total Metals by EPA Method 6020				Batch ID: 907		Analyst: MC
Antimony	0.598	0.160		mg/Kg-dry	1	8/4/2011 2:42:51 PM
Arsenic	4.44	0.0798		mg/Kg-dry	1	8/4/2011 2:42:51 PM
Cadmium	1.31	0.160		mg/Kg-dry	1	8/4/2011 2:42:51 PM
Copper	51.7	0.160		mg/Kg-dry	1	8/4/2011 2:42:51 PM
Lead	456	0.160		mg/Kg-dry	1	8/4/2011 2:42:51 PM
Selenium	ND	0.399		mg/Kg-dry	1	8/4/2011 2:42:51 PM
Zinc	288	0.319		mg/Kg-dry	1	8/4/2011 2:42:51 PM

Qualifiers:

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

Analytical Report

WO#: **1108009**
Date Reported: **8/5/2011**

Client: Calibre
Collection Date: 8/2/2011 12:04:00 PM
Project: Bordeaux
Lab ID: 1108009-005
Matrix: Soil
Client Sample ID: BDX-05-080211

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Total Metals by EPA Method 6020				Batch ID: 907		Analyst: MC
Antimony	ND	0.146		mg/Kg-dry	1	8/4/2011 2:42:51 PM
Arsenic	1.60	0.0731		mg/Kg-dry	1	8/4/2011 2:42:51 PM
Cadmium	0.305	0.146		mg/Kg-dry	1	8/4/2011 2:42:51 PM
Copper	15.7	0.146		mg/Kg-dry	1	8/4/2011 2:42:51 PM
Lead	3.87	0.146		mg/Kg-dry	1	8/4/2011 2:42:51 PM
Selenium	ND	0.365		mg/Kg-dry	1	8/4/2011 2:42:51 PM
Zinc	25.1	0.292		mg/Kg-dry	1	8/4/2011 2:42:51 PM

Qualifiers:

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

Analytical Report

WO#: **1108009**
Date Reported: **8/5/2011**

Client: Calibre
Collection Date: 8/2/2011 12:08:00 PM
Project: Bordeaux
Lab ID: 1108009-006
Matrix: Soil
Client Sample ID: BDX-06-080211

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Total Metals by EPA Method 6020				Batch ID: 907		Analyst: MC
Antimony	ND	0.151		mg/Kg-dry	1	8/4/2011 2:42:51 PM
Arsenic	1.54	0.0756		mg/Kg-dry	1	8/4/2011 2:42:51 PM
Cadmium	0.296	0.151		mg/Kg-dry	1	8/4/2011 2:42:51 PM
Copper	13.7	0.151		mg/Kg-dry	1	8/4/2011 2:42:51 PM
Lead	3.91	0.151		mg/Kg-dry	1	8/4/2011 2:42:51 PM
Selenium	ND	0.378		mg/Kg-dry	1	8/4/2011 2:42:51 PM
Zinc	25.0	0.302		mg/Kg-dry	1	8/4/2011 2:42:51 PM

Qualifiers:

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

Analytical Report

WO#: **1108009**
Date Reported: **8/5/2011**

Client: Calibre
Collection Date: 8/2/2011 12:12:00 PM
Project: Bordeaux
Lab ID: 1108009-007
Matrix: Soil
Client Sample ID: BDX-07-080211

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Total Metals by EPA Method 6020				Batch ID: 907		Analyst: MC
Antimony	ND	0.154		mg/Kg-dry	1	8/4/2011 2:42:51 PM
Arsenic	2.15	0.0770		mg/Kg-dry	1	8/4/2011 2:42:51 PM
Cadmium	0.458	0.154		mg/Kg-dry	1	8/4/2011 2:42:51 PM
Copper	16.1	0.154		mg/Kg-dry	1	8/4/2011 2:42:51 PM
Lead	39.5	0.154		mg/Kg-dry	1	8/4/2011 2:42:51 PM
Selenium	ND	0.385		mg/Kg-dry	1	8/4/2011 2:42:51 PM
Zinc	59.1	0.308		mg/Kg-dry	1	8/4/2011 2:42:51 PM

Qualifiers:

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

Analytical Report

WO#: **1108009**
Date Reported: **8/5/2011**

Client: Calibre
Collection Date: 8/2/2011 12:16:00 PM
Project: Bordeaux
Lab ID: 1108009-008
Matrix: Soil
Client Sample ID: BDX-08-080211

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Total Metals by EPA Method 6020				Batch ID: 907		Analyst: MC
Antimony	ND	0.149		mg/Kg-dry	1	8/4/2011 2:42:51 PM
Arsenic	1.96	0.0746		mg/Kg-dry	1	8/4/2011 2:42:51 PM
Cadmium	0.313	0.149		mg/Kg-dry	1	8/4/2011 2:42:51 PM
Copper	12.9	0.149		mg/Kg-dry	1	8/4/2011 2:42:51 PM
Lead	10.6	0.149		mg/Kg-dry	1	8/4/2011 2:42:51 PM
Selenium	ND	0.373		mg/Kg-dry	1	8/4/2011 2:42:51 PM
Zinc	29.4	0.298		mg/Kg-dry	1	8/4/2011 2:42:51 PM

Qualifiers:

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

Analytical Report

WO#: **1108009**
Date Reported: **8/5/2011**

Client: Calibre
Collection Date: 8/2/2011 12:20:00 PM
Project: Bordeaux
Lab ID: 1108009-009
Matrix: Soil
Client Sample ID: BDX-09-080211

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Total Metals by EPA Method 6020				Batch ID: 907		Analyst: MC
Antimony	ND	0.161		mg/Kg-dry	1	8/4/2011 2:42:51 PM
Arsenic	1.75	0.0807		mg/Kg-dry	1	8/4/2011 2:42:51 PM
Cadmium	0.230	0.161		mg/Kg-dry	1	8/4/2011 2:42:51 PM
Copper	20.7	0.161		mg/Kg-dry	1	8/4/2011 2:42:51 PM
Lead	14.7	0.161		mg/Kg-dry	1	8/4/2011 2:42:51 PM
Selenium	ND	0.404		mg/Kg-dry	1	8/4/2011 2:42:51 PM
Zinc	52.7	0.323		mg/Kg-dry	1	8/4/2011 2:42:51 PM

Qualifiers:

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

Analytical Report

WO#: **1108009**
Date Reported: **8/5/2011**

Client: Calibre
Collection Date: 8/2/2011 12:24:00 PM
Project: Bordeaux
Lab ID: 1108009-010
Matrix: Soil
Client Sample ID: BDX-10-080211

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Total Metals by EPA Method 6020				Batch ID: 907		Analyst: MC
Antimony	ND	0.164		mg/Kg-dry	1	8/4/2011 2:42:51 PM
Arsenic	1.99	0.0822		mg/Kg-dry	1	8/4/2011 2:42:51 PM
Cadmium	0.206	0.164		mg/Kg-dry	1	8/4/2011 2:42:51 PM
Copper	18.7	0.164		mg/Kg-dry	1	8/4/2011 2:42:51 PM
Lead	7.04	0.164		mg/Kg-dry	1	8/4/2011 2:42:51 PM
Selenium	ND	0.411		mg/Kg-dry	1	8/4/2011 2:42:51 PM
Zinc	30.4	0.329		mg/Kg-dry	1	8/4/2011 2:42:51 PM

Qualifiers:

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

Analytical Report

WO#: **1108009**
Date Reported: **8/5/2011**

Client: Calibre
Collection Date: 8/2/2011 12:28:00 PM
Project: Bordeaux
Lab ID: 1108009-011
Matrix: Soil
Client Sample ID: BDX-11-080211

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Total Metals by EPA Method 6020				Batch ID: 907		Analyst: MC
Antimony	ND	0.165		mg/Kg-dry	1	8/4/2011 2:42:51 PM
Arsenic	1.75	0.0824		mg/Kg-dry	1	8/4/2011 2:42:51 PM
Cadmium	0.512	0.165		mg/Kg-dry	1	8/4/2011 2:42:51 PM
Copper	14.9	0.165		mg/Kg-dry	1	8/4/2011 2:42:51 PM
Lead	4.30	0.165		mg/Kg-dry	1	8/4/2011 2:42:51 PM
Selenium	ND	0.412		mg/Kg-dry	1	8/4/2011 2:42:51 PM
Zinc	84.3	0.330		mg/Kg-dry	1	8/4/2011 2:42:51 PM

Qualifiers:

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

Analytical Report

WO#: **1108009**
Date Reported: **8/5/2011**

Client: Calibre
Collection Date: 8/2/2011 12:30:00 PM
Project: Bordeaux
Lab ID: 1108009-012
Matrix: Soil
Client Sample ID: BDX-12-080211

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Total Metals by EPA Method 6020				Batch ID: 907		Analyst: MC
Antimony	0.242	0.155		mg/Kg-dry	1	8/4/2011 2:42:51 PM
Arsenic	2.66	0.0773		mg/Kg-dry	1	8/4/2011 2:42:51 PM
Cadmium	0.822	0.155		mg/Kg-dry	1	8/4/2011 2:42:51 PM
Copper	25.4	0.155		mg/Kg-dry	1	8/4/2011 2:42:51 PM
Lead	99.3	0.155		mg/Kg-dry	1	8/4/2011 2:42:51 PM
Selenium	ND	0.386		mg/Kg-dry	1	8/4/2011 2:42:51 PM
Zinc	194	0.309		mg/Kg-dry	1	8/4/2011 2:42:51 PM

Qualifiers:

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

Analytical Report

WO#: **1108009**
Date Reported: **8/5/2011**

Client: Calibre
Collection Date: 8/2/2011 12:35:00 PM
Project: Bordeaux
Lab ID: 1108009-013
Matrix: Soil
Client Sample ID: BDX-13-080211

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Total Metals by EPA Method 6020				Batch ID: 907		Analyst: MC
Antimony	ND	0.159		mg/Kg-dry	1	8/4/2011 2:42:51 PM
Arsenic	2.29	0.0794		mg/Kg-dry	1	8/4/2011 2:42:51 PM
Cadmium	0.441	0.159		mg/Kg-dry	1	8/4/2011 2:42:51 PM
Copper	12.1	0.159		mg/Kg-dry	1	8/4/2011 2:42:51 PM
Lead	13.1	0.159		mg/Kg-dry	1	8/4/2011 2:42:51 PM
Selenium	ND	0.397		mg/Kg-dry	1	8/4/2011 2:42:51 PM
Zinc	67.2	0.317		mg/Kg-dry	1	8/4/2011 2:42:51 PM

Qualifiers:

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

Fremont Analytical

Date: *8/5/2011*

Work Order: 1108009
CLIENT: Calibre
Project: Bordeaux

QC SUMMARY REPORT

Total Metals by EPA Method 6020

Sample ID: **MB-907** SampType: **MBLK** Units: **mg/Kg** Prep Date: **8/3/2011** RunNo: **1456**
Client ID: **MBLKS** Batch ID: **907** Analysis Date: **8/4/2011** SeqNo: **26085**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	ND	0.200									
Arsenic	ND	0.100									
Cadmium	ND	0.200									
Copper	ND	0.200									
Lead	ND	0.200									
Selenium	ND	0.500									
Zinc	ND	0.400									

Sample ID: **LCS-907** SampType: **LCS** Units: **mg/Kg** Prep Date: **8/3/2011** RunNo: **1456**
Client ID: **LCSS** Batch ID: **907** Analysis Date: **8/4/2011** SeqNo: **26086**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	2.32	0.200	2.500	0	92.7	80	120				
Arsenic	51.2	0.100	50.00	0	102	80	120				
Cadmium	2.46	0.200	2.500	0	98.4	80	120				
Copper	46.5	0.200	50.00	0	93.0	80	120				
Lead	21.9	0.200	25.00	0	87.7	80	120				
Selenium	5.54	0.500	5.000	0	111	80	120				
Zinc	53.6	0.400	50.00	0	107	80	120				

Sample ID: **1108009-001ADUP** SampType: **DUP** Units: **mg/Kg-dry** Prep Date: **8/3/2011** RunNo: **1456**
Client ID: **BDX-01-080211** Batch ID: **907** Analysis Date: **8/4/2011** SeqNo: **26088**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	ND	0.164						0	0	30	
Arsenic	2.21	0.0818						1.765	22.6	30	

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not detected at the Reporting Limit	R	RPD outside accepted recovery limits	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits				

Work Order: 1108009
CLIENT: Calibre
Project: Bordeaux

QC SUMMARY REPORT

Total Metals by EPA Method 6020

Sample ID: **1108009-001ADUP** SampType: **DUP** Units: **mg/Kg-dry** Prep Date: **8/3/2011** RunNo: **1456**
Client ID: **BDX-01-080211** Batch ID: **907** Analysis Date: **8/4/2011** SeqNo: **26088**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Cadmium	0.203	0.164						0.2067	1.72	30	
Copper	17.2	0.164						15.14	12.7	30	
Lead	2.70	0.164						2.730	1.11	30	
Selenium	ND	0.409						0	0	30	
Zinc	56.1	0.327						57.06	1.62	30	

Sample ID: **1108009-001AMS** SampType: **MS** Units: **mg/Kg-dry** Prep Date: **8/3/2011** RunNo: **1456**
Client ID: **BDX-01-080211** Batch ID: **907** Analysis Date: **8/4/2011** SeqNo: **26089**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	0.553	0.157	1.966	0.07100	24.5	75	125				S
Arsenic	27.4	0.0786	39.32	1.765	65.2	75	125				S
Cadmium	2.33	0.157	1.966	0.2067	108	75	125				
Copper	42.3	0.157	39.32	15.14	69.0	75	125				S
Lead	23.3	0.157	19.66	2.730	104	75	125				
Selenium	2.48	0.393	3.932	0	63.1	75	125				S
Zinc	87.9	0.315	39.32	57.06	78.4	75	125				

Sample ID: **1108009-001AMSD** SampType: **MSD** Units: **mg/Kg-dry** Prep Date: **8/3/2011** RunNo: **1456**
Client ID: **BDX-01-080211** Batch ID: **907** Analysis Date: **8/4/2011** SeqNo: **26090**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	0.577	0.159	1.981	0.07100	25.5	75	125	0.5533	4.13	30	S
Arsenic	30.1	0.0793	39.63	1.765	71.5	75	125	27.39	9.39	30	S
Cadmium	2.22	0.159	1.981	0.2067	101	75	125	2.329	5.01	30	
Copper	39.1	0.159	39.63	15.14	60.5	75	125	42.26	7.76	30	S

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not detected at the Reporting Limit	R	RPD outside accepted recovery limits	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits				

Work Order: 1108009
CLIENT: Calibre
Project: Bordeaux

QC SUMMARY REPORT

Total Metals by EPA Method 6020

Sample ID: **1108009-001AMSD** SampType: **MSD** Units: **mg/Kg-dry** Prep Date: **8/3/2011** RunNo: **1456**
Client ID: **BDX-01-080211** Batch ID: **907** Analysis Date: **8/4/2011** SeqNo: **26090**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	22.0	0.159	19.81	2.730	97.1	75	125	23.28	5.78	30	
Selenium	2.83	0.396	3.963	0	71.5	75	125	2.482	13.2	30	S
Zinc	80.8	0.317	39.63	57.06	59.9	75	125	87.90	8.43	30	S

Sample ID: **1108009-013ADUP** SampType: **DUP** Units: **mg/Kg-dry** Prep Date: **8/3/2011** RunNo: **1456**
Client ID: **BDX-13-080211** Batch ID: **907** Analysis Date: **8/4/2011** SeqNo: **26103**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	ND	0.159						0	0	30	
Arsenic	2.49	0.0794						2.288	8.61	30	
Cadmium	0.400	0.159						0.4414	9.90	30	
Copper	12.8	0.159						12.12	5.86	30	
Lead	14.0	0.159						13.10	6.30	30	
Selenium	ND	0.397						0	0	30	
Zinc	72.1	0.317						67.17	7.14	30	

Sample ID: **1108009-003APDS** SampType: **PDS** Units: **mg/Kg-dry** Prep Date: **8/3/2011** RunNo: **1456**
Client ID: **BDX-03-080211** Batch ID: **907** Analysis Date: **8/4/2011** SeqNo: **26119**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	4.87	0.162	2.50	0.190	93.6	75	125				
Arsenic	76.9	0.0808	50.0	4.97	71.9	75	125				S
Cadmium	5.36	0.162	2.50	0.670	93.8	75	125				
Copper	102	0.162	50.0	52.7	49.5	75	125				S
Lead	51.5	0.162	25.0	7.31	88.4	75	125				
Selenium	7.25	0.404	5.00	0.0761	71.7	75	125				S

Qualifiers:

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: *8/5/2011*

Work Order: 1108009
CLIENT: Calibre
Project: Bordeaux

QC SUMMARY REPORT

Total Metals by EPA Method 6020

Sample ID: **1108009-003APDS**	SampType: **PDS**			Units: **mg/Kg-dry**		Prep Date: **8/3/2011**		RunNo: **1456**			
Client ID: **BDX-03-080211**	Batch ID: **907**					Analysis Date: **8/4/2011**		SeqNo: **26119**			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Zinc	140	0.323	50.0	77.3	62.6	75	125				S

Sample ID: **CCV-907**	SampType: **CCV**			Units: **µg/L**		Prep Date:		RunNo: **1456**			
Client ID: **CCV**	Batch ID: **907**					Analysis Date: **8/4/2011**		SeqNo: **26120**			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	4.98	0.200	5.000	0	99.6	90	110				
Arsenic	105	0.100	100.0	0	105	90	110				
Cadmium	5.28	0.200	5.000	0	106	90	110				
Copper	97.5	0.200	100.0	0	97.5	90	110				
Lead	49.6	0.200	50.00	0	99.2	90	110				
Selenium	25.8	0.500	25.00	0	103	90	110				
Zinc	104	0.400	100.0	0	104	90	110				

NOTES:

A second Duplicate sample was analyzed. A Continuing Calibration Verification Sample (CCV) was also included demonstrating that the analysis was in control.

MS/MSD spike recovery indicate matrix interferences. The method is in control as indicated by the laboratory control sample (LCS). A Post Digestion Spike (PDS) was also analyzed, demonstrating similar matrix interferences.

Qualifiers:

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				

Fremont Analytical

Chain of Custody Record

1131 N. 35th Street
Seattle, WA 98103
Tel: 206-352-3790
Fax: 206-352-7178

Laboratory Project No (internal): 1108009

Date: 8/3/11

Page: 1 of: 3

Client: CALIBRE
Address:
City, State, Zip
Tel:

Project Name: H-Tec
Location: Little Rock, WA
Collected by: CWD

Reports To (PM): Tom McKean, Grant Dawson, Justin Neste
Fax:
Email:
Project No:

	Sample Name	Sample Date	Sample Time	Sample Type (Matrix)	VOC (EPA 8260)	BTEX	EPA 8260	EPA 8021b	Gasoline Range Organics	Hydrocarbon Identification (HCID)	Diesel/Heavy Oil Range Organics	SEMI VOL (EPA 8270)	PAH (EPA 8270 - SIM)	PCBs (EPA 8082)	Cl Pesticides (EPA 8081)	Cl Herbicides (EPA 8151A)	Metals* (6020 / 200.8)	Total (T) | Dissolved (D)	Anions (IC)**	Comments/Depth
1	BDX-01-080211	8/2/11	1150	Soil													X			
2	BDX-02-080211	8/2/11	1153	Soil													X			
3	BDX-03-080211	8/2/11	1156	Soil													X			
4	BDX-04-080211	8/2/11	1200	Soil													X			
5	BDX-05-080211	8/2/11	1204	Soil													X			
6	BDX-06-080211	8/2/11	1208	Soil													X			
7	BDX-07-080211	8/2/11	1212	Soil													X			
8	BDX-08-080211	8/2/11	1216	Soil													X			
9	BDX-09-080211	8/2/11	1220	Soil													X			
10	BDX-10-080211	8/2/11	1224	Soil													X			

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

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

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

Special Remarks: Hold BDX samples for possible gyros analysis

Relinquished	Date/Time	Received	Date/Time
x	8/3/11 830	x	8/3/11 8:30
x		x	

TAT --> Next Day 2 Day 3 Day STD

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

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Fremont Analytical

Chain of Custody Record

1131 N. 35th Street
Seattle, WA 98103
Tel: 206-352-3790
Fax: 206-352-7178

Laboratory Project No (internal): 1108009

Date: 8/3/11

Page: 2 of: 3

Client: CALIBRE

Address:

City, State, Zip: Tel:

Project Name: Hytec

Location: Little Rock, WA

Collected by: GWD

Reports To (PM): Tom McKeon, Grant Dawson, Justin Neste

Fax: Email: Project No:

	Sample Name	Sample Date	Sample Time	Sample Type (Matrix)	VOC (EPA 8260)	BTEX: EPA 8260 EPA 8021b	Gasoline Range Organics	Hydrocarbon Identification (HCID)	Diesel/Heavy Oil Range Organics	SEMI VOL (EPA 8270)	PAH (EPA 8270 - SIM)	PCBs (EPA 8082)	Cl Pesticides (EPA 8081)	Cl Herbicides (EPA 8151A)	Metals* (6020 / 200.8)	Total (T) / Dissolved (D)	Anions (IC)**	Comments/Depth
1	BDX-11-080211	8/2/11	1228	Soil									X					
2	BDX-12-080211	8/2/11	1230	Soil									X					
3	BDX-13-080211	8/2/11	1235	Soil									X					
4	HE-01-080211	8/2/11	1500	Soil	X				X				X					
5	HE-02-080211	8/2/11	1505	Soil	X				X				X					
6	HE-03-080211	8/2/11	1510	Soil	X				X				X					
7	HE-04-080211	8/2/11	1515	Soil	X				X				X					
8	HE-05-080211	8/2/11	1520	Soil	X				X				X					
9	HE-06-080211	8/2/11	1525	Soil	X				X				X					
10	HE-07-080211	8/2/11	1530	Soil	X				X				X					

The Samples are to be separated out to a new project. Per TMcKeon. FB 8/3/11

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

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

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

Relinquished	Date/Time		Received	Date/Time	
x [signature]	8/3/11	830	x [signature]	8/3/11	8:30
x			x		

Special Remarks: Hold BDX samples for possible SVOCs analysis

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

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

www.fremontanalytical.com

1311 N. 35th St.
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Calibre
Tom McKeon
16935 SE 39th St.
Bellevue, Washington 98008

RE: Bordeaux
Lab ID: 1108019

August 08, 2011

Attention Tom McKeon:

Fremont Analytical, Inc. received 4 sample(s) on 8/4/2011 for the analyses presented in the following report.

Total Metals by EPA Method 6020

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,

Michelle Clements
Sr. Chemist / Lab Manager

CC:
Grant Dawson
Justin Neste

Date: *08/08/2011*

CLIENT: Calibre
Project: Bordeaux
Lab Order: 1108019

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
1108019-001	BDX-14-080411	08/04/2011 2:15 PM	08/04/2011 4:53 PM
1108019-002	BDX-15-080411	08/04/2011 2:22 PM	08/04/2011 4:53 PM
1108019-003	BDX-16-080411	08/04/2011 2:30 PM	08/04/2011 4:53 PM
1108019-004	DUP1-080411	08/04/2011 9:00 AM	08/04/2011 4:53 PM

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

Case Narrative

WO#: **1108019**
Date: **8/8/2011**

CLIENT: Calibre
Project: Bordeaux

I. SAMPLE RECEIPT:
All samples were received intact.

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

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

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

Analytical Report

WO#: **1108019**
Date Reported: **8/8/2011**

Client: Calibre
Collection Date: 8/4/2011 2:15:00 PM
Project: Bordeaux
Lab ID: 1108019-001
Matrix: Soil
Client Sample ID: BDX-14-080411

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Total Metals by EPA Method 6020				Batch ID: 921		Analyst: MC
Antimony	ND	0.164		mg/Kg-dry	1	8/5/2011 12:12:21 PM
Arsenic	3.30	0.0819		mg/Kg-dry	1	8/5/2011 12:12:21 PM
Cadmium	0.396	0.164		mg/Kg-dry	1	8/5/2011 12:12:21 PM
Copper	23.6	0.164		mg/Kg-dry	1	8/5/2011 12:12:21 PM
Lead	53.4	0.164		mg/Kg-dry	1	8/5/2011 12:12:21 PM
Selenium	ND	0.410		mg/Kg-dry	1	8/5/2011 12:12:21 PM
Zinc	167	0.328		mg/Kg-dry	1	8/5/2011 12:12:21 PM

Qualifiers:

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

Analytical Report

WO#: **1108019**
Date Reported: **8/8/2011**

Client: Calibre
Collection Date: 8/4/2011 2:22:00 PM
Project: Bordeaux
Lab ID: 1108019-002
Matrix: Soil
Client Sample ID: BDX-15-080411

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Total Metals by EPA Method 6020				Batch ID: 921		Analyst: MC
Antimony	ND	0.165		mg/Kg-dry	1	8/5/2011 12:12:21 PM
Arsenic	2.77	0.0824		mg/Kg-dry	1	8/5/2011 12:12:21 PM
Cadmium	0.235	0.165		mg/Kg-dry	1	8/5/2011 12:12:21 PM
Copper	22.1	0.165		mg/Kg-dry	1	8/5/2011 12:12:21 PM
Lead	7.51	0.165		mg/Kg-dry	1	8/5/2011 12:12:21 PM
Selenium	ND	0.412		mg/Kg-dry	1	8/5/2011 12:12:21 PM
Zinc	101	0.330		mg/Kg-dry	1	8/5/2011 12:12:21 PM

Qualifiers:

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

Analytical Report

WO#: **1108019**
Date Reported: **8/8/2011**

Client: Calibre
Collection Date: 8/4/2011 2:30:00 PM
Project: Bordeaux
Lab ID: 1108019-003
Matrix: Soil
Client Sample ID: BDX-16-080411

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Total Metals by EPA Method 6020				Batch ID: 921		Analyst: MC
Antimony	ND	0.161		mg/Kg-dry	1	8/5/2011 12:12:21 PM
Arsenic	3.73	0.0803		mg/Kg-dry	1	8/5/2011 12:12:21 PM
Cadmium	0.262	0.161		mg/Kg-dry	1	8/5/2011 12:12:21 PM
Copper	26.2	0.161		mg/Kg-dry	1	8/5/2011 12:12:21 PM
Lead	25.0	0.161		mg/Kg-dry	1	8/5/2011 12:12:21 PM
Selenium	ND	0.402		mg/Kg-dry	1	8/5/2011 12:12:21 PM
Zinc	84.9	0.321		mg/Kg-dry	1	8/5/2011 12:12:21 PM

Qualifiers:

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

Analytical Report

WO#: **1108019**
Date Reported: **8/8/2011**

Client: Calibre
Collection Date: 8/4/2011 9:00:00 AM
Project: Bordeaux
Lab ID: 1108019-004
Matrix: Soil
Client Sample ID: DUP1-080411

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Total Metals by EPA Method 6020				Batch ID: 921		Analyst: MC
Antimony	ND	0.163		mg/Kg-dry	1	8/5/2011 12:12:21 PM
Arsenic	3.58	0.0813		mg/Kg-dry	1	8/5/2011 12:12:21 PM
Cadmium	0.285	0.163		mg/Kg-dry	1	8/5/2011 12:12:21 PM
Copper	26.9	0.163		mg/Kg-dry	1	8/5/2011 12:12:21 PM
Lead	13.1	0.163		mg/Kg-dry	1	8/5/2011 12:12:21 PM
Selenium	ND	0.406		mg/Kg-dry	1	8/5/2011 12:12:21 PM
Zinc	115	0.325		mg/Kg-dry	1	8/5/2011 12:12:21 PM

Qualifiers:

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

Fremont Analytical

Date: *8/8/2011*

Work Order: 1108019
CLIENT: Calibre
Project: Bordeaux

QC SUMMARY REPORT

Total Metals by EPA Method 6020

Sample ID: **MB-921** SampType: **MBLK** Units: **mg/Kg** Prep Date: **8/5/2011** RunNo: **1462**
Client ID: **MBLKS** Batch ID: **921** Analysis Date: **8/5/2011** SeqNo: **26195**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	ND	0.200									
Arsenic	ND	0.100									
Cadmium	ND	0.200									
Copper	ND	0.200									
Lead	ND	0.200									
Selenium	ND	0.500									
Zinc	ND	0.400									

Sample ID: **LCS-921** SampType: **LCS** Units: **mg/Kg** Prep Date: **8/5/2011** RunNo: **1462**
Client ID: **LCSS** Batch ID: **921** Analysis Date: **8/5/2011** SeqNo: **26196**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	2.56	0.200	2.500	0	103	80	120				
Arsenic	56.1	0.100	50.00	0	112	80	120				
Cadmium	2.70	0.200	2.500	0	108	80	120				
Copper	50.5	0.200	50.00	0	101	80	120				
Lead	22.9	0.200	25.00	0	91.5	80	120				
Selenium	4.87	0.500	5.000	0	97.4	80	120				
Zinc	48.9	0.400	50.00	0	97.8	80	120				

Sample ID: **1108019-001AMS** SampType: **MS** Units: **mg/Kg-dry** Prep Date: **8/5/2011** RunNo: **1462**
Client ID: **BDX-14-080411** Batch ID: **921** Analysis Date: **8/5/2011** SeqNo: **26199**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	0.491	0.161	2.017	0.07129	20.8	75	125				S
Arsenic	55.3	0.0807	40.35	3.303	129	75	125				S

Qualifiers:

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				

Fremont Analytical

Date: *8/8/2011*

Work Order: 1108019
CLIENT: Calibre
Project: Bordeaux

QC SUMMARY REPORT

Total Metals by EPA Method 6020

Sample ID: **1108019-001AMS** SampType: **MS** Units: **mg/Kg-dry** Prep Date: **8/5/2011** RunNo: **1462**
Client ID: **BDX-14-080411** Batch ID: **921** Analysis Date: **8/5/2011** SeqNo: **26199**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Cadmium	2.81	0.161	2.017	0.3957	120	75	125				
Copper	72.9	0.161	40.35	23.62	122	75	125				
Lead	52.1	0.161	20.17	53.36	-6.41	75	125				S
Selenium	5.22	0.403	4.035	0.1674	125	75	125				S
Zinc	201	0.323	40.35	167.3	83.4	75	125				

Sample ID: **1108019-001AMSD** SampType: **MSD** Units: **mg/Kg-dry** Prep Date: **8/5/2011** RunNo: **1462**
Client ID: **BDX-14-080411** Batch ID: **921** Analysis Date: **8/5/2011** SeqNo: **26200**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	0.481	0.163	2.033	0.07129	20.2	75	125	0.4907	1.94	30	S
Arsenic	57.9	0.0813	40.66	3.303	134	75	125	55.33	4.60	30	S
Cadmium	2.85	0.163	2.033	0.3957	121	75	125	2.809	1.48	30	
Copper	74.7	0.163	40.66	23.62	126	75	125	72.95	2.42	30	S
Lead	49.3	0.163	20.33	53.36	-19.8	75	125	52.07	5.39	30	S
Selenium	5.21	0.407	4.066	0.1674	124	75	125	5.221	0.194	30	
Zinc	210	0.325	40.66	167.3	106	75	125	200.9	4.57	30	

Sample ID: **1108019-004ADUP** SampType: **DUP** Units: **mg/Kg-dry** Prep Date: **8/5/2011** RunNo: **1462**
Client ID: **DUP1-080411** Batch ID: **921** Analysis Date: **8/5/2011** SeqNo: **26204**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	ND	0.163						0	0	30	
Arsenic	3.17	0.0813						3.577	12.0	30	
Cadmium	0.250	0.163						0.2848	13.1	30	
Copper	25.0	0.163						26.92	7.29	30	

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not detected at the Reporting Limit	R	RPD outside accepted recovery limits	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits				

Work Order: 1108019
CLIENT: Calibre
Project: Bordeaux

QC SUMMARY REPORT

Total Metals by EPA Method 6020

Sample ID: **1108019-004ADUP** SampType: **DUP** Units: **mg/Kg-dry** Prep Date: **8/5/2011** RunNo: **1462**
Client ID: **DUP1-080411** Batch ID: **921** Analysis Date: **8/5/2011** SeqNo: **26204**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	10.5	0.163						13.09	22.0	30	
Selenium	ND	0.406						0	0	30	
Zinc	114	0.325						115.4	1.47	30	

Sample ID: **1108019-004APDS** SampType: **PDS** Units: **mg/Kg-dry** Prep Date: **8/5/2011** RunNo: **1462**
Client ID: **DUP1-080411** Batch ID: **921** Analysis Date: **8/5/2011** SeqNo: **26264**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	5.79	0.163	2.50	0.161	113	75	125				
Arsenic	124	0.0813	50.0	8.80	115	75	125				
Cadmium	5.72	0.163	2.50	0.701	100	75	125				
Copper	145	0.163	50.0	66.2	79.2	75	125				
Lead	80.6	0.163	25.0	32.2	96.7	75	125				
Selenium	11.7	0.406	5.00	0.484	112	75	125				
Zinc	394	0.325	50.0	284	110	75	125				

NOTES:
The MS/MSD spike recoveries indicate matrix interferences. The method is in control as indicated by the laboratory control sample (LCS). A Post Digestion Spike (PDS) was analyzed. The PDS was within control limits.

Qualifiers:

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				

Fremont Analytical

Chain of Custody Record

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

Laboratory Project No (internal): 1108018, 1108019

Date: 8/4/11

Page: 1 of: 1

Client: Calibre
Address:
City, State, Zip
Tel:

Project Name: Hytec / Cuflin
Location: Little rock, WA
Collected by: JNeste

Reports To (PM): Tom McKeon, Grant Dawson, Justin Neste
Fax:
Email:
Project No: K0308000

	Sample Name	Sample Date	Sample Time	Sample Type (Matrix)	VOC (EPA 8260)	BTEX: EPA 8260 EPA 8021b	Gasoline Range Organics	Hydrocarbon Identification (HCID)	Diesel/heavy Oil Range Organics	SEMI VOL (EPA 8270)	PAH (EPA 8270 - SIM)	PCBs (EPA 8082)	Cl Pesticides (EPA 8081)	Cl Herbicides (EPA 8151A)	Metals* (6020 / 200.8)	Total (T) / Dissolved (D)	Anions (IC)**	TCLP				Comments/Depth
1	HE-09-080411	8/4/11	1336	Soil	X					X							X					
2	HE-10-080411	8/4/11	1350	Soil	X					X							X					
3	HE-11-080411	8/4/11	1358	Soil	X					X							X					
4	BDX-14-080411	8/4/11	1415	Soil											X	T						
5	BDX-15-080411	8/4/11	1422	Soil											X	T						
6	BDX-16-080411	8/4/11	1430	Soil											X	T						
7	Dupl-080411	8/4/11	0900	Soil											X	T						
8																						
9																						
10																						

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

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

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

Relinquished	Date/Time	Received	Date/Time
x [signature]	8/4/11 1653	x [signature]	8/4/11 1653
Relinquished	Date/Time	Received	
x		x	

Special Remarks:
Hold BDX Samples for possible SVOC analysis

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

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

www.fremontanalytical.com

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

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

RE: Bordeaux
Lab ID: 1108025

August 10, 2011

Attention Tom McKeon:

Fremont Analytical, Inc. received 1 sample(s) on 8/8/2011 for the analyses presented in the following report.

Total Metals by EPA Method 6020

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,

Michelle Clements
Sr. Chemist / Lab Manager

CC:
Grant Dawson
Justin Neste

Date: *08/10/2011*

CLIENT: Calibre
Project: Bordeaux
Lab Order: 1108025

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
1108025-001	BDX-17-080411	08/08/2011 1:10 PM	08/08/2011 3:28 PM

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

Case Narrative

WO#: **1108025**
Date: **8/10/2011**

CLIENT: Calibre
Project: Bordeaux

I. SAMPLE RECEIPT:
All samples were received intact.

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

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

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

Analytical Report

WO#: **1108025**
Date Reported: **8/10/2011**

Client: Calibre
Collection Date: 8/8/2011 1:10:00 PM
Project: Bordeaux
Lab ID: 1108025-001
Matrix: Soil
Client Sample ID: BDX-17-080411

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Total Metals by EPA Method 6020				Batch ID: 925		Analyst: MC
Antimony	ND	0.171		mg/Kg-dry	1	8/9/2011 10:10:00 AM
Arsenic	1.18	0.0854		mg/Kg-dry	1	8/9/2011 10:10:00 AM
Cadmium	ND	0.171		mg/Kg-dry	1	8/9/2011 10:10:00 AM
Copper	14.6	0.171		mg/Kg-dry	1	8/9/2011 10:10:00 AM
Lead	2.68	0.171		mg/Kg-dry	1	8/9/2011 10:10:00 AM
Selenium	ND	0.427		mg/Kg-dry	1	8/9/2011 10:10:00 AM
Zinc	19.8	0.341		mg/Kg-dry	1	8/9/2011 10:10:00 AM

Qualifiers:

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

Fremont Analytical

Date: *8/10/2011*

Work Order: 1108025
CLIENT: Calibre
Project: Bordeaux

QC SUMMARY REPORT

Total Metals by EPA Method 6020

Sample ID: **MB-925** SampType: **MBLK** Units: **mg/Kg** Prep Date: **8/8/2011** RunNo: **1475**
Client ID: **MBLKS** Batch ID: **925** Analysis Date: **8/9/2011** SeqNo: **26343**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	ND	0.200									
Arsenic	ND	0.100									
Cadmium	ND	0.200									
Copper	ND	0.200									
Lead	ND	0.200									
Selenium	ND	0.500									
Zinc	ND	0.400									

Sample ID: **LCS-925** SampType: **LCS** Units: **mg/Kg** Prep Date: **8/8/2011** RunNo: **1475**
Client ID: **LCSS** Batch ID: **925** Analysis Date: **8/9/2011** SeqNo: **26344**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	2.65	0.200	2.500	0	106	80	120				
Arsenic	53.7	0.100	50.00	0	107	80	120				
Cadmium	2.70	0.200	2.500	0	108	80	120				
Copper	51.8	0.200	50.00	0	104	80	120				
Lead	24.0	0.200	25.00	0	96.1	80	120				
Selenium	4.91	0.500	5.000	0	98.2	80	120				
Zinc	56.3	0.400	50.00	0	113	80	120				

Sample ID: **1108024-002ADUP** SampType: **DUP** Units: **mg/Kg-dry** Prep Date: **8/8/2011** RunNo: **1475**
Client ID: **BATCH** Batch ID: **925** Analysis Date: **8/9/2011** SeqNo: **26346**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	ND	0.169						0	0	30	
Arsenic	1.23	0.0847						1.584	25.0	30	

Qualifiers:

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				

Fremont Analytical

Date: *8/10/2011*

Work Order: 1108025
CLIENT: Calibre
Project: Bordeaux

QC SUMMARY REPORT

Total Metals by EPA Method 6020

Sample ID: **1108024-002ADUP** SampType: **DUP** Units: **mg/Kg-dry** Prep Date: **8/8/2011** RunNo: **1475**
Client ID: **BATCH** Batch ID: **925** Analysis Date: **8/9/2011** SeqNo: **26346**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Cadmium	ND	0.169						0	0	30	
Copper	8.78	0.169						10.90	21.5	30	
Lead	1.89	0.169						2.040	7.39	30	
Selenium	ND	0.424						0	0	30	
Zinc	20.8	0.339						23.79	13.4	30	

Sample ID: **1108024-002AMS** SampType: **MS** Units: **mg/Kg-dry** Prep Date: **8/8/2011** RunNo: **1475**
Client ID: **BATCH** Batch ID: **925** Analysis Date: **8/9/2011** SeqNo: **26347**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	0.508	0.158	1.978	0	25.7	75	125				S
Arsenic	31.3	0.0791	39.56	1.584	75.2	75	125				
Cadmium	2.31	0.158	1.978	0.08118	113	75	125				
Copper	36.0	0.158	39.56	10.90	63.5	75	125				S
Lead	22.5	0.158	19.78	2.040	103	75	125				
Selenium	2.92	0.396	3.956	0	73.8	75	125				S
Zinc	50.8	0.316	39.56	23.79	68.2	75	125				S

Sample ID: **1108024-002AMSD** SampType: **MSD** Units: **mg/Kg-dry** Prep Date: **8/8/2011** RunNo: **1475**
Client ID: **BATCH** Batch ID: **925** Analysis Date: **8/9/2011** SeqNo: **26348**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	0.469	0.168	2.101	0	22.3	75	125	0.5078	7.89	30	S
Arsenic	33.3	0.0841	42.03	1.584	75.5	75	125	31.34	6.06	30	
Cadmium	2.39	0.168	2.101	0.08118	110	75	125	2.314	3.09	30	
Copper	39.8	0.168	42.03	10.90	68.8	75	125	36.01	10.1	30	S

Qualifiers:

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: *8/10/2011*

Work Order: 1108025
CLIENT: Calibre
Project: Bordeaux

QC SUMMARY REPORT

Total Metals by EPA Method 6020

Sample ID: **1108024-002AMSD** SampType: **MSD** Units: **mg/Kg-dry** Prep Date: **8/8/2011** RunNo: **1475**
Client ID: **BATCH** Batch ID: **925** Analysis Date: **8/9/2011** SeqNo: **26348**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	23.7	0.168	21.01	2.040	103	75	125	22.50	5.19	30	
Selenium	3.04	0.420	4.203	0	72.4	75	125	2.918	4.20	30	S
Zinc	56.4	0.336	42.03	23.79	77.5	75	125	50.76	10.5	30	

NOTES:
The MS/MSD spike recoveries (Batch Sample) indicates matrix interferences. The method is in control as indicated by the laboratory control sample (LCS).

Qualifiers:

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				

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: Bordeaux
Lab ID: 1108005

August 03, 2011

Attention Tom McKeon:

Fremont Analytical, Inc. received 3 sample(s) on 8/1/2011 for the analyses presented in the following report.

TCLP by EPA Method 1311

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,

Michelle Clements
Sr. Chemist / Lab Manager

CC:
Grant Dawson
Justin Neste

Date: *08/03/2011*

CLIENT: Calibre
Project: Bordeaux
Lab Order: 1108005

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
1108005-001	BSP 1	07/29/2011 2:20 PM	08/01/2011 1:50 PM
1108005-002	BSP 2	07/29/2011 2:25 PM	08/01/2011 1:50 PM
1108005-003	BSP 3	07/29/2011 2:30 PM	08/01/2011 1:50 PM

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

Case Narrative

WO#: **1108005**
Date: **8/3/2011**

CLIENT: Calibre
Project: Bordeaux

I. SAMPLE RECEIPT:
All samples were received intact.

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

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

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

Analytical Report

WO#: **1108005**
Date Reported: **8/3/2011**

Client: Calibre
Collection Date: 7/29/2011 2:20:00 PM
Project: Bordeaux
Lab ID: 1108005-001
Matrix: Soil
Client Sample ID: BSP 1

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
TCLP by EPA Method 1311				Batch ID	904	Analyst: BR
Arsenic	ND	0.500		mg/L	1	8/2/2011 5:00:00 PM
Barium	ND	5.00		mg/L	1	8/2/2011 5:00:00 PM
Cadmium	ND	0.100		mg/L	1	8/2/2011 5:00:00 PM
Chromium	ND	0.500		mg/L	1	8/2/2011 5:00:00 PM
Lead	1.42	0.500		mg/L	1	8/2/2011 5:00:00 PM
Mercury	ND	0.250		mg/L	1	8/2/2011 5:00:00 PM
Selenium	ND	1.00		mg/L	1	8/2/2011 5:00:00 PM
Silver	ND	0.100		mg/L	1	8/2/2011 5:00:00 PM

Qualifiers:

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

Analytical Report

WO#: **1108005**
Date Reported: **8/3/2011**

Client: Calibre
Collection Date: 7/29/2011 2:25:00 PM
Project: Bordeaux
Lab ID: 1108005-002
Matrix: Soil
Client Sample ID: BSP 2

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
TCLP by EPA Method 1311				Batch ID	904	Analyst: BR
Arsenic	ND	0.500		mg/L	1	8/2/2011 5:00:00 PM
Barium	ND	5.00		mg/L	1	8/2/2011 5:00:00 PM
Cadmium	ND	0.100		mg/L	1	8/2/2011 5:00:00 PM
Chromium	ND	0.500		mg/L	1	8/2/2011 5:00:00 PM
Lead	ND	0.500		mg/L	1	8/2/2011 5:00:00 PM
Mercury	ND	0.250		mg/L	1	8/2/2011 5:00:00 PM
Selenium	ND	1.00		mg/L	1	8/2/2011 5:00:00 PM
Silver	ND	0.100		mg/L	1	8/2/2011 5:00:00 PM

Qualifiers:

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

Analytical Report

WO#: **1108005**
Date Reported: **8/3/2011**

Client: Calibre
Collection Date: 7/29/2011 2:30:00 PM
Project: Bordeaux
Lab ID: 1108005-003
Matrix: Soil
Client Sample ID: BSP 3

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
TCLP by EPA Method 1311				Batch ID	904	Analyst: BR
Arsenic	ND	0.500		mg/L	1	8/2/2011 5:00:00 PM
Barium	ND	5.00		mg/L	1	8/2/2011 5:00:00 PM
Cadmium	ND	0.100		mg/L	1	8/2/2011 5:00:00 PM
Chromium	ND	0.500		mg/L	1	8/2/2011 5:00:00 PM
Lead	ND	0.500		mg/L	1	8/2/2011 5:00:00 PM
Mercury	ND	0.250		mg/L	1	8/2/2011 5:00:00 PM
Selenium	ND	1.00		mg/L	1	8/2/2011 5:00:00 PM
Silver	ND	0.100		mg/L	1	8/2/2011 5:00:00 PM

Qualifiers:

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

Fremont Analytical

Date: *8/3/2011*

Work Order: 1108005
CLIENT: Calibre
Project: Bordeaux

QC SUMMARY REPORT

TCLP by EPA Method 1311

Sample ID: **MB-904** SampType: **MBLK** Units: **mg/L** Prep Date: **8/2/2011** RunNo: **1440**
Client ID: **MBLKS** Batch ID: **904** Analysis Date: **8/2/2011** SeqNo: **25890**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.500									
Barium	ND	5.00									
Cadmium	ND	0.100									
Chromium	ND	0.500									
Lead	ND	0.500									
Mercury	ND	0.250									
Selenium	ND	1.00									
Silver	ND	0.100									

Sample ID: **LCS-904** SampType: **LCS** Units: **mg/L** Prep Date: **8/2/2011** RunNo: **1440**
Client ID: **LCSS** Batch ID: **904** Analysis Date: **8/2/2011** SeqNo: **25891**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	22.0	0.500	25.00	0	88.0	65	135				
Barium	17.0	5.00	25.00	0	67.9	65	135				
Cadmium	19.4	0.100	25.00	0	77.5	65	135				
Chromium	23.5	0.500	25.00	0	93.9	65	135				
Lead	26.4	0.500	25.00	0	106	65	135				
Mercury	0.518	0.250	0.5000	0	104	65	135				
Selenium	2.01	1.00	2.500	0	80.4	65	135				
Silver	0.238	0.100	0.2500	0	95.2	65	135				

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not detected at the Reporting Limit	R	RPD outside accepted recovery limits	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits				

Work Order: 1108005
CLIENT: Calibre
Project: Bordeaux

QC SUMMARY REPORT

TCLP by EPA Method 1311

Sample ID: **1108004-001ADUP** SampType: **DUP** Units: **mg/L** Prep Date: **8/2/2011** RunNo: **1440**
Client ID: **BATCH** Batch ID: **904** Analysis Date: **8/2/2011** SeqNo: **25893**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.500						0	0	30	
Barium	ND	5.00						0	0	30	
Cadmium	ND	0.100						0	0	30	
Chromium	ND	0.500						0	0	30	
Lead	ND	0.500						0	0	20	
Mercury	ND	0.250						0	0	20	
Selenium	ND	1.00						0	0	20	
Silver	ND	0.100						0	0	20	

Sample ID: **1108004-001AMS** SampType: **MS** Units: **mg/L** Prep Date: **8/2/2011** RunNo: **1440**
Client ID: **BATCH** Batch ID: **904** Analysis Date: **8/2/2011** SeqNo: **25894**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	27.4	0.500	25.00	0	109	65	135				
Barium	24.9	5.00	25.00	3.186	87.0	65	135				
Cadmium	28.3	0.100	25.00	0	113	65	135				
Chromium	27.7	0.500	25.00	0.1238	110	65	135				
Lead	31.9	0.500	25.00	0	127	65	135				
Mercury	0.526	0.250	0.5000	0	105	65	135				
Selenium	2.47	1.00	2.500	0	98.8	65	135				
Silver	0.972	0.100	1.250	0	77.7	65	135				

Qualifiers:

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				

Fremont Analytical

Date: *8/3/2011*

Work Order: 1108005
CLIENT: Calibre
Project: Bordeaux

QC SUMMARY REPORT

TCLP by EPA Method 1311

Sample ID: **1108004-001AMSD** SampType: **MSD** Units: **mg/L** Prep Date: **8/2/2011** RunNo: **1440**
Client ID: **BATCH** Batch ID: **904** Analysis Date: **8/2/2011** SeqNo: **25895**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	26.3	0.500	25.00	0	105	65	135	27.36	4.05	30	
Barium	23.7	5.00	25.00	3.186	82.2	65	135	24.94	4.97	30	
Cadmium	27.7	0.100	25.00	0	111	65	135	28.31	2.06	30	
Chromium	26.4	0.500	25.00	0.1238	105	65	135	27.69	4.90	30	
Lead	31.0	0.500	25.00	0	124	65	135	31.85	2.84	30	
Mercury	0.479	0.250	0.5000	0	95.7	65	135	0.5256	9.37	30	
Selenium	2.36	1.00	2.500	0	94.3	65	135	2.471	4.71	30	
Silver	0.954	0.100	1.250	0	76.3	65	135	0.9718	1.85	30	

Sample ID: **1108005-001ADUP** SampType: **DUP** Units: **mg/L** Prep Date: **8/2/2011** RunNo: **1440**
Client ID: **BSP 1** Batch ID: **904** Analysis Date: **8/2/2011** SeqNo: **25900**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.500						0	0	30	
Barium	ND	5.00						0	0	30	
Cadmium	ND	0.100						0	0	30	
Chromium	ND	0.500						0	0	30	
Lead	1.46	0.500						1.424	2.29	20	
Mercury	ND	0.250						0	0	20	
Selenium	ND	1.00						0	0	20	
Silver	ND	0.100						0	0	20	

Qualifiers:

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				

Chain of Custody Record

Fremont Analytical

1131 N. 35th Street
Seattle, WA 98103
Tel: 206-352-3790
Fax: 206-352-7178

Laboratory Project No (internal): 1108005

Date: 08/11/11

Page: _____ of: _____

Client: Calibre
Address: 16435 SE 39th St.
City, State, Zip: Bellevue WA Tel: 425-643-4634

Project Name: Bordeaux
Location:
Collected by:

Reports To (PM): Tom McLean, Justin Nesbit, Grant Dawson
Fax:
Email: ON FILE
Project No:

	Sample Name	Sample Date	Sample Time	Sample Type (Matrix)	VOC (EPA 8260)	BTEX: EPA 8260 EPA 8021b	Gasoline Range Organics	Hydrocarbon Identification (HCID)	Diesel/Heavy Oil Range Organics	SEMI VOL (EPA 3270)	PAH (EPA 8270 - SIM)	PCBs (EPA 8082)	Cl Pesticides (EPA 8081)	Cl Herbicides (EPA 8151A)	Metals* (6020 / 200.8) Total (T) / Dissolved (D)	Anions (IC)**	TCLP RCRA 8				Comments/Depth
1	BSP 1	7/29	1420	S													X				
2	BSP 2	7/29	1425	S													X				
3	BSP 3	7/29	1430	S													X				
4																					
5																					
6																					
7																					
8																					
9																					
10																					

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

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

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

Special Remarks:

Relinquished	Date/Time	Received	Date/Time
x Tom McLean	8/11/11 1:30	x	8/11/11 1350
Relinquished	Date/Time	Received	Date/Time
x		x	

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

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

www.fremontanalytical.com

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Seattle, WA 98103
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info@fremontanalytical.com

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

RE: Hytec/Bordeaux
Lab ID: 1203151

April 11, 2012

Attention Tom McKeon:

Fremont Analytical, Inc. received 9 sample(s) on 3/23/2012 for the analyses presented in the following report.

Dissolved Mercury by EPA Method 245.1
Dissolved Metals by EPA Method 200.8
Mercury by EPA Method 245.1
Semi-Volatile Organic Compounds by EPA Method 8270
Total Metals by EPA Method 200.8
Volatile Organic Compounds by EPA Method 8260

This report consists of the following:

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

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

Thank you for using Fremont Analytical.

Sincerely,

Michael Dee
Sr. Chemist / Principal

CC:
Grant Dawson
Justin Neste

CLIENT: Calibre
Project: Hytec/Bordeaux
Lab Order: 1203151

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
1203151-001	HLMW-07A-032212	03/22/2012 10:39 AM	03/23/2012 8:47 AM
1203151-002	HLMW-06B-032212	03/22/2012 11:25 AM	03/23/2012 8:47 AM
1203151-003	HLMW-03A-032212	03/22/2012 12:00 PM	03/23/2012 8:47 AM
1203151-004	HLMW-05B-032212	03/22/2012 1:06 PM	03/23/2012 8:47 AM
1203151-005	HLMW-02A-032212	03/22/2012 1:49 PM	03/23/2012 8:47 AM
1203151-006	HLMW-01A-032212	03/22/2012 2:27 PM	03/23/2012 8:47 AM
1203151-007	HLMW-04A-032212	03/22/2012 3:05 PM	03/23/2012 8:47 AM
1203151-008	MOWE-032212	03/22/2012 3:30 PM	03/23/2012 8:47 AM
1203151-009	Trip Blank	03/20/2012 3:44 PM	03/23/2012 8:47 AM

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

Case Narrative

WO#: **1203151**
Date: **4/11/2012**

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.

Client: Calibre **Collection Date:** 3/22/2012 10:39:00 AM
Project: Hytec/Bordeaux
Lab ID: 1203151-001 **Matrix:** Water
Client Sample ID: HLMW-07A-032212

Semi-Volatile Organic Compounds by EPA Method 8270

Batch ID: 2119 Analyst: SG

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Phenol	ND	2.00		µg/L	1	3/28/2012 9:28:00 AM
2-Chlorophenol	ND	1.00		µg/L	1	3/28/2012 9:28:00 AM
1,3-Dichlorobenzene	ND	1.00		µg/L	1	3/28/2012 9:28:00 AM
1,4-Dichlorobenzene	ND	1.00		µg/L	1	3/28/2012 9:28:00 AM
1,2-Dichlorobenzene	ND	1.00		µg/L	1	3/28/2012 9:28:00 AM
Benzyl alcohol	ND	1.00		µg/L	1	3/28/2012 9:28:00 AM
Bis(2-chloroethyl) ether	ND	2.00		µg/L	1	3/28/2012 9:28:00 AM
2-Methylphenol (o-cresol)	ND	1.00		µg/L	1	3/28/2012 9:28:00 AM
Hexachloroethane	ND	1.00		µg/L	1	3/28/2012 9:28:00 AM
N-Nitrosodi-n-propylamine	ND	1.00		µg/L	1	3/28/2012 9:28:00 AM
Nitrobenzene	ND	2.00		µg/L	1	3/28/2012 9:28:00 AM
Isophorone	ND	1.00		µg/L	1	3/28/2012 9:28:00 AM
4-Methylphenol (p-cresol)	ND	1.00		µg/L	1	3/28/2012 9:28:00 AM
2-Nitrophenol	ND	2.00		µg/L	1	3/28/2012 9:28:00 AM
2,4-Dimethylphenol	ND	1.00		µg/L	1	3/28/2012 9:28:00 AM
Bis(2-chloroethoxy)methane	ND	1.00		µg/L	1	3/28/2012 9:28:00 AM
2,4-Dichlorophenol	ND	2.00		µg/L	1	3/28/2012 9:28:00 AM
1,2,4-Trichlorobenzene	ND	1.00		µg/L	1	3/28/2012 9:28:00 AM
Naphthalene	ND	0.500		µg/L	1	3/28/2012 9:28:00 AM
4-Chloroaniline	ND	5.00		µg/L	1	3/28/2012 9:28:00 AM
Hexachlorobutadiene	ND	1.00		µg/L	1	3/28/2012 9:28:00 AM
4-Chloro-3-methylphenol	ND	5.00		µg/L	1	3/28/2012 9:28:00 AM
2-Methylnaphthalene	ND	0.500		µg/L	1	3/28/2012 9:28:00 AM
1-Methylnaphthalene	ND	0.500		µg/L	1	3/28/2012 9:28:00 AM
Hexachlorocyclopentadiene	ND	1.00		µg/L	1	3/28/2012 9:28:00 AM
2,4,6-Trichlorophenol	ND	2.00		µg/L	1	3/28/2012 9:28:00 AM
2,4,5-Trichlorophenol	ND	2.00		µg/L	1	3/28/2012 9:28:00 AM
2-Chloronaphthalene	ND	1.00		µg/L	1	3/28/2012 9:28:00 AM
2-Nitroaniline	ND	5.00		µg/L	1	3/28/2012 9:28:00 AM
Acenaphthene	ND	0.500		µg/L	1	3/28/2012 9:28:00 AM
Dimethylphthalate	ND	1.00		µg/L	1	3/28/2012 9:28:00 AM
2,6-Dinitrotoluene	ND	1.00		µg/L	1	3/28/2012 9:28:00 AM
Acenaphthylene	ND	0.500		µg/L	1	3/28/2012 9:28:00 AM
2,4-Dinitrophenol	ND	2.00		µg/L	1	3/28/2012 9:28:00 AM
Dibenzofuran	ND	1.00		µg/L	1	3/28/2012 9:28:00 AM

Qualifiers:

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

Analytical Report

WO#: **1203151**
Date Reported: **4/11/2012**

Client: Calibre
Collection Date: 3/22/2012 10:39:00 AM
Project: Hytec/Bordeaux
Lab ID: 1203151-001
Matrix: Water
Client Sample ID: HLMW-07A-032212

Semi-Volatile Organic Compounds by EPA Method 8270

Batch ID: 2119 Analyst: SG

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
2,4-Dinitrotoluene	ND	1.00		µg/L	1	3/28/2012 9:28:00 AM
4-Nitrophenol	ND	5.00		µg/L	1	3/28/2012 9:28:00 AM
Fluorene	ND	0.500		µg/L	1	3/28/2012 9:28:00 AM
4-Chlorophenyl phenyl ether	ND	1.00		µg/L	1	3/28/2012 9:28:00 AM
Diethylphthalate	ND	1.00		µg/L	1	3/28/2012 9:28:00 AM
4,6-Dinitro-2-methylphenol	ND	2.00		µg/L	1	3/28/2012 9:28:00 AM
4-Bromophenyl phenyl ether	ND	1.00		µg/L	1	3/28/2012 9:28:00 AM
Hexachlorobenzene	ND	1.00		µg/L	1	3/28/2012 9:28:00 AM
Pentachlorophenol	ND	2.00		µg/L	1	3/28/2012 9:28:00 AM
Phenanthrene	ND	0.500		µg/L	1	3/28/2012 9:28:00 AM
Anthracene	ND	0.500		µg/L	1	3/28/2012 9:28:00 AM
Carbazole	ND	5.00		µg/L	1	3/28/2012 9:28:00 AM
Di-n-butyl phthalate	ND	1.00		µg/L	1	3/28/2012 9:28:00 AM
Fluoranthene	ND	0.500		µg/L	1	3/28/2012 9:28:00 AM
Pyrene	ND	0.500		µg/L	1	3/28/2012 9:28:00 AM
Benzyl Butylphthalate	ND	1.00		µg/L	1	3/28/2012 9:28:00 AM
bis(2-Ethylhexyl)adipate	ND	1.00		µg/L	1	3/28/2012 9:28:00 AM
Benz[a]anthracene	ND	0.500		µg/L	1	3/28/2012 9:28:00 AM
Chrysene	ND	0.500		µg/L	1	3/28/2012 9:28:00 AM
Bis(2-ethylhexyl) phthalate	1.89	1.00		µg/L	1	3/28/2012 9:28:00 AM
Di-n-octyl phthalate	ND	1.00		µg/L	1	3/28/2012 9:28:00 AM
Benzo (b) fluoranthene	ND	0.500		µg/L	1	3/28/2012 9:28:00 AM
Benzo (k) fluoranthene	ND	0.500		µg/L	1	3/28/2012 9:28:00 AM
Benzo[a]pyrene	ND	0.500		µg/L	1	3/28/2012 9:28:00 AM
Indeno (1,2,3-cd) pyrene	ND	0.500		µg/L	1	3/28/2012 9:28:00 AM
Dibenzo (a,h) anthracene	ND	0.500		µg/L	1	3/28/2012 9:28:00 AM
Benzo (g,h,I) perylene	ND	0.500		µg/L	1	3/28/2012 9:28:00 AM
Surr: 2,4,6-Tribromophenol	65.6	24-138		%REC	1	3/28/2012 9:28:00 AM
Surr: 2-Fluorobiphenyl	65.4	38.6-138		%REC	1	3/28/2012 9:28:00 AM
Surr: Nitrobenzene-d5	62.1	31.7-140		%REC	1	3/28/2012 9:28:00 AM
Surr: Phenol-d6	21.8	15-116		%REC	1	3/28/2012 9:28:00 AM
Surr: p-Terphenyl	82.7	49-156		%REC	1	3/28/2012 9:28:00 AM

Qualifiers:

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

Analytical Report

WO#: **1203151**
Date Reported: **4/11/2012**

Client: Calibre
Collection Date: 3/22/2012 10:39:00 AM
Project: Hytec/Bordeaux
Lab ID: 1203151-001
Matrix: Water
Client Sample ID: HLMW-07A-032212

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Total Metals by EPA Method 200.8				Batch ID: 2109		Analyst: BR
Antimony	ND	0.200		µg/L	1	3/23/2012 7:31:03 PM
Arsenic	ND	1.00		µg/L	1	3/23/2012 7:31:03 PM
Beryllium	ND	0.200		µg/L	1	3/23/2012 7:31:03 PM
Cadmium	ND	0.200		µg/L	1	3/23/2012 7:31:03 PM
Chromium	3.18	0.500		µg/L	1	3/23/2012 7:31:03 PM
Copper	2.04	0.500		µg/L	1	3/23/2012 7:31:03 PM
Lead	ND	1.00		µg/L	1	3/23/2012 7:31:03 PM
Nickel	1.68	0.500		µg/L	1	3/23/2012 7:31:03 PM
Silver	ND	0.200		µg/L	1	3/23/2012 7:31:03 PM
Thallium	ND	0.200		µg/L	1	3/23/2012 7:31:03 PM
Zinc	9.15	1.50	B	µg/L	1	3/23/2012 7:31:03 PM
Mercury by EPA Method 245.1				Batch ID: 2135		Analyst: MC
Mercury	ND	0.100		µg/L	1	3/29/2012 2:08:19 PM

Qualifiers:

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

Work Order: 1203151
CLIENT: Calibre
Project: Hytec/Bordeaux

QC SUMMARY REPORT

Total Metals by EPA Method 200.8

Sample ID: **MB-2109** SampType: **MBLK** Units: **µg/L** Prep Date: **3/23/2012** RunNo: **3745**
Client ID: **MBLKW** Batch ID: **2109** Analysis Date: **3/23/2012** SeqNo: **67176**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	ND	0.200									
Arsenic	ND	1.00									
Beryllium	ND	0.200									
Cadmium	ND	0.200									
Chromium	ND	0.500									
Copper	ND	0.500									
Lead	ND	1.00									
Nickel	ND	0.500									
Silver	ND	0.200									
Thallium	ND	0.200									
Zinc	2.16	1.50									

Sample ID: **LCS-2109** SampType: **LCS** Units: **µg/L** Prep Date: **3/23/2012** RunNo: **3745**
Client ID: **LCSW** Batch ID: **2109** Analysis Date: **3/23/2012** SeqNo: **67177**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	5.03	0.200	5.000	0	101	85	115				
Arsenic	95.7	1.00	100.0	0	95.7	85	115				
Beryllium	4.85	0.200	5.000	0	97.1	85	115				
Cadmium	4.88	0.200	5.000	0	97.7	85	115				
Chromium	101	0.500	100.0	0	101	85	115				
Copper	97.9	0.500	100.0	0	97.9	85	115				
Lead	46.6	1.00	50.00	0	93.3	85	115				
Nickel	93.7	0.500	100.0	0	93.7	85	115				
Silver	9.60	0.200	10.00	0	96.0	85	115				

Qualifiers:

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

Work Order: 1203151
CLIENT: Calibre
Project: Hytec/Bordeaux

QC SUMMARY REPORT

Total Metals by EPA Method 200.8

Sample ID: **LCS-2109** SampType: **LCS** Units: **µg/L** Prep Date: **3/23/2012** RunNo: **3745**
Client ID: **LCSW** Batch ID: **2109** Analysis Date: **3/23/2012** SeqNo: **67177**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Thallium	2.44	0.200	2.500	0	97.6	85	115				
Zinc	97.0	1.50	100.0	0	97.0	85	115				B

Sample ID: **1203138-001CDUP** SampType: **DUP** Units: **µg/L** Prep Date: **3/23/2012** RunNo: **3745**
Client ID: **BATCH** Batch ID: **2109** Analysis Date: **3/23/2012** SeqNo: **67180**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	ND	0.200						0	0	30	
Arsenic	7.84	1.00						7.193	8.59	30	
Beryllium	ND	0.200						0	0	30	
Cadmium	ND	0.200						0	0	30	
Chromium	1.59	0.500						1.680	5.47	30	
Copper	15.6	0.500						12.93	18.5	30	
Lead	1.04	1.00						1.022	1.51	30	
Nickel	ND	0.500						0	0	30	
Silver	ND	0.200						0	0	30	
Thallium	ND	0.200						0	0	30	
Zinc	37.8	1.50						31.57	17.9	30	B

Sample ID: **1203144-004BMS** SampType: **MS** Units: **µg/L** Prep Date: **3/23/2012** RunNo: **3745**
Client ID: **BATCH** Batch ID: **2109** Analysis Date: **3/23/2012** SeqNo: **67186**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	26.2	0.200	25.00	1.920	97.1	70	130				
Arsenic	474	1.00	500.0	0	94.7	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

Fremont Analytical

Date: *4/11/2012*

Work Order: 1203151
CLIENT: Calibre
Project: Hytec/Bordeaux

QC SUMMARY REPORT

Total Metals by EPA Method 200.8

Sample ID: **1203144-004BMS** SampType: **MS** Units: **µg/L** Prep Date: **3/23/2012** RunNo: **3745**
Client ID: **BATCH** Batch ID: **2109** Analysis Date: **3/23/2012** SeqNo: **67186**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Beryllium	24.8	0.200	25.00	0	99.3	70	130				
Cadmium	26.4	0.200	25.00	0.5995	103	70	130				
Chromium	485	0.500	500.0	1.646	96.7	70	130				
Copper	467	0.500	500.0	2.295	92.9	70	130				
Lead	250	1.00	250.0	0.6200	99.7	70	130				
Nickel	471	0.500	500.0	5.786	93.1	70	130				
Silver	26.7	0.200	50.00	0	53.3	70	130				S
Thallium	12.4	0.200	12.50	0	99.0	70	130				
Zinc	584	1.50	500.0	107.8	95.3	70	130				B

Sample ID: **1203144-004BMSD** SampType: **MSD** Units: **µg/L** Prep Date: **3/23/2012** RunNo: **3745**
Client ID: **BATCH** Batch ID: **2109** Analysis Date: **3/23/2012** SeqNo: **67187**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	26.8	0.200	25.00	1.920	99.5	70	130	26.20	2.19	30	
Arsenic	484	1.00	500.0	0	96.7	70	130	473.7	2.05	30	
Beryllium	25.1	0.200	25.00	0	101	70	130	24.81	1.33	30	
Cadmium	27.1	0.200	25.00	0.5995	106	70	130	26.38	2.55	30	
Chromium	496	0.500	500.0	1.646	98.9	70	130	484.9	2.27	30	
Copper	476	0.500	500.0	2.295	94.8	70	130	466.7	2.02	30	
Lead	255	1.00	250.0	0.6200	102	70	130	249.8	2.02	30	
Nickel	478	0.500	500.0	5.786	94.4	70	130	471.4	1.37	30	
Silver	30.5	0.200	50.00	0	61.0	70	130	26.66	13.5	30	S
Thallium	13.0	0.200	12.50	0	104	70	130	12.38	4.89	30	
Zinc	609	1.50	500.0	107.8	100	70	130	584.2	4.12	30	B

Qualifiers:

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

Work Order: 1203151
CLIENT: Calibre
Project: Hytec/Bordeaux

QC SUMMARY REPORT

Total Metals by EPA Method 200.8

NOTES:
S - Silver (Ag) spike recoveries (MS/MSD) indicate a possible matrix effect. 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

Fremont Analytical

Date: *4/11/2012*

Work Order: 1203151
CLIENT: Calibre
Project: Hytec/Bordeaux

QC SUMMARY REPORT

Mercury by EPA Method 245.1

Sample ID: **MB-2135**	SampType: **MBLK**	Units: **µg/L**	Prep Date: **3/28/2012**	RunNo: **3785**
Client ID: **MBLKW**	Batch ID: **2135**		Analysis Date: **3/29/2012**	SeqNo: **68072**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	ND	0.100									

Sample ID: **LCS-2135**	SampType: **LCS**	Units: **µg/L**	Prep Date: **3/28/2012**	RunNo: **3785**
Client ID: **LCSW**	Batch ID: **2135**		Analysis Date: **3/29/2012**	SeqNo: **68073**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	3.36	0.100	3.000	0	112	85	115				

Sample ID: **1203151-001BDUP**	SampType: **DUP**	Units: **µg/L**	Prep Date: **3/28/2012**	RunNo: **3785**
Client ID: **HLMW-07A-032212**	Batch ID: **2135**		Analysis Date: **3/29/2012**	SeqNo: **68075**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	ND	0.100						0	0	20	

Sample ID: **1203151-001BMS**	SampType: **MS**	Units: **µg/L**	Prep Date: **3/28/2012**	RunNo: **3785**
Client ID: **HLMW-07A-032212**	Batch ID: **2135**		Analysis Date: **3/29/2012**	SeqNo: **68076**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	3.28	0.100	3.000	0	109	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

Fremont Analytical

Date: *4/11/2012*

Work Order: 1203151
CLIENT: Calibre
Project: Hytec/Bordeaux

QC SUMMARY REPORT

Mercury by EPA Method 245.1

Sample ID: **1203151-001BMSD** SampType: **MSD** Units: **µg/L** Prep Date: **3/28/2012** RunNo: **3785**
Client ID: **HLMW-07A-032212** Batch ID: **2135** Analysis Date: **3/29/2012** SeqNo: **68077**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	3.44	0.100	3.000	0	115	85	115	3.280	4.76	20	

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

Fremont Analytical

Date: *4/11/2012*

Work Order: 1203151
CLIENT: Calibre
Project: Hytec/Bordeaux

QC SUMMARY REPORT

Dissolved Mercury by EPA Method 245.1

Sample ID: **MB-2191** SampType: **MBLK** Units: **µg/L** Prep Date: **4/6/2012** RunNo: **3900**
Client ID: **MBLKW** Batch ID: **2191** Analysis Date: **4/6/2012** SeqNo: **70295**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	ND	0.100									

Sample ID: **LCS-2191** SampType: **LCS** Units: **µg/L** Prep Date: **4/6/2012** RunNo: **3900**
Client ID: **LCSW** Batch ID: **2191** Analysis Date: **4/6/2012** SeqNo: **70296**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	1.98	0.100	2.000	0	99.0	85	115				

Sample ID: **1203151-003DDUP** SampType: **DUP** Units: **µg/L** Prep Date: **4/6/2012** RunNo: **3900**
Client ID: **HLMW-03A-032212** Batch ID: **2191** Analysis Date: **4/6/2012** SeqNo: **70298**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	ND	0.100						0	0	20	

Sample ID: **1203151-003DMS** SampType: **MS** Units: **µg/L** Prep Date: **4/6/2012** RunNo: **3900**
Client ID: **HLMW-03A-032212** Batch ID: **2191** Analysis Date: **4/6/2012** SeqNo: **70299**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	1.76	0.106	2.000	0	88.2	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

Fremont Analytical

Date: *4/11/2012*

Work Order: 1203151
CLIENT: Calibre
Project: Hytec/Bordeaux

QC SUMMARY REPORT

Dissolved Mercury by EPA Method 245.1

Sample ID: **1203151-003DMSD** SampType: **MSD** Units: **µg/L** Prep Date: **4/6/2012** RunNo: **3900**
Client ID: **HLMW-03A-032212** Batch ID: **2191** Analysis Date: **4/6/2012** SeqNo: **70300**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	1.78	0.106	2.000	0	89.2	85	115	1.764	1.20	20	

Qualifiers:

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

Work Order: 1203151
CLIENT: Calibre
Project: Hytec/Bordeaux

QC SUMMARY REPORT

Semi-Volatile Organic Compounds by EPA Method 8270

Sample ID: **1203151-007BMS** SampType: **MS** Units: **µg/L** Prep Date: **3/26/2012** RunNo: **3776**
Client ID: **HLMW-04A-032212** Batch ID: **2119** Analysis Date: **3/28/2012** SeqNo: **68275**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phenol	3.35	2.00	16.00	0.1071	20.3	15	112				
2-Chlorophenol	2.62	1.00	4.000	0	65.6	23.7	136				
1,4-Dichlorobenzene	1.44	1.00	2.000	0	71.9	57.4	140				
N-Nitrosodi-n-propylamine	1.03	1.00	2.000	0	51.4	46.1	132				
1,2,4-Trichlorobenzene	1.17	1.00	2.000	0	58.4	42.2	136				
4-Chloro-3-methylphenol	9.12	5.00	16.00	0	57.0	34.4	146				
Acenaphthene	1.14	0.500	2.000	0	56.8	46.9	132				
2,4-Dinitrotoluene	3.36	1.00	8.000	0	42.0	27.7	123				
Pentachlorophenol	3.16	2.00	16.00	0	19.7	21.6	125				S
Pyrene	1.23	0.500	2.000	0.08772	57.3	54.8	143				
Surr: 2,4,6-Tribromophenol	1.72		4.000		43.0	24	138				
Surr: 2-Fluorobiphenyl	1.25		2.000		62.5	38.6	138				
Surr: Nitrobenzene-d5	1.31		2.000		65.3	31.7	140				
Surr: Phenol-d6	0.968		4.000		24.2	15	116				
Surr: p-Terphenyl	1.44		2.000		72.1	49	156				

Sample ID: **1203151-007BMSD** SampType: **MSD** Units: **µg/L** Prep Date: **3/26/2012** RunNo: **3776**
Client ID: **HLMW-04A-032212** Batch ID: **2119** Analysis Date: **3/28/2012** SeqNo: **68276**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phenol	3.31	2.00	4.000	0.1071	80.0	15	112	3.349	1.32	50	
2-Chlorophenol	2.40	1.00	4.000	0	59.9	23.7	136	2.622	8.94	50	
1,4-Dichlorobenzene	1.35	1.00	2.000	0	67.7	57.4	140	1.437	6.05	50	
N-Nitrosodi-n-propylamine	1.02	1.00	2.000	0	51.0	46.1	132	1.027	0.641	50	
1,2,4-Trichlorobenzene	1.14	1.00	2.000	0	56.8	42.2	136	1.167	2.66	50	

Qualifiers:

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

Work Order: 1203151
CLIENT: Calibre
Project: Hytec/Bordeaux

QC SUMMARY REPORT

Semi-Volatile Organic Compounds by EPA Method 8270

Sample ID: **1203151-007BMSD** SampType: **MSD** Units: **µg/L** Prep Date: **3/26/2012** RunNo: **3776**
Client ID: **HLMW-04A-032212** Batch ID: **2119** Analysis Date: **3/28/2012** SeqNo: **68276**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
4-Chloro-3-methylphenol	8.04	5.00	16.00	0	50.3	34.4	146	9.121	12.6	50	
Acenaphthene	1.12	0.500	2.000	0	56.1	46.9	132	1.136	1.32	50	
2,4-Dinitrotoluene	2.85	1.00	8.000	0	35.6	27.7	123	3.358	16.3	50	
Pentachlorophenol	3.68	2.00	16.00	0	23.0	21.6	125	3.158	15.4	50	
Pyrene	1.31	0.500	2.000	0.08772	61.0	54.8	143	1.233	5.79	50	
Surr: 2,4,6-Tribromophenol	2.40		4.000		60.1	24	138		0		
Surr: 2-Fluorobiphenyl	1.26		2.000		62.9	38.6	138		0		
Surr: Nitrobenzene-d5	1.22		2.000		60.8	31.7	140		0		
Surr: Phenol-d6	0.870		4.000		21.7	15	116		0		
Surr: p-Terphenyl	1.53		2.000		76.7	49	156		0		

Sample ID: **CCV-2119 C** SampType: **CCV** Units: **µg/L** Prep Date: RunNo: **3776**
Client ID: **CCV** Batch ID: **2119** Analysis Date: **4/2/2012** SeqNo: **68570**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Bis(2-ethylhexyl) phthalate	1,020	1.00	1,000	0	102	80	120				
Surr: 2,4,6-Tribromophenol	1,070		1,000		107	24	138				
Surr: 2-Fluorobiphenyl	495		500.0		99.0	38.6	138				
Surr: Nitrobenzene-d5	503		500.0		101	31.7	140				
Surr: Phenol-d6	1,050		1,000		105	15	116				
Surr: p-Terphenyl	510		500.0		102	49	156				

Qualifiers:

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

Work Order: 1203151
CLIENT: Calibre
Project: Hytec/Bordeaux

QC SUMMARY REPORT

Semi-Volatile Organic Compounds by EPA Method 8270

Sample ID: **MB-2119** SampType: **MBLK** Units: **µg/L** Prep Date: **3/26/2012** RunNo: **3776**
Client ID: **MBLKW** Batch ID: **2119** Analysis Date: **3/28/2012** SeqNo: **68608**

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									

Qualifiers:

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

Work Order: 1203151
CLIENT: Calibre
Project: Hytec/Bordeaux

QC SUMMARY REPORT

Semi-Volatile Organic Compounds by EPA Method 8270

Sample ID: **MB-2119** SampType: **MBLK** Units: **µg/L** Prep Date: **3/26/2012** RunNo: **3776**
Client ID: **MBLKW** Batch ID: **2119** Analysis Date: **3/28/2012** SeqNo: **68608**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
2,4,6-Trichlorophenol	ND	2.00									
2,4,5-Trichlorophenol	ND	2.00									
2-Chloronaphthalene	ND	1.00									
2-Nitroaniline	ND	5.00									
Acenaphthene	ND	0.500									
Dimethylphthalate	ND	1.00									
2,6-Dinitrotoluene	ND	1.00									
Acenaphthylene	ND	0.500									
2,4-Dinitrophenol	ND	2.00									
Dibenzofuran	ND	1.00									
2,4-Dinitrotoluene	ND	1.00									
4-Nitrophenol	ND	5.00									
Fluorene	ND	0.500									
4-Chlorophenyl phenyl ether	ND	1.00									
Diethylphthalate	ND	1.00									
4,6-Dinitro-2-methylphenol	ND	2.00									
4-Bromophenyl phenyl ether	ND	1.00									
Hexachlorobenzene	ND	1.00									
Pentachlorophenol	ND	2.00									
Phenanthrene	ND	0.500									
Anthracene	ND	0.500									
Carbazole	ND	5.00									
Di-n-butyl phthalate	1.16	1.00									
Fluoranthene	ND	0.500									
Pyrene	ND	0.500									

Qualifiers:

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

Work Order: 1203151
CLIENT: Calibre
Project: Hytec/Bordeaux

QC SUMMARY REPORT

Semi-Volatile Organic Compounds by EPA Method 8270

Sample ID: **MB-2119** SampType: **MBLK** Units: **µg/L** Prep Date: **3/26/2012** RunNo: **3776**
Client ID: **MBLKW** Batch ID: **2119** Analysis Date: **3/28/2012** SeqNo: **68608**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
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	ND	1.00									
Di-n-octyl phthalate	ND	1.00									
Benzo (b) fluoranthene	ND	0.500									
Benzo (k) fluoranthene	ND	0.500									
Benzo[a]pyrene	ND	0.500									
Indeno (1,2,3-cd) pyrene	ND	0.500									
Dibenzo (a,h) anthracene	ND	0.500									
Benzo (g,h,I) perylene	ND	0.500									
Surr: 2,4,6-Tribromophenol	3.12		4.000		78.1	24	138				
Surr: 2-Fluorobiphenyl	1.70		2.000		85.0	38.6	138				
Surr: Nitrobenzene-d5	1.51		2.000		75.6	31.7	140				
Surr: Phenol-d6	0.831		4.000		20.8	15	116				
Surr: p-Terphenyl	1.59		2.000		79.7	49	156				

Sample ID: **LCS-2119** SampType: **LCS** Units: **µg/L** Prep Date: **3/26/2012** RunNo: **3776**
Client ID: **LCSW** Batch ID: **2119** Analysis Date: **3/28/2012** SeqNo: **68611**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phenol	3.83	2.00	16.00	0	23.9	15	112				
2-Chlorophenol	2.30	1.00	4.000	0	57.5	23.7	136				
1,4-Dichlorobenzene	2.81	1.00	4.000	0	70.3	57.4	140				

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

Fremont Analytical

Date: *4/11/2012*

Work Order: 1203151
CLIENT: Calibre
Project: Hytec/Bordeaux

QC SUMMARY REPORT

Semi-Volatile Organic Compounds by EPA Method 8270

Sample ID: **LCS-2119** SampType: **LCS** Units: **µg/L** Prep Date: **3/26/2012** RunNo: **3776**
Client ID: **LCSW** Batch ID: **2119** Analysis Date: **3/28/2012** SeqNo: **68611**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
N-Nitrosodi-n-propylamine	2.29	1.00	4.000	0	57.3	46.1	132				
1,2,4-Trichlorobenzene	2.39	1.00	4.000	0	59.7	42.2	136				
4-Chloro-3-methylphenol	6.96	5.00	16.00	0	43.5	34.4	146				
Acenaphthene	2.44	0.500	4.000	0	61.0	46.9	132				
2,4-Dinitrotoluene	2.11	1.00	4.000	0	52.8	27.7	123				
Pentachlorophenol	2.32	2.00	4.000	0	58.1	21.6	125				
Pyrene	3.04	0.500	4.000	0	76.0	54.8	143				
Surr: 2,4,6-Tribromophenol	2.88		4.000		72.0	24	138				
Surr: 2-Fluorobiphenyl	1.30		2.000		64.9	38.6	138				
Surr: Nitrobenzene-d5	1.14		2.000		57.2	31.7	140				
Surr: Phenol-d6	0.861		4.000		21.5	20	116				
Surr: p-Terphenyl	1.61		2.000		80.4	49	156				

NOTES:
S - Outlying Pentachlorophenol MS spike recovery observed. The MSD was within range.

Qualifiers:

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

Sample Log-In Check List

Client Name: **CLBRE**	Work Order Number: **1203151**
Logged by: **Troy Zehr**	Date Received: **3/23/2012 8:47:00 AM**

Chain of Custody

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

Log In

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

Special Handling (if applicable)

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

Person Notified: _____ Date: _____

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

Regarding: _____

Client Instructions: _____

18. Additional remarks/Disrepancies

Item Information

Item #	Temp ºC	Condition
Cooler	3.8	Good
Temp Blank	2.9	Good

Fremont Analytical

Chain of Custody Record

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

Laboratory Project No (internal): 1203151

Date: 3-22-12

Page: 1 of: 1

Client: CALIBRE
Address:
City, State, Zip
Tel:

Project Name: Hytec / Bordeaux
Location: Little rock, WA
Collected by: G Dawson J Neste

Reports To (PM): Tom McKeon
Fax:
Email: Tom.McKeon@calibresys.com
Project No: K0308000

Sample Name	Sample Date	Sample Time	Sample Type (Matrix)	VOC (EPA 8260)	GX/BTEX by EPA 8021b	BTEX by 8260	Gasoline Range Organics	Hydrocarbon identification (HCID)	Diesel/Heavy Oil Range Organics	SEMI VOC (EPA 8270)	PAH (EPA 8270 - SIM)	PCBs (EPA 8082)	Cl Pesticides (EPA 8081)	Cl Herbicides (EPA 8151A)	Metals* (6020 / 200.8)	Total (T)	Dissolved (D)	Anions (IC)**	Comments/Depth
1 HLMW-07A-032212	3/22/12	1039	GW							X					X	X			
2 HLMW-06B-032212	3/22/12	1125	GW	X						X					X	X			
3 HLMW-03A-032212	3/22/12	1200	GW	X						X					X	X			
4 HLMW-05B-032212	3/22/12	1306	GW	X						X					X	X			
5 HLMW-02A-032212	3/22/12	1349	GW	X						X					X	X			
6 HLMW-01A-032212	3/22/12	1427	GW	X						X					X	X			
7 HLMW-04A-032212	3/22/12	1505	GW	X						X					X	X			MS/MSD
8 MOWE-032212	3/22/12	1530	GW	X						X					X	X			
9																			
10																			

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

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

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

Relinquished	Date/Time	Received	Date/Time
x	3-23-12 0847	x Tony Zeha	3/23/12 8:47
Relinquished	Date/Time	Received	Date/Time
x		x	

Special Remarks: Metals not field filtered. Need to be split, filtered & preserved for totals. Hold dissolved metals until Totals have been reviewed.

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

Fremont Analytical

Chain of Custody Record

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

Laboratory Project No (internal): 1203151
Date: 3-22-12
Page: 1 of: 1

Client: CALIBRE
Address:
City, State, Zip: Tel:
Project Name: Hytec / Bordeaux
Location: Little rock, WA
Collected by: G Dawson J Nesbit

Reports To (PM): Tom McKeon Fax: Email: Tom.McKeon@calibresys.com Project No: K0308000

	Sample Name	Sample Date	Sample Time	Sample Type (Matrix)	VOC (EPA 8260)	GX/BTEX by EPA 8021B	BTEX by 8260	Gasoline Range Organics	Hydrocarbon Identification (HCID)	Diesel/Heavy Oil Range Organics	sBNA VOC (EPA 8270)	PAH (EPA 8270 - SIM)	PCBs (EPA 8082)	Cl Pesticides (EPA 8081)	Cl Herbicides (EPA 8151A)	Metals* (6020 / 200.8)	Total (T) / Dissolved (D)	Anions (IC)**	Comments/Depth
1	HLMW-07A-032212	3/22/12	1039	GW						X						X	X		
2	HLMW-06B-032212	3/22/12	1125	GW	X					X						X	X		(*) ADE Diss Metals 4/3/12
3	HLMW-03A-032212	3/22/12	1200	GW	X					X						X	X		D
4	HLMW-05B-032212	3/22/12	1306	GW	X					X						X	X		D
5	HLMW-02A-032212	3/22/12	1349	GW	X					X						X	X		
6	HLMW-01A-032212	3/22/12	1427	GW	X					X						X	X		
7	HLMW-04A-032212	3/22/12	1505	GW	X					X						X	X		MS/MSD
8	MOWE-032212	3/22/12	1530	GW	X					X						X	X		
9																			
10																			

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

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

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

Relinquished	Date/Time	Received	Date/Time
x	3-23-12 0847	x	3/23/12 8:47
x		x	

Special Remarks: Metals not field filtered, Need to be split, filtered & preserved for totals. Hold dissolved metals until Totals have been reviewed.

TAT-> Next Day 2 Day 3 Day STD

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

www.fremontanalytical.com

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

Calibre
Jeff Dawson
16935 SE 39th St.
Bellevue, Washington 98008

RE: Hytec-Luftkin
Lab ID: 1207067

July 23, 2012

Attention Jeff Dawson:

Fremont Analytical, Inc. received 12 sample(s) on 7/13/2012 for the analyses presented in the following report.

Dissolved Mercury by EPA Method 245.1
Dissolved Metals by EPA Method 200.8
Mercury by EPA Method 245.1
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,

CC:
Tom McKeon

Michael Dee
Sr. Chemist / Principal

Date: *07/23/2012*

CLIENT: Calibre
Project: Hytec-Luftkin
Lab Order: 1207067

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
1207067-001	Trip Blank	07/11/2012 7:00 AM	07/13/2012 1:02 PM
1207067-002	MOWE-071112	07/11/2012 8:07 AM	07/13/2012 1:02 PM
1207067-003	HLMW-4B	07/11/2012 7:20 AM	07/13/2012 1:02 PM
1207067-004	SPWE-071112	07/11/2012 9:40 AM	07/13/2012 1:02 PM
1207067-005	HLMW-04A	07/11/2012 10:40 AM	07/13/2012 1:02 PM
1207067-006	HLMW-01A	07/11/2012 11:31 AM	07/13/2012 1:02 PM
1207067-007	PAWE-071112	07/11/2012 12:56 PM	07/13/2012 1:02 PM
1207067-008	HLMW-07A	07/11/2012 1:31 PM	07/13/2012 1:02 PM
1207067-009	HLMW-03A	07/11/2012 2:45 PM	07/13/2012 1:02 PM
1207067-010	HLMW-02A	07/11/2012 3:40 PM	07/13/2012 1:02 PM
1207067-011	HLMW-05B	07/12/2012 3:30 PM	07/13/2012 1:02 PM
1207067-012	HLMW-06B	07/13/2012 9:40 AM	07/13/2012 1:02 PM

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

Case Narrative

WO#: **1207067**
Date: **7/23/2012**

CLIENT: Calibre
Project: Hytec-Luftkin

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

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

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

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

Analytical Report

WO#: **1207067**

Date Reported: **7/23/2012**

Client: Calibre **Collection Date:** 7/11/2012 7:00:00 AM

Project: Hytec-Luftkin

Lab ID: 1207067-001 **Matrix:** Liquid

Client Sample ID: Trip Blank

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260				Batch ID: R4997		Analyst: EM
Dichlorodifluoromethane (CFC-12)	ND	1.00		µg/L	1	7/17/2012 10:24:00 AM
Chloromethane	ND	1.00		µg/L	1	7/17/2012 10:24:00 AM
Vinyl chloride	ND	0.200		µg/L	1	7/17/2012 10:24:00 AM
Bromomethane	ND	1.00		µg/L	1	7/17/2012 10:24:00 AM
Trichlorofluoromethane (CFC-11)	ND	1.00		µg/L	1	7/17/2012 10:24:00 AM
Chloroethane	ND	1.00		µg/L	1	7/17/2012 10:24:00 AM
1,1-Dichloroethene	ND	1.00		µg/L	1	7/17/2012 10:24:00 AM
Methylene chloride	ND	1.00		µg/L	1	7/17/2012 10:24:00 AM
trans-1,2-Dichloroethene	ND	1.00		µg/L	1	7/17/2012 10:24:00 AM
Methyl tert-butyl ether (MTBE)	ND	1.00		µg/L	1	7/17/2012 10:24:00 AM
1,1-Dichloroethane	ND	1.00		µg/L	1	7/17/2012 10:24:00 AM
2,2-Dichloropropane	ND	2.00		µg/L	1	7/17/2012 10:24:00 AM
cis-1,2-Dichloroethene	ND	1.00		µg/L	1	7/17/2012 10:24:00 AM
Chloroform	ND	1.00		µg/L	1	7/17/2012 10:24:00 AM
1,1,1-Trichloroethane (TCA)	ND	1.00		µg/L	1	7/17/2012 10:24:00 AM
1,1-Dichloropropene	ND	1.00		µg/L	1	7/17/2012 10:24:00 AM
Carbon tetrachloride	ND	1.00		µg/L	1	7/17/2012 10:24:00 AM
1,2-Dichloroethane (EDC)	ND	1.00		µg/L	1	7/17/2012 10:24:00 AM
Benzene	ND	1.00		µg/L	1	7/17/2012 10:24:00 AM
Trichloroethene (TCE)	ND	1.00		µg/L	1	7/17/2012 10:24:00 AM
1,2-Dichloropropane	ND	1.00		µg/L	1	7/17/2012 10:24:00 AM
Bromodichloromethane	ND	1.00		µg/L	1	7/17/2012 10:24:00 AM
Dibromomethane	ND	1.00		µg/L	1	7/17/2012 10:24:00 AM
cis-1,3-Dichloropropene	ND	1.00		µg/L	1	7/17/2012 10:24:00 AM
Toluene	ND	1.00		µg/L	1	7/17/2012 10:24:00 AM
trans-1,3-Dichloropropene	ND	1.00		µg/L	1	7/17/2012 10:24:00 AM
1,1,2-Trichloroethane	ND	1.00		µg/L	1	7/17/2012 10:24:00 AM
1,3-Dichloropropane	ND	1.00		µg/L	1	7/17/2012 10:24:00 AM
Tetrachloroethene (PCE)	ND	1.00		µg/L	1	7/17/2012 10:24:00 AM
Dibromochloromethane	ND	1.00		µg/L	1	7/17/2012 10:24:00 AM
1,2-Dibromoethane (EDB)	ND	0.0100		µg/L	1	7/17/2012 10:24:00 AM
Chlorobenzene	ND	1.00		µg/L	1	7/17/2012 10:24:00 AM
1,1,1,2-Tetrachloroethane	ND	1.00		µg/L	1	7/17/2012 10:24:00 AM
Ethylbenzene	ND	1.00		µg/L	1	7/17/2012 10:24:00 AM
m,p-Xylene	ND	1.00		µg/L	1	7/17/2012 10:24:00 AM

Qualifiers:

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

Analytical Report

WO#: **1207067**
Date Reported: **7/23/2012**

Client: Calibre
Collection Date: 7/11/2012 7:00:00 AM
Project: Hytec-Luftkin
Lab ID: 1207067-001
Matrix: Liquid
Client Sample ID: Trip Blank

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260				Batch ID: R4997		Analyst: EM
o-Xylene	ND	1.00		µg/L	1	7/17/2012 10:24:00 AM
Styrene	ND	1.00		µg/L	1	7/17/2012 10:24:00 AM
Isopropylbenzene	ND	1.00		µg/L	1	7/17/2012 10:24:00 AM
Bromoform	ND	1.00		µg/L	1	7/17/2012 10:24:00 AM
1,1,2,2-Tetrachloroethane	ND	1.00		µg/L	1	7/17/2012 10:24:00 AM
n-Propylbenzene	ND	1.00		µg/L	1	7/17/2012 10:24:00 AM
Bromobenzene	ND	1.00		µg/L	1	7/17/2012 10:24:00 AM
1,3,5-Trimethylbenzene	ND	1.00		µg/L	1	7/17/2012 10:24:00 AM
2-Chlorotoluene	ND	1.00		µg/L	1	7/17/2012 10:24:00 AM
4-Chlorotoluene	ND	1.00		µg/L	1	7/17/2012 10:24:00 AM
tert-Butylbenzene	ND	1.00		µg/L	1	7/17/2012 10:24:00 AM
1,2,3-Trichloropropane	ND	1.00		µg/L	1	7/17/2012 10:24:00 AM
1,2,4-Trichlorobenzene	ND	2.00		µg/L	1	7/17/2012 10:24:00 AM
sec-Butylbenzene	ND	1.00		µg/L	1	7/17/2012 10:24:00 AM
4-Isopropyltoluene	ND	1.00		µg/L	1	7/17/2012 10:24:00 AM
1,3-Dichlorobenzene	ND	1.00		µg/L	1	7/17/2012 10:24:00 AM
1,4-Dichlorobenzene	ND	1.00		µg/L	1	7/17/2012 10:24:00 AM
n-Butylbenzene	ND	1.00		µg/L	1	7/17/2012 10:24:00 AM
1,2-Dichlorobenzene	ND	1.00		µg/L	1	7/17/2012 10:24:00 AM
1,2-Dibromo-3-chloropropane	ND	1.00		µg/L	1	7/17/2012 10:24:00 AM
1,2,4-Trimethylbenzene	ND	1.00		µg/L	1	7/17/2012 10:24:00 AM
Hexachlorobutadiene	ND	4.00		µg/L	1	7/17/2012 10:24:00 AM
Naphthalene	ND	1.00		µg/L	1	7/17/2012 10:24:00 AM
1,2,3-Trichlorobenzene	ND	4.00		µg/L	1	7/17/2012 10:24:00 AM
Surr: 1-Bromo-4-fluorobenzene	101	79.2-120		%REC	1	7/17/2012 10:24:00 AM
Surr: Dibromofluoromethane	97.9	76-114		%REC	1	7/17/2012 10:24:00 AM
Surr: Toluene-d8	99.4	86.8-119		%REC	1	7/17/2012 10:24:00 AM

Qualifiers:

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

Analytical Report

WO#: **1207067**

Date Reported: **7/23/2012**

Client: Calibre **Collection Date:** 7/11/2012 1:31:00 PM

Project: Hytec-Luftkin

Lab ID: 1207067-008 **Matrix:** Water

Client Sample ID: HLMW-07A

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Semi-Volatile Organic Compounds by EPA Method 8270				Batch ID: 2823		Analyst: PH
Phenol	ND	2.00		µg/L	1	7/19/2012 9:08:00 PM
2-Chlorophenol	ND	1.00		µg/L	1	7/19/2012 9:08:00 PM
1,3-Dichlorobenzene	ND	1.00		µg/L	1	7/19/2012 9:08:00 PM
1,4-Dichlorobenzene	ND	1.00		µg/L	1	7/19/2012 9:08:00 PM
1,2-Dichlorobenzene	ND	1.00		µg/L	1	7/19/2012 9:08:00 PM
Benzyl alcohol	ND	1.00		µg/L	1	7/19/2012 9:08:00 PM
Bis(2-chloroethyl) ether	ND	2.00		µg/L	1	7/19/2012 9:08:00 PM
2-Methylphenol (o-cresol)	ND	1.00		µg/L	1	7/19/2012 9:08:00 PM
Hexachloroethane	ND	1.00		µg/L	1	7/19/2012 9:08:00 PM
N-Nitrosodi-n-propylamine	ND	1.00		µg/L	1	7/19/2012 9:08:00 PM
Nitrobenzene	ND	2.00		µg/L	1	7/19/2012 9:08:00 PM
Isophorone	ND	1.00		µg/L	1	7/19/2012 9:08:00 PM
4-Methylphenol (p-cresol)	ND	1.00		µg/L	1	7/19/2012 9:08:00 PM
2-Nitrophenol	ND	2.00		µg/L	1	7/19/2012 9:08:00 PM
2,4-Dimethylphenol	ND	1.00		µg/L	1	7/19/2012 9:08:00 PM
Bis(2-chloroethoxy)methane	ND	1.00		µg/L	1	7/19/2012 9:08:00 PM
2,4-Dichlorophenol	ND	2.00		µg/L	1	7/19/2012 9:08:00 PM
1,2,4-Trichlorobenzene	ND	1.00		µg/L	1	7/19/2012 9:08:00 PM
Naphthalene	ND	0.500		µg/L	1	7/19/2012 9:08:00 PM
4-Chloroaniline	ND	5.00		µg/L	1	7/19/2012 9:08:00 PM
Hexachlorobutadiene	ND	1.00		µg/L	1	7/19/2012 9:08:00 PM
4-Chloro-3-methylphenol	ND	5.00		µg/L	1	7/19/2012 9:08:00 PM
2-Methylnaphthalene	ND	0.500		µg/L	1	7/19/2012 9:08:00 PM
1-Methylnaphthalene	ND	0.500		µg/L	1	7/19/2012 9:08:00 PM
Hexachlorocyclopentadiene	ND	1.00		µg/L	1	7/19/2012 9:08:00 PM
2,4,6-Trichlorophenol	ND	2.00		µg/L	1	7/19/2012 9:08:00 PM
2,4,5-Trichlorophenol	ND	2.00		µg/L	1	7/19/2012 9:08:00 PM
2-Chloronaphthalene	ND	1.00		µg/L	1	7/19/2012 9:08:00 PM
2-Nitroaniline	ND	5.00		µg/L	1	7/19/2012 9:08:00 PM
Acenaphthene	ND	0.500		µg/L	1	7/19/2012 9:08:00 PM
Dimethylphthalate	ND	1.00		µg/L	1	7/19/2012 9:08:00 PM
2,6-Dinitrotoluene	ND	1.00		µg/L	1	7/19/2012 9:08:00 PM
Acenaphthylene	ND	0.500		µg/L	1	7/19/2012 9:08:00 PM
2,4-Dinitrophenol	ND	2.00		µg/L	1	7/19/2012 9:08:00 PM
Dibenzofuran	ND	1.00		µg/L	1	7/19/2012 9:08:00 PM

Qualifiers:

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

Analytical Report

WO#: **1207067**
Date Reported: **7/23/2012**

Client: Calibre
Collection Date: 7/11/2012 1:31:00 PM
Project: Hytec-Luftkin
Lab ID: 1207067-008
Matrix: Water
Client Sample ID: HLMW-07A

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Semi-Volatile Organic Compounds by EPA Method 8270				Batch ID: 2823		Analyst: PH
2,4-Dinitrotoluene	ND	1.00		µg/L	1	7/19/2012 9:08:00 PM
4-Nitrophenol	ND	5.00		µg/L	1	7/19/2012 9:08:00 PM
Fluorene	ND	0.500		µg/L	1	7/19/2012 9:08:00 PM
4-Chlorophenyl phenyl ether	ND	1.00		µg/L	1	7/19/2012 9:08:00 PM
Diethylphthalate	ND	1.00		µg/L	1	7/19/2012 9:08:00 PM
4,6-Dinitro-2-methylphenol	ND	5.00		µg/L	1	7/19/2012 9:08:00 PM
4-Bromophenyl phenyl ether	ND	1.00		µg/L	1	7/19/2012 9:08:00 PM
Hexachlorobenzene	ND	1.00		µg/L	1	7/19/2012 9:08:00 PM
Pentachlorophenol	ND	2.00		µg/L	1	7/19/2012 9:08:00 PM
Phenanthrene	ND	0.500		µg/L	1	7/19/2012 9:08:00 PM
Anthracene	ND	0.500		µg/L	1	7/19/2012 9:08:00 PM
Carbazole	ND	5.00		µg/L	1	7/19/2012 9:08:00 PM
Di-n-butyl phthalate	1.52	1.00	B	µg/L	1	7/19/2012 9:08:00 PM
Fluoranthene	ND	0.500		µg/L	1	7/19/2012 9:08:00 PM
Pyrene	ND	0.500		µg/L	1	7/19/2012 9:08:00 PM
Benzyl Butylphthalate	1.00	1.00		µg/L	1	7/19/2012 9:08:00 PM
bis(2-Ethylhexyl)adipate	ND	1.00		µg/L	1	7/19/2012 9:08:00 PM
Benz[a]anthracene	ND	0.500		µg/L	1	7/19/2012 9:08:00 PM
Chrysene	ND	0.500		µg/L	1	7/19/2012 9:08:00 PM
Bis(2-ethylhexyl) phthalate	ND	1.00		µg/L	1	7/19/2012 9:08:00 PM
Di-n-octyl phthalate	ND	1.00		µg/L	1	7/19/2012 9:08:00 PM
Benzo (b) fluoranthene	ND	0.500		µg/L	1	7/19/2012 9:08:00 PM
Benzo (k) fluoranthene	ND	0.500		µg/L	1	7/19/2012 9:08:00 PM
Benzo[a]pyrene	ND	0.500		µg/L	1	7/19/2012 9:08:00 PM
Indeno (1,2,3-cd) pyrene	ND	0.500		µg/L	1	7/19/2012 9:08:00 PM
Dibenzo (a,h) anthracene	ND	0.500		µg/L	1	7/19/2012 9:08:00 PM
Benzo (g,h,I) perylene	ND	0.500		µg/L	1	7/19/2012 9:08:00 PM
Surr: 2,4,6-Tribromophenol	83.0	24-138		%REC	1	7/19/2012 9:08:00 PM
Surr: 2-Fluorobiphenyl	83.3	38.6-138		%REC	1	7/19/2012 9:08:00 PM
Surr: Nitrobenzene-d5	86.5	31.7-140		%REC	1	7/19/2012 9:08:00 PM
Surr: Phenol-d6	36.0	15-116		%REC	1	7/19/2012 9:08:00 PM
Surr: p-Terphenyl	94.5	49-156		%REC	1	7/19/2012 9:08:00 PM

Qualifiers:

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

Analytical Report

WO#: **1207067**
Date Reported: **7/23/2012**

Client: Calibre
Collection Date: 7/11/2012 1:31:00 PM
Project: Hytec-Luftkin
Lab ID: 1207067-008
Matrix: Water
Client Sample ID: HLMW-07A

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260				Batch ID: R4997		Analyst: EM
Dichlorodifluoromethane (CFC-12)	ND	1.00		µg/L	1	7/17/2012 2:09:00 PM
Chloromethane	ND	1.00		µg/L	1	7/17/2012 2:09:00 PM
Vinyl chloride	ND	0.200		µg/L	1	7/17/2012 2:09:00 PM
Bromomethane	ND	1.00		µg/L	1	7/17/2012 2:09:00 PM
Trichlorofluoromethane (CFC-11)	ND	1.00		µg/L	1	7/17/2012 2:09:00 PM
Chloroethane	ND	1.00		µg/L	1	7/17/2012 2:09:00 PM
1,1-Dichloroethene	ND	1.00		µg/L	1	7/17/2012 2:09:00 PM
Methylene chloride	ND	1.00		µg/L	1	7/17/2012 2:09:00 PM
trans-1,2-Dichloroethene	ND	1.00		µg/L	1	7/17/2012 2:09:00 PM
Methyl tert-butyl ether (MTBE)	ND	1.00		µg/L	1	7/17/2012 2:09:00 PM
1,1-Dichloroethane	ND	1.00		µg/L	1	7/17/2012 2:09:00 PM
2,2-Dichloropropane	ND	2.00		µg/L	1	7/17/2012 2:09:00 PM
cis-1,2-Dichloroethene	ND	1.00		µg/L	1	7/17/2012 2:09:00 PM
Chloroform	ND	1.00		µg/L	1	7/17/2012 2:09:00 PM
1,1,1-Trichloroethane (TCA)	ND	1.00		µg/L	1	7/17/2012 2:09:00 PM
1,1-Dichloropropene	ND	1.00		µg/L	1	7/17/2012 2:09:00 PM
Carbon tetrachloride	ND	1.00		µg/L	1	7/17/2012 2:09:00 PM
1,2-Dichloroethane (EDC)	ND	1.00		µg/L	1	7/17/2012 2:09:00 PM
Benzene	ND	1.00		µg/L	1	7/17/2012 2:09:00 PM
Trichloroethene (TCE)	ND	1.00		µg/L	1	7/17/2012 2:09:00 PM
1,2-Dichloropropane	ND	1.00		µg/L	1	7/17/2012 2:09:00 PM
Bromodichloromethane	ND	1.00		µg/L	1	7/17/2012 2:09:00 PM
Dibromomethane	ND	1.00		µg/L	1	7/17/2012 2:09:00 PM
cis-1,3-Dichloropropene	ND	1.00		µg/L	1	7/17/2012 2:09:00 PM
Toluene	ND	1.00		µg/L	1	7/17/2012 2:09:00 PM
trans-1,3-Dichloropropene	ND	1.00		µg/L	1	7/17/2012 2:09:00 PM
1,1,2-Trichloroethane	ND	1.00		µg/L	1	7/17/2012 2:09:00 PM
1,3-Dichloropropane	ND	1.00		µg/L	1	7/17/2012 2:09:00 PM
Tetrachloroethene (PCE)	ND	1.00		µg/L	1	7/17/2012 2:09:00 PM
Dibromochloromethane	ND	1.00		µg/L	1	7/17/2012 2:09:00 PM
1,2-Dibromoethane (EDB)	ND	0.0100		µg/L	1	7/17/2012 2:09:00 PM
Chlorobenzene	ND	1.00		µg/L	1	7/17/2012 2:09:00 PM
1,1,1,2-Tetrachloroethane	ND	1.00		µg/L	1	7/17/2012 2:09:00 PM
Ethylbenzene	ND	1.00		µg/L	1	7/17/2012 2:09:00 PM
m,p-Xylene	ND	1.00		µg/L	1	7/17/2012 2:09:00 PM

Qualifiers:

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

Analytical Report

WO#: **1207067**
Date Reported: **7/23/2012**

Client: Calibre
Collection Date: 7/11/2012 1:31:00 PM
Project: Hytec-Luftkin
Lab ID: 1207067-008
Matrix: Water
Client Sample ID: HLMW-07A

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260				Batch ID: R4997		Analyst: EM
o-Xylene	ND	1.00		µg/L	1	7/17/2012 2:09:00 PM
Styrene	ND	1.00		µg/L	1	7/17/2012 2:09:00 PM
Isopropylbenzene	ND	1.00		µg/L	1	7/17/2012 2:09:00 PM
Bromoform	ND	1.00		µg/L	1	7/17/2012 2:09:00 PM
1,1,2,2-Tetrachloroethane	ND	1.00		µg/L	1	7/17/2012 2:09:00 PM
n-Propylbenzene	ND	1.00		µg/L	1	7/17/2012 2:09:00 PM
Bromobenzene	ND	1.00		µg/L	1	7/17/2012 2:09:00 PM
1,3,5-Trimethylbenzene	ND	1.00		µg/L	1	7/17/2012 2:09:00 PM
2-Chlorotoluene	ND	1.00		µg/L	1	7/17/2012 2:09:00 PM
4-Chlorotoluene	ND	1.00		µg/L	1	7/17/2012 2:09:00 PM
tert-Butylbenzene	ND	1.00		µg/L	1	7/17/2012 2:09:00 PM
1,2,3-Trichloropropane	ND	1.00		µg/L	1	7/17/2012 2:09:00 PM
1,2,4-Trichlorobenzene	ND	2.00		µg/L	1	7/17/2012 2:09:00 PM
sec-Butylbenzene	ND	1.00		µg/L	1	7/17/2012 2:09:00 PM
4-Isopropyltoluene	ND	1.00		µg/L	1	7/17/2012 2:09:00 PM
1,3-Dichlorobenzene	ND	1.00		µg/L	1	7/17/2012 2:09:00 PM
1,4-Dichlorobenzene	ND	1.00		µg/L	1	7/17/2012 2:09:00 PM
n-Butylbenzene	ND	1.00		µg/L	1	7/17/2012 2:09:00 PM
1,2-Dichlorobenzene	ND	1.00		µg/L	1	7/17/2012 2:09:00 PM
1,2-Dibromo-3-chloropropane	ND	1.00		µg/L	1	7/17/2012 2:09:00 PM
1,2,4-Trimethylbenzene	ND	1.00		µg/L	1	7/17/2012 2:09:00 PM
Hexachlorobutadiene	ND	4.00		µg/L	1	7/17/2012 2:09:00 PM
Naphthalene	ND	1.00		µg/L	1	7/17/2012 2:09:00 PM
1,2,3-Trichlorobenzene	ND	4.00		µg/L	1	7/17/2012 2:09:00 PM
Surr: 1-Bromo-4-fluorobenzene	101	79.2-120		%REC	1	7/17/2012 2:09:00 PM
Surr: Dibromofluoromethane	99.0	76-114		%REC	1	7/17/2012 2:09:00 PM
Surr: Toluene-d8	99.6	86.8-119		%REC	1	7/17/2012 2:09:00 PM
Total Metals by EPA Method 200.8				Batch ID: 2790		Analyst: BR
Antimony	ND	0.200		µg/L	1	7/18/2012 12:56:19 AM
Arsenic	1.27	1.00		µg/L	1	7/18/2012 12:56:19 AM
Beryllium	ND	0.200		µg/L	1	7/18/2012 12:56:19 AM
Cadmium	ND	0.200		µg/L	1	7/18/2012 12:56:19 AM
Chromium	6.07	0.500		µg/L	1	7/18/2012 12:56:19 AM

Qualifiers:

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

Analytical Report

WO#: **1207067**
Date Reported: **7/23/2012**

Client: Calibre
Collection Date: 7/11/2012 1:31:00 PM
Project: Hytec-Luftkin
Lab ID: 1207067-008
Matrix: Water
Client Sample ID: HLMW-07A

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Total Metals by EPA Method 200.8				Batch ID: 2790		Analyst: BR
Copper	11.3	0.500		µg/L	1	7/18/2012 12:56:19 AM
Lead	ND	1.00		µg/L	1	7/18/2012 12:56:19 AM
Nickel	7.58	0.500		µg/L	1	7/18/2012 12:56:19 AM
Thallium	ND	0.200		µg/L	1	7/18/2012 12:56:19 AM
Tin	1.77	1.00		µg/L	1	7/18/2012 12:56:19 AM
Zinc	33.9	1.50		µg/L	1	7/18/2012 12:56:19 AM
Mercury by EPA Method 245.1				Batch ID: 2798		Analyst: MC
Mercury	ND	0.100		µg/L	1	7/18/2012 2:58:06 PM

Qualifiers:

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

Fremont Analytical

Date: *7/23/2012*

Work Order: 1207067
CLIENT: Calibre
Project: Hytec-Luftkin

QC SUMMARY REPORT

Total Metals by EPA Method 200.8

Sample ID: **MB-2790** SampType: **MBLK** Units: **µg/L** Prep Date: **7/16/2012** RunNo: **4995**
Client ID: **MBLKW** Batch ID: **2790** Analysis Date: **7/17/2012** SeqNo: **96331**

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

Sample ID: **LCS-2790** SampType: **LCS** Units: **µg/L** Prep Date: **7/16/2012** RunNo: **4995**
Client ID: **LCSW** Batch ID: **2790** Analysis Date: **7/17/2012** SeqNo: **96332**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	5.19	0.200	5.000	0	104	85	115				
Arsenic	103	1.00	100.0	0	103	85	115				
Beryllium	5.21	0.200	5.000	0	104	85	115				
Cadmium	5.22	0.200	5.000	0	104	85	115				
Chromium	109	0.500	100.0	0	109	85	115				
Copper	107	0.500	100.0	0	107	85	115				
Lead	56.4	1.00	50.00	0	113	85	115				
Nickel	97.5	0.500	100.0	0	97.5	85	115				
Thallium	2.84	0.200	2.500	0	113	85	115				
Tin	102	1.00	100.0	0	102	85	115				
Zinc	107	1.50	100.0	0	107	85	115				

Qualifiers:

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

Work Order: 1207067
CLIENT: Calibre
Project: Hytec-Luftkin

QC SUMMARY REPORT

Total Metals by EPA Method 200.8

Sample ID: **1207067-002CDUP** SampType: **DUP** Units: **µg/L** Prep Date: **7/16/2012** RunNo: **4995**
Client ID: **MOWE-071112** Batch ID: **2790** Analysis Date: **7/17/2012** SeqNo: **96334**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	ND	0.200						0.2850	200	30	R
Arsenic	ND	1.00						1.712	200	30	R
Beryllium	ND	0.200						0	0	30	
Cadmium	ND	0.200						0	0	30	
Chromium	ND	0.500						0.5395	200	30	R
Copper	ND	0.500						0	0	30	
Lead	ND	1.00						0	0	30	R
Nickel	ND	0.500						0	200	30	R
Thallium	ND	0.200						0	0	30	
Tin	3.49	1.00						9.184	89.8	30	R
Zinc	22.3	1.50						22.44	0.444	30	

NOTES:
R - High RPD for Sn. The method is in control as indicated by the laboratory control sample (LCS).

Sample ID: **1207067-008CMS** SampType: **MS** Units: **µg/L** Prep Date: **7/16/2012** RunNo: **4995**
Client ID: **HLMW-07A** Batch ID: **2790** Analysis Date: **7/18/2012** SeqNo: **96343**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	28.0	0.200	25.00	0.1045	112	70	130				
Arsenic	526	1.00	500.0	1.267	105	70	130				
Beryllium	26.4	0.200	25.00	0.1045	105	70	130				
Cadmium	26.4	0.200	25.00	0	106	70	130				
Chromium	563	0.500	500.0	6.073	111	70	130				
Copper	548	0.500	500.0	11.29	107	70	130				
Lead	286	1.00	250.0	0.7985	114	70	130				
Nickel	506	0.500	500.0	7.578	99.7	70	130				
Thallium	14.4	0.200	12.50	0.03650	115	70	130				
Tin	517	1.00	500.0	1.771	103	70	130				
Zinc	551	1.50	500.0	33.87	103	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

Fremont Analytical

Date: *7/23/2012*

Work Order: 1207067
CLIENT: Calibre
Project: Hytec-Luftkin

QC SUMMARY REPORT

Total Metals by EPA Method 200.8

Sample ID: **1207067-008CMS**	SampType: **MS**		Units: **µg/L**	Prep Date: **7/16/2012**		RunNo: **4995**			
Client ID: **HLMW-07A**	Batch ID: **2790**			Analysis Date: **7/18/2012**		SeqNo: **96343**			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Sample ID: **1207067-008CMSD**	SampType: **MSD**		Units: **µg/L**	Prep Date: **7/16/2012**		RunNo: **4995**			
Client ID: **HLMW-07A**	Batch ID: **2790**			Analysis Date: **7/18/2012**		SeqNo: **96344**			

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	28.1	0.200	25.00	0.1045	112	70	130	28.00	0.203	30	
Arsenic	536	1.00	500.0	1.267	107	70	130	525.9	1.88	30	
Beryllium	26.6	0.200	25.00	0.1045	106	70	130	26.38	0.665	30	
Cadmium	26.4	0.200	25.00	0	105	70	130	26.45	0.295	30	
Chromium	574	0.500	500.0	6.073	114	70	130	563.1	1.91	30	
Copper	546	0.500	500.0	11.29	107	70	130	548.4	0.474	30	
Lead	287	1.00	250.0	0.7985	115	70	130	285.9	0.490	30	
Nickel	509	0.500	500.0	7.578	100	70	130	506.0	0.542	30	
Thallium	14.4	0.200	12.50	0.03650	115	70	130	14.44	0.399	30	
Tin	535	1.00	500.0	1.771	107	70	130	516.7	3.48	30	
Zinc	556	1.50	500.0	33.87	104	70	130	550.5	0.908	30	

Qualifiers:

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

Fremont Analytical

Date: *7/23/2012*

Work Order: 1207067
CLIENT: Calibre
Project: Hytec-Luftkin

QC SUMMARY REPORT

Mercury by EPA Method 245.1

Sample ID: **MB-2798** SampType: **MBLK** Units: **µg/L** Prep Date: **7/17/2012** RunNo: **5003**
Client ID: **MBLKW** Batch ID: **2798** Analysis Date: **7/18/2012** SeqNo: **96723**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	ND	0.100									

Sample ID: **LCS-2798** SampType: **LCS** Units: **µg/L** Prep Date: **7/17/2012** RunNo: **5003**
Client ID: **LCSW** Batch ID: **2798** Analysis Date: **7/18/2012** SeqNo: **96724**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	1.92	0.100	2.000	0	96.0	85	115				

Sample ID: **1207067-002CDUP** SampType: **DUP** Units: **µg/L** Prep Date: **7/17/2012** RunNo: **5003**
Client ID: **MOWE-071112** Batch ID: **2798** Analysis Date: **7/18/2012** SeqNo: **96726**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	ND	0.100						0	0	20	

Sample ID: **1207067-008CMS** SampType: **MS** Units: **µg/L** Prep Date: **7/17/2012** RunNo: **5003**
Client ID: **HLMW-07A** Batch ID: **2798** Analysis Date: **7/18/2012** SeqNo: **96735**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	1.88	0.100	2.000	0	94.0	85	115				

Sample ID: **1207067-008CMSD** SampType: **MSD** Units: **µg/L** Prep Date: **7/17/2012** RunNo: **5003**
Client ID: **HLMW-07A** Batch ID: **2798** Analysis Date: **7/18/2012** SeqNo: **96736**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	1.92	0.100	2.000	0	96.0	85	115	1.880	2.11	20	

Qualifiers:

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

Work Order: 1207067
CLIENT: Calibre
Project: Hytec-Luftkin

QC SUMMARY REPORT

Semi-Volatile Organic Compounds by EPA Method 8270

Sample ID: **MB-2823** SampType: **MBLK** Units: **µg/L** Prep Date: **7/16/2012** RunNo: **5031**
Client ID: **MBLKW** Batch ID: **2823** Analysis Date: **7/19/2012** SeqNo: **97636**

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

Qualifiers:

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

Work Order: 1207067
CLIENT: Calibre
Project: Hytec-Luftkin

QC SUMMARY REPORT

Semi-Volatile Organic Compounds by EPA Method 8270

Sample ID: **MB-2823** SampType: **MBLK** Units: **µg/L** Prep Date: **7/16/2012** RunNo: **5031**
Client ID: **MBLKW** Batch ID: **2823** Analysis Date: **7/19/2012** SeqNo: **97636**

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	ND	1.00									
4,6-Dinitro-2-methylphenol	ND	5.00									
4-Bromophenyl phenyl ether	ND	1.00									
Hexachlorobenzene	ND	1.00									
Pentachlorophenol	ND	2.00									
Phenanthrene	ND	0.500									
Anthracene	ND	0.500									
Carbazole	ND	5.00									
Di-n-butyl phthalate	1.24	1.00									
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	ND	1.00									
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	D	Dilution was required	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

Work Order: 1207067
CLIENT: Calibre
Project: Hytec-Luftkin

QC SUMMARY REPORT

Semi-Volatile Organic Compounds by EPA Method 8270

Sample ID: **MB-2823** SampType: **MBLK** Units: **µg/L** Prep Date: **7/16/2012** RunNo: **5031**
Client ID: **MBLKW** Batch ID: **2823** Analysis Date: **7/19/2012** SeqNo: **97636**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzo[a]pyrene	ND	0.500									
Indeno (1,2,3-cd) pyrene	ND	0.500									
Dibenzo (a,h) anthracene	ND	0.500									
Benzo (g,h,I) perylene	ND	0.500									
Surr: 2,4,6-Tribromophenol	2.75		4.000		68.8	24	138				
Surr: 2-Fluorobiphenyl	1.54		2.000		76.8	38.6	138				
Surr: Nitrobenzene-d5	1.53		2.000		76.6	31.7	140				
Surr: Phenol-d6	1.31		4.000		32.8	15	116				
Surr: p-Terphenyl	1.84		2.000		92.0	49	156				

Sample ID: **LCS-2823** SampType: **LCS** Units: **µg/L** Prep Date: **7/16/2012** RunNo: **5031**
Client ID: **LCSW** Batch ID: **2823** Analysis Date: **7/19/2012** SeqNo: **97637**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phenol	2.52	2.00	8.000	0	31.5	15	112				
2-Chlorophenol	5.22	1.00	8.000	0	65.3	15	136				
1,3-Dichlorobenzene	5.39	1.00	8.000	0	67.4	50	150				
1,4-Dichlorobenzene	5.26	1.00	8.000	0	65.8	31.4	135				
1,2-Dichlorobenzene	5.49	1.00	8.000	0	68.6	50	150				
Benzyl alcohol	3.39	1.00	8.000	0	42.4	50	150				S
Bis(2-chloroethyl) ether	5.75	2.00	8.000	0	71.8	50	150				
2-Methylphenol (o-cresol)	4.48	1.00	8.000	0	56.1	50	150				
Hexachloroethane	5.49	1.00	8.000	0	68.6	50	150				
N-Nitrosodi-n-propylamine	5.96	1.00	8.000	0	74.4	20	136				
Nitrobenzene	5.45	2.00	8.000	0	68.1	50	150				
Isophorone	6.00	1.00	8.000	0	75.0	50	150				
4-Methylphenol (p-cresol)	4.42	1.00	8.000	0	55.2	50	150				
2-Nitrophenol	6.25	2.00	8.000	0	78.1	50	150				

Qualifiers:

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

Work Order: 1207067
CLIENT: Calibre
Project: Hytec-Luftkin

QC SUMMARY REPORT

Semi-Volatile Organic Compounds by EPA Method 8270

Sample ID: **LCS-2823** SampType: **LCS** Units: **µg/L** Prep Date: **7/16/2012** RunNo: **5031**
Client ID: **LCSW** Batch ID: **2823** Analysis Date: **7/19/2012** SeqNo: **97637**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
2,4-Dimethylphenol	5.81	1.00	8.000	0	72.6	50	150				
Bis(2-chloroethoxy)methane	6.01	1.00	8.000	0	75.1	50	150				
2,4-Dichlorophenol	5.95	2.00	8.000	0	74.4	50	150				
1,2,4-Trichlorobenzene	5.65	1.00	8.000	0	70.6	28.4	122				
Naphthalene	5.65	0.500	8.000	0	70.6	50	150				
4-Chloroaniline	ND	5.00	8.000	0	61.2	50	150				
Hexachlorobutadiene	5.35	1.00	8.000	0	66.9	50	150				
4-Chloro-3-methylphenol	6.13	5.00	8.000	0	76.6	15	145				
2-Methylnaphthalene	5.89	0.500	8.000	0	73.7	50	150				
1-Methylnaphthalene	5.78	0.500	8.000	0	72.2	50	150				
Hexachlorocyclopentadiene	5.04	1.00	8.000	0	63.0	50	150				
2,4,6-Trichlorophenol	6.37	2.00	8.000	0	79.7	50	150				
2,4,5-Trichlorophenol	5.06	2.00	8.000	0	63.3	50	150				
2-Chloronaphthalene	5.90	1.00	8.000	0	73.8	50	150				
2-Nitroaniline	5.80	5.00	8.000	0	72.5	50	150				
Acenaphthene	6.00	0.500	8.000	0	75.0	31.7	130				
Dimethylphthalate	6.55	1.00	8.000	0	81.9	50	150				
2,6-Dinitrotoluene	6.08	1.00	8.000	0	76.0	50	150				
Acenaphthylene	6.03	0.500	8.000	0	75.3	50	150				
2,4-Dinitrophenol	7.20	2.00	8.000	0	90.1	50	150				
Dibenzofuran	5.98	1.00	8.000	0	74.7	50	150				
2,4-Dinitrotoluene	5.76	1.00	8.000	0	71.9	21.2	111				
4-Nitrophenol	ND	5.00	8.000	0	30.4	50	150				S
Fluorene	6.24	0.500	8.000	0	77.9	50	150				
4-Chlorophenyl phenyl ether	6.20	1.00	8.000	0	77.4	50	150				
Diethylphthalate	7.38	1.00	8.000	0	92.2	50	150				
4,6-Dinitro-2-methylphenol	5.69	5.00	8.000	0	71.2	50	150				
4-Bromophenyl phenyl ether	6.37	1.00	8.000	0	79.6	50	150				
Hexachlorobenzene	6.09	1.00	8.000	0	76.1	50	150				

Qualifiers:

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

Work Order: 1207067
CLIENT: Calibre
Project: Hytec-Luftkin

QC SUMMARY REPORT

Semi-Volatile Organic Compounds by EPA Method 8270

Sample ID: **LCS-2823** SampType: **LCS** Units: **µg/L** Prep Date: **7/16/2012** RunNo: **5031**
Client ID: **LCSW** Batch ID: **2823** Analysis Date: **7/19/2012** SeqNo: **97637**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Pentachlorophenol	6.31	2.00	8.000	0	78.8	16.1	128				
Phenanthrene	6.47	0.500	8.000	0	80.8	50	150				
Anthracene	6.63	0.500	8.000	0	82.9	50	150				
Carbazole	7.25	5.00	8.000	0	90.7	50	150				
Di-n-butyl phthalate	10.5	1.00	8.000	0	132	50	150				B
Fluoranthene	7.15	0.500	8.000	0	89.4	50	150				
Pyrene	7.18	0.500	8.000	0	89.7	54.8	143				
Benzyl Butylphthalate	7.36	1.00	8.000	0	92.0	50	150				
bis(2-Ethylhexyl)adipate	6.87	1.00	8.000	0	85.9	50	150				
Benz[a]anthracene	6.56	0.500	8.000	0	82.0	50	150				
Chrysene	6.67	0.500	8.000	0	83.4	50	150				
Bis(2-ethylhexyl) phthalate	7.96	1.00	8.000	0	99.5	50	150				
Di-n-octyl phthalate	8.58	1.00	8.000	0	107	50	150				
Benzo (b) fluoranthene	6.43	0.500	8.000	0	80.4	50	150				
Benzo (k) fluoranthene	6.46	0.500	8.000	0	80.7	50	150				
Benzo[a]pyrene	6.16	0.500	8.000	0	77.1	50	150				
Indeno (1,2,3-cd) pyrene	5.15	0.500	8.000	0	64.4	50	150				
Dibenzo (a,h) anthracene	5.46	0.500	8.000	0	68.2	50	150				
Benzo (g,h,I) perylene	5.12	0.500	8.000	0	64.0	50	150				
Surr: 2,4,6-Tribromophenol	3.53		4.000		88.3	24	138				
Surr: 2-Fluorobiphenyl	1.61		2.000		80.3	38.6	138				
Surr: Nitrobenzene-d5	1.48		2.000		74.0	31.7	140				
Surr: Phenol-d6	1.42		4.000		35.4	20	116				
Surr: p-Terphenyl	1.90		2.000		95.2	49	156				

NOTES:
S - Outlying spike recoveries were observed for 4-Nitrophenol and Benzyl Alchohol. Analytes are in control in the initial calibration verification - ICV (second source).

Work Order: 1207067
CLIENT: Calibre
Project: Hytec-Luftkin

QC SUMMARY REPORT

Semi-Volatile Organic Compounds by EPA Method 8270

Sample ID: **1207067-002BDUP** SampType: **DUP** Units: **µg/L** Prep Date: **7/16/2012** RunNo: **5031**
Client ID: **MOWE-071112** Batch ID: **2823** Analysis Date: **7/19/2012** SeqNo: **97639**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phenol	ND	2.00						0	0	50	
2-Chlorophenol	ND	1.00						0	0	50	
1,3-Dichlorobenzene	ND	1.00						0	0	50	
1,4-Dichlorobenzene	ND	1.00						0	0	50	
1,2-Dichlorobenzene	ND	1.00						0	0	50	
Benzyl alcohol	ND	1.00						0	0	50	
Bis(2-chloroethyl) ether	ND	2.00						0	0	50	
2-Methylphenol (o-cresol)	ND	1.00						0	0	50	
Hexachloroethane	ND	1.00						0	0	50	
N-Nitrosodi-n-propylamine	ND	1.00						0	0	50	
Nitrobenzene	ND	2.00						0	0	50	
Isophorone	ND	1.00						0	0	50	
4-Methylphenol (p-cresol)	ND	1.00						0	0	50	
2-Nitrophenol	ND	2.00						0	0	50	
2,4-Dimethylphenol	ND	1.00						0	0	50	
Bis(2-chloroethoxy)methane	ND	1.00						0	0	50	
2,4-Dichlorophenol	ND	2.00						0	0	50	
1,2,4-Trichlorobenzene	ND	1.00						0	0	50	
Naphthalene	ND	0.500						0	0	50	
4-Chloroaniline	ND	5.00						0	0	50	
Hexachlorobutadiene	ND	1.00						0	0	50	
4-Chloro-3-methylphenol	ND	5.00						0	0	50	
2-Methylnaphthalene	ND	0.500						0	0	50	
1-Methylnaphthalene	ND	0.500						0	0	50	
Hexachlorocyclopentadiene	ND	1.00						0	0	50	
2,4,6-Trichlorophenol	ND	2.00						0	0	50	
2,4,5-Trichlorophenol	ND	2.00						0	0	50	
2-Chloronaphthalene	ND	1.00						0	0	50	
2-Nitroaniline	ND	5.00						0	0	50	

Qualifiers:

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

Work Order: 1207067
CLIENT: Calibre
Project: Hytec-Luftkin

QC SUMMARY REPORT

Semi-Volatile Organic Compounds by EPA Method 8270

Sample ID: **1207067-002BDUP** SampType: **DUP** Units: **µg/L** Prep Date: **7/16/2012** RunNo: **5031**
Client ID: **MOWE-071112** Batch ID: **2823** Analysis Date: **7/19/2012** SeqNo: **97639**

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	ND	1.00						0	0	50	
4,6-Dinitro-2-methylphenol	ND	5.00						0	0	50	
4-Bromophenyl phenyl ether	ND	1.00						0	0	50	
Hexachlorobenzene	ND	1.00						0	0	50	
Pentachlorophenol	ND	2.00						0	0	50	
Phenanthrene	ND	0.500						0	0	50	
Anthracene	ND	0.500						0	0	50	
Carbazole	ND	5.00						0	0	50	
Di-n-butyl phthalate	1.11	1.00						0.8412	27.3	50	B
Fluoranthene	ND	0.500						0	0	50	
Pyrene	ND	0.500						0	0	50	
Benzyl Butylphthalate	ND	1.00						0	0	50	R
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	ND	1.00						0	0	50	
Di-n-octyl phthalate	ND	1.00						0	0	50	
Benzo (b) fluoranthene	ND	0.500						0	0	50	
Benzo (k) fluoranthene	ND	0.500						0	0	50	

Qualifiers:

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

Work Order: 1207067
CLIENT: Calibre
Project: Hytec-Luftkin

QC SUMMARY REPORT

Semi-Volatile Organic Compounds by EPA Method 8270

Sample ID: **1207067-002BDUP** SampType: **DUP** Units: **µg/L** Prep Date: **7/16/2012** RunNo: **5031**
Client ID: **MOWE-071112** Batch ID: **2823** Analysis Date: **7/19/2012** SeqNo: **97639**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzo[a]pyrene	ND	0.500						0	0	50	
Indeno (1,2,3-cd) pyrene	ND	0.500						0	0	50	
Dibenzo (a,h) anthracene	ND	0.500						0	0	50	
Benzo (g,h,I) perylene	ND	0.500						0	0	50	
Surr: 2,4,6-Tribromophenol	3.03		4.000		75.7	24	138		0		
Surr: 2-Fluorobiphenyl	1.49		2.000		74.4	38.6	138		0		
Surr: Nitrobenzene-d5	1.61		2.000		80.5	31.7	140		0		
Surr: Phenol-d6	1.34		4.000		33.4	15	116		0		
Surr: p-Terphenyl	1.81		2.000		90.4	49	156		0		

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

Sample ID: **1207067-008BMSD** SampType: **MSD** Units: **µg/L** Prep Date: **7/16/2012** RunNo: **5031**
Client ID: **HLMW-07A** Batch ID: **2823** Analysis Date: **7/19/2012** SeqNo: **97647**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phenol	2.63	2.00	8.000	0	32.9	15	112	2.660	1.13	50	
2-Chlorophenol	5.65	1.00	8.000	0	70.6	23.7	136	5.405	4.35	50	
1,3-Dichlorobenzene	5.78	1.00	8.000	0	72.2	50	150	5.363	7.45	50	
1,4-Dichlorobenzene	5.70	1.00	8.000	0	71.2	57.4	140	5.228	8.57	50	
1,2-Dichlorobenzene	6.04	1.00	8.000	0	75.5	50	150	5.401	11.1	50	
Benzyl alcohol	2.97	1.00	8.000	0	37.1	50	150	3.180	6.92	50	S
Bis(2-chloroethyl) ether	6.70	2.00	8.000	0	83.7	50	150	5.569	18.4	50	
2-Methylphenol (o-cresol)	4.97	1.00	8.000	0	62.1	50	150	4.899	1.36	50	
Hexachloroethane	6.09	1.00	8.000	0	76.1	50	150	5.435	11.3	50	
N-Nitrosodi-n-propylamine	5.41	1.00	8.000	0	67.7	46.1	132	6.107	12.0	50	
Nitrobenzene	5.86	2.00	8.000	0	73.3	50	150	5.624	4.12	50	
Isophorone	6.62	1.00	8.000	0	82.7	50	150	6.183	6.82	50	
4-Methylphenol (p-cresol)	4.89	1.00	8.000	0	61.1	50	150	4.628	5.42	50	

Qualifiers:

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

Work Order: 1207067
CLIENT: Calibre
Project: Hytec-Luftkin

QC SUMMARY REPORT

Semi-Volatile Organic Compounds by EPA Method 8270

Sample ID: **1207067-008BMSD** SampType: **MSD** Units: **µg/L** Prep Date: **7/16/2012** RunNo: **5031**
Client ID: **HLMW-07A** Batch ID: **2823** Analysis Date: **7/19/2012** SeqNo: **97647**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
2-Nitrophenol	7.00	2.00	8.000	0	87.5	50	150	6.323	10.1	50	
2,4-Dimethylphenol	6.26	1.00	8.000	0	78.2	50	150	5.974	4.61	50	
Bis(2-chloroethoxy)methane	6.50	1.00	8.000	0	81.3	50	150	5.998	8.06	50	
2,4-Dichlorophenol	6.35	2.00	8.000	0	79.4	50	150	6.084	4.35	50	
1,2,4-Trichlorobenzene	6.32	1.00	8.000	0	79.0	42.2	136	5.700	10.3	50	
Naphthalene	5.90	0.500	8.000	0	73.7	50	150	5.869	0.481	50	
4-Chloroaniline	ND	5.00	8.000	0	46.4	50	150	0	0	50	S
Hexachlorobutadiene	5.44	1.00	8.000	0	68.0	50	150	5.471	0.525	50	
4-Chloro-3-methylphenol	6.27	5.00	8.000	0	78.3	34.4	146	6.459	3.03	50	
2-Methylnaphthalene	6.07	0.500	8.000	0	75.9	50	150	6.075	0.0968	50	
1-Methylnaphthalene	6.01	0.500	8.000	0	75.1	50	150	5.972	0.587	50	
Hexachlorocyclopentadiene	3.90	1.00	8.000	0	48.8	50	150	4.160	6.44	50	S
2,4,6-Trichlorophenol	6.39	2.00	8.000	0	79.8	50	150	6.554	2.61	50	
2,4,5-Trichlorophenol	4.63	2.00	8.000	0	57.9	50	150	5.134	10.3	50	
2-Chloronaphthalene	6.16	1.00	8.000	0	77.1	50	150	6.104	0.977	50	
2-Nitroaniline	5.15	5.00	8.000	0	64.3	50	150	5.599	8.41	50	
Acenaphthene	6.26	0.500	8.000	0	78.3	46.9	132	6.242	0.299	50	
Dimethylphthalate	6.90	1.00	8.000	0	86.2	50	150	6.895	0.0360	50	
2,6-Dinitrotoluene	6.22	1.00	8.000	0	77.7	50	150	6.390	2.72	50	
Acenaphthylene	6.36	0.500	8.000	0	79.5	50	150	6.350	0.184	50	
2,4-Dinitrophenol	7.05	2.00	8.000	0	88.1	50	150	7.161	1.54	50	
Dibenzofuran	6.18	1.00	8.000	0	77.3	50	150	6.216	0.537	50	
2,4-Dinitrotoluene	5.53	1.00	8.000	0	69.1	20	123	5.811	5.04	50	
4-Nitrophenol	ND	5.00	8.000	0	14.4	50	150	0	0	50	S
Fluorene	6.40	0.500	8.000	0	80.0	50	150	6.516	1.73	50	
4-Chlorophenyl phenyl ether	6.40	1.00	8.000	0	79.9	50	150	6.442	0.730	50	
Diethylphthalate	7.40	1.00	8.000	0.4510	86.8	50	150	7.555	2.12	50	
4,6-Dinitro-2-methylphenol	ND	5.00	8.000	0	46.2	50	150	0	0	50	S
4-Bromophenyl phenyl ether	6.44	1.00	8.000	0	80.5	50	150	6.653	3.25	50	

Qualifiers:

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

Work Order: 1207067
CLIENT: Calibre
Project: Hytec-Luftkin

QC SUMMARY REPORT

Semi-Volatile Organic Compounds by EPA Method 8270

Sample ID: **1207067-008BMSD** SampType: **MSD** Units: **µg/L** Prep Date: **7/16/2012** RunNo: **5031**
Client ID: **HLMW-07A** Batch ID: **2823** Analysis Date: **7/19/2012** SeqNo: **97647**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexachlorobenzene	6.07	1.00	8.000	0	75.8	50	150	6.147	1.34	50	
Pentachlorophenol	4.75	2.00	8.000	0	59.4	21.6	125	5.164	8.27	50	
Phenanthrene	6.76	0.500	8.000	0.07488	83.6	50	150	6.683	1.17	50	
Anthracene	6.74	0.500	8.000	0	84.3	50	150	6.791	0.679	50	
Carbazole	7.29	5.00	8.000	0	91.1	50	150	7.297	0.155	50	
Di-n-butyl phthalate	8.82	1.00	8.000	1.516	91.3	50	150	8.974	1.72	50	B
Fluoranthene	7.07	0.500	8.000	0	88.4	50	150	7.041	0.452	50	
Pyrene	7.06	0.500	8.000	0	88.3	54.8	143	7.005	0.827	50	
Benzyl Butylphthalate	7.53	1.00	8.000	1.001	81.6	50	150	7.802	3.55	50	
bis(2-Ethylhexyl)adipate	5.09	1.00	8.000	0.1030	62.4	50	150	5.232	2.70	50	
Benz[a]anthracene	6.10	0.500	8.000	0	76.2	50	150	6.258	2.61	50	
Chrysene	6.50	0.500	8.000	0	81.3	50	150	6.099	6.41	50	
Bis(2-ethylhexyl) phthalate	6.45	1.00	8.000	0.7484	71.3	50	150	6.471	0.281	50	
Di-n-octyl phthalate	6.79	1.00	8.000	0	84.9	50	150	6.430	5.51	50	
Benzo (b) fluoranthene	5.62	0.500	8.000	0	70.3	50	150	5.810	3.29	50	
Benzo (k) fluoranthene	5.58	0.500	8.000	0	69.8	50	150	5.467	2.07	50	
Benzo[a]pyrene	3.99	0.500	8.000	0	49.9	50	150	4.036	1.05	50	S
Indeno (1,2,3-cd) pyrene	3.67	0.500	8.000	0	45.9	50	150	3.274	11.4	50	S
Dibenzo (a,h) anthracene	3.81	0.500	8.000	0	47.7	50	150	3.842	0.716	50	S
Benzo (g,h,I) perylene	3.62	0.500	8.000	0	45.2	50	150	3.220	11.6	50	S
Surr: 2,4,6-Tribromophenol	3.23		4.000		80.8	24	138		0	0	
Surr: 2-Fluorobiphenyl	1.64		2.000		81.8	38.6	138		0	0	
Surr: Nitrobenzene-d5	1.57		2.000		78.5	31.7	140		0	0	
Surr: Phenol-d6	1.61		4.000		40.3	20	116		0	0	
Surr: p-Terphenyl	1.87		2.000		93.4	49	156		0	0	

NOTES:
S - Outlying spike recoveries observed (possible matrix effect). The LCS was within range.

Qualifiers:

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

Work Order: 1207067
CLIENT: Calibre
Project: Hytec-Luftkin

QC SUMMARY REPORT

Semi-Volatile Organic Compounds by EPA Method 8270

Sample ID: **1207067-008BMS** SampType: **MS** Units: **µg/L** Prep Date: **7/16/2012** RunNo: **5031**
Client ID: **HLMW-07A** Batch ID: **2823** Analysis Date: **7/19/2012** SeqNo: **97652**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phenol	2.66	2.00	8.000	0	33.3	15	112				
2-Chlorophenol	5.41	1.00	8.000	0	67.6	23.7	136				
1,3-Dichlorobenzene	5.36	1.00	8.000	0	67.0	50	150				
1,4-Dichlorobenzene	5.23	1.00	8.000	0	65.4	57.4	140				
1,2-Dichlorobenzene	5.40	1.00	8.000	0	67.5	50	150				
Benzyl alcohol	3.18	1.00	8.000	0	39.8	50	150				S
Bis(2-chloroethyl) ether	5.57	2.00	8.000	0	69.6	50	150				
2-Methylphenol (o-cresol)	4.90	1.00	8.000	0	61.2	50	150				
Hexachloroethane	5.43	1.00	8.000	0	67.9	50	150				
N-Nitrosodi-n-propylamine	6.11	1.00	8.000	0	76.3	46.1	132				
Nitrobenzene	5.62	2.00	8.000	0	70.3	50	150				
Isophorone	6.18	1.00	8.000	0	77.3	50	150				
4-Methylphenol (p-cresol)	4.63	1.00	8.000	0	57.9	50	150				
2-Nitrophenol	6.32	2.00	8.000	0	79.0	50	150				
2,4-Dimethylphenol	5.97	1.00	8.000	0	74.7	50	150				
Bis(2-chloroethoxy)methane	6.00	1.00	8.000	0	75.0	50	150				
2,4-Dichlorophenol	6.08	2.00	8.000	0	76.0	50	150				
1,2,4-Trichlorobenzene	5.70	1.00	8.000	0	71.3	42.2	136				
Naphthalene	5.87	0.500	8.000	0	73.4	50	150				
4-Chloroaniline	ND	5.00	8.000	0	53.7	50	150				
Hexachlorobutadiene	5.47	1.00	8.000	0	68.4	50	150				
4-Chloro-3-methylphenol	6.46	5.00	8.000	0	80.7	34.4	146				
2-Methylnaphthalene	6.08	0.500	8.000	0	75.9	50	150				
1-Methylnaphthalene	5.97	0.500	8.000	0	74.6	50	150				
Hexachlorocyclopentadiene	4.16	1.00	8.000	0	52.0	50	150				
2,4,6-Trichlorophenol	6.55	2.00	8.000	0	81.9	50	150				
2,4,5-Trichlorophenol	5.13	2.00	8.000	0	64.2	50	150				
2-Chloronaphthalene	6.10	1.00	8.000	0	76.3	50	150				
2-Nitroaniline	5.60	5.00	8.000	0	70.0	50	150				

Qualifiers:

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

Work Order: 1207067
CLIENT: Calibre
Project: Hytec-Luftkin

QC SUMMARY REPORT

Semi-Volatile Organic Compounds by EPA Method 8270

Sample ID: **1207067-008BMS** SampType: **MS** Units: **µg/L** Prep Date: **7/16/2012** RunNo: **5031**
Client ID: **HLMW-07A** Batch ID: **2823** Analysis Date: **7/19/2012** SeqNo: **97652**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Acenaphthene	6.24	0.500	8.000	0	78.0	46.9	132				
Dimethylphthalate	6.89	1.00	8.000	0	86.2	50	150				
2,6-Dinitrotoluene	6.39	1.00	8.000	0	79.9	50	150				
Acenaphthylene	6.35	0.500	8.000	0	79.4	50	150				
2,4-Dinitrophenol	7.16	2.00	8.000	0	89.5	50	150				
Dibenzofuran	6.22	1.00	8.000	0	77.7	50	150				
2,4-Dinitrotoluene	5.81	1.00	8.000	0	72.6	20	123				
4-Nitrophenol	ND	5.00	8.000	0	16.5	50	150				S
Fluorene	6.52	0.500	8.000	0	81.4	50	150				
4-Chlorophenyl phenyl ether	6.44	1.00	8.000	0	80.5	50	150				
Diethylphthalate	7.55	1.00	8.000	0.4510	88.8	50	150				
4,6-Dinitro-2-methylphenol	ND	5.00	8.000	0	48.0	50	150				S
4-Bromophenyl phenyl ether	6.65	1.00	8.000	0	83.2	50	150				
Hexachlorobenzene	6.15	1.00	8.000	0	76.8	50	150				
Pentachlorophenol	5.16	2.00	8.000	0	64.5	21.6	125				
Phenanthrene	6.68	0.500	8.000	0.07488	82.6	50	150				
Anthracene	6.79	0.500	8.000	0	84.9	50	150				
Carbazole	7.30	5.00	8.000	0	91.2	50	150				
Di-n-butyl phthalate	8.97	1.00	8.000	1.516	93.2	50	150				B
Fluoranthene	7.04	0.500	8.000	0	88.0	50	150				
Pyrene	7.01	0.500	8.000	0	87.6	54.8	143				
Benzyl Butylphthalate	7.80	1.00	8.000	1.001	85.0	50	150				
bis(2-Ethylhexyl)adipate	5.23	1.00	8.000	0.1030	64.1	50	150				
Benz[a]anthracene	6.26	0.500	8.000	0	78.2	50	150				
Chrysene	6.10	0.500	8.000	0	76.2	50	150				
Bis(2-ethylhexyl) phthalate	6.47	1.00	8.000	0.7484	71.5	50	150				
Di-n-octyl phthalate	6.43	1.00	8.000	0	80.4	50	150				
Benzo (b) fluoranthene	5.81	0.500	8.000	0	72.6	50	150				
Benzo (k) fluoranthene	5.47	0.500	8.000	0	68.3	50	150				

Qualifiers:

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

Work Order: 1207067
CLIENT: Calibre
Project: Hytec-Luftkin

QC SUMMARY REPORT

Semi-Volatile Organic Compounds by EPA Method 8270

Sample ID: **1207067-008BMS** SampType: **MS** Units: **µg/L** Prep Date: **7/16/2012** RunNo: **5031**
Client ID: **HLMW-07A** Batch ID: **2823** Analysis Date: **7/19/2012** SeqNo: **97652**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzo[a]pyrene	4.04	0.500	8.000	0	50.5	50	150				
Indeno (1,2,3-cd) pyrene	3.27	0.500	8.000	0	40.9	50	150				S
Dibenzo (a,h) anthracene	3.84	0.500	8.000	0	48.0	50	150				S
Benzo (g,h,I) perylene	3.22	0.500	8.000	0	40.2	50	150				S
Surr: 2,4,6-Tribromophenol	3.57		4.000		89.2	24	138				
Surr: 2-Fluorobiphenyl	1.64		2.000		82.0	38.6	138				
Surr: Nitrobenzene-d5	1.49		2.000		74.5	31.7	140				
Surr: Phenol-d6	1.53		4.000		38.2	20	116				
Surr: p-Terphenyl	1.91		2.000		95.6	49	156				

NOTES:
S - Outlying spike recoveries observed (possible matrix effect). The LCS was within range.

Sample ID: **ICV-2823** SampType: **ICV** Units: **µg/L** Prep Date: **7/19/2012** RunNo: **5031**
Client ID: **ICV** Batch ID: **2823** Analysis Date: **7/19/2012** SeqNo: **97688**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzyl alcohol	915	1.00	1,000	0	91.5	70	130				
4-Nitrophenol	1,030	5.00	1,000	0	103	70	130				
Surr: 2,4,6-Tribromophenol	981		1,000		98.1	24	138				
Surr: 2-Fluorobiphenyl	502		500.0		100	38.6	138				
Surr: Nitrobenzene-d5	494		500.0		98.7	31.7	140				
Surr: Phenol-d6	994		1,000		99.4	15	116				
Surr: p-Terphenyl	498		500.0		99.5	49	156				

Qualifiers:

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

Sample Log-In Check List

Client Name: **CLBRE**	Work Order Number: **1207067**
Logged by: **Troy Zehr**	Date Received: **7/13/2012 1:02:00 PM**

Chain of Custody

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

Log In

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

Special Handling (if applicable)

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

Person Notified: _____ Date: _____

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

Regarding: _____

Client Instructions: _____

18. Additional remarks/Disrepancies

Item Information

Item #	Temp ºC	Condition
Cooler 1	1.2	Good
Cooler 2	1.6	Good

Fremont Analytical

Chain of Custody Record

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

Laboratory Project No (internal): 1207067
Date: 12 Jul 12
Page: 1 of: 2

Client: Calibre Systems
Address: 64290 Airway Rd.
City, State, Zip: Joseph, OR 97846 Tel: 541 432-0305
Reports To (PM): Jeff Dawson Fax: 541 432-0305 Email: jeff.dawson@calibresys.com

Project Name: Hytec - Lufkin
Location: Little rock, WA
Collected by: Jeff Dawson - Chris Gallagher
Project No: K0308000

Sample Name	Sample Date	Sample Time	Sample Type (Matrix)	VOC (EPA 8260)	GX/BTEX by EPA 8021b	BTEX by 8260	Gasoline Range Organics	Hydrocarbon Identification (HCID)	Diesel/Heavy Oil Range Organics	CEM VOL (EPA 8270)	PAH (EPA 8270 - SIM)	PCBs (EPA 8082)	Cl Pesticides (EPA 8081)	Cl Herbicides (EPA 8151A)	Metals* (6020 / 200.8)	Total (T) | Dissolved (D)	Anions (IC)**	Comments/Depth
1 Trip Blank 71112	11 Jul 12	0700	H_2O	2														
2 MOWE-071112	"	0807	"	3						1				1				see remarks
3 HLMW-4B	"	0720	"	3						1				1				
4 SPWE-071112	"	0940	"	3						1				1				
5 HLMW-04A	"	1040	"	3						1				1				
6 HLMW-01A	"	1131	"	3						1				1				
7 PAWE-071112	"	1256	"	3						1				1				
8 HLMW-07A	"	1331	"	9						2				2				MS/MSD
9 HLMW-03A	"	1445	"	3						1				1				
10 HLMW-02A	"	1540	"	3						1				1				

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

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

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

Relinquished	Date/Time	Received	Date/Time
x	7/13/2012 1:02pm	x	7/13/12 13:02
Relinquished	Date/Time	Received	Date/Time
x		x	

Special Remarks: metals not field filtered or preserved. Need to be split, filtered & preserved for dissolved. Hold dissolved metals until Total have been reviewed.

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

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

www.fremontanalytical.com

Fremont Analytical

Chain of Custody Record

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

Laboratory Project No (internal): _____

Date: 12 Jul 12

Page: 2 of: 2

Client: Calibre Systems
Address: 64290 Airway Rd.
City, State, Zip: Joseph, OR 97846 Tel: 541 432-0305

Project Name: Hytec - Lufkin
Location: Littlerock, WA
Collected by: Jeff Dawson - Chris Gallagher

Reports To (PM): Jeff Dawson Fax: 541 432-0305 Email: jeff.dawson@calibresys.com Project No: K0308000

Sample Name	Sample Date	Sample Time	Sample Type (Matrix)	# Containers	VOC (EPA 8260)	GX/BTEX by EPA 8021b	BTEX by 8260	Gasoline Range Organics	Hydrocarbon Identification (HCID)	Diesel/Heavy Oil Range Organics	SemiVOC (EPA 8270)	PAH (EPA 8270 - SIM)	PCBs (EPA 8082)	Cl Pesticides (EPA 8081)	Cl Herbicides (EPA 8151A)	Metals* (6020 / 200.8)	Total (T)	Dissolved (D)	Anions (IC)**	Comments/Depth
1 HLMW-05B	12 Jul 11	1530	H_2O	3							1					1				
2 HLMW-06B	13 Jul 12	0940	H_2O	3							1					1				
3																				
4																				
5																				
6																				
7																				
8																				
9																				
10																				

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

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

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

Special Remarks: Metals not field filtered or preserved - Need to be split, filtered and preserved for dissolved. Hold dissolved metals until totals have been received.

Relinquished	Date/Time	Received	Date/Time
x [signature]	7/13/12 13:02	x [signature]	7/13/12 13:02
Relinquished	Date/Time	Received	Date/Time
x		x	

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

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

www.fremontanalytical.com

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-Lufkin
Lab ID: 1209186

October 22, 2012

Attention Tom McKeon:

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

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

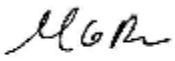
This report consists of the following:

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

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

Thank you for using Fremont Analytical.

Sincerely,



Michael Dee
Sr. Chemist / Principal

CC:
Grant Dawson
Justin Neste

Date: *10/22/2012*

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

Work Order Sample Summary

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

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

Case Narrative

WO#: **1209186**
Date: **10/22/2012**

CLIENT: Calibre
Project: Hytec-Lufkin

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

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

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

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

Analytical Report

WO#: **1209186**

Date Reported: **10/22/2012**

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

Project: Hytec-Lufkin

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

Client Sample ID: Trip Blank

Analyses	Result	MDL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260				Batch ID: R5936		Analyst: EM
Dichlorodifluoromethane (CFC-12)	ND	0.0300		µg/L	1	10/1/2012 2:39:00 PM
Chloromethane	ND	0.0470		µg/L	1	10/1/2012 2:39:00 PM
Vinyl chloride	ND	0.0530		µg/L	1	10/1/2012 2:39:00 PM
Bromomethane	ND	0.121		µg/L	1	10/1/2012 2:39:00 PM
Trichlorofluoromethane (CFC-11)	ND	0.0340		µg/L	1	10/1/2012 2:39:00 PM
Chloroethane	ND	0.0590		µg/L	1	10/1/2012 2:39:00 PM
1,1-Dichloroethene	ND	0.0470		µg/L	1	10/1/2012 2:39:00 PM
Methylene chloride	ND	0.0520		µg/L	1	10/1/2012 2:39:00 PM
trans-1,2-Dichloroethene	ND	0.0370		µg/L	1	10/1/2012 2:39:00 PM
Methyl tert-butyl ether (MTBE)	ND	0.0260		µg/L	1	10/1/2012 2:39:00 PM
1,1-Dichloroethane	ND	0.0270		µg/L	1	10/1/2012 2:39:00 PM
2,2-Dichloropropane	ND	0.0460		µg/L	1	10/1/2012 2:39:00 PM
cis-1,2-Dichloroethene	ND	0.0190		µg/L	1	10/1/2012 2:39:00 PM
Chloroform	ND	0.0320		µg/L	1	10/1/2012 2:39:00 PM
1,1,1-Trichloroethane (TCA)	ND	0.0320		µg/L	1	10/1/2012 2:39:00 PM
1,1-Dichloropropene	ND	0.0390		µg/L	1	10/1/2012 2:39:00 PM
Carbon tetrachloride	ND	0.0320		µg/L	1	10/1/2012 2:39:00 PM
1,2-Dichloroethane (EDC)	ND	0.0350		µg/L	1	10/1/2012 2:39:00 PM
Benzene	ND	0.0250		µg/L	1	10/1/2012 2:39:00 PM
Trichloroethene (TCE)	ND	0.0400		µg/L	1	10/1/2012 2:39:00 PM
1,2-Dichloropropane	ND	0.0470		µg/L	1	10/1/2012 2:39:00 PM
Bromodichloromethane	ND	0.0600		µg/L	1	10/1/2012 2:39:00 PM
Dibromomethane	ND	0.115		µg/L	1	10/1/2012 2:39:00 PM
cis-1,3-Dichloropropene	ND	0.0430		µg/L	1	10/1/2012 2:39:00 PM
Toluene	ND	0.0330		µg/L	1	10/1/2012 2:39:00 PM
trans-1,3-Dichloropropene	ND	0.0420		µg/L	1	10/1/2012 2:39:00 PM
1,1,2-Trichloroethane	ND	0.120		µg/L	1	10/1/2012 2:39:00 PM
1,3-Dichloropropane	ND	0.0530		µg/L	1	10/1/2012 2:39:00 PM
Tetrachloroethene (PCE)	ND	0.0350		µg/L	1	10/1/2012 2:39:00 PM
Dibromochloromethane	ND	0.0440		µg/L	1	10/1/2012 2:39:00 PM
1,2-Dibromoethane (EDB)	ND	0.00650		µg/L	1	10/1/2012 2:39:00 PM
Chlorobenzene	ND	0.0240		µg/L	1	10/1/2012 2:39:00 PM
1,1,1,2-Tetrachloroethane	ND	0.0640		µg/L	1	10/1/2012 2:39:00 PM
Ethylbenzene	ND	0.0170		µg/L	1	10/1/2012 2:39:00 PM
m,p-Xylene	ND	0.0410		µg/L	1	10/1/2012 2:39:00 PM

Qualifiers:

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

Analytical Report

WO#: **1209186**

Date Reported: **10/22/2012**

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

Project: Hytec-Lufkin

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

Client Sample ID: Trip Blank

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

Qualifiers:

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

Analytical Report

WO#: **1209186**

Date Reported: **10/22/2012**

Client: Calibre **Collection Date:** 9/27/2012 2:41:00 PM

Project: Hytec-Lufkin

Lab ID: 1209186-011 **Matrix:** Water

Client Sample ID: HLMW-07A-92712

Analyses	Result	MDL	Qual	Units	DF	Date Analyzed
Semi-Volatile Organic Compounds by EPA Method 8270				Batch ID: 3344		Analyst: PH
Phenol	ND	0.0401		µg/L	1	10/6/2012 8:56:00 AM
2-Chlorophenol	ND	0.0132		µg/L	1	10/6/2012 8:56:00 AM
1,3-Dichlorobenzene	ND	0.0161		µg/L	1	10/6/2012 8:56:00 AM
1,4-Dichlorobenzene	ND	0.0241		µg/L	1	10/6/2012 8:56:00 AM
1,2-Dichlorobenzene	ND	0.0232		µg/L	1	10/6/2012 8:56:00 AM
Benzyl alcohol	ND	0.0371		µg/L	1	10/6/2012 8:56:00 AM
Bis(2-chloroethyl) ether	ND	0.0294		µg/L	1	10/6/2012 8:56:00 AM
2-Methylphenol (o-cresol)	ND	0.0245		µg/L	1	10/6/2012 8:56:00 AM
Hexachloroethane	ND	0.0653		µg/L	1	10/6/2012 8:56:00 AM
N-Nitrosodi-n-propylamine	ND	0.0642		µg/L	1	10/6/2012 8:56:00 AM
Nitrobenzene	ND	0.0392		µg/L	1	10/6/2012 8:56:00 AM
Isophorone	ND	0.0205		µg/L	1	10/6/2012 8:56:00 AM
4-Methylphenol (p-cresol)	ND	0.0563		µg/L	1	10/6/2012 8:56:00 AM
2-Nitrophenol	ND	0.0912		µg/L	1	10/6/2012 8:56:00 AM
2,4-Dimethylphenol	ND	0.0376		µg/L	1	10/6/2012 8:56:00 AM
Bis(2-chloroethoxy)methane	ND	0.0337		µg/L	1	10/6/2012 8:56:00 AM
2,4-Dichlorophenol	ND	0.0188		µg/L	1	10/6/2012 8:56:00 AM
1,2,4-Trichlorobenzene	ND	0.0194		µg/L	1	10/6/2012 8:56:00 AM
Naphthalene	ND	0.0123		µg/L	1	10/6/2012 8:56:00 AM
4-Chloroaniline	ND	0.0180		µg/L	1	10/6/2012 8:56:00 AM
Hexachlorobutadiene	ND	0.0390		µg/L	1	10/6/2012 8:56:00 AM
4-Chloro-3-methylphenol	ND	0.0687		µg/L	1	10/6/2012 8:56:00 AM
2-Methylnaphthalene	ND	0.0252		µg/L	1	10/6/2012 8:56:00 AM
1-Methylnaphthalene	ND	0.0214		µg/L	1	10/6/2012 8:56:00 AM
Hexachlorocyclopentadiene	ND	0.0313		µg/L	1	10/6/2012 8:56:00 AM
2,4,6-Trichlorophenol	ND	0.0210		µg/L	1	10/6/2012 8:56:00 AM
2,4,5-Trichlorophenol	ND	0.0339		µg/L	1	10/6/2012 8:56:00 AM
2-Chloronaphthalene	ND	0.0143		µg/L	1	10/6/2012 8:56:00 AM
2-Nitroaniline	ND	0.0710		µg/L	1	10/6/2012 8:56:00 AM
Acenaphthene	ND	0.0139		µg/L	1	10/6/2012 8:56:00 AM
Dimethylphthalate	ND	0.0347		µg/L	1	10/6/2012 8:56:00 AM
2,6-Dinitrotoluene	ND	0.0269		µg/L	1	10/6/2012 8:56:00 AM
Acenaphthylene	ND	0.00613		µg/L	1	10/6/2012 8:56:00 AM
2,4-Dinitrophenol	ND	0.689		µg/L	1	10/6/2012 8:56:00 AM
Dibenzofuran	ND	0.0131		µg/L	1	10/6/2012 8:56:00 AM

Qualifiers:

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

Analytical Report

WO#: **1209186**

Date Reported: **10/22/2012**

Client: Calibre **Collection Date:** 9/27/2012 2:41:00 PM

Project: Hytec-Lufkin

Lab ID: 1209186-011 **Matrix:** Water

Client Sample ID: HLMW-07A-92712

Analyses	Result	MDL	Qual	Units	DF	Date Analyzed
Semi-Volatile Organic Compounds by EPA Method 8270				Batch ID: 3344		Analyst: PH
2,4-Dinitrotoluene	ND	0.0701		µg/L	1	10/6/2012 8:56:00 AM
4-Nitrophenol	ND	0.431		µg/L	1	10/6/2012 8:56:00 AM
Fluorene	ND	0.0164		µg/L	1	10/6/2012 8:56:00 AM
4-Chlorophenyl phenyl ether	ND	0.0199		µg/L	1	10/6/2012 8:56:00 AM
Diethylphthalate	0.125	0.0144	J	µg/L	1	10/6/2012 8:56:00 AM
4,6-Dinitro-2-methylphenol	ND	0.487		µg/L	1	10/6/2012 8:56:00 AM
4-Bromophenyl phenyl ether	ND	0.0241		µg/L	1	10/6/2012 8:56:00 AM
Hexachlorobenzene	ND	0.0264		µg/L	1	10/6/2012 8:56:00 AM
Pentachlorophenol	ND	0.0344		µg/L	1	10/6/2012 8:56:00 AM
Phenanthrene	ND	0.0130		µg/L	1	10/6/2012 8:56:00 AM
Anthracene	ND	0.0167		µg/L	1	10/6/2012 8:56:00 AM
Carbazole	ND	0.0553		µg/L	1	10/6/2012 8:56:00 AM
Di-n-butyl phthalate	0.600	0.0268	J	µg/L	1	10/6/2012 8:56:00 AM
Fluoranthene	ND	0.0112		µg/L	1	10/6/2012 8:56:00 AM
Pyrene	ND	0.0146		µg/L	1	10/6/2012 8:56:00 AM
Benzyl Butylphthalate	0.210	0.0552	J	µg/L	1	10/6/2012 8:56:00 AM
bis(2-Ethylhexyl)adipate	0.0846	0.0443	J	µg/L	1	10/6/2012 8:56:00 AM
Benz[a]anthracene	ND	0.0123		µg/L	1	10/6/2012 8:56:00 AM
Chrysene	ND	0.0126		µg/L	1	10/6/2012 8:56:00 AM
Bis(2-ethylhexyl) phthalate	0.246	0.0316	J	µg/L	1	10/6/2012 8:56:00 AM
Di-n-octyl phthalate	0.0539	0.0258	J	µg/L	1	10/6/2012 8:56:00 AM
Benzo (b) fluoranthene	ND	0.0259		µg/L	1	10/6/2012 8:56:00 AM
Benzo (k) fluoranthene	ND	0.0341		µg/L	1	10/6/2012 8:56:00 AM
Benzo[a]pyrene	ND	0.0304		µg/L	1	10/6/2012 8:56:00 AM
Indeno (1,2,3-cd) pyrene	ND	0.0673		µg/L	1	10/6/2012 8:56:00 AM
Dibenzo (a,h) anthracene	ND	0.0366		µg/L	1	10/6/2012 8:56:00 AM
Benzo (g,h,I) perylene	ND	0.0378		µg/L	1	10/6/2012 8:56:00 AM
Surr: 2,4,6-Tribromophenol	74.7	24-138		%REC	1	10/6/2012 8:56:00 AM
Surr: 2-Fluorobiphenyl	61.1	38.6-138		%REC	1	10/6/2012 8:56:00 AM
Surr: Nitrobenzene-d5	70.4	31.7-140		%REC	1	10/6/2012 8:56:00 AM
Surr: Phenol-d6	35.1	15-116		%REC	1	10/6/2012 8:56:00 AM
Surr: p-Terphenyl	81.5	49-156		%REC	1	10/6/2012 8:56:00 AM

Qualifiers:

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

Analytical Report

WO#: **1209186**

Date Reported: **10/22/2012**

Client: Calibre **Collection Date:** 9/27/2012 2:41:00 PM

Project: Hytec-Lufkin

Lab ID: 1209186-011 **Matrix:** Water

Client Sample ID: HLMW-07A-92712

Volatile Organic Compounds by EPA Method 8260

Batch ID: R5936 Analyst: EM

Analyses	Result	MDL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	0.0300		µg/L	1	10/1/2012 7:14:00 PM
Chloromethane	ND	0.0470		µg/L	1	10/1/2012 7:14:00 PM
Vinyl chloride	ND	0.0530		µg/L	1	10/1/2012 7:14:00 PM
Bromomethane	ND	0.121		µg/L	1	10/1/2012 7:14:00 PM
Trichlorofluoromethane (CFC-11)	ND	0.0340		µg/L	1	10/1/2012 7:14:00 PM
Chloroethane	ND	0.0590		µg/L	1	10/1/2012 7:14:00 PM
1,1-Dichloroethene	ND	0.0470		µg/L	1	10/1/2012 7:14:00 PM
Methylene chloride	ND	0.0520		µg/L	1	10/1/2012 7:14:00 PM
trans-1,2-Dichloroethene	ND	0.0370		µg/L	1	10/1/2012 7:14:00 PM
Methyl tert-butyl ether (MTBE)	ND	0.0260		µg/L	1	10/1/2012 7:14:00 PM
1,1-Dichloroethane	ND	0.0270		µg/L	1	10/1/2012 7:14:00 PM
2,2-Dichloropropane	ND	0.0460		µg/L	1	10/1/2012 7:14:00 PM
cis-1,2-Dichloroethene	ND	0.0190		µg/L	1	10/1/2012 7:14:00 PM
Chloroform	ND	0.0320		µg/L	1	10/1/2012 7:14:00 PM
1,1,1-Trichloroethane (TCA)	ND	0.0320		µg/L	1	10/1/2012 7:14:00 PM
1,1-Dichloropropene	ND	0.0390		µg/L	1	10/1/2012 7:14:00 PM
Carbon tetrachloride	ND	0.0320		µg/L	1	10/1/2012 7:14:00 PM
1,2-Dichloroethane (EDC)	ND	0.0350		µg/L	1	10/1/2012 7:14:00 PM
Benzene	ND	0.0250		µg/L	1	10/1/2012 7:14:00 PM
Trichloroethene (TCE)	ND	0.0400		µg/L	1	10/1/2012 7:14:00 PM
1,2-Dichloropropane	ND	0.0470		µg/L	1	10/1/2012 7:14:00 PM
Bromodichloromethane	ND	0.0600		µg/L	1	10/1/2012 7:14:00 PM
Dibromomethane	ND	0.115		µg/L	1	10/1/2012 7:14:00 PM
cis-1,3-Dichloropropene	ND	0.0430		µg/L	1	10/1/2012 7:14:00 PM
Toluene	ND	0.0330		µg/L	1	10/1/2012 7:14:00 PM
trans-1,3-Dichloropropene	ND	0.0420		µg/L	1	10/1/2012 7:14:00 PM
1,1,2-Trichloroethane	ND	0.120		µg/L	1	10/1/2012 7:14:00 PM
1,3-Dichloropropane	ND	0.0530		µg/L	1	10/1/2012 7:14:00 PM
Tetrachloroethene (PCE)	ND	0.0350		µg/L	1	10/1/2012 7:14:00 PM
Dibromochloromethane	ND	0.0440		µg/L	1	10/1/2012 7:14:00 PM
1,2-Dibromoethane (EDB)	ND	0.00650		µg/L	1	10/1/2012 7:14:00 PM
Chlorobenzene	ND	0.0240		µg/L	1	10/1/2012 7:14:00 PM
1,1,1,2-Tetrachloroethane	ND	0.0640		µg/L	1	10/1/2012 7:14:00 PM
Ethylbenzene	ND	0.0170		µg/L	1	10/1/2012 7:14:00 PM
m,p-Xylene	ND	0.0410		µg/L	1	10/1/2012 7:14:00 PM

Qualifiers:

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

Analytical Report

WO#: **1209186**

Date Reported: **10/22/2012**

Client: Calibre **Collection Date:** 9/27/2012 2:41:00 PM

Project: Hytec-Lufkin

Lab ID: 1209186-011 **Matrix:** Water

Client Sample ID: HLMW-07A-92712

Analyses	Result	MDL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260				Batch ID: R5936		Analyst: EM
o-Xylene	ND	0.0340		µg/L	1	10/1/2012 7:14:00 PM
Styrene	ND	0.0230		µg/L	1	10/1/2012 7:14:00 PM
Isopropylbenzene	ND	0.0180		µg/L	1	10/1/2012 7:14:00 PM
Bromoform	ND	0.115		µg/L	1	10/1/2012 7:14:00 PM
1,1,2,2-Tetrachloroethane	ND	0.108		µg/L	1	10/1/2012 7:14:00 PM
n-Propylbenzene	ND	0.0330		µg/L	1	10/1/2012 7:14:00 PM
Bromobenzene	ND	0.0550		µg/L	1	10/1/2012 7:14:00 PM
1,3,5-Trimethylbenzene	ND	0.0300		µg/L	1	10/1/2012 7:14:00 PM
2-Chlorotoluene	ND	0.0320		µg/L	1	10/1/2012 7:14:00 PM
4-Chlorotoluene	ND	0.0370		µg/L	1	10/1/2012 7:14:00 PM
tert-Butylbenzene	ND	0.0360		µg/L	1	10/1/2012 7:14:00 PM
1,2,3-Trichloropropane	ND	0.130		µg/L	1	10/1/2012 7:14:00 PM
1,2,4-Trichlorobenzene	ND	0.0990		µg/L	1	10/1/2012 7:14:00 PM
sec-Butylbenzene	ND	0.0230		µg/L	1	10/1/2012 7:14:00 PM
4-Isopropyltoluene	ND	0.0360		µg/L	1	10/1/2012 7:14:00 PM
1,3-Dichlorobenzene	ND	0.0290		µg/L	1	10/1/2012 7:14:00 PM
1,4-Dichlorobenzene	ND	0.0260		µg/L	1	10/1/2012 7:14:00 PM
n-Butylbenzene	ND	0.0200		µg/L	1	10/1/2012 7:14:00 PM
1,2-Dichlorobenzene	ND	0.0460		µg/L	1	10/1/2012 7:14:00 PM
1,2-Dibromo-3-chloropropane	ND	0.315		µg/L	1	10/1/2012 7:14:00 PM
1,2,4-Trimethylbenzene	ND	0.0200		µg/L	1	10/1/2012 7:14:00 PM
Hexachlorobutadiene	ND	0.154		µg/L	1	10/1/2012 7:14:00 PM
Naphthalene	ND	0.0940		µg/L	1	10/1/2012 7:14:00 PM
1,2,3-Trichlorobenzene	ND	0.147		µg/L	1	10/1/2012 7:14:00 PM
Surr: 1-Bromo-4-fluorobenzene	102	79.2-120		%REC	1	10/1/2012 7:14:00 PM
Surr: Dibromofluoromethane	96.5	76-114		%REC	1	10/1/2012 7:14:00 PM
Surr: Toluene-d8	102	86.8-119		%REC	1	10/1/2012 7:14:00 PM
Dissolved Metals by EPA Method 200.8				Batch ID: 3486		Analyst: SG
Arsenic	ND	0.266		µg/L	1	10/20/2012 12:41:16 AM
Total Metals by EPA Method 200.8				Batch ID: 3326		Analyst: SG
Antimony	0.442	0.00300		µg/L	1	10/3/2012 11:53:45 PM

Qualifiers:

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

Analytical Report

WO#: **1209186**

Date Reported: **10/22/2012**

Client: Calibre **Collection Date:** 9/27/2012 2:41:00 PM

Project: Hytec-Lufkin

Lab ID: 1209186-011 **Matrix:** Water

Client Sample ID: HLMW-07A-92712

Analyses	Result	MDL	Qual	Units	DF	Date Analyzed
Total Metals by EPA Method 200.8				Batch ID: 3326		Analyst: SG
Arsenic	4.59	0.266		µg/L	1	10/3/2012 11:53:45 PM
Beryllium	0.380	0.0680		µg/L	1	10/3/2012 11:53:45 PM
Cadmium	0.0620	0.0160	J	µg/L	1	10/3/2012 11:53:45 PM
Chromium	15.4	0.0810		µg/L	1	10/3/2012 11:53:45 PM
Copper	46.8	0.0930		µg/L	1	10/3/2012 11:53:45 PM
Lead	2.96	0.0750		µg/L	1	10/3/2012 11:53:45 PM
Nickel	26.9	0.110		µg/L	1	10/3/2012 11:53:45 PM
Zinc	109	0.121		µg/L	1	10/3/2012 11:53:45 PM

Qualifiers:

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

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

QC SUMMARY REPORT

Dissolved Metals by EPA Method 200.8

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

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

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

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

Qualifiers:

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

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

QC SUMMARY REPORT

Dissolved Metals by EPA Method 200.8

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

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

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

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

Qualifiers:

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

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

QC SUMMARY REPORT

Dissolved Metals by EPA Method 200.8

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

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

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

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

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

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

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

Qualifiers:

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

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

QC SUMMARY REPORT

Dissolved Metals by EPA Method 200.8

Sample ID: **1209186-002DDUP**	SampType: **DUP**			Units: **µg/L**		Prep Date: **10/19/2012**		RunNo: **6238**			
Client ID: **HLMW-02A-92712**	Batch ID: **3486**					Analysis Date: **10/20/2012**		SeqNo: **123942**			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	1.00						0	0	30	

Sample ID: **1209186-002DMS**	SampType: **MS**			Units: **µg/L**		Prep Date: **10/19/2012**		RunNo: **6238**			
Client ID: **HLMW-02A-92712**	Batch ID: **3486**					Analysis Date: **10/20/2012**		SeqNo: **123943**			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	501	1.00	500.0	0	100	70	130				

Sample ID: **1209186-002DMSD**	SampType: **MSD**			Units: **µg/L**		Prep Date: **10/19/2012**		RunNo: **6238**			
Client ID: **HLMW-02A-92712**	Batch ID: **3486**					Analysis Date: **10/20/2012**		SeqNo: **123944**			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	512	1.00	500.0	0	102	70	130	501.4	2.09	30	

Qualifiers:

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

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

QC SUMMARY REPORT

Total Metals by EPA Method 200.8

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

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

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

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

Qualifiers:

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

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

QC SUMMARY REPORT

Total Metals by EPA Method 200.8

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

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

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

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

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

Qualifiers:

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

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

QC SUMMARY REPORT

Total Metals by EPA Method 200.8

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

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

Qualifiers:

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

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

QC SUMMARY REPORT

Semi-Volatile Organic Compounds by EPA Method 8270

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

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

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

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

Qualifiers:

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

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

QC SUMMARY REPORT

Semi-Volatile Organic Compounds by EPA Method 8270

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

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

Qualifiers:

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

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

QC SUMMARY REPORT

Semi-Volatile Organic Compounds by EPA Method 8270

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

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

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

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

Qualifiers:

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

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

QC SUMMARY REPORT

Semi-Volatile Organic Compounds by EPA Method 8270

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

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

Qualifiers:

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

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

QC SUMMARY REPORT

Semi-Volatile Organic Compounds by EPA Method 8270

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

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

Qualifiers:

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

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

QC SUMMARY REPORT

Semi-Volatile Organic Compounds by EPA Method 8270

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

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

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

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

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

Qualifiers:

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

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

QC SUMMARY REPORT

Semi-Volatile Organic Compounds by EPA Method 8270

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

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

Qualifiers:

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

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

QC SUMMARY REPORT

Semi-Volatile Organic Compounds by EPA Method 8270

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

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

Qualifiers:

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

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

QC SUMMARY REPORT

Semi-Volatile Organic Compounds by EPA Method 8270

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

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

Qualifiers:

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

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

QC SUMMARY REPORT

Semi-Volatile Organic Compounds by EPA Method 8270

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

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

Qualifiers:

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

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

QC SUMMARY REPORT

Semi-Volatile Organic Compounds by EPA Method 8270

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

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

Qualifiers:

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

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

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260

Sample ID: **1209184-001ADUP** SampType: **DUP** Units: **µg/L** Prep Date: **10/1/2012** RunNo: **5936**
Client ID: **BATCH** Batch ID: **R5936** Analysis Date: **10/1/2012** SeqNo: **117475**

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	0.500						0	0	30	
Vinyl chloride	ND	0.200						0	0	30	
Bromomethane	ND	0.500						0	0	30	
Trichlorofluoromethane (CFC-11)	ND	0.500						0	0	30	
Chloroethane	ND	0.500						0	0	30	
1,1-Dichloroethene	ND	0.500						0	0	30	
Methylene chloride	ND	0.500						0	0	30	
trans-1,2-Dichloroethene	ND	0.500						0	0	30	
Methyl tert-butyl ether (MTBE)	ND	1.00						0	0	30	
1,1-Dichloroethane	ND	0.500						0	0	30	
2,2-Dichloropropane	ND	1.00						0	0	30	
cis-1,2-Dichloroethene	ND	0.500						0	0	30	
Chloroform	1.48	1.00						1.210	20.1	30	
1,1,1-Trichloroethane (TCA)	ND	0.500						0	0	30	
1,1-Dichloropropene	ND	0.500						0	0	30	
Carbon tetrachloride	ND	1.00						0	0	30	
1,2-Dichloroethane (EDC)	ND	0.500						0	0	30	
Benzene	ND	0.500						0	0	30	
Trichloroethene (TCE)	ND	0.500						0	0	30	
1,2-Dichloropropane	ND	0.500						0	0	30	
Bromodichloromethane	ND	0.500						0	0	30	
Dibromomethane	ND	0.500						0	0	30	
cis-1,3-Dichloropropene	ND	0.500						0	0	30	
Toluene	ND	0.500						0	0	30	
trans-1,3-Dichloropropene	ND	0.500						0	0	30	
1,1,2-Trichloroethane	ND	0.500						0	0	30	
1,3-Dichloropropane	ND	0.500						0	0	30	
Tetrachloroethene (PCE)	ND	0.500						0	0	30	

Qualifiers:

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

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

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260

Sample ID: **1209184-001ADUP** SampType: **DUP** Units: **µg/L** Prep Date: **10/1/2012** RunNo: **5936**
Client ID: **BATCH** Batch ID: **R5936** Analysis Date: **10/1/2012** SeqNo: **117475**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dibromochloromethane	ND	0.500						0	0	30	
1,2-Dibromoethane (EDB)	ND	0.200						0	0	30	
Chlorobenzene	ND	0.500						0	0	30	
1,1,1,2-Tetrachloroethane	ND	0.500						0	0	30	
Ethylbenzene	ND	0.500						0	0	30	
m,p-Xylene	ND	0.500						0	0	30	
o-Xylene	ND	0.500						0	0	30	
Styrene	ND	0.500						0	0	30	
Isopropylbenzene	ND	1.00						0	0	30	
Bromoform	ND	0.500						0	0	30	
1,1,2,2-Tetrachloroethane	ND	0.500						0	0	30	
n-Propylbenzene	ND	0.500						0	0	30	
Bromobenzene	ND	0.500						0	0	30	
1,3,5-Trimethylbenzene	ND	0.500						0	0	30	
2-Chlorotoluene	ND	0.500						0	0	30	
4-Chlorotoluene	ND	0.500						0	0	30	
tert-Butylbenzene	ND	0.500						0	0	30	
1,2,3-Trichloropropane	ND	0.500						0	0	30	
1,2,4-Trichlorobenzene	ND	1.00						0	0	30	
sec-Butylbenzene	ND	0.500						0	0	30	
4-Isopropyltoluene	ND	0.500						0	0	30	
1,3-Dichlorobenzene	ND	0.500						0	0	30	
1,4-Dichlorobenzene	ND	0.500						0	0	30	
n-Butylbenzene	ND	0.500						0	0	30	
1,2-Dichlorobenzene	ND	0.500						0	0	30	
1,2-Dibromo-3-chloropropane	ND	0.500						0	0	30	
1,2,4-Trimethylbenzene	ND	0.500						0	0	30	
Hexachlorobutadiene	ND	2.00						0	0	30	
Naphthalene	ND	2.00						0	0	30	

Qualifiers:

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

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

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260

Sample ID: **1209184-001ADUP** SampType: **DUP** Units: **µg/L** Prep Date: **10/1/2012** RunNo: **5936**
Client ID: **BATCH** Batch ID: **R5936** Analysis Date: **10/1/2012** SeqNo: **117475**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2,3-Trichlorobenzene	ND	2.00						0	0	30	
Surr: 1-Bromo-4-fluorobenzene	11.2		10.00		112	79.2	120		0		
Surr: Dibromofluoromethane	10.6		10.00		106	76	114		0		
Surr: Toluene-d8	10.6		10.00		106	86.8	119		0		

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

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

Qualifiers:

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

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

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260

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

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Trichloroethene (TCE)	21.1	0.500	20.00	0	106	65.7	133				
1,2-Dichloropropane	19.7	0.500	20.00	0	98.4	70	130				
Bromodichloromethane	21.4	0.500	20.00	0	107	59.4	139				
Dibromomethane	20.9	0.500	20.00	0	105	65.5	130				
cis-1,3-Dichloropropene	16.6	0.500	20.00	0	83.3	63.3	124				
Toluene	20.9	0.500	20.00	0	104	68.4	133				
trans-1,3-Dichloropropene	16.6	0.500	20.00	0	83.3	57.7	125				
1,1,2-Trichloroethane	19.6	0.500	20.00	0	98.0	59.4	127				
1,3-Dichloropropane	19.9	0.500	20.00	0	99.4	68.2	134				
Tetrachloroethene (PCE)	16.9	0.500	20.00	0	84.4	51.5	109				
Dibromochloromethane	21.8	0.500	20.00	0	109	66.2	138				
1,2-Dibromoethane (EDB)	20.1	0.200	20.00	0	100	68.9	124				
Chlorobenzene	20.2	0.500	20.00	0	101	68.9	128				
1,1,1,2-Tetrachloroethane	20.4	0.500	20.00	0	102	67.3	135				
Ethylbenzene	20.2	0.500	20.00	0	101	67.3	135				
m,p-Xylene	40.1	0.500	40.00	0	100	63.3	135				
o-Xylene	20.2	0.500	20.00	0	101	67.8	131				
Styrene	19.7	0.500	20.00	0	98.5	67.2	123				
Isopropylbenzene	19.9	1.00	20.00	0	99.5	56	147				
Bromoform	21.7	0.500	20.00	0	108	61.4	136				
1,1,2,2-Tetrachloroethane	19.6	0.500	20.00	0	98.0	59.1	137				
n-Propylbenzene	18.9	0.500	20.00	0	94.5	57.6	142				
Bromobenzene	19.2	0.500	20.00	0	95.8	63.6	130				
1,3,5-Trimethylbenzene	18.8	0.500	20.00	0	94.2	59.9	136				
2-Chlorotoluene	19.9	0.500	20.00	0	99.6	63.4	134				
4-Chlorotoluene	18.8	0.500	20.00	0	94.3	58.4	134				
tert-Butylbenzene	20.4	0.500	20.00	0	102	74.2	141				
1,2,3-Trichloropropane	19.6	0.500	20.00	0	97.8	62.4	129				
1,2,4-Trichlorobenzene	17.2	1.00	20.00	0	86.0	53.7	120				

Qualifiers:

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

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

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260

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

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
sec-Butylbenzene	18.2	0.500	20.00	0	91.1	56	146				
4-Isopropyltoluene	17.9	0.500	20.00	0	89.6	62.4	134				
1,3-Dichlorobenzene	18.3	0.500	20.00	0	91.3	58.2	128				
1,4-Dichlorobenzene	19.3	0.500	20.00	0	96.5	60.1	123				
n-Butylbenzene	16.2	0.500	20.00	0	81.2	54.6	135				
1,2-Dichlorobenzene	19.1	0.500	20.00	0	95.4	62.6	124				
1,2-Dibromo-3-chloropropane	18.4	0.500	20.00	0	92.0	51.8	142				
1,2,4-Trimethylbenzene	18.9	0.500	20.00	0	94.4	63.7	132				
Hexachlorobutadiene	13.1	2.00	20.00	0	65.4	62.1	121				
Naphthalene	17.3	2.00	20.00	0	86.3	58.7	119				
1,2,3-Trichlorobenzene	17.8	2.00	20.00	0	89.0	50.7	113				
Surr: 1-Bromo-4-fluorobenzene	10.3		10.00		103	79.2	120				
Surr: Dibromofluoromethane	9.75		10.00		97.5	76	114				
Surr: Toluene-d8	10.4		10.00		104	86.8	119				

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

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	ND	1.00									
Chloromethane	ND	0.500									
Vinyl chloride	ND	0.200									
Bromomethane	ND	0.500									
Trichlorofluoromethane (CFC-11)	ND	0.500									
Chloroethane	ND	0.500									
1,1-Dichloroethene	ND	0.500									
Methylene chloride	ND	0.500									
trans-1,2-Dichloroethene	ND	0.500									

Qualifiers:

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

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

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260

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

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	ND	1.00									
1,1-Dichloroethane	ND	0.500									
2,2-Dichloropropane	ND	1.00									
cis-1,2-Dichloroethene	ND	0.500									
Chloroform	ND	1.00									
1,1,1-Trichloroethane (TCA)	ND	0.500									
1,1-Dichloropropene	ND	0.500									
Carbon tetrachloride	ND	1.00									
1,2-Dichloroethane (EDC)	ND	0.500									
Benzene	ND	0.500									
Trichloroethene (TCE)	ND	0.500									
1,2-Dichloropropane	ND	0.500									
Bromodichloromethane	ND	0.500									
Dibromomethane	ND	0.500									
cis-1,3-Dichloropropene	ND	0.500									
Toluene	ND	0.500									
trans-1,3-Dichloropropene	ND	0.500									
1,1,2-Trichloroethane	ND	0.500									
1,3-Dichloropropane	ND	0.500									
Tetrachloroethene (PCE)	ND	0.500									
Dibromochloromethane	ND	0.500									
1,2-Dibromoethane (EDB)	ND	0.200									
Chlorobenzene	ND	0.500									
1,1,1,2-Tetrachloroethane	ND	0.500									
Ethylbenzene	ND	0.500									
m,p-Xylene	ND	0.500									
o-Xylene	ND	0.500									
Styrene	ND	0.500									
Isopropylbenzene	ND	1.00									

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

Fremont Analytical

Date: *10/22/2012*

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

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260

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

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Bromoform	ND	0.500									
1,1,2,2-Tetrachloroethane	ND	0.500									
n-Propylbenzene	ND	0.500									
Bromobenzene	ND	0.500									
1,3,5-Trimethylbenzene	ND	0.500									
2-Chlorotoluene	ND	0.500									
4-Chlorotoluene	ND	0.500									
tert-Butylbenzene	ND	0.500									
1,2,3-Trichloropropane	ND	0.500									
1,2,4-Trichlorobenzene	ND	1.00									
sec-Butylbenzene	ND	0.500									
4-Isopropyltoluene	ND	0.500									
1,3-Dichlorobenzene	ND	0.500									
1,4-Dichlorobenzene	ND	0.500									
n-Butylbenzene	ND	0.500									
1,2-Dichlorobenzene	ND	0.500									
1,2-Dibromo-3-chloropropane	ND	0.500									
1,2,4-Trimethylbenzene	ND	0.500									
Hexachlorobutadiene	ND	2.00									
Naphthalene	ND	2.00									
1,2,3-Trichlorobenzene	ND	2.00									
Surr: 1-Bromo-4-fluorobenzene	9.79		10.00		97.9	79.2	120				
Surr: Dibromofluoromethane	10.2		10.00		102	76	114				
Surr: Toluene-d8	10.0		10.00		100	86.8	119				

Qualifiers:

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

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

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260

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

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	16.2	1.00	20.00	0	81.2	45.1	121				
Chloromethane	15.9	0.500	20.00	0	79.7	42.5	131				
Vinyl chloride	14.6	0.200	20.00	0	73.2	56.2	130				
Bromomethane	16.3	0.500	20.00	0	81.4	45.4	138				
Trichlorofluoromethane (CFC-11)	18.8	0.500	20.00	0	93.9	64.7	129				
Chloroethane	17.7	0.500	20.00	0	88.6	62.5	123				
1,1-Dichloroethene	18.0	0.500	20.00	0	89.8	60.7	146				
Methylene chloride	18.7	0.500	20.00	0	93.7	60.3	135				
trans-1,2-Dichloroethene	19.7	0.500	20.00	0	98.3	71.3	129				
Methyl tert-butyl ether (MTBE)	18.4	1.00	20.00	0	91.9	75.4	123				
1,1-Dichloroethane	19.2	0.500	20.00	0	96.2	71.3	129				
2,2-Dichloropropane	17.1	1.00	20.00	0	85.4	37.8	132				
cis-1,2-Dichloroethene	18.2	0.500	20.00	0	90.8	67.5	127				
Chloroform	19.7	1.00	20.00	0	98.6	70.3	123				
1,1,1-Trichloroethane (TCA)	20.2	0.500	20.00	0	101	67.9	134				
1,1-Dichloropropene	19.0	0.500	20.00	0	94.8	72.1	133				
Carbon tetrachloride	24.5	1.00	20.00	0	122	68	136				
1,2-Dichloroethane (EDC)	19.0	0.500	20.00	0	94.8	65.8	126				
Benzene	19.5	0.500	20.00	0	97.6	75.2	124				
Trichloroethene (TCE)	21.3	0.500	20.00	0	107	71.9	130				
1,2-Dichloropropane	18.8	0.500	20.00	0	94.0	71.9	131				
Bromodichloromethane	20.3	0.500	20.00	0	101	70	130				
Dibromomethane	19.9	0.500	20.00	0	99.3	74.2	125				
cis-1,3-Dichloropropene	15.8	0.500	20.00	0	78.8	62.8	135				
Toluene	19.8	0.500	20.00	0	99.2	75.2	129				
trans-1,3-Dichloropropene	16.0	0.500	20.00	0	79.8	58.1	138				
1,1,2-Trichloroethane	18.7	0.500	20.00	0	93.4	65.4	128				
1,3-Dichloropropane	18.6	0.500	20.00	0	93.2	71.9	131				
Tetrachloroethene (PCE)	28.0	0.500	20.00	0	140	52.4	140				

Qualifiers:

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

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

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260

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

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dibromochloromethane	19.2	0.500	20.00	0	96.0	68.7	139				
1,2-Dibromoethane (EDB)	18.9	0.200	20.00	0	94.4	71.2	129				
Chlorobenzene	20.0	0.500	20.00	0	100	77.2	122				
1,1,1,2-Tetrachloroethane	20.5	0.500	20.00	0	102	76.2	130				
Ethylbenzene	20.3	0.500	20.00	0	101	78	127				
m,p-Xylene	40.4	0.500	40.00	0	101	77.5	130				
o-Xylene	21.0	0.500	20.00	0	105	77.6	126				
Styrene	19.6	0.500	20.00	0	97.9	66.8	137				
Isopropylbenzene	19.6	1.00	20.00	0	98.1	75.9	133				
Bromoform	21.6	0.500	20.00	0	108	69.9	142				
1,1,2,2-Tetrachloroethane	17.0	0.500	20.00	0	85.0	68	134				
n-Propylbenzene	19.0	0.500	20.00	0	95.1	77.1	133				
Bromobenzene	19.0	0.500	20.00	0	94.8	71.1	131				
1,3,5-Trimethylbenzene	19.5	0.500	20.00	0	97.3	76.2	133				
2-Chlorotoluene	20.0	0.500	20.00	0	100	67.1	137				
4-Chlorotoluene	19.8	0.500	20.00	0	99.0	70.7	132				
tert-Butylbenzene	16.4	0.500	20.00	0	81.8	71.3	139				
1,2,3-Trichloropropane	19.8	0.500	20.00	0	99.0	70.8	132				
1,2,4-Trichlorobenzene	17.1	1.00	20.00	0	85.5	61.4	139				
sec-Butylbenzene	18.6	0.500	20.00	0	93.0	77.4	136				
4-Isopropyltoluene	18.3	0.500	20.00	0	91.7	78.1	131				
1,3-Dichlorobenzene	19.4	0.500	20.00	0	97.1	73.5	125				
1,4-Dichlorobenzene	19.3	0.500	20.00	0	96.4	71.4	125				
n-Butylbenzene	16.8	0.500	20.00	0	83.9	69.8	138				
1,2-Dichlorobenzene	19.5	0.500	20.00	0	97.6	74.2	123				
1,2-Dibromo-3-chloropropane	14.7	0.500	20.00	0	73.3	66.1	138				
1,2,4-Trimethylbenzene	18.7	0.500	20.00	0	93.6	72.3	133				
Hexachlorobutadiene	14.6	2.00	20.00	0	73.2	60.9	141				
Naphthalene	16.5	2.00	20.00	0	82.6	58.2	140				

Qualifiers:

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

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

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260

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

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2,3-Trichlorobenzene	18.2	2.00	20.00	0	91.2	61.3	133				
Surr: 1-Bromo-4-fluorobenzene	10.1		10.00		101	79.2	120				
Surr: Dibromofluoromethane	10.0		10.00		100	76	114				
Surr: Toluene-d8	9.96		10.00		99.6	86.8	119				

Sample ID: **1209186-008ADUP**	SampType: **DUP**	Units: **µg/L**	Prep Date: **10/1/2012**	RunNo: **5936**
Client ID: **MOWE-92712**	Batch ID: **R5936**		Analysis Date: **10/1/2012**	SeqNo: **118709**

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	0.500						0	0	30	
Vinyl chloride	ND	0.200						0	0	30	
Bromomethane	ND	0.500						0	0	30	
Trichlorofluoromethane (CFC-11)	ND	0.500						0	0	30	
Chloroethane	ND	0.500						0	0	30	
1,1-Dichloroethene	ND	0.500						0	0	30	
Methylene chloride	ND	0.500						0	0	30	
trans-1,2-Dichloroethene	ND	0.500						0	0	30	
Methyl tert-butyl ether (MTBE)	ND	1.00						0	0	30	
1,1-Dichloroethane	ND	0.500						0	0	30	
2,2-Dichloropropane	ND	1.00						0	0	30	
cis-1,2-Dichloroethene	ND	0.500						0	0	30	
Chloroform	ND	1.00						0	0	30	
1,1,1-Trichloroethane (TCA)	ND	0.500						0	0	30	
1,1-Dichloropropene	ND	0.500						0	0	30	
Carbon tetrachloride	ND	1.00						0	0	30	
1,2-Dichloroethane (EDC)	ND	0.500						0	0	30	
Benzene	ND	0.500						0	0	30	

Qualifiers:

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

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

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260

Sample ID: **1209186-008ADUP** SampType: **DUP** Units: **µg/L** Prep Date: **10/1/2012** RunNo: **5936**
Client ID: **MOWE-92712** Batch ID: **R5936** Analysis Date: **10/1/2012** SeqNo: **118709**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Trichloroethene (TCE)	ND	0.500						0	0	30	
1,2-Dichloropropane	ND	0.500						0	0	30	
Bromodichloromethane	ND	0.500						0	0	30	
Dibromomethane	ND	0.500						0	0	30	
cis-1,3-Dichloropropene	ND	0.500						0	0	30	
Toluene	ND	0.500						0	0	30	
trans-1,3-Dichloropropene	ND	0.500						0	0	30	
1,1,2-Trichloroethane	ND	0.500						0	0	30	
1,3-Dichloropropane	ND	0.500						0	0	30	
Tetrachloroethene (PCE)	ND	0.500						0	0	30	
Dibromochloromethane	ND	0.500						0	0	30	
1,2-Dibromoethane (EDB)	ND	0.200						0	0	30	
Chlorobenzene	ND	0.500						0	0	30	
1,1,1,2-Tetrachloroethane	ND	0.500						0	0	30	
Ethylbenzene	ND	0.500						0	0	30	
m,p-Xylene	ND	0.500						0	0	30	
o-Xylene	ND	0.500						0	0	30	
Styrene	ND	0.500						0	0	30	
Isopropylbenzene	ND	1.00						0	0	30	
Bromoform	ND	0.500						0	0	30	
1,1,2,2-Tetrachloroethane	ND	0.500						0	0	30	
n-Propylbenzene	ND	0.500						0	0	30	
Bromobenzene	ND	0.500						0	0	30	
1,3,5-Trimethylbenzene	ND	0.500						0	0	30	
2-Chlorotoluene	ND	0.500						0	0	30	
4-Chlorotoluene	ND	0.500						0	0	30	
tert-Butylbenzene	ND	0.500						0	0	30	
1,2,3-Trichloropropane	ND	0.500						0	0	30	
1,2,4-Trichlorobenzene	ND	1.00						0	0	30	

Qualifiers:

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

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

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260

Sample ID: **1209186-008ADUP** SampType: **DUP** Units: **µg/L** Prep Date: **10/1/2012** RunNo: **5936**
Client ID: **MOWE-92712** Batch ID: **R5936** Analysis Date: **10/1/2012** SeqNo: **118709**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
sec-Butylbenzene	ND	0.500						0	0	30	
4-Isopropyltoluene	ND	0.500						0	0	30	
1,3-Dichlorobenzene	ND	0.500						0	0	30	
1,4-Dichlorobenzene	ND	0.500						0	0	30	
n-Butylbenzene	ND	0.500						0	0	30	
1,2-Dichlorobenzene	ND	0.500						0	0	30	
1,2-Dibromo-3-chloropropane	ND	0.500						0	0	30	
1,2,4-Trimethylbenzene	ND	0.500						0	0	30	
Hexachlorobutadiene	ND	2.00						0	0	30	
Naphthalene	ND	2.00						0	0	30	
1,2,3-Trichlorobenzene	ND	2.00						0	0	30	
Surr: 1-Bromo-4-fluorobenzene	9.19		10.00		91.9	79.2	120		0		
Surr: Dibromofluoromethane	10.1		10.00		101	76	114		0		
Surr: Toluene-d8	9.68		10.00		96.8	86.8	119		0		

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

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	16.3	1.00	20.00	0	81.4	33.3	122	17.72	8.41	30	
Chloromethane	15.8	0.500	20.00	0	79.2	48.2	145	17.26	8.64	30	
Vinyl chloride	15.4	0.200	20.00	0	76.8	45.6	149	16.66	8.18	30	
Bromomethane	17.2	0.500	20.00	0	86.2	31.5	135	18.07	4.76	30	
Trichlorofluoromethane (CFC-11)	21.0	0.500	20.00	0	105	54.7	138	20.92	0.619	30	
Chloroethane	18.1	0.500	20.00	0	90.4	52.7	140	19.17	5.91	30	
1,1-Dichloroethene	18.8	0.500	20.00	0	93.8	58.2	146	19.96	6.20	30	
Methylene chloride	18.3	0.500	20.00	0	91.6	65.1	127	18.82	2.75	30	
trans-1,2-Dichloroethene	19.3	0.500	20.00	0	96.5	69	132	21.40	10.3	30	

Qualifiers:

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

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

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260

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

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	18.1	1.00	20.00	0	90.7	70	130	19.62	7.89	30	
1,1-Dichloroethane	18.7	0.500	20.00	0	93.6	74.7	133	20.55	9.27	30	
2,2-Dichloropropane	6.42	1.00	20.00	0	32.1	31.5	121	7.680	17.9	30	
cis-1,2-Dichloroethene	17.9	0.500	20.00	0	89.4	67.1	123	19.29	7.53	30	
Chloroform	19.5	1.00	20.00	0	97.5	58.6	123	19.99	2.53	30	
1,1,1-Trichloroethane (TCA)	21.6	0.500	20.00	0	108	64.2	146	20.87	3.48	30	
1,1-Dichloropropene	19.7	0.500	20.00	0	98.3	73.8	136	19.08	2.99	30	
Carbon tetrachloride	25.5	1.00	20.00	0	128	69.2	141	24.99	2.10	30	
1,2-Dichloroethane (EDC)	18.8	0.500	20.00	0	94.2	62.3	130	18.25	3.18	30	
Benzene	19.9	0.500	20.00	0	99.7	68.7	132	19.67	1.31	30	
Trichloroethene (TCE)	20.2	0.500	20.00	0	101	65.7	133	21.13	4.45	30	
1,2-Dichloropropane	18.8	0.500	20.00	0	93.8	70	130	19.69	4.78	30	
Bromodichloromethane	20.3	0.500	20.00	0	102	59.4	139	21.35	4.94	30	
Dibromomethane	20.1	0.500	20.00	0	100	65.5	130	20.91	4.05	30	
cis-1,3-Dichloropropene	15.9	0.500	20.00	0	79.6	63.3	124	16.65	4.48	30	
Toluene	20.3	0.500	20.00	0	101	68.4	133	20.86	2.77	30	
trans-1,3-Dichloropropene	15.9	0.500	20.00	0	79.6	57.7	125	16.65	4.42	30	
1,1,2-Trichloroethane	19.0	0.500	20.00	0	95.2	59.4	127	19.59	2.90	30	
1,3-Dichloropropane	19.4	0.500	20.00	0	96.8	68.2	134	19.88	2.65	30	
Tetrachloroethene (PCE)	15.6	0.500	20.00	0	77.9	51.5	109	16.87	7.95	30	
Dibromochloromethane	20.7	0.500	20.00	0	104	66.2	138	21.83	5.31	30	
1,2-Dibromoethane (EDB)	20.0	0.200	20.00	0	100	68.9	124	20.07	0.249	30	
Chlorobenzene	19.9	0.500	20.00	0	99.6	68.9	128	20.15	1.15	30	
1,1,1,2-Tetrachloroethane	20.4	0.500	20.00	0	102	67.3	135	20.41	0.147	30	
Ethylbenzene	19.7	0.500	20.00	0	98.6	67.3	135	20.24	2.65	30	
m,p-Xylene	38.6	0.500	40.00	0	96.6	63.3	135	40.06	3.61	30	
o-Xylene	20.0	0.500	20.00	0	99.8	67.8	131	20.20	1.15	30	
Styrene	19.2	0.500	20.00	0	96.2	67.2	123	19.70	2.41	30	
Isopropylbenzene	19.6	1.00	20.00	0	98.2	56	147	19.90	1.32	30	

Qualifiers:

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

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

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260

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

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Bromoform	21.4	0.500	20.00	0	107	61.4	136	21.69	1.11	30	
1,1,2,2-Tetrachloroethane	19.2	0.500	20.00	0	95.9	59.1	137	19.61	2.27	30	
n-Propylbenzene	18.0	0.500	20.00	0	90.2	57.6	142	18.90	4.66	30	
Bromobenzene	18.7	0.500	20.00	0	93.7	63.6	130	19.15	2.16	30	
1,3,5-Trimethylbenzene	18.5	0.500	20.00	0	92.4	59.9	136	18.84	1.93	30	
2-Chlorotoluene	19.2	0.500	20.00	0	95.8	63.4	134	19.92	3.89	30	
4-Chlorotoluene	18.2	0.500	20.00	0	91.2	58.4	134	18.85	3.23	30	
tert-Butylbenzene	19.6	0.500	20.00	0	98.2	74.2	141	20.37	3.65	30	
1,2,3-Trichloropropane	19.9	0.500	20.00	0	99.4	62.4	129	19.56	1.57	30	
1,2,4-Trichlorobenzene	15.4	1.00	20.00	0	77.0	53.7	120	17.19	11.0	30	
sec-Butylbenzene	17.8	0.500	20.00	0	88.8	56	146	18.21	2.45	30	
4-Isopropyltoluene	16.2	0.500	20.00	0	81.0	62.4	134	17.92	10.0	30	
1,3-Dichlorobenzene	18.6	0.500	20.00	0	93.2	58.2	128	18.26	2.06	30	
1,4-Dichlorobenzene	18.7	0.500	20.00	0	93.6	60.1	123	19.29	2.95	30	
n-Butylbenzene	15.3	0.500	20.00	0	76.7	54.6	135	16.25	5.83	30	
1,2-Dichlorobenzene	19.1	0.500	20.00	0	95.5	62.6	124	19.07	0.157	30	
1,2-Dibromo-3-chloropropane	14.9	0.500	20.00	0	74.7	51.8	142	18.40	20.8	30	
1,2,4-Trimethylbenzene	18.1	0.500	20.00	0	90.3	63.7	132	18.88	4.44	30	
Hexachlorobutadiene	11.7	2.00	20.00	0	58.7	62.1	121	13.07	10.7	30	S
Naphthalene	17.7	2.00	20.00	0	88.7	58.7	119	17.26	2.74	30	
1,2,3-Trichlorobenzene	17.1	2.00	20.00	0	85.4	50.7	113	17.80	4.07	30	
Surr: 1-Bromo-4-fluorobenzene	10.2		10.00		102	79.2	120		0	0	
Surr: Dibromofluoromethane	10.1		10.00		101	76	114		0	0	
Surr: Toluene-d8	10.1		10.00		101	86.8	119		0	0	

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

Sample Log-In Check List

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

Chain of Custody

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

Log In

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

Special Handling (if applicable)

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

Person Notified: _____ Date: _____

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

Regarding: _____

Client Instructions: _____

18. Additional remarks/Disrepancies

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

Item Information

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

Fremont Analytical

Chain of Custody Record

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

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

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

Project Name: Hytec - Lufkin
Location: Littlerock, WA
Collected by: Jeff Dawson and Chris Gallagher
Email: Tom.McKeon@calibresys.com
Project No: K0308090-003

	Sample Name	Sample Date	Sample Time	Sample Type (Matrix)	VOC (EPA 8260)	GX/BTCX by EPA 8021b	BTCX by 8260	Gasoline Range Organics	Hydrocarbon Identification (HCID)	Diesel/Heavy Oil Range Organics	SEMI VOL (EPA 8270)	PAH (EPA 8270 - SIM)	PCBs (EPA 8082)	Cl Pesticides (EPA 8081)	Cl Herbicides (EPA 8151A)	Metals* (6020 / 200.8)	Total (T) | Dissolved (D)	Anions (IC)**	Comments/Depth
1	HLMW-01A-92712	9/27	0800	aqueous	X					X						T	D		
2	HLMW-02A-92712	9/27	1059	aqueous	X					X						T			
3	HLMW-03A-92712	9/27	1556	aqueous	X					X CG						T	D		Bottle broke during transportation
4	HLMW-04A-92712	9/27	1307	aqueous	X					X						T			
5	HLMW-04B-92712	9/27	0700	aqueous	X					X						T			
6	HLMW-05B-92712	9/27	1142	aqueous	X					X						T	D		
7	HLMW-06B-92712	9/27	1524	aqueous	X					X						T			
8	MOWE-92712	9/27	0915	aqueous	X					X						T			
9	SPWE-92712	9/27	0845	aqueous	X					X						T			
10	trip blank	9/27	0600	aqueous	X					X CG									

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

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

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

Relinquished	Date/Time	Received	Date/Time
x	09/28/12 1136	x	9.28.12 1136
x		x	

Special Remarks: Dissolved samples (metals) were field filtered

TAT--> Next Day 2 Day 3 Day Std

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

www.fremontanalytical.com

Fremont Analytical

Chain of Custody Record

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

Laboratory Project No (internal): _____

Date: 09-27-12

Page: 1 of: 1

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

Project Name: Bordeaux Dump
Location: Littlerock, WA
Collected by: Jeff Dawson & Chris Gallagher
Email: Tom.McKeon@CalibreSys.com
Project No: KO3080000-006

	Sample Name	Sample Date	Sample Time	Sample Type (Matrix)	VOC (EPA 8260)	GX/BTEX by EPA 8021b	BTEX by 8260	Gasoline Range Organics	Hydrocarbon Identification (HCID)	Diesel/Heavy Oil Range Organics	SEMI VOL (EPA 8270)	PAH (EPA 8270 - SIM)	PCBS (EPA 8082)	Cl Pesticides (EPA 8081)	Cl Herbicides (EPA 8151A)	Metals* (6020 / 200.8)	Total (T)	Dissolved (D)	Anions (IC)**	Comments/Depth
1	HLMW-07A-92712	9/27	1441	aqueous	X					X					T					
2	PAWE-92712	9/27	0953	aqueous	X					X					T					
3																				
4																				
5																				
6																				
7																				
8																				
9																				
10																				

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

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

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

Special Remarks:

Relinquished	Date/Time	Received	Date/Time
x	11:36 09/28/12	x	9/28/12 1136
Relinquished	Date/Time	Received	Date/Time
x		x	

TAT --> Next Day 2 Day 3 Day STD

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

www.fremontanalytical.com

APPENDIX C

Burn Permit

Olympic Region Clean Air Agency
2940-B Limited Lane NW
Olympia, WA 98502
(360) 539-7610 • FAX (360) 491-6308
(800) 422-5623 • www.ORCAA.org

Land Clearing Burn Permit

This permit is not valid until fees are paid and permittee receives an approved permit. Permit fee: $100.00 per acre cleared. Non-refundable. Permit duration: 30 days.

Land clearing burning means outdoor burning of trees, stumps, shrubbery, or other natural vegetation from projects that clear the land surface so it can be developed or be left unused.

Burning is authorized subject to the following conditions:

1. This permit may be suspended, modified or revoked at any time when deemed necessary for the protection of life, property, or air quality, or for violation of permit conditions.

2. At all times during burning, this approved permit must be on site and available for inspection by an ORCAA inspector.

3. A person and equipment capable of extinguishing the fire must be in attendance at all times. A fire is not extinguished until there is no visible smoke and no visible flame.

4. Only **natural vegetation,** originating on the parcel, may be burned. No burn pile may have a diameter greater than 20 feet.

5. The fire must not create a nuisance, obscure visibility on public roads and highways, or endanger life and property through spread of a fire or pollutants. In case of any of these events, combustion must be improved or fire shall be extinguished at the discretion of ORCAA.

6. No fires are to be within 100 feet of structures, 500 feet of forest slash, or 50 feet of standing trees.

7. Burn only during approved hours. Prior to ignition, call ORCAA at 360-539-7610 or 800-422-5623 (after hours, press extension 5), for current air quality information, burning hours, and restrictions.

8. This permit does not relieve the applicant from obtaining permits required by any state or local fire protection agency or from compliance with the Uniform Fire Code.

9. The permittee, by igniting a fire pursuant to this permit, accepts all responsibility for fire suppression costs incurred, or damage sustained, by any person or property. If the fire escapes, regardless of cause, the permittee shall be responsible for paying for the people and equipment for fire suppression, as required by Chapter 76.04 RCW.

10. A map or site plan where burning is proposed must be clearly outlined and included with the permit application.

11. Additional Conditions: _____

Permit # _____ Expiration Date: _____/ _____/ _____

--OVER--

Olympic Region Clean Air Agency
2940-B Limited Lane NW
Olympia, WA 98502
(360) 539-7610 • FAX (360) 491-6308
(800) 422-5623 • www.ORCAA.org

Land Clearing Burn Permit Application

Permit fee: $100.00 per acre cleared. Non-refundable. Permit duration: 30 days
This permit is for AIR QUALITY purposes only and is not intended to replace any permit or applicable fire safety requirements, codes, or restrictions of an appropriate fire agency.

PROPERTY OWNER

Property Owner/Business: Chauncey + Elizabeth Lufkin

Burn Site Address: 13434 Halo-Kuntux Lane

City: Littlerock State: WA Zip: 98512

Phone: ______ FAX: ______

Legal: T 16N R 3W S 9 Parcel #: 13609210400 Fire District: 11

Purpose of burn: Land clearing

Total Acreage of parcel: 44 Acreage being cleared: 3 # Pile(s): ~2 Width: 20ft

Material being burned: [x] Fir/Hemlock [x] Hardwood [x] Brush [x] Grass [ ] Other: ______

Is this site within 2000 feet of a hospital, school, day care, or assisted-living facility? [ ] Yes [x] No

BURN OPERATOR

Name/Business Name: Jeff Dawson - CALIBRE Systems

Mailing Address: 64240 Airway Rd

City: Joseph State: OR Zip: 97846

Phone: 541 (603)559 3557 Alt. phone: (541) 432-0565 FAX: ______

I have read and will abide by the conditions set forth in this permit and any addendum thereto. I do hereby certify that the information in this application and supplemental data described herein is, to the best of my knowledge, accurate and complete.

Justin Leslie (360)951-5606 [signature] 10/7/11

Applicant Name Signature Date

Date Application Received	Payment Due: ______ [ ] Cash [ ] Check: #______ [ ] Credit: #______ Receive date: __/__/__	[ ] Approved [ ] Disapproved Review date: __/__/__ Reviewed by: ______	Permit # ______ Permit Expiration: __/__/__
Agency Use Only	*Agency Use Only*	*Agency Use Only*	*Agency Use Only*

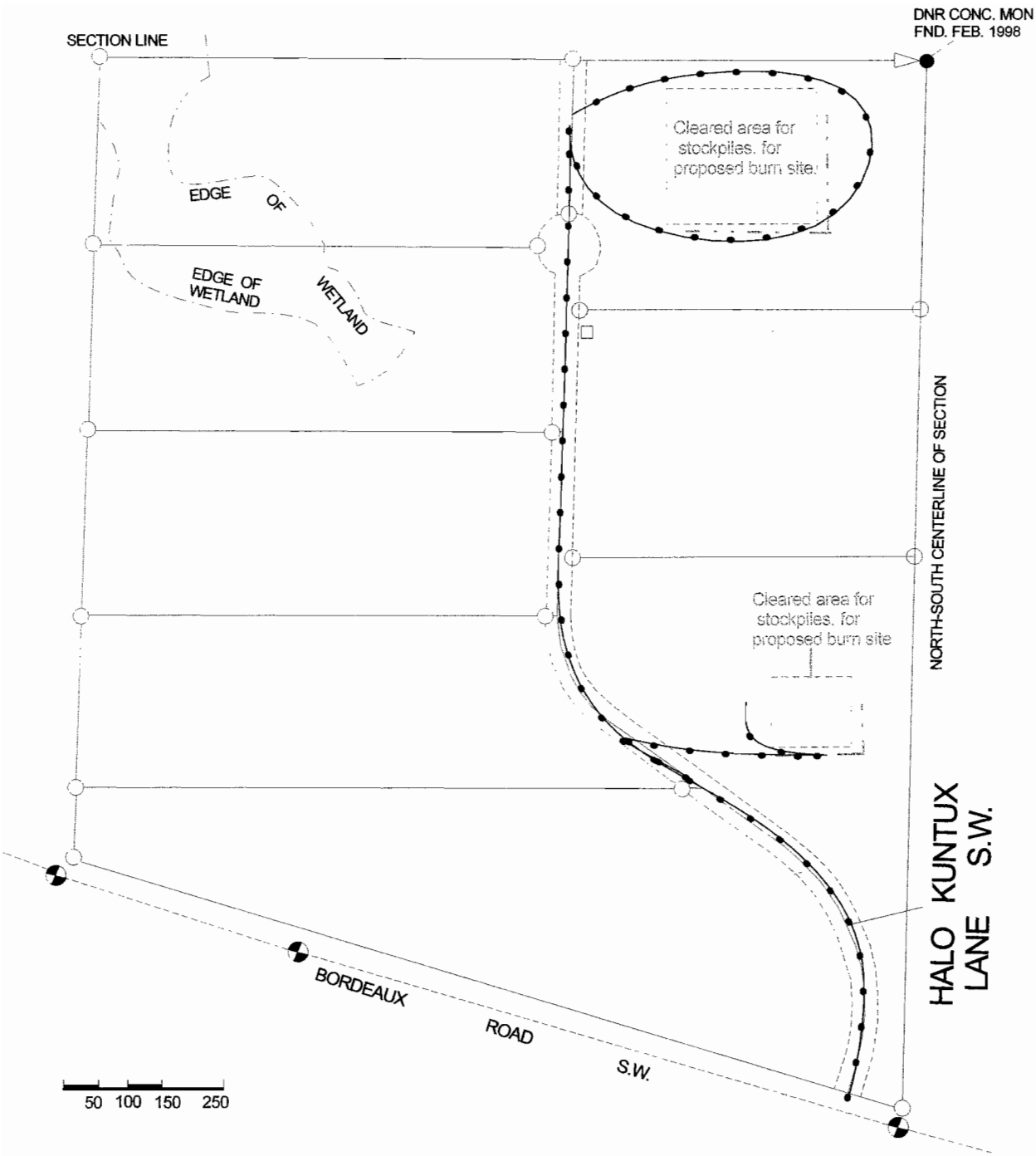


Figure 1 Proposed Land Clearing Burn Sites.

APPENDIX D

Well Construction Log

Please print, sign and return to the Department of Ecology

RESOURCE PROTECTION WELL REPORT

CURRENT Notice of Intent No. RE 06828

(SUBMIT ONE WELL REPORT PER WELL INSTALLED)

Construction/Decommission *("x" in box)*

☒ Construction
☐ Decommission

ORIGINAL INSTALLATION Notice of Intent Number:

RE 06828

Consulting Firm

Unique Ecology Well IDTag No. BHH 133

WELL CONSTRUCTION CERTIFICATION: I constructed and/or *accept responsibility for construction of this well, and its compliance with all* Washington well construction standards. Materials used and the information reported above are true to my best knowledge and belief.

☒ Driller ☐ Engineer ☐ Trainee

Name (Print Last, First Name) Phythian, Roger

Driller/Engineer /Trainee Signature

Driller or Trainee License No. 2053

If trainee, licensed driller's Signature and License Number:

Type of Well *("x in box)*

☒ Resource Protection
☐ Geotech Soil Boring

Property Owner Chauncey Lufkin

Site Address

City Little Rock County Thurston

Location NE 1/4-1/4 NW 1/4 Sec 9 Twn 16N R 3W

EWM ☐ or WWM ☒

Lat/Long (s, t, r still REQUIRED) Lat Deg Min Sec

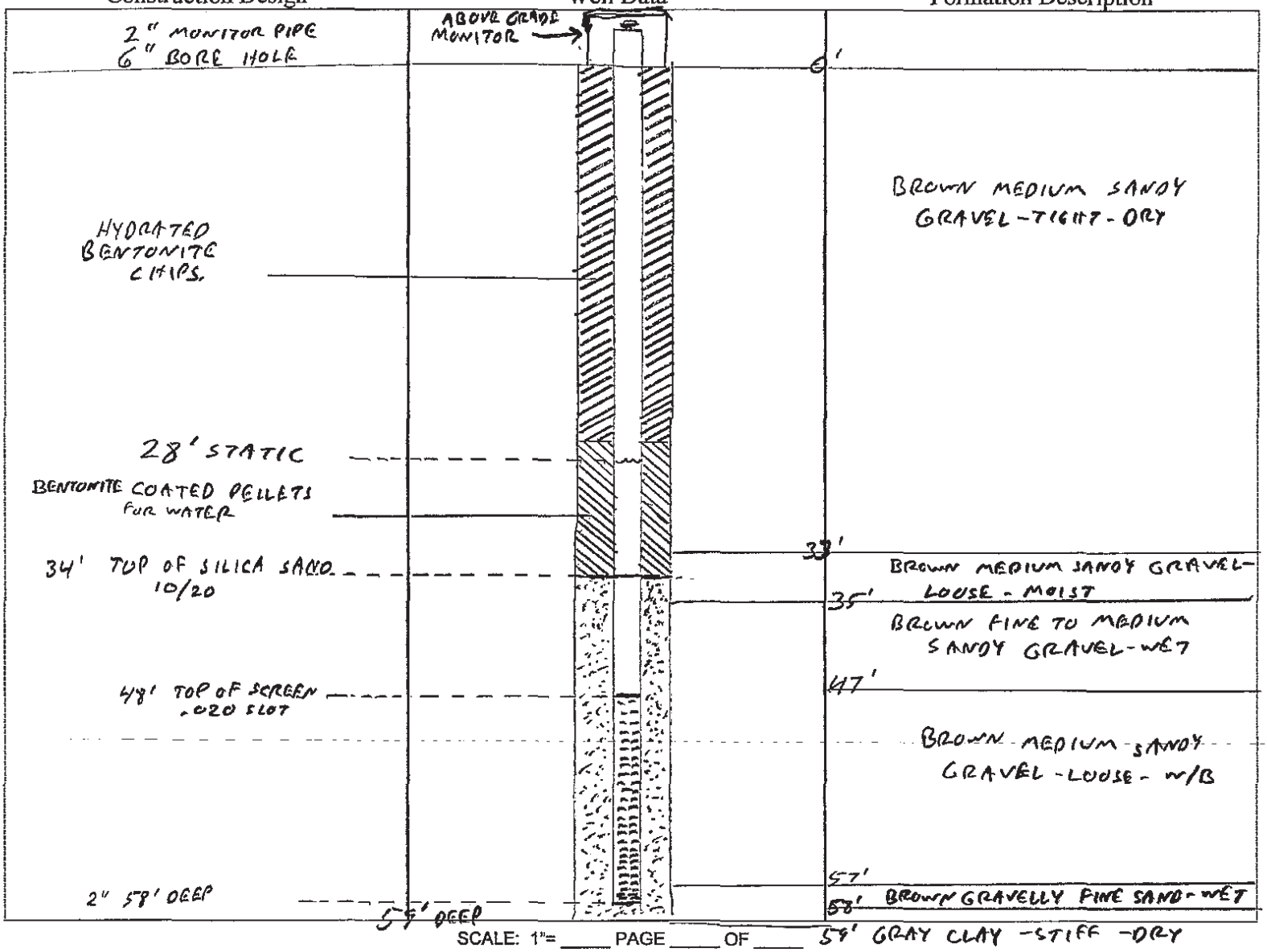
Long Deg Min Sec

Tax Parcel No. 13609210400

Cased or Uncased Diameter 2" Static Level 28'

Work/Decommission Start Date 2-29-12

Work/Decommission Completed Date 3-1-12



SCALE: 1"= PAGE OF

APPENDIX E

Well Sample Data Sheet

Well Sampling Data Sheet

Date	3/22/12	Site Location	Bordeaux
Samplers	GD JN	Well ID	HLMW-07A
Casing Material	PVC	Constructed Depth	59'
Casing Diameter	2"	Condition of Well	New

Field Measurements:

Time	1012	Depth Measured From:	
Depth to Water	29.08'		Top of access port
		x	Mark on PVC casing
			Mark of protective casing
			Other

Purging Information:

Pump:		Dedicated	x	Non-dedicated		Peristaltic	
Bailer:		PVC		Stainless Steel		Other:	
Purge Start Time	1015	Purge End Time	1040				
Approximate Volume Purged	3.5						

Water Monitoring Conditions:

Time	Vol. Purged	Temperature (°C)	Conductivity (mg) (mS/cm)	D.O.	pH	ORP (mV)	Others (Turb. NTU)
1019	0	7.76	0.106	11.17	5.75	340	883
1024	1	7.50	0.072	8.46	6.13	376	740
1029	1.5	7.44	0.068	8.20	6.33	386	229
1034	2.5	7.43	0.068	8.15	6.35	392	95.3

Sampling Data:

Time	1039	Sample ID	HLMW-07A-032212
Vol. Purged	3.5	Duplicates	
Temperature (°C)	7.35	QA/QC Volumes	
Conductivity (mg)	0.071		
D.O.	8.07	Turb - 104.	
pH	6.30		
ORP (mV)	399		

Sampling Device:

PVC Bailer		SS Bailer		Dedicated Pump		Teflon Bailer	

Analyses to be Performed:

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

Sampling Notes:

Horiba calibrated ok.

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	7 / 11 /2012	Site Location	Bordeaux
Samplers	JD + CG	Well ID	HLMW-07A
Casing Material	PVC	Constructed Depth	59'
Casing Diameter	2"	Condition of Well	good

Field Measurements:

Time	1:25 pm	Depth Measured From:	
Depth to Water	43.97'		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	1:31p	1:36p	1:41p	1:46p			
pH	6.18	5.64	5.63	5.67			
Conductivity	0.061	0.061	0.061	0.061			
Turbidity 7999	~~0.0~~	7999	7999	709			
D.O.	10.46	8.11					
Temperature	10.56	9.15	9.01	8.94			
ORP	188	242	249	255			
Purge Rate							
Gallons Purged	0.5 gal	1.5 gal	2.75	4.5			

Sampling Data:

Time	1.46p	Sample ID	HMLW-074-071112
pH	5.67	Duplicates	~~#~~
Conductivity	0.061	QA/QC Volumes	HMLW-074-MS/MSD
Turbidity	709		
D.O.			
Temperature	8.94		
ORP	~~4.5~~ 255		

Sampling Device:

PVC Bailer		SS Bailer		Dedicated Pump		Teflon Bailer	

Analyses to be Performed:

Volatile Organics	X	VOCs 8260B	SVOCs by 8270C	X	Sulfate 375.2	
Total Metals	X	RCRA 8 or Priority Pollutants	SVOCs by 8270C/SIM		RSK-175 (methane, ethane, ethene)	
Dissolved Metals	2		Total Organic Carbon 415.1		Other	

Sampling Notes:

unable to read D.O. measurement on HORIBA. Condensation on screen.

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

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

Well Sampling Data Sheet

Date	9/27/2012	Site Location	Bordeaux
Samplers	JD + CG	Well ID	HLMW-07A
Casing Material	PVC	Constructed Depth	59'
Casing Diameter	2"	Condition of Well	

Field Measurements:

Time	1419	Depth Measured From:	
Depth to Water	50.00'		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	1426	1431	1436	1441			
pH	5.63	5.07	5.05	5.00			
Conductivity	0.067	0.063	0.063	0.063			
Turbidity	7999	7999	7999	7999			
D.O.	11.80	11.43	12.16	12.09			
Temperature	12.14	9.01	8.75	8.69			
ORP	141	218	222	232			
Purge Rate	—	—		—			
Gallons Purged	0	1.5	2.5	4.0			

Sampling Data:

Time	1441	Sample ID	HLMW-07A
pH	5.00	Duplicates	
Conductivity	0.063	QA/QC Volumes	
Turbidity	7999		
D.O.	12.09		
Temperature	8.69		
ORP	232		

Sampling Device:

PVC Bailer		SS Bailer		Dedicated Pump		Teflon Bailer	

Analyses to be Performed:

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

Sampling Notes:

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

APPENDIX F

Photographs

1. Bordeaux Dump area excavation with compliance sample locations.

2. Entrance to Bordeaux Dump staging area and laydown yard.

3. Loading out Bordeaux Dump excavated material.

4. Bordeaux Dump stockpile greatly reduced.

5. Bordeaux Dump stockpile yard cleared.

6. Bordeaux Dump excavation backfilled and with topsoil spread and rollered.

7. Slash pile burn at Bordeaux Dump staging area.

8. Bordeaux Dump staging area and laydown yard graded and reseeded.

9. Monitoring well HLMW-07A.

Appendix G

Quarterly Monitoring Addendum - January 2013