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Mr. Roy Crossland
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**Subject: Phase II Targeted Brownfields Assessment
Kuhlman Diecasting Site, Stanley, Kansas
EPA Region 7, Mini-START, Contract No. EP-S7-09-01, Task Order No. 0035
Task Monitor: Todd Davis, EPA Project Manager**

Dear Mr. Crossland:

Seagull Environmental Technologies Inc. (Seagull) is submitting the attached Phase II Targeted Brownfields Assessment (TBA) report for the Kuhlman Diecasting site, located in Stanley, Kansas. If you have any questions or comments, please contact the project manager at (913) 220-5887.

Sincerely,

Jeff Pritchard, CHMM
Mini-START Project Manager

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Mini-START Program Manager

Enclosures

PHASE II TARGETED BROWNFIELDS ASSESSMENT REPORT

KUHLMAN DIECASTING SITE, STANLEY, KANSAS

Mini-Superfund Technical Assessment and Response Team (Mini-START)

Contract No. EP-S7-09-01, Task Order No. 0035

Prepared For:

U.S. Environmental Protection Agency
Region 7
901 North 5th Street
Kansas City, Kansas 66101

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Prepared By:

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EXECUTIVE SUMMARY

Seagull Environmental Technologies Inc. (Seagull) was tasked by the U.S. Environmental Protection Agency (EPA), under the Mini-Superfund Technical Assessment and Response Team (Mini-START) contract, to conduct a Phase II Targeted Brownfields Assessment (TBA) of the Kuhlman Diecasting site. The Kuhlman Diecasting site is located near the southwestern edge of Stanley, Johnson County, Kansas. The site property is currently owned by the Kuhlman Diecasting Company and consists of a defunct electroplating facility that covers approximately 35.15 acres, which is bounded to the west and south by the Blue River. The site is located in a mixed rural, residential, and agricultural use area. A small residential area comprised of approximately six residences is located approximately 200 feet northeast of the site. Agricultural land and woodlands surround the site to the north, west, and south. The purpose of the Phase II TBA is to determine current contaminant concentrations and the extent of previously identified contamination.

Phase II TBA activities were conducted July 17-27, 2012, and included the collection of soil (subsurface and surface soil), groundwater, surface water, and sediment samples from locations geographically covering the site. Specifically, 15 subsurface soil samples, 12 surface soil samples, 18 groundwater samples (eight from temporary Geoprobe[®] wells and 10 from permanent monitoring wells), 13 sediment samples, and eight surface water samples were collected from the site for analysis of chemical constituents (volatile organic compounds [VOCs], total petroleum hydrocarbons [TPH]-gasoline range organics [GRO], TPH-diesel range organics [DRO], polynuclear aromatic hydrocarbons [PAH], metals, hexavalent chromium, cyanide, and polychlorinated biphenyls (PCB)). It should be noted that not all of the samples were submitted for the full list of analyses listed above. For evaluation purposes, soil (and sediment from the on-site features) and groundwater sample results from this Phase II TBA were compared to their respective Risk-Based Standards for Kansas (RSK) developed by the Kansas Department of Health and Environment (KDHE). Surface water sample results were compared to their respective Kansas Surface Water Quality Standards (KSWQS), also developed by KDHE. Additionally, sediment sample results from the Blue River were compared to Threshold Effects Concentrations (TEC) and Probable Effects Concentrations (PEC). Findings and recommendations as a result of the Phase II TBA follows:

One of the purposes of this Phase II TBA was to determine if past site operations had resulted in contamination on the east portion of the site, which had not been previously investigated. Sampling results did not identify widespread contamination in soil and groundwater across the east portion of the site. However, subsurface soil sample results collected from soil boring SB-6 indicated TPH-DRO and TPH-GRO at concentrations that exceeded their respective RSK values. The presence of TPH at that location is likely associated with historical site operations involving bulk petroleum storage/transfer. No other

samples collected from the east portion of the site during this Phase II TBA contained site-related contaminants at levels of concern, excluding TPH-DRO detected in groundwater sample SB-5-GW at 0.56 milligrams per liter.

Consistent with past environmental investigations, samples collected as part of this Phase II TBA from the west portion of the site contained contaminants (primarily chromium, copper, nickel, and zinc) that are associated with historic site operations (electroplating in particular). Of note, elevated concentrations of the site-related metals were detected in subsurface soil samples collected from locations within the capped surface impoundments located on the southwest portion of the site. Those surface impoundments historically received waste from the electroplating operations on the site. Past investigations conducted at the site determined that elevated levels of metals remain within one of the surface impoundments (Lagoon #3), which is located in the northwest corner of the site. The sample results indicate that waste also remains within the two southern surface impoundments. Additionally, elevated concentrations of both VOCs and TPH were detected in samples collected from the west portion of the site. Chlorinated VOCs, which are common industrial contaminants, were detected in both soil and groundwater at sample locations SB-11-GW and SB-7-GW. Sample SB-11-GW was collected from the southwest portion of the site and just east of the wastewater evaporation sanitary lagoons. This location formerly contained a large aboveground storage tank that was associated with historical bulk oil storage/transfer operations. Of the VOCs detected in sample SB-11-GW, trichloroethene (TCE), 1,2-dichloroethene (1,2-DCE), and *cis*-1,2-DCE were detected at 384, 294, and 299 micrograms per liter (µg/L), respectively. Those concentrations are well above the RSK values established for these compounds. For reference, the RSK values (for the groundwater exposure pathway) for TCE, 1,2-DCE, and *cis*-1,2-DCE are 5, 5, and 70 µg/L, respectively. Additionally, sample SB-7-GW contained TCE (at 9.5 µg/L) and 1,2-DCE (at 25.5 µg/L) at concentrations that exceeded their respective RSK values. Sample SB-7-GW was collected within the capped surface impoundments located in the southwest portion of the site. Past investigations have not identified elevated concentrations of these compounds. Based on the groundwater sample results, it appears that the VOC plume is primarily located near the wastewater evaporation sanitary lagoons and to the southwest to the capped surface impoundments. Historically, groundwater flow at the site has been determined to be to the south/southwest, towards the Blue River. As stated above, the detected concentrations of several VOCs were above their respective RSK values; however, it should be noted that RSK values for the groundwater exposure pathway have been established for groundwater ingestion. Because groundwater at the site is not currently used for domestic purposes (drinking, washing, etc.), comparing the groundwater sample results to those standards may not be entirely applicable.

Also consistent with past investigations, elevated concentrations of site-related metals were detected in the wastewater evaporation sanitary lagoons (specifically from the south lagoon); however, surface soil

sampling conducted as part of this Phase II TBA determined that elevated concentrations of metals are not present across the south portion of the site.

The collection of surface water and sediment samples from the Blue River as part of this Phase II TBA did not identify site-related contaminants at levels of concern.

Sample results from this Phase II TBA should be reviewed by personnel from EPA and KDHE to determine if additional investigation may be warranted. Review of this sample data, as well as the findings from previous investigations at the site, should be conducted to specifically identify environmental liabilities associated with the site — in particular, those liabilities that could affect a potential purchaser or entity taking ownership of the property. As previously mentioned, the three former surface impoundments (that historically received waste from electroplating operations on the site) are considered Resource Conservation and Recovery Act (RCRA) post-closure units. KDHE maintains post-closure authority over those units, while EPA Region 7 maintains regulatory authority over the entire site.

1.0 INTRODUCTION

Seagull Environmental Technologies Inc. (Seagull) was tasked by the U.S. Environmental Protection Agency (EPA), under the Mini-Superfund Technical Assessment and Response Team (Mini-START) contract, to conduct a Phase II Targeted Brownfields Assessment (TBA) at the Kuhlman Diecasting site. The Kuhlman Diecasting site is located near the southwestern edge of Stanley, Johnson County, Kansas. The site property is currently owned by the Kuhlman Diecasting Company and consists of a defunct electroplating facility that covers approximately 35.15 acres, which is bounded to the west and south by the Blue River. The Kuhlman Diecasting site will hereafter be referred to as the “subject property” or “site.” Seagull conducted this Phase II TBA in accordance with the *Standard Guide for Environmental Site Assessments: Phase II Environmental Site Assessment Process*, American Society for Testing and Materials (ASTM) designation E 1903-11. The following sections address the background and site history, Phase II TBA activities, presentation and evaluation of analytical results, and a discussion of findings and recommendations.

1.1 PURPOSE

The purpose of this Phase II TBA was to confirm or eliminate recognized environmental conditions (REC) specified in the Phase I TBA report for the site (Environment International Government Ltd. [EIGov] 2011), determine the nature and extent of any soil and water contamination, and assess risks to human health and the environment posed by any contamination. RECs specified in the Phase I TBA report were primarily related to historical use of the site associated with bulk oil storage, as well as electroplating operations.

1.2 SPECIAL TERMS AND CONDITIONS

No special terms or conditions were identified during the Phase II TBA.

2.0 BACKGROUND AND SITE HISTORY

This section provides a brief description of the site, the physical setting, site history and land use, adjacent land use, and a summary of previous environmental investigations completed for the site.

2.1 SITE DESCRIPTION AND FEATURES

The site address is 16400 Mission Road, which is located near the intersection of 164th Street and Mission Road in Stanley, Kansas. The site can be accessed off Mission Road via a gravel road that connects to West 163rd Street. The subject property is currently owned by the Kuhlman Diecasting Company; however, it is not currently used for any beneficial purpose. The site contains a single-story, concrete block warehouse building that is 73,730 square feet (ft²) in size. In addition, the site contains two process water storage basins, two wastewater evaporation sanitary lagoons, three capped lagoons (surface impoundments), and a pond (see Appendix A, Figures 1 and 2). The site is surrounded by a levee constructed to provide flood control. A railroad line bisects the site in a north-south direction.

2.2 PHYSICAL SETTING

The site is included on the Stillwell, Kansas, U.S. Geological Survey (USGS) 7.5-minute topographic series map (USGS 1991; see Appendix A, Figure 1). The site is located in Section 16, Township 14 South, Range 25 West. The coordinates for the approximate center of the site are 38.830741 degrees north latitude and 94.633464 degrees west longitude.

2.2.1 Geologic Setting

The site is located in eastern Johnson County in northeastern Kansas. Johnson County lies partly in the Osage Cuestas, a portion of the Osage Plains physiographic province. Most of Johnson County consists of gently rolling uplands with a greater relief along streams (Ecology and Environment, Inc. [E&E] 1995).

Sedimentary rocks in northeast Kansas range from Late Pennsylvanian to Late Cambrian age. In the vicinity of the site, the aggregate thickness is approximately 1,700 feet. Structurally, the site lies within the Forest City basin. Shale and carbonates are the predominant lithologies of Paleozoic rocks in the Forest City basin, although sandstone composes the bulk of Late Cambrian and Early Ordovician-age formations. Middle Ordovician through Mississippian-age formations are typically thick-bedded limestone and dolomite interbedded with thick shale. The overlying Middle Pennsylvanian-age rocks that underlie the site are cyclothermic shale and limestone formations, varying in thickness from several inches to tens of feet.

Eastern Johnson County is underlain by the Upper Pennsylvanian-age Kansas City Group. Within the Kansas City Group, thick limestone and thin shale of the Bronson Subgroup underlie thick shale and thin limestone of the Linn Subgroup.

2.2.2 Hydrogeology

Unconsolidated sediments in the Blue River Valley are Wisconsinan to Recent. The thickness of the alluvium varies from approximately 30 feet in the northern and central portions of the site to approximately 20 feet in the southern portion of the site.

Previous investigations have determined that groundwater is located approximately 10-15 feet below ground surface (bgs). Groundwater flow at the site is to the south-southwest towards the Blue River.

2.2.3 Hydrology

Topsoil at the site belongs to the Kennebec and Chase Series. Kennebec silt loam covers the southern portion of the site. Typically, Kennebec soil is very dark grayish-brown becoming very dark gray with depth, slightly hard, friable, with weak to moderate fine granular structure. Kennebec soils are deep, moderately well drained, moderately permeable, and level (E&E 1995).

Based on a recent topographic map, the site is approximately 893 feet above mean sea level (amsl). The site is relatively flat, as it is located within a meander of the Blue River. Surface water runoff likely flows south-southwest toward the Blue River.

2.3 SITE HISTORY AND LAND USE

Site operations have included bulk oil storage/transfer, grain storage, and electroplating. Property information from the Johnson County Assessor website indicates the the on-site building was constructed in 1904 (Environmental International Government LTD. [EIGov] 2011). Historical photographs show seven large aboveground storage tanks (AST) located at the site dating back to 1941. Kuhlman began electroplating operations at the site in 1962. Kuhlman manufactured zinc diecastings for a variety of commercial and industrial customers. Kuhlman operations consisted of an electroplating process that used chromium, nickel, and copper plating on zinc diecastings. On November 30, 1990, Kuhlman ceased all operations and filed for bankruptcy.

2.4 ADJACENT PROPERTY USE

The site is located in a mixed rural, residential, and agricultural use area. A small residential area comprised of approximately six residences is located approximately 200 feet northeast of the site. Agricultural land and woodlands surround the site to the north, west, and south. Residential areas are located in all directions from the site, beyond the undeveloped areas (see Appendix A, Figure 2).

2.5 SUMMARY OF PREVIOUS ASSESSMENTS

The site has a well-documented environmental history associated with Resource Conservation and Recovery Act (RCRA) and Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) investigations and cleanups. Numerous investigations have been conducted at the site and have involved the collection of multimedia samples to determine if past site operations have resulted in releases of hazardous substances. The multimedia samples that were collected during those investigations consisted of soil (surface and subsurface), groundwater, surface water, and sediment samples. In addition, air, dust, and concrete samples were collected from within the site building.

Because the site's environmental history is well documented, a complete discussion of past investigations at the site is not included in this Phase II TBA report. However, listed below are site reports that have been completed for the EPA that summarize the site's history and results of environmental investigations and cleanups:

- Jacobs Engineering. 1988. RCRA Facility Assessment of Kuhlman Diecasting Site. Stanley, Kansas. EPA ID No. KSD006325013. July.
- Ecology and Environment, Inc. 1992. Removal Funded: Kuhlman Diecasting Co., Stanley, Kansas. Removal Assessment Phase II. TDD# T07-9107-035D. September 24.
- Ecology and Environment, Inc. 1993. Removal Funded: Kuhlman Diecasting Co., Stanley, Kansas. Removal Assessment Phase II. TDD# T07-9301-025. April 16.
- Ecology and Environment, Inc. 1995. Preliminary Assessment/Site Inspection for the Kuhlman Diecasting Site. Stanley, Kansas. TDD# T07-9412-506A. October 5.

From 1991 to 1992, an EPA-funded removal action was conducted at the site. During the removal action, over 1 million gallons of liquid wastes contaminated with metals and cyanide were treated on site and properly discharged. Wastes that could not be treated on site were transported off site for proper disposal. In 1992, following the completion of the removal action, EPA conducted a removal assessment to determine whether further removal activity would be required. The removal assessment determined elevated concentrations of metals – specifically, chromium, copper, nickel, and zinc – were present in soil (both surface and subsurface), groundwater, and sediment at the site. Nickel and zinc were detected at concentrations that exceeded EPA-established site-specific action levels; however, no further removal activity was conducted. Additionally, several other sampling activities have been completed at the site since the completion of the removal action.

In 2002, EPA responded to a fire at the site and collected three water samples from areas of pooled water created as a result of the fire-fighting efforts. Those samples were analyzed for total metals and cyanide. No contaminants were detected above levels of concern. In 2004, EPA conducted additional sampling activities that included the collection of groundwater samples from monitoring wells and surface soil samples from across the site. Only one groundwater sample, collected from monitoring well GM-17 (located downgradient of Lagoon #3) (see Appendix A, Figure 2), contained elevated levels of site-related contaminants. Specifically, this sample contained elevated concentrations of chromium, copper, lead, nickel, and zinc. Numerous surface soil samples collected at locations surrounding the two wastewater evaporation sanitary lagoons in the southern portion of the site contained elevated concentrations of chromium, copper, nickel, and zinc. In 2010, the Johnson County Environmental Department collected three samples of water that had accumulated in the basement of the site building. Those samples were collected to assist with an ongoing criminal investigation associated with the site (not an environmental criminal investigation). The samples were analyzed for total metals and volatile organic compounds (VOC). No contaminants were detected above levels of concern.

Most recently, a Phase I Environmental Site Assessment (ESA) was completed for the site by EIGov and Seagull (under contract to EPA Region 7). The Phase I ESA was completed as a TBA for EPA Region 7 and the Johnson County Government, which had applied for a Brownfields Grant to assess the site.

The following were findings from the Phase I TBA:

- Review of historical documents showed the subject property had been operated as a bulk oil storage facility. That former business could be a potential source of contamination. The likelihood of release and migration of hazardous materials or wastes from oil storage facilities pose a REC to the subject property.
- The subject property has a well-documented history of environmental investigations and cleanups associated with its past operation as an electroplating facility. The Kuhlman Diecasting Company conducted electroplating at the subject property from the early 1960s to 1990. Historical site operations as an electroplating facility which resulted in releases of hazardous substances to environmental media at the site pose a REC to the subject property.
- Records review and interviews conducted during the Phase I ESA determined that three RCRA post-closure units remain at the site. The three units are former surface impoundments that historically received waste from electroplating operations on the site. The units are currently capped. The Kansas Department of Health and Environment (KDHE) maintains post-closure authority over those units, while EPA Region 7 maintains regulatory authority over the entire site. The presence of the three RCRA post-closure units poses a REC to the subject property.

Based on the identification of those RECs, the Phase I ESA recommended the following:

- A Phase II ESA of the subject property should be conducted. The Phase II ESA should include the collection of surface and subsurface soil, groundwater, surface water, and sediment samples. Those samples should be analyzed for contaminants commonly associated with bulk oil storage facilities and electroplating facilities. Phase II sampling should be conducted to confirm historical investigation findings and address data gaps. Additionally, Phase II sampling should be conducted in consultation with EPA Region 7 and KDHE. Specific areas of concern that should be addressed during Phase II sampling are listed below.
- Past investigations have had limited focus on the east portion of the site (east of the railroad track). Historical records indicate that bulk oil storage tanks were located in that area. Future sampling should include the collection of soil and groundwater from this area to determine if historical site activities have resulted in a release of hazardous substances.
- Groundwater samples should be collected from permanent monitoring wells currently located at the site to characterize groundwater quality. Additionally, specific emphasis should be placed on the monitoring wells downgradient of/and surrounding the three RCRA post-closure units (surface impoundments).
- Both surface and subsurface soil samples should be collected across the site to determine current concentrations of site-related contaminants — metals in particular. Past sampling results indicated that elevated concentrations of metals (chromium, copper, nickel, and zinc) exist in surface soil near the two wastewater evaporation sanitary lagoons in the southern portion of the site. Additionally, surface soils to the south and west of the building have been determined to contain elevated concentrations of site-related metals. Sampling should be conducted to delineate the lateral and vertical extent of contamination.
- Surface water and sediment samples should be collected from the two process water basins in the northern portion of the site, two wastewater evaporation sanitary lagoons in the southern portion of the site, and from several locations on the Blue River.

3.0 PHASE II TARGETED BROWNFIELDS ASSESSMENT ACTIVITIES

The following sections describe the scope of the Phase II TBA and field exploration and methods.

3.1 SCOPE OF THE ASSESSMENT

Mini-START field team members conducted sampling to determine current contaminant concentrations and the extent of previously identified contamination. Photographs were taken to document the site activities (see Appendix B), which were also recorded in a site logbook (see Appendix C). The sampling was conducted in accordance with an approved Quality Assurance Project Plan (QAPP).

3.1.1 Conceptual Site Model and Sampling Plan

The conceptual site model is a way of describing what contaminants are present, what is the source, pathways of migration, exposure potential, media, and sensitive receptors. Based upon review of historical

records, it appears that potential sources of contamination are historical site operations. Specifically, those include activities associated with the former site uses for bulk oil storage/transfer and electroplating. The sampling plan was designed to provide for the collection of potentially contaminated environmental media, if they occur, at locations and depths where the highest concentrations are likely to occur.

The proposed sampling scheme for the collection of soil and water samples was biased/judgmental, in accordance with the *Guidance for Performing Site Inspections under CERCLA*, Office of Solid Waste and Emergency Response (OSWER) Directive #9345.1-05. Fifteen subsurface soil samples, 12 surface soil samples, eight groundwater samples collected from Geoprobe® temporary wells, 10 groundwater samples collected from permanent monitoring wells, 13 sediment samples, and eight surface water (and basement water) samples were collected from the site for analysis of chemical constituents. Surface soil samples were collected from 0 to 2 inches bgs, and subsurface soil samples were collected from depths greater than 2 feet bgs. All of the subsurface soil and Geoprobe® temporary well samples were collected using Geoprobe® direct-push technology equipment, in accordance with EPA Region 7 standard operating procedure (SOP) 4230.07, Geoprobe® Operations. Quality control (QC) samples collected during the field activities included one water trip blank (laboratory prepared), one equipment rinsate sample (of the Geoprobe® Screen Point 15 [SP 15] groundwater sampler), and one field blank. Sampling methods and activities are described in Section 3.2. A summary of samples collected during the Phase II TBA activities is included in Table 1.

TABLE 1

**SUMMARY OF SAMPLES COLLECTED DURING PHASE II TBA ACTIVITIES
KUHLMAN DIECASTING SITE, STANLEY, KANSAS**

Sample Description	Sample Type	Total Number of Samples
Subsurface Soil	Field Samples	15
Surface Soil	Field Samples	24 (Field Screened) 12 (Laboratory Analyzed)
Groundwater – Geoprobe® Temporary Well	Field Samples	8
Groundwater – Monitoring Well	Field Samples	10
Sediment	Field Samples	13
Surface Water and Basement Water	Field Samples	8
Water (Equipment Rinsate)	Quality Control Sample	1
Water (Field Blank)	Quality Control Sample	1
Water (Trip Blank)	Quality Control Sample	1

3.1.2 Chemical Testing Plan

Phase II TBA activities included the collection of subsurface soil, surface soil, groundwater, sediment, and surface water samples. Subsurface soil, surface soil, groundwater, sediment, and surface water samples collected during the Phase II TBA activities were analyzed for the following: VOCs (by Method 8260), total petroleum hydrocarbons (TPH)-gasoline range organics (GRO) (by Method OA-1), TPH-diesel range organics (DRO) (by Method OA-2), polynuclear aromatic hydrocarbons (PAH) (by Method 8270), priority pollutant metals (by Methods 6010 for soil and 6020 for water), mercury (by Methods 7471 for soil and 7470 for water), hexavalent chromium (by Method 7196), polychlorinated biphenyls (PCB) (by Method 8082), and cyanide (by Method 9012). It should be noted that not all of the samples were submitted for all of the analyses listed above. Table 2 in this report summarizes the samples collected during this Phase II TBA and requested analyses for each. All samples were submitted to Pace Analytical Services (Pace) in Lenexa, Kansas, for laboratory analysis.

3.1.3 Deviations from the QAPP

Two significant deviations from the QAPP were made during the course of the Phase II TBA activities. The QAPP called for sediment and surface water to be collected from three locations within the on-site building at the subject property, but upon inspection of building, only two locations were accessible for sample collection. Additionally, surface water samples were to be collected from the east pond, south process water basin, and north wastewater evaporation sanitary lagoon. However, those samples were not collected because no water was present at those features.

3.2 FIELD EXPLORATION AND METHODS

Field activities at the site were conducted from July 17 through 27, 2012. Seagull team members involved with the field activities were Cosmo Canacari, Greg Dillon, and Joel Harvester. EPA On-Scene Coordinator (OSC) John Frey provided assistance during the Geoprobe[®] soil and groundwater sampling activities.

3.2.1 Subsurface Soil Sampling

Fifteen subsurface soil samples were collected from 19 boring locations (see Appendix A, Figure 3). Of those 19 locations, three were within, or adjacent to, the two former surface impoundments located in the southwest portion of this site; four were on the west side of the site where large ASTs were formerly located; six were from locations within the surface soil grid described in the following section (only two

samples for laboratory analysis were collected from these six borings); and six were from the east portion of the site where bulk oil storage had been conducted. At each of the boreholes (excluding the locations within the surface soil sampling grid), a Geoprobe[®] Macro-Core soil sampler fitted with a disposable polyvinyl chloride (PVC) liner was advanced to a depth of at least 20 feet bgs, groundwater, refusal, or whichever was encountered first. At each of the six locations within the surface soil grid, the Geoprobe[®] Macro-Core soil sampler was advanced to 12 feet bgs. The soil cores were retrieved and immediately screened for VOCs with a photoionization detector (PID) and for metals with an x-ray fluorescence spectrometer (XRF). All soil cores were logged to determine lithology and soil characteristics. From each of the boreholes (excluding the six located within the surface soil sampling grid), one soil sample was collected from a 2-foot interval. From the six borings advanced within the surface soil sampling grid, two samples were collected for laboratory analysis. Those samples were collected from SB-14 and SB-17. The sampled intervals were selected based on field screening results, visual observations, and sampler judgment. Boring logs are included as Appendix D. Following sample collection from the soil boring locations, excess soil was returned to their respective boreholes and any remaining void space was filled with bentonite.

Subsurface soil samples were submitted for analysis of VOCs, TPH-DRO (by Method OA-2), TPH-GRO (by Method OA-1), PAHs, and priority pollutant metals. Soil samples for analysis of VOCs and TPH-GRO were collected following EPA Method 5035 guidelines, which involved placing approximately 5 grams of soil into two 40-milliliter (mL) volatile organic analysis (VOA) vials pre-preserved with sodium bisulfate and one VOA vial preserved with methanol. Then, remaining soil from the sample interval was removed from the PVC liner and placed in a disposable aluminum pie pan for homogenization prior to transfer to 4-ounce jars for analysis of PAHs, TPH-DRO, and priority pollutant metals.

Pertinent data, including analyses to be performed and sample locations, were recorded on field sheets for each soil sample (see Appendix E). Table 2 in this report summarizes the sample identification numbers, locations, global positioning system (GPS) coordinates, depth intervals, and analyses for the soil samples collected during the Phase II TBA activities. All soil samples were stored in coolers maintained at or below 4 degrees Celsius (°C) pending submittal to Pace.

3.2.2 Surface Soil Sampling

To assess metals concentrations in surface soil at the site, surface soil samples were collected and screened with an XRF. Surface soil samples were collected from areas located in the south-southwest portion of the site. Specifically, the surface soil samples were located south of the on-site building, primarily north of the

levee (see Appendix A, Figures 3 and 4). The 2004 EPA sampling activities identified elevated concentrations of metals (specifically, chromium, copper, nickel, and zinc) in surface soil in and around the wastewater evaporation sanitary lagoons. Therefore, the proposed surface soil sampling was conducted to delineate the extent of metals-contaminated surface soil.

In the surface soil sampling area, transect lines were spaced 100 feet apart running north and south; sample points were located at 100-foot intervals along those transect lines (see Appendix A, Figure 4).

Surrounding each transect sample point, a 25-foot by 25-foot cell was established. In each cell, a five-aliquot composite sample was collected from the upper 2 inches of soil with a disposable stainless steel spoon. Each surface soil sample was then placed in a clean, dedicated, aluminum pie pan, homogenized, passed through a number 10 (2 millimeter [mm]) sieve, then screened for metals (chromium, copper, nickel, and zinc, in particular) with the XRF. Three separate XRF readings were obtained from each sample. The average of the three XRF readings (for all four of the specified metals) were calculated and recorded. Table F-1 in Appendix F summarizes the XRF surface soil screening results. Twelve of the 24 samples collected were selected based on the highest average XRF readings and transferred to two 4-ounce jars — one 4-ounce jar for analysis of chromium, copper, nickel, and zinc; and one 4-ounce jar for analysis of hexavalent chromium. In general, XRF screening of the surface soils did not indicate elevated concentrations of the metals of concern.

Pertinent data, including analyses to be performed and sample locations, were recorded on field sheets for each sample (see Appendix E). Table 2 of this report summarizes the sample identification numbers, locations, depth intervals, and analyses for the soil samples collected during the Phase II TBA activities. All soil samples were stored in coolers maintained at or below 4 °C pending submittal to Pace.

3.2.3 Temporary Geoprobe® Well Sampling

Eight groundwater samples were collected from temporary Geoprobe® wells installed at the site (see Appendix A, Figure 3). Groundwater sample locations were selected to investigate areas of the site where permanent monitoring wells were not already present. At each temporary Geoprobe® well location, a Geoprobe® Screen Point 15 groundwater sampling apparatus was driven below the water table. The sampler sheath was then withdrawn 4 feet (exposing a 4-foot-long stainless steel screen), allowing a sample to be collected with a peristaltic pump through disposable polyethylene tubing. New tubing was used for each sample to avoid cross-contamination from previous sampling locations. Geoprobe® rods and samplers were decontaminated with a tap water wash and rinse between sampling locations. Following

sample collection from the temporary monitoring wells, Geoprobe® rods were removed and the boreholes were backfilled with bentonite.

The groundwater samples were collected for analysis of VOCs, TPH-GRO (OA-1), PAHs, TPH-DRO (OA-2), and total and dissolved priority pollutant metals. Water samples collected for analysis of VOCs and TPH-GRO were collected in three 40-mL VOA vials preserved with hydrochloric acid (HCl) to a pH <2. Water samples collected for analysis of PAHs and TPH-DRO were collected in 100-mL glass, amber bottles (three per sample). Water samples collected for analysis of priority pollutant metals (total and dissolved) were collected in 250-mL polyethylene bottles (one each for total and dissolved metals) and preserved with nitric acid (HNO₃) to a pH <2. The dissolved samples were filtered in the field through disposable 0.45-micron filters.

Pertinent data, including analyses to be performed and sample locations, were recorded on field sheets for each sample (see Appendix E). Table 2 this report summarizes the sample identification numbers, locations, GPS coordinates, depth intervals, and analyses for the groundwater samples. All water samples were stored in coolers maintained at or below 4 °C pending submittal to Pace.

3.2.4 Permanent Monitoring Well Sampling

Ten groundwater samples were collected from permanent monitoring wells currently located at the site. Those wells are located across the site and were selected to represent site-wide groundwater quality (see Appendix A, Figure 3). The wells were sampled with a peristaltic pump in accordance with a low-flow or “micro-purge” technique. This sampling method involved placing disposable polyethylene tubing at the middle of the screened interval and pumping groundwater at a flow rate of 0.1 to 0.5 liter per minute (L/min). Prior to sampling, depth to groundwater was recorded at each well. While purging, field parameters (pH, conductivity, dissolved oxygen, oxidation-reduction potential, temperature) were recorded; once field parameters had stabilized (indicating the purge discharge was representative of aquifer conditions), samples were collected. Low-flow purge sheets containing specific well information for each sample location are included as Appendix E (with the field sheets)

All of the permanent monitoring well samples were submitted for analysis of total and dissolved chromium, copper, nickel, and zinc; and samples collected from monitoring wells GM-2, GM-5, GM-10, and GM-13 were also submitted for analysis of total and dissolved hexavalent chromium. Water samples collected for analysis of chromium, copper, nickel, and zinc (total and dissolved) were collected in 250-mL polyethylene bottles (one each for total and dissolved metals) and preserved with HNO₃ to a pH <2. The

samples collected for analysis of hexavalent chromium were also collected in 250-mL polyethylene bottles, unpreserved. The dissolved samples were filtered in the field through disposable 0.45-micron filters.

Pertinent data, including analyses to be performed and sample locations, were recorded on field sheets for each sample (see Appendix E). Table 2 of this report summarizes the sample identification numbers, locations, GPS coordinates, screened intervals, and analyses for the groundwater samples collected from permanent monitoring wells. All water samples were stored in coolers maintained at or below 4 °C pending submittal to Pace.

3.2.5 Basement – Water Sampling

In order to determine if site-related contaminants were present in water that had collected in the basement of the site building, water samples were collected from two locations inside the building (see Appendix A, Figure 4). Samples were collected through access points (i.e., holes) in the concrete floor of the first floor of the building. At each location, a water sample was collected by lowering disposable polyethylene tubing into the basement and withdrawing water with a peristaltic pump. The water samples were submitted for analysis of chromium (total), copper, nickel, and zinc; PCBs; cyanide; and hexavalent chromium. Water samples collected for analysis of PCBs were collected in 1-liter glass bottles (two per sample). Water samples that were analyzed for cyanide were collected in 250-mL polyethylene bottles (one per sample) preserved with sodium hydroxide (NaOH) to a pH >12. Water samples that were analyzed for chromium (total), copper, nickel, zinc; and hexavalent chromium were collected following the protocol listed in Section 3.2.4.

Pertinent data, including analyses to be performed and sample locations, were recorded on field sheets for each sample (see Appendix E). Table 2 in Appendix E of this report summarizes the sample identification numbers, locations, GPS coordinates, depth intervals, and analyses for the basement water samples. All water samples were stored in coolers maintained at or below 4 °C pending submittal to Pace.

3.2.6 Surface Water/Sediment Sampling

In order to determine the impacts of site operations to surface water and sediment, samples were collected from the Blue River and on-site features (see Appendix A, Figure 4). Specifically, the on-site features included the two wastewater evaporation sanitary lagoons, the two process water basins, and the pond located on the east portion of the site (referred to as the east pond) (see Appendix A, Figure 4). As previously mentioned, surface water samples were only collected from the Blue River, north process water

basin and south wastewater evaporation sanitary lagoon, because no water was present at the other on-site features.

Surface Water

Six surface water samples were collected. These include four samples from the Blue River, one from the south wastewater evaporation sanitary lagoon, and one from the north process water basin. The surface water samples were collected prior to the collection of sediment samples. The surface water samples were collected by immersing sample containers directly into the water.

All surface water samples were submitted for analysis of chromium (total), copper, nickel, and zinc. The samples collected from the north process water basin and south wastewater evaporation sanitary lagoon were also submitted for analysis of PCBs and total cyanide. Additionally, the sample collected from the south wastewater evaporation sanitary lagoon was also submitted for analysis of hexavalent chromium. All of the water samples were collected in accordance with the protocol previously discussed.

Sediment

Thirteen sediment samples were collected during the Phase II TBA sampling activities. Of those thirteen samples, four samples were collected from the Blue River, one sample was collected from each of the two wastewater evaporation sanitary lagoons, two samples were collected from each of the process water basins, one sample was from the east pond, and two samples were from the basement of the site building. The sediment samples from the Blue River and the basement of the site building were grab samples collocated with the surface water samples collected from those locations. The sediment samples collected from the lagoons and the water basins were five-aliquot composite samples. All sediment samples were collected from the top 6 inches of sediment using a hand-held auger. For the samples collected from the process water basins, each basin was divided in half, and a five-aliquot sediment sample was collected from each half.

All sediment samples were submitted for analysis of chromium (total), copper, nickel, and zinc. Each sediment sample submitted for the listed metals was collected in a 4-ounce glass jar. Sediment samples collected from the process water basins, the wastewater evaporation sanitary lagoons, and the east pond were also submitted for analysis of PCBs and cyanide. Samples for analysis of PCBs and cyanide were collected in 4-ounce glass jars. Additionally, the sediment samples collected from the basement of the site building and wastewater evaporation sanitary lagoons were submitted for analysis of hexavalent chromium, which were collected in 4-ounce glass jars.

For the surface water and sediment samples, pertinent data, including analyses to be performed and sample locations, were recorded on field sheets for each sample (see Appendix E). Table 2 of this report summarizes the sample identification numbers, locations, GPS coordinates, depth intervals, and analyses to be performed. All samples were stored in coolers maintained at or below 4 °C pending submittal to Pace.

TABLE 2
SUMMARY OF SAMPLES SUBMITTED FOR LABORATORY ANALYSIS
KUHLMAN DIECASTING SITE, STANLEY, KANSAS

Sample ID	Sample Location	Depth Interval (bgs)	GPS Coordinates	Analysis
SUBSURFACE SOIL				
SB-1-25-27	SB-1	25-27 feet	38.83069° N 94.63113° W	VOCs, PAHs, TPH-GRO, TPH-DRO, and Priority Pollutant Metals
SB-2-2-4	SB-2	2-4 feet	38.83149° N 94.63135° W	VOCs, PAHs, TPH-GRO, TPH-DRO, and Priority Pollutant Metals
SB-3-16-18	SB-3	16-18 feet	38.82963° N 94.63222° W	VOCs, PAHs, TPH-GRO, TPH-DRO, and Priority Pollutant Metals
SB-4-14-16	SB-4	14-16 feet	38.83130° N 94.63217° W	VOCs, PAHs, TPH-GRO, TPH-DRO, and Priority Pollutant Metals
SB-5-10-12	SB-5	10-12 feet	38.83200° N 94.63198° W	VOCs, PAHs, TPH-GRO, TPH-DRO, and Priority Pollutant Metals
SB-6-14-16	SB-6	14-16 feet	38.83063° N 94.63227° W	VOCs, PAHs, TPH-GRO, TPH-DRO, and Priority Pollutant Metals
SB-7-10-12	SB-7	10-12 feet	38.82938° N 94.63461° W	VOCs, PAHs, TPH-GRO, TPH-DRO, and Priority Pollutant Metals
SB-8-9-11	SB-8	9-11 feet	38.82922° N 94.63435° W	VOCs, PAHs, TPH-GRO, TPH-DRO, and Priority Pollutant Metals
SB-9-12-14	SB-9	12-14 feet	38.82915° N 94.63409° W	VOCs, PAHs, TPH-GRO, TPH-DRO, and Priority Pollutant Metals
SB-10-12-14	SB-10	12-14 feet	38.82963° N 94.63445° W	VOCs, PAHs, TPH-GRO, TPH-DRO, and Priority Pollutant Metals
SB-11-17-19	SB-11	17-19 feet	38.82952° N 94.63407° W	VOCs, PAHs, TPH-GRO, TPH-DRO, and Priority Pollutant Metals
SB-14-8-10	SB-14	8-10 feet	38.82973° N 94.63304° W	VOCs, PAHs, TPH-GRO, TPH-DRO, and Priority Pollutant Metals
SB-17-10-12	SB-17	10-12 feet	38.83000° N 94.63336° W	VOCs, PAHs, TPH-GRO, TPH-DRO, and Priority Pollutant Metals
SB-18-12-14	SB-18	12-14 feet	38.83175° N 94.63412° W	VOCs, PAHs, TPH-GRO, TPH-DRO, and Priority Pollutant Metals

Sample ID	Sample Location	Depth Interval (bgs)	GPS Coordinates	Analysis
SB-19-6-8	SB-19	6-8 feet	38.83242° N 94.63383° W	VOCs, PAHs, TPH-GRO, TPH-DRO, and Priority Pollutant Metals
SURFACE SOIL				
SS-1	SS-1	0-2 inches	38.83036° N 94.63412° W	Chromium, Copper, Nickel, Zinc, and Hexavalent Chromium
SS-2	SS-2	0-2 inches	38.82982° N 94.63411° W	Chromium, Copper, Nickel, Zinc, and Hexavalent Chromium
SS-3	SS-3	0-2 inches	38.82899° N 94.63409° W	Chromium, Copper, Nickel, Zinc, and Hexavalent Chromium
SS-4	SS-4	0-2 inches	38.83037° N 94.63377° W	Chromium, Copper, Nickel, Zinc, and Hexavalent Chromium
SS-5	SS-5	0-2 inches	38.82982° N 94.63376° W	Chromium, Copper, Nickel, Zinc, and Hexavalent Chromium
SS-6	SS-6	0-2 inches	38.82927° N 94.63375° W	Chromium, Copper, Nickel, Zinc, and Hexavalent Chromium
SS-7	SS-7	0-2 inches	38.83037° N 94.63342° W	Chromium, Copper, Nickel, Zinc, and Hexavalent Chromium
SS-8	SS-8	0-2 inches	38.82983° N 94.63341° W	Chromium, Copper, Nickel, Zinc, and Hexavalent Chromium
SS-9	SS-9	0-2 inches	38.82955° N 94.63340° W	Chromium, Copper, Nickel, Zinc, and Hexavalent Chromium
SS-10	SS-10	0-2 inches	38.83038° N 94.63307° W	Chromium, Copper, Nickel, Zinc, and Hexavalent Chromium
SS-11	SS-11	0-2 inches	38.83010° N 94.63306° W	Chromium, Copper, Nickel, Zinc, and Hexavalent Chromium
SS-12	SS-12	0-2 inches	38.82928° N 94.63304° W	Chromium, Copper, Nickel, Zinc, and Hexavalent Chromium
TEMPORARY GEOPROBE® WELLS				
SB-1-GW	SB-1	20-24	38.83069° N 94.63113° W	VOCs, PAHs, TPH-GRO, TPH-DRO, and Priority Pollutant Metals (total and dissolved)
SB-3-GW	SB-3	20-24	38.82963° N 94.63222° W	VOCs, PAHs, TPH-GRO, TPH-DRO, and Priority Pollutant Metals (total and dissolved)
SB-5-GW	SB-5	20-24	38.83200° N 94.63198° W	VOCs, PAHs, TPH-GRO, TPH-DRO, and Priority Pollutant Metals (total and dissolved)
SB-6-GW	SB-6	20-24	38.83063° N 94.63227° W	VOCs, PAHs, TPH-GRO, TPH-DRO, and Priority Pollutant Metals (total and dissolved)

Sample ID	Sample Location	Depth Interval (bgs)	GPS Coordinates	Analysis
SB-7-GW	SB-7	20-24	38.82938° N 94.63461° W	VOCs, PAHs, TPH-GRO, TPH-DRO, and Priority Pollutant Metals (total and dissolved)
SB-9-GW	SB-9	20-24	38.82915° N 94.63409° W	VOCs, PAHs, TPH-GRO, TPH-DRO, and Priority Pollutant Metals (total and dissolved)
SB-11-GW	SB-11	20-24	38.82952° N 94.63407° W	VOCs, PAHs, TPH-GRO, TPH-DRO, and Priority Pollutant Metals (total and dissolved)
SB-17-GW	SB-17	20-24	38.83000° N 94.63336° W	VOCs, PAHs, TPH-GRO, TPH-DRO, and Priority Pollutant Metals (total and dissolved)
PERMANENT MONITORING WELLS				
GM-1	GM-1	17.0	38.83271 °N 94.63375 °W	Chromium, Copper, Nickel, and Zinc (total and dissolved)
GM-2	GM-2	23.3	38.83212° N 94.63485° W	Chromium, Copper, Nickel, and Zinc (total and dissolved); and Hexavalent Chromium (total and dissolved)
GM-5	GM-5	14.9	38.82884° N 94.63435° W	Chromium, Copper, Nickel, and Zinc (total and dissolved); and Hexavalent Chromium (total and dissolved)
GM-7	GM-7	16.8	38.82882° N 94.63289° W	Chromium, Copper, Nickel, and Zinc (total and dissolved)
GM-8	GM-8	20.0	38.83260° N 94.63239° W	Chromium, Copper, Nickel, and Zinc (total and dissolved)
GM-10	GM-10	19.4	38.83204° N 94.63358° W	Chromium, Copper, Nickel, and Zinc (total and dissolved); and Hexavalent Chromium (total and dissolved)
GM-12	GM-12	24.9	38.82985° N 94.63201° W	Chromium, Copper, Nickel, and Zinc (total and dissolved)
GM-13	GM-13	17.0	38.83104° N 94.63247° W	Chromium, Copper, Nickel, and Zinc (total and dissolved); and Hexavalent Chromium (total and dissolved)
GM-15	GM-15	20.5	38.82941° N 94.63309° W	Chromium, Copper, Nickel, and Zinc (total and dissolved)
GM-17	GM-17	17.0	38.83160° N 94.63432° W	Chromium, Copper, Nickel, and Zinc (total and dissolved)
SEDIMENT				
BR-1-SED	Blue River	NA	38.83186° N 94.63510° W	Chromium, Copper, Nickel, and Zinc

Sample ID	Sample Location	Depth Interval (bgs)	GPS Coordinates	Analysis
BR-2-SED	Blue River	NA	38.83096° N 94.63115° W	Chromium, Copper, Nickel, and Zinc
BR-3-SED	Blue River	NA	38.82823° N 94.63390° W	Chromium, Copper, Nickel, and Zinc
BR-4-SED	Blue River	NA	38.83077° N 94.62990° W	Chromium, Copper, Nickel, and Zinc
NPWB-SED-N	North Process Water Basin	NA	38.83264° N 94.63280° W	Chromium, Copper, Nickel, and Zinc; Cyanide; and PCBs
NPWB-SED-S	North Process Water Basin	NA	38.83230° N 94.63290° W	Chromium, Copper, Nickel, and Zinc; Cyanide; and PCBs
SPWB-SED-N	South Process Water Basin	NA	38.83184° N 94.63340° W	Chromium, Copper, Nickel, and Zinc; Cyanide; and PCBs
SPWB-SED-S	South Process Water Basin	NA	38.83154° N 94.63350° W	Chromium, Copper, Nickel, and Zinc; Cyanide; and PCBs
WWEL-N-SED	North Wastewater Evaporation Lagoon	NA	38.82976° N 94.63420° W	Chromium, Copper, Nickel, and Zinc; Cyanide; PCBs; and Hexavalent Chromium
WWEL-S-SED	South Wastewater Evaporation Lagoon	NA	38.82961° N 94.63430° W	Chromium, Copper, Nickel, and Zinc; Cyanide; PCBs; and Hexavalent Chromium
EP-SED	East Pond	NA	38.83158° N 94.63190° W	Chromium, Copper, Nickel, and Zinc; Cyanide; and PCBs
BLDG-1-SED	Site Building	NA	38.83079° N 94.63400° W	Chromium, Copper, Nickel, and Zinc; Cyanide; PCBs; and Hexavalent Chromium
BLDG-2-SED	Site Building	NA	38.83070° N 94.63325° W	Chromium, Copper, Nickel, and Zinc; Cyanide; PCBs; and Hexavalent Chromium
SURFACE WATER				
BR-1-SW	Blue River	NA	38.83186° N 94.63510° W	Chromium, Copper, Nickel, and Zinc
BR-2-SW	Blue River	NA	38.83096° N 94.63115° W	Chromium, Copper, Nickel, and Zinc
BR-3-SW	Blue River	NA	38.82823° N 94.63390° W	Chromium, Copper, Nickel, and Zinc
BR-4-SW	Blue River	NA	38.83077° N 94.62990° W	Chromium, Copper, Nickel, and Zinc

Sample ID	Sample Location	Depth Interval (bgs)	GPS Coordinates	Analysis
NPWB-SW	North Process Water Basin	NA	38.83238° N 94.63290° W	Chromium, Copper, Nickel, and Zinc; Cyanide; and PCBs
WWEL-S-SW	South Process Water Basin	NA	38.82961° N 94.63430° W	Chromium, Copper, Nickel, and Zinc; Cyanide; PCBs; and Hexavalent Chromium
BLDG-1-SW	Site Building	NA	38.83079° N 94.63400° W	Chromium, Copper, Nickel, and Zinc; Cyanide; PCBs; and Hexavalent Chromium
BLDG-2-SW	Site Building	NA	38.83070° N 94.63330° W	Chromium, Copper, Nickel, and Zinc; Cyanide; PCBs; and Hexavalent Chromium
QUALITY CONTROL				
Trip Blank-GW	N/A	N/A	N/A	VOCs
Equipment Rinsate	N/A	N/A	N/A	VOCs, PAHs, TPH-GRO, TPH-DRO, Priority Pollutant Metals (total and dissolved), and Hexavalent Chromium (total and dissolved)
Field Blank	N/A	N/A	N/A	VOCs, PAHs, TPH-GRO, TPH-DRO, Priority Pollutant Metals (total and dissolved), and Hexavalent Chromium (total and dissolved)

Notes:

°	Degrees	PAH	Polynuclear aromatic hydrocarbons
bgs	Below ground surface	PCB	Polychlorinated biphenyls
DRO	Diesel range organics	TPH	Total petroleum hydrocarbons
GPS	Global positioning system	VOC	Volatile organic compound
GRO	Gasoline range organics	W	West
N/A	Not applicable		
N	North		

4.0 EVALUATION AND PRESENTATION OF RESULTS

This section summarizes the analytical data for the soil, groundwater, surface water, sediment, and QC samples collected during the Phase II TBA. Soil (and sediment from the on-site features) and groundwater sample results from this Phase II TBA were compared to their respective Risk-Based Standards for Kansas (RSK) developed by KDHE. The RSK Manual is meant to serve as a tool for evaluation of the need for additional assessment or cleanup at contaminated sites, when considered in conjunction with other site-specific conditions (KDHE 2010). Comparison of sample results to both residential and non-residential

RSK values were made (when applicable) to address multiple land use scenarios for future site redevelopment.

Surface water sample results were compared to their respective Kansas Surface Water Quality Standards (KSWQS), also developed by KDHE (KDHE 2004). Additionally, sediment sample results from the Blue River were compared to Threshold Effects Concentrations (TEC) and Probable Effects Concentrations (PEC) (National Oceanic Atmospheric Administration [NOAA] 2008). The complete analytical data package is included as Appendix G.

4.1 SUBSURFACE SOIL SAMPLES

Fifteen subsurface soil samples were submitted to Pace for analysis of VOCs, PAHs, TPH-GRO, TPH-DRO, and priority pollutant metals (including mercury). A summary of the analytes detected in the subsurface soil samples follows:

Volatile Organic Compounds

Seven of the 15 subsurface soil samples contained VOCs at concentrations that ranged from 5.8 to 1,310 micrograms per kilogram ($\mu\text{g}/\text{kg}$). In those samples, the following seven VOCs were detected: acetone, 2-butanone (MEK), n-butylbenzene, sec-butylbenzene, carbon disulfide, isopropylbenzene, and 1,2,4-trimethylbenzene. None of the VOCs were detected at concentrations that exceeded their respective RSK values. In general, the VOCs were detected at low concentrations. Table F-2 in Appendix F summarizes the analytical data for VOCs in the soil samples.

Polynuclear Aromatic Hydrocarbons

Twelve of the 15 subsurface soil samples contained PAHs at concentrations that ranged from 4.4 to 2,120 $\mu\text{g}/\text{kg}$. In those samples, the following 16 PAHs were detected: acenaphthene, acenaphthylene, anthracene, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(g,h,i)perylene, benzo(k)fluoranthene, chrysene, dibenzo(a,h)anthracene, fluoranthene, fluorene, indeno(1,2,3-cd)pyrene, naphthalene, phenanthrene, and pyrene. None of the PAHs were detected at concentrations that exceeded their respective RSK values. PAHs are a byproduct of burning fossil fuels and are commonly associated with industrial sites/settings. In general, the PAHs were detected at low concentrations. Table F-3 in Appendix F summarizes the analytical data for PAHs in the subsurface soil samples.

Total Petroleum Hydrocarbons

Five of the 15 subsurface soil samples contained TPH-DRO at concentrations that ranged from 792 to 7,970 milligrams per kilogram (mg/kg). Two of those samples contained TPH-DRO above its RSK value established for residential soil, which is 2,000 mg/kg. However, none of the detected TPH-DRO concentrations were above its RSK value established for non-residential soil, which is 20,000 mg/kg. The sample locations that contained TPH-DRO above its residential RSK value (of 2,000 mg/kg) were SB-6 (from 14 to 16 feet bgs) and SB-7 (from 10 to 12 feet bgs). Soil boring SB-6, from which a sample was collected that contained TPH-DRO at 3,640 mg/kg, was located on the east side of the property and near the former location of a large petroleum AST. Soil boring SB-7, from which a sample was collected that contained TPH-DRO at 7,970 mg/kg, was located within a capped surface impoundment located on the southwest portion of the site. Additionally, sample from soil borings SB-8 and SB-9, which were also located within the two capped surface impoundments located on the southwest portion of the site, contained TPH-DRO at 792 and 1,980 mg/kg, respectively.

Five of the 15 subsurface soil samples contained TPH-GRO at concentrations that ranged from 1.4 to 640 mg/kg. Two of those samples contained TPH-GRO above its RSK values established for both residential and non-residential soil, which are 220 and 450 mg/kg, respectively. Those samples were collected from SB-6 (from 14 to 16 feet bgs) and SB-7 (from 10 to 12 feet bgs). Specifically, the sample collected from SB-6 contained TPH-GRO at 640 mg/kg, and the sample collected from SB-7 contained the analyte at 539 mg/kg. Samples from soil borings SB-6 and SB-7 contained the highest detected concentrations of both TPH-DRO and TPH-GRO. Table F-4 in Appendix F summarizes the analytical data for TPH in the subsurface soil samples.

Priority Pollutant Metals

All 15 of the subsurface soil samples contained priority pollutant metals. In those samples, the following metals were detected: antimony, arsenic, beryllium, chromium, copper, lead, nickel, zinc, and mercury. Only the samples collected from SB-8 (from 9 to 11 feet bgs) and SB-9 (from 12 to 14 feet bgs) contained concentrations of metals that exceeded their respective RSK values; these included arsenic, chromium, copper, and nickel. Both of those sample locations (SB-8 and SB-9) were within the capped surface impoundments located in the southwest portion of the site. The surface impoundments historically received waste from the electroplating operations on the site. The sample collected from SB-8 contained arsenic (at 116 mg/kg), chromium (at 4,060 mg/kg), copper (3,630 mg/kg), and nickel (7,180 mg/kg), at concentrations that exceeded their respective RSK values established for residential land use. The detected concentrations of arsenic and chromium also exceeded their respective RSK values established for non-residential land use, which are 38 mg/kg for arsenic and 111 mg/kg for chromium. The sample collected

from SB-9 contained chromium at 342 mg/kg, which exceeded both its residential and non-residential RSK values, which are 33.6 and 111 mg/kg, respectively. The sample results from locations SB-8 and SB-9 determined that elevated concentrations of metals are present in subsurface soil within the former surface impoundments. None of the other samples contained metals above their respective RSK values. Table F-5 in Appendix F summarizes the analytical data for metals in the subsurface soil samples.

4.2 SURFACE SOIL SAMPLES

Twelve surface soil samples were submitted to Pace for analysis of chromium (total), copper, nickel, zinc, and hexavalent chromium. All 12 of the surface soil samples contained chromium, copper, nickel, and zinc; however, hexavalent chromium was not detected in any of the samples. Of the metals detected, only chromium was identified at concentrations above its respective RSK values. Samples SS-1 and SS-9 contained chromium at 44.7 and 60 mg/kg, respectively, which exceed the RSK value of 33.6 mg/kg established for chromium in residential soil. Additionally, samples SS-2, SS-4, SS-5, and SS-7 contained chromium at concentrations that ranged from 144 to 177 mg/kg. The chromium concentrations in all four of those samples were above its respective RSK values established for both residential (33.6 mg/kg) and non-residential soil (111 mg/kg). It should be discussed that the RSK values for total chromium assume a ratio (generally 6 to 1) of trivalent chromium to hexavalent chromium. As stated above, hexavalent chromium was not detected in any of the surface soil samples; therefore, it may be more appropriate to compare the chromium results to the EPA Regional Screening Levels for trivalent chromium, which are 120,000 mg/kg for residential soil and 1,500,000 mg/kg for industrial soil. When making this comparison, the detected chromium in surface soil concentrations are well below these health-based standards. None of the other analytes were detected at concentrations exceeding their respective RSK values. Table F-6 in Appendix F summarizes the analytical data for metals in the surface soil samples.

4.3 TEMPORARY GEOPROBE[®] WELL SAMPLES

Eight groundwater samples were collected from temporary Geoprobe[®] wells and submitted to Pace for analysis of VOCs, TPH-GRO, TPH-DRO, PAHs, and total and dissolved priority pollutant metals. A summary of analytes detected in the groundwater samples follows:

Volatile Organic Compounds

Five of the eight groundwater samples collected from temporary Geoprobe[®] well samples contained VOCs at concentrations that ranged from 0.1 to 384 micrograms per liter (µg/L). In those samples, the following seven VOCs were detected: 1,1-dichloroethane (1,1-DCA), 1,2-dichloroethene (1,2-DCE), 1,1-

dichloroethene (1,1-DCE), *cis*-1,2-dichloroethene (*cis*-1,2-DCE), *trans*-1,2-dichloroethene (*trans*-1,2-DCE), trichloroethene (TCE), and vinyl chloride. The majority of those VOCs were detected in samples SB-7-GW and SB-11-GW. Specifically, 1,2-DCE, *cis*-1,2-DCE, and TCE were detected at concentrations above their respective RSK values. Sample SB-11-GW contained the highest concentrations of VOCs. This sample was collected from the southwest portion of the site, just east of the wastewater evaporation sanitary lagoons. This location formerly contained a large AST that was associated with historical bulk oil storage/transfer operations. Of the VOCs detected in sample SB-11-GW, TCE, 1,2-DCE, and *cis*-1,2-DCE were detected at 384, 294, and 299 µg/L, respectively. Those concentrations are well above the RSK values established for these compounds. For reference, the RSK values for TCE, 1,2-DCE, and *cis*-1,2-DCE are 5, 5, and 70 µg/L, respectively. Additionally, sample SB-7-GW contained TCE (at 9.5 µg/L) and 1,2-DCE (at 25.5 µg/L) at concentrations that exceeded their respective RSK values. Sample SB-7-GW was collected within the capped surface impoundments located in the southwest portion of the site. The surface impoundments historically received waste from the electroplating operations on the site. All of the detected VOCs are chlorinated solvents that are commonly associated with industrial activities; however, past investigations have not identified elevated concentrations of these compounds. It should be noted that RSK values for the groundwater exposure pathway have been established for groundwater ingestion. Because groundwater at the site is not currently used for domestic purposes (drinking, washing, etc.), comparing the groundwater sample results to those standards may not be entirely applicable. Table F-7 in Appendix F summarizes the analytical data for VOCs in the temporary Geoprobe® well samples.

Polynuclear Aromatic Hydrocarbons

One PAH compound, fluoranthene, was detected in two of the eight groundwater samples collected from temporary Geoprobe® wells. Samples SB-5-GW and SB-7-GW contained fluoranthene at 0.16 and 0.13 µg/L, respectively. The detected concentrations of fluoranthene were well below its established RSK values. No other PAH compounds were detected in the temporary Geoprobe® well samples. Table F-7 in Appendix F summarizes the analytical data for PAHs in the temporary Geoprobe® well samples.

Total Petroleum Hydrocarbons

Only one of the eight groundwater samples collected from temporary Geoprobe® wells contained a reportable concentration of TPH-GRO. Sample SB-11-GW contained TPH-GRO at 0.64 milligrams per liter (mg/L). This concentration of TPH-GRO is above the analyte's RSK values established for the residential and non-residential groundwater exposure pathways, which are both 0.5 mg/L.

Two of the eight groundwater samples collected from temporary Geoprobe® wells contained reportable concentrations of TPH-DRO. Samples SB-5-GW and SB-7-GW contained TPH-DRO at 0.56 and 0.51 mg/L, respectively. Both of those concentrations exceeded the analyte's established RSK value established for the residential groundwater exposure pathway. However, the detected concentrations of TPH-DRO were below its RSK value established for the non-residential groundwater exposure pathway, which is 0.72 mg/L. As mentioned above, the RSK values for the groundwater exposure pathway have been established for groundwater ingestion, and because groundwater is not used at the site, this comparison may not be entirely applicable. Table F-8 in Appendix F summarizes the analytical data for TPH in the temporary Geoprobe® well samples.

Priority Pollutant Metals

Groundwater samples contained concentrations of arsenic, beryllium, cadmium, chromium, copper, lead, nickel, selenium, zinc, and mercury. Total beryllium, cadmium, chromium, lead, nickel, and mercury were detected at concentrations that exceeded their respective RSK values for the groundwater exposure pathway. In the dissolved samples, only lead, in sample SB-6-GW, was detected above its respective RSK value, which is 15 µg/L. Specifically, lead was detected at 34.8 µg/L in sample SB-6-GW. The elevated concentrations of metals detected in the unfiltered samples (total metals) are likely attributable to suspended sediment in the samples and are not likely representative of groundwater quality in the site area. Table F-9 in Appendix F summarizes the analytical data for priority pollutant metals in the temporary Geoprobe® well samples.

4.4 PERMANENT MONITORING WELL SAMPLES

Ten groundwater samples were collected from permanent monitoring wells and submitted to Pace for analysis of total and dissolved chromium, copper, nickel, and zinc. Additionally, samples GM-2, GM-5, GM-10, and GM-13 were also submitted for analysis of total and dissolved hexavalent chromium. A summary of analytes detected in the groundwater samples follows:

Chromium, Copper, Nickel, and Zinc

Five of the 10 permanent monitoring wells contained detected concentrations of (total or dissolved) chromium, copper, nickel, and/or zinc; however, none of the metals were detected above their respective RSK values. Table F-9 in Appendix F summarizes the analytical data for priority pollutant metals in the permanent monitoring well samples.

Hexavalent Chromium

Hexavalent chromium was not detected in any of the permanent monitoring well samples submitted for analysis.

4.5 BASEMENT – WATER SAMPLES

Two water samples collected from the basement of the on-site building were submitted to Pace for analysis of chromium (total), copper, nickel, zinc, PCBs, cyanide, and hexavalent chromium. A summary of analytes detected in those water samples follows:

Chromium, Copper, Nickel, and Zinc

Chromium, copper, nickel, and zinc were detected in both of the water samples collected from the basement; however, the detected concentrations were all well below KSWQS values established for those metals. Table F-10 in Appendix F summarizes the analytical data for water samples collected from the basement.

Hexavalent Chromium

Hexavalent chromium was not detected in either of the water samples.

Cyanide

Cyanide was detected at 0.022 mg/L in sample BLDG-2-SW, which was collected from the east portion of the building. This concentration of cyanide is below its respective KSWQS established for protection of domestic water supply, which is 0.2 mg/L. Table F-10 in Appendix F summarizes the analytical data for water samples collected from the basement.

Polychlorinated Biphenyls

PCBs were not detected in either of the water samples.

4.6 SURFACE WATER SAMPLES

In all, six surface water samples were collected for laboratory analyses during the Phase II TBA. As previously mentioned, the four samples collected from the Blue River were only submitted for analysis of chromium (total), copper, nickel, and zinc. However, the two samples collected from the north process

water basin and south wastewater evaporation sanitary lagoon were also submitted for analysis of PCBs and total cyanide. Additionally, the water sample collected from the south wastewater evaporation sanitary lagoon was also submitted for analysis of hexavalent chromium. A summary of analytes detected in those samples follows:

Chromium, Copper, Nickel, and Zinc

Of the four surface water samples collected from the Blue River, only nickel (at 5.3 µg/L in sample BR-3-SW) was detected above laboratory reporting limits. The detected concentration of nickel in this sample was just above the laboratory reporting limit of 5.0 µg/L, and well below the metal's KSWQS established for protection of domestic water supplies, which is 610 µg/L.

Concentrations of the four site-related metals were detected in the samples collected from the north process water basin and the south wastewater evaporation sanitary lagoon. In those samples, only chromium was detected at a concentration above its KSWQS established for protection of domestic water supplies, which is 100 µg/L. Specifically, chromium was detected at 186 µg/L in sample NPWB-SW, which was collected from the north process water basin. Table F-10 in Appendix F summarizes the analytical data for the surface water samples.

Hexavalent Chromium

Hexavalent chromium was detected at 0.057 mg/L in sample WWEL-S-SW, which was collected from the south wastewater evaporation sanitary lagoon. The detected concentration of hexavalent chromium exceeds its KSWQS established for protection of domestic water supplies, which is 0.05 mg/L. Table F-10 in Appendix F summarizes the analytical data for the surface water samples.

Cyanide

Cyanide was not detected in either of the surface water samples submitted for that analysis.

Polychlorinated Biphenyls

PCBs were not detected in either of the surface water samples submitted for that analysis.

4.7 SEDIMENT SAMPLES

Thirteen sediment samples were collected for laboratory analysis during the Phase II TBA. As previously mentioned, the four sediment samples collected from the Blue River were only submitted for analysis of

chromium (total), copper, nickel, and zinc. The other nine sediment samples were also submitted for analysis of those metals, as well as cyanide. The sediment samples collected from the two wastewater evaporation sanitary lagoons and the basement of the building were also submitted for analysis of PCBs. Additionally, sediment samples collected from the basement of the site building and the wastewater evaporation sanitary lagoons were submitted for analysis of hexavalent chromium. A summary of analytes detected in the sediment samples follows:

Chromium, Copper, Nickel, and Zinc

All 13 of the sediment samples collected during the site activities contained detected concentrations of chromium (total), copper, nickel, and zinc. In the four sediment samples collected from the Blue River, the site-related metals were all detected at similar concentrations. However, it should be noted that the upstream sample (BR-1-SED) contained lower concentrations of each of the metals than all of the downstream samples. Nickel was the only metal that was detected above its respective TEC. Specifically, samples BR-2-SED and BR-3-SED contained nickel at 23.9 and 24.9 mg/kg, respectively. Those concentrations were just above the TEC established for nickel, which is 22.7 mg/kg. The detected concentrations of nickel were below its respective PEC, which is 48.6 mg/kg. None of the other metals were detected at concentrations that exceeded their respective TEC or PEC.

The site-related metals were all detected at much higher concentrations (excluding the sample collected from the east pond) in the sediment samples collected from the on-site features (process water basins, wastewater evaporation sanitary lagoons, and from the basement of the building). In those samples, chromium was detected at concentrations that ranged from 64.2 to 7,030 mg/kg; copper from 307 to 5,770 mg/kg; nickel from 58.7 to 14,900 mg/kg; and zinc from 288 to 154,000 mg/kg. The sediment sample results for the on-site features were compared to RSK values established for soil instead of TEC and PEC sediment standards. Chromium was consistently detected above its established RSK values, which are 33.6 mg/kg for residential soil and 111 mg/kg for non-residential soil. However, as previously discussed, the RSK values for total chromium assume a ratio (generally 6 to 1) of trivalent chromium to hexavalent chromium. As discussed below, hexavalent chromium was not detected above laboratory reporting limits in the sediment samples collected from the on-site features. Therefore, it may be more appropriate to compare the chromium results to the EPA Regional Screening Levels for trivalent chromium, which are 120,000 mg/kg for residential soil and 1,500,000 mg/kg for industrial soil. When making this comparison, the detected concentrations of chromium are well below those health-based standards. In general, the highest concentrations were detected in the sample collected from the north wastewater evaporation sanitary lagoon. Levels of metals in this sample were consistent with historical sampling results — in

particular, the 2004 EPA sampling event. Table F-11 in Appendix F summarizes the analytical data for the sediment samples.

Hexavalent Chromium

Hexavalent chromium was not detected above laboratory reporting limits in the sediment samples. Laboratory reporting limits for those samples ranged from 3.2 to 11.4 mg/kg. Table F-11 in Appendix F summarizes the analytical data for the sediment samples.

Cyanide

Cyanide was detected in four of the nine sediment samples at concentrations that ranged from 0.27 to 3.3 mg/kg. The highest concentration of cyanide (3.3 mg/kg) was detected in sample BLDG-1-SED, which was collected from the basement of the on-site building. The detected concentrations of cyanide were all well below its respective RSK values. Table F-11 in Appendix F summarizes the analytical data for the sediment samples.

Polychlorinated Biphenyls

PCBs were not detected in any of the sediment samples.

4.8 QUALITY CONTROL SAMPLES

The QC samples included a water field blank, rinsate blank, and trip blank. Only the field blank contained a detection of any of the analyzed compounds. The field blank contained fluoranthene at a concentration of 0.1 µg/L. For reference, the detected concentration of fluoranthene is well below its respective residential RSK value of 255 µg/L.

5.0 DISCUSSION OF FINDINGS, AFFECTED MEDIA, AND RECOMMENDATIONS

Sample results from this Phase II TBA have determined that site-related contaminants are present in environmental media. A discussion of the findings and recommendations is detailed below.

One of the purposes of this Phase II TBA was to determine if past site operations had resulted in contamination on the east portion of the site, which had not been previously investigated. Sampling results did not identify widespread contamination in soil and groundwater across the east portion of the site. However, subsurface soil sample results collected from soil boring SB-6 indicated TPH-DRO and TPH-GRO at concentrations that exceeded their respective RSK values. The presence of TPH at that location is

likely associated with historical site operations involving bulk oil storage/transfer. No other samples collected from the east portion of the site during this Phase II TBA contained site-related contaminants at levels of concern, excluding TPH-DRO detected in groundwater sample SB-5-GW at 0.56 mg/L.

Consistent with past environmental investigations, samples collected as part of this Phase II TBA from the west portion of the site contained contaminants (primarily chromium, copper, nickel, and zinc) that are associated with historic site operations (electroplating in particular). Of note, elevated concentrations of the site-related metals were detected in subsurface soil samples collected from locations within the capped surface impoundments located on the southwest portion of the site. Those surface impoundments historically received waste from the electroplating operations on the site. Past investigations conducted at the site determined that elevated levels of metals remain within one of the surface impoundments (Lagoon #3), which is located in the northwest corner of the site. The sample results indicate that waste also remains within the two southern surface impoundments. Additionally, elevated concentrations of both VOCs and TPH were detected in samples collected from the west portion of the site. Chlorinated VOCs, which are common industrial contaminants, were detected in both soil and groundwater at sample locations SB-11-GW and SB-7-GW. Sample SB-11-GW was collected from the southwest portion of the site and just east of the wastewater evaporation sanitary lagoons. This location formerly contained a large AST that was associated with historical bulk oil storage/transfer operations. Of the VOCs detected in sample SB-11-GW, TCE, 1,2-DCE, and *cis*-1,2-DCE were detected at concentrations of 384, 294, and 299 µg/L, respectively. Those concentrations are well above the RSK values established for these compounds. For reference, the RSK values (for the groundwater exposure pathway) for TCE, 1,2-DCE, and *cis*-1,2-DCE are 5, 5, and 70 µg/L, respectively. Additionally, sample SB-7-GW contained TCE (at 9.5 µg/L) and 1,2-DCE (at 25.5 µg/L) at concentrations that exceeded their respective RSK values. Sample SB-7-GW was collected within the capped surface impoundments located in the southwest portion of the site. Past investigations have not identified elevated concentrations of these compounds. Based on the groundwater sample results, it appears that the VOC plume is primarily located near the wastewater evaporation sanitary lagoons and the capped surface impoundments. Historically, groundwater flow at the site has been determined to be to the south/southwest, towards the Blue River. As stated above, the detected concentrations of several VOCs were above their respective RSK values; however, it should be noted that RSK values for the groundwater exposure pathway have been established for groundwater ingestion. Because groundwater at the site is not currently used for domestic purposes (drinking, washing, etc.), comparing the groundwater sample results to those standards may not be entirely applicable.

Also consistent with past investigations, elevated concentrations of site-related metals were detected in the wastewater evaporation sanitary lagoons (specifically from the south lagoon); however, surface soil sampling conducted as part of this Phase II TBA determined that elevated concentrations of metals are not present across the south portion of the site.

The collection of surface water and sediment samples from the Blue River as part of this Phase II TBA did not identify site-related contaminants at levels of concern.

Sample results from this Phase II TBA should be reviewed by personnel from EPA and KDHE to determine if additional investigation may be warranted. Review of this sample data, as well as the findings from previous investigations at the site should be conducted to specifically identify environmental liabilities associated with the site — in particular, those liabilities that could affect a potential purchaser or entity taking ownership of the property. As previously mentioned, the three former surface impoundments (that historically received waste from electroplating operations on the site) are considered RCRA post-closure units. KDHE maintains post-closure authority over those units, while EPA Region 7 maintains regulatory authority over the entire site.

6.0 REFERENCES

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APPENDIX A

FIGURES

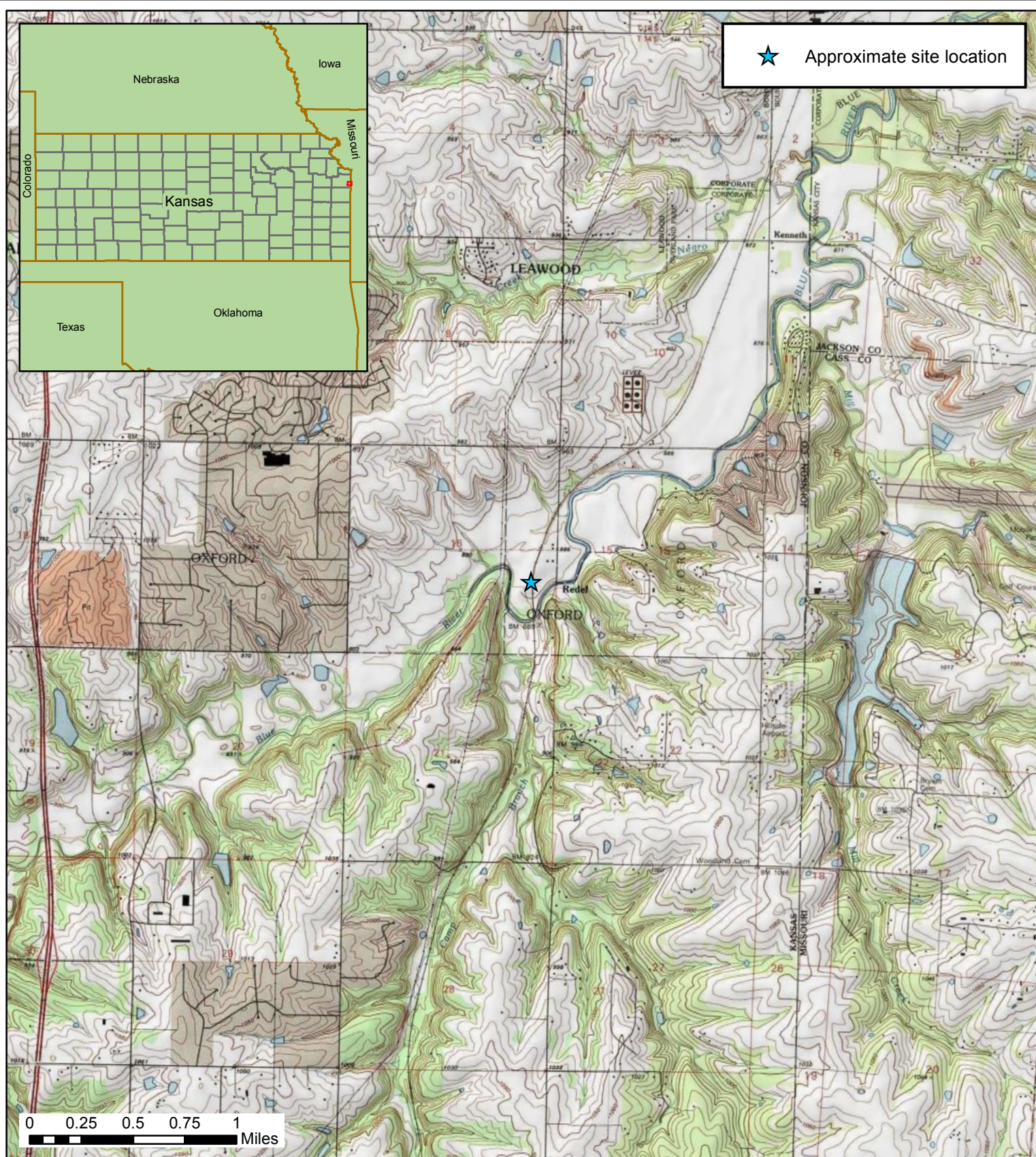


Figure 1
Site Location Map

Kuhlman Diecasting Site, Stanley, Kansas

Seagull Environmental Technologies, Inc.

Source: U.S. Geological Survey



Figure 2
Site Aerial Map

Kuhlman Diecasting Site, Stanley, Kansas

Seagull Environmental Technologies, Inc.

Source: ArcGIS Online, Bing Maps Aerial Imagery, 2011

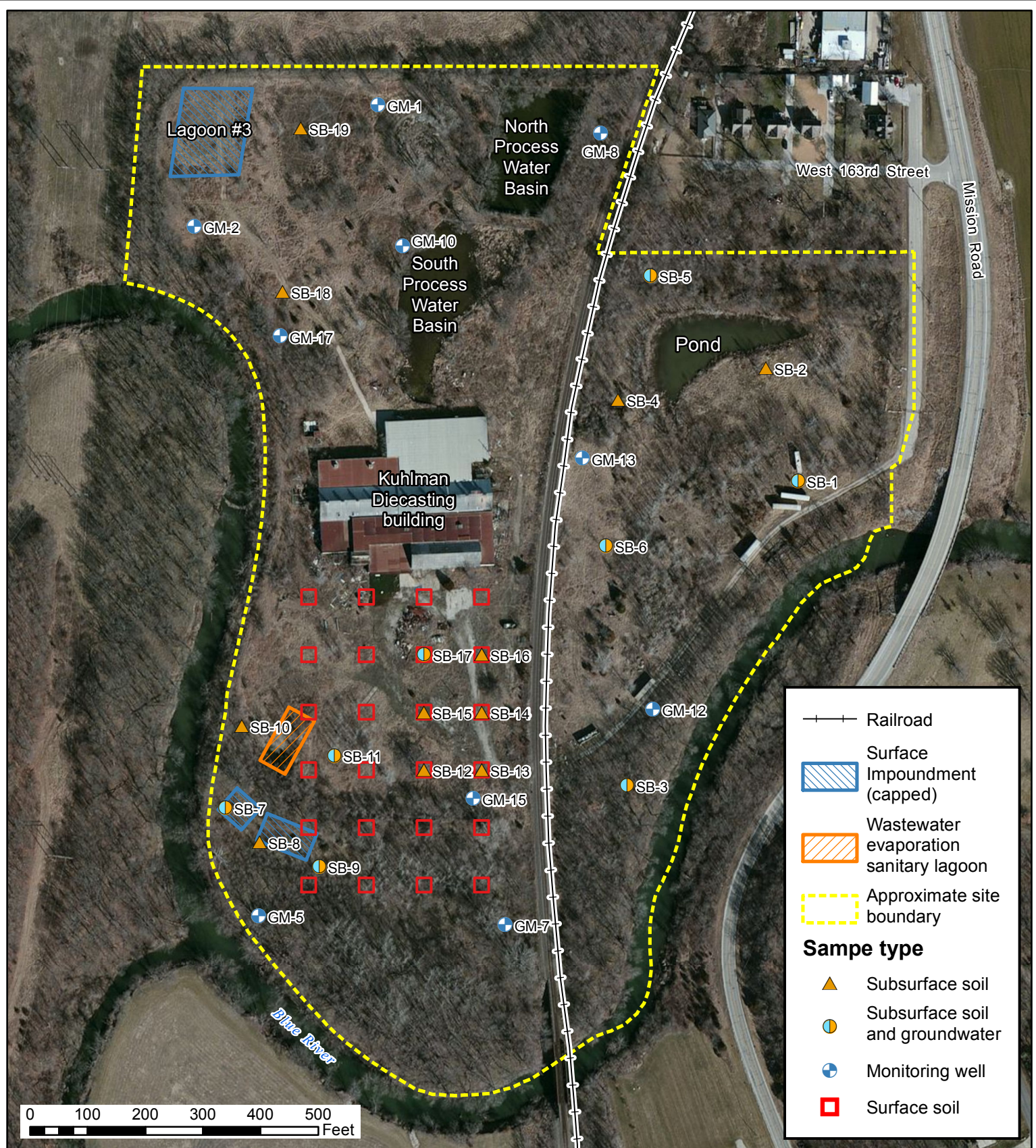
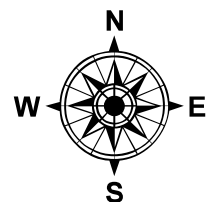


Figure 3
Soil and Groundwater Sample Location Map
Kuhlman Diecasting Site, Stanley, Kansas



Seagull Environmental Technologies, Inc.



Source: ArcGIS Online, Bing Maps Aerial Imagery, 2011

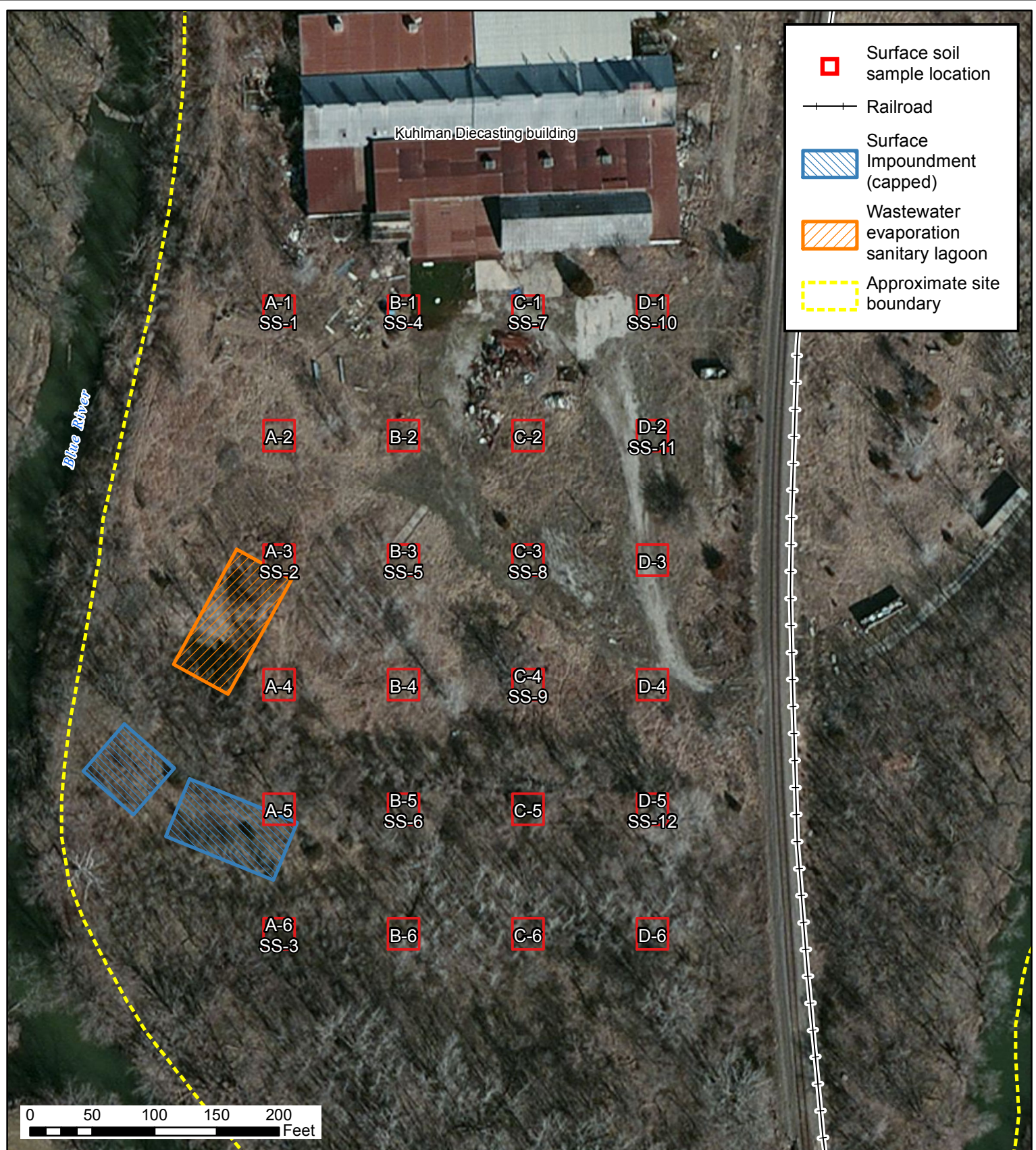


Figure 4
Surface Soil Sample Location Map

Kuhlman Diecasting Site, Stanley, Kansas



Seagull Environmental Technologies, Inc.

Source: ArcGIS Online, Bing Maps Aerial Imagery, 2011

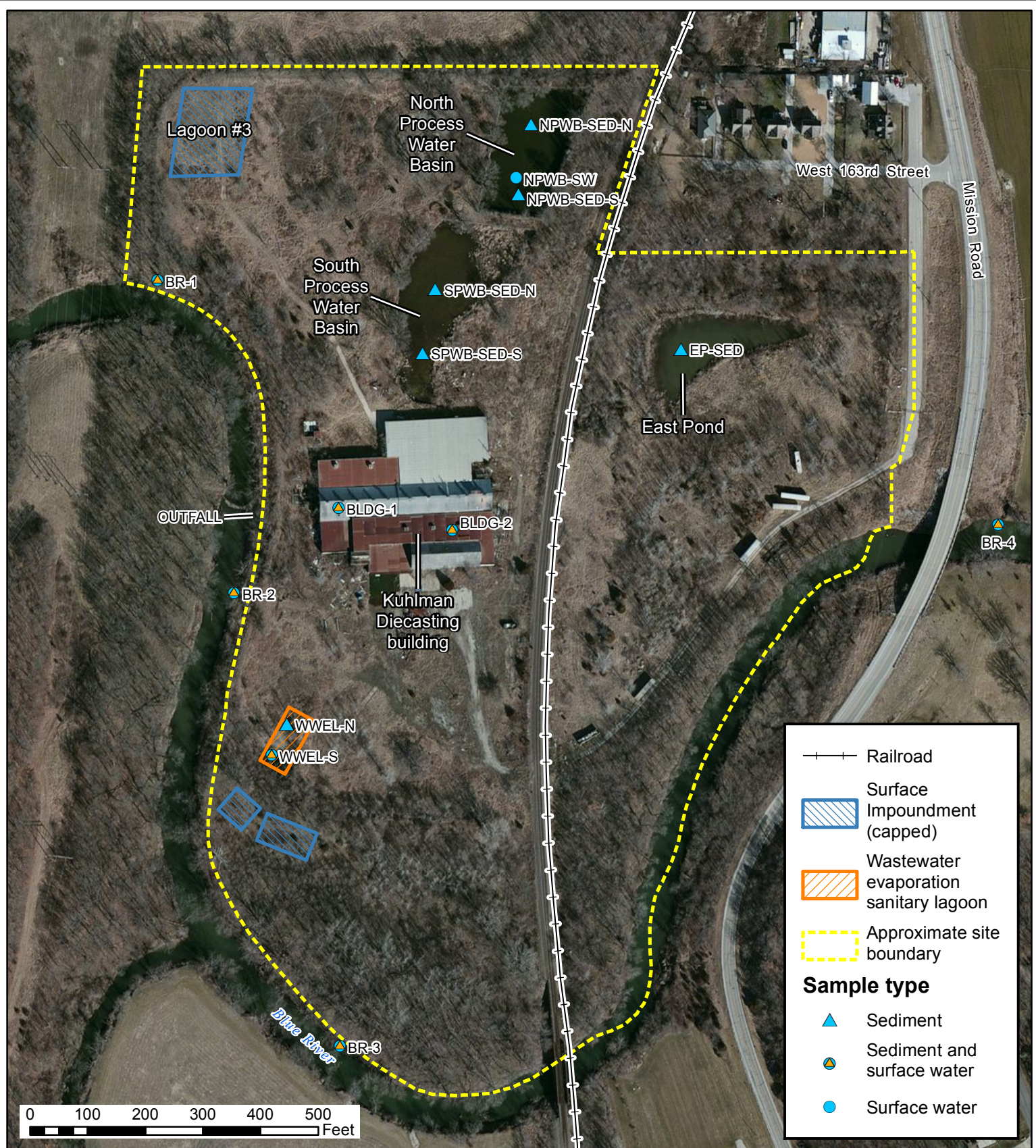


Figure 5
Sediment and Surface Water Sample Location Map

Kuhlman Diecasting Site, Stanley, Kansas

Seagull Environmental Technologies, Inc.

Source: ArcGIS Online, Bing Maps Aerial Imagery, 2011

APPENDIX B

PHOTOGRAPHIC DOCUMENTATION



Client: Environmental Protection
Agency Region 7

Description: Photograph of Mini-Superfund Technical Assessment and
Response Team (Mini-START) personnel conducting
subsurface soil sampling activities using a Geoprobe®
direct-push apparatus.

Photograph
Number: 1

Direction: Southeast

Photographer: Todd Davis

Date: 07/17/2012



Client: Environmental Protection
Agency Region 7

Description: Photograph of Mini-START personnel conducting sampling
activities.

Photograph
Number: 2

Direction: N/A

Photographer: Todd Davis

Date: 07/18/2012



Kuhlman Diecasting Site

Stanley, Kansas

EPS70901.0035



Client: Environmental Protection
Agency Region 7

Description: Photograph of Mini-START personnel conducting
subsurface soil sampling activities using a Geoprobe®
direct-push apparatus.

Photograph
Number: 3

Direction: West

Photographer: Todd Davis

Date: 07/18/2012



Client: Environmental Protection
Agency Region 7

Description: Photograph of Mini-START personnel using a hand auger to
collect sediment samples from the Blue River.

Photograph
Number: 4

Direction: North

Photographer: Joel Harvester

Date: 07/23/2012



Kuhlman Diecasting Site

Stanley, Kansas

EPS70901.0035



Client: Environmental Protection
Agency Region 7

Description: Photograph of Mini-START personnel collecting water
samples from a permanent monitoring well located at the
site.

Photograph
Number: 5

Direction: West

Photographer: Joel Harvester

Date: 07/24/2012



Client: Environmental Protection
Agency Region 7

Description: Photograph of Mini-START personnel conducting
groundwater sampling activities.

Photograph
Number: 6

Direction: North

Photographer: Cosmo Canacari

Date: 07/24/2012



Kuhlman Diecasting Site

Stanley, Kansas

EPS70901.0035



Client: Environmental Protection
Agency Region 7

Description: Photograph of the outfall for the former wastewater
treatment system west of the building.

Photograph
Number: 7

Direction: East

Photographer: Joel Harvester

Date: 07/26/2012



Client: Environmental Protection
Agency Region 7

Description: Photograph of concrete debris along the Blue River just
below the outfall of the former wastewater treatment
system west of the building.

Photograph
Number: 8

Direction: West

Photographer: Joel Harvester

Date: 07/26/2012



Kuhlman Diecasting Site

Stanley, Kansas

EPS70901.0035



Client: Environmental Protection
Agency Region 7

Description: Photograph of North Process Water Basin.

Photograph
Number: 9

Direction: Northeast

Photographer: Joel Harvester

Date: 07/26/2012



Client: Environmental Protection
Agency Region 7

Description: Photograph of South Process Water Basin.

Photograph
Number: 10

Direction: South

Photographer: Joel Harvester

Date: 07/26/2012



Kuhlman Diecasting Site

Stanley, Kansas

EPS70901.0035



Client: Environmental Protection
Agency Region 7

Description: Photograph of Mini-START personnel collecting sediment
samples from the basement of the site building.

Photograph
Number: 11

Direction: NA

Photographer: Joel Harvester

Date: 07/27/2012



Client: Environmental Protection
Agency Region 7

Description: Photograph of Mini-START personnel collecting sediment
and water samples from the basement of the site building.

Photograph
Number: 12

Direction: NA

Photographer: Cosmo Canacari

Date: 07/27/2012

APPENDIX C
SITE LOGBOOK



Rite in the Rain
ALL-WEATHER
FIELD
Nº 351

Kuhlman
Die casting
Site

EPS 70901.0035

7-17-12

Page 1 Kuhlman Diecasting Site

Summary: Begin collecting site samples
weather: Sunny, high of $\approx 100^{\circ}\text{F}$

0830 Arrive on-site meet with
Seagull personnel/Caracari

0835 Depart site for Field Environmental

0900 Arrive Field Environmental to pick
up PID

0950 Arrive on-site, EPA OSC
John Frey arrives on site

1011 collect SB-1-25-27

for pertinent data see Field sheet

1205 collect SB-1-GW

see field sheet for pertinent data

1215-1245 Lunch

1432 - collect SB-2-24

see field sheet for pertinent data

1455 - attempt ^{sample} collection at various
locat. ons

1608 collect SB-3-16-18

see field sheets for pertinent data

1645 Leave site - End of day

~~Jeff~~ 7/17/12

7-18-12

Page 2

Kuhlman Diecasting Site

3

Summary: continue collecting geo probe samples

Weather: sunny. high of $\approx 105^{\circ}\text{F}$

0830 Arrive on site, begin Sample Prep

Seagull Personnel Dillon arrives on-site
personnel present: Seagull Harvester,
Seagull Conaco, Seagull Dillon, and
EPA Fry.

1007 Collect SB-4-14-16

see field sheets for pertinent data

1042 collect SB-4-GW

see field sheets for pertinent data

1102 Collect SB-5-10-12

see field sheet for pertinent data

on-site personnel begin having
problems w XRF

1200 collect SB-6-14-16

see field sheet for pertinent data

sample collected from SB-6

contained staining consistent
w petroleum staining

1202 collect SB-6-GW

see field sheet for pertinent data

Rite in the Rain.

7-18-12

Page 3

Kuhlman Diecasting Site

1230-1300 Lunch

1400 - EPA Todd Davis arrives at site

1423 - Collect SB-7-10-12

see field sheet for pertinent data

1507 - Collect SB-7-GW

see field sheet for pertinent data

1612 Collect SB-8-9-11

see field sheet for pertinent data

1648 Collect SB-9-12-14

see field sheet for pertinent data

1655 collect SB-9-GW

see field sheet for pertinent data

site personnel decide to leave

track probe in same area

as SB-9 due to distance

to Entrance of site ^{exit} In order

to efficiently start work on

7.19.12.

1750 Depart site. End of day

~~DLH 7/18/12~~

7-19-12

5

Page 4 Kuhlman Diecasting Site

Summary? Continue collecting geoprobe samples

Weather Sunny High of $\approx 103^{\circ}\text{F}$

0820 - Arrive at site

Site personnel: Seagull Canacari,
Seagull Harvester, and EPA Frey

0940 collect SB-10-12-14

see field sheets for pertinent data

1013 have issues with geoprobe

and with groundwater collection

1025 Seagull Harvester begins setting
up grid for surface soil collection

1130 Geoprobe problems resolved

site personnel decide to collect
groundwater at SB-11 instead of
SB-10

1150 Collect SB-11-17-19

See field sheet for pertinent details

collect SB-11-GW

see field sheet for pertinent details

1230-1300 Lunch

1310 collect ^{soil} from SB-12

1330 collect soil from SB-13

1352 collect SB-14-8-10

see field sheet for pertinent data

Rite in the Rain.

7-19-12

Page 5 Kuhlman Diecasting Site

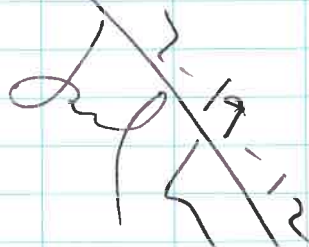
1420 Collect soil from SB-15

1450 Collect soil from SB-11a

1510 Collect SB-17-10-12

See field sheet for pertinent data

1645 Depart site - End of Day



7-19-12

7-20-12

page 6

Kuhlman Dredging site

Summary: Continue Finish collecting
geoprobe samples & Collect surface
soil samples

weather: Sunny high at $\approx 100^{\circ}\text{F}$

0730 - Arrive on-site

site personnel: Seagull Curacari
and Seagull Harvester

0811 - Due to slow recharge rate
filter was left in SB-17 overnight.
collect SB-17-GW

see field sheet for pertinent data

0900 EPA John Frey arrives on site

0908 Collect SB-18-12-14

see field sheets for pertinent data

0938 collect SB-19-C-8

see field sheets for pertinent data

1130 Collect Rinse Blank

1140 collect Field Blank

1215-1245 Lunch

1300 - Begin collecting surface soil
samples

1330 Seagull Greg Dillon arrives on site

1515 Finish collecting surface soil

1545 Depart Site. End of Day *Rite in the Rain.*

Joe / K 7/20/12

7-24-12

Page 7

Kuhlm Diecasting site

Summary: Collect water and sediment samples

Weather: Sunny high of $\approx 102^{\circ}\text{F}$

1030 arrive on site

site personnel: Sengulley Canacari and
Harveste

1050 collect SPWB-SED-N

see field sheets for pertinent data

1105 collect SPWB-SED-S

1130 collect BR-1-SED*

collect BR-1-SW*

1150 collect BR-2-SED*

collect BR-2-SW*

1220 collect BR-3-SED*

collect BR-3-SW*

1250 collect BR-4-SED*

collect BR-4-SW*

1315-1345 Lunch

1430 collect NPWB-SW*

1440 collect NPWB-SED-N*

1450 collect NPWB-SED-S*

1522 collect WWEL-N-SED*

1534 collect WWEL-S-SW*

1540 collect WWEL-S-SED*

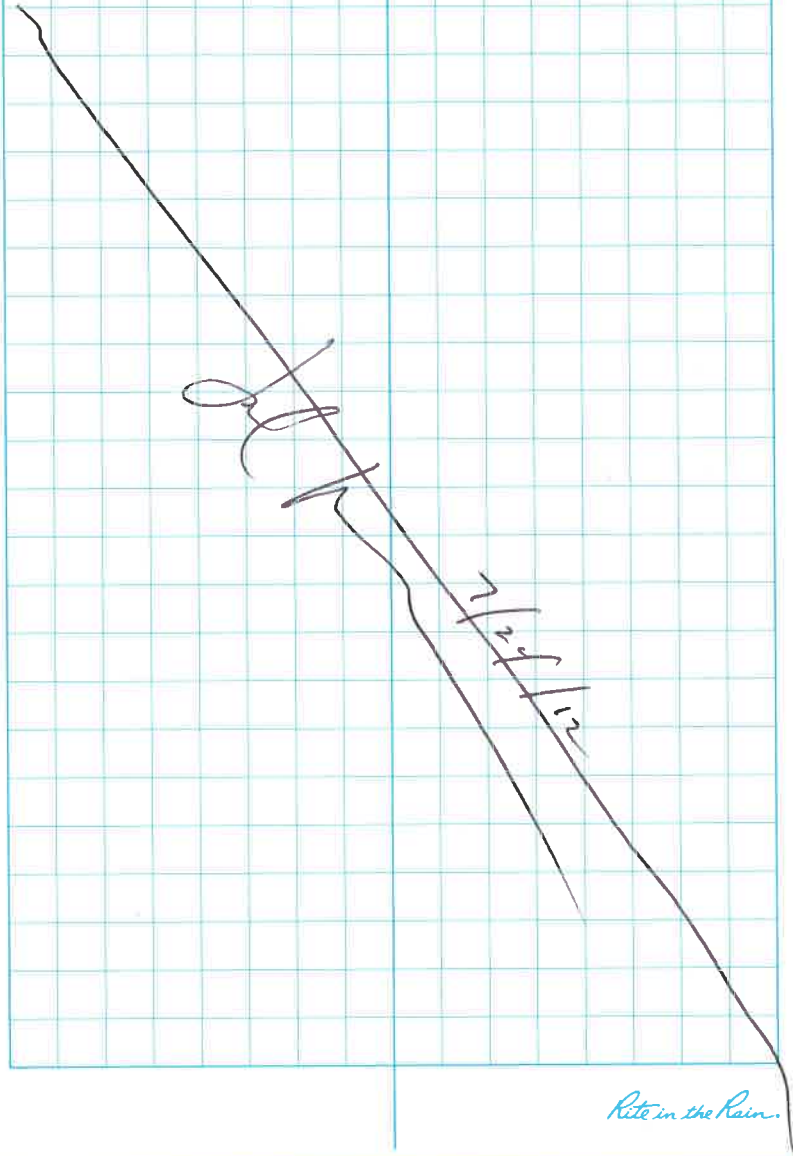
* see field sheets for pertinent data

7-24-12

Page 8 Kuhlman Diecasting Site

9

1730 Depart Site. End at Lar



Rite in the Rain.

7-25-12

Page 9

Kuhlman Diecasting site

Summary: Collect sediment from East pond
Collect groundwater from monitoring well

Weather: Sunny high at $\approx 106^{\circ}\text{F}$

0900 - Arrive on site

on-site personnel: Seagitts Canacari &
Harvester

0955 Collect EP-SED* No water collect only
sediment

1200-1230 Lunch

1338 Collect GM-1*

1440 Collect sample from GM-2*

1538 Collect sample from GM-17*

1730 Depart site end of day

* See field sheets for pertinent data

~~Seagitts~~

~~7/25/12~~

7-26-12

Page 10

Kuhlman Diecasting Site

11

Summary: continue collecting
monitoring wall samples
weather: Sunny high of $\approx 100^{\circ}\text{F}$

0900 - Arrive at site

site personnel: Seagulls Harvester;
(welder)

1020 Collect sample from GM-10*

1157 collect sample from GM-8*

1247 collect sample from GM-15*

1300-1330 Lunch

1440 collect sample from GM-13*

1529 collect sample from GM-12*

1630 Depart Site for lab, End of Day

* see field sheets for pertinent data

~~Log~~

~~7/26/12~~

Rite in the Rain

7/27/12

Page 11

Kuhlman Diecasting site

Summary: finish collecting monitoring well samples
finish collecting surface water feed
samples. Close up site

weather: sunny high $\approx 95^{\circ}\text{F}$

0900 Arrive on site

on site personnel: Sengul's

Harvester & Conner

0958 collect Sample from GM-5*

1110 collect Sample from GM-7*

1130-1200 lunch

1238 collect BLDG-1-SED*

1248 collect BLDG-1-SW*

1323 collect BLDG-2-SED*

1340 collect BLDG-2-SW*

1430 Depart site End of day

* see field sheets for pertinent data

~~Inf 7/27/12~~

APPENDIX D
BORING LOGS



Seagull Environmental Technologies, Inc.

Project: Kuhlman Diecasting Site
Project No: EPS70901.0035
Date: 7/17/2012
Time: 10:11
Logged by: Joel Harvester

Boring No: SB-1
Total Depth (ft): 27.0'
Location: 38.83069° N; 94.63113° W
Drilling Method: Truck-mounted direct-push Geoprobe
Sampling Method: Macro-Core soil sampler

Depth (feet)	Recovery	PID Reading	Laboratory Sample ID	Lithology	Remarks
1	4/4	0.0		Silt, brown, dry	
2		0.0			
3		0.0			
4		0.0			
5	4/4	0.0		Clay, dark brown	< 20 ppm Pb
6		0.0			
7		0.0			
8		0.0			
9	4/4	0.0		Clay, dark brown	
10		0.0			
11		0.0			
12		0.0			
13	4/4	0.0		Clay, brown, wet	< 17 ppm Pb
14		0.0			
15		0.0			
16		0.0			
17	4/4	0.0			
18		0.0			
19		0.0			
20		0.0			



Seagull Environmental Technologies, Inc.

Project: Kuhlman Diecasting Site
Project No: EPS70901.0035
Date: 7/17/2012
Time: 10:11
Logged by: Joel Harvester

Boring No: SB-1
Total Depth (ft): 27.0'
Location: 38.83069° N; 94.63113° W
Drilling Method: Truck-mounted direct-push Geoprobe
Sampling Method: Macro-Core soil sampler

Depth (feet)	Recovery	PID Reading	Laboratory Sample ID	Lithology	Remarks
21	4/4	0.0		Clay, brown, moist	ND
22		0.0			
23		0.0			
24		0.0			
25	3/4	0.0		-----	ND
26		0.0	SB-1-25-27	Clay, brown, moist, stained	
27		0.0		Clay with some limestone, brown	< 30 ppm Pb

				bottom of boring	
28				TD = 27.0' bgs	
29					
30					
31					
32					
33					
34					
35					
36					
37					
38					
39					
40					



Seagull Environmental Technologies, Inc.

Project: Kuhlman Diecasting Site
Project No: EPS70901.0035
Date: 7/17/2012
Time: 14:32
Logged by: Joel Harvester

Boring No: SB-2
Total Depth (ft): 20.0'
Location: 38.83149° N; 94.63136° W
Drilling Method: Truck-mounted direct-push Geoprobe
Sampling Method: Macro-Core soil sampler

Depth (feet)	Recovery	PID Reading	Laboratory Sample ID	Lithology	Remarks
1	4/4	0.0	SB-2-2-4	Silt, brown	< 33 ppm Pb
2		0.0			
3		0.0			< 24 ppm Pb
4		0.0			
5	4/4	0.0		Silt with some clay, brown	ND
6		0.0			
7		0.0			
8		0.0			
9	4/4	0.0			ND
10		0.0			
11		0.0			
12		0.0			
13	3/4	0.0		Clay, brown	ND
14		0.0			
15		0.0		Silt, brown	
16		0.0			
17	4/4	0.0		Clay, brown	ND
18		0.0			
19		0.0			
20		0.0		TD = 20.0' bgs	



Seagull Environmental Technologies, Inc.

Project: Kuhlman Diecasting Site
Project No: EPS70901.0035
Date: 7/17/2012
Time: 16:08
Logged by: Joel Harvester

Boring No: SB-3
Total Depth (ft): 20.0'
Location: 38.82963° N; 94.63222° W
Drilling Method: Truck-mounted direct-push Geoprobe
Sampling Method: Macro-Core soil sampler

Depth (feet)	Recovery	PID Reading	Laboratory Sample ID	Lithology	Remarks
1	4/4	0.0		Silt, brown	< 31 ppm Pb
2		0.0			
3		0.0			< 35 ppm Pb
4		0.0			
5	4/4	0.0		Clay, brown	ND
6		0.0			
7		0.0			< 21 ppm Pb
8		0.0			
9	4/4	0.0		Clay, brown	< 15 ppm Pb
10		0.0			
11		0.0			< 18 ppm Pb
12		0.0			
13	4/4	0.0		Clay with some silt, brown	ND
14		0.0			
15		0.0			
16		0.0			
17	4/4	0.0	SB-3-16-18	Clay, brown	< 21 ppm Pb
18		0.0			
19		0.0			ND
20		0.0		TD = 20.0' bgs	



Seagull Environmental Technologies, Inc.

Project: Kuhlman Diecasting Site
Project No: EPS70901.0035
Date: 7/18/2012
Time: 10:07
Logged by: Joel Harvester

Boring No: SB-4
Total Depth (ft): 20.0'
Location: 38.83130° N; 94.63217° W
Drilling Method: Truck-mounted direct-push Geoprobe
Sampling Method: Macro-Core soil sampler

Depth (feet)	Recovery	PID Reading	Laboratory Sample ID	Lithology	Remarks			
1	4/4	0.0		Silt, brown	ND			
2		0.0						
3		0.0						
4		0.0						
5	4/4	0.0			-----	ND		
6		0.0						
7		0.0						
8		0.0						
9	4/4	0.0				ND		
10		0.0						
11		0.0						
12		0.0						
13	4/4	0.0				Clay, brown	< 18 ppm Pb	
14		0.0						
15		0.0	SB-4-14-16				< 18 ppm Pb	
16		0.0						
17	4/4	0.0						< 18 ppm Pb
18		0.0						
19		0.0						ND
20		0.0						



Seagull Environmental Technologies, Inc.

Project: Kuhlman Diecasting Site
Project No: EPS70901.0035
Date: 7/18/2012
Time: 11:02
Logged by: Joel Harvester

Boring No: SB-5
Total Depth (ft): 20.0'
Location: 38.83200° N; 94.63198° W
Drilling Method: Truck-mounted direct-push Geoprobe
Sampling Method: Macro-Core soil sampler

Depth (feet)	Recovery	PID Reading	Laboratory Sample ID	Lithology	Remarks
1	4/4	0.0		Silt, light brown	ND
2		0.0			
3		0.0			< 17 ppm Pb
4		0.0			
5	4/4	0.0		Silt, brown	< 17 ppm Pb
6		0.0			
7		0.0			ND
8		0.0			
9	4/4	0.0	SB-5-10-12	Clay, brown	ND
10		0.0			
11		0.0			< 21 ppm Pb
12		0.0			
13	4/4	0.0		Clay, dark brown	ND
14		0.0			
15		0.0			
16		0.0			
17	4/4	0.0		Clay, brown	< 21 ppm Pb
18		0.0			
19		0.0			ND
20		0.0		TD = 20.0' bgs	



Seagull Environmental Technologies, Inc.

Project: Kuhlman Diecasting Site
Project No: EPS70901.0035
Date: 7/18/2012
Time: 12:00
Logged by: Joel Harvester

Boring No: SB-6
Total Depth (ft): 20.0'
Location: 38.83063° N; 94.63227° W
Drilling Method: Truck-mounted direct-push Geoprobe
Sampling Method: Macro-Core soil sampler

Depth (feet)	Recovery	PID Reading	Laboratory Sample ID	Lithology	Remarks
1	4/4	0.0		Silt, brown	< 65 ppm Pb
2		0.0			
3		0.0			< 24 ppm Pb
4		0.0			
5	4/4	0.0		Silt with some clay, brown	ND
6		0.0			
7		0.0			
8		0.0			
9	4/4	0.0		Clay with some silt, brown	< 19 ppm Pb
10		0.0			
11		114 ppm			ND
12		69.8 ppm			
13	4/4	4 ppm	SB-6-14-16	Clay with some silt, brown	ND
14		18 ppm			
15		218 ppm			
16		266 ppm			
17	4/4	5 ppm		Clay, green and gray, stained, petroleum odor	< 16 ppm Pb
18		8 ppm			
19		8 ppm			ND
20		13.6 ppm		TD = 20.0' bgs	



Seagull Environmental Technologies, Inc.

Project: Kuhlman Diecasting Site
Project No: EPS70901.0035
Date: 7/18/2012
Time: 14:42
Logged by: Joel Harvester

Boring No: SB-7
Total Depth (ft): 20.0'
Location: 38.82938° N; 94.63461° W
Drilling Method: Truck-mounted direct-push Geoprobe
Sampling Method: Macro-Core soil sampler

Depth (feet)	Recovery	PID Reading	Laboratory Sample ID	Lithology	Remarks
1	4/4	0.0			< 21 ppm Pb
2		0.0			
3		0.0			< 21 ppm Pb
4		0.0			
5	4/4	0.0		Silt, brown, dry	ND
6		0.0			
7		0.0			
8		0.0			
9	4/4	0.0			ND
10		0.0			
11		160 ppm			
12		119 ppm	SB-7-10-12		< 24 ppm Pb
13	4/4	4 ppm		Clay, gray, stained with petroleum odor	ND
14		3 ppm			
15		2 ppm			
16		2 ppm			
17	4/4	0.0		Clay, gray	ND
18		0.0			
19		0.0			
20		0.0		TD = 20.0' bgs	



Seagull Environmental Technologies, Inc.

Project: Kuhlman Diecasting Site
Project No: EPS70901.0035
Date: 7/18/2012
Time: 16:12
Logged by: Joel Harvester

Boring No: SB-8
Total Depth (ft): 20.0'
Location: 38.82922° N; 94.63435° W
Drilling Method: Truck-mounted direct-push Geoprobe
Sampling Method: Macro-Core soil sampler

Depth (feet)	Recovery	PID Reading	Laboratory Sample ID	Lithology	Remarks
1	4/4	0.0		Silt, brown	ND
2		0.0			
3		0.0			
4		0.0			
5	4/4	0.0		Clay with some silt, brown	ND
6		0.0			
7		0.0		Clay with some silt, gray	
8		0.0			
9	4/4	0.0	SB-8-9-11	Clay with some silt, brown, some staining	ND
10		0.0			
11		3 ppm			
12		2 ppm			
13	4/4	0.0		Clay, brown	ND
14		0.0			
15		0.0		Clay, brown with some gray	
16		0.0			
17	4/4	0.0		Clay, brown	ND
18		0.0			
19		0.0			
20		0.0		TD = 20.0' bgs	



Seagull Environmental Technologies, Inc.

Project: Kuhlman Diecasting Site
Project No: EPS70901.0035
Date: 7/18/2012
Time: 16:48
Logged by: Joel Harvester

Boring No: SB-9
Total Depth (ft): 20.0'
Location: 38.82915° N; 94.63409° W
Drilling Method: Truck-mounted direct-push Geoprobe
Sampling Method: Macro-Core soil sampler

Depth (feet)	Recovery	PID Reading	Laboratory Sample ID	Lithology	Remarks
1	4/4	0.0		Silt, brown	ND
2		0.0			
3		0.0			
4		0.0			
5	4/4	0.0		Clay with some silt, brown	ND
6		0.0			
7		0.0			
8		0.0			
9	4/4	0.0			ND
10		0.0			
11		0.0			
12		4.1 ppm			
13	4/4	3.9 ppm	SB-9-12-14	Clay, dark brown to black	ND
14		3.7 ppm			
15		3.1 ppm			
16		3.1 ppm			
17	4/4	0.0		Clay, dark brown with some gray	ND
18		0.0			
19		0.0			
20		0.0		TD = 20.0' bgs	



Seagull Environmental Technologies, Inc.

Project: Kuhlman Diecasting Company Site
Project No: EPS70901.0035
Date: 7/19/2012
Time: 9:40
Logged by: Joel Harvester

Boring No: SB-10
Total Depth (ft): 20.0'
Location: 38.82963° N; 94.63445° W
Drilling Method: Truck-mounted direct-push Geoprobe
Sampling Method: Macro-Core soil sampler

Depth (feet)	Recovery	PID Reading	Laboratory Sample ID	Lithology	Remarks
1	4/4	0.0		Silt, brown, dry	< 16 ppm Pb
2		0.0			
3		0.0			ND
4		0.0			
5	4/4	0.0		Silt, brown, dry	ND
6		0.0			
7		0.0			
8		0.0			
9	4/4	0.0		Clay with silt, brown	ND
10		0.0			
11		0.0			
12		0.0			
13	4/4	0.0	SB-10-12-14	Clay, brown	< 21 ppm Pb
14		0.0			
15		0.0			ND
16		0.0			
17	4/4	0.0		Clay, gray	ND
18		0.0			
19		0.0			
20		0.0		TD = 20.0' bgs	



Seagull Environmental Technologies, Inc.

Project: Kuhlman Diecasting Company Site
Project No: EPS70901.0035
Date: 7/19/2012
Time: 11:50
Logged by: Joel Harvester

Boring No: SB-11
Total Depth (ft): 20.0'
Location: 38.82952° N; 94.63407° W
Drilling Method: Truck-mounted direct-push Geoprobe
Sampling Method: Macro-Core soil sampler

Depth (feet)	Recovery	PID Reading	Laboratory Sample ID	Lithology	Remarks		
1	4/4	0.0		Gravel/fill	ND		
2		0.0		Silt, brown			
3		0.0					
4		0.0					
5	4/4	0.0			ND		
6		0.0					
7		0.0					
8		0.0					
9	4/4	0.0				< 31 ppm Pb	
10		0.0					
11		0.0				ND	
12		0.0					
13	4/4	0.0					ND
14		0.0					
15		0.0					
16		0.0					
17	4/4	0.0	SB-11-17-19	Clay, gray			ND
18		64.0					
19		14.1					
20		1.2		TD = 20.0' bgs			



Seagull Environmental Technologies, Inc.

Project: Kuhlman Diecasting Company Site
Project No: EPS70901.0035
Date: 7/19/2012
Time: 13:10
Logged by: Joel Harvester

Boring No: SB-12
Total Depth (ft): 12.0'
Location: 38.82942° N; 94.63355° W
Drilling Method: Truck-mounted direct-push Geoprobe
Sampling Method: Macro-Core soil sampler

Depth (feet)	Recovery	PID Reading	Laboratory Sample ID	Lithology	Remarks
1	4/4	0.0		Silt, brown	< 165 ppm Pb
2		0.0			
3		0.0			ND
4		0.0			
5	4/4	0.0		Silt with clay, brown	< 35 ppm Pb
6		0.0			
7		0.0			< 17 ppm Pb
8		0.0			
9	4/4	0.0		Clay, brown	ND
10		0.0			
11		0.0			
12		0.0			
13					
14					
15					
16					
17					
18					
19					
20					



Seagull Environmental Technologies, Inc.

Project: Kuhlman Diecasting Company Site
Project No: EPS70901.0035
Date: 7/19/2012
Time: 13:30
Logged by: Joel Harvester

Boring No: SB-13
Total Depth (ft): 12.0'
Location: 38.82945° N; 94.63301° W
Drilling Method: Truck-mounted direct-push Geoprobe
Sampling Method: Macro-Core soil sampler

Depth (feet)	Recovery	PID Reading	Laboratory Sample ID	Lithology	Remarks
1	4/4	0.0		Gravel	< 29 ppm Pb
2		0.0		Silt with gravel, brown	
3		0.0			ND
4		0.0			
5	4/4	0.0		Clay with silt, brown	ND
6		0.0			
7		0.0			
8		0.0			
9	4/4	0.0		Clay, brown	< 25 ppm Pb
10		0.0		ND	
11		0.0			
12		0.0		TD = 12.0' bgs	
13					
14					
15					
16					
17					
18					
19					
20					



Seagull Environmental Technologies, Inc.

Project: Kuhlman Diecasting Company Site
Project No: EPS70901.0035
Date: 7/19/2012
Time: 13:52
Logged by: Joel Harvester

Boring No: SB-14
Total Depth (ft): 12.0'
Location: 38.82973° N; 94.63304° W
Drilling Method: Truck-mounted direct-push Geoprobe
Sampling Method: Macro-Core soil sampler

Depth (feet)	Recovery	PID Reading	Laboratory Sample ID	Lithology	Remarks
1	4/4	0.0		Gravel and asphalt fill	< 32 ppm Pb
2		0.0			
3		0.0			< 20 ppm Pb
4		0.0		Clay with silt, brown	
5	4/4	0.0			< 16 ppm Pb
6		0.0			
7		0.0		Clay, brown	< 21 ppm Pb
8		0.0			
9	4/4	0.0	SB-14-8-10	Silt with sand, gray	< 55 ppm Pb
10		0.0			
11		0.0		Clay, reddish brown	< 18 ppm Pb
12		0.0		TD = 12.0' bgs	
13					
14					
15					
16					
17					
18					
19					
20					



Seagull Environmental Technologies, Inc.

Project: Kuhlman Diecasting Company Site
Project No: EPS70901.0035
Date: 7/19/2012
Time: 14:20
Logged by: Joel Harvester

Boring No: SB-15
Total Depth (ft): 12.0'
Location: 38.82974° N; 94.63346° W
Drilling Method: Truck-mounted direct-push Geoprobe
Sampling Method: Macro-Core soil sampler

Depth (feet)	Recovery	PID Reading	Laboratory Sample ID	Lithology	Remarks
1	4/4	0.0		Silt, brown	< 33 ppm Pb
2		0.0			
3		0.0			< 29 ppm Pb
4		0.0			
5	4/4	0.0		Silt with sand	< 34 ppm Pb
6		0.0		Silt, brown	
7		0.0		Clay, reddish brown	< 16 ppm Pb
8		0.0			
9	4/4	0.0		Silt with clay, some sand, light brown	< 29 ppm Pb
10		0.0			
11		0.0		Clay, reddish brown	< 21 ppm Pb
12		0.0		TD = 12.0' bgs	
13					
14					
15					
16					
17					
18					
19					
20					



Seagull Environmental Technologies, Inc.

Project: Kuhlman Diecasting Company Site
Project No: EPS70901.0035
Date: 7/19/2012
Time: 14:50
Logged by: Joel Harvester

Boring No: SB-16
Total Depth (ft): 12.0'
Location: 38.83002° N; 94.63305° W
Drilling Method: Truck-mounted direct-push Geoprobe
Sampling Method: Macro-Core soil sampler

Depth (feet)	Recovery	PID Reading	Laboratory Sample ID	Lithology	Remarks
1	4/4	0.0		Gravel and asphalt with some silt	ND
2		0.0			
3		0.0		Silt, brown	
4		0.0			
5	4/4	0.0		Gravel and asphalt with some silt	ND
6		0.0			
7		0.0		Clay, reddish brown	
8		0.0			
9	4/4	0.0		Clay with silt, brown	ND
10		0.0			
11		0.0		Clay, reddish brown	
12		0.0		TD = 12.0' bgs	
13					
14					
15					
16					
17					
18					
19					
20					



Seagull Environmental Technologies, Inc.

Project: Kuhlman Diecasting Company Site
Project No: EPS70901.0035
Date: 7/19/2012
Time: 15:10
Logged by: Joel Harvester

Boring No: SB-17
Total Depth (ft): 12.0'
Location: 38.83000° N; 94.63336° W
Drilling Method: Truck-mounted direct-push Geoprobe
Sampling Method: Macro-Core soil sampler

Depth (feet)	Recovery	PID Reading	Laboratory Sample ID	Lithology	Remarks
1	4/4	0.0		Silt, brown	ND
2		0.0			
3		0.0			
4		0.0			
5	4/4	0.0		Clay with silt, brown	ND
6		0.0		Clay, brown	
7		0.0			
8		0.0			
9	4/4	0.0		Clay with silt, brown	ND
10		0.0		Clay, brown	
11		0.0	SB-17-10-12		
12		0.0		TD = 12.0' bgs	
13					
14					
15					
16					
17					
18					
19					
20					



Seagull Environmental Technologies, Inc.

Project: Kuhlman Diecasting Company Site
Project No: EPS70901.0035
Date: 7/20/2012
Time: 9:08
Logged by: Joel Harvester

Boring No: SB-18
Total Depth (ft): 16.0'
Location: 38.83175° N; 94.63412° W
Drilling Method: Truck-mounted direct-push Geoprobe
Sampling Method: Macro-Core soil sampler

Depth (feet)	Recovery	PID Reading	Laboratory Sample ID	Lithology	Remarks
1	4/4	0.0		Silt, brown	< 27 ppm Pb
2		0.0		Silt with clay, brown	
3		0.0		Clay, brown	ND
4		0.0			
5	4/4	0.0	< 17 ppm Pb		
6		0.0			
7		0.0			ND
8		0.0			
9	4/4	0.0	ND		
10		0.0			
11		0.0			< 17 ppm Pb
12		0.0			
13		0.0	SB-18-12-14	Clay, brown, wet	< 28 ppm Pb
14		0.0			
15		0.0	Groundwater encountered at 16.0' bgs		
16		0.0		TD = 16.0' bgs	
17					
18					
19					
20					



Seagull Environmental Technologies, Inc.

Project: Kuhlman Diecasting Company Site
Project No: EPS70901.0035
Date: 7/20/2012
Time: 9:38
Logged by: Joel Harvester

Boring No: SB-19
Total Depth (ft): 20.0'
Location: 38.83242° N; 94.63383° W
Drilling Method: Truck-mounted direct-push Geoprobe
Sampling Method: Macro-Core soil sampler

Depth (feet)	Recovery	PID Reading	Laboratory Sample ID	Lithology	Remarks
1	4/4	0.0		Silt, brown	ND
2		0.0			
3		0.0			< 23 ppm Pb
4		0.0			
5	4/4	0.0	SB-19-6-8	Silt with clay, brown	< 20 ppm Pb
6		0.0			
7		0.0			ND
8		0.0			
9	4/4	0.0			ND
10		0.0			
11		0.0			
12		0.0			
13	4/4	0.0		Clay, brown, wet	ND
14		0.0			
15		0.0			
16		0.0			
17	4/4	0.0			ND
18		0.0			
19		0.0			
20		0.0			
				TD = 20.0' bgs	

APPENDIX E
FIELD SHEETS

Sample Collection Field Sheet
US EPA Region -

KDC-SB-1

Matrix:

Soil

Sample Number:

KDC-SB-1 ^{JH} SB-1-25-27

Project ID: EPS 20901.0035

Project Manager: J. Pritchard

Location: Stanley

State: KS

Location Description: SB-1

External Sample Number: SB-1-25-27

Latitude: _____

Sample Collection: 7/17/2012 ^{JH} 11

Longitude: _____

Laboratory Analysis:

Container

402 jar
402 jar
2-40ml vial
2-40ml vial
1-40ml vial

Preservative

None
None
None
boric acid
M&DH

Holding Time

Analysis

OA2/PAH
Priority metals

5035/CA1

Property Owner Information:

Sample Comments:

Sample Location Map:

Sample collected by: JH

Sample Collection Field Sheet
US EPA Region 7

KDC

Matrix:

H₂O

Sample Number:

SB-1-GW

KDC

Project ID: EPS 70901-0035

Project Manager: J Pritchard

Location: ~~SB~~ Stanley

State: Kansas

Location Description: SB-1

External Sample Number: SB-1-GW

Latitude: _____

Sample Collection: 7/17/2012 12:05

Longitude: _____

Laboratory Analysis:

Container

2x 100mL amber
100mL Amber

2x 250mL poly

3x 40mL vials

Preservative

None

None

HNO₃

HCl

Holding Time

Analysis

OA2/DR2

PAH

Priority metals (Total & Dissolved)

VOCs/OA1

Property Owner Information:

Sample Comments:

GW - 24 to 27

Sample Location Map:

Sample collected by:

JHawes

Sample Collection Field Sheet
US EPA Region 7

Kuhlman Diecasting Site

Matrix:

Soil

Sample Number:

SB-2-2-4

Project ID: EPST0901.0035

Project Manager:

J. Pritchard

Location: Stanley

State: Kansas

Location Description: SB-2

External Sample Number: SB-2-2-4

Latitude: _____

Sample Collection: 7/17/2012 14:32

Longitude: _____

Laboratory Analysis:

Container

4oz jar
4oz jar
2x 40mL vial
2x 40mL vial
1x 40mL vial

Preservative

None
None
None
bisulfate
MeOH

Holding Time

Analysis

OA2/PAH
Priority metals
5035/OA1

Property Owner Information:

Sample Comments:

Sample Location Map:

Sample collected by: J. Harvester

✓

Sample Collection Field Sheet
US EPA Region 7

Kuhlman Diecast Site

Matrix:

Soil

Sample Number:

SB-3-16-18

Project ID: EPS 70901.0035

Project Manager: J. Pritchard

Location: Stanley

State: Kansas

Location Description: S13-3

External Sample Number: SB-3-16-18

Latitude: _____

Sample Collection: 7/17/2012 ~~24:00~~ ^{3#}
1608

Longitude: _____

Laboratory Analysis:

Container

402 Jar
402 Jar
2x 40mL vial
2x 40mL vial
1x 40mL vial

Preservative

None
None
None
bisulfate
MeOH

Holding Time

Analysis

OA2/PAH
Priority metals

5035/OA1

Property Owner Information:

Sample Comments:

Sample Location Map:

Sample collected by:

Joel Hawley

✓

Sample Collection Field Sheet

US EPA Region 7

Kuhlman Diecast Site

Matrix:

Water

Sample Number:

SB-3-GW

Project ID: EPS70901.0035

Project Manager: J. Pritchard

Location: Stanley

State: Kansas

Location Description: SB-3

External Sample Number: SB-3-GW

Latitude: _____

Sample Collection: 7/17/2012 16:17

Longitude: _____

Laboratory Analysis:

Container	Preservative	Holding Time	Analysis
2 x 100 mL Amber	<u>None</u>		<u>GAZ/DO</u>
100 mL Amber	<u>None</u>		<u>PAH</u>
2 x 250 mL Poly	<u>HNO₃</u>		<u>Priority metals (Total & Dissolved)</u>
3 x 40 mL vial	<u>HCl</u>		<u>VOCs / DAI</u>

Property Owner Information:

Sample Comments:

Groundwater found @ 20-24 ft bgs

Sample Location Map:

Sample collected by: J. Harvister

Sample Collection Field Sheet
US EPA Region 7

Kuhman Drilling Site

Matrix:

Soil

Sample Number:

SB-4-14-16

Project ID: EPS 20901.0035

Project Manager:

J Pritchard

Location: Stanley

State: KS

Location Description: SB-4

External Sample Number: SB-4-14-16

Latitude: _____

Sample Collection: 7/18/12 10:07

Longitude: _____

Laboratory Analysis:

Container

4oz jar

4oz jar

2-40ml vial

2-40ml vial

1-40ml vial

Preservative

None

None

None

bisulfate

~~None~~ MeOH

Holding Time

Analysis

On2/PAH

Priority metals

5035/DA1

Property Owner Information:

Sample Comments:

Sample Location Map:

Sample collected by: J Hargrave

Sample Collection Field Sheet
US EPA Region 7

Kuhman Dicast Site

Matrix:

Soil

Sample Number:

SB-4^{1st} SB-5-10-12

Project ID: EPS 70901.0035

Project Manager: J Pritchard

Location: Sturley

State: KS

Location Description: SB-4 SB-5

External Sample Number: SB-4 SB-5-10-12

Latitude: _____

Sample Collection: 7/18/12 11:02

Longitude: _____

Laboratory Analysis:

Container

402 jar
402 jar
2-40ml vial
2-40ml vial
1-40ml vial

Preservative

None
None
None
bisulfate
M&DH

Holding Time

Analysis

OA 2/PAH
Priority metals

5035/OA1

Property Owner Information:

Sample Comments:

Sample Location Map:

Sample collected by: G.D. Har

✓

Sample Collection Field Sheet
US EPA Region 7

Kuhlmann Diecast

Matrix: Ground water

Sample Number: SB-5-GW

Project ID: EPS 70901.0035

Project Manager: J. Pritchard

Location: Staten

State: KS

Location Description: SB-4 SB-5-Sub

External Sample Number: SB-5-GW SB-5-GW

Latitude: _____

Sample Collection: 7/18/12 10:42

Longitude: _____

Laboratory Analysis:

Container	Preservative	Holding Time	Analysis
2-100 mL Amber	None		OA2/DRO
100 mL Amber	None		PAH
2-250 mL poly	HNO ₃		Priority metals (Total & Dissolved)
3-40 mL vials	HCL		VOCs/OA1

Property Owner Information: _____

Sample Comments: _____

Sample Location Map: _____

Sample collected by: J. Haves

Sample Collection Field Sheet
US EPA Region 7

Kuhlman Diescasting Site

Matrix:

Soil

Sample Number:

SB-L-14-16

Project ID: EPS70901.0035

Location: Stanley

Project Manager: Jeff Pritchard

State: Kansas

Location Description:

SB-L

External Sample Number:

SB-L-14-16

Latitude:

Sample Collection:

7/18/12

12:00

Longitude:

Laboratory Analysis:

Container

Preservative

Holding Time

Analysis

VOLs

PAHs

OA-1

OA-2

PP Metals

Property Owner Information:

Sample Comments:

Sample Location Map:

Sample collected by:

JH

✓

Sample Collection Field Sheet

US EPA Region 7

Kuhlman Diescasting Site

Matrix:

H₂O

Sample Number:

SB-6-GW

Project ID: EPS70901.0035

Project Manager: Jeff Pritchard

Location: Stanley

State: Kansas

Location Description: SB-6

External Sample Number: SB-6-GW

Latitude: _____

Sample Collection: 7/18/12 12:02

Longitude: _____

Laboratory Analysis:

Container
2-100ml Amber
100ml Amber
2-250ml poly
3-40ml vial

Preservative
None
None
HNO₃
HCl

Holding Time

Analysis

OA2/DO

PAH

priority metals (Total & Dissolved)

Volc Al

Property Owner Information:

Sample Comments:

Sample Location Map:

Sample collected by: JH

Sample Collection Field Sheet

US EPA Region 7

Kuhlman Diecasting Site

Matrix:

Soil

Sample Number:

SB-7-10-12

Project ID: EPS70901.0035

Project Manager: Jeff Pritchard

Location: Stanley

State: Kansas

Location Description:

SB-7

External Sample Number:

SB-7-10-12

Latitude:

Sample Collection:

7/18/12 14:42

Longitude:

Laboratory Analysis:

Container

40%
40%
2-40ml vial
2-40ml vial
1-40ml vial

Preservative

None
None
None
Disulfide
MeOH

Holding Time

Analysis

0A2/PAH
Priority metals
5035/0A1

Property Owner Information:

Sample Comments:

Sample Location Map:

Sample collected by:

JH

Sample Collection Field Sheet

US EPA Region 7

Kuhlman Diecasting Site

Matrix:

H₂O

Sample Number:

SB-7-GW

Project ID: EPS70901.0035

Project Manager: Jeff Pritchard

Location: Stanley

State: Kansas

Location Description: SB-7

External Sample Number: SB-7-GW

Latitude: _____

Sample Collection: 7/18/12 15:07

Longitude: _____

Laboratory Analysis:

Container

2-100 ml amber
100 ml amber

2-250 ml Poly

3-40 mL vials

Preservative

None

None

HNO₃

HCl

Holding Time

Analysis

OA2/DR0

PAH

Priority metals (Total i Dissolved)

VOCs /DAI

Property Owner Information:

Sample Comments:

JH

Sample Location Map:

Sample collected by: _____

JH

Sample Collection Field Sheet

US EPA Region 7

Kuhlman Diecasting Site

Matrix:

Soil

Sample Number:

SB-8-9-11

Project ID: EPS70901.0035

Project Manager: Jeff Pritchard

Location: Stanley

State: Kansas

Location Description:

SB-8

External Sample Number:

SB-8-9-11

Latitude:

Sample Collection:

7/18/12 16:12

Longitude:

Laboratory Analysis:

Container

402 jar

402 jar

2-40ml vial

2-40ml vial

1-40ml vial

Preservative

None

None

None

bisulfite

MeOH

Holding Time

Analysis

OA2/PAH

Priority metals

5035/OA1

Property Owner Information:

Sample Comments:

Sample Location Map:

Sample collected by:

JH

Sample Collection Field Sheet

US EPA Region 7

Kuhlman Diecasting Site

Matrix:

Soil

Sample Number: SB-9-12-14

Project ID: EPS70901.0035

Project Manager: Jeff Pritchard

Location: Stanley

State: Kansas

Location Description: SB-9

External Sample Number: SB-9-12-14

Latitude: _____

Sample Collection: 7/18/12 16:48

Longitude: _____

Laboratory Analysis:

Container
4oz jar
4oz jar
2-40ml vial
2-40ml vial
1-40ml vial

Preservative
None
None
None
bisulfate
MeOH

Holding Time

Analysis
OA 2/PAH
priority metals
5035/OAL

Property Owner Information:

Sample Comments:

Sample Location Map:

Sample collected by:

JH

Sample Collection Field Sheet

US EPA Region 7

Kuhlman Diecasting Site

Matrix:

H₂O

Sample Number:

SB-9-GW

Project ID: EPS70901.0035

Location: Stanley

Project Manager: Jeff Pritchard

State: Kansas

Location Description:

SB-9

External Sample Number:

SB-9-GW

Latitude:

Sample Collection:

7/18/12 16:55

Longitude:

Laboratory Analysis:

Container

2-100 mL Amber

1-100 mL Amber

2-250 mL Poly

3-40 mL Vials

Preservative

None

None

HNO₃

HCl

Holding Time

Analysis

PA2/DRD

PAH

Priority metals (total & dissolved)

Volts/DAL

Property Owner Information:

Sample Comments:

Sample Location Map:

Sample collected by:

C. Caracci

Sample Collection Field Sheet

US EPA Region 7

Kuhlman Diecasting Site

Matrix:

Soil

Sample Number:

SB-10-12-14

Project ID: EPS70901.0035

Project Manager: Jeff Pritchard

Location: Stanley

State: Kansas

Location Description: SB-10

External Sample Number: SB-10-12-14

Latitude: _____

Sample Collection: 7/17/12 09:40

Longitude: _____

Laboratory Analysis:

Container

402 JN

402 JN

2-40 ml vial

2-40 ml vial

1-40 ml vial

Preservative

None

None

None

bisulfite

MCDH

Holding Time

Analysis

0A2/PAH

Priority metals

5035/OA1

Property Owner Information:

Sample Comments:

Sample Location Map:

Sample collected by:

J. Hawes

Sample Collection Field Sheet

US EPA Region 7

Kuhlman Diecasting Site

Matrix:

Soil

Sample Number:

SB-11-17-19

Project ID: EPS70901.0035

Project Manager: Jeff Pritchard

Location: Stanley

State: Kansas

Location Description:

SB-11

External Sample Number:

SB-11-17-19

Latitude:

Sample Collection:

7/19/12 11:50

Longitude:

Laboratory Analysis:

Container

402 jar

402 jar

2-40ml vial

2-40ml vial

1-40ml vial

Preservative

None

None

None

bisulfate

MDH

Holding Time

Analysis

OA2/PAH

Priority metals

5035/OA1

Property Owner Information:

Sample Comments:

Sample Location Map:

Sample collected by:

JH

Sample Collection Field Sheet

US EPA Region 7

Kuhlman Diecasting Site

Matrix: water

Sample Number: SB-11-GW

Project ID: EPS70901.0035

Project Manager: Jeff Pritchard

Location: Stanley

State: Kansas

Location Description: SB-11

External Sample Number: SB-11-GW

Latitude: _____

Sample Collection: 7/19/12 11:50

Longitude: _____

Laboratory Analysis:

Container
2-100ml Amber
100ml Amber
2-250ml polar
3-40ml vial

Preservative
None
None
HNO₃
HCl

Holding Time

Analysis
DAZ/DRO
PAH
Priority metals (Total & Dissolved)
VOLs/DAI

Property Owner Information:

Sample Comments:

Sample Location Map:

Sample collected by: C. L. L. L. L.

Sample Collection Field Sheet

US EPA Region 7

Kuhlman Diecasting Site

Matrix: Soil

Sample Number: SB-14-8-10

Project ID: EPS70901.0035

Project Manager: Jeff Pritchard

Location: Stanley

State: Kansas

Location Description: SB-14

External Sample Number: SB-14-8-10

Latitude: _____

Sample Collection: 7/19/12 13:52

Longitude: _____

Laboratory Analysis:

Container	Preservative
4oz jar	None
4oz jar	None
2-40ml vial	None
2-40ml vial	bisulfate
1-40ml vial	MeDH

Holding Time

Analysis
DA 2/PAH
Priority metals

5035/DA1

Property Owner Information:

Sample Comments:

Sample Location Map:

Sample collected by: JH

Sample Collection Field Sheet

US EPA Region 7

Kuhlman Diecasting Site

Matrix: Soil

Sample Number: SB-17-10-12

Project ID: EPS70901.0035

Project Manager: Jeff Pritchard

Location: Stanley

State: Kansas

Location Description: SB-17

External Sample Number: SB-17-10-12

Latitude: _____

Sample Collection: 7/19/12 15:10

Longitude: _____

Laboratory Analysis:

Container	Preservative	Holding Time	Analysis
402 jar	None		OA 2/PAH
402 jar	None		Priority metals
2-40 ml vial	None		
2-40 ml vial	bisulfate		
1-40 ml vial	MeOH		5035/OA1

Property Owner Information:

Sample Comments:

Sample Location Map:

Sample collected by: JH

Sample Collection Field Sheet

US EPA Region 7

Kuhlman Diecasting Site

Matrix:

H₂O

Sample Number:

SB-17-GW

Project ID: EPS70901.0035

Location: Stanley

Project Manager: Jeff Pritchard

State: Kansas

Location Description: SB-17

External Sample Number: SB-17-GW

Latitude: _____

Sample Collection: 7/20/2012 08:11

Longitude: _____

Laboratory Analysis:

Container	Preservative	Holding Time	Analysis
2-100 ml amber	None		OA2/PRO
100 ml amber	None		PAH
2-250 ml poly	HNO ₃		Priority metals (Total & Dissolved)
3-40 ml vials	HCl		VOCs/O&A

Property Owner Information:

Sample Comments:

Sample Location Map:

Sample collected by:

J. Harvester

Sample Collection Field Sheet
US EPA Region 7

Kuhlman Diescasting Site

Matrix:

Soil

Sample Number:

SB-18-12-14

Project ID: EPS70901.0035

Location: Stanley

Project Manager: Jeff Pritchard

State: Kansas

Location Description: SB-18

External Sample Number: SB-18-12-14

Latitude: _____

Sample Collection: 7/20/12 09:08

Longitude: _____

Laboratory Analysis:

Container	Preservative	Holding Time	Analysis
402 jar	None		OA 2/PAH
402 jar	None		priority metals
2-40-ml vial	None		
2-40-ml vial	disulfate		
1-40-ml vial	MeOH		5035/OA1

Property Owner Information:

Sample Comments:

Sample Location Map:

Sample collected by: JH

✓

Sample Collection Field Sheet

US EPA Region 7

Kuhlman Diecasting Site

Matrix:

Soil

Sample Number:

SB-19-6-8

Project ID: EPS70901.0035

Project Manager: Jeff Pritchard

Location: Stanley

State: Kansas

Location Description:

SB-19-~~6-8~~

External Sample Number:

SB-19-6-8

Latitude:

Sample Collection: 7/20/12 6A:38

Longitude:

Laboratory Analysis:

Container

4oz jar

4oz jar

2-40ml vial

2-40ml vial

1-40ml vial

Preservative

None

None

None

bisulfate

MnOH

Holding Time

Analysis

CA2/PAH

Pr. metals

5035/DA1

Property Owner Information:

4

Sample Comments:

Sample Location Map:

Sample collected by:

J. Hester

Sample Collection Field Sheet

US EPA Region 7

Kuhlman Diecasting Site

Matrix:

H₂O

Sample Number:

Equipment + Rinse
~~Equipment Rinse~~

Project ID: EPS70901.0035

Location: Stanley

Project Manager: Jeff Pritchard

State: Kansas

Location Description: -

External Sample Number: * ER-1

Latitude: _____

Sample Collection: 7/20/12 09:38-1130

Longitude: _____

Laboratory Analysis:

Container

Preservative

Holding Time

Analysis

VOCs, PAHs, DA-1, DA-2,
priority metals (total).

Hexavalent Chromium

Property Owner Information:

Sample Comments:

Sample Location Map:

Sample collected by:

J. Harvest

✓

Sample Collection Field Sheet

US EPA Region 7

Kuhlman Diecasting Site

Matrix:

H2O

Sample Number:

Field Blank

Project ID: EPS70901.0035

Location: Stanley

Project Manager: Jeff Pritchard

State: Kansas

Location Description: ~

External Sample Number: FB-1

Latitude: _____

Sample Collection: 7/20/12 11:40

Longitude: _____

Laboratory Analysis:

Container

Preservative

Holding Time

Analysis

VOCs

PAHs

OA-1

OA-2

Total priority metals

Hexavalent Chromium

Property Owner Information:

Sample Comments:

Sample Location Map:

Sample collected by:

J. Harvester

Sample Collection Field Sheet

US EPA Region 7

Kuhlman Diescasting Site

Matrix:

Soil

Sample Number:

SS-1

Project ID: EPS70901.0035

Location: Stanley

Project Manager: Jeff Pritchard

State: Kansas

Location Description: SS-1 A-1

External Sample Number: SS-1

Latitude: _____

Sample Collection: 7/24/12 09:12

Longitude: _____

Laboratory Analysis:

Container

402 jar

Preservative

Holding Time

Analysis

Cr, Cu, Ni, Zn

402 jar

Hexavalent Chromium

Property Owner Information:

Sample Comments:

SS-1 = A-1

Sample Location Map:

Sample collected by: JH

Sample Collection Field Sheet

US EPA Region 7

Kuhlman Diescasting Site

Matrix:

Soil

Sample Number:

SS-2

Project ID: EPS70901.0035

Location: Stanley

Project Manager: Jeff Pritchard

State: Kansas

Location Description: A-3

External Sample Number: SS-2

Latitude: _____

Sample Collection: 7/24/12 09:13

Longitude: _____

Laboratory Analysis:

Container

Preservative

Holding Time

Analysis

402 jar

Cr, Cu, Ni, Zn

402 jar

Hexavalent Chrome

Property Owner Information:

Sample Comments:

JH
SS-2 = A-3

Sample Location Map:

Sample collected by:

JH

Sample Collection Field Sheet

US EPA Region 7

Kuhlman Diescasting Site

Matrix:

Soil

Sample Number:

SS-3

Project ID: EPS70901.0035

Location: Stanley

Project Manager: Jeff Pritchard

State: Kansas

Location Description: A-6

External Sample Number: SS-3

Latitude: _____

Sample Collection: 7/24/12 09:15

Longitude: _____

Laboratory Analysis:

Container

Preservative

Holding Time

Analysis

402 jar

Cr, Cu, Ni, Zn

402 jar

Hexavalent Chromium

Property Owner Information:

Sample Comments:

SS-3 = A-6

Sample Location Map:

Sample collected by: JH

Sample Collection Field Sheet
US EPA Region 7

Kuhlman Diescasting Site

Matrix:

Soil

Sample Number:

SS-4

Project ID: EPS70901.0035

Project Manager: Jeff Pritchard

Location: Stanley

State: Kansas

Location Description:

B-1

External Sample Number:

SS-4

Latitude:

Sample Collection: 7/24/12 09:18

Longitude:

Laboratory Analysis:

Container

Preservative

Holding Time

Analysis

402 Jar

Cr, Cu, Ni, Zn

402 jar

Hexavalent + Chromium

Property Owner Information:

Sample Comments:

SS-4 = B-1

Sample Location Map:

Sample collected by:

JH

Sample Collection Field Sheet
US EPA Region 7

Kuhlman Diescasting Site

Matrix:

Soil

Sample Number:

SS-5

Project ID: EPS70901.0035

Location: Stanley

Project Manager: Jeff Pritchard

State: Kansas

Location Description: B-3

External Sample Number: SS-5

Latitude: _____

Sample Collection: 7/24/12 09:19

Longitude: _____

Laboratory Analysis:

Container

402 jar

Preservative

Holding Time

Analysis

Cr, Cu, Ni, Zn

402 jar

Hexavalent Chromium

Property Owner Information:

Sample Comments:

SS-5 = B-3

Sample Location Map:

Sample collected by: _____

JH

Sample Collection Field Sheet

US EPA Region 7

Kuhlman Diescasting Site

Matrix: Sed

Sample Number: WWEL-S-SED

Project ID: EPS70901.0035

Project Manager: Jeff Pritchard

Location: Stanley

State: Kansas

Location Description: WWEL-S-SED

External Sample Number: WWEL-S-SED

Latitude: _____

Sample Collection: 7/24/12 15:40

Longitude: _____

Laboratory Analysis:

Container

Preservative

Holding Time

Analysis
Cr, Cu, Ni, Zn
PCBs, Cyanide
Cr VI

Property Owner Information:

Sample Comments:

Sample Location Map:

Waste
water
Evap
Lagoon
South

Sample collected by: CC

Sample Collection Field Sheet

US EPA Region 7

Kuhlman Diescasting Site

Matrix:

water

Sample Number:

WWEL-S-SW

Project ID: EPS70901.0035

Location: Stanley

Project Manager: Jeff Pritchard

State: Kansas

Location Description: WWEL-S

External Sample Number: WWEL-S-SW

Latitude:

Sample Collection: 7/24/12 15:34

Longitude:

Laboratory Analysis:

Container

Preservative

Holding Time

Analysis
Cr, Cu, Ni, Zn
cyanide, PCBs
Cr VI

Property Owner Information:

Sample Comments:

Waste
Water
Evaporation
Logan
South

Sample Location Map:

Sample collected by:

CL

Sample Collection Field Sheet

US EPA Region 7

Kuhlman Diescasting Site

Matrix:

Soil

Sample Number:

BR-1-SED

Project ID: EPS70901.0035

Location: Stanley

Project Manager: Jeff Pritchard

State: Kansas

Location Description: BR-1

External Sample Number: BR-1-SED

Latitude: _____

Sample Collection: 7/24/11 11:30

Longitude: _____

Laboratory Analysis:

Container

Preservative

Holding Time

Analysis

Cr, Cu, Ni, Zn

Property Owner Information:

Sample Comments:

Blue River

Sample Location Map:

Sample collected by: CL

Sample Collection Field Sheet

US EPA Region 7

Kuhlman Diescasting Site

Matrix:

Soil

Sample Number:

SS-6

Project ID: EPS70901.0035

Project Manager: Jeff Pritchard

Location: Stanley

State: Kansas

Location Description: B-5

External Sample Number: SS-6

Latitude: _____

Sample Collection: 7/24/02 09:21

Longitude: _____

Laboratory Analysis:

Container

402 jar

Preservative

Holding Time

Analysis

Cr, Cu, Ni, Zn

402 jar

Hexavalent Chromium

Property Owner Information:

Sample Comments:

SS-6 = B-5

Sample Location Map:

Sample collected by: _____

JH

Sample Collection Field Sheet
US EPA Region 7

Kuhlman Diescasting Site

Matrix:

Soil

Sample Number:

SS-7

Project ID: EPS70901.0035

Location: Stanley

Project Manager: Jeff Pritchard

State: Kansas

Location Description:

C-1

External Sample Number:

SS-7

Latitude:

Sample Collection:

~~7/24~~ 7/24/12 09:22

Longitude:

Laboratory Analysis:

Container

Preservative

Holding Time

Analysis

402 jar

Cr, Cu, Zn, Ni

402 jar

Hexavalent Chromium

Property Owner Information:

Sample Comments:

SS-7 = C-1

Sample Location Map:

Sample collected by:

JH

Sample Collection Field Sheet

US EPA Region 7

Kuhlman Diescasting Site

Matrix:

Soil

Sample Number:

SS-8

Project ID: EPS70901.0035

Location: Stanley

Project Manager: Jeff Pritchard

State: Kansas

Location Description: C-3

External Sample Number: SS-8

Latitude: _____

Sample Collection: 7/24/12 09:25

Longitude: _____

Laboratory Analysis:

Container

Preservative

Holding Time

Analysis

402 jar

Cr, Cu, Ni, Zn

402 jar

Hexavalent Chromium

Property Owner Information:

Sample Comments:

SS-8 = C-3

Sample Location Map:

Sample collected by: _____

JA

Sample Collection Field Sheet

US EPA Region 7

Kuhlman Diescasting Site

Matrix:

Soil

Sample Number:

SS-9

Project ID: EPS70901.0035

Project Manager: Jeff Pritchard

Location: Stanley

State: Kansas

Location Description:

C-4

External Sample Number:

SS-9

Latitude:

Sample Collection:

7/24/12

09:27

Longitude:

Laboratory Analysis:

Container

Preservative

Holding Time

Analysis

402 jar

C, Cu, Ni, Zn

402 jar

Hexavalent + Chromium

Property Owner Information:

Sample Comments:

SS-9 = C-4

Sample Location Map:

Sample collected by:

JH

Sample Collection Field Sheet
US EPA Region 7

Kuhlman Diescasting Site

Matrix:

Soil

Sample Number:

SS-10

Project ID: EPS70901.0035

Location: Stanley

Project Manager: Jeff Pritchard

State: Kansas

Location Description:

D-1

External Sample Number:

SS-10

Latitude:

Sample Collection:

7/24/12 09:28

Longitude:

Laboratory Analysis:

Container

Preservative

Holding Time

Analysis

402 jar

Cu, Co, Ni, Zn

402 jar

Hexavalent Chromium

Property Owner Information:

Sample Comments:

SS-10 = D-1

Sample Location Map:

Sample collected by:

JH

Sample Collection Field Sheet

US EPA Region 7

Kuhlman Diescasting Site

Matrix:

Soil

Sample Number:

SS-11

Project ID: EPS70901.0035

Location: Stanley

Project Manager: Jeff Pritchard

State: Kansas

Location Description: D-2

External Sample Number: SS-11

Latitude: _____

Sample Collection: 7/24/12 09:30

Longitude: _____

Laboratory Analysis:

Container

Preservative

Holding Time

Analysis

402 jar

Cr, Cu, Ni, Zn

402 jar

Hexavalent Chromium

Property Owner Information:

Sample Comments:

SS-11 = D-2

Sample Location Map:

Sample collected by: _____

JH

Sample Collection Field Sheet
US EPA Region 7

Kuhlman Diescasting Site

Matrix:

So. 1

Sample Number:

SS-12

Project ID: EPS70901.0035

Location: Stanley

Project Manager: Jeff Pritchard

State: Kansas

Location Description:

D-5

External Sample Number:

SS-12

Latitude:

Sample Collection:

7/24/12 09:32

Longitude:

Laboratory Analysis:

Container

Preservative

Holding Time

Analysis

402 jar

Cu, Cr, Ni, Zn

402 jar

hexavalent Chromium

Property Owner Information:

Sample Comments:

SS-12 = D-5

Sample Location Map:

Sample collected by:

JH

Sample Collection Field Sheet
US EPA Region 7

Kuhlman Diecasting Site

Matrix:

Soil

Sample Number:

WWEL-N-SED

Project ID: EPS70901.0035

Location: Stanley

Project Manager: Jeff Pritchard

State: Kansas

Location Description: WWEL-N

External Sample Number: WWEL-N-SED

Latitude: _____

Sample Collection: 7/24/12 15:22

Longitude: _____

Laboratory Analysis:

Container

Preservative

Holding Time

Analysis
Cr, Cu, Ni, Zn
PCBs, Cyanide
Cr VI

Property Owner Information:

Sample Comments:

Waste
water
Evaporation
Lagoon
North

Sample Location Map:

No Surface water available

Sample collected by:

CC

Sample Collection Field Sheet

US EPA Region 7

Kuhlman Diecasting Site

Matrix:

Water

Sample Number:

BR-1-SW

Project ID: EPS70901.0035

Location: Stanley

Project Manager: Jeff Pritchard

State: Kansas

Location Description:

BR-1

External Sample Number:

BR-1-SW

Latitude:

Sample Collection:

7/24/12 11:30

Longitude:

Laboratory Analysis:

Container

Preservative

Holding Time

Analysis

Cr, Cu, Ni, Zn

Property Owner Information:

Sample Comments:

Blue River

Sample Location Map:

Sample collected by:

CL

Sample Collection Field Sheet
US EPA Region 7

Kuhlman Diescasting Site

Matrix:

Soil

Sample Number:

BR-2-SED

Project ID: EPS70901.0035

Location: Stanley

Project Manager: Jeff Pritchard

State: Kansas

Location Description:

BR-2

External Sample Number:

BR-2-SED

Latitude:

Sample Collection: 7/24/12 11:50

Longitude:

Laboratory Analysis:

Container

Preservative

Holding Time

Analysis

Cr, Cu, Ni, Zn

Property Owner Information:

Sample Comments:

Blue River

Sample Location Map:

Sample collected by:

U

Sample Collection Field Sheet
US EPA Region 7

Kuhlman Diescasting Site

Matrix:

water

Sample Number:

BR-2-SW

Project ID: EPS70901.0035

Location: Stanley

Project Manager: Jeff Pritchard

State: Kansas

Location Description:

BR-2

External Sample Number:

BR-2-SW

Latitude:

Longitude:

Sample Collection: 7/24/12 11:50

Laboratory Analysis:

Container

Preservative

Holding Time

Analysis

C, Cu, Ni, Zn

Property Owner Information:

Sample Comments:

Blue River

Sample Location Map:

Sample collected by:

LL

Sample Collection Field Sheet
US EPA Region 7

Kuhlman Diecasting Site

Matrix:

Soil

Sample Number:

BR-3-SED

Project ID: EPS70901.0035

Project Manager: Jeff Pritchard

Location: Stanley

State: Kansas

Location Description: BR-3

External Sample Number: BR-3-SED

Latitude:

Sample Collection: 7/24/12 12:20

Longitude:

Laboratory Analysis:

Container

Preservative

Holding Time

Analysis

Cr Cu Ni Zn

Property Owner Information:

Sample Comments:

Sample Location Map:

Blue River

Sample collected by:

CC

Sample Collection Field Sheet
US EPA Region 7

Kuhlman Diescasting Site

Matrix:

water

Sample Number:

BR-3-SW

Project ID: EPS70901.0035

Location: Stanley

Project Manager: Jeff Pritchard

State: Kansas

Location Description: BR-3

External Sample Number: ~~BR-3~~^{SW} BR-3-SW

Latitude: _____

Sample Collection: 7/24/ 12:20

Longitude: _____

Laboratory Analysis:

Container

Preservative

Holding Time

Analysis

Cr, Cu, Ni, Zn

Property Owner Information:

Sample Comments:

Blue River

Sample Location Map:

Sample collected by: BL

Sample Collection Field Sheet

US EPA Region 7

Kuhlman Diescasting Site

Matrix:

water

Sample Number:

BR-4-sw

Project ID: EPS70901.0035

Project Manager: Jeff Pritchard

Location: Stanley

State: Kansas

Location Description:

BR-4

External Sample Number:

BR-4-sw

Latitude:

Sample Collection: 7/24/12 12:50

Longitude:

Laboratory Analysis:

Container

Preservative

Holding Time

Analysis

Cr, Cu, Ni, Zn

Property Owner Information:

Sample Comments:

Blue River

Sample Location Map:

Sample collected by:

CL

Sample Collection Field Sheet
US EPA Region 7

Kuhlman Diescasting Site

Matrix:

Soil

Sample Number:

BR-4-sed

Project ID: EPS70901.0035

Project Manager: Jeff Pritchard

Location: Stanley

State: Kansas

Location Description:

BR-4

External Sample Number:

BR-4-SED

Latitude:

Sample Collection: 7/24/12 12:50

Longitude:

Laboratory Analysis:

Container

Preservative

Holding Time

Analysis

Cr Cu Ni Zn

Property Owner Information:

Sample Comments:

Sample Location Map:

Sample collected by:

CC

Sample Collection Field Sheet

US EPA Region 7

Kuhlman Diescasting Site

Matrix:

Soil

Sample Number:

EP-SED

Project ID: EPS70901.0035

Location: Stanley

Project Manager: Jeff Pritchard

State: Kansas

Location Description: East Pond

External Sample Number: EP-SED

Latitude: _____

Sample Collection: 7/25/12 09:55

Longitude: _____

Laboratory Analysis:

Container

Preservative

Holding Time

Analysis

Cu, Cr, Ni, Zn

total cyanide, PCBs

Property Owner Information:

Sample Comments:

Sample Location Map:

Sample collected by:

Clanacasi

Sample Collection Field Sheet
US EPA Region 7

Kuhlman Diescasting Site

Matrix:

Water

Sample Number:

NPWB-SW

Project ID: EPS70901.0035

Project Manager: Jeff Pritchard

Location: Stanley

State: Kansas

Location Description: NPWB

External Sample Number: NPWB-SW

Latitude: _____

Sample Collection: 7/24/12 30:1505

Longitude: _____

Laboratory Analysis:

Container

Preservative

Holding Time

Analysis

Cu, Cr, Ni, Zn

total cyanide, PCBs

Property Owner Information:

Sample Comments:

Sample Location Map:

North Process Water Basin
Surface Water

Sample collected by:

Comari

Sample Collection Field Sheet
US EPA Region 7

Kuhlman Diescasting Site

Matrix:

Soil

Sample Number:

NPWB-SED-N

Project ID: EPS70901.0035

Project Manager: Jeff Pritchard

Location: Stanley

State: Kansas

Location Description: NPWB

External Sample Number: NPWB-SED-N

Latitude: _____

Sample Collection: 7/24/12 15:10

Longitude: _____

Laboratory Analysis:

Container

Preservative

Holding Time

Analysis

Cd, Cr, Ni, HZ
total Cyanide PCBs

Property Owner Information:

Sample Comments:

Sample Location Map:

North Process water basin
North side

Sample collected by:

Concannon

Sample Collection Field Sheet
US EPA Region 7

Kuhlman Diescasting Site

Matrix:

Soil

Sample Number:

NPWB-SED-5

Project ID: EPS70901.0035

Location: Stanley

Project Manager: Jeff Pritchard

State: Kansas

Location Description: NPWB

External Sample Number: NPWB-SED-5

Latitude: _____

Sample Collection: 7/24/12 15:18

Longitude: _____

Laboratory Analysis:

Container

Preservative

Holding Time

Analysis

Cu, Cr, Ni, Zn

total Cyanide, PCBs

Property Owner Information:

Sample Comments:

Sample Location Map:

North Process water basin
South side

Sample collected by:

C. Caracasi

Sample Collection Field Sheet

US EPA Region 7

Kuhlman Diescasting Site

Matrix:

Soil

Sample Number:

SPWB-SED-S

Project ID: EPS70901.0035

Location: Stanley

Project Manager: Jeff Pritchard

State: Kansas

Location Description:

SPWB

External Sample Number:

SPWB-SED-S

Latitude:

Sample Collection:

7/24/12

11:05

Longitude:

Laboratory Analysis:

Container

Preservative

Holding Time

Analysis

Cr, Cu, Ni, Zn

Cyanid, PCBs

Property Owner Information:

Sample Comments:

South Process
water Basin

Sample Location Map:

Sample collected by:

CC

Sample Collection Field Sheet

US EPA Region 7

Kuhlman Diescasting Site

Matrix:

Soil

Sample Number:

SPWB-SED-N

Project ID: EPS70901.0035

Location: Stanley

Project Manager: Jeff Pritchard

State: Kansas

Location Description: SPWB

External Sample Number: SPWB-SED-N

Latitude: _____

Sample Collection: 7/24/12 10:50

Longitude: _____

Laboratory Analysis:

Container

Preservative

Holding Time

Analysis

C, Cu, Ni, Zn

Cyanide, ~~PCBs~~

PCBs

Property Owner Information:

Sample Comments:

South
Process
Water
Basin

Sample Location Map:

Sample collected by: CL

Sample Collection Field Sheet

US EPA Region 7

Kuhlman Diecasting Site

Matrix:

water

Sample Number:

GM-1

Project ID: EPS70901.0035

Project Manager: Jeff Pritchard

Location: Stanley

State: Kansas

Location Description:

~~*GM-1-00*~~ *GM-1*

External Sample Number:

~~*GM-1-00*~~ *GM-1*

Latitude:

Sample Collection: *07/25/12 13:38*

Longitude:

Laboratory Analysis:

Container

Preservative

Holding Time

Analysis

2-250 ml

*Nitric Acid
HNO₃*

*1-Total metals
1-Dissolved*

Property Owner Information:

Sample Comments:

Sample Location Map:

Sample collected by:

JH

Sample Collection Field Sheet

US EPA Region 7

Kuhlman Diescasting Site

Matrix: Water

Sample Number: GM-2-~~14~~ 3*

Project ID: EPS70901.0035

Project Manager: Jeff Pritchard

Location: Stanley

State: Kansas

Location Description: GM-2

External Sample Number: GM-2-~~14~~ 3*

Latitude: _____

Sample Collection: 07/25/12 14:40

Longitude: _____

Laboratory Analysis:

Container	Preservative	Holding Time	Analysis
<u>2-250 ml</u>	<u>2-HNO₃</u>		<u>Total/Dissolved Cu, Co, Ni, Zn</u>
<u>2-250 mL</u>	<u> </u>		<u>total/Dissolved Cr VI</u>

Property Owner Information:

Sample Comments:

Petroleum odor

Sample Location Map:

Sample collected by: JA

Sample Collection Field Sheet

US EPA Region 7

Kuhlman Diecasting Site

Matrix:

water

Sample Number:

GM-5

Project ID: EPS70901.0035

Project Manager: Jeff Pritchard

Location: Stanley

State: Kansas

Location Description:

GM-5

External Sample Number:

GM-5

Latitude:

Sample Collection: 07/27/12 09:58

Longitude:

Laboratory Analysis:

Container

Preservative

Holding Time

Analysis

2-250ml

HNO₃

Cr, Cu, Ni, Zn

Total
Dissolved

2-250ml

unpreserved

Hexachrome

Property Owner Information:

Sample Comments:

Sample Location Map:

Sample collected by:

JH

Sample Collection Field Sheet

US EPA Region 7

Kuhlman Diecasting Site

Matrix:

Water

Sample Number:

GM-7

Project ID: EPS70901.0035

Project Manager: Jeff Pritchard

Location: Stanley

State: Kansas

Location Description:

GM-7

External Sample Number:

GM-7

Latitude:

Sample Collection: 07/27/12 11:10

Longitude:

Laboratory Analysis:

Container

Preservative

Holding Time

Analysis

2-250 mL

HNO₃

Cr, Cu, Ni, Zn

Property Owner Information:

Sample Comments:

Sample Location Map:

Sample collected by:

JH

Sample Collection Field Sheet
US EPA Region 7

Kuhlman Diescasting Site

Matrix:

Water

Sample Number:

GM-8

Project ID: EPS70901.0035

Location: Stanley

Project Manager: Jeff Pritchard

State: Kansas

Location Description:

GM-8

External Sample Number:

GM-8

Latitude:

Sample Collection:

07/26/12 11:51

Longitude:

Laboratory Analysis:

Container

2-250 mL

Preservative

HNO₃

Holding Time

Analysis

Total/Dissolved
CR, CU, NI, ZN

Property Owner Information:

Sample Comments:

Sample Location Map:

Sample collected by:

JH

Sample Collection Field Sheet
US EPA Region 7

Kuhlman Diecasting Site

Matrix:

Water

Sample Number:

GM-10-~~10~~ ^{JH}

Project ID: EPS70901.0035

Project Manager: Jeff Pritchard

Location: Stanley

State: Kansas

Location Description:

GM-10

External Sample Number:

GM-10-~~10~~ ^{JH}

Latitude: _____

Sample Collection: 07/26/12 10:20

Longitude: _____

Laboratory Analysis:

Container	Preservative	Holding Time	Analysis
2-250 ml	HNO ₃	- - - - -	Total, Dissolved CR, Cd, Pb
2-250 ml	None	- - - - -	Hexachrome

Property Owner Information:

Sample Comments:

Sample Location Map:

Sample collected by: JH

Sample Collection Field Sheet

US EPA Region 7

Kuhlman Diescasting Site

Matrix: Water

Sample Number: GM-12

Project ID: EPS70901.0035

Project Manager: Jeff Pritchard

Location: Stanley

State: Kansas

Location Description: GM-12

External Sample Number: GM-12

Latitude: _____

Sample Collection: 07/26/12 15:29

Longitude: _____

Laboratory Analysis:

Container	Preservative	Holding Time	Analysis
<u>2-250 mL</u>	<u>HNO₃</u>		<u>CR, CU, VI, 2N</u> <u>Total & Dissolved</u>

Property Owner Information:

Sample Comments:

Sample Location Map:

Sample collected by: JH

Sample Collection Field Sheet

US EPA Region 7

Kuhlman Diecasting Site

Matrix:

water

Sample Number:

GM-13

Project ID: EPS70901.0035

Project Manager: Jeff Pritchard

Location: Stanley

State: Kansas

Location Description:

GM-13

External Sample Number:

GM-13

Latitude:

Sample Collection:

07/26/12 14:40

Longitude:

Laboratory Analysis:

Container

Preservative

Holding Time

Analysis

2-250 mL

HNO₃

CR, CU, NI, 2N Total

2-250 mL

none

Hexchrome

disagreed

Property Owner Information:

Sample Comments:

Sample Location Map:

Sample collected by:

JH

Sample Collection Field Sheet

US EPA Region 7

Kuhlman Diecasting Site

Matrix:

Water

Sample Number:

GM-15

Project ID: EPS70901.0035

Project Manager: Jeff Pritchard

Location: Stanley

State: Kansas

Location Description:

GM-15

External Sample Number:

GM-15

Latitude:

Sample Collection: 07/26/12 12:47

Longitude:

Laboratory Analysis:

Container

Preservative

Holding Time

Analysis

2-250 mL

HNO₃

—

CR, CU, NI, ZN - Total
- Dissolved

Property Owner Information:

Sample Comments:

Sample Location Map:

Sample collected by:

JH

Sample Collection Field Sheet

US EPA Region 7

Kuhlman Diescasting Site

Matrix:

Water

Sample Number:

GM-17-ua

Project ID: EPS70901.0035

Project Manager: Jeff Pritchard

Location: Stanley

State: Kansas

Location Description:

GM-17

External Sample Number:

GM-17-ua

Latitude:

Sample Collection: 07/25/12 15:38

Longitude:

Laboratory Analysis:

Container

Preservative

Holding Time

Analysis

2 ~ 250ml

HNO₃

1 - Total

Cr, Cu, Ni, Zn

1 - Dissolved

Property Owner Information:

Sample Comments:

Sample Location Map:

Sample collected by:

JH

Sample Collection Field Sheet

US EPA Region 7

Kuhlman Diescasting Site

Matrix:

water

Sample Number:

BLDG - 1 - SW

Project ID: EPS70901.0035

Project Manager: Jeff Pritchard

Location: Stanley

State: Kansas

Location Description:

BLDG - 1

External Sample Number:

BLDG - 1 - SW

Latitude:

Sample Collection: 7/27/12 12:48

Longitude:

Laboratory Analysis:

Container

Preservative

Holding Time

Analysis

Cr, Cu, Ni, Zn
PCBs, Cyanide
Cr VI

Property Owner Information:

Sample Comments:

Sample Location Map:

Sample collected by:

JH

Sample Collection Field Sheet

US EPA Region 7

Kuhlman Diescasting Site

Matrix:

Soil

Sample Number:

BLDG-1-SED

Project ID: EPS70901.0035

Location: Stanley

Project Manager: Jeff Pritchard

State: Kansas

Location Description: BLDG-1

External Sample Number: BLDG-1-SED

Latitude: _____

Sample Collection: 7/27/12 12:38

Longitude: _____

Laboratory Analysis:

Container

Preservative

Holding Time

Analysis

Cu, Cr, Ni, Zn,
Cyanide, PCB
Cr VI

Property Owner Information:

Sample Comments:

Sample Location Map:

Sample collected by:

CL

Sample Collection Field Sheet

US EPA Region 7

Kuhlman Diescasting Site

Matrix:

water

Sample Number:

BLDG-2-SW

Project ID: EPS70901.0035

Project Manager: Jeff Pritchard

Location: Stanley

State: Kansas

Location Description:

BLDG-2

External Sample Number:

BLDG-2-SW

Latitude:

Sample Collection:

7/27/12 13:40

Longitude:

Laboratory Analysis:

Container

Preservative

Holding Time

Analysis

Cr, Cu, Ni, Zn
PCBs, Cyanide
Cr VI

Property Owner Information:

Sample Comments:

Sample Location Map:

Sample collected by:

CL

Sample Collection Field Sheet

US EPA Region 7

Kuhlman Diescasting Site

Matrix: Soil

Sample Number: BLDG-2-SED

Project ID: EPS70901.0035

Project Manager: Jeff Pritchard

Location: Stanley

State: Kansas

Location Description: BLDG-2

External Sample Number: BLDG-2-SED

Latitude: _____

Sample Collection: 7/27/12 13:23

Longitude: _____

Laboratory Analysis:

Container

Preservative

Holding Time

Analysis
Cu, Cr, Ni, Zn
Cyanide, PCBs
Cr VI

Property Owner Information:

Sample Comments:

Sample Location Map:

Sample collected by: CL

Micropurging Groundwater Sampling Data Sheet

Well Name	GM-1	Sample Personnel	CL, JH	Screen Interval	5.0-29.5
Project	Kuhlman	Sample ID	GM-1-W	Static Water Level	9.1 ft
Project No.		Duplicate ID		Well Depth (TOC)	28.8
Sample Date	7-25-72			Feet of Water	19.7 ft
Condition of Well	Good	Flush Mount or Stickup			Stickup
Construction	PVC	Well Size			
Remarks		Casing - PVC or other			PVC

Purging

[illegible]

Micropurging Groundwater Sampling Data Sheet

Well Name	<u>GM-2</u>	Sample Personnel	<u>PC, JH</u>	Screen Interval	<u>11.0-29.5</u>
Project	<u>Kahlmen</u>	Sample ID	<u>GM-2-W</u>	Static Water Level	<u>15.3</u>
Project No.		Duplicate ID		Well Depth (TOC)	<u>31.3</u>
Sample Date	<u>7-25-22/14:40</u>			Feet of Water	<u>16.0 FT</u>
Condition of Well	<u>No Cap</u>	Flush Mount or Stickup	<u>Stick up</u>		
Construction		Well Size			
Remarks		Casing - PVC or other	<u>PVC</u>		

Purging

[illegible]

Micropurging Groundwater Sampling Data Sheet

Well Name	GM-5	Sample Personnel	K, JH	Screen Interval	7.5-17.5 ft
Project	Kuhlman	Sample ID	GM-5	Static Water Level	7.5-17 11.9 ft
Project No.		Duplicate ID		Well Depth (TOC)	17.5 ft
Sample Date	07-27-12	09:58		Feet of Water	5.6 ft
Condition of Well	Good	Flush Mount or Stickup	Stickup		
Construction	PVC	Well Size			
Remarks		Casing - PVC or other	PVC		

Purging

[illegible]

Micropurging Groundwater Sampling Data Sheet

Well Name	GM-7	Sample Personnel	CC, JH	Screen Interval	7.5-22.5
Project	Kuhlman	Sample ID	GM-7	Static Water Level	12.8
Project No.		Duplicate ID		Well Depth (TOC)	19.1
Sample Date	07-27-12			Feet of Water	7.7 Ft
Condition of Well	Good	Flush Mount or Stickup	Stickup		
Construction	PVC	Well Size			
Remarks		Casing - PVC or other	PVC		

Purging

[illegible]

Micropurging Groundwater Sampling Data Sheet

Well Name	<u>GM-8</u>	Sample Personnel	<u>CC, JH</u>	Screen Interval	<u>20-30 ft</u>
Project	<u>Kuhlman</u>	Sample ID	<u>GM-8</u>	Static Water Level	<u>11.0 ft</u>
Project No.		Duplicate ID		Well Depth (TOC)	<u>29.0 ft</u>
Sample Date	<u>07-26-12 - 11:51</u>			Feet of Water	<u>18 ft</u>
Condition of Well	<u>Cut in PVC at Base</u>	Flush Mount or Stickup	<u>Stick up</u>		
Construction	<u>PVC</u>	Well Size			
Remarks		Casing - PVC or other	<u>PVC</u>		

Purgina

[illegible]

Micropurging Groundwater Sampling Data Sheet

Well Name	GM-10	Sample Personnel	CC, JH	Screen Interval	22.5 - 32.5
Project	Kuhlman	Sample ID	GM-10-1	Static Water Level	11.45
Project No.		Duplicate ID		Well Depth (TOC)	29.30
Sample Date	07/26/12 - 10:20			Feet of Water	17.85
Condition of Well	Good	Flush Mount or Stickup	Stickup		
Construction		Well Size	PVC		
Remarks	no cap	Casing - PVC or other			

Purging

[illegible]

Micropurging Groundwater Sampling Data Sheet

Well Name	<u>GM-12</u>	Sample Personnel	<u>CC, JH</u>	Screen Interval	<u>15.0-25.0 f</u>
Project	<u>Kuhlman</u>	Sample ID	<u>GM-12</u>	Static Water Level	<u>19.5 ft</u>
Project No.		Duplicate ID		Well Depth (TOC)	<u>30.3 ft</u>
Sample Date	<u>07-26-12</u>		<u>-15:29</u>	Feet of Water	<u>10.6 ft</u>
Condition of Well	<u>Good</u>	Flush Mount or Stickup	<u>Stickup</u>		
Construction	<u>PVC</u>	Well Size			
Remarks		Casing - PVC or other	<u>PVC</u>		

Purging

[illegible]

Micropurging Groundwater Sampling Data Sheet

Well Name	GM-13	Sample Personnel	CC, TH	Screen Interval	17.5-27.5
Project	Kuhlman	Sample ID	GM-13	Static Water Level	9.30
Project No.		Duplicate ID		Well Depth (TOC)	24.5
Sample Date	07-26-12			Feet of Water	15.2
Condition of Well	Good	Flush Mount or Stickup	Stickup		
Construction	PVC	Well Size			
Remarks		Casing - PVC or other	PVC		

Purging

[illegible]

Micropurging Groundwater Sampling Data Sheet

Well Name	<u>CM-15</u>	Sample Personnel	<u>CL JH</u>	Screen Interval	<u>15-25 ft</u>
Project	<u>Kuhlman</u>	Sample ID	<u>CM-15</u>	Static Water Level	<u>17.5</u>
Project No.		Duplicate ID		Well Depth (TOC)	<u>23.5</u>
Sample Date	<u>07-26-12</u>	<u>-12:47</u>		Feet of Water	<u>6</u>
Condition of Well	<u>Good</u>	Flush Mount or Stickup	<u>Stickup</u>	Well Size	<u>PVC</u>
Construction		Casing - PVC or other			
Remarks					

Purging

[illegible]

Micropurging Groundwater Sampling Data Sheet

Well Name	GM-17 GM-17	Sample Personnel	CC, JH	Screen Interval	15.0-25.0
Project	Kuhlman	Sample ID	GM-17-W	Static Water Level	13.6
Project No.		Duplicate ID		Well Depth (TOC)	20.2
Sample Date	07-25-12			Feet of Water	6.6

Condition of Well	Good	Flush Mount or Stickup	Stickup
Construction		Well Size	
Remarks		Casing - PvC or other	PVC

Purging

[illegible]

APPENDIX F

TABLES

TABLE F-1
SURFACE SOIL X-RAY FLUORESCENCE SPECTROMETER SCREENING RESULTS
KUHLMAN DIECASTING SITE, STANLEY, KANSAS

Sample ID	Average
SS-1	Cu- 91
	Cr- 173
	Ni- 226
	Zn- 375
SS-2	Cu- 127
	Cr- 341
	Ni- 326
	Zn- 586
SS-3	Cu- < 20
	Cr- < 20
	Ni- 9.9
	Zn- 73
SS-4	Cu- 108
	Cr- 135
	Ni- 294
	Zn- 3,411
SS-5	Cu- 125
	Cr- 239
	Ni- 344
	Zn- 2,497
SS-6	Cu- < 20
	Cr- < 20
	Ni- 41
	Zn- 95

Sample ID	Average
SS-7	Cu- 175
	Cr- 396
	Ni- 468
	Zn- 10,748
SS-8	Cu- 26
	Cr- 31
	Ni- 178
	Zn- 3,279
SS-9	Cu- 20
	Cr- < 20
	Ni- 45
	Zn- 532
SS-10	Cu- 40
	Cr- 29
	Ni- 65
	Zn- 1,443
SS-11	Cu- < 20
	Cr- < 20
	Ni- 317
	Zn- 9,846
SS-12	Cu- 22
	Cr- < 20
	Ni- 114
	Zn- 1,370

Notes:

Averages were from three separate x-ray fluorescence spectrometer readings.

Cu Copper
 Cr Chromium
 ID Identification
 Ni Nickel
 Zn Zinc

TABLE F-2
VOLATILE ORGANIC COMPOUNDS IN SUBSURFACE SOIL
KUHLMAN DIECASTING SITE, STANLEY, KANSAS

Sample ID	Depth (ft bgs)	Volatile Organic Compounds (micrograms per kilogram)						
		Acetone	2-Butanone (MEK)	n-Butylbenzene	sec-Butylbenzene	Carbon disulfide	Isopropylbenzene (Cumene)	1,2,4-Trimethylbenzene
SB-1-25-27	25-27	< 23.2	< 11.6	< 5.8	< 5.8	< 5.8	< 5.8	< 5.8
SB-2-2-4	2-4	186	18.5	< 6.4	< 6.4	< 6.4	< 6.4	< 6.4
SB-3-16-18	16-18	< 21.6	< 10.8	< 5.4	< 5.4	< 5.4	< 5.4	< 5.4
SB-4-14-16	14-16	< 19.7	< 9.8	< 4.9	< 4.9	< 4.9	< 4.9	< 4.9
SB-5-10-12	10-12	< 21.1	< 10.6	< 5.3	< 5.3	< 5.3	< 5.3	< 5.3
SB-6-14-16	14-16	< 1160	< 580	< 290	662	< 290	< 290	< 290
SB-7-10-12	10-12	< 1240	< 620	700	1310	< 310	331	< 310
SB-8-9-11	9-11	75.3	13.4	< 5.6	< 5.6	6.5	< 5.6	5.8
SB-9-12-14	12-14	224	27.8	< 6.3	< 6.3	32.9	< 6.3	< 6.3
SB-10-12-14	12-14	87.3	14.3	< 5.2	< 5.2	< 5.2	< 5.2	< 5.2
SB-11-17-19	17-19	< 1200	< 598	< 299	< 299	< 299	< 299	< 299
SB-14-8-10	8-10	< 26.0	< 13.0	< 6.5	< 6.5	< 6.5	< 6.5	< 6.5
SB-17-10-12	10-12	88.8	20.8	< 5.5	< 5.5	< 5.5	< 5.5	< 5.5
SB-18-12-14	12-14	35.7	< 11.1	< 5.5	< 5.5	< 5.5	< 5.5	< 5.5
SB-19-6-8	6-8	< 23.1	< 11.6	< 5.8	< 5.8	< 5.8	< 5.8	< 5.8
KDHE RSK - Residential Soil		5E+07	2.5E+07	285,000	276,000	1,020,000	NE	54,000
KDHE RSK - Non-Residential Soil		4.1E+08	1E+08	687,000	654,000	1,680,000	NE	126,000

Notes:

Sample results were compared to Risk-Based Standards for Kansas developed by the Kansas Department of Health and Environment.

< Less than
ft bgs Feet below ground surface
ID Identification
KDHE Kansas Department of Health and Environment
RSK Risk-based Standards for Kansas

TABLE F-3
POLYNUCLEAR AROMATIC HYDROCARBONS IN SUBSURFACE SOIL
KUHLMAN DIECASTING SITE, STANLEY, KANSAS

Sample ID	Depth (ft bgs)	Polynuclear Aromatic Hydrocarbons (milligrams per kilogram)															
		Acenaphthene	Acenaphthylene	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Chrysene	Dibenz(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	Naphthalene	Phenanthrene	Pyrene
SB-1-25-27	25-27	< 4.2	< 4.2	< 4.2	< 4.2	< 4.2	< 4.2	< 4.2	< 4.2	< 4.2	< 4.2	< 4.2	< 4.2	< 4.2	14.4	< 4.2	< 4.2
SB-2-2-4	2-4	< 3.7	6.3	8.9	39.9	36.6	50.7	29.4	28.1	39.8	8.9	61.3	< 3.7	22.1	< 3.7	33.4	53.3
SB-3-16-18	16-18	< 4.1	< 4.1	< 4.1	12.2	9.9	9.9	7.5	9.7	12.2	< 4.1	22.3	< 4.1	5.3	< 4.1	23.2	18.5
SB-4-14-16	14-16	< 4.1	< 4.1	< 4.1	< 4.1	< 4.1	< 4.1	< 4.1	< 4.1	< 4.1	< 4.1	< 4.1	< 4.1	< 4.1	15.9	< 4.1	< 4.1
SB-5-10-12	10-12	< 4.2	< 4.2	< 4.2	< 4.2	< 4.2	< 4.2	< 4.2	< 4.2	< 4.2	< 4.2	< 4.2	< 4.2	< 4.2	< 4.2	< 4.2	< 4.2
SB-6-14-16	14-16	82.6	42.2	32.5	< 20.9	< 20.9	< 20.9	< 20.9	< 20.9	104	< 20.9	25.6	261	< 20.9	268	804	24
SB-7-10-12	10-12	290	< 200	414	356	455	397	579	< 200	969	< 200	281	574	< 200	887	2,120	1,620
SB-8-9-11	9-11	24.3	15.9	< 4.2	4.8	6.0	9.3	5.3	4.4	5.6	< 4.2	7.8	62.5	< 4.2	11.2	49.7	7.4
SB-9-12-14	12-14	< 4.2	66.6	< 4.2	5.1	4.8	11.4	5.1	4.5	10.3	< 4.2	9.7	49.7	< 4.2	6.9	30.7	11.2
SB-10-12-14	12-14	< 4.0	< 4.0	13	73.8	65.5	78.1	38.1	51.6	69.0	15.1	94.5	< 4.0	31.5	< 4.0	50.1	78.9
SB-11-17-19	17-19	18.0	6.3	8.3	< 4.2	< 4.2	5.1	< 4.2	< 4.2	23.3	< 4.2	7.2	17.1	< 4.2	43.1	13.0	8.4
SB-14-8-10	8-10	< 4.3	< 4.3	< 4.3	14.2	13.8	16.9	10.9	10.9	15.1	< 4.3	17.1	< 4.3	7.4	7.4	40.7	17.8
SB-17-10-12	10-12	< 4.2	< 4.2	< 4.2	< 4.2	< 4.2	< 4.2	< 4.2	< 4.2	< 4.2	< 4.2	< 4.2	< 4.2	< 4.2	13.0	< 4.2	< 4.2
SB-18-12-14	12-14	< 4.2	< 4.2	< 4.2	< 4.2	< 4.2	< 4.2	< 4.2	< 4.2	< 4.2	< 4.2	< 4.2	< 4.2	< 4.2	< 4.2	< 4.2	< 4.2
SB-19-6-8	6-8	< 4.2	< 4.2	< 4.2	< 4.2	< 4.2	< 4.2	< 4.2	< 4.2	< 4.2	< 4.2	< 4.2	< 4.2	< 4.2	< 4.2	< 4.2	< 4.2
KDHE RSK - Residential Soil		3,420	NE	2E+07	10,900	1,090	10,900	NE	109,000	1E+06	1,090	2E+06	2E+06	10,900	30,500	NE	2E+06
KDHE RSK - Non-Residential Soil		30,600	NE	2E+08	33,800	33,800	3,380	NE	338,000	3E+06	3,380	4E+07	3E+07	33,800	64,700	NE	3E+07

Notes:

Sample results were compared to Risk-Based Standards for Kansas developed by the Kansas Department of Health and Environment.

< Less than
ft bgs Feet below ground surface
ID Identification
KDHE Kansas Department of Health and Environment
NE Not established
RSK Risk-Based Standards for Kansas

TABLE F-4
TOTAL PETROLEUM HYDROCARBONS IN SUBSURFACE SOIL
KUHLMAN DIECASTING SITE, STANLEY, KANSAS

Sample ID	Sample Location	Depth (ft bgs)	Total Petroleum Hydrocarbons (milligrams per kilogram)	
			TPH-DRO	TPH-GRO
SB-1-25-27	SB-1	25-27	< 24	< 1.2
SB-2-2-4	SB-2	2-4	< 20.4	< 1.3
SB-3-16-18	SB-3	16-18	< 22.5	< 1.1
SB-4-14-16	SB-4	14-16	< 24.6	< 0.98
SB-5-10-12	SB-5	10-12	< 22.8	< 1.1
SB-6-14-16	SB-6	14-16	3,640	640
SB-7-10-12	SB-7	10-12	7,970	539
SB-8-9-11	SB-8	9-11	792	1.4
SB-9-12-14	SB-9	12-14	1,980	1.8
SB-10-12-14	SB-10	12-14	< 24.1	< 1.0
SB-11-17-19	SB-11	17-19	1,590	114
SB-14-8-10	SB-14	8-10	< 26.4	< 1.3
SB-17-10-12	SB-17	10-12	< 24.5	< 1.1
SB-18-12-14	SB-18	12-14	< 25.2	< 1.1
SB-19-6-8	SB-19	6-8	< 24.9	< 1.2
KDHE RSK - Residential Soil			2,000	220
KDHE RSK - Non-Residential Soil			20,000	450

Notes:

Sample results were compared to Risk-Based Standards for Kansas developed by the Kansas Department of Health and Environment.

Shaded result indicates analyte was detected above a respective Kansas RSK value.

<	Less than
DRO	Diesel range organics
ft bgs	Feet below ground surface
GRO	Gasoline range organics
ID	Identification
KDHE	Kansas Department of Health and Environment
RSK	Risk-Based Standards for Kansas
TPH	Total petroleum hydrocarbons

TABLE F-5
METALS IN SUBSURFACE SOIL
KUHLMAN DIECASTING SITE, STANLEY, KANSAS

Sample ID	Depth (ft bgs)	Metals (milligrams per kilogram)								
		Antimony	Arsenic	Beryllium	Chromium	Copper	Lead	Nickel	Zinc	Mercury
SB-1-25-27	25-27	< 1.2	8.2	0.8	19.5	17.8	14.4	23.0	65.8	< 0.050
SB-2-2-4	2-4	< 1.1	4.5	0.63	13.2	12.7	25.0	15.2	64.9	< 0.66
SB-3-16-18	16-18	< 1.1	4.7	0.77	18.5	14.3	12.1	18.8	55.4	< 0.044
SB-4-14-16	14-16	< 1.1	5.5	0.70	17.0	14.4	11.0	18.1	60.6	< 0.054
SB-5-10-12	10-12	< 1.1	6.0	0.78	17.8	15.0	12.4	20.0	57.8	< 0.049
SB-6-14-16	14-16	< 1.2	4.7	0.74	20.3	14.5	10.6	19.6	57.6	< 0.053
SB-7-10-12	10-12	< 1.0	4.1	0.73	16.2	13.4	14.0	17.5	49.8	< 0.056
SB-8-9-11	9-11	29.3	116	16.0	4,060	3,630	251	7,180	1,930	0.028
SB-9-12-14	12-14	2.3	5.8	0.81	342	284	17.7	542	427	0.031
SB-10-12-14	12-14	< 1.0	4.3	0.82	14.6	13.2	11.3	17.5	46.9	< 0.016
SB-11-17-19	17-19	< 1.0	4.6	0.76	16.1	13.0	12.2	13.1	54.0	0.019
SB-14-8-10	8-10	< 1.1	5.3	0.54	12.0	11.6	17.0	13.7	85.8	0.570
SB-17-10-12	10-12	< 1.1	5.3	0.81	14.0	13.2	10.3	17.0	51.6	0.017
SB-18-12-14	12-14	< 1.1	4.9	0.77	14.6	12.3	12.2	16.8	52.6	< 0.016
SB-19-6-8	6-8	< 2.1	5.8	0.83	20.2	14.7	11.3	19.0	58.9	< 0.017
KDHE RSK - Residential Soil		31	11	155	34	3,130	400	1,540	23,500	2
KDHE RSK - Non-Residential Soil		817	38	3,650	111	81,700	1,000	32,400	613,000	20

Notes:

Sample results were compared to Risk-Based Standards for Kansas developed by the Kansas Department of Health and Environment.
Shaded result indicates analyte was detected above a respective Kansas RSK value.

<	Less than	KDHE	Kansas Department of Health and Environment
ft bgs	Feet below ground surface	RSK	Risk-Based Standards for Kansas
ID	Identification		

TABLE F-6
METALS IN SURFACE SOIL
KUHLMAN DIECASTING SITE, STANLEY, KANSAS

Sample ID	Depth (inches bgs)	Metals (milligrams per kilogram)				
		Chromium	Copper	Nickel	Zinc	Chromium VI
SS-1	0-2	44.7	105	105	220	< 4.1
SS-2	0-2	144	103	139	301	< 4.1
SS-3	0-2	31.3	26.1	43.7	67.4	< 4.2
SS-4	0-2	177	109	143	1,870	< 4.2
SS-5	0-2	153	118	182	1,570	< 10.5
SS-6	0-2	27.7	23.9	37.3	96.6	< 10.6
SS-7	0-2	155	175	279	13,900	< 2.0
SS-8	0-2	18.5	35.7	71.2	1,380	< 2.0
SS-9	0-2	60.0	42.3	36.4	347	< 10.5
SS-10	0-2	17.3	36.1	29.4	686	< 4.1
SS-11	0-2	8.8	28.7	87.6	5,480	< 2.0
SS-12	0-2	21.7	29.4	38.2	1,030	< 10.9
KDHE RSK - Residential Soil		33.6	3,130	1,540	23,500	NE
KDHE RSK - Non-Residential Soil		111	81,700	32,400	613,000	NE

Notes

Sample results were compared to Risk-Based Standards for Kansas developed by the Kansas Department of Health and Environment.

Shaded result indicates analyte was detected above a respective Kansas RSK value.

<	Less than
bgs	Below ground surface
ID	Identification
KDHE	Kansas Department of Health and Environment
NE	Not established
RSK	Risk-Based Standards for Kansas

TABLE F-7
POLYNUCLEAR AROMATIC HYDROCARBONS AND VOLATILE ORGANIC COMPOUNDS IN GROUNDWATER
KUHLMAN DIECASTING SITE, STANLEY, KANSAS

Sample ID	Sample Location	Depth (ft bgs)	PAHs (micrograms per liter)	Volatile Organic Compounds (micrograms per liter)						
			Fluoranthene	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Trichloroethene	Vinyl Chloride
SB-1-GW	SB-1	23-27	<0.10	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	1.1	< 1.0
SB-3-GW	SB-3	20-24	<0.10	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
SB-5-GW	SB-5	24-28	0.16	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
SB-6-GW	SB-6	20-24	<0.10	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
SB-7-GW	SB-7	20-24	0.13	1.1	25.5	< 1.0	25.3	< 1.0	9.5	< 1.0
SB-9-GW	SB-9	20-24	<0.10	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
SB-11-GW	SB-11	20-24	<0.10	4	299	3.4	294	4.8	384	1.4
SB-17-GW	SB-17	20-24	<0.10	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Rinsate Blank			NA	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Field Blank			0.1	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Trip Blank			NA	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
KDHE RSK - Residential Pathway			255	25	5	7	70	100	5	2
KDHE RSK - Non-Residential Pathway			1,370	46.1	5	7	70	100	5	2

Notes:

Sample results were compared to Risk-Based Standards for Kansas developed by the Kansas Department of Health and Environment.

Shaded result indicates analyte was detected above a respective Kansas RSK value.

<	Less than	KDHE	Kansas Department of Health and Environment
ft bgs	Feet below ground surface	NA	Not analyzed
ID	Identification	PAH	Polynuclear aromatic hydrocarbons
		RSK	Risk-Based Standards for Kansas

TABLE F-8
TOTAL PETROLEUM HYDROCARBONS IN GROUNDWATER
KUHLMAN DIECASTING SITE, STANLEY, KANSAS

Sample ID	Sample Location	Depth (ft bgs)	Total Petroleum Hydrocarbons (milligrams per liter)	
			TPH-DRO	TPH-GRO
SB-1-GW	SB-1	23-27	< 0.40	< 0.50
SB-3-GW	SB-3	20-24	< 0.40	< 0.50
SB-5-GW	SB-5	24-28	0.56	< 0.50
SB-6-GW	SB-6	20-24	< 0.40	< 0.50
SB-7-GW	SB-7	20-24	0.51	< 0.50
SB-9-GW	SB-9	20-24	< 0.40	< 0.50
SB-11-GW	SB-11	20-24	< 0.40	0.64
SB-17-GW	SB-17	20-24	< 0.40	< 0.50
Field Blank			< 0.40	< 0.50
Equipment Rinsate			< 0.40	< 0.50
KDHE RSK - Residential Pathway			0.5	0.5
KDHE RSK - Non-Residential Pathway			0.72	0.5

Notes:

Sample results were compared to Risk-Based Standards for Kansas developed by the Kansas Department of Health and Environment.

Shaded result indicates analyte was detected above a respective Kansas RSK value.

<	Less than
DRO	Diesel range organics
ft bgs	Feet below ground surface
GRO	Gasoline range organics
ID	Identification
KDHE	Kansas Department of Health and Environment
RSK	Risk-Based Standards for Kansas
TPH	Total petroleum hydrocarbons

TABLE F-9
PRIORITY POLLUTANT METALS IN GROUNDWATER
KUHLMAN DIECASTING SITE, STANLEY, KANSAS

Sample ID	Sample Location	Depth (ft bgs)	Priority Pollutant Metals (micrograms per liter)																					
			Arsenic		Beryllium		Cadmium		Chromium		Chromium IV		Copper		Lead		Mercury		Nickel		Selenium		Zinc	
			Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved
GM-1	GM-1	5.0-29.5	NA	NA	NA	NA	NA	NA	< 5.0	< 5.0	NA	NA	< 10.0	< 10.0	NA	NA	NA	NA	< 5.0	< 5.0	NA	NA	< 50.0	< 50.0
GM-2	GM-2	11.0-29.5	NA	NA	NA	NA	NA	NA	5.1	< 5.0	< 0.01	< 0.01	< 10.0	< 10.0	NA	NA	NA	NA	6.4	< 5.0	NA	NA	< 50.0	< 50.0
GM-5	GM-5	7.5-17.5	NA	NA	NA	NA	NA	NA	< 5.0	< 5.0	< 0.01	< 0.01	< 10.0	< 10.0	NA	NA	NA	NA	< 5.0	< 5.0	NA	NA	< 50.0	< 50.0
GM-7	GM-7	7.5-22.5	NA	NA	NA	NA	NA	NA	6.8	< 5.0	NA	NA	14.5	< 10.0	NA	NA	NA	NA	15.7	9.8	NA	NA	< 50.0	< 50.0
GM-8	GM-8	20-30	NA	NA	NA	NA	NA	NA	< 5.0	< 5.0	NA	NA	< 10.0	< 10.0	NA	NA	NA	NA	< 5.0	< 5.0	NA	NA	53.1	< 50.0
GM-10	GM-10	22.5-32.5	NA	NA	NA	NA	NA	NA	< 5.0	< 5.0	< 0.01	< 0.01	< 10.0	< 10.0	NA	NA	NA	NA	< 5.0	< 5.0	NA	NA	< 50.0	< 50.0
GM-12	GM-12	15-25	NA	NA	NA	NA	NA	NA	< 5.0	< 5.0	NA	NA	< 10.0	< 10.0	NA	NA	NA	NA	< 5.0	< 5.0	NA	NA	< 50.0	< 50.0
GM-13	GM-13	17.5-27.5	NA	NA	NA	NA	NA	NA	< 5.0	< 5.0	< 0.01	< 0.01	< 10.0	< 10.0	NA	NA	NA	NA	< 5.0	< 5.0	NA	NA	< 50.0	< 50.0
GM-15	GM-15	15-25	NA	NA	NA	NA	NA	NA	7.2	6.9	NA	NA	< 10.0	< 10.0	NA	NA	NA	NA	< 5.0	< 5.0	NA	NA	< 50.0	< 50.0
GM-17	GM-17	15-25	NA	NA	NA	NA	NA	NA	5.5	< 5.0	NA	NA	< 10.0	< 10.0	NA	NA	NA	NA	6.8	< 5.0	NA	NA	< 50.0	< 50.0
SB-1-GW	SB-1	23-27	32.4	39	3.1	< 1.0	8	< 5.0	43.4	< 5.0	NA	NA	259	< 10.0	65	< 5.0	< 0.20	< 0.20	158	18.2	< 15.0	< 15.0	NA	NA
SB-3-GW	SB-3	20-24	39.4	54	< 1.0	< 1.0	< 5.0	< 5.0	< 5.0	< 5.0	NA	NA	< 10.0	< 10.0	< 5.0	< 5.0	< 0.20	< 0.20	20.9	< 5.0	< 15.0	< 15.0	NA	NA
SB-5-GW	SB-5	24-28	16.8	< 10.0	18.1	< 1.0	97.9	< 5.0	76.7	< 5.0	NA	NA	498	< 10.0	47.1	< 5.0	2.4	< 0.20	385	12.4	< 15.0	< 15.0	NA	NA
SB-6-GW	SB-6	20-24	18.2	< 10.0	1.6	< 1.0	10.9	< 5.0	22.1	< 5.0	NA	NA	251	< 10.0	24.8	34.8	0.46	< 0.20	75.4	10.3	< 15.0	22.7	NA	NA
SB-7-GW	SB-7	20-24	42.1	< 10.0	< 1.0	< 1.0	< 5.0	< 5.0	27.4	< 5.0	NA	NA	29.5	< 10.0	24.5	< 5.0	0.43	< 0.20	81.1	< 5.0	< 15.0	< 15.0	NA	NA
SB-9-GW	SB-9	20-24	77.3	17.6	2.7	< 1.0	29	< 5.0	152	< 5.0	NA	NA	54.1	< 10.0	101	< 5.0	0.30	< 0.20	136	< 5.0	< 15.0	< 15.0	NA	NA
SB-11-GW	SB-11	20-24	12.2	< 10.0	< 1.0	< 1.0	22.5	< 5.0	307	< 5.0	NA	NA	372	< 10.0	44.4	< 5.0	0.60	< 0.20	300	22.4	< 15.0	< 15.0	NA	NA
SB-17-GW	SB-17	20-24	30.6	< 10.0	2.2	< 1.0	35.1	< 5.0	55.7	< 5.0	NA	NA	186	< 10.0	72.1	5.0	0.35	< 0.20	151	35.2	< 15.0	< 15.0	NA	NA
Field Blank			< 10.0	< 10.0	< 1.0	< 1.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.01	< 0.01	< 10.0	< 10.0	< 5.0	< 5.0	< 0.20	< 0.20	< 0.20	< 0.20	< 15.0	< 15.0	< 50.0	< 50.0
Equipment Rinsate			< 10.0	< 10.0	< 1.0	< 1.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.01	< 0.01	< 10.0	< 10.0	< 5.0	< 5.0	< 0.20	< 0.20	< 0.20	< 0.20	< 15.0	< 15.0	< 50.0	< 50.0
KDHE RSK - Residential Pathway			100		4		5		100		NE		1,300		15		2		312		50		4,670	
KDHE RSK - Non-Residential Pathway			100		4		5		100		NE		1,300		15		2		2,040		50		30,500	

Notes:

Sample results were compared to Risk-Based Standards for Kansas developed by the Kansas Department of Health and Environment.

Shaded result indicates analyte was detected above a respective Kansas RSK value.

<	Less than	NA	Not analyzed
ft bgs	Feet below ground surface	NE	Not established
ID	Identification	RSK	Risk-Based Standards for Kansas
KDHE	Kansas Department of Health and Environment		

TABLE F-10
ANALYTES DETECTED IN SURFACE WATER
KUHLMAN DIECASTING SITE, STANLEY, KANSAS

Sample ID	Sample Location	Analytes					
		<i>micrograms per liter</i>				<i>milligrams per liter</i>	
		Chromium	Copper	Nickel	Zinc	Cyanide	Chromium VI
BR-1-SW	BR-1	< 5.0	< 10.0	< 5.0	< 50.0	NA	NA
BR-2-SW	BR-2	< 5.0	< 10.0	< 5.0	< 50.0	NA	NA
BR-3-SW	BR-3	< 5.0	< 10.0	5.3	< 50.0	NA	NA
BR-4-SW	BR-4	< 5.0	< 10.0	< 5.0	< 50.0	NA	NA
NPWB-SW	NPWB-SW	186	450	57.8	456	< 0.005	NA
WWEL-S-SW	WWEL-S	30.3	112	307	120	< 0.005	0.057
BLDG-1-SW	BLDG-1	5.1	10.3	33.2	204	< 0.005	< 0.005
BLDG-2-SW	BLDG-2	12.7	15.9	42.2	2,480	0.022	< 0.010
KDHE-KSWQS - Domestic Water Supply		100	1,300	610	7,400	0.2	0.05

Notes:

Sample results were compared to Kansas Surface Water Quality Standards (KSWQS) developed by the Kansas Department of Health and Environment.

Shaded result indicates analyte was detected above a respective Kansas KSWQS value for surface water.

< Less than
ID Identification
KDHE Kansas Department of Health and Environment
KSWQS Kansas Surface Water Quality Standards

TABLE F-11
ANALYTES DETECTED IN SEDIMENT
KUHLMAN DIECASTING SITE, STANLEY, KANSAS

Sample ID	Sample Location	Depth (inches bgs)	Analytes (milligrams per kilogram)					
			Chromium	Copper	Nickel	Zinc	Chromium VI	Cyanide
BR-1-SED	Blue River	0-6	13.5	12	15.2	44.2	NA	NA
BR-2-SED	Blue River	0-6	15	17.9	23.9	58.8	NA	NA
BR-3-SED	Blue River	0-6	21.3	17.8	24.9	70.3	NA	NA
BR-4-SED	Blue River	0-6	18	14.9	20.7	62.4	NA	NA
Threshold Effects Concentration			43.4	31.6	22.7	121	NE	NE
Probable Effects Concentration			111	149	48.6	459	NE	NE
NPWB-SED-N	North Process Water Basin	0-6	301	873	74.5	435	NA	< 0.37
NPWB-SED-S	North Process Water Basin	0-6	385	979	91.2	564	NA	< 0.69
SPWB-SED-N	South Process Water Basin	0-6	70.4	739	58.7	433	NA	0.27
SPWB-SED-S	South Process Water Basin	0-6	64.2	742	68.6	683	NA	< 0.28
WWEL-N-SED	Waste Water Elimination Lagoon	0-6	7,030	5,770	14,900	8,210	< 11.4	1.2
WWEL-S-SED	Waste Water Elimination Lagoon	0-6	571	687	891	288	< 8.4	0.33
EP-SED	East Pond	0-6	19	19.1	18.1	59.9	NA	< 0.44
BLDG-1-SED	Kuhlman Diecasting Building	0-6	520	530	2,560	7,060	< 6.0	3.3
BLDG-2-SED	Kuhlman Diecasting Building	0-6	106	307	233	154,000	< 3.2	< 0.23
KDHE RSK - Residential Soil			33.6	3,130	1,540	23,500	NE	1,560
KDHE RSK - Non-Residential Soil			111	81,700	32,400	601,000	NE	40,900

Notes:

Sediment sample results from the Blue River were compared to Threshold Effects Concentrations and Probable Effects Concentrations. Sediment sample results from on-site features were compared to Risk-Based Standards for Kansas developed by the Kansas Department of Health and Environment.

Shaded result indicates analyte was detected above a respective comparison standard/value.

bgs	Below ground surface	NA	Not analyzed
ID	Identification	NE	Not established
KDHE	Kansas Department of Health and Environment	RSK	Risk-Based standards for Kansas

APPENDIX G

CHAIN-OF-CUSTODY RECORDS AND ANALYTICAL RESULTS

August 09, 2012

Jeff Pritchard
Seagull Environmental Technologies
415 Oak St.
Kansas City, MO 64106

RE: Project: KUHLMAN DIECASTING
Pace Project No.: 60125643

Dear Jeff Pritchard:

Enclosed are the analytical results for sample(s) received by the laboratory on July 21, 2012. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,



Mary Jane Walls

maryjane.walls@pacelabs.com
PM Lab Management

Enclosures



REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: KUHLMAN DIECASTING

Pace Project No.: 60125643

Kansas Certification IDs

9608 Loiret Boulevard, Lenexa, KS 66219

A2LA Certification #: 2456.01

Arkansas Certification #: 12-019-0

Illinois Certification #: 002885

Iowa Certification #: 118

Kansas/NELAP Certification #: E-10116

Louisiana Certification #: 03055

Nevada Certification #: KS000212008A

Oklahoma Certification #: 9205/9935

Texas Certification #: T104704407-12-3

Utah Certification #: KS000212012-2

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SAMPLE SUMMARY

Project: KUHLMAN DIECASTING

Pace Project No.: 60125643

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60125643001	FIELD BLANK	Water	07/20/12 11:40	07/21/12 08:50
60125643002	EQUIPMENT RINSATE	Water	07/20/12 11:30	07/21/12 08:50
60125643003	SB-1-25-27	Solid	07/17/12 10:11	07/21/12 08:55
60125643004	SB-1-GW	Water	07/17/12 12:05	07/21/12 08:55
60125643005	SB-2-2-4	Solid	07/17/12 14:32	07/21/12 08:55
60125643006	SB-3-16-18	Solid	07/17/12 16:08	07/21/12 08:55
60125643007	SB-3-GW	Water	07/17/12 16:17	07/21/12 08:55
60125643008	SB-4-14-16	Solid	07/18/12 10:07	07/21/12 08:55
60125643009	SB-5-10-12	Solid	07/18/12 11:02	07/21/12 08:55
60125643010	SB-5-GW	Water	07/18/12 10:42	07/21/12 08:55
60125643011	SB-6-14-16	Solid	07/18/12 12:00	07/21/12 08:55
60125643012	SB-6-GW	Water	07/18/12 12:02	07/21/12 08:55
60125643013	SB-7-10-12	Solid	07/18/12 14:23	07/21/12 08:55
60125643014	SB-7-GW	Water	07/18/12 15:07	07/21/12 08:55
60125643015	TRIP BLANK	Solid	07/18/12 08:00	07/21/12 08:55

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SAMPLE ANALYTE COUNT

Project: KUHLMAN DIECASTING
Pace Project No.: 60125643

Lab ID	Sample ID	Method	Analysts	Analytes Reported
60125643001	FIELD BLANK	OA2	NAW	9
		EPA 6010	SMW	12
		EPA 6010	SMW	12
		EPA 7470	TJT	1
		EPA 7470	TJT	1
		EPA 8270C by SIM	BRM	19
		EPA 5030B/8260	PRG	70
		EPA 8260/OA1	PRG	14
		SM 3500-Cr D	AJM	1
60125643002	EQUIPMENT RINSATE	OA2	NAW	9
		EPA 6010	SMW	12
		EPA 6010	SMW	12
		EPA 7470	TJT	1
		EPA 7470	TJT	1
		EPA 5030B/8260	PRG	70
		EPA 8260/OA1	PRG	13
		SM 3500-Cr D	AJM	1
60125643003	SB-1-25-27	OA2	NAW	9
		EPA 6010	SMW	12
		EPA 7471	TJT	1
		EPA 8270 by SIM	BRM	19
		OA1	RAB	1
		EPA 8260	RAB	69
		ASTM D2974	CEM	1
60125643004	SB-1-GW	OA2	SDR	9
		EPA 6010	SMW	12
		EPA 6010	SMW	12
		EPA 7470	TJT	1
		EPA 7470	TJT	1
		EPA 8270C by SIM	BRM	19
		EPA 5030B/8260	PRG	70
		EPA 8260/OA1	PRG	14
60125643005	SB-2-2-4	OA2	NAW	9
		EPA 6010	SMW	12
		EPA 7471	TJT	1
		EPA 8270 by SIM	BRM	19
		OA1	RAB	1

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SAMPLE ANALYTE COUNT

Project: KUHLMAN DIECASTING

Pace Project No.: 60125643

Lab ID	Sample ID	Method	Analysts	Analytes Reported
60125643006	SB-3-16-18	EPA 8260	RAB	69
		ASTM D2974	CEM	1
		OA2	NAW	9
		EPA 6010	SMW	12
		EPA 7471	TJT	1
		EPA 8270 by SIM	BRM	19
		OA1	RAB	1
60125643007	SB-3-GW	EPA 8260	RAB	69
		ASTM D2974	CEM	1
		OA2	SDR	9
		EPA 6010	SMW	12
		EPA 6010	SMW	12
		EPA 7470	TJT	1
		EPA 7470	TJT	1
		EPA 8270C by SIM	BRM	19
		EPA 5030B/8260	PRG	70
		EPA 8260/OA1	PRG	14
60125643008	SB-4-14-16	OA2	NAW	9
		EPA 6010	SMW	12
		EPA 7471	TJT	1
		EPA 8270 by SIM	BRM	19
		OA1	RAB	1
		EPA 8260	RAB	69
		ASTM D2974	CEM	1
60125643009	SB-5-10-12	OA2	NAW	9
		EPA 6010	SMW	12
		EPA 7471	TJT	1
		EPA 8270 by SIM	BRM	19
		OA1	RAB	1
		EPA 8260	RAB	69
		ASTM D2974	CEM	1
60125643010	SB-5-GW	OA2	SDR	9
		EPA 6010	SMW	12
		EPA 6010	SMW	12
		EPA 7470	TJT	1
		EPA 7470	TJT	1
		EPA 8270C by SIM	BRM	19

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SAMPLE ANALYTE COUNT

Project: KUHLMAN DIECASTING

Pace Project No.: 60125643

Lab ID	Sample ID	Method	Analysts	Analytes Reported
60125643011	SB-6-14-16	EPA 5030B/8260	RNS	70
		EPA 8260/OA1	RNS	14
		OA2	NAW	9
		EPA 6010	SMW	12
		EPA 7471	TJT	1
		EPA 8270 by SIM	BRM	19
		OA1	RAB	1
		EPA 8260	RAB	69
60125643012	SB-6-GW	ASTM D2974	CEM	1
		OA2	SDR	9
		EPA 6010	SMW	12
		EPA 6010	SMW	12
		EPA 7470	TJT	1
		EPA 7470	TJT	1
		EPA 8270C by SIM	BRM	19
		EPA 5030B/8260	RNS	70
60125643013	SB-7-10-12	EPA 8260/OA1	RNS	14
		OA2	NAW	9
		EPA 6010	SMW	12
		EPA 7471	TJT	1
		EPA 8270 by SIM	BRM	19
		OA1	RAB	1
		EPA 8260	RAB	69
		ASTM D2974	CEM	1
60125643014	SB-7-GW	OA2	SDR	9
		EPA 6010	SMW	12
		EPA 6010	SMW	12
		EPA 7470	TJT	1
		EPA 7470	TJT	1
		EPA 8270C by SIM	BRM	19
		EPA 5030B/8260	RNS	70
		EPA 8260/OA1	RNS	14
60125643015	TRIP BLANK	EPA 8260	RAB	69

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ANALYTICAL RESULTS

Project: KUHLMAN DIECASTING

Pace Project No.: 60125643

Sample: FIELD BLANK		Lab ID: 60125643001	Collected: 07/20/12 11:40	Received: 07/21/12 08:50	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
OA2 GCS Analytical Method: OA2 Preparation Method: OA2								
Diesel Fuel	ND mg/L		0.40	1	07/25/12 00:00	07/27/12 10:26	68334-30-5	
Fuel Oil	ND mg/L		0.40	1	07/25/12 00:00	07/27/12 10:26	68553-00-4	
Jet Fuel	ND mg/L		0.40	1	07/25/12 00:00	07/27/12 10:26	94114-58-6	
Kerosene	ND mg/L		0.40	1	07/25/12 00:00	07/27/12 10:26	8008-20-6	
Mineral Spirits	ND mg/L		0.40	1	07/25/12 00:00	07/27/12 10:26	8030-30-6	
Motor Oil	ND mg/L		0.40	1	07/25/12 00:00	07/27/12 10:26	64742-65-0	
Total Petroleum Hydrocarbons	ND mg/L		0.40	1	07/25/12 00:00	07/27/12 10:26		
Surrogates								
p-Terphenyl (S)	61 %		20-122	1	07/25/12 00:00	07/27/12 10:26	92-94-4	
n-Tetracosane (S)	62 %		30-122	1	07/25/12 00:00	07/27/12 10:26	646-31-1	
6010 MET ICP Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Antimony	ND ug/L		10.0	1	07/27/12 14:15	07/31/12 14:03	7440-36-0	
Arsenic	ND ug/L		10.0	1	07/27/12 14:15	07/31/12 14:03	7440-38-2	
Beryllium	ND ug/L		1.0	1	07/27/12 14:15	07/31/12 14:03	7440-41-7	
Cadmium	ND ug/L		5.0	1	07/27/12 14:15	07/31/12 14:03	7440-43-9	
Chromium	ND ug/L		5.0	1	07/27/12 14:15	07/31/12 14:03	7440-47-3	
Copper	ND ug/L		10.0	1	07/27/12 14:15	07/31/12 14:03	7440-50-8	
Lead	ND ug/L		5.0	1	07/27/12 14:15	07/31/12 14:03	7439-92-1	
Nickel	ND ug/L		5.0	1	07/27/12 14:15	07/31/12 14:03	7440-02-0	
Selenium	ND ug/L		15.0	1	07/27/12 14:15	07/31/12 14:03	7782-49-2	
Silver	ND ug/L		7.0	1	07/27/12 14:15	07/31/12 14:03	7440-22-4	
Thallium	ND ug/L		20.0	1	07/27/12 14:15	07/31/12 14:03	7440-28-0	
Zinc	ND ug/L		50.0	1	07/27/12 14:15	07/31/12 14:03	7440-66-6	
6010 MET ICP, Dissolved Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Antimony, Dissolved	ND ug/L		10.0	1	07/27/12 10:30	07/30/12 13:15	7440-36-0	
Arsenic, Dissolved	ND ug/L		10.0	1	07/27/12 10:30	07/30/12 13:15	7440-38-2	
Beryllium, Dissolved	ND ug/L		1.0	1	07/27/12 10:30	07/30/12 13:15	7440-41-7	
Cadmium, Dissolved	ND ug/L		5.0	1	07/27/12 10:30	07/30/12 13:15	7440-43-9	
Chromium, Dissolved	ND ug/L		5.0	1	07/27/12 10:30	07/30/12 13:15	7440-47-3	
Copper, Dissolved	ND ug/L		10.0	1	07/27/12 10:30	07/30/12 13:15	7440-50-8	
Lead, Dissolved	ND ug/L		5.0	1	07/27/12 10:30	07/30/12 13:15	7439-92-1	
Nickel, Dissolved	ND ug/L		5.0	1	07/27/12 10:30	07/30/12 13:15	7440-02-0	
Selenium, Dissolved	ND ug/L		15.0	1	07/27/12 10:30	07/30/12 13:15	7782-49-2	
Silver, Dissolved	ND ug/L		7.0	1	07/27/12 10:30	07/30/12 13:15	7440-22-4	
Thallium, Dissolved	ND ug/L		20.0	1	07/27/12 10:30	07/30/12 13:15	7440-28-0	
Zinc, Dissolved	ND ug/L		50.0	1	07/27/12 10:30	07/30/12 13:15	7440-66-6	
7470 Mercury Analytical Method: EPA 7470 Preparation Method: EPA 7470								
Mercury	ND ug/L		0.20	1	07/24/12 09:15	07/24/12 15:31	7439-97-6	
7470 Mercury, Dissolved Analytical Method: EPA 7470 Preparation Method: EPA 7470								
Mercury, Dissolved	ND ug/L		0.20	1	08/01/12 06:30	08/03/12 11:11	7439-97-6	

ANALYTICAL RESULTS

Project: KUHLMAN DIECASTING

Pace Project No.: 60125643

Sample: FIELD BLANK		Lab ID: 60125643001	Collected: 07/20/12 11:40	Received: 07/21/12 08:50	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by SIM		Analytical Method: EPA 8270C by SIM Preparation Method: EPA 3510C						
Acenaphthene	ND ug/L		0.10	1	07/25/12 00:00	08/06/12 17:55	83-32-9	
Acenaphthylene	ND ug/L		0.10	1	07/25/12 00:00	08/06/12 17:55	208-96-8	
Anthracene	ND ug/L		0.10	1	07/25/12 00:00	08/06/12 17:55	120-12-7	
Benzo(a)anthracene	ND ug/L		0.10	1	07/25/12 00:00	08/06/12 17:55	56-55-3	
Benzo(a)pyrene	ND ug/L		0.10	1	07/25/12 00:00	08/06/12 17:55	50-32-8	
Benzo(b)fluoranthene	ND ug/L		0.10	1	07/25/12 00:00	08/06/12 17:55	205-99-2	
Benzo(g,h,i)perylene	ND ug/L		0.10	1	07/25/12 00:00	08/06/12 17:55	191-24-2	
Benzo(k)fluoranthene	ND ug/L		0.10	1	07/25/12 00:00	08/06/12 17:55	207-08-9	
Chrysene	ND ug/L		0.10	1	07/25/12 00:00	08/06/12 17:55	218-01-9	
Dibenz(a,h)anthracene	ND ug/L		0.10	1	07/25/12 00:00	08/06/12 17:55	53-70-3	
Fluoranthene	0.10 ug/L		0.10	1	07/25/12 00:00	08/06/12 17:55	206-44-0	B
Fluorene	ND ug/L		0.10	1	07/25/12 00:00	08/06/12 17:55	86-73-7	
Indeno(1,2,3-cd)pyrene	ND ug/L		0.10	1	07/25/12 00:00	08/06/12 17:55	193-39-5	
Naphthalene	ND ug/L		0.50	1	07/25/12 00:00	08/06/12 17:55	91-20-3	
Phenanthrene	ND ug/L		0.50	1	07/25/12 00:00	08/06/12 17:55	85-01-8	
Pyrene	ND ug/L		0.10	1	07/25/12 00:00	08/06/12 17:55	129-00-0	
Surrogates								
Nitrobenzene-d5 (S)	78 %		42-120	1	07/25/12 00:00	08/06/12 17:55	4165-60-0	
2-Fluorobiphenyl (S)	82 %		44-120	1	07/25/12 00:00	08/06/12 17:55	321-60-8	
Terphenyl-d14 (S)	102 %		46-131	1	07/25/12 00:00	08/06/12 17:55	1718-51-0	
8260 MSV		Analytical Method: EPA 5030B/8260						
Acetone	ND ug/L		10.0	1		07/30/12 13:33	67-64-1	
Benzene	ND ug/L		1.0	1		07/30/12 13:33	71-43-2	
Bromobenzene	ND ug/L		1.0	1		07/30/12 13:33	108-86-1	
Bromochloromethane	ND ug/L		1.0	1		07/30/12 13:33	74-97-5	
Bromodichloromethane	ND ug/L		1.0	1		07/30/12 13:33	75-27-4	
Bromoform	ND ug/L		1.0	1		07/30/12 13:33	75-25-2	
Bromomethane	ND ug/L		5.0	1		07/30/12 13:33	74-83-9	
2-Butanone (MEK)	ND ug/L		10.0	1		07/30/12 13:33	78-93-3	
n-Butylbenzene	ND ug/L		1.0	1		07/30/12 13:33	104-51-8	
sec-Butylbenzene	ND ug/L		1.0	1		07/30/12 13:33	135-98-8	
tert-Butylbenzene	ND ug/L		1.0	1		07/30/12 13:33	98-06-6	
Carbon disulfide	ND ug/L		5.0	1		07/30/12 13:33	75-15-0	
Carbon tetrachloride	ND ug/L		1.0	1		07/30/12 13:33	56-23-5	
Chlorobenzene	ND ug/L		1.0	1		07/30/12 13:33	108-90-7	
Chloroethane	ND ug/L		1.0	1		07/30/12 13:33	75-00-3	
Chloroform	ND ug/L		1.0	1		07/30/12 13:33	67-66-3	
Chloromethane	ND ug/L		1.0	1		07/30/12 13:33	74-87-3	
2-Chlorotoluene	ND ug/L		1.0	1		07/30/12 13:33	95-49-8	
4-Chlorotoluene	ND ug/L		1.0	1		07/30/12 13:33	106-43-4	
1,2-Dibromo-3-chloropropane	ND ug/L		2.5	1		07/30/12 13:33	96-12-8	
Dibromochloromethane	ND ug/L		1.0	1		07/30/12 13:33	124-48-1	
1,2-Dibromoethane (EDB)	ND ug/L		1.0	1		07/30/12 13:33	106-93-4	
Dibromomethane	ND ug/L		1.0	1		07/30/12 13:33	74-95-3	
1,2-Dichlorobenzene	ND ug/L		1.0	1		07/30/12 13:33	95-50-1	
1,3-Dichlorobenzene	ND ug/L		1.0	1		07/30/12 13:33	541-73-1	

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REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: KUHLMAN DIECASTING

Pace Project No.: 60125643

Sample: FIELD BLANK		Lab ID: 60125643001	Collected: 07/20/12 11:40	Received: 07/21/12 08:50	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV		Analytical Method: EPA 5030B/8260						
1,4-Dichlorobenzene	ND ug/L		1.0	1		07/30/12 13:33	106-46-7	
Dichlorodifluoromethane	ND ug/L		1.0	1		07/30/12 13:33	75-71-8	
1,1-Dichloroethane	ND ug/L		1.0	1		07/30/12 13:33	75-34-3	
1,2-Dichloroethane	ND ug/L		1.0	1		07/30/12 13:33	107-06-2	
1,2-Dichloroethene (Total)	ND ug/L		1.0	1		07/30/12 13:33	540-59-0	
1,1-Dichloroethene	ND ug/L		1.0	1		07/30/12 13:33	75-35-4	
cis-1,2-Dichloroethene	ND ug/L		1.0	1		07/30/12 13:33	156-59-2	
trans-1,2-Dichloroethene	ND ug/L		1.0	1		07/30/12 13:33	156-60-5	
1,2-Dichloropropane	ND ug/L		1.0	1		07/30/12 13:33	78-87-5	
1,3-Dichloropropane	ND ug/L		1.0	1		07/30/12 13:33	142-28-9	
2,2-Dichloropropane	ND ug/L		1.0	1		07/30/12 13:33	594-20-7	
1,1-Dichloropropene	ND ug/L		1.0	1		07/30/12 13:33	563-58-6	
cis-1,3-Dichloropropene	ND ug/L		1.0	1		07/30/12 13:33	10061-01-5	
trans-1,3-Dichloropropene	ND ug/L		1.0	1		07/30/12 13:33	10061-02-6	
Ethylbenzene	ND ug/L		1.0	1		07/30/12 13:33	100-41-4	
Hexachloro-1,3-butadiene	ND ug/L		1.0	1		07/30/12 13:33	87-68-3	
2-Hexanone	ND ug/L		10.0	1		07/30/12 13:33	591-78-6	
Isopropylbenzene (Cumene)	ND ug/L		1.0	1		07/30/12 13:33	98-82-8	
p-Isopropyltoluene	ND ug/L		1.0	1		07/30/12 13:33	99-87-6	
Methylene chloride	ND ug/L		1.0	1		07/30/12 13:33	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND ug/L		10.0	1		07/30/12 13:33	108-10-1	
Methyl-tert-butyl ether	ND ug/L		1.0	1		07/30/12 13:33	1634-04-4	
Naphthalene	ND ug/L		10.0	1		07/30/12 13:33	91-20-3	
n-Propylbenzene	ND ug/L		1.0	1		07/30/12 13:33	103-65-1	
Styrene	ND ug/L		1.0	1		07/30/12 13:33	100-42-5	
1,1,1,2-Tetrachloroethane	ND ug/L		1.0	1		07/30/12 13:33	630-20-6	
1,1,2,2-Tetrachloroethane	ND ug/L		1.0	1		07/30/12 13:33	79-34-5	
Tetrachloroethene	ND ug/L		1.0	1		07/30/12 13:33	127-18-4	
Toluene	ND ug/L		1.0	1		07/30/12 13:33	108-88-3	
1,2,3-Trichlorobenzene	ND ug/L		1.0	1		07/30/12 13:33	87-61-6	
1,2,4-Trichlorobenzene	ND ug/L		1.0	1		07/30/12 13:33	120-82-1	
1,1,1-Trichloroethane	ND ug/L		1.0	1		07/30/12 13:33	71-55-6	
1,1,2-Trichloroethane	ND ug/L		1.0	1		07/30/12 13:33	79-00-5	
Trichloroethene	ND ug/L		1.0	1		07/30/12 13:33	79-01-6	
Trichlorofluoromethane	ND ug/L		1.0	1		07/30/12 13:33	75-69-4	
1,2,3-Trichloropropane	ND ug/L		2.5	1		07/30/12 13:33	96-18-4	
1,2,4-Trimethylbenzene	ND ug/L		1.0	1		07/30/12 13:33	95-63-6	
1,3,5-Trimethylbenzene	ND ug/L		1.0	1		07/30/12 13:33	108-67-8	
Vinyl chloride	ND ug/L		1.0	1		07/30/12 13:33	75-01-4	
Xylene (Total)	ND ug/L		3.0	1		07/30/12 13:33	1330-20-7	
Surrogates								
4-Bromofluorobenzene (S)	102 %		80-120	1		07/30/12 13:33	460-00-4	
Dibromofluoromethane (S)	93 %		80-120	1		07/30/12 13:33	1868-53-7	
1,2-Dichloroethane-d4 (S)	97 %		80-120	1		07/30/12 13:33	17060-07-0	
Toluene-d8 (S)	102 %		80-120	1		07/30/12 13:33	2037-26-5	
Preservation pH	1.0		0.10	1		07/30/12 13:33		

ANALYTICAL RESULTS

Project: KUHLMAN DIECASTING

Pace Project No.: 60125643

Sample: FIELD BLANK		Lab ID: 60125643001	Collected: 07/20/12 11:40	Received: 07/21/12 08:50	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260/OA1 UST, Water		Analytical Method: EPA 8260/OA1						
Gasoline Range Organics	ND mg/L		0.50	1		07/30/12 13:33		
Benzene	ND ug/L		1.0	1		07/30/12 13:33	71-43-2	
Toluene	ND ug/L		1.0	1		07/30/12 13:33	108-88-3	
Ethylbenzene	ND ug/L		1.0	1		07/30/12 13:33	100-41-4	
Xylene (Total)	ND ug/L		3.0	1		07/30/12 13:33	1330-20-7	
Methyl-tert-butyl ether	ND ug/L		1.0	1		07/30/12 13:33	1634-04-4	
Naphthalene	ND ug/L		10.0	1		07/30/12 13:33	91-20-3	
1,2-Dichloroethane	ND ug/L		1.0	1		07/30/12 13:33	107-06-2	
tert-Butyl Alcohol	ND ug/L		10.0	1		07/30/12 13:33	75-65-0	
Surrogates								
Dibromofluoromethane (S)	93 %		80-120	1		07/30/12 13:33	1868-53-7	
Toluene-d8 (S)	102 %		80-120	1		07/30/12 13:33	2037-26-5	
4-Bromofluorobenzene (S)	102 %		80-120	1		07/30/12 13:33	460-00-4	
1,2-Dichloroethane-d4 (S)	97 %		80-120	1		07/30/12 13:33	17060-07-0	
Preservation pH	1.0		0.10	1		07/30/12 13:33		
Chromium, Hexavalent		Analytical Method: SM 3500-Cr D						
Chromium, Hexavalent	ND mg/L		0.010	1		07/21/12 10:55	18540-29-9	

ANALYTICAL RESULTS

Project: KUHLMAN DIECASTING

Pace Project No.: 60125643

Sample: EQUIPMENT RINSATE		Lab ID: 60125643002	Collected: 07/20/12 11:30	Received: 07/21/12 08:50	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
OA2 GCS		Analytical Method: OA2 Preparation Method: OA2						
Diesel Fuel	ND mg/L		0.40	1	07/25/12 00:00	07/27/12 10:36	68334-30-5	
Fuel Oil	ND mg/L		0.40	1	07/25/12 00:00	07/27/12 10:36	68553-00-4	
Jet Fuel	ND mg/L		0.40	1	07/25/12 00:00	07/27/12 10:36	94114-58-6	
Kerosene	ND mg/L		0.40	1	07/25/12 00:00	07/27/12 10:36	8008-20-6	
Mineral Spirits	ND mg/L		0.40	1	07/25/12 00:00	07/27/12 10:36	8030-30-6	
Motor Oil	ND mg/L		0.40	1	07/25/12 00:00	07/27/12 10:36	64742-65-0	
Total Petroleum Hydrocarbons	ND mg/L		0.40	1	07/25/12 00:00	07/27/12 10:36		
Surrogates								
p-Terphenyl (S)	65 %		20-122	1	07/25/12 00:00	07/27/12 10:36	92-94-4	
n-Tetracosane (S)	66 %		30-122	1	07/25/12 00:00	07/27/12 10:36	646-31-1	
6010 MET ICP		Analytical Method: EPA 6010 Preparation Method: EPA 3010						
Antimony	ND ug/L		10.0	1	07/27/12 14:15	07/31/12 14:13	7440-36-0	
Arsenic	ND ug/L		10.0	1	07/27/12 14:15	07/31/12 14:13	7440-38-2	
Beryllium	ND ug/L		1.0	1	07/27/12 14:15	07/31/12 14:13	7440-41-7	
Cadmium	ND ug/L		5.0	1	07/27/12 14:15	07/31/12 14:13	7440-43-9	
Chromium	ND ug/L		5.0	1	07/27/12 14:15	07/31/12 14:13	7440-47-3	
Copper	ND ug/L		10.0	1	07/27/12 14:15	07/31/12 14:13	7440-50-8	
Lead	ND ug/L		5.0	1	07/27/12 14:15	07/31/12 14:13	7439-92-1	
Nickel	ND ug/L		5.0	1	07/27/12 14:15	07/31/12 14:13	7440-02-0	
Selenium	ND ug/L		15.0	1	07/27/12 14:15	07/31/12 14:13	7782-49-2	
Silver	ND ug/L		7.0	1	07/27/12 14:15	07/31/12 14:13	7440-22-4	
Thallium	ND ug/L		20.0	1	07/27/12 14:15	07/31/12 14:13	7440-28-0	
Zinc	ND ug/L		50.0	1	07/27/12 14:15	07/31/12 14:13	7440-66-6	
6010 MET ICP, Dissolved		Analytical Method: EPA 6010 Preparation Method: EPA 3010						
Antimony, Dissolved	ND ug/L		10.0	1	07/27/12 10:30	07/30/12 13:25	7440-36-0	
Arsenic, Dissolved	ND ug/L		10.0	1	07/27/12 10:30	07/30/12 13:25	7440-38-2	
Beryllium, Dissolved	ND ug/L		1.0	1	07/27/12 10:30	07/30/12 13:25	7440-41-7	
Cadmium, Dissolved	ND ug/L		5.0	1	07/27/12 10:30	07/30/12 13:25	7440-43-9	
Chromium, Dissolved	ND ug/L		5.0	1	07/27/12 10:30	07/30/12 13:25	7440-47-3	
Copper, Dissolved	ND ug/L		10.0	1	07/27/12 10:30	07/30/12 13:25	7440-50-8	
Lead, Dissolved	ND ug/L		5.0	1	07/27/12 10:30	07/30/12 13:25	7439-92-1	
Nickel, Dissolved	ND ug/L		5.0	1	07/27/12 10:30	07/30/12 13:25	7440-02-0	
Selenium, Dissolved	ND ug/L		15.0	1	07/27/12 10:30	07/30/12 13:25	7782-49-2	
Silver, Dissolved	ND ug/L		7.0	1	07/27/12 10:30	07/30/12 13:25	7440-22-4	
Thallium, Dissolved	ND ug/L		20.0	1	07/27/12 10:30	07/30/12 13:25	7440-28-0	
Zinc, Dissolved	ND ug/L		50.0	1	07/27/12 10:30	07/30/12 13:25	7440-66-6	
7470 Mercury		Analytical Method: EPA 7470 Preparation Method: EPA 7470						
Mercury	ND ug/L		0.20	1	07/24/12 09:15	07/24/12 15:34	7439-97-6	
7470 Mercury, Dissolved		Analytical Method: EPA 7470 Preparation Method: EPA 7470						
Mercury, Dissolved	ND ug/L		0.20	1	08/01/12 06:30	08/03/12 11:20	7439-97-6	

ANALYTICAL RESULTS

Project: KUHLMAN DIECASTING

Pace Project No.: 60125643

Sample: EQUIPMENT RINSATE		Lab ID: 60125643002	Collected: 07/20/12 11:30	Received: 07/21/12 08:50	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV		Analytical Method: EPA 5030B/8260						
Acetone	ND	ug/L	10.0	1		07/30/12 13:49	67-64-1	
Benzene	ND	ug/L	1.0	1		07/30/12 13:49	71-43-2	
Bromobenzene	ND	ug/L	1.0	1		07/30/12 13:49	108-86-1	
Bromochloromethane	ND	ug/L	1.0	1		07/30/12 13:49	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1		07/30/12 13:49	75-27-4	
Bromoform	ND	ug/L	1.0	1		07/30/12 13:49	75-25-2	
Bromomethane	ND	ug/L	5.0	1		07/30/12 13:49	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	1		07/30/12 13:49	78-93-3	
n-Butylbenzene	ND	ug/L	1.0	1		07/30/12 13:49	104-51-8	
sec-Butylbenzene	ND	ug/L	1.0	1		07/30/12 13:49	135-98-8	
tert-Butylbenzene	ND	ug/L	1.0	1		07/30/12 13:49	98-06-6	
Carbon disulfide	ND	ug/L	5.0	1		07/30/12 13:49	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		07/30/12 13:49	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		07/30/12 13:49	108-90-7	
Chloroethane	ND	ug/L	1.0	1		07/30/12 13:49	75-00-3	
Chloroform	ND	ug/L	1.0	1		07/30/12 13:49	67-66-3	
Chloromethane	ND	ug/L	1.0	1		07/30/12 13:49	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	1		07/30/12 13:49	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	1		07/30/12 13:49	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	2.5	1		07/30/12 13:49	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		07/30/12 13:49	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		07/30/12 13:49	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		07/30/12 13:49	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		07/30/12 13:49	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		07/30/12 13:49	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		07/30/12 13:49	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		07/30/12 13:49	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	1		07/30/12 13:49	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		07/30/12 13:49	107-06-2	
1,2-Dichloroethene (Total)	ND	ug/L	1.0	1		07/30/12 13:49	540-59-0	
1,1-Dichloroethene	ND	ug/L	1.0	1		07/30/12 13:49	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		07/30/12 13:49	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		07/30/12 13:49	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		07/30/12 13:49	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	1		07/30/12 13:49	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	1		07/30/12 13:49	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		07/30/12 13:49	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		07/30/12 13:49	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		07/30/12 13:49	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	1		07/30/12 13:49	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	1		07/30/12 13:49	87-68-3	
2-Hexanone	ND	ug/L	10.0	1		07/30/12 13:49	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	1		07/30/12 13:49	98-82-8	
p-Isopropyltoluene	ND	ug/L	1.0	1		07/30/12 13:49	99-87-6	
Methylene chloride	ND	ug/L	1.0	1		07/30/12 13:49	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	1		07/30/12 13:49	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		07/30/12 13:49	1634-04-4	

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REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: KUHLMAN DIECASTING

Pace Project No.: 60125643

Sample: EQUIPMENT RINSATE		Lab ID: 60125643002	Collected: 07/20/12 11:30	Received: 07/21/12 08:50	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV		Analytical Method: EPA 5030B/8260						
Naphthalene	ND ug/L		10.0	1		07/30/12 13:49	91-20-3	
n-Propylbenzene	ND ug/L		1.0	1		07/30/12 13:49	103-65-1	
Styrene	ND ug/L		1.0	1		07/30/12 13:49	100-42-5	
1,1,1,2-Tetrachloroethane	ND ug/L		1.0	1		07/30/12 13:49	630-20-6	
1,1,2,2-Tetrachloroethane	ND ug/L		1.0	1		07/30/12 13:49	79-34-5	
Tetrachloroethene	ND ug/L		1.0	1		07/30/12 13:49	127-18-4	
Toluene	ND ug/L		1.0	1		07/30/12 13:49	108-88-3	
1,2,3-Trichlorobenzene	ND ug/L		1.0	1		07/30/12 13:49	87-61-6	
1,2,4-Trichlorobenzene	ND ug/L		1.0	1		07/30/12 13:49	120-82-1	
1,1,1-Trichloroethane	ND ug/L		1.0	1		07/30/12 13:49	71-55-6	
1,1,2-Trichloroethane	ND ug/L		1.0	1		07/30/12 13:49	79-00-5	
Trichloroethene	ND ug/L		1.0	1		07/30/12 13:49	79-01-6	
Trichlorofluoromethane	ND ug/L		1.0	1		07/30/12 13:49	75-69-4	
1,2,3-Trichloropropane	ND ug/L		2.5	1		07/30/12 13:49	96-18-4	
1,2,4-Trimethylbenzene	ND ug/L		1.0	1		07/30/12 13:49	95-63-6	
1,3,5-Trimethylbenzene	ND ug/L		1.0	1		07/30/12 13:49	108-67-8	
Vinyl chloride	ND ug/L		1.0	1		07/30/12 13:49	75-01-4	
Xylene (Total)	ND ug/L		3.0	1		07/30/12 13:49	1330-20-7	
Surrogates								
4-Bromofluorobenzene (S)	104 %		80-120	1		07/30/12 13:49	460-00-4	
Dibromofluoromethane (S)	92 %		80-120	1		07/30/12 13:49	1868-53-7	
1,2-Dichloroethane-d4 (S)	96 %		80-120	1		07/30/12 13:49	17060-07-0	
Toluene-d8 (S)	104 %		80-120	1		07/30/12 13:49	2037-26-5	
Preservation pH	1.0		0.10	1		07/30/12 13:49		
8260/OA1 UST, Water		Analytical Method: EPA 8260/OA1						
Gasoline Range Organics	ND mg/L		0.50	1		07/30/12 13:49		
Benzene	ND ug/L		1.0	1		07/30/12 13:49	71-43-2	
Toluene	ND ug/L		1.0	1		07/30/12 13:49	108-88-3	
Ethylbenzene	ND ug/L		1.0	1		07/30/12 13:49	100-41-4	
Xylene (Total)	ND ug/L		3.0	1		07/30/12 13:49	1330-20-7	
Methyl-tert-butyl ether	ND ug/L		1.0	1		07/30/12 13:49	1634-04-4	
Naphthalene	ND ug/L		10.0	1		07/30/12 13:49	91-20-3	
1,2-Dichloroethane	ND ug/L		1.0	1		07/30/12 13:49	107-06-2	
tert-Butyl Alcohol	ND ug/L		10.0	1		07/30/12 13:49	75-65-0	
Surrogates								
Dibromofluoromethane (S)	92 %		80-120	1		07/30/12 13:49	1868-53-7	
Toluene-d8 (S)	104 %		80-120	1		07/30/12 13:49	2037-26-5	
4-Bromofluorobenzene (S)	104 %		80-120	1		07/30/12 13:49	460-00-4	
Preservation pH	1.0		0.10	1		07/30/12 13:49		
Chromium, Hexavalent		Analytical Method: SM 3500-Cr D						
Chromium, Hexavalent	ND mg/L		0.010	1		07/21/12 10:55	18540-29-9	

ANALYTICAL RESULTS

Project: KUHLMAN DIECASTING

Pace Project No.: 60125643

Sample: SB-1-25-27 Lab ID: 60125643003 Collected: 07/17/12 10:11 Received: 07/21/12 08:55 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
OA2 GCS Analytical Method: OA2 Preparation Method: OA2								
Diesel Fuel	ND	mg/kg	24.0	1	07/24/12 00:00	07/29/12 07:40	68334-30-5	
Fuel Oil	ND	mg/kg	24.0	1	07/24/12 00:00	07/29/12 07:40	68553-00-4	
Jet Fuel	ND	mg/kg	24.0	1	07/24/12 00:00	07/29/12 07:40	94114-58-6	
Kerosene	ND	mg/kg	24.0	1	07/24/12 00:00	07/29/12 07:40	8008-20-6	
Mineral Spirits	ND	mg/kg	24.0	1	07/24/12 00:00	07/29/12 07:40	8030-30-6	
Motor Oil	ND	mg/kg	24.0	1	07/24/12 00:00	07/29/12 07:40	64742-65-0	
Total Petroleum Hydrocarbons	ND	mg/kg	24.0	1	07/24/12 00:00	07/29/12 07:40		
Surrogates								
n-Tetracosane (S)	88 %		50-137	1	07/24/12 00:00	07/29/12 07:40	646-31-1	
p-Terphenyl (S)	82 %		41-129	1	07/24/12 00:00	07/29/12 07:40	92-94-4	
6010 MET ICP Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Antimony	ND	mg/kg	1.2	1	07/25/12 16:15	07/26/12 17:48	7440-36-0	
Arsenic	8.2	mg/kg	1.2	1	07/25/12 16:15	07/26/12 17:48	7440-38-2	
Beryllium	0.80	mg/kg	0.12	1	07/25/12 16:15	07/26/12 17:48	7440-41-7	
Cadmium	ND	mg/kg	0.58	1	07/25/12 16:15	07/26/12 17:48	7440-43-9	
Chromium	19.5	mg/kg	0.58	1	07/25/12 16:15	07/26/12 17:48	7440-47-3	
Copper	17.8	mg/kg	1.2	1	07/25/12 16:15	07/26/12 17:48	7440-50-8	
Lead	14.4	mg/kg	0.58	1	07/25/12 16:15	07/26/12 17:48	7439-92-1	
Nickel	23.0	mg/kg	0.58	1	07/25/12 16:15	07/26/12 17:48	7440-02-0	
Selenium	ND	mg/kg	1.8	1	07/25/12 16:15	07/26/12 17:48	7782-49-2	
Silver	ND	mg/kg	0.82	1	07/25/12 16:15	07/26/12 17:48	7440-22-4	
Thallium	ND	mg/kg	2.3	1	07/25/12 16:15	07/26/12 17:48	7440-28-0	
Zinc	65.8	mg/kg	11.7	1	07/25/12 16:15	07/26/12 17:48	7440-66-6	
7471 Mercury Analytical Method: EPA 7471 Preparation Method: EPA 7471								
Mercury	ND	mg/kg	0.050	1	07/26/12 12:50	07/26/12 16:47	7439-97-6	
8270 MSSV PAH by SIM Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546								
Acenaphthene	ND	ug/kg	4.2	1	07/26/12 00:00	07/27/12 13:07	83-32-9	
Acenaphthylene	ND	ug/kg	4.2	1	07/26/12 00:00	07/27/12 13:07	208-96-8	
Anthracene	ND	ug/kg	4.2	1	07/26/12 00:00	07/27/12 13:07	120-12-7	
Benzo(a)anthracene	ND	ug/kg	4.2	1	07/26/12 00:00	07/27/12 13:07	56-55-3	
Benzo(a)pyrene	ND	ug/kg	4.2	1	07/26/12 00:00	07/27/12 13:07	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	4.2	1	07/26/12 00:00	07/27/12 13:07	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	4.2	1	07/26/12 00:00	07/27/12 13:07	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	4.2	1	07/26/12 00:00	07/27/12 13:07	207-08-9	
Chrysene	ND	ug/kg	4.2	1	07/26/12 00:00	07/27/12 13:07	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	4.2	1	07/26/12 00:00	07/27/12 13:07	53-70-3	
Fluoranthene	ND	ug/kg	4.2	1	07/26/12 00:00	07/27/12 13:07	206-44-0	
Fluorene	ND	ug/kg	4.2	1	07/26/12 00:00	07/27/12 13:07	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	4.2	1	07/26/12 00:00	07/27/12 13:07	193-39-5	
Naphthalene	14.4	ug/kg	4.2	1	07/26/12 00:00	07/27/12 13:07	91-20-3	
Phenanthrene	ND	ug/kg	4.2	1	07/26/12 00:00	07/27/12 13:07	85-01-8	
Pyrene	ND	ug/kg	4.2	1	07/26/12 00:00	07/27/12 13:07	129-00-0	

ANALYTICAL RESULTS

Project: KUHLMAN DIECASTING

Pace Project No.: 60125643

Sample: SB-1-25-27 Lab ID: 60125643003 Collected: 07/17/12 10:11 Received: 07/21/12 08:55 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
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8270 MSSV PAH by SIM

Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546

Surrogates

Nitrobenzene-d5 (S)	81 %		35-121	1	07/26/12 00:00	07/27/12 13:07	4165-60-0	
2-Fluorobiphenyl (S)	81 %		41-120	1	07/26/12 00:00	07/27/12 13:07	321-60-8	
Terphenyl-d14 (S)	69 %		39-123	1	07/26/12 00:00	07/27/12 13:07	1718-51-0	

OA1 Volatile Pet. Hydrocarbons

Analytical Method: OA1

Gasoline Range Organics	ND mg/kg		1.2	1		07/26/12 13:34		
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8260 MSV 5035A VOA

Analytical Method: EPA 8260

Acetone	ND ug/kg		23.2	1		07/26/12 13:34	67-64-1	
Benzene	ND ug/kg		5.8	1		07/26/12 13:34	71-43-2	
Bromobenzene	ND ug/kg		5.8	1		07/26/12 13:34	108-86-1	
Bromochloromethane	ND ug/kg		5.8	1		07/26/12 13:34	74-97-5	
Bromodichloromethane	ND ug/kg		5.8	1		07/26/12 13:34	75-27-4	
Bromoform	ND ug/kg		5.8	1		07/26/12 13:34	75-25-2	
Bromomethane	ND ug/kg		5.8	1		07/26/12 13:34	74-83-9	
2-Butanone (MEK)	ND ug/kg		11.6	1		07/26/12 13:34	78-93-3	
n-Butylbenzene	ND ug/kg		5.8	1		07/26/12 13:34	104-51-8	
sec-Butylbenzene	ND ug/kg		5.8	1		07/26/12 13:34	135-98-8	
tert-Butylbenzene	ND ug/kg		5.8	1		07/26/12 13:34	98-06-6	
Carbon disulfide	ND ug/kg		5.8	1		07/26/12 13:34	75-15-0	
Carbon tetrachloride	ND ug/kg		5.8	1		07/26/12 13:34	56-23-5	
Chlorobenzene	ND ug/kg		5.8	1		07/26/12 13:34	108-90-7	
Chloroethane	ND ug/kg		5.8	1		07/26/12 13:34	75-00-3	
Chloroform	ND ug/kg		5.8	1		07/26/12 13:34	67-66-3	
Chloromethane	ND ug/kg		5.8	1		07/26/12 13:34	74-87-3	
2-Chlorotoluene	ND ug/kg		5.8	1		07/26/12 13:34	95-49-8	
4-Chlorotoluene	ND ug/kg		5.8	1		07/26/12 13:34	106-43-4	
1,2-Dibromo-3-chloropropane	ND ug/kg		11.6	1		07/26/12 13:34	96-12-8	
Dibromochloromethane	ND ug/kg		5.8	1		07/26/12 13:34	124-48-1	
1,2-Dibromoethane (EDB)	ND ug/kg		5.8	1		07/26/12 13:34	106-93-4	
Dibromomethane	ND ug/kg		5.8	1		07/26/12 13:34	74-95-3	
1,2-Dichlorobenzene	ND ug/kg		5.8	1		07/26/12 13:34	95-50-1	
1,3-Dichlorobenzene	ND ug/kg		5.8	1		07/26/12 13:34	541-73-1	
1,4-Dichlorobenzene	ND ug/kg		5.8	1		07/26/12 13:34	106-46-7	
Dichlorodifluoromethane	ND ug/kg		5.8	1		07/26/12 13:34	75-71-8	
1,1-Dichloroethane	ND ug/kg		5.8	1		07/26/12 13:34	75-34-3	
1,2-Dichloroethane	ND ug/kg		5.8	1		07/26/12 13:34	107-06-2	
1,2-Dichloroethene (Total)	ND ug/kg		5.8	1		07/26/12 13:34	540-59-0	
1,1-Dichloroethene	ND ug/kg		5.8	1		07/26/12 13:34	75-35-4	
cis-1,2-Dichloroethene	ND ug/kg		5.8	1		07/26/12 13:34	156-59-2	
trans-1,2-Dichloroethene	ND ug/kg		5.8	1		07/26/12 13:34	156-60-5	
1,2-Dichloropropane	ND ug/kg		5.8	1		07/26/12 13:34	78-87-5	
1,3-Dichloropropane	ND ug/kg		5.8	1		07/26/12 13:34	142-28-9	
2,2-Dichloropropane	ND ug/kg		5.8	1		07/26/12 13:34	594-20-7	
1,1-Dichloropropene	ND ug/kg		5.8	1		07/26/12 13:34	563-58-6	

Date: 08/09/2012 10:51 AM

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: KUHLMAN DIECASTING

Pace Project No.: 60125643

Sample: **SB-1-25-27** Lab ID: **60125643003** Collected: 07/17/12 10:11 Received: 07/21/12 08:55 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035A VOA		Analytical Method: EPA 8260						
cis-1,3-Dichloropropene	ND	ug/kg	5.8	1		07/26/12 13:34	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/kg	5.8	1		07/26/12 13:34	10061-02-6	
Ethylbenzene	ND	ug/kg	5.8	1		07/26/12 13:34	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	5.8	1		07/26/12 13:34	87-68-3	
2-Hexanone	ND	ug/kg	23.2	1		07/26/12 13:34	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/kg	5.8	1		07/26/12 13:34	98-82-8	
p-Isopropyltoluene	ND	ug/kg	5.8	1		07/26/12 13:34	99-87-6	
Methylene chloride	ND	ug/kg	5.8	1		07/26/12 13:34	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	11.6	1		07/26/12 13:34	108-10-1	
Methyl-tert-butyl ether	ND	ug/kg	5.8	1		07/26/12 13:34	1634-04-4	
Naphthalene	ND	ug/kg	11.6	1		07/26/12 13:34	91-20-3	
n-Propylbenzene	ND	ug/kg	5.8	1		07/26/12 13:34	103-65-1	
Styrene	ND	ug/kg	5.8	1		07/26/12 13:34	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/kg	5.8	1		07/26/12 13:34	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	5.8	1		07/26/12 13:34	79-34-5	
Tetrachloroethene	ND	ug/kg	5.8	1		07/26/12 13:34	127-18-4	
Toluene	ND	ug/kg	5.8	1		07/26/12 13:34	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/kg	5.8	1		07/26/12 13:34	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/kg	5.8	1		07/26/12 13:34	120-82-1	
1,1,1-Trichloroethane	ND	ug/kg	5.8	1		07/26/12 13:34	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	5.8	1		07/26/12 13:34	79-00-5	
Trichloroethene	ND	ug/kg	5.8	1		07/26/12 13:34	79-01-6	
Trichlorofluoromethane	ND	ug/kg	5.8	1		07/26/12 13:34	75-69-4	
1,2,3-Trichloropropane	ND	ug/kg	5.8	1		07/26/12 13:34	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/kg	5.8	1		07/26/12 13:34	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/kg	5.8	1		07/26/12 13:34	108-67-8	
Vinyl chloride	ND	ug/kg	5.8	1		07/26/12 13:34	75-01-4	
Xylene (Total)	ND	ug/kg	5.8	1		07/26/12 13:34	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	102 %		78-122	1		07/26/12 13:34	1868-53-7	
Toluene-d8 (S)	101 %		80-123	1		07/26/12 13:34	2037-26-5	
4-Bromofluorobenzene (S)	98 %		78-125	1		07/26/12 13:34	460-00-4	
1,2-Dichloroethane-d4 (S)	110 %		73-135	1		07/26/12 13:34	17060-07-0	

Percent Moisture

Analytical Method: ASTM D2974

Percent Moisture	23.5 %	0.50	1	08/01/12 00:00
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ANALYTICAL RESULTS

Project: KUHLMAN DIECASTING

Pace Project No.: 60125643

Sample: SB-1-GW		Lab ID: 60125643004	Collected: 07/17/12 12:05	Received: 07/21/12 08:55	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
OA2 GCS		Analytical Method: OA2 Preparation Method: OA2						
Diesel Fuel	ND mg/L		0.40	1	07/24/12 00:00	07/25/12 03:13	68334-30-5	
Fuel Oil	ND mg/L		0.40	1	07/24/12 00:00	07/25/12 03:13	68553-00-4	
Jet Fuel	ND mg/L		0.40	1	07/24/12 00:00	07/25/12 03:13	94114-58-6	
Kerosene	ND mg/L		0.40	1	07/24/12 00:00	07/25/12 03:13	8008-20-6	
Mineral Spirits	ND mg/L		0.40	1	07/24/12 00:00	07/25/12 03:13	8030-30-6	
Motor Oil	ND mg/L		0.40	1	07/24/12 00:00	07/25/12 03:13	64742-65-0	
Total Petroleum Hydrocarbons	ND mg/L		0.40	1	07/24/12 00:00	07/25/12 03:13		
Surrogates								
p-Terphenyl (S)	68 %		20-122	1	07/24/12 00:00	07/25/12 03:13	92-94-4	
n-Tetracosane (S)	68 %		30-122	1	07/24/12 00:00	07/25/12 03:13	646-31-1	
6010 MET ICP		Analytical Method: EPA 6010 Preparation Method: EPA 3010						
Antimony	ND ug/L		10.0	1	07/26/12 14:30	07/27/12 12:27	7440-36-0	
Arsenic	32.4 ug/L		10.0	1	07/26/12 14:30	07/27/12 12:27	7440-38-2	
Beryllium	3.1 ug/L		1.0	1	07/26/12 14:30	07/27/12 12:27	7440-41-7	
Cadmium	8.0 ug/L		5.0	1	07/26/12 14:30	07/27/12 12:27	7440-43-9	
Chromium	43.4 ug/L		5.0	1	07/26/12 14:30	07/27/12 12:27	7440-47-3	
Copper	259 ug/L		10.0	1	07/26/12 14:30	07/27/12 12:27	7440-50-8	
Lead	65.0 ug/L		5.0	1	07/26/12 14:30	07/27/12 12:27	7439-92-1	
Nickel	158 ug/L		5.0	1	07/26/12 14:30	07/27/12 12:27	7440-02-0	
Selenium	ND ug/L		15.0	1	07/26/12 14:30	07/27/12 12:27	7782-49-2	
Silver	ND ug/L		7.0	1	07/26/12 14:30	07/27/12 12:27	7440-22-4	
Thallium	ND ug/L		20.0	1	07/26/12 14:30	07/27/12 12:27	7440-28-0	
Zinc	1480 ug/L		50.0	1	07/26/12 14:30	07/27/12 12:27	7440-66-6	
6010 MET ICP, Dissolved		Analytical Method: EPA 6010 Preparation Method: EPA 3010						
Antimony, Dissolved	ND ug/L		10.0	1	07/26/12 14:30	07/30/12 16:31	7440-36-0	D9
Arsenic, Dissolved	39.0 ug/L		10.0	1	07/26/12 14:30	07/30/12 16:31	7440-38-2	
Beryllium, Dissolved	ND ug/L		1.0	1	07/26/12 14:30	07/30/12 16:31	7440-41-7	
Cadmium, Dissolved	ND ug/L		5.0	1	07/26/12 14:30	07/30/12 16:31	7440-43-9	
Chromium, Dissolved	ND ug/L		5.0	1	07/26/12 14:30	07/30/12 16:31	7440-47-3	
Copper, Dissolved	ND ug/L		10.0	1	07/26/12 14:30	07/30/12 16:31	7440-50-8	
Lead, Dissolved	ND ug/L		5.0	1	07/26/12 14:30	07/30/12 16:31	7439-92-1	
Nickel, Dissolved	18.2 ug/L		5.0	1	07/26/12 14:30	07/30/12 16:31	7440-02-0	
Selenium, Dissolved	ND ug/L		15.0	1	07/26/12 14:30	07/30/12 16:31	7782-49-2	
Silver, Dissolved	ND ug/L		7.0	1	07/26/12 14:30	07/30/12 16:31	7440-22-4	
Thallium, Dissolved	ND ug/L		20.0	1	07/26/12 14:30	07/30/12 16:31	7440-28-0	
Zinc, Dissolved	146 ug/L		50.0	1	07/26/12 14:30	07/30/12 16:31	7440-66-6	
7470 Mercury		Analytical Method: EPA 7470 Preparation Method: EPA 7470						
Mercury	ND ug/L		0.20	1	07/24/12 09:15	07/24/12 15:36	7439-97-6	
7470 Mercury, Dissolved		Analytical Method: EPA 7470 Preparation Method: EPA 7470						
Mercury, Dissolved	ND ug/L		0.20	1	08/01/12 06:30	08/03/12 11:22	7439-97-6	M1

ANALYTICAL RESULTS

Project: KUHLMAN DIECASTING

Pace Project No.: 60125643

Sample: SB-1-GW		Lab ID: 60125643004	Collected: 07/17/12 12:05	Received: 07/21/12 08:55	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by SIM		Analytical Method: EPA 8270C by SIM Preparation Method: EPA 3510C						
Acenaphthene	ND ug/L		0.10	1	07/24/12 00:00	08/06/12 18:29	83-32-9	
Acenaphthylene	ND ug/L		0.10	1	07/24/12 00:00	08/06/12 18:29	208-96-8	
Anthracene	ND ug/L		0.10	1	07/24/12 00:00	08/06/12 18:29	120-12-7	
Benzo(a)anthracene	ND ug/L		0.10	1	07/24/12 00:00	08/06/12 18:29	56-55-3	
Benzo(a)pyrene	ND ug/L		0.10	1	07/24/12 00:00	08/06/12 18:29	50-32-8	
Benzo(b)fluoranthene	ND ug/L		0.10	1	07/24/12 00:00	08/06/12 18:29	205-99-2	
Benzo(g,h,i)perylene	ND ug/L		0.10	1	07/24/12 00:00	08/06/12 18:29	191-24-2	
Benzo(k)fluoranthene	ND ug/L		0.10	1	07/24/12 00:00	08/06/12 18:29	207-08-9	
Chrysene	ND ug/L		0.10	1	07/24/12 00:00	08/06/12 18:29	218-01-9	
Dibenz(a,h)anthracene	ND ug/L		0.10	1	07/24/12 00:00	08/06/12 18:29	53-70-3	
Fluoranthene	ND ug/L		0.10	1	07/24/12 00:00	08/06/12 18:29	206-44-0	
Fluorene	ND ug/L		0.10	1	07/24/12 00:00	08/06/12 18:29	86-73-7	
Indeno(1,2,3-cd)pyrene	ND ug/L		0.10	1	07/24/12 00:00	08/06/12 18:29	193-39-5	
Naphthalene	ND ug/L		0.50	1	07/24/12 00:00	08/06/12 18:29	91-20-3	
Phenanthrene	ND ug/L		0.50	1	07/24/12 00:00	08/06/12 18:29	85-01-8	
Pyrene	ND ug/L		0.10	1	07/24/12 00:00	08/06/12 18:29	129-00-0	
Surrogates								
Nitrobenzene-d5 (S)	78 %		42-120	1	07/24/12 00:00	08/06/12 18:29	4165-60-0	
2-Fluorobiphenyl (S)	78 %		44-120	1	07/24/12 00:00	08/06/12 18:29	321-60-8	
Terphenyl-d14 (S)	90 %		46-131	1	07/24/12 00:00	08/06/12 18:29	1718-51-0	
8260 MSV		Analytical Method: EPA 5030B/8260						
Acetone	ND ug/L		10.0	1		07/27/12 17:30	67-64-1	
Benzene	ND ug/L		1.0	1		07/27/12 17:30	71-43-2	
Bromobenzene	ND ug/L		1.0	1		07/27/12 17:30	108-86-1	
Bromochloromethane	ND ug/L		1.0	1		07/27/12 17:30	74-97-5	
Bromodichloromethane	ND ug/L		1.0	1		07/27/12 17:30	75-27-4	
Bromoform	ND ug/L		1.0	1		07/27/12 17:30	75-25-2	
Bromomethane	ND ug/L		5.0	1		07/27/12 17:30	74-83-9	
2-Butanone (MEK)	ND ug/L		10.0	1		07/27/12 17:30	78-93-3	
n-Butylbenzene	ND ug/L		1.0	1		07/27/12 17:30	104-51-8	
sec-Butylbenzene	ND ug/L		1.0	1		07/27/12 17:30	135-98-8	
tert-Butylbenzene	ND ug/L		1.0	1		07/27/12 17:30	98-06-6	
Carbon disulfide	ND ug/L		5.0	1		07/27/12 17:30	75-15-0	
Carbon tetrachloride	ND ug/L		1.0	1		07/27/12 17:30	56-23-5	
Chlorobenzene	ND ug/L		1.0	1		07/27/12 17:30	108-90-7	
Chloroethane	ND ug/L		1.0	1		07/27/12 17:30	75-00-3	
Chloroform	ND ug/L		1.0	1		07/27/12 17:30	67-66-3	
Chloromethane	ND ug/L		1.0	1		07/27/12 17:30	74-87-3	
2-Chlorotoluene	ND ug/L		1.0	1		07/27/12 17:30	95-49-8	
4-Chlorotoluene	ND ug/L		1.0	1		07/27/12 17:30	106-43-4	
1,2-Dibromo-3-chloropropane	ND ug/L		2.5	1		07/27/12 17:30	96-12-8	
Dibromochloromethane	ND ug/L		1.0	1		07/27/12 17:30	124-48-1	
1,2-Dibromoethane (EDB)	ND ug/L		1.0	1		07/27/12 17:30	106-93-4	
Dibromomethane	ND ug/L		1.0	1		07/27/12 17:30	74-95-3	
1,2-Dichlorobenzene	ND ug/L		1.0	1		07/27/12 17:30	95-50-1	
1,3-Dichlorobenzene	ND ug/L		1.0	1		07/27/12 17:30	541-73-1	

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REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: KUHLMAN DIECASTING

Pace Project No.: 60125643

Sample: SB-1-GW		Lab ID: 60125643004	Collected: 07/17/12 12:05	Received: 07/21/12 08:55	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV		Analytical Method: EPA 5030B/8260						
1,4-Dichlorobenzene	ND ug/L		1.0	1		07/27/12 17:30	106-46-7	
Dichlorodifluoromethane	ND ug/L		1.0	1		07/27/12 17:30	75-71-8	
1,1-Dichloroethane	ND ug/L		1.0	1		07/27/12 17:30	75-34-3	
1,2-Dichloroethane	ND ug/L		1.0	1		07/27/12 17:30	107-06-2	
1,2-Dichloroethene (Total)	ND ug/L		1.0	1		07/27/12 17:30	540-59-0	
1,1-Dichloroethene	ND ug/L		1.0	1		07/27/12 17:30	75-35-4	
cis-1,2-Dichloroethene	ND ug/L		1.0	1		07/27/12 17:30	156-59-2	
trans-1,2-Dichloroethene	ND ug/L		1.0	1		07/27/12 17:30	156-60-5	
1,2-Dichloropropane	ND ug/L		1.0	1		07/27/12 17:30	78-87-5	
1,3-Dichloropropane	ND ug/L		1.0	1		07/27/12 17:30	142-28-9	
2,2-Dichloropropane	ND ug/L		1.0	1		07/27/12 17:30	594-20-7	
1,1-Dichloropropene	ND ug/L		1.0	1		07/27/12 17:30	563-58-6	
cis-1,3-Dichloropropene	ND ug/L		1.0	1		07/27/12 17:30	10061-01-5	
trans-1,3-Dichloropropene	ND ug/L		1.0	1		07/27/12 17:30	10061-02-6	
Ethylbenzene	ND ug/L		1.0	1		07/27/12 17:30	100-41-4	
Hexachloro-1,3-butadiene	ND ug/L		1.0	1		07/27/12 17:30	87-68-3	
2-Hexanone	ND ug/L		10.0	1		07/27/12 17:30	591-78-6	
Isopropylbenzene (Cumene)	ND ug/L		1.0	1		07/27/12 17:30	98-82-8	
p-Isopropyltoluene	ND ug/L		1.0	1		07/27/12 17:30	99-87-6	
Methylene chloride	ND ug/L		1.0	1		07/27/12 17:30	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND ug/L		10.0	1		07/27/12 17:30	108-10-1	
Methyl-tert-butyl ether	ND ug/L		1.0	1		07/27/12 17:30	1634-04-4	
Naphthalene	ND ug/L		10.0	1		07/27/12 17:30	91-20-3	
n-Propylbenzene	ND ug/L		1.0	1		07/27/12 17:30	103-65-1	
Styrene	ND ug/L		1.0	1		07/27/12 17:30	100-42-5	
1,1,1,2-Tetrachloroethane	ND ug/L		1.0	1		07/27/12 17:30	630-20-6	
1,1,2,2-Tetrachloroethane	ND ug/L		1.0	1		07/27/12 17:30	79-34-5	
Tetrachloroethene	ND ug/L		1.0	1		07/27/12 17:30	127-18-4	
Toluene	ND ug/L		1.0	1		07/27/12 17:30	108-88-3	
1,2,3-Trichlorobenzene	ND ug/L		1.0	1		07/27/12 17:30	87-61-6	
1,2,4-Trichlorobenzene	ND ug/L		1.0	1		07/27/12 17:30	120-82-1	
1,1,1-Trichloroethane	ND ug/L		1.0	1		07/27/12 17:30	71-55-6	
1,1,2-Trichloroethane	ND ug/L		1.0	1		07/27/12 17:30	79-00-5	
Trichloroethene	1.1 ug/L		1.0	1		07/27/12 17:30	79-01-6	
Trichlorofluoromethane	ND ug/L		1.0	1		07/27/12 17:30	75-69-4	
1,2,3-Trichloropropane	ND ug/L		2.5	1		07/27/12 17:30	96-18-4	
1,2,4-Trimethylbenzene	ND ug/L		1.0	1		07/27/12 17:30	95-63-6	
1,3,5-Trimethylbenzene	ND ug/L		1.0	1		07/27/12 17:30	108-67-8	
Vinyl chloride	ND ug/L		1.0	1		07/27/12 17:30	75-01-4	
Xylene (Total)	ND ug/L		3.0	1		07/27/12 17:30	1330-20-7	
Surrogates								
4-Bromofluorobenzene (S)	106 %		80-120	1		07/27/12 17:30	460-00-4	HS
Dibromofluoromethane (S)	95 %		80-120	1		07/27/12 17:30	1868-53-7	
1,2-Dichloroethane-d4 (S)	94 %		80-120	1		07/27/12 17:30	17060-07-0	
Toluene-d8 (S)	97 %		80-120	1		07/27/12 17:30	2037-26-5	
Preservation pH	1.0		0.10	1		07/27/12 17:30		

ANALYTICAL RESULTS

Project: KUHLMAN DIECASTING

Pace Project No.: 60125643

Sample: SB-1-GW		Lab ID: 60125643004	Collected: 07/17/12 12:05	Received: 07/21/12 08:55	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260/OA1 UST, Water		Analytical Method: EPA 8260/OA1						
Gasoline Range Organics	ND mg/L		0.50	1		07/27/12 17:30		
Benzene	ND ug/L		1.0	1		07/27/12 17:30	71-43-2	
Toluene	ND ug/L		1.0	1		07/27/12 17:30	108-88-3	
Ethylbenzene	ND ug/L		1.0	1		07/27/12 17:30	100-41-4	
Xylene (Total)	ND ug/L		3.0	1		07/27/12 17:30	1330-20-7	
Methyl-tert-butyl ether	ND ug/L		1.0	1		07/27/12 17:30	1634-04-4	
Naphthalene	ND ug/L		10.0	1		07/27/12 17:30	91-20-3	
1,2-Dichloroethane	ND ug/L		1.0	1		07/27/12 17:30	107-06-2	
tert-Butyl Alcohol	ND ug/L		10.0	1		07/27/12 17:30	75-65-0	
Surrogates								
Dibromofluoromethane (S)	95 %		80-120	1		07/27/12 17:30	1868-53-7	HS
Toluene-d8 (S)	97 %		80-120	1		07/27/12 17:30	2037-26-5	
4-Bromofluorobenzene (S)	106 %		80-120	1		07/27/12 17:30	460-00-4	
1,2-Dichloroethane-d4 (S)	94 %		80-120	1		07/27/12 17:30	17060-07-0	
Preservation pH	1.0		0.10	1		07/27/12 17:30		

ANALYTICAL RESULTS

Project: KUHLMAN DIECASTING

Pace Project No.: 60125643

Sample: SB-2-2-4 Lab ID: 60125643005 Collected: 07/17/12 14:32 Received: 07/21/12 08:55 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
OA2 GCS Analytical Method: OA2 Preparation Method: OA2								
Diesel Fuel	ND	mg/kg	20.4	1	07/24/12 00:00	07/29/12 07:51	68334-30-5	
Fuel Oil	ND	mg/kg	20.4	1	07/24/12 00:00	07/29/12 07:51	68553-00-4	
Jet Fuel	ND	mg/kg	20.4	1	07/24/12 00:00	07/29/12 07:51	94114-58-6	
Kerosene	ND	mg/kg	20.4	1	07/24/12 00:00	07/29/12 07:51	8008-20-6	
Mineral Spirits	ND	mg/kg	20.4	1	07/24/12 00:00	07/29/12 07:51	8030-30-6	
Motor Oil	ND	mg/kg	20.4	1	07/24/12 00:00	07/29/12 07:51	64742-65-0	
Total Petroleum Hydrocarbons	ND	mg/kg	20.4	1	07/24/12 00:00	07/29/12 07:51		

Surrogates

n-Tetracosane (S)	89 %		50-137	1	07/24/12 00:00	07/29/12 07:51	646-31-1	
p-Terphenyl (S)	80 %		41-129	1	07/24/12 00:00	07/29/12 07:51	92-94-4	

6010 MET ICP

Analytical Method: EPA 6010 Preparation Method: EPA 3050

Antimony	ND	mg/kg	1.1	1	07/25/12 16:15	07/26/12 17:50	7440-36-0	
Arsenic	4.5	mg/kg	1.1	1	07/25/12 16:15	07/26/12 17:50	7440-38-2	
Beryllium	0.63	mg/kg	0.11	1	07/25/12 16:15	07/26/12 17:50	7440-41-7	
Cadmium	ND	mg/kg	0.54	1	07/25/12 16:15	07/26/12 17:50	7440-43-9	
Chromium	13.2	mg/kg	0.54	1	07/25/12 16:15	07/26/12 17:50	7440-47-3	
Copper	12.7	mg/kg	1.1	1	07/25/12 16:15	07/26/12 17:50	7440-50-8	
Lead	25.0	mg/kg	0.54	1	07/25/12 16:15	07/26/12 17:50	7439-92-1	
Nickel	15.2	mg/kg	0.54	1	07/25/12 16:15	07/26/12 17:50	7440-02-0	
Selenium	ND	mg/kg	1.6	1	07/25/12 16:15	07/26/12 17:50	7782-49-2	
Silver	ND	mg/kg	0.76	1	07/25/12 16:15	07/26/12 17:50	7440-22-4	
Thallium	ND	mg/kg	2.2	1	07/25/12 16:15	07/26/12 17:50	7440-28-0	
Zinc	64.9	mg/kg	10.8	1	07/25/12 16:15	07/26/12 17:50	7440-66-6	

7471 Mercury

Analytical Method: EPA 7471 Preparation Method: EPA 7471

Mercury	0.066	mg/kg	0.047	1	07/26/12 12:50	07/26/12 16:54	7439-97-6	
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8270 MSSV PAH by SIM

Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546

Acenaphthene	ND	ug/kg	3.7	1	07/26/12 00:00	07/27/12 13:28	83-32-9	
Acenaphthylene	6.3	ug/kg	3.7	1	07/26/12 00:00	07/27/12 13:28	208-96-8	
Anthracene	8.9	ug/kg	3.7	1	07/26/12 00:00	07/27/12 13:28	120-12-7	
Benzo(a)anthracene	39.9	ug/kg	3.7	1	07/26/12 00:00	07/27/12 13:28	56-55-3	
Benzo(a)pyrene	36.6	ug/kg	3.7	1	07/26/12 00:00	07/27/12 13:28	50-32-8	
Benzo(b)fluoranthene	50.7	ug/kg	3.7	1	07/26/12 00:00	07/27/12 13:28	205-99-2	
Benzo(g,h,i)perylene	29.4	ug/kg	3.7	1	07/26/12 00:00	07/27/12 13:28	191-24-2	
Benzo(k)fluoranthene	28.1	ug/kg	3.7	1	07/26/12 00:00	07/27/12 13:28	207-08-9	
Chrysene	39.8	ug/kg	3.7	1	07/26/12 00:00	07/27/12 13:28	218-01-9	
Dibenz(a,h)anthracene	8.9	ug/kg	3.7	1	07/26/12 00:00	07/27/12 13:28	53-70-3	
Fluoranthene	61.3	ug/kg	3.7	1	07/26/12 00:00	07/27/12 13:28	206-44-0	
Fluorene	ND	ug/kg	3.7	1	07/26/12 00:00	07/27/12 13:28	86-73-7	
Indeno(1,2,3-cd)pyrene	22.1	ug/kg	3.7	1	07/26/12 00:00	07/27/12 13:28	193-39-5	
Naphthalene	ND	ug/kg	3.7	1	07/26/12 00:00	07/27/12 13:28	91-20-3	
Phenanthrene	33.4	ug/kg	3.7	1	07/26/12 00:00	07/27/12 13:28	85-01-8	
Pyrene	53.3	ug/kg	3.7	1	07/26/12 00:00	07/27/12 13:28	129-00-0	

ANALYTICAL RESULTS

Project: KUHLMAN DIECASTING

Pace Project No.: 60125643

Sample: SB-2-2-4 **Lab ID:** 60125643005 **Collected:** 07/17/12 14:32 **Received:** 07/21/12 08:55 **Matrix:** Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by SIM								
Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546								
Surrogates								
Nitrobenzene-d5 (S)	88 %		35-121	1	07/26/12 00:00	07/27/12 13:28	4165-60-0	
2-Fluorobiphenyl (S)	85 %		41-120	1	07/26/12 00:00	07/27/12 13:28	321-60-8	
Terphenyl-d14 (S)	72 %		39-123	1	07/26/12 00:00	07/27/12 13:28	1718-51-0	
OA1 Volatile Pet. Hydrocarbons								
Analytical Method: OA1								
Gasoline Range Organics	ND mg/kg		1.3	1		07/26/12 13:50		
8260 MSV 5035A VOA								
Analytical Method: EPA 8260								
Acetone	186 ug/kg		25.7	1		07/26/12 13:50	67-64-1	
Benzene	ND ug/kg		6.4	1		07/26/12 13:50	71-43-2	
Bromobenzene	ND ug/kg		6.4	1		07/26/12 13:50	108-86-1	
Bromochloromethane	ND ug/kg		6.4	1		07/26/12 13:50	74-97-5	
Bromodichloromethane	ND ug/kg		6.4	1		07/26/12 13:50	75-27-4	
Bromoform	ND ug/kg		6.4	1		07/26/12 13:50	75-25-2	
Bromomethane	ND ug/kg		6.4	1		07/26/12 13:50	74-83-9	
2-Butanone (MEK)	18.5 ug/kg		12.9	1		07/26/12 13:50	78-93-3	
n-Butylbenzene	ND ug/kg		6.4	1		07/26/12 13:50	104-51-8	
sec-Butylbenzene	ND ug/kg		6.4	1		07/26/12 13:50	135-98-8	
tert-Butylbenzene	ND ug/kg		6.4	1		07/26/12 13:50	98-06-6	
Carbon disulfide	ND ug/kg		6.4	1		07/26/12 13:50	75-15-0	
Carbon tetrachloride	ND ug/kg		6.4	1		07/26/12 13:50	56-23-5	
Chlorobenzene	ND ug/kg		6.4	1		07/26/12 13:50	108-90-7	
Chloroethane	ND ug/kg		6.4	1		07/26/12 13:50	75-00-3	
Chloroform	ND ug/kg		6.4	1		07/26/12 13:50	67-66-3	
Chloromethane	ND ug/kg		6.4	1		07/26/12 13:50	74-87-3	
2-Chlorotoluene	ND ug/kg		6.4	1		07/26/12 13:50	95-49-8	
4-Chlorotoluene	ND ug/kg		6.4	1		07/26/12 13:50	106-43-4	
1,2-Dibromo-3-chloropropane	ND ug/kg		12.9	1		07/26/12 13:50	96-12-8	
Dibromochloromethane	ND ug/kg		6.4	1		07/26/12 13:50	124-48-1	
1,2-Dibromoethane (EDB)	ND ug/kg		6.4	1		07/26/12 13:50	106-93-4	
Dibromomethane	ND ug/kg		6.4	1		07/26/12 13:50	74-95-3	
1,2-Dichlorobenzene	ND ug/kg		6.4	1		07/26/12 13:50	95-50-1	
1,3-Dichlorobenzene	ND ug/kg		6.4	1		07/26/12 13:50	541-73-1	
1,4-Dichlorobenzene	ND ug/kg		6.4	1		07/26/12 13:50	106-46-7	
Dichlorodifluoromethane	ND ug/kg		6.4	1		07/26/12 13:50	75-71-8	
1,1-Dichloroethane	ND ug/kg		6.4	1		07/26/12 13:50	75-34-3	
1,2-Dichloroethane	ND ug/kg		6.4	1		07/26/12 13:50	107-06-2	
1,2-Dichloroethene (Total)	ND ug/kg		6.4	1		07/26/12 13:50	540-59-0	
1,1-Dichloroethene	ND ug/kg		6.4	1		07/26/12 13:50	75-35-4	
cis-1,2-Dichloroethene	ND ug/kg		6.4	1		07/26/12 13:50	156-59-2	
trans-1,2-Dichloroethene	ND ug/kg		6.4	1		07/26/12 13:50	156-60-5	
1,2-Dichloropropane	ND ug/kg		6.4	1		07/26/12 13:50	78-87-5	
1,3-Dichloropropane	ND ug/kg		6.4	1		07/26/12 13:50	142-28-9	
2,2-Dichloropropane	ND ug/kg		6.4	1		07/26/12 13:50	594-20-7	
1,1-Dichloropropene	ND ug/kg		6.4	1		07/26/12 13:50	563-58-6	

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ANALYTICAL RESULTS

Project: KUHLMAN DIECASTING

Pace Project No.: 60125643

Sample: **SB-2-2-4** Lab ID: **60125643005** Collected: 07/17/12 14:32 Received: 07/21/12 08:55 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035A VOA		Analytical Method: EPA 8260						
cis-1,3-Dichloropropene	ND	ug/kg	6.4	1		07/26/12 13:50	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/kg	6.4	1		07/26/12 13:50	10061-02-6	
Ethylbenzene	ND	ug/kg	6.4	1		07/26/12 13:50	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	6.4	1		07/26/12 13:50	87-68-3	
2-Hexanone	ND	ug/kg	25.7	1		07/26/12 13:50	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/kg	6.4	1		07/26/12 13:50	98-82-8	
p-Isopropyltoluene	ND	ug/kg	6.4	1		07/26/12 13:50	99-87-6	
Methylene chloride	ND	ug/kg	6.4	1		07/26/12 13:50	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	12.9	1		07/26/12 13:50	108-10-1	
Methyl-tert-butyl ether	ND	ug/kg	6.4	1		07/26/12 13:50	1634-04-4	
Naphthalene	ND	ug/kg	12.9	1		07/26/12 13:50	91-20-3	
n-Propylbenzene	ND	ug/kg	6.4	1		07/26/12 13:50	103-65-1	
Styrene	ND	ug/kg	6.4	1		07/26/12 13:50	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/kg	6.4	1		07/26/12 13:50	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	6.4	1		07/26/12 13:50	79-34-5	
Tetrachloroethene	ND	ug/kg	6.4	1		07/26/12 13:50	127-18-4	
Toluene	ND	ug/kg	6.4	1		07/26/12 13:50	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/kg	6.4	1		07/26/12 13:50	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/kg	6.4	1		07/26/12 13:50	120-82-1	
1,1,1-Trichloroethane	ND	ug/kg	6.4	1		07/26/12 13:50	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	6.4	1		07/26/12 13:50	79-00-5	
Trichloroethene	ND	ug/kg	6.4	1		07/26/12 13:50	79-01-6	
Trichlorofluoromethane	ND	ug/kg	6.4	1		07/26/12 13:50	75-69-4	
1,2,3-Trichloropropane	ND	ug/kg	6.4	1		07/26/12 13:50	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/kg	6.4	1		07/26/12 13:50	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/kg	6.4	1		07/26/12 13:50	108-67-8	
Vinyl chloride	ND	ug/kg	6.4	1		07/26/12 13:50	75-01-4	
Xylene (Total)	ND	ug/kg	6.4	1		07/26/12 13:50	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	102 %		78-122	1		07/26/12 13:50	1868-53-7	
Toluene-d8 (S)	102 %		80-123	1		07/26/12 13:50	2037-26-5	
4-Bromofluorobenzene (S)	98 %		78-125	1		07/26/12 13:50	460-00-4	
1,2-Dichloroethane-d4 (S)	110 %		73-135	1		07/26/12 13:50	17060-07-0	

Percent Moisture

Analytical Method: ASTM D2974

Percent Moisture	10.9 %	0.50	1	08/01/12 00:00
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ANALYTICAL RESULTS

Project: KUHLMAN DIECASTING

Pace Project No.: 60125643

Sample: SB-3-16-18 Lab ID: 60125643006 Collected: 07/17/12 16:08 Received: 07/21/12 08:55 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
OA2 GCS Analytical Method: OA2 Preparation Method: OA2								
Diesel Fuel	ND	mg/kg	22.5	1	07/24/12 00:00	07/29/12 08:02	68334-30-5	
Fuel Oil	ND	mg/kg	22.5	1	07/24/12 00:00	07/29/12 08:02	68553-00-4	
Jet Fuel	ND	mg/kg	22.5	1	07/24/12 00:00	07/29/12 08:02	94114-58-6	
Kerosene	ND	mg/kg	22.5	1	07/24/12 00:00	07/29/12 08:02	8008-20-6	
Mineral Spirits	ND	mg/kg	22.5	1	07/24/12 00:00	07/29/12 08:02	8030-30-6	
Motor Oil	ND	mg/kg	22.5	1	07/24/12 00:00	07/29/12 08:02	64742-65-0	
Total Petroleum Hydrocarbons	ND	mg/kg	22.5	1	07/24/12 00:00	07/29/12 08:02		
Surrogates								
n-Tetracosane (S)	90	%	50-137	1	07/24/12 00:00	07/29/12 08:02	646-31-1	
p-Terphenyl (S)	80	%	41-129	1	07/24/12 00:00	07/29/12 08:02	92-94-4	
6010 MET ICP Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Antimony	ND	mg/kg	1.1	1	07/25/12 16:15	07/26/12 17:53	7440-36-0	
Arsenic	4.7	mg/kg	1.1	1	07/25/12 16:15	07/26/12 17:53	7440-38-2	
Beryllium	0.77	mg/kg	0.11	1	07/25/12 16:15	07/26/12 17:53	7440-41-7	
Cadmium	ND	mg/kg	0.54	1	07/25/12 16:15	07/26/12 17:53	7440-43-9	
Chromium	18.5	mg/kg	0.54	1	07/25/12 16:15	07/26/12 17:53	7440-47-3	
Copper	14.3	mg/kg	1.1	1	07/25/12 16:15	07/26/12 17:53	7440-50-8	
Lead	12.1	mg/kg	0.54	1	07/25/12 16:15	07/26/12 17:53	7439-92-1	
Nickel	18.8	mg/kg	0.54	1	07/25/12 16:15	07/26/12 17:53	7440-02-0	
Selenium	ND	mg/kg	1.6	1	07/25/12 16:15	07/26/12 17:53	7782-49-2	
Silver	ND	mg/kg	0.75	1	07/25/12 16:15	07/26/12 17:53	7440-22-4	
Thallium	ND	mg/kg	2.2	1	07/25/12 16:15	07/26/12 17:53	7440-28-0	
Zinc	55.4	mg/kg	10.8	1	07/25/12 16:15	07/26/12 17:53	7440-66-6	
7471 Mercury Analytical Method: EPA 7471 Preparation Method: EPA 7471								
Mercury	ND	mg/kg	0.044	1	07/26/12 12:50	07/26/12 16:58	7439-97-6	
8270 MSSV PAH by SIM Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546								
Acenaphthene	ND	ug/kg	4.1	1	07/26/12 00:00	07/27/12 13:48	83-32-9	
Acenaphthylene	ND	ug/kg	4.1	1	07/26/12 00:00	07/27/12 13:48	208-96-8	
Anthracene	ND	ug/kg	4.1	1	07/26/12 00:00	07/27/12 13:48	120-12-7	
Benzo(a)anthracene	12.2	ug/kg	4.1	1	07/26/12 00:00	07/27/12 13:48	56-55-3	
Benzo(a)pyrene	9.9	ug/kg	4.1	1	07/26/12 00:00	07/27/12 13:48	50-32-8	
Benzo(b)fluoranthene	9.9	ug/kg	4.1	1	07/26/12 00:00	07/27/12 13:48	205-99-2	
Benzo(g,h,i)perylene	7.5	ug/kg	4.1	1	07/26/12 00:00	07/27/12 13:48	191-24-2	
Benzo(k)fluoranthene	9.7	ug/kg	4.1	1	07/26/12 00:00	07/27/12 13:48	207-08-9	
Chrysene	12.2	ug/kg	4.1	1	07/26/12 00:00	07/27/12 13:48	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	4.1	1	07/26/12 00:00	07/27/12 13:48	53-70-3	
Fluoranthene	22.3	ug/kg	4.1	1	07/26/12 00:00	07/27/12 13:48	206-44-0	
Fluorene	ND	ug/kg	4.1	1	07/26/12 00:00	07/27/12 13:48	86-73-7	
Indeno(1,2,3-cd)pyrene	5.3	ug/kg	4.1	1	07/26/12 00:00	07/27/12 13:48	193-39-5	
Naphthalene	ND	ug/kg	4.1	1	07/26/12 00:00	07/27/12 13:48	91-20-3	
Phenanthrene	23.2	ug/kg	4.1	1	07/26/12 00:00	07/27/12 13:48	85-01-8	
Pyrene	18.5	ug/kg	4.1	1	07/26/12 00:00	07/27/12 13:48	129-00-0	

ANALYTICAL RESULTS

Project: KUHLMAN DIECASTING

Pace Project No.: 60125643

Sample: SB-3-16-18 **Lab ID: 60125643006** Collected: 07/17/12 16:08 Received: 07/21/12 08:55 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
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8270 MSSV PAH by SIM

Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546

Surrogates

Nitrobenzene-d5 (S)	89 %		35-121	1	07/26/12 00:00	07/27/12 13:48	4165-60-0	
2-Fluorobiphenyl (S)	84 %		41-120	1	07/26/12 00:00	07/27/12 13:48	321-60-8	
Terphenyl-d14 (S)	71 %		39-123	1	07/26/12 00:00	07/27/12 13:48	1718-51-0	

OA1 Volatile Pet. Hydrocarbons

Analytical Method: OA1

Gasoline Range Organics	ND mg/kg		1.1	1		07/26/12 15:53		
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8260 MSV 5035A VOA

Analytical Method: EPA 8260

Acetone	ND ug/kg		21.6	1		07/26/12 15:53	67-64-1	
Benzene	ND ug/kg		5.4	1		07/26/12 15:53	71-43-2	
Bromobenzene	ND ug/kg		5.4	1		07/26/12 15:53	108-86-1	
Bromochloromethane	ND ug/kg		5.4	1		07/26/12 15:53	74-97-5	
Bromodichloromethane	ND ug/kg		5.4	1		07/26/12 15:53	75-27-4	
Bromoform	ND ug/kg		5.4	1		07/26/12 15:53	75-25-2	
Bromomethane	ND ug/kg		5.4	1		07/26/12 15:53	74-83-9	
2-Butanone (MEK)	ND ug/kg		10.8	1		07/26/12 15:53	78-93-3	
n-Butylbenzene	ND ug/kg		5.4	1		07/26/12 15:53	104-51-8	
sec-Butylbenzene	ND ug/kg		5.4	1		07/26/12 15:53	135-98-8	
tert-Butylbenzene	ND ug/kg		5.4	1		07/26/12 15:53	98-06-6	
Carbon disulfide	ND ug/kg		5.4	1		07/26/12 15:53	75-15-0	
Carbon tetrachloride	ND ug/kg		5.4	1		07/26/12 15:53	56-23-5	
Chlorobenzene	ND ug/kg		5.4	1		07/26/12 15:53	108-90-7	
Chloroethane	ND ug/kg		5.4	1		07/26/12 15:53	75-00-3	
Chloroform	ND ug/kg		5.4	1		07/26/12 15:53	67-66-3	L2
Chloromethane	ND ug/kg		5.4	1		07/26/12 15:53	74-87-3	
2-Chlorotoluene	ND ug/kg		5.4	1		07/26/12 15:53	95-49-8	
4-Chlorotoluene	ND ug/kg		5.4	1		07/26/12 15:53	106-43-4	
1,2-Dibromo-3-chloropropane	ND ug/kg		10.8	1		07/26/12 15:53	96-12-8	
Dibromochloromethane	ND ug/kg		5.4	1		07/26/12 15:53	124-48-1	
1,2-Dibromoethane (EDB)	ND ug/kg		5.4	1		07/26/12 15:53	106-93-4	
Dibromomethane	ND ug/kg		5.4	1		07/26/12 15:53	74-95-3	
1,2-Dichlorobenzene	ND ug/kg		5.4	1		07/26/12 15:53	95-50-1	
1,3-Dichlorobenzene	ND ug/kg		5.4	1		07/26/12 15:53	541-73-1	
1,4-Dichlorobenzene	ND ug/kg		5.4	1		07/26/12 15:53	106-46-7	
Dichlorodifluoromethane	ND ug/kg		5.4	1		07/26/12 15:53	75-71-8	
1,1-Dichloroethane	ND ug/kg		5.4	1		07/26/12 15:53	75-34-3	
1,2-Dichloroethane	ND ug/kg		5.4	1		07/26/12 15:53	107-06-2	
1,2-Dichloroethene (Total)	ND ug/kg		5.4	1		07/26/12 15:53	540-59-0	
1,1-Dichloroethene	ND ug/kg		5.4	1		07/26/12 15:53	75-35-4	
cis-1,2-Dichloroethene	ND ug/kg		5.4	1		07/26/12 15:53	156-59-2	
trans-1,2-Dichloroethene	ND ug/kg		5.4	1		07/26/12 15:53	156-60-5	
1,2-Dichloropropane	ND ug/kg		5.4	1		07/26/12 15:53	78-87-5	
1,3-Dichloropropane	ND ug/kg		5.4	1		07/26/12 15:53	142-28-9	
2,2-Dichloropropane	ND ug/kg		5.4	1		07/26/12 15:53	594-20-7	
1,1-Dichloropropene	ND ug/kg		5.4	1		07/26/12 15:53	563-58-6	

Date: 08/09/2012 10:51 AM

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: KUHLMAN DIECASTING

Pace Project No.: 60125643

Sample: **SB-3-16-18** Lab ID: **60125643006** Collected: 07/17/12 16:08 Received: 07/21/12 08:55 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035A VOA		Analytical Method: EPA 8260						
cis-1,3-Dichloropropene	ND	ug/kg	5.4	1		07/26/12 15:53	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/kg	5.4	1		07/26/12 15:53	10061-02-6	
Ethylbenzene	ND	ug/kg	5.4	1		07/26/12 15:53	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	5.4	1		07/26/12 15:53	87-68-3	
2-Hexanone	ND	ug/kg	21.6	1		07/26/12 15:53	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/kg	5.4	1		07/26/12 15:53	98-82-8	
p-Isopropyltoluene	ND	ug/kg	5.4	1		07/26/12 15:53	99-87-6	
Methylene chloride	ND	ug/kg	5.4	1		07/26/12 15:53	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	10.8	1		07/26/12 15:53	108-10-1	
Methyl-tert-butyl ether	ND	ug/kg	5.4	1		07/26/12 15:53	1634-04-4	
Naphthalene	ND	ug/kg	10.8	1		07/26/12 15:53	91-20-3	
n-Propylbenzene	ND	ug/kg	5.4	1		07/26/12 15:53	103-65-1	
Styrene	ND	ug/kg	5.4	1		07/26/12 15:53	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/kg	5.4	1		07/26/12 15:53	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	5.4	1		07/26/12 15:53	79-34-5	
Tetrachloroethene	ND	ug/kg	5.4	1		07/26/12 15:53	127-18-4	
Toluene	ND	ug/kg	5.4	1		07/26/12 15:53	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/kg	5.4	1		07/26/12 15:53	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/kg	5.4	1		07/26/12 15:53	120-82-1	
1,1,1-Trichloroethane	ND	ug/kg	5.4	1		07/26/12 15:53	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	5.4	1		07/26/12 15:53	79-00-5	
Trichloroethene	ND	ug/kg	5.4	1		07/26/12 15:53	79-01-6	
Trichlorofluoromethane	ND	ug/kg	5.4	1		07/26/12 15:53	75-69-4	
1,2,3-Trichloropropane	ND	ug/kg	5.4	1		07/26/12 15:53	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/kg	5.4	1		07/26/12 15:53	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/kg	5.4	1		07/26/12 15:53	108-67-8	
Vinyl chloride	ND	ug/kg	5.4	1		07/26/12 15:53	75-01-4	
Xylene (Total)	ND	ug/kg	5.4	1		07/26/12 15:53	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	105 %		78-122	1		07/26/12 15:53	1868-53-7	
Toluene-d8 (S)	102 %		80-123	1		07/26/12 15:53	2037-26-5	
4-Bromofluorobenzene (S)	99 %		78-125	1		07/26/12 15:53	460-00-4	
1,2-Dichloroethane-d4 (S)	117 %		73-135	1		07/26/12 15:53	17060-07-0	

Percent Moisture

Analytical Method: ASTM D2974

Percent Moisture	19.3 %	0.50	1	08/01/12 00:00
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ANALYTICAL RESULTS

Project: KUHLMAN DIECASTING

Pace Project No.: 60125643

Sample: SB-3-GW		Lab ID: 60125643007	Collected: 07/17/12 16:17	Received: 07/21/12 08:55	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
OA2 GCS		Analytical Method: OA2 Preparation Method: OA2						
Diesel Fuel	ND mg/L		0.40	1	07/24/12 00:00	07/25/12 03:24	68334-30-5	
Fuel Oil	ND mg/L		0.40	1	07/24/12 00:00	07/25/12 03:24	68553-00-4	
Jet Fuel	ND mg/L		0.40	1	07/24/12 00:00	07/25/12 03:24	94114-58-6	
Kerosene	ND mg/L		0.40	1	07/24/12 00:00	07/25/12 03:24	8008-20-6	
Mineral Spirits	ND mg/L		0.40	1	07/24/12 00:00	07/25/12 03:24	8030-30-6	
Motor Oil	ND mg/L		0.40	1	07/24/12 00:00	07/25/12 03:24	64742-65-0	
Total Petroleum Hydrocarbons	ND mg/L		0.40	1	07/24/12 00:00	07/25/12 03:24		
Surrogates								
p-Terphenyl (S)	62 %		20-122	1	07/24/12 00:00	07/25/12 03:24	92-94-4	
n-Tetracosane (S)	62 %		30-122	1	07/24/12 00:00	07/25/12 03:24	646-31-1	
6010 MET ICP		Analytical Method: EPA 6010 Preparation Method: EPA 3010						
Antimony	ND ug/L		10.0	1	07/26/12 14:30	07/27/12 12:29	7440-36-0	
Arsenic	39.4 ug/L		10.0	1	07/26/12 14:30	07/27/12 12:29	7440-38-2	
Beryllium	ND ug/L		1.0	1	07/26/12 14:30	07/27/12 12:29	7440-41-7	
Cadmium	ND ug/L		5.0	1	07/26/12 14:30	07/27/12 12:29	7440-43-9	
Chromium	ND ug/L		5.0	1	07/26/12 14:30	07/27/12 12:29	7440-47-3	
Copper	ND ug/L		10.0	1	07/26/12 14:30	07/27/12 12:29	7440-50-8	
Lead	ND ug/L		5.0	1	07/26/12 14:30	07/27/12 12:29	7439-92-1	
Nickel	20.9 ug/L		5.0	1	07/26/12 14:30	07/27/12 12:29	7440-02-0	
Selenium	ND ug/L		15.0	1	07/26/12 14:30	07/27/12 12:29	7782-49-2	
Silver	ND ug/L		7.0	1	07/26/12 14:30	07/27/12 12:29	7440-22-4	
Thallium	ND ug/L		20.0	1	07/26/12 14:30	07/27/12 12:29	7440-28-0	
Zinc	108 ug/L		50.0	1	07/26/12 14:30	07/27/12 12:29	7440-66-6	
6010 MET ICP, Dissolved		Analytical Method: EPA 6010 Preparation Method: EPA 3010						
Antimony, Dissolved	ND ug/L		10.0	1	07/26/12 14:30	07/30/12 16:41	7440-36-0	D9
Arsenic, Dissolved	54.0 ug/L		10.0	1	07/26/12 14:30	07/30/12 16:41	7440-38-2	
Beryllium, Dissolved	ND ug/L		1.0	1	07/26/12 14:30	07/30/12 16:41	7440-41-7	
Cadmium, Dissolved	ND ug/L		5.0	1	07/26/12 14:30	07/30/12 16:41	7440-43-9	
Chromium, Dissolved	ND ug/L		5.0	1	07/26/12 14:30	07/30/12 16:41	7440-47-3	
Copper, Dissolved	ND ug/L		10.0	1	07/26/12 14:30	07/30/12 16:41	7440-50-8	
Lead, Dissolved	ND ug/L		5.0	1	07/26/12 14:30	07/30/12 16:41	7439-92-1	
Nickel, Dissolved	ND ug/L		5.0	1	07/26/12 14:30	07/30/12 16:41	7440-02-0	
Selenium, Dissolved	ND ug/L		15.0	1	07/26/12 14:30	07/30/12 16:41	7782-49-2	
Silver, Dissolved	ND ug/L		7.0	1	07/26/12 14:30	07/30/12 16:41	7440-22-4	
Thallium, Dissolved	ND ug/L		20.0	1	07/26/12 14:30	07/30/12 16:41	7440-28-0	
Zinc, Dissolved	ND ug/L		50.0	1	07/26/12 14:30	07/30/12 16:41	7440-66-6	
7470 Mercury		Analytical Method: EPA 7470 Preparation Method: EPA 7470						
Mercury	ND ug/L		0.20	1	07/24/12 09:15	07/24/12 15:38	7439-97-6	
7470 Mercury, Dissolved		Analytical Method: EPA 7470 Preparation Method: EPA 7470						
Mercury, Dissolved	ND ug/L		0.20	1	08/01/12 06:30	08/03/12 11:25	7439-97-6	

ANALYTICAL RESULTS

Project: KUHLMAN DIECASTING
Pace Project No.: 60125643

Sample: SB-3-GW		Lab ID: 60125643007	Collected: 07/17/12 16:17	Received: 07/21/12 08:55	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by SIM		Analytical Method: EPA 8270C by SIM Preparation Method: EPA 3510C						
Acenaphthene	ND ug/L		0.10	1	07/24/12 00:00	08/06/12 18:46	83-32-9	
Acenaphthylene	ND ug/L		0.10	1	07/24/12 00:00	08/06/12 18:46	208-96-8	
Anthracene	ND ug/L		0.10	1	07/24/12 00:00	08/06/12 18:46	120-12-7	
Benzo(a)anthracene	ND ug/L		0.10	1	07/24/12 00:00	08/06/12 18:46	56-55-3	
Benzo(a)pyrene	ND ug/L		0.10	1	07/24/12 00:00	08/06/12 18:46	50-32-8	
Benzo(b)fluoranthene	ND ug/L		0.10	1	07/24/12 00:00	08/06/12 18:46	205-99-2	
Benzo(g,h,i)perylene	ND ug/L		0.10	1	07/24/12 00:00	08/06/12 18:46	191-24-2	
Benzo(k)fluoranthene	ND ug/L		0.10	1	07/24/12 00:00	08/06/12 18:46	207-08-9	
Chrysene	ND ug/L		0.10	1	07/24/12 00:00	08/06/12 18:46	218-01-9	
Dibenz(a,h)anthracene	ND ug/L		0.10	1	07/24/12 00:00	08/06/12 18:46	53-70-3	
Fluoranthene	ND ug/L		0.10	1	07/24/12 00:00	08/06/12 18:46	206-44-0	
Fluorene	ND ug/L		0.10	1	07/24/12 00:00	08/06/12 18:46	86-73-7	
Indeno(1,2,3-cd)pyrene	ND ug/L		0.10	1	07/24/12 00:00	08/06/12 18:46	193-39-5	
Naphthalene	ND ug/L		0.50	1	07/24/12 00:00	08/06/12 18:46	91-20-3	
Phenanthrene	ND ug/L		0.50	1	07/24/12 00:00	08/06/12 18:46	85-01-8	
Pyrene	ND ug/L		0.10	1	07/24/12 00:00	08/06/12 18:46	129-00-0	
Surrogates								
Nitrobenzene-d5 (S)	78 %		42-120	1	07/24/12 00:00	08/06/12 18:46	4165-60-0	
2-Fluorobiphenyl (S)	76 %		44-120	1	07/24/12 00:00	08/06/12 18:46	321-60-8	
Terphenyl-d14 (S)	95 %		46-131	1	07/24/12 00:00	08/06/12 18:46	1718-51-0	
8260 MSV		Analytical Method: EPA 5030B/8260						
Acetone	ND ug/L		10.0	1		07/27/12 17:46	67-64-1	
Benzene	ND ug/L		1.0	1		07/27/12 17:46	71-43-2	
Bromobenzene	ND ug/L		1.0	1		07/27/12 17:46	108-86-1	
Bromochloromethane	ND ug/L		1.0	1		07/27/12 17:46	74-97-5	
Bromodichloromethane	ND ug/L		1.0	1		07/27/12 17:46	75-27-4	
Bromoform	ND ug/L		1.0	1		07/27/12 17:46	75-25-2	
Bromomethane	ND ug/L		5.0	1		07/27/12 17:46	74-83-9	
2-Butanone (MEK)	ND ug/L		10.0	1		07/27/12 17:46	78-93-3	
n-Butylbenzene	ND ug/L		1.0	1		07/27/12 17:46	104-51-8	
sec-Butylbenzene	ND ug/L		1.0	1		07/27/12 17:46	135-98-8	
tert-Butylbenzene	ND ug/L		1.0	1		07/27/12 17:46	98-06-6	
Carbon disulfide	ND ug/L		5.0	1		07/27/12 17:46	75-15-0	
Carbon tetrachloride	ND ug/L		1.0	1		07/27/12 17:46	56-23-5	
Chlorobenzene	ND ug/L		1.0	1		07/27/12 17:46	108-90-7	
Chloroethane	ND ug/L		1.0	1		07/27/12 17:46	75-00-3	
Chloroform	ND ug/L		1.0	1		07/27/12 17:46	67-66-3	
Chloromethane	ND ug/L		1.0	1		07/27/12 17:46	74-87-3	
2-Chlorotoluene	ND ug/L		1.0	1		07/27/12 17:46	95-49-8	
4-Chlorotoluene	ND ug/L		1.0	1		07/27/12 17:46	106-43-4	
1,2-Dibromo-3-chloropropane	ND ug/L		2.5	1		07/27/12 17:46	96-12-8	
Dibromochloromethane	ND ug/L		1.0	1		07/27/12 17:46	124-48-1	
1,2-Dibromoethane (EDB)	ND ug/L		1.0	1		07/27/12 17:46	106-93-4	
Dibromomethane	ND ug/L		1.0	1		07/27/12 17:46	74-95-3	
1,2-Dichlorobenzene	ND ug/L		1.0	1		07/27/12 17:46	95-50-1	
1,3-Dichlorobenzene	ND ug/L		1.0	1		07/27/12 17:46	541-73-1	

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REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: KUHLMAN DIECASTING

Pace Project No.: 60125643

Sample: SB-3-GW		Lab ID: 60125643007	Collected: 07/17/12 16:17	Received: 07/21/12 08:55	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV		Analytical Method: EPA 5030B/8260						
1,4-Dichlorobenzene	ND ug/L		1.0	1		07/27/12 17:46	106-46-7	
Dichlorodifluoromethane	ND ug/L		1.0	1		07/27/12 17:46	75-71-8	
1,1-Dichloroethane	ND ug/L		1.0	1		07/27/12 17:46	75-34-3	
1,2-Dichloroethane	ND ug/L		1.0	1		07/27/12 17:46	107-06-2	
1,2-Dichloroethene (Total)	ND ug/L		1.0	1		07/27/12 17:46	540-59-0	
1,1-Dichloroethene	ND ug/L		1.0	1		07/27/12 17:46	75-35-4	
cis-1,2-Dichloroethene	ND ug/L		1.0	1		07/27/12 17:46	156-59-2	
trans-1,2-Dichloroethene	ND ug/L		1.0	1		07/27/12 17:46	156-60-5	
1,2-Dichloropropane	ND ug/L		1.0	1		07/27/12 17:46	78-87-5	
1,3-Dichloropropane	ND ug/L		1.0	1		07/27/12 17:46	142-28-9	
2,2-Dichloropropane	ND ug/L		1.0	1		07/27/12 17:46	594-20-7	
1,1-Dichloropropene	ND ug/L		1.0	1		07/27/12 17:46	563-58-6	
cis-1,3-Dichloropropene	ND ug/L		1.0	1		07/27/12 17:46	10061-01-5	
trans-1,3-Dichloropropene	ND ug/L		1.0	1		07/27/12 17:46	10061-02-6	
Ethylbenzene	ND ug/L		1.0	1		07/27/12 17:46	100-41-4	
Hexachloro-1,3-butadiene	ND ug/L		1.0	1		07/27/12 17:46	87-68-3	
2-Hexanone	ND ug/L		10.0	1		07/27/12 17:46	591-78-6	
Isopropylbenzene (Cumene)	ND ug/L		1.0	1		07/27/12 17:46	98-82-8	
p-Isopropyltoluene	ND ug/L		1.0	1		07/27/12 17:46	99-87-6	
Methylene chloride	ND ug/L		1.0	1		07/27/12 17:46	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND ug/L		10.0	1		07/27/12 17:46	108-10-1	
Methyl-tert-butyl ether	ND ug/L		1.0	1		07/27/12 17:46	1634-04-4	
Naphthalene	ND ug/L		10.0	1		07/27/12 17:46	91-20-3	
n-Propylbenzene	ND ug/L		1.0	1		07/27/12 17:46	103-65-1	
Styrene	ND ug/L		1.0	1		07/27/12 17:46	100-42-5	
1,1,1,2-Tetrachloroethane	ND ug/L		1.0	1		07/27/12 17:46	630-20-6	
1,1,2,2-Tetrachloroethane	ND ug/L		1.0	1		07/27/12 17:46	79-34-5	
Tetrachloroethene	ND ug/L		1.0	1		07/27/12 17:46	127-18-4	
Toluene	ND ug/L		1.0	1		07/27/12 17:46	108-88-3	
1,2,3-Trichlorobenzene	ND ug/L		1.0	1		07/27/12 17:46	87-61-6	
1,2,4-Trichlorobenzene	ND ug/L		1.0	1		07/27/12 17:46	120-82-1	
1,1,1-Trichloroethane	ND ug/L		1.0	1		07/27/12 17:46	71-55-6	
1,1,2-Trichloroethane	ND ug/L		1.0	1		07/27/12 17:46	79-00-5	
Trichloroethene	ND ug/L		1.0	1		07/27/12 17:46	79-01-6	
Trichlorofluoromethane	ND ug/L		1.0	1		07/27/12 17:46	75-69-4	
1,2,3-Trichloropropane	ND ug/L		2.5	1		07/27/12 17:46	96-18-4	
1,2,4-Trimethylbenzene	ND ug/L		1.0	1		07/27/12 17:46	95-63-6	
1,3,5-Trimethylbenzene	ND ug/L		1.0	1		07/27/12 17:46	108-67-8	
Vinyl chloride	ND ug/L		1.0	1		07/27/12 17:46	75-01-4	
Xylene (Total)	ND ug/L		3.0	1		07/27/12 17:46	1330-20-7	
Surrogates								
4-Bromofluorobenzene (S)	106 %		80-120	1		07/27/12 17:46	460-00-4	HS
Dibromofluoromethane (S)	96 %		80-120	1		07/27/12 17:46	1868-53-7	
1,2-Dichloroethane-d4 (S)	93 %		80-120	1		07/27/12 17:46	17060-07-0	
Toluene-d8 (S)	98 %		80-120	1		07/27/12 17:46	2037-26-5	
Preservation pH	1.0		0.10	1		07/27/12 17:46		

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ANALYTICAL RESULTS

Project: KUHLMAN DIECASTING

Pace Project No.: 60125643

Sample: SB-3-GW		Lab ID: 60125643007	Collected: 07/17/12 16:17	Received: 07/21/12 08:55	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260/OA1 UST, Water		Analytical Method: EPA 8260/OA1						
Gasoline Range Organics	ND mg/L		0.50	1		07/27/12 17:46		
Benzene	ND ug/L		1.0	1		07/27/12 17:46	71-43-2	
Toluene	ND ug/L		1.0	1		07/27/12 17:46	108-88-3	
Ethylbenzene	ND ug/L		1.0	1		07/27/12 17:46	100-41-4	
Xylene (Total)	ND ug/L		3.0	1		07/27/12 17:46	1330-20-7	
Methyl-tert-butyl ether	ND ug/L		1.0	1		07/27/12 17:46	1634-04-4	
Naphthalene	ND ug/L		10.0	1		07/27/12 17:46	91-20-3	
1,2-Dichloroethane	ND ug/L		1.0	1		07/27/12 17:46	107-06-2	
tert-Butyl Alcohol	ND ug/L		10.0	1		07/27/12 17:46	75-65-0	
Surrogates								
Dibromofluoromethane (S)	96 %		80-120	1		07/27/12 17:46	1868-53-7	HS
Toluene-d8 (S)	98 %		80-120	1		07/27/12 17:46	2037-26-5	
4-Bromofluorobenzene (S)	106 %		80-120	1		07/27/12 17:46	460-00-4	
1,2-Dichloroethane-d4 (S)	93 %		80-120	1		07/27/12 17:46	17060-07-0	
Preservation pH	1.0		0.10	1		07/27/12 17:46		

ANALYTICAL RESULTS

Project: KUHLMAN DIECASTING

Pace Project No.: 60125643

Sample: SB-4-14-16 Lab ID: 60125643008 Collected: 07/18/12 10:07 Received: 07/21/12 08:55 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
OA2 GCS Analytical Method: OA2 Preparation Method: OA2								
Diesel Fuel	ND	mg/kg	24.6	1	07/24/12 00:00	07/29/12 08:12	68334-30-5	
Fuel Oil	ND	mg/kg	24.6	1	07/24/12 00:00	07/29/12 08:12	68553-00-4	
Jet Fuel	ND	mg/kg	24.6	1	07/24/12 00:00	07/29/12 08:12	94114-58-6	
Kerosene	ND	mg/kg	24.6	1	07/24/12 00:00	07/29/12 08:12	8008-20-6	
Mineral Spirits	ND	mg/kg	24.6	1	07/24/12 00:00	07/29/12 08:12	8030-30-6	
Motor Oil	ND	mg/kg	24.6	1	07/24/12 00:00	07/29/12 08:12	64742-65-0	
Total Petroleum Hydrocarbons	ND	mg/kg	24.6	1	07/24/12 00:00	07/29/12 08:12		
Surrogates								
n-Tetracosane (S)	89 %		50-137	1	07/24/12 00:00	07/29/12 08:12	646-31-1	
p-Terphenyl (S)	80 %		41-129	1	07/24/12 00:00	07/29/12 08:12	92-94-4	
6010 MET ICP Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Antimony	ND	mg/kg	1.1	1	07/25/12 16:15	07/26/12 17:55	7440-36-0	
Arsenic	5.5	mg/kg	1.1	1	07/25/12 16:15	07/26/12 17:55	7440-38-2	
Beryllium	0.70	mg/kg	0.11	1	07/25/12 16:15	07/26/12 17:55	7440-41-7	
Cadmium	ND	mg/kg	0.56	1	07/25/12 16:15	07/26/12 17:55	7440-43-9	
Chromium	17.0	mg/kg	0.56	1	07/25/12 16:15	07/26/12 17:55	7440-47-3	
Copper	14.4	mg/kg	1.1	1	07/25/12 16:15	07/26/12 17:55	7440-50-8	
Lead	11.0	mg/kg	0.56	1	07/25/12 16:15	07/26/12 17:55	7439-92-1	
Nickel	18.1	mg/kg	0.56	1	07/25/12 16:15	07/26/12 17:55	7440-02-0	
Selenium	ND	mg/kg	1.7	1	07/25/12 16:15	07/26/12 17:55	7782-49-2	
Silver	ND	mg/kg	0.78	1	07/25/12 16:15	07/26/12 17:55	7440-22-4	
Thallium	ND	mg/kg	2.2	1	07/25/12 16:15	07/26/12 17:55	7440-28-0	
Zinc	60.6	mg/kg	11.1	1	07/25/12 16:15	07/26/12 17:55	7440-66-6	
7471 Mercury Analytical Method: EPA 7471 Preparation Method: EPA 7471								
Mercury	ND	mg/kg	0.054	1	07/26/12 12:50	07/26/12 16:56	7439-97-6	
8270 MSSV PAH by SIM Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546								
Acenaphthene	ND	ug/kg	4.1	1	07/26/12 00:00	07/27/12 14:08	83-32-9	
Acenaphthylene	ND	ug/kg	4.1	1	07/26/12 00:00	07/27/12 14:08	208-96-8	
Anthracene	ND	ug/kg	4.1	1	07/26/12 00:00	07/27/12 14:08	120-12-7	
Benzo(a)anthracene	ND	ug/kg	4.1	1	07/26/12 00:00	07/27/12 14:08	56-55-3	
Benzo(a)pyrene	ND	ug/kg	4.1	1	07/26/12 00:00	07/27/12 14:08	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	4.1	1	07/26/12 00:00	07/27/12 14:08	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	4.1	1	07/26/12 00:00	07/27/12 14:08	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	4.1	1	07/26/12 00:00	07/27/12 14:08	207-08-9	
Chrysene	ND	ug/kg	4.1	1	07/26/12 00:00	07/27/12 14:08	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	4.1	1	07/26/12 00:00	07/27/12 14:08	53-70-3	
Fluoranthene	ND	ug/kg	4.1	1	07/26/12 00:00	07/27/12 14:08	206-44-0	
Fluorene	ND	ug/kg	4.1	1	07/26/12 00:00	07/27/12 14:08	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	4.1	1	07/26/12 00:00	07/27/12 14:08	193-39-5	
Naphthalene	15.9	ug/kg	4.1	1	07/26/12 00:00	07/27/12 14:08	91-20-3	
Phenanthrene	ND	ug/kg	4.1	1	07/26/12 00:00	07/27/12 14:08	85-01-8	
Pyrene	ND	ug/kg	4.1	1	07/26/12 00:00	07/27/12 14:08	129-00-0	

ANALYTICAL RESULTS

Project: KUHLMAN DIECASTING

Pace Project No.: 60125643

Sample: SB-4-14-16 Lab ID: 60125643008 Collected: 07/18/12 10:07 Received: 07/21/12 08:55 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by SIM								
Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546								
Surrogates								
Nitrobenzene-d5 (S)	90 %		35-121	1	07/26/12 00:00	07/27/12 14:08	4165-60-0	
2-Fluorobiphenyl (S)	90 %		41-120	1	07/26/12 00:00	07/27/12 14:08	321-60-8	
Terphenyl-d14 (S)	86 %		39-123	1	07/26/12 00:00	07/27/12 14:08	1718-51-0	
OA1 Volatile Pet. Hydrocarbons								
Analytical Method: OA1								
Gasoline Range Organics	ND mg/kg		0.98	1		07/26/12 16:08		
8260 MSV 5035A VOA								
Analytical Method: EPA 8260								
Acetone	ND ug/kg		19.7	1		07/26/12 16:08	67-64-1	
Benzene	ND ug/kg		4.9	1		07/26/12 16:08	71-43-2	
Bromobenzene	ND ug/kg		4.9	1		07/26/12 16:08	108-86-1	
Bromochloromethane	ND ug/kg		4.9	1		07/26/12 16:08	74-97-5	
Bromodichloromethane	ND ug/kg		4.9	1		07/26/12 16:08	75-27-4	
Bromoform	ND ug/kg		4.9	1		07/26/12 16:08	75-25-2	
Bromomethane	ND ug/kg		4.9	1		07/26/12 16:08	74-83-9	
2-Butanone (MEK)	ND ug/kg		9.8	1		07/26/12 16:08	78-93-3	
n-Butylbenzene	ND ug/kg		4.9	1		07/26/12 16:08	104-51-8	
sec-Butylbenzene	ND ug/kg		4.9	1		07/26/12 16:08	135-98-8	
tert-Butylbenzene	ND ug/kg		4.9	1		07/26/12 16:08	98-06-6	
Carbon disulfide	ND ug/kg		4.9	1		07/26/12 16:08	75-15-0	
Carbon tetrachloride	ND ug/kg		4.9	1		07/26/12 16:08	56-23-5	
Chlorobenzene	ND ug/kg		4.9	1		07/26/12 16:08	108-90-7	
Chloroethane	ND ug/kg		4.9	1		07/26/12 16:08	75-00-3	
Chloroform	ND ug/kg		4.9	1		07/26/12 16:08	67-66-3	L2
Chloromethane	ND ug/kg		4.9	1		07/26/12 16:08	74-87-3	
2-Chlorotoluene	ND ug/kg		4.9	1		07/26/12 16:08	95-49-8	
4-Chlorotoluene	ND ug/kg		4.9	1		07/26/12 16:08	106-43-4	
1,2-Dibromo-3-chloropropane	ND ug/kg		9.8	1		07/26/12 16:08	96-12-8	
Dibromochloromethane	ND ug/kg		4.9	1		07/26/12 16:08	124-48-1	
1,2-Dibromoethane (EDB)	ND ug/kg		4.9	1		07/26/12 16:08	106-93-4	
Dibromomethane	ND ug/kg		4.9	1		07/26/12 16:08	74-95-3	
1,2-Dichlorobenzene	ND ug/kg		4.9	1		07/26/12 16:08	95-50-1	
1,3-Dichlorobenzene	ND ug/kg		4.9	1		07/26/12 16:08	541-73-1	
1,4-Dichlorobenzene	ND ug/kg		4.9	1		07/26/12 16:08	106-46-7	
Dichlorodifluoromethane	ND ug/kg		4.9	1		07/26/12 16:08	75-71-8	
1,1-Dichloroethane	ND ug/kg		4.9	1		07/26/12 16:08	75-34-3	
1,2-Dichloroethane	ND ug/kg		4.9	1		07/26/12 16:08	107-06-2	
1,2-Dichloroethene (Total)	ND ug/kg		4.9	1		07/26/12 16:08	540-59-0	
1,1-Dichloroethene	ND ug/kg		4.9	1		07/26/12 16:08	75-35-4	
cis-1,2-Dichloroethene	ND ug/kg		4.9	1		07/26/12 16:08	156-59-2	
trans-1,2-Dichloroethene	ND ug/kg		4.9	1		07/26/12 16:08	156-60-5	
1,2-Dichloropropane	ND ug/kg		4.9	1		07/26/12 16:08	78-87-5	
1,3-Dichloropropane	ND ug/kg		4.9	1		07/26/12 16:08	142-28-9	
2,2-Dichloropropane	ND ug/kg		4.9	1		07/26/12 16:08	594-20-7	
1,1-Dichloropropene	ND ug/kg		4.9	1		07/26/12 16:08	563-58-6	

Date: 08/09/2012 10:51 AM

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: KUHLMAN DIECASTING

Pace Project No.: 60125643

Sample: SB-4-14-16 **Lab ID: 60125643008** Collected: 07/18/12 10:07 Received: 07/21/12 08:55 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035A VOA		Analytical Method: EPA 8260						
cis-1,3-Dichloropropene	ND	ug/kg	4.9	1		07/26/12 16:08	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/kg	4.9	1		07/26/12 16:08	10061-02-6	
Ethylbenzene	ND	ug/kg	4.9	1		07/26/12 16:08	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	4.9	1		07/26/12 16:08	87-68-3	
2-Hexanone	ND	ug/kg	19.7	1		07/26/12 16:08	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/kg	4.9	1		07/26/12 16:08	98-82-8	
p-Isopropyltoluene	ND	ug/kg	4.9	1		07/26/12 16:08	99-87-6	
Methylene chloride	ND	ug/kg	4.9	1		07/26/12 16:08	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	9.8	1		07/26/12 16:08	108-10-1	
Methyl-tert-butyl ether	ND	ug/kg	4.9	1		07/26/12 16:08	1634-04-4	
Naphthalene	ND	ug/kg	9.8	1		07/26/12 16:08	91-20-3	
n-Propylbenzene	ND	ug/kg	4.9	1		07/26/12 16:08	103-65-1	
Styrene	ND	ug/kg	4.9	1		07/26/12 16:08	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/kg	4.9	1		07/26/12 16:08	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	4.9	1		07/26/12 16:08	79-34-5	
Tetrachloroethene	ND	ug/kg	4.9	1		07/26/12 16:08	127-18-4	
Toluene	ND	ug/kg	4.9	1		07/26/12 16:08	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/kg	4.9	1		07/26/12 16:08	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/kg	4.9	1		07/26/12 16:08	120-82-1	
1,1,1-Trichloroethane	ND	ug/kg	4.9	1		07/26/12 16:08	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	4.9	1		07/26/12 16:08	79-00-5	
Trichloroethene	ND	ug/kg	4.9	1		07/26/12 16:08	79-01-6	
Trichlorofluoromethane	ND	ug/kg	4.9	1		07/26/12 16:08	75-69-4	
1,2,3-Trichloropropane	ND	ug/kg	4.9	1		07/26/12 16:08	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/kg	4.9	1		07/26/12 16:08	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/kg	4.9	1		07/26/12 16:08	108-67-8	
Vinyl chloride	ND	ug/kg	4.9	1		07/26/12 16:08	75-01-4	
Xylene (Total)	ND	ug/kg	4.9	1		07/26/12 16:08	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	105 %		78-122	1		07/26/12 16:08	1868-53-7	
Toluene-d8 (S)	102 %		80-123	1		07/26/12 16:08	2037-26-5	
4-Bromofluorobenzene (S)	100 %		78-125	1		07/26/12 16:08	460-00-4	
1,2-Dichloroethane-d4 (S)	114 %		73-135	1		07/26/12 16:08	17060-07-0	

Percent Moisture

Analytical Method: ASTM D2974

Percent Moisture	21.0 %	0.50	1	08/01/12 00:00
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ANALYTICAL RESULTS

Project: KUHLMAN DIECASTING

Pace Project No.: 60125643

Sample: SB-5-10-12 Lab ID: 60125643009 Collected: 07/18/12 11:02 Received: 07/21/12 08:55 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
OA2 GCS Analytical Method: OA2 Preparation Method: OA2								
Diesel Fuel	ND	mg/kg	22.8	1	07/24/12 00:00	07/29/12 08:23	68334-30-5	
Fuel Oil	ND	mg/kg	22.8	1	07/24/12 00:00	07/29/12 08:23	68553-00-4	
Jet Fuel	ND	mg/kg	22.8	1	07/24/12 00:00	07/29/12 08:23	94114-58-6	
Kerosene	ND	mg/kg	22.8	1	07/24/12 00:00	07/29/12 08:23	8008-20-6	
Mineral Spirits	ND	mg/kg	22.8	1	07/24/12 00:00	07/29/12 08:23	8030-30-6	
Motor Oil	ND	mg/kg	22.8	1	07/24/12 00:00	07/29/12 08:23	64742-65-0	
Total Petroleum Hydrocarbons	ND	mg/kg	22.8	1	07/24/12 00:00	07/29/12 08:23		
Surrogates								
n-Tetracosane (S)	88 %		50-137	1	07/24/12 00:00	07/29/12 08:23	646-31-1	
p-Terphenyl (S)	78 %		41-129	1	07/24/12 00:00	07/29/12 08:23	92-94-4	
6010 MET ICP Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Antimony	ND	mg/kg	1.1	1	07/25/12 16:15	07/26/12 18:01	7440-36-0	
Arsenic	6.0	mg/kg	1.1	1	07/25/12 16:15	07/26/12 18:01	7440-38-2	
Beryllium	0.78	mg/kg	0.11	1	07/25/12 16:15	07/26/12 18:01	7440-41-7	
Cadmium	ND	mg/kg	0.53	1	07/25/12 16:15	07/26/12 18:01	7440-43-9	
Chromium	17.8	mg/kg	0.53	1	07/25/12 16:15	07/26/12 18:01	7440-47-3	
Copper	15.0	mg/kg	1.1	1	07/25/12 16:15	07/26/12 18:01	7440-50-8	
Lead	12.4	mg/kg	0.53	1	07/25/12 16:15	07/26/12 18:01	7439-92-1	
Nickel	20.0	mg/kg	0.53	1	07/25/12 16:15	07/26/12 18:01	7440-02-0	
Selenium	ND	mg/kg	1.6	1	07/25/12 16:15	07/26/12 18:01	7782-49-2	
Silver	ND	mg/kg	0.74	1	07/25/12 16:15	07/26/12 18:01	7440-22-4	
Thallium	ND	mg/kg	2.1	1	07/25/12 16:15	07/26/12 18:01	7440-28-0	
Zinc	57.8	mg/kg	10.6	1	07/25/12 16:15	07/26/12 18:01	7440-66-6	
7471 Mercury Analytical Method: EPA 7471 Preparation Method: EPA 7471								
Mercury	ND	mg/kg	0.049	1	07/26/12 12:50	07/26/12 17:00	7439-97-6	
8270 MSSV PAH by SIM Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546								
Acenaphthene	ND	ug/kg	4.2	1	07/26/12 00:00	07/27/12 14:28	83-32-9	
Acenaphthylene	ND	ug/kg	4.2	1	07/26/12 00:00	07/27/12 14:28	208-96-8	
Anthracene	ND	ug/kg	4.2	1	07/26/12 00:00	07/27/12 14:28	120-12-7	
Benzo(a)anthracene	ND	ug/kg	4.2	1	07/26/12 00:00	07/27/12 14:28	56-55-3	
Benzo(a)pyrene	ND	ug/kg	4.2	1	07/26/12 00:00	07/27/12 14:28	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	4.2	1	07/26/12 00:00	07/27/12 14:28	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	4.2	1	07/26/12 00:00	07/27/12 14:28	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	4.2	1	07/26/12 00:00	07/27/12 14:28	207-08-9	
Chrysene	ND	ug/kg	4.2	1	07/26/12 00:00	07/27/12 14:28	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	4.2	1	07/26/12 00:00	07/27/12 14:28	53-70-3	
Fluoranthene	ND	ug/kg	4.2	1	07/26/12 00:00	07/27/12 14:28	206-44-0	
Fluorene	ND	ug/kg	4.2	1	07/26/12 00:00	07/27/12 14:28	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	4.2	1	07/26/12 00:00	07/27/12 14:28	193-39-5	
Naphthalene	ND	ug/kg	4.2	1	07/26/12 00:00	07/27/12 14:28	91-20-3	
Phenanthrene	ND	ug/kg	4.2	1	07/26/12 00:00	07/27/12 14:28	85-01-8	
Pyrene	ND	ug/kg	4.2	1	07/26/12 00:00	07/27/12 14:28	129-00-0	

ANALYTICAL RESULTS

Project: KUHLMAN DIECASTING

Pace Project No.: 60125643

Sample: SB-5-10-12 **Lab ID: 60125643009** Collected: 07/18/12 11:02 Received: 07/21/12 08:55 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by SIM								
Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546								
Surrogates								
Nitrobenzene-d5 (S)	81 %		35-121	1	07/26/12 00:00	07/27/12 14:28	4165-60-0	
2-Fluorobiphenyl (S)	77 %		41-120	1	07/26/12 00:00	07/27/12 14:28	321-60-8	
Terphenyl-d14 (S)	67 %		39-123	1	07/26/12 00:00	07/27/12 14:28	1718-51-0	
OA1 Volatile Pet. Hydrocarbons								
Analytical Method: OA1								
Gasoline Range Organics	ND mg/kg		1.1	1		07/26/12 16:24		
8260 MSV 5035A VOA								
Analytical Method: EPA 8260								
Acetone	ND ug/kg		21.1	1		07/26/12 16:24	67-64-1	
Benzene	ND ug/kg		5.3	1		07/26/12 16:24	71-43-2	
Bromobenzene	ND ug/kg		5.3	1		07/26/12 16:24	108-86-1	
Bromochloromethane	ND ug/kg		5.3	1		07/26/12 16:24	74-97-5	
Bromodichloromethane	ND ug/kg		5.3	1		07/26/12 16:24	75-27-4	
Bromoform	ND ug/kg		5.3	1		07/26/12 16:24	75-25-2	
Bromomethane	ND ug/kg		5.3	1		07/26/12 16:24	74-83-9	
2-Butanone (MEK)	ND ug/kg		10.6	1		07/26/12 16:24	78-93-3	
n-Butylbenzene	ND ug/kg		5.3	1		07/26/12 16:24	104-51-8	
sec-Butylbenzene	ND ug/kg		5.3	1		07/26/12 16:24	135-98-8	
tert-Butylbenzene	ND ug/kg		5.3	1		07/26/12 16:24	98-06-6	
Carbon disulfide	ND ug/kg		5.3	1		07/26/12 16:24	75-15-0	
Carbon tetrachloride	ND ug/kg		5.3	1		07/26/12 16:24	56-23-5	
Chlorobenzene	ND ug/kg		5.3	1		07/26/12 16:24	108-90-7	
Chloroethane	ND ug/kg		5.3	1		07/26/12 16:24	75-00-3	
Chloroform	ND ug/kg		5.3	1		07/26/12 16:24	67-66-3	L2
Chloromethane	ND ug/kg		5.3	1		07/26/12 16:24	74-87-3	
2-Chlorotoluene	ND ug/kg		5.3	1		07/26/12 16:24	95-49-8	
4-Chlorotoluene	ND ug/kg		5.3	1		07/26/12 16:24	106-43-4	
1,2-Dibromo-3-chloropropane	ND ug/kg		10.6	1		07/26/12 16:24	96-12-8	
Dibromochloromethane	ND ug/kg		5.3	1		07/26/12 16:24	124-48-1	
1,2-Dibromoethane (EDB)	ND ug/kg		5.3	1		07/26/12 16:24	106-93-4	
Dibromomethane	ND ug/kg		5.3	1		07/26/12 16:24	74-95-3	
1,2-Dichlorobenzene	ND ug/kg		5.3	1		07/26/12 16:24	95-50-1	
1,3-Dichlorobenzene	ND ug/kg		5.3	1		07/26/12 16:24	541-73-1	
1,4-Dichlorobenzene	ND ug/kg		5.3	1		07/26/12 16:24	106-46-7	
Dichlorodifluoromethane	ND ug/kg		5.3	1		07/26/12 16:24	75-71-8	
1,1-Dichloroethane	ND ug/kg		5.3	1		07/26/12 16:24	75-34-3	
1,2-Dichloroethane	ND ug/kg		5.3	1		07/26/12 16:24	107-06-2	
1,2-Dichloroethene (Total)	ND ug/kg		5.3	1		07/26/12 16:24	540-59-0	
1,1-Dichloroethene	ND ug/kg		5.3	1		07/26/12 16:24	75-35-4	
cis-1,2-Dichloroethene	ND ug/kg		5.3	1		07/26/12 16:24	156-59-2	
trans-1,2-Dichloroethene	ND ug/kg		5.3	1		07/26/12 16:24	156-60-5	
1,2-Dichloropropane	ND ug/kg		5.3	1		07/26/12 16:24	78-87-5	
1,3-Dichloropropane	ND ug/kg		5.3	1		07/26/12 16:24	142-28-9	
2,2-Dichloropropane	ND ug/kg		5.3	1		07/26/12 16:24	594-20-7	
1,1-Dichloropropene	ND ug/kg		5.3	1		07/26/12 16:24	563-58-6	

Date: 08/09/2012 10:51 AM

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: KUHLMAN DIECASTING

Pace Project No.: 60125643

Sample: SB-5-10-12 Lab ID: 60125643009 Collected: 07/18/12 11:02 Received: 07/21/12 08:55 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035A VOA		Analytical Method: EPA 8260						
cis-1,3-Dichloropropene	ND	ug/kg	5.3	1		07/26/12 16:24	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/kg	5.3	1		07/26/12 16:24	10061-02-6	
Ethylbenzene	ND	ug/kg	5.3	1		07/26/12 16:24	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	5.3	1		07/26/12 16:24	87-68-3	
2-Hexanone	ND	ug/kg	21.1	1		07/26/12 16:24	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/kg	5.3	1		07/26/12 16:24	98-82-8	
p-Isopropyltoluene	ND	ug/kg	5.3	1		07/26/12 16:24	99-87-6	
Methylene chloride	ND	ug/kg	5.3	1		07/26/12 16:24	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	10.6	1		07/26/12 16:24	108-10-1	
Methyl-tert-butyl ether	ND	ug/kg	5.3	1		07/26/12 16:24	1634-04-4	
Naphthalene	ND	ug/kg	10.6	1		07/26/12 16:24	91-20-3	
n-Propylbenzene	ND	ug/kg	5.3	1		07/26/12 16:24	103-65-1	
Styrene	ND	ug/kg	5.3	1		07/26/12 16:24	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/kg	5.3	1		07/26/12 16:24	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	5.3	1		07/26/12 16:24	79-34-5	
Tetrachloroethene	ND	ug/kg	5.3	1		07/26/12 16:24	127-18-4	
Toluene	ND	ug/kg	5.3	1		07/26/12 16:24	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/kg	5.3	1		07/26/12 16:24	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/kg	5.3	1		07/26/12 16:24	120-82-1	
1,1,1-Trichloroethane	ND	ug/kg	5.3	1		07/26/12 16:24	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	5.3	1		07/26/12 16:24	79-00-5	
Trichloroethene	ND	ug/kg	5.3	1		07/26/12 16:24	79-01-6	
Trichlorofluoromethane	ND	ug/kg	5.3	1		07/26/12 16:24	75-69-4	
1,2,3-Trichloropropane	ND	ug/kg	5.3	1		07/26/12 16:24	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/kg	5.3	1		07/26/12 16:24	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/kg	5.3	1		07/26/12 16:24	108-67-8	
Vinyl chloride	ND	ug/kg	5.3	1		07/26/12 16:24	75-01-4	
Xylene (Total)	ND	ug/kg	5.3	1		07/26/12 16:24	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	106 %		78-122	1		07/26/12 16:24	1868-53-7	
Toluene-d8 (S)	103 %		80-123	1		07/26/12 16:24	2037-26-5	
4-Bromofluorobenzene (S)	101 %		78-125	1		07/26/12 16:24	460-00-4	
1,2-Dichloroethane-d4 (S)	118 %		73-135	1		07/26/12 16:24	17060-07-0	

Percent Moisture

Analytical Method: ASTM D2974

Percent Moisture	21.1 %	0.50	1	08/01/12 00:00
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ANALYTICAL RESULTS

Project: KUHLMAN DIECASTING

Pace Project No.: 60125643

Sample: SB-5-GW		Lab ID: 60125643010	Collected: 07/18/12 10:42	Received: 07/21/12 08:55	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
OA2 GCS		Analytical Method: OA2 Preparation Method: OA2						
Diesel Fuel	ND mg/L		0.44	1	07/24/12 00:00	07/25/12 05:21	68334-30-5	
Fuel Oil	ND mg/L		0.44	1	07/24/12 00:00	07/25/12 05:21	68553-00-4	
Jet Fuel	ND mg/L		0.44	1	07/24/12 00:00	07/25/12 05:21	94114-58-6	
Kerosene	ND mg/L		0.44	1	07/24/12 00:00	07/25/12 05:21	8008-20-6	
Mineral Spirits	ND mg/L		0.44	1	07/24/12 00:00	07/25/12 05:21	8030-30-6	
Motor Oil	ND mg/L		0.44	1	07/24/12 00:00	07/25/12 05:21	64742-65-0	
Total Petroleum Hydrocarbons	0.56 mg/L		0.44	1	07/24/12 00:00	07/25/12 05:21		3e
Surrogates								
p-Terphenyl (S)	61 %		20-122	1	07/24/12 00:00	07/25/12 05:21	92-94-4	
n-Tetracosane (S)	61 %		30-122	1	07/24/12 00:00	07/25/12 05:21	646-31-1	
6010 MET ICP		Analytical Method: EPA 6010 Preparation Method: EPA 3010						
Antimony	ND ug/L		10.0	1	07/26/12 14:30	07/27/12 12:31	7440-36-0	
Arsenic	16.8 ug/L		10.0	1	07/26/12 14:30	07/27/12 12:31	7440-38-2	
Beryllium	18.1 ug/L		1.0	1	07/26/12 14:30	07/27/12 12:31	7440-41-7	
Cadmium	97.9 ug/L		5.0	1	07/26/12 14:30	07/27/12 12:31	7440-43-9	
Chromium	76.7 ug/L		15.0	3	07/26/12 14:30	07/30/12 15:32	7440-47-3	
Copper	498 ug/L		10.0	1	07/26/12 14:30	07/27/12 12:31	7440-50-8	
Lead	47.2 ug/L		5.0	1	07/26/12 14:30	07/27/12 12:31	7439-92-1	
Nickel	385 ug/L		5.0	1	07/26/12 14:30	07/27/12 12:31	7440-02-0	
Selenium	ND ug/L		45.0	3	07/26/12 14:30	07/30/12 15:32	7782-49-2	D3
Silver	ND ug/L		7.0	1	07/26/12 14:30	07/27/12 12:31	7440-22-4	
Thallium	ND ug/L		60.0	3	07/26/12 14:30	07/30/12 15:32	7440-28-0	
Zinc	3230 ug/L		50.0	1	07/26/12 14:30	07/27/12 12:31	7440-66-6	
6010 MET ICP, Dissolved		Analytical Method: EPA 6010 Preparation Method: EPA 3010						
Antimony, Dissolved	ND ug/L		10.0	1	07/26/12 14:30	07/30/12 16:45	7440-36-0	
Arsenic, Dissolved	ND ug/L		10.0	1	07/26/12 14:30	07/30/12 16:45	7440-38-2	
Beryllium, Dissolved	ND ug/L		1.0	1	07/26/12 14:30	07/30/12 16:45	7440-41-7	
Cadmium, Dissolved	ND ug/L		5.0	1	07/26/12 14:30	07/30/12 16:45	7440-43-9	
Chromium, Dissolved	ND ug/L		5.0	1	07/26/12 14:30	07/30/12 16:45	7440-47-3	
Copper, Dissolved	ND ug/L		10.0	1	07/26/12 14:30	07/30/12 16:45	7440-50-8	
Lead, Dissolved	ND ug/L		5.0	1	07/26/12 14:30	07/30/12 16:45	7439-92-1	
Nickel, Dissolved	12.4 ug/L		5.0	1	07/26/12 14:30	07/30/12 16:45	7440-02-0	
Selenium, Dissolved	ND ug/L		15.0	1	07/26/12 14:30	07/30/12 16:45	7782-49-2	
Silver, Dissolved	ND ug/L		7.0	1	07/26/12 14:30	07/30/12 16:45	7440-22-4	
Thallium, Dissolved	ND ug/L		20.0	1	07/26/12 14:30	07/30/12 16:45	7440-28-0	
Zinc, Dissolved	81.7 ug/L		50.0	1	07/26/12 14:30	07/30/12 16:45	7440-66-6	
7470 Mercury		Analytical Method: EPA 7470 Preparation Method: EPA 7470						
Mercury	2.4 ug/L		0.20	1	07/24/12 09:15	07/24/12 15:40	7439-97-6	
7470 Mercury, Dissolved		Analytical Method: EPA 7470 Preparation Method: EPA 7470						
Mercury, Dissolved	ND ug/L		0.20	1	08/01/12 06:30	08/03/12 11:27	7439-97-6	

ANALYTICAL RESULTS

Project: KUHLMAN DIECASTING

Pace Project No.: 60125643

Sample: SB-5-GW		Lab ID: 60125643010	Collected: 07/18/12 10:42	Received: 07/21/12 08:55	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by SIM		Analytical Method: EPA 8270C by SIM Preparation Method: EPA 3510C						
Acenaphthene	ND ug/L		0.10	1	07/24/12 00:00	08/06/12 19:03	83-32-9	
Acenaphthylene	ND ug/L		0.10	1	07/24/12 00:00	08/06/12 19:03	208-96-8	
Anthracene	ND ug/L		0.10	1	07/24/12 00:00	08/06/12 19:03	120-12-7	
Benzo(a)anthracene	ND ug/L		0.10	1	07/24/12 00:00	08/06/12 19:03	56-55-3	
Benzo(a)pyrene	ND ug/L		0.10	1	07/24/12 00:00	08/06/12 19:03	50-32-8	
Benzo(b)fluoranthene	ND ug/L		0.10	1	07/24/12 00:00	08/06/12 19:03	205-99-2	
Benzo(g,h,i)perylene	ND ug/L		0.10	1	07/24/12 00:00	08/06/12 19:03	191-24-2	
Benzo(k)fluoranthene	ND ug/L		0.10	1	07/24/12 00:00	08/06/12 19:03	207-08-9	
Chrysene	ND ug/L		0.10	1	07/24/12 00:00	08/06/12 19:03	218-01-9	
Dibenz(a,h)anthracene	ND ug/L		0.10	1	07/24/12 00:00	08/06/12 19:03	53-70-3	
Fluoranthene	0.16 ug/L		0.10	1	07/24/12 00:00	08/06/12 19:03	206-44-0	
Fluorene	ND ug/L		0.10	1	07/24/12 00:00	08/06/12 19:03	86-73-7	
Indeno(1,2,3-cd)pyrene	ND ug/L		0.10	1	07/24/12 00:00	08/06/12 19:03	193-39-5	
Naphthalene	ND ug/L		0.50	1	07/24/12 00:00	08/06/12 19:03	91-20-3	
Phenanthrene	ND ug/L		0.50	1	07/24/12 00:00	08/06/12 19:03	85-01-8	
Pyrene	ND ug/L		0.10	1	07/24/12 00:00	08/06/12 19:03	129-00-0	
Surrogates								
Nitrobenzene-d5 (S)	70 %		42-120	1	07/24/12 00:00	08/06/12 19:03	4165-60-0	
2-Fluorobiphenyl (S)	70 %		44-120	1	07/24/12 00:00	08/06/12 19:03	321-60-8	
Terphenyl-d14 (S)	83 %		46-131	1	07/24/12 00:00	08/06/12 19:03	1718-51-0	
8260 MSV		Analytical Method: EPA 5030B/8260						
Acetone	ND ug/L		10.0	1		07/27/12 14:26	67-64-1	
Benzene	ND ug/L		1.0	1		07/27/12 14:26	71-43-2	
Bromobenzene	ND ug/L		1.0	1		07/27/12 14:26	108-86-1	
Bromochloromethane	ND ug/L		1.0	1		07/27/12 14:26	74-97-5	
Bromodichloromethane	ND ug/L		1.0	1		07/27/12 14:26	75-27-4	
Bromoform	ND ug/L		1.0	1		07/27/12 14:26	75-25-2	
Bromomethane	ND ug/L		5.0	1		07/27/12 14:26	74-83-9	
2-Butanone (MEK)	ND ug/L		10.0	1		07/27/12 14:26	78-93-3	
n-Butylbenzene	ND ug/L		1.0	1		07/27/12 14:26	104-51-8	
sec-Butylbenzene	ND ug/L		1.0	1		07/27/12 14:26	135-98-8	
tert-Butylbenzene	ND ug/L		1.0	1		07/27/12 14:26	98-06-6	
Carbon disulfide	ND ug/L		5.0	1		07/27/12 14:26	75-15-0	
Carbon tetrachloride	ND ug/L		1.0	1		07/27/12 14:26	56-23-5	
Chlorobenzene	ND ug/L		1.0	1		07/27/12 14:26	108-90-7	
Chloroethane	ND ug/L		1.0	1		07/27/12 14:26	75-00-3	
Chloroform	ND ug/L		1.0	1		07/27/12 14:26	67-66-3	
Chloromethane	ND ug/L		1.0	1		07/27/12 14:26	74-87-3	
2-Chlorotoluene	ND ug/L		1.0	1		07/27/12 14:26	95-49-8	
4-Chlorotoluene	ND ug/L		1.0	1		07/27/12 14:26	106-43-4	
1,2-Dibromo-3-chloropropane	ND ug/L		2.5	1		07/27/12 14:26	96-12-8	
Dibromochloromethane	ND ug/L		1.0	1		07/27/12 14:26	124-48-1	
1,2-Dibromoethane (EDB)	ND ug/L		1.0	1		07/27/12 14:26	106-93-4	
Dibromomethane	ND ug/L		1.0	1		07/27/12 14:26	74-95-3	
1,2-Dichlorobenzene	ND ug/L		1.0	1		07/27/12 14:26	95-50-1	
1,3-Dichlorobenzene	ND ug/L		1.0	1		07/27/12 14:26	541-73-1	

Date: 08/09/2012 10:51 AM

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ANALYTICAL RESULTS

Project: KUHLMAN DIECASTING

Pace Project No.: 60125643

Sample: SB-5-GW		Lab ID: 60125643010	Collected: 07/18/12 10:42	Received: 07/21/12 08:55	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV		Analytical Method: EPA 5030B/8260						
1,4-Dichlorobenzene	ND ug/L		1.0	1		07/27/12 14:26	106-46-7	
Dichlorodifluoromethane	ND ug/L		1.0	1		07/27/12 14:26	75-71-8	
1,1-Dichloroethane	ND ug/L		1.0	1		07/27/12 14:26	75-34-3	
1,2-Dichloroethane	ND ug/L		1.0	1		07/27/12 14:26	107-06-2	
1,2-Dichloroethene (Total)	ND ug/L		1.0	1		07/27/12 14:26	540-59-0	
1,1-Dichloroethene	ND ug/L		1.0	1		07/27/12 14:26	75-35-4	
cis-1,2-Dichloroethene	ND ug/L		1.0	1		07/27/12 14:26	156-59-2	
trans-1,2-Dichloroethene	ND ug/L		1.0	1		07/27/12 14:26	156-60-5	
1,2-Dichloropropane	ND ug/L		1.0	1		07/27/12 14:26	78-87-5	
1,3-Dichloropropane	ND ug/L		1.0	1		07/27/12 14:26	142-28-9	
2,2-Dichloropropane	ND ug/L		1.0	1		07/27/12 14:26	594-20-7	
1,1-Dichloropropene	ND ug/L		1.0	1		07/27/12 14:26	563-58-6	
cis-1,3-Dichloropropene	ND ug/L		1.0	1		07/27/12 14:26	10061-01-5	
trans-1,3-Dichloropropene	ND ug/L		1.0	1		07/27/12 14:26	10061-02-6	
Ethylbenzene	ND ug/L		1.0	1		07/27/12 14:26	100-41-4	
Hexachloro-1,3-butadiene	ND ug/L		1.0	1		07/27/12 14:26	87-68-3	
2-Hexanone	ND ug/L		10.0	1		07/27/12 14:26	591-78-6	
Isopropylbenzene (Cumene)	ND ug/L		1.0	1		07/27/12 14:26	98-82-8	
p-Isopropyltoluene	ND ug/L		1.0	1		07/27/12 14:26	99-87-6	
Methylene chloride	ND ug/L		1.0	1		07/27/12 14:26	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND ug/L		10.0	1		07/27/12 14:26	108-10-1	
Methyl-tert-butyl ether	ND ug/L		1.0	1		07/27/12 14:26	1634-04-4	
Naphthalene	ND ug/L		10.0	1		07/27/12 14:26	91-20-3	
n-Propylbenzene	ND ug/L		1.0	1		07/27/12 14:26	103-65-1	
Styrene	ND ug/L		1.0	1		07/27/12 14:26	100-42-5	
1,1,1,2-Tetrachloroethane	ND ug/L		1.0	1		07/27/12 14:26	630-20-6	
1,1,2,2-Tetrachloroethane	ND ug/L		1.0	1		07/27/12 14:26	79-34-5	
Tetrachloroethene	ND ug/L		1.0	1		07/27/12 14:26	127-18-4	
Toluene	ND ug/L		1.0	1		07/27/12 14:26	108-88-3	
1,2,3-Trichlorobenzene	ND ug/L		1.0	1		07/27/12 14:26	87-61-6	
1,2,4-Trichlorobenzene	ND ug/L		1.0	1		07/27/12 14:26	120-82-1	
1,1,1-Trichloroethane	ND ug/L		1.0	1		07/27/12 14:26	71-55-6	
1,1,2-Trichloroethane	ND ug/L		1.0	1		07/27/12 14:26	79-00-5	
Trichloroethene	ND ug/L		1.0	1		07/27/12 14:26	79-01-6	
Trichlorofluoromethane	ND ug/L		1.0	1		07/27/12 14:26	75-69-4	
1,2,3-Trichloropropane	ND ug/L		2.5	1		07/27/12 14:26	96-18-4	
1,2,4-Trimethylbenzene	ND ug/L		1.0	1		07/27/12 14:26	95-63-6	
1,3,5-Trimethylbenzene	ND ug/L		1.0	1		07/27/12 14:26	108-67-8	
Vinyl chloride	ND ug/L		1.0	1		07/27/12 14:26	75-01-4	
Xylene (Total)	ND ug/L		3.0	1		07/27/12 14:26	1330-20-7	
Surrogates								
4-Bromofluorobenzene (S)	100 %		80-120	1		07/27/12 14:26	460-00-4	
Dibromofluoromethane (S)	97 %		80-120	1		07/27/12 14:26	1868-53-7	
1,2-Dichloroethane-d4 (S)	87 %		80-120	1		07/27/12 14:26	17060-07-0	
Toluene-d8 (S)	99 %		80-120	1		07/27/12 14:26	2037-26-5	
Preservation pH	1.0		0.10	1		07/27/12 14:26		

Date: 08/09/2012 10:51 AM

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: KUHLMAN DIECASTING

Pace Project No.: 60125643

Sample: SB-5-GW		Lab ID: 60125643010	Collected: 07/18/12 10:42	Received: 07/21/12 08:55	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260/OA1 UST, Water		Analytical Method: EPA 8260/OA1						
Gasoline Range Organics	ND mg/L		0.50	1		07/27/12 14:26		
Benzene	ND ug/L		1.0	1		07/27/12 14:26	71-43-2	
Toluene	ND ug/L		1.0	1		07/27/12 14:26	108-88-3	
Ethylbenzene	ND ug/L		1.0	1		07/27/12 14:26	100-41-4	
Xylene (Total)	ND ug/L		3.0	1		07/27/12 14:26	1330-20-7	
Methyl-tert-butyl ether	ND ug/L		1.0	1		07/27/12 14:26	1634-04-4	
Naphthalene	ND ug/L		10.0	1		07/27/12 14:26	91-20-3	
1,2-Dichloroethane	ND ug/L		1.0	1		07/27/12 14:26	107-06-2	
tert-Butyl Alcohol	ND ug/L		10.0	1		07/27/12 14:26	75-65-0	
Surrogates								
Dibromofluoromethane (S)	97 %		80-120	1		07/27/12 14:26	1868-53-7	
Toluene-d8 (S)	99 %		80-120	1		07/27/12 14:26	2037-26-5	
4-Bromofluorobenzene (S)	100 %		80-120	1		07/27/12 14:26	460-00-4	
1,2-Dichloroethane-d4 (S)	87 %		80-120	1		07/27/12 14:26	17060-07-0	
Preservation pH	1.0		0.10	1		07/27/12 14:26		

ANALYTICAL RESULTS

Project: KUHLMAN DIECASTING

Pace Project No.: 60125643

Sample: **SB-6-14-16** Lab ID: **60125643011** Collected: 07/18/12 12:00 Received: 07/21/12 08:55 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
OA2 GCS Analytical Method: OA2 Preparation Method: OA2								
Diesel Fuel	ND	mg/kg	23.5	1	07/24/12 00:00	07/29/12 08:34	68334-30-5	
Fuel Oil	ND	mg/kg	23.5	1	07/24/12 00:00	07/29/12 08:34	68553-00-4	
Jet Fuel	ND	mg/kg	23.5	1	07/24/12 00:00	07/29/12 08:34	94114-58-6	
Kerosene	ND	mg/kg	23.5	1	07/24/12 00:00	07/29/12 08:34	8008-20-6	
Mineral Spirits	ND	mg/kg	23.5	1	07/24/12 00:00	07/29/12 08:34	8030-30-6	
Motor Oil	ND	mg/kg	23.5	1	07/24/12 00:00	07/29/12 08:34	64742-65-0	
Total Petroleum Hydrocarbons	3640	mg/kg	23.5	1	07/24/12 00:00	07/29/12 08:34		2e
Surrogates								
n-Tetracosane (S)	136	%	50-137	1	07/24/12 00:00	07/29/12 08:34	646-31-1	
p-Terphenyl (S)	131	%	41-129	1	07/24/12 00:00	07/29/12 08:34	92-94-4	1e,S0

6010 MET ICP Analytical Method: EPA 6010 Preparation Method: EPA 3050

Antimony	ND	mg/kg	1.2	1	07/25/12 16:15	07/26/12 18:03	7440-36-0	
Arsenic	4.7	mg/kg	1.2	1	07/25/12 16:15	07/26/12 18:03	7440-38-2	
Beryllium	0.74	mg/kg	0.12	1	07/25/12 16:15	07/26/12 18:03	7440-41-7	
Cadmium	ND	mg/kg	0.58	1	07/25/12 16:15	07/26/12 18:03	7440-43-9	
Chromium	20.3	mg/kg	0.58	1	07/25/12 16:15	07/26/12 18:03	7440-47-3	
Copper	14.5	mg/kg	1.2	1	07/25/12 16:15	07/26/12 18:03	7440-50-8	
Lead	10.6	mg/kg	0.58	1	07/25/12 16:15	07/26/12 18:03	7439-92-1	
Nickel	19.6	mg/kg	0.58	1	07/25/12 16:15	07/26/12 18:03	7440-02-0	
Selenium	ND	mg/kg	1.7	1	07/25/12 16:15	07/26/12 18:03	7782-49-2	
Silver	ND	mg/kg	0.81	1	07/25/12 16:15	07/26/12 18:03	7440-22-4	
Thallium	ND	mg/kg	2.3	1	07/25/12 16:15	07/26/12 18:03	7440-28-0	
Zinc	57.6	mg/kg	11.5	1	07/25/12 16:15	07/26/12 18:03	7440-66-6	

7471 Mercury Analytical Method: EPA 7471 Preparation Method: EPA 7471

Mercury	ND	mg/kg	0.053	1	07/26/12 12:50	07/26/12 17:03	7439-97-6	
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8270 MSSV PAH by SIM Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546

Acenaphthene	82.6	ug/kg	20.9	5	07/26/12 00:00	07/28/12 20:24	83-32-9	
Acenaphthylene	42.2	ug/kg	20.9	5	07/26/12 00:00	07/28/12 20:24	208-96-8	
Anthracene	32.5	ug/kg	20.9	5	07/26/12 00:00	07/28/12 20:24	120-12-7	
Benzo(a)anthracene	ND	ug/kg	20.9	5	07/26/12 00:00	07/28/12 20:24	56-55-3	
Benzo(a)pyrene	ND	ug/kg	20.9	5	07/26/12 00:00	07/28/12 20:24	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	20.9	5	07/26/12 00:00	07/28/12 20:24	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	20.9	5	07/26/12 00:00	07/28/12 20:24	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	20.9	5	07/26/12 00:00	07/28/12 20:24	207-08-9	
Chrysene	104	ug/kg	20.9	5	07/26/12 00:00	07/28/12 20:24	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	20.9	5	07/26/12 00:00	07/28/12 20:24	53-70-3	
Fluoranthene	25.6	ug/kg	20.9	5	07/26/12 00:00	07/28/12 20:24	206-44-0	
Fluorene	261	ug/kg	20.9	5	07/26/12 00:00	07/28/12 20:24	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	20.9	5	07/26/12 00:00	07/28/12 20:24	193-39-5	
Naphthalene	268	ug/kg	20.9	5	07/26/12 00:00	07/28/12 20:24	91-20-3	
Phenanthrene	804	ug/kg	20.9	5	07/26/12 00:00	07/28/12 20:24	85-01-8	
Pyrene	24.0	ug/kg	20.9	5	07/26/12 00:00	07/28/12 20:24	129-00-0	

ANALYTICAL RESULTS

Project: KUHLMAN DIECASTING

Pace Project No.: 60125643

Sample: SB-6-14-16 Lab ID: 60125643011 Collected: 07/18/12 12:00 Received: 07/21/12 08:55 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
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8270 MSSV PAH by SIM

Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546

Surrogates

Nitrobenzene-d5 (S)	0 %		35-121	5	07/26/12 00:00	07/28/12 20:24	4165-60-0	S4
2-Fluorobiphenyl (S)	0 %		41-120	5	07/26/12 00:00	07/28/12 20:24	321-60-8	S4
Terphenyl-d14 (S)	0 %		39-123	5	07/26/12 00:00	07/28/12 20:24	1718-51-0	S4

OA1 Volatile Pet. Hydrocarbons

Analytical Method: OA1

Gasoline Range Organics	640 mg/kg		58.0	50		07/26/12 16:39		
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8260 MSV 5035A VOA

Analytical Method: EPA 8260

Acetone	ND ug/kg		1160	50		07/26/12 16:39	67-64-1	
Benzene	ND ug/kg		290	50		07/26/12 16:39	71-43-2	
Bromobenzene	ND ug/kg		290	50		07/26/12 16:39	108-86-1	
Bromochloromethane	ND ug/kg		290	50		07/26/12 16:39	74-97-5	
Bromodichloromethane	ND ug/kg		290	50		07/26/12 16:39	75-27-4	
Bromoform	ND ug/kg		290	50		07/26/12 16:39	75-25-2	
Bromomethane	ND ug/kg		290	50		07/26/12 16:39	74-83-9	
2-Butanone (MEK)	ND ug/kg		580	50		07/26/12 16:39	78-93-3	
n-Butylbenzene	ND ug/kg		290	50		07/26/12 16:39	104-51-8	
sec-Butylbenzene	662 ug/kg		290	50		07/26/12 16:39	135-98-8	
tert-Butylbenzene	ND ug/kg		290	50		07/26/12 16:39	98-06-6	
Carbon disulfide	ND ug/kg		290	50		07/26/12 16:39	75-15-0	
Carbon tetrachloride	ND ug/kg		290	50		07/26/12 16:39	56-23-5	
Chlorobenzene	ND ug/kg		290	50		07/26/12 16:39	108-90-7	
Chloroethane	ND ug/kg		290	50		07/26/12 16:39	75-00-3	
Chloroform	ND ug/kg		290	50		07/26/12 16:39	67-66-3	L2
Chloromethane	ND ug/kg		290	50		07/26/12 16:39	74-87-3	
2-Chlorotoluene	ND ug/kg		290	50		07/26/12 16:39	95-49-8	
4-Chlorotoluene	ND ug/kg		290	50		07/26/12 16:39	106-43-4	
1,2-Dibromo-3-chloropropane	ND ug/kg		580	50		07/26/12 16:39	96-12-8	
Dibromochloromethane	ND ug/kg		290	50		07/26/12 16:39	124-48-1	
1,2-Dibromoethane (EDB)	ND ug/kg		290	50		07/26/12 16:39	106-93-4	
Dibromomethane	ND ug/kg		290	50		07/26/12 16:39	74-95-3	
1,2-Dichlorobenzene	ND ug/kg		290	50		07/26/12 16:39	95-50-1	
1,3-Dichlorobenzene	ND ug/kg		290	50		07/26/12 16:39	541-73-1	
1,4-Dichlorobenzene	ND ug/kg		290	50		07/26/12 16:39	106-46-7	
Dichlorodifluoromethane	ND ug/kg		290	50		07/26/12 16:39	75-71-8	
1,1-Dichloroethane	ND ug/kg		290	50		07/26/12 16:39	75-34-3	
1,2-Dichloroethane	ND ug/kg		290	50		07/26/12 16:39	107-06-2	
1,2-Dichloroethene (Total)	ND ug/kg		290	50		07/26/12 16:39	540-59-0	
1,1-Dichloroethene	ND ug/kg		290	50		07/26/12 16:39	75-35-4	
cis-1,2-Dichloroethene	ND ug/kg		290	50		07/26/12 16:39	156-59-2	
trans-1,2-Dichloroethene	ND ug/kg		290	50		07/26/12 16:39	156-60-5	
1,2-Dichloropropane	ND ug/kg		290	50		07/26/12 16:39	78-87-5	
1,3-Dichloropropane	ND ug/kg		290	50		07/26/12 16:39	142-28-9	
2,2-Dichloropropane	ND ug/kg		290	50		07/26/12 16:39	594-20-7	
1,1-Dichloropropene	ND ug/kg		290	50		07/26/12 16:39	563-58-6	

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ANALYTICAL RESULTS

Project: KUHLMAN DIECASTING

Pace Project No.: 60125643

Sample: SB-6-14-16 **Lab ID: 60125643011** Collected: 07/18/12 12:00 Received: 07/21/12 08:55 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035A VOA		Analytical Method: EPA 8260						
cis-1,3-Dichloropropene	ND	ug/kg	290	50		07/26/12 16:39	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/kg	290	50		07/26/12 16:39	10061-02-6	
Ethylbenzene	ND	ug/kg	290	50		07/26/12 16:39	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	290	50		07/26/12 16:39	87-68-3	
2-Hexanone	ND	ug/kg	1160	50		07/26/12 16:39	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/kg	290	50		07/26/12 16:39	98-82-8	
p-Isopropyltoluene	ND	ug/kg	290	50		07/26/12 16:39	99-87-6	
Methylene chloride	ND	ug/kg	290	50		07/26/12 16:39	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	580	50		07/26/12 16:39	108-10-1	
Methyl-tert-butyl ether	ND	ug/kg	290	50		07/26/12 16:39	1634-04-4	
Naphthalene	ND	ug/kg	580	50		07/26/12 16:39	91-20-3	
n-Propylbenzene	ND	ug/kg	290	50		07/26/12 16:39	103-65-1	
Styrene	ND	ug/kg	290	50		07/26/12 16:39	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/kg	290	50		07/26/12 16:39	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	290	50		07/26/12 16:39	79-34-5	
Tetrachloroethene	ND	ug/kg	290	50		07/26/12 16:39	127-18-4	
Toluene	ND	ug/kg	290	50		07/26/12 16:39	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/kg	290	50		07/26/12 16:39	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/kg	290	50		07/26/12 16:39	120-82-1	
1,1,1-Trichloroethane	ND	ug/kg	290	50		07/26/12 16:39	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	290	50		07/26/12 16:39	79-00-5	
Trichloroethene	ND	ug/kg	290	50		07/26/12 16:39	79-01-6	
Trichlorofluoromethane	ND	ug/kg	290	50		07/26/12 16:39	75-69-4	
1,2,3-Trichloropropane	ND	ug/kg	290	50		07/26/12 16:39	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/kg	290	50		07/26/12 16:39	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/kg	290	50		07/26/12 16:39	108-67-8	
Vinyl chloride	ND	ug/kg	290	50		07/26/12 16:39	75-01-4	
Xylene (Total)	ND	ug/kg	290	50		07/26/12 16:39	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	94 %		78-122	50		07/26/12 16:39	1868-53-7	D3
Toluene-d8 (S)	115 %		80-123	50		07/26/12 16:39	2037-26-5	
4-Bromofluorobenzene (S)	97 %		78-125	50		07/26/12 16:39	460-00-4	
1,2-Dichloroethane-d4 (S)	92 %		73-135	50		07/26/12 16:39	17060-07-0	

Percent Moisture

Analytical Method: ASTM D2974

Percent Moisture	21.2 %	0.50	1	08/01/12 00:00
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ANALYTICAL RESULTS

Project: KUHLMAN DIECASTING

Pace Project No.: 60125643

Sample: SB-6-GW		Lab ID: 60125643012	Collected: 07/18/12 12:02	Received: 07/21/12 08:55	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
OA2 GCS		Analytical Method: OA2 Preparation Method: OA2						
Diesel Fuel	ND mg/L		0.40	1	07/24/12 00:00	07/25/12 05:32	68334-30-5	
Fuel Oil	ND mg/L		0.40	1	07/24/12 00:00	07/25/12 05:32	68553-00-4	
Jet Fuel	ND mg/L		0.40	1	07/24/12 00:00	07/25/12 05:32	94114-58-6	
Kerosene	ND mg/L		0.40	1	07/24/12 00:00	07/25/12 05:32	8008-20-6	
Mineral Spirits	ND mg/L		0.40	1	07/24/12 00:00	07/25/12 05:32	8030-30-6	
Motor Oil	ND mg/L		0.40	1	07/24/12 00:00	07/25/12 05:32	64742-65-0	
Total Petroleum Hydrocarbons	ND mg/L		0.40	1	07/24/12 00:00	07/25/12 05:32		
Surrogates								
p-Terphenyl (S)	60 %		20-122	1	07/24/12 00:00	07/25/12 05:32	92-94-4	
n-Tetracosane (S)	58 %		30-122	1	07/24/12 00:00	07/25/12 05:32	646-31-1	
6010 MET ICP		Analytical Method: EPA 6010 Preparation Method: EPA 3010						
Antimony	ND ug/L		10.0	1	07/26/12 14:30	07/27/12 12:33	7440-36-0	
Arsenic	18.2 ug/L		10.0	1	07/26/12 14:30	07/27/12 12:33	7440-38-2	
Beryllium	1.6 ug/L		1.0	1	07/26/12 14:30	07/27/12 12:33	7440-41-7	
Cadmium	10.9 ug/L		5.0	1	07/26/12 14:30	07/27/12 12:33	7440-43-9	
Chromium	22.1 ug/L		5.0	1	07/26/12 14:30	07/27/12 12:33	7440-47-3	
Copper	251 ug/L		10.0	1	07/26/12 14:30	07/27/12 12:33	7440-50-8	
Lead	24.8 ug/L		5.0	1	07/26/12 14:30	07/27/12 12:33	7439-92-1	
Nickel	75.4 ug/L		5.0	1	07/26/12 14:30	07/27/12 12:33	7440-02-0	
Selenium	ND ug/L		15.0	1	07/26/12 14:30	07/27/12 12:33	7782-49-2	
Silver	ND ug/L		7.0	1	07/26/12 14:30	07/27/12 12:33	7440-22-4	
Thallium	ND ug/L		20.0	1	07/26/12 14:30	07/27/12 12:33	7440-28-0	
Zinc	273 ug/L		50.0	1	07/26/12 14:30	07/27/12 12:33	7440-66-6	
6010 MET ICP, Dissolved		Analytical Method: EPA 6010 Preparation Method: EPA 3010						
Antimony, Dissolved	ND ug/L		10.0	1	07/26/12 14:30	07/30/12 16:48	7440-36-0	
Arsenic, Dissolved	ND ug/L		10.0	1	07/26/12 14:30	07/30/12 16:48	7440-38-2	
Beryllium, Dissolved	ND ug/L		1.0	1	07/26/12 14:30	07/30/12 16:48	7440-41-7	
Cadmium, Dissolved	ND ug/L		5.0	1	07/26/12 14:30	07/30/12 16:48	7440-43-9	
Chromium, Dissolved	ND ug/L		5.0	1	07/26/12 14:30	07/30/12 16:48	7440-47-3	
Copper, Dissolved	ND ug/L		10.0	1	07/26/12 14:30	07/30/12 16:48	7440-50-8	
Lead, Dissolved	34.8 ug/L		5.0	1	07/26/12 14:30	07/30/12 16:48	7439-92-1	D9
Nickel, Dissolved	10.3 ug/L		5.0	1	07/26/12 14:30	07/30/12 16:48	7440-02-0	
Selenium, Dissolved	22.7 ug/L		15.0	1	07/26/12 14:30	07/30/12 16:48	7782-49-2	D9
Silver, Dissolved	ND ug/L		7.0	1	07/26/12 14:30	07/30/12 16:48	7440-22-4	
Thallium, Dissolved	ND ug/L		20.0	1	07/26/12 14:30	07/30/12 16:48	7440-28-0	
Zinc, Dissolved	91.5 ug/L		50.0	1	07/26/12 14:30	07/30/12 16:48	7440-66-6	
7470 Mercury		Analytical Method: EPA 7470 Preparation Method: EPA 7470						
Mercury	0.46 ug/L		0.20	1	07/24/12 09:15	07/24/12 15:47	7439-97-6	
7470 Mercury, Dissolved		Analytical Method: EPA 7470 Preparation Method: EPA 7470						
Mercury, Dissolved	ND ug/L		0.20	1	08/01/12 06:30	08/03/12 11:29	7439-97-6	

ANALYTICAL RESULTS

Project: KUHLMAN DIECASTING
Pace Project No.: 60125643

Sample: SB-6-GW		Lab ID: 60125643012	Collected: 07/18/12 12:02	Received: 07/21/12 08:55	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by SIM		Analytical Method: EPA 8270C by SIM Preparation Method: EPA 3510C						
Acenaphthene	ND ug/L		0.10	1	07/24/12 00:00	08/06/12 19:21	83-32-9	
Acenaphthylene	ND ug/L		0.10	1	07/24/12 00:00	08/06/12 19:21	208-96-8	
Anthracene	ND ug/L		0.10	1	07/24/12 00:00	08/06/12 19:21	120-12-7	
Benzo(a)anthracene	ND ug/L		0.10	1	07/24/12 00:00	08/06/12 19:21	56-55-3	
Benzo(a)pyrene	ND ug/L		0.10	1	07/24/12 00:00	08/06/12 19:21	50-32-8	
Benzo(b)fluoranthene	ND ug/L		0.10	1	07/24/12 00:00	08/06/12 19:21	205-99-2	
Benzo(g,h,i)perylene	ND ug/L		0.10	1	07/24/12 00:00	08/06/12 19:21	191-24-2	
Benzo(k)fluoranthene	ND ug/L		0.10	1	07/24/12 00:00	08/06/12 19:21	207-08-9	
Chrysene	ND ug/L		0.10	1	07/24/12 00:00	08/06/12 19:21	218-01-9	
Dibenz(a,h)anthracene	ND ug/L		0.10	1	07/24/12 00:00	08/06/12 19:21	53-70-3	
Fluoranthene	ND ug/L		0.10	1	07/24/12 00:00	08/06/12 19:21	206-44-0	
Fluorene	ND ug/L		0.10	1	07/24/12 00:00	08/06/12 19:21	86-73-7	
Indeno(1,2,3-cd)pyrene	ND ug/L		0.10	1	07/24/12 00:00	08/06/12 19:21	193-39-5	
Naphthalene	ND ug/L		0.50	1	07/24/12 00:00	08/06/12 19:21	91-20-3	
Phenanthrene	ND ug/L		0.50	1	07/24/12 00:00	08/06/12 19:21	85-01-8	
Pyrene	ND ug/L		0.10	1	07/24/12 00:00	08/06/12 19:21	129-00-0	
Surrogates								
Nitrobenzene-d5 (S)	79 %		42-120	1	07/24/12 00:00	08/06/12 19:21	4165-60-0	
2-Fluorobiphenyl (S)	72 %		44-120	1	07/24/12 00:00	08/06/12 19:21	321-60-8	
Terphenyl-d14 (S)	83 %		46-131	1	07/24/12 00:00	08/06/12 19:21	1718-51-0	
8260 MSV		Analytical Method: EPA 5030B/8260						
Acetone	ND ug/L		10.0	1		07/27/12 14:41	67-64-1	
Benzene	ND ug/L		1.0	1		07/27/12 14:41	71-43-2	
Bromobenzene	ND ug/L		1.0	1		07/27/12 14:41	108-86-1	
Bromochloromethane	ND ug/L		1.0	1		07/27/12 14:41	74-97-5	
Bromodichloromethane	ND ug/L		1.0	1		07/27/12 14:41	75-27-4	
Bromoform	ND ug/L		1.0	1		07/27/12 14:41	75-25-2	
Bromomethane	ND ug/L		5.0	1		07/27/12 14:41	74-83-9	
2-Butanone (MEK)	ND ug/L		10.0	1		07/27/12 14:41	78-93-3	
n-Butylbenzene	ND ug/L		1.0	1		07/27/12 14:41	104-51-8	
sec-Butylbenzene	ND ug/L		1.0	1		07/27/12 14:41	135-98-8	
tert-Butylbenzene	ND ug/L		1.0	1		07/27/12 14:41	98-06-6	
Carbon disulfide	ND ug/L		5.0	1		07/27/12 14:41	75-15-0	
Carbon tetrachloride	ND ug/L		1.0	1		07/27/12 14:41	56-23-5	
Chlorobenzene	ND ug/L		1.0	1		07/27/12 14:41	108-90-7	
Chloroethane	ND ug/L		1.0	1		07/27/12 14:41	75-00-3	
Chloroform	ND ug/L		1.0	1		07/27/12 14:41	67-66-3	
Chloromethane	ND ug/L		1.0	1		07/27/12 14:41	74-87-3	
2-Chlorotoluene	ND ug/L		1.0	1		07/27/12 14:41	95-49-8	
4-Chlorotoluene	ND ug/L		1.0	1		07/27/12 14:41	106-43-4	
1,2-Dibromo-3-chloropropane	ND ug/L		2.5	1		07/27/12 14:41	96-12-8	
Dibromochloromethane	ND ug/L		1.0	1		07/27/12 14:41	124-48-1	
1,2-Dibromoethane (EDB)	ND ug/L		1.0	1		07/27/12 14:41	106-93-4	
Dibromomethane	ND ug/L		1.0	1		07/27/12 14:41	74-95-3	
1,2-Dichlorobenzene	ND ug/L		1.0	1		07/27/12 14:41	95-50-1	
1,3-Dichlorobenzene	ND ug/L		1.0	1		07/27/12 14:41	541-73-1	

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ANALYTICAL RESULTS

Project: KUHLMAN DIECASTING

Pace Project No.: 60125643

Sample: SB-6-GW		Lab ID: 60125643012	Collected: 07/18/12 12:02	Received: 07/21/12 08:55	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV		Analytical Method: EPA 5030B/8260						
1,4-Dichlorobenzene	ND ug/L		1.0	1		07/27/12 14:41	106-46-7	
Dichlorodifluoromethane	ND ug/L		1.0	1		07/27/12 14:41	75-71-8	
1,1-Dichloroethane	ND ug/L		1.0	1		07/27/12 14:41	75-34-3	
1,2-Dichloroethane	ND ug/L		1.0	1		07/27/12 14:41	107-06-2	
1,2-Dichloroethene (Total)	ND ug/L		1.0	1		07/27/12 14:41	540-59-0	
1,1-Dichloroethene	ND ug/L		1.0	1		07/27/12 14:41	75-35-4	
cis-1,2-Dichloroethene	ND ug/L		1.0	1		07/27/12 14:41	156-59-2	
trans-1,2-Dichloroethene	ND ug/L		1.0	1		07/27/12 14:41	156-60-5	
1,2-Dichloropropane	ND ug/L		1.0	1		07/27/12 14:41	78-87-5	
1,3-Dichloropropane	ND ug/L		1.0	1		07/27/12 14:41	142-28-9	
2,2-Dichloropropane	ND ug/L		1.0	1		07/27/12 14:41	594-20-7	
1,1-Dichloropropene	ND ug/L		1.0	1		07/27/12 14:41	563-58-6	
cis-1,3-Dichloropropene	ND ug/L		1.0	1		07/27/12 14:41	10061-01-5	
trans-1,3-Dichloropropene	ND ug/L		1.0	1		07/27/12 14:41	10061-02-6	
Ethylbenzene	ND ug/L		1.0	1		07/27/12 14:41	100-41-4	
Hexachloro-1,3-butadiene	ND ug/L		1.0	1		07/27/12 14:41	87-68-3	
2-Hexanone	ND ug/L		10.0	1		07/27/12 14:41	591-78-6	
Isopropylbenzene (Cumene)	ND ug/L		1.0	1		07/27/12 14:41	98-82-8	
p-Isopropyltoluene	ND ug/L		1.0	1		07/27/12 14:41	99-87-6	
Methylene chloride	ND ug/L		1.0	1		07/27/12 14:41	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND ug/L		10.0	1		07/27/12 14:41	108-10-1	
Methyl-tert-butyl ether	ND ug/L		1.0	1		07/27/12 14:41	1634-04-4	
Naphthalene	ND ug/L		10.0	1		07/27/12 14:41	91-20-3	
n-Propylbenzene	ND ug/L		1.0	1		07/27/12 14:41	103-65-1	
Styrene	ND ug/L		1.0	1		07/27/12 14:41	100-42-5	
1,1,1,2-Tetrachloroethane	ND ug/L		1.0	1		07/27/12 14:41	630-20-6	
1,1,2,2-Tetrachloroethane	ND ug/L		1.0	1		07/27/12 14:41	79-34-5	
Tetrachloroethene	ND ug/L		1.0	1		07/27/12 14:41	127-18-4	
Toluene	ND ug/L		1.0	1		07/27/12 14:41	108-88-3	
1,2,3-Trichlorobenzene	ND ug/L		1.0	1		07/27/12 14:41	87-61-6	
1,2,4-Trichlorobenzene	ND ug/L		1.0	1		07/27/12 14:41	120-82-1	
1,1,1-Trichloroethane	ND ug/L		1.0	1		07/27/12 14:41	71-55-6	
1,1,2-Trichloroethane	ND ug/L		1.0	1		07/27/12 14:41	79-00-5	
Trichloroethene	ND ug/L		1.0	1		07/27/12 14:41	79-01-6	
Trichlorofluoromethane	ND ug/L		1.0	1		07/27/12 14:41	75-69-4	
1,2,3-Trichloropropane	ND ug/L		2.5	1		07/27/12 14:41	96-18-4	
1,2,4-Trimethylbenzene	ND ug/L		1.0	1		07/27/12 14:41	95-63-6	
1,3,5-Trimethylbenzene	ND ug/L		1.0	1		07/27/12 14:41	108-67-8	
Vinyl chloride	ND ug/L		1.0	1		07/27/12 14:41	75-01-4	
Xylene (Total)	ND ug/L		3.0	1		07/27/12 14:41	1330-20-7	
Surrogates								
4-Bromofluorobenzene (S)	102 %		80-120	1		07/27/12 14:41	460-00-4	
Dibromofluoromethane (S)	96 %		80-120	1		07/27/12 14:41	1868-53-7	
1,2-Dichloroethane-d4 (S)	86 %		80-120	1		07/27/12 14:41	17060-07-0	
Toluene-d8 (S)	101 %		80-120	1		07/27/12 14:41	2037-26-5	
Preservation pH	1.0		0.10	1		07/27/12 14:41		

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ANALYTICAL RESULTS

Project: KUHLMAN DIECASTING

Pace Project No.: 60125643

Sample: SB-6-GW		Lab ID: 60125643012	Collected: 07/18/12 12:02	Received: 07/21/12 08:55	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260/OA1 UST, Water		Analytical Method: EPA 8260/OA1						
Gasoline Range Organics	ND mg/L		0.50	1		07/27/12 14:41		
Benzene	ND ug/L		1.0	1		07/27/12 14:41	71-43-2	
Toluene	ND ug/L		1.0	1		07/27/12 14:41	108-88-3	
Ethylbenzene	ND ug/L		1.0	1		07/27/12 14:41	100-41-4	
Xylene (Total)	ND ug/L		3.0	1		07/27/12 14:41	1330-20-7	
Methyl-tert-butyl ether	ND ug/L		1.0	1		07/27/12 14:41	1634-04-4	
Naphthalene	ND ug/L		10.0	1		07/27/12 14:41	91-20-3	
1,2-Dichloroethane	ND ug/L		1.0	1		07/27/12 14:41	107-06-2	
tert-Butyl Alcohol	ND ug/L		10.0	1		07/27/12 14:41	75-65-0	
Surrogates								
Dibromofluoromethane (S)	96 %		80-120	1		07/27/12 14:41	1868-53-7	
Toluene-d8 (S)	101 %		80-120	1		07/27/12 14:41	2037-26-5	
4-Bromofluorobenzene (S)	102 %		80-120	1		07/27/12 14:41	460-00-4	
1,2-Dichloroethane-d4 (S)	86 %		80-120	1		07/27/12 14:41	17060-07-0	
Preservation pH	1.0		0.10	1		07/27/12 14:41		

ANALYTICAL RESULTS

Project: KUHLMAN DIECASTING

Pace Project No.: 60125643

Sample: SB-7-10-12 **Lab ID: 60125643013** Collected: 07/18/12 14:23 Received: 07/21/12 08:55 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
OA2 GCS Analytical Method: OA2 Preparation Method: OA2								
Diesel Fuel	ND	mg/kg	239	10	07/24/12 00:00	07/30/12 02:17	68334-30-5	
Fuel Oil	ND	mg/kg	239	10	07/24/12 00:00	07/30/12 02:17	68553-00-4	
Jet Fuel	ND	mg/kg	239	10	07/24/12 00:00	07/30/12 02:17	94114-58-6	
Kerosene	ND	mg/kg	239	10	07/24/12 00:00	07/30/12 02:17	8008-20-6	
Mineral Spirits	ND	mg/kg	239	10	07/24/12 00:00	07/30/12 02:17	8030-30-6	
Motor Oil	ND	mg/kg	239	10	07/24/12 00:00	07/30/12 02:17	64742-65-0	
Total Petroleum Hydrocarbons	7970	mg/kg	239	10	07/24/12 00:00	07/30/12 02:17		2e
Surrogates								
n-Tetracosane (S)	0 %		50-137	10	07/24/12 00:00	07/30/12 02:17	646-31-1	D4,S4
p-Terphenyl (S)	0 %		41-129	10	07/24/12 00:00	07/30/12 02:17	92-94-4	S4

6010 MET ICP Analytical Method: EPA 6010 Preparation Method: EPA 3050

Antimony	ND	mg/kg	1.0	1	07/25/12 16:15	07/26/12 18:05	7440-36-0	
Arsenic	4.1	mg/kg	1.0	1	07/25/12 16:15	07/26/12 18:05	7440-38-2	
Beryllium	0.73	mg/kg	0.10	1	07/25/12 16:15	07/26/12 18:05	7440-41-7	
Cadmium	ND	mg/kg	0.52	1	07/25/12 16:15	07/26/12 18:05	7440-43-9	
Chromium	16.2	mg/kg	0.52	1	07/25/12 16:15	07/26/12 18:05	7440-47-3	
Copper	13.4	mg/kg	1.0	1	07/25/12 16:15	07/26/12 18:05	7440-50-8	
Lead	14.0	mg/kg	0.52	1	07/25/12 16:15	07/26/12 18:05	7439-92-1	
Nickel	17.5	mg/kg	0.52	1	07/25/12 16:15	07/26/12 18:05	7440-02-0	
Selenium	ND	mg/kg	1.6	1	07/25/12 16:15	07/26/12 18:05	7782-49-2	
Silver	ND	mg/kg	0.72	1	07/25/12 16:15	07/26/12 18:05	7440-22-4	
Thallium	ND	mg/kg	2.1	1	07/25/12 16:15	07/26/12 18:05	7440-28-0	
Zinc	49.8	mg/kg	10.3	1	07/25/12 16:15	07/26/12 18:05	7440-66-6	

7471 Mercury Analytical Method: EPA 7471 Preparation Method: EPA 7471

Mercury	ND	mg/kg	0.056	1	07/26/12 12:50	07/26/12 17:05	7439-97-6	
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8270 MSSV PAH by SIM Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546

Acenaphthene	290	ug/kg	200	10	07/26/12 00:00	07/27/12 15:09	83-32-9	
Acenaphthylene	ND	ug/kg	200	10	07/26/12 00:00	07/27/12 15:09	208-96-8	
Anthracene	414	ug/kg	200	10	07/26/12 00:00	07/27/12 15:09	120-12-7	
Benzo(a)anthracene	356	ug/kg	200	10	07/26/12 00:00	07/27/12 15:09	56-55-3	
Benzo(a)pyrene	455	ug/kg	200	10	07/26/12 00:00	07/27/12 15:09	50-32-8	
Benzo(b)fluoranthene	397	ug/kg	200	10	07/26/12 00:00	07/27/12 15:09	205-99-2	
Benzo(g,h,i)perylene	579	ug/kg	200	10	07/26/12 00:00	07/27/12 15:09	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	200	10	07/26/12 00:00	07/27/12 15:09	207-08-9	
Chrysene	969	ug/kg	200	10	07/26/12 00:00	07/27/12 15:09	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	200	10	07/26/12 00:00	07/27/12 15:09	53-70-3	
Fluoranthene	281	ug/kg	200	10	07/26/12 00:00	07/27/12 15:09	206-44-0	
Fluorene	574	ug/kg	200	10	07/26/12 00:00	07/27/12 15:09	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	200	10	07/26/12 00:00	07/27/12 15:09	193-39-5	
Naphthalene	887	ug/kg	200	10	07/26/12 00:00	07/27/12 15:09	91-20-3	
Phenanthrene	2120	ug/kg	200	10	07/26/12 00:00	07/27/12 15:09	85-01-8	
Pyrene	1620	ug/kg	200	10	07/26/12 00:00	07/27/12 15:09	129-00-0	

ANALYTICAL RESULTS

Project: KUHLMAN DIECASTING

Pace Project No.: 60125643

Sample: SB-7-10-12 Lab ID: 60125643013 Collected: 07/18/12 14:23 Received: 07/21/12 08:55 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
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8270 MSSV PAH by SIM

Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546

Surrogates

Nitrobenzene-d5 (S)	0 %		35-121	10	07/26/12 00:00	07/27/12 15:09	4165-60-0	P3,S4
2-Fluorobiphenyl (S)	0 %		41-120	10	07/26/12 00:00	07/27/12 15:09	321-60-8	S4
Terphenyl-d14 (S)	0 %		39-123	10	07/26/12 00:00	07/27/12 15:09	1718-51-0	S4

OA1 Volatile Pet. Hydrocarbons

Analytical Method: OA1

Gasoline Range Organics	539 mg/kg		62.0	50		07/26/12 16:54		
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8260 MSV 5035A VOA

Analytical Method: EPA 8260

Acetone	ND ug/kg		1240	50		07/26/12 16:54	67-64-1	
Benzene	ND ug/kg		310	50		07/26/12 16:54	71-43-2	
Bromobenzene	ND ug/kg		310	50		07/26/12 16:54	108-86-1	
Bromochloromethane	ND ug/kg		310	50		07/26/12 16:54	74-97-5	
Bromodichloromethane	ND ug/kg		310	50		07/26/12 16:54	75-27-4	
Bromoform	ND ug/kg		310	50		07/26/12 16:54	75-25-2	
Bromomethane	ND ug/kg		310	50		07/26/12 16:54	74-83-9	
2-Butanone (MEK)	ND ug/kg		620	50		07/26/12 16:54	78-93-3	
n-Butylbenzene	700 ug/kg		310	50		07/26/12 16:54	104-51-8	
sec-Butylbenzene	1310 ug/kg		310	50		07/26/12 16:54	135-98-8	
tert-Butylbenzene	ND ug/kg		310	50		07/26/12 16:54	98-06-6	
Carbon disulfide	ND ug/kg		310	50		07/26/12 16:54	75-15-0	
Carbon tetrachloride	ND ug/kg		310	50		07/26/12 16:54	56-23-5	
Chlorobenzene	ND ug/kg		310	50		07/26/12 16:54	108-90-7	
Chloroethane	ND ug/kg		310	50		07/26/12 16:54	75-00-3	
Chloroform	ND ug/kg		310	50		07/26/12 16:54	67-66-3	L2
Chloromethane	ND ug/kg		310	50		07/26/12 16:54	74-87-3	
2-Chlorotoluene	ND ug/kg		310	50		07/26/12 16:54	95-49-8	
4-Chlorotoluene	ND ug/kg		310	50		07/26/12 16:54	106-43-4	
1,2-Dibromo-3-chloropropane	ND ug/kg		620	50		07/26/12 16:54	96-12-8	
Dibromochloromethane	ND ug/kg		310	50		07/26/12 16:54	124-48-1	
1,2-Dibromoethane (EDB)	ND ug/kg		310	50		07/26/12 16:54	106-93-4	
Dibromomethane	ND ug/kg		310	50		07/26/12 16:54	74-95-3	
1,2-Dichlorobenzene	ND ug/kg		310	50		07/26/12 16:54	95-50-1	
1,3-Dichlorobenzene	ND ug/kg		310	50		07/26/12 16:54	541-73-1	
1,4-Dichlorobenzene	ND ug/kg		310	50		07/26/12 16:54	106-46-7	
Dichlorodifluoromethane	ND ug/kg		310	50		07/26/12 16:54	75-71-8	
1,1-Dichloroethane	ND ug/kg		310	50		07/26/12 16:54	75-34-3	
1,2-Dichloroethane	ND ug/kg		310	50		07/26/12 16:54	107-06-2	
1,2-Dichloroethene (Total)	ND ug/kg		310	50		07/26/12 16:54	540-59-0	
1,1-Dichloroethene	ND ug/kg		310	50		07/26/12 16:54	75-35-4	
cis-1,2-Dichloroethene	ND ug/kg		310	50		07/26/12 16:54	156-59-2	
trans-1,2-Dichloroethene	ND ug/kg		310	50		07/26/12 16:54	156-60-5	
1,2-Dichloropropane	ND ug/kg		310	50		07/26/12 16:54	78-87-5	
1,3-Dichloropropane	ND ug/kg		310	50		07/26/12 16:54	142-28-9	
2,2-Dichloropropane	ND ug/kg		310	50		07/26/12 16:54	594-20-7	
1,1-Dichloropropene	ND ug/kg		310	50		07/26/12 16:54	563-58-6	

Date: 08/09/2012 10:51 AM

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: KUHLMAN DIECASTING

Pace Project No.: 60125643

Sample: **SB-7-10-12** Lab ID: **60125643013** Collected: 07/18/12 14:23 Received: 07/21/12 08:55 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035A VOA		Analytical Method: EPA 8260						
cis-1,3-Dichloropropene	ND	ug/kg	310	50		07/26/12 16:54	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/kg	310	50		07/26/12 16:54	10061-02-6	
Ethylbenzene	ND	ug/kg	310	50		07/26/12 16:54	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	310	50		07/26/12 16:54	87-68-3	
2-Hexanone	ND	ug/kg	1240	50		07/26/12 16:54	591-78-6	
Isopropylbenzene (Cumene)	331	ug/kg	310	50		07/26/12 16:54	98-82-8	
p-Isopropyltoluene	ND	ug/kg	310	50		07/26/12 16:54	99-87-6	
Methylene chloride	ND	ug/kg	310	50		07/26/12 16:54	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	620	50		07/26/12 16:54	108-10-1	
Methyl-tert-butyl ether	ND	ug/kg	310	50		07/26/12 16:54	1634-04-4	
Naphthalene	ND	ug/kg	620	50		07/26/12 16:54	91-20-3	
n-Propylbenzene	ND	ug/kg	310	50		07/26/12 16:54	103-65-1	
Styrene	ND	ug/kg	310	50		07/26/12 16:54	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/kg	310	50		07/26/12 16:54	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	310	50		07/26/12 16:54	79-34-5	
Tetrachloroethene	ND	ug/kg	310	50		07/26/12 16:54	127-18-4	
Toluene	ND	ug/kg	310	50		07/26/12 16:54	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/kg	310	50		07/26/12 16:54	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/kg	310	50		07/26/12 16:54	120-82-1	
1,1,1-Trichloroethane	ND	ug/kg	310	50		07/26/12 16:54	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	310	50		07/26/12 16:54	79-00-5	
Trichloroethene	ND	ug/kg	310	50		07/26/12 16:54	79-01-6	
Trichlorofluoromethane	ND	ug/kg	310	50		07/26/12 16:54	75-69-4	
1,2,3-Trichloropropane	ND	ug/kg	310	50		07/26/12 16:54	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/kg	310	50		07/26/12 16:54	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/kg	310	50		07/26/12 16:54	108-67-8	
Vinyl chloride	ND	ug/kg	310	50		07/26/12 16:54	75-01-4	
Xylene (Total)	ND	ug/kg	310	50		07/26/12 16:54	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	89 %		78-122	50		07/26/12 16:54	1868-53-7	D3
Toluene-d8 (S)	113 %		80-123	50		07/26/12 16:54	2037-26-5	
4-Bromofluorobenzene (S)	96 %		78-125	50		07/26/12 16:54	460-00-4	
1,2-Dichloroethane-d4 (S)	89 %		73-135	50		07/26/12 16:54	17060-07-0	

Percent Moisture

Analytical Method: ASTM D2974

Percent Moisture	19.5 %	0.50	1	08/01/12 00:00
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ANALYTICAL RESULTS

Project: KUHLMAN DIECASTING

Pace Project No.: 60125643

Sample: SB-7-GW		Lab ID: 60125643014	Collected: 07/18/12 15:07	Received: 07/21/12 08:55	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
OA2 GCS		Analytical Method: OA2 Preparation Method: OA2						
Diesel Fuel	ND mg/L		0.50	1	07/24/12 00:00	07/25/12 05:43	68334-30-5	
Fuel Oil	ND mg/L		0.50	1	07/24/12 00:00	07/25/12 05:43	68553-00-4	
Jet Fuel	ND mg/L		0.50	1	07/24/12 00:00	07/25/12 05:43	94114-58-6	
Kerosene	ND mg/L		0.50	1	07/24/12 00:00	07/25/12 05:43	8008-20-6	
Mineral Spirits	ND mg/L		0.50	1	07/24/12 00:00	07/25/12 05:43	8030-30-6	
Motor Oil	ND mg/L		0.50	1	07/24/12 00:00	07/25/12 05:43	64742-65-0	
Total Petroleum Hydrocarbons	0.51 mg/L		0.50	1	07/24/12 00:00	07/25/12 05:43		3e
Surrogates								
p-Terphenyl (S)	61 %		20-122	1	07/24/12 00:00	07/25/12 05:43	92-94-4	
n-Tetracosane (S)	61 %		30-122	1	07/24/12 00:00	07/25/12 05:43	646-31-1	
6010 MET ICP		Analytical Method: EPA 6010 Preparation Method: EPA 3010						
Antimony	ND ug/L		10.0	1	07/26/12 14:30	07/27/12 12:40	7440-36-0	
Arsenic	42.1 ug/L		10.0	1	07/26/12 14:30	07/27/12 12:40	7440-38-2	
Beryllium	ND ug/L		1.0	1	07/26/12 14:30	07/27/12 12:40	7440-41-7	
Cadmium	ND ug/L		5.0	1	07/26/12 14:30	07/27/12 12:40	7440-43-9	
Chromium	27.4 ug/L		5.0	1	07/26/12 14:30	07/27/12 12:40	7440-47-3	
Copper	29.5 ug/L		10.0	1	07/26/12 14:30	07/27/12 12:40	7440-50-8	
Lead	24.5 ug/L		5.0	1	07/26/12 14:30	07/27/12 12:40	7439-92-1	
Nickel	81.1 ug/L		5.0	1	07/26/12 14:30	07/27/12 12:40	7440-02-0	
Selenium	ND ug/L		15.0	1	07/26/12 14:30	07/27/12 12:40	7782-49-2	
Silver	ND ug/L		7.0	1	07/26/12 14:30	07/27/12 12:40	7440-22-4	
Thallium	ND ug/L		20.0	1	07/26/12 14:30	07/27/12 12:40	7440-28-0	
Zinc	313 ug/L		50.0	1	07/26/12 14:30	07/27/12 12:40	7440-66-6	
6010 MET ICP, Dissolved		Analytical Method: EPA 6010 Preparation Method: EPA 3010						
Antimony, Dissolved	ND ug/L		10.0	1	07/26/12 14:30	07/30/12 16:52	7440-36-0	
Arsenic, Dissolved	ND ug/L		10.0	1	07/26/12 14:30	07/30/12 16:52	7440-38-2	
Beryllium, Dissolved	ND ug/L		1.0	1	07/26/12 14:30	07/30/12 16:52	7440-41-7	
Cadmium, Dissolved	ND ug/L		5.0	1	07/26/12 14:30	07/30/12 16:52	7440-43-9	
Chromium, Dissolved	ND ug/L		5.0	1	07/26/12 14:30	07/30/12 16:52	7440-47-3	
Copper, Dissolved	ND ug/L		10.0	1	07/26/12 14:30	07/30/12 16:52	7440-50-8	
Lead, Dissolved	ND ug/L		5.0	1	07/26/12 14:30	07/30/12 16:52	7439-92-1	
Nickel, Dissolved	ND ug/L		5.0	1	07/26/12 14:30	07/30/12 16:52	7440-02-0	
Selenium, Dissolved	ND ug/L		15.0	1	07/26/12 14:30	07/30/12 16:52	7782-49-2	
Silver, Dissolved	ND ug/L		7.0	1	07/26/12 14:30	07/30/12 16:52	7440-22-4	
Thallium, Dissolved	ND ug/L		20.0	1	07/26/12 14:30	07/30/12 16:52	7440-28-0	
Zinc, Dissolved	60.2 ug/L		50.0	1	07/26/12 14:30	07/30/12 16:52	7440-66-6	
7470 Mercury		Analytical Method: EPA 7470 Preparation Method: EPA 7470						
Mercury	0.43 ug/L		0.20	1	07/24/12 09:15	07/24/12 15:49	7439-97-6	
7470 Mercury, Dissolved		Analytical Method: EPA 7470 Preparation Method: EPA 7470						
Mercury, Dissolved	ND ug/L		0.20	1	08/01/12 06:30	08/03/12 11:36	7439-97-6	

ANALYTICAL RESULTS

Project: KUHLMAN DIECASTING
Pace Project No.: 60125643

Sample: SB-7-GW		Lab ID: 60125643014	Collected: 07/18/12 15:07	Received: 07/21/12 08:55	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by SIM		Analytical Method: EPA 8270C by SIM Preparation Method: EPA 3510C						
Acenaphthene	ND ug/L		0.10	1	07/24/12 00:00	08/06/12 19:38	83-32-9	
Acenaphthylene	ND ug/L		0.10	1	07/24/12 00:00	08/06/12 19:38	208-96-8	
Anthracene	ND ug/L		0.10	1	07/24/12 00:00	08/06/12 19:38	120-12-7	
Benzo(a)anthracene	ND ug/L		0.10	1	07/24/12 00:00	08/06/12 19:38	56-55-3	
Benzo(a)pyrene	ND ug/L		0.10	1	07/24/12 00:00	08/06/12 19:38	50-32-8	
Benzo(b)fluoranthene	ND ug/L		0.10	1	07/24/12 00:00	08/06/12 19:38	205-99-2	
Benzo(g,h,i)perylene	ND ug/L		0.10	1	07/24/12 00:00	08/06/12 19:38	191-24-2	
Benzo(k)fluoranthene	ND ug/L		0.10	1	07/24/12 00:00	08/06/12 19:38	207-08-9	
Chrysene	ND ug/L		0.10	1	07/24/12 00:00	08/06/12 19:38	218-01-9	
Dibenz(a,h)anthracene	ND ug/L		0.10	1	07/24/12 00:00	08/06/12 19:38	53-70-3	
Fluoranthene	0.13 ug/L		0.10	1	07/24/12 00:00	08/06/12 19:38	206-44-0	
Fluorene	ND ug/L		0.10	1	07/24/12 00:00	08/06/12 19:38	86-73-7	
Indeno(1,2,3-cd)pyrene	ND ug/L		0.10	1	07/24/12 00:00	08/06/12 19:38	193-39-5	
Naphthalene	ND ug/L		0.50	1	07/24/12 00:00	08/06/12 19:38	91-20-3	
Phenanthrene	ND ug/L		0.50	1	07/24/12 00:00	08/06/12 19:38	85-01-8	
Pyrene	ND ug/L		0.10	1	07/24/12 00:00	08/06/12 19:38	129-00-0	
Surrogates								
Nitrobenzene-d5 (S)	78 %		42-120	1	07/24/12 00:00	08/06/12 19:38	4165-60-0	
2-Fluorobiphenyl (S)	73 %		44-120	1	07/24/12 00:00	08/06/12 19:38	321-60-8	
Terphenyl-d14 (S)	77 %		46-131	1	07/24/12 00:00	08/06/12 19:38	1718-51-0	
8260 MSV		Analytical Method: EPA 5030B/8260						
Acetone	ND ug/L		10.0	1		07/27/12 14:56	67-64-1	
Benzene	ND ug/L		1.0	1		07/27/12 14:56	71-43-2	
Bromobenzene	ND ug/L		1.0	1		07/27/12 14:56	108-86-1	
Bromochloromethane	ND ug/L		1.0	1		07/27/12 14:56	74-97-5	
Bromodichloromethane	ND ug/L		1.0	1		07/27/12 14:56	75-27-4	
Bromoform	ND ug/L		1.0	1		07/27/12 14:56	75-25-2	
Bromomethane	ND ug/L		5.0	1		07/27/12 14:56	74-83-9	
2-Butanone (MEK)	ND ug/L		10.0	1		07/27/12 14:56	78-93-3	
n-Butylbenzene	ND ug/L		1.0	1		07/27/12 14:56	104-51-8	
sec-Butylbenzene	ND ug/L		1.0	1		07/27/12 14:56	135-98-8	
tert-Butylbenzene	ND ug/L		1.0	1		07/27/12 14:56	98-06-6	
Carbon disulfide	ND ug/L		5.0	1		07/27/12 14:56	75-15-0	
Carbon tetrachloride	ND ug/L		1.0	1		07/27/12 14:56	56-23-5	
Chlorobenzene	ND ug/L		1.0	1		07/27/12 14:56	108-90-7	
Chloroethane	ND ug/L		1.0	1		07/27/12 14:56	75-00-3	
Chloroform	ND ug/L		1.0	1		07/27/12 14:56	67-66-3	
Chloromethane	ND ug/L		1.0	1		07/27/12 14:56	74-87-3	
2-Chlorotoluene	ND ug/L		1.0	1		07/27/12 14:56	95-49-8	
4-Chlorotoluene	ND ug/L		1.0	1		07/27/12 14:56	106-43-4	
1,2-Dibromo-3-chloropropane	ND ug/L		2.5	1		07/27/12 14:56	96-12-8	
Dibromochloromethane	ND ug/L		1.0	1		07/27/12 14:56	124-48-1	
1,2-Dibromoethane (EDB)	ND ug/L		1.0	1		07/27/12 14:56	106-93-4	
Dibromomethane	ND ug/L		1.0	1		07/27/12 14:56	74-95-3	
1,2-Dichlorobenzene	ND ug/L		1.0	1		07/27/12 14:56	95-50-1	
1,3-Dichlorobenzene	ND ug/L		1.0	1		07/27/12 14:56	541-73-1	

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ANALYTICAL RESULTS

Project: KUHLMAN DIECASTING

Pace Project No.: 60125643

Sample: SB-7-GW		Lab ID: 60125643014	Collected: 07/18/12 15:07	Received: 07/21/12 08:55	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV		Analytical Method: EPA 5030B/8260						
1,4-Dichlorobenzene	ND	ug/L	1.0	1		07/27/12 14:56	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		07/27/12 14:56	75-71-8	
1,1-Dichloroethane	1.1	ug/L	1.0	1		07/27/12 14:56	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		07/27/12 14:56	107-06-2	
1,2-Dichloroethene (Total)	25.5	ug/L	1.0	1		07/27/12 14:56	540-59-0	
1,1-Dichloroethene	ND	ug/L	1.0	1		07/27/12 14:56	75-35-4	
cis-1,2-Dichloroethene	25.3	ug/L	1.0	1		07/27/12 14:56	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		07/27/12 14:56	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		07/27/12 14:56	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	1		07/27/12 14:56	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	1		07/27/12 14:56	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		07/27/12 14:56	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		07/27/12 14:56	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		07/27/12 14:56	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	1		07/27/12 14:56	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	1		07/27/12 14:56	87-68-3	
2-Hexanone	ND	ug/L	10.0	1		07/27/12 14:56	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	1		07/27/12 14:56	98-82-8	
p-Isopropyltoluene	ND	ug/L	1.0	1		07/27/12 14:56	99-87-6	
Methylene chloride	ND	ug/L	1.0	1		07/27/12 14:56	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	1		07/27/12 14:56	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		07/27/12 14:56	1634-04-4	
Naphthalene	ND	ug/L	10.0	1		07/27/12 14:56	91-20-3	
n-Propylbenzene	ND	ug/L	1.0	1		07/27/12 14:56	103-65-1	
Styrene	ND	ug/L	1.0	1		07/27/12 14:56	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		07/27/12 14:56	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		07/27/12 14:56	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		07/27/12 14:56	127-18-4	
Toluene	ND	ug/L	1.0	1		07/27/12 14:56	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		07/27/12 14:56	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		07/27/12 14:56	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		07/27/12 14:56	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		07/27/12 14:56	79-00-5	
Trichloroethene	9.5	ug/L	1.0	1		07/27/12 14:56	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		07/27/12 14:56	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	2.5	1		07/27/12 14:56	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	1.0	1		07/27/12 14:56	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	1.0	1		07/27/12 14:56	108-67-8	
Vinyl chloride	ND	ug/L	1.0	1		07/27/12 14:56	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1		07/27/12 14:56	1330-20-7	
Surrogates								
4-Bromofluorobenzene (S)	104 %		80-120	1		07/27/12 14:56	460-00-4	HS
Dibromofluoromethane (S)	96 %		80-120	1		07/27/12 14:56	1868-53-7	
1,2-Dichloroethane-d4 (S)	93 %		80-120	1		07/27/12 14:56	17060-07-0	
Toluene-d8 (S)	100 %		80-120	1		07/27/12 14:56	2037-26-5	
Preservation pH	6.0		0.10	1		07/27/12 14:56		pH

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ANALYTICAL RESULTS

Project: KUHLMAN DIECASTING

Pace Project No.: 60125643

Sample: SB-7-GW		Lab ID: 60125643014	Collected: 07/18/12 15:07	Received: 07/21/12 08:55	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260/OA1 UST, Water		Analytical Method: EPA 8260/OA1						
Gasoline Range Organics	ND mg/L		0.50	1		07/27/12 14:56		
Benzene	ND ug/L		1.0	1		07/27/12 14:56	71-43-2	
Toluene	ND ug/L		1.0	1		07/27/12 14:56	108-88-3	
Ethylbenzene	ND ug/L		1.0	1		07/27/12 14:56	100-41-4	
Xylene (Total)	ND ug/L		3.0	1		07/27/12 14:56	1330-20-7	
Methyl-tert-butyl ether	ND ug/L		1.0	1		07/27/12 14:56	1634-04-4	
Naphthalene	ND ug/L		10.0	1		07/27/12 14:56	91-20-3	
1,2-Dichloroethane	ND ug/L		1.0	1		07/27/12 14:56	107-06-2	
tert-Butyl Alcohol	ND ug/L		10.0	1		07/27/12 14:56	75-65-0	
Surrogates								
Dibromofluoromethane (S)	96 %		80-120	1		07/27/12 14:56	1868-53-7	HS
Toluene-d8 (S)	100 %		80-120	1		07/27/12 14:56	2037-26-5	
4-Bromofluorobenzene (S)	104 %		80-120	1		07/27/12 14:56	460-00-4	
1,2-Dichloroethane-d4 (S)	93 %		80-120	1		07/27/12 14:56	17060-07-0	
Preservation pH	6.0		0.10	1		07/27/12 14:56		pH

ANALYTICAL RESULTS

Project: KUHLMAN DIECASTING

Pace Project No.: 60125643

Sample: TRIP BLANK Lab ID: 60125643015 Collected: 07/18/12 08:00 Received: 07/21/12 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035A VOA		Analytical Method: EPA 8260						
Acetone	ND	ug/kg	20.0	1		07/30/12 17:35	67-64-1	
Benzene	ND	ug/kg	5.0	1		07/30/12 17:35	71-43-2	
Bromobenzene	ND	ug/kg	5.0	1		07/30/12 17:35	108-86-1	
Bromochloromethane	ND	ug/kg	5.0	1		07/30/12 17:35	74-97-5	
Bromodichloromethane	ND	ug/kg	5.0	1		07/30/12 17:35	75-27-4	
Bromoform	ND	ug/kg	5.0	1		07/30/12 17:35	75-25-2	
Bromomethane	ND	ug/kg	5.0	1		07/30/12 17:35	74-83-9	
2-Butanone (MEK)	ND	ug/kg	10.0	1		07/30/12 17:35	78-93-3	
n-Butylbenzene	ND	ug/kg	5.0	1		07/30/12 17:35	104-51-8	
sec-Butylbenzene	ND	ug/kg	5.0	1		07/30/12 17:35	135-98-8	
tert-Butylbenzene	ND	ug/kg	5.0	1		07/30/12 17:35	98-06-6	
Carbon disulfide	ND	ug/kg	5.0	1		07/30/12 17:35	75-15-0	
Carbon tetrachloride	ND	ug/kg	5.0	1		07/30/12 17:35	56-23-5	
Chlorobenzene	ND	ug/kg	5.0	1		07/30/12 17:35	108-90-7	
Chloroethane	ND	ug/kg	5.0	1		07/30/12 17:35	75-00-3	
Chloroform	ND	ug/kg	5.0	1		07/30/12 17:35	67-66-3	
Chloromethane	ND	ug/kg	5.0	1		07/30/12 17:35	74-87-3	
2-Chlorotoluene	ND	ug/kg	5.0	1		07/30/12 17:35	95-49-8	
4-Chlorotoluene	ND	ug/kg	5.0	1		07/30/12 17:35	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/kg	10.0	1		07/30/12 17:35	96-12-8	
Dibromochloromethane	ND	ug/kg	5.0	1		07/30/12 17:35	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/kg	5.0	1		07/30/12 17:35	106-93-4	
Dibromomethane	ND	ug/kg	5.0	1		07/30/12 17:35	74-95-3	
1,2-Dichlorobenzene	ND	ug/kg	5.0	1		07/30/12 17:35	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	5.0	1		07/30/12 17:35	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	5.0	1		07/30/12 17:35	106-46-7	
Dichlorodifluoromethane	ND	ug/kg	5.0	1		07/30/12 17:35	75-71-8	
1,1-Dichloroethane	ND	ug/kg	5.0	1		07/30/12 17:35	75-34-3	
1,2-Dichloroethane	ND	ug/kg	5.0	1		07/30/12 17:35	107-06-2	
1,2-Dichloroethene (Total)	ND	ug/kg	5.0	1		07/30/12 17:35	540-59-0	
1,1-Dichloroethene	ND	ug/kg	5.0	1		07/30/12 17:35	75-35-4	
cis-1,2-Dichloroethene	ND	ug/kg	5.0	1		07/30/12 17:35	156-59-2	
trans-1,2-Dichloroethene	ND	ug/kg	5.0	1		07/30/12 17:35	156-60-5	
1,2-Dichloropropane	ND	ug/kg	5.0	1		07/30/12 17:35	78-87-5	
1,3-Dichloropropane	ND	ug/kg	5.0	1		07/30/12 17:35	142-28-9	
2,2-Dichloropropane	ND	ug/kg	5.0	1		07/30/12 17:35	594-20-7	
1,1-Dichloropropene	ND	ug/kg	5.0	1		07/30/12 17:35	563-58-6	
cis-1,3-Dichloropropene	ND	ug/kg	5.0	1		07/30/12 17:35	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/kg	5.0	1		07/30/12 17:35	10061-02-6	
Ethylbenzene	ND	ug/kg	5.0	1		07/30/12 17:35	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	5.0	1		07/30/12 17:35	87-68-3	
2-Hexanone	ND	ug/kg	20.0	1		07/30/12 17:35	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/kg	5.0	1		07/30/12 17:35	98-82-8	
p-Isopropyltoluene	ND	ug/kg	5.0	1		07/30/12 17:35	99-87-6	
Methylene chloride	ND	ug/kg	5.0	1		07/30/12 17:35	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	10.0	1		07/30/12 17:35	108-10-1	

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ANALYTICAL RESULTS

Project: KUHLMAN DIECASTING

Pace Project No.: 60125643

Sample: TRIP BLANK **Lab ID:** 60125643015 **Collected:** 07/18/12 08:00 **Received:** 07/21/12 08:55 **Matrix:** Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035A VOA		Analytical Method: EPA 8260						
Methyl-tert-butyl ether	ND	ug/kg	5.0	1		07/30/12 17:35	1634-04-4	
Naphthalene	ND	ug/kg	10.0	1		07/30/12 17:35	91-20-3	
n-Propylbenzene	ND	ug/kg	5.0	1		07/30/12 17:35	103-65-1	
Styrene	ND	ug/kg	5.0	1		07/30/12 17:35	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/kg	5.0	1		07/30/12 17:35	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	5.0	1		07/30/12 17:35	79-34-5	
Tetrachloroethene	ND	ug/kg	5.0	1		07/30/12 17:35	127-18-4	
Toluene	ND	ug/kg	5.0	1		07/30/12 17:35	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/kg	5.0	1		07/30/12 17:35	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/kg	5.0	1		07/30/12 17:35	120-82-1	
1,1,1-Trichloroethane	ND	ug/kg	5.0	1		07/30/12 17:35	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	5.0	1		07/30/12 17:35	79-00-5	
Trichloroethene	ND	ug/kg	5.0	1		07/30/12 17:35	79-01-6	
Trichlorofluoromethane	ND	ug/kg	5.0	1		07/30/12 17:35	75-69-4	
1,2,3-Trichloropropane	ND	ug/kg	5.0	1		07/30/12 17:35	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/kg	5.0	1		07/30/12 17:35	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/kg	5.0	1		07/30/12 17:35	108-67-8	
Vinyl chloride	ND	ug/kg	5.0	1		07/30/12 17:35	75-01-4	
Xylene (Total)	ND	ug/kg	5.0	1		07/30/12 17:35	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	97 %		78-122	1		07/30/12 17:35	1868-53-7	
Toluene-d8 (S)	100 %		80-123	1		07/30/12 17:35	2037-26-5	
4-Bromofluorobenzene (S)	101 %		78-125	1		07/30/12 17:35	460-00-4	
1,2-Dichloroethane-d4 (S)	100 %		73-135	1		07/30/12 17:35	17060-07-0	

QUALITY CONTROL DATA

Project: KUHLMAN DIECASTING

Pace Project No.: 60125643

QC Batch:	MERP/6475	Analysis Method:	EPA 7470
QC Batch Method:	EPA 7470	Analysis Description:	7470 Mercury
Associated Lab Samples:	60125643001, 60125643002, 60125643004, 60125643007, 60125643010, 60125643012, 60125643014		

METHOD BLANK:	1033648	Matrix:	Water
Associated Lab Samples:	60125643001, 60125643002, 60125643004, 60125643007, 60125643010, 60125643012, 60125643014		

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	ug/L	ND	0.20	07/24/12 15:00	

LABORATORY CONTROL SAMPLE: 1033649						
Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	5	4.6	92	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1033650												1033651	
Parameter	Units	60125568010 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual	
Mercury	ug/L	ND	5	5	4.7	4.7	94	94	75-125	1	20		

QUALITY CONTROL DATA

Project: KUHLMAN DIECASTING

Pace Project No.: 60125643

QC Batch:	MERP/6489	Analysis Method:	EPA 7470
QC Batch Method:	EPA 7470	Analysis Description:	7470 Mercury ,Dissolved
Associated Lab Samples:	60125643001, 60125643002, 60125643004, 60125643007, 60125643010, 60125643012, 60125643014		

METHOD BLANK:	1037724	Matrix:	Water
Associated Lab Samples:	60125643001, 60125643002, 60125643004, 60125643007, 60125643010, 60125643012, 60125643014		

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury, Dissolved	ug/L	ND	0.20	08/03/12 11:06	

LABORATORY CONTROL SAMPLE: 1037725						
Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury, Dissolved	ug/L	5	4.8	95	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1037726													1037727		
Parameter	Units	60125643004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual			
Mercury, Dissolved	ug/L	ND	5	5	3.5	3.8	69	75	75-125	9	20	M1			

QUALITY CONTROL DATA

Project: KUHLMAN DIECASTING

Pace Project No.: 60125643

QC Batch:	MERP/6477	Analysis Method:	EPA 7471
QC Batch Method:	EPA 7471	Analysis Description:	7471 Mercury
Associated Lab Samples:	60125643003, 60125643005, 60125643006, 60125643008, 60125643009, 60125643011, 60125643013		

METHOD BLANK:	1033814	Matrix:	Solid
Associated Lab Samples:	60125643003, 60125643005, 60125643006, 60125643008, 60125643009, 60125643011, 60125643013		

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	mg/kg	ND	0.050	07/26/12 16:14	

LABORATORY CONTROL SAMPLE: 1033815

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/kg	.5	0.49	98	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1033816 1033817

Parameter	Units	60125568001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/kg	0.014J	.45	.47	0.48	0.46	105	95	75-125	4	20	

QUALITY CONTROL DATA

Project: KUHLMAN DIECASTING

Pace Project No.: 60125643

QC Batch:	MPRP/18848	Analysis Method:	EPA 6010
QC Batch Method:	EPA 3050	Analysis Description:	6010 MET
Associated Lab Samples: 60125643003, 60125643005, 60125643006, 60125643008, 60125643009, 60125643011, 60125643013			

METHOD BLANK: 1034609 Matrix: Solid

Associated Lab Samples: 60125643003, 60125643005, 60125643006, 60125643008, 60125643009, 60125643011, 60125643013

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Antimony	mg/kg	ND	1.0	07/26/12 17:11	
Arsenic	mg/kg	ND	1.0	07/26/12 17:11	
Beryllium	mg/kg	ND	0.10	07/26/12 17:11	
Cadmium	mg/kg	ND	0.50	07/26/12 17:11	
Chromium	mg/kg	ND	0.50	07/26/12 17:11	
Copper	mg/kg	ND	1.0	07/26/12 17:11	
Lead	mg/kg	ND	0.50	07/26/12 17:11	
Nickel	mg/kg	ND	0.50	07/26/12 17:11	
Selenium	mg/kg	ND	1.5	07/26/12 17:11	
Silver	mg/kg	ND	0.70	07/26/12 17:11	
Thallium	mg/kg	ND	2.0	07/26/12 17:11	
Zinc	mg/kg	ND	10.0	07/26/12 17:11	

LABORATORY CONTROL SAMPLE: 1034610

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/kg	50	45.4	91	80-120	
Arsenic	mg/kg	50	46.6	93	80-120	
Beryllium	mg/kg	50	50.2	100	80-120	
Cadmium	mg/kg	50	47.0	94	80-120	
Chromium	mg/kg	50	50.1	100	80-120	
Copper	mg/kg	50	48.7	97	80-120	
Lead	mg/kg	50	47.8	96	80-120	
Nickel	mg/kg	50	49.0	98	80-120	
Selenium	mg/kg	50	43.0	86	80-120	
Silver	mg/kg	25	23.7	95	80-120	
Thallium	mg/kg	50	45.6	91	80-120	
Zinc	mg/kg	50	48.9	98	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1034611 1034612

Parameter	Units	60125652001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual
Antimony	mg/kg	ND	55.5	53.5	16.2	14.3	28	26	75-125	12	M1
Arsenic	mg/kg	1.8	55.5	53.5	50.6	48.4	88	87	75-125	4	20
Beryllium	mg/kg	0.34	55.5	53.5	53.2	50.5	95	94	75-125	5	20
Cadmium	mg/kg	ND	55.5	53.5	50.3	47.9	91	90	75-125	5	20
Chromium	mg/kg	9.8	55.5	53.5	66.7	62.8	103	99	75-125	6	20
Copper	mg/kg	5.6	55.5	53.5	60.6	58.2	99	99	75-125	4	20
Lead	mg/kg	7.0	55.5	53.5	57.9	57.4	92	94	75-125	1	20

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QUALITY CONTROL DATA

Project: KUHLMAN DIECASTING

Pace Project No.: 60125643

MATRIX SPIKE & MATRIX SPIKE DUPLICATE:												
1034611					1034612							
Parameter	Units	60125652001 Result	MS	MSD	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max	Qual
			Spike Conc.	Spike Conc.							RPD	
Nickel	mg/kg	5.7	55.5	53.5	59.4	56.4	97	95	75-125	5	20	
Selenium	mg/kg	ND	55.5	53.5	45.0	43.0	81	80	75-125	5	20	
Silver	mg/kg	ND	27.7	26.7	25.8	24.7	93	92	75-125	5	20	
Thallium	mg/kg	ND	55.5	53.5	48.5	46.2	87	86	75-125	5	20	
Zinc	mg/kg	26.8	55.5	53.5	81.0	77.8	98	95	75-125	4	20	

QUALITY CONTROL DATA

Project: KUHLMAN DIECASTING

Pace Project No.: 60125643

QC Batch: MPRP/18874 Analysis Method: EPA 6010
QC Batch Method: EPA 3010 Analysis Description: 6010 MET
Associated Lab Samples: 60125643004, 60125643007, 60125643010, 60125643012, 60125643014

METHOD BLANK: 1035333 Matrix: Water
Associated Lab Samples: 60125643004, 60125643007, 60125643010, 60125643012, 60125643014

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Antimony	ug/L	ND	10.0	07/27/12 12:14	
Arsenic	ug/L	ND	10.0	07/27/12 12:14	
Beryllium	ug/L	ND	1.0	07/27/12 12:14	
Cadmium	ug/L	ND	5.0	07/27/12 12:14	
Chromium	ug/L	ND	5.0	07/27/12 12:14	
Copper	ug/L	ND	10.0	07/27/12 12:14	
Lead	ug/L	ND	5.0	07/27/12 12:14	
Nickel	ug/L	ND	5.0	07/27/12 12:14	
Selenium	ug/L	ND	15.0	07/27/12 12:14	
Silver	ug/L	ND	7.0	07/27/12 12:14	
Thallium	ug/L	ND	20.0	07/27/12 12:14	
Zinc	ug/L	ND	50.0	07/27/12 12:14	

LABORATORY CONTROL SAMPLE: 1035334

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	ug/L	1000	1010	101	80-120	
Arsenic	ug/L	1000	1030	103	80-120	
Beryllium	ug/L	1000	1050	105	80-120	
Cadmium	ug/L	1000	1030	103	80-120	
Chromium	ug/L	1000	1020	102	80-120	
Copper	ug/L	1000	987	99	80-120	
Lead	ug/L	1000	1000	100	80-120	
Nickel	ug/L	1000	1020	102	80-120	
Selenium	ug/L	1000	1000	100	80-120	
Silver	ug/L	500	493	99	80-120	
Thallium	ug/L	1000	976	98	80-120	
Zinc	ug/L	1000	1040	104	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1035335 1035336

Parameter	Units	60125879001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	ug/L	ND	1000	1000	1010	1010	101	101	75-125	0	20	
Arsenic	ug/L	ND	1000	1000	1040	1040	104	104	75-125	0	20	
Beryllium	ug/L	ND	1000	1000	1060	1050	106	105	75-125	1	20	
Cadmium	ug/L	ND	1000	1000	1030	1030	103	103	75-125	0	20	
Chromium	ug/L	ND	1000	1000	1010	1010	101	101	75-125	1	20	
Copper	ug/L	17.7	1000	1000	1030	1030	101	101	75-125	0	20	
Lead	ug/L	ND	1000	1000	1000	1010	100	100	75-125	0	20	

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QUALITY CONTROL DATA

Project: KUHLMAN DIECASTING

Pace Project No.: 60125643

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1035335 1035336											
Parameter	Units	60125879001 Result	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	Max	
			Spike Conc.	Spike Conc.	MS Result	MSD Result				RPD	RPD
Nickel	ug/L	ND	1000	1000	1010	1010	101	101	75-125	0	20
Selenium	ug/L	ND	1000	1000	1000	1000	100	100	75-125	0	20
Silver	ug/L	ND	500	500	502	499	100	100	75-125	1	20
Thallium	ug/L	ND	1000	1000	986	986	99	99	75-125	0	20
Zinc	ug/L	ND	1000	1000	1030	1030	102	102	75-125	0	20

QUALITY CONTROL DATA

Project: KUHLMAN DIECASTING

Pace Project No.: 60125643

QC Batch: MPRP/18881

Analysis Method: EPA 6010

QC Batch Method: EPA 3010

Analysis Description: 6010 MET

Associated Lab Samples: 60125643001, 60125643002

METHOD BLANK: 1035772

Matrix: Water

Associated Lab Samples: 60125643001, 60125643002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Antimony	ug/L	ND	10.0	07/31/12 13:56	
Arsenic	ug/L	ND	10.0	07/31/12 13:56	
Beryllium	ug/L	ND	1.0	07/31/12 13:56	
Cadmium	ug/L	ND	5.0	07/31/12 13:56	
Chromium	ug/L	ND	5.0	07/31/12 13:56	
Copper	ug/L	ND	10.0	07/31/12 13:56	
Lead	ug/L	ND	5.0	07/31/12 13:56	
Nickel	ug/L	ND	5.0	07/31/12 13:56	
Selenium	ug/L	ND	15.0	07/31/12 13:56	
Silver	ug/L	ND	7.0	07/31/12 13:56	
Thallium	ug/L	ND	20.0	07/31/12 13:56	
Zinc	ug/L	ND	50.0	07/31/12 13:56	

LABORATORY CONTROL SAMPLE: 1035773

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	ug/L	1000	997	100	80-120	
Arsenic	ug/L	1000	1020	102	80-120	
Beryllium	ug/L	1000	932	93	80-120	
Cadmium	ug/L	1000	970	97	80-120	
Chromium	ug/L	1000	918	92	80-120	
Copper	ug/L	1000	877	88	80-120	
Lead	ug/L	1000	912	91	80-120	
Nickel	ug/L	1000	955	96	80-120	
Selenium	ug/L	1000	1000	100	80-120	
Silver	ug/L	500	454	91	80-120	
Thallium	ug/L	1000	888	89	80-120	
Zinc	ug/L	1000	941	94	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1035774

1035775

Parameter	Units	60125643001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	ug/L	ND	1000	1000	989	982	99	98	75-125	1	20	
Arsenic	ug/L	ND	1000	1000	1000	995	100	99	75-125	1	20	
Beryllium	ug/L	ND	1000	1000	931	921	93	92	75-125	1	20	
Cadmium	ug/L	ND	1000	1000	965	955	97	95	75-125	1	20	
Chromium	ug/L	ND	1000	1000	916	901	92	90	75-125	2	20	
Copper	ug/L	ND	1000	1000	894	884	89	88	75-125	1	20	
Lead	ug/L	ND	1000	1000	921	909	92	91	75-125	1	20	

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QUALITY CONTROL DATA

Project: KUHLMAN DIECASTING

Pace Project No.: 60125643

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1035774 1035775											
Parameter	Units	60125643001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual
Nickel	ug/L	ND	1000	1000	955	943	95	94	75-125	1	20
Selenium	ug/L	ND	1000	1000	1000	984	100	98	75-125	2	20
Silver	ug/L	ND	500	500	457	451	91	90	75-125	1	20
Thallium	ug/L	ND	1000	1000	886	877	89	88	75-125	1	20
Zinc	ug/L	ND	1000	1000	941	929	94	93	75-125	1	20

QUALITY CONTROL DATA

Project: KUHLMAN DIECASTING

Pace Project No.: 60125643

QC Batch: MPRP/18877 Analysis Method: EPA 6010
QC Batch Method: EPA 3010 Analysis Description: 6010 MET Dissolved
Associated Lab Samples: 60125643004, 60125643007, 60125643010, 60125643012, 60125643014

METHOD BLANK: 1035345 Matrix: Water
Associated Lab Samples: 60125643004, 60125643007, 60125643010, 60125643012, 60125643014

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Antimony, Dissolved	ug/L	ND	10.0	07/30/12 16:25	
Arsenic, Dissolved	ug/L	ND	10.0	07/30/12 16:25	
Beryllium, Dissolved	ug/L	ND	1.0	07/30/12 16:25	
Cadmium, Dissolved	ug/L	ND	5.0	07/30/12 16:25	
Chromium, Dissolved	ug/L	ND	5.0	07/30/12 16:25	
Copper, Dissolved	ug/L	ND	10.0	07/30/12 16:25	
Lead, Dissolved	ug/L	ND	5.0	07/30/12 16:25	
Nickel, Dissolved	ug/L	ND	5.0	07/30/12 16:25	
Selenium, Dissolved	ug/L	ND	15.0	07/30/12 16:25	
Silver, Dissolved	ug/L	ND	7.0	07/30/12 16:25	
Thallium, Dissolved	ug/L	ND	20.0	07/30/12 16:25	
Zinc, Dissolved	ug/L	ND	50.0	07/30/12 16:25	

LABORATORY CONTROL SAMPLE: 1035346

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony, Dissolved	ug/L	1000	948	95	80-120	
Arsenic, Dissolved	ug/L	1000	972	97	80-120	
Beryllium, Dissolved	ug/L	1000	1000	100	80-120	
Cadmium, Dissolved	ug/L	1000	954	95	80-120	
Chromium, Dissolved	ug/L	1000	991	99	80-120	
Copper, Dissolved	ug/L	1000	910	91	80-120	
Lead, Dissolved	ug/L	1000	954	95	80-120	
Nickel, Dissolved	ug/L	1000	974	97	80-120	
Selenium, Dissolved	ug/L	1000	954	95	80-120	
Silver, Dissolved	ug/L	500	472	94	80-120	
Thallium, Dissolved	ug/L	1000	901	90	80-120	
Zinc, Dissolved	ug/L	1000	1010	101	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1035347 1035348

Parameter	Units	60125643004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony, Dissolved	ug/L	ND	1000	1000	967	980	97	98	75-125	1	20	
Arsenic, Dissolved	ug/L	39.0	1000	1000	1020	1030	98	99	75-125	1	20	
Beryllium, Dissolved	ug/L	ND	1000	1000	999	1010	100	101	75-125	1	20	
Cadmium, Dissolved	ug/L	ND	1000	1000	973	985	97	98	75-125	1	20	
Chromium, Dissolved	ug/L	ND	1000	1000	968	983	97	98	75-125	1	20	
Copper, Dissolved	ug/L	ND	1000	1000	990	992	99	99	75-125	0	20	
Lead, Dissolved	ug/L	ND	1000	1000	975	986	97	98	75-125	1	20	

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QUALITY CONTROL DATA

Project: KUHLMAN DIECASTING

Pace Project No.: 60125643

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1035347 1035348											
Parameter	Units	60125643004 Result	MS	MSD	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max	
			Spike Conc.	Spike Conc.						RPD	RPD
Nickel, Dissolved	ug/L	18.2	1000	1000	989	998	97	98	75-125	1	20
Selenium, Dissolved	ug/L	ND	1000	1000	963	973	96	97	75-125	1	20
Silver, Dissolved	ug/L	ND	500	500	493	494	99	99	75-125	0	20
Thallium, Dissolved	ug/L	ND	1000	1000	930	942	93	94	75-125	1	20
Zinc, Dissolved	ug/L	146	1000	1000	1110	1130	97	98	75-125	1	20

QUALITY CONTROL DATA

Project: KUHLMAN DIECASTING

Pace Project No.: 60125643

QC Batch: MPRP/18880

Analysis Method: EPA 6010

QC Batch Method: EPA 3010

Analysis Description: 6010 MET Dissolved

Associated Lab Samples: 60125643001, 60125643002

METHOD BLANK: 1035765

Matrix: Water

Associated Lab Samples: 60125643001, 60125643002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Antimony, Dissolved	ug/L	ND	10.0	07/30/12 13:05	
Arsenic, Dissolved	ug/L	ND	10.0	07/30/12 13:05	
Beryllium, Dissolved	ug/L	ND	1.0	07/30/12 13:05	
Cadmium, Dissolved	ug/L	ND	5.0	07/30/12 13:05	
Chromium, Dissolved	ug/L	ND	5.0	07/30/12 13:05	
Copper, Dissolved	ug/L	ND	10.0	07/30/12 13:05	
Lead, Dissolved	ug/L	ND	5.0	07/30/12 13:05	
Nickel, Dissolved	ug/L	ND	5.0	07/30/12 13:05	
Selenium, Dissolved	ug/L	ND	15.0	07/30/12 13:05	
Silver, Dissolved	ug/L	ND	7.0	07/30/12 13:05	
Thallium, Dissolved	ug/L	ND	20.0	07/30/12 13:05	
Zinc, Dissolved	ug/L	ND	50.0	07/30/12 13:05	

LABORATORY CONTROL SAMPLE: 1035766

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony, Dissolved	ug/L	1000	972	97	80-120	
Arsenic, Dissolved	ug/L	1000	995	100	80-120	
Beryllium, Dissolved	ug/L	1000	972	97	80-120	
Cadmium, Dissolved	ug/L	1000	966	97	80-120	
Chromium, Dissolved	ug/L	1000	986	99	80-120	
Copper, Dissolved	ug/L	1000	901	90	80-120	
Lead, Dissolved	ug/L	1000	935	93	80-120	
Nickel, Dissolved	ug/L	1000	969	97	80-120	
Selenium, Dissolved	ug/L	1000	974	97	80-120	
Silver, Dissolved	ug/L	500	462	92	80-120	
Thallium, Dissolved	ug/L	1000	903	90	80-120	
Zinc, Dissolved	ug/L	1000	985	98	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1035767

1035768

Parameter	Units	60125643001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony, Dissolved	ug/L	ND	1000	1000	977	973	98	97	75-125	0	20	
Arsenic, Dissolved	ug/L	ND	1000	1000	1000	993	100	99	75-125	1	20	
Beryllium, Dissolved	ug/L	ND	1000	1000	988	980	99	98	75-125	1	20	
Cadmium, Dissolved	ug/L	ND	1000	1000	975	967	98	97	75-125	1	20	
Chromium, Dissolved	ug/L	ND	1000	1000	996	984	100	98	75-125	1	20	
Copper, Dissolved	ug/L	ND	1000	1000	923	909	92	91	75-125	2	20	
Lead, Dissolved	ug/L	ND	1000	1000	952	941	95	94	75-125	1	20	

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QUALITY CONTROL DATA

Project: KUHLMAN DIECASTING

Pace Project No.: 60125643

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 10357671035768												
Parameter	Units	60125643001 Result	MS	MSD	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max	Qual
			Spike Conc.	Spike Conc.							RPD	
Nickel, Dissolved	ug/L	ND	1000	1000	983	974	98	97	75-125	1	20	
Selenium, Dissolved	ug/L	ND	1000	1000	981	967	98	97	75-125	1	20	
Silver, Dissolved	ug/L	ND	500	500	472	466	94	93	75-125	1	20	
Thallium, Dissolved	ug/L	ND	1000	1000	918	912	92	91	75-125	1	20	
Zinc, Dissolved	ug/L	ND	1000	1000	1000	992	100	99	75-125	1	20	

QUALITY CONTROL DATA

Project: KUHLMAN DIECASTING

Pace Project No.: 60125643

QC Batch: MSV/47378

Analysis Method: OA1

QC Batch Method: OA1

Analysis Description: OA1 Volatile Pet. Hydrocarbon

Associated Lab Samples: 60125643003, 60125643005

METHOD BLANK: 1036952

Matrix: Solid

Associated Lab Samples: 60125643003, 60125643005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Gasoline Range Organics	mg/kg	ND	1.0	07/26/12 09:15	

LABORATORY CONTROL SAMPLE: 1036953

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Gasoline Range Organics	mg/kg	4	4.3	107	63-138	

QUALITY CONTROL DATA

Project: KUHLMAN DIECASTING

Pace Project No.: 60125643

QC Batch:	MSV/47379	Analysis Method:	OA1
QC Batch Method:	OA1	Analysis Description:	OA1 Volatile Pet. Hydrocarbon
Associated Lab Samples:	60125643006, 60125643008, 60125643009, 60125643011, 60125643013		

METHOD BLANK:	1036954	Matrix:	Solid
Associated Lab Samples:	60125643006, 60125643008, 60125643009, 60125643011, 60125643013		

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Gasoline Range Organics	mg/kg	ND	1.0	07/26/12 15:38	

LABORATORY CONTROL SAMPLE: 1036955

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Gasoline Range Organics	mg/kg	4	4.3	107	63-138	

QUALITY CONTROL DATA

Project: KUHLMAN DIECASTING

Pace Project No.: 60125643

QC Batch: MSV/47349

Analysis Method: EPA 5030B/8260

QC Batch Method: EPA 5030B/8260

Analysis Description: 8260 MSV Water 10 mL Purge

Associated Lab Samples: 60125643004, 60125643007

METHOD BLANK: 1035916

Matrix: Water

Associated Lab Samples: 60125643004, 60125643007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	1.0	07/27/12 15:56	
1,1,1-Trichloroethane	ug/L	ND	1.0	07/27/12 15:56	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	07/27/12 15:56	
1,1,2-Trichloroethane	ug/L	ND	1.0	07/27/12 15:56	
1,1-Dichloroethane	ug/L	ND	1.0	07/27/12 15:56	
1,1-Dichloroethene	ug/L	ND	1.0	07/27/12 15:56	
1,1-Dichloropropene	ug/L	ND	1.0	07/27/12 15:56	
1,2,3-Trichlorobenzene	ug/L	ND	1.0	07/27/12 15:56	
1,2,3-Trichloropropane	ug/L	ND	2.5	07/27/12 15:56	
1,2,4-Trichlorobenzene	ug/L	ND	1.0	07/27/12 15:56	
1,2,4-Trimethylbenzene	ug/L	ND	1.0	07/27/12 15:56	
1,2-Dibromo-3-chloropropane	ug/L	ND	2.5	07/27/12 15:56	
1,2-Dibromoethane (EDB)	ug/L	ND	1.0	07/27/12 15:56	
1,2-Dichlorobenzene	ug/L	ND	1.0	07/27/12 15:56	
1,2-Dichloroethane	ug/L	ND	1.0	07/27/12 15:56	
1,2-Dichloroethene (Total)	ug/L	ND	1.0	07/27/12 15:56	
1,2-Dichloropropane	ug/L	ND	1.0	07/27/12 15:56	
1,3,5-Trimethylbenzene	ug/L	ND	1.0	07/27/12 15:56	
1,3-Dichlorobenzene	ug/L	ND	1.0	07/27/12 15:56	
1,3-Dichloropropane	ug/L	ND	1.0	07/27/12 15:56	
1,4-Dichlorobenzene	ug/L	ND	1.0	07/27/12 15:56	
2,2-Dichloropropane	ug/L	ND	1.0	07/27/12 15:56	
2-Butanone (MEK)	ug/L	ND	10.0	07/27/12 15:56	
2-Chlorotoluene	ug/L	ND	1.0	07/27/12 15:56	
2-Hexanone	ug/L	ND	10.0	07/27/12 15:56	
4-Chlorotoluene	ug/L	ND	1.0	07/27/12 15:56	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	07/27/12 15:56	
Acetone	ug/L	ND	10.0	07/27/12 15:56	
Benzene	ug/L	ND	1.0	07/27/12 15:56	
Bromobenzene	ug/L	ND	1.0	07/27/12 15:56	
Bromochloromethane	ug/L	ND	1.0	07/27/12 15:56	
Bromodichloromethane	ug/L	ND	1.0	07/27/12 15:56	
Bromoform	ug/L	ND	1.0	07/27/12 15:56	
Bromomethane	ug/L	ND	5.0	07/27/12 15:56	
Carbon disulfide	ug/L	ND	5.0	07/27/12 15:56	
Carbon tetrachloride	ug/L	ND	1.0	07/27/12 15:56	
Chlorobenzene	ug/L	ND	1.0	07/27/12 15:56	
Chloroethane	ug/L	ND	1.0	07/27/12 15:56	
Chloroform	ug/L	ND	1.0	07/27/12 15:56	
Chloromethane	ug/L	ND	1.0	07/27/12 15:56	
cis-1,2-Dichloroethene	ug/L	ND	1.0	07/27/12 15:56	
cis-1,3-Dichloropropene	ug/L	ND	1.0	07/27/12 15:56	
Dibromochloromethane	ug/L	ND	1.0	07/27/12 15:56	

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QUALITY CONTROL DATA

Project: KUHLMAN DIECASTING

Pace Project No.: 60125643

METHOD BLANK: 1035916

Matrix: Water

Associated Lab Samples: 60125643004, 60125643007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Dibromomethane	ug/L	ND	1.0	07/27/12 15:56	
Dichlorodifluoromethane	ug/L	ND	1.0	07/27/12 15:56	
Ethylbenzene	ug/L	ND	1.0	07/27/12 15:56	
Hexachloro-1,3-butadiene	ug/L	ND	1.0	07/27/12 15:56	
Isopropylbenzene (Cumene)	ug/L	ND	1.0	07/27/12 15:56	
Methyl-tert-butyl ether	ug/L	ND	1.0	07/27/12 15:56	
Methylene chloride	ug/L	ND	1.0	07/27/12 15:56	
n-Butylbenzene	ug/L	ND	1.0	07/27/12 15:56	
n-Propylbenzene	ug/L	ND	1.0	07/27/12 15:56	
Naphthalene	ug/L	ND	10.0	07/27/12 15:56	
p-Isopropyltoluene	ug/L	ND	1.0	07/27/12 15:56	
sec-Butylbenzene	ug/L	ND	1.0	07/27/12 15:56	
Styrene	ug/L	ND	1.0	07/27/12 15:56	
tert-Butylbenzene	ug/L	ND	1.0	07/27/12 15:56	
Tetrachloroethene	ug/L	ND	1.0	07/27/12 15:56	
Toluene	ug/L	ND	1.0	07/27/12 15:56	
trans-1,2-Dichloroethene	ug/L	ND	1.0	07/27/12 15:56	
trans-1,3-Dichloropropene	ug/L	ND	1.0	07/27/12 15:56	
Trichloroethene	ug/L	ND	1.0	07/27/12 15:56	
Trichlorofluoromethane	ug/L	ND	1.0	07/27/12 15:56	
Vinyl chloride	ug/L	ND	1.0	07/27/12 15:56	
Xylene (Total)	ug/L	ND	3.0	07/27/12 15:56	
1,2-Dichloroethane-d4 (S)	%	94	80-120	07/27/12 15:56	
4-Bromofluorobenzene (S)	%	106	80-120	07/27/12 15:56	
Dibromofluoromethane (S)	%	94	80-120	07/27/12 15:56	
Toluene-d8 (S)	%	98	80-120	07/27/12 15:56	

LABORATORY CONTROL SAMPLE: 1035917

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	20	19.5	97	79-121	
1,1,1-Trichloroethane	ug/L	20	20.2	101	76-120	
1,1,2,2-Tetrachloroethane	ug/L	20	16.3	81	71-121	
1,1,2-Trichloroethane	ug/L	20	17.8	89	78-120	
1,1-Dichloroethane	ug/L	20	19.6	98	74-120	
1,1-Dichloroethene	ug/L	20	21.8	109	68-120	
1,1-Dichloropropene	ug/L	20	20.5	103	78-120	
1,2,3-Trichlorobenzene	ug/L	20	17.6	88	70-129	
1,2,3-Trichloropropane	ug/L	20	16.1	80	74-121	
1,2,4-Trichlorobenzene	ug/L	20	17.8	89	76-123	
1,2,4-Trimethylbenzene	ug/L	20	18.0	90	76-121	
1,2-Dibromo-3-chloropropane	ug/L	20	16.8	84	65-124	
1,2-Dibromoethane (EDB)	ug/L	20	19.2	96	76-125	
1,2-Dichlorobenzene	ug/L	20	18.2	91	80-120	
1,2-Dichloroethane	ug/L	20	20.6	103	72-123	

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QUALITY CONTROL DATA

Project: KUHLMAN DIECASTING

Pace Project No.: 60125643

LABORATORY CONTROL SAMPLE: 1035917

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dichloroethene (Total)	ug/L	40	41.8	105	78-120	
1,2-Dichloropropane	ug/L	20	20.6	103	78-120	
1,3,5-Trimethylbenzene	ug/L	20	18.4	92	75-120	
1,3-Dichlorobenzene	ug/L	20	18.6	93	79-120	
1,3-Dichloropropane	ug/L	20	18.3	91	75-120	
1,4-Dichlorobenzene	ug/L	20	18.4	92	80-120	
2,2-Dichloropropane	ug/L	20	19.0	95	54-132	
2-Butanone (MEK)	ug/L	100	88.4	88	40-160	
2-Chlorotoluene	ug/L	20	18.0	90	78-120	
2-Hexanone	ug/L	100	83.2	83	40-160	
4-Chlorotoluene	ug/L	20	19.2	96	79-120	
4-Methyl-2-pentanone (MIBK)	ug/L	100	91.7	92	65-126	
Acetone	ug/L	100	81.2	81	40-160	
Benzene	ug/L	20	20.8	104	74-123	
Bromobenzene	ug/L	20	18.4	92	79-120	
Bromochloromethane	ug/L	20	21.3	107	75-120	
Bromodichloromethane	ug/L	20	20.2	101	74-120	
Bromoform	ug/L	20	18.7	93	70-123	
Bromomethane	ug/L	20	15.9	79	40-158	
Carbon disulfide	ug/L	20	18.5	93	67-135	
Carbon tetrachloride	ug/L	20	21.1	106	74-126	
Chlorobenzene	ug/L	20	20.0	100	80-120	
Chloroethane	ug/L	20	25.2	126	60-144	
Chloroform	ug/L	20	20.3	101	77-120	
Chloromethane	ug/L	20	19.2	96	40-142	
cis-1,2-Dichloroethene	ug/L	20	19.7	99	70-120	
cis-1,3-Dichloropropene	ug/L	20	19.9	99	73-121	
Dibromochloromethane	ug/L	20	19.4	97	77-122	
Dibromomethane	ug/L	20	19.5	98	76-120	
Dichlorodifluoromethane	ug/L	20	17.6	88	40-160	
Ethylbenzene	ug/L	20	19.8	99	76-123	
Hexachloro-1,3-butadiene	ug/L	20	18.1	91	72-124	
Isopropylbenzene (Cumene)	ug/L	20	21.8	109	80-126	
Methyl-tert-butyl ether	ug/L	20	18.5	93	67-125	
Methylene chloride	ug/L	20	20.2	101	72-127	
n-Butylbenzene	ug/L	20	18.3	92	76-125	
n-Propylbenzene	ug/L	20	17.8	89	77-120	
Naphthalene	ug/L	20	15.9	80	63-128	
p-Isopropyltoluene	ug/L	20	18.3	91	77-121	
sec-Butylbenzene	ug/L	20	18.7	93	77-122	
Styrene	ug/L	20	20.0	100	79-120	
tert-Butylbenzene	ug/L	20	18.4	92	75-124	
Tetrachloroethene	ug/L	20	21.0	105	78-121	
Toluene	ug/L	20	19.8	99	75-123	
trans-1,2-Dichloroethene	ug/L	20	22.1	111	80-129	
trans-1,3-Dichloropropene	ug/L	20	19.6	98	77-122	
Trichloroethene	ug/L	20	21.6	108	74-120	
Trichlorofluoromethane	ug/L	20	22.2	111	69-122	

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QUALITY CONTROL DATA

Project: KUHLMAN DIECASTING

Pace Project No.: 60125643

LABORATORY CONTROL SAMPLE: 1035917

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Vinyl chloride	ug/L	20	21.9	109	50-140	
Xylene (Total)	ug/L	60	60.7	101	76-123	
1,2-Dichloroethane-d4 (S)	%			93	80-120	
4-Bromofluorobenzene (S)	%			103	80-120	
Dibromofluoromethane (S)	%			95	80-120	
Toluene-d8 (S)	%			95	80-120	

QUALITY CONTROL DATA

Project: KUHLMAN DIECASTING

Pace Project No.: 60125643

QC Batch: MSV/47352

Analysis Method: EPA 5030B/8260

QC Batch Method: EPA 5030B/8260

Analysis Description: 8260 MSV Water 10 mL Purge

Associated Lab Samples: 60125643010, 60125643012, 60125643014

METHOD BLANK: 1035943

Matrix: Water

Associated Lab Samples: 60125643010, 60125643012, 60125643014

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	1.0	07/27/12 12:11	
1,1,1-Trichloroethane	ug/L	ND	1.0	07/27/12 12:11	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	07/27/12 12:11	
1,1,2-Trichloroethane	ug/L	ND	1.0	07/27/12 12:11	
1,1-Dichloroethane	ug/L	ND	1.0	07/27/12 12:11	
1,1-Dichloroethene	ug/L	ND	1.0	07/27/12 12:11	
1,1-Dichloropropene	ug/L	ND	1.0	07/27/12 12:11	
1,2,3-Trichlorobenzene	ug/L	ND	1.0	07/27/12 12:11	
1,2,3-Trichloropropane	ug/L	ND	2.5	07/27/12 12:11	
1,2,4-Trichlorobenzene	ug/L	ND	1.0	07/27/12 12:11	
1,2,4-Trimethylbenzene	ug/L	ND	1.0	07/27/12 12:11	
1,2-Dibromo-3-chloropropane	ug/L	ND	2.5	07/27/12 12:11	
1,2-Dibromoethane (EDB)	ug/L	ND	1.0	07/27/12 12:11	
1,2-Dichlorobenzene	ug/L	ND	1.0	07/27/12 12:11	
1,2-Dichloroethane	ug/L	ND	1.0	07/27/12 12:11	
1,2-Dichloroethene (Total)	ug/L	ND	1.0	07/27/12 12:11	
1,2-Dichloropropane	ug/L	ND	1.0	07/27/12 12:11	
1,3,5-Trimethylbenzene	ug/L	ND	1.0	07/27/12 12:11	
1,3-Dichlorobenzene	ug/L	ND	1.0	07/27/12 12:11	
1,3-Dichloropropane	ug/L	ND	1.0	07/27/12 12:11	
1,4-Dichlorobenzene	ug/L	ND	1.0	07/27/12 12:11	
2,2-Dichloropropane	ug/L	ND	1.0	07/27/12 12:11	
2-Butanone (MEK)	ug/L	ND	10.0	07/27/12 12:11	
2-Chlorotoluene	ug/L	ND	1.0	07/27/12 12:11	
2-Hexanone	ug/L	ND	10.0	07/27/12 12:11	
4-Chlorotoluene	ug/L	ND	1.0	07/27/12 12:11	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	07/27/12 12:11	
Acetone	ug/L	ND	10.0	07/27/12 12:11	
Benzene	ug/L	ND	1.0	07/27/12 12:11	
Bromobenzene	ug/L	ND	1.0	07/27/12 12:11	
Bromochloromethane	ug/L	ND	1.0	07/27/12 12:11	
Bromodichloromethane	ug/L	ND	1.0	07/27/12 12:11	
Bromoform	ug/L	ND	1.0	07/27/12 12:11	
Bromomethane	ug/L	ND	5.0	07/27/12 12:11	
Carbon disulfide	ug/L	ND	5.0	07/27/12 12:11	
Carbon tetrachloride	ug/L	ND	1.0	07/27/12 12:11	
Chlorobenzene	ug/L	ND	1.0	07/27/12 12:11	
Chloroethane	ug/L	ND	1.0	07/27/12 12:11	
Chloroform	ug/L	ND	1.0	07/27/12 12:11	
Chloromethane	ug/L	ND	1.0	07/27/12 12:11	
cis-1,2-Dichloroethene	ug/L	ND	1.0	07/27/12 12:11	
cis-1,3-Dichloropropene	ug/L	ND	1.0	07/27/12 12:11	
Dibromochloromethane	ug/L	ND	1.0	07/27/12 12:11	

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QUALITY CONTROL DATA

Project: KUHLMAN DIECASTING

Pace Project No.: 60125643

METHOD BLANK: 1035943

Matrix: Water

Associated Lab Samples: 60125643010, 60125643012, 60125643014

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Dibromomethane	ug/L	ND	1.0	07/27/12 12:11	
Dichlorodifluoromethane	ug/L	ND	1.0	07/27/12 12:11	
Ethylbenzene	ug/L	ND	1.0	07/27/12 12:11	
Hexachloro-1,3-butadiene	ug/L	ND	1.0	07/27/12 12:11	
Isopropylbenzene (Cumene)	ug/L	ND	1.0	07/27/12 12:11	
Methyl-tert-butyl ether	ug/L	ND	1.0	07/27/12 12:11	
Methylene chloride	ug/L	ND	1.0	07/27/12 12:11	
n-Butylbenzene	ug/L	ND	1.0	07/27/12 12:11	
n-Propylbenzene	ug/L	ND	1.0	07/27/12 12:11	
Naphthalene	ug/L	ND	10.0	07/27/12 12:11	
p-Isopropyltoluene	ug/L	ND	1.0	07/27/12 12:11	
sec-Butylbenzene	ug/L	ND	1.0	07/27/12 12:11	
Styrene	ug/L	ND	1.0	07/27/12 12:11	
tert-Butylbenzene	ug/L	ND	1.0	07/27/12 12:11	
Tetrachloroethene	ug/L	ND	1.0	07/27/12 12:11	
Toluene	ug/L	ND	1.0	07/27/12 12:11	
trans-1,2-Dichloroethene	ug/L	ND	1.0	07/27/12 12:11	
trans-1,3-Dichloropropene	ug/L	ND	1.0	07/27/12 12:11	
Trichloroethene	ug/L	ND	1.0	07/27/12 12:11	
Trichlorofluoromethane	ug/L	ND	1.0	07/27/12 12:11	
Vinyl chloride	ug/L	ND	1.0	07/27/12 12:11	
Xylene (Total)	ug/L	ND	3.0	07/27/12 12:11	
1,2-Dichloroethane-d4 (S)	%	90	80-120	07/27/12 12:11	
4-Bromofluorobenzene (S)	%	103	80-120	07/27/12 12:11	
Dibromofluoromethane (S)	%	97	80-120	07/27/12 12:11	
Toluene-d8 (S)	%	100	80-120	07/27/12 12:11	

LABORATORY CONTROL SAMPLE: 1035944

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	20	18.5	93	79-121	
1,1,1-Trichloroethane	ug/L	20	19.9	99	76-120	
1,1,2,2-Tetrachloroethane	ug/L	20	19.2	96	71-121	
1,1,2-Trichloroethane	ug/L	20	18.1	90	78-120	
1,1-Dichloroethane	ug/L	20	17.9	90	74-120	
1,1-Dichloroethene	ug/L	20	21.7	108	68-120	
1,1-Dichloropropene	ug/L	20	20.5	102	78-120	
1,2,3-Trichlorobenzene	ug/L	20	17.3	87	70-129	
1,2,3-Trichloropropane	ug/L	20	19.1	96	74-121	
1,2,4-Trichlorobenzene	ug/L	20	19.3	96	76-123	
1,2,4-Trimethylbenzene	ug/L	20	16.7	84	76-121	
1,2-Dibromo-3-chloropropane	ug/L	20	18.3	92	65-124	
1,2-Dibromoethane (EDB)	ug/L	20	18.5	92	76-125	
1,2-Dichlorobenzene	ug/L	20	18.1	91	80-120	
1,2-Dichloroethane	ug/L	20	18.3	92	72-123	

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QUALITY CONTROL DATA

Project: KUHLMAN DIECASTING

Pace Project No.: 60125643

LABORATORY CONTROL SAMPLE: 1035944

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dichloroethene (Total)	ug/L	40	38.4	96	78-120	
1,2-Dichloropropane	ug/L	20	19.3	97	78-120	
1,3,5-Trimethylbenzene	ug/L	20	18.2	91	75-120	
1,3-Dichlorobenzene	ug/L	20	18.7	93	79-120	
1,3-Dichloropropane	ug/L	20	18.2	91	75-120	
1,4-Dichlorobenzene	ug/L	20	18.1	91	80-120	
2,2-Dichloropropane	ug/L	20	18.9	94	54-132	
2-Butanone (MEK)	ug/L	100	86.8	87	40-160	
2-Chlorotoluene	ug/L	20	19.7	99	78-120	
2-Hexanone	ug/L	100	86.4	86	40-160	
4-Chlorotoluene	ug/L	20	20.0	100	79-120	
4-Methyl-2-pentanone (MIBK)	ug/L	100	87.6	88	65-126	
Acetone	ug/L	100	85.7	86	40-160	
Benzene	ug/L	20	18.4	92	74-123	
Bromobenzene	ug/L	20	19.4	97	79-120	
Bromochloromethane	ug/L	20	19.9	100	75-120	
Bromodichloromethane	ug/L	20	17.2	86	74-120	
Bromoform	ug/L	20	17.1	85	70-123	
Bromomethane	ug/L	20	16.2	81	40-158	
Carbon disulfide	ug/L	20	17.8	89	67-135	
Carbon tetrachloride	ug/L	20	18.4	92	74-126	
Chlorobenzene	ug/L	20	19.2	96	80-120	
Chloroethane	ug/L	20	24.5	123	60-144	
Chloroform	ug/L	20	17.8	89	77-120	
Chloromethane	ug/L	20	18.9	94	40-142	
cis-1,2-Dichloroethene	ug/L	20	18.6	93	70-120	
cis-1,3-Dichloropropene	ug/L	20	17.7	89	73-121	
Dibromochloromethane	ug/L	20	17.8	89	77-122	
Dibromomethane	ug/L	20	19.2	96	76-120	
Dichlorodifluoromethane	ug/L	20	22.0	110	40-160	
Ethylbenzene	ug/L	20	18.9	95	76-123	
Hexachloro-1,3-butadiene	ug/L	20	17.5	88	72-124	
Isopropylbenzene (Cumene)	ug/L	20	20.4	102	80-126	
Methyl-tert-butyl ether	ug/L	20	18.0	90	67-125	
Methylene chloride	ug/L	20	18.3	91	72-127	
n-Butylbenzene	ug/L	20	18.8	94	76-125	
n-Propylbenzene	ug/L	20	19.1	95	77-120	
Naphthalene	ug/L	20	16.8	84	63-128	
p-Isopropyltoluene	ug/L	20	18.5	93	77-121	
sec-Butylbenzene	ug/L	20	16.7	84	77-122	
Styrene	ug/L	20	18.6	93	79-120	
tert-Butylbenzene	ug/L	20	18.7	93	75-124	
Tetrachloroethene	ug/L	20	19.5	98	78-121	
Toluene	ug/L	20	17.7	88	75-123	
trans-1,2-Dichloroethene	ug/L	20	19.8	99	80-129	
trans-1,3-Dichloropropene	ug/L	20	20.1	100	77-122	
Trichloroethene	ug/L	20	17.8	89	74-120	
Trichlorofluoromethane	ug/L	20	22.7	113	69-122	

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QUALITY CONTROL DATA

Project: KUHLMAN DIECASTING

Pace Project No.: 60125643

LABORATORY CONTROL SAMPLE: 1035944

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Vinyl chloride	ug/L	20	21.8	109	50-140	
Xylene (Total)	ug/L	60	56.1	93	76-123	
1,2-Dichloroethane-d4 (S)	%			101	80-120	
4-Bromofluorobenzene (S)	%			104	80-120	
Dibromofluoromethane (S)	%			102	80-120	
Toluene-d8 (S)	%			101	80-120	

QUALITY CONTROL DATA

Project: KUHLMAN DIECASTING

Pace Project No.: 60125643

QC Batch: MSV/47383

Analysis Method: EPA 5030B/8260

QC Batch Method: EPA 5030B/8260

Analysis Description: 8260 MSV Water 10 mL Purge

Associated Lab Samples: 60125643001, 60125643002

METHOD BLANK: 1036999

Matrix: Water

Associated Lab Samples: 60125643001, 60125643002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	1.0	07/30/12 10:21	
1,1,1-Trichloroethane	ug/L	ND	1.0	07/30/12 10:21	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	07/30/12 10:21	
1,1,2-Trichloroethane	ug/L	ND	1.0	07/30/12 10:21	
1,1-Dichloroethane	ug/L	ND	1.0	07/30/12 10:21	
1,1-Dichloroethene	ug/L	ND	1.0	07/30/12 10:21	
1,1-Dichloropropene	ug/L	ND	1.0	07/30/12 10:21	
1,2,3-Trichlorobenzene	ug/L	ND	1.0	07/30/12 10:21	
1,2,3-Trichloropropane	ug/L	ND	2.5	07/30/12 10:21	
1,2,4-Trichlorobenzene	ug/L	ND	1.0	07/30/12 10:21	
1,2,4-Trimethylbenzene	ug/L	ND	1.0	07/30/12 10:21	
1,2-Dibromo-3-chloropropane	ug/L	ND	2.5	07/30/12 10:21	
1,2-Dibromoethane (EDB)	ug/L	ND	1.0	07/30/12 10:21	
1,2-Dichlorobenzene	ug/L	ND	1.0	07/30/12 10:21	
1,2-Dichloroethane	ug/L	ND	1.0	07/30/12 10:21	
1,2-Dichloroethene (Total)	ug/L	ND	1.0	07/30/12 10:21	
1,2-Dichloropropane	ug/L	ND	1.0	07/30/12 10:21	
1,3,5-Trimethylbenzene	ug/L	ND	1.0	07/30/12 10:21	
1,3-Dichlorobenzene	ug/L	ND	1.0	07/30/12 10:21	
1,3-Dichloropropane	ug/L	ND	1.0	07/30/12 10:21	
1,4-Dichlorobenzene	ug/L	ND	1.0	07/30/12 10:21	
2,2-Dichloropropane	ug/L	ND	1.0	07/30/12 10:21	
2-Butanone (MEK)	ug/L	ND	10.0	07/30/12 10:21	
2-Chlorotoluene	ug/L	ND	1.0	07/30/12 10:21	
2-Hexanone	ug/L	ND	10.0	07/30/12 10:21	
4-Chlorotoluene	ug/L	ND	1.0	07/30/12 10:21	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	07/30/12 10:21	
Acetone	ug/L	ND	10.0	07/30/12 10:21	
Benzene	ug/L	ND	1.0	07/30/12 10:21	
Bromobenzene	ug/L	ND	1.0	07/30/12 10:21	
Bromochloromethane	ug/L	ND	1.0	07/30/12 10:21	
Bromodichloromethane	ug/L	ND	1.0	07/30/12 10:21	
Bromoform	ug/L	ND	1.0	07/30/12 10:21	
Bromomethane	ug/L	ND	5.0	07/30/12 10:21	
Carbon disulfide	ug/L	ND	5.0	07/30/12 10:21	
Carbon tetrachloride	ug/L	ND	1.0	07/30/12 10:21	
Chlorobenzene	ug/L	ND	1.0	07/30/12 10:21	
Chloroethane	ug/L	ND	1.0	07/30/12 10:21	
Chloroform	ug/L	ND	1.0	07/30/12 10:21	
Chloromethane	ug/L	ND	1.0	07/30/12 10:21	
cis-1,2-Dichloroethene	ug/L	ND	1.0	07/30/12 10:21	
cis-1,3-Dichloropropene	ug/L	ND	1.0	07/30/12 10:21	
Dibromochloromethane	ug/L	ND	1.0	07/30/12 10:21	

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QUALITY CONTROL DATA

Project: KUHLMAN DIECASTING

Pace Project No.: 60125643

METHOD BLANK: 1036999

Matrix: Water

Associated Lab Samples: 60125643001, 60125643002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Dibromomethane	ug/L	ND	1.0	07/30/12 10:21	
Dichlorodifluoromethane	ug/L	ND	1.0	07/30/12 10:21	
Ethylbenzene	ug/L	ND	1.0	07/30/12 10:21	
Hexachloro-1,3-butadiene	ug/L	ND	1.0	07/30/12 10:21	
Isopropylbenzene (Cumene)	ug/L	ND	1.0	07/30/12 10:21	
Methyl-tert-butyl ether	ug/L	ND	1.0	07/30/12 10:21	
Methylene chloride	ug/L	ND	1.0	07/30/12 10:21	
n-Butylbenzene	ug/L	ND	1.0	07/30/12 10:21	
n-Propylbenzene	ug/L	ND	1.0	07/30/12 10:21	
Naphthalene	ug/L	ND	10.0	07/30/12 10:21	
p-Isopropyltoluene	ug/L	ND	1.0	07/30/12 10:21	
sec-Butylbenzene	ug/L	ND	1.0	07/30/12 10:21	
Styrene	ug/L	ND	1.0	07/30/12 10:21	
tert-Butylbenzene	ug/L	ND	1.0	07/30/12 10:21	
Tetrachloroethene	ug/L	ND	1.0	07/30/12 10:21	
Toluene	ug/L	ND	1.0	07/30/12 10:21	
trans-1,2-Dichloroethene	ug/L	ND	1.0	07/30/12 10:21	
trans-1,3-Dichloropropene	ug/L	ND	1.0	07/30/12 10:21	
Trichloroethene	ug/L	ND	1.0	07/30/12 10:21	
Trichlorofluoromethane	ug/L	ND	1.0	07/30/12 10:21	
Vinyl chloride	ug/L	ND	1.0	07/30/12 10:21	
Xylene (Total)	ug/L	ND	3.0	07/30/12 10:21	
1,2-Dichloroethane-d4 (S)	%	116	80-120	07/30/12 10:21	
4-Bromofluorobenzene (S)	%	102	80-120	07/30/12 10:21	
Dibromofluoromethane (S)	%	114	80-120	07/30/12 10:21	
Toluene-d8 (S)	%	102	80-120	07/30/12 10:21	

LABORATORY CONTROL SAMPLE: 1037000

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	20	21.4	107	79-121	
1,1,1-Trichloroethane	ug/L	20	20.0	100	76-120	
1,1,2,2-Tetrachloroethane	ug/L	20	19.5	98	71-121	
1,1,2-Trichloroethane	ug/L	20	19.8	99	78-120	
1,1-Dichloroethane	ug/L	20	19.6	98	74-120	
1,1-Dichloroethene	ug/L	20	21.2	106	68-120	
1,1-Dichloropropene	ug/L	20	20.4	102	78-120	
1,2,3-Trichlorobenzene	ug/L	20	21.2	106	70-129	
1,2,3-Trichloropropane	ug/L	20	19.7	99	74-121	
1,2,4-Trichlorobenzene	ug/L	20	21.8	109	76-123	
1,2,4-Trimethylbenzene	ug/L	20	21.0	105	76-121	
1,2-Dibromo-3-chloropropane	ug/L	20	20.1	100	65-124	
1,2-Dibromoethane (EDB)	ug/L	20	20.9	105	76-125	
1,2-Dichlorobenzene	ug/L	20	21.4	107	80-120	
1,2-Dichloroethane	ug/L	20	20.6	103	72-123	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: KUHLMAN DIECASTING

Pace Project No.: 60125643

LABORATORY CONTROL SAMPLE: 1037000

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dichloroethene (Total)	ug/L	40	41.0	103	78-120	
1,2-Dichloropropane	ug/L	20	21.5	108	78-120	
1,3,5-Trimethylbenzene	ug/L	20	21.1	106	75-120	
1,3-Dichlorobenzene	ug/L	20	21.4	107	79-120	
1,3-Dichloropropane	ug/L	20	19.5	97	75-120	
1,4-Dichlorobenzene	ug/L	20	21.5	108	80-120	
2,2-Dichloropropane	ug/L	20	23.5	117	54-132	
2-Butanone (MEK)	ug/L	100	92.6	93	40-160	
2-Chlorotoluene	ug/L	20	20.8	104	78-120	
2-Hexanone	ug/L	100	95.4	95	40-160	
4-Chlorotoluene	ug/L	20	22.1	111	79-120	
4-Methyl-2-pentanone (MIBK)	ug/L	100	95.8	96	65-126	
Acetone	ug/L	100	83.2	83	40-160	
Benzene	ug/L	20	20.5	103	74-123	
Bromobenzene	ug/L	20	21.0	105	79-120	
Bromochloromethane	ug/L	20	20.9	105	75-120	
Bromodichloromethane	ug/L	20	20.1	100	74-120	
Bromoform	ug/L	20	20.8	104	70-123	
Bromomethane	ug/L	20	17.1	85	40-158	
Carbon disulfide	ug/L	20	18.0	90	67-135	
Carbon tetrachloride	ug/L	20	20.6	103	74-126	
Chlorobenzene	ug/L	20	21.7	109	80-120	
Chloroethane	ug/L	20	24.2	121	60-144	
Chloroform	ug/L	20	20.0	100	77-120	
Chloromethane	ug/L	20	17.5	88	40-142	
cis-1,2-Dichloroethene	ug/L	20	19.6	98	70-120	
cis-1,3-Dichloropropene	ug/L	20	21.2	106	73-121	
Dibromochloromethane	ug/L	20	21.5	107	77-122	
Dibromomethane	ug/L	20	19.3	97	76-120	
Dichlorodifluoromethane	ug/L	20	14.8	74	40-160	
Ethylbenzene	ug/L	20	21.7	109	76-123	
Hexachloro-1,3-butadiene	ug/L	20	22.8	114	72-124	
Isopropylbenzene (Cumene)	ug/L	20	23.7	118	80-126	
Methyl-tert-butyl ether	ug/L	20	19.2	96	67-125	
Methylene chloride	ug/L	20	19.5	97	72-127	
n-Butylbenzene	ug/L	20	22.2	111	76-125	
n-Propylbenzene	ug/L	20	20.6	103	77-120	
Naphthalene	ug/L	20	19.1	95	63-128	
p-Isopropyltoluene	ug/L	20	21.5	107	77-121	
sec-Butylbenzene	ug/L	20	21.3	107	77-122	
Styrene	ug/L	20	21.8	109	79-120	
tert-Butylbenzene	ug/L	20	21.4	107	75-124	
Tetrachloroethene	ug/L	20	22.7	114	78-121	
Toluene	ug/L	20	21.5	107	75-123	
trans-1,2-Dichloroethene	ug/L	20	21.5	107	80-129	
trans-1,3-Dichloropropene	ug/L	20	22.8	114	77-122	
Trichloroethene	ug/L	20	20.6	103	74-120	
Trichlorofluoromethane	ug/L	20	20.9	105	69-122	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: KUHLMAN DIECASTING

Pace Project No.: 60125643

LABORATORY CONTROL SAMPLE: 1037000

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Vinyl chloride	ug/L	20	19.9	100	50-140	
Xylene (Total)	ug/L	60	65.7	109	76-123	
1,2-Dichloroethane-d4 (S)	%			94	80-120	
4-Bromofluorobenzene (S)	%			101	80-120	
Dibromofluoromethane (S)	%			93	80-120	
Toluene-d8 (S)	%			102	80-120	

QUALITY CONTROL DATA

Project: KUHLMAN DIECASTING

Pace Project No.: 60125643

QC Batch: MSV/47353 Analysis Method: EPA 8260/OA1
QC Batch Method: EPA 8260/OA1 Analysis Description: 8260/OA1 UST-WATER
Associated Lab Samples: 60125643010, 60125643012, 60125643014

METHOD BLANK: 1035947 Matrix: Water

Associated Lab Samples: 60125643010, 60125643012, 60125643014

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,2-Dichloroethane	ug/L	ND	1.0	07/27/12 12:11	
Benzene	ug/L	ND	1.0	07/27/12 12:11	
Ethylbenzene	ug/L	ND	1.0	07/27/12 12:11	
Gasoline Range Organics	mg/L	ND	0.50	07/27/12 12:11	
Methyl-tert-butyl ether	ug/L	ND	1.0	07/27/12 12:11	
Naphthalene	ug/L	ND	10.0	07/27/12 12:11	
tert-Butyl Alcohol	ug/L	ND	10.0	07/27/12 12:11	
Toluene	ug/L	ND	1.0	07/27/12 12:11	
Xylene (Total)	ug/L	ND	3.0	07/27/12 12:11	
1,2-Dichloroethane-d4 (S)	%	90	80-120	07/27/12 12:11	
4-Bromofluorobenzene (S)	%	103	80-120	07/27/12 12:11	
Dibromofluoromethane (S)	%	97	80-120	07/27/12 12:11	
Toluene-d8 (S)	%	100	80-120	07/27/12 12:11	

LABORATORY CONTROL SAMPLE: 1035948

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dichloroethane	ug/L	20	18.3	92	72-123	
Benzene	ug/L	20	18.4	92	74-123	
Ethylbenzene	ug/L	20	18.9	95	76-123	
Gasoline Range Organics	mg/L	4	3.8	95	65-136	
Methyl-tert-butyl ether	ug/L	20	18.0	90	67-125	
Naphthalene	ug/L	20	16.8	84	63-128	
tert-Butyl Alcohol	ug/L	100	82.3	82	44-142	
Toluene	ug/L	20	17.7	88	75-123	
Xylene (Total)	ug/L	60	56.1	93	76-123	
1,2-Dichloroethane-d4 (S)	%			101	80-120	
4-Bromofluorobenzene (S)	%			104	80-120	
Dibromofluoromethane (S)	%			102	80-120	
Toluene-d8 (S)	%			101	80-120	

QUALITY CONTROL DATA

Project: KUHLMAN DIECASTING

Pace Project No.: 60125643

QC Batch:	MSV/47406	Analysis Method:	EPA 8260/OA1
QC Batch Method:	EPA 8260/OA1	Analysis Description:	8260/OA1 UST-WATER
Associated Lab Samples: 60125643004, 60125643007			

METHOD BLANK: 1037162 Matrix: Water

Associated Lab Samples: 60125643004, 60125643007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,2-Dichloroethane	ug/L	ND	1.0	07/27/12 15:56	
Benzene	ug/L	ND	1.0	07/27/12 15:56	
Ethylbenzene	ug/L	ND	1.0	07/27/12 15:56	
Gasoline Range Organics	mg/L	ND	0.50	07/27/12 15:56	
Methyl-tert-butyl ether	ug/L	ND	1.0	07/27/12 15:56	
Naphthalene	ug/L	ND	10.0	07/27/12 15:56	
tert-Butyl Alcohol	ug/L	ND	10.0	07/27/12 15:56	
Toluene	ug/L	ND	1.0	07/27/12 15:56	
Xylene (Total)	ug/L	ND	3.0	07/27/12 15:56	
1,2-Dichloroethane-d4 (S)	%	94	80-120	07/27/12 15:56	
4-Bromofluorobenzene (S)	%	106	80-120	07/27/12 15:56	
Dibromofluoromethane (S)	%	94	80-120	07/27/12 15:56	
Toluene-d8 (S)	%	98	80-120	07/27/12 15:56	

LABORATORY CONTROL SAMPLE: 1037163

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dichloroethane	ug/L	20	20.6	103	72-123	
Benzene	ug/L	20	20.8	104	74-123	
Ethylbenzene	ug/L	20	19.8	99	76-123	
Gasoline Range Organics	mg/L	4	3.1	78	65-136	
Methyl-tert-butyl ether	ug/L	20	18.5	93	67-125	
Naphthalene	ug/L	20	15.9	80	63-128	
tert-Butyl Alcohol	ug/L	100	97.4	97	44-142	
Toluene	ug/L	20	19.8	99	75-123	
Xylene (Total)	ug/L	60	60.7	101	76-123	
1,2-Dichloroethane-d4 (S)	%			93	80-120	
4-Bromofluorobenzene (S)	%			103	80-120	
Dibromofluoromethane (S)	%			95	80-120	
Toluene-d8 (S)	%			95	80-120	

QUALITY CONTROL DATA

Project: KUHLMAN DIECASTING

Pace Project No.: 60125643

QC Batch:	MSV/47407	Analysis Method:	EPA 8260/OA1
QC Batch Method:	EPA 8260/OA1	Analysis Description:	8260/OA1 UST-WATER
Associated Lab Samples: 60125643001, 60125643002			

METHOD BLANK: 1037164 Matrix: Water

Associated Lab Samples: 60125643001, 60125643002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,2-Dichloroethane	ug/L	ND	1.0	07/30/12 10:21	
Benzene	ug/L	ND	1.0	07/30/12 10:21	
Ethylbenzene	ug/L	ND	1.0	07/30/12 10:21	
Gasoline Range Organics	mg/L	ND	0.50	07/30/12 10:21	
Methyl-tert-butyl ether	ug/L	ND	1.0	07/30/12 10:21	
Naphthalene	ug/L	ND	10.0	07/30/12 10:21	
tert-Butyl Alcohol	ug/L	ND	10.0	07/30/12 10:21	
Toluene	ug/L	ND	1.0	07/30/12 10:21	
Xylene (Total)	ug/L	ND	3.0	07/30/12 10:21	
1,2-Dichloroethane-d4 (S)	%	116	80-120	07/30/12 10:21	
4-Bromofluorobenzene (S)	%	102	80-120	07/30/12 10:21	
Dibromofluoromethane (S)	%	114	80-120	07/30/12 10:21	
Toluene-d8 (S)	%	102	80-120	07/30/12 10:21	

LABORATORY CONTROL SAMPLE: 1037165

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dichloroethane	ug/L	20	20.6	103	72-123	
Benzene	ug/L	20	20.5	103	74-123	
Ethylbenzene	ug/L	20	21.7	109	76-123	
Gasoline Range Organics	mg/L	4	3.3	83	65-136	
Methyl-tert-butyl ether	ug/L	20	19.2	96	67-125	
Naphthalene	ug/L	20	19.1	95	63-128	
tert-Butyl Alcohol	ug/L	100	102	102	44-142	
Toluene	ug/L	20	21.5	107	75-123	
Xylene (Total)	ug/L	60	65.7	109	76-123	
1,2-Dichloroethane-d4 (S)	%			94	80-120	
4-Bromofluorobenzene (S)	%			101	80-120	
Dibromofluoromethane (S)	%			93	80-120	
Toluene-d8 (S)	%			102	80-120	

QUALITY CONTROL DATA

Project: KUHLMAN DIECASTING

Pace Project No.: 60125643

QC Batch: MSV/47270

Analysis Method: EPA 8260

QC Batch Method: EPA 8260

Analysis Description: 8260 MSV 5035A Volatile Organics

Associated Lab Samples: 60125643003, 60125643005

METHOD BLANK: 1034592

Matrix: Solid

Associated Lab Samples: 60125643003, 60125643005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	ND	5.0	07/26/12 09:15	
1,1,1-Trichloroethane	ug/kg	ND	5.0	07/26/12 09:15	
1,1,2,2-Tetrachloroethane	ug/kg	ND	5.0	07/26/12 09:15	
1,1,2-Trichloroethane	ug/kg	ND	5.0	07/26/12 09:15	
1,1-Dichloroethane	ug/kg	ND	5.0	07/26/12 09:15	
1,1-Dichloroethene	ug/kg	ND	5.0	07/26/12 09:15	
1,1-Dichloropropene	ug/kg	ND	5.0	07/26/12 09:15	
1,2,3-Trichlorobenzene	ug/kg	ND	5.0	07/26/12 09:15	
1,2,3-Trichloropropane	ug/kg	ND	5.0	07/26/12 09:15	
1,2,4-Trichlorobenzene	ug/kg	ND	5.0	07/26/12 09:15	
1,2,4-Trimethylbenzene	ug/kg	ND	5.0	07/26/12 09:15	
1,2-Dibromo-3-chloropropane	ug/kg	ND	10.0	07/26/12 09:15	
1,2-Dibromoethane (EDB)	ug/kg	ND	5.0	07/26/12 09:15	
1,2-Dichlorobenzene	ug/kg	ND	5.0	07/26/12 09:15	
1,2-Dichloroethane	ug/kg	ND	5.0	07/26/12 09:15	
1,2-Dichloroethene (Total)	ug/kg	ND	5.0	07/26/12 09:15	
1,2-Dichloropropane	ug/kg	ND	5.0	07/26/12 09:15	
1,3,5-Trimethylbenzene	ug/kg	ND	5.0	07/26/12 09:15	
1,3-Dichlorobenzene	ug/kg	ND	5.0	07/26/12 09:15	
1,3-Dichloropropane	ug/kg	ND	5.0	07/26/12 09:15	
1,4-Dichlorobenzene	ug/kg	ND	5.0	07/26/12 09:15	
2,2-Dichloropropane	ug/kg	ND	5.0	07/26/12 09:15	
2-Butanone (MEK)	ug/kg	ND	10.0	07/26/12 09:15	
2-Chlorotoluene	ug/kg	ND	5.0	07/26/12 09:15	
2-Hexanone	ug/kg	ND	20.0	07/26/12 09:15	
4-Chlorotoluene	ug/kg	ND	5.0	07/26/12 09:15	
4-Methyl-2-pentanone (MIBK)	ug/kg	ND	10.0	07/26/12 09:15	
Acetone	ug/kg	ND	20.0	07/26/12 09:15	
Benzene	ug/kg	ND	5.0	07/26/12 09:15	
Bromobenzene	ug/kg	ND	5.0	07/26/12 09:15	
Bromochloromethane	ug/kg	ND	5.0	07/26/12 09:15	
Bromodichloromethane	ug/kg	ND	5.0	07/26/12 09:15	
Bromoform	ug/kg	ND	5.0	07/26/12 09:15	
Bromomethane	ug/kg	ND	5.0	07/26/12 09:15	
Carbon disulfide	ug/kg	ND	5.0	07/26/12 09:15	
Carbon tetrachloride	ug/kg	ND	5.0	07/26/12 09:15	
Chlorobenzene	ug/kg	ND	5.0	07/26/12 09:15	
Chloroethane	ug/kg	ND	5.0	07/26/12 09:15	
Chloroform	ug/kg	ND	5.0	07/26/12 09:15	
Chloromethane	ug/kg	ND	5.0	07/26/12 09:15	
cis-1,2-Dichloroethene	ug/kg	ND	5.0	07/26/12 09:15	
cis-1,3-Dichloropropene	ug/kg	ND	5.0	07/26/12 09:15	
Dibromochloromethane	ug/kg	ND	5.0	07/26/12 09:15	

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QUALITY CONTROL DATA

Project: KUHLMAN DIECASTING

Pace Project No.: 60125643

METHOD BLANK: 1034592

Matrix: Solid

Associated Lab Samples: 60125643003, 60125643005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Dibromomethane	ug/kg	ND	5.0	07/26/12 09:15	
Dichlorodifluoromethane	ug/kg	ND	5.0	07/26/12 09:15	
Ethylbenzene	ug/kg	ND	5.0	07/26/12 09:15	
Hexachloro-1,3-butadiene	ug/kg	ND	5.0	07/26/12 09:15	
Isopropylbenzene (Cumene)	ug/kg	ND	5.0	07/26/12 09:15	
Methyl-tert-butyl ether	ug/kg	ND	5.0	07/26/12 09:15	
Methylene chloride	ug/kg	ND	5.0	07/26/12 09:15	
n-Butylbenzene	ug/kg	ND	5.0	07/26/12 09:15	
n-Propylbenzene	ug/kg	ND	5.0	07/26/12 09:15	
Naphthalene	ug/kg	ND	10.0	07/26/12 09:15	
p-Isopropyltoluene	ug/kg	ND	5.0	07/26/12 09:15	
sec-Butylbenzene	ug/kg	ND	5.0	07/26/12 09:15	
Styrene	ug/kg	ND	5.0	07/26/12 09:15	
tert-Butylbenzene	ug/kg	ND	5.0	07/26/12 09:15	
Tetrachloroethene	ug/kg	ND	5.0	07/26/12 09:15	
Toluene	ug/kg	ND	5.0	07/26/12 09:15	
trans-1,2-Dichloroethene	ug/kg	ND	5.0	07/26/12 09:15	
trans-1,3-Dichloropropene	ug/kg	ND	5.0	07/26/12 09:15	
Trichloroethene	ug/kg	ND	5.0	07/26/12 09:15	
Trichlorofluoromethane	ug/kg	ND	5.0	07/26/12 09:15	
Vinyl chloride	ug/kg	ND	5.0	07/26/12 09:15	
Xylene (Total)	ug/kg	ND	5.0	07/26/12 09:15	
1,2-Dichloroethane-d4 (S)	%	95	73-135	07/26/12 09:15	
4-Bromofluorobenzene (S)	%	95	78-125	07/26/12 09:15	
Dibromofluoromethane (S)	%	91	78-122	07/26/12 09:15	
Toluene-d8 (S)	%	101	80-123	07/26/12 09:15	

LABORATORY CONTROL SAMPLE: 1034593

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	100	96.6	97	80-120	
1,1,1-Trichloroethane	ug/kg	100	98.3	98	78-128	
1,1,2,2-Tetrachloroethane	ug/kg	100	80.1	80	70-120	
1,1,2-Trichloroethane	ug/kg	100	79.9	80	77-120	
1,1-Dichloroethane	ug/kg	100	79.6	80	78-120	
1,1-Dichloroethene	ug/kg	100	98.0	98	71-123	
1,1-Dichloropropene	ug/kg	100	99.4	99	77-127	
1,2,3-Trichlorobenzene	ug/kg	100	93.9	94	80-120	
1,2,3-Trichloropropane	ug/kg	100	82.8	83	73-120	
1,2,4-Trichlorobenzene	ug/kg	100	93.7	94	78-121	
1,2,4-Trimethylbenzene	ug/kg	100	86.9	87	80-120	
1,2-Dibromo-3-chloropropane	ug/kg	100	82.8	83	70-125	
1,2-Dibromoethane (EDB)	ug/kg	100	89.8	90	78-120	
1,2-Dichlorobenzene	ug/kg	100	88.4	88	80-120	
1,2-Dichloroethane	ug/kg	100	87.6	88	76-121	

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QUALITY CONTROL DATA

Project: KUHLMAN DIECASTING

Pace Project No.: 60125643

LABORATORY CONTROL SAMPLE: 1034593

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dichloroethene (Total)	ug/kg	200	174	87	80-120	
1,2-Dichloropropane	ug/kg	100	92.8	93	80-120	
1,3,5-Trimethylbenzene	ug/kg	100	90.0	90	79-120	
1,3-Dichlorobenzene	ug/kg	100	89.7	90	80-120	
1,3-Dichloropropane	ug/kg	100	80.0	80	76-120	
1,4-Dichlorobenzene	ug/kg	100	89.4	89	80-120	
2,2-Dichloropropane	ug/kg	100	85.6	86	71-130	
2-Butanone (MEK)	ug/kg	500	351	70	45-160	
2-Chlorotoluene	ug/kg	100	90.6	91	78-120	
2-Hexanone	ug/kg	500	407	81	47-160	
4-Chlorotoluene	ug/kg	100	85.6	86	79-120	
4-Methyl-2-pentanone (MIBK)	ug/kg	500	439	88	68-123	
Acetone	ug/kg	500	359	72	40-160	
Benzene	ug/kg	100	92.0	92	78-120	
Bromobenzene	ug/kg	100	94.0	94	80-120	
Bromochloromethane	ug/kg	100	87.8	88	76-120	
Bromodichloromethane	ug/kg	100	88.9	89	79-120	
Bromoform	ug/kg	100	94.8	95	75-124	
Bromomethane	ug/kg	100	84.0	84	59-157	
Carbon disulfide	ug/kg	100	90.3	90	74-158	
Carbon tetrachloride	ug/kg	100	95.2	95	79-139	
Chlorobenzene	ug/kg	100	92.0	92	80-120	
Chloroethane	ug/kg	100	98.3	98	66-153	
Chloroform	ug/kg	100	81.4	81	74-120	
Chloromethane	ug/kg	100	92.5	92	40-160	
cis-1,2-Dichloroethene	ug/kg	100	81.8	82	75-120	
cis-1,3-Dichloropropene	ug/kg	100	90.6	91	80-120	
Dibromochloromethane	ug/kg	100	94.0	94	80-123	
Dibromomethane	ug/kg	100	89.0	89	80-120	
Dichlorodifluoromethane	ug/kg	100	110	110	40-160	
Ethylbenzene	ug/kg	100	96.1	96	77-120	
Hexachloro-1,3-butadiene	ug/kg	100	102	102	71-134	
Isopropylbenzene (Cumene)	ug/kg	100	103	103	80-128	
Methyl-tert-butyl ether	ug/kg	100	77.5	77	71-122	
Methylene chloride	ug/kg	100	79.7	80	76-131	
n-Butylbenzene	ug/kg	100	92.2	92	78-130	
n-Propylbenzene	ug/kg	100	92.8	93	78-121	
Naphthalene	ug/kg	100	89.3	89	67-123	
p-Isopropyltoluene	ug/kg	100	94.3	94	80-122	
sec-Butylbenzene	ug/kg	100	93.5	93	79-124	
Styrene	ug/kg	100	91.6	92	77-120	
tert-Butylbenzene	ug/kg	100	95.4	95	80-123	
Tetrachloroethene	ug/kg	100	106	106	74-129	
Toluene	ug/kg	100	95.6	96	76-120	
trans-1,2-Dichloroethene	ug/kg	100	92.2	92	80-129	
trans-1,3-Dichloropropene	ug/kg	100	92.0	92	80-120	
Trichloroethene	ug/kg	100	95.0	95	79-120	
Trichlorofluoromethane	ug/kg	100	97.1	97	70-135	

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QUALITY CONTROL DATA

Project: KUHLMAN DIECASTING

Pace Project No.: 60125643

LABORATORY CONTROL SAMPLE: 1034593

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Vinyl chloride	ug/kg	100	99.1	99	64-148	
Xylene (Total)	ug/kg	300	275	92	76-120	
1,2-Dichloroethane-d4 (S)	%			93	73-135	
4-Bromofluorobenzene (S)	%			95	78-125	
Dibromofluoromethane (S)	%			99	78-122	
Toluene-d8 (S)	%			101	80-123	

QUALITY CONTROL DATA

Project: KUHLMAN DIECASTING

Pace Project No.: 60125643

QC Batch: MSV/47311

Analysis Method: EPA 8260

QC Batch Method: EPA 8260

Analysis Description: 8260 MSV 5035A Volatile Organics

Associated Lab Samples: 60125643006, 60125643008, 60125643009, 60125643011, 60125643013

METHOD BLANK: 1035294

Matrix: Solid

Associated Lab Samples: 60125643006, 60125643008, 60125643009, 60125643011, 60125643013

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	ND	5.0	07/26/12 15:38	
1,1,1-Trichloroethane	ug/kg	ND	5.0	07/26/12 15:38	
1,1,2,2-Tetrachloroethane	ug/kg	ND	5.0	07/26/12 15:38	
1,1,2-Trichloroethane	ug/kg	ND	5.0	07/26/12 15:38	
1,1-Dichloroethane	ug/kg	ND	5.0	07/26/12 15:38	
1,1-Dichloroethene	ug/kg	ND	5.0	07/26/12 15:38	
1,1-Dichloropropene	ug/kg	ND	5.0	07/26/12 15:38	
1,2,3-Trichlorobenzene	ug/kg	ND	5.0	07/26/12 15:38	
1,2,3-Trichloropropane	ug/kg	ND	5.0	07/26/12 15:38	
1,2,4-Trichlorobenzene	ug/kg	ND	5.0	07/26/12 15:38	
1,2,4-Trimethylbenzene	ug/kg	ND	5.0	07/26/12 15:38	
1,2-Dibromo-3-chloropropane	ug/kg	ND	10.0	07/26/12 15:38	
1,2-Dibromoethane (EDB)	ug/kg	ND	5.0	07/26/12 15:38	
1,2-Dichlorobenzene	ug/kg	ND	5.0	07/26/12 15:38	
1,2-Dichloroethane	ug/kg	ND	5.0	07/26/12 15:38	
1,2-Dichloroethene (Total)	ug/kg	ND	5.0	07/26/12 15:38	
1,2-Dichloropropane	ug/kg	ND	5.0	07/26/12 15:38	
1,3,5-Trimethylbenzene	ug/kg	ND	5.0	07/26/12 15:38	
1,3-Dichlorobenzene	ug/kg	ND	5.0	07/26/12 15:38	
1,3-Dichloropropane	ug/kg	ND	5.0	07/26/12 15:38	
1,4-Dichlorobenzene	ug/kg	ND	5.0	07/26/12 15:38	
2,2-Dichloropropane	ug/kg	ND	5.0	07/26/12 15:38	
2-Butanone (MEK)	ug/kg	ND	10.0	07/26/12 15:38	
2-Chlorotoluene	ug/kg	ND	5.0	07/26/12 15:38	
2-Hexanone	ug/kg	ND	20.0	07/26/12 15:38	
4-Chlorotoluene	ug/kg	ND	5.0	07/26/12 15:38	
4-Methyl-2-pentanone (MIBK)	ug/kg	ND	10.0	07/26/12 15:38	
Acetone	ug/kg	ND	20.0	07/26/12 15:38	
Benzene	ug/kg	ND	5.0	07/26/12 15:38	
Bromobenzene	ug/kg	ND	5.0	07/26/12 15:38	
Bromochloromethane	ug/kg	ND	5.0	07/26/12 15:38	
Bromodichloromethane	ug/kg	ND	5.0	07/26/12 15:38	
Bromoform	ug/kg	ND	5.0	07/26/12 15:38	
Bromomethane	ug/kg	ND	5.0	07/26/12 15:38	
Carbon disulfide	ug/kg	ND	5.0	07/26/12 15:38	
Carbon tetrachloride	ug/kg	ND	5.0	07/26/12 15:38	
Chlorobenzene	ug/kg	ND	5.0	07/26/12 15:38	
Chloroethane	ug/kg	ND	5.0	07/26/12 15:38	
Chloroform	ug/kg	ND	5.0	07/26/12 15:38	
Chloromethane	ug/kg	ND	5.0	07/26/12 15:38	
cis-1,2-Dichloroethene	ug/kg	ND	5.0	07/26/12 15:38	
cis-1,3-Dichloropropene	ug/kg	ND	5.0	07/26/12 15:38	
Dibromochloromethane	ug/kg	ND	5.0	07/26/12 15:38	

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QUALITY CONTROL DATA

Project: KUHLMAN DIECASTING

Pace Project No.: 60125643

METHOD BLANK: 1035294

Matrix: Solid

Associated Lab Samples: 60125643006, 60125643008, 60125643009, 60125643011, 60125643013

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Dibromomethane	ug/kg	ND	5.0	07/26/12 15:38	
Dichlorodifluoromethane	ug/kg	ND	5.0	07/26/12 15:38	
Ethylbenzene	ug/kg	ND	5.0	07/26/12 15:38	
Hexachloro-1,3-butadiene	ug/kg	ND	5.0	07/26/12 15:38	
Isopropylbenzene (Cumene)	ug/kg	ND	5.0	07/26/12 15:38	
Methyl-tert-butyl ether	ug/kg	ND	5.0	07/26/12 15:38	
Methylene chloride	ug/kg	ND	5.0	07/26/12 15:38	
n-Butylbenzene	ug/kg	ND	5.0	07/26/12 15:38	
n-Propylbenzene	ug/kg	ND	5.0	07/26/12 15:38	
Naphthalene	ug/kg	ND	10.0	07/26/12 15:38	
p-Isopropyltoluene	ug/kg	ND	5.0	07/26/12 15:38	
sec-Butylbenzene	ug/kg	ND	5.0	07/26/12 15:38	
Styrene	ug/kg	ND	5.0	07/26/12 15:38	
tert-Butylbenzene	ug/kg	ND	5.0	07/26/12 15:38	
Tetrachloroethene	ug/kg	ND	5.0	07/26/12 15:38	
Toluene	ug/kg	ND	5.0	07/26/12 15:38	
trans-1,2-Dichloroethene	ug/kg	ND	5.0	07/26/12 15:38	
trans-1,3-Dichloropropene	ug/kg	ND	5.0	07/26/12 15:38	
Trichloroethene	ug/kg	ND	5.0	07/26/12 15:38	
Trichlorofluoromethane	ug/kg	ND	5.0	07/26/12 15:38	
Vinyl chloride	ug/kg	ND	5.0	07/26/12 15:38	
Xylene (Total)	ug/kg	ND	5.0	07/26/12 15:38	
1,2-Dichloroethane-d4 (S)	%	95	73-135	07/26/12 15:38	
4-Bromofluorobenzene (S)	%	96	78-125	07/26/12 15:38	
Dibromofluoromethane (S)	%	93	78-122	07/26/12 15:38	
Toluene-d8 (S)	%	102	80-123	07/26/12 15:38	

LABORATORY CONTROL SAMPLE: 1035295

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	100	95.3	95	80-120	
1,1,1-Trichloroethane	ug/kg	100	93.6	94	78-128	
1,1,2,2-Tetrachloroethane	ug/kg	100	81.1	81	70-120	
1,1,2-Trichloroethane	ug/kg	100	83.4	83	77-120	
1,1-Dichloroethane	ug/kg	100	79.1	79	78-120	
1,1-Dichloroethene	ug/kg	100	91.7	92	71-123	
1,1-Dichloropropene	ug/kg	100	95.3	95	77-127	
1,2,3-Trichlorobenzene	ug/kg	100	93.9	94	80-120	
1,2,3-Trichloropropane	ug/kg	100	85.7	86	73-120	
1,2,4-Trichlorobenzene	ug/kg	100	93.2	93	78-121	
1,2,4-Trimethylbenzene	ug/kg	100	83.4	83	80-120	
1,2-Dibromo-3-chloropropane	ug/kg	100	83.5	83	70-125	
1,2-Dibromoethane (EDB)	ug/kg	100	92.5	92	78-120	
1,2-Dichlorobenzene	ug/kg	100	87.7	88	80-120	
1,2-Dichloroethane	ug/kg	100	88.9	89	76-121	

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QUALITY CONTROL DATA

Project: KUHLMAN DIECASTING

Pace Project No.: 60125643

LABORATORY CONTROL SAMPLE: 1035295

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dichloroethene (Total)	ug/kg	200	171	85	80-120	
1,2-Dichloropropane	ug/kg	100	95.7	96	80-120	
1,3,5-Trimethylbenzene	ug/kg	100	85.1	85	79-120	
1,3-Dichlorobenzene	ug/kg	100	87.5	88	80-120	
1,3-Dichloropropane	ug/kg	100	82.6	83	76-120	
1,4-Dichlorobenzene	ug/kg	100	89.1	89	80-120	
2,2-Dichloropropane	ug/kg	100	82.1	82	71-130	
2-Butanone (MEK)	ug/kg	500	371	74	45-160	
2-Chlorotoluene	ug/kg	100	86.0	86	78-120	
2-Hexanone	ug/kg	500	426	85	47-160	
4-Chlorotoluene	ug/kg	100	82.6	83	79-120	
4-Methyl-2-pentanone (MIBK)	ug/kg	500	459	92	68-123	
Acetone	ug/kg	500	366	73	40-160	
Benzene	ug/kg	100	91.2	91	78-120	
Bromobenzene	ug/kg	100	93.7	94	80-120	
Bromochloromethane	ug/kg	100	90.1	90	76-120	
Bromodichloromethane	ug/kg	100	90.9	91	79-120	
Bromoform	ug/kg	100	98.6	99	75-124	
Bromomethane	ug/kg	100	82.9	83	59-157	
Carbon disulfide	ug/kg	100	86.3	86	74-158	
Carbon tetrachloride	ug/kg	100	90.1	90	79-139	
Chlorobenzene	ug/kg	100	91.9	92	80-120	
Chloroethane	ug/kg	100	96.1	96	66-153	
Chloroform	ug/kg	100	72.2	72	74-120	L0
Chloromethane	ug/kg	100	93.1	93	40-160	
cis-1,2-Dichloroethene	ug/kg	100	81.7	82	75-120	
cis-1,3-Dichloropropene	ug/kg	100	92.3	92	80-120	
Dibromochloromethane	ug/kg	100	97.4	97	80-123	
Dibromomethane	ug/kg	100	91.6	92	80-120	
Dichlorodifluoromethane	ug/kg	100	97.4	97	40-160	
Ethylbenzene	ug/kg	100	92.4	92	77-120	
Hexachloro-1,3-butadiene	ug/kg	100	97.3	97	71-134	
Isopropylbenzene (Cumene)	ug/kg	100	98.1	98	80-128	
Methyl-tert-butyl ether	ug/kg	100	81.0	81	71-122	
Methylene chloride	ug/kg	100	84.2	84	76-131	
n-Butylbenzene	ug/kg	100	86.3	86	78-130	
n-Propylbenzene	ug/kg	100	87.4	87	78-121	
Naphthalene	ug/kg	100	92.8	93	67-123	
p-Isopropyltoluene	ug/kg	100	88.0	88	80-122	
sec-Butylbenzene	ug/kg	100	87.9	88	79-124	
Styrene	ug/kg	100	90.6	91	77-120	
tert-Butylbenzene	ug/kg	100	89.1	89	80-123	
Tetrachloroethene	ug/kg	100	99.1	99	74-129	
Toluene	ug/kg	100	93.3	93	76-120	
trans-1,2-Dichloroethene	ug/kg	100	89.1	89	80-129	
trans-1,3-Dichloropropene	ug/kg	100	93.5	94	80-120	
Trichloroethene	ug/kg	100	93.1	93	79-120	
Trichlorofluoromethane	ug/kg	100	91.1	91	70-135	

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QUALITY CONTROL DATA

Project: KUHLMAN DIECASTING

Pace Project No.: 60125643

LABORATORY CONTROL SAMPLE: 1035295

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Vinyl chloride	ug/kg	100	93.2	93	64-148	
Xylene (Total)	ug/kg	300	267	89	76-120	
1,2-Dichloroethane-d4 (S)	%			96	73-135	
4-Bromofluorobenzene (S)	%			95	78-125	
Dibromofluoromethane (S)	%			100	78-122	
Toluene-d8 (S)	%			101	80-123	

QUALITY CONTROL DATA

Project: KUHLMAN DIECASTING

Pace Project No.: 60125643

QC Batch: MSV/47410

Analysis Method: EPA 8260

QC Batch Method: EPA 8260

Analysis Description: 8260 MSV 5035A Volatile Organics

Associated Lab Samples: 60125643015

METHOD BLANK: 1037202

Matrix: Solid

Associated Lab Samples: 60125643015

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	ND	5.0	07/30/12 17:20	
1,1,1-Trichloroethane	ug/kg	ND	5.0	07/30/12 17:20	
1,1,2,2-Tetrachloroethane	ug/kg	ND	5.0	07/30/12 17:20	
1,1,2-Trichloroethane	ug/kg	ND	5.0	07/30/12 17:20	
1,1-Dichloroethane	ug/kg	ND	5.0	07/30/12 17:20	
1,1-Dichloroethene	ug/kg	ND	5.0	07/30/12 17:20	
1,1-Dichloropropene	ug/kg	ND	5.0	07/30/12 17:20	
1,2,3-Trichlorobenzene	ug/kg	ND	5.0	07/30/12 17:20	
1,2,3-Trichloropropane	ug/kg	ND	5.0	07/30/12 17:20	
1,2,4-Trichlorobenzene	ug/kg	ND	5.0	07/30/12 17:20	
1,2,4-Trimethylbenzene	ug/kg	ND	5.0	07/30/12 17:20	
1,2-Dibromo-3-chloropropane	ug/kg	ND	10.0	07/30/12 17:20	
1,2-Dibromoethane (EDB)	ug/kg	ND	5.0	07/30/12 17:20	
1,2-Dichlorobenzene	ug/kg	ND	5.0	07/30/12 17:20	
1,2-Dichloroethane	ug/kg	ND	5.0	07/30/12 17:20	
1,2-Dichloroethene (Total)	ug/kg	ND	5.0	07/30/12 17:20	
1,2-Dichloropropane	ug/kg	ND	5.0	07/30/12 17:20	
1,3,5-Trimethylbenzene	ug/kg	ND	5.0	07/30/12 17:20	
1,3-Dichlorobenzene	ug/kg	ND	5.0	07/30/12 17:20	
1,3-Dichloropropane	ug/kg	ND	5.0	07/30/12 17:20	
1,4-Dichlorobenzene	ug/kg	ND	5.0	07/30/12 17:20	
2,2-Dichloropropane	ug/kg	ND	5.0	07/30/12 17:20	
2-Butanone (MEK)	ug/kg	ND	10.0	07/30/12 17:20	
2-Chlorotoluene	ug/kg	ND	5.0	07/30/12 17:20	
2-Hexanone	ug/kg	ND	20.0	07/30/12 17:20	
4-Chlorotoluene	ug/kg	ND	5.0	07/30/12 17:20	
4-Methyl-2-pentanone (MIBK)	ug/kg	ND	10.0	07/30/12 17:20	
Acetone	ug/kg	ND	20.0	07/30/12 17:20	
Benzene	ug/kg	ND	5.0	07/30/12 17:20	
Bromobenzene	ug/kg	ND	5.0	07/30/12 17:20	
Bromochloromethane	ug/kg	ND	5.0	07/30/12 17:20	
Bromodichloromethane	ug/kg	ND	5.0	07/30/12 17:20	
Bromoform	ug/kg	ND	5.0	07/30/12 17:20	
Bromomethane	ug/kg	ND	5.0	07/30/12 17:20	
Carbon disulfide	ug/kg	ND	5.0	07/30/12 17:20	
Carbon tetrachloride	ug/kg	ND	5.0	07/30/12 17:20	
Chlorobenzene	ug/kg	ND	5.0	07/30/12 17:20	
Chloroethane	ug/kg	ND	5.0	07/30/12 17:20	
Chloroform	ug/kg	ND	5.0	07/30/12 17:20	
Chloromethane	ug/kg	ND	5.0	07/30/12 17:20	
cis-1,2-Dichloroethene	ug/kg	ND	5.0	07/30/12 17:20	
cis-1,3-Dichloropropene	ug/kg	ND	5.0	07/30/12 17:20	
Dibromochloromethane	ug/kg	ND	5.0	07/30/12 17:20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: KUHLMAN DIECASTING

Pace Project No.: 60125643

METHOD BLANK: 1037202

Matrix: Solid

Associated Lab Samples: 60125643015

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Dibromomethane	ug/kg	ND	5.0	07/30/12 17:20	
Dichlorodifluoromethane	ug/kg	ND	5.0	07/30/12 17:20	
Ethylbenzene	ug/kg	ND	5.0	07/30/12 17:20	
Hexachloro-1,3-butadiene	ug/kg	ND	5.0	07/30/12 17:20	
Isopropylbenzene (Cumene)	ug/kg	ND	5.0	07/30/12 17:20	
Methyl-tert-butyl ether	ug/kg	ND	5.0	07/30/12 17:20	
Methylene chloride	ug/kg	ND	5.0	07/30/12 17:20	
n-Butylbenzene	ug/kg	ND	5.0	07/30/12 17:20	
n-Propylbenzene	ug/kg	ND	5.0	07/30/12 17:20	
Naphthalene	ug/kg	ND	10.0	07/30/12 17:20	
p-Isopropyltoluene	ug/kg	ND	5.0	07/30/12 17:20	
sec-Butylbenzene	ug/kg	ND	5.0	07/30/12 17:20	
Styrene	ug/kg	ND	5.0	07/30/12 17:20	
tert-Butylbenzene	ug/kg	ND	5.0	07/30/12 17:20	
Tetrachloroethene	ug/kg	ND	5.0	07/30/12 17:20	
Toluene	ug/kg	ND	5.0	07/30/12 17:20	
trans-1,2-Dichloroethene	ug/kg	ND	5.0	07/30/12 17:20	
trans-1,3-Dichloropropene	ug/kg	ND	5.0	07/30/12 17:20	
Trichloroethene	ug/kg	ND	5.0	07/30/12 17:20	
Trichlorofluoromethane	ug/kg	ND	5.0	07/30/12 17:20	
Vinyl chloride	ug/kg	ND	5.0	07/30/12 17:20	
Xylene (Total)	ug/kg	ND	5.0	07/30/12 17:20	
1,2-Dichloroethane-d4 (S)	%	99	73-135	07/30/12 17:20	
4-Bromofluorobenzene (S)	%	99	78-125	07/30/12 17:20	
Dibromofluoromethane (S)	%	100	78-122	07/30/12 17:20	
Toluene-d8 (S)	%	100	80-123	07/30/12 17:20	

LABORATORY CONTROL SAMPLE: 1037203

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	100	91.7	92	80-120	
1,1,1-Trichloroethane	ug/kg	100	87.9	88	78-128	
1,1,2,2-Tetrachloroethane	ug/kg	100	91.6	92	70-120	
1,1,2-Trichloroethane	ug/kg	100	88.0	88	77-120	
1,1-Dichloroethane	ug/kg	100	85.1	85	78-120	
1,1-Dichloroethene	ug/kg	100	93.4	93	71-123	
1,1-Dichloropropene	ug/kg	100	89.0	89	77-127	
1,2,3-Trichlorobenzene	ug/kg	100	82.6	83	80-120	
1,2,3-Trichloropropane	ug/kg	100	88.7	89	73-120	
1,2,4-Trichlorobenzene	ug/kg	100	80.6	81	78-121	
1,2,4-Trimethylbenzene	ug/kg	100	83.7	84	80-120	
1,2-Dibromo-3-chloropropane	ug/kg	100	84.6	85	70-125	
1,2-Dibromoethane (EDB)	ug/kg	100	92.4	92	78-120	
1,2-Dichlorobenzene	ug/kg	100	86.6	87	80-120	
1,2-Dichloroethane	ug/kg	100	91.8	92	76-121	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: KUHLMAN DIECASTING

Pace Project No.: 60125643

LABORATORY CONTROL SAMPLE: 1037203

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dichloroethene (Total)	ug/kg	200	177	88	80-120	
1,2-Dichloropropane	ug/kg	100	89.6	90	80-120	
1,3,5-Trimethylbenzene	ug/kg	100	83.1	83	79-120	
1,3-Dichlorobenzene	ug/kg	100	84.8	85	80-120	
1,3-Dichloropropane	ug/kg	100	84.3	84	76-120	
1,4-Dichlorobenzene	ug/kg	100	86.7	87	80-120	
2,2-Dichloropropane	ug/kg	100	83.8	84	71-130	
2-Butanone (MEK)	ug/kg	500	435	87	45-160	
2-Chlorotoluene	ug/kg	100	84.3	84	78-120	
2-Hexanone	ug/kg	500	439	88	47-160	
4-Chlorotoluene	ug/kg	100	84.1	84	79-120	
4-Methyl-2-pentanone (MIBK)	ug/kg	500	443	89	68-123	
Acetone	ug/kg	500	438	88	40-160	
Benzene	ug/kg	100	87.2	87	78-120	
Bromobenzene	ug/kg	100	86.0	86	80-120	
Bromochloromethane	ug/kg	100	95.9	96	76-120	
Bromodichloromethane	ug/kg	100	88.5	88	79-120	
Bromoform	ug/kg	100	93.8	94	75-124	
Bromomethane	ug/kg	100	85.0	85	59-157	
Carbon disulfide	ug/kg	100	91.5	92	74-158	
Carbon tetrachloride	ug/kg	100	90.9	91	79-139	
Chlorobenzene	ug/kg	100	87.1	87	80-120	
Chloroethane	ug/kg	100	104	104	66-153	
Chloroform	ug/kg	100	78.5	78	74-120	
Chloromethane	ug/kg	100	105	105	40-160	
cis-1,2-Dichloroethene	ug/kg	100	86.6	87	75-120	
cis-1,3-Dichloropropene	ug/kg	100	90.4	90	80-120	
Dibromochloromethane	ug/kg	100	95.4	95	80-123	
Dibromomethane	ug/kg	100	86.2	86	80-120	
Dichlorodifluoromethane	ug/kg	100	104	104	40-160	
Ethylbenzene	ug/kg	100	84.3	84	77-120	
Hexachloro-1,3-butadiene	ug/kg	100	81.8	82	71-134	
Isopropylbenzene (Cumene)	ug/kg	100	89.4	89	80-128	
Methyl-tert-butyl ether	ug/kg	100	87.5	87	71-122	
Methylene chloride	ug/kg	100	91.0	91	76-131	
n-Butylbenzene	ug/kg	100	85.0	85	78-130	
n-Propylbenzene	ug/kg	100	85.2	85	78-121	
Naphthalene	ug/kg	100	84.0	84	67-123	
p-Isopropyltoluene	ug/kg	100	81.9	82	80-122	
sec-Butylbenzene	ug/kg	100	83.8	84	79-124	
Styrene	ug/kg	100	86.0	86	77-120	
tert-Butylbenzene	ug/kg	100	84.3	84	80-123	
Tetrachloroethene	ug/kg	100	84.2	84	74-129	
Toluene	ug/kg	100	80.4	80	76-120	
trans-1,2-Dichloroethene	ug/kg	100	90.0	90	80-129	
trans-1,3-Dichloropropene	ug/kg	100	99.3	99	80-120	
Trichloroethene	ug/kg	100	85.8	86	79-120	
Trichlorofluoromethane	ug/kg	100	97.2	97	70-135	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: KUHLMAN DIECASTING

Pace Project No.: 60125643

LABORATORY CONTROL SAMPLE: 1037203

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Vinyl chloride	ug/kg	100	108	108	64-148	
Xylene (Total)	ug/kg	300	252	84	76-120	
1,2-Dichloroethane-d4 (S)	%			100	73-135	
4-Bromofluorobenzene (S)	%			98	78-125	
Dibromofluoromethane (S)	%			101	78-122	
Toluene-d8 (S)	%			99	80-123	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1037204 1037205

Parameter	Units	60125686004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual
1,1,1,2-Tetrachloroethane	ug/kg	ND	99.5	99.3	69.5	75.5	70	76	40-138	8	48
1,1,1-Trichloroethane	ug/kg	ND	99.5	99.3	80.2	83.0	81	84	40-136	3	39
1,1,2,2-Tetrachloroethane	ug/kg	ND	99.5	99.3	ND	ND	2	2	40-157		47 M1
1,1,2-Trichloroethane	ug/kg	ND	99.5	99.3	26.2	26.5	26	27	40-141	1	47 M1
1,1-Dichloroethane	ug/kg	ND	99.5	99.3	76.6	81.5	77	82	40-126	6	42
1,1-Dichloroethene	ug/kg	ND	99.5	99.3	129	138	129	139	40-130	7	33 M1
1,1-Dichloropropene	ug/kg	ND	99.5	99.3	74.3	80.1	75	81	40-134	7	44
1,2,3-Trichlorobenzene	ug/kg	ND	99.5	99.3	57.7	66.8	58	67	40-131	15	45
1,2,3-Trichloropropane	ug/kg	ND	99.5	99.3	72.0	80.6	72	81	40-160	11	48
1,2,4-Trichlorobenzene	ug/kg	ND	99.5	99.3	57.4	63.4	58	64	40-133	10	48
1,2,4-Trimethylbenzene	ug/kg	ND	99.5	99.3	74.1	75.7	70	71	40-132	2	46
1,2-Dibromo-3-chloropropane	ug/kg	ND	99.5	99.3	21.8	21.9	22	22	40-160	0	49 M1
1,2-Dibromoethane (EDB)	ug/kg	ND	99.5	99.3	81.9	89.8	82	90	40-143	9	39
1,2-Dichlorobenzene	ug/kg	ND	99.5	99.3	67.2	75.1	68	76	40-133	11	45
1,2-Dichloroethane	ug/kg	ND	99.5	99.3	85.6	93.0	86	94	40-141	8	41
1,2-Dichloroethene (Total)	ug/kg	ND	199	199	156	167	79	84	40-131	7	42
1,2-Dichloropropane	ug/kg	ND	99.5	99.3	84.7	90.8	85	91	40-134	7	43
1,3,5-Trimethylbenzene	ug/kg	ND	99.5	99.3	70.6	71.6	70	71	40-134	1	47
1,3-Dichlorobenzene	ug/kg	ND	99.5	99.3	62.8	70.0	63	71	40-131	11	45
1,3-Dichloropropane	ug/kg	ND	99.5	99.3	77.8	84.0	78	85	40-133	8	45
1,4-Dichlorobenzene	ug/kg	ND	99.5	99.3	64.8	72.2	65	73	40-134	11	46
2,2-Dichloropropane	ug/kg	ND	99.5	99.3	75.2	80.6	76	81	40-135	7	45
2-Butanone (MEK)	ug/kg	ND	497	496	418	465	83	93	45-160	11	48
2-Chlorotoluene	ug/kg	ND	99.5	99.3	67.1	72.1	67	73	40-133	7	46
2-Hexanone	ug/kg	ND	497	496	423	463	85	93	40-160	9	47
4-Chlorotoluene	ug/kg	ND	99.5	99.3	65.7	70.6	66	71	40-136	7	46
4-Methyl-2-pentanone (MIBK)	ug/kg	ND	497	496	425	462	85	92	40-148	8	49
Acetone	ug/kg	0.024 mg/kg	497	496	445	480	85	92	40-160	8	44
Benzene	ug/kg	ND	99.5	99.3	78.5	83.7	79	84	40-141	6	34
Bromobenzene	ug/kg	ND	99.5	99.3	72.1	78.1	73	79	40-138	8	44
Bromochloromethane	ug/kg	ND	99.5	99.3	89.0	96.2	90	97	40-141	8	45
Bromodichloromethane	ug/kg	ND	99.5	99.3	59.9	65.4	60	66	40-136	9	47
Bromoform	ug/kg	ND	99.5	99.3	76.2	86.2	77	87	40-146	12	47
Bromomethane	ug/kg	ND	99.5	99.3	68.7	71.4	69	72	40-147	4	40
Carbon disulfide	ug/kg	ND	99.5	99.3	49.1	64.6	49	65	40-147	27	34

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: KUHLMAN DIECASTING

Pace Project No.: 60125643

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1037204 1037205											
Parameter	Units	60125686004		MS	MSD	MS		MSD	% Rec		Max
		Result	Conc.	Spike	Spike	Result	Result	Result	% Rec	Limits	RPD
Carbon tetrachloride	ug/kg	ND	99.5	99.3	99.3	78.7	82.7	79	83	40-138	5
Chlorobenzene	ug/kg	ND	99.5	99.3	99.3	73.4	78.9	74	79	40-130	7
Chloroethane	ug/kg	ND	99.5	99.3	99.3	83.4	88.9	84	90	40-157	6
Chloroform	ug/kg	ND	99.5	99.3	99.3	72.4	77.0	72	76	40-129	6
Chloromethane	ug/kg	ND	99.5	99.3	99.3	75.1	79.7	76	80	40-140	6
cis-1,2-Dichloroethene	ug/kg	ND	99.5	99.3	99.3	78.9	84.2	79	85	40-125	6
cis-1,3-Dichloropropene	ug/kg	ND	99.5	99.3	99.3	80.1	85.9	80	87	40-132	7
Dibromochloromethane	ug/kg	ND	99.5	99.3	99.3	70.3	75.0	71	76	40-144	6
Dibromomethane	ug/kg	ND	99.5	99.3	99.3	80.3	87.1	81	88	40-140	8
Dichlorodifluoromethane	ug/kg	ND	99.5	99.3	99.3	61.7	66.7	62	67	40-127	8
Ethylbenzene	ug/kg	ND	99.5	99.3	99.3	73.9	77.0	73	76	40-149	4
Hexachloro-1,3-butadiene	ug/kg	ND	99.5	99.3	99.3	60.9	54.3	61	55	40-128	11
Isopropylbenzene (Cumene)	ug/kg	ND	99.5	99.3	99.3	79.0	78.4	79	79	40-142	1
Methyl-tert-butyl ether	ug/kg	ND	99.5	99.3	99.3	81.7	90.1	82	91	40-147	10
Methylene chloride	ug/kg	ND	99.5	99.3	99.3	87.4	92.4	86	91	40-147	6
n-Butylbenzene	ug/kg	ND	99.5	99.3	99.3	69.3	64.4	70	65	40-136	7
n-Propylbenzene	ug/kg	ND	99.5	99.3	99.3	69.8	71.5	70	72	40-134	2
Naphthalene	ug/kg	ND	99.5	99.3	99.3	74.1	84.5	70	81	40-158	13
p-Isopropyltoluene	ug/kg	ND	99.5	99.3	99.3	68.6	65.2	69	66	40-133	5
sec-Butylbenzene	ug/kg	ND	99.5	99.3	99.3	71.6	67.7	72	68	40-135	6
Styrene	ug/kg	ND	99.5	99.3	99.3	72.7	78.6	73	79	40-133	8
tert-Butylbenzene	ug/kg	ND	99.5	99.3	99.3	75.5	72.7	76	73	40-137	4
Tetrachloroethene	ug/kg	ND	99.5	99.3	99.3	65.8	73.0	66	74	40-128	10
Toluene	ug/kg	ND	99.5	99.3	99.3	70.7	76.3	68	74	40-143	8
trans-1,2-Dichloroethene	ug/kg	ND	99.5	99.3	99.3	77.5	83.1	78	84	40-140	7
trans-1,3-Dichloropropene	ug/kg	ND	99.5	99.3	99.3	86.7	94.7	87	95	40-144	9
Trichloroethene	ug/kg	ND	99.5	99.3	99.3	139	149	139	150	40-139	7
Trichlorofluoromethane	ug/kg	ND	99.5	99.3	99.3	75.0	81.5	75	82	40-137	8
Vinyl chloride	ug/kg	ND	99.5	99.3	99.3	79.0	83.6	79	84	40-150	6
Xylene (Total)	ug/kg	0.0066	299	298	224	236	73	77	77	40-147	5
	mg/kg										
1,2-Dichloroethane-d4 (S)	%							100	100	73-135	
4-Bromofluorobenzene (S)	%							101	99	78-125	
Dibromofluoromethane (S)	%							48	44	78-122	S0
Toluene-d8 (S)	%							100	100	80-123	

QUALITY CONTROL DATA

Project: KUHLMAN DIECASTING

Pace Project No.: 60125643

QC Batch:	OEXT/34158	Analysis Method:	EPA 8270 by SIM
QC Batch Method:	EPA 3546	Analysis Description:	8270/3546 MSSV PAH by SIM
Associated Lab Samples:	60125643003, 60125643005, 60125643006, 60125643008, 60125643009, 60125643011, 60125643013		

METHOD BLANK: 1034973 Matrix: Solid

Associated Lab Samples: 60125643003, 60125643005, 60125643006, 60125643008, 60125643009, 60125643011, 60125643013

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Acenaphthene	ug/kg	ND	3.2	07/27/12 11:46	
Acenaphthylene	ug/kg	ND	3.2	07/27/12 11:46	
Anthracene	ug/kg	ND	3.2	07/27/12 11:46	
Benzo(a)anthracene	ug/kg	ND	3.2	07/27/12 11:46	
Benzo(a)pyrene	ug/kg	ND	3.2	07/27/12 11:46	
Benzo(b)fluoranthene	ug/kg	ND	3.2	07/27/12 11:46	
Benzo(g,h,i)perylene	ug/kg	ND	3.2	07/27/12 11:46	
Benzo(k)fluoranthene	ug/kg	ND	3.2	07/27/12 11:46	
Chrysene	ug/kg	ND	3.2	07/27/12 11:46	
Dibenz(a,h)anthracene	ug/kg	ND	3.2	07/27/12 11:46	
Fluoranthene	ug/kg	ND	3.2	07/27/12 11:46	
Fluorene	ug/kg	ND	3.2	07/27/12 11:46	
Indeno(1,2,3-cd)pyrene	ug/kg	ND	3.2	07/27/12 11:46	
Naphthalene	ug/kg	ND	3.2	07/27/12 11:46	
Phenanthrene	ug/kg	ND	3.2	07/27/12 11:46	
Pyrene	ug/kg	ND	3.2	07/27/12 11:46	
2-Fluorobiphenyl (S)	%	78	41-120	07/27/12 11:46	
Nitrobenzene-d5 (S)	%	95	35-121	07/27/12 11:46	
Terphenyl-d14 (S)	%	78	39-123	07/27/12 11:46	

LABORATORY CONTROL SAMPLE: 1034974

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Acenaphthene	ug/kg	32.5	26.3	81	58-120	
Acenaphthylene	ug/kg	32.5	25.5	78	56-120	
Anthracene	ug/kg	32.5	23.5	72	55-120	
Benzo(a)anthracene	ug/kg	32.5	26.3	81	60-120	
Benzo(a)pyrene	ug/kg	32.5	26.2	81	54-120	
Benzo(b)fluoranthene	ug/kg	32.5	26.2	81	54-128	
Benzo(g,h,i)perylene	ug/kg	32.5	25.6	79	26-126	
Benzo(k)fluoranthene	ug/kg	32.5	26.0	80	53-120	
Chrysene	ug/kg	32.5	26.8	82	56-120	
Dibenz(a,h)anthracene	ug/kg	32.5	25.7	79	42-120	
Fluoranthene	ug/kg	32.5	27.3	84	57-120	
Fluorene	ug/kg	32.5	27.4	84	58-120	
Indeno(1,2,3-cd)pyrene	ug/kg	32.5	23.9	74	37-120	
Naphthalene	ug/kg	32.5	25.6	79	55-120	
Phenanthrene	ug/kg	32.5	30.1	92	57-120	
Pyrene	ug/kg	32.5	27.3	84	57-120	
2-Fluorobiphenyl (S)	%			81	41-120	
Nitrobenzene-d5 (S)	%			94	35-121	

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QUALITY CONTROL DATA

Project: KUHLMAN DIECASTING

Pace Project No.: 60125643

LABORATORY CONTROL SAMPLE: 1034974

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Terphenyl-d14 (S)	%			77	39-123	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1034975 1034976

Parameter	Units	60125643003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Acenaphthene	ug/kg	ND	43.3	43.4	36.8	31.9	84	72	45-120	14	30	
Acenaphthylene	ug/kg	ND	43.3	43.4	35.3	30.9	81	71	28-129	13	35	
Anthracene	ug/kg	ND	43.3	43.4	35.9	29.4	83	68	27-130	20	37	
Benzo(a)anthracene	ug/kg	ND	43.3	43.4	38.2	33.5	87	76	36-127	13	39	
Benzo(a)pyrene	ug/kg	ND	43.3	43.4	32.1	29.3	73	66	21-135	9	35	
Benzo(b)fluoranthene	ug/kg	ND	43.3	43.4	41.0	36.9	90	80	17-158	11	36	
Benzo(g,h,i)perylene	ug/kg	ND	43.3	43.4	36.8	34.5	77	72	10-141	6	41	
Benzo(k)fluoranthene	ug/kg	ND	43.3	43.4	32.1	29.1	72	65	47-120	10	33	
Chrysene	ug/kg	ND	43.3	43.4	35.4	29.3	80	66	24-128	19	42	
Dibenz(a,h)anthracene	ug/kg	ND	43.3	43.4	32.9	31.3	75	71	10-137	5	31	
Fluoranthene	ug/kg	ND	43.3	43.4	36.4	31.5	83	71	34-126	15	43	
Fluorene	ug/kg	ND	43.3	43.4	37.9	32.6	86	73	42-123	15	35	
Indeno(1,2,3-cd)pyrene	ug/kg	ND	43.3	43.4	33.7	30.7	76	69	10-126	9	32	
Naphthalene	ug/kg	14.4	43.3	43.4	36.3	33.6	51	44	22-135	8	41	
Phenanthrene	ug/kg	ND	43.3	43.4	42.6	36.9	91	78	29-139	14	42	
Pyrene	ug/kg	ND	43.3	43.4	36.6	32.1	83	72	20-138	13	43	
2-Fluorobiphenyl (S)	%						100	74	41-120			
Nitrobenzene-d5 (S)	%						85	78	35-121			
Terphenyl-d14 (S)	%						98	61	39-123			

QUALITY CONTROL DATA

Project: KUHLMAN DIECASTING

Pace Project No.: 60125643

QC Batch: OEXT/34123

Analysis Method: EPA 8270C by SIM

QC Batch Method: EPA 3510C

Analysis Description: 8270 Water PAH by SIM MSSV

Associated Lab Samples: 60125643004, 60125643007, 60125643010, 60125643012, 60125643014

METHOD BLANK: 1033735

Matrix: Water

Associated Lab Samples: 60125643004, 60125643007, 60125643010, 60125643012, 60125643014

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Acenaphthene	ug/L	ND	0.10	08/05/12 11:51	
Acenaphthylene	ug/L	ND	0.10	08/05/12 11:51	
Anthracene	ug/L	ND	0.10	08/05/12 11:51	
Benzo(a)anthracene	ug/L	ND	0.10	08/05/12 11:51	
Benzo(a)pyrene	ug/L	ND	0.10	08/05/12 11:51	
Benzo(b)fluoranthene	ug/L	ND	0.10	08/05/12 11:51	
Benzo(g,h,i)perylene	ug/L	ND	0.10	08/05/12 11:51	
Benzo(k)fluoranthene	ug/L	ND	0.10	08/05/12 11:51	
Chrysene	ug/L	ND	0.10	08/05/12 11:51	
Dibenz(a,h)anthracene	ug/L	ND	0.10	08/05/12 11:51	
Fluoranthene	ug/L	ND	0.10	08/05/12 11:51	
Fluorene	ug/L	ND	0.10	08/05/12 11:51	
Indeno(1,2,3-cd)pyrene	ug/L	ND	0.10	08/05/12 11:51	
Naphthalene	ug/L	ND	0.50	08/05/12 11:51	
Phenanthrene	ug/L	ND	0.50	08/05/12 11:51	
Pyrene	ug/L	ND	0.10	08/05/12 11:51	
2-Fluorobiphenyl (S)	%	89	44-120	08/05/12 11:51	
Nitrobenzene-d5 (S)	%	105	42-120	08/05/12 11:51	
Terphenyl-d14 (S)	%	116	46-131	08/05/12 11:51	

LABORATORY CONTROL SAMPLE: 1033736

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Acenaphthene	ug/L	10	8.2	82	48-120	
Acenaphthylene	ug/L	10	8.4	84	42-120	
Anthracene	ug/L	10	8.7	87	48-120	
Benzo(a)anthracene	ug/L	10	9.1	91	53-118	
Benzo(a)pyrene	ug/L	10	8.6	86	48-115	
Benzo(b)fluoranthene	ug/L	10	8.6	86	42-132	
Benzo(g,h,i)perylene	ug/L	10	7.1	71	38-116	
Benzo(k)fluoranthene	ug/L	10	8.9	89	48-117	
Chrysene	ug/L	10	8.8	88	51-115	
Dibenz(a,h)anthracene	ug/L	10	6.7	67	40-116	
Fluoranthene	ug/L	10	10.5	105	37-134	
Fluorene	ug/L	10	9.1	91	49-116	
Indeno(1,2,3-cd)pyrene	ug/L	10	6.8	68	37-118	
Naphthalene	ug/L	10	8.2	82	41-112	
Phenanthrene	ug/L	10	8.7	87	52-116	
Pyrene	ug/L	10	8.8	88	44-134	
2-Fluorobiphenyl (S)	%			80	44-120	
Nitrobenzene-d5 (S)	%			94	42-120	

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QUALITY CONTROL DATA

Project: KUHLMAN DIECASTING

Pace Project No.: 60125643

LABORATORY CONTROL SAMPLE: 1033736

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Terphenyl-d14 (S)	%			83	46-131	

QUALITY CONTROL DATA

Project: KUHLMAN DIECASTING

Pace Project No.: 60125643

QC Batch: OEXT/34136

Analysis Method: EPA 8270C by SIM

QC Batch Method: EPA 3510C

Analysis Description: 8270 Water PAH by SIM MSSV

Associated Lab Samples: 60125643001, 60125643002

METHOD BLANK: 1034350

Matrix: Water

Associated Lab Samples: 60125643001, 60125643002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Acenaphthene	ug/L	ND	0.10	08/03/12 17:05	
Acenaphthylene	ug/L	ND	0.10	08/03/12 17:05	
Anthracene	ug/L	ND	0.10	08/03/12 17:05	
Benzo(a)anthracene	ug/L	ND	0.10	08/03/12 17:05	
Benzo(a)pyrene	ug/L	ND	0.10	08/03/12 17:05	
Benzo(b)fluoranthene	ug/L	ND	0.10	08/03/12 17:05	
Benzo(g,h,i)perylene	ug/L	ND	0.10	08/03/12 17:05	
Benzo(k)fluoranthene	ug/L	ND	0.10	08/03/12 17:05	
Chrysene	ug/L	ND	0.10	08/03/12 17:05	
Dibenz(a,h)anthracene	ug/L	ND	0.10	08/03/12 17:05	
Fluoranthene	ug/L	0.15	0.10	08/03/12 17:05	
Fluorene	ug/L	ND	0.10	08/03/12 17:05	
Indeno(1,2,3-cd)pyrene	ug/L	ND	0.10	08/03/12 17:05	
Naphthalene	ug/L	ND	0.50	08/03/12 17:05	
Phenanthrene	ug/L	ND	0.50	08/03/12 17:05	
Pyrene	ug/L	ND	0.10	08/03/12 17:05	
2-Fluorobiphenyl (S)	%	83	44-120	08/03/12 17:05	
Nitrobenzene-d5 (S)	%	93	42-120	08/03/12 17:05	
Terphenyl-d14 (S)	%	91	46-131	08/03/12 17:05	

LABORATORY CONTROL SAMPLE: 1034351

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Acenaphthene	ug/L	10	7.3	73	48-120	
Acenaphthylene	ug/L	10	7.3	73	42-120	
Anthracene	ug/L	10	8.0	80	48-120	
Benzo(a)anthracene	ug/L	10	10.0	100	53-118	
Benzo(a)pyrene	ug/L	10	8.2	82	48-115	
Benzo(b)fluoranthene	ug/L	10	9.5	95	42-132	
Benzo(g,h,i)perylene	ug/L	10	7.6	76	38-116	
Benzo(k)fluoranthene	ug/L	10	7.5	75	48-117	
Chrysene	ug/L	10	7.5	75	51-115	
Dibenz(a,h)anthracene	ug/L	10	7.0	70	40-116	
Fluoranthene	ug/L	10	9.6	96	37-134	
Fluorene	ug/L	10	8.2	82	49-116	
Indeno(1,2,3-cd)pyrene	ug/L	10	7.0	70	37-118	
Naphthalene	ug/L	10	7.2	72	41-112	
Phenanthrene	ug/L	10	7.8	78	52-116	
Pyrene	ug/L	10	7.9	79	44-134	
2-Fluorobiphenyl (S)	%			70	44-120	
Nitrobenzene-d5 (S)	%			79	42-120	

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QUALITY CONTROL DATA

Project: KUHLMAN DIECASTING

Pace Project No.: 60125643

LABORATORY CONTROL SAMPLE: 1034351

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Terphenyl-d14 (S)	%			73	46-131	

QUALITY CONTROL DATA

Project: KUHLMAN DIECASTING

Pace Project No.: 60125643

QC Batch: OEXT/34120 Analysis Method: OA2
QC Batch Method: OA2 Analysis Description: OA2 GCS
Associated Lab Samples: 60125643004, 60125643007, 60125643010, 60125643012, 60125643014

METHOD BLANK: 1033727 Matrix: Water
Associated Lab Samples: 60125643004, 60125643007, 60125643010, 60125643012, 60125643014

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Diesel Fuel	mg/L	ND	0.40	07/25/12 02:52	
Fuel Oil	mg/L	ND	0.40	07/25/12 02:52	
Jet Fuel	mg/L	ND	0.40	07/25/12 02:52	
Kerosene	mg/L	ND	0.40	07/25/12 02:52	
Mineral Spirits	mg/L	ND	0.40	07/25/12 02:52	
Motor Oil	mg/L	ND	0.40	07/25/12 02:52	
n-Tetracosane (S)	%	73	30-122	07/25/12 02:52	
p-Terphenyl (S)	%	73	20-122	07/25/12 02:52	

LABORATORY CONTROL SAMPLE: 1033728

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Diesel Fuel	mg/L	25	21.0	84	47-122	
n-Tetracosane (S)	%			73	30-122	
p-Terphenyl (S)	%			72	20-122	

QUALITY CONTROL DATA

Project: KUHLMAN DIECASTING

Pace Project No.: 60125643

QC Batch: OEXT/34137

Analysis Method: OA2

QC Batch Method: OA2

Analysis Description: OA2 GCS

Associated Lab Samples: 60125643001, 60125643002

METHOD BLANK: 1034359

Matrix: Water

Associated Lab Samples: 60125643001, 60125643002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Diesel Fuel	mg/L	ND	0.40	07/27/12 07:24	
Fuel Oil	mg/L	ND	0.40	07/27/12 07:24	
Jet Fuel	mg/L	ND	0.40	07/27/12 07:24	
Kerosene	mg/L	ND	0.40	07/27/12 07:24	
Mineral Spirits	mg/L	ND	0.40	07/27/12 07:24	
Motor Oil	mg/L	ND	0.40	07/27/12 07:24	
Total Petroleum Hydrocarbons	mg/L	ND	0.40	07/27/12 07:24	
n-Tetracosane (S)	%	68	30-122	07/27/12 07:24	
p-Terphenyl (S)	%	66	20-122	07/27/12 07:24	

LABORATORY CONTROL SAMPLE: 1034360

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Diesel Fuel	mg/L	25	20.2	81	47-122	
n-Tetracosane (S)	%			66	30-122	
p-Terphenyl (S)	%			66	20-122	

QUALITY CONTROL DATA

Project: KUHLMAN DIECASTING

Pace Project No.: 60125643

QC Batch:	OEXT/34132	Analysis Method:	OA2
QC Batch Method:	OA2	Analysis Description:	OA2 GCS
Associated Lab Samples:	60125643003, 60125643005, 60125643006, 60125643008, 60125643009, 60125643011, 60125643013		

METHOD BLANK:	1034325	Matrix:	Solid
Associated Lab Samples:	60125643003, 60125643005, 60125643006, 60125643008, 60125643009, 60125643011, 60125643013		

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Diesel Fuel	mg/kg	ND	18.4	07/29/12 04:59	
Fuel Oil	mg/kg	ND	18.4	07/29/12 04:59	
Jet Fuel	mg/kg	ND	18.4	07/29/12 04:59	
Kerosene	mg/kg	ND	18.4	07/29/12 04:59	
Mineral Spirits	mg/kg	ND	18.4	07/29/12 04:59	
Motor Oil	mg/kg	ND	18.4	07/29/12 04:59	
Total Petroleum Hydrocarbons	mg/kg	ND	18.4	07/29/12 04:59	
n-Tetracosane (S)	%	81	50-137	07/29/12 04:59	
p-Terphenyl (S)	%	75	41-129	07/29/12 04:59	

LABORATORY CONTROL SAMPLE: 1034326

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Diesel Fuel	mg/kg	472	404	86	66-138	M4
n-Tetracosane (S)	%			78	50-137	
p-Terphenyl (S)	%			68	41-129	

QUALITY CONTROL DATA

Project: KUHLMAN DIECASTING

Pace Project No.: 60125643

QC Batch:	PMST/7541	Analysis Method:	ASTM D2974
QC Batch Method:	ASTM D2974	Analysis Description:	Dry Weight/Percent Moisture
Associated Lab Samples:	60125643003, 60125643005		

METHOD BLANK: 1037827 Matrix: Solid

Associated Lab Samples: 60125643003, 60125643005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Percent Moisture	%	ND	0.50	08/01/12 00:00	

SAMPLE DUPLICATE: 1037828

Parameter	Units	60125570007 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	19.2	20.7	8	20	

QUALITY CONTROL DATA

Project: KUHLMAN DIECASTING

Pace Project No.: 60125643

QC Batch:	PMST/7542	Analysis Method:	ASTM D2974
QC Batch Method:	ASTM D2974	Analysis Description:	Dry Weight/Percent Moisture
Associated Lab Samples:	60125643006, 60125643008, 60125643009, 60125643011, 60125643013		

METHOD BLANK: 1037829 Matrix: Solid

Associated Lab Samples: 60125643006, 60125643008, 60125643009, 60125643011, 60125643013

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Percent Moisture	%	ND	0.50	08/01/12 00:00	

SAMPLE DUPLICATE: 1037830

Parameter	Units	60125643006 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	19.3	19.3	0	20	

QUALITY CONTROL DATA

Project: KUHLMAN DIECASTING

Pace Project No.: 60125643

QC Batch: WETA/20978

Analysis Method: SM 3500-Cr D

QC Batch Method: SM 3500-Cr D

Analysis Description: Chromium, Hexavalent by 3500

Associated Lab Samples: 60125643001, 60125643002

METHOD BLANK: 1033097

Matrix: Water

Associated Lab Samples: 60125643001, 60125643002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chromium, Hexavalent	mg/L	ND	0.010	07/21/12 10:55	

LABORATORY CONTROL SAMPLE: 1033098

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chromium, Hexavalent	mg/L	.1	0.10	102	90-110	

MATRIX SPIKE SAMPLE: 1033099

Parameter	Units	60125643002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chromium, Hexavalent	mg/L	ND	.1	0.10	101	85-115	

SAMPLE DUPLICATE: 1033100

Parameter	Units	60125643001 Result	Dup Result	RPD	Max RPD	Qualifiers
Chromium, Hexavalent	mg/L	ND	ND		20	

QUALIFIERS

Project: KUHLMAN DIECASTING

Pace Project No.: 60125643

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

PRL - Pace Reporting Limit.

RL - Reporting Limit.

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

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

TNI - The NELAC Institute.

SAMPLE QUALIFIERS

Sample: 60125643014

[1] VOC analyzed from vial with headspace >6 mm.

BATCH QUALIFIERS

Batch: OEXT/34120

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

Batch: OEXT/34123

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

Batch: OEXT/34136

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

Batch: OEXT/34137

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

Batch: MSV/47270

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

Batch: MSV/47311

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

Batch: MSV/47349

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

Batch: MSV/47352

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

QUALIFIERS

Project: KUHLMAN DIECASTING

Pace Project No.: 60125643

BATCH QUALIFIERS

Batch: MSV/47353

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

Batch: MSV/47378

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

Batch: MSV/47379

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

Batch: MSV/47383

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

Batch: MSV/47406

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

Batch: MSV/47407

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

ANALYTE QUALIFIERS

- 1e Surrogate recovery outside laboratory control limits due to matrix interferences.
- 2e The sample does not match a profile of laboratory standards. Hydrocarbon fractions are present from the early diesel fuel to late motor oil range. Quantitation achieved using diesel fuel as a reference standard.
- 3e The sample does not match a profile of laboratory standards. Hydrocarbon fractions are present from the early diesel fuel to early motor oil range. Quantitation achieved using diesel fuel as a reference standard.
- B Analyte was detected in the associated method blank.
- D3 Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.
- D4 Sample was diluted due to the presence of high levels of target analytes.
- D9 Dissolved result is greater than the total. Data is within laboratory control limits.
- HS Results are from sample aliquot taken from VOA vial with headspace (air bubble greater than 6 mm diameter).
- L0 Analyte recovery in the laboratory control sample (LCS) was outside QC limits.
- L2 Analyte recovery in the laboratory control sample (LCS) was below QC limits. Results for this analyte in associated samples may be biased low.
- M1 Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
- M4 A matrix spike/matrix spike duplicate was not performed for this batch due to sample dilution.
- P3 Sample extract could not be concentrated to the routine final volume, resulting in elevated reporting limits.
- S0 Surrogate recovery outside laboratory control limits.
- S4 Surrogate recovery not evaluated against control limits due to sample dilution.
- pH Post-analysis pH measurement indicates insufficient VOA sample preservation.

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: KUHLMAN DIECASTING

Pace Project No.: 60125643

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60125643001	FIELD BLANK	OA2	OEXT/34137	OA2	GCSV/12858
60125643002	EQUIPMENT RINSATE	OA2	OEXT/34137	OA2	GCSV/12858
60125643004	SB-1-GW	OA2	OEXT/34120	OA2	GCSV/12838
60125643007	SB-3-GW	OA2	OEXT/34120	OA2	GCSV/12838
60125643010	SB-5-GW	OA2	OEXT/34120	OA2	GCSV/12838
60125643012	SB-6-GW	OA2	OEXT/34120	OA2	GCSV/12838
60125643014	SB-7-GW	OA2	OEXT/34120	OA2	GCSV/12838
60125643003	SB-1-25-27	OA2	OEXT/34132	OA2	GCSV/12862
60125643005	SB-2-2-4	OA2	OEXT/34132	OA2	GCSV/12862
60125643006	SB-3-16-18	OA2	OEXT/34132	OA2	GCSV/12862
60125643008	SB-4-14-16	OA2	OEXT/34132	OA2	GCSV/12862
60125643009	SB-5-10-12	OA2	OEXT/34132	OA2	GCSV/12862
60125643011	SB-6-14-16	OA2	OEXT/34132	OA2	GCSV/12862
60125643013	SB-7-10-12	OA2	OEXT/34132	OA2	GCSV/12862
60125643003	SB-1-25-27	EPA 3050	MPRP/18848	EPA 6010	ICP/15697
60125643005	SB-2-2-4	EPA 3050	MPRP/18848	EPA 6010	ICP/15697
60125643006	SB-3-16-18	EPA 3050	MPRP/18848	EPA 6010	ICP/15697
60125643008	SB-4-14-16	EPA 3050	MPRP/18848	EPA 6010	ICP/15697
60125643009	SB-5-10-12	EPA 3050	MPRP/18848	EPA 6010	ICP/15697
60125643011	SB-6-14-16	EPA 3050	MPRP/18848	EPA 6010	ICP/15697
60125643013	SB-7-10-12	EPA 3050	MPRP/18848	EPA 6010	ICP/15697
60125643001	FIELD BLANK	EPA 3010	MPRP/18881	EPA 6010	ICP/15725
60125643002	EQUIPMENT RINSATE	EPA 3010	MPRP/18881	EPA 6010	ICP/15725
60125643004	SB-1-GW	EPA 3010	MPRP/18874	EPA 6010	ICP/15704
60125643007	SB-3-GW	EPA 3010	MPRP/18874	EPA 6010	ICP/15704
60125643010	SB-5-GW	EPA 3010	MPRP/18874	EPA 6010	ICP/15704
60125643012	SB-6-GW	EPA 3010	MPRP/18874	EPA 6010	ICP/15704
60125643014	SB-7-GW	EPA 3010	MPRP/18874	EPA 6010	ICP/15704
60125643001	FIELD BLANK	EPA 3010	MPRP/18880	EPA 6010	ICP/15715
60125643002	EQUIPMENT RINSATE	EPA 3010	MPRP/18880	EPA 6010	ICP/15715
60125643004	SB-1-GW	EPA 3010	MPRP/18877	EPA 6010	ICP/15706
60125643007	SB-3-GW	EPA 3010	MPRP/18877	EPA 6010	ICP/15706
60125643010	SB-5-GW	EPA 3010	MPRP/18877	EPA 6010	ICP/15706
60125643012	SB-6-GW	EPA 3010	MPRP/18877	EPA 6010	ICP/15706
60125643014	SB-7-GW	EPA 3010	MPRP/18877	EPA 6010	ICP/15706
60125643001	FIELD BLANK	EPA 7470	MERP/6475	EPA 7470	MERC/6436
60125643002	EQUIPMENT RINSATE	EPA 7470	MERP/6475	EPA 7470	MERC/6436
60125643004	SB-1-GW	EPA 7470	MERP/6475	EPA 7470	MERC/6436
60125643007	SB-3-GW	EPA 7470	MERP/6475	EPA 7470	MERC/6436
60125643010	SB-5-GW	EPA 7470	MERP/6475	EPA 7470	MERC/6436
60125643012	SB-6-GW	EPA 7470	MERP/6475	EPA 7470	MERC/6436
60125643014	SB-7-GW	EPA 7470	MERP/6475	EPA 7470	MERC/6436
60125643001	FIELD BLANK	EPA 7470	MERP/6489	EPA 7470	MERC/6458
60125643002	EQUIPMENT RINSATE	EPA 7470	MERP/6489	EPA 7470	MERC/6458

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: KUHLMAN DIECASTING

Pace Project No.: 60125643

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60125643004	SB-1-GW	EPA 7470	MERP/6489	EPA 7470	MERC/6458
60125643007	SB-3-GW	EPA 7470	MERP/6489	EPA 7470	MERC/6458
60125643010	SB-5-GW	EPA 7470	MERP/6489	EPA 7470	MERC/6458
60125643012	SB-6-GW	EPA 7470	MERP/6489	EPA 7470	MERC/6458
60125643014	SB-7-GW	EPA 7470	MERP/6489	EPA 7470	MERC/6458
60125643003	SB-1-25-27	EPA 7471	MERP/6477	EPA 7471	MERC/6444
60125643005	SB-2-2-4	EPA 7471	MERP/6477	EPA 7471	MERC/6444
60125643006	SB-3-16-18	EPA 7471	MERP/6477	EPA 7471	MERC/6444
60125643008	SB-4-14-16	EPA 7471	MERP/6477	EPA 7471	MERC/6444
60125643009	SB-5-10-12	EPA 7471	MERP/6477	EPA 7471	MERC/6444
60125643011	SB-6-14-16	EPA 7471	MERP/6477	EPA 7471	MERC/6444
60125643013	SB-7-10-12	EPA 7471	MERP/6477	EPA 7471	MERC/6444
60125643003	SB-1-25-27	EPA 3546	OEXT/34158	EPA 8270 by SIM	MSSV/10712
60125643005	SB-2-2-4	EPA 3546	OEXT/34158	EPA 8270 by SIM	MSSV/10712
60125643006	SB-3-16-18	EPA 3546	OEXT/34158	EPA 8270 by SIM	MSSV/10712
60125643008	SB-4-14-16	EPA 3546	OEXT/34158	EPA 8270 by SIM	MSSV/10712
60125643009	SB-5-10-12	EPA 3546	OEXT/34158	EPA 8270 by SIM	MSSV/10712
60125643011	SB-6-14-16	EPA 3546	OEXT/34158	EPA 8270 by SIM	MSSV/10712
60125643013	SB-7-10-12	EPA 3546	OEXT/34158	EPA 8270 by SIM	MSSV/10712
60125643001	FIELD BLANK	EPA 3510C	OEXT/34136	EPA 8270C by SIM	MSSV/10739
60125643002	EQUIPMENT RINSATE	EPA 3510C	OEXT/34136	EPA 8270C by SIM	MSSV/10739
60125643004	SB-1-GW	EPA 3510C	OEXT/34123	EPA 8270C by SIM	MSSV/10743
60125643007	SB-3-GW	EPA 3510C	OEXT/34123	EPA 8270C by SIM	MSSV/10743
60125643010	SB-5-GW	EPA 3510C	OEXT/34123	EPA 8270C by SIM	MSSV/10743
60125643012	SB-6-GW	EPA 3510C	OEXT/34123	EPA 8270C by SIM	MSSV/10743
60125643014	SB-7-GW	EPA 3510C	OEXT/34123	EPA 8270C by SIM	MSSV/10743
60125643003	SB-1-25-27	OA1	MSV/47378		
60125643005	SB-2-2-4	OA1	MSV/47378		
60125643006	SB-3-16-18	OA1	MSV/47379		
60125643008	SB-4-14-16	OA1	MSV/47379		
60125643009	SB-5-10-12	OA1	MSV/47379		
60125643011	SB-6-14-16	OA1	MSV/47379		
60125643013	SB-7-10-12	OA1	MSV/47379		
60125643001	FIELD BLANK	EPA 5030B/8260	MSV/47383		
60125643002	EQUIPMENT RINSATE	EPA 5030B/8260	MSV/47383		
60125643004	SB-1-GW	EPA 5030B/8260	MSV/47349		
60125643007	SB-3-GW	EPA 5030B/8260	MSV/47349		
60125643010	SB-5-GW	EPA 5030B/8260	MSV/47352		
60125643012	SB-6-GW	EPA 5030B/8260	MSV/47352		
60125643014	SB-7-GW	EPA 5030B/8260	MSV/47352		
60125643001	FIELD BLANK	EPA 8260/OA1	MSV/47407		
60125643002	EQUIPMENT RINSATE	EPA 8260/OA1	MSV/47407		
60125643004	SB-1-GW	EPA 8260/OA1	MSV/47406		

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: KUHLMAN DIECASTING

Pace Project No.: 60125643

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60125643007	SB-3-GW	EPA 8260/OA1	MSV/47406		
60125643010	SB-5-GW	EPA 8260/OA1	MSV/47353		
60125643012	SB-6-GW	EPA 8260/OA1	MSV/47353		
60125643014	SB-7-GW	EPA 8260/OA1	MSV/47353		
60125643003	SB-1-25-27	EPA 8260	MSV/47270		
60125643005	SB-2-2-4	EPA 8260	MSV/47270		
60125643006	SB-3-16-18	EPA 8260	MSV/47311		
60125643008	SB-4-14-16	EPA 8260	MSV/47311		
60125643009	SB-5-10-12	EPA 8260	MSV/47311		
60125643011	SB-6-14-16	EPA 8260	MSV/47311		
60125643013	SB-7-10-12	EPA 8260	MSV/47311		
60125643015	TRIP BLANK	EPA 8260	MSV/47410		
60125643003	SB-1-25-27	ASTM D2974	PMST/7541		
60125643005	SB-2-2-4	ASTM D2974	PMST/7541		
60125643006	SB-3-16-18	ASTM D2974	PMST/7542		
60125643008	SB-4-14-16	ASTM D2974	PMST/7542		
60125643009	SB-5-10-12	ASTM D2974	PMST/7542		
60125643011	SB-6-14-16	ASTM D2974	PMST/7542		
60125643013	SB-7-10-12	ASTM D2974	PMST/7542		
60125643001	FIELD BLANK	SM 3500-Cr D	WETA/20978		
60125643002	EQUIPMENT RINSATE	SM 3500-Cr D	WETA/20978		



CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Section A Required Client Information		Section B Required Project Information		Section C Invoice Information	
Company	Seagull Environmental Technologies	Report To	Jeff Pitchard	Attention	
Address	415 Oak St. Kansas City, MO 64106	Copy To		Company Name	
Email To:	jpitchard@seagullenvirotech.com	Purchase Order No.		Address:	
Phone:	913-220-5887	Project Name	Kuhman Diecasting	Pace Client Reference	
Requested Due Date/AT:	standard	Project Number		Pace Project Manager	MJW
			Pace Profile #		
			Requested Analysis Filtered (Y/N)		
			REGULATORY AGENCY		
			NPDES <input type="checkbox"/> GROUND WATER <input type="checkbox"/> DRINKING WATER <input type="checkbox"/>		
			UST <input type="checkbox"/> RCRA <input type="checkbox"/> OTHER <input type="checkbox"/>		
			Site Location		
			STATE: KS		

ITEM #	Section D Required Client Information Valid Matrix Codes MATRIX CODE DIV WATER WASTE WATER PRODUCT SOIL/SOLID OIL WASTE AIR OTHER TS	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED				SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives							Analysis Test	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
				DATE	TIME	DATE	TIME			COMPOSITE START	COMPOSITE END/GRAB	H ₂ SO ₄	HNO ₃	HCl	NaOH	Na ₂ S ₂ O ₃				Methanol	Other																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
1	SB-1-25-27	SLC	7/17/12 10:11	7/17/12	10:11				7	4					2	1																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								

SAMPLER NAME AND SIGNATURE	
PRINT Name of SAMPLER:	Joel Heuser
SIGNATURE of SAMPLER:	
DATE Signed (MM/DD/YY):	7-20-12
Temp in °C	
Received on Ice (Y/N)	
Custody Sealed Cooler (Y/N)	
Samples Intact (Y/N)	

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Section A

Required Client Information

Company: Seagull Environmental Technologies

Address: 415 Oak St.

Kansas City, MO 64106

Email To: jpitchard@seagullenvrotech.com

Phone: 913-220-5887

Requested Due Date/TAT: standard

Section B

Required Project Information:

Report To: Jeff Pitchard

Copy To:

Purchase Order No.:

Project Name: Kuhlman Diecasting

Project Number:

Section C

Invoice Information:

Attention:

Company Name:

Address:

Pace Quote

Reference:

Pace Project Manager

MJW

Pace Profile #:

REGULATORY AGENCY

NPDES ☐ GROUND WATER ☐ DRINKING WATER

UST ☐ RCRA ☐ OTHER ☐

Site Location

STATE: KS

Requested Analysis Filtered (Y/N)

Hexavalent Chromium

Residual Chlorine (Y/N)

Pace Project No./ Lab I.D.

ITEM #	Section D Required Client Information	Valid Matrix Codes MATRIX CODE DRINKING WATER DW WASTE WATER WW PRODUCT P SOL/SOLID SL OIL OL WIPE WIP AIR AR OTHER OT TISSUE TS	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED		SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives	Analysis Test	Requested Analysis Filtered (Y/N)	Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
					COMPOSITE START	COMPOSITE END/GRAB									
1	Field Blank		WT G	7/20/12 1140	7/20/12 1140		9	4	23	1					
2	Private Blanks Equipment Risers		WT G	7/20/12 1150	7/20/12 1150		16	5	26	1					
3	Trip Blank		WT G	5/9/12			2	2		2V694					
4															
5															
6															
7															
8															
9															
10															
11															
12															

ADDITIONAL COMMENTS

RELINQUISHED BY / AFFILIATION

DATE

TIME

ACCEPTED BY / AFFILIATION

DATE

TIME

SAMPLE CONDITIONS

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Joel Harvester

SIGNATURE of SAMPLER:

DATE Signed (MM/DD/YY):

7-20-12

Temp in °C

Received on Ice (Y/N)

Custody Sealed Cooler (Y/N)

Samples Intact (Y/N)

*Important Note By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days



Sample Condition Upon Receipt

Client Name: Seagull Env. technologies Project # 10125643

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☒ Client ☐ Commercial ☐ Pace ☐ Other

Tracking #: _____ Pace Shipping Label Used? ☐ Yes ☒ No

Custody Seal on Cooler/Box Present: ☒ Yes ☐ No Seals intact: ☒ Yes ☐ No

Optional

Proj. Due Date: 013

Proj. Name: Kuhlman

Packing Material: ☐ Bubble Wrap ☒ Bubble Bags ☒ Foam ☐ None ☒ Other EPLC

Thermometer Used: T-191 T-194

Type of Ice: Wet Blue None ☐ Samples on ice, cooling process has begun

Cooler Temperature: 1.6, 3.7

Temperature should be above freezing to 6°C

Comments:

Date and Initials of person examining contents: 7/21

Chain of Custody present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody filled out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler name & signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples arrived within holding time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Short Hold Time analyses (<72hr):	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	6. <u>Kits, Cr+6</u>
Rush Turn Around Time requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	7.
Sufficient volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8.
Correct containers used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
-Pace containers used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Containers intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	10.
Unpreserved 5035A soils frozen w/in 48hrs?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	11.
Filtered volume received for dissolved tests	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	12. <u>7/21</u>
Sample labels match COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	13.
-Includes date/time/ID/analyses Matrix:	<u>WT, SL</u>	
All containers needing preservation have been checked.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	14. <u>Non-F. Hurd samples</u> <u>containers</u> <u>for samples SB-3-GW</u> <u>SB-7-GW were out of pH,</u> <u>(both 4.7)</u>
All containers needing preservation are found to be in compliance with EPA recommendation.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Exceptions: <u>VOA</u> , coliform, TOC, O&G, WI-DRO (water), Phenolics	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Trip Blank present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	15. <u>SB-6-14-16</u> - <u>(137-10-12) came w/ TBS</u>
Pace Trip Blank lot # (if purchased): <u>05 2812-3 - VG9H</u>		
Headspace in VOA vials (>6mm):	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	16. <u>SB-1-GW (2 of 3)</u> <u>(SB-7-GW) (3 of 3)</u> <u>SB-3-GW (2 of 3)</u> <u>SB-5-GW (1 of 3)</u>
Project sampled in USDA Regulated Area:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	17. List State: <u>h</u>

Client Notification/ Resolution:

Copy COC to Client?

Y / N

Field Data Required?

Y / N

Person Contacted: _____

Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: mw

Date: 7/23/12

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

August 09, 2012

Jeff Pritchard
Seagull Environmental Technologies
415 Oak St.
Kansas City, MO 64106

RE: Project: KUHLMAN DIECASTING
Pace Project No.: 60125813

Dear Jeff Pritchard:

Enclosed are the analytical results for sample(s) received by the laboratory on July 25, 2012. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,



Mary Jane Walls

maryjane.walls@pacelabs.com
PM Lab Management

Enclosures



REPORT OF LABORATORY ANALYSIS

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Page 1 of 67

CERTIFICATIONS

Project: KUHLMAN DIECASTING

Pace Project No.: 60125813

Kansas Certification IDs

9608 Loiret Boulevard, Lenexa, KS 66219

A2LA Certification #: 2456.01

Arkansas Certification #: 12-019-0

Illinois Certification #: 002885

Iowa Certification #: 118

Kansas/NELAP Certification #: E-10116

Louisiana Certification #: 03055

Nevada Certification #: KS000212008A

Oklahoma Certification #: 9205/9935

Texas Certification #: T104704407-12-3

Utah Certification #: KS000212012-2

REPORT OF LABORATORY ANALYSIS

Page 2 of 67

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SAMPLE SUMMARY

Project: KUHLMAN DIECASTING

Pace Project No.: 60125813

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60125813001	SB-8 9-11	Solid	07/18/12 16:12	07/25/12 08:30
60125813002	SB-9 12-14	Solid	07/18/12 16:48	07/25/12 08:30
60125813003	SB-9 GW	Water	07/18/12 16:55	07/25/12 08:30
60125813004	SB-10 12-14	Solid	07/19/12 09:40	07/25/12 08:30
60125813005	SB-11 17-19	Solid	07/19/12 11:50	07/25/12 08:30
60125813006	SB-14 8-10	Solid	07/19/12 13:52	07/25/12 08:30
60125813007	SB-17 10-12	Solid	07/19/12 15:10	07/25/12 08:30
60125813008	SB-18 12-14	Solid	07/20/12 09:08	07/25/12 08:30

REPORT OF LABORATORY ANALYSIS

Page 3 of 67

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SAMPLE ANALYTE COUNT

Project: KUHLMAN DIECASTING

Pace Project No.: 60125813

Lab ID	Sample ID	Method	Analysts	Analytes Reported
60125813001	SB-8 9-11	OA2	NAW	9
		EPA 6010	TJG	12
		EPA 7471	TJT	1
		EPA 8270 by SIM	BRM	19
		OA1	RAB	1
		EPA 8260	RAB	69
		ASTM D2974	DWC	1
60125813002	SB-9 12-14	OA2	NAW	9
		EPA 6010	TJG	12
		EPA 7471	TJT	1
		EPA 8270 by SIM	BRM	19
		OA1	RAB	1
		EPA 8260	RAB	69
		ASTM D2974	DWC	1
60125813003	SB-9 GW	OA2	NAW	9
		EPA 6010	SMW	12
		EPA 6010	SMW	12
		EPA 7470	TJT	1
		EPA 7470	TJT	1
		EPA 8270C by SIM	BRM	19
		EPA 5030B/8260	RNS	70
		EPA 8260/OA1	RNS	14
60125813004	SB-10 12-14	OA2	NAW	9
		EPA 6010	TJG	12
		EPA 7471	TJT	1
		EPA 8270 by SIM	BRM	19
		OA1	RAB	1
		EPA 8260	RAB	69
		ASTM D2974	DWC	1
60125813005	SB-11 17-19	OA2	NAW	9
		EPA 6010	TJG	12
		EPA 7471	TJT	1
		EPA 8270 by SIM	BRM	19
		OA1	RAB	1
		EPA 8260	RAB	69
		ASTM D2974	DWC	1
60125813006	SB-14 8-10	OA2	NAW	9

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SAMPLE ANALYTE COUNT

Project: KUHLMAN DIECASTING

Pace Project No.: 60125813

Lab ID	Sample ID	Method	Analysts	Analytes Reported
60125813007	SB-17 10-12	EPA 6010	TJG	12
		EPA 7471	TJT	1
		EPA 8270 by SIM	BRM	19
		OA1	RAB	1
		EPA 8260	RAB	69
		ASTM D2974	DWC	1
		OA2	NAW	9
		EPA 6010	TJG	12
		EPA 7471	TJT	1
		EPA 8270 by SIM	BRM	19
		OA1	RAB	1
		EPA 8260	RAB	69
		ASTM D2974	DWC	1
		OA2	NAW	9
60125813008	SB-18 12-14	EPA 6010	TJG	12
		EPA 7471	TJT	1
		EPA 8270 by SIM	BRM	19
		OA1	RAB	1
		EPA 8260	RAB	69
		ASTM D2974	DWC	1

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ANALYTICAL RESULTS

Project: KUHLMAN DIECASTING

Pace Project No.: 60125813

Sample: SB-8 9-11 **Lab ID: 60125813001** Collected: 07/18/12 16:12 Received: 07/25/12 08:30 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
OA2 GCS Analytical Method: OA2 Preparation Method: OA2								
Diesel Fuel	792	mg/kg	24.9	1	07/27/12 00:00	07/31/12 00:42	68334-30-5	
Fuel Oil	ND	mg/kg	24.9	1	07/27/12 00:00	07/31/12 00:42	68553-00-4	
Jet Fuel	ND	mg/kg	24.9	1	07/27/12 00:00	07/31/12 00:42	94114-58-6	
Kerosene	ND	mg/kg	24.9	1	07/27/12 00:00	07/31/12 00:42	8008-20-6	
Mineral Spirits	ND	mg/kg	24.9	1	07/27/12 00:00	07/31/12 00:42	8030-30-6	
Motor Oil	ND	mg/kg	24.9	1	07/27/12 00:00	07/31/12 00:42	64742-65-0	
Total Petroleum Hydrocarbons	ND	mg/kg	24.9	1	07/27/12 00:00	07/31/12 00:42		
Surrogates								
n-Tetracosane (S)	99	%	50-137	1	07/27/12 00:00	07/31/12 00:42	646-31-1	
p-Terphenyl (S)	82	%	41-129	1	07/27/12 00:00	07/31/12 00:42	92-94-4	
6010 MET ICP Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Antimony	29.3	mg/kg	21.3	1	07/31/12 17:10	08/06/12 14:51	7440-36-0	M1
Arsenic	116	mg/kg	21.3	1	07/31/12 17:10	08/06/12 14:51	7440-38-2	M1
Beryllium	16.0	mg/kg	2.1	1	07/31/12 17:10	08/07/12 09:54	7440-41-7	M1
Cadmium	ND	mg/kg	10.7	1	07/31/12 17:10	08/06/12 14:51	7440-43-9	M1
Chromium	4060	mg/kg	10.7	1	07/31/12 17:10	08/06/12 14:51	7440-47-3	M1
Copper	3630	mg/kg	21.3	1	07/31/12 17:10	08/06/12 14:51	7440-50-8	M1
Lead	251	mg/kg	10.7	1	07/31/12 17:10	08/06/12 14:51	7439-92-1	M1
Nickel	7180	mg/kg	10.7	1	07/31/12 17:10	08/06/12 14:51	7440-02-0	M1
Selenium	ND	mg/kg	32.0	1	07/31/12 17:10	08/06/12 14:51	7782-49-2	
Silver	ND	mg/kg	14.9	1	07/31/12 17:10	08/06/12 14:51	7440-22-4	M1
Thallium	ND	mg/kg	42.7	1	07/31/12 17:10	08/06/12 14:51	7440-28-0	M1
Zinc	1930	mg/kg	213	1	07/31/12 17:10	08/06/12 14:51	7440-66-6	M1
7471 Mercury Analytical Method: EPA 7471 Preparation Method: EPA 7471								
Mercury	0.028	mg/kg	0.019	1	08/04/12 09:00	08/04/12 13:16	7439-97-6	
8270 MSSV PAH by SIM Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546								
Acenaphthene	24.3	ug/kg	4.2	1	07/26/12 00:00	07/27/12 15:49	83-32-9	
Acenaphthylene	15.9	ug/kg	4.2	1	07/26/12 00:00	07/27/12 15:49	208-96-8	
Anthracene	ND	ug/kg	4.2	1	07/26/12 00:00	07/27/12 15:49	120-12-7	
Benzo(a)anthracene	4.8	ug/kg	4.2	1	07/26/12 00:00	07/27/12 15:49	56-55-3	
Benzo(a)pyrene	6.0	ug/kg	4.2	1	07/26/12 00:00	07/27/12 15:49	50-32-8	
Benzo(b)fluoranthene	9.3	ug/kg	4.2	1	07/26/12 00:00	07/27/12 15:49	205-99-2	
Benzo(g,h,i)perylene	5.3	ug/kg	4.2	1	07/26/12 00:00	07/27/12 15:49	191-24-2	
Benzo(k)fluoranthene	4.4	ug/kg	4.2	1	07/26/12 00:00	07/27/12 15:49	207-08-9	
Chrysene	5.6	ug/kg	4.2	1	07/26/12 00:00	07/27/12 15:49	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	4.2	1	07/26/12 00:00	07/27/12 15:49	53-70-3	
Fluoranthene	7.8	ug/kg	4.2	1	07/26/12 00:00	07/27/12 15:49	206-44-0	
Fluorene	62.5	ug/kg	4.2	1	07/26/12 00:00	07/27/12 15:49	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	4.2	1	07/26/12 00:00	07/27/12 15:49	193-39-5	
Naphthalene	11.2	ug/kg	4.2	1	07/26/12 00:00	07/27/12 15:49	91-20-3	
Phenanthrene	49.7	ug/kg	4.2	1	07/26/12 00:00	07/27/12 15:49	85-01-8	
Pyrene	7.4	ug/kg	4.2	1	07/26/12 00:00	07/27/12 15:49	129-00-0	

Date: 08/09/2012 11:06 AM

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ANALYTICAL RESULTS

Project: KUHLMAN DIECASTING

Pace Project No.: 60125813

Sample: SB-8 9-11 **Lab ID: 60125813001** Collected: 07/18/12 16:12 Received: 07/25/12 08:30 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by SIM Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546								
Surrogates								
Nitrobenzene-d5 (S)	124 %		35-121	1	07/26/12 00:00	07/27/12 15:49	4165-60-0	1e
2-Fluorobiphenyl (S)	91 %		41-120	1	07/26/12 00:00	07/27/12 15:49	321-60-8	
Terphenyl-d14 (S)	70 %		39-123	1	07/26/12 00:00	07/27/12 15:49	1718-51-0	
OA1 Volatile Pet. Hydrocarbons Analytical Method: OA1								
Gasoline Range Organics	1.4 mg/kg		1.1	1		07/26/12 17:09		
8260 MSV 5035A VOA Analytical Method: EPA 8260								
Acetone	75.3 ug/kg		22.5	1		07/26/12 17:09	67-64-1	
Benzene	ND ug/kg		5.6	1		07/26/12 17:09	71-43-2	
Bromobenzene	ND ug/kg		5.6	1		07/26/12 17:09	108-86-1	
Bromochloromethane	ND ug/kg		5.6	1		07/26/12 17:09	74-97-5	
Bromodichloromethane	ND ug/kg		5.6	1		07/26/12 17:09	75-27-4	
Bromoform	ND ug/kg		5.6	1		07/26/12 17:09	75-25-2	
Bromomethane	ND ug/kg		5.6	1		07/26/12 17:09	74-83-9	
2-Butanone (MEK)	13.4 ug/kg		11.3	1		07/26/12 17:09	78-93-3	
n-Butylbenzene	ND ug/kg		5.6	1		07/26/12 17:09	104-51-8	
sec-Butylbenzene	ND ug/kg		5.6	1		07/26/12 17:09	135-98-8	
tert-Butylbenzene	ND ug/kg		5.6	1		07/26/12 17:09	98-06-6	
Carbon disulfide	6.5 ug/kg		5.6	1		07/26/12 17:09	75-15-0	
Carbon tetrachloride	ND ug/kg		5.6	1		07/26/12 17:09	56-23-5	
Chlorobenzene	ND ug/kg		5.6	1		07/26/12 17:09	108-90-7	
Chloroethane	ND ug/kg		5.6	1		07/26/12 17:09	75-00-3	
Chloroform	ND ug/kg		5.6	1		07/26/12 17:09	67-66-3	L2
Chloromethane	ND ug/kg		5.6	1		07/26/12 17:09	74-87-3	
2-Chlorotoluene	ND ug/kg		5.6	1		07/26/12 17:09	95-49-8	
4-Chlorotoluene	ND ug/kg		5.6	1		07/26/12 17:09	106-43-4	
1,2-Dibromo-3-chloropropane	ND ug/kg		11.3	1		07/26/12 17:09	96-12-8	
Dibromochloromethane	ND ug/kg		5.6	1		07/26/12 17:09	124-48-1	
1,2-Dibromoethane (EDB)	ND ug/kg		5.6	1		07/26/12 17:09	106-93-4	
Dibromomethane	ND ug/kg		5.6	1		07/26/12 17:09	74-95-3	
1,2-Dichlorobenzene	ND ug/kg		5.6	1		07/26/12 17:09	95-50-1	
1,3-Dichlorobenzene	ND ug/kg		5.6	1		07/26/12 17:09	541-73-1	
1,4-Dichlorobenzene	ND ug/kg		5.6	1		07/26/12 17:09	106-46-7	
Dichlorodifluoromethane	ND ug/kg		5.6	1		07/26/12 17:09	75-71-8	
1,1-Dichloroethane	ND ug/kg		5.6	1		07/26/12 17:09	75-34-3	
1,2-Dichloroethane	ND ug/kg		5.6	1		07/26/12 17:09	107-06-2	
1,2-Dichloroethene (Total)	ND ug/kg		5.6	1		07/26/12 17:09	540-59-0	
1,1-Dichloroethene	ND ug/kg		5.6	1		07/26/12 17:09	75-35-4	
cis-1,2-Dichloroethene	ND ug/kg		5.6	1		07/26/12 17:09	156-59-2	
trans-1,2-Dichloroethene	ND ug/kg		5.6	1		07/26/12 17:09	156-60-5	
1,2-Dichloropropane	ND ug/kg		5.6	1		07/26/12 17:09	78-87-5	
1,3-Dichloropropane	ND ug/kg		5.6	1		07/26/12 17:09	142-28-9	
2,2-Dichloropropane	ND ug/kg		5.6	1		07/26/12 17:09	594-20-7	
1,1-Dichloropropene	ND ug/kg		5.6	1		07/26/12 17:09	563-58-6	

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ANALYTICAL RESULTS

Project: KUHLMAN DIECASTING

Pace Project No.: 60125813

Sample: SB-8 9-11 **Lab ID: 60125813001** Collected: 07/18/12 16:12 Received: 07/25/12 08:30 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035A VOA		Analytical Method: EPA 8260						
cis-1,3-Dichloropropene	ND	ug/kg	5.6	1		07/26/12 17:09	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/kg	5.6	1		07/26/12 17:09	10061-02-6	
Ethylbenzene	ND	ug/kg	5.6	1		07/26/12 17:09	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	5.6	1		07/26/12 17:09	87-68-3	
2-Hexanone	ND	ug/kg	22.5	1		07/26/12 17:09	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/kg	5.6	1		07/26/12 17:09	98-82-8	
p-Isopropyltoluene	ND	ug/kg	5.6	1		07/26/12 17:09	99-87-6	
Methylene chloride	ND	ug/kg	5.6	1		07/26/12 17:09	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	11.3	1		07/26/12 17:09	108-10-1	
Methyl-tert-butyl ether	ND	ug/kg	5.6	1		07/26/12 17:09	1634-04-4	
Naphthalene	ND	ug/kg	11.3	1		07/26/12 17:09	91-20-3	
n-Propylbenzene	ND	ug/kg	5.6	1		07/26/12 17:09	103-65-1	
Styrene	ND	ug/kg	5.6	1		07/26/12 17:09	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/kg	5.6	1		07/26/12 17:09	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	5.6	1		07/26/12 17:09	79-34-5	
Tetrachloroethene	ND	ug/kg	5.6	1		07/26/12 17:09	127-18-4	
Toluene	ND	ug/kg	5.6	1		07/26/12 17:09	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/kg	5.6	1		07/26/12 17:09	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/kg	5.6	1		07/26/12 17:09	120-82-1	
1,1,1-Trichloroethane	ND	ug/kg	5.6	1		07/26/12 17:09	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	5.6	1		07/26/12 17:09	79-00-5	
Trichloroethene	ND	ug/kg	5.6	1		07/26/12 17:09	79-01-6	
Trichlorofluoromethane	ND	ug/kg	5.6	1		07/26/12 17:09	75-69-4	
1,2,3-Trichloropropane	ND	ug/kg	5.6	1		07/26/12 17:09	96-18-4	
1,2,4-Trimethylbenzene	5.8	ug/kg	5.6	1		07/26/12 17:09	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/kg	5.6	1		07/26/12 17:09	108-67-8	
Vinyl chloride	ND	ug/kg	5.6	1		07/26/12 17:09	75-01-4	
Xylene (Total)	ND	ug/kg	5.6	1		07/26/12 17:09	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	99 %		78-122	1		07/26/12 17:09	1868-53-7	
Toluene-d8 (S)	101 %		80-123	1		07/26/12 17:09	2037-26-5	
4-Bromofluorobenzene (S)	97 %		78-125	1		07/26/12 17:09	460-00-4	
1,2-Dichloroethane-d4 (S)	102 %		73-135	1		07/26/12 17:09	17060-07-0	

Percent Moisture

Analytical Method: ASTM D2974

Percent Moisture	21.9 %	0.50	1	08/03/12 00:00
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ANALYTICAL RESULTS

Project: KUHLMAN DIECASTING

Pace Project No.: 60125813

Sample: SB-9 12-14 **Lab ID: 60125813002** Collected: 07/18/12 16:48 Received: 07/25/12 08:30 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
OA2 GCS Analytical Method: OA2 Preparation Method: OA2								
Diesel Fuel	1980	mg/kg	24.9	1	07/27/12 00:00	07/31/12 00:53	68334-30-5	
Fuel Oil	ND	mg/kg	24.9	1	07/27/12 00:00	07/31/12 00:53	68553-00-4	
Jet Fuel	ND	mg/kg	24.9	1	07/27/12 00:00	07/31/12 00:53	94114-58-6	
Kerosene	ND	mg/kg	24.9	1	07/27/12 00:00	07/31/12 00:53	8008-20-6	
Mineral Spirits	ND	mg/kg	24.9	1	07/27/12 00:00	07/31/12 00:53	8030-30-6	
Motor Oil	153	mg/kg	24.9	1	07/27/12 00:00	07/31/12 00:53	64742-65-0	
Total Petroleum Hydrocarbons	ND	mg/kg	24.9	1	07/27/12 00:00	07/31/12 00:53		
Surrogates								
n-Tetracosane (S)	104	%	50-137	1	07/27/12 00:00	07/31/12 00:53	646-31-1	
p-Terphenyl (S)	87	%	41-129	1	07/27/12 00:00	07/31/12 00:53	92-94-4	
6010 MET ICP Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Antimony	2.3	mg/kg	1.2	1	07/31/12 17:10	08/06/12 14:57	7440-36-0	
Arsenic	5.8	mg/kg	1.2	1	07/31/12 17:10	08/06/12 14:57	7440-38-2	
Beryllium	0.81	mg/kg	0.12	1	07/31/12 17:10	08/07/12 09:56	7440-41-7	
Cadmium	ND	mg/kg	0.58	1	07/31/12 17:10	08/06/12 14:57	7440-43-9	
Chromium	342	mg/kg	0.58	1	07/31/12 17:10	08/06/12 14:57	7440-47-3	
Copper	284	mg/kg	1.2	1	07/31/12 17:10	08/06/12 14:57	7440-50-8	
Lead	17.7	mg/kg	0.58	1	07/31/12 17:10	08/06/12 14:57	7439-92-1	
Nickel	542	mg/kg	0.58	1	07/31/12 17:10	08/06/12 14:57	7440-02-0	
Selenium	ND	mg/kg	1.7	1	07/31/12 17:10	08/06/12 14:57	7782-49-2	
Silver	ND	mg/kg	0.81	1	07/31/12 17:10	08/06/12 14:57	7440-22-4	
Thallium	ND	mg/kg	2.3	1	07/31/12 17:10	08/06/12 14:57	7440-28-0	
Zinc	427	mg/kg	11.6	1	07/31/12 17:10	08/06/12 14:57	7440-66-6	
7471 Mercury Analytical Method: EPA 7471 Preparation Method: EPA 7471								
Mercury	0.031	mg/kg	0.016	1	08/04/12 09:00	08/04/12 13:19	7439-97-6	
8270 MSSV PAH by SIM Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546								
Acenaphthene	ND	ug/kg	4.2	1	07/26/12 00:00	07/27/12 16:10	83-32-9	
Acenaphthylene	66.6	ug/kg	4.2	1	07/26/12 00:00	07/27/12 16:10	208-96-8	
Anthracene	ND	ug/kg	4.2	1	07/26/12 00:00	07/27/12 16:10	120-12-7	
Benzo(a)anthracene	5.1	ug/kg	4.2	1	07/26/12 00:00	07/27/12 16:10	56-55-3	
Benzo(a)pyrene	4.8	ug/kg	4.2	1	07/26/12 00:00	07/27/12 16:10	50-32-8	
Benzo(b)fluoranthene	11.4	ug/kg	4.2	1	07/26/12 00:00	07/27/12 16:10	205-99-2	
Benzo(g,h,i)perylene	5.1	ug/kg	4.2	1	07/26/12 00:00	07/27/12 16:10	191-24-2	
Benzo(k)fluoranthene	4.5	ug/kg	4.2	1	07/26/12 00:00	07/27/12 16:10	207-08-9	
Chrysene	10.3	ug/kg	4.2	1	07/26/12 00:00	07/27/12 16:10	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	4.2	1	07/26/12 00:00	07/27/12 16:10	53-70-3	
Fluoranthene	9.7	ug/kg	4.2	1	07/26/12 00:00	07/27/12 16:10	206-44-0	
Fluorene	49.7	ug/kg	4.2	1	07/26/12 00:00	07/27/12 16:10	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	4.2	1	07/26/12 00:00	07/27/12 16:10	193-39-5	
Naphthalene	6.9	ug/kg	4.2	1	07/26/12 00:00	07/27/12 16:10	91-20-3	
Phenanthrene	30.7	ug/kg	4.2	1	07/26/12 00:00	07/27/12 16:10	85-01-8	
Pyrene	11.2	ug/kg	4.2	1	07/26/12 00:00	07/27/12 16:10	129-00-0	

ANALYTICAL RESULTS

Project: KUHLMAN DIECASTING

Pace Project No.: 60125813

Sample: SB-9 12-14 **Lab ID: 60125813002** Collected: 07/18/12 16:48 Received: 07/25/12 08:30 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by SIM Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546								
Surrogates								
Nitrobenzene-d5 (S)	103 %		35-121	1	07/26/12 00:00	07/27/12 16:10	4165-60-0	
2-Fluorobiphenyl (S)	114 %		41-120	1	07/26/12 00:00	07/27/12 16:10	321-60-8	
Terphenyl-d14 (S)	71 %		39-123	1	07/26/12 00:00	07/27/12 16:10	1718-51-0	
OA1 Volatile Pet. Hydrocarbons Analytical Method: OA1								
Gasoline Range Organics	1.8 mg/kg		1.3	1		07/30/12 20:22		
8260 MSV 5035A VOA Analytical Method: EPA 8260								
Acetone	224 ug/kg		25.2	1		07/30/12 20:22	67-64-1	
Benzene	ND ug/kg		6.3	1		07/30/12 20:22	71-43-2	
Bromobenzene	ND ug/kg		6.3	1		07/30/12 20:22	108-86-1	
Bromochloromethane	ND ug/kg		6.3	1		07/30/12 20:22	74-97-5	
Bromodichloromethane	ND ug/kg		6.3	1		07/30/12 20:22	75-27-4	
Bromoform	ND ug/kg		6.3	1		07/30/12 20:22	75-25-2	
Bromomethane	ND ug/kg		6.3	1		07/30/12 20:22	74-83-9	
2-Butanone (MEK)	27.8 ug/kg		12.6	1		07/30/12 20:22	78-93-3	
n-Butylbenzene	ND ug/kg		6.3	1		07/30/12 20:22	104-51-8	
sec-Butylbenzene	ND ug/kg		6.3	1		07/30/12 20:22	135-98-8	
tert-Butylbenzene	ND ug/kg		6.3	1		07/30/12 20:22	98-06-6	
Carbon disulfide	32.9 ug/kg		6.3	1		07/30/12 20:22	75-15-0	
Carbon tetrachloride	ND ug/kg		6.3	1		07/30/12 20:22	56-23-5	
Chlorobenzene	ND ug/kg		6.3	1		07/30/12 20:22	108-90-7	
Chloroethane	ND ug/kg		6.3	1		07/30/12 20:22	75-00-3	
Chloroform	ND ug/kg		6.3	1		07/30/12 20:22	67-66-3	
Chloromethane	ND ug/kg		6.3	1		07/30/12 20:22	74-87-3	
2-Chlorotoluene	ND ug/kg		6.3	1		07/30/12 20:22	95-49-8	
4-Chlorotoluene	ND ug/kg		6.3	1		07/30/12 20:22	106-43-4	
1,2-Dibromo-3-chloropropane	ND ug/kg		12.6	1		07/30/12 20:22	96-12-8	
Dibromochloromethane	ND ug/kg		6.3	1		07/30/12 20:22	124-48-1	
1,2-Dibromoethane (EDB)	ND ug/kg		6.3	1		07/30/12 20:22	106-93-4	
Dibromomethane	ND ug/kg		6.3	1		07/30/12 20:22	74-95-3	
1,2-Dichlorobenzene	ND ug/kg		6.3	1		07/30/12 20:22	95-50-1	
1,3-Dichlorobenzene	ND ug/kg		6.3	1		07/30/12 20:22	541-73-1	
1,4-Dichlorobenzene	ND ug/kg		6.3	1		07/30/12 20:22	106-46-7	
Dichlorodifluoromethane	ND ug/kg		6.3	1		07/30/12 20:22	75-71-8	
1,1-Dichloroethane	ND ug/kg		6.3	1		07/30/12 20:22	75-34-3	
1,2-Dichloroethane	ND ug/kg		6.3	1		07/30/12 20:22	107-06-2	
1,2-Dichloroethene (Total)	ND ug/kg		6.3	1		07/30/12 20:22	540-59-0	
1,1-Dichloroethene	ND ug/kg		6.3	1		07/30/12 20:22	75-35-4	
cis-1,2-Dichloroethene	ND ug/kg		6.3	1		07/30/12 20:22	156-59-2	
trans-1,2-Dichloroethene	ND ug/kg		6.3	1		07/30/12 20:22	156-60-5	
1,2-Dichloropropane	ND ug/kg		6.3	1		07/30/12 20:22	78-87-5	
1,3-Dichloropropane	ND ug/kg		6.3	1		07/30/12 20:22	142-28-9	
2,2-Dichloropropane	ND ug/kg		6.3	1		07/30/12 20:22	594-20-7	
1,1-Dichloropropene	ND ug/kg		6.3	1		07/30/12 20:22	563-58-6	

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ANALYTICAL RESULTS

Project: KUHLMAN DIECASTING

Pace Project No.: 60125813

Sample: **SB-9 12-14** Lab ID: **60125813002** Collected: 07/18/12 16:48 Received: 07/25/12 08:30 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035A VOA		Analytical Method: EPA 8260						
cis-1,3-Dichloropropene	ND	ug/kg	6.3	1		07/30/12 20:22	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/kg	6.3	1		07/30/12 20:22	10061-02-6	
Ethylbenzene	ND	ug/kg	6.3	1		07/30/12 20:22	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	6.3	1		07/30/12 20:22	87-68-3	
2-Hexanone	ND	ug/kg	25.2	1		07/30/12 20:22	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/kg	6.3	1		07/30/12 20:22	98-82-8	
p-Isopropyltoluene	ND	ug/kg	6.3	1		07/30/12 20:22	99-87-6	
Methylene chloride	ND	ug/kg	6.3	1		07/30/12 20:22	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	12.6	1		07/30/12 20:22	108-10-1	
Methyl-tert-butyl ether	ND	ug/kg	6.3	1		07/30/12 20:22	1634-04-4	
Naphthalene	ND	ug/kg	12.6	1		07/30/12 20:22	91-20-3	
n-Propylbenzene	ND	ug/kg	6.3	1		07/30/12 20:22	103-65-1	
Styrene	ND	ug/kg	6.3	1		07/30/12 20:22	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/kg	6.3	1		07/30/12 20:22	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	6.3	1		07/30/12 20:22	79-34-5	
Tetrachloroethene	ND	ug/kg	6.3	1		07/30/12 20:22	127-18-4	
Toluene	ND	ug/kg	6.3	1		07/30/12 20:22	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/kg	6.3	1		07/30/12 20:22	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/kg	6.3	1		07/30/12 20:22	120-82-1	
1,1,1-Trichloroethane	ND	ug/kg	6.3	1		07/30/12 20:22	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	6.3	1		07/30/12 20:22	79-00-5	
Trichloroethene	ND	ug/kg	6.3	1		07/30/12 20:22	79-01-6	
Trichlorofluoromethane	ND	ug/kg	6.3	1		07/30/12 20:22	75-69-4	
1,2,3-Trichloropropane	ND	ug/kg	6.3	1		07/30/12 20:22	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/kg	6.3	1		07/30/12 20:22	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/kg	6.3	1		07/30/12 20:22	108-67-8	
Vinyl chloride	ND	ug/kg	6.3	1		07/30/12 20:22	75-01-4	
Xylene (Total)	ND	ug/kg	6.3	1		07/30/12 20:22	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	105 %		78-122	1		07/30/12 20:22	1868-53-7	
Toluene-d8 (S)	98 %		80-123	1		07/30/12 20:22	2037-26-5	
4-Bromofluorobenzene (S)	100 %		78-125	1		07/30/12 20:22	460-00-4	
1,2-Dichloroethane-d4 (S)	118 %		73-135	1		07/30/12 20:22	17060-07-0	

Percent Moisture

Analytical Method: ASTM D2974

Percent Moisture	22.9 %	0.50	1	08/03/12 00:00
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ANALYTICAL RESULTS

Project: KUHLMAN DIECASTING

Pace Project No.: 60125813

Sample: SB-9 GW		Lab ID: 60125813003	Collected: 07/18/12 16:55	Received: 07/25/12 08:30	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
OA2 GCS		Analytical Method: OA2 Preparation Method: OA2						
Diesel Fuel	ND mg/L		0.40	1	07/25/12 00:00	07/27/12 10:47	68334-30-5	
Fuel Oil	ND mg/L		0.40	1	07/25/12 00:00	07/27/12 10:47	68553-00-4	
Jet Fuel	ND mg/L		0.40	1	07/25/12 00:00	07/27/12 10:47	94114-58-6	
Kerosene	ND mg/L		0.40	1	07/25/12 00:00	07/27/12 10:47	8008-20-6	
Mineral Spirits	ND mg/L		0.40	1	07/25/12 00:00	07/27/12 10:47	8030-30-6	
Motor Oil	ND mg/L		0.40	1	07/25/12 00:00	07/27/12 10:47	64742-65-0	
Total Petroleum Hydrocarbons	ND mg/L		0.40	1	07/25/12 00:00	07/27/12 10:47		
Surrogates								
p-Terphenyl (S)	59 %		20-122	1	07/25/12 00:00	07/27/12 10:47	92-94-4	
n-Tetracosane (S)	63 %		30-122	1	07/25/12 00:00	07/27/12 10:47	646-31-1	
6010 MET ICP		Analytical Method: EPA 6010 Preparation Method: EPA 3010						
Antimony	ND ug/L		10.0	1	07/27/12 14:15	07/31/12 14:26	7440-36-0	
Arsenic	77.3 ug/L		10.0	1	07/27/12 14:15	07/31/12 14:26	7440-38-2	
Beryllium	2.7 ug/L		1.0	1	07/27/12 14:15	07/31/12 14:26	7440-41-7	
Cadmium	29.0 ug/L		5.0	1	07/27/12 14:15	07/31/12 14:26	7440-43-9	
Chromium	152 ug/L		5.0	1	07/27/12 14:15	07/31/12 14:26	7440-47-3	
Copper	54.1 ug/L		10.0	1	07/27/12 14:15	07/31/12 14:26	7440-50-8	
Lead	101 ug/L		5.0	1	07/27/12 14:15	07/31/12 14:26	7439-92-1	
Nickel	136 ug/L		5.0	1	07/27/12 14:15	07/31/12 14:26	7440-02-0	
Selenium	ND ug/L		15.0	1	07/27/12 14:15	07/31/12 14:26	7782-49-2	
Silver	ND ug/L		7.0	1	07/27/12 14:15	07/31/12 14:26	7440-22-4	
Thallium	ND ug/L		20.0	1	07/27/12 14:15	07/31/12 14:26	7440-28-0	
Zinc	948 ug/L		50.0	1	07/27/12 14:15	07/31/12 14:26	7440-66-6	
6010 MET ICP, Dissolved		Analytical Method: EPA 6010 Preparation Method: EPA 3010						
Antimony, Dissolved	ND ug/L		10.0	1	07/27/12 10:30	07/30/12 13:56	7440-36-0	
Arsenic, Dissolved	17.6 ug/L		10.0	1	07/27/12 10:30	07/30/12 13:56	7440-38-2	
Beryllium, Dissolved	ND ug/L		1.0	1	07/27/12 10:30	07/30/12 13:56	7440-41-7	
Cadmium, Dissolved	ND ug/L		5.0	1	07/27/12 10:30	07/30/12 13:56	7440-43-9	
Chromium, Dissolved	ND ug/L		5.0	1	07/27/12 10:30	07/30/12 13:56	7440-47-3	
Copper, Dissolved	ND ug/L		10.0	1	07/27/12 10:30	07/30/12 13:56	7440-50-8	
Lead, Dissolved	ND ug/L		5.0	1	07/27/12 10:30	07/30/12 13:56	7439-92-1	
Nickel, Dissolved	ND ug/L		5.0	1	07/27/12 10:30	07/30/12 13:56	7440-02-0	
Selenium, Dissolved	ND ug/L		15.0	1	07/27/12 10:30	07/30/12 13:56	7782-49-2	
Silver, Dissolved	ND ug/L		7.0	1	07/27/12 10:30	07/30/12 13:56	7440-22-4	
Thallium, Dissolved	ND ug/L		20.0	1	07/27/12 10:30	07/30/12 13:56	7440-28-0	
Zinc, Dissolved	56.6 ug/L		50.0	1	07/27/12 10:30	07/30/12 13:56	7440-66-6	
7470 Mercury		Analytical Method: EPA 7470 Preparation Method: EPA 7470						
Mercury	0.30 ug/L		0.20	1	07/31/12 18:30	08/02/12 11:59	7439-97-6	
7470 Mercury, Dissolved		Analytical Method: EPA 7470 Preparation Method: EPA 7470						
Mercury, Dissolved	ND ug/L		0.20	1	08/01/12 06:30	08/03/12 11:49	7439-97-6	

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ANALYTICAL RESULTS

Project: KUHLMAN DIECASTING

Pace Project No.: 60125813

Sample: SB-9 GW		Lab ID: 60125813003	Collected: 07/18/12 16:55	Received: 07/25/12 08:30	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by SIM		Analytical Method: EPA 8270C by SIM Preparation Method: EPA 3510C						
Acenaphthene	ND ug/L		0.10	1	07/25/12 00:00	08/06/12 21:37	83-32-9	
Acenaphthylene	ND ug/L		0.10	1	07/25/12 00:00	08/06/12 21:37	208-96-8	
Anthracene	ND ug/L		0.10	1	07/25/12 00:00	08/06/12 21:37	120-12-7	
Benzo(a)anthracene	ND ug/L		0.10	1	07/25/12 00:00	08/06/12 21:37	56-55-3	
Benzo(a)pyrene	ND ug/L		0.10	1	07/25/12 00:00	08/06/12 21:37	50-32-8	
Benzo(b)fluoranthene	ND ug/L		0.10	1	07/25/12 00:00	08/06/12 21:37	205-99-2	
Benzo(g,h,i)perylene	ND ug/L		0.10	1	07/25/12 00:00	08/06/12 21:37	191-24-2	
Benzo(k)fluoranthene	ND ug/L		0.10	1	07/25/12 00:00	08/06/12 21:37	207-08-9	
Chrysene	ND ug/L		0.10	1	07/25/12 00:00	08/06/12 21:37	218-01-9	
Dibenz(a,h)anthracene	ND ug/L		0.10	1	07/25/12 00:00	08/06/12 21:37	53-70-3	
Fluoranthene	ND ug/L		0.10	1	07/25/12 00:00	08/06/12 21:37	206-44-0	
Fluorene	ND ug/L		0.10	1	07/25/12 00:00	08/06/12 21:37	86-73-7	
Indeno(1,2,3-cd)pyrene	ND ug/L		0.10	1	07/25/12 00:00	08/06/12 21:37	193-39-5	
Naphthalene	ND ug/L		0.50	1	07/25/12 00:00	08/06/12 21:37	91-20-3	
Phenanthrene	ND ug/L		0.50	1	07/25/12 00:00	08/06/12 21:37	85-01-8	
Pyrene	ND ug/L		0.10	1	07/25/12 00:00	08/06/12 21:37	129-00-0	
Surrogates								
Nitrobenzene-d5 (S)	80 %		42-120	1	07/25/12 00:00	08/06/12 21:37	4165-60-0	
2-Fluorobiphenyl (S)	78 %		44-120	1	07/25/12 00:00	08/06/12 21:37	321-60-8	
Terphenyl-d14 (S)	94 %		46-131	1	07/25/12 00:00	08/06/12 21:37	1718-51-0	
8260 MSV		Analytical Method: EPA 5030B/8260						
Acetone	ND ug/L		10.0	1		07/27/12 15:11	67-64-1	
Benzene	ND ug/L		1.0	1		07/27/12 15:11	71-43-2	
Bromobenzene	ND ug/L		1.0	1		07/27/12 15:11	108-86-1	
Bromochloromethane	ND ug/L		1.0	1		07/27/12 15:11	74-97-5	
Bromodichloromethane	ND ug/L		1.0	1		07/27/12 15:11	75-27-4	
Bromoform	ND ug/L		1.0	1		07/27/12 15:11	75-25-2	
Bromomethane	ND ug/L		5.0	1		07/27/12 15:11	74-83-9	
2-Butanone (MEK)	ND ug/L		10.0	1		07/27/12 15:11	78-93-3	
n-Butylbenzene	ND ug/L		1.0	1		07/27/12 15:11	104-51-8	
sec-Butylbenzene	ND ug/L		1.0	1		07/27/12 15:11	135-98-8	
tert-Butylbenzene	ND ug/L		1.0	1		07/27/12 15:11	98-06-6	
Carbon disulfide	ND ug/L		5.0	1		07/27/12 15:11	75-15-0	
Carbon tetrachloride	ND ug/L		1.0	1		07/27/12 15:11	56-23-5	
Chlorobenzene	ND ug/L		1.0	1		07/27/12 15:11	108-90-7	
Chloroethane	ND ug/L		1.0	1		07/27/12 15:11	75-00-3	
Chloroform	ND ug/L		1.0	1		07/27/12 15:11	67-66-3	
Chloromethane	ND ug/L		1.0	1		07/27/12 15:11	74-87-3	
2-Chlorotoluene	ND ug/L		1.0	1		07/27/12 15:11	95-49-8	
4-Chlorotoluene	ND ug/L		1.0	1		07/27/12 15:11	106-43-4	
1,2-Dibromo-3-chloropropane	ND ug/L		2.5	1		07/27/12 15:11	96-12-8	
Dibromochloromethane	ND ug/L		1.0	1		07/27/12 15:11	124-48-1	
1,2-Dibromoethane (EDB)	ND ug/L		1.0	1		07/27/12 15:11	106-93-4	
Dibromomethane	ND ug/L		1.0	1		07/27/12 15:11	74-95-3	
1,2-Dichlorobenzene	ND ug/L		1.0	1		07/27/12 15:11	95-50-1	
1,3-Dichlorobenzene	ND ug/L		1.0	1		07/27/12 15:11	541-73-1	

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ANALYTICAL RESULTS

Project: KUHLMAN DIECASTING

Pace Project No.: 60125813

Sample: SB-9 GW		Lab ID: 60125813003	Collected: 07/18/12 16:55	Received: 07/25/12 08:30	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV		Analytical Method: EPA 5030B/8260						
1,4-Dichlorobenzene	ND ug/L		1.0	1		07/27/12 15:11	106-46-7	
Dichlorodifluoromethane	ND ug/L		1.0	1		07/27/12 15:11	75-71-8	
1,1-Dichloroethane	ND ug/L		1.0	1		07/27/12 15:11	75-34-3	
1,2-Dichloroethane	ND ug/L		1.0	1		07/27/12 15:11	107-06-2	
1,2-Dichloroethene (Total)	ND ug/L		1.0	1		07/27/12 15:11	540-59-0	
1,1-Dichloroethene	ND ug/L		1.0	1		07/27/12 15:11	75-35-4	
cis-1,2-Dichloroethene	ND ug/L		1.0	1		07/27/12 15:11	156-59-2	
trans-1,2-Dichloroethene	ND ug/L		1.0	1		07/27/12 15:11	156-60-5	
1,2-Dichloropropane	ND ug/L		1.0	1		07/27/12 15:11	78-87-5	
1,3-Dichloropropane	ND ug/L		1.0	1		07/27/12 15:11	142-28-9	
2,2-Dichloropropane	ND ug/L		1.0	1		07/27/12 15:11	594-20-7	
1,1-Dichloropropene	ND ug/L		1.0	1		07/27/12 15:11	563-58-6	
cis-1,3-Dichloropropene	ND ug/L		1.0	1		07/27/12 15:11	10061-01-5	
trans-1,3-Dichloropropene	ND ug/L		1.0	1		07/27/12 15:11	10061-02-6	
Ethylbenzene	ND ug/L		1.0	1		07/27/12 15:11	100-41-4	
Hexachloro-1,3-butadiene	ND ug/L		1.0	1		07/27/12 15:11	87-68-3	
2-Hexanone	ND ug/L		10.0	1		07/27/12 15:11	591-78-6	
Isopropylbenzene (Cumene)	ND ug/L		1.0	1		07/27/12 15:11	98-82-8	
p-Isopropyltoluene	ND ug/L		1.0	1		07/27/12 15:11	99-87-6	
Methylene chloride	ND ug/L		1.0	1		07/27/12 15:11	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND ug/L		10.0	1		07/27/12 15:11	108-10-1	
Methyl-tert-butyl ether	ND ug/L		1.0	1		07/27/12 15:11	1634-04-4	
Naphthalene	ND ug/L		10.0	1		07/27/12 15:11	91-20-3	
n-Propylbenzene	ND ug/L		1.0	1		07/27/12 15:11	103-65-1	
Styrene	ND ug/L		1.0	1		07/27/12 15:11	100-42-5	
1,1,1,2-Tetrachloroethane	ND ug/L		1.0	1		07/27/12 15:11	630-20-6	
1,1,2,2-Tetrachloroethane	ND ug/L		1.0	1		07/27/12 15:11	79-34-5	
Tetrachloroethene	ND ug/L		1.0	1		07/27/12 15:11	127-18-4	
Toluene	ND ug/L		1.0	1		07/27/12 15:11	108-88-3	
1,2,3-Trichlorobenzene	ND ug/L		1.0	1		07/27/12 15:11	87-61-6	
1,2,4-Trichlorobenzene	ND ug/L		1.0	1		07/27/12 15:11	120-82-1	
1,1,1-Trichloroethane	ND ug/L		1.0	1		07/27/12 15:11	71-55-6	
1,1,2-Trichloroethane	ND ug/L		1.0	1		07/27/12 15:11	79-00-5	
Trichloroethene	ND ug/L		1.0	1		07/27/12 15:11	79-01-6	
Trichlorofluoromethane	ND ug/L		1.0	1		07/27/12 15:11	75-69-4	
1,2,3-Trichloropropane	ND ug/L		2.5	1		07/27/12 15:11	96-18-4	
1,2,4-Trimethylbenzene	ND ug/L		1.0	1		07/27/12 15:11	95-63-6	
1,3,5-Trimethylbenzene	ND ug/L		1.0	1		07/27/12 15:11	108-67-8	
Vinyl chloride	ND ug/L		1.0	1		07/27/12 15:11	75-01-4	
Xylene (Total)	ND ug/L		3.0	1		07/27/12 15:11	1330-20-7	
Surrogates								
4-Bromofluorobenzene (S)	103 %		80-120	1		07/27/12 15:11	460-00-4	
Dibromofluoromethane (S)	100 %		80-120	1		07/27/12 15:11	1868-53-7	
1,2-Dichloroethane-d4 (S)	91 %		80-120	1		07/27/12 15:11	17060-07-0	
Toluene-d8 (S)	100 %		80-120	1		07/27/12 15:11	2037-26-5	
Preservation pH	1.0		0.10	1		07/27/12 15:11		

ANALYTICAL RESULTS

Project: KUHLMAN DIECASTING

Pace Project No.: 60125813

Sample: SB-9 GW		Lab ID: 60125813003	Collected: 07/18/12 16:55	Received: 07/25/12 08:30	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260/OA1 UST, Water		Analytical Method: EPA 8260/OA1						
Gasoline Range Organics	ND mg/L		0.50	1		07/27/12 15:11		
Benzene	ND ug/L		1.0	1		07/27/12 15:11	71-43-2	
Toluene	ND ug/L		1.0	1		07/27/12 15:11	108-88-3	
Ethylbenzene	ND ug/L		1.0	1		07/27/12 15:11	100-41-4	
Xylene (Total)	ND ug/L		3.0	1		07/27/12 15:11	1330-20-7	
Methyl-tert-butyl ether	ND ug/L		1.0	1		07/27/12 15:11	1634-04-4	
Naphthalene	ND ug/L		10.0	1		07/27/12 15:11	91-20-3	
1,2-Dichloroethane	ND ug/L		1.0	1		07/27/12 15:11	107-06-2	
tert-Butyl Alcohol	ND ug/L		10.0	1		07/27/12 15:11	75-65-0	
Surrogates								
Dibromofluoromethane (S)	100 %		80-120	1		07/27/12 15:11	1868-53-7	
Toluene-d8 (S)	100 %		80-120	1		07/27/12 15:11	2037-26-5	
4-Bromofluorobenzene (S)	103 %		80-120	1		07/27/12 15:11	460-00-4	
1,2-Dichloroethane-d4 (S)	91 %		80-120	1		07/27/12 15:11	17060-07-0	
Preservation pH	1.0		0.10	1		07/27/12 15:11		

ANALYTICAL RESULTS

Project: KUHLMAN DIECASTING

Pace Project No.: 60125813

Sample: SB-10 12-14 **Lab ID: 60125813004** Collected: 07/19/12 09:40 Received: 07/25/12 08:30 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
OA2 GCS Analytical Method: OA2 Preparation Method: OA2								
Diesel Fuel	ND	mg/kg	24.1	1	07/27/12 00:00	07/31/12 01:04	68334-30-5	
Fuel Oil	ND	mg/kg	24.1	1	07/27/12 00:00	07/31/12 01:04	68553-00-4	
Jet Fuel	ND	mg/kg	24.1	1	07/27/12 00:00	07/31/12 01:04	94114-58-6	
Kerosene	ND	mg/kg	24.1	1	07/27/12 00:00	07/31/12 01:04	8008-20-6	
Mineral Spirits	ND	mg/kg	24.1	1	07/27/12 00:00	07/31/12 01:04	8030-30-6	
Motor Oil	ND	mg/kg	24.1	1	07/27/12 00:00	07/31/12 01:04	64742-65-0	
Total Petroleum Hydrocarbons	ND	mg/kg	24.1	1	07/27/12 00:00	07/31/12 01:04		
Surrogates								
n-Tetracosane (S)	101	%	50-137	1	07/27/12 00:00	07/31/12 01:04	646-31-1	
p-Terphenyl (S)	86	%	41-129	1	07/27/12 00:00	07/31/12 01:04	92-94-4	
6010 MET ICP Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Antimony	ND	mg/kg	1.0	1	07/31/12 17:10	08/06/12 14:59	7440-36-0	
Arsenic	4.3	mg/kg	1.0	1	07/31/12 17:10	08/06/12 14:59	7440-38-2	
Beryllium	0.82	mg/kg	0.10	1	07/31/12 17:10	08/07/12 09:58	7440-41-7	
Cadmium	ND	mg/kg	0.51	1	07/31/12 17:10	08/06/12 14:59	7440-43-9	
Chromium	14.6	mg/kg	0.51	1	07/31/12 17:10	08/06/12 14:59	7440-47-3	
Copper	13.2	mg/kg	1.0	1	07/31/12 17:10	08/06/12 14:59	7440-50-8	
Lead	11.3	mg/kg	0.51	1	07/31/12 17:10	08/06/12 14:59	7439-92-1	
Nickel	17.5	mg/kg	0.51	1	07/31/12 17:10	08/06/12 14:59	7440-02-0	
Selenium	ND	mg/kg	1.5	1	07/31/12 17:10	08/06/12 14:59	7782-49-2	
Silver	ND	mg/kg	0.72	1	07/31/12 17:10	08/06/12 14:59	7440-22-4	
Thallium	ND	mg/kg	2.1	1	07/31/12 17:10	08/06/12 14:59	7440-28-0	
Zinc	46.9	mg/kg	10.3	1	07/31/12 17:10	08/06/12 14:59	7440-66-6	
7471 Mercury Analytical Method: EPA 7471 Preparation Method: EPA 7471								
Mercury	ND	mg/kg	0.016	1	08/04/12 09:00	08/04/12 13:21	7439-97-6	
8270 MSSV PAH by SIM Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546								
Acenaphthene	ND	ug/kg	4.0	1	07/26/12 00:00	07/27/12 16:30	83-32-9	
Acenaphthylene	ND	ug/kg	4.0	1	07/26/12 00:00	07/27/12 16:30	208-96-8	
Anthracene	13.0	ug/kg	4.0	1	07/26/12 00:00	07/27/12 16:30	120-12-7	
Benzo(a)anthracene	73.8	ug/kg	4.0	1	07/26/12 00:00	07/27/12 16:30	56-55-3	
Benzo(a)pyrene	65.5	ug/kg	4.0	1	07/26/12 00:00	07/27/12 16:30	50-32-8	
Benzo(b)fluoranthene	78.1	ug/kg	4.0	1	07/26/12 00:00	07/27/12 16:30	205-99-2	
Benzo(g,h,i)perylene	38.1	ug/kg	4.0	1	07/26/12 00:00	07/27/12 16:30	191-24-2	
Benzo(k)fluoranthene	51.6	ug/kg	4.0	1	07/26/12 00:00	07/27/12 16:30	207-08-9	
Chrysene	69.0	ug/kg	4.0	1	07/26/12 00:00	07/27/12 16:30	218-01-9	
Dibenz(a,h)anthracene	15.1	ug/kg	4.0	1	07/26/12 00:00	07/27/12 16:30	53-70-3	
Fluoranthene	94.5	ug/kg	4.0	1	07/26/12 00:00	07/27/12 16:30	206-44-0	
Fluorene	ND	ug/kg	4.0	1	07/26/12 00:00	07/27/12 16:30	86-73-7	
Indeno(1,2,3-cd)pyrene	31.5	ug/kg	4.0	1	07/26/12 00:00	07/27/12 16:30	193-39-5	
Naphthalene	ND	ug/kg	4.0	1	07/26/12 00:00	07/27/12 16:30	91-20-3	
Phenanthrene	50.1	ug/kg	4.0	1	07/26/12 00:00	07/27/12 16:30	85-01-8	
Pyrene	78.9	ug/kg	4.0	1	07/26/12 00:00	07/27/12 16:30	129-00-0	

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ANALYTICAL RESULTS

Project: KUHLMAN DIECASTING

Pace Project No.: 60125813

Sample: SB-10 12-14 Lab ID: 60125813004 Collected: 07/19/12 09:40 Received: 07/25/12 08:30 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
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8270 MSSV PAH by SIM

Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546

Surrogates

Nitrobenzene-d5 (S)	85 %		35-121	1	07/26/12 00:00	07/27/12 16:30	4165-60-0	
2-Fluorobiphenyl (S)	80 %		41-120	1	07/26/12 00:00	07/27/12 16:30	321-60-8	
Terphenyl-d14 (S)	71 %		39-123	1	07/26/12 00:00	07/27/12 16:30	1718-51-0	

OA1 Volatile Pet. Hydrocarbons

Analytical Method: OA1

Gasoline Range Organics	ND mg/kg		1.0	1		07/26/12 17:40		
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8260 MSV 5035A VOA

Analytical Method: EPA 8260

Acetone	87.3 ug/kg		20.8	1		07/26/12 17:40	67-64-1	
Benzene	ND ug/kg		5.2	1		07/26/12 17:40	71-43-2	
Bromobenzene	ND ug/kg		5.2	1		07/26/12 17:40	108-86-1	
Bromochloromethane	ND ug/kg		5.2	1		07/26/12 17:40	74-97-5	
Bromodichloromethane	ND ug/kg		5.2	1		07/26/12 17:40	75-27-4	
Bromoform	ND ug/kg		5.2	1		07/26/12 17:40	75-25-2	
Bromomethane	ND ug/kg		5.2	1		07/26/12 17:40	74-83-9	
2-Butanone (MEK)	14.3 ug/kg		10.4	1		07/26/12 17:40	78-93-3	
n-Butylbenzene	ND ug/kg		5.2	1		07/26/12 17:40	104-51-8	
sec-Butylbenzene	ND ug/kg		5.2	1		07/26/12 17:40	135-98-8	
tert-Butylbenzene	ND ug/kg		5.2	1		07/26/12 17:40	98-06-6	
Carbon disulfide	ND ug/kg		5.2	1		07/26/12 17:40	75-15-0	
Carbon tetrachloride	ND ug/kg		5.2	1		07/26/12 17:40	56-23-5	
Chlorobenzene	ND ug/kg		5.2	1		07/26/12 17:40	108-90-7	
Chloroethane	ND ug/kg		5.2	1		07/26/12 17:40	75-00-3	
Chloroform	ND ug/kg		5.2	1		07/26/12 17:40	67-66-3	L2
Chloromethane	ND ug/kg		5.2	1		07/26/12 17:40	74-87-3	
2-Chlorotoluene	ND ug/kg		5.2	1		07/26/12 17:40	95-49-8	
4-Chlorotoluene	ND ug/kg		5.2	1		07/26/12 17:40	106-43-4	
1,2-Dibromo-3-chloropropane	ND ug/kg		10.4	1		07/26/12 17:40	96-12-8	
Dibromochloromethane	ND ug/kg		5.2	1		07/26/12 17:40	124-48-1	
1,2-Dibromoethane (EDB)	ND ug/kg		5.2	1		07/26/12 17:40	106-93-4	
Dibromomethane	ND ug/kg		5.2	1		07/26/12 17:40	74-95-3	
1,2-Dichlorobenzene	ND ug/kg		5.2	1		07/26/12 17:40	95-50-1	
1,3-Dichlorobenzene	ND ug/kg		5.2	1		07/26/12 17:40	541-73-1	
1,4-Dichlorobenzene	ND ug/kg		5.2	1		07/26/12 17:40	106-46-7	
Dichlorodifluoromethane	ND ug/kg		5.2	1		07/26/12 17:40	75-71-8	
1,1-Dichloroethane	ND ug/kg		5.2	1		07/26/12 17:40	75-34-3	
1,2-Dichloroethane	ND ug/kg		5.2	1		07/26/12 17:40	107-06-2	
1,2-Dichloroethene (Total)	ND ug/kg		5.2	1		07/26/12 17:40	540-59-0	
1,1-Dichloroethene	ND ug/kg		5.2	1		07/26/12 17:40	75-35-4	
cis-1,2-Dichloroethene	ND ug/kg		5.2	1		07/26/12 17:40	156-59-2	
trans-1,2-Dichloroethene	ND ug/kg		5.2	1		07/26/12 17:40	156-60-5	
1,2-Dichloropropane	ND ug/kg		5.2	1		07/26/12 17:40	78-87-5	
1,3-Dichloropropane	ND ug/kg		5.2	1		07/26/12 17:40	142-28-9	
2,2-Dichloropropane	ND ug/kg		5.2	1		07/26/12 17:40	594-20-7	
1,1-Dichloropropene	ND ug/kg		5.2	1		07/26/12 17:40	563-58-6	

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ANALYTICAL RESULTS

Project: KUHLMAN DIECASTING

Pace Project No.: 60125813

Sample: **SB-10 12-14** Lab ID: **60125813004** Collected: 07/19/12 09:40 Received: 07/25/12 08:30 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035A VOA		Analytical Method: EPA 8260						
cis-1,3-Dichloropropene	ND	ug/kg	5.2	1		07/26/12 17:40	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/kg	5.2	1		07/26/12 17:40	10061-02-6	
Ethylbenzene	ND	ug/kg	5.2	1		07/26/12 17:40	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	5.2	1		07/26/12 17:40	87-68-3	
2-Hexanone	ND	ug/kg	20.8	1		07/26/12 17:40	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/kg	5.2	1		07/26/12 17:40	98-82-8	
p-Isopropyltoluene	ND	ug/kg	5.2	1		07/26/12 17:40	99-87-6	
Methylene chloride	ND	ug/kg	5.2	1		07/26/12 17:40	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	10.4	1		07/26/12 17:40	108-10-1	
Methyl-tert-butyl ether	ND	ug/kg	5.2	1		07/26/12 17:40	1634-04-4	
Naphthalene	ND	ug/kg	10.4	1		07/26/12 17:40	91-20-3	
n-Propylbenzene	ND	ug/kg	5.2	1		07/26/12 17:40	103-65-1	
Styrene	ND	ug/kg	5.2	1		07/26/12 17:40	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/kg	5.2	1		07/26/12 17:40	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	5.2	1		07/26/12 17:40	79-34-5	
Tetrachloroethene	ND	ug/kg	5.2	1		07/26/12 17:40	127-18-4	
Toluene	ND	ug/kg	5.2	1		07/26/12 17:40	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/kg	5.2	1		07/26/12 17:40	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/kg	5.2	1		07/26/12 17:40	120-82-1	
1,1,1-Trichloroethane	ND	ug/kg	5.2	1		07/26/12 17:40	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	5.2	1		07/26/12 17:40	79-00-5	
Trichloroethene	ND	ug/kg	5.2	1		07/26/12 17:40	79-01-6	
Trichlorofluoromethane	ND	ug/kg	5.2	1		07/26/12 17:40	75-69-4	
1,2,3-Trichloropropane	ND	ug/kg	5.2	1		07/26/12 17:40	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/kg	5.2	1		07/26/12 17:40	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/kg	5.2	1		07/26/12 17:40	108-67-8	
Vinyl chloride	ND	ug/kg	5.2	1		07/26/12 17:40	75-01-4	
Xylene (Total)	ND	ug/kg	5.2	1		07/26/12 17:40	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	102 %		78-122	1		07/26/12 17:40	1868-53-7	
Toluene-d8 (S)	103 %		80-123	1		07/26/12 17:40	2037-26-5	
4-Bromofluorobenzene (S)	96 %		78-125	1		07/26/12 17:40	460-00-4	
1,2-Dichloroethane-d4 (S)	103 %		73-135	1		07/26/12 17:40	17060-07-0	

Percent Moisture

Analytical Method: ASTM D2974

Percent Moisture	17.4 %	0.50	1	08/03/12 00:00
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ANALYTICAL RESULTS

Project: KUHLMAN DIECASTING

Pace Project No.: 60125813

Sample: SB-11 17-19 Lab ID: 60125813005 Collected: 07/19/12 11:50 Received: 07/25/12 08:30 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
OA2 GCS Analytical Method: OA2 Preparation Method: OA2								
Diesel Fuel	ND	mg/kg	24.8	1	07/27/12 00:00	07/31/12 01:14	68334-30-5	
Fuel Oil	ND	mg/kg	24.8	1	07/27/12 00:00	07/31/12 01:14	68553-00-4	
Jet Fuel	ND	mg/kg	24.8	1	07/27/12 00:00	07/31/12 01:14	94114-58-6	
Kerosene	ND	mg/kg	24.8	1	07/27/12 00:00	07/31/12 01:14	8008-20-6	
Mineral Spirits	ND	mg/kg	24.8	1	07/27/12 00:00	07/31/12 01:14	8030-30-6	
Motor Oil	ND	mg/kg	24.8	1	07/27/12 00:00	07/31/12 01:14	64742-65-0	
Total Petroleum Hydrocarbons	1590	mg/kg	24.8	1	07/27/12 00:00	07/31/12 01:14		2e
Surrogates								
n-Tetracosane (S)	124	%	50-137	1	07/27/12 00:00	07/31/12 01:14	646-31-1	
p-Terphenyl (S)	110	%	41-129	1	07/27/12 00:00	07/31/12 01:14	92-94-4	
6010 MET ICP Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Antimony	ND	mg/kg	1.0	1	07/31/12 17:10	08/06/12 15:02	7440-36-0	
Arsenic	4.6	mg/kg	1.0	1	07/31/12 17:10	08/06/12 15:02	7440-38-2	
Beryllium	0.76	mg/kg	0.10	1	07/31/12 17:10	08/07/12 10:00	7440-41-7	
Cadmium	ND	mg/kg	0.51	1	07/31/12 17:10	08/06/12 15:02	7440-43-9	
Chromium	16.1	mg/kg	0.51	1	07/31/12 17:10	08/06/12 15:02	7440-47-3	
Copper	13.0	mg/kg	1.0	1	07/31/12 17:10	08/06/12 15:02	7440-50-8	
Lead	12.2	mg/kg	0.51	1	07/31/12 17:10	08/06/12 15:02	7439-92-1	
Nickel	13.1	mg/kg	0.51	1	07/31/12 17:10	08/06/12 15:02	7440-02-0	
Selenium	ND	mg/kg	1.5	1	07/31/12 17:10	08/06/12 15:02	7782-49-2	
Silver	ND	mg/kg	0.71	1	07/31/12 17:10	08/06/12 15:02	7440-22-4	
Thallium	ND	mg/kg	2.0	1	07/31/12 17:10	08/06/12 15:02	7440-28-0	
Zinc	54.0	mg/kg	10.1	1	07/31/12 17:10	08/06/12 15:02	7440-66-6	
7471 Mercury Analytical Method: EPA 7471 Preparation Method: EPA 7471								
Mercury	0.019	mg/kg	0.017	1	08/04/12 09:00	08/04/12 13:23	7439-97-6	
8270 MSSV PAH by SIM Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546								
Acenaphthene	18.0	ug/kg	4.2	1	07/26/12 00:00	07/27/12 16:50	83-32-9	
Acenaphthylene	6.3	ug/kg	4.2	1	07/26/12 00:00	07/27/12 16:50	208-96-8	
Anthracene	8.3	ug/kg	4.2	1	07/26/12 00:00	07/27/12 16:50	120-12-7	
Benzo(a)anthracene	ND	ug/kg	4.2	1	07/26/12 00:00	07/27/12 16:50	56-55-3	
Benzo(a)pyrene	ND	ug/kg	4.2	1	07/26/12 00:00	07/27/12 16:50	50-32-8	
Benzo(b)fluoranthene	5.1	ug/kg	4.2	1	07/26/12 00:00	07/27/12 16:50	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	4.2	1	07/26/12 00:00	07/27/12 16:50	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	4.2	1	07/26/12 00:00	07/27/12 16:50	207-08-9	
Chrysene	23.3	ug/kg	4.2	1	07/26/12 00:00	07/27/12 16:50	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	4.2	1	07/26/12 00:00	07/27/12 16:50	53-70-3	
Fluoranthene	7.2	ug/kg	4.2	1	07/26/12 00:00	07/27/12 16:50	206-44-0	
Fluorene	17.1	ug/kg	4.2	1	07/26/12 00:00	07/27/12 16:50	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	4.2	1	07/26/12 00:00	07/27/12 16:50	193-39-5	
Naphthalene	43.1	ug/kg	4.2	1	07/26/12 00:00	07/27/12 16:50	91-20-3	
Phenanthrene	13.0	ug/kg	4.2	1	07/26/12 00:00	07/27/12 16:50	85-01-8	
Pyrene	8.4	ug/kg	4.2	1	07/26/12 00:00	07/27/12 16:50	129-00-0	

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ANALYTICAL RESULTS

Project: KUHLMAN DIECASTING

Pace Project No.: 60125813

Sample: SB-11 17-19 **Lab ID: 60125813005** Collected: 07/19/12 11:50 Received: 07/25/12 08:30 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by SIM Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546								
Surrogates								
Nitrobenzene-d5 (S)	594 %		35-121	1	07/26/12 00:00	07/27/12 16:50	4165-60-0	1e
2-Fluorobiphenyl (S)	91 %		41-120	1	07/26/12 00:00	07/27/12 16:50	321-60-8	
Terphenyl-d14 (S)	69 %		39-123	1	07/26/12 00:00	07/27/12 16:50	1718-51-0	
OA1 Volatile Pet. Hydrocarbons Analytical Method: OA1								
Gasoline Range Organics	114 mg/kg		59.8	50		07/26/12 17:55		
8260 MSV 5035A VOA Analytical Method: EPA 8260								
Acetone	ND ug/kg		1200	50		07/26/12 17:55	67-64-1	
Benzene	ND ug/kg		299	50		07/26/12 17:55	71-43-2	
Bromobenzene	ND ug/kg		299	50		07/26/12 17:55	108-86-1	
Bromochloromethane	ND ug/kg		299	50		07/26/12 17:55	74-97-5	
Bromodichloromethane	ND ug/kg		299	50		07/26/12 17:55	75-27-4	
Bromoform	ND ug/kg		299	50		07/26/12 17:55	75-25-2	
Bromomethane	ND ug/kg		299	50		07/26/12 17:55	74-83-9	
2-Butanone (MEK)	ND ug/kg		598	50		07/26/12 17:55	78-93-3	
n-Butylbenzene	ND ug/kg		299	50		07/26/12 17:55	104-51-8	
sec-Butylbenzene	ND ug/kg		299	50		07/26/12 17:55	135-98-8	
tert-Butylbenzene	ND ug/kg		299	50		07/26/12 17:55	98-06-6	
Carbon disulfide	ND ug/kg		299	50		07/26/12 17:55	75-15-0	
Carbon tetrachloride	ND ug/kg		299	50		07/26/12 17:55	56-23-5	
Chlorobenzene	ND ug/kg		299	50		07/26/12 17:55	108-90-7	
Chloroethane	ND ug/kg		299	50		07/26/12 17:55	75-00-3	
Chloroform	ND ug/kg		299	50		07/26/12 17:55	67-66-3	L2
Chloromethane	ND ug/kg		299	50		07/26/12 17:55	74-87-3	
2-Chlorotoluene	ND ug/kg		299	50		07/26/12 17:55	95-49-8	
4-Chlorotoluene	ND ug/kg		299	50		07/26/12 17:55	106-43-4	
1,2-Dibromo-3-chloropropane	ND ug/kg		598	50		07/26/12 17:55	96-12-8	
Dibromochloromethane	ND ug/kg		299	50		07/26/12 17:55	124-48-1	
1,2-Dibromoethane (EDB)	ND ug/kg		299	50		07/26/12 17:55	106-93-4	
Dibromomethane	ND ug/kg		299	50		07/26/12 17:55	74-95-3	
1,2-Dichlorobenzene	ND ug/kg		299	50		07/26/12 17:55	95-50-1	
1,3-Dichlorobenzene	ND ug/kg		299	50		07/26/12 17:55	541-73-1	
1,4-Dichlorobenzene	ND ug/kg		299	50		07/26/12 17:55	106-46-7	
Dichlorodifluoromethane	ND ug/kg		299	50		07/26/12 17:55	75-71-8	
1,1-Dichloroethane	ND ug/kg		299	50		07/26/12 17:55	75-34-3	
1,2-Dichloroethane	ND ug/kg		299	50		07/26/12 17:55	107-06-2	
1,2-Dichloroethene (Total)	ND ug/kg		299	50		07/26/12 17:55	540-59-0	
1,1-Dichloroethene	ND ug/kg		299	50		07/26/12 17:55	75-35-4	
cis-1,2-Dichloroethene	ND ug/kg		299	50		07/26/12 17:55	156-59-2	
trans-1,2-Dichloroethene	ND ug/kg		299	50		07/26/12 17:55	156-60-5	
1,2-Dichloropropane	ND ug/kg		299	50		07/26/12 17:55	78-87-5	
1,3-Dichloropropane	ND ug/kg		299	50		07/26/12 17:55	142-28-9	
2,2-Dichloropropane	ND ug/kg		299	50		07/26/12 17:55	594-20-7	
1,1-Dichloropropene	ND ug/kg		299	50		07/26/12 17:55	563-58-6	

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ANALYTICAL RESULTS

Project: KUHLMAN DIECASTING

Pace Project No.: 60125813

Sample: SB-11 17-19 **Lab ID: 60125813005** Collected: 07/19/12 11:50 Received: 07/25/12 08:30 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035A VOA		Analytical Method: EPA 8260						
cis-1,3-Dichloropropene	ND	ug/kg	299	50		07/26/12 17:55	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/kg	299	50		07/26/12 17:55	10061-02-6	
Ethylbenzene	ND	ug/kg	299	50		07/26/12 17:55	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	299	50		07/26/12 17:55	87-68-3	
2-Hexanone	ND	ug/kg	1200	50		07/26/12 17:55	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/kg	299	50		07/26/12 17:55	98-82-8	
p-Isopropyltoluene	ND	ug/kg	299	50		07/26/12 17:55	99-87-6	
Methylene chloride	ND	ug/kg	299	50		07/26/12 17:55	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	598	50		07/26/12 17:55	108-10-1	
Methyl-tert-butyl ether	ND	ug/kg	299	50		07/26/12 17:55	1634-04-4	
Naphthalene	ND	ug/kg	598	50		07/26/12 17:55	91-20-3	
n-Propylbenzene	ND	ug/kg	299	50		07/26/12 17:55	103-65-1	
Styrene	ND	ug/kg	299	50		07/26/12 17:55	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/kg	299	50		07/26/12 17:55	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	299	50		07/26/12 17:55	79-34-5	
Tetrachloroethene	ND	ug/kg	299	50		07/26/12 17:55	127-18-4	
Toluene	ND	ug/kg	299	50		07/26/12 17:55	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/kg	299	50		07/26/12 17:55	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/kg	299	50		07/26/12 17:55	120-82-1	
1,1,1-Trichloroethane	ND	ug/kg	299	50		07/26/12 17:55	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	299	50		07/26/12 17:55	79-00-5	
Trichloroethene	ND	ug/kg	299	50		07/26/12 17:55	79-01-6	
Trichlorofluoromethane	ND	ug/kg	299	50		07/26/12 17:55	75-69-4	
1,2,3-Trichloropropane	ND	ug/kg	299	50		07/26/12 17:55	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/kg	299	50		07/26/12 17:55	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/kg	299	50		07/26/12 17:55	108-67-8	
Vinyl chloride	ND	ug/kg	299	50		07/26/12 17:55	75-01-4	
Xylene (Total)	ND	ug/kg	299	50		07/26/12 17:55	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	96 %		78-122	50		07/26/12 17:55	1868-53-7	D3
Toluene-d8 (S)	103 %		80-123	50		07/26/12 17:55	2037-26-5	
4-Bromofluorobenzene (S)	94 %		78-125	50		07/26/12 17:55	460-00-4	
1,2-Dichloroethane-d4 (S)	91 %		73-135	50		07/26/12 17:55	17060-07-0	

Percent Moisture

Analytical Method: ASTM D2974

Percent Moisture	22.8 %	0.50	1	08/03/12 00:00
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ANALYTICAL RESULTS

Project: KUHLMAN DIECASTING

Pace Project No.: 60125813

Sample: SB-14 8-10 **Lab ID: 60125813006** Collected: 07/19/12 13:52 Received: 07/25/12 08:30 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
OA2 GCS Analytical Method: OA2 Preparation Method: OA2								
Diesel Fuel	ND	mg/kg	26.4	1	07/27/12 00:00	07/31/12 12:30	68334-30-5	
Fuel Oil	ND	mg/kg	26.4	1	07/27/12 00:00	07/31/12 12:30	68553-00-4	
Jet Fuel	ND	mg/kg	26.4	1	07/27/12 00:00	07/31/12 12:30	94114-58-6	
Kerosene	ND	mg/kg	26.4	1	07/27/12 00:00	07/31/12 12:30	8008-20-6	
Mineral Spirits	ND	mg/kg	26.4	1	07/27/12 00:00	07/31/12 12:30	8030-30-6	
Motor Oil	ND	mg/kg	26.4	1	07/27/12 00:00	07/31/12 12:30	64742-65-0	
Total Petroleum Hydrocarbons	ND	mg/kg	26.4	1	07/27/12 00:00	07/31/12 12:30		
Surrogates								
n-Tetracosane (S)	90	%	50-137	1	07/27/12 00:00	07/31/12 12:30	646-31-1	
p-Terphenyl (S)	76	%	41-129	1	07/27/12 00:00	07/31/12 12:30	92-94-4	
6010 MET ICP Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Antimony	ND	mg/kg	1.1	1	07/31/12 17:10	08/06/12 15:04	7440-36-0	
Arsenic	5.3	mg/kg	1.1	1	07/31/12 17:10	08/06/12 15:04	7440-38-2	
Beryllium	0.54	mg/kg	0.11	1	07/31/12 17:10	08/07/12 10:02	7440-41-7	
Cadmium	ND	mg/kg	0.56	1	07/31/12 17:10	08/06/12 15:04	7440-43-9	
Chromium	12.0	mg/kg	0.56	1	07/31/12 17:10	08/06/12 15:04	7440-47-3	
Copper	11.6	mg/kg	1.1	1	07/31/12 17:10	08/06/12 15:04	7440-50-8	
Lead	17.0	mg/kg	0.56	1	07/31/12 17:10	08/06/12 15:04	7439-92-1	
Nickel	13.7	mg/kg	0.56	1	07/31/12 17:10	08/06/12 15:04	7440-02-0	
Selenium	ND	mg/kg	1.7	1	07/31/12 17:10	08/06/12 15:04	7782-49-2	
Silver	ND	mg/kg	0.79	1	07/31/12 17:10	08/06/12 15:04	7440-22-4	
Thallium	ND	mg/kg	2.2	1	07/31/12 17:10	08/06/12 15:04	7440-28-0	
Zinc	85.8	mg/kg	11.2	1	07/31/12 17:10	08/06/12 15:04	7440-66-6	
7471 Mercury Analytical Method: EPA 7471 Preparation Method: EPA 7471								
Mercury	0.57	mg/kg	0.091	5	08/04/12 09:00	08/04/12 16:41	7439-97-6	
8270 MSSV PAH by SIM Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546								
Acenaphthene	ND	ug/kg	4.3	1	07/26/12 00:00	07/27/12 17:10	83-32-9	
Acenaphthylene	ND	ug/kg	4.3	1	07/26/12 00:00	07/27/12 17:10	208-96-8	
Anthracene	ND	ug/kg	4.3	1	07/26/12 00:00	07/27/12 17:10	120-12-7	
Benzo(a)anthracene	14.2	ug/kg	4.3	1	07/26/12 00:00	07/27/12 17:10	56-55-3	
Benzo(a)pyrene	13.8	ug/kg	4.3	1	07/26/12 00:00	07/27/12 17:10	50-32-8	
Benzo(b)fluoranthene	16.9	ug/kg	4.3	1	07/26/12 00:00	07/27/12 17:10	205-99-2	
Benzo(g,h,i)perylene	10.9	ug/kg	4.3	1	07/26/12 00:00	07/27/12 17:10	191-24-2	
Benzo(k)fluoranthene	10.9	ug/kg	4.3	1	07/26/12 00:00	07/27/12 17:10	207-08-9	
Chrysene	15.1	ug/kg	4.3	1	07/26/12 00:00	07/27/12 17:10	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	4.3	1	07/26/12 00:00	07/27/12 17:10	53-70-3	
Fluoranthene	17.1	ug/kg	4.3	1	07/26/12 00:00	07/27/12 17:10	206-44-0	
Fluorene	ND	ug/kg	4.3	1	07/26/12 00:00	07/27/12 17:10	86-73-7	
Indeno(1,2,3-cd)pyrene	7.4	ug/kg	4.3	1	07/26/12 00:00	07/27/12 17:10	193-39-5	
Naphthalene	7.4	ug/kg	4.3	1	07/26/12 00:00	07/27/12 17:10	91-20-3	
Phenanthrene	40.7	ug/kg	4.3	1	07/26/12 00:00	07/27/12 17:10	85-01-8	
Pyrene	17.8	ug/kg	4.3	1	07/26/12 00:00	07/27/12 17:10	129-00-0	

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ANALYTICAL RESULTS

Project: KUHLMAN DIECASTING

Pace Project No.: 60125813

Sample: SB-14 8-10 **Lab ID: 60125813006** Collected: 07/19/12 13:52 Received: 07/25/12 08:30 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by SIM Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546								
Surrogates								
Nitrobenzene-d5 (S)	85 %		35-121	1	07/26/12 00:00	07/27/12 17:10	4165-60-0	
2-Fluorobiphenyl (S)	67 %		41-120	1	07/26/12 00:00	07/27/12 17:10	321-60-8	
Terphenyl-d14 (S)	59 %		39-123	1	07/26/12 00:00	07/27/12 17:10	1718-51-0	
OA1 Volatile Pet. Hydrocarbons Analytical Method: OA1								
Gasoline Range Organics	ND mg/kg		1.3	1		07/26/12 18:10		
8260 MSV 5035A VOA Analytical Method: EPA 8260								
Acetone	ND ug/kg		26.0	1		07/26/12 18:10	67-64-1	
Benzene	ND ug/kg		6.5	1		07/26/12 18:10	71-43-2	
Bromobenzene	ND ug/kg		6.5	1		07/26/12 18:10	108-86-1	
Bromochloromethane	ND ug/kg		6.5	1		07/26/12 18:10	74-97-5	
Bromodichloromethane	ND ug/kg		6.5	1		07/26/12 18:10	75-27-4	
Bromoform	ND ug/kg		6.5	1		07/26/12 18:10	75-25-2	
Bromomethane	ND ug/kg		6.5	1		07/26/12 18:10	74-83-9	
2-Butanone (MEK)	ND ug/kg		13.0	1		07/26/12 18:10	78-93-3	
n-Butylbenzene	ND ug/kg		6.5	1		07/26/12 18:10	104-51-8	
sec-Butylbenzene	ND ug/kg		6.5	1		07/26/12 18:10	135-98-8	
tert-Butylbenzene	ND ug/kg		6.5	1		07/26/12 18:10	98-06-6	
Carbon disulfide	ND ug/kg		6.5	1		07/26/12 18:10	75-15-0	
Carbon tetrachloride	ND ug/kg		6.5	1		07/26/12 18:10	56-23-5	
Chlorobenzene	ND ug/kg		6.5	1		07/26/12 18:10	108-90-7	
Chloroethane	ND ug/kg		6.5	1		07/26/12 18:10	75-00-3	
Chloroform	ND ug/kg		6.5	1		07/26/12 18:10	67-66-3	L2
Chloromethane	ND ug/kg		6.5	1		07/26/12 18:10	74-87-3	
2-Chlorotoluene	ND ug/kg		6.5	1		07/26/12 18:10	95-49-8	
4-Chlorotoluene	ND ug/kg		6.5	1		07/26/12 18:10	106-43-4	
1,2-Dibromo-3-chloropropane	ND ug/kg		13.0	1		07/26/12 18:10	96-12-8	
Dibromochloromethane	ND ug/kg		6.5	1		07/26/12 18:10	124-48-1	
1,2-Dibromoethane (EDB)	ND ug/kg		6.5	1		07/26/12 18:10	106-93-4	
Dibromomethane	ND ug/kg		6.5	1		07/26/12 18:10	74-95-3	
1,2-Dichlorobenzene	ND ug/kg		6.5	1		07/26/12 18:10	95-50-1	
1,3-Dichlorobenzene	ND ug/kg		6.5	1		07/26/12 18:10	541-73-1	
1,4-Dichlorobenzene	ND ug/kg		6.5	1		07/26/12 18:10	106-46-7	
Dichlorodifluoromethane	ND ug/kg		6.5	1		07/26/12 18:10	75-71-8	
1,1-Dichloroethane	ND ug/kg		6.5	1		07/26/12 18:10	75-34-3	
1,2-Dichloroethane	ND ug/kg		6.5	1		07/26/12 18:10	107-06-2	
1,2-Dichloroethene (Total)	ND ug/kg		6.5	1		07/26/12 18:10	540-59-0	
1,1-Dichloroethene	ND ug/kg		6.5	1		07/26/12 18:10	75-35-4	
cis-1,2-Dichloroethene	ND ug/kg		6.5	1		07/26/12 18:10	156-59-2	
trans-1,2-Dichloroethene	ND ug/kg		6.5	1		07/26/12 18:10	156-60-5	
1,2-Dichloropropane	ND ug/kg		6.5	1		07/26/12 18:10	78-87-5	
1,3-Dichloropropane	ND ug/kg		6.5	1		07/26/12 18:10	142-28-9	
2,2-Dichloropropane	ND ug/kg		6.5	1		07/26/12 18:10	594-20-7	
1,1-Dichloropropene	ND ug/kg		6.5	1		07/26/12 18:10	563-58-6	

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ANALYTICAL RESULTS

Project: KUHLMAN DIECASTING

Pace Project No.: 60125813

Sample: SB-14 8-10 **Lab ID: 60125813006** Collected: 07/19/12 13:52 Received: 07/25/12 08:30 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035A VOA		Analytical Method: EPA 8260						
cis-1,3-Dichloropropene	ND	ug/kg	6.5	1		07/26/12 18:10	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/kg	6.5	1		07/26/12 18:10	10061-02-6	
Ethylbenzene	ND	ug/kg	6.5	1		07/26/12 18:10	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	6.5	1		07/26/12 18:10	87-68-3	
2-Hexanone	ND	ug/kg	26.0	1		07/26/12 18:10	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/kg	6.5	1		07/26/12 18:10	98-82-8	
p-Isopropyltoluene	ND	ug/kg	6.5	1		07/26/12 18:10	99-87-6	
Methylene chloride	ND	ug/kg	6.5	1		07/26/12 18:10	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	13.0	1		07/26/12 18:10	108-10-1	
Methyl-tert-butyl ether	ND	ug/kg	6.5	1		07/26/12 18:10	1634-04-4	
Naphthalene	ND	ug/kg	13.0	1		07/26/12 18:10	91-20-3	
n-Propylbenzene	ND	ug/kg	6.5	1		07/26/12 18:10	103-65-1	
Styrene	ND	ug/kg	6.5	1		07/26/12 18:10	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/kg	6.5	1		07/26/12 18:10	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	6.5	1		07/26/12 18:10	79-34-5	
Tetrachloroethene	ND	ug/kg	6.5	1		07/26/12 18:10	127-18-4	
Toluene	ND	ug/kg	6.5	1		07/26/12 18:10	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/kg	6.5	1		07/26/12 18:10	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/kg	6.5	1		07/26/12 18:10	120-82-1	
1,1,1-Trichloroethane	ND	ug/kg	6.5	1		07/26/12 18:10	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	6.5	1		07/26/12 18:10	79-00-5	
Trichloroethene	ND	ug/kg	6.5	1		07/26/12 18:10	79-01-6	
Trichlorofluoromethane	ND	ug/kg	6.5	1		07/26/12 18:10	75-69-4	
1,2,3-Trichloropropane	ND	ug/kg	6.5	1		07/26/12 18:10	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/kg	6.5	1		07/26/12 18:10	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/kg	6.5	1		07/26/12 18:10	108-67-8	
Vinyl chloride	ND	ug/kg	6.5	1		07/26/12 18:10	75-01-4	
Xylene (Total)	ND	ug/kg	6.5	1		07/26/12 18:10	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	91 %		78-122	1		07/26/12 18:10	1868-53-7	
Toluene-d8 (S)	101 %		80-123	1		07/26/12 18:10	2037-26-5	
4-Bromofluorobenzene (S)	98 %		78-125	1		07/26/12 18:10	460-00-4	
1,2-Dichloroethane-d4 (S)	104 %		73-135	1		07/26/12 18:10	17060-07-0	

Percent Moisture

Analytical Method: ASTM D2974

Percent Moisture	24.7 %	0.50	1	08/03/12 00:00
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ANALYTICAL RESULTS

Project: KUHLMAN DIECASTING

Pace Project No.: 60125813

Sample: **SB-17 10-12** Lab ID: **60125813007** Collected: 07/19/12 15:10 Received: 07/25/12 08:30 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
OA2 GCS Analytical Method: OA2 Preparation Method: OA2								
Diesel Fuel	ND	mg/kg	24.5	1	07/27/12 00:00	07/31/12 01:36	68334-30-5	
Fuel Oil	ND	mg/kg	24.5	1	07/27/12 00:00	07/31/12 01:36	68553-00-4	
Jet Fuel	ND	mg/kg	24.5	1	07/27/12 00:00	07/31/12 01:36	94114-58-6	
Kerosene	ND	mg/kg	24.5	1	07/27/12 00:00	07/31/12 01:36	8008-20-6	
Mineral Spirits	ND	mg/kg	24.5	1	07/27/12 00:00	07/31/12 01:36	8030-30-6	
Motor Oil	ND	mg/kg	24.5	1	07/27/12 00:00	07/31/12 01:36	64742-65-0	
Total Petroleum Hydrocarbons	ND	mg/kg	24.5	1	07/27/12 00:00	07/31/12 01:36		

Surrogates

n-Tetracosane (S)	97 %		50-137	1	07/27/12 00:00	07/31/12 01:36	646-31-1	
p-Terphenyl (S)	81 %		41-129	1	07/27/12 00:00	07/31/12 01:36	92-94-4	

6010 MET ICP

Analytical Method: EPA 6010 Preparation Method: EPA 3050

Antimony	ND	mg/kg	1.1	1	07/31/12 17:10	08/06/12 15:06	7440-36-0	
Arsenic	5.3	mg/kg	1.1	1	07/31/12 17:10	08/06/12 15:06	7440-38-2	
Beryllium	0.81	mg/kg	0.11	1	07/31/12 17:10	08/07/12 10:04	7440-41-7	
Cadmium	ND	mg/kg	0.54	1	07/31/12 17:10	08/06/12 15:06	7440-43-9	
Chromium	14.0	mg/kg	0.54	1	07/31/12 17:10	08/06/12 15:06	7440-47-3	
Copper	13.2	mg/kg	1.1	1	07/31/12 17:10	08/06/12 15:06	7440-50-8	
Lead	10.3	mg/kg	0.54	1	07/31/12 17:10	08/06/12 15:06	7439-92-1	
Nickel	17.0	mg/kg	0.54	1	07/31/12 17:10	08/06/12 15:06	7440-02-0	
Selenium	ND	mg/kg	1.6	1	07/31/12 17:10	08/06/12 15:06	7782-49-2	
Silver	ND	mg/kg	0.75	1	07/31/12 17:10	08/06/12 15:06	7440-22-4	
Thallium	ND	mg/kg	2.1	1	07/31/12 17:10	08/06/12 15:06	7440-28-0	
Zinc	51.6	mg/kg	10.7	1	07/31/12 17:10	08/06/12 15:06	7440-66-6	

7471 Mercury

Analytical Method: EPA 7471 Preparation Method: EPA 7471

Mercury	0.017	mg/kg	0.016	1	08/04/12 09:00	08/04/12 13:27	7439-97-6	
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8270 MSSV PAH by SIM

Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546

Acenaphthene	ND	ug/kg	4.2	1	07/26/12 00:00	07/27/12 17:31	83-32-9	
Acenaphthylene	ND	ug/kg	4.2	1	07/26/12 00:00	07/27/12 17:31	208-96-8	
Anthracene	ND	ug/kg	4.2	1	07/26/12 00:00	07/27/12 17:31	120-12-7	
Benzo(a)anthracene	ND	ug/kg	4.2	1	07/26/12 00:00	07/27/12 17:31	56-55-3	
Benzo(a)pyrene	ND	ug/kg	4.2	1	07/26/12 00:00	07/27/12 17:31	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	4.2	1	07/26/12 00:00	07/27/12 17:31	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	4.2	1	07/26/12 00:00	07/27/12 17:31	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	4.2	1	07/26/12 00:00	07/27/12 17:31	207-08-9	
Chrysene	ND	ug/kg	4.2	1	07/26/12 00:00	07/27/12 17:31	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	4.2	1	07/26/12 00:00	07/27/12 17:31	53-70-3	
Fluoranthene	ND	ug/kg	4.2	1	07/26/12 00:00	07/27/12 17:31	206-44-0	
Fluorene	ND	ug/kg	4.2	1	07/26/12 00:00	07/27/12 17:31	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	4.2	1	07/26/12 00:00	07/27/12 17:31	193-39-5	
Naphthalene	13.0	ug/kg	4.2	1	07/26/12 00:00	07/27/12 17:31	91-20-3	
Phenanthrene	ND	ug/kg	4.2	1	07/26/12 00:00	07/27/12 17:31	85-01-8	
Pyrene	ND	ug/kg	4.2	1	07/26/12 00:00	07/27/12 17:31	129-00-0	

ANALYTICAL RESULTS

Project: KUHLMAN DIECASTING

Pace Project No.: 60125813

Sample: **SB-17 10-12** Lab ID: **60125813007** Collected: 07/19/12 15:10 Received: 07/25/12 08:30 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
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8270 MSSV PAH by SIM

Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546

Surrogates

Nitrobenzene-d5 (S)	93 %		35-121	1	07/26/12 00:00	07/27/12 17:31	4165-60-0	
2-Fluorobiphenyl (S)	81 %		41-120	1	07/26/12 00:00	07/27/12 17:31	321-60-8	
Terphenyl-d14 (S)	70 %		39-123	1	07/26/12 00:00	07/27/12 17:31	1718-51-0	

OA1 Volatile Pet. Hydrocarbons

Analytical Method: OA1

Gasoline Range Organics	ND mg/kg		1.1	1		07/26/12 18:25		
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8260 MSV 5035A VOA

Analytical Method: EPA 8260

Acetone	88.8 ug/kg		22.1	1		07/26/12 18:25	67-64-1	
Benzene	ND ug/kg		5.5	1		07/26/12 18:25	71-43-2	
Bromobenzene	ND ug/kg		5.5	1		07/26/12 18:25	108-86-1	
Bromochloromethane	ND ug/kg		5.5	1		07/26/12 18:25	74-97-5	
Bromodichloromethane	ND ug/kg		5.5	1		07/26/12 18:25	75-27-4	
Bromoform	ND ug/kg		5.5	1		07/26/12 18:25	75-25-2	
Bromomethane	ND ug/kg		5.5	1		07/26/12 18:25	74-83-9	
2-Butanone (MEK)	20.8 ug/kg		11.0	1		07/26/12 18:25	78-93-3	
n-Butylbenzene	ND ug/kg		5.5	1		07/26/12 18:25	104-51-8	
sec-Butylbenzene	ND ug/kg		5.5	1		07/26/12 18:25	135-98-8	
tert-Butylbenzene	ND ug/kg		5.5	1		07/26/12 18:25	98-06-6	
Carbon disulfide	ND ug/kg		5.5	1		07/26/12 18:25	75-15-0	
Carbon tetrachloride	ND ug/kg		5.5	1		07/26/12 18:25	56-23-5	
Chlorobenzene	ND ug/kg		5.5	1		07/26/12 18:25	108-90-7	
Chloroethane	ND ug/kg		5.5	1		07/26/12 18:25	75-00-3	
Chloroform	ND ug/kg		5.5	1		07/26/12 18:25	67-66-3	L2
Chloromethane	ND ug/kg		5.5	1		07/26/12 18:25	74-87-3	
2-Chlorotoluene	ND ug/kg		5.5	1		07/26/12 18:25	95-49-8	
4-Chlorotoluene	ND ug/kg		5.5	1		07/26/12 18:25	106-43-4	
1,2-Dibromo-3-chloropropane	ND ug/kg		11.0	1		07/26/12 18:25	96-12-8	
Dibromochloromethane	ND ug/kg		5.5	1		07/26/12 18:25	124-48-1	
1,2-Dibromoethane (EDB)	ND ug/kg		5.5	1		07/26/12 18:25	106-93-4	
Dibromomethane	ND ug/kg		5.5	1		07/26/12 18:25	74-95-3	
1,2-Dichlorobenzene	ND ug/kg		5.5	1		07/26/12 18:25	95-50-1	
1,3-Dichlorobenzene	ND ug/kg		5.5	1		07/26/12 18:25	541-73-1	
1,4-Dichlorobenzene	ND ug/kg		5.5	1		07/26/12 18:25	106-46-7	
Dichlorodifluoromethane	ND ug/kg		5.5	1		07/26/12 18:25	75-71-8	
1,1-Dichloroethane	ND ug/kg		5.5	1		07/26/12 18:25	75-34-3	
1,2-Dichloroethane	ND ug/kg		5.5	1		07/26/12 18:25	107-06-2	
1,2-Dichloroethene (Total)	ND ug/kg		5.5	1		07/26/12 18:25	540-59-0	
1,1-Dichloroethene	ND ug/kg		5.5	1		07/26/12 18:25	75-35-4	
cis-1,2-Dichloroethene	ND ug/kg		5.5	1		07/26/12 18:25	156-59-2	
trans-1,2-Dichloroethene	ND ug/kg		5.5	1		07/26/12 18:25	156-60-5	
1,2-Dichloropropane	ND ug/kg		5.5	1		07/26/12 18:25	78-87-5	
1,3-Dichloropropane	ND ug/kg		5.5	1		07/26/12 18:25	142-28-9	
2,2-Dichloropropane	ND ug/kg		5.5	1		07/26/12 18:25	594-20-7	
1,1-Dichloropropene	ND ug/kg		5.5	1		07/26/12 18:25	563-58-6	

Date: 08/09/2012 11:06 AM

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: KUHLMAN DIECASTING

Pace Project No.: 60125813

Sample: **SB-17 10-12** Lab ID: **60125813007** Collected: 07/19/12 15:10 Received: 07/25/12 08:30 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035A VOA		Analytical Method: EPA 8260						
cis-1,3-Dichloropropene	ND	ug/kg	5.5	1		07/26/12 18:25	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/kg	5.5	1		07/26/12 18:25	10061-02-6	
Ethylbenzene	ND	ug/kg	5.5	1		07/26/12 18:25	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	5.5	1		07/26/12 18:25	87-68-3	
2-Hexanone	ND	ug/kg	22.1	1		07/26/12 18:25	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/kg	5.5	1		07/26/12 18:25	98-82-8	
p-Isopropyltoluene	ND	ug/kg	5.5	1		07/26/12 18:25	99-87-6	
Methylene chloride	ND	ug/kg	5.5	1		07/26/12 18:25	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	11.0	1		07/26/12 18:25	108-10-1	
Methyl-tert-butyl ether	ND	ug/kg	5.5	1		07/26/12 18:25	1634-04-4	
Naphthalene	ND	ug/kg	11.0	1		07/26/12 18:25	91-20-3	
n-Propylbenzene	ND	ug/kg	5.5	1		07/26/12 18:25	103-65-1	
Styrene	ND	ug/kg	5.5	1		07/26/12 18:25	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/kg	5.5	1		07/26/12 18:25	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	5.5	1		07/26/12 18:25	79-34-5	
Tetrachloroethene	ND	ug/kg	5.5	1		07/26/12 18:25	127-18-4	
Toluene	ND	ug/kg	5.5	1		07/26/12 18:25	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/kg	5.5	1		07/26/12 18:25	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/kg	5.5	1		07/26/12 18:25	120-82-1	
1,1,1-Trichloroethane	ND	ug/kg	5.5	1		07/26/12 18:25	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	5.5	1		07/26/12 18:25	79-00-5	
Trichloroethene	ND	ug/kg	5.5	1		07/26/12 18:25	79-01-6	
Trichlorofluoromethane	ND	ug/kg	5.5	1		07/26/12 18:25	75-69-4	
1,2,3-Trichloropropane	ND	ug/kg	5.5	1		07/26/12 18:25	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/kg	5.5	1		07/26/12 18:25	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/kg	5.5	1		07/26/12 18:25	108-67-8	
Vinyl chloride	ND	ug/kg	5.5	1		07/26/12 18:25	75-01-4	
Xylene (Total)	ND	ug/kg	5.5	1		07/26/12 18:25	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	102 %		78-122	1		07/26/12 18:25	1868-53-7	
Toluene-d8 (S)	101 %		80-123	1		07/26/12 18:25	2037-26-5	
4-Bromofluorobenzene (S)	98 %		78-125	1		07/26/12 18:25	460-00-4	
1,2-Dichloroethane-d4 (S)	109 %		73-135	1		07/26/12 18:25	17060-07-0	

Percent Moisture

Analytical Method: ASTM D2974

Percent Moisture	22.1 %	0.50	1	08/03/12 00:00
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ANALYTICAL RESULTS

Project: KUHLMAN DIECASTING

Pace Project No.: 60125813

Sample: SB-18 12-14 Lab ID: 60125813008 Collected: 07/20/12 09:08 Received: 07/25/12 08:30 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
OA2 GCS Analytical Method: OA2 Preparation Method: OA2								
Diesel Fuel	ND	mg/kg	25.2	1	07/27/12 00:00	07/31/12 01:46	68334-30-5	
Fuel Oil	ND	mg/kg	25.2	1	07/27/12 00:00	07/31/12 01:46	68553-00-4	
Jet Fuel	ND	mg/kg	25.2	1	07/27/12 00:00	07/31/12 01:46	94114-58-6	
Kerosene	ND	mg/kg	25.2	1	07/27/12 00:00	07/31/12 01:46	8008-20-6	
Mineral Spirits	ND	mg/kg	25.2	1	07/27/12 00:00	07/31/12 01:46	8030-30-6	
Motor Oil	ND	mg/kg	25.2	1	07/27/12 00:00	07/31/12 01:46	64742-65-0	
Total Petroleum Hydrocarbons	ND	mg/kg	25.2	1	07/27/12 00:00	07/31/12 01:46		
Surrogates								
n-Tetracosane (S)	98 %		50-137	1	07/27/12 00:00	07/31/12 01:46	646-31-1	
p-Terphenyl (S)	82 %		41-129	1	07/27/12 00:00	07/31/12 01:46	92-94-4	
6010 MET ICP Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Antimony	ND	mg/kg	1.1	1	07/31/12 17:10	08/06/12 15:08	7440-36-0	
Arsenic	4.9	mg/kg	1.1	1	07/31/12 17:10	08/06/12 15:08	7440-38-2	
Beryllium	0.77	mg/kg	0.11	1	07/31/12 17:10	08/07/12 10:06	7440-41-7	
Cadmium	ND	mg/kg	0.55	1	07/31/12 17:10	08/06/12 15:08	7440-43-9	
Chromium	14.6	mg/kg	0.55	1	07/31/12 17:10	08/06/12 15:08	7440-47-3	
Copper	12.3	mg/kg	1.1	1	07/31/12 17:10	08/06/12 15:08	7440-50-8	
Lead	12.2	mg/kg	0.55	1	07/31/12 17:10	08/06/12 15:08	7439-92-1	
Nickel	16.8	mg/kg	0.55	1	07/31/12 17:10	08/06/12 15:08	7440-02-0	
Selenium	ND	mg/kg	1.6	1	07/31/12 17:10	08/06/12 15:08	7782-49-2	
Silver	ND	mg/kg	0.77	1	07/31/12 17:10	08/06/12 15:08	7440-22-4	
Thallium	ND	mg/kg	2.2	1	07/31/12 17:10	08/06/12 15:08	7440-28-0	
Zinc	52.6	mg/kg	11.0	1	07/31/12 17:10	08/06/12 15:08	7440-66-6	
7471 Mercury Analytical Method: EPA 7471 Preparation Method: EPA 7471								
Mercury	ND	mg/kg	0.016	1	08/04/12 09:00	08/04/12 13:34	7439-97-6	
8270 MSSV PAH by SIM Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546								
Acenaphthene	ND	ug/kg	4.2	1	07/26/12 00:00	07/27/12 17:51	83-32-9	
Acenaphthylene	ND	ug/kg	4.2	1	07/26/12 00:00	07/27/12 17:51	208-96-8	
Anthracene	ND	ug/kg	4.2	1	07/26/12 00:00	07/27/12 17:51	120-12-7	
Benzo(a)anthracene	ND	ug/kg	4.2	1	07/26/12 00:00	07/27/12 17:51	56-55-3	
Benzo(a)pyrene	ND	ug/kg	4.2	1	07/26/12 00:00	07/27/12 17:51	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	4.2	1	07/26/12 00:00	07/27/12 17:51	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	4.2	1	07/26/12 00:00	07/27/12 17:51	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	4.2	1	07/26/12 00:00	07/27/12 17:51	207-08-9	
Chrysene	ND	ug/kg	4.2	1	07/26/12 00:00	07/27/12 17:51	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	4.2	1	07/26/12 00:00	07/27/12 17:51	53-70-3	
Fluoranthene	ND	ug/kg	4.2	1	07/26/12 00:00	07/27/12 17:51	206-44-0	
Fluorene	ND	ug/kg	4.2	1	07/26/12 00:00	07/27/12 17:51	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	4.2	1	07/26/12 00:00	07/27/12 17:51	193-39-5	
Naphthalene	ND	ug/kg	4.2	1	07/26/12 00:00	07/27/12 17:51	91-20-3	
Phenanthrene	ND	ug/kg	4.2	1	07/26/12 00:00	07/27/12 17:51	85-01-8	
Pyrene	ND	ug/kg	4.2	1	07/26/12 00:00	07/27/12 17:51	129-00-0	

ANALYTICAL RESULTS

Project: KUHLMAN DIECASTING

Pace Project No.: 60125813

Sample: SB-18 12-14 Lab ID: 60125813008 Collected: 07/20/12 09:08 Received: 07/25/12 08:30 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
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8270 MSSV PAH by SIM

Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546

Surrogates

Nitrobenzene-d5 (S)	81 %		35-121	1	07/26/12 00:00	07/27/12 17:51	4165-60-0	
2-Fluorobiphenyl (S)	78 %		41-120	1	07/26/12 00:00	07/27/12 17:51	321-60-8	
Terphenyl-d14 (S)	60 %		39-123	1	07/26/12 00:00	07/27/12 17:51	1718-51-0	

OA1 Volatile Pet. Hydrocarbons

Analytical Method: OA1

Gasoline Range Organics	ND mg/kg		1.1	1		07/30/12 20:07		
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8260 MSV 5035A VOA

Analytical Method: EPA 8260

Acetone	35.7 ug/kg		22.1	1		07/30/12 20:07	67-64-1	
Benzene	ND ug/kg		5.5	1		07/30/12 20:07	71-43-2	
Bromobenzene	ND ug/kg		5.5	1		07/30/12 20:07	108-86-1	
Bromochloromethane	ND ug/kg		5.5	1		07/30/12 20:07	74-97-5	
Bromodichloromethane	ND ug/kg		5.5	1		07/30/12 20:07	75-27-4	
Bromoform	ND ug/kg		5.5	1		07/30/12 20:07	75-25-2	
Bromomethane	ND ug/kg		5.5	1		07/30/12 20:07	74-83-9	
2-Butanone (MEK)	ND ug/kg		11.1	1		07/30/12 20:07	78-93-3	
n-Butylbenzene	ND ug/kg		5.5	1		07/30/12 20:07	104-51-8	
sec-Butylbenzene	ND ug/kg		5.5	1		07/30/12 20:07	135-98-8	
tert-Butylbenzene	ND ug/kg		5.5	1		07/30/12 20:07	98-06-6	
Carbon disulfide	ND ug/kg		5.5	1		07/30/12 20:07	75-15-0	
Carbon tetrachloride	ND ug/kg		5.5	1		07/30/12 20:07	56-23-5	
Chlorobenzene	ND ug/kg		5.5	1		07/30/12 20:07	108-90-7	
Chloroethane	ND ug/kg		5.5	1		07/30/12 20:07	75-00-3	
Chloroform	ND ug/kg		5.5	1		07/30/12 20:07	67-66-3	
Chloromethane	ND ug/kg		5.5	1		07/30/12 20:07	74-87-3	
2-Chlorotoluene	ND ug/kg		5.5	1		07/30/12 20:07	95-49-8	
4-Chlorotoluene	ND ug/kg		5.5	1		07/30/12 20:07	106-43-4	
1,2-Dibromo-3-chloropropane	ND ug/kg		11.1	1		07/30/12 20:07	96-12-8	
Dibromochloromethane	ND ug/kg		5.5	1		07/30/12 20:07	124-48-1	
1,2-Dibromoethane (EDB)	ND ug/kg		5.5	1		07/30/12 20:07	106-93-4	
Dibromomethane	ND ug/kg		5.5	1		07/30/12 20:07	74-95-3	
1,2-Dichlorobenzene	ND ug/kg		5.5	1		07/30/12 20:07	95-50-1	
1,3-Dichlorobenzene	ND ug/kg		5.5	1		07/30/12 20:07	541-73-1	
1,4-Dichlorobenzene	ND ug/kg		5.5	1		07/30/12 20:07	106-46-7	
Dichlorodifluoromethane	ND ug/kg		5.5	1		07/30/12 20:07	75-71-8	
1,1-Dichloroethane	ND ug/kg		5.5	1		07/30/12 20:07	75-34-3	
1,2-Dichloroethane	ND ug/kg		5.5	1		07/30/12 20:07	107-06-2	
1,2-Dichloroethene (Total)	ND ug/kg		5.5	1		07/30/12 20:07	540-59-0	
1,1-Dichloroethene	ND ug/kg		5.5	1		07/30/12 20:07	75-35-4	
cis-1,2-Dichloroethene	ND ug/kg		5.5	1		07/30/12 20:07	156-59-2	
trans-1,2-Dichloroethene	ND ug/kg		5.5	1		07/30/12 20:07	156-60-5	
1,2-Dichloropropane	ND ug/kg		5.5	1		07/30/12 20:07	78-87-5	
1,3-Dichloropropane	ND ug/kg		5.5	1		07/30/12 20:07	142-28-9	
2,2-Dichloropropane	ND ug/kg		5.5	1		07/30/12 20:07	594-20-7	
1,1-Dichloropropene	ND ug/kg		5.5	1		07/30/12 20:07	563-58-6	

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REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: KUHLMAN DIECASTING

Pace Project No.: 60125813

Sample: **SB-18 12-14** Lab ID: **60125813008** Collected: 07/20/12 09:08 Received: 07/25/12 08:30 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035A VOA		Analytical Method: EPA 8260						
cis-1,3-Dichloropropene	ND	ug/kg	5.5	1		07/30/12 20:07	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/kg	5.5	1		07/30/12 20:07	10061-02-6	
Ethylbenzene	ND	ug/kg	5.5	1		07/30/12 20:07	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	5.5	1		07/30/12 20:07	87-68-3	
2-Hexanone	ND	ug/kg	22.1	1		07/30/12 20:07	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/kg	5.5	1		07/30/12 20:07	98-82-8	
p-Isopropyltoluene	ND	ug/kg	5.5	1		07/30/12 20:07	99-87-6	
Methylene chloride	ND	ug/kg	5.5	1		07/30/12 20:07	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	11.1	1		07/30/12 20:07	108-10-1	
Methyl-tert-butyl ether	ND	ug/kg	5.5	1		07/30/12 20:07	1634-04-4	
Naphthalene	ND	ug/kg	11.1	1		07/30/12 20:07	91-20-3	
n-Propylbenzene	ND	ug/kg	5.5	1		07/30/12 20:07	103-65-1	
Styrene	ND	ug/kg	5.5	1		07/30/12 20:07	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/kg	5.5	1		07/30/12 20:07	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	5.5	1		07/30/12 20:07	79-34-5	
Tetrachloroethene	ND	ug/kg	5.5	1		07/30/12 20:07	127-18-4	
Toluene	ND	ug/kg	5.5	1		07/30/12 20:07	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/kg	5.5	1		07/30/12 20:07	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/kg	5.5	1		07/30/12 20:07	120-82-1	
1,1,1-Trichloroethane	ND	ug/kg	5.5	1		07/30/12 20:07	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	5.5	1		07/30/12 20:07	79-00-5	
Trichloroethene	ND	ug/kg	5.5	1		07/30/12 20:07	79-01-6	
Trichlorofluoromethane	ND	ug/kg	5.5	1		07/30/12 20:07	75-69-4	
1,2,3-Trichloropropane	ND	ug/kg	5.5	1		07/30/12 20:07	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/kg	5.5	1		07/30/12 20:07	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/kg	5.5	1		07/30/12 20:07	108-67-8	
Vinyl chloride	ND	ug/kg	5.5	1		07/30/12 20:07	75-01-4	
Xylene (Total)	ND	ug/kg	5.5	1		07/30/12 20:07	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	105 %		78-122	1		07/30/12 20:07	1868-53-7	
Toluene-d8 (S)	101 %		80-123	1		07/30/12 20:07	2037-26-5	
4-Bromofluorobenzene (S)	102 %		78-125	1		07/30/12 20:07	460-00-4	
1,2-Dichloroethane-d4 (S)	118 %		73-135	1		07/30/12 20:07	17060-07-0	

Percent Moisture

Analytical Method: ASTM D2974

Percent Moisture	22.9 %	0.50	1	08/03/12 00:00
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QUALITY CONTROL DATA

Project: KUHLMAN DIECASTING

Pace Project No.: 60125813

QC Batch: MERP/6490

Analysis Method: EPA 7470

QC Batch Method: EPA 7470

Analysis Description: 7470 Mercury

Associated Lab Samples: 60125813003

METHOD BLANK: 1037728

Matrix: Water

Associated Lab Samples: 60125813003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	ug/L	ND	0.20	08/02/12 11:37	

LABORATORY CONTROL SAMPLE: 1037729

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	5	4.4	88	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1037730 1037731

Parameter	Units	60125738001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	ug/L	ND	5	5	6.1	6.2	120	122	75-125	2	20	

QUALITY CONTROL DATA

Project: KUHLMAN DIECASTING

Pace Project No.: 60125813

QC Batch: MERP/6489

Analysis Method: EPA 7470

QC Batch Method: EPA 7470

Analysis Description: 7470 Mercury ,Dissolved

Associated Lab Samples: 60125813003

METHOD BLANK: 1037724

Matrix: Water

Associated Lab Samples: 60125813003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury, Dissolved	ug/L	ND	0.20	08/03/12 11:06	

LABORATORY CONTROL SAMPLE: 1037725

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury, Dissolved	ug/L	5	4.8	95	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1037726 1037727

Parameter	Units	60125643004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury, Dissolved	ug/L	ND	5	5	3.5	3.8	69	75	75-125	9	20	M1

QUALITY CONTROL DATA

Project: KUHLMAN DIECASTING

Pace Project No.: 60125813

QC Batch: MERP/6494

Analysis Method: EPA 7471

QC Batch Method: EPA 7471

Analysis Description: 7471 Mercury

Associated Lab Samples: 60125813001, 60125813002, 60125813004, 60125813005, 60125813006, 60125813007, 60125813008

METHOD BLANK: 1038143

Matrix: Solid

Associated Lab Samples: 60125813001, 60125813002, 60125813004, 60125813005, 60125813006, 60125813007, 60125813008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	mg/kg	ND	0.050	08/04/12 13:01	

LABORATORY CONTROL SAMPLE: 1038144

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/kg	.5	0.54	107	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1038145 1038146

Parameter	Units	60125766001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/kg	ND	.17	.17	0.17	0.18	98	100	75-125	2	20	

QUALITY CONTROL DATA

Project: KUHLMAN DIECASTING

Pace Project No.: 60125813

QC Batch:	MPRP/18871	Analysis Method:	EPA 6010
QC Batch Method:	EPA 3050	Analysis Description:	6010 MET
Associated Lab Samples:	60125813001, 60125813002, 60125813004, 60125813005, 60125813006, 60125813007, 60125813008		

METHOD BLANK: 1035198 Matrix: Solid

Associated Lab Samples: 60125813001, 60125813002, 60125813004, 60125813005, 60125813006, 60125813007, 60125813008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Antimony	mg/kg	ND	1.0	08/06/12 14:29	
Arsenic	mg/kg	ND	1.0	08/06/12 14:29	
Beryllium	mg/kg	ND	0.10	08/06/12 14:29	
Cadmium	mg/kg	ND	0.50	08/06/12 14:29	
Chromium	mg/kg	ND	0.50	08/06/12 14:29	
Copper	mg/kg	ND	1.0	08/06/12 14:29	
Lead	mg/kg	ND	0.50	08/06/12 14:29	
Nickel	mg/kg	ND	0.50	08/06/12 14:29	
Selenium	mg/kg	ND	1.5	08/06/12 14:29	
Silver	mg/kg	ND	0.70	08/06/12 14:29	
Thallium	mg/kg	ND	2.0	08/06/12 14:29	
Zinc	mg/kg	ND	10.0	08/06/12 14:29	

LABORATORY CONTROL SAMPLE: 1035199

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/kg	50	46.7	93	80-120	
Arsenic	mg/kg	50	46.0	92	80-120	
Beryllium	mg/kg	50	46.1	92	80-120	
Cadmium	mg/kg	50	46.5	93	80-120	
Chromium	mg/kg	50	47.7	95	80-120	
Copper	mg/kg	50	48.6	97	80-120	
Lead	mg/kg	50	49.1	98	80-120	
Nickel	mg/kg	50	48.8	98	80-120	
Selenium	mg/kg	50	46.8	94	80-120	
Silver	mg/kg	25	23.4	94	80-120	
Thallium	mg/kg	50	48.8	98	80-120	
Zinc	mg/kg	50	46.5	93	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1035200 1035201

Parameter	Units	60125813001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/kg	29.3	58.2	57.1	13.6	13.4	-27	-28	75-125	1	20	M1
Arsenic	mg/kg	116	58.2	57.1	52.0	51.2	-110	-113	75-125	2	20	M1
Beryllium	mg/kg	16.0	58.2	57.1	55.2	55.4	67	69	75-125	0	20	M1
Cadmium	mg/kg	ND	58.2	57.1	46.6	46.2	71	72	75-125	1	20	M1
Chromium	mg/kg	4060	58.2	57.1	355	323	-6370	-6542	75-125	9	20	M1
Copper	mg/kg	3630	58.2	57.1	327	299	-5676	-5827	75-125	9	20	M1
Lead	mg/kg	251	58.2	57.1	57.8	57.2	-332	-339	75-125	1	20	M1

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QUALITY CONTROL DATA

Project: KUHLMAN DIECASTING

Pace Project No.: 60125813

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1035200 1035201												
Parameter	Units	60125813001 Result	MS	MSD	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max		
			Spike Conc.	Spike Conc.						RPD	RPD	Qual
Nickel	mg/kg	7180	58.2	57.1	543	500	-11408	-11692	75-125	8	20	M1
Selenium	mg/kg	ND	58.2	57.1	45.1	44.4	78	78	75-125	2	20	
Silver	mg/kg	ND	29.1	28.5	24.3	24.0	72	72	75-125	1	20	M1
Thallium	mg/kg	ND	58.2	57.1	40.5	40.0	70	70	75-125	1	20	M1
Zinc	mg/kg	1930	58.2	57.1	175	168	-3025	-3092	75-125	4	20	M1

QUALITY CONTROL DATA

Project: KUHLMAN DIECASTING

Pace Project No.: 60125813

QC Batch: MPRP/18881

Analysis Method: EPA 6010

QC Batch Method: EPA 3010

Analysis Description: 6010 MET

Associated Lab Samples: 60125813003

METHOD BLANK: 1035772

Matrix: Water

Associated Lab Samples: 60125813003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Antimony	ug/L	ND	10.0	07/31/12 13:56	
Arsenic	ug/L	ND	10.0	07/31/12 13:56	
Beryllium	ug/L	ND	1.0	07/31/12 13:56	
Cadmium	ug/L	ND	5.0	07/31/12 13:56	
Chromium	ug/L	ND	5.0	07/31/12 13:56	
Copper	ug/L	ND	10.0	07/31/12 13:56	
Lead	ug/L	ND	5.0	07/31/12 13:56	
Nickel	ug/L	ND	5.0	07/31/12 13:56	
Selenium	ug/L	ND	15.0	07/31/12 13:56	
Silver	ug/L	ND	7.0	07/31/12 13:56	
Thallium	ug/L	ND	20.0	07/31/12 13:56	
Zinc	ug/L	ND	50.0	07/31/12 13:56	

LABORATORY CONTROL SAMPLE: 1035773

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	ug/L	1000	997	100	80-120	
Arsenic	ug/L	1000	1020	102	80-120	
Beryllium	ug/L	1000	932	93	80-120	
Cadmium	ug/L	1000	970	97	80-120	
Chromium	ug/L	1000	918	92	80-120	
Copper	ug/L	1000	877	88	80-120	
Lead	ug/L	1000	912	91	80-120	
Nickel	ug/L	1000	955	96	80-120	
Selenium	ug/L	1000	1000	100	80-120	
Silver	ug/L	500	454	91	80-120	
Thallium	ug/L	1000	888	89	80-120	
Zinc	ug/L	1000	941	94	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1035774

1035775

Parameter	Units	60125643001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	ug/L	ND	1000	1000	989	982	99	98	75-125	1	20	
Arsenic	ug/L	ND	1000	1000	1000	995	100	99	75-125	1	20	
Beryllium	ug/L	ND	1000	1000	931	921	93	92	75-125	1	20	
Cadmium	ug/L	ND	1000	1000	965	955	97	95	75-125	1	20	
Chromium	ug/L	ND	1000	1000	916	901	92	90	75-125	2	20	
Copper	ug/L	ND	1000	1000	894	884	89	88	75-125	1	20	
Lead	ug/L	ND	1000	1000	921	909	92	91	75-125	1	20	

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QUALITY CONTROL DATA

Project: KUHLMAN DIECASTING

Pace Project No.: 60125813

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1035774 1035775											
Parameter	Units	60125643001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual
Nickel	ug/L	ND	1000	1000	955	943	95	94	75-125	1	20
Selenium	ug/L	ND	1000	1000	1000	984	100	98	75-125	2	20
Silver	ug/L	ND	500	500	457	451	91	90	75-125	1	20
Thallium	ug/L	ND	1000	1000	886	877	89	88	75-125	1	20
Zinc	ug/L	ND	1000	1000	941	929	94	93	75-125	1	20

QUALITY CONTROL DATA

Project: KUHLMAN DIECASTING
Pace Project No.: 60125813

QC Batch: MPRP/18880 Analysis Method: EPA 6010
QC Batch Method: EPA 3010 Analysis Description: 6010 MET Dissolved
Associated Lab Samples: 60125813003

METHOD BLANK: 1035765 Matrix: Water
Associated Lab Samples: 60125813003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Antimony, Dissolved	ug/L	ND	10.0	07/30/12 13:05	
Arsenic, Dissolved	ug/L	ND	10.0	07/30/12 13:05	
Beryllium, Dissolved	ug/L	ND	1.0	07/30/12 13:05	
Cadmium, Dissolved	ug/L	ND	5.0	07/30/12 13:05	
Chromium, Dissolved	ug/L	ND	5.0	07/30/12 13:05	
Copper, Dissolved	ug/L	ND	10.0	07/30/12 13:05	
Lead, Dissolved	ug/L	ND	5.0	07/30/12 13:05	
Nickel, Dissolved	ug/L	ND	5.0	07/30/12 13:05	
Selenium, Dissolved	ug/L	ND	15.0	07/30/12 13:05	
Silver, Dissolved	ug/L	ND	7.0	07/30/12 13:05	
Thallium, Dissolved	ug/L	ND	20.0	07/30/12 13:05	
Zinc, Dissolved	ug/L	ND	50.0	07/30/12 13:05	

LABORATORY CONTROL SAMPLE: 1035766

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony, Dissolved	ug/L	1000	972	97	80-120	
Arsenic, Dissolved	ug/L	1000	995	100	80-120	
Beryllium, Dissolved	ug/L	1000	972	97	80-120	
Cadmium, Dissolved	ug/L	1000	966	97	80-120	
Chromium, Dissolved	ug/L	1000	986	99	80-120	
Copper, Dissolved	ug/L	1000	901	90	80-120	
Lead, Dissolved	ug/L	1000	935	93	80-120	
Nickel, Dissolved	ug/L	1000	969	97	80-120	
Selenium, Dissolved	ug/L	1000	974	97	80-120	
Silver, Dissolved	ug/L	500	462	92	80-120	
Thallium, Dissolved	ug/L	1000	903	90	80-120	
Zinc, Dissolved	ug/L	1000	985	98	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1035767 1035768

Parameter	Units	60125643001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony, Dissolved	ug/L	ND	1000	1000	977	973	98	97	75-125	0	20	
Arsenic, Dissolved	ug/L	ND	1000	1000	1000	993	100	99	75-125	1	20	
Beryllium, Dissolved	ug/L	ND	1000	1000	988	980	99	98	75-125	1	20	
Cadmium, Dissolved	ug/L	ND	1000	1000	975	967	98	97	75-125	1	20	
Chromium, Dissolved	ug/L	ND	1000	1000	996	984	100	98	75-125	1	20	
Copper, Dissolved	ug/L	ND	1000	1000	923	909	92	91	75-125	2	20	
Lead, Dissolved	ug/L	ND	1000	1000	952	941	95	94	75-125	1	20	

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QUALITY CONTROL DATA

Project: KUHLMAN DIECASTING

Pace Project No.: 60125813

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 10357671035768												
Parameter	Units	60125643001 Result	MS	MSD	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max	Qual
			Spike Conc.	Spike Conc.							RPD	
Nickel, Dissolved	ug/L	ND	1000	1000	983	974	98	97	75-125	1	20	
Selenium, Dissolved	ug/L	ND	1000	1000	981	967	98	97	75-125	1	20	
Silver, Dissolved	ug/L	ND	500	500	472	466	94	93	75-125	1	20	
Thallium, Dissolved	ug/L	ND	1000	1000	918	912	92	91	75-125	1	20	
Zinc, Dissolved	ug/L	ND	1000	1000	1000	992	100	99	75-125	1	20	

QUALITY CONTROL DATA

Project: KUHLMAN DIECASTING

Pace Project No.: 60125813

QC Batch:	MSV/47379	Analysis Method:	OA1
QC Batch Method:	OA1	Analysis Description:	OA1 Volatile Pet. Hydrocarbon
Associated Lab Samples:	60125813001, 60125813004, 60125813005, 60125813006, 60125813007		

METHOD BLANK:	1036954	Matrix:	Solid
Associated Lab Samples:	60125813001, 60125813004, 60125813005, 60125813006, 60125813007		

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Gasoline Range Organics	mg/kg	ND	1.0	07/26/12 15:38	

LABORATORY CONTROL SAMPLE: 1036955

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Gasoline Range Organics	mg/kg	4	4.3	107	63-138	

QUALITY CONTROL DATA

Project: KUHLMAN DIECASTING

Pace Project No.: 60125813

QC Batch: MSV/47425

Analysis Method: OA1

QC Batch Method: OA1

Analysis Description: OA1 Volatile Pet. Hydrocarbon

Associated Lab Samples: 60125813002, 60125813008

METHOD BLANK: 1037459

Matrix: Solid

Associated Lab Samples: 60125813002, 60125813008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Gasoline Range Organics	mg/kg	ND	1.0	07/30/12 17:20	

LABORATORY CONTROL SAMPLE: 1037460

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Gasoline Range Organics	mg/kg	4	4.3	107	63-138	

QUALITY CONTROL DATA

Project: KUHLMAN DIECASTING

Pace Project No.: 60125813

QC Batch: MSV/47352

Analysis Method: EPA 5030B/8260

QC Batch Method: EPA 5030B/8260

Analysis Description: 8260 MSV Water 10 mL Purge

Associated Lab Samples: 60125813003

METHOD BLANK: 1035943

Matrix: Water

Associated Lab Samples: 60125813003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	1.0	07/27/12 12:11	
1,1,1-Trichloroethane	ug/L	ND	1.0	07/27/12 12:11	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	07/27/12 12:11	
1,1,2-Trichloroethane	ug/L	ND	1.0	07/27/12 12:11	
1,1-Dichloroethane	ug/L	ND	1.0	07/27/12 12:11	
1,1-Dichloroethene	ug/L	ND	1.0	07/27/12 12:11	
1,1-Dichloropropene	ug/L	ND	1.0	07/27/12 12:11	
1,2,3-Trichlorobenzene	ug/L	ND	1.0	07/27/12 12:11	
1,2,3-Trichloropropane	ug/L	ND	2.5	07/27/12 12:11	
1,2,4-Trichlorobenzene	ug/L	ND	1.0	07/27/12 12:11	
1,2,4-Trimethylbenzene	ug/L	ND	1.0	07/27/12 12:11	
1,2-Dibromo-3-chloropropane	ug/L	ND	2.5	07/27/12 12:11	
1,2-Dibromoethane (EDB)	ug/L	ND	1.0	07/27/12 12:11	
1,2-Dichlorobenzene	ug/L	ND	1.0	07/27/12 12:11	
1,2-Dichloroethane	ug/L	ND	1.0	07/27/12 12:11	
1,2-Dichloroethene (Total)	ug/L	ND	1.0	07/27/12 12:11	
1,2-Dichloropropane	ug/L	ND	1.0	07/27/12 12:11	
1,3,5-Trimethylbenzene	ug/L	ND	1.0	07/27/12 12:11	
1,3-Dichlorobenzene	ug/L	ND	1.0	07/27/12 12:11	
1,3-Dichloropropane	ug/L	ND	1.0	07/27/12 12:11	
1,4-Dichlorobenzene	ug/L	ND	1.0	07/27/12 12:11	
2,2-Dichloropropane	ug/L	ND	1.0	07/27/12 12:11	
2-Butanone (MEK)	ug/L	ND	10.0	07/27/12 12:11	
2-Chlorotoluene	ug/L	ND	1.0	07/27/12 12:11	
2-Hexanone	ug/L	ND	10.0	07/27/12 12:11	
4-Chlorotoluene	ug/L	ND	1.0	07/27/12 12:11	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	07/27/12 12:11	
Acetone	ug/L	ND	10.0	07/27/12 12:11	
Benzene	ug/L	ND	1.0	07/27/12 12:11	
Bromobenzene	ug/L	ND	1.0	07/27/12 12:11	
Bromochloromethane	ug/L	ND	1.0	07/27/12 12:11	
Bromodichloromethane	ug/L	ND	1.0	07/27/12 12:11	
Bromoform	ug/L	ND	1.0	07/27/12 12:11	
Bromomethane	ug/L	ND	5.0	07/27/12 12:11	
Carbon disulfide	ug/L	ND	5.0	07/27/12 12:11	
Carbon tetrachloride	ug/L	ND	1.0	07/27/12 12:11	
Chlorobenzene	ug/L	ND	1.0	07/27/12 12:11	
Chloroethane	ug/L	ND	1.0	07/27/12 12:11	
Chloroform	ug/L	ND	1.0	07/27/12 12:11	
Chloromethane	ug/L	ND	1.0	07/27/12 12:11	
cis-1,2-Dichloroethene	ug/L	ND	1.0	07/27/12 12:11	
cis-1,3-Dichloropropene	ug/L	ND	1.0	07/27/12 12:11	
Dibromochloromethane	ug/L	ND	1.0	07/27/12 12:11	

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QUALITY CONTROL DATA

Project: KUHLMAN DIECASTING

Pace Project No.: 60125813

METHOD BLANK: 1035943

Matrix: Water

Associated Lab Samples: 60125813003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Dibromomethane	ug/L	ND	1.0	07/27/12 12:11	
Dichlorodifluoromethane	ug/L	ND	1.0	07/27/12 12:11	
Ethylbenzene	ug/L	ND	1.0	07/27/12 12:11	
Hexachloro-1,3-butadiene	ug/L	ND	1.0	07/27/12 12:11	
Isopropylbenzene (Cumene)	ug/L	ND	1.0	07/27/12 12:11	
Methyl-tert-butyl ether	ug/L	ND	1.0	07/27/12 12:11	
Methylene chloride	ug/L	ND	1.0	07/27/12 12:11	
n-Butylbenzene	ug/L	ND	1.0	07/27/12 12:11	
n-Propylbenzene	ug/L	ND	1.0	07/27/12 12:11	
Naphthalene	ug/L	ND	10.0	07/27/12 12:11	
p-Isopropyltoluene	ug/L	ND	1.0	07/27/12 12:11	
sec-Butylbenzene	ug/L	ND	1.0	07/27/12 12:11	
Styrene	ug/L	ND	1.0	07/27/12 12:11	
tert-Butylbenzene	ug/L	ND	1.0	07/27/12 12:11	
Tetrachloroethene	ug/L	ND	1.0	07/27/12 12:11	
Toluene	ug/L	ND	1.0	07/27/12 12:11	
trans-1,2-Dichloroethene	ug/L	ND	1.0	07/27/12 12:11	
trans-1,3-Dichloropropene	ug/L	ND	1.0	07/27/12 12:11	
Trichloroethene	ug/L	ND	1.0	07/27/12 12:11	
Trichlorofluoromethane	ug/L	ND	1.0	07/27/12 12:11	
Vinyl chloride	ug/L	ND	1.0	07/27/12 12:11	
Xylene (Total)	ug/L	ND	3.0	07/27/12 12:11	
1,2-Dichloroethane-d4 (S)	%	90	80-120	07/27/12 12:11	
4-Bromofluorobenzene (S)	%	103	80-120	07/27/12 12:11	
Dibromofluoromethane (S)	%	97	80-120	07/27/12 12:11	
Toluene-d8 (S)	%	100	80-120	07/27/12 12:11	

LABORATORY CONTROL SAMPLE: 1035944

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	20	18.5	93	79-121	
1,1,1-Trichloroethane	ug/L	20	19.9	99	76-120	
1,1,2,2-Tetrachloroethane	ug/L	20	19.2	96	71-121	
1,1,2-Trichloroethane	ug/L	20	18.1	90	78-120	
1,1-Dichloroethane	ug/L	20	17.9	90	74-120	
1,1-Dichloroethene	ug/L	20	21.7	108	68-120	
1,1-Dichloropropene	ug/L	20	20.5	102	78-120	
1,2,3-Trichlorobenzene	ug/L	20	17.3	87	70-129	
1,2,3-Trichloropropane	ug/L	20	19.1	96	74-121	
1,2,4-Trichlorobenzene	ug/L	20	19.3	96	76-123	
1,2,4-Trimethylbenzene	ug/L	20	16.7	84	76-121	
1,2-Dibromo-3-chloropropane	ug/L	20	18.3	92	65-124	
1,2-Dibromoethane (EDB)	ug/L	20	18.5	92	76-125	
1,2-Dichlorobenzene	ug/L	20	18.1	91	80-120	
1,2-Dichloroethane	ug/L	20	18.3	92	72-123	

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QUALITY CONTROL DATA

Project: KUHLMAN DIECASTING

Pace Project No.: 60125813

LABORATORY CONTROL SAMPLE: 1035944

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dichloroethene (Total)	ug/L	40	38.4	96	78-120	
1,2-Dichloropropane	ug/L	20	19.3	97	78-120	
1,3,5-Trimethylbenzene	ug/L	20	18.2	91	75-120	
1,3-Dichlorobenzene	ug/L	20	18.7	93	79-120	
1,3-Dichloropropane	ug/L	20	18.2	91	75-120	
1,4-Dichlorobenzene	ug/L	20	18.1	91	80-120	
2,2-Dichloropropane	ug/L	20	18.9	94	54-132	
2-Butanone (MEK)	ug/L	100	86.8	87	40-160	
2-Chlorotoluene	ug/L	20	19.7	99	78-120	
2-Hexanone	ug/L	100	86.4	86	40-160	
4-Chlorotoluene	ug/L	20	20.0	100	79-120	
4-Methyl-2-pentanone (MIBK)	ug/L	100	87.6	88	65-126	
Acetone	ug/L	100	85.7	86	40-160	
Benzene	ug/L	20	18.4	92	74-123	
Bromobenzene	ug/L	20	19.4	97	79-120	
Bromochloromethane	ug/L	20	19.9	100	75-120	
Bromodichloromethane	ug/L	20	17.2	86	74-120	
Bromoform	ug/L	20	17.1	85	70-123	
Bromomethane	ug/L	20	16.2	81	40-158	
Carbon disulfide	ug/L	20	17.8	89	67-135	
Carbon tetrachloride	ug/L	20	18.4	92	74-126	
Chlorobenzene	ug/L	20	19.2	96	80-120	
Chloroethane	ug/L	20	24.5	123	60-144	
Chloroform	ug/L	20	17.8	89	77-120	
Chloromethane	ug/L	20	18.9	94	40-142	
cis-1,2-Dichloroethene	ug/L	20	18.6	93	70-120	
cis-1,3-Dichloropropene	ug/L	20	17.7	89	73-121	
Dibromochloromethane	ug/L	20	17.8	89	77-122	
Dibromomethane	ug/L	20	19.2	96	76-120	
Dichlorodifluoromethane	ug/L	20	22.0	110	40-160	
Ethylbenzene	ug/L	20	18.9	95	76-123	
Hexachloro-1,3-butadiene	ug/L	20	17.5	88	72-124	
Isopropylbenzene (Cumene)	ug/L	20	20.4	102	80-126	
Methyl-tert-butyl ether	ug/L	20	18.0	90	67-125	
Methylene chloride	ug/L	20	18.3	91	72-127	
n-Butylbenzene	ug/L	20	18.8	94	76-125	
n-Propylbenzene	ug/L	20	19.1	95	77-120	
Naphthalene	ug/L	20	16.8	84	63-128	
p-Isopropyltoluene	ug/L	20	18.5	93	77-121	
sec-Butylbenzene	ug/L	20	16.7	84	77-122	
Styrene	ug/L	20	18.6	93	79-120	
tert-Butylbenzene	ug/L	20	18.7	93	75-124	
Tetrachloroethene	ug/L	20	19.5	98	78-121	
Toluene	ug/L	20	17.7	88	75-123	
trans-1,2-Dichloroethene	ug/L	20	19.8	99	80-129	
trans-1,3-Dichloropropene	ug/L	20	20.1	100	77-122	
Trichloroethene	ug/L	20	17.8	89	74-120	
Trichlorofluoromethane	ug/L	20	22.7	113	69-122	

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QUALITY CONTROL DATA

Project: KUHLMAN DIECASTING

Pace Project No.: 60125813

LABORATORY CONTROL SAMPLE: 1035944

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Vinyl chloride	ug/L	20	21.8	109	50-140	
Xylene (Total)	ug/L	60	56.1	93	76-123	
1,2-Dichloroethane-d4 (S)	%			101	80-120	
4-Bromofluorobenzene (S)	%			104	80-120	
Dibromofluoromethane (S)	%			102	80-120	
Toluene-d8 (S)	%			101	80-120	

QUALITY CONTROL DATA

Project: KUHLMAN DIECASTING

Pace Project No.: 60125813

QC Batch: MSV/47353

Analysis Method: EPA 8260/OA1

QC Batch Method: EPA 8260/OA1

Analysis Description: 8260/OA1 UST-WATER

Associated Lab Samples: 60125813003

METHOD BLANK: 1035947

Matrix: Water

Associated Lab Samples: 60125813003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,2-Dichloroethane	ug/L	ND	1.0	07/27/12 12:11	
Benzene	ug/L	ND	1.0	07/27/12 12:11	
Ethylbenzene	ug/L	ND	1.0	07/27/12 12:11	
Gasoline Range Organics	mg/L	ND	0.50	07/27/12 12:11	
Methyl-tert-butyl ether	ug/L	ND	1.0	07/27/12 12:11	
Naphthalene	ug/L	ND	10.0	07/27/12 12:11	
tert-Butyl Alcohol	ug/L	ND	10.0	07/27/12 12:11	
Toluene	ug/L	ND	1.0	07/27/12 12:11	
Xylene (Total)	ug/L	ND	3.0	07/27/12 12:11	
1,2-Dichloroethane-d4 (S)	%	90	80-120	07/27/12 12:11	
4-Bromofluorobenzene (S)	%	103	80-120	07/27/12 12:11	
Dibromofluoromethane (S)	%	97	80-120	07/27/12 12:11	
Toluene-d8 (S)	%	100	80-120	07/27/12 12:11	

LABORATORY CONTROL SAMPLE: 1035948

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dichloroethane	ug/L	20	18.3	92	72-123	
Benzene	ug/L	20	18.4	92	74-123	
Ethylbenzene	ug/L	20	18.9	95	76-123	
Gasoline Range Organics	mg/L	4	3.8	95	65-136	
Methyl-tert-butyl ether	ug/L	20	18.0	90	67-125	
Naphthalene	ug/L	20	16.8	84	63-128	
tert-Butyl Alcohol	ug/L	100	82.3	82	44-142	
Toluene	ug/L	20	17.7	88	75-123	
Xylene (Total)	ug/L	60	56.1	93	76-123	
1,2-Dichloroethane-d4 (S)	%			101	80-120	
4-Bromofluorobenzene (S)	%			104	80-120	
Dibromofluoromethane (S)	%			102	80-120	
Toluene-d8 (S)	%			101	80-120	

QUALITY CONTROL DATA

Project: KUHLMAN DIECASTING

Pace Project No.: 60125813

QC Batch: MSV/47311

Analysis Method: EPA 8260

QC Batch Method: EPA 8260

Analysis Description: 8260 MSV 5035A Volatile Organics

Associated Lab Samples: 60125813001, 60125813004, 60125813005, 60125813006, 60125813007

METHOD BLANK: 1035294

Matrix: Solid

Associated Lab Samples: 60125813001, 60125813004, 60125813005, 60125813006, 60125813007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	ND	5.0	07/26/12 15:38	
1,1,1-Trichloroethane	ug/kg	ND	5.0	07/26/12 15:38	
1,1,2,2-Tetrachloroethane	ug/kg	ND	5.0	07/26/12 15:38	
1,1,2-Trichloroethane	ug/kg	ND	5.0	07/26/12 15:38	
1,1-Dichloroethane	ug/kg	ND	5.0	07/26/12 15:38	
1,1-Dichloroethene	ug/kg	ND	5.0	07/26/12 15:38	
1,1-Dichloropropene	ug/kg	ND	5.0	07/26/12 15:38	
1,2,3-Trichlorobenzene	ug/kg	ND	5.0	07/26/12 15:38	
1,2,3-Trichloropropane	ug/kg	ND	5.0	07/26/12 15:38	
1,2,4-Trichlorobenzene	ug/kg	ND	5.0	07/26/12 15:38	
1,2,4-Trimethylbenzene	ug/kg	ND	5.0	07/26/12 15:38	
1,2-Dibromo-3-chloropropane	ug/kg	ND	10.0	07/26/12 15:38	
1,2-Dibromoethane (EDB)	ug/kg	ND	5.0	07/26/12 15:38	
1,2-Dichlorobenzene	ug/kg	ND	5.0	07/26/12 15:38	
1,2-Dichloroethane	ug/kg	ND	5.0	07/26/12 15:38	
1,2-Dichloroethene (Total)	ug/kg	ND	5.0	07/26/12 15:38	
1,2-Dichloropropane	ug/kg	ND	5.0	07/26/12 15:38	
1,3,5-Trimethylbenzene	ug/kg	ND	5.0	07/26/12 15:38	
1,3-Dichlorobenzene	ug/kg	ND	5.0	07/26/12 15:38	
1,3-Dichloropropane	ug/kg	ND	5.0	07/26/12 15:38	
1,4-Dichlorobenzene	ug/kg	ND	5.0	07/26/12 15:38	
2,2-Dichloropropane	ug/kg	ND	5.0	07/26/12 15:38	
2-Butanone (MEK)	ug/kg	ND	10.0	07/26/12 15:38	
2-Chlorotoluene	ug/kg	ND	5.0	07/26/12 15:38	
2-Hexanone	ug/kg	ND	20.0	07/26/12 15:38	
4-Chlorotoluene	ug/kg	ND	5.0	07/26/12 15:38	
4-Methyl-2-pentanone (MIBK)	ug/kg	ND	10.0	07/26/12 15:38	
Acetone	ug/kg	ND	20.0	07/26/12 15:38	
Benzene	ug/kg	ND	5.0	07/26/12 15:38	
Bromobenzene	ug/kg	ND	5.0	07/26/12 15:38	
Bromochloromethane	ug/kg	ND	5.0	07/26/12 15:38	
Bromodichloromethane	ug/kg	ND	5.0	07/26/12 15:38	
Bromoform	ug/kg	ND	5.0	07/26/12 15:38	
Bromomethane	ug/kg	ND	5.0	07/26/12 15:38	
Carbon disulfide	ug/kg	ND	5.0	07/26/12 15:38	
Carbon tetrachloride	ug/kg	ND	5.0	07/26/12 15:38	
Chlorobenzene	ug/kg	ND	5.0	07/26/12 15:38	
Chloroethane	ug/kg	ND	5.0	07/26/12 15:38	
Chloroform	ug/kg	ND	5.0	07/26/12 15:38	
Chloromethane	ug/kg	ND	5.0	07/26/12 15:38	
cis-1,2-Dichloroethene	ug/kg	ND	5.0	07/26/12 15:38	
cis-1,3-Dichloropropene	ug/kg	ND	5.0	07/26/12 15:38	
Dibromochloromethane	ug/kg	ND	5.0	07/26/12 15:38	

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QUALITY CONTROL DATA

Project: KUHLMAN DIECASTING

Pace Project No.: 60125813

METHOD BLANK: 1035294

Matrix: Solid

Associated Lab Samples: 60125813001, 60125813004, 60125813005, 60125813006, 60125813007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Dibromomethane	ug/kg	ND	5.0	07/26/12 15:38	
Dichlorodifluoromethane	ug/kg	ND	5.0	07/26/12 15:38	
Ethylbenzene	ug/kg	ND	5.0	07/26/12 15:38	
Hexachloro-1,3-butadiene	ug/kg	ND	5.0	07/26/12 15:38	
Isopropylbenzene (Cumene)	ug/kg	ND	5.0	07/26/12 15:38	
Methyl-tert-butyl ether	ug/kg	ND	5.0	07/26/12 15:38	
Methylene chloride	ug/kg	ND	5.0	07/26/12 15:38	
n-Butylbenzene	ug/kg	ND	5.0	07/26/12 15:38	
n-Propylbenzene	ug/kg	ND	5.0	07/26/12 15:38	
Naphthalene	ug/kg	ND	10.0	07/26/12 15:38	
p-Isopropyltoluene	ug/kg	ND	5.0	07/26/12 15:38	
sec-Butylbenzene	ug/kg	ND	5.0	07/26/12 15:38	
Styrene	ug/kg	ND	5.0	07/26/12 15:38	
tert-Butylbenzene	ug/kg	ND	5.0	07/26/12 15:38	
Tetrachloroethene	ug/kg	ND	5.0	07/26/12 15:38	
Toluene	ug/kg	ND	5.0	07/26/12 15:38	
trans-1,2-Dichloroethene	ug/kg	ND	5.0	07/26/12 15:38	
trans-1,3-Dichloropropene	ug/kg	ND	5.0	07/26/12 15:38	
Trichloroethene	ug/kg	ND	5.0	07/26/12 15:38	
Trichlorofluoromethane	ug/kg	ND	5.0	07/26/12 15:38	
Vinyl chloride	ug/kg	ND	5.0	07/26/12 15:38	
Xylene (Total)	ug/kg	ND	5.0	07/26/12 15:38	
1,2-Dichloroethane-d4 (S)	%	95	73-135	07/26/12 15:38	
4-Bromofluorobenzene (S)	%	96	78-125	07/26/12 15:38	
Dibromofluoromethane (S)	%	93	78-122	07/26/12 15:38	
Toluene-d8 (S)	%	102	80-123	07/26/12 15:38	

LABORATORY CONTROL SAMPLE: 1035295

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	100	95.3	95	80-120	
1,1,1-Trichloroethane	ug/kg	100	93.6	94	78-128	
1,1,2,2-Tetrachloroethane	ug/kg	100	81.1	81	70-120	
1,1,2-Trichloroethane	ug/kg	100	83.4	83	77-120	
1,1-Dichloroethane	ug/kg	100	79.1	79	78-120	
1,1-Dichloroethene	ug/kg	100	91.7	92	71-123	
1,1-Dichloropropene	ug/kg	100	95.3	95	77-127	
1,2,3-Trichlorobenzene	ug/kg	100	93.9	94	80-120	
1,2,3-Trichloropropane	ug/kg	100	85.7	86	73-120	
1,2,4-Trichlorobenzene	ug/kg	100	93.2	93	78-121	
1,2,4-Trimethylbenzene	ug/kg	100	83.4	83	80-120	
1,2-Dibromo-3-chloropropane	ug/kg	100	83.5	83	70-125	
1,2-Dibromoethane (EDB)	ug/kg	100	92.5	92	78-120	
1,2-Dichlorobenzene	ug/kg	100	87.7	88	80-120	
1,2-Dichloroethane	ug/kg	100	88.9	89	76-121	

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QUALITY CONTROL DATA

Project: KUHLMAN DIECASTING

Pace Project No.: 60125813

LABORATORY CONTROL SAMPLE: 1035295

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dichloroethene (Total)	ug/kg	200	171	85	80-120	
1,2-Dichloropropane	ug/kg	100	95.7	96	80-120	
1,3,5-Trimethylbenzene	ug/kg	100	85.1	85	79-120	
1,3-Dichlorobenzene	ug/kg	100	87.5	88	80-120	
1,3-Dichloropropane	ug/kg	100	82.6	83	76-120	
1,4-Dichlorobenzene	ug/kg	100	89.1	89	80-120	
2,2-Dichloropropane	ug/kg	100	82.1	82	71-130	
2-Butanone (MEK)	ug/kg	500	371	74	45-160	
2-Chlorotoluene	ug/kg	100	86.0	86	78-120	
2-Hexanone	ug/kg	500	426	85	47-160	
4-Chlorotoluene	ug/kg	100	82.6	83	79-120	
4-Methyl-2-pentanone (MIBK)	ug/kg	500	459	92	68-123	
Acetone	ug/kg	500	366	73	40-160	
Benzene	ug/kg	100	91.2	91	78-120	
Bromobenzene	ug/kg	100	93.7	94	80-120	
Bromochloromethane	ug/kg	100	90.1	90	76-120	
Bromodichloromethane	ug/kg	100	90.9	91	79-120	
Bromoform	ug/kg	100	98.6	99	75-124	
Bromomethane	ug/kg	100	82.9	83	59-157	
Carbon disulfide	ug/kg	100	86.3	86	74-158	
Carbon tetrachloride	ug/kg	100	90.1	90	79-139	
Chlorobenzene	ug/kg	100	91.9	92	80-120	
Chloroethane	ug/kg	100	96.1	96	66-153	
Chloroform	ug/kg	100	72.2	72	74-120	L0
Chloromethane	ug/kg	100	93.1	93	40-160	
cis-1,2-Dichloroethene	ug/kg	100	81.7	82	75-120	
cis-1,3-Dichloropropene	ug/kg	100	92.3	92	80-120	
Dibromochloromethane	ug/kg	100	97.4	97	80-123	
Dibromomethane	ug/kg	100	91.6	92	80-120	
Dichlorodifluoromethane	ug/kg	100	97.4	97	40-160	
Ethylbenzene	ug/kg	100	92.4	92	77-120	
Hexachloro-1,3-butadiene	ug/kg	100	97.3	97	71-134	
Isopropylbenzene (Cumene)	ug/kg	100	98.1	98	80-128	
Methyl-tert-butyl ether	ug/kg	100	81.0	81	71-122	
Methylene chloride	ug/kg	100	84.2	84	76-131	
n-Butylbenzene	ug/kg	100	86.3	86	78-130	
n-Propylbenzene	ug/kg	100	87.4	87	78-121	
Naphthalene	ug/kg	100	92.8	93	67-123	
p-Isopropyltoluene	ug/kg	100	88.0	88	80-122	
sec-Butylbenzene	ug/kg	100	87.9	88	79-124	
Styrene	ug/kg	100	90.6	91	77-120	
tert-Butylbenzene	ug/kg	100	89.1	89	80-123	
Tetrachloroethene	ug/kg	100	99.1	99	74-129	
Toluene	ug/kg	100	93.3	93	76-120	
trans-1,2-Dichloroethene	ug/kg	100	89.1	89	80-129	
trans-1,3-Dichloropropene	ug/kg	100	93.5	94	80-120	
Trichloroethene	ug/kg	100	93.1	93	79-120	
Trichlorofluoromethane	ug/kg	100	91.1	91	70-135	

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QUALITY CONTROL DATA

Project: KUHLMAN DIECASTING

Pace Project No.: 60125813

LABORATORY CONTROL SAMPLE: 1035295

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Vinyl chloride	ug/kg	100	93.2	93	64-148	
Xylene (Total)	ug/kg	300	267	89	76-120	
1,2-Dichloroethane-d4 (S)	%			96	73-135	
4-Bromofluorobenzene (S)	%			95	78-125	
Dibromofluoromethane (S)	%			100	78-122	
Toluene-d8 (S)	%			101	80-123	

QUALITY CONTROL DATA

Project: KUHLMAN DIECASTING

Pace Project No.: 60125813

QC Batch: MSV/47410

Analysis Method: EPA 8260

QC Batch Method: EPA 8260

Analysis Description: 8260 MSV 5035A Volatile Organics

Associated Lab Samples: 60125813002, 60125813008

METHOD BLANK: 1037202

Matrix: Solid

Associated Lab Samples: 60125813002, 60125813008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	ND	5.0	07/30/12 17:20	
1,1,1-Trichloroethane	ug/kg	ND	5.0	07/30/12 17:20	
1,1,2,2-Tetrachloroethane	ug/kg	ND	5.0	07/30/12 17:20	
1,1,2-Trichloroethane	ug/kg	ND	5.0	07/30/12 17:20	
1,1-Dichloroethane	ug/kg	ND	5.0	07/30/12 17:20	
1,1-Dichloroethene	ug/kg	ND	5.0	07/30/12 17:20	
1,1-Dichloropropene	ug/kg	ND	5.0	07/30/12 17:20	
1,2,3-Trichlorobenzene	ug/kg	ND	5.0	07/30/12 17:20	
1,2,3-Trichloropropane	ug/kg	ND	5.0	07/30/12 17:20	
1,2,4-Trichlorobenzene	ug/kg	ND	5.0	07/30/12 17:20	
1,2,4-Trimethylbenzene	ug/kg	ND	5.0	07/30/12 17:20	
1,2-Dibromo-3-chloropropane	ug/kg	ND	10.0	07/30/12 17:20	
1,2-Dibromoethane (EDB)	ug/kg	ND	5.0	07/30/12 17:20	
1,2-Dichlorobenzene	ug/kg	ND	5.0	07/30/12 17:20	
1,2-Dichloroethane	ug/kg	ND	5.0	07/30/12 17:20	
1,2-Dichloroethene (Total)	ug/kg	ND	5.0	07/30/12 17:20	
1,2-Dichloropropane	ug/kg	ND	5.0	07/30/12 17:20	
1,3,5-Trimethylbenzene	ug/kg	ND	5.0	07/30/12 17:20	
1,3-Dichlorobenzene	ug/kg	ND	5.0	07/30/12 17:20	
1,3-Dichloropropane	ug/kg	ND	5.0	07/30/12 17:20	
1,4-Dichlorobenzene	ug/kg	ND	5.0	07/30/12 17:20	
2,2-Dichloropropane	ug/kg	ND	5.0	07/30/12 17:20	
2-Butanone (MEK)	ug/kg	ND	10.0	07/30/12 17:20	
2-Chlorotoluene	ug/kg	ND	5.0	07/30/12 17:20	
2-Hexanone	ug/kg	ND	20.0	07/30/12 17:20	
4-Chlorotoluene	ug/kg	ND	5.0	07/30/12 17:20	
4-Methyl-2-pentanone (MIBK)	ug/kg	ND	10.0	07/30/12 17:20	
Acetone	ug/kg	ND	20.0	07/30/12 17:20	
Benzene	ug/kg	ND	5.0	07/30/12 17:20	
Bromobenzene	ug/kg	ND	5.0	07/30/12 17:20	
Bromochloromethane	ug/kg	ND	5.0	07/30/12 17:20	
Bromodichloromethane	ug/kg	ND	5.0	07/30/12 17:20	
Bromoform	ug/kg	ND	5.0	07/30/12 17:20	
Bromomethane	ug/kg	ND	5.0	07/30/12 17:20	
Carbon disulfide	ug/kg	ND	5.0	07/30/12 17:20	
Carbon tetrachloride	ug/kg	ND	5.0	07/30/12 17:20	
Chlorobenzene	ug/kg	ND	5.0	07/30/12 17:20	
Chloroethane	ug/kg	ND	5.0	07/30/12 17:20	
Chloroform	ug/kg	ND	5.0	07/30/12 17:20	
Chloromethane	ug/kg	ND	5.0	07/30/12 17:20	
cis-1,2-Dichloroethene	ug/kg	ND	5.0	07/30/12 17:20	
cis-1,3-Dichloropropene	ug/kg	ND	5.0	07/30/12 17:20	
Dibromochloromethane	ug/kg	ND	5.0	07/30/12 17:20	

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QUALITY CONTROL DATA

Project: KUHLMAN DIECASTING

Pace Project No.: 60125813

METHOD BLANK: 1037202

Matrix: Solid

Associated Lab Samples: 60125813002, 60125813008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Dibromomethane	ug/kg	ND	5.0	07/30/12 17:20	
Dichlorodifluoromethane	ug/kg	ND	5.0	07/30/12 17:20	
Ethylbenzene	ug/kg	ND	5.0	07/30/12 17:20	
Hexachloro-1,3-butadiene	ug/kg	ND	5.0	07/30/12 17:20	
Isopropylbenzene (Cumene)	ug/kg	ND	5.0	07/30/12 17:20	
Methyl-tert-butyl ether	ug/kg	ND	5.0	07/30/12 17:20	
Methylene chloride	ug/kg	ND	5.0	07/30/12 17:20	
n-Butylbenzene	ug/kg	ND	5.0	07/30/12 17:20	
n-Propylbenzene	ug/kg	ND	5.0	07/30/12 17:20	
Naphthalene	ug/kg	ND	10.0	07/30/12 17:20	
p-Isopropyltoluene	ug/kg	ND	5.0	07/30/12 17:20	
sec-Butylbenzene	ug/kg	ND	5.0	07/30/12 17:20	
Styrene	ug/kg	ND	5.0	07/30/12 17:20	
tert-Butylbenzene	ug/kg	ND	5.0	07/30/12 17:20	
Tetrachloroethene	ug/kg	ND	5.0	07/30/12 17:20	
Toluene	ug/kg	ND	5.0	07/30/12 17:20	
trans-1,2-Dichloroethene	ug/kg	ND	5.0	07/30/12 17:20	
trans-1,3-Dichloropropene	ug/kg	ND	5.0	07/30/12 17:20	
Trichloroethene	ug/kg	ND	5.0	07/30/12 17:20	
Trichlorofluoromethane	ug/kg	ND	5.0	07/30/12 17:20	
Vinyl chloride	ug/kg	ND	5.0	07/30/12 17:20	
Xylene (Total)	ug/kg	ND	5.0	07/30/12 17:20	
1,2-Dichloroethane-d4 (S)	%	99	73-135	07/30/12 17:20	
4-Bromofluorobenzene (S)	%	99	78-125	07/30/12 17:20	
Dibromofluoromethane (S)	%	100	78-122	07/30/12 17:20	
Toluene-d8 (S)	%	100	80-123	07/30/12 17:20	

LABORATORY CONTROL SAMPLE: 1037203

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	100	91.7	92	80-120	
1,1,1-Trichloroethane	ug/kg	100	87.9	88	78-128	
1,1,2,2-Tetrachloroethane	ug/kg	100	91.6	92	70-120	
1,1,2-Trichloroethane	ug/kg	100	88.0	88	77-120	
1,1-Dichloroethane	ug/kg	100	85.1	85	78-120	
1,1-Dichloroethene	ug/kg	100	93.4	93	71-123	
1,1-Dichloropropene	ug/kg	100	89.0	89	77-127	
1,2,3-Trichlorobenzene	ug/kg	100	82.6	83	80-120	
1,2,3-Trichloropropane	ug/kg	100	88.7	89	73-120	
1,2,4-Trichlorobenzene	ug/kg	100	80.6	81	78-121	
1,2,4-Trimethylbenzene	ug/kg	100	83.7	84	80-120	
1,2-Dibromo-3-chloropropane	ug/kg	100	84.6	85	70-125	
1,2-Dibromoethane (EDB)	ug/kg	100	92.4	92	78-120	
1,2-Dichlorobenzene	ug/kg	100	86.6	87	80-120	
1,2-Dichloroethane	ug/kg	100	91.8	92	76-121	

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QUALITY CONTROL DATA

Project: KUHLMAN DIECASTING

Pace Project No.: 60125813

LABORATORY CONTROL SAMPLE: 1037203

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dichloroethene (Total)	ug/kg	200	177	88	80-120	
1,2-Dichloropropane	ug/kg	100	89.6	90	80-120	
1,3,5-Trimethylbenzene	ug/kg	100	83.1	83	79-120	
1,3-Dichlorobenzene	ug/kg	100	84.8	85	80-120	
1,3-Dichloropropane	ug/kg	100	84.3	84	76-120	
1,4-Dichlorobenzene	ug/kg	100	86.7	87	80-120	
2,2-Dichloropropane	ug/kg	100	83.8	84	71-130	
2-Butanone (MEK)	ug/kg	500	435	87	45-160	
2-Chlorotoluene	ug/kg	100	84.3	84	78-120	
2-Hexanone	ug/kg	500	439	88	47-160	
4-Chlorotoluene	ug/kg	100	84.1	84	79-120	
4-Methyl-2-pentanone (MIBK)	ug/kg	500	443	89	68-123	
Acetone	ug/kg	500	438	88	40-160	
Benzene	ug/kg	100	87.2	87	78-120	
Bromobenzene	ug/kg	100	86.0	86	80-120	
Bromochloromethane	ug/kg	100	95.9	96	76-120	
Bromodichloromethane	ug/kg	100	88.5	88	79-120	
Bromoform	ug/kg	100	93.8	94	75-124	
Bromomethane	ug/kg	100	85.0	85	59-157	
Carbon disulfide	ug/kg	100	91.5	92	74-158	
Carbon tetrachloride	ug/kg	100	90.9	91	79-139	
Chlorobenzene	ug/kg	100	87.1	87	80-120	
Chloroethane	ug/kg	100	104	104	66-153	
Chloroform	ug/kg	100	78.5	78	74-120	
Chloromethane	ug/kg	100	105	105	40-160	
cis-1,2-Dichloroethene	ug/kg	100	86.6	87	75-120	
cis-1,3-Dichloropropene	ug/kg	100	90.4	90	80-120	
Dibromochloromethane	ug/kg	100	95.4	95	80-123	
Dibromomethane	ug/kg	100	86.2	86	80-120	
Dichlorodifluoromethane	ug/kg	100	104	104	40-160	
Ethylbenzene	ug/kg	100	84.3	84	77-120	
Hexachloro-1,3-butadiene	ug/kg	100	81.8	82	71-134	
Isopropylbenzene (Cumene)	ug/kg	100	89.4	89	80-128	
Methyl-tert-butyl ether	ug/kg	100	87.5	87	71-122	
Methylene chloride	ug/kg	100	91.0	91	76-131	
n-Butylbenzene	ug/kg	100	85.0	85	78-130	
n-Propylbenzene	ug/kg	100	85.2	85	78-121	
Naphthalene	ug/kg	100	84.0	84	67-123	
p-Isopropyltoluene	ug/kg	100	81.9	82	80-122	
sec-Butylbenzene	ug/kg	100	83.8	84	79-124	
Styrene	ug/kg	100	86.0	86	77-120	
tert-Butylbenzene	ug/kg	100	84.3	84	80-123	
Tetrachloroethene	ug/kg	100	84.2	84	74-129	
Toluene	ug/kg	100	80.4	80	76-120	
trans-1,2-Dichloroethene	ug/kg	100	90.0	90	80-129	
trans-1,3-Dichloropropene	ug/kg	100	99.3	99	80-120	
Trichloroethene	ug/kg	100	85.8	86	79-120	
Trichlorofluoromethane	ug/kg	100	97.2	97	70-135	

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QUALITY CONTROL DATA

Project: KUHLMAN DIECASTING

Pace Project No.: 60125813

LABORATORY CONTROL SAMPLE: 1037203

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Vinyl chloride	ug/kg	100	108	108	64-148	
Xylene (Total)	ug/kg	300	252	84	76-120	
1,2-Dichloroethane-d4 (S)	%			100	73-135	
4-Bromofluorobenzene (S)	%			98	78-125	
Dibromofluoromethane (S)	%			101	78-122	
Toluene-d8 (S)	%			99	80-123	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1037204 1037205

Parameter	Units	60125686004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1,2-Tetrachloroethane	ug/kg	ND	99.5	99.3	69.5	75.5	70	76	40-138	8	48	
1,1,1-Trichloroethane	ug/kg	ND	99.5	99.3	80.2	83.0	81	84	40-136	3	39	
1,1,2,2-Tetrachloroethane	ug/kg	ND	99.5	99.3	ND	ND	2	2	40-157		47	M1
1,1,2-Trichloroethane	ug/kg	ND	99.5	99.3	26.2	26.5	26	27	40-141	1	47	M1
1,1-Dichloroethane	ug/kg	ND	99.5	99.3	76.6	81.5	77	82	40-126	6	42	
1,1-Dichloroethene	ug/kg	ND	99.5	99.3	129	138	129	139	40-130	7	33	M1
1,1-Dichloropropene	ug/kg	ND	99.5	99.3	74.3	80.1	75	81	40-134	7	44	
1,2,3-Trichlorobenzene	ug/kg	ND	99.5	99.3	57.7	66.8	58	67	40-131	15	45	
1,2,3-Trichloropropane	ug/kg	ND	99.5	99.3	72.0	80.6	72	81	40-160	11	48	
1,2,4-Trichlorobenzene	ug/kg	ND	99.5	99.3	57.4	63.4	58	64	40-133	10	48	
1,2,4-Trimethylbenzene	ug/kg	ND	99.5	99.3	74.1	75.7	70	71	40-132	2	46	
1,2-Dibromo-3-chloropropane	ug/kg	ND	99.5	99.3	21.8	21.9	22	22	40-160	0	49	M1
1,2-Dibromoethane (EDB)	ug/kg	ND	99.5	99.3	81.9	89.8	82	90	40-143	9	39	
1,2-Dichlorobenzene	ug/kg	ND	99.5	99.3	67.2	75.1	68	76	40-133	11	45	
1,2-Dichloroethane	ug/kg	ND	99.5	99.3	85.6	93.0	86	94	40-141	8	41	
1,2-Dichloroethene (Total)	ug/kg	ND	199	199	156	167	79	84	40-131	7	42	
1,2-Dichloropropane	ug/kg	ND	99.5	99.3	84.7	90.8	85	91	40-134	7	43	
1,3,5-Trimethylbenzene	ug/kg	ND	99.5	99.3	70.6	71.6	70	71	40-134	1	47	
1,3-Dichlorobenzene	ug/kg	ND	99.5	99.3	62.8	70.0	63	71	40-131	11	45	
1,3-Dichloropropane	ug/kg	ND	99.5	99.3	77.8	84.0	78	85	40-133	8	45	
1,4-Dichlorobenzene	ug/kg	ND	99.5	99.3	64.8	72.2	65	73	40-134	11	46	
2,2-Dichloropropane	ug/kg	ND	99.5	99.3	75.2	80.6	76	81	40-135	7	45	
2-Butanone (MEK)	ug/kg	ND	497	496	418	465	83	93	45-160	11	48	
2-Chlorotoluene	ug/kg	ND	99.5	99.3	67.1	72.1	67	73	40-133	7	46	
2-Hexanone	ug/kg	ND	497	496	423	463	85	93	40-160	9	47	
4-Chlorotoluene	ug/kg	ND	99.5	99.3	65.7	70.6	66	71	40-136	7	46	
4-Methyl-2-pentanone (MIBK)	ug/kg	ND	497	496	425	462	85	92	40-148	8	49	
Acetone	ug/kg	0.024 mg/kg	497	496	445	480	85	92	40-160	8	44	
Benzene	ug/kg	ND	99.5	99.3	78.5	83.7	79	84	40-141	6	34	
Bromobenzene	ug/kg	ND	99.5	99.3	72.1	78.1	73	79	40-138	8	44	
Bromochloromethane	ug/kg	ND	99.5	99.3	89.0	96.2	90	97	40-141	8	45	
Bromodichloromethane	ug/kg	ND	99.5	99.3	59.9	65.4	60	66	40-136	9	47	
Bromoform	ug/kg	ND	99.5	99.3	76.2	86.2	77	87	40-146	12	47	
Bromomethane	ug/kg	ND	99.5	99.3	68.7	71.4	69	72	40-147	4	40	
Carbon disulfide	ug/kg	ND	99.5	99.3	49.1	64.6	49	65	40-147	27	34	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: KUHLMAN DIECASTING

Pace Project No.: 60125813

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1037204 1037205											
Parameter	Units	60125686004		MS	MSD	MS	MSD	MS	MSD	% Rec	Max
		Result	Conc.	Spike	Spike						RPD
				Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD
Carbon tetrachloride	ug/kg	ND	99.5	99.3	99.3	78.7	82.7	79	83	40-138	5
Chlorobenzene	ug/kg	ND	99.5	99.3	99.3	73.4	78.9	74	79	40-130	7
Chloroethane	ug/kg	ND	99.5	99.3	99.3	83.4	88.9	84	90	40-157	6
Chloroform	ug/kg	ND	99.5	99.3	99.3	72.4	77.0	72	76	40-129	6
Chloromethane	ug/kg	ND	99.5	99.3	99.3	75.1	79.7	76	80	40-140	6
cis-1,2-Dichloroethene	ug/kg	ND	99.5	99.3	99.3	78.9	84.2	79	85	40-125	6
cis-1,3-Dichloropropene	ug/kg	ND	99.5	99.3	99.3	80.1	85.9	80	87	40-132	7
Dibromochloromethane	ug/kg	ND	99.5	99.3	99.3	70.3	75.0	71	76	40-144	6
Dibromomethane	ug/kg	ND	99.5	99.3	99.3	80.3	87.1	81	88	40-140	8
Dichlorodifluoromethane	ug/kg	ND	99.5	99.3	99.3	61.7	66.7	62	67	40-127	8
Ethylbenzene	ug/kg	ND	99.5	99.3	99.3	73.9	77.0	73	76	40-149	4
Hexachloro-1,3-butadiene	ug/kg	ND	99.5	99.3	99.3	60.9	54.3	61	55	40-128	11
Isopropylbenzene (Cumene)	ug/kg	ND	99.5	99.3	99.3	79.0	78.4	79	79	40-142	1
Methyl-tert-butyl ether	ug/kg	ND	99.5	99.3	99.3	81.7	90.1	82	91	40-147	10
Methylene chloride	ug/kg	ND	99.5	99.3	99.3	87.4	92.4	86	91	40-147	6
n-Butylbenzene	ug/kg	ND	99.5	99.3	99.3	69.3	64.4	70	65	40-136	7
n-Propylbenzene	ug/kg	ND	99.5	99.3	99.3	69.8	71.5	70	72	40-134	2
Naphthalene	ug/kg	ND	99.5	99.3	99.3	74.1	84.5	70	81	40-158	13
p-Isopropyltoluene	ug/kg	ND	99.5	99.3	99.3	68.6	65.2	69	66	40-133	5
sec-Butylbenzene	ug/kg	ND	99.5	99.3	99.3	71.6	67.7	72	68	40-135	6
Styrene	ug/kg	ND	99.5	99.3	99.3	72.7	78.6	73	79	40-133	8
tert-Butylbenzene	ug/kg	ND	99.5	99.3	99.3	75.5	72.7	76	73	40-137	4
Tetrachloroethene	ug/kg	ND	99.5	99.3	99.3	65.8	73.0	66	74	40-128	10
Toluene	ug/kg	ND	99.5	99.3	99.3	70.7	76.3	68	74	40-143	8
trans-1,2-Dichloroethene	ug/kg	ND	99.5	99.3	99.3	77.5	83.1	78	84	40-140	7
trans-1,3-Dichloropropene	ug/kg	ND	99.5	99.3	99.3	86.7	94.7	87	95	40-144	9
Trichloroethene	ug/kg	ND	99.5	99.3	99.3	139	149	139	150	40-139	7
Trichlorofluoromethane	ug/kg	ND	99.5	99.3	99.3	75.0	81.5	75	82	40-137	8
Vinyl chloride	ug/kg	ND	99.5	99.3	99.3	79.0	83.6	79	84	40-150	6
Xylene (Total)	ug/kg	0.0066	299	298	298	224	236	73	77	40-147	5
	mg/kg										
1,2-Dichloroethane-d4 (S)	%							100	100	73-135	
4-Bromofluorobenzene (S)	%							101	99	78-125	
Dibromofluoromethane (S)	%							48	44	78-122	S0
Toluene-d8 (S)	%							100	100	80-123	

QUALITY CONTROL DATA

Project: KUHLMAN DIECASTING

Pace Project No.: 60125813

QC Batch:	OEXT/34158	Analysis Method:	EPA 8270 by SIM
QC Batch Method:	EPA 3546	Analysis Description:	8270/3546 MSSV PAH by SIM
Associated Lab Samples:	60125813001, 60125813002, 60125813004, 60125813005, 60125813006, 60125813007, 60125813008		

METHOD BLANK: 1034973 Matrix: Solid

Associated Lab Samples: 60125813001, 60125813002, 60125813004, 60125813005, 60125813006, 60125813007, 60125813008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Acenaphthene	ug/kg	ND	3.2	07/27/12 11:46	
Acenaphthylene	ug/kg	ND	3.2	07/27/12 11:46	
Anthracene	ug/kg	ND	3.2	07/27/12 11:46	
Benzo(a)anthracene	ug/kg	ND	3.2	07/27/12 11:46	
Benzo(a)pyrene	ug/kg	ND	3.2	07/27/12 11:46	
Benzo(b)fluoranthene	ug/kg	ND	3.2	07/27/12 11:46	
Benzo(g,h,i)perylene	ug/kg	ND	3.2	07/27/12 11:46	
Benzo(k)fluoranthene	ug/kg	ND	3.2	07/27/12 11:46	
Chrysene	ug/kg	ND	3.2	07/27/12 11:46	
Dibenz(a,h)anthracene	ug/kg	ND	3.2	07/27/12 11:46	
Fluoranthene	ug/kg	ND	3.2	07/27/12 11:46	
Fluorene	ug/kg	ND	3.2	07/27/12 11:46	
Indeno(1,2,3-cd)pyrene	ug/kg	ND	3.2	07/27/12 11:46	
Naphthalene	ug/kg	ND	3.2	07/27/12 11:46	
Phenanthrene	ug/kg	ND	3.2	07/27/12 11:46	
Pyrene	ug/kg	ND	3.2	07/27/12 11:46	
2-Fluorobiphenyl (S)	%	78	41-120	07/27/12 11:46	
Nitrobenzene-d5 (S)	%	95	35-121	07/27/12 11:46	
Terphenyl-d14 (S)	%	78	39-123	07/27/12 11:46	

LABORATORY CONTROL SAMPLE: 1034974

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Acenaphthene	ug/kg	32.5	26.3	81	58-120	
Acenaphthylene	ug/kg	32.5	25.5	78	56-120	
Anthracene	ug/kg	32.5	23.5	72	55-120	
Benzo(a)anthracene	ug/kg	32.5	26.3	81	60-120	
Benzo(a)pyrene	ug/kg	32.5	26.2	81	54-120	
Benzo(b)fluoranthene	ug/kg	32.5	26.2	81	54-128	
Benzo(g,h,i)perylene	ug/kg	32.5	25.6	79	26-126	
Benzo(k)fluoranthene	ug/kg	32.5	26.0	80	53-120	
Chrysene	ug/kg	32.5	26.8	82	56-120	
Dibenz(a,h)anthracene	ug/kg	32.5	25.7	79	42-120	
Fluoranthene	ug/kg	32.5	27.3	84	57-120	
Fluorene	ug/kg	32.5	27.4	84	58-120	
Indeno(1,2,3-cd)pyrene	ug/kg	32.5	23.9	74	37-120	
Naphthalene	ug/kg	32.5	25.6	79	55-120	
Phenanthrene	ug/kg	32.5	30.1	92	57-120	
Pyrene	ug/kg	32.5	27.3	84	57-120	
2-Fluorobiphenyl (S)	%			81	41-120	
Nitrobenzene-d5 (S)	%			94	35-121	

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QUALITY CONTROL DATA

Project: KUHLMAN DIECASTING

Pace Project No.: 60125813

LABORATORY CONTROL SAMPLE: 1034974

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Terphenyl-d14 (S)	%			77	39-123	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1034975 1034976

Parameter	Units	60125643003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Acenaphthene	ug/kg	ND	43.3	43.4	36.8	31.9	84	72	45-120	14	30	
Acenaphthylene	ug/kg	ND	43.3	43.4	35.3	30.9	81	71	28-129	13	35	
Anthracene	ug/kg	ND	43.3	43.4	35.9	29.4	83	68	27-130	20	37	
Benzo(a)anthracene	ug/kg	ND	43.3	43.4	38.2	33.5	87	76	36-127	13	39	
Benzo(a)pyrene	ug/kg	ND	43.3	43.4	32.1	29.3	73	66	21-135	9	35	
Benzo(b)fluoranthene	ug/kg	ND	43.3	43.4	41.0	36.9	90	80	17-158	11	36	
Benzo(g,h,i)perylene	ug/kg	ND	43.3	43.4	36.8	34.5	77	72	10-141	6	41	
Benzo(k)fluoranthene	ug/kg	ND	43.3	43.4	32.1	29.1	72	65	47-120	10	33	
Chrysene	ug/kg	ND	43.3	43.4	35.4	29.3	80	66	24-128	19	42	
Dibenz(a,h)anthracene	ug/kg	ND	43.3	43.4	32.9	31.3	75	71	10-137	5	31	
Fluoranthene	ug/kg	ND	43.3	43.4	36.4	31.5	83	71	34-126	15	43	
Fluorene	ug/kg	ND	43.3	43.4	37.9	32.6	86	73	42-123	15	35	
Indeno(1,2,3-cd)pyrene	ug/kg	ND	43.3	43.4	33.7	30.7	76	69	10-126	9	32	
Naphthalene	ug/kg	14.4	43.3	43.4	36.3	33.6	51	44	22-135	8	41	
Phenanthrene	ug/kg	ND	43.3	43.4	42.6	36.9	91	78	29-139	14	42	
Pyrene	ug/kg	ND	43.3	43.4	36.6	32.1	83	72	20-138	13	43	
2-Fluorobiphenyl (S)	%						100	74	41-120			
Nitrobenzene-d5 (S)	%						85	78	35-121			
Terphenyl-d14 (S)	%						98	61	39-123			

QUALITY CONTROL DATA

Project: KUHLMAN DIECASTING
Pace Project No.: 60125813

QC Batch:	OEXT/34136	Analysis Method:	EPA 8270C by SIM
QC Batch Method:	EPA 3510C	Analysis Description:	8270 Water PAH by SIM MSSV
Associated Lab Samples:	60125813003		

METHOD BLANK: 1034350 Matrix: Water
Associated Lab Samples: 60125813003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Acenaphthene	ug/L	ND	0.10	08/03/12 17:05	
Acenaphthylene	ug/L	ND	0.10	08/03/12 17:05	
Anthracene	ug/L	ND	0.10	08/03/12 17:05	
Benzo(a)anthracene	ug/L	ND	0.10	08/03/12 17:05	
Benzo(a)pyrene	ug/L	ND	0.10	08/03/12 17:05	
Benzo(b)fluoranthene	ug/L	ND	0.10	08/03/12 17:05	
Benzo(g,h,i)perylene	ug/L	ND	0.10	08/03/12 17:05	
Benzo(k)fluoranthene	ug/L	ND	0.10	08/03/12 17:05	
Chrysene	ug/L	ND	0.10	08/03/12 17:05	
Dibenz(a,h)anthracene	ug/L	ND	0.10	08/03/12 17:05	
Fluoranthene	ug/L	0.15	0.10	08/03/12 17:05	
Fluorene	ug/L	ND	0.10	08/03/12 17:05	
Indeno(1,2,3-cd)pyrene	ug/L	ND	0.10	08/03/12 17:05	
Naphthalene	ug/L	ND	0.50	08/03/12 17:05	
Phenanthrene	ug/L	ND	0.50	08/03/12 17:05	
Pyrene	ug/L	ND	0.10	08/03/12 17:05	
2-Fluorobiphenyl (S)	%	83	44-120	08/03/12 17:05	
Nitrobenzene-d5 (S)	%	93	42-120	08/03/12 17:05	
Terphenyl-d14 (S)	%	91	46-131	08/03/12 17:05	

LABORATORY CONTROL SAMPLE: 1034351

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Acenaphthene	ug/L	10	7.3	73	48-120	
Acenaphthylene	ug/L	10	7.3	73	42-120	
Anthracene	ug/L	10	8.0	80	48-120	
Benzo(a)anthracene	ug/L	10	10.0	100	53-118	
Benzo(a)pyrene	ug/L	10	8.2	82	48-115	
Benzo(b)fluoranthene	ug/L	10	9.5	95	42-132	
Benzo(g,h,i)perylene	ug/L	10	7.6	76	38-116	
Benzo(k)fluoranthene	ug/L	10	7.5	75	48-117	
Chrysene	ug/L	10	7.5	75	51-115	
Dibenz(a,h)anthracene	ug/L	10	7.0	70	40-116	
Fluoranthene	ug/L	10	9.6	96	37-134	
Fluorene	ug/L	10	8.2	82	49-116	
Indeno(1,2,3-cd)pyrene	ug/L	10	7.0	70	37-118	
Naphthalene	ug/L	10	7.2	72	41-112	
Phenanthrene	ug/L	10	7.8	78	52-116	
Pyrene	ug/L	10	7.9	79	44-134	
2-Fluorobiphenyl (S)	%			70	44-120	
Nitrobenzene-d5 (S)	%			79	42-120	

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QUALITY CONTROL DATA

Project: KUHLMAN DIECASTING

Pace Project No.: 60125813

LABORATORY CONTROL SAMPLE: 1034351

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Terphenyl-d14 (S)	%			73	46-131	

QUALITY CONTROL DATA

Project: KUHLMAN DIECASTING

Pace Project No.: 60125813

QC Batch: OEXT/34137

Analysis Method: OA2

QC Batch Method: OA2

Analysis Description: OA2 GCS

Associated Lab Samples: 60125813003

METHOD BLANK: 1034359

Matrix: Water

Associated Lab Samples: 60125813003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Diesel Fuel	mg/L	ND	0.40	07/27/12 07:24	
Fuel Oil	mg/L	ND	0.40	07/27/12 07:24	
Jet Fuel	mg/L	ND	0.40	07/27/12 07:24	
Kerosene	mg/L	ND	0.40	07/27/12 07:24	
Mineral Spirits	mg/L	ND	0.40	07/27/12 07:24	
Motor Oil	mg/L	ND	0.40	07/27/12 07:24	
Total Petroleum Hydrocarbons	mg/L	ND	0.40	07/27/12 07:24	
n-Tetracosane (S)	%	68	30-122	07/27/12 07:24	
p-Terphenyl (S)	%	66	20-122	07/27/12 07:24	

LABORATORY CONTROL SAMPLE: 1034360

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Diesel Fuel	mg/L	25	20.2	81	47-122	
n-Tetracosane (S)	%			66	30-122	
p-Terphenyl (S)	%			66	20-122	

QUALITY CONTROL DATA

Project: KUHLMAN DIECASTING

Pace Project No.: 60125813

QC Batch:	OEXT/34179	Analysis Method:	OA2
QC Batch Method:	OA2	Analysis Description:	OA2 GCS
Associated Lab Samples:	60125813001, 60125813002, 60125813004, 60125813005, 60125813006, 60125813007, 60125813008		

METHOD BLANK: 1035683 Matrix: Solid

Associated Lab Samples: 60125813001, 60125813002, 60125813004, 60125813005, 60125813006, 60125813007, 60125813008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Diesel Fuel	mg/kg	ND	19.8	07/30/12 22:56	
Fuel Oil	mg/kg	ND	19.8	07/30/12 22:56	
Jet Fuel	mg/kg	ND	19.8	07/30/12 22:56	
Kerosene	mg/kg	ND	19.8	07/30/12 22:56	
Mineral Spirits	mg/kg	ND	19.8	07/30/12 22:56	
Motor Oil	mg/kg	ND	19.8	07/30/12 22:56	
Total Petroleum Hydrocarbons	mg/kg	ND	19.8	07/30/12 22:56	
n-Tetracosane (S)	%	97	50-137	07/30/12 22:56	
p-Terphenyl (S)	%	83	41-129	07/30/12 22:56	

LABORATORY CONTROL SAMPLE: 1035684

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Diesel Fuel	mg/kg	486	519	107	66-138	
n-Tetracosane (S)	%			103	50-137	
p-Terphenyl (S)	%			97	41-129	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1035685 1035686

Parameter	Units	60125914001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Diesel Fuel	mg/kg	ND	507	493	542	541	107	110	56-154	0	27	
n-Tetracosane (S)	%						100	104	50-137			
p-Terphenyl (S)	%						88	91	41-129			

QUALITY CONTROL DATA

Project: KUHLMAN DIECASTING

Pace Project No.: 60125813

QC Batch:	PMST/7549	Analysis Method:	ASTM D2974
QC Batch Method:	ASTM D2974	Analysis Description:	Dry Weight/Percent Moisture
Associated Lab Samples:	60125813001, 60125813002, 60125813004, 60125813005		

METHOD BLANK: 1039390 Matrix: Solid

Associated Lab Samples: 60125813001, 60125813002, 60125813004, 60125813005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Percent Moisture	%	ND	0.50	08/03/12 00:00	

SAMPLE DUPLICATE: 1039391

Parameter	Units	60125766001 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	21.8	21.7	1	20	

QUALITY CONTROL DATA

Project: KUHLMAN DIECASTING

Pace Project No.: 60125813

QC Batch:	PMST/7550	Analysis Method:	ASTM D2974
QC Batch Method:	ASTM D2974	Analysis Description:	Dry Weight/Percent Moisture
Associated Lab Samples:	60125813006, 60125813007, 60125813008		

METHOD BLANK: 1039395 Matrix: Solid

Associated Lab Samples: 60125813006, 60125813007, 60125813008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Percent Moisture	%	ND	0.50	08/03/12 00:00	

SAMPLE DUPLICATE: 1039396

Parameter	Units	60125857008 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	24.6	26.4	7	20	

QUALIFIERS

Project: KUHLMAN DIECASTING
Pace Project No.: 60125813

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

PRL - Pace Reporting Limit.

RL - Reporting Limit.

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

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

TNI - The NELAC Institute.

BATCH QUALIFIERS

Batch: OEXT/34136

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

Batch: OEXT/34137

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

Batch: MSV/47311

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

Batch: MSV/47352

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

Batch: MSV/47353

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

Batch: MSV/47379

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

Batch: MSV/47425

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

ANALYTE QUALIFIERS

1e Surrogate recovery outside laboratory control limits due to matrix interferences.

2e The sample does not match a profile of laboratory standards. Hydrocarbon fractions are present from the early diesel fuel to late motor oil range. Quantitation achieved using diesel fuel as a reference standard.

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

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

QUALIFIERS

Project: KUHLMAN DIECASTING

Pace Project No.: 60125813

ANALYTE QUALIFIERS

- | | |
|----|--|
| L2 | Analyte recovery in the laboratory control sample (LCS) was below QC limits. Results for this analyte in associated samples may be biased low. |
| M1 | Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery. |
| S0 | Surrogate recovery outside laboratory control limits. |

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: KUHLMAN DIECASTING

Pace Project No.: 60125813

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60125813003	SB-9 GW	OA2	OEXT/34137	OA2	GCSV/12858
60125813001	SB-8 9-11	OA2	OEXT/34179	OA2	GCSV/12867
60125813002	SB-9 12-14	OA2	OEXT/34179	OA2	GCSV/12867
60125813004	SB-10 12-14	OA2	OEXT/34179	OA2	GCSV/12867
60125813005	SB-11 17-19	OA2	OEXT/34179	OA2	GCSV/12867
60125813006	SB-14 8-10	OA2	OEXT/34179	OA2	GCSV/12867
60125813007	SB-17 10-12	OA2	OEXT/34179	OA2	GCSV/12867
60125813008	SB-18 12-14	OA2	OEXT/34179	OA2	GCSV/12867
60125813001	SB-8 9-11	EPA 3050	MPRP/18871	EPA 6010	ICP/15732
60125813002	SB-9 12-14	EPA 3050	MPRP/18871	EPA 6010	ICP/15732
60125813004	SB-10 12-14	EPA 3050	MPRP/18871	EPA 6010	ICP/15732
60125813005	SB-11 17-19	EPA 3050	MPRP/18871	EPA 6010	ICP/15732
60125813006	SB-14 8-10	EPA 3050	MPRP/18871	EPA 6010	ICP/15732
60125813007	SB-17 10-12	EPA 3050	MPRP/18871	EPA 6010	ICP/15732
60125813008	SB-18 12-14	EPA 3050	MPRP/18871	EPA 6010	ICP/15732
60125813003	SB-9 GW	EPA 3010	MPRP/18881	EPA 6010	ICP/15725
60125813003	SB-9 GW	EPA 3010	MPRP/18880	EPA 6010	ICP/15715
60125813003	SB-9 GW	EPA 7470	MERP/6490	EPA 7470	MERC/6455
60125813003	SB-9 GW	EPA 7470	MERP/6489	EPA 7470	MERC/6458
60125813001	SB-8 9-11	EPA 7471	MERP/6494	EPA 7471	MERC/6463
60125813002	SB-9 12-14	EPA 7471	MERP/6494	EPA 7471	MERC/6463
60125813004	SB-10 12-14	EPA 7471	MERP/6494	EPA 7471	MERC/6463
60125813005	SB-11 17-19	EPA 7471	MERP/6494	EPA 7471	MERC/6463
60125813006	SB-14 8-10	EPA 7471	MERP/6494	EPA 7471	MERC/6463
60125813007	SB-17 10-12	EPA 7471	MERP/6494	EPA 7471	MERC/6463
60125813008	SB-18 12-14	EPA 7471	MERP/6494	EPA 7471	MERC/6463
60125813001	SB-8 9-11	EPA 3546	OEXT/34158	EPA 8270 by SIM	MSSV/10712
60125813002	SB-9 12-14	EPA 3546	OEXT/34158	EPA 8270 by SIM	MSSV/10712
60125813004	SB-10 12-14	EPA 3546	OEXT/34158	EPA 8270 by SIM	MSSV/10712
60125813005	SB-11 17-19	EPA 3546	OEXT/34158	EPA 8270 by SIM	MSSV/10712
60125813006	SB-14 8-10	EPA 3546	OEXT/34158	EPA 8270 by SIM	MSSV/10712
60125813007	SB-17 10-12	EPA 3546	OEXT/34158	EPA 8270 by SIM	MSSV/10712
60125813008	SB-18 12-14	EPA 3546	OEXT/34158	EPA 8270 by SIM	MSSV/10712
60125813003	SB-9 GW	EPA 3510C	OEXT/34136	EPA 8270C by SIM	MSSV/10739
60125813001	SB-8 9-11	OA1	MSV/47379		
60125813002	SB-9 12-14	OA1	MSV/47425		
60125813004	SB-10 12-14	OA1	MSV/47379		
60125813005	SB-11 17-19	OA1	MSV/47379		
60125813006	SB-14 8-10	OA1	MSV/47379		
60125813007	SB-17 10-12	OA1	MSV/47379		
60125813008	SB-18 12-14	OA1	MSV/47425		
60125813003	SB-9 GW	EPA 5030B/8260	MSV/47352		

Date: 08/09/2012 11:06 AM

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: KUHLMAN DIECASTING

Pace Project No.: 60125813

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60125813003	SB-9 GW	EPA 8260/OA1	MSV/47353		
60125813001	SB-8 9-11	EPA 8260	MSV/47311		
60125813002	SB-9 12-14	EPA 8260	MSV/47410		
60125813004	SB-10 12-14	EPA 8260	MSV/47311		
60125813005	SB-11 17-19	EPA 8260	MSV/47311		
60125813006	SB-14 8-10	EPA 8260	MSV/47311		
60125813007	SB-17 10-12	EPA 8260	MSV/47311		
60125813008	SB-18 12-14	EPA 8260	MSV/47410		
60125813001	SB-8 9-11	ASTM D2974	PMST/7549		
60125813002	SB-9 12-14	ASTM D2974	PMST/7549		
60125813004	SB-10 12-14	ASTM D2974	PMST/7549		
60125813005	SB-11 17-19	ASTM D2974	PMST/7549		
60125813006	SB-14 8-10	ASTM D2974	PMST/7550		
60125813007	SB-17 10-12	ASTM D2974	PMST/7550		
60125813008	SB-18 12-14	ASTM D2974	PMST/7550		



CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: 1 of 1[illegible][illegible]



Sample Condition Upon Receipt

Client Name: Seagull Env.

Project # 66125813

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☒ Client ☐ Commercial ☐ Pace ☐ Other

Tracking #: _____ Pace Shipping Label Used? ☐ Yes ☒ No

Custody Seal on Cooler/Box Present: ☐ Yes ☒ No Seals intact: ☐ Yes ☒ No

Optional
Proj. Due Date: <u>8/8</u>
Proj. Name: _____

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☒ Foam ☐ None ☒ Other ZPLC

Thermometer Used: T-191 / T-194

Type of Ice: Wet Blue None ☐ Samples on ice, cooling process has begun

Cooler Temperature: 5.0

Temperature should be above freezing to 6°C

Comments:

Date and Initials of person examining contents: 7/25

Chain of Custody present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody filled out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler name & signature on COC:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples arrived within holding time:	<input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	5.
Short Hold Time analyses (<72hr):	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	6. <u>K.T.S</u>
Rush Turn Around Time requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	7.
Sufficient volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8.
Correct containers used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
-Pace containers used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Containers intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	10.
Unpreserved 5035A soils frozen w/in 48hrs?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	11.
Filtered volume received for dissolved tests	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	12.
Sample labels match COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	13.
-Includes date/time/ID/analyses Matrix:	<u>SL, w/1</u>	
All containers needing preservation have been checked.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<u>7/25</u>
All containers needing preservation are found to be in compliance with EPA recommendation.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Exceptions: <u>VOA</u> , coliform, TOC, O&G, WI-DRO (water), Phenolics	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Initial when completed _____ Lot # of added preservative _____
Trip Blank present:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	15.
Pace Trip Blank lot # (if purchased):	_____	
Headspace in VOA vials (>6mm):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	16.
Project sampled in USDA Regulated Area:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	17. List State: _____ <u>h</u>

Client Notification/ Resolution:

Copy COC to Client? Y / N

Field Data Required? Y / N

Person Contacted: _____

Date/Time: _____

Comments/ Resolution:

Total & dissolved metals per soil Harvestor. -mw 7/26/12

Project Manager Review: mw

Date: 7/25/12

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

August 13, 2012

Jeff Pritchard
Seagull Environmental Technologies
415 Oak St.
Kansas City, MO 64106

RE: Project: KUHLMAN DIECASTING
Pace Project No.: 60125852

Dear Jeff Pritchard:

Enclosed are the analytical results for sample(s) received by the laboratory on July 26, 2012. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,



Mary Jane Walls

maryjane.walls@pacelabs.com
PM Lab Management

Enclosures



REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: KUHLMAN DIECASTING

Pace Project No.: 60125852

Kansas Certification IDs

9608 Loiret Boulevard, Lenexa, KS 66219

A2LA Certification #: 2456.01

Arkansas Certification #: 12-019-0

Illinois Certification #: 002885

Iowa Certification #: 118

Kansas/NELAP Certification #: E-10116

Louisiana Certification #: 03055

Nevada Certification #: KS000212008A

Oklahoma Certification #: 9205/9935

Texas Certification #: T104704407-12-3

Utah Certification #: KS000212012-2

REPORT OF LABORATORY ANALYSIS

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SAMPLE SUMMARY

Project: KUHLMAN DIECASTING

Pace Project No.: 60125852

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60125852001	BR-1-SW	Water	07/24/12 11:30	07/26/12 08:25
60125852002	BR-2-SW	Water	07/24/12 11:50	07/26/12 08:25
60125852003	BR-3-SW	Water	07/24/12 12:20	07/26/12 08:25
60125852004	BR-4-SW	Water	07/24/12 12:50	07/26/12 08:25
60125852005	BR-1-SED	Solid	07/24/12 11:30	07/26/12 08:25
60125852006	BR-2-SED	Solid	07/24/12 11:50	07/26/12 08:25
60125852007	BR-3-SED	Solid	07/24/12 12:20	07/26/12 08:25
60125852008	BR-4-SED	Solid	07/24/12 12:50	07/26/12 08:25
60125852009	EP-SED	Solid	07/25/12 09:55	07/26/12 08:25
60125852010	NPWB-SED-S	Solid	07/24/12 14:50	07/26/12 08:25
60125852011	NPWB-SED-N	Solid	07/24/12 14:40	07/26/12 08:25
60125852012	NPWB-SW	Water	07/24/12 14:30	07/26/12 08:25
60125852013	SPWB-SED-N	Solid	07/24/12 10:50	07/26/12 08:25
60125852014	SPWB-SED-S	Solid	07/24/12 11:05	07/26/12 08:25
60125852015	GM-1	Water	07/25/12 13:38	07/26/12 08:25
60125852016	GM-2	Water	07/25/12 14:40	07/26/12 08:25
60125852017	GM-17	Water	07/25/12 15:38	07/26/12 08:25

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SAMPLE ANALYTE COUNT

Project: KUHLMAN DIECASTING

Pace Project No.: 60125852

Lab ID	Sample ID	Method	Analysts	Analytes Reported
60125852001	BR-1-SW	EPA 6010	SMW	4
60125852002	BR-2-SW	EPA 6010	SMW	4
60125852003	BR-3-SW	EPA 6010	SMW	4
60125852004	BR-4-SW	EPA 6010	SMW	4
60125852005	BR-1-SED	EPA 6010	SMW	4
		ASTM D2974	TMD	1
60125852006	BR-2-SED	EPA 6010	SMW	4
		ASTM D2974	TMD	1
60125852007	BR-3-SED	EPA 6010	SMW	4
		ASTM D2974	TMD	1
60125852008	BR-4-SED	EPA 6010	SMW	4
		ASTM D2974	TMD	1
60125852009	EP-SED	EPA 6010	SMW	4
		ASTM D2974	TMD	1
		EPA 9012A	AJM	1
60125852010	NPWB-SED-S	EPA 6010	SMW	4
		ASTM D2974	TMD	1
		EPA 9012A	AJM	1
60125852011	NPWB-SED-N	EPA 6010	SMW	4
		ASTM D2974	TMD	1
		EPA 9012A	AJM	1
60125852012	NPWB-SW	EPA 8082	NAW	9
		EPA 6010	SMW	4
		EPA 9012A	AJM	1
60125852013	SPWB-SED-N	EPA 6010	SMW	4
		ASTM D2974	TMD	1
		EPA 9012A	AJM	1
60125852014	SPWB-SED-S	EPA 6010	SMW	4
		ASTM D2974	TMD	1
		EPA 9012A	AJM	1
60125852015	GM-1	EPA 6010	SMW	4
		EPA 6010	SMW	4
60125852016	GM-2	EPA 6010	SMW	4
		EPA 6010	SMW	4
		EPA 7196	JML	1
		EPA 7196	JML	1
60125852017	GM-17	EPA 6010	SMW	4

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: KUHLMAN DIECASTING

Pace Project No.: 60125852

Lab ID	Sample ID	Method	Analysts	Analytes Reported
		EPA 6010	SMW	4

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: KUHLMAN DIECASTING

Pace Project No.: 60125852

Sample: BR-1-SW		Lab ID: 60125852001	Collected: 07/24/12 11:30	Received: 07/26/12 08:25	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP		Analytical Method: EPA 6010 Preparation Method: EPA 3010						
Chromium	ND ug/L		5.0	1	08/01/12 13:00	08/02/12 11:09	7440-47-3	
Copper	ND ug/L		10.0	1	08/01/12 13:00	08/02/12 11:09	7440-50-8	
Nickel	ND ug/L		5.0	1	08/01/12 13:00	08/02/12 11:09	7440-02-0	
Zinc	ND ug/L		50.0	1	08/01/12 13:00	08/02/12 11:09	7440-66-6	

ANALYTICAL RESULTS

Project: KUHLMAN DIECASTING

Pace Project No.: 60125852

Sample: BR-2-SW		Lab ID: 60125852002	Collected: 07/24/12 11:50	Received: 07/26/12 08:25	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP		Analytical Method: EPA 6010 Preparation Method: EPA 3010						
Chromium	ND ug/L		5.0	1	08/01/12 13:00	08/02/12 11:11	7440-47-3	
Copper	ND ug/L		10.0	1	08/01/12 13:00	08/02/12 11:11	7440-50-8	
Nickel	ND ug/L		5.0	1	08/01/12 13:00	08/02/12 11:11	7440-02-0	
Zinc	ND ug/L		50.0	1	08/01/12 13:00	08/02/12 11:11	7440-66-6	

ANALYTICAL RESULTS

Project: KUHLMAN DIECASTING

Pace Project No.: 60125852

Sample: BR-3-SW		Lab ID: 60125852003	Collected: 07/24/12 12:20	Received: 07/26/12 08:25	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP		Analytical Method: EPA 6010 Preparation Method: EPA 3010						
Chromium	ND ug/L		5.0	1	08/01/12 13:00	08/02/12 11:13	7440-47-3	
Copper	ND ug/L		10.0	1	08/01/12 13:00	08/02/12 11:13	7440-50-8	
Nickel	5.3 ug/L		5.0	1	08/01/12 13:00	08/02/12 11:13	7440-02-0	
Zinc	ND ug/L		50.0	1	08/01/12 13:00	08/02/12 11:13	7440-66-6	

ANALYTICAL RESULTS

Project: KUHLMAN DIECASTING

Pace Project No.: 60125852

Sample: BR-4-SW		Lab ID: 60125852004	Collected: 07/24/12 12:50	Received: 07/26/12 08:25	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP		Analytical Method: EPA 6010 Preparation Method: EPA 3010						
Chromium	ND ug/L		5.0	1	08/01/12 13:00	08/02/12 11:15	7440-47-3	
Copper	ND ug/L		10.0	1	08/01/12 13:00	08/02/12 11:15	7440-50-8	
Nickel	ND ug/L		5.0	1	08/01/12 13:00	08/02/12 11:15	7440-02-0	
Zinc	ND ug/L		50.0	1	08/01/12 13:00	08/02/12 11:15	7440-66-6	

ANALYTICAL RESULTS

Project: KUHLMAN DIECASTING

Pace Project No.: 60125852

Sample: BR-1-SED **Lab ID:** 60125852005 Collected: 07/24/12 11:30 Received: 07/26/12 08:25 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP		Analytical Method: EPA 6010 Preparation Method: EPA 3050						
Chromium	13.5	mg/kg	2.2	5	07/31/12 08:15	08/06/12 12:24	7440-47-3	
Copper	12.0	mg/kg	4.4	5	07/31/12 08:15	08/06/12 12:24	7440-50-8	
Nickel	15.2	mg/kg	2.2	5	07/31/12 08:15	08/06/12 12:24	7440-02-0	
Zinc	44.2	mg/kg	44.0	5	07/31/12 08:15	08/06/12 12:24	7440-66-6	
Percent Moisture		Analytical Method: ASTM D2974						
Percent Moisture	8.3	%	0.50	1		08/06/12 00:00		

ANALYTICAL RESULTS

Project: KUHLMAN DIECASTING

Pace Project No.: 60125852

Sample: BR-2-SED **Lab ID: 60125852006** Collected: 07/24/12 11:50 Received: 07/26/12 08:25 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Chromium	15.0	mg/kg	2.9	5	07/31/12 08:15	08/06/12 12:27	7440-47-3	
Copper	17.9	mg/kg	5.9	5	07/31/12 08:15	08/06/12 12:27	7440-50-8	
Nickel	23.9	mg/kg	2.9	5	07/31/12 08:15	08/06/12 12:27	7440-02-0	
Zinc	58.8	mg/kg	58.6	5	07/31/12 08:15	08/06/12 12:27	7440-66-6	
Percent Moisture Analytical Method: ASTM D2974								
Percent Moisture	31.2	%	0.50	1		08/06/12 00:00		

ANALYTICAL RESULTS

Project: KUHLMAN DIECASTING

Pace Project No.: 60125852

Sample: BR-3-SED **Lab ID: 60125852007** Collected: 07/24/12 12:20 Received: 07/26/12 08:25 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Chromium	21.3	mg/kg	3.4	5	07/31/12 08:15	08/06/12 12:30	7440-47-3	
Copper	17.8	mg/kg	6.7	5	07/31/12 08:15	08/06/12 12:30	7440-50-8	
Nickel	24.9	mg/kg	3.4	5	07/31/12 08:15	08/06/12 12:30	7440-02-0	
Zinc	70.3	mg/kg	67.2	5	07/31/12 08:15	08/06/12 12:30	7440-66-6	
Percent Moisture Analytical Method: ASTM D2974								
Percent Moisture	42.7	%	0.50	1		08/07/12 00:00		

ANALYTICAL RESULTS

Project: KUHLMAN DIECASTING

Pace Project No.: 60125852

Sample: BR-4-SED **Lab ID: 60125852008** Collected: 07/24/12 12:50 Received: 07/26/12 08:25 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Chromium	18.0	mg/kg	2.7	5	07/31/12 08:15	08/06/12 12:34	7440-47-3	
Copper	14.9	mg/kg	5.5	5	07/31/12 08:15	08/06/12 12:34	7440-50-8	
Nickel	20.7	mg/kg	2.7	5	07/31/12 08:15	08/06/12 12:34	7440-02-0	
Zinc	62.4	mg/kg	54.7	5	07/31/12 08:15	08/06/12 12:34	7440-66-6	
Percent Moisture Analytical Method: ASTM D2974								
Percent Moisture	28.6	%	0.50	1		08/07/12 00:00		

ANALYTICAL RESULTS

Project: KUHLMAN DIECASTING

Pace Project No.: 60125852

Sample: EP-SED **Lab ID: 60125852009** Collected: 07/25/12 09:55 Received: 07/26/12 08:25 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Chromium	19.0	mg/kg	5.3	5	07/31/12 08:15	08/06/12 12:37	7440-47-3	
Copper	19.1	mg/kg	10.5	5	07/31/12 08:15	08/06/12 12:37	7440-50-8	
Nickel	18.1	mg/kg	1.1	1	07/31/12 08:15	08/03/12 17:10	7440-02-0	
Zinc	59.9	mg/kg	21.1	1	07/31/12 08:15	08/03/12 17:10	7440-66-6	
Percent Moisture Analytical Method: ASTM D2974								
Percent Moisture	63.5	%	0.50	1		08/07/12 00:00		
9012 Cyanide, Total Analytical Method: EPA 9012A Preparation Method: EPA 9012A								
Cyanide	ND	mg/kg	0.44	1	07/30/12 07:35	07/30/12 18:21	57-12-5	

ANALYTICAL RESULTS

Project: KUHLMAN DIECASTING

Pace Project No.: 60125852

Sample: NPWB-SED-S **Lab ID: 60125852010** Collected: 07/24/12 14:50 Received: 07/26/12 08:25 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Chromium	385	mg/kg	1.0	1	07/31/12 08:15	08/03/12 17:13	7440-47-3	
Copper	979	mg/kg	2.0	1	07/31/12 08:15	08/03/12 17:13	7440-50-8	
Nickel	91.2	mg/kg	1.0	1	07/31/12 08:15	08/03/12 17:13	7440-02-0	
Zinc	564	mg/kg	20.1	1	07/31/12 08:15	08/03/12 17:13	7440-66-6	
Percent Moisture Analytical Method: ASTM D2974								
Percent Moisture	60.6	%	0.50	1		08/07/12 00:00		
9012 Cyanide, Total Analytical Method: EPA 9012A Preparation Method: EPA 9012A								
Cyanide	ND	mg/kg	0.37	1	07/30/12 07:35	07/30/12 18:22	57-12-5	

ANALYTICAL RESULTS

Project: KUHLMAN DIECASTING

Pace Project No.: 60125852

Sample: NPWB-SED-N **Lab ID:** 60125852011 **Collected:** 07/24/12 14:40 **Received:** 07/26/12 08:25 **Matrix:** Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP								
Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Chromium	301	mg/kg	1.8	1	07/31/12 08:15	08/03/12 17:17	7440-47-3	
Copper	873	mg/kg	3.7	1	07/31/12 08:15	08/03/12 17:17	7440-50-8	
Nickel	74.5	mg/kg	1.8	1	07/31/12 08:15	08/03/12 17:17	7440-02-0	
Zinc	435	mg/kg	36.9	1	07/31/12 08:15	08/03/12 17:17	7440-66-6	
Percent Moisture								
Analytical Method: ASTM D2974								
Percent Moisture	76.7	%	0.50	1		08/07/12 00:00		
9012 Cyanide, Total								
Analytical Method: EPA 9012A Preparation Method: EPA 9012A								
Cyanide	ND	mg/kg	0.69	1	07/30/12 07:35	07/30/12 18:22	57-12-5	

ANALYTICAL RESULTS

Project: KUHLMAN DIECASTING

Pace Project No.: 60125852

Sample: NPWB-SW		Lab ID: 60125852012	Collected: 07/24/12 14:30	Received: 07/26/12 08:25	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB		Analytical Method: EPA 8082 Preparation Method: EPA 3510						
PCB-1016 (Aroclor 1016)	ND ug/L		1.8	1	07/30/12 00:00	08/10/12 00:26	12674-11-2	
PCB-1221 (Aroclor 1221)	ND ug/L		1.8	1	07/30/12 00:00	08/10/12 00:26	11104-28-2	
PCB-1232 (Aroclor 1232)	ND ug/L		1.8	1	07/30/12 00:00	08/10/12 00:26	11141-16-5	
PCB-1242 (Aroclor 1242)	ND ug/L		1.8	1	07/30/12 00:00	08/10/12 00:26	53469-21-9	
PCB-1248 (Aroclor 1248)	ND ug/L		1.8	1	07/30/12 00:00	08/10/12 00:26	12672-29-6	
PCB-1254 (Aroclor 1254)	ND ug/L		1.8	1	07/30/12 00:00	08/10/12 00:26	11097-69-1	
PCB-1260 (Aroclor 1260)	ND ug/L		1.8	1	07/30/12 00:00	08/10/12 00:26	11096-82-5	
Surrogates								
Tetrachloro-m-xylene (S)	44 %		36-115	1	07/30/12 00:00	08/10/12 00:26	877-09-8	
Decachlorobiphenyl (S)	54 %		17-122	1	07/30/12 00:00	08/10/12 00:26	2051-24-3	CH
6010 MET ICP		Analytical Method: EPA 6010 Preparation Method: EPA 3010						
Chromium	186 ug/L		5.0	1	08/01/12 13:00	08/02/12 11:17	7440-47-3	
Copper	450 ug/L		10.0	1	08/01/12 13:00	08/02/12 11:17	7440-50-8	
Nickel	57.8 ug/L		5.0	1	08/01/12 13:00	08/02/12 11:17	7440-02-0	
Zinc	456 ug/L		50.0	1	08/01/12 13:00	08/02/12 11:17	7440-66-6	
9012 Cyanide, Total		Analytical Method: EPA 9012A Preparation Method: EPA 9012A						
Cyanide	ND mg/L		0.0050	1	07/30/12 07:33	07/30/12 19:17	57-12-5	

ANALYTICAL RESULTS

Project: KUHLMAN DIECASTING

Pace Project No.: 60125852

Sample: SPWB-SED-N **Lab ID:** 60125852013 Collected: 07/24/12 10:50 Received: 07/26/12 08:25 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Chromium	70.4	mg/kg	3.2	5	07/31/12 08:15	08/06/12 12:40	7440-47-3	
Copper	739	mg/kg	6.5	5	07/31/12 08:15	08/06/12 12:40	7440-50-8	
Nickel	58.7	mg/kg	0.65	1	07/31/12 08:15	08/03/12 17:21	7440-02-0	
Zinc	433	mg/kg	12.9	1	07/31/12 08:15	08/03/12 17:21	7440-66-6	
Percent Moisture Analytical Method: ASTM D2974								
Percent Moisture	24.1	%	0.50	1		08/07/12 00:00		
9012 Cyanide, Total Analytical Method: EPA 9012A Preparation Method: EPA 9012A								
Cyanide	0.27	mg/kg	0.20	1	07/30/12 07:35	07/30/12 18:25	57-12-5	

ANALYTICAL RESULTS

Project: KUHLMAN DIECASTING

Pace Project No.: 60125852

Sample: SPWB-SED-S **Lab ID: 60125852014** Collected: 07/24/12 11:05 Received: 07/26/12 08:25 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Chromium	64.2	mg/kg	3.9	5	07/31/12 08:15	08/06/12 12:51	7440-47-3	
Copper	742	mg/kg	7.8	5	07/31/12 08:15	08/06/12 12:51	7440-50-8	
Nickel	68.6	mg/kg	0.78	1	07/31/12 08:15	08/03/12 17:24	7440-02-0	
Zinc	683	mg/kg	15.5	1	07/31/12 08:15	08/03/12 17:24	7440-66-6	
Percent Moisture Analytical Method: ASTM D2974								
Percent Moisture	45.4	%	0.50	1		08/07/12 00:00		
9012 Cyanide, Total Analytical Method: EPA 9012A Preparation Method: EPA 9012A								
Cyanide	ND	mg/kg	0.28	1	07/30/12 07:35	07/30/12 18:25	57-12-5	

ANALYTICAL RESULTS

Project: KUHLMAN DIECASTING

Pace Project No.: 60125852

Sample: GM-1		Lab ID: 60125852015	Collected: 07/25/12 13:38	Received: 07/26/12 08:25	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP		Analytical Method: EPA 6010 Preparation Method: EPA 3010						
Chromium	ND ug/L		5.0	1	08/01/12 13:00	08/02/12 11:23	7440-47-3	
Copper	ND ug/L		10.0	1	08/01/12 13:00	08/02/12 11:23	7440-50-8	
Nickel	ND ug/L		5.0	1	08/01/12 13:00	08/02/12 11:23	7440-02-0	
Zinc	ND ug/L		50.0	1	08/01/12 13:00	08/02/12 11:23	7440-66-6	
6010 MET ICP, Dissolved		Analytical Method: EPA 6010 Preparation Method: EPA 3010						
Chromium, Dissolved	ND ug/L		5.0	1	07/27/12 10:30	07/30/12 13:59	7440-47-3	
Copper, Dissolved	ND ug/L		10.0	1	07/27/12 10:30	07/30/12 13:59	7440-50-8	
Nickel, Dissolved	ND ug/L		5.0	1	07/27/12 10:30	07/30/12 13:59	7440-02-0	
Zinc, Dissolved	ND ug/L		50.0	1	07/27/12 10:30	07/30/12 13:59	7440-66-6	

ANALYTICAL RESULTS

Project: KUHLMAN DIECASTING

Pace Project No.: 60125852

Sample: GM-2		Lab ID: 60125852016	Collected: 07/25/12 14:40	Received: 07/26/12 08:25	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP		Analytical Method: EPA 6010 Preparation Method: EPA 3010						
Chromium	5.1 ug/L		5.0	1	08/01/12 13:00	08/02/12 11:25	7440-47-3	
Copper	ND ug/L		10.0	1	08/01/12 13:00	08/02/12 11:25	7440-50-8	
Nickel	6.4 ug/L		5.0	1	08/01/12 13:00	08/02/12 11:25	7440-02-0	
Zinc	ND ug/L		50.0	1	08/01/12 13:00	08/02/12 11:25	7440-66-6	
6010 MET ICP, Dissolved		Analytical Method: EPA 6010 Preparation Method: EPA 3010						
Chromium, Dissolved	ND ug/L		5.0	1	07/27/12 10:30	07/30/12 14:03	7440-47-3	
Copper, Dissolved	ND ug/L		10.0	1	07/27/12 10:30	07/30/12 14:03	7440-50-8	
Nickel, Dissolved	ND ug/L		5.0	1	07/27/12 10:30	07/30/12 14:03	7440-02-0	
Zinc, Dissolved	ND ug/L		50.0	1	07/27/12 10:30	07/30/12 14:03	7440-66-6	
7196 Chromium, Hexavalent		Analytical Method: EPA 7196						
Chromium, Hexavalent	ND mg/L		0.010	1		07/26/12 10:41	18540-29-9	
7196 Chromium, Hexavalent Diss		Analytical Method: EPA 7196						
Chromium, Hexavalent,Dissolved	ND mg/L		0.010	1		07/26/12 10:45	18540-29-9	

ANALYTICAL RESULTS

Project: KUHLMAN DIECASTING

Pace Project No.: 60125852

Sample: GM-17		Lab ID: 60125852017	Collected: 07/25/12 15:38	Received: 07/26/12 08:25	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP		Analytical Method: EPA 6010 Preparation Method: EPA 3010						
Chromium	5.5 ug/L		5.0	1	08/01/12 13:00	08/02/12 11:28	7440-47-3	
Copper	ND ug/L		10.0	1	08/01/12 13:00	08/02/12 11:28	7440-50-8	
Nickel	6.8 ug/L		5.0	1	08/01/12 13:00	08/02/12 11:28	7440-02-0	
Zinc	ND ug/L		50.0	1	08/01/12 13:00	08/02/12 11:28	7440-66-6	
6010 MET ICP, Dissolved		Analytical Method: EPA 6010 Preparation Method: EPA 3010						
Chromium, Dissolved	ND ug/L		5.0	1	07/27/12 10:30	07/30/12 14:06	7440-47-3	
Copper, Dissolved	ND ug/L		10.0	1	07/27/12 10:30	07/30/12 14:06	7440-50-8	
Nickel, Dissolved	ND ug/L		5.0	1	07/27/12 10:30	07/30/12 14:06	7440-02-0	
Zinc, Dissolved	ND ug/L		50.0	1	07/27/12 10:30	07/30/12 14:06	7440-66-6	

QUALITY CONTROL DATA

Project: KUHLMAN DIECASTING

Pace Project No.: 60125852

QC Batch:	MPRP/18896	Analysis Method:	EPA 6010
QC Batch Method:	EPA 3050	Analysis Description:	6010 MET
Associated Lab Samples:	60125852005, 60125852006, 60125852007, 60125852008, 60125852009, 60125852010, 60125852011, 60125852013, 60125852014		

METHOD BLANK: 1036875 Matrix: Solid

Associated Lab Samples: 60125852005, 60125852006, 60125852007, 60125852008, 60125852009, 60125852010, 60125852011, 60125852013, 60125852014

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chromium	mg/kg	ND	0.50	08/03/12 16:12	
Copper	mg/kg	ND	1.0	08/03/12 16:12	
Nickel	mg/kg	ND	0.50	08/03/12 16:12	
Zinc	mg/kg	ND	10.0	08/03/12 16:12	

LABORATORY CONTROL SAMPLE: 1036876

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chromium	mg/kg	50	42.2	84	80-120	
Copper	mg/kg	50	42.2	84	80-120	
Nickel	mg/kg	50	42.5	85	80-120	
Zinc	mg/kg	50	43.6	87	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1036877 1036878

Parameter	Units	60125880001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chromium	mg/kg	8.4	544	553	443	461	80	82	75-125	4	20	
Copper	mg/kg	106	544	553	602	624	91	94	75-125	3	20	
Nickel	mg/kg	18.3	544	553	475	497	84	87	75-125	5	20	
Zinc	mg/kg	778	544	553	1250	1240	86	85	75-125	0	20	

QUALITY CONTROL DATA

Project: KUHLMAN DIECASTING

Pace Project No.: 60125852

QC Batch:	MPRP/18924	Analysis Method:	EPA 6010
QC Batch Method:	EPA 3010	Analysis Description:	6010 MET
Associated Lab Samples:	60125852001, 60125852002, 60125852003, 60125852004, 60125852012, 60125852015, 60125852016, 60125852017		

METHOD BLANK: 1037888 Matrix: Water

Associated Lab Samples: 60125852001, 60125852002, 60125852003, 60125852004, 60125852012, 60125852015, 60125852016, 60125852017

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chromium	ug/L	ND	5.0	08/02/12 10:59	
Copper	ug/L	ND	10.0	08/02/12 10:59	
Nickel	ug/L	ND	5.0	08/02/12 10:59	
Zinc	ug/L	ND	50.0	08/02/12 10:59	

LABORATORY CONTROL SAMPLE: 1037889

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chromium	ug/L	1000	1020	102	80-120	
Copper	ug/L	1000	982	98	80-120	
Nickel	ug/L	1000	1010	101	80-120	
Zinc	ug/L	1000	1040	104	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1037890 1037891

Parameter	Units	60126151001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chromium	ug/L	0.0091 mg/L	1000	1000	1030	1020	102	101	75-125	0	20	
Copper	ug/L	0.037 mg/L	1000	1000	1020	1020	98	98	75-125	0	20	
Nickel	ug/L	0.0072 mg/L	1000	1000	1010	1010	100	100	75-125	0	20	
Zinc	ug/L	0.057 mg/L	1000	1000	1080	1080	102	102	75-125	0	20	

QUALITY CONTROL DATA

Project: KUHLMAN DIECASTING

Pace Project No.: 60125852

QC Batch: MPRP/18880 Analysis Method: EPA 6010
QC Batch Method: EPA 3010 Analysis Description: 6010 MET Dissolved
Associated Lab Samples: 60125852015, 60125852016, 60125852017

METHOD BLANK: 1035765 Matrix: Water

Associated Lab Samples: 60125852015, 60125852016, 60125852017

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chromium, Dissolved	ug/L	ND	5.0	07/30/12 13:05	
Copper, Dissolved	ug/L	ND	10.0	07/30/12 13:05	
Nickel, Dissolved	ug/L	ND	5.0	07/30/12 13:05	
Zinc, Dissolved	ug/L	ND	50.0	07/30/12 13:05	

LABORATORY CONTROL SAMPLE: 1035766

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chromium, Dissolved	ug/L	1000	986	99	80-120	
Copper, Dissolved	ug/L	1000	901	90	80-120	
Nickel, Dissolved	ug/L	1000	969	97	80-120	
Zinc, Dissolved	ug/L	1000	985	98	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1035767 1035768

Parameter	Units	60125643001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chromium, Dissolved	ug/L	ND	1000	1000	996	984	100	98	75-125	1	20	
Copper, Dissolved	ug/L	ND	1000	1000	923	909	92	91	75-125	2	20	
Nickel, Dissolved	ug/L	ND	1000	1000	983	974	98	97	75-125	1	20	
Zinc, Dissolved	ug/L	ND	1000	1000	1000	992	100	99	75-125	1	20	

QUALITY CONTROL DATA

Project: KUHLMAN DIECASTING

Pace Project No.: 60125852

QC Batch: OEXT/34200

Analysis Method: EPA 8082

QC Batch Method: EPA 3510

Analysis Description: 8082 GCS PCB

Associated Lab Samples: 60125852012

METHOD BLANK: 1036831

Matrix: Water

Associated Lab Samples: 60125852012

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
PCB-1016 (Aroclor 1016)	ug/L	ND	0.50	08/09/12 23:33	
PCB-1221 (Aroclor 1221)	ug/L	ND	0.50	08/09/12 23:33	
PCB-1232 (Aroclor 1232)	ug/L	ND	0.50	08/09/12 23:33	
PCB-1242 (Aroclor 1242)	ug/L	ND	0.50	08/09/12 23:33	
PCB-1248 (Aroclor 1248)	ug/L	ND	0.50	08/09/12 23:33	
PCB-1254 (Aroclor 1254)	ug/L	ND	0.50	08/09/12 23:33	
PCB-1260 (Aroclor 1260)	ug/L	ND	0.50	08/09/12 23:33	
Decachlorobiphenyl (S)	%	77	17-122	08/09/12 23:33	CH
Tetrachloro-m-xylene (S)	%	82	36-115	08/09/12 23:33	

LABORATORY CONTROL SAMPLE: 1036832

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
PCB-1016 (Aroclor 1016)	ug/L	5	2.4	49	38-130	
PCB-1260 (Aroclor 1260)	ug/L	5	2.4	48	39-131	
Decachlorobiphenyl (S)	%			76	17-122	CH
Tetrachloro-m-xylene (S)	%			82	36-115	

QUALITY CONTROL DATA

Project: KUHLMAN DIECASTING

Pace Project No.: 60125852

QC Batch: PMST/7554

Analysis Method: ASTM D2974

QC Batch Method: ASTM D2974

Analysis Description: Dry Weight/Percent Moisture

Associated Lab Samples: 60125852005, 60125852006

METHOD BLANK: 1040494

Matrix: Solid

Associated Lab Samples: 60125852005, 60125852006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Percent Moisture	%	ND	0.50	08/06/12 00:00	

SAMPLE DUPLICATE: 1040495

Parameter	Units	60125851002 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	21.0	23.9	13	20	

QUALITY CONTROL DATA

Project: KUHLMAN DIECASTING

Pace Project No.: 60125852

QC Batch:	PMST/7558	Analysis Method:	ASTM D2974
QC Batch Method:	ASTM D2974	Analysis Description:	Dry Weight/Percent Moisture
Associated Lab Samples:	60125852007, 60125852008, 60125852009, 60125852010, 60125852011, 60125852013, 60125852014		

METHOD BLANK:	1040976	Matrix:	Solid
Associated Lab Samples:	60125852007, 60125852008, 60125852009, 60125852010, 60125852011, 60125852013, 60125852014		

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Percent Moisture	%	ND	0.50	08/07/12 00:00	

SAMPLE DUPLICATE: 1040977

Parameter	Units	60125852007 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	42.7	43.2	1	20	

QUALITY CONTROL DATA

Project: KUHLMAN DIECASTING

Pace Project No.: 60125852

QC Batch: WETA/21027

Analysis Method: EPA 7196

QC Batch Method: EPA 7196

Analysis Description: 7196 Chromium, Hexavalent

Associated Lab Samples: 60125852016

METHOD BLANK: 1035099

Matrix: Water

Associated Lab Samples: 60125852016

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chromium, Hexavalent	mg/L	ND	0.010	07/26/12 10:37	

LABORATORY CONTROL SAMPLE: 1035100

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chromium, Hexavalent	mg/L	.1	0.10	105	90-110	

MATRIX SPIKE SAMPLE: 1035102

Parameter	Units	60125853004 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chromium, Hexavalent	mg/L	ND	.1	0.11	107	85-115	

SAMPLE DUPLICATE: 1035101

Parameter	Units	60125853006 Result	Dup Result	RPD	Max RPD	Qualifiers
Chromium, Hexavalent	mg/L	ND	ND		20 H1	

QUALITY CONTROL DATA

Project: KUHLMAN DIECASTING

Pace Project No.: 60125852

QC Batch: WETA/21028

Analysis Method: EPA 7196

QC Batch Method: EPA 7196

Analysis Description: 7196 Chromium, Hexavalent Diss

Associated Lab Samples: 60125852016

METHOD BLANK: 1035103

Matrix: Water

Associated Lab Samples: 60125852016

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chromium, Hexavalent,Dissolved	mg/L	ND	0.010	07/26/12 10:44	

LABORATORY CONTROL SAMPLE: 1035104

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chromium, Hexavalent,Dissolved	mg/L	.1	0.090	90	90-110	

MATRIX SPIKE SAMPLE: 1035105

Parameter	Units	60125852016 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chromium, Hexavalent,Dissolved	mg/L	ND	.1	0.10	102	85-115	

QUALITY CONTROL DATA

Project: KUHLMAN DIECASTING

Pace Project No.: 60125852

QC Batch: WETA/21068 Analysis Method: EPA 9012A
QC Batch Method: EPA 9012A Analysis Description: 9012 Cyanide
Associated Lab Samples: 60125852009, 60125852010, 60125852011, 60125852013, 60125852014

METHOD BLANK: 1036816 Matrix: Solid
Associated Lab Samples: 60125852009, 60125852010, 60125852011, 60125852013, 60125852014

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Cyanide	mg/kg	ND	0.15	07/30/12 19:30	

LABORATORY CONTROL SAMPLE: 1036817

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cyanide	mg/kg	3	3.2	106	81-117	

SAMPLE DUPLICATE: 1036819

Parameter	Units	60125766017 Result	Dup Result	RPD	Max RPD	Qualifiers
Cyanide	mg/kg	0.33	.19J		20	

QUALITY CONTROL DATA

Project: KUHLMAN DIECASTING

Pace Project No.: 60125852

QC Batch: WETA/21067

Analysis Method: EPA 9012A

QC Batch Method: EPA 9012A

Analysis Description: EPA 9012 Cyanide

Associated Lab Samples: 60125852012

METHOD BLANK: 1036810

Matrix: Solid

Associated Lab Samples: 60125852012

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Cyanide	mg/L	ND	0.0050	07/30/12 19:13	

LABORATORY CONTROL SAMPLE: 1036811

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cyanide	mg/L	.1	0.10	105	81-117	

MATRIX SPIKE SAMPLE: 1036812

Parameter	Units	60125766018 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Cyanide	mg/L	ND	.1	0.11	105	50-150	

SAMPLE DUPLICATE: 1036813

Parameter	Units	60125852012 Result	Dup Result	RPD	Max RPD	Qualifiers
Cyanide	mg/L	ND	.0029J		20	

QUALIFIERS

Project: KUHLMAN DIECASTING
Pace Project No.: 60125852

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

PRL - Pace Reporting Limit.

RL - Reporting Limit.

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

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

TNI - The NELAC Institute.

BATCH QUALIFIERS

Batch: OEXT/34200

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

ANALYTE QUALIFIERS

CH The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.

H1 Analysis conducted outside the EPA method holding time.

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: KUHLMAN DIECASTING

Pace Project No.: 60125852

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60125852012	NPWB-SW	EPA 3510	OEXT/34200	EPA 8082	GCSV/12868
60125852005	BR-1-SED	EPA 3050	MPRP/18896	EPA 6010	ICP/15743
60125852006	BR-2-SED	EPA 3050	MPRP/18896	EPA 6010	ICP/15743
60125852007	BR-3-SED	EPA 3050	MPRP/18896	EPA 6010	ICP/15743
60125852008	BR-4-SED	EPA 3050	MPRP/18896	EPA 6010	ICP/15743
60125852009	EP-SED	EPA 3050	MPRP/18896	EPA 6010	ICP/15743
60125852010	NPWB-SED-S	EPA 3050	MPRP/18896	EPA 6010	ICP/15743
60125852011	NPWB-SED-N	EPA 3050	MPRP/18896	EPA 6010	ICP/15743
60125852013	SPWB-SED-N	EPA 3050	MPRP/18896	EPA 6010	ICP/15743
60125852014	SPWB-SED-S	EPA 3050	MPRP/18896	EPA 6010	ICP/15743
60125852001	BR-1-SW	EPA 3010	MPRP/18924	EPA 6010	ICP/15740
60125852002	BR-2-SW	EPA 3010	MPRP/18924	EPA 6010	ICP/15740
60125852003	BR-3-SW	EPA 3010	MPRP/18924	EPA 6010	ICP/15740
60125852004	BR-4-SW	EPA 3010	MPRP/18924	EPA 6010	ICP/15740
60125852012	NPWB-SW	EPA 3010	MPRP/18924	EPA 6010	ICP/15740
60125852015	GM-1	EPA 3010	MPRP/18924	EPA 6010	ICP/15740
60125852016	GM-2	EPA 3010	MPRP/18924	EPA 6010	ICP/15740
60125852017	GM-17	EPA 3010	MPRP/18924	EPA 6010	ICP/15740
60125852015	GM-1	EPA 3010	MPRP/18880	EPA 6010	ICP/15715
60125852016	GM-2	EPA 3010	MPRP/18880	EPA 6010	ICP/15715
60125852017	GM-17	EPA 3010	MPRP/18880	EPA 6010	ICP/15715
60125852005	BR-1-SED	ASTM D2974	PMST/7554		
60125852006	BR-2-SED	ASTM D2974	PMST/7554		
60125852007	BR-3-SED	ASTM D2974	PMST/7558		
60125852008	BR-4-SED	ASTM D2974	PMST/7558		
60125852009	EP-SED	ASTM D2974	PMST/7558		
60125852010	NPWB-SED-S	ASTM D2974	PMST/7558		
60125852011	NPWB-SED-N	ASTM D2974	PMST/7558		
60125852013	SPWB-SED-N	ASTM D2974	PMST/7558		
60125852014	SPWB-SED-S	ASTM D2974	PMST/7558		
60125852012	NPWB-SW	EPA 9012A	WETA/21067	EPA 9012A	WET/36289
60125852016	GM-2	EPA 7196	WETA/21027		
60125852016	GM-2	EPA 7196	WETA/21028		
60125852009	EP-SED	EPA 9012A	WETA/21068	EPA 9012A	WETA/21069
60125852010	NPWB-SED-S	EPA 9012A	WETA/21068	EPA 9012A	WETA/21069
60125852011	NPWB-SED-N	EPA 9012A	WETA/21068	EPA 9012A	WETA/21069
60125852013	SPWB-SED-N	EPA 9012A	WETA/21068	EPA 9012A	WETA/21069
60125852014	SPWB-SED-S	EPA 9012A	WETA/21068	EPA 9012A	WETA/21069



CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Section A

Required Client Information

Company	Seagull Environmental Technologies	Report To:	Jeff Pritchard
Address	415 Oak St	Copy To:	
	Kansas City, MO 64106		
Email To:	jpritchard@seagullenvirotech.com	Purchase Order No:	
Phone	913-220-5887	Project Name:	Kuhlman Diecasting
Requested Due Date/TAT:	standard	Project Number:	

Section B

Required Project Information:

Attention:	
Company Name	
Address	
Pace Quote Reference	
Pace Project Manager	MJW
Pace Profile #:	

Section C

Invoice Information:

REGULATORY AGENCY	
<input type="checkbox"/> NPDES <input type="checkbox"/> GROUND WATER <input type="checkbox"/> DRINKING WATER	
<input type="checkbox"/> UST <input type="checkbox"/> RCRA <input type="checkbox"/> OTHER	
Site Location	KS
STATE:	

ITEM #	Section D Required Client Information	Valid Matrix Codes MATRIX CODE DW DRINKING WATER WT WASTE WATER WM WASTE WATER P PRODUCT SL SOLID OIL OIL WIPE WIPE AIR AIR AR AR OT OT TS TISSUE	SAMPLE ID (A-Z, 0-9 /, .) Sample IDs MUST BE UNIQUE	COLLECTED		MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	DATE		TIME	DATE	TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives							Analysis Test ↑ Y/N ↓	Requested Analysis Filtered (Y/N)										Pace Project No./ Lab I.D.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
				COMPOSITE START	COMPOSITE END/GRAB			Unpreserved	H ₂ SO ₄						HNO ₃	HCl	NaOH	Na ₂ S ₂ O ₃	Methanol	Other	8260		OA1	OA2	PPL metals - 6010/7470	6010 -Cr,Cu,Ni,Zn	PCBs	PAH SIM	Cyanide-total 9012	Residual Chlorine (Y/N)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
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ADDITIONAL COMMENTS		RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS	
all metals total & dissolved per fuel		Jeff	7/26	0825	7/26	0825	1.2	Y	Y
blaster. med									
7/26/12									

SAMPLER NAME AND SIGNATURE		Temp in °C	Received on	Cooler (Y/N)	Samples Intact
PRINT Name of SAMPLER:					
SIGNATURE of SAMPLER:					
DATE Signed (MM/DD/YY):					

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: **2** of **2**

Section A Required Client Information

Company Seagull Environmental Technologies		Report To Jeff Pritchard	
Address 415 Oak St Kansas City, MO 64106		Copy To	
Email To jpritchard@seagullenvirotech.com		Purchase Order No	
Phone: 913-220-5887	Fax: standard	Project Name Kuhlman Diecasting	
Requested Due Date/TAT:		Project Number	

Section B Required Project Information

Company Name:		Attention:	
Address:		Company Name:	
Pace Quote Reference:		Pace Project Manager:	
Pace Project Manager:		Pace Profile #:	

Section C Invoice Information

REGULATORY AGENCY		NPDES <input type="checkbox"/> GROUND WATER <input type="checkbox"/> DRINKING WATER <input type="checkbox"/>	
UST <input type="checkbox"/> RCRA <input type="checkbox"/> OTHER <input type="checkbox"/>		Site Location	
STATE: KS		Pace Project No./ Lab I.D.	

ITEM #	Section D Required Client Information	Valid Matrix Codes MATRIX CODE DRINKING WATER DW WATER WT WASTE WATER WW PRODUCT P SOILSOLID SL OIL OL WIPE WP AIR AR OTHER OT TISSUE TS	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED				SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives								Requested Analysis Filtered (Y/N)	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
					COMPOSITE START	DATE	TIME	DATE			TIME	Unpreserved	H ₂ SO ₄	HNO ₃	HCl	NaOH	Na ₂ S ₂ O ₃	Methanol				Other																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
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ADDITIONAL COMMENTS		RELINQUISHED BY / AFFILIATION		DATE		TIME		ACCEPTED BY / AFFILIATION		DATE		TIME		SAMPLE CONDITIONS	
Total g Dress Cete		Jeff		7/24		0825		Jeff		7/26		0825		Y N Y	
on GM-2 per S. Navarrete															
-new 7/26/12															

SAMPLER NAME AND SIGNATURE		DATE Signed (MM/DD/YY):	
PRINT Name of SAMPLER:			
SIGNATURE of SAMPLER:			

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

F-ALL-Q-020rev 08, 12-Oct-2007



Sample Condition Upon Receipt

Client Name: Seagull Environmental Project # 60125852

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☒ Client ☐ Commercial ☐ Pace ☒ Other H7/26

Tracking #: _____ Pace Shipping Label Used? ☐ Yes ☒ No

Custody Seal on Cooler/Box Present: ☐ Yes ☒ No Seals intact: ☐ Yes ☒ No

Optional
Proj. Due Date: <u>8/9</u>
Proj. Name: _____

Packing Material: ☐ Bubble Wrap ☒ Bubble Bags ☐ Foam ☐ None ☒ Other ZPLC

Thermometer Used: T-191 / T-194

Type of Ice: Web Blue None ☐ Samples on ice, cooling process has begun

Cooler Temperature: 1.2

Temperature should be above freezing to 6°C

Comments:

Date and Initials of person examining contents: H7/26

Chain of Custody present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody filled out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler name & signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples arrived within holding time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Short Hold Time analyses (<72hr):	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	6. <u>Cr⁶⁺ (one filtered, one not filtered)</u>
Rush Turn Around Time requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	7.
Sufficient volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8.
Correct containers used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
-Pace containers used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Containers intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	10.
Unpreserved 5035A soils frozen w/in 48hrs?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Filtered volume received for dissolved tests	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	12.
Sample labels match COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	13.
-Includes date/time/ID/analyses Matrix:	<u>WT, SL</u>	
All containers needing preservation have been checked.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	14. <u>Sample NPWB-SW (BP3N) was at pH of 7.0, 2.5 ml of HNO₃ added, now at 2.0</u>
All containers needing preservation are found to be in compliance with EPA recommendation.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Exceptions: VOA, coliform, TOC, O&G, WI-DRO (water), Phenolics	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Initial when completed <u>H7</u> Lot # of added preservative <u>12624</u>
Trip Blank present:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	15.
Pace Trip Blank lot # (if purchased):	_____	
Headspace in VOA vials (>6mm):	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	16.
Project sampled in USDA Regulated Area:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	17. List State: _____ <u>h</u>

Client Notification/ Resolution:

Copy COC to Client? Y / N

Field Data Required? Y / N

Person Contacted: _____

Date/Time: _____

Comments/ Resolution:

Total & Dissolved metals per Joel Hernandez. new 7/26/12

Project Manager Review: _____

Date: _____

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

August 13, 2012

Jeff Pritchard
Seagull Environmental Technologies
415 Oak St.
Kansas City, MO 64106

RE: Project: KUHLMAN DIECASTING
Pace Project No.: 60125766

Dear Jeff Pritchard:

Enclosed are the analytical results for sample(s) received by the laboratory on July 25, 2012. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,



Mary Jane Walls

maryjane.walls@pacelabs.com
PM Lab Management

Enclosures



REPORT OF LABORATORY ANALYSIS

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Page 1 of 68

CERTIFICATIONS

Project: KUHLMAN DIECASTING

Pace Project No.: 60125766

Indiana Certification IDs

7726 Moller Road, Indianapolis, IN 46268

Illinois Certification #: 200074

Indiana Certification #: C-49-06

Kansas Certification #: E-10247

Kentucky Certification #: 0042

Louisiana/NELAC Certification #: 04076

Ohio VAP Certification #: CL0065

Pennsylvania Certification #: 68-04991

West Virginia Certification #: 330

Kansas Certification IDs

9608 Loiret Boulevard, Lenexa, KS 66219

A2LA Certification #: 2456.01

Arkansas Certification #: 12-019-0

Illinois Certification #: 002885

Iowa Certification #: 118

Kansas/NELAP Certification #: E-10116

Louisiana Certification #: 03055

Nevada Certification #: KS000212008A

Oklahoma Certification #: 9205/9935

Texas Certification #: T104704407-12-3

Utah Certification #: KS000212012-2

REPORT OF LABORATORY ANALYSIS

Page 2 of 68

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SAMPLE SUMMARY

Project: KUHLMAN DIECASTING

Pace Project No.: 60125766

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60125766001	SB-19-6-8	Solid	07/20/12 09:38	07/25/12 08:30
60125766002	SB-11 GW	Water	07/19/12 11:50	07/25/12 08:30
60125766003	SB-17 GW	Water	07/20/12 08:11	07/25/12 08:30
60125766004	SS-1	Solid	07/24/12 09:12	07/25/12 08:30
60125766005	SS-2	Solid	07/24/12 09:13	07/25/12 08:30
60125766006	SS-3	Solid	07/24/12 09:15	07/25/12 08:30
60125766007	SS-4	Solid	07/24/12 09:18	07/25/12 08:30
60125766008	SS-5	Solid	07/24/12 09:19	07/25/12 08:30
60125766009	SS-6	Solid	07/24/12 09:21	07/25/12 08:30
60125766010	SS-7	Solid	07/24/12 09:22	07/25/12 08:30
60125766011	SS-8	Solid	07/24/12 09:25	07/25/12 08:30
60125766012	SS-9	Solid	07/24/12 09:27	07/25/12 08:30
60125766013	SS-10	Solid	07/24/12 09:28	07/25/12 08:30
60125766014	SS-11	Solid	07/24/12 09:30	07/25/12 08:30
60125766015	SS-12	Solid	07/24/12 09:32	07/25/12 08:30
60125766016	WWEL-N-SED	Solid	07/24/12 15:22	07/25/12 08:30
60125766017	WWEL-S-SED	Solid	07/24/12 15:40	07/25/12 08:30
60125766018	WWEL-S-SW	Water	07/24/12 15:34	07/25/12 08:30

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: KUHLMAN DIECASTING
Pace Project No.: 60125766

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
60125766001	SB-19-6-8	OA2	NAW	9	PASI-K
		EPA 6010	JGP	12	PASI-K
		EPA 7471	TJT	1	PASI-K
		EPA 8270 by SIM	BRM	19	PASI-K
		OA1	RAB	1	PASI-K
		EPA 8260	RAB	69	PASI-K
		ASTM D2974	DWC	1	PASI-K
60125766002	SB-11 GW	OA2	NAW	9	PASI-K
		EPA 6010	SMW	12	PASI-K
		EPA 6010	SMW	12	PASI-K
		EPA 7470	TJT	1	PASI-K
		EPA 7470	TJT	1	PASI-K
		EPA 8270C by SIM	BRM	19	PASI-K
		EPA 5030B/8260	PRG	70	PASI-K
60125766003	SB-17 GW	EPA 8260/OA1	PRG	5	PASI-K
		OA2	NAW	9	PASI-K
		EPA 6010	SMW	12	PASI-K
		EPA 6010	SMW	12	PASI-K
		EPA 7470	TJT	1	PASI-K
		EPA 7470	TJT	1	PASI-K
		EPA 8270C by SIM	BRM	19	PASI-K
60125766004	SS-1	EPA 5030B/8260	PRG	70	PASI-K
		EPA 8260/OA1	PRG	5	PASI-K
		EPA 6010	JGP, SMW	4	PASI-K
		ASTM D2974	DWC	1	PASI-K
		EPA 7196A	TPD	1	PASI-I
		EPA 6010	JGP, SMW	4	PASI-K
		ASTM D2974	DWC	1	PASI-K
60125766005	SS-2	EPA 7196A	TPD	1	PASI-I
		EPA 6010	JGP	4	PASI-K
		ASTM D2974	DWC	1	PASI-K
60125766006	SS-3	EPA 7196A	TPD	1	PASI-I
		EPA 6010	JGP	4	PASI-K
		ASTM D2974	DWC	1	PASI-K
60125766007	SS-4	EPA 7196A	TPD	1	PASI-I
		EPA 6010	JGP, SMW	4	PASI-K
		ASTM D2974	DWC	1	PASI-K
60125766008	SS-5	EPA 7196A	TPD	1	PASI-I
		EPA 6010	JGP, SMW	4	PASI-K
		ASTM D2974	DWC	1	PASI-K

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: KUHLMAN DIECASTING

Pace Project No.: 60125766

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
60125766009	SS-6	EPA 7196A	TPD	1	PASI-I
		EPA 6010	JGP	4	PASI-K
		ASTM D2974	DWC	1	PASI-K
60125766010	SS-7	EPA 7196A	TPD	1	PASI-I
		EPA 6010	JGP, SMW	4	PASI-K
		ASTM D2974	DWC	1	PASI-K
60125766011	SS-8	EPA 7196A	TPD	1	PASI-I
		EPA 6010	JGP, SMW	4	PASI-K
		ASTM D2974	DWC	1	PASI-K
60125766012	SS-9	EPA 7196A	TPD	1	PASI-I
		EPA 6010	JGP, SMW	4	PASI-K
		ASTM D2974	DWC	1	PASI-K
60125766013	SS-10	EPA 7196A	TPD	1	PASI-I
		EPA 6010	JGP, SMW	4	PASI-K
		ASTM D2974	DWC	1	PASI-K
60125766014	SS-11	EPA 7196A	TPD	1	PASI-I
		EPA 6010	JGP, SMW	4	PASI-K
		ASTM D2974	DWC	1	PASI-K
60125766015	SS-12	EPA 7196A	TPD	1	PASI-I
		EPA 6010	JGP, SMW	4	PASI-K
		ASTM D2974	DWC	1	PASI-K
60125766016	WWEL-N-SED	EPA 7196A	TPD	1	PASI-I
		EPA 8082	NAW	9	PASI-K
		EPA 6010	JGP	4	PASI-K
		ASTM D2974	DWC	1	PASI-K
60125766017	WWEL-S-SED	EPA 7196A	TPD	1	PASI-I
		EPA 9012A	AJM	1	PASI-K
		EPA 8082	NAW	9	PASI-K
		EPA 6010	JGP, SMW	4	PASI-K
60125766018	WWEL-S-SW	ASTM D2974	DWC	1	PASI-K
		EPA 7196A	TPD	1	PASI-I
		EPA 9012A	AJM	1	PASI-K
		EPA 8082	NAW	9	PASI-K
		EPA 6010	SMW	4	PASI-K
		EPA 9012A	AJM	1	PASI-K
		EPA 7196	NDL	1	PASI-K
		EPA 7196	NDL	1	PASI-K

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ANALYTICAL RESULTS

Project: KUHLMAN DIECASTING

Pace Project No.: 60125766

Sample: SB-19-6-8 Lab ID: 60125766001 Collected: 07/20/12 09:38 Received: 07/25/12 08:30 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
OA2 GCS Analytical Method: OA2 Preparation Method: OA2								
Diesel Fuel	ND	mg/kg	24.9	1	07/27/12 00:00	07/31/12 00:32	68334-30-5	
Fuel Oil	ND	mg/kg	24.9	1	07/27/12 00:00	07/31/12 00:32	68553-00-4	
Jet Fuel	ND	mg/kg	24.9	1	07/27/12 00:00	07/31/12 00:32	94114-58-6	
Kerosene	ND	mg/kg	24.9	1	07/27/12 00:00	07/31/12 00:32	8008-20-6	
Mineral Spirits	ND	mg/kg	24.9	1	07/27/12 00:00	07/31/12 00:32	8030-30-6	
Motor Oil	ND	mg/kg	24.9	1	07/27/12 00:00	07/31/12 00:32	64742-65-0	
Total Petroleum Hydrocarbons	ND	mg/kg	24.9	1	07/27/12 00:00	07/31/12 00:32		
Surrogates								
n-Tetracosane (S)	108	%	50-137	1	07/27/12 00:00	07/31/12 00:32	646-31-1	
p-Terphenyl (S)	92	%	41-129	1	07/27/12 00:00	07/31/12 00:32	92-94-4	
6010 MET ICP Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Antimony	ND	mg/kg	2.1	2	07/26/12 17:00	08/01/12 15:08	7440-36-0	M1
Arsenic	5.8	mg/kg	2.1	2	07/26/12 17:00	08/01/12 15:08	7440-38-2	
Beryllium	0.83	mg/kg	0.21	2	07/26/12 17:00	08/01/12 15:08	7440-41-7	
Cadmium	ND	mg/kg	1.0	2	07/26/12 17:00	08/01/12 15:08	7440-43-9	D3
Chromium	20.2	mg/kg	1.0	2	07/26/12 17:00	08/01/12 15:08	7440-47-3	
Copper	14.7	mg/kg	2.1	2	07/26/12 17:00	08/01/12 15:08	7440-50-8	
Lead	11.3	mg/kg	1.0	2	07/26/12 17:00	08/01/12 15:08	7439-92-1	
Nickel	19.0	mg/kg	1.0	2	07/26/12 17:00	08/01/12 15:08	7440-02-0	
Selenium	ND	mg/kg	3.1	2	07/26/12 17:00	08/01/12 15:08	7782-49-2	
Silver	ND	mg/kg	1.4	2	07/26/12 17:00	08/01/12 15:08	7440-22-4	
Thallium	ND	mg/kg	4.1	2	07/26/12 17:00	08/01/12 15:08	7440-28-0	
Zinc	58.9	mg/kg	20.6	2	07/26/12 17:00	08/01/12 15:08	7440-66-6	
7471 Mercury Analytical Method: EPA 7471 Preparation Method: EPA 7471								
Mercury	ND	mg/kg	0.017	1	08/04/12 09:00	08/04/12 13:10	7439-97-6	
8270 MSSV PAH by SIM Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546								
Acenaphthene	ND	ug/kg	4.2	1	07/26/12 00:00	07/27/12 15:29	83-32-9	
Acenaphthylene	ND	ug/kg	4.2	1	07/26/12 00:00	07/27/12 15:29	208-96-8	
Anthracene	ND	ug/kg	4.2	1	07/26/12 00:00	07/27/12 15:29	120-12-7	
Benzo(a)anthracene	ND	ug/kg	4.2	1	07/26/12 00:00	07/27/12 15:29	56-55-3	
Benzo(a)pyrene	ND	ug/kg	4.2	1	07/26/12 00:00	07/27/12 15:29	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	4.2	1	07/26/12 00:00	07/27/12 15:29	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	4.2	1	07/26/12 00:00	07/27/12 15:29	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	4.2	1	07/26/12 00:00	07/27/12 15:29	207-08-9	
Chrysene	ND	ug/kg	4.2	1	07/26/12 00:00	07/27/12 15:29	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	4.2	1	07/26/12 00:00	07/27/12 15:29	53-70-3	
Fluoranthene	ND	ug/kg	4.2	1	07/26/12 00:00	07/27/12 15:29	206-44-0	
Fluorene	ND	ug/kg	4.2	1	07/26/12 00:00	07/27/12 15:29	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	4.2	1	07/26/12 00:00	07/27/12 15:29	193-39-5	
Naphthalene	ND	ug/kg	4.2	1	07/26/12 00:00	07/27/12 15:29	91-20-3	
Phenanthrene	ND	ug/kg	4.2	1	07/26/12 00:00	07/27/12 15:29	85-01-8	
Pyrene	ND	ug/kg	4.2	1	07/26/12 00:00	07/27/12 15:29	129-00-0	

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ANALYTICAL RESULTS

Project: KUHLMAN DIECASTING

Pace Project No.: 60125766

Sample: SB-19-6-8 Lab ID: 60125766001 Collected: 07/20/12 09:38 Received: 07/25/12 08:30 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by SIM								
Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546								
Surrogates								
Nitrobenzene-d5 (S)	88 %		35-121	1	07/26/12 00:00	07/27/12 15:29	4165-60-0	
2-Fluorobiphenyl (S)	92 %		41-120	1	07/26/12 00:00	07/27/12 15:29	321-60-8	
Terphenyl-d14 (S)	82 %		39-123	1	07/26/12 00:00	07/27/12 15:29	1718-51-0	
OA1 Volatile Pet. Hydrocarbons								
Analytical Method: OA1								
Gasoline Range Organics	ND mg/kg		1.2	1		07/30/12 19:52		
8260 MSV 5035A VOA								
Analytical Method: EPA 8260								
Acetone	ND ug/kg		23.1	1		07/30/12 19:52	67-64-1	
Benzene	ND ug/kg		5.8	1		07/30/12 19:52	71-43-2	
Bromobenzene	ND ug/kg		5.8	1		07/30/12 19:52	108-86-1	
Bromochloromethane	ND ug/kg		5.8	1		07/30/12 19:52	74-97-5	
Bromodichloromethane	ND ug/kg		5.8	1		07/30/12 19:52	75-27-4	
Bromoform	ND ug/kg		5.8	1		07/30/12 19:52	75-25-2	
Bromomethane	ND ug/kg		5.8	1		07/30/12 19:52	74-83-9	
2-Butanone (MEK)	ND ug/kg		11.6	1		07/30/12 19:52	78-93-3	
n-Butylbenzene	ND ug/kg		5.8	1		07/30/12 19:52	104-51-8	
sec-Butylbenzene	ND ug/kg		5.8	1		07/30/12 19:52	135-98-8	
tert-Butylbenzene	ND ug/kg		5.8	1		07/30/12 19:52	98-06-6	
Carbon disulfide	ND ug/kg		5.8	1		07/30/12 19:52	75-15-0	
Carbon tetrachloride	ND ug/kg		5.8	1		07/30/12 19:52	56-23-5	
Chlorobenzene	ND ug/kg		5.8	1		07/30/12 19:52	108-90-7	
Chloroethane	ND ug/kg		5.8	1		07/30/12 19:52	75-00-3	
Chloroform	ND ug/kg		5.8	1		07/30/12 19:52	67-66-3	
Chloromethane	ND ug/kg		5.8	1		07/30/12 19:52	74-87-3	
2-Chlorotoluene	ND ug/kg		5.8	1		07/30/12 19:52	95-49-8	
4-Chlorotoluene	ND ug/kg		5.8	1		07/30/12 19:52	106-43-4	
1,2-Dibromo-3-chloropropane	ND ug/kg		11.6	1		07/30/12 19:52	96-12-8	
Dibromochloromethane	ND ug/kg		5.8	1		07/30/12 19:52	124-48-1	
1,2-Dibromoethane (EDB)	ND ug/kg		5.8	1		07/30/12 19:52	106-93-4	
Dibromomethane	ND ug/kg		5.8	1		07/30/12 19:52	74-95-3	
1,2-Dichlorobenzene	ND ug/kg		5.8	1		07/30/12 19:52	95-50-1	
1,3-Dichlorobenzene	ND ug/kg		5.8	1		07/30/12 19:52	541-73-1	
1,4-Dichlorobenzene	ND ug/kg		5.8	1		07/30/12 19:52	106-46-7	
Dichlorodifluoromethane	ND ug/kg		5.8	1		07/30/12 19:52	75-71-8	
1,1-Dichloroethane	ND ug/kg		5.8	1		07/30/12 19:52	75-34-3	
1,2-Dichloroethane	ND ug/kg		5.8	1		07/30/12 19:52	107-06-2	
1,2-Dichloroethene (Total)	ND ug/kg		5.8	1		07/30/12 19:52	540-59-0	
1,1-Dichloroethene	ND ug/kg		5.8	1		07/30/12 19:52	75-35-4	
cis-1,2-Dichloroethene	ND ug/kg		5.8	1		07/30/12 19:52	156-59-2	
trans-1,2-Dichloroethene	ND ug/kg		5.8	1		07/30/12 19:52	156-60-5	
1,2-Dichloropropane	ND ug/kg		5.8	1		07/30/12 19:52	78-87-5	
1,3-Dichloropropane	ND ug/kg		5.8	1		07/30/12 19:52	142-28-9	
2,2-Dichloropropane	ND ug/kg		5.8	1		07/30/12 19:52	594-20-7	
1,1-Dichloropropene	ND ug/kg		5.8	1		07/30/12 19:52	563-58-6	

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ANALYTICAL RESULTS

Project: KUHLMAN DIECASTING

Pace Project No.: 60125766

Sample: SB-19-6-8 Lab ID: 60125766001 Collected: 07/20/12 09:38 Received: 07/25/12 08:30 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035A VOA		Analytical Method: EPA 8260						
cis-1,3-Dichloropropene	ND	ug/kg	5.8	1		07/30/12 19:52	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/kg	5.8	1		07/30/12 19:52	10061-02-6	
Ethylbenzene	ND	ug/kg	5.8	1		07/30/12 19:52	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	5.8	1		07/30/12 19:52	87-68-3	
2-Hexanone	ND	ug/kg	23.1	1		07/30/12 19:52	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/kg	5.8	1		07/30/12 19:52	98-82-8	
p-Isopropyltoluene	ND	ug/kg	5.8	1		07/30/12 19:52	99-87-6	
Methylene chloride	ND	ug/kg	5.8	1		07/30/12 19:52	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	11.6	1		07/30/12 19:52	108-10-1	
Methyl-tert-butyl ether	ND	ug/kg	5.8	1		07/30/12 19:52	1634-04-4	
Naphthalene	ND	ug/kg	11.6	1		07/30/12 19:52	91-20-3	
n-Propylbenzene	ND	ug/kg	5.8	1		07/30/12 19:52	103-65-1	
Styrene	ND	ug/kg	5.8	1		07/30/12 19:52	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/kg	5.8	1		07/30/12 19:52	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	5.8	1		07/30/12 19:52	79-34-5	
Tetrachloroethene	ND	ug/kg	5.8	1		07/30/12 19:52	127-18-4	
Toluene	ND	ug/kg	5.8	1		07/30/12 19:52	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/kg	5.8	1		07/30/12 19:52	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/kg	5.8	1		07/30/12 19:52	120-82-1	
1,1,1-Trichloroethane	ND	ug/kg	5.8	1		07/30/12 19:52	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	5.8	1		07/30/12 19:52	79-00-5	
Trichloroethene	ND	ug/kg	5.8	1		07/30/12 19:52	79-01-6	
Trichlorofluoromethane	ND	ug/kg	5.8	1		07/30/12 19:52	75-69-4	
1,2,3-Trichloropropane	ND	ug/kg	5.8	1		07/30/12 19:52	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/kg	5.8	1		07/30/12 19:52	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/kg	5.8	1		07/30/12 19:52	108-67-8	
Vinyl chloride	ND	ug/kg	5.8	1		07/30/12 19:52	75-01-4	
Xylene (Total)	ND	ug/kg	5.8	1		07/30/12 19:52	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	104 %		78-122	1		07/30/12 19:52	1868-53-7	
Toluene-d8 (S)	100 %		80-123	1		07/30/12 19:52	2037-26-5	
4-Bromofluorobenzene (S)	103 %		78-125	1		07/30/12 19:52	460-00-4	
1,2-Dichloroethane-d4 (S)	118 %		73-135	1		07/30/12 19:52	17060-07-0	

Percent Moisture

Analytical Method: ASTM D2974

Percent Moisture	21.8 %	0.50	1	08/03/12 00:00
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ANALYTICAL RESULTS

Project: KUHLMAN DIECASTING

Pace Project No.: 60125766

Sample: SB-11 GW		Lab ID: 60125766002	Collected: 07/19/12 11:50	Received: 07/25/12 08:30	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
OA2 GCS Analytical Method: OA2 Preparation Method: OA2								
Diesel Fuel	ND mg/L		0.40	1	07/26/12 00:00	08/02/12 11:44	68334-30-5	
Fuel Oil	ND mg/L		0.40	1	07/26/12 00:00	08/02/12 11:44	68553-00-4	
Jet Fuel	ND mg/L		0.40	1	07/26/12 00:00	08/02/12 11:44	94114-58-6	
Kerosene	ND mg/L		0.40	1	07/26/12 00:00	08/02/12 11:44	8008-20-6	
Mineral Spirits	ND mg/L		0.40	1	07/26/12 00:00	08/02/12 11:44	8030-30-6	
Motor Oil	ND mg/L		0.40	1	07/26/12 00:00	08/02/12 11:44	64742-65-0	
Total Petroleum Hydrocarbons	ND mg/L		0.40	1	07/26/12 00:00	08/02/12 11:44		
Surrogates								
p-Terphenyl (S)	95 %		20-122	1	07/26/12 00:00	08/02/12 11:44	92-94-4	
n-Tetracosane (S)	87 %		30-122	1	07/26/12 00:00	08/02/12 11:44	646-31-1	
6010 MET ICP Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Antimony	ND ug/L		10.0	1	07/27/12 14:15	07/31/12 14:16	7440-36-0	
Arsenic	12.2 ug/L		10.0	1	07/27/12 14:15	07/31/12 14:16	7440-38-2	
Beryllium	ND ug/L		1.0	1	07/27/12 14:15	07/31/12 14:16	7440-41-7	
Cadmium	22.5 ug/L		5.0	1	07/27/12 14:15	07/31/12 14:16	7440-43-9	
Chromium	307 ug/L		5.0	1	07/27/12 14:15	07/31/12 14:16	7440-47-3	
Copper	372 ug/L		10.0	1	07/27/12 14:15	07/31/12 14:16	7440-50-8	
Lead	44.4 ug/L		5.0	1	07/27/12 14:15	07/31/12 14:16	7439-92-1	
Nickel	300 ug/L		5.0	1	07/27/12 14:15	07/31/12 14:16	7440-02-0	
Selenium	ND ug/L		15.0	1	07/27/12 14:15	07/31/12 14:16	7782-49-2	
Silver	ND ug/L		7.0	1	07/27/12 14:15	07/31/12 14:16	7440-22-4	
Thallium	ND ug/L		20.0	1	07/27/12 14:15	07/31/12 14:16	7440-28-0	
Zinc	1000 ug/L		50.0	1	07/27/12 14:15	07/31/12 14:16	7440-66-6	
6010 MET ICP, Dissolved Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Antimony, Dissolved	ND ug/L		10.0	1	07/27/12 10:30	07/30/12 13:49	7440-36-0	
Arsenic, Dissolved	ND ug/L		10.0	1	07/27/12 10:30	07/30/12 13:49	7440-38-2	
Beryllium, Dissolved	ND ug/L		1.0	1	07/27/12 10:30	07/30/12 13:49	7440-41-7	
Cadmium, Dissolved	ND ug/L		5.0	1	07/27/12 10:30	07/30/12 13:49	7440-43-9	
Chromium, Dissolved	ND ug/L		5.0	1	07/27/12 10:30	07/30/12 13:49	7440-47-3	
Copper, Dissolved	ND ug/L		10.0	1	07/27/12 10:30	07/30/12 13:49	7440-50-8	
Lead, Dissolved	ND ug/L		5.0	1	07/27/12 10:30	07/30/12 13:49	7439-92-1	
Nickel, Dissolved	22.4 ug/L		5.0	1	07/27/12 10:30	07/30/12 13:49	7440-02-0	
Selenium, Dissolved	ND ug/L		15.0	1	07/27/12 10:30	07/30/12 13:49	7782-49-2	
Silver, Dissolved	ND ug/L		7.0	1	07/27/12 10:30	07/30/12 13:49	7440-22-4	
Thallium, Dissolved	ND ug/L		20.0	1	07/27/12 10:30	07/30/12 13:49	7440-28-0	
Zinc, Dissolved	50.3 ug/L		50.0	1	07/27/12 10:30	07/30/12 13:49	7440-66-6	
7470 Mercury Analytical Method: EPA 7470 Preparation Method: EPA 7470								
Mercury	0.60 ug/L		0.20	1	07/31/12 18:30	08/02/12 11:55	7439-97-6	
7470 Mercury, Dissolved Analytical Method: EPA 7470 Preparation Method: EPA 7470								
Mercury, Dissolved	ND ug/L		0.20	1	08/01/12 06:30	08/03/12 11:45	7439-97-6	

ANALYTICAL RESULTS

Project: KUHLMAN DIECASTING

Pace Project No.: 60125766

Sample: SB-11 GW		Lab ID: 60125766002	Collected: 07/19/12 11:50	Received: 07/25/12 08:30	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by SIM		Analytical Method: EPA 8270C by SIM Preparation Method: EPA 3510C						
Acenaphthene	ND ug/L		0.10	1	07/26/12 00:00	08/06/12 21:03	83-32-9	
Acenaphthylene	ND ug/L		0.10	1	07/26/12 00:00	08/06/12 21:03	208-96-8	
Anthracene	ND ug/L		0.10	1	07/26/12 00:00	08/06/12 21:03	120-12-7	
Benzo(a)anthracene	ND ug/L		0.10	1	07/26/12 00:00	08/06/12 21:03	56-55-3	
Benzo(a)pyrene	ND ug/L		0.10	1	07/26/12 00:00	08/06/12 21:03	50-32-8	
Benzo(b)fluoranthene	ND ug/L		0.10	1	07/26/12 00:00	08/06/12 21:03	205-99-2	
Benzo(g,h,i)perylene	ND ug/L		0.10	1	07/26/12 00:00	08/06/12 21:03	191-24-2	
Benzo(k)fluoranthene	ND ug/L		0.10	1	07/26/12 00:00	08/06/12 21:03	207-08-9	
Chrysene	ND ug/L		0.10	1	07/26/12 00:00	08/06/12 21:03	218-01-9	
Dibenz(a,h)anthracene	ND ug/L		0.10	1	07/26/12 00:00	08/06/12 21:03	53-70-3	
Fluoranthene	ND ug/L		0.10	1	07/26/12 00:00	08/06/12 21:03	206-44-0	
Fluorene	ND ug/L		0.10	1	07/26/12 00:00	08/06/12 21:03	86-73-7	
Indeno(1,2,3-cd)pyrene	ND ug/L		0.10	1	07/26/12 00:00	08/06/12 21:03	193-39-5	
Naphthalene	ND ug/L		0.50	1	07/26/12 00:00	08/06/12 21:03	91-20-3	
Phenanthrene	ND ug/L		0.50	1	07/26/12 00:00	08/06/12 21:03	85-01-8	
Pyrene	ND ug/L		0.10	1	07/26/12 00:00	08/06/12 21:03	129-00-0	
Surrogates								
Nitrobenzene-d5 (S)	68 %		42-120	1	07/26/12 00:00	08/06/12 21:03	4165-60-0	
2-Fluorobiphenyl (S)	68 %		44-120	1	07/26/12 00:00	08/06/12 21:03	321-60-8	
Terphenyl-d14 (S)	73 %		46-131	1	07/26/12 00:00	08/06/12 21:03	1718-51-0	
8260 MSV		Analytical Method: EPA 5030B/8260						
Acetone	ND ug/L		10.0	1		07/30/12 14:04	67-64-1	
Benzene	ND ug/L		1.0	1		07/30/12 14:04	71-43-2	
Bromobenzene	ND ug/L		1.0	1		07/30/12 14:04	108-86-1	
Bromochloromethane	ND ug/L		1.0	1		07/30/12 14:04	74-97-5	
Bromodichloromethane	ND ug/L		1.0	1		07/30/12 14:04	75-27-4	
Bromoform	ND ug/L		1.0	1		07/30/12 14:04	75-25-2	
Bromomethane	ND ug/L		5.0	1		07/30/12 14:04	74-83-9	
2-Butanone (MEK)	ND ug/L		10.0	1		07/30/12 14:04	78-93-3	
n-Butylbenzene	ND ug/L		1.0	1		07/30/12 14:04	104-51-8	
sec-Butylbenzene	ND ug/L		1.0	1		07/30/12 14:04	135-98-8	
tert-Butylbenzene	ND ug/L		1.0	1		07/30/12 14:04	98-06-6	
Carbon disulfide	ND ug/L		5.0	1		07/30/12 14:04	75-15-0	
Carbon tetrachloride	ND ug/L		1.0	1		07/30/12 14:04	56-23-5	
Chlorobenzene	ND ug/L		1.0	1		07/30/12 14:04	108-90-7	
Chloroethane	ND ug/L		1.0	1		07/30/12 14:04	75-00-3	
Chloroform	ND ug/L		1.0	1		07/30/12 14:04	67-66-3	
Chloromethane	ND ug/L		1.0	1		07/30/12 14:04	74-87-3	
2-Chlorotoluene	ND ug/L		1.0	1		07/30/12 14:04	95-49-8	
4-Chlorotoluene	ND ug/L		1.0	1		07/30/12 14:04	106-43-4	
1,2-Dibromo-3-chloropropane	ND ug/L		2.5	1		07/30/12 14:04	96-12-8	
Dibromochloromethane	ND ug/L		1.0	1		07/30/12 14:04	124-48-1	
1,2-Dibromoethane (EDB)	ND ug/L		1.0	1		07/30/12 14:04	106-93-4	
Dibromomethane	ND ug/L		1.0	1		07/30/12 14:04	74-95-3	
1,2-Dichlorobenzene	ND ug/L		1.0	1		07/30/12 14:04	95-50-1	
1,3-Dichlorobenzene	ND ug/L		1.0	1		07/30/12 14:04	541-73-1	

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ANALYTICAL RESULTS

Project: KUHLMAN DIECASTING

Pace Project No.: 60125766

Sample: SB-11 GW		Lab ID: 60125766002	Collected: 07/19/12 11:50	Received: 07/25/12 08:30	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV		Analytical Method: EPA 5030B/8260						
1,4-Dichlorobenzene	ND	ug/L	1.0	1		07/30/12 14:04	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		07/30/12 14:04	75-71-8	
1,1-Dichloroethane	4.0	ug/L	1.0	1		07/30/12 14:04	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		07/30/12 14:04	107-06-2	
1,2-Dichloroethene (Total)	299	ug/L	5.0	5		07/31/12 15:34	540-59-0	
1,1-Dichloroethene	3.4	ug/L	1.0	1		07/30/12 14:04	75-35-4	
cis-1,2-Dichloroethene	294	ug/L	5.0	5		07/31/12 15:34	156-59-2	
trans-1,2-Dichloroethene	4.8	ug/L	1.0	1		07/30/12 14:04	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		07/30/12 14:04	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	1		07/30/12 14:04	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	1		07/30/12 14:04	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		07/30/12 14:04	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		07/30/12 14:04	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		07/30/12 14:04	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	1		07/30/12 14:04	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	1		07/30/12 14:04	87-68-3	
2-Hexanone	ND	ug/L	10.0	1		07/30/12 14:04	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	1		07/30/12 14:04	98-82-8	
p-Isopropyltoluene	ND	ug/L	1.0	1		07/30/12 14:04	99-87-6	
Methylene chloride	ND	ug/L	1.0	1		07/30/12 14:04	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	1		07/30/12 14:04	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		07/30/12 14:04	1634-04-4	
Naphthalene	ND	ug/L	10.0	1		07/30/12 14:04	91-20-3	
n-Propylbenzene	ND	ug/L	1.0	1		07/30/12 14:04	103-65-1	
Styrene	ND	ug/L	1.0	1		07/30/12 14:04	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		07/30/12 14:04	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		07/30/12 14:04	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		07/30/12 14:04	127-18-4	
Toluene	ND	ug/L	1.0	1		07/30/12 14:04	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		07/30/12 14:04	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		07/30/12 14:04	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		07/30/12 14:04	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		07/30/12 14:04	79-00-5	
Trichloroethene	384	ug/L	5.0	5		07/31/12 15:34	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		07/30/12 14:04	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	2.5	1		07/30/12 14:04	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	1.0	1		07/30/12 14:04	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	1.0	1		07/30/12 14:04	108-67-8	
Vinyl chloride	1.4	ug/L	1.0	1		07/30/12 14:04	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1		07/30/12 14:04	1330-20-7	
Surrogates								
4-Bromofluorobenzene (S)	103	%	80-120	1		07/30/12 14:04	460-00-4	
Dibromofluoromethane (S)	93	%	80-120	1		07/30/12 14:04	1868-53-7	
1,2-Dichloroethane-d4 (S)	97	%	80-120	1		07/30/12 14:04	17060-07-0	
Toluene-d8 (S)	102	%	80-120	1		07/30/12 14:04	2037-26-5	
Preservation pH	1.0		0.10	1		07/30/12 14:04		

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ANALYTICAL RESULTS

Project: KUHLMAN DIECASTING

Pace Project No.: 60125766

Sample: SB-11 GW		Lab ID: 60125766002	Collected: 07/19/12 11:50	Received: 07/25/12 08:30	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260/OA1 UST, Water		Analytical Method: EPA 8260/OA1						
Gasoline Range Organics Surrogates	0.64 mg/L		0.50	1		07/30/12 14:04		
Dibromofluoromethane (S)	93 %		80-120	1		07/30/12 14:04	1868-53-7	
Toluene-d8 (S)	102 %		80-120	1		07/30/12 14:04	2037-26-5	
4-Bromofluorobenzene (S)	103 %		80-120	1		07/30/12 14:04	460-00-4	
1,2-Dichloroethane-d4 (S)	97 %		80-120	1		07/30/12 14:04	17060-07-0	

ANALYTICAL RESULTS

Project: KUHLMAN DIECASTING

Pace Project No.: 60125766

Sample: SB-17 GW		Lab ID: 60125766003	Collected: 07/20/12 08:11	Received: 07/25/12 08:30	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
OA2 GCS		Analytical Method: OA2 Preparation Method: OA2						
Diesel Fuel	ND mg/L		0.40	1	07/26/12 00:00	08/02/12 11:54	68334-30-5	
Fuel Oil	ND mg/L		0.40	1	07/26/12 00:00	08/02/12 11:54	68553-00-4	
Jet Fuel	ND mg/L		0.40	1	07/26/12 00:00	08/02/12 11:54	94114-58-6	
Kerosene	ND mg/L		0.40	1	07/26/12 00:00	08/02/12 11:54	8008-20-6	
Mineral Spirits	ND mg/L		0.40	1	07/26/12 00:00	08/02/12 11:54	8030-30-6	
Motor Oil	ND mg/L		0.40	1	07/26/12 00:00	08/02/12 11:54	64742-65-0	
Total Petroleum Hydrocarbons	ND mg/L		0.40	1	07/26/12 00:00	08/02/12 11:54		
Surrogates								
p-Terphenyl (S)	86 %		20-122	1	07/26/12 00:00	08/02/12 11:54	92-94-4	
n-Tetracosane (S)	77 %		30-122	1	07/26/12 00:00	08/02/12 11:54	646-31-1	
6010 MET ICP		Analytical Method: EPA 6010 Preparation Method: EPA 3010						
Antimony	ND ug/L		10.0	1	07/27/12 14:15	07/31/12 14:20	7440-36-0	
Arsenic	30.6 ug/L		10.0	1	07/27/12 14:15	07/31/12 14:20	7440-38-2	
Beryllium	2.2 ug/L		1.0	1	07/27/12 14:15	07/31/12 14:20	7440-41-7	
Cadmium	35.1 ug/L		5.0	1	07/27/12 14:15	07/31/12 14:20	7440-43-9	
Chromium	55.7 ug/L		5.0	1	07/27/12 14:15	07/31/12 14:20	7440-47-3	
Copper	186 ug/L		10.0	1	07/27/12 14:15	07/31/12 14:20	7440-50-8	
Lead	72.1 ug/L		5.0	1	07/27/12 14:15	07/31/12 14:20	7439-92-1	
Nickel	151 ug/L		5.0	1	07/27/12 14:15	07/31/12 14:20	7440-02-0	
Selenium	ND ug/L		15.0	1	07/27/12 14:15	07/31/12 14:20	7782-49-2	
Silver	ND ug/L		7.0	1	07/27/12 14:15	07/31/12 14:20	7440-22-4	
Thallium	ND ug/L		20.0	1	07/27/12 14:15	07/31/12 14:20	7440-28-0	
Zinc	1540 ug/L		50.0	1	07/27/12 14:15	07/31/12 14:20	7440-66-6	
6010 MET ICP, Dissolved		Analytical Method: EPA 6010 Preparation Method: EPA 3010						
Antimony, Dissolved	ND ug/L		10.0	1	07/27/12 10:30	07/30/12 13:52	7440-36-0	
Arsenic, Dissolved	ND ug/L		10.0	1	07/27/12 10:30	07/30/12 13:52	7440-38-2	
Beryllium, Dissolved	ND ug/L		1.0	1	07/27/12 10:30	07/30/12 13:52	7440-41-7	
Cadmium, Dissolved	ND ug/L		5.0	1	07/27/12 10:30	07/30/12 13:52	7440-43-9	
Chromium, Dissolved	ND ug/L		5.0	1	07/27/12 10:30	07/30/12 13:52	7440-47-3	
Copper, Dissolved	ND ug/L		10.0	1	07/27/12 10:30	07/30/12 13:52	7440-50-8	
Lead, Dissolved	5.0 ug/L		5.0	1	07/27/12 10:30	07/30/12 13:52	7439-92-1	
Nickel, Dissolved	35.2 ug/L		5.0	1	07/27/12 10:30	07/30/12 13:52	7440-02-0	
Selenium, Dissolved	ND ug/L		15.0	1	07/27/12 10:30	07/30/12 13:52	7782-49-2	
Silver, Dissolved	ND ug/L		7.0	1	07/27/12 10:30	07/30/12 13:52	7440-22-4	
Thallium, Dissolved	ND ug/L		20.0	1	07/27/12 10:30	07/30/12 13:52	7440-28-0	
Zinc, Dissolved	113 ug/L		50.0	1	07/27/12 10:30	07/30/12 13:52	7440-66-6	
7470 Mercury		Analytical Method: EPA 7470 Preparation Method: EPA 7470						
Mercury	0.35 ug/L		0.20	1	07/31/12 18:30	08/02/12 11:57	7439-97-6	
7470 Mercury, Dissolved		Analytical Method: EPA 7470 Preparation Method: EPA 7470						
Mercury, Dissolved	ND ug/L		0.20	1	08/01/12 06:30	08/03/12 11:47	7439-97-6	

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ANALYTICAL RESULTS

Project: KUHLMAN DIECASTING

Pace Project No.: 60125766

Sample: SB-17 GW		Lab ID: 60125766003	Collected: 07/20/12 08:11	Received: 07/25/12 08:30	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by SIM		Analytical Method: EPA 8270C by SIM Preparation Method: EPA 3510C						
Acenaphthene	ND ug/L		0.10	1	07/26/12 00:00	08/06/12 21:20	83-32-9	
Acenaphthylene	ND ug/L		0.10	1	07/26/12 00:00	08/06/12 21:20	208-96-8	
Anthracene	ND ug/L		0.10	1	07/26/12 00:00	08/06/12 21:20	120-12-7	
Benzo(a)anthracene	ND ug/L		0.10	1	07/26/12 00:00	08/06/12 21:20	56-55-3	
Benzo(a)pyrene	ND ug/L		0.10	1	07/26/12 00:00	08/06/12 21:20	50-32-8	
Benzo(b)fluoranthene	ND ug/L		0.10	1	07/26/12 00:00	08/06/12 21:20	205-99-2	
Benzo(g,h,i)perylene	ND ug/L		0.10	1	07/26/12 00:00	08/06/12 21:20	191-24-2	
Benzo(k)fluoranthene	ND ug/L		0.10	1	07/26/12 00:00	08/06/12 21:20	207-08-9	
Chrysene	ND ug/L		0.10	1	07/26/12 00:00	08/06/12 21:20	218-01-9	
Dibenz(a,h)anthracene	ND ug/L		0.10	1	07/26/12 00:00	08/06/12 21:20	53-70-3	
Fluoranthene	ND ug/L		0.10	1	07/26/12 00:00	08/06/12 21:20	206-44-0	
Fluorene	ND ug/L		0.10	1	07/26/12 00:00	08/06/12 21:20	86-73-7	
Indeno(1,2,3-cd)pyrene	ND ug/L		0.10	1	07/26/12 00:00	08/06/12 21:20	193-39-5	
Naphthalene	ND ug/L		0.50	1	07/26/12 00:00	08/06/12 21:20	91-20-3	
Phenanthrene	ND ug/L		0.50	1	07/26/12 00:00	08/06/12 21:20	85-01-8	
Pyrene	ND ug/L		0.10	1	07/26/12 00:00	08/06/12 21:20	129-00-0	
Surrogates								
Nitrobenzene-d5 (S)	85 %		42-120	1	07/26/12 00:00	08/06/12 21:20	4165-60-0	
2-Fluorobiphenyl (S)	84 %		44-120	1	07/26/12 00:00	08/06/12 21:20	321-60-8	
Terphenyl-d14 (S)	92 %		46-131	1	07/26/12 00:00	08/06/12 21:20	1718-51-0	
8260 MSV		Analytical Method: EPA 5030B/8260						
Acetone	ND ug/L		10.0	1		07/30/12 14:20	67-64-1	
Benzene	ND ug/L		1.0	1		07/30/12 14:20	71-43-2	
Bromobenzene	ND ug/L		1.0	1		07/30/12 14:20	108-86-1	
Bromochloromethane	ND ug/L		1.0	1		07/30/12 14:20	74-97-5	
Bromodichloromethane	ND ug/L		1.0	1		07/30/12 14:20	75-27-4	
Bromoform	ND ug/L		1.0	1		07/30/12 14:20	75-25-2	
Bromomethane	ND ug/L		5.0	1		07/30/12 14:20	74-83-9	
2-Butanone (MEK)	ND ug/L		10.0	1		07/30/12 14:20	78-93-3	
n-Butylbenzene	ND ug/L		1.0	1		07/30/12 14:20	104-51-8	
sec-Butylbenzene	ND ug/L		1.0	1		07/30/12 14:20	135-98-8	
tert-Butylbenzene	ND ug/L		1.0	1		07/30/12 14:20	98-06-6	
Carbon disulfide	ND ug/L		5.0	1		07/30/12 14:20	75-15-0	
Carbon tetrachloride	ND ug/L		1.0	1		07/30/12 14:20	56-23-5	
Chlorobenzene	ND ug/L		1.0	1		07/30/12 14:20	108-90-7	
Chloroethane	ND ug/L		1.0	1		07/30/12 14:20	75-00-3	
Chloroform	ND ug/L		1.0	1		07/30/12 14:20	67-66-3	
Chloromethane	ND ug/L		1.0	1		07/30/12 14:20	74-87-3	
2-Chlorotoluene	ND ug/L		1.0	1		07/30/12 14:20	95-49-8	
4-Chlorotoluene	ND ug/L		1.0	1		07/30/12 14:20	106-43-4	
1,2-Dibromo-3-chloropropane	ND ug/L		2.5	1		07/30/12 14:20	96-12-8	
Dibromochloromethane	ND ug/L		1.0	1		07/30/12 14:20	124-48-1	
1,2-Dibromoethane (EDB)	ND ug/L		1.0	1		07/30/12 14:20	106-93-4	
Dibromomethane	ND ug/L		1.0	1		07/30/12 14:20	74-95-3	
1,2-Dichlorobenzene	ND ug/L		1.0	1		07/30/12 14:20	95-50-1	
1,3-Dichlorobenzene	ND ug/L		1.0	1		07/30/12 14:20	541-73-1	

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ANALYTICAL RESULTS

Project: KUHLMAN DIECASTING

Pace Project No.: 60125766

Sample: SB-17 GW		Lab ID: 60125766003	Collected: 07/20/12 08:11	Received: 07/25/12 08:30	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV		Analytical Method: EPA 5030B/8260						
1,4-Dichlorobenzene	ND ug/L		1.0	1		07/30/12 14:20	106-46-7	
Dichlorodifluoromethane	ND ug/L		1.0	1		07/30/12 14:20	75-71-8	
1,1-Dichloroethane	ND ug/L		1.0	1		07/30/12 14:20	75-34-3	
1,2-Dichloroethane	ND ug/L		1.0	1		07/30/12 14:20	107-06-2	
1,2-Dichloroethene (Total)	ND ug/L		1.0	1		07/31/12 15:50	540-59-0	
1,1-Dichloroethene	ND ug/L		1.0	1		07/30/12 14:20	75-35-4	
cis-1,2-Dichloroethene	ND ug/L		1.0	1		07/31/12 15:50	156-59-2	
trans-1,2-Dichloroethene	ND ug/L		1.0	1		07/30/12 14:20	156-60-5	
1,2-Dichloropropane	ND ug/L		1.0	1		07/30/12 14:20	78-87-5	
1,3-Dichloropropane	ND ug/L		1.0	1		07/30/12 14:20	142-28-9	
2,2-Dichloropropane	ND ug/L		1.0	1		07/30/12 14:20	594-20-7	
1,1-Dichloropropene	ND ug/L		1.0	1		07/30/12 14:20	563-58-6	
cis-1,3-Dichloropropene	ND ug/L		1.0	1		07/30/12 14:20	10061-01-5	
trans-1,3-Dichloropropene	ND ug/L		1.0	1		07/30/12 14:20	10061-02-6	
Ethylbenzene	ND ug/L		1.0	1		07/30/12 14:20	100-41-4	
Hexachloro-1,3-butadiene	ND ug/L		1.0	1		07/30/12 14:20	87-68-3	
2-Hexanone	ND ug/L		10.0	1		07/30/12 14:20	591-78-6	
Isopropylbenzene (Cumene)	ND ug/L		1.0	1		07/30/12 14:20	98-82-8	
p-Isopropyltoluene	ND ug/L		1.0	1		07/30/12 14:20	99-87-6	
Methylene chloride	ND ug/L		1.0	1		07/30/12 14:20	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND ug/L		10.0	1		07/30/12 14:20	108-10-1	
Methyl-tert-butyl ether	ND ug/L		1.0	1		07/30/12 14:20	1634-04-4	
Naphthalene	ND ug/L		10.0	1		07/30/12 14:20	91-20-3	
n-Propylbenzene	ND ug/L		1.0	1		07/30/12 14:20	103-65-1	
Styrene	ND ug/L		1.0	1		07/30/12 14:20	100-42-5	
1,1,1,2-Tetrachloroethane	ND ug/L		1.0	1		07/30/12 14:20	630-20-6	
1,1,2,2-Tetrachloroethane	ND ug/L		1.0	1		07/30/12 14:20	79-34-5	
Tetrachloroethene	ND ug/L		1.0	1		07/30/12 14:20	127-18-4	
Toluene	ND ug/L		1.0	1		07/30/12 14:20	108-88-3	
1,2,3-Trichlorobenzene	ND ug/L		1.0	1		07/30/12 14:20	87-61-6	
1,2,4-Trichlorobenzene	ND ug/L		1.0	1		07/30/12 14:20	120-82-1	
1,1,1-Trichloroethane	ND ug/L		1.0	1		07/30/12 14:20	71-55-6	
1,1,2-Trichloroethane	ND ug/L		1.0	1		07/30/12 14:20	79-00-5	
Trichloroethene	ND ug/L		1.0	1		07/31/12 15:50	79-01-6	
Trichlorofluoromethane	ND ug/L		1.0	1		07/30/12 14:20	75-69-4	
1,2,3-Trichloropropane	ND ug/L		2.5	1		07/30/12 14:20	96-18-4	
1,2,4-Trimethylbenzene	ND ug/L		1.0	1		07/30/12 14:20	95-63-6	
1,3,5-Trimethylbenzene	ND ug/L		1.0	1		07/30/12 14:20	108-67-8	
Vinyl chloride	ND ug/L		1.0	1		07/30/12 14:20	75-01-4	
Xylene (Total)	ND ug/L		3.0	1		07/30/12 14:20	1330-20-7	
Surrogates								
4-Bromofluorobenzene (S)	102 %		80-120	1		07/30/12 14:20	460-00-4	
Dibromofluoromethane (S)	95 %		80-120	1		07/30/12 14:20	1868-53-7	
1,2-Dichloroethane-d4 (S)	96 %		80-120	1		07/30/12 14:20	17060-07-0	
Toluene-d8 (S)	102 %		80-120	1		07/30/12 14:20	2037-26-5	
Preservation pH	1.0		0.10	1		07/30/12 14:20		

Date: 08/13/2012 09:36 PM

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: KUHLMAN DIECASTING

Pace Project No.: 60125766

Sample: SB-17 GW		Lab ID: 60125766003	Collected: 07/20/12 08:11	Received: 07/25/12 08:30	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260/OA1 UST, Water		Analytical Method: EPA 8260/OA1						
Gasoline Range Organics Surrogates	ND mg/L		0.50	1		07/30/12 14:20		
Dibromofluoromethane (S)	95 %		80-120	1		07/30/12 14:20	1868-53-7	
Toluene-d8 (S)	102 %		80-120	1		07/30/12 14:20	2037-26-5	
4-Bromofluorobenzene (S)	102 %		80-120	1		07/30/12 14:20	460-00-4	
1,2-Dichloroethane-d4 (S)	96 %		80-120	1		07/30/12 14:20	17060-07-0	

ANALYTICAL RESULTS

Project: KUHLMAN DIECASTING

Pace Project No.: 60125766

Sample: SS-1 **Lab ID: 60125766004** Collected: 07/24/12 09:12 Received: 07/25/12 08:30 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Chromium	44.7	mg/kg	0.88	2	07/26/12 17:00	08/01/12 15:14	7440-47-3	
Copper	105	mg/kg	1.8	2	07/26/12 17:00	08/01/12 15:14	7440-50-8	
Nickel	105	mg/kg	0.44	1	07/26/12 17:00	07/31/12 16:32	7440-02-0	
Zinc	220	mg/kg	8.8	1	07/26/12 17:00	07/31/12 16:32	7440-66-6	
Percent Moisture Analytical Method: ASTM D2974								
Percent Moisture	2.3	%	0.50	1		08/03/12 00:00		
7196 Chromium, Hexavalent Analytical Method: EPA 7196A								
Chromium, Hexavalent	ND	mg/kg	4.1	2	07/31/12 13:42	08/01/12 12:14	18540-29-9	D3

ANALYTICAL RESULTS

Project: KUHLMAN DIECASTING

Pace Project No.: 60125766

Sample: SS-2 **Lab ID: 60125766005** Collected: 07/24/12 09:13 Received: 07/25/12 08:30 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Chromium	144	mg/kg	0.92	2	07/26/12 17:00	08/01/12 15:20	7440-47-3	
Copper	103	mg/kg	1.8	2	07/26/12 17:00	08/01/12 15:20	7440-50-8	
Nickel	139	mg/kg	0.46	1	07/26/12 17:00	07/31/12 16:35	7440-02-0	
Zinc	301	mg/kg	9.2	1	07/26/12 17:00	07/31/12 16:35	7440-66-6	
Percent Moisture Analytical Method: ASTM D2974								
Percent Moisture	3.5	%	0.50	1		08/03/12 00:00		
7196 Chromium, Hexavalent Analytical Method: EPA 7196A								
Chromium, Hexavalent	ND	mg/kg	4.1	2	07/31/12 13:42	08/01/12 12:14	18540-29-9	D3

ANALYTICAL RESULTS

Project: KUHLMAN DIECASTING

Pace Project No.: 60125766

Sample: SS-3 **Lab ID: 60125766006** Collected: 07/24/12 09:15 Received: 07/25/12 08:30 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP		Analytical Method: EPA 6010 Preparation Method: EPA 3050						
Chromium	31.3	mg/kg	1.3	3	07/26/12 17:00	08/01/12 15:22	7440-47-3	
Copper	26.1	mg/kg	2.6	3	07/26/12 17:00	08/01/12 15:22	7440-50-8	
Nickel	43.7	mg/kg	1.3	3	07/26/12 17:00	08/01/12 15:22	7440-02-0	
Zinc	67.4	mg/kg	26.3	3	07/26/12 17:00	08/01/12 15:22	7440-66-6	
Percent Moisture		Analytical Method: ASTM D2974						
Percent Moisture	4.9	%	0.50	1		08/03/12 00:00		
7196 Chromium, Hexavalent		Analytical Method: EPA 7196A						
Chromium, Hexavalent	ND	mg/kg	4.2	2	07/31/12 13:42	08/01/12 12:14	18540-29-9	D3

ANALYTICAL RESULTS

Project: KUHLMAN DIECASTING

Pace Project No.: 60125766

Sample: SS-4 **Lab ID: 60125766007** Collected: 07/24/12 09:18 Received: 07/25/12 08:30 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Chromium	177	mg/kg	0.94	2	07/26/12 17:00	08/01/12 15:24	7440-47-3	
Copper	109	mg/kg	1.9	2	07/26/12 17:00	08/01/12 15:24	7440-50-8	
Nickel	143	mg/kg	0.47	1	07/26/12 17:00	07/31/12 16:42	7440-02-0	
Zinc	1870	mg/kg	9.4	1	07/26/12 17:00	07/31/12 16:42	7440-66-6	
Percent Moisture Analytical Method: ASTM D2974								
Percent Moisture	3.9	%	0.50	1		08/03/12 00:00		
7196 Chromium, Hexavalent Analytical Method: EPA 7196A								
Chromium, Hexavalent	ND	mg/kg	4.2	2	07/31/12 13:42	08/01/12 12:14	18540-29-9	D3

ANALYTICAL RESULTS

Project: KUHLMAN DIECASTING

Pace Project No.: 60125766

Sample: SS-5 **Lab ID: 60125766008** Collected: 07/24/12 09:19 Received: 07/25/12 08:30 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Chromium	153	mg/kg	1.0	2	07/26/12 17:00	08/01/12 15:27	7440-47-3	
Copper	118	mg/kg	2.1	2	07/26/12 17:00	08/01/12 15:27	7440-50-8	
Nickel	182	mg/kg	0.52	1	07/26/12 17:00	07/31/12 16:46	7440-02-0	
Zinc	1570	mg/kg	10.5	1	07/26/12 17:00	07/31/12 16:46	7440-66-6	
Percent Moisture Analytical Method: ASTM D2974								
Percent Moisture	4.5	%	0.50	1		08/03/12 00:00		
7196 Chromium, Hexavalent Analytical Method: EPA 7196A								
Chromium, Hexavalent	ND	mg/kg	10.5	5	07/31/12 13:42	08/01/12 12:14	18540-29-9	D3

ANALYTICAL RESULTS

Project: KUHLMAN DIECASTING

Pace Project No.: 60125766

Sample: SS-6 **Lab ID: 60125766009** Collected: 07/24/12 09:21 Received: 07/25/12 08:30 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Chromium	27.7	mg/kg	1.4	3	07/26/12 17:00	08/01/12 15:29	7440-47-3	
Copper	23.9	mg/kg	2.7	3	07/26/12 17:00	08/01/12 15:29	7440-50-8	
Nickel	37.3	mg/kg	1.4	3	07/26/12 17:00	08/01/12 15:29	7440-02-0	
Zinc	96.6	mg/kg	27.1	3	07/26/12 17:00	08/01/12 15:29	7440-66-6	
Percent Moisture Analytical Method: ASTM D2974								
Percent Moisture	6.0	%	0.50	1		08/03/12 00:00		
7196 Chromium, Hexavalent Analytical Method: EPA 7196A								
Chromium, Hexavalent	ND	mg/kg	10.6	5	07/31/12 13:42	08/01/12 12:14	18540-29-9	D3

ANALYTICAL RESULTS

Project: KUHLMAN DIECASTING

Pace Project No.: 60125766

Sample: SS-7 **Lab ID: 60125766010** Collected: 07/24/12 09:22 Received: 07/25/12 08:30 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Chromium	155	mg/kg	4.5	10	07/26/12 17:00	08/01/12 15:31	7440-47-3	
Copper	175	mg/kg	0.90	1	07/26/12 17:00	07/31/12 17:00	7440-50-8	
Nickel	279	mg/kg	0.45	1	07/26/12 17:00	07/31/12 17:00	7440-02-0	
Zinc	13900	mg/kg	90.0	10	07/26/12 17:00	08/01/12 15:31	7440-66-6	
Percent Moisture Analytical Method: ASTM D2974								
Percent Moisture	0.83	%	0.50	1		08/03/12 00:00		
7196 Chromium, Hexavalent Analytical Method: EPA 7196A								
Chromium, Hexavalent	ND	mg/kg	2.0	1	07/31/12 13:42	08/01/12 12:14	18540-29-9	

ANALYTICAL RESULTS

Project: KUHLMAN DIECASTING

Pace Project No.: 60125766

Sample: SS-8 **Lab ID: 60125766011** Collected: 07/24/12 09:25 Received: 07/25/12 08:30 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Chromium	18.5	mg/kg	0.48	1	07/26/12 17:00	07/31/12 17:04	7440-47-3	
Copper	35.7	mg/kg	1.9	2	07/26/12 17:00	08/01/12 15:33	7440-50-8	
Nickel	71.2	mg/kg	0.48	1	07/26/12 17:00	07/31/12 17:04	7440-02-0	
Zinc	1380	mg/kg	9.5	1	07/26/12 17:00	07/31/12 17:04	7440-66-6	
Percent Moisture Analytical Method: ASTM D2974								
Percent Moisture	0.70	%	0.50	1		08/03/12 00:00		
7196 Chromium, Hexavalent Analytical Method: EPA 7196A								
Chromium, Hexavalent	ND	mg/kg	2.0	1	07/31/12 13:42	08/01/12 12:14	18540-29-9	

ANALYTICAL RESULTS

Project: KUHLMAN DIECASTING

Pace Project No.: 60125766

Sample: SS-9 **Lab ID: 60125766012** Collected: 07/24/12 09:27 Received: 07/25/12 08:30 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Chromium	60.0	mg/kg	0.98	2	07/26/12 17:00	08/01/12 15:35	7440-47-3	
Copper	42.3	mg/kg	2.0	2	07/26/12 17:00	08/01/12 15:35	7440-50-8	
Nickel	36.4	mg/kg	0.49	1	07/26/12 17:00	07/31/12 17:07	7440-02-0	
Zinc	347	mg/kg	9.8	1	07/26/12 17:00	07/31/12 17:07	7440-66-6	
Percent Moisture Analytical Method: ASTM D2974								
Percent Moisture	5.1	%	0.50	1		08/03/12 00:00		
7196 Chromium, Hexavalent Analytical Method: EPA 7196A								
Chromium, Hexavalent	ND	mg/kg	10.5	5	07/31/12 13:42	08/01/12 12:14	18540-29-9	D3

ANALYTICAL RESULTS

Project: KUHLMAN DIECASTING

Pace Project No.: 60125766

Sample: SS-10 **Lab ID: 60125766013** Collected: 07/24/12 09:28 Received: 07/25/12 08:30 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP		Analytical Method: EPA 6010 Preparation Method: EPA 3050						
Chromium	17.3	mg/kg	0.84	2	07/26/12 17:00	08/01/12 15:37	7440-47-3	
Copper	36.1	mg/kg	1.7	2	07/26/12 17:00	08/01/12 15:37	7440-50-8	
Nickel	29.4	mg/kg	0.42	1	07/26/12 17:00	07/31/12 17:11	7440-02-0	
Zinc	686	mg/kg	8.4	1	07/26/12 17:00	07/31/12 17:11	7440-66-6	
Percent Moisture		Analytical Method: ASTM D2974						
Percent Moisture	2.2	%	0.50	1		08/03/12 00:00		
7196 Chromium, Hexavalent		Analytical Method: EPA 7196A						
Chromium, Hexavalent	ND	mg/kg	4.1	2	07/31/12 13:42	08/01/12 12:14	18540-29-9	D3

ANALYTICAL RESULTS

Project: KUHLMAN DIECASTING

Pace Project No.: 60125766

Sample: SS-11 **Lab ID: 60125766014** Collected: 07/24/12 09:30 Received: 07/25/12 08:30 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Chromium	8.8	mg/kg	0.47	1	07/26/12 17:00	07/31/12 17:14	7440-47-3	
Copper	28.7	mg/kg	4.7	5	07/26/12 17:00	08/01/12 15:39	7440-50-8	
Nickel	87.6	mg/kg	0.47	1	07/26/12 17:00	07/31/12 17:14	7440-02-0	
Zinc	5480	mg/kg	47.4	5	07/26/12 17:00	08/01/12 15:39	7440-66-6	
Percent Moisture Analytical Method: ASTM D2974								
Percent Moisture	ND	%	0.50	1		08/03/12 00:00		
7196 Chromium, Hexavalent Analytical Method: EPA 7196A								
Chromium, Hexavalent	ND	mg/kg	2.0	1	07/31/12 13:42	08/01/12 12:14	18540-29-9	

ANALYTICAL RESULTS

Project: KUHLMAN DIECASTING

Pace Project No.: 60125766

Sample: SS-12 **Lab ID: 60125766015** Collected: 07/24/12 09:32 Received: 07/25/12 08:30 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Chromium	21.7	mg/kg	1.0	2	07/26/12 17:00	08/01/12 15:46	7440-47-3	
Copper	29.4	mg/kg	2.1	2	07/26/12 17:00	08/01/12 15:46	7440-50-8	
Nickel	38.2	mg/kg	0.52	1	07/26/12 17:00	07/31/12 17:18	7440-02-0	
Zinc	1030	mg/kg	10.4	1	07/26/12 17:00	07/31/12 17:18	7440-66-6	
Percent Moisture Analytical Method: ASTM D2974								
Percent Moisture	7.9	%	0.50	1		08/03/12 00:00		
7196 Chromium, Hexavalent Analytical Method: EPA 7196A								
Chromium, Hexavalent	ND	mg/kg	10.9	5	07/31/12 13:42	08/01/12 12:14	18540-29-9	D3

ANALYTICAL RESULTS

Project: KUHLMAN DIECASTING

Pace Project No.: 60125766

Sample: WWEL-N-SED **Lab ID: 60125766016** Collected: 07/24/12 15:22 Received: 07/25/12 08:30 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB SW Analytical Method: EPA 8082 Preparation Method: EPA 3546								
PCB-1016 (Aroclor 1016)	ND	ug/kg	374	1	07/26/12 00:00	08/10/12 15:46	12674-11-2	
PCB-1221 (Aroclor 1221)	ND	ug/kg	748	1	07/26/12 00:00	08/10/12 15:46	11104-28-2	
PCB-1232 (Aroclor 1232)	ND	ug/kg	374	1	07/26/12 00:00	08/10/12 15:46	11141-16-5	
PCB-1242 (Aroclor 1242)	ND	ug/kg	374	1	07/26/12 00:00	08/10/12 15:46	53469-21-9	
PCB-1248 (Aroclor 1248)	ND	ug/kg	374	1	07/26/12 00:00	08/10/12 15:46	12672-29-6	
PCB-1254 (Aroclor 1254)	ND	ug/kg	374	1	07/26/12 00:00	08/10/12 15:46	11097-69-1	
PCB-1260 (Aroclor 1260)	ND	ug/kg	374	1	07/26/12 00:00	08/10/12 15:46	11096-82-5	
Surrogates								
Tetrachloro-m-xylene (S)	0 %		34-132	1	07/26/12 00:00	08/10/12 15:46	877-09-8	P3,S4
Decachlorobiphenyl (S)	0 %		36-131	1	07/26/12 00:00	08/10/12 15:46	2051-24-3	S4
6010 MET ICP Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Chromium	7030	mg/kg	9.5	20	07/26/12 17:00	08/01/12 15:48	7440-47-3	
Copper	5770	mg/kg	19.0	20	07/26/12 17:00	08/01/12 15:48	7440-50-8	
Nickel	14900	mg/kg	9.5	20	07/26/12 17:00	08/01/12 15:48	7440-02-0	
Zinc	8210	mg/kg	190	20	07/26/12 17:00	08/01/12 15:48	7440-66-6	
Percent Moisture Analytical Method: ASTM D2974								
Percent Moisture	12.4	%	0.50	1		08/03/12 00:00		
7196 Chromium, Hexavalent Analytical Method: EPA 7196A								
Chromium, Hexavalent	ND	mg/kg	11.4	5	07/31/12 13:42	08/01/12 12:14	18540-29-9	D3
9012 Cyanide, Total Analytical Method: EPA 9012A Preparation Method: EPA 9012A								
Cyanide	1.2	mg/kg	0.18	1	07/30/12 07:35	07/30/12 19:31	57-12-5	

ANALYTICAL RESULTS

Project: KUHLMAN DIECASTING

Pace Project No.: 60125766

Sample: WWEL-S-SED **Lab ID: 60125766017** Collected: 07/24/12 15:40 Received: 07/25/12 08:30 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB SW Analytical Method: EPA 8082 Preparation Method: EPA 3546								
PCB-1016 (Aroclor 1016)	ND	ug/kg	1310	1	07/26/12 00:00	08/10/12 16:24	12674-11-2	
PCB-1221 (Aroclor 1221)	ND	ug/kg	2620	1	07/26/12 00:00	08/10/12 16:24	11104-28-2	
PCB-1232 (Aroclor 1232)	ND	ug/kg	1310	1	07/26/12 00:00	08/10/12 16:24	11141-16-5	
PCB-1242 (Aroclor 1242)	ND	ug/kg	1310	1	07/26/12 00:00	08/10/12 16:24	53469-21-9	
PCB-1248 (Aroclor 1248)	ND	ug/kg	1310	1	07/26/12 00:00	08/10/12 16:24	12672-29-6	
PCB-1254 (Aroclor 1254)	ND	ug/kg	1310	1	07/26/12 00:00	08/10/12 16:24	11097-69-1	
PCB-1260 (Aroclor 1260)	ND	ug/kg	1310	1	07/26/12 00:00	08/10/12 16:24	11096-82-5	
Surrogates								
Tetrachloro-m-xylene (S)	0 %		34-132	1	07/26/12 00:00	08/10/12 16:24	877-09-8	P3,S4
Decachlorobiphenyl (S)	0 %		36-131	1	07/26/12 00:00	08/10/12 16:24	2051-24-3	S4
6010 MET ICP Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Chromium	571	mg/kg	1.0	1	07/26/12 17:00	07/31/12 17:25	7440-47-3	
Copper	687	mg/kg	10.3	5	07/26/12 17:00	08/01/12 15:50	7440-50-8	
Nickel	891	mg/kg	1.0	1	07/26/12 17:00	07/31/12 17:25	7440-02-0	
Zinc	288	mg/kg	20.6	1	07/26/12 17:00	07/31/12 17:25	7440-66-6	
Percent Moisture Analytical Method: ASTM D2974								
Percent Moisture	52.4	%	0.50	1		08/03/12 00:00		
7196 Chromium, Hexavalent Analytical Method: EPA 7196A								
Chromium, Hexavalent	ND	mg/kg	8.4	2	07/31/12 13:42	08/01/12 12:14	18540-29-9	D3
9012 Cyanide, Total Analytical Method: EPA 9012A Preparation Method: EPA 9012A								
Cyanide	0.33	mg/kg	0.33	1	07/30/12 07:35	07/30/12 18:18	57-12-5	

ANALYTICAL RESULTS

Project: KUHLMAN DIECASTING

Pace Project No.: 60125766

Sample: WWEL-S-SW **Lab ID:** 60125766018 **Collected:** 07/24/12 15:34 **Received:** 07/25/12 08:30 **Matrix:** Water

Comments: • Dissolved hexavalent chromium analyzed outside of holding time since it was not noted on the COC.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB Analytical Method: EPA 8082 Preparation Method: EPA 3510								
PCB-1016 (Aroclor 1016)	ND ug/L		1.0	1	07/26/12 00:00	08/07/12 12:38	12674-11-2	
PCB-1221 (Aroclor 1221)	ND ug/L		1.0	1	07/26/12 00:00	08/07/12 12:38	11104-28-2	
PCB-1232 (Aroclor 1232)	ND ug/L		1.0	1	07/26/12 00:00	08/07/12 12:38	11141-16-5	
PCB-1242 (Aroclor 1242)	ND ug/L		1.0	1	07/26/12 00:00	08/07/12 12:38	53469-21-9	
PCB-1248 (Aroclor 1248)	ND ug/L		1.0	1	07/26/12 00:00	08/07/12 12:38	12672-29-6	
PCB-1254 (Aroclor 1254)	ND ug/L		1.0	1	07/26/12 00:00	08/07/12 12:38	11097-69-1	
PCB-1260 (Aroclor 1260)	ND ug/L		1.0	1	07/26/12 00:00	08/07/12 12:38	11096-82-5	
Surrogates								
Tetrachloro-m-xylene (S)	78 %		36-115	1	07/26/12 00:00	08/07/12 12:38	877-09-8	
Decachlorobiphenyl (S)	49 %		17-122	1	07/26/12 00:00	08/07/12 12:38	2051-24-3	
6010 MET ICP Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Chromium	30.3 ug/L		5.0	1	07/27/12 14:15	07/31/12 14:23	7440-47-3	
Copper	112 ug/L		10.0	1	07/27/12 14:15	07/31/12 14:23	7440-50-8	
Nickel	307 ug/L		5.0	1	07/27/12 14:15	07/31/12 14:23	7440-02-0	
Zinc	120 ug/L		50.0	1	07/27/12 14:15	07/31/12 14:23	7440-66-6	
9012 Cyanide, Total Analytical Method: EPA 9012A Preparation Method: EPA 9012A								
Cyanide	ND mg/L		0.0050	1	07/30/12 07:33	07/30/12 19:14	57-12-5	
7196 Chromium, Hexavalent Analytical Method: EPA 7196								
Chromium, Hexavalent	0.057 mg/L		0.010	1		07/25/12 15:15	18540-29-9	1e
7196 Chromium, Hexavalent Diss Analytical Method: EPA 7196								
Chromium, Hexavalent,Dissolved	ND mg/L		0.010	1		07/27/12 09:19	18540-29-9	H1

QUALITY CONTROL DATA

Project: KUHLMAN DIECASTING

Pace Project No.: 60125766

QC Batch: MERP/6490

Analysis Method: EPA 7470

QC Batch Method: EPA 7470

Analysis Description: 7470 Mercury

Associated Lab Samples: 60125766002, 60125766003

METHOD BLANK: 1037728

Matrix: Water

Associated Lab Samples: 60125766002, 60125766003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	ug/L	ND	0.20	08/02/12 11:37	

LABORATORY CONTROL SAMPLE: 1037729

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	5	4.4	88	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1037730 1037731

Parameter	Units	60125738001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	ug/L	ND	5	5	6.1	6.2	120	122	75-125	2	20	

QUALITY CONTROL DATA

Project: KUHLMAN DIECASTING

Pace Project No.: 60125766

QC Batch: MERP/6489

Analysis Method: EPA 7470

QC Batch Method: EPA 7470

Analysis Description: 7470 Mercury ,Dissolved

Associated Lab Samples: 60125766002, 60125766003

METHOD BLANK: 1037724

Matrix: Water

Associated Lab Samples: 60125766002, 60125766003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury, Dissolved	ug/L	ND	0.20	08/03/12 11:06	

LABORATORY CONTROL SAMPLE: 1037725

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury, Dissolved	ug/L	5	4.8	95	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1037726 1037727

Parameter	Units	60125643004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury, Dissolved	ug/L	ND	5	5	3.5	3.8	69	75	75-125	9	20	M1

QUALITY CONTROL DATA

Project: KUHLMAN DIECASTING

Pace Project No.: 60125766

QC Batch: MERP/6494

Analysis Method: EPA 7471

QC Batch Method: EPA 7471

Analysis Description: 7471 Mercury

Associated Lab Samples: 60125766001

METHOD BLANK: 1038143

Matrix: Solid

Associated Lab Samples: 60125766001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	mg/kg	ND	0.050	08/04/12 13:01	

LABORATORY CONTROL SAMPLE: 1038144

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/kg	.5	0.54	107	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1038145 1038146

Parameter	Units	60125766001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/kg	ND	.17	.17	0.17	0.18	98	100	75-125	2	20	

QUALITY CONTROL DATA

Project: KUHLMAN DIECASTING

Pace Project No.: 60125766

QC Batch:	MPRP/18868	Analysis Method:	EPA 6010
QC Batch Method:	EPA 3050	Analysis Description:	6010 MET
Associated Lab Samples:	60125766001, 60125766004, 60125766005, 60125766006, 60125766007, 60125766008, 60125766009, 60125766010, 60125766011, 60125766012, 60125766013, 60125766014, 60125766015, 60125766016, 60125766017		

METHOD BLANK: 1035171 Matrix: Solid

Associated Lab Samples: 60125766001, 60125766004, 60125766005, 60125766006, 60125766007, 60125766008, 60125766009, 60125766010, 60125766011, 60125766012, 60125766013, 60125766014, 60125766015, 60125766016, 60125766017

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Antimony	mg/kg	ND	1.0	07/31/12 16:14	
Arsenic	mg/kg	ND	1.0	07/31/12 16:14	
Beryllium	mg/kg	ND	0.10	07/31/12 16:14	
Cadmium	mg/kg	ND	0.50	07/31/12 16:14	
Chromium	mg/kg	ND	0.50	07/31/12 16:14	
Copper	mg/kg	ND	1.0	08/01/12 15:06	
Lead	mg/kg	ND	0.50	07/31/12 16:14	
Nickel	mg/kg	ND	0.50	07/31/12 16:14	
Selenium	mg/kg	ND	1.5	07/31/12 16:14	
Silver	mg/kg	ND	0.70	07/31/12 16:14	
Thallium	mg/kg	ND	2.0	07/31/12 16:14	
Zinc	mg/kg	ND	10.0	07/31/12 16:14	

LABORATORY CONTROL SAMPLE: 1035172

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/kg	50	40.3	81	80-120	
Arsenic	mg/kg	50	40.4	81	80-120	
Beryllium	mg/kg	50	41.2	82	80-120	
Cadmium	mg/kg	50	42.0	84	80-120	
Chromium	mg/kg	50	41.1	82	80-120	
Copper	mg/kg	50	49.5	99	80-120	
Lead	mg/kg	50	39.9	80	80-120	
Nickel	mg/kg	50	41.8	84	80-120	
Selenium	mg/kg	50	44.2	88	80-120	
Silver	mg/kg	25	20.1	80	80-120	
Thallium	mg/kg	50	46.2	92	80-120	
Zinc	mg/kg	50	42.1	84	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1035173 1035174

Parameter	Units	60125766001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual
Antimony	mg/kg	ND	52.4	55.1	14.2	14.5	26	25	75-125	2	20 M1
Arsenic	mg/kg	5.8	52.4	55.1	53.3	54.8	91	89	75-125	3	20
Beryllium	mg/kg	0.83	52.4	55.1	50.8	52.8	95	94	75-125	4	20

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QUALITY CONTROL DATA

Project: KUHLMAN DIECASTING

Pace Project No.: 60125766

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1035173 1035174												
Parameter	Units	60125766001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	RPD	Qual
Cadmium	mg/kg	ND	52.4	55.1	46.4	48.6	88	88	75-125	5	20	
Chromium	mg/kg	20.2	52.4	55.1	73.8	76.6	102	102	75-125	4	20	
Copper	mg/kg	14.7	52.4	55.1	67.9	70.9	101	102	75-125	4	20	
Lead	mg/kg	11.3	52.4	55.1	61.7	61.9	96	92	75-125	0	20	
Nickel	mg/kg	19.0	52.4	55.1	69.6	71.5	97	95	75-125	3	20	
Selenium	mg/kg	ND	52.4	55.1	44.6	47.2	85	86	75-125	6	20	
Silver	mg/kg	ND	26.2	27.6	25.1	26.1	95	94	75-125	4	20	
Thallium	mg/kg	ND	52.4	55.1	46.9	49.2	90	89	75-125	5	20	
Zinc	mg/kg	58.9	52.4	55.1	109	111	95	95	75-125	2	20	

QUALITY CONTROL DATA

Project: KUHLMAN DIECASTING

Pace Project No.: 60125766

QC Batch: MPRP/18881 Analysis Method: EPA 6010
QC Batch Method: EPA 3010 Analysis Description: 6010 MET
Associated Lab Samples: 60125766002, 60125766003, 60125766018

METHOD BLANK: 1035772 Matrix: Water

Associated Lab Samples: 60125766002, 60125766003, 60125766018

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Antimony	ug/L	ND	10.0	07/31/12 13:56	
Arsenic	ug/L	ND	10.0	07/31/12 13:56	
Beryllium	ug/L	ND	1.0	07/31/12 13:56	
Cadmium	ug/L	ND	5.0	07/31/12 13:56	
Chromium	ug/L	ND	5.0	07/31/12 13:56	
Copper	ug/L	ND	10.0	07/31/12 13:56	
Lead	ug/L	ND	5.0	07/31/12 13:56	
Nickel	ug/L	ND	5.0	07/31/12 13:56	
Selenium	ug/L	ND	15.0	07/31/12 13:56	
Silver	ug/L	ND	7.0	07/31/12 13:56	
Thallium	ug/L	ND	20.0	07/31/12 13:56	
Zinc	ug/L	ND	50.0	07/31/12 13:56	

LABORATORY CONTROL SAMPLE: 1035773

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	ug/L	1000	997	100	80-120	
Arsenic	ug/L	1000	1020	102	80-120	
Beryllium	ug/L	1000	932	93	80-120	
Cadmium	ug/L	1000	970	97	80-120	
Chromium	ug/L	1000	918	92	80-120	
Copper	ug/L	1000	877	88	80-120	
Lead	ug/L	1000	912	91	80-120	
Nickel	ug/L	1000	955	96	80-120	
Selenium	ug/L	1000	1000	100	80-120	
Silver	ug/L	500	454	91	80-120	
Thallium	ug/L	1000	888	89	80-120	
Zinc	ug/L	1000	941	94	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1035774 1035775

Parameter	Units	60125643001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	ug/L	ND	1000	1000	989	982	99	98	75-125	1	20	
Arsenic	ug/L	ND	1000	1000	1000	995	100	99	75-125	1	20	
Beryllium	ug/L	ND	1000	1000	931	921	93	92	75-125	1	20	
Cadmium	ug/L	ND	1000	1000	965	955	97	95	75-125	1	20	
Chromium	ug/L	ND	1000	1000	916	901	92	90	75-125	2	20	
Copper	ug/L	ND	1000	1000	894	884	89	88	75-125	1	20	
Lead	ug/L	ND	1000	1000	921	909	92	91	75-125	1	20	

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QUALITY CONTROL DATA

Project: KUHLMAN DIECASTING

Pace Project No.: 60125766

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1035774 1035775											
Parameter	Units	60125643001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual
Nickel	ug/L	ND	1000	1000	955	943	95	94	75-125	1	20
Selenium	ug/L	ND	1000	1000	1000	984	100	98	75-125	2	20
Silver	ug/L	ND	500	500	457	451	91	90	75-125	1	20
Thallium	ug/L	ND	1000	1000	886	877	89	88	75-125	1	20
Zinc	ug/L	ND	1000	1000	941	929	94	93	75-125	1	20

QUALITY CONTROL DATA

Project: KUHLMAN DIECASTING

Pace Project No.: 60125766

QC Batch: MPRP/18880

Analysis Method: EPA 6010

QC Batch Method: EPA 3010

Analysis Description: 6010 MET Dissolved

Associated Lab Samples: 60125766002, 60125766003

METHOD BLANK: 1035765

Matrix: Water

Associated Lab Samples: 60125766002, 60125766003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Antimony, Dissolved	ug/L	ND	10.0	07/30/12 13:05	
Arsenic, Dissolved	ug/L	ND	10.0	07/30/12 13:05	
Beryllium, Dissolved	ug/L	ND	1.0	07/30/12 13:05	
Cadmium, Dissolved	ug/L	ND	5.0	07/30/12 13:05	
Chromium, Dissolved	ug/L	ND	5.0	07/30/12 13:05	
Copper, Dissolved	ug/L	ND	10.0	07/30/12 13:05	
Lead, Dissolved	ug/L	ND	5.0	07/30/12 13:05	
Nickel, Dissolved	ug/L	ND	5.0	07/30/12 13:05	
Selenium, Dissolved	ug/L	ND	15.0	07/30/12 13:05	
Silver, Dissolved	ug/L	ND	7.0	07/30/12 13:05	
Thallium, Dissolved	ug/L	ND	20.0	07/30/12 13:05	
Zinc, Dissolved	ug/L	ND	50.0	07/30/12 13:05	

LABORATORY CONTROL SAMPLE: 1035766

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony, Dissolved	ug/L	1000	972	97	80-120	
Arsenic, Dissolved	ug/L	1000	995	100	80-120	
Beryllium, Dissolved	ug/L	1000	972	97	80-120	
Cadmium, Dissolved	ug/L	1000	966	97	80-120	
Chromium, Dissolved	ug/L	1000	986	99	80-120	
Copper, Dissolved	ug/L	1000	901	90	80-120	
Lead, Dissolved	ug/L	1000	935	93	80-120	
Nickel, Dissolved	ug/L	1000	969	97	80-120	
Selenium, Dissolved	ug/L	1000	974	97	80-120	
Silver, Dissolved	ug/L	500	462	92	80-120	
Thallium, Dissolved	ug/L	1000	903	90	80-120	
Zinc, Dissolved	ug/L	1000	985	98	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1035767

1035768

Parameter	Units	60125643001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony, Dissolved	ug/L	ND	1000	1000	977	973	98	97	75-125	0	20	
Arsenic, Dissolved	ug/L	ND	1000	1000	1000	993	100	99	75-125	1	20	
Beryllium, Dissolved	ug/L	ND	1000	1000	988	980	99	98	75-125	1	20	
Cadmium, Dissolved	ug/L	ND	1000	1000	975	967	98	97	75-125	1	20	
Chromium, Dissolved	ug/L	ND	1000	1000	996	984	100	98	75-125	1	20	
Copper, Dissolved	ug/L	ND	1000	1000	923	909	92	91	75-125	2	20	
Lead, Dissolved	ug/L	ND	1000	1000	952	941	95	94	75-125	1	20	

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QUALITY CONTROL DATA

Project: KUHLMAN DIECASTING

Pace Project No.: 60125766

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 10357671035768												
Parameter	Units	60125643001 Result	MS	MSD	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max	Qual
			Spike Conc.	Spike Conc.							RPD	
Nickel, Dissolved	ug/L	ND	1000	1000	983	974	98	97	75-125	1	20	
Selenium, Dissolved	ug/L	ND	1000	1000	981	967	98	97	75-125	1	20	
Silver, Dissolved	ug/L	ND	500	500	472	466	94	93	75-125	1	20	
Thallium, Dissolved	ug/L	ND	1000	1000	918	912	92	91	75-125	1	20	
Zinc, Dissolved	ug/L	ND	1000	1000	1000	992	100	99	75-125	1	20	

QUALITY CONTROL DATA

Project: KUHLMAN DIECASTING

Pace Project No.: 60125766

QC Batch: MSV/47425

Analysis Method: OA1

QC Batch Method: OA1

Analysis Description: OA1 Volatile Pet. Hydrocarbon

Associated Lab Samples: 60125766001

METHOD BLANK: 1037459

Matrix: Solid

Associated Lab Samples: 60125766001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Gasoline Range Organics	mg/kg	ND	1.0	07/30/12 17:20	

LABORATORY CONTROL SAMPLE: 1037460

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Gasoline Range Organics	mg/kg	4	4.3	107	63-138	

QUALITY CONTROL DATA

Project: KUHLMAN DIECASTING

Pace Project No.: 60125766

QC Batch: MSV/47383

Analysis Method: EPA 5030B/8260

QC Batch Method: EPA 5030B/8260

Analysis Description: 8260 MSV Water 10 mL Purge

Associated Lab Samples: 60125766002, 60125766003

METHOD BLANK: 1036999

Matrix: Water

Associated Lab Samples: 60125766002, 60125766003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	1.0	07/30/12 10:21	
1,1,1-Trichloroethane	ug/L	ND	1.0	07/30/12 10:21	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	07/30/12 10:21	
1,1,2-Trichloroethane	ug/L	ND	1.0	07/30/12 10:21	
1,1-Dichloroethane	ug/L	ND	1.0	07/30/12 10:21	
1,1-Dichloroethene	ug/L	ND	1.0	07/30/12 10:21	
1,1-Dichloropropene	ug/L	ND	1.0	07/30/12 10:21	
1,2,3-Trichlorobenzene	ug/L	ND	1.0	07/30/12 10:21	
1,2,3-Trichloropropane	ug/L	ND	2.5	07/30/12 10:21	
1,2,4-Trichlorobenzene	ug/L	ND	1.0	07/30/12 10:21	
1,2,4-Trimethylbenzene	ug/L	ND	1.0	07/30/12 10:21	
1,2-Dibromo-3-chloropropane	ug/L	ND	2.5	07/30/12 10:21	
1,2-Dibromoethane (EDB)	ug/L	ND	1.0	07/30/12 10:21	
1,2-Dichlorobenzene	ug/L	ND	1.0	07/30/12 10:21	
1,2-Dichloroethane	ug/L	ND	1.0	07/30/12 10:21	
1,2-Dichloropropane	ug/L	ND	1.0	07/30/12 10:21	
1,3,5-Trimethylbenzene	ug/L	ND	1.0	07/30/12 10:21	
1,3-Dichlorobenzene	ug/L	ND	1.0	07/30/12 10:21	
1,3-Dichloropropane	ug/L	ND	1.0	07/30/12 10:21	
1,4-Dichlorobenzene	ug/L	ND	1.0	07/30/12 10:21	
2,2-Dichloropropane	ug/L	ND	1.0	07/30/12 10:21	
2-Butanone (MEK)	ug/L	ND	10.0	07/30/12 10:21	
2-Chlorotoluene	ug/L	ND	1.0	07/30/12 10:21	
2-Hexanone	ug/L	ND	10.0	07/30/12 10:21	
4-Chlorotoluene	ug/L	ND	1.0	07/30/12 10:21	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	07/30/12 10:21	
Acetone	ug/L	ND	10.0	07/30/12 10:21	
Benzene	ug/L	ND	1.0	07/30/12 10:21	
Bromobenzene	ug/L	ND	1.0	07/30/12 10:21	
Bromochloromethane	ug/L	ND	1.0	07/30/12 10:21	
Bromodichloromethane	ug/L	ND	1.0	07/30/12 10:21	
Bromoform	ug/L	ND	1.0	07/30/12 10:21	
Bromomethane	ug/L	ND	5.0	07/30/12 10:21	
Carbon disulfide	ug/L	ND	5.0	07/30/12 10:21	
Carbon tetrachloride	ug/L	ND	1.0	07/30/12 10:21	
Chlorobenzene	ug/L	ND	1.0	07/30/12 10:21	
Chloroethane	ug/L	ND	1.0	07/30/12 10:21	
Chloroform	ug/L	ND	1.0	07/30/12 10:21	
Chloromethane	ug/L	ND	1.0	07/30/12 10:21	
cis-1,3-Dichloropropene	ug/L	ND	1.0	07/30/12 10:21	
Dibromochloromethane	ug/L	ND	1.0	07/30/12 10:21	
Dibromomethane	ug/L	ND	1.0	07/30/12 10:21	
Dichlorodifluoromethane	ug/L	ND	1.0	07/30/12 10:21	

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QUALITY CONTROL DATA

Project: KUHLMAN DIECASTING

Pace Project No.: 60125766

METHOD BLANK: 1036999

Matrix: Water

Associated Lab Samples: 60125766002, 60125766003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Ethylbenzene	ug/L	ND	1.0	07/30/12 10:21	
Hexachloro-1,3-butadiene	ug/L	ND	1.0	07/30/12 10:21	
Isopropylbenzene (Cumene)	ug/L	ND	1.0	07/30/12 10:21	
Methyl-tert-butyl ether	ug/L	ND	1.0	07/30/12 10:21	
Methylene chloride	ug/L	ND	1.0	07/30/12 10:21	
n-Butylbenzene	ug/L	ND	1.0	07/30/12 10:21	
n-Propylbenzene	ug/L	ND	1.0	07/30/12 10:21	
Naphthalene	ug/L	ND	10.0	07/30/12 10:21	
p-Isopropyltoluene	ug/L	ND	1.0	07/30/12 10:21	
sec-Butylbenzene	ug/L	ND	1.0	07/30/12 10:21	
Styrene	ug/L	ND	1.0	07/30/12 10:21	
tert-Butylbenzene	ug/L	ND	1.0	07/30/12 10:21	
Tetrachloroethene	ug/L	ND	1.0	07/30/12 10:21	
Toluene	ug/L	ND	1.0	07/30/12 10:21	
trans-1,2-Dichloroethene	ug/L	ND	1.0	07/30/12 10:21	
trans-1,3-Dichloropropene	ug/L	ND	1.0	07/30/12 10:21	
Trichlorofluoromethane	ug/L	ND	1.0	07/30/12 10:21	
Vinyl chloride	ug/L	ND	1.0	07/30/12 10:21	
Xylene (Total)	ug/L	ND	3.0	07/30/12 10:21	
1,2-Dichloroethane-d4 (S)	%	116	80-120	07/30/12 10:21	
4-Bromofluorobenzene (S)	%	102	80-120	07/30/12 10:21	
Dibromofluoromethane (S)	%	114	80-120	07/30/12 10:21	
Toluene-d8 (S)	%	102	80-120	07/30/12 10:21	

LABORATORY CONTROL SAMPLE: 1037000

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	20	21.4	107	79-121	
1,1,1-Trichloroethane	ug/L	20	20.0	100	76-120	
1,1,2,2-Tetrachloroethane	ug/L	20	19.5	98	71-121	
1,1,2-Trichloroethane	ug/L	20	19.8	99	78-120	
1,1-Dichloroethane	ug/L	20	19.6	98	74-120	
1,1-Dichloroethene	ug/L	20	21.2	106	68-120	
1,1-Dichloropropene	ug/L	20	20.4	102	78-120	
1,2,3-Trichlorobenzene	ug/L	20	21.2	106	70-129	
1,2,3-Trichloropropane	ug/L	20	19.7	99	74-121	
1,2,4-Trichlorobenzene	ug/L	20	21.8	109	76-123	
1,2,4-Trimethylbenzene	ug/L	20	21.0	105	76-121	
1,2-Dibromo-3-chloropropane	ug/L	20	20.1	100	65-124	
1,2-Dibromoethane (EDB)	ug/L	20	20.9	105	76-125	
1,2-Dichlorobenzene	ug/L	20	21.4	107	80-120	
1,2-Dichloroethane	ug/L	20	20.6	103	72-123	
1,2-Dichloropropane	ug/L	20	21.5	108	78-120	
1,3,5-Trimethylbenzene	ug/L	20	21.1	106	75-120	
1,3-Dichlorobenzene	ug/L	20	21.4	107	79-120	

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QUALITY CONTROL DATA

Project: KUHLMAN DIECASTING

Pace Project No.: 60125766

LABORATORY CONTROL SAMPLE: 1037000

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,3-Dichloropropane	ug/L	20	19.5	97	75-120	
1,4-Dichlorobenzene	ug/L	20	21.5	108	80-120	
2,2-Dichloropropane	ug/L	20	23.5	117	54-132	
2-Butanone (MEK)	ug/L	100	92.6	93	40-160	
2-Chlorotoluene	ug/L	20	20.8	104	78-120	
2-Hexanone	ug/L	100	95.4	95	40-160	
4-Chlorotoluene	ug/L	20	22.1	111	79-120	
4-Methyl-2-pentanone (MIBK)	ug/L	100	95.8	96	65-126	
Acetone	ug/L	100	83.2	83	40-160	
Benzene	ug/L	20	20.5	103	74-123	
Bromobenzene	ug/L	20	21.0	105	79-120	
Bromochloromethane	ug/L	20	20.9	105	75-120	
Bromodichloromethane	ug/L	20	20.1	100	74-120	
Bromoform	ug/L	20	20.8	104	70-123	
Bromomethane	ug/L	20	17.1	85	40-158	
Carbon disulfide	ug/L	20	18.0	90	67-135	
Carbon tetrachloride	ug/L	20	20.6	103	74-126	
Chlorobenzene	ug/L	20	21.7	109	80-120	
Chloroethane	ug/L	20	24.2	121	60-144	
Chloroform	ug/L	20	20.0	100	77-120	
Chloromethane	ug/L	20	17.5	88	40-142	
cis-1,3-Dichloropropene	ug/L	20	21.2	106	73-121	
Dibromochloromethane	ug/L	20	21.5	107	77-122	
Dibromomethane	ug/L	20	19.3	97	76-120	
Dichlorodifluoromethane	ug/L	20	14.8	74	40-160	
Ethylbenzene	ug/L	20	21.7	109	76-123	
Hexachloro-1,3-butadiene	ug/L	20	22.8	114	72-124	
Isopropylbenzene (Cumene)	ug/L	20	23.7	118	80-126	
Methyl-tert-butyl ether	ug/L	20	19.2	96	67-125	
Methylene chloride	ug/L	20	19.5	97	72-127	
n-Butylbenzene	ug/L	20	22.2	111	76-125	
n-Propylbenzene	ug/L	20	20.6	103	77-120	
Naphthalene	ug/L	20	19.1	95	63-128	
p-Isopropyltoluene	ug/L	20	21.5	107	77-121	
sec-Butylbenzene	ug/L	20	21.3	107	77-122	
Styrene	ug/L	20	21.8	109	79-120	
tert-Butylbenzene	ug/L	20	21.4	107	75-124	
Tetrachloroethene	ug/L	20	22.7	114	78-121	
Toluene	ug/L	20	21.5	107	75-123	
trans-1,2-Dichloroethene	ug/L	20	21.5	107	80-129	
trans-1,3-Dichloropropene	ug/L	20	22.8	114	77-122	
Trichlorofluoromethane	ug/L	20	20.9	105	69-122	
Vinyl chloride	ug/L	20	19.9	100	50-140	
Xylene (Total)	ug/L	60	65.7	109	76-123	
1,2-Dichloroethane-d4 (S)	%			94	80-120	
4-Bromofluorobenzene (S)	%			101	80-120	
Dibromofluoromethane (S)	%			93	80-120	
Toluene-d8 (S)	%			102	80-120	

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QUALITY CONTROL DATA

Project: KUHLMAN DIECASTING

Pace Project No.: 60125766

QC Batch: MSV/47421

Analysis Method: EPA 5030B/8260

QC Batch Method: EPA 5030B/8260

Analysis Description: 8260 MSV Water 10 mL Purge

Associated Lab Samples: 60125766002, 60125766003

METHOD BLANK: 1037410

Matrix: Water

Associated Lab Samples: 60125766002, 60125766003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,2-Dichloroethene (Total)	ug/L	ND	1.0	07/31/12 10:36	
cis-1,2-Dichloroethene	ug/L	ND	1.0	07/31/12 10:36	
Trichloroethene	ug/L	ND	1.0	07/31/12 10:36	
1,2-Dichloroethane-d4 (S)	%	96	80-120	07/31/12 10:36	
4-Bromofluorobenzene (S)	%	102	80-120	07/31/12 10:36	
Dibromofluoromethane (S)	%	93	80-120	07/31/12 10:36	
Toluene-d8 (S)	%	104	80-120	07/31/12 10:36	

LABORATORY CONTROL SAMPLE: 1037411

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dichloroethene (Total)	ug/L	40	40.1	100	78-120	
cis-1,2-Dichloroethene	ug/L	20	19.1	96	70-120	
Trichloroethene	ug/L	20	20.3	101	74-120	
1,2-Dichloroethane-d4 (S)	%			96	80-120	
4-Bromofluorobenzene (S)	%			102	80-120	
Dibromofluoromethane (S)	%			91	80-120	
Toluene-d8 (S)	%			102	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1037412 1037413

Parameter	Units	60125632025 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual
1,2-Dichloroethene (Total)	ug/L	ND	200	200	192	187	96	94	53-150	3	31
cis-1,2-Dichloroethene	ug/L	ND	100	100	90.8	88.9	91	89	46-144	2	34
Trichloroethene	ug/L	ND	100	100	96.6	92.2	97	92	51-146	5	34
1,2-Dichloroethane-d4 (S)	%						95	93	80-120		
4-Bromofluorobenzene (S)	%						100	101	80-120		
Dibromofluoromethane (S)	%						92	91	80-120		
Toluene-d8 (S)	%						82	102	80-120		

QUALITY CONTROL DATA

Project: KUHLMAN DIECASTING

Pace Project No.: 60125766

QC Batch:	MSV/47407	Analysis Method:	EPA 8260/OA1
QC Batch Method:	EPA 8260/OA1	Analysis Description:	8260/OA1 UST-WATER
Associated Lab Samples:	60125766002, 60125766003		

METHOD BLANK: 1037164 Matrix: Water

Associated Lab Samples: 60125766002, 60125766003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Gasoline Range Organics	mg/L	ND	0.50	07/30/12 10:21	
1,2-Dichloroethane-d4 (S)	%	116	80-120	07/30/12 10:21	
4-Bromofluorobenzene (S)	%	102	80-120	07/30/12 10:21	
Dibromofluoromethane (S)	%	114	80-120	07/30/12 10:21	
Toluene-d8 (S)	%	102	80-120	07/30/12 10:21	

LABORATORY CONTROL SAMPLE: 1037165

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Gasoline Range Organics	mg/L	4	3.3	83	65-136	
1,2-Dichloroethane-d4 (S)	%			94	80-120	
4-Bromofluorobenzene (S)	%			101	80-120	
Dibromofluoromethane (S)	%			93	80-120	
Toluene-d8 (S)	%			102	80-120	

QUALITY CONTROL DATA

Project: KUHLMAN DIECASTING

Pace Project No.: 60125766

QC Batch: MSV/47410

Analysis Method: EPA 8260

QC Batch Method: EPA 8260

Analysis Description: 8260 MSV 5035A Volatile Organics

Associated Lab Samples: 60125766001

METHOD BLANK: 1037202

Matrix: Solid

Associated Lab Samples: 60125766001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	ND	5.0	07/30/12 17:20	
1,1,1-Trichloroethane	ug/kg	ND	5.0	07/30/12 17:20	
1,1,2,2-Tetrachloroethane	ug/kg	ND	5.0	07/30/12 17:20	
1,1,2-Trichloroethane	ug/kg	ND	5.0	07/30/12 17:20	
1,1-Dichloroethane	ug/kg	ND	5.0	07/30/12 17:20	
1,1-Dichloroethene	ug/kg	ND	5.0	07/30/12 17:20	
1,1-Dichloropropene	ug/kg	ND	5.0	07/30/12 17:20	
1,2,3-Trichlorobenzene	ug/kg	ND	5.0	07/30/12 17:20	
1,2,3-Trichloropropane	ug/kg	ND	5.0	07/30/12 17:20	
1,2,4-Trichlorobenzene	ug/kg	ND	5.0	07/30/12 17:20	
1,2,4-Trimethylbenzene	ug/kg	ND	5.0	07/30/12 17:20	
1,2-Dibromo-3-chloropropane	ug/kg	ND	10.0	07/30/12 17:20	
1,2-Dibromoethane (EDB)	ug/kg	ND	5.0	07/30/12 17:20	
1,2-Dichlorobenzene	ug/kg	ND	5.0	07/30/12 17:20	
1,2-Dichloroethane	ug/kg	ND	5.0	07/30/12 17:20	
1,2-Dichloroethene (Total)	ug/kg	ND	5.0	07/30/12 17:20	
1,2-Dichloropropane	ug/kg	ND	5.0	07/30/12 17:20	
1,3,5-Trimethylbenzene	ug/kg	ND	5.0	07/30/12 17:20	
1,3-Dichlorobenzene	ug/kg	ND	5.0	07/30/12 17:20	
1,3-Dichloropropane	ug/kg	ND	5.0	07/30/12 17:20	
1,4-Dichlorobenzene	ug/kg	ND	5.0	07/30/12 17:20	
2,2-Dichloropropane	ug/kg	ND	5.0	07/30/12 17:20	
2-Butanone (MEK)	ug/kg	ND	10.0	07/30/12 17:20	
2-Chlorotoluene	ug/kg	ND	5.0	07/30/12 17:20	
2-Hexanone	ug/kg	ND	20.0	07/30/12 17:20	
4-Chlorotoluene	ug/kg	ND	5.0	07/30/12 17:20	
4-Methyl-2-pentanone (MIBK)	ug/kg	ND	10.0	07/30/12 17:20	
Acetone	ug/kg	ND	20.0	07/30/12 17:20	
Benzene	ug/kg	ND	5.0	07/30/12 17:20	
Bromobenzene	ug/kg	ND	5.0	07/30/12 17:20	
Bromochloromethane	ug/kg	ND	5.0	07/30/12 17:20	
Bromodichloromethane	ug/kg	ND	5.0	07/30/12 17:20	
Bromoform	ug/kg	ND	5.0	07/30/12 17:20	
Bromomethane	ug/kg	ND	5.0	07/30/12 17:20	
Carbon disulfide	ug/kg	ND	5.0	07/30/12 17:20	
Carbon tetrachloride	ug/kg	ND	5.0	07/30/12 17:20	
Chlorobenzene	ug/kg	ND	5.0	07/30/12 17:20	
Chloroethane	ug/kg	ND	5.0	07/30/12 17:20	
Chloroform	ug/kg	ND	5.0	07/30/12 17:20	
Chloromethane	ug/kg	ND	5.0	07/30/12 17:20	
cis-1,2-Dichloroethene	ug/kg	ND	5.0	07/30/12 17:20	
cis-1,3-Dichloropropene	ug/kg	ND	5.0	07/30/12 17:20	
Dibromochloromethane	ug/kg	ND	5.0	07/30/12 17:20	

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QUALITY CONTROL DATA

Project: KUHLMAN DIECASTING

Pace Project No.: 60125766

METHOD BLANK: 1037202

Matrix: Solid

Associated Lab Samples: 60125766001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Dibromomethane	ug/kg	ND	5.0	07/30/12 17:20	
Dichlorodifluoromethane	ug/kg	ND	5.0	07/30/12 17:20	
Ethylbenzene	ug/kg	ND	5.0	07/30/12 17:20	
Hexachloro-1,3-butadiene	ug/kg	ND	5.0	07/30/12 17:20	
Isopropylbenzene (Cumene)	ug/kg	ND	5.0	07/30/12 17:20	
Methyl-tert-butyl ether	ug/kg	ND	5.0	07/30/12 17:20	
Methylene chloride	ug/kg	ND	5.0	07/30/12 17:20	
n-Butylbenzene	ug/kg	ND	5.0	07/30/12 17:20	
n-Propylbenzene	ug/kg	ND	5.0	07/30/12 17:20	
Naphthalene	ug/kg	ND	10.0	07/30/12 17:20	
p-Isopropyltoluene	ug/kg	ND	5.0	07/30/12 17:20	
sec-Butylbenzene	ug/kg	ND	5.0	07/30/12 17:20	
Styrene	ug/kg	ND	5.0	07/30/12 17:20	
tert-Butylbenzene	ug/kg	ND	5.0	07/30/12 17:20	
Tetrachloroethene	ug/kg	ND	5.0	07/30/12 17:20	
Toluene	ug/kg	ND	5.0	07/30/12 17:20	
trans-1,2-Dichloroethene	ug/kg	ND	5.0	07/30/12 17:20	
trans-1,3-Dichloropropene	ug/kg	ND	5.0	07/30/12 17:20	
Trichloroethene	ug/kg	ND	5.0	07/30/12 17:20	
Trichlorofluoromethane	ug/kg	ND	5.0	07/30/12 17:20	
Vinyl chloride	ug/kg	ND	5.0	07/30/12 17:20	
Xylene (Total)	ug/kg	ND	5.0	07/30/12 17:20	
1,2-Dichloroethane-d4 (S)	%	99	73-135	07/30/12 17:20	
4-Bromofluorobenzene (S)	%	99	78-125	07/30/12 17:20	
Dibromofluoromethane (S)	%	100	78-122	07/30/12 17:20	
Toluene-d8 (S)	%	100	80-123	07/30/12 17:20	

LABORATORY CONTROL SAMPLE: 1037203

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	100	91.7	92	80-120	
1,1,1-Trichloroethane	ug/kg	100	87.9	88	78-128	
1,1,2,2-Tetrachloroethane	ug/kg	100	91.6	92	70-120	
1,1,2-Trichloroethane	ug/kg	100	88.0	88	77-120	
1,1-Dichloroethane	ug/kg	100	85.1	85	78-120	
1,1-Dichloroethene	ug/kg	100	93.4	93	71-123	
1,1-Dichloropropene	ug/kg	100	89.0	89	77-127	
1,2,3-Trichlorobenzene	ug/kg	100	82.6	83	80-120	
1,2,3-Trichloropropane	ug/kg	100	88.7	89	73-120	
1,2,4-Trichlorobenzene	ug/kg	100	80.6	81	78-121	
1,2,4-Trimethylbenzene	ug/kg	100	83.7	84	80-120	
1,2-Dibromo-3-chloropropane	ug/kg	100	84.6	85	70-125	
1,2-Dibromoethane (EDB)	ug/kg	100	92.4	92	78-120	
1,2-Dichlorobenzene	ug/kg	100	86.6	87	80-120	
1,2-Dichloroethane	ug/kg	100	91.8	92	76-121	

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QUALITY CONTROL DATA

Project: KUHLMAN DIECASTING

Pace Project No.: 60125766

LABORATORY CONTROL SAMPLE: 1037203

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dichloroethene (Total)	ug/kg	200	177	88	80-120	
1,2-Dichloropropane	ug/kg	100	89.6	90	80-120	
1,3,5-Trimethylbenzene	ug/kg	100	83.1	83	79-120	
1,3-Dichlorobenzene	ug/kg	100	84.8	85	80-120	
1,3-Dichloropropane	ug/kg	100	84.3	84	76-120	
1,4-Dichlorobenzene	ug/kg	100	86.7	87	80-120	
2,2-Dichloropropane	ug/kg	100	83.8	84	71-130	
2-Butanone (MEK)	ug/kg	500	435	87	45-160	
2-Chlorotoluene	ug/kg	100	84.3	84	78-120	
2-Hexanone	ug/kg	500	439	88	47-160	
4-Chlorotoluene	ug/kg	100	84.1	84	79-120	
4-Methyl-2-pentanone (MIBK)	ug/kg	500	443	89	68-123	
Acetone	ug/kg	500	438	88	40-160	
Benzene	ug/kg	100	87.2	87	78-120	
Bromobenzene	ug/kg	100	86.0	86	80-120	
Bromochloromethane	ug/kg	100	95.9	96	76-120	
Bromodichloromethane	ug/kg	100	88.5	88	79-120	
Bromoform	ug/kg	100	93.8	94	75-124	
Bromomethane	ug/kg	100	85.0	85	59-157	
Carbon disulfide	ug/kg	100	91.5	92	74-158	
Carbon tetrachloride	ug/kg	100	90.9	91	79-139	
Chlorobenzene	ug/kg	100	87.1	87	80-120	
Chloroethane	ug/kg	100	104	104	66-153	
Chloroform	ug/kg	100	78.5	78	74-120	
Chloromethane	ug/kg	100	105	105	40-160	
cis-1,2-Dichloroethene	ug/kg	100	86.6	87	75-120	
cis-1,3-Dichloropropene	ug/kg	100	90.4	90	80-120	
Dibromochloromethane	ug/kg	100	95.4	95	80-123	
Dibromomethane	ug/kg	100	86.2	86	80-120	
Dichlorodifluoromethane	ug/kg	100	104	104	40-160	
Ethylbenzene	ug/kg	100	84.3	84	77-120	
Hexachloro-1,3-butadiene	ug/kg	100	81.8	82	71-134	
Isopropylbenzene (Cumene)	ug/kg	100	89.4	89	80-128	
Methyl-tert-butyl ether	ug/kg	100	87.5	87	71-122	
Methylene chloride	ug/kg	100	91.0	91	76-131	
n-Butylbenzene	ug/kg	100	85.0	85	78-130	
n-Propylbenzene	ug/kg	100	85.2	85	78-121	
Naphthalene	ug/kg	100	84.0	84	67-123	
p-Isopropyltoluene	ug/kg	100	81.9	82	80-122	
sec-Butylbenzene	ug/kg	100	83.8	84	79-124	
Styrene	ug/kg	100	86.0	86	77-120	
tert-Butylbenzene	ug/kg	100	84.3	84	80-123	
Tetrachloroethene	ug/kg	100	84.2	84	74-129	
Toluene	ug/kg	100	80.4	80	76-120	
trans-1,2-Dichloroethene	ug/kg	100	90.0	90	80-129	
trans-1,3-Dichloropropene	ug/kg	100	99.3	99	80-120	
Trichloroethene	ug/kg	100	85.8	86	79-120	
Trichlorofluoromethane	ug/kg	100	97.2	97	70-135	

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QUALITY CONTROL DATA

Project: KUHLMAN DIECASTING

Pace Project No.: 60125766

LABORATORY CONTROL SAMPLE: 1037203

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Vinyl chloride	ug/kg	100	108	108	64-148	
Xylene (Total)	ug/kg	300	252	84	76-120	
1,2-Dichloroethane-d4 (S)	%			100	73-135	
4-Bromofluorobenzene (S)	%			98	78-125	
Dibromofluoromethane (S)	%			101	78-122	
Toluene-d8 (S)	%			99	80-123	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1037204 1037205

Parameter	Units	60125686004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1,2-Tetrachloroethane	ug/kg	ND	99.5	99.3	69.5	75.5	70	76	40-138	8	48	
1,1,1-Trichloroethane	ug/kg	ND	99.5	99.3	80.2	83.0	81	84	40-136	3	39	
1,1,2,2-Tetrachloroethane	ug/kg	ND	99.5	99.3	ND	ND	2	2	40-157		47	M1
1,1,2-Trichloroethane	ug/kg	ND	99.5	99.3	26.2	26.5	26	27	40-141	1	47	M1
1,1-Dichloroethane	ug/kg	ND	99.5	99.3	76.6	81.5	77	82	40-126	6	42	
1,1-Dichloroethene	ug/kg	ND	99.5	99.3	129	138	129	139	40-130	7	33	M1
1,1-Dichloropropene	ug/kg	ND	99.5	99.3	74.3	80.1	75	81	40-134	7	44	
1,2,3-Trichlorobenzene	ug/kg	ND	99.5	99.3	57.7	66.8	58	67	40-131	15	45	
1,2,3-Trichloropropane	ug/kg	ND	99.5	99.3	72.0	80.6	72	81	40-160	11	48	
1,2,4-Trichlorobenzene	ug/kg	ND	99.5	99.3	57.4	63.4	58	64	40-133	10	48	
1,2,4-Trimethylbenzene	ug/kg	ND	99.5	99.3	74.1	75.7	70	71	40-132	2	46	
1,2-Dibromo-3-chloropropane	ug/kg	ND	99.5	99.3	21.8	21.9	22	22	40-160	0	49	M1
1,2-Dibromoethane (EDB)	ug/kg	ND	99.5	99.3	81.9	89.8	82	90	40-143	9	39	
1,2-Dichlorobenzene	ug/kg	ND	99.5	99.3	67.2	75.1	68	76	40-133	11	45	
1,2-Dichloroethane	ug/kg	ND	99.5	99.3	85.6	93.0	86	94	40-141	8	41	
1,2-Dichloroethene (Total)	ug/kg	ND	199	199	156	167	79	84	40-131	7	42	
1,2-Dichloropropane	ug/kg	ND	99.5	99.3	84.7	90.8	85	91	40-134	7	43	
1,3,5-Trimethylbenzene	ug/kg	ND	99.5	99.3	70.6	71.6	70	71	40-134	1	47	
1,3-Dichlorobenzene	ug/kg	ND	99.5	99.3	62.8	70.0	63	71	40-131	11	45	
1,3-Dichloropropane	ug/kg	ND	99.5	99.3	77.8	84.0	78	85	40-133	8	45	
1,4-Dichlorobenzene	ug/kg	ND	99.5	99.3	64.8	72.2	65	73	40-134	11	46	
2,2-Dichloropropane	ug/kg	ND	99.5	99.3	75.2	80.6	76	81	40-135	7	45	
2-Butanone (MEK)	ug/kg	ND	497	496	418	465	83	93	45-160	11	48	
2-Chlorotoluene	ug/kg	ND	99.5	99.3	67.1	72.1	67	73	40-133	7	46	
2-Hexanone	ug/kg	ND	497	496	423	463	85	93	40-160	9	47	
4-Chlorotoluene	ug/kg	ND	99.5	99.3	65.7	70.6	66	71	40-136	7	46	
4-Methyl-2-pentanone (MIBK)	ug/kg	ND	497	496	425	462	85	92	40-148	8	49	
Acetone	ug/kg	0.024 mg/kg	497	496	445	480	85	92	40-160	8	44	
Benzene	ug/kg	ND	99.5	99.3	78.5	83.7	79	84	40-141	6	34	
Bromobenzene	ug/kg	ND	99.5	99.3	72.1	78.1	73	79	40-138	8	44	
Bromochloromethane	ug/kg	ND	99.5	99.3	89.0	96.2	90	97	40-141	8	45	
Bromodichloromethane	ug/kg	ND	99.5	99.3	59.9	65.4	60	66	40-136	9	47	
Bromoform	ug/kg	ND	99.5	99.3	76.2	86.2	77	87	40-146	12	47	
Bromomethane	ug/kg	ND	99.5	99.3	68.7	71.4	69	72	40-147	4	40	
Carbon disulfide	ug/kg	ND	99.5	99.3	49.1	64.6	49	65	40-147	27	34	

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QUALITY CONTROL DATA

Project: KUHLMAN DIECASTING

Pace Project No.: 60125766

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1037204 1037205											
Parameter	Units	60125686004		MS	MSD	MS	MSD	MS	MSD	% Rec	Max
		Result	Conc.	Spike	Spike						RPD
				Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD
Carbon tetrachloride	ug/kg	ND	99.5	99.3	99.3	78.7	82.7	79	83	40-138	5 45
Chlorobenzene	ug/kg	ND	99.5	99.3	99.3	73.4	78.9	74	79	40-130	7 46
Chloroethane	ug/kg	ND	99.5	99.3	99.3	83.4	88.9	84	90	40-157	6 34
Chloroform	ug/kg	ND	99.5	99.3	99.3	72.4	77.0	72	76	40-129	6 43
Chloromethane	ug/kg	ND	99.5	99.3	99.3	75.1	79.7	76	80	40-140	6 37
cis-1,2-Dichloroethene	ug/kg	ND	99.5	99.3	99.3	78.9	84.2	79	85	40-125	6 46
cis-1,3-Dichloropropene	ug/kg	ND	99.5	99.3	99.3	80.1	85.9	80	87	40-132	7 47
Dibromochloromethane	ug/kg	ND	99.5	99.3	99.3	70.3	75.0	71	76	40-144	6 41
Dibromomethane	ug/kg	ND	99.5	99.3	99.3	80.3	87.1	81	88	40-140	8 47
Dichlorodifluoromethane	ug/kg	ND	99.5	99.3	99.3	61.7	66.7	62	67	40-127	8 37
Ethylbenzene	ug/kg	ND	99.5	99.3	99.3	73.9	77.0	73	76	40-149	4 39
Hexachloro-1,3-butadiene	ug/kg	ND	99.5	99.3	99.3	60.9	54.3	61	55	40-128	11 48
Isopropylbenzene (Cumene)	ug/kg	ND	99.5	99.3	99.3	79.0	78.4	79	79	40-142	1 48
Methyl-tert-butyl ether	ug/kg	ND	99.5	99.3	99.3	81.7	90.1	82	91	40-147	10 36
Methylene chloride	ug/kg	ND	99.5	99.3	99.3	87.4	92.4	86	91	40-147	6 44
n-Butylbenzene	ug/kg	ND	99.5	99.3	99.3	69.3	64.4	70	65	40-136	7 47
n-Propylbenzene	ug/kg	ND	99.5	99.3	99.3	69.8	71.5	70	72	40-134	2 45
Naphthalene	ug/kg	ND	99.5	99.3	99.3	74.1	84.5	70	81	40-158	13 46
p-Isopropyltoluene	ug/kg	ND	99.5	99.3	99.3	68.6	65.2	69	66	40-133	5 46
sec-Butylbenzene	ug/kg	ND	99.5	99.3	99.3	71.6	67.7	72	68	40-135	6 48
Styrene	ug/kg	ND	99.5	99.3	99.3	72.7	78.6	73	79	40-133	8 48
tert-Butylbenzene	ug/kg	ND	99.5	99.3	99.3	75.5	72.7	76	73	40-137	4 45
Tetrachloroethene	ug/kg	ND	99.5	99.3	99.3	65.8	73.0	66	74	40-128	10 44
Toluene	ug/kg	ND	99.5	99.3	99.3	70.7	76.3	68	74	40-143	8 39
trans-1,2-Dichloroethene	ug/kg	ND	99.5	99.3	99.3	77.5	83.1	78	84	40-140	7 35
trans-1,3-Dichloropropene	ug/kg	ND	99.5	99.3	99.3	86.7	94.7	87	95	40-144	9 46
Trichloroethene	ug/kg	ND	99.5	99.3	99.3	139	149	139	150	40-139	7 37 M1
Trichlorofluoromethane	ug/kg	ND	99.5	99.3	99.3	75.0	81.5	75	82	40-137	8 34
Vinyl chloride	ug/kg	ND	99.5	99.3	99.3	79.0	83.6	79	84	40-150	6 32
Xylene (Total)	ug/kg	0.0066	299	298	298	224	236	73	77	40-147	5 40
	mg/kg										
1,2-Dichloroethane-d4 (S)	%							100	100	73-135	
4-Bromofluorobenzene (S)	%							101	99	78-125	
Dibromofluoromethane (S)	%							48	44	78-122	S0
Toluene-d8 (S)	%							100	100	80-123	

QUALITY CONTROL DATA

Project: KUHLMAN DIECASTING

Pace Project No.: 60125766

QC Batch: OEXT/34170

Analysis Method: EPA 8082

QC Batch Method: EPA 3546

Analysis Description: 8082 GCS PCB

Associated Lab Samples: 60125766016, 60125766017

METHOD BLANK: 1035590

Matrix: Solid

Associated Lab Samples: 60125766016, 60125766017

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
PCB-1016 (Aroclor 1016)	ug/kg	ND	32.6	08/10/12 06:34	
PCB-1221 (Aroclor 1221)	ug/kg	ND	65.1	08/10/12 06:34	
PCB-1232 (Aroclor 1232)	ug/kg	ND	32.6	08/10/12 06:34	
PCB-1242 (Aroclor 1242)	ug/kg	ND	32.6	08/10/12 06:34	
PCB-1248 (Aroclor 1248)	ug/kg	ND	32.6	08/10/12 06:34	
PCB-1254 (Aroclor 1254)	ug/kg	ND	32.6	08/10/12 06:34	
PCB-1260 (Aroclor 1260)	ug/kg	ND	32.6	08/10/12 06:34	
Decachlorobiphenyl (S)	%	91	36-131	08/10/12 06:34	
Tetrachloro-m-xylene (S)	%	92	34-132	08/10/12 06:34	

LABORATORY CONTROL SAMPLE: 1035591

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
PCB-1016 (Aroclor 1016)	ug/kg	163	171	105	54-129	
PCB-1260 (Aroclor 1260)	ug/kg	163	161	99	62-129	
Decachlorobiphenyl (S)	%			93	36-131	
Tetrachloro-m-xylene (S)	%			95	34-132	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1035600 1035601

Parameter	Units	60125764002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
PCB-1016 (Aroclor 1016)	ug/kg	ND	201	204	169	196	84	96	41-144	15	35	
PCB-1260 (Aroclor 1260)	ug/kg	ND	201	204	165	195	82	96	28-156	17	31	
Decachlorobiphenyl (S)	%						77	86	36-131			
Tetrachloro-m-xylene (S)	%						80	88	34-132			

QUALITY CONTROL DATA

Project: KUHLMAN DIECASTING
Pace Project No.: 60125766

QC Batch:	OEXT/34154	Analysis Method:	EPA 8082
QC Batch Method:	EPA 3510	Analysis Description:	8082 GCS PCB
Associated Lab Samples:	60125766018		

METHOD BLANK: 1034958 Matrix: Water
Associated Lab Samples: 60125766018

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
PCB-1016 (Aroclor 1016)	ug/L	ND	0.50	08/07/12 10:35	
PCB-1221 (Aroclor 1221)	ug/L	ND	0.50	08/07/12 10:35	
PCB-1232 (Aroclor 1232)	ug/L	ND	0.50	08/07/12 10:35	
PCB-1242 (Aroclor 1242)	ug/L	ND	0.50	08/07/12 10:35	
PCB-1248 (Aroclor 1248)	ug/L	ND	0.50	08/07/12 10:35	
PCB-1254 (Aroclor 1254)	ug/L	ND	0.50	08/07/12 10:35	
PCB-1260 (Aroclor 1260)	ug/L	ND	0.50	08/07/12 10:35	
Decachlorobiphenyl (S)	%	66	17-122	08/07/12 10:35	
Tetrachloro-m-xylene (S)	%	70	36-115	08/07/12 10:35	

LABORATORY CONTROL SAMPLE: 1034959

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
PCB-1016 (Aroclor 1016)	ug/L	2.5	2.3	92	38-130	
PCB-1260 (Aroclor 1260)	ug/L	2.5	2.4	95	39-131	
Decachlorobiphenyl (S)	%			74	17-122	
Tetrachloro-m-xylene (S)	%			82	36-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1034960 1034961

Parameter	Units	60125742003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
PCB-1016 (Aroclor 1016)	ug/L	ND	2.5	2.5	2.4	2.4	97	98	35-144	1	30	
PCB-1260 (Aroclor 1260)	ug/L	ND	2.5	2.5	2.3	2.3	93	92	37-134	1	35	
Decachlorobiphenyl (S)	%						59	61	17-122			
Tetrachloro-m-xylene (S)	%						77	74	36-115			

QUALITY CONTROL DATA

Project: KUHLMAN DIECASTING
Pace Project No.: 60125766

QC Batch:	OEXT/34158	Analysis Method:	EPA 8270 by SIM
QC Batch Method:	EPA 3546	Analysis Description:	8270/3546 MSSV PAH by SIM
Associated Lab Samples:	60125766001		

METHOD BLANK: 1034973 Matrix: Solid
Associated Lab Samples: 60125766001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Acenaphthene	ug/kg	ND	3.2	07/27/12 11:46	
Acenaphthylene	ug/kg	ND	3.2	07/27/12 11:46	
Anthracene	ug/kg	ND	3.2	07/27/12 11:46	
Benzo(a)anthracene	ug/kg	ND	3.2	07/27/12 11:46	
Benzo(a)pyrene	ug/kg	ND	3.2	07/27/12 11:46	
Benzo(b)fluoranthene	ug/kg	ND	3.2	07/27/12 11:46	
Benzo(g,h,i)perylene	ug/kg	ND	3.2	07/27/12 11:46	
Benzo(k)fluoranthene	ug/kg	ND	3.2	07/27/12 11:46	
Chrysene	ug/kg	ND	3.2	07/27/12 11:46	
Dibenz(a,h)anthracene	ug/kg	ND	3.2	07/27/12 11:46	
Fluoranthene	ug/kg	ND	3.2	07/27/12 11:46	
Fluorene	ug/kg	ND	3.2	07/27/12 11:46	
Indeno(1,2,3-cd)pyrene	ug/kg	ND	3.2	07/27/12 11:46	
Naphthalene	ug/kg	ND	3.2	07/27/12 11:46	
Phenanthrene	ug/kg	ND	3.2	07/27/12 11:46	
Pyrene	ug/kg	ND	3.2	07/27/12 11:46	
2-Fluorobiphenyl (S)	%	78	41-120	07/27/12 11:46	
Nitrobenzene-d5 (S)	%	95	35-121	07/27/12 11:46	
Terphenyl-d14 (S)	%	78	39-123	07/27/12 11:46	

LABORATORY CONTROL SAMPLE: 1034974

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Acenaphthene	ug/kg	32.5	26.3	81	58-120	
Acenaphthylene	ug/kg	32.5	25.5	78	56-120	
Anthracene	ug/kg	32.5	23.5	72	55-120	
Benzo(a)anthracene	ug/kg	32.5	26.3	81	60-120	
Benzo(a)pyrene	ug/kg	32.5	26.2	81	54-120	
Benzo(b)fluoranthene	ug/kg	32.5	26.2	81	54-128	
Benzo(g,h,i)perylene	ug/kg	32.5	25.6	79	26-126	
Benzo(k)fluoranthene	ug/kg	32.5	26.0	80	53-120	
Chrysene	ug/kg	32.5	26.8	82	56-120	
Dibenz(a,h)anthracene	ug/kg	32.5	25.7	79	42-120	
Fluoranthene	ug/kg	32.5	27.3	84	57-120	
Fluorene	ug/kg	32.5	27.4	84	58-120	
Indeno(1,2,3-cd)pyrene	ug/kg	32.5	23.9	74	37-120	
Naphthalene	ug/kg	32.5	25.6	79	55-120	
Phenanthrene	ug/kg	32.5	30.1	92	57-120	
Pyrene	ug/kg	32.5	27.3	84	57-120	
2-Fluorobiphenyl (S)	%			81	41-120	
Nitrobenzene-d5 (S)	%			94	35-121	

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QUALITY CONTROL DATA

Project: KUHLMAN DIECASTING

Pace Project No.: 60125766

LABORATORY CONTROL SAMPLE: 1034974

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Terphenyl-d14 (S)	%			77	39-123	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1034975 1034976

Parameter	Units	60125643003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Acenaphthene	ug/kg	ND	43.3	43.4	36.8	31.9	84	72	45-120	14	30	
Acenaphthylene	ug/kg	ND	43.3	43.4	35.3	30.9	81	71	28-129	13	35	
Anthracene	ug/kg	ND	43.3	43.4	35.9	29.4	83	68	27-130	20	37	
Benzo(a)anthracene	ug/kg	ND	43.3	43.4	38.2	33.5	87	76	36-127	13	39	
Benzo(a)pyrene	ug/kg	ND	43.3	43.4	32.1	29.3	73	66	21-135	9	35	
Benzo(b)fluoranthene	ug/kg	ND	43.3	43.4	41.0	36.9	90	80	17-158	11	36	
Benzo(g,h,i)perylene	ug/kg	ND	43.3	43.4	36.8	34.5	77	72	10-141	6	41	
Benzo(k)fluoranthene	ug/kg	ND	43.3	43.4	32.1	29.1	72	65	47-120	10	33	
Chrysene	ug/kg	ND	43.3	43.4	35.4	29.3	80	66	24-128	19	42	
Dibenz(a,h)anthracene	ug/kg	ND	43.3	43.4	32.9	31.3	75	71	10-137	5	31	
Fluoranthene	ug/kg	ND	43.3	43.4	36.4	31.5	83	71	34-126	15	43	
Fluorene	ug/kg	ND	43.3	43.4	37.9	32.6	86	73	42-123	15	35	
Indeno(1,2,3-cd)pyrene	ug/kg	ND	43.3	43.4	33.7	30.7	76	69	10-126	9	32	
Naphthalene	ug/kg	14.4	43.3	43.4	36.3	33.6	51	44	22-135	8	41	
Phenanthrene	ug/kg	ND	43.3	43.4	42.6	36.9	91	78	29-139	14	42	
Pyrene	ug/kg	ND	43.3	43.4	36.6	32.1	83	72	20-138	13	43	
2-Fluorobiphenyl (S)	%						100	74	41-120			
Nitrobenzene-d5 (S)	%						85	78	35-121			
Terphenyl-d14 (S)	%						98	61	39-123			

QUALITY CONTROL DATA

Project: KUHLMAN DIECASTING

Pace Project No.: 60125766

QC Batch: OEXT/34151

Analysis Method: EPA 8270C by SIM

QC Batch Method: EPA 3510C

Analysis Description: 8270 Water PAH by SIM MSSV

Associated Lab Samples: 60125766002, 60125766003

METHOD BLANK: 1034950

Matrix: Water

Associated Lab Samples: 60125766002, 60125766003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Acenaphthene	ug/L	ND	0.10	08/06/12 19:55	
Acenaphthylene	ug/L	ND	0.10	08/06/12 19:55	
Anthracene	ug/L	ND	0.10	08/06/12 19:55	
Benzo(a)anthracene	ug/L	ND	0.10	08/06/12 19:55	
Benzo(a)pyrene	ug/L	ND	0.10	08/06/12 19:55	
Benzo(b)fluoranthene	ug/L	ND	0.10	08/06/12 19:55	
Benzo(g,h,i)perylene	ug/L	ND	0.10	08/06/12 19:55	
Benzo(k)fluoranthene	ug/L	ND	0.10	08/06/12 19:55	
Chrysene	ug/L	ND	0.10	08/06/12 19:55	
Dibenz(a,h)anthracene	ug/L	ND	0.10	08/06/12 19:55	
Fluoranthene	ug/L	0.10	0.10	08/06/12 19:55	
Fluorene	ug/L	ND	0.10	08/06/12 19:55	
Indeno(1,2,3-cd)pyrene	ug/L	ND	0.10	08/06/12 19:55	
Naphthalene	ug/L	ND	0.50	08/06/12 19:55	
Phenanthrene	ug/L	ND	0.50	08/06/12 19:55	
Pyrene	ug/L	ND	0.10	08/06/12 19:55	
2-Fluorobiphenyl (S)	%	81	44-120	08/06/12 19:55	
Nitrobenzene-d5 (S)	%	81	42-120	08/06/12 19:55	
Terphenyl-d14 (S)	%	93	46-131	08/06/12 19:55	

LABORATORY CONTROL SAMPLE: 1034951

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Acenaphthene	ug/L	10	7.4	74	48-120	
Acenaphthylene	ug/L	10	8.4	84	42-120	
Anthracene	ug/L	10	8.1	81	48-120	
Benzo(a)anthracene	ug/L	10	9.8	98	53-118	
Benzo(a)pyrene	ug/L	10	6.1	61	48-115	
Benzo(b)fluoranthene	ug/L	10	7.4	74	42-132	
Benzo(g,h,i)perylene	ug/L	10	5.8	58	38-116	
Benzo(k)fluoranthene	ug/L	10	6.6	66	48-117	
Chrysene	ug/L	10	7.4	74	51-115	
Dibenz(a,h)anthracene	ug/L	10	5.9	59	40-116	
Fluoranthene	ug/L	10	9.4	94	37-134	
Fluorene	ug/L	10	8.0	80	49-116	
Indeno(1,2,3-cd)pyrene	ug/L	10	5.9	59	37-118	
Naphthalene	ug/L	10	7.4	74	41-112	
Phenanthrene	ug/L	10	7.7	77	52-116	
Pyrene	ug/L	10	7.9	79	44-134	
2-Fluorobiphenyl (S)	%			73	44-120	
Nitrobenzene-d5 (S)	%			71	42-120	

Date: 08/13/2012 09:36 PM

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: KUHLMAN DIECASTING

Pace Project No.: 60125766

LABORATORY CONTROL SAMPLE: 1034951

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Terphenyl-d14 (S)	%			72	46-131	

QUALITY CONTROL DATA

Project: KUHLMAN DIECASTING

Pace Project No.: 60125766

QC Batch:	OEXT/34152	Analysis Method:	OA2
QC Batch Method:	OA2	Analysis Description:	OA2 GCS
Associated Lab Samples: 60125766002, 60125766003			

METHOD BLANK: 1034952 Matrix: Water

Associated Lab Samples: 60125766002, 60125766003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Diesel Fuel	mg/L	ND	0.40	08/02/12 11:01	
Fuel Oil	mg/L	ND	0.40	08/02/12 11:01	
Jet Fuel	mg/L	ND	0.40	08/02/12 11:01	
Kerosene	mg/L	ND	0.40	08/02/12 11:01	
Mineral Spirits	mg/L	ND	0.40	08/02/12 11:01	
Motor Oil	mg/L	ND	0.40	08/02/12 11:01	
Total Petroleum Hydrocarbons	mg/L	ND	0.40	08/02/12 11:01	
n-Tetracosane (S)	%	81	30-122	08/02/12 11:01	
p-Terphenyl (S)	%	88	20-122	08/02/12 11:01	

LABORATORY CONTROL SAMPLE: 1034953

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Diesel Fuel	mg/L	25	24.7	99	47-122	
n-Tetracosane (S)	%			86	30-122	
p-Terphenyl (S)	%			94	20-122	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1034954 1034955

Parameter	Units	60125817004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Diesel Fuel	mg/L	ND	25	25	24.2	24.9	97	100	41-130	3	27	
n-Tetracosane (S)	%						88	89	30-122			
p-Terphenyl (S)	%						95	95	20-122			

QUALITY CONTROL DATA

Project: KUHLMAN DIECASTING

Pace Project No.: 60125766

QC Batch: OEXT/34179

Analysis Method: OA2

QC Batch Method: OA2

Analysis Description: OA2 GCS

Associated Lab Samples: 60125766001

METHOD BLANK: 1035683

Matrix: Solid

Associated Lab Samples: 60125766001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Diesel Fuel	mg/kg	ND	19.8	07/30/12 22:56	
Fuel Oil	mg/kg	ND	19.8	07/30/12 22:56	
Jet Fuel	mg/kg	ND	19.8	07/30/12 22:56	
Kerosene	mg/kg	ND	19.8	07/30/12 22:56	
Mineral Spirits	mg/kg	ND	19.8	07/30/12 22:56	
Motor Oil	mg/kg	ND	19.8	07/30/12 22:56	
Total Petroleum Hydrocarbons	mg/kg	ND	19.8	07/30/12 22:56	
n-Tetracosane (S)	%	97	50-137	07/30/12 22:56	
p-Terphenyl (S)	%	83	41-129	07/30/12 22:56	

LABORATORY CONTROL SAMPLE: 1035684

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Diesel Fuel	mg/kg	486	519	107	66-138	
n-Tetracosane (S)	%			103	50-137	
p-Terphenyl (S)	%			97	41-129	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1035685 1035686

Parameter	Units	60125914001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Diesel Fuel	mg/kg	ND	507	493	542	541	107	110	56-154	0	27	
n-Tetracosane (S)	%						100	104	50-137			
p-Terphenyl (S)	%						88	91	41-129			

QUALITY CONTROL DATA

Project: KUHLMAN DIECASTING

Pace Project No.: 60125766

QC Batch:	PMST/7549	Analysis Method:	ASTM D2974
QC Batch Method:	ASTM D2974	Analysis Description:	Dry Weight/Percent Moisture
Associated Lab Samples:	60125766001, 60125766004, 60125766005, 60125766006, 60125766007, 60125766008, 60125766009, 60125766010, 60125766011, 60125766012, 60125766013, 60125766014, 60125766015, 60125766016, 60125766017		

METHOD BLANK: 1039390 Matrix: Solid

Associated Lab Samples: 60125766001, 60125766004, 60125766005, 60125766006, 60125766007, 60125766008, 60125766009, 60125766010, 60125766011, 60125766012, 60125766013, 60125766014, 60125766015, 60125766016, 60125766017

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Percent Moisture	%	ND	0.50	08/03/12 00:00	

SAMPLE DUPLICATE: 1039391

Parameter	Units	60125766001 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	21.8	21.7	1	20	

QUALITY CONTROL DATA

Project: KUHLMAN DIECASTING

Pace Project No.: 60125766

QC Batch:	WET/9801	Analysis Method:	EPA 7196A
QC Batch Method:	EPA 7196A	Analysis Description:	7196 Chromium, Hexavalent
Associated Lab Samples:	60125766004, 60125766005, 60125766006, 60125766007, 60125766008, 60125766009, 60125766010, 60125766011, 60125766012, 60125766013, 60125766014, 60125766015, 60125766016, 60125766017		

METHOD BLANK:	773995	Matrix:	Solid
Associated Lab Samples:	60125766004, 60125766005, 60125766006, 60125766007, 60125766008, 60125766009, 60125766010, 60125766011, 60125766012, 60125766013, 60125766014, 60125766015, 60125766016, 60125766017		

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chromium, Hexavalent	mg/kg	ND	2.0	08/01/12 12:14	

LABORATORY CONTROL SAMPLE:	773996
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Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chromium, Hexavalent	mg/kg	1070	876	82	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE:	773998	773999
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Parameter	Units	60125766004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual
Chromium, Hexavalent	mg/kg	ND	1090	1040	594	498	54	47	75-125	18	20 M3

SAMPLE DUPLICATE:	773997
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Parameter	Units	5066656003 Result	Dup Result	RPD	Max RPD	Qualifiers
Chromium, Hexavalent	mg/kg	ND	ND		20	

QUALITY CONTROL DATA

Project: KUHLMAN DIECASTING
Pace Project No.: 60125766

QC Batch:	WETA/21016	Analysis Method:	EPA 7196
QC Batch Method:	EPA 7196	Analysis Description:	7196 Chromium, Hexavalent
Associated Lab Samples:	60125766018		

METHOD BLANK: 1034522 Matrix: Water
Associated Lab Samples: 60125766018

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chromium, Hexavalent	mg/L	ND	0.010	07/25/12 15:08	

LABORATORY CONTROL SAMPLE: 1034523

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chromium, Hexavalent	mg/L	.1	0.094	94	90-110	

MATRIX SPIKE SAMPLE: 1034525

Parameter	Units	60125753001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chromium, Hexavalent	mg/L	0.019	.1	0.12	106	85-115	

SAMPLE DUPLICATE: 1034524

Parameter	Units	60125766018 Result	Dup Result	RPD	Max RPD	Qualifiers
Chromium, Hexavalent	mg/L	0.057	0.051	11	20 H1	

QUALITY CONTROL DATA

Project: KUHLMAN DIECASTING

Pace Project No.: 60125766

QC Batch: WETA/21048

Analysis Method: EPA 7196

QC Batch Method: EPA 7196

Analysis Description: 7196 Chromium, Hexavalent Diss

Associated Lab Samples: 60125766018

METHOD BLANK: 1035811

Matrix: Water

Associated Lab Samples: 60125766018

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chromium, Hexavalent,Dissolved	mg/L	ND	0.010	07/27/12 09:17	

LABORATORY CONTROL SAMPLE: 1035812

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chromium, Hexavalent,Dissolved	mg/L	.1	0.10	103	90-110	

MATRIX SPIKE SAMPLE: 1035814

Parameter	Units	60125938001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chromium, Hexavalent,Dissolved	mg/L	ND	.1	0.049	47	85-115	M1

SAMPLE DUPLICATE: 1036047

Parameter	Units	60125938004 Result	Dup Result	RPD	Max RPD	Qualifiers
Chromium, Hexavalent,Dissolved	mg/L	ND	.005J		20	

QUALITY CONTROL DATA

Project: KUHLMAN DIECASTING

Pace Project No.: 60125766

QC Batch: WETA/21068

Analysis Method: EPA 9012A

QC Batch Method: EPA 9012A

Analysis Description: 9012 Cyanide

Associated Lab Samples: 60125766016, 60125766017

METHOD BLANK: 1036816

Matrix: Solid

Associated Lab Samples: 60125766016, 60125766017

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Cyanide	mg/kg	ND	0.15	07/30/12 19:30	

LABORATORY CONTROL SAMPLE: 1036817

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cyanide	mg/kg	3	3.2	106	81-117	

SAMPLE DUPLICATE: 1036819

Parameter	Units	60125766017 Result	Dup Result	RPD	Max RPD	Qualifiers
Cyanide	mg/kg	0.33	.19J		20	

QUALITY CONTROL DATA

Project: KUHLMAN DIECASTING

Pace Project No.: 60125766

QC Batch: WETA/21067

Analysis Method: EPA 9012A

QC Batch Method: EPA 9012A

Analysis Description: EPA 9012 Cyanide

Associated Lab Samples: 60125766018

METHOD BLANK: 1036810

Matrix: Solid

Associated Lab Samples: 60125766018

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Cyanide	mg/L	ND	0.0050	07/30/12 19:13	

LABORATORY CONTROL SAMPLE: 1036811

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cyanide	mg/L	.1	0.10	105	81-117	

MATRIX SPIKE SAMPLE: 1036812

Parameter	Units	60125766018 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Cyanide	mg/L	ND	.1	0.11	105	50-150	

SAMPLE DUPLICATE: 1036813

Parameter	Units	60125852012 Result	Dup Result	RPD	Max RPD	Qualifiers
Cyanide	mg/L	ND	.0029J		20	

QUALIFIERS

Project: KUHLMAN DIECASTING
Pace Project No.: 60125766

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

PRL - Pace Reporting Limit.

RL - Reporting Limit.

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

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

TNI - The NELAC Institute.

LABORATORIES

PASI-I Pace Analytical Services - Indianapolis

PASI-K Pace Analytical Services - Kansas City

BATCH QUALIFIERS

Batch: MSV/47383

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

Batch: MSV/47407

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

Batch: MSV/47425

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

ANALYTE QUALIFIERS

1e Sample was filtered and blanked against the parent sample.

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

H1 Analysis conducted outside the EPA method holding time.

M1 Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

M3 Matrix spike recovery was outside laboratory control limits due to matrix interferences.

P3 Sample extract could not be concentrated to the routine final volume, resulting in elevated reporting limits.

S0 Surrogate recovery outside laboratory control limits.

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: KUHLMAN DIECASTING

Pace Project No.: 60125766

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60125766016	WWEL-N-SED	EPA 3546	OEXT/34170	EPA 8082	GCSV/12872
60125766017	WWEL-S-SED	EPA 3546	OEXT/34170	EPA 8082	GCSV/12872
60125766018	WWEL-S-SW	EPA 3510	OEXT/34154	EPA 8082	GCSV/12870
60125766002	SB-11 GW	OA2	OEXT/34152	OA2	GCSV/12889
60125766003	SB-17 GW	OA2	OEXT/34152	OA2	GCSV/12889
60125766001	SB-19-6-8	OA2	OEXT/34179	OA2	GCSV/12867
60125766001	SB-19-6-8	EPA 3050	MPRP/18868	EPA 6010	ICP/15712
60125766004	SS-1	EPA 3050	MPRP/18868	EPA 6010	ICP/15712
60125766005	SS-2	EPA 3050	MPRP/18868	EPA 6010	ICP/15712
60125766006	SS-3	EPA 3050	MPRP/18868	EPA 6010	ICP/15712
60125766007	SS-4	EPA 3050	MPRP/18868	EPA 6010	ICP/15712
60125766008	SS-5	EPA 3050	MPRP/18868	EPA 6010	ICP/15712
60125766009	SS-6	EPA 3050	MPRP/18868	EPA 6010	ICP/15712
60125766010	SS-7	EPA 3050	MPRP/18868	EPA 6010	ICP/15712
60125766011	SS-8	EPA 3050	MPRP/18868	EPA 6010	ICP/15712
60125766012	SS-9	EPA 3050	MPRP/18868	EPA 6010	ICP/15712
60125766013	SS-10	EPA 3050	MPRP/18868	EPA 6010	ICP/15712
60125766014	SS-11	EPA 3050	MPRP/18868	EPA 6010	ICP/15712
60125766015	SS-12	EPA 3050	MPRP/18868	EPA 6010	ICP/15712
60125766016	WWEL-N-SED	EPA 3050	MPRP/18868	EPA 6010	ICP/15712
60125766017	WWEL-S-SED	EPA 3050	MPRP/18868	EPA 6010	ICP/15712
60125766002	SB-11 GW	EPA 3010	MPRP/18881	EPA 6010	ICP/15725
60125766003	SB-17 GW	EPA 3010	MPRP/18881	EPA 6010	ICP/15725
60125766018	WWEL-S-SW	EPA 3010	MPRP/18881	EPA 6010	ICP/15725
60125766002	SB-11 GW	EPA 3010	MPRP/18880	EPA 6010	ICP/15715
60125766003	SB-17 GW	EPA 3010	MPRP/18880	EPA 6010	ICP/15715
60125766002	SB-11 GW	EPA 7470	MERP/6490	EPA 7470	MERC/6455
60125766003	SB-17 GW	EPA 7470	MERP/6490	EPA 7470	MERC/6455
60125766002	SB-11 GW	EPA 7470	MERP/6489	EPA 7470	MERC/6458
60125766003	SB-17 GW	EPA 7470	MERP/6489	EPA 7470	MERC/6458
60125766001	SB-19-6-8	EPA 7471	MERP/6494	EPA 7471	MERC/6463
60125766001	SB-19-6-8	EPA 3546	OEXT/34158	EPA 8270 by SIM	MSSV/10712
60125766002	SB-11 GW	EPA 3510C	OEXT/34151	EPA 8270C by SIM	MSSV/10746
60125766003	SB-17 GW	EPA 3510C	OEXT/34151	EPA 8270C by SIM	MSSV/10746
60125766001	SB-19-6-8	OA1	MSV/47425		
60125766002	SB-11 GW	EPA 5030B/8260	MSV/47383		
60125766002	SB-11 GW	EPA 5030B/8260	MSV/47421		
60125766003	SB-17 GW	EPA 5030B/8260	MSV/47383		
60125766003	SB-17 GW	EPA 5030B/8260	MSV/47421		
60125766002	SB-11 GW	EPA 8260/OA1	MSV/47407		

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: KUHLMAN DIECASTING

Pace Project No.: 60125766

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60125766003	SB-17 GW	EPA 8260/OA1	MSV/47407		
60125766001	SB-19-6-8	EPA 8260	MSV/47410		
60125766001	SB-19-6-8	ASTM D2974	PMST/7549		
60125766004	SS-1	ASTM D2974	PMST/7549		
60125766005	SS-2	ASTM D2974	PMST/7549		
60125766006	SS-3	ASTM D2974	PMST/7549		
60125766007	SS-4	ASTM D2974	PMST/7549		
60125766008	SS-5	ASTM D2974	PMST/7549		
60125766009	SS-6	ASTM D2974	PMST/7549		
60125766010	SS-7	ASTM D2974	PMST/7549		
60125766011	SS-8	ASTM D2974	PMST/7549		
60125766012	SS-9	ASTM D2974	PMST/7549		
60125766013	SS-10	ASTM D2974	PMST/7549		
60125766014	SS-11	ASTM D2974	PMST/7549		
60125766015	SS-12	ASTM D2974	PMST/7549		
60125766016	WWEL-N-SED	ASTM D2974	PMST/7549		
60125766017	WWEL-S-SED	ASTM D2974	PMST/7549		
60125766004	SS-1	EPA 7196A	WET/9801	EPA 7196A	WET/9805
60125766005	SS-2	EPA 7196A	WET/9801	EPA 7196A	WET/9805
60125766006	SS-3	EPA 7196A	WET/9801	EPA 7196A	WET/9805
60125766007	SS-4	EPA 7196A	WET/9801	EPA 7196A	WET/9805
60125766008	SS-5	EPA 7196A	WET/9801	EPA 7196A	WET/9805
60125766009	SS-6	EPA 7196A	WET/9801	EPA 7196A	WET/9805
60125766010	SS-7	EPA 7196A	WET/9801	EPA 7196A	WET/9805
60125766011	SS-8	EPA 7196A	WET/9801	EPA 7196A	WET/9805
60125766012	SS-9	EPA 7196A	WET/9801	EPA 7196A	WET/9805
60125766013	SS-10	EPA 7196A	WET/9801	EPA 7196A	WET/9805
60125766014	SS-11	EPA 7196A	WET/9801	EPA 7196A	WET/9805
60125766015	SS-12	EPA 7196A	WET/9801	EPA 7196A	WET/9805
60125766016	WWEL-N-SED	EPA 7196A	WET/9801	EPA 7196A	WET/9805
60125766017	WWEL-S-SED	EPA 7196A	WET/9801	EPA 7196A	WET/9805
60125766018	WWEL-S-SW	EPA 9012A	WETA/21067	EPA 9012A	WET/36289
60125766018	WWEL-S-SW	EPA 7196	WETA/21016		
60125766018	WWEL-S-SW	EPA 7196	WETA/21048		
60125766016	WWEL-N-SED	EPA 9012A	WETA/21068	EPA 9012A	WETA/21069
60125766017	WWEL-S-SED	EPA 9012A	WETA/21068	EPA 9012A	WETA/21069



The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	Seagull Environmental Technologies	Report To:	Jeff Pritchard	Attention:	
Address:	415 Oak St Kansas City, MO 64106	Copy To:		Company Name:	
Email To:	jpritchard@seagullenvirotech.com	Purchase Order No.:		Address:	
Phone:	913-220-5887	Project Name:	Kuhlman Diecasting	Pace Quote Reference:	
Requested Due Date/TAT:	standard	Project Number:		Pace Project Manager:	MJW
Valid Matrix Codes		COLLECTED		Requested Analysis Filtered (Y/N)	
MATRIX	CODE	COMPOSITE START	COMPOSITE END/GRAB	Y/N	
DRINKING WATER	DW	DATE	TIME	Preservatives	
WASTE WATER	WW	DATE	TIME	Unpreserved	
WASTE WATER PRODUCT	WP	DATE	TIME	H2SO4	
SOILS/SOLID	SL	DATE	TIME	HNO3	
OIL	OL	DATE	TIME	HCl	
WIFE	WF	DATE	TIME	NaOH	
AIR	AR	DATE	TIME	Na2O2	
OTHER	OT	DATE	TIME	Methanol	
TISSUE	TS	DATE	TIME	Other	
SAMPLE ID (A-Z, 0-9 / -) Sample IDs MUST BE UNIQUE		MATRIX CODE (see valid codes to left)		SAMPLE TEMP AT COLLECTION	
SAMPLE TYPE (G=GRAB C=COMP)		DATE		TIME	
DATE		TIME		TIME	
RELINQUISHED BY / AFFILIATION		DATE		TIME	
ADDITIONAL COMMENTS		DATE		TIME	
SAMPLE CONDITIONS		DATE		TIME	
Pace Package P. 70 of 71		Pace Package P. 70 of 71		Pace Package P. 70 of 71	



Sample Condition Upon Receipt

Client Name: SET

Project # 66125766

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☒ Client ☐ Commercial ☐ Pace ☐ Other

Tracking #: _____ Pace Shipping Label Used? ☐ Yes ☒ No

Custody Seal on Cooler/Box Present: ☐ Yes ☒ No Seals intact: ☐ Yes ☒ No

Packing Material: ☐ Bubble Wrap ☒ Bubble Bags ☐ Foam ☐ None ☒ Other 2PIL

Thermometer Used: T-191 / T-194

Type of Ice: Wet Blue None

☐ Samples on ice, cooling process has begun

Cooler Temperature: 3.0

Temperature should be above freezing to 6°C

Comments:

Date and Initials of person examining contents: pu 7-

Chain of Custody present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody filled out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler name & signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4. <u>2089u</u>
Samples arrived within holding time:	<input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	5. <u>2089u</u> For the kits are out of hdd
Short Hold Time analyses (<72hr):	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	6. <u>CRC</u> <u>pu 7-25-12</u>
Rush Turn Around Time requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	7.
Sufficient volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8.
Correct containers used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
-Pace containers used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Containers intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	10.
Unpreserved 5035A soils frozen w/in 48hrs?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	11.
Filtered volume received for dissolved tests	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	12.
Sample labels match COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	13.
-Includes date/time/ID/analyses Matrix:	<u>NT/SL</u>	
All containers needing preservation have been checked.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	14.
All containers needing preservation are found to be in compliance with EPA recommendation.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Exceptions: <u>VOA</u> , coliform, TOC, O&G, WI-DRO (water), Phenolics	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Initial when completed _____ Lot # of added preservative _____
Trip Blank present:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	15.
Pace Trip Blank lot # (if purchased):		
Headspace in VOA vials (>6mm):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	16.
Project sampled in USDA Regulated Area:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	17. List State: _____

Client Notification/ Resolution:

Copy COC to Client? Y / N

Field Data Required? Y / N

Person Contacted: _____

Date/Time: _____

Comments/ Resolution:

- Total of dissolved metals per Joel Hester - new 7/25/12

Project Manager Review: new

Date: 7/25/12

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

August 09, 2012

Jeff Pritchard
Seagull Environmental Technologies
415 Oak St.
Kansas City, MO 64106

RE: Project: KUHLMAN DIECASTING
Pace Project No.: 60125938

Dear Jeff Pritchard:

Enclosed are the analytical results for sample(s) received by the laboratory on July 26, 2012. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,



Mary Jane Walls

maryjane.walls@pacelabs.com
PM Lab Management

Enclosures



REPORT OF LABORATORY ANALYSIS

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Page 1 of 15

CERTIFICATIONS

Project: KUHLMAN DIECASTING

Pace Project No.: 60125938

Kansas Certification IDs

9608 Loiret Boulevard, Lenexa, KS 66219

A2LA Certification #: 2456.01

Arkansas Certification #: 12-019-0

Illinois Certification #: 002885

Iowa Certification #: 118

Kansas/NELAP Certification #: E-10116

Louisiana Certification #: 03055

Nevada Certification #: KS000212008A

Oklahoma Certification #: 9205/9935

Texas Certification #: T104704407-12-3

Utah Certification #: KS000212012-2

REPORT OF LABORATORY ANALYSIS

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SAMPLE SUMMARY

Project: KUHLMAN DIECASTING

Pace Project No.: 60125938

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60125938001	GM-10	Water	07/26/12 10:20	07/26/12 17:11
60125938002	GM-8	Water	07/26/12 11:51	07/26/12 17:11
60125938003	GM-15	Water	07/26/12 12:47	07/26/12 17:11
60125938004	GM-13	Water	07/26/12 14:40	07/26/12 17:11
60125938005	GM-12	Water	07/26/12 15:29	07/26/12 17:11

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: KUHLMAN DIECASTING

Pace Project No.: 60125938

Lab ID	Sample ID	Method	Analysts	Analytes Reported
60125938001	GM-10	EPA 6010	SMW	4
		EPA 6010	SMW	4
		EPA 7196	NDL	1
		EPA 7196	NDL	1
60125938002	GM-8	EPA 6010	SMW	4
		EPA 6010	SMW	4
60125938003	GM-15	EPA 6010	SMW	4
		EPA 6010	SMW	4
60125938004	GM-13	EPA 6010	SMW	4
		EPA 6010	SMW	4
		EPA 7196	NDL	1
		EPA 7196	NDL	1
60125938005	GM-12	EPA 6010	SMW	4
		EPA 6010	SMW	4

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: KUHLMAN DIECASTING

Pace Project No.: 60125938

Sample: GM-10		Lab ID: 60125938001	Collected: 07/26/12 10:20	Received: 07/26/12 17:11	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP		Analytical Method: EPA 6010 Preparation Method: EPA 3010						
Chromium	ND ug/L		5.0	1	08/01/12 13:00	08/02/12 11:30	7440-47-3	
Copper	ND ug/L		10.0	1	08/01/12 13:00	08/02/12 11:30	7440-50-8	
Nickel	ND ug/L		5.0	1	08/01/12 13:00	08/02/12 11:30	7440-02-0	
Zinc	ND ug/L		50.0	1	08/01/12 13:00	08/02/12 11:30	7440-66-6	
6010 MET ICP, Dissolved		Analytical Method: EPA 6010 Preparation Method: EPA 3010						
Chromium, Dissolved	ND ug/L		5.0	1	08/01/12 17:30	08/06/12 14:36	7440-47-3	
Copper, Dissolved	ND ug/L		10.0	1	08/01/12 17:30	08/06/12 14:36	7440-50-8	
Nickel, Dissolved	ND ug/L		5.0	1	08/01/12 17:30	08/06/12 14:36	7440-02-0	
Zinc, Dissolved	ND ug/L		50.0	1	08/01/12 17:30	08/06/12 14:36	7440-66-6	
7196 Chromium, Hexavalent		Analytical Method: EPA 7196						
Chromium, Hexavalent	ND mg/L		0.010	1		07/27/12 08:40	18540-29-9	M1
7196 Chromium, Hexavalent Diss		Analytical Method: EPA 7196						
Chromium, Hexavalent,Dissolved	ND mg/L		0.010	1		07/27/12 09:19	18540-29-9	M1

ANALYTICAL RESULTS

Project: KUHLMAN DIECASTING

Pace Project No.: 60125938

Sample: GM-8		Lab ID: 60125938002	Collected: 07/26/12 11:51	Received: 07/26/12 17:11	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP		Analytical Method: EPA 6010 Preparation Method: EPA 3010						
Chromium	ND ug/L		5.0	1	08/01/12 13:00	08/02/12 11:32	7440-47-3	
Copper	ND ug/L		10.0	1	08/01/12 13:00	08/02/12 11:32	7440-50-8	
Nickel	ND ug/L		5.0	1	08/01/12 13:00	08/02/12 11:32	7440-02-0	
Zinc	53.1 ug/L		50.0	1	08/01/12 13:00	08/02/12 11:32	7440-66-6	
6010 MET ICP, Dissolved		Analytical Method: EPA 6010 Preparation Method: EPA 3010						
Chromium, Dissolved	ND ug/L		5.0	1	08/01/12 17:30	08/06/12 14:53	7440-47-3	
Copper, Dissolved	ND ug/L		10.0	1	08/01/12 17:30	08/06/12 14:53	7440-50-8	
Nickel, Dissolved	ND ug/L		5.0	1	08/01/12 17:30	08/06/12 14:53	7440-02-0	
Zinc, Dissolved	ND ug/L		50.0	1	08/01/12 17:30	08/06/12 14:53	7440-66-6	

ANALYTICAL RESULTS

Project: KUHLMAN DIECASTING

Pace Project No.: 60125938

Sample: GM-15		Lab ID: 60125938003	Collected: 07/26/12 12:47	Received: 07/26/12 17:11	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP		Analytical Method: EPA 6010 Preparation Method: EPA 3010						
Chromium	7.2 ug/L		5.0	1	08/01/12 13:00	08/02/12 11:34	7440-47-3	
Copper	ND ug/L		10.0	1	08/01/12 13:00	08/02/12 11:34	7440-50-8	
Nickel	ND ug/L		5.0	1	08/01/12 13:00	08/02/12 11:34	7440-02-0	
Zinc	ND ug/L		50.0	1	08/01/12 13:00	08/02/12 11:34	7440-66-6	
6010 MET ICP, Dissolved		Analytical Method: EPA 6010 Preparation Method: EPA 3010						
Chromium, Dissolved	6.9 ug/L		5.0	1	08/01/12 17:30	08/06/12 14:56	7440-47-3	
Copper, Dissolved	ND ug/L		10.0	1	08/01/12 17:30	08/06/12 14:56	7440-50-8	
Nickel, Dissolved	ND ug/L		5.0	1	08/01/12 17:30	08/06/12 14:56	7440-02-0	
Zinc, Dissolved	ND ug/L		50.0	1	08/01/12 17:30	08/06/12 14:56	7440-66-6	

ANALYTICAL RESULTS

Project: KUHLMAN DIECASTING

Pace Project No.: 60125938

Sample: GM-13		Lab ID: 60125938004	Collected: 07/26/12 14:40	Received: 07/26/12 17:11	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP		Analytical Method: EPA 6010 Preparation Method: EPA 3010						
Chromium	ND ug/L		5.0	1	08/01/12 13:00	08/02/12 11:36	7440-47-3	
Copper	ND ug/L		10.0	1	08/01/12 13:00	08/02/12 11:36	7440-50-8	
Nickel	ND ug/L		5.0	1	08/01/12 13:00	08/02/12 11:36	7440-02-0	
Zinc	ND ug/L		50.0	1	08/01/12 13:00	08/02/12 11:36	7440-66-6	
6010 MET ICP, Dissolved		Analytical Method: EPA 6010 Preparation Method: EPA 3010						
Chromium, Dissolved	ND ug/L		5.0	1	08/01/12 17:30	08/06/12 14:59	7440-47-3	
Copper, Dissolved	ND ug/L		10.0	1	08/01/12 17:30	08/06/12 14:59	7440-50-8	
Nickel, Dissolved	ND ug/L		5.0	1	08/01/12 17:30	08/06/12 14:59	7440-02-0	
Zinc, Dissolved	ND ug/L		50.0	1	08/01/12 17:30	08/06/12 14:59	7440-66-6	
7196 Chromium, Hexavalent		Analytical Method: EPA 7196						
Chromium, Hexavalent	ND mg/L		0.010	1		07/27/12 09:00	18540-29-9	
7196 Chromium, Hexavalent Diss		Analytical Method: EPA 7196						
Chromium, Hexavalent,Dissolved	ND mg/L		0.010	1		07/27/12 09:20	18540-29-9	

ANALYTICAL RESULTS

Project: KUHLMAN DIECASTING

Pace Project No.: 60125938

Sample: GM-12		Lab ID: 60125938005	Collected: 07/26/12 15:29	Received: 07/26/12 17:11	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP		Analytical Method: EPA 6010 Preparation Method: EPA 3010						
Chromium	ND ug/L		5.0	1	08/01/12 13:00	08/02/12 11:38	7440-47-3	
Copper	ND ug/L		10.0	1	08/01/12 13:00	08/02/12 11:38	7440-50-8	
Nickel	ND ug/L		5.0	1	08/01/12 13:00	08/02/12 11:38	7440-02-0	
Zinc	ND ug/L		50.0	1	08/01/12 13:00	08/02/12 11:38	7440-66-6	
6010 MET ICP, Dissolved		Analytical Method: EPA 6010 Preparation Method: EPA 3010						
Chromium, Dissolved	ND ug/L		5.0	1	08/01/12 17:30	08/06/12 15:03	7440-47-3	
Copper, Dissolved	ND ug/L		10.0	1	08/01/12 17:30	08/06/12 15:03	7440-50-8	
Nickel, Dissolved	ND ug/L		5.0	1	08/01/12 17:30	08/06/12 15:03	7440-02-0	
Zinc, Dissolved	ND ug/L		50.0	1	08/01/12 17:30	08/06/12 15:03	7440-66-6	

QUALITY CONTROL DATA

Project: KUHLMAN DIECASTING

Pace Project No.: 60125938

QC Batch: MPRP/18924 Analysis Method: EPA 6010
QC Batch Method: EPA 3010 Analysis Description: 6010 MET
Associated Lab Samples: 60125938001, 60125938002, 60125938003, 60125938004, 60125938005

METHOD BLANK: 1037888 Matrix: Water
Associated Lab Samples: 60125938001, 60125938002, 60125938003, 60125938004, 60125938005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chromium	ug/L	ND	5.0	08/02/12 10:59	
Copper	ug/L	ND	10.0	08/02/12 10:59	
Nickel	ug/L	ND	5.0	08/02/12 10:59	
Zinc	ug/L	ND	50.0	08/02/12 10:59	

LABORATORY CONTROL SAMPLE: 1037889

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chromium	ug/L	1000	1020	102	80-120	
Copper	ug/L	1000	982	98	80-120	
Nickel	ug/L	1000	1010	101	80-120	
Zinc	ug/L	1000	1040	104	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1037890 1037891

Parameter	Units	60126151001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chromium	ug/L	0.0091 mg/L	1000	1000	1030	1020	102	101	75-125	0	20	
Copper	ug/L	0.037 mg/L	1000	1000	1020	1020	98	98	75-125	0	20	
Nickel	ug/L	0.0072 mg/L	1000	1000	1010	1010	100	100	75-125	0	20	
Zinc	ug/L	0.057 mg/L	1000	1000	1080	1080	102	102	75-125	0	20	

QUALITY CONTROL DATA

Project: KUHLMAN DIECASTING

Pace Project No.: 60125938

QC Batch: MPRP/18937

Analysis Method: EPA 6010

QC Batch Method: EPA 3010

Analysis Description: 6010 MET Dissolved

Associated Lab Samples: 60125938001, 60125938002, 60125938003, 60125938004, 60125938005

METHOD BLANK: 1038287

Matrix: Water

Associated Lab Samples: 60125938001, 60125938002, 60125938003, 60125938004, 60125938005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chromium, Dissolved	ug/L	ND	5.0	08/06/12 14:29	
Copper, Dissolved	ug/L	ND	10.0	08/06/12 14:29	
Nickel, Dissolved	ug/L	ND	5.0	08/06/12 14:29	
Zinc, Dissolved	ug/L	ND	50.0	08/06/12 14:29	

LABORATORY CONTROL SAMPLE: 1038288

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chromium, Dissolved	ug/L	1000	1000	100	80-120	
Copper, Dissolved	ug/L	1000	962	96	80-120	
Nickel, Dissolved	ug/L	1000	1000	100	80-120	
Zinc, Dissolved	ug/L	1000	1010	101	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1038289

1038290

Parameter	Units	60125938001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chromium, Dissolved	ug/L	ND	1000	1000	981	991	98	99	75-125	1	20	
Copper, Dissolved	ug/L	ND	1000	1000	956	967	95	97	75-125	1	20	
Nickel, Dissolved	ug/L	ND	1000	1000	971	976	97	97	75-125	1	20	
Zinc, Dissolved	ug/L	ND	1000	1000	978	984	98	98	75-125	1	20	

QUALITY CONTROL DATA

Project: KUHLMAN DIECASTING

Pace Project No.: 60125938

QC Batch: WETA/21043

Analysis Method: EPA 7196

QC Batch Method: EPA 7196

Analysis Description: 7196 Chromium, Hexavalent

Associated Lab Samples: 60125938001, 60125938004

METHOD BLANK: 1035709

Matrix: Water

Associated Lab Samples: 60125938001, 60125938004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chromium, Hexavalent	mg/L	ND	0.010	07/27/12 08:24	

LABORATORY CONTROL SAMPLE: 1035710

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chromium, Hexavalent	mg/L	.1	0.10	103	90-110	

MATRIX SPIKE SAMPLE: 1035711

Parameter	Units	60125938001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chromium, Hexavalent	mg/L	ND	.1	0.050	47	85-115	M1

SAMPLE DUPLICATE: 1035712

Parameter	Units	60125938004 Result	Dup Result	RPD	Max RPD	Qualifiers
Chromium, Hexavalent	mg/L	ND	.007J		20	

QUALITY CONTROL DATA

Project: KUHLMAN DIECASTING

Pace Project No.: 60125938

QC Batch: WETA/21048

Analysis Method: EPA 7196

QC Batch Method: EPA 7196

Analysis Description: 7196 Chromium, Hexavalent Diss

Associated Lab Samples: 60125938001, 60125938004

METHOD BLANK: 1035811

Matrix: Water

Associated Lab Samples: 60125938001, 60125938004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chromium, Hexavalent,Dissolved	mg/L	ND	0.010	07/27/12 09:17	

LABORATORY CONTROL SAMPLE: 1035812

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chromium, Hexavalent,Dissolved	mg/L	.1	0.10	103	90-110	

MATRIX SPIKE SAMPLE: 1035814

Parameter	Units	60125938001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chromium, Hexavalent,Dissolved	mg/L	ND	.1	0.049	47	85-115	M1

SAMPLE DUPLICATE: 1036047

Parameter	Units	60125938004 Result	Dup Result	RPD	Max RPD	Qualifiers
Chromium, Hexavalent,Dissolved	mg/L	ND	.005J		20	

QUALIFIERS

Project: KUHLMAN DIECASTING

Pace Project No.: 60125938

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

PRL - Pace Reporting Limit.

RL - Reporting Limit.

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

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

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

M1 Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: KUHLMAN DIECASTING

Pace Project No.: 60125938

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60125938001	GM-10	EPA 3010	MPRP/18924	EPA 6010	ICP/15740
60125938002	GM-8	EPA 3010	MPRP/18924	EPA 6010	ICP/15740
60125938003	GM-15	EPA 3010	MPRP/18924	EPA 6010	ICP/15740
60125938004	GM-13	EPA 3010	MPRP/18924	EPA 6010	ICP/15740
60125938005	GM-12	EPA 3010	MPRP/18924	EPA 6010	ICP/15740
60125938001	GM-10	EPA 3010	MPRP/18937	EPA 6010	ICP/15744
60125938002	GM-8	EPA 3010	MPRP/18937	EPA 6010	ICP/15744
60125938003	GM-15	EPA 3010	MPRP/18937	EPA 6010	ICP/15744
60125938004	GM-13	EPA 3010	MPRP/18937	EPA 6010	ICP/15744
60125938005	GM-12	EPA 3010	MPRP/18937	EPA 6010	ICP/15744
60125938001	GM-10	EPA 7196	WETA/21043		
60125938004	GM-13	EPA 7196	WETA/21043		
60125938001	GM-10	EPA 7196	WETA/21048		
60125938004	GM-13	EPA 7196	WETA/21048		

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: 1 of 1

Section A Required Client Information		Section B Required Project Information		Section C Invoice Information:	
Company	Seagull Environmental Technologies	Report To:	Jeff Pritchard	Attention:	
Address:	415 Oak St	Copy To		Company Name:	
	Kansas City, MO 64106			Address:	
E-mail To	jpritchard@seagullenvirotech.com	Purchase Order No.:		Pace Quote# Reference:	
Phone:	913-220-5887	Project Name:	Kuhlman Diecasting	Pace Project Manager:	MJW
Requested Due Date/TAT:	standard	Project Number:		Pace Profile #:	
				<div style="display: flex; justify-content: space-between;"> <div>Site Location</div> <div>KS</div> </div> <div style="text-align: center;">STATE:</div>	
				<div style="display: flex; justify-content: space-around;"> <input type="checkbox"/> NPDES <input type="checkbox"/> GROUND WATER <input type="checkbox"/> DRINKING WATER <input type="checkbox"/> UST <input type="checkbox"/> RCRA <input type="checkbox"/> OTHER _____ </div>	
				REGULATORY AGENCY	

[illegible][illegible]



Sample Condition Upon Receipt

Client Name: Seagull Env Technology

Project # 60125938

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☒ Client ☐ Commercial ☐ Pace ☐ Other

Tracking #: _____ Pace Shipping Label Used? ☐ Yes ☒ No

Custody Seal on Cooler/Box Present: ☐ Yes ☒ No Seals intact: ☐ Yes ☒ No

Optional

Proj. Due Date: 8/10

Proj. Name: _____

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☐ Foam ☐ None ☒ Other PLC

Thermometer Used: T-191 / T-194

Type of Ice: Wet Blue None ☐ Samples on ice, cooling process has begun

Cooler Temperature: 4.5

Temperature should be above freezing to 6°C

Comments:

Date and Initials of person examining contents: 7/26

Chain of Custody present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody filled out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler name & signature on COC:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples arrived within holding time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Short Hold Time analyses (<72hr):	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	6. <u>Cr +6</u> <u>One dissolved, one total for both samples</u>
Rush Turn Around Time requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	7.
Sufficient volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8.
Correct containers used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
-Pace containers used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Containers intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	10.
Unpreserved 5035A soils frozen w/in 48hrs?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Filtered volume received for dissolved tests	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	12.
Sample labels match COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	13.
-Includes date/time/ID/analyses Matrix: <u>WT</u>		
All containers needing preservation have been checked.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	14.
All containers needing preservation are found to be in compliance with EPA recommendation.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Exceptions: VOA, coliform, TOC, O&G, WI-DRO (water), Phenolics	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Initial when completed _____ Lot # of added preservative _____
Trip Blank present:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	15.
Pace Trip Blank lot # (if purchased): _____		
Headspace in VOA vials (>6mm):	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	16.
Project sampled in USDA Regulated Area:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	17. List State: <u>h</u>

Client Notification/ Resolution:

Copy COC to Client? Y / N

Field Data Required? Y / N

Person Contacted: _____

Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: me

Date: 7/27/12

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

August 13, 2012

Jeff Pritchard
Seagull Environmental Technologies
415 Oak St.
Kansas City, MO 64106

RE: Project: Kuhlman Diecasting
Pace Project No.: 60126042

Dear Jeff Pritchard:

Enclosed are the analytical results for sample(s) received by the laboratory on July 27, 2012. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,



Mary Jane Walls

maryjane.walls@pacelabs.com
PM Lab Management

Enclosures



REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: Kuhlman Diecasting

Pace Project No.: 60126042

Indiana Certification IDs

7726 Moller Road, Indianapolis, IN 46268

Illinois Certification #: 200074

Indiana Certification #: C-49-06

Kansas Certification #: E-10247

Kentucky Certification #: 0042

Louisiana/NELAC Certification #: 04076

Ohio VAP Certification #: CL0065

Pennsylvania Certification #: 68-04991

West Virginia Certification #: 330

Kansas Certification IDs

9608 Loiret Boulevard, Lenexa, KS 66219

A2LA Certification #: 2456.01

Arkansas Certification #: 12-019-0

Illinois Certification #: 002885

Iowa Certification #: 118

Kansas/NELAP Certification #: E-10116

Louisiana Certification #: 03055

Nevada Certification #: KS000212008A

Oklahoma Certification #: 9205/9935

Texas Certification #: T104704407-12-3

Utah Certification #: KS000212012-2

REPORT OF LABORATORY ANALYSIS

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SAMPLE SUMMARY

Project: Kuhlman Diecasting

Pace Project No.: 60126042

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60126042001	GM-5	Water	07/27/12 09:58	07/27/12 17:00
60126042002	GM-7	Water	07/27/12 11:10	07/27/12 17:00
60126042003	BLDG-1-SW	Water	07/27/12 12:48	07/27/12 17:00
60126042004	BLDG-2-SW	Water	07/27/12 13:40	07/27/12 17:00
60126042005	BLDG-1-SED	Solid	07/27/12 12:38	07/27/12 17:00
60126042006	BLDG-2-SED	Solid	07/27/12 13:23	07/27/12 17:00
60126042007	TRIP BLANK WATER	Water	07/27/12 08:00	07/27/12 17:00
60126042008	TRIP BLANK SOIL	Solid	07/27/12 08:00	07/27/12 17:00

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: Kuhlman Diecasting

Pace Project No.: 60126042

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
60126042001	GM-5	EPA 6010	SMW	4	PASI-K
		EPA 6010	SMW	4	PASI-K
		EPA 7196	NDL	1	PASI-K
		EPA 7196	NDL	1	PASI-K
60126042002	GM-7	EPA 6010	SMW	4	PASI-K
		EPA 6010	SMW	4	PASI-K
60126042003	BLDG-1-SW	EPA 8082	NAW	9	PASI-K
		EPA 6010	SMW	4	PASI-K
		EPA 9012A	AJM	1	PASI-K
		EPA 7196	NDL	1	PASI-K
60126042004	BLDG-2-SW	EPA 8082	NAW	9	PASI-K
		EPA 6010	SMW	4	PASI-K
		EPA 9012A	AJM	1	PASI-K
		EPA 7196	NDL	1	PASI-K
60126042005	BLDG-1-SED	EPA 8082	NAW	9	PASI-K
		EPA 6010	SMW	4	PASI-K
		ASTM D2974	DWC	1	PASI-K
		EPA 7196A	TPD	1	PASI-I
60126042006	BLDG-2-SED	EPA 9012A	AJM	1	PASI-K
		EPA 8082	NAW	9	PASI-K
		EPA 6010	SMW	4	PASI-K
		ASTM D2974	DWC	1	PASI-K
		EPA 7196A	TPD	1	PASI-I
		EPA 9012A	AJM	1	PASI-K

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Kuhlman Diecasting

Pace Project No.: 60126042

Sample: GM-5		Lab ID: 60126042001	Collected: 07/27/12 09:58	Received: 07/27/12 17:00	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP		Analytical Method: EPA 6010 Preparation Method: EPA 3010						
Chromium	ND ug/L		5.0	1	08/01/12 13:00	08/02/12 11:40	7440-47-3	
Copper	ND ug/L		10.0	1	08/01/12 13:00	08/02/12 11:40	7440-50-8	
Nickel	ND ug/L		5.0	1	08/01/12 13:00	08/02/12 11:40	7440-02-0	
Zinc	ND ug/L		50.0	1	08/01/12 13:00	08/02/12 11:40	7440-66-6	
6010 MET ICP, Dissolved		Analytical Method: EPA 6010 Preparation Method: EPA 3010						
Chromium, Dissolved	ND ug/L		5.0	1	08/01/12 17:30	08/06/12 15:17	7440-47-3	
Copper, Dissolved	ND ug/L		10.0	1	08/01/12 17:30	08/06/12 15:17	7440-50-8	
Nickel, Dissolved	ND ug/L		5.0	1	08/01/12 17:30	08/06/12 15:17	7440-02-0	
Zinc, Dissolved	ND ug/L		50.0	1	08/01/12 17:30	08/06/12 15:17	7440-66-6	
7196 Chromium, Hexavalent		Analytical Method: EPA 7196						
Chromium, Hexavalent	ND mg/L		0.010	1		07/28/12 09:41	18540-29-9	
7196 Chromium, Hexavalent Diss		Analytical Method: EPA 7196						
Chromium, Hexavalent,Dissolved	ND mg/L		0.010	1		07/28/12 09:51	18540-29-9	

ANALYTICAL RESULTS

Project: Kuhlman Diecasting

Pace Project No.: 60126042

Sample: GM-7		Lab ID: 60126042002	Collected: 07/27/12 11:10	Received: 07/27/12 17:00	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP		Analytical Method: EPA 6010 Preparation Method: EPA 3010						
Chromium	6.8 ug/L		5.0	1	08/01/12 13:00	08/02/12 11:42	7440-47-3	
Copper	14.5 ug/L		10.0	1	08/01/12 13:00	08/02/12 11:42	7440-50-8	
Nickel	15.7 ug/L		5.0	1	08/01/12 13:00	08/02/12 11:42	7440-02-0	
Zinc	ND ug/L		50.0	1	08/01/12 13:00	08/02/12 11:42	7440-66-6	
6010 MET ICP, Dissolved		Analytical Method: EPA 6010 Preparation Method: EPA 3010						
Chromium, Dissolved	ND ug/L		5.0	1	08/01/12 17:30	08/06/12 15:20	7440-47-3	
Copper, Dissolved	ND ug/L		10.0	1	08/01/12 17:30	08/06/12 15:20	7440-50-8	
Nickel, Dissolved	9.8 ug/L		5.0	1	08/01/12 17:30	08/06/12 15:20	7440-02-0	
Zinc, Dissolved	ND ug/L		50.0	1	08/01/12 17:30	08/06/12 15:20	7440-66-6	

ANALYTICAL RESULTS

Project: Kuhlman Diecasting
Pace Project No.: 60126042

Sample: BLDG-1-SW		Lab ID: 60126042003	Collected: 07/27/12 12:48	Received: 07/27/12 17:00	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB		Analytical Method: EPA 8082 Preparation Method: EPA 3510						
PCB-1016 (Aroclor 1016)	ND ug/L		1.1	1	08/01/12 00:00	08/10/12 02:28	12674-11-2	
PCB-1221 (Aroclor 1221)	ND ug/L		1.1	1	08/01/12 00:00	08/10/12 02:28	11104-28-2	
PCB-1232 (Aroclor 1232)	ND ug/L		1.1	1	08/01/12 00:00	08/10/12 02:28	11141-16-5	
PCB-1242 (Aroclor 1242)	ND ug/L		1.1	1	08/01/12 00:00	08/10/12 02:28	53469-21-9	
PCB-1248 (Aroclor 1248)	ND ug/L		1.1	1	08/01/12 00:00	08/10/12 02:28	12672-29-6	
PCB-1254 (Aroclor 1254)	ND ug/L		1.1	1	08/01/12 00:00	08/10/12 02:28	11097-69-1	
PCB-1260 (Aroclor 1260)	ND ug/L		1.1	1	08/01/12 00:00	08/10/12 02:28	11096-82-5	
Surrogates								
Tetrachloro-m-xylene (S)	81 %		36-115	1	08/01/12 00:00	08/10/12 02:28	877-09-8	
Decachlorobiphenyl (S)	71 %		17-122	1	08/01/12 00:00	08/10/12 02:28	2051-24-3	CH
6010 MET ICP		Analytical Method: EPA 6010 Preparation Method: EPA 3010						
Chromium	5.1 ug/L		5.0	1	08/01/12 13:00	08/02/12 11:49	7440-47-3	
Copper	10.3 ug/L		10.0	1	08/01/12 13:00	08/02/12 11:49	7440-50-8	
Nickel	33.2 ug/L		5.0	1	08/01/12 13:00	08/02/12 11:49	7440-02-0	
Zinc	204 ug/L		50.0	1	08/01/12 13:00	08/02/12 11:49	7440-66-6	
9012 Cyanide, Total		Analytical Method: EPA 9012A Preparation Method: EPA 9012A						
Cyanide	ND mg/L		0.0050	1	08/01/12 10:34	08/02/12 09:53	57-12-5	
7196 Chromium, Hexavalent		Analytical Method: EPA 7196						
Chromium, Hexavalent	ND mg/L		0.010	1		07/28/12 09:41	18540-29-9	

ANALYTICAL RESULTS

Project: Kuhlman Diecasting
Pace Project No.: 60126042

Sample: BLDG-2-SW		Lab ID: 60126042004	Collected: 07/27/12 13:40	Received: 07/27/12 17:00	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB		Analytical Method: EPA 8082 Preparation Method: EPA 3510						
PCB-1016 (Aroclor 1016)	ND ug/L		1.1	1	08/01/12 00:00	08/10/12 02:46	12674-11-2	
PCB-1221 (Aroclor 1221)	ND ug/L		1.1	1	08/01/12 00:00	08/10/12 02:46	11104-28-2	
PCB-1232 (Aroclor 1232)	ND ug/L		1.1	1	08/01/12 00:00	08/10/12 02:46	11141-16-5	
PCB-1242 (Aroclor 1242)	ND ug/L		1.1	1	08/01/12 00:00	08/10/12 02:46	53469-21-9	
PCB-1248 (Aroclor 1248)	ND ug/L		1.1	1	08/01/12 00:00	08/10/12 02:46	12672-29-6	
PCB-1254 (Aroclor 1254)	ND ug/L		1.1	1	08/01/12 00:00	08/10/12 02:46	11097-69-1	
PCB-1260 (Aroclor 1260)	ND ug/L		1.1	1	08/01/12 00:00	08/10/12 02:46	11096-82-5	
Surrogates								
Tetrachloro-m-xylene (S)	91 %		36-115	1	08/01/12 00:00	08/10/12 02:46	877-09-8	
Decachlorobiphenyl (S)	74 %		17-122	1	08/01/12 00:00	08/10/12 02:46	2051-24-3	CH
6010 MET ICP		Analytical Method: EPA 6010 Preparation Method: EPA 3010						
Chromium	12.7 ug/L		5.0	1	08/01/12 13:00	08/02/12 11:51	7440-47-3	
Copper	15.9 ug/L		10.0	1	08/01/12 13:00	08/02/12 11:51	7440-50-8	
Nickel	42.2 ug/L		5.0	1	08/01/12 13:00	08/02/12 11:51	7440-02-0	
Zinc	2480 ug/L		50.0	1	08/01/12 13:00	08/02/12 11:51	7440-66-6	
9012 Cyanide, Total		Analytical Method: EPA 9012A Preparation Method: EPA 9012A						
Cyanide	0.022 mg/L		0.0050	1	08/01/12 10:34	08/02/12 09:55	57-12-5	
7196 Chromium, Hexavalent		Analytical Method: EPA 7196						
Chromium, Hexavalent	ND mg/L		0.010	1		07/28/12 09:46	18540-29-9	

ANALYTICAL RESULTS

Project: Kuhlman Diecasting

Pace Project No.: 60126042

Sample: BLDG-1-SED **Lab ID:** 60126042005 **Collected:** 07/27/12 12:38 **Received:** 07/27/12 17:00 **Matrix:** Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB SW Analytical Method: EPA 8082 Preparation Method: EPA 3546								
PCB-1016 (Aroclor 1016)	ND	ug/kg	1180	1	07/31/12 00:00	08/07/12 01:19	12674-11-2	
PCB-1221 (Aroclor 1221)	ND	ug/kg	2360	1	07/31/12 00:00	08/07/12 01:19	11104-28-2	
PCB-1232 (Aroclor 1232)	ND	ug/kg	1180	1	07/31/12 00:00	08/07/12 01:19	11141-16-5	
PCB-1242 (Aroclor 1242)	ND	ug/kg	1180	1	07/31/12 00:00	08/07/12 01:19	53469-21-9	
PCB-1248 (Aroclor 1248)	ND	ug/kg	1180	1	07/31/12 00:00	08/07/12 01:19	12672-29-6	
PCB-1254 (Aroclor 1254)	ND	ug/kg	1180	1	07/31/12 00:00	08/07/12 01:19	11097-69-1	
PCB-1260 (Aroclor 1260)	ND	ug/kg	1180	1	07/31/12 00:00	08/07/12 01:19	11096-82-5	
Surrogates								
Tetrachloro-m-xylene (S)	101	%	34-132	1	07/31/12 00:00	08/07/12 01:19	877-09-8	
Decachlorobiphenyl (S)	85	%	36-131	1	07/31/12 00:00	08/07/12 01:19	2051-24-3	
6010 MET ICP Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Chromium	520	mg/kg	6.2	5	07/31/12 17:10	08/02/12 15:11	7440-47-3	
Copper	530	mg/kg	12.4	5	07/31/12 17:10	08/02/12 15:11	7440-50-8	
Nickel	2560	mg/kg	6.2	5	07/31/12 17:10	08/02/12 15:11	7440-02-0	
Zinc	7060	mg/kg	124	5	07/31/12 17:10	08/02/12 15:11	7440-66-6	
Percent Moisture Analytical Method: ASTM D2974								
Percent Moisture	66.5	%	0.50	1		08/08/12 00:00		
7196 Chromium, Hexavalent Analytical Method: EPA 7196A								
Chromium, Hexavalent	ND	mg/kg	6.0	1	07/31/12 13:42	08/01/12 12:14	18540-29-9	
9012 Cyanide, Total Analytical Method: EPA 9012A Preparation Method: EPA 9012A								
Cyanide	3.3	mg/kg	0.49	1	08/01/12 10:35	08/02/12 10:03	57-12-5	

ANALYTICAL RESULTS

Project: Kuhlman Diecasting
Pace Project No.: 60126042

Sample: BLDG-2-SED **Lab ID:** 60126042006 **Collected:** 07/27/12 13:23 **Received:** 07/27/12 17:00 **Matrix:** Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB SW Analytical Method: EPA 8082 Preparation Method: EPA 3546								
PCB-1016 (Aroclor 1016)	ND	ug/kg	423	1	07/31/12 00:00	08/07/12 01:37	12674-11-2	
PCB-1221 (Aroclor 1221)	ND	ug/kg	845	1	07/31/12 00:00	08/07/12 01:37	11104-28-2	
PCB-1232 (Aroclor 1232)	ND	ug/kg	423	1	07/31/12 00:00	08/07/12 01:37	11141-16-5	
PCB-1242 (Aroclor 1242)	ND	ug/kg	423	1	07/31/12 00:00	08/07/12 01:37	53469-21-9	
PCB-1248 (Aroclor 1248)	ND	ug/kg	423	1	07/31/12 00:00	08/07/12 01:37	12672-29-6	
PCB-1254 (Aroclor 1254)	ND	ug/kg	423	1	07/31/12 00:00	08/07/12 01:37	11097-69-1	
PCB-1260 (Aroclor 1260)	ND	ug/kg	423	1	07/31/12 00:00	08/07/12 01:37	11096-82-5	
Surrogates								
Tetrachloro-m-xylene (S)	102 %		34-132	1	07/31/12 00:00	08/07/12 01:37	877-09-8	
Decachlorobiphenyl (S)	74 %		36-131	1	07/31/12 00:00	08/07/12 01:37	2051-24-3	
6010 MET ICP Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Chromium	106	mg/kg	3.0	5	07/31/12 17:10	08/02/12 15:13	7440-47-3	
Copper	307	mg/kg	5.9	5	07/31/12 17:10	08/02/12 15:13	7440-50-8	
Nickel	233	mg/kg	3.0	5	07/31/12 17:10	08/02/12 15:13	7440-02-0	
Zinc	154000	mg/kg	1190	100	07/31/12 17:10	08/06/12 12:13	7440-66-6	
Percent Moisture Analytical Method: ASTM D2974								
Percent Moisture	38.2	%	0.50	1		08/08/12 00:00		
7196 Chromium, Hexavalent Analytical Method: EPA 7196A								
Chromium, Hexavalent	ND	mg/kg	3.2	1	07/31/12 13:42	08/01/12 12:14	18540-29-9	
9012 Cyanide, Total Analytical Method: EPA 9012A Preparation Method: EPA 9012A								
Cyanide	ND	mg/kg	0.23	1	08/01/12 10:35	08/02/12 10:06	57-12-5	

QUALITY CONTROL DATA

Project: Kuhlman Diecasting

Pace Project No.: 60126042

QC Batch: MPRP/18917

Analysis Method: EPA 6010

QC Batch Method: EPA 3050

Analysis Description: 6010 MET

Associated Lab Samples: 60126042005, 60126042006

METHOD BLANK: 1037482

Matrix: Solid

Associated Lab Samples: 60126042005, 60126042006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chromium	mg/kg	ND	0.50	08/02/12 14:46	
Copper	mg/kg	ND	1.0	08/02/12 14:46	
Nickel	mg/kg	ND	0.50	08/02/12 14:46	
Zinc	mg/kg	ND	10.0	08/02/12 14:46	

LABORATORY CONTROL SAMPLE: 1037483

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chromium	mg/kg	50	49.8	100	80-120	
Copper	mg/kg	50	47.7	95	80-120	
Nickel	mg/kg	50	49.0	98	80-120	
Zinc	mg/kg	50	50.6	101	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1037484

1037485

Parameter	Units	60126107001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chromium	mg/kg	15.1	54.1	55.1	65.4	66.6	93	94	75-125	2	20	
Copper	mg/kg	12.0	54.1	55.1	60.4	62.0	89	91	75-125	3	20	
Nickel	mg/kg	16.3	54.1	55.1	63.7	64.8	88	88	75-125	2	20	
Zinc	mg/kg	40.2	54.1	55.1	87.4	89.8	87	90	75-125	3	20	

QUALITY CONTROL DATA

Project: Kuhlman Diecasting
Pace Project No.: 60126042

QC Batch: MPRP/18924 Analysis Method: EPA 6010
QC Batch Method: EPA 3010 Analysis Description: 6010 MET
Associated Lab Samples: 60126042001, 60126042002, 60126042003, 60126042004

METHOD BLANK: 1037888 Matrix: Water
Associated Lab Samples: 60126042001, 60126042002, 60126042003, 60126042004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chromium	ug/L	ND	5.0	08/02/12 10:59	
Copper	ug/L	ND	10.0	08/02/12 10:59	
Nickel	ug/L	ND	5.0	08/02/12 10:59	
Zinc	ug/L	ND	50.0	08/02/12 10:59	

LABORATORY CONTROL SAMPLE: 1037889

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chromium	ug/L	1000	1020	102	80-120	
Copper	ug/L	1000	982	98	80-120	
Nickel	ug/L	1000	1010	101	80-120	
Zinc	ug/L	1000	1040	104	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1037890 1037891

Parameter	Units	60126151001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chromium	ug/L	0.0091 mg/L	1000	1000	1030	1020	102	101	75-125	0	20	
Copper	ug/L	0.037 mg/L	1000	1000	1020	1020	98	98	75-125	0	20	
Nickel	ug/L	0.0072 mg/L	1000	1000	1010	1010	100	100	75-125	0	20	
Zinc	ug/L	0.057 mg/L	1000	1000	1080	1080	102	102	75-125	0	20	

QUALITY CONTROL DATA

Project: Kuhlman Diecasting
Pace Project No.: 60126042

QC Batch: MPRP/18937 Analysis Method: EPA 6010
QC Batch Method: EPA 3010 Analysis Description: 6010 MET Dissolved
Associated Lab Samples: 60126042001, 60126042002

METHOD BLANK: 1038287 Matrix: Water
Associated Lab Samples: 60126042001, 60126042002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chromium, Dissolved	ug/L	ND	5.0	08/06/12 14:29	
Copper, Dissolved	ug/L	ND	10.0	08/06/12 14:29	
Nickel, Dissolved	ug/L	ND	5.0	08/06/12 14:29	
Zinc, Dissolved	ug/L	ND	50.0	08/06/12 14:29	

LABORATORY CONTROL SAMPLE: 1038288

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chromium, Dissolved	ug/L	1000	1000	100	80-120	
Copper, Dissolved	ug/L	1000	962	96	80-120	
Nickel, Dissolved	ug/L	1000	1000	100	80-120	
Zinc, Dissolved	ug/L	1000	1010	101	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1038289 1038290

Parameter	Units	60125938001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chromium, Dissolved	ug/L	ND	1000	1000	981	991	98	99	75-125	1	20	
Copper, Dissolved	ug/L	ND	1000	1000	956	967	95	97	75-125	1	20	
Nickel, Dissolved	ug/L	ND	1000	1000	971	976	97	97	75-125	1	20	
Zinc, Dissolved	ug/L	ND	1000	1000	978	984	98	98	75-125	1	20	

QUALITY CONTROL DATA

Project: Kuhlman Diecasting

Pace Project No.: 60126042

QC Batch: OEXT/34240

Analysis Method: EPA 8082

QC Batch Method: EPA 3546

Analysis Description: 8082 GCS PCB

Associated Lab Samples: 60126042005, 60126042006

METHOD BLANK: 1037606

Matrix: Solid

Associated Lab Samples: 60126042005, 60126042006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
PCB-1016 (Aroclor 1016)	ug/kg	ND	32.7	08/06/12 23:34	
PCB-1221 (Aroclor 1221)	ug/kg	ND	65.3	08/06/12 23:34	
PCB-1232 (Aroclor 1232)	ug/kg	ND	32.7	08/06/12 23:34	
PCB-1242 (Aroclor 1242)	ug/kg	ND	32.7	08/06/12 23:34	
PCB-1248 (Aroclor 1248)	ug/kg	ND	32.7	08/06/12 23:34	
PCB-1254 (Aroclor 1254)	ug/kg	ND	32.7	08/06/12 23:34	
PCB-1260 (Aroclor 1260)	ug/kg	ND	32.7	08/06/12 23:34	
Decachlorobiphenyl (S)	%	90	36-131	08/06/12 23:34	
Tetrachloro-m-xylene (S)	%	97	34-132	08/06/12 23:34	

LABORATORY CONTROL SAMPLE: 1037607

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
PCB-1016 (Aroclor 1016)	ug/kg	166	169	102	54-129	
PCB-1260 (Aroclor 1260)	ug/kg	166	172	104	62-129	
Decachlorobiphenyl (S)	%			91	36-131	
Tetrachloro-m-xylene (S)	%			101	34-132	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1037608 1037609

Parameter	Units	60126114001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
PCB-1016 (Aroclor 1016)	ug/kg	ND	1980	2240	1340	1620	68	72	41-144	19	35	
PCB-1260 (Aroclor 1260)	ug/kg	ND	1980	2240	2050	2250	104	100	28-156	10	31	
Decachlorobiphenyl (S)	%						78	79	36-131			
Tetrachloro-m-xylene (S)	%						96	97	34-132			

QUALITY CONTROL DATA

Project: Kuhlman Diecasting

Pace Project No.: 60126042

QC Batch: OEXT/34247

Analysis Method: EPA 8082

QC Batch Method: EPA 3510

Analysis Description: 8082 GCS PCB

Associated Lab Samples: 60126042003, 60126042004

METHOD BLANK: 1037802

Matrix: Water

Associated Lab Samples: 60126042003, 60126042004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
PCB-1016 (Aroclor 1016)	ug/L	ND	0.50	08/08/12 12:23	
PCB-1221 (Aroclor 1221)	ug/L	ND	0.50	08/08/12 12:23	
PCB-1232 (Aroclor 1232)	ug/L	ND	0.50	08/08/12 12:23	
PCB-1242 (Aroclor 1242)	ug/L	ND	0.50	08/08/12 12:23	
PCB-1248 (Aroclor 1248)	ug/L	ND	0.50	08/08/12 12:23	
PCB-1254 (Aroclor 1254)	ug/L	ND	0.50	08/08/12 12:23	
PCB-1260 (Aroclor 1260)	ug/L	ND	0.50	08/08/12 12:23	
Decachlorobiphenyl (S)	%	74	17-122	08/08/12 12:23	
Tetrachloro-m-xylene (S)	%	83	36-115	08/08/12 12:23	

LABORATORY CONTROL SAMPLE: 1037803

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
PCB-1016 (Aroclor 1016)	ug/L	2.5	2.4	97	38-130	
PCB-1260 (Aroclor 1260)	ug/L	2.5	2.4	98	39-131	
Decachlorobiphenyl (S)	%			74	17-122	
Tetrachloro-m-xylene (S)	%			84	36-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1037804

1037805

Parameter	Units	60126153003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
PCB-1016 (Aroclor 1016)	ug/L	ND	2.5	2.5	2.5	2.5	99	99	35-144	0	30	
PCB-1260 (Aroclor 1260)	ug/L	ND	2.5	2.5	2.3	2.3	92	91	37-134	2	35	
Decachlorobiphenyl (S)	%						62	59	17-122			CH
Tetrachloro-m-xylene (S)	%						81	78	36-115			

QUALITY CONTROL DATA

Project: Kuhlman Diecasting

Pace Project No.: 60126042

QC Batch: PMST/7563

Analysis Method: ASTM D2974

QC Batch Method: ASTM D2974

Analysis Description: Dry Weight/Percent Moisture

Associated Lab Samples: 60126042005, 60126042006

METHOD BLANK: 1041504

Matrix: Solid

Associated Lab Samples: 60126042005, 60126042006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Percent Moisture	%	ND	0.50	08/08/12 00:00	

SAMPLE DUPLICATE: 1041505

Parameter	Units	60126042005 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	66.5	64.7	3	20	

QUALITY CONTROL DATA

Project: Kuhlman Diecasting
Pace Project No.: 60126042

QC Batch: WET/9801 Analysis Method: EPA 7196A
QC Batch Method: EPA 7196A Analysis Description: 7196 Chromium, Hexavalent
Associated Lab Samples: 60126042005, 60126042006

METHOD BLANK: 773995 Matrix: Solid
Associated Lab Samples: 60126042005, 60126042006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chromium, Hexavalent	mg/kg	ND	2.0	08/01/12 12:14	

LABORATORY CONTROL SAMPLE: 773996

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chromium, Hexavalent	mg/kg	1070	876	82	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 773998 773999

Parameter	Units	60125766004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chromium, Hexavalent	mg/kg	ND	1090	1040	594	498	54	47	75-125	18	20	M3

SAMPLE DUPLICATE: 773997

Parameter	Units	5066656003 Result	Dup Result	RPD	Max RPD	Qualifiers
Chromium, Hexavalent	mg/kg	ND	ND		20	

QUALITY CONTROL DATA

Project: Kuhlman Diecasting

Pace Project No.: 60126042

QC Batch:	WETA/21063	Analysis Method:	EPA 7196
QC Batch Method:	EPA 7196	Analysis Description:	7196 Chromium, Hexavalent
Associated Lab Samples:	60126042001, 60126042003, 60126042004		

METHOD BLANK: 1036456 Matrix: Water

Associated Lab Samples: 60126042001, 60126042003, 60126042004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chromium, Hexavalent	mg/L	ND	0.010	07/28/12 09:40	

LABORATORY CONTROL SAMPLE: 1036457

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chromium, Hexavalent	mg/L	.1	0.10	105	90-110	

MATRIX SPIKE SAMPLE: 1036458

Parameter	Units	60126042001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chromium, Hexavalent	mg/L	ND	.1	0.096	94	85-115	

SAMPLE DUPLICATE: 1036459

Parameter	Units	60126042003 Result	Dup Result	RPD	Max RPD	Qualifiers
Chromium, Hexavalent	mg/L	ND	.007J		20	

QUALITY CONTROL DATA

Project: Kuhlman Diecasting

Pace Project No.: 60126042

QC Batch: WETA/21064

Analysis Method: EPA 7196

QC Batch Method: EPA 7196

Analysis Description: 7196 Chromium, Hexavalent Diss

Associated Lab Samples: 60126042001

METHOD BLANK: 1036463

Matrix: Water

Associated Lab Samples: 60126042001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chromium, Hexavalent,Dissolved	mg/L	ND	0.010	07/28/12 09:49	

LABORATORY CONTROL SAMPLE: 1036464

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chromium, Hexavalent,Dissolved	mg/L	.1	0.10	104	90-110	

MATRIX SPIKE SAMPLE: 1036465

Parameter	Units	60126042001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chromium, Hexavalent,Dissolved	mg/L	ND	.1	0.097	92	85-115	

QUALITY CONTROL DATA

Project: Kuhlman Diecasting

Pace Project No.: 60126042

QC Batch: WETA/21101

Analysis Method: EPA 9012A

QC Batch Method: EPA 9012A

Analysis Description: 9012 Cyanide

Associated Lab Samples: 60126042005, 60126042006

METHOD BLANK: 1037967

Matrix: Solid

Associated Lab Samples: 60126042005, 60126042006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Cyanide	mg/kg	ND	0.15	08/02/12 09:58	

LABORATORY CONTROL SAMPLE: 1037968

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cyanide	mg/kg	3	3.3	110	81-117	

MATRIX SPIKE SAMPLE: 1037969

Parameter	Units	60126114001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Cyanide	mg/kg	0.28	2.9	1.9	55	50-150	

SAMPLE DUPLICATE: 1037970

Parameter	Units	60126042005 Result	Dup Result	RPD	Max RPD	Qualifiers
Cyanide	mg/kg	3.3	ND		20	

QUALITY CONTROL DATA

Project: Kuhlman Diecasting

Pace Project No.: 60126042

QC Batch: WETA/21100

Analysis Method: EPA 9012A

QC Batch Method: EPA 9012A

Analysis Description: EPA 9012 Cyanide

Associated Lab Samples: 60126042003, 60126042004

METHOD BLANK: 1037955

Matrix: Solid

Associated Lab Samples: 60126042003, 60126042004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Cyanide	mg/L	ND	0.0050	08/02/12 09:50	

LABORATORY CONTROL SAMPLE: 1037956

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cyanide	mg/L	.1	0.10	101	81-117	

MATRIX SPIKE SAMPLE: 1037957

Parameter	Units	60126042003 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Cyanide	mg/L	ND	.1	0.11	111	50-150	

SAMPLE DUPLICATE: 1037958

Parameter	Units	60126042004 Result	Dup Result	RPD	Max RPD	Qualifiers
Cyanide	mg/L	0.022	0.0068	105	20	D6

QUALIFIERS

Project: Kuhlman Diecasting
Pace Project No.: 60126042

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

PRL - Pace Reporting Limit.

RL - Reporting Limit.

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

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

TNI - The NELAC Institute.

LABORATORIES

PASI-I Pace Analytical Services - Indianapolis

PASI-K Pace Analytical Services - Kansas City

ANALYTE QUALIFIERS

CH The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.

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

M3 Matrix spike recovery was outside laboratory control limits due to matrix interferences.

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Kuhlman Diecasting

Pace Project No.: 60126042

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60126042005	BLDG-1-SED	EPA 3546	OEXT/34240	EPA 8082	GCSV/12892
60126042006	BLDG-2-SED	EPA 3546	OEXT/34240	EPA 8082	GCSV/12892
60126042003	BLDG-1-SW	EPA 3510	OEXT/34247	EPA 8082	GCSV/12932
60126042004	BLDG-2-SW	EPA 3510	OEXT/34247	EPA 8082	GCSV/12932
60126042005	BLDG-1-SED	EPA 3050	MPRP/18917	EPA 6010	ICP/15733
60126042006	BLDG-2-SED	EPA 3050	MPRP/18917	EPA 6010	ICP/15733
60126042001	GM-5	EPA 3010	MPRP/18924	EPA 6010	ICP/15740
60126042002	GM-7	EPA 3010	MPRP/18924	EPA 6010	ICP/15740
60126042003	BLDG-1-SW	EPA 3010	MPRP/18924	EPA 6010	ICP/15740
60126042004	BLDG-2-SW	EPA 3010	MPRP/18924	EPA 6010	ICP/15740
60126042001	GM-5	EPA 3010	MPRP/18937	EPA 6010	ICP/15744
60126042002	GM-7	EPA 3010	MPRP/18937	EPA 6010	ICP/15744
60126042005	BLDG-1-SED	ASTM D2974	PMST/7563		
60126042006	BLDG-2-SED	ASTM D2974	PMST/7563		
60126042005	BLDG-1-SED	EPA 7196A	WET/9801	EPA 7196A	WET/9805
60126042006	BLDG-2-SED	EPA 7196A	WET/9801	EPA 7196A	WET/9805
60126042003	BLDG-1-SW	EPA 9012A	WETA/21100	EPA 9012A	WET/36347
60126042004	BLDG-2-SW	EPA 9012A	WETA/21100	EPA 9012A	WET/36347
60126042001	GM-5	EPA 7196	WETA/21063		
60126042003	BLDG-1-SW	EPA 7196	WETA/21063		
60126042004	BLDG-2-SW	EPA 7196	WETA/21063		
60126042001	GM-5	EPA 7196	WETA/21064		
60126042005	BLDG-1-SED	EPA 9012A	WETA/21101	EPA 9012A	WETA/21102
60126042006	BLDG-2-SED	EPA 9012A	WETA/21101	EPA 9012A	WETA/21102

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.



Section A Required Client Information: Company: <u>Sergeant Environmental</u> Address: <u>415 Oak St.</u> Kansas City, MO 64106 Email To: <u>sp@sergentenv.com</u> Phone: <u>913-220-5819</u> Requested Due Date/TAT: <u>Standard</u>		Section B Required Project Information: Report To: <u>Jeff Pritchard</u> Copy To: Purchase Order No.: Project Name: <u>Kuhlm Diecasting</u> Project Number:		Section C Invoice Information: Attention: Company Name: Address: Pace Quote Reference: Pace Project Manager: <u>MJW</u> Pace Profile #:	
Regulatory Agency: NPDES <input type="checkbox"/> GROUND WATER <input type="checkbox"/> DRINKING WATER UST <input type="checkbox"/> RCRA <input type="checkbox"/> OTHER		Site Location: STATE: <u>KS</u>		Page: <u>1</u> of <u>1</u> 1553730	

ITEM #	Section D Required Client Information	Matrix Codes MATRIX / CODE	COLLECTED				SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives								Analysis Test ↑ Y/N ↓	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
			COMPOSITE START	COMPOSITE END/GRAB	DATE	TIME			Unpreserved	H ₂ SO ₄	HNO ₃	HCl	NaOH	Na ₂ S ₂ O ₃	Methanol	Other																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
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ADDITIONAL COMMENTS 007-TB H2O - new 008-TB soil - 4/30/12		RELINQUISHED BY / AFFILIATION [Signature]	DATE 7/27	TIME 1200 E	ACCEPTED BY / AFFILIATION E Brackett	DATE 7/27	TIME 1700	SAMPLE CONDITIONS Y N Y	Temp in °C 84	Received on Y	Sealed Cooler Y	Custody Y	Samples Intact Y
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ORIGINAL

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.



Sample Condition Upon Receipt

Client Name: Seagull Env. Project # 00126042

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☒ Client ☐ Commercial ☐ Pace ☐ Other

Tracking #: _____ Pace Shipping Label Used? ☐ Yes ☒ No

Custody Seal on Cooler/Box Present: ☐ Yes ☒ No Seals intact: ☐ Yes ☒ No

Optional
Proj. Due Date: 8/10
Proj. Name: Kuhlman Recycling

Packing Material: ☒ Bubble Wrap ☐ Bubble Bags ☐ Foam ☐ None ☐ Other

Thermometer Used: T-191 / T-194

Type of Ice: Wet Blue None ☐ Samples on ice, cooling process has begun

Cooler Temperature: 13.4

Temperature should be above freezing to 6°C

Comments:

Date and Initials of person examining contents: JS 7/27/12 1715

Chain of Custody present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody filled out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler name & signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples arrived within holding time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Short Hold Time analyses (<72hr):	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	6. <u>Cr¹⁰</u>
Rush Turn Around Time requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	7.
Sufficient volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8.
Correct containers used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
-Pace containers used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Containers intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	10.
Unpreserved 5035A soils frozen w/in 48hrs?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Filtered volume received for dissolved tests	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	12.
Sample labels match COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	13.
-Includes date/time/ID/analyses Matrix: <u>water/soil</u>		
All containers needing preservation have been checked.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	14.
All containers needing preservation are found to be in compliance with EPA recommendation.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Exceptions: VOA, coliform, TOC, O&G, WI-DRO (water), Phenolics	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Initial when completed <u>MP</u> Lot # of added preservative
Trip Blank present: <u>061112-3</u>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	15.
Pace Trip Blank lot # (if purchased): <u>NA</u>		
Headspace in VOA vials (>6mm):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input checked="" type="checkbox"/> N/A	16.
Project sampled in USDA Regulated Area:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	17. List State: _____

Client Notification/ Resolution:

Copy COC to Client? Y / N

Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: mw

Date: 7/30/12

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