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City of Muncie  
300 North High Street  
Muncie, IN 47305

**PREPARED BY:**

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Phase II Environmental Site Assessment  
Former Kiser Plating  
401 East Howard Street  
Muncie, IN 47305



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## **Section 1.0 INTRODUCTION**

### **1.1 PROJECT IDENTIFICATION**

#### **1.1.1 Site Name, Facility Identification Number(S), Mailing Address, and Telephone Number**

The former Kiser Plating facility ("Site") is located at 401 East Howard Street in the City of Muncie, Indiana. The Site consists of one (1) parcel of land described as:

<b>Street Address</b>	<b>Owner Name</b>	<b>Parcel No.</b>	<b>Parcel Description</b>	<b>Lot Size (acres)</b>
401 East Howard Street	Tri-Unity LLC	11-15-118-001	See Legal Description	0.69

Only one (1) building is present on the property, which has been abandoned. No operations are being conducted at the site. The site was issued a site number, BFD4030031, by the Indiana Brownfields Program.

#### **1.1.2 Site Location Map**

The location and layout of the Site is depicted in Figures 1 and 2

#### **1.1.3 Current Owner and Operator, Mailing Address, and Telephone Number**

The current owner of record is Tri-Unity, LLC, P.O. Box 115, Middletown, Indiana 47356. The property is approximately \$21,343.00 delinquent in due property taxes. The property has been listed on past Delaware County Sheriff sales, but the property was not purchased.

#### **1.1.4 Site Contact Person or Group Responsible for the Investigation**

This Site Investigation Report was prepared for the City of Muncie, utilizing funds from the City's United States Environmental Protection Agency (U.S. EPA) Brownfields Site Assessment grant. Implementation of the grant is being administered by the City of Muncie, Office of Community Development.

Contact: Ms. Gretchen Cheesman  
Office of Community Development  
300 N. High Street  
Muncie, Indiana 47305

## **1.2 OVERVIEW OF CURRENT CONTAMINATION CONDITIONS**

No specific spill release was reported to the Indiana Department of Environmental Management (IDEM). However, various environmental assessments have been conducted at the site. No deed or land use restrictions for the site have been identified.

Prior to this site investigation conducted in 2008, results from a limited subsurface investigation conducted for the City of Muncie in March of 2004 indicated that:

- No analyzed constituents were detected that exceeded Risk Integrated System of Closure (RISC) Industrial Default Closure Levels for soil samples.
- Arsenic was detected in soil at concentrations in excess of RISC Residential Default Closure Levels.
- Low level detections of chlorinated solvents (cis-1,2-DCE and TCE) were found in two (2) of three (3) soil samples at the Site as well as trace amounts of barium, total chromium, lead, nickel and zinc.
- Groundwater samples collected at the Site exceeded RISC Industrial Default Closure Levels for arsenic, cadmium, lead, silver, nickel, zinc and trichloroethylene (TCE).

## **Section 2.0**

### **SITE BACKGROUND AND BASELINE PROJECT ASSESSMENT**

#### **2.1 SITE HISTORY**

##### **2.1.1 Current and Past Operations**

The Site is currently abandoned. The City of Muncie has boarded up potential entryways into the one (1) building on Site. The property is used by transient citizens for dumping of general refuse. According to the fire insurance maps and record of ownership, it appears that the property has been used for industrial purposes since 1887. The Muncie Heat and Light Company occupied the site in 1896, and the Kiser Corporation began plating operations at the property prior to 1911 and remained on site until 1999. A fire destroyed all buildings but one (1) building on Site in 2001. It appears as though the Site has been vacant since at least 2001.

Symbiont reviewed available Sanborn Fire Insurance Maps for the Site dated 1887, 1889, 1892, 1896, 1902, 1911, 1945 and 1972. The property is located at the southeast corner of Willow and Chestnut Streets on the 1887 map. A large building is located on the west side of the property and is noted as the Muncie Bagging Company/Warehouse. Other structures are noted as residential dwellings. The rail line is located on the south and east side of the property.

The 1889 map has the property is located at the southeast corner of Willow and Chestnut Streets. A large building is located on the west side of the property and is noted as the Muncie Bagging Company. Other structures are noted as residential dwellings. The rail line is located on the south and east side of the property.

The 1892 map has the property located at the intersection of Chestnut and Willow Streets. A large hay warehouse is located on the west side of the property, with residential dwellings on the north side and the rail line to the south and southeast.

The 1896 map identified the first set of street name changes. Pearl Street became Howard Street, Chestnut Street became Elm Street and Willow Street became Seymour. Muncie Heat, Light and Power Company/Electric Light Station is located along the west side of the property. Residential dwellings are present on the north side and the rail line run along the south and east sides.

The 1902 map identified the Muncie Electric Light Company/Electric Light Station and Muncie Carpet Cleaning Works present on the property, at the southeast corner of Elm and Seymour. The rail line is present to the south and east of the property.

The 1911 map has the property located at the southeast corner of Elm and Howard Streets. Seymour Street is now indicated as Howard. Muncie Jewelry and Plating Works occupy the west side of the property. Residential dwellings are noted on the north end, and the rail line is present on the south and east sides.

The 1945 map identifies the site occupied by the J.F. Kiser Company Plating Works. Rail lines are still present to the south and east of the property.

The 1972 map, an update of the 1954 map, indicated that the site was occupied by the J.F. Kiser Plating Works. A machine shop building is now present over the area that once was the rail line that was present on the south and east sides of the property. This machine shop is the only current building remaining on the property.

### **2.1.2 Hazardous Materials Used or Stored on Site**

Information concerning recent material storage at the site was obtained from the 2008 Phase I ESA completed by Symbiont in July 2008. The Site is currently vacant. Symbiont personnel observed miscellaneous empty chemical containers at the Site during the Site inspection. A complete inventory of chemicals present at the Site was not performed during the Site inspection. The containers potentially included oils, antifreeze, solvent and grease.

Various types of debris are present across the parcel, especially inside the building. Although the property is vacant, the building is open to the general public allowing for dumping and potential shelter. Debris identified inside the building includes, but not limited to, general refuse, broken glass, and cardboard boxes. Numerous unidentified substance containers were observed at the Site during the Site inspection. Most containers appeared to have contained petroleum products such as oils and lubricants.

At least six (6) sumps or vaults are present inside the existing building. Additional vaults could be present as some of the vaults were covered with lumber and not visible in the limited light conditions. A 6-inch deep open concrete drain runs along the north and south side of the building. These drains are not connected. Based on visual inspection, the south side drain appears to flow into the storm sewer and the north drain appears to flow into the sanitary sewer. The actual drainage path was not traced for the purpose of this inspection. An additional buried drain line runs from the center portion of the property, where previous buildings were present, to the sanitary sewer line located on the northwest corner of the existing building. The drain line includes five (5) lid covers for access.

### **2.1.3 Site Ownership and Operational History**

A review of historical City Directories for the Site was completed by American Environmental Corporation (American) during a previous Phase I ESA completed in 1998 for approximately ten (10)-year intervals for the years spanning 1936 through 1986. Symbiont did not verify the results, and the information was accepted as written. The following occupants were reported for the Site:

- 1936 and 1946 – J.F. Kiser Jewelry Company and Kiser Plating Company
- 1956 – Residential, Kiser Plating Company and Howard Industries, Inc. Electro Plating
- 1966 and 1976 – Kiser Corp. and Die Castings, Inc.; Die cast, Inc. Castings; Howard Industries, Inc. Electro Plating; and Markson Manufacturing, Inc. Platers
- 1986 – Kiser Corporation Plating

According to the Indiana Secretary of State records, the Kiser Corporation was administratively dissolved on July 11, 1988. Additionally, the Kiser Corp was administratively dissolved on

November 14, 2002. The property has been listed at the Delaware County Sheriff tax sales due to property tax delinquency, but it has not sold.

#### **2.1.4 Site Spill and Contamination History**

No spill notification reports were reported to IDEM for the facility. Soil and groundwater contamination has been identified at the Site from site investigations conducted to aid in potential redevelopment.

#### **2.1.5 Previously Completed Investigations**

Numerous environmental assessments or investigations have been completed at the Kiser site or included the Kiser property. The assessments/investigations completed by the City of Muncie were conducted to aid in redevelopment of the property.

Symbiont reviewed previous environmental reports for the Site and adjacent area previously completed on behalf of Kiser Corporation and the City of Muncie Office of Community Development. A summary of these assessments is provided.

##### *September 1998*

A Phase I ESA was completed at the Site on behalf of Kiser Corporation by American in September 1998. At the time of the completion of the Phase I ESA, the facility was occupied by the Kiser Corporation and was used to manufacture golf clubs. The building layout is included in Figure 3 of the report. Photographs of the Site are included in Appendix A of the report. The building consisted of a total floor space area of 20,000 square feet and consisted of offices, a manufacturing area, a die casting area, and storage areas. The building consisted of four (4) different structures constructed at different times and joined together. The original building dated back to the 1800s. The building that is still standing today was constructed in 1977.

According to the Phase I ESA, muriatic acid and chromate were located in drums in a containment area. Copper, zinc cyanide, asbestos and hydraulic oils were reportedly previously removed from the Site by Heritage Environmental in 1994 and 1998. Four (4) pole-mounted transformers, owned by American Electric Power (AEP), were identified on the Site. The Site was identified as a Resource Conservation and Recovery Act (RCRA) Small Quantity Generator (SQG) of hazardous waste.

##### *May 1999*

A Phase II ESA was completed at the Site on behalf of Kiser Corporation by "Ken Overby EHS Consultant" in May 1999. Five (5) soil samples were taken at locations south and east of the buildings. The samples were analyzed for RCRA metals and aluminum and zinc. It was concluded that metals were "below EPA limits." "The Kiser Corporation property was found to be within acceptable limits as set by the U.S. EPA for heavy metals. Other environmental concerns were addressed in the Phase I assessment conducted by American Environmental. They concluded that soil contamination was the only significant concern. Therefore, the property would appear to be free of contamination from past industrial usage."



#### *August 2001*

A Phase I ESA was completed on behalf of the City of Muncie Office of Community Development by Alt & Witzig Engineering, Inc. (Alt & Witzig) in August 2001. The Phase I ESA report was completed on the "Mystery District" and included properties north and west of the Site. The Site was located adjacent to these properties. The report concluded that "the potential for the Site to be impacted exists from the adjacent plating facility. Based on the plating facility being present since 1911, the potential for the Site to be impacted exists."

#### *September 2001*

Drilling and sampling was completed on behalf of the City of Muncie Office of Community Development by the Hydrotech Corporation (Hydrotech) in September 2001, the Drilling and Sampling Report was dated September 28, 2001. The subsurface investigation focused on "potential environmental concerns relating to the ongoing industrial operations at the Kiser property." Four (4) soil borings were installed and converted to one-inch diameter groundwater monitoring wells. The borings were completed on properties neighboring the Site on the north side of Howard Street (420 South Elm Street) and the west side of Elm Street (327 East Howard Street). Soil samples were continuously collected using Geoprobe™ methods. Soil samples were logged and field screened with an organic vapor analyzer (OVA). Groundwater samples were collected and analyzed for volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs), 27 metals, and PCBs.

The report concluded that only trace levels of metals (Aluminum, Barium, Boron, Calcium, Iron, Magnesium, Manganese, Potassium, Sodium) were detected in the water samples. No VOCs, SVOCs, or PCBs were detected in any of the samples. The report stated that "even though these levels were found to be relatively low, they could be representative of the forefront of a contaminant plume. In addition, the property of concern is believed to be upgradient of the site specific."

#### *September 2001*

A subsurface investigation was completed on behalf of the City of Muncie Office of Community Development by the Hydrotech Corporation (Hydrotech) in 2001 on the former "Cammack Tool" property located south of and adjacent to the Site. The Drilling and Sampling Report was dated September 28, 2001. The subsurface investigation focused on "potential environmental concerns relating to past industrial operations at the property." Four (4) soil borings were installed on and around the location of the former building. Four (4) soil samples were collected and analyzed for VOCs, toxicity, characteristic, leachate potential (TCLP), SVOCs (TCLP), RCRA metals (TCLP), and PCBs. All results were reported to be below IDEM and EPA threshold criteria.

Groundwater samples were analyzed for VOCs, SVOCs, total metals, and PCBs. Lead, bis (2-Ethylhexyl) phthalate, Arsenic, Chromium, Lead and Nickel was detected above U.S. EPA Maximum Contaminant Levels (MCLs) and/or IDEM RISC Default Closure Levels for Residential and/or Industrial properties.

#### *September 2002-September 2003*

Hydrotech and/or the Muncie Sanitary District (MSD) Bureau of Water Quality (BWQ) performed quarterly monitoring of the wells in 2002 and 2003 in response to the results of the Drilling and

Sampling report summarized above. Select metals were analyzed from each of the monitoring wells during each quarter, along with periodic analysis for VOCs and SVOCs (and/or polyaromatic hydrocarbons (PAHs). The laboratory analytical data included on the tables indicates that:

- The February of 2002 groundwater sample collected north of Kiser indicated concentrations of Arsenic, Cadmium, Chromium, Copper, Nickel and Lead in excess of Risk Integrated System of Closure (RISC) Residential Default Closure Levels. Since that time the metals have shown a steady decline and have dropped below RISC Residential Default Closure Levels.
- There are elevated Cyanide detections as well, although only one appears to have been in excess of RISC Residential Default Closure Levels.
- VOC samples were not collected every quarter.
- In two (2) of three (3) sampling rounds where VOC samples were collected, TCE and cis/trans-1, 2-DCE were detected at concentrations in excess of RISC Residential Default Closure Levels.

#### *March 2004*

Alt & Witzig performed a limited subsurface investigation for the City of Muncie in March of 2004. Fourteen (14) soil borings were completed on the Mystery District properties, and three (3) of the soil borings were completed at the Site adjacent to the floor slab of the former buildings. Soil and groundwater samples were collected and analyzed for RCRA metals plus nickel and zinc, VOCs and/or SVOCs. The laboratory analytical data included on the tables indicates that:

- No analyzed constituents were detected that exceeded RISC Industrial Default Closure Levels for soil samples.
- Arsenic in soil was detected at concentrations in excess of RISC Residential Default Closure Levels.
- Low level detections of chlorinated solvents (cis-1,2-dichloroethylene (DCE) and TCE) were found in two of three soil samples at the Site as well as trace amounts of barium, total chromium, lead, nickel and zinc.
- Groundwater samples collected at the Site exceeded RISC Industrial Default Closure Levels for arsenic, cadmium, lead, silver, nickel, zinc and TCE.

#### *June 2004*

The Indiana Brownfields Program reviewed the Phase I ESA and Phase II Subsurface Investigation documents for the Mystery District.

### **2.1.6 IDEM Comments for Soil**

No soil contamination exceeded the IDEM RISC Industrial Default Closure Levels. Arsenic was the only contaminant that exceeded the RISC Residential Default Closure Levels; however, it was deemed possible that the elevated arsenic concentrations may be naturally occurring and that background sampling may be needed to confirm this.

### **2.1.7 IDEM Comments for Groundwater**

Groundwater samples indicated levels of Arsenic, Cadmium, Lead, Silver, Nickel, Zinc and TCE in excess of RISC Industrial Default Closure Levels at the Site.

### **2.1.8 IDEM Comments on Laboratory Data**

Adequate QA/QC data and analysis was not collected/performed. Specifically:

- Several VOC/SVOC constituents had detection limits exceeding RISC Residential Default Closure Levels.
- Temperature of soil and groundwater samples received at the laboratory was 11.6 degrees Celsius and the VOC samples are considered biased low.
- No matrix spike/matrix spike duplicate samples (MS/MSD) were analyzed as required to determine the validity of the analytical results.
- Therefore, analytical results are considered estimated and can be used for informational purposes only.

Additional sampling was determined to be required. Specifically:

- Metals and pH in surface soil.
- Arsenic background sampling (recommended).
- Groundwater sampling to determine the nature and extent.
- Appropriate QA/QC data/sampling collection/analysis must be collected/performed.

### **2.1.9 Current Status of Site Conditions**

Symbiont completed a Phase I ESA on the Kiser Plating site in July 2008. The assessment was conducted under the City of Muncie U.S. EPA brownfields assessment grant. The Phase I ESA identified the following Recognized Environmental Conditions or Potential Environmental Concerns:

- Historic Site Uses – The Site was actively used for industrial purposes from approximately 1887 to 1990. Site use included plating operations and electrical power generation. The site was previously listed as a small quantity generator (SCG) of hazardous wastes.

- Current Site Conditions – Concrete vaults, which held plating baths, are present inside the Site building. At least six (6) sumps or vaults are present inside the existing building. Previous site environmental reports indicated the presence of metal and solvent impacts to the soil and groundwater on Site. The nature and extent of the identified release remains undefined.
- Miscellaneous Containers – Numerous containers including drums, buckets and plastic jugs containing various petroleum products/hazardous substances were observed inside the Site building during the property walk through.
- Adjacent Railroad Tracks – Railroad tracks were located to the south and east of the Site. The current building is constructed over the former railroad tracks.
- Unknown/Historic Fill-Soil/Fill Piles – Piles of unknown origin were observed in the northeast portion of the Site.
- Building/Construction/Demolition Materials – It is possible that Asbestos Containing Materials (ACMs) and lead-based paint or sealers are present in building materials and/or construction/demolition debris present at the Site.

#### *Potential Chemical(s) of Concern*

Potential chemicals of concern for the Kiser Plating site include trichloroethylene, cis-1,2-DCE zinc, lead, cadmium and total chromium.

## **2.2 GEOGRAPHIC INFORMATION**

The Site is located in Center Township of Delaware County, on the southeast corner of the intersection of East Howard Street and South Elm Street. The Site is located in the northwest quarter of Section 15, Township 20 North, and Range 10 East. The approximate latitude of the Site is 40° 11' 24.5" north and the approximate longitude is 85° 22' 59.8" west. The Universal Transverse Mercator (UTM) is Zone 16, the UTM X coordinate is 637626.8 meters and the UTM Y is 444990.0 meters.

According to the Indiana Geological Survey (IGS) Web site, the Site is located in the "Bluffton Till Plain" of the "Central Till Plain" natural region. The Site is located in the "New Castle Till Plains and Drainageways" physiographic unit.

Ground Surface Elevations on Site: Based on the topographic contours on the United States Geological Survey (USGS) topographic map provided in Figure 1 ground surface at the Site is approximately 948 feet above mean sea level (amsl). According to observations made during the Site visit on June 23, 2008, the Site is relatively flat and has a slight slope downward towards the south.

Ground Surface Elevations in the Site Vicinity: Ground surface elevations within an approximate 1-mile radius of the Site range from approximately 926 to 956 feet amsl. The general slope of the ground surface in the Site vicinity is downward towards the northwest (in the direction of the White River).

The nearest surface water body is the White River, which is located approximately one-half of a mile northwest of the Site. According to the IGS website, the Site is located in the White River/Buck Creek (Lower) Watershed Information regarding the potential for on-site wetlands from the United States Fish and Wildlife Service (USFWS) National Wetland Inventory Map were available for the Site and surrounding area. The nearest documented wetlands are present adjacent to the White River (greater than one-half of a mile northwest of the Site). Symbiont's visual inspection included the search for obvious wetland species, such as cattails or reeds, or obvious wetland conditions, such as standing water or saturated soils. Symbiont did not observe any of these conditions. It should be noted that Symbiont's observations do not represent a wetlands delineation.

The majority of the surface of the Site consists of exposed soil, vegetated, gravel and concrete covered areas. The Site is relatively flat and has a slight slope downward towards the south. A storm sewer drain is located on the property at the southwest corner of the building. The drain appears to be used for collection of roof drainage rather than surface water collection. Surface storm water appears to be predominantly managed by infiltration to the ground.

Federal Emergency Management Agency (FEMA) flood zone data was provided by Environmental Data Resources (EDR) Radius Map Report with Geocheck© provided in the Phase I ESA completed by Symbiont. The nearest flood zones are located adjacent to the White River (greater than one-half of a mile northwest of the Site). The Site does not appear to be located in a flood zone.

## **2.3 GEOLOGIC INFORMATION**

According to the USDA Indiana Soil Survey, the soil at the Site is classified in the Miami Series (MmA). The Miami Series consists of well drained silt loam soils with 0-2 percent slopes. The subsoils are reddish brown, and the lower part is sandy and somewhat gravelly. Gravel and sand at depths of 4-10 feet bgs are also present. Miami soils are low in content of organic matter, a high moisture capacity and moderate permeability.

Soil boring logs from previous subsurface investigations conducted at the Site and in the vicinity of the Site were reviewed. The soil boring logs indicate that subsurface soils are likely predominantly silt and clay with 1-2-foot thick layers of sand and/or gravel.

Surface soil descriptions from U.S. Department of Agriculture (USDA) Soil Conservation Service (SCS), surface soil characteristics consist of reworked native soil and potential fill. Additionally, the native surface soil description, 0 – 8 inches below ground surface (bgs), is dark grayish-brown (10YR 4/2) silt loam, clay loam or silty clay loam.

The dark grayish-brown (10YR 4/2) silt loam, clay loam or silty clay loam is present to a depth of 9 to 13 inches bgs. A heavy silt loam (10YR 5/3) is present from 12 to 16 inches bgs, a yellowish-brown clay loam (10YR 5/4) is present from 16 to 43 inches bgs, a yellowish-brown loam (10YR 5/6) is present from 43 to 45 inches bgs with distinct grayish brown mottles (10YR 5/2), and yellowish-brown stratified coarse silt and very fine sand (10YR 5/4) is present from 45 to 60 inches bgs with light brownish-gray mottles.

Below the surface layer is approximately 12 inches of dark grayish-brown silt loam. The firm subsoil is approximately 24 inches of mainly yellowish-brown silty clay loam and clay loam. The underlying glacial till is light olive brown calcareous loam.

According to IGS, the Site is located within the “Urban Land – Wawaka-Miami” complex and the “Miami-Crosby-Treaty” soil association zone. The Site is located in a zone with 0 to 50 feet of unconsolidated deposits above bedrock.

Well logs for three wells located approximately one quarter of a mile northeast of the Site (Midwest Towel and Linen located at 610 East Main Street South) were obtained on the Indiana Department of Natural Resource (IDNR) online well database. The well logs are included in Appendix A; Figure 3 indicates the well location per the IDNR location map. The well records indicate that bedrock was encountered between 42 and 49 feet bgs (at elevations ranging between 901 and 908 ft amsl). Clay, sand, and gravel layers were identified above the bedrock. The bedrock consisted of limestone and dolomite.

According to IGS and the United States Geological Survey (USGS) Hydrogeological Atlas of Indiana, bedrock beneath the Site is located within the White River Basin and consists of silurian dolomite and limestone from the “Pleasant Mills” formation. The depth to bedrock is anticipated to be from 0 to 50 feet.

The White Water Basin lies within the Tipton Till Plain. This plain is composed of thick glacial deposits with low relief that obscure the underlying bedrock topography. The Pleasant Mills Formation is contained in the Salina Group which is composed of limestone and dolostone interbedded with shale of variable thickness.

According to the USGS, within the White Water Basin there are surficial glacial-drift deposits that yield small quantities of water, carbonate-bedrock aquifers are used for water supply. In the Tipton Till plain, bedrock aquifers consist of fractured limestone of Silurian and Devonian Age.

The Indiana American Water Company provides potable water for the City of Muncie. According to IDEM Office of Water Quality, the majority of the potable water supply for the City comes from surface water intakes on the White River.

According to the Indiana Department of Natural Resources (IDNR), *Ground Water Resources in the White and West Fork White River Basin, Indiana* publication, the aquifer system in the Muncie area is composed of limestone and dolomite with some interbedded shale units. This is the principal bedrock aquifer in the basin and the only bedrock aquifer capable of supporting high-capacity pumping. The yields of large-diameter wells range from 50 to 350 gallons per minute (gpm), but higher-yielding wells may be possible where several feet of sand and gravel directly overlie the bedrock surface. The publication also notes that in the areas where the Silurian and Devonian Carbonates are overlain directly by unconfined sand and gravel outwash, the bedrock is highly susceptible to surface contamination.

Specifically at the Site, the Tipton Till Plain Aquifer system contains sand and gravel lenses that are highly variable in depth and lateral extent. These lenses are confined by variably thick clay or till. The publication states that individual aquifers within this system are usually not extensive, and commonly range from 12 to 14 feet in thickness. Large diameter, high-capacity wells commonly yield from 70 to 300 gpm. This aquifer system is generally considered to have low susceptibility to surface contamination.

## **2.4 ECOLOGIC INFORMATION**

Information regarding the potential for on-site wetlands from the United States Fish and Wildlife Service (USFWS) National Wetland Inventory Map were available for the Site and surrounding area. The nearest documented wetlands are present adjacent to the White River (greater than one-half of a mile northwest of the Site). Symbiont's visual inspection included the search for obvious wetland species, such as cattails or reeds, or obvious wetland conditions, such as standing water or saturated soils. Symbiont did not observe any of these conditions. It should be noted that Symbiont's observations do not represent a wetlands delineation. Only a wetlands delineation, per local, state, and federal regulations, performed by a wetland specialist can confirm the presence, extent, and type of wetlands at a particular site.

Due to the location of the Site in an urban area, there is a low probability of endangered species present. The areas of the Site not under building are covered by concrete foundations from buildings that were present on the site. Flora species encountered at the site is mainly grassy overgrowth that is coming up from the foundation areas.

## **2.5 PRELIMINARY EVALUATION OF POTENTIALLY SUSCEPTIBLE AREAS**

The site is approximately 1.07 miles west of the five (5) year well head protection area and 1.25 miles west of the Indiana American Water drinking water source in the White River. It is not anticipated that concentrations detected at the site would impact these areas.

The White River is located approximately 1.25 miles from the site to the east, west and north as it runs through The City of Muncie. It is not anticipated that concentrations detected at the site would impact the river.

The nearest school is the Friends Memorial School at 418 W. Adams, which is 0.40 miles from the site. The Muncie YMCA is located at 500 S. Albany, 0.13 miles from the site. The closest hospital is Ball Memorial, which is located 1.7 miles from the site. It is not anticipated that concentrations detected at the site would impact these areas.

No ecologically susceptible areas are located in the vicinity of the site.

## **2.6 PRELIMINARY EVALUATION OF POSSIBLE CHEMICALS OF CONCERN**

Based on a review of historical uses of the Site, chemicals of concern would be those associated with electro-plating and die casting. These types of operations were conducted at the site from approximately 1936 to 1986.

Previous assessments at the Site identified the presence of arsenic, cis-1,2-dichloroethylene (DCE), trichloroethylene (TCE), total chromium, lead, nickel and zinc in both soil and groundwater. These constituents were found at concentrations below Risk Integrated System of Closure (RISC) industrial closure levels in soil, but above the closure levels in groundwater.

## **2.7 PRELIMINARY EVALUATION OF POTENTIAL CONTAMINANT TRANSPORT MECHANISMS**

The majority of the surface of the Site consists of exposed soil, vegetated, gravel and concrete covered areas. The Site is relatively flat and may have a slight slope downward towards the south. A storm sewer drain is located on the property at the southwest corner of the building. The drain appears to be used for collection of roof drainage rather than surface water collection. Surface storm water appears to be predominantly managed by infiltration to the ground

Numerous sumps and drains were identified during the Site inspection. A 6-inch deep open concrete drain runs along the north and south side of the building. These drains are not connected. Based on visual inspection, the south side drain appears to flow into the storm sewer and the north drain appears to flow into the sanitary sewer. The actual drainage path was not traced for the purpose of this inspection.

An additional buried drain line runs from the center portion of the property, where previous buildings were present, to the sanitary sewer line located on the northwest corner of the existing building. The drain line includes five lid covers for access.

Groundwater flow on site appears to be influenced by the concrete that covers the majority of the property and fill material present on the northeast portion of the property. Flow is basically to the west; however the potential for a mounding effect is present in the center of the property.

## **2.8 PRELIMINARY EVALUATION OF POTENTIAL HUMAN EXPOSURE PATHWAYS**

Concrete covers more than 90 percent of the Site, limiting the inhalation, ingestion and dermal absorption exposure pathways. The Site is located in an urban area limiting an ecological exposure pathway.



## **Section 3.0 INVESTIGATION RESULTS**

### **3.1 SOIL STRATIGRAPHY**

Based on information collected during installation of the soil borings, soil stratigraphy across the site is generally fill material from 0 to 8 feet bgs consisting of fine sand silt and clay. The 8 to 20 foot bgs horizon appeared to be brown silt and clay with little sand and trace gravel. Soil boring logs are provided in Appendix B. Soil boring locations are provided on Figure 2. North/south and east/west cross sections are provided in Figures 7 and 8.

### **3.2 HORIZONTAL AND VERTICAL EXTENT OF SOIL CONTAMINATION**

Field photoionization detector (PID) readings were measured from discrete and transitional soil horizons. These readings are presented on the Soil Boring Logs in Appendix B and Table 1. In addition, a hydrogen cyanide meter was used to screen the boreholes for the presence of hydrogen cyanide. At times during investigation activities the PID was not working properly, so only limited field screening data is available. The SOW for this investigation was to document field conditions and collect samples for analysis from areas where limited data was available.

A total of ten (10) soil borings were advanced across the site. Table 2, as included in the original approved Scope of Work (SOW), provides justification for the soil boring locations and associated laboratory analysis. Laboratory analytical results for constituents detected in Site soil samples are summarized on Table 3 and Figure 3. The results are evaluated below for each constituent group.

#### *VOCs*

Based on previous investigation results at the Site and in the vicinity of the Site, a soil sample was collected at SB-5 at a depth of 6-7 feet bgs and analyzed for VOCs. TCE was detected at 32.6 mg/kg, Cis-1,2-DCE at 5.39 mg/kg and vinyl chloride at 0.356 mg/kg. These results exceed both the IDEM RISC Residential Default Closure Levels (RDCLs) and Industrial Default Closure Levels (IDCLs). Trans-1,2-DCE was also detected at 4.81 mg/kg, which is above the RDCL but below the IDCL.

#### *PAH Compounds*

A total of 16 individual PAH compounds were detected in one (1) or more of the three (3) soil samples analyzed for PAHs. The concentration of benzo-a-pyrene at SB-6 (4-5 feet bgs) was the only PAH detected above RDCLs; however, this concentration is less than the IDCL.

#### *Metals*

Nine (9) soil samples were submitted for metals analysis. Arsenic, barium, cadmium, chromium, hexavalent chromium, copper, lead, mercury, nickel, and zinc were detected, however only arsenic, cadmium, lead, mercury, and zinc were found exceeding respective RDCLs.

Arsenic concentrations ranged from 4.9 to 9 mg/kg in the nine soil samples, which exceed the RDCL and residential direct contact closure level of 3.9 mg/kg. However, only seven (7) of the nine (9) samples exceeded the IDCL of 5.8 mg/kg. The source of the arsenic is unknown, but due to its widespread presence across the site it is likely attributable predominantly to natural occurrence.

Cadmium was detected in five (5) soil samples; however only three (3) borings, SB-4 (0-2 feet bgs), SB-5 (0-2 feet bgs) and SB-7 (0-1 feet bgs) exhibited concentrations exceeding the RDCL of 7.5 mg/kg. Cadmium levels in those samples were 10.6mg/kg; 68.7 mg/kg and SB-7, 8.8 mg/kg, respectively. The concentration of cadmium was less than the IDCLs in a sample.

Lead was detected in all nine (9) soil samples and ranged in concentration from 20 mg/kg to 133 mg/kg. The concentrations in SB-7 (0-1 feet bgs) and SB-6 (4-5 feet bgs) exceeded the RDCL of 81 mg/kg. The concentration of lead at SB-7 does not exceed the RISC direct contact closure level of 400 mg/kg. The sample horizon for SB-6 was from an area with fill material.

Mercury was detected in two (2) soil samples, SB-4 (0-1 feet bgs) at 0.55 mg/kg and SB-10 (0-2 feet bgs) at 75.8 mg/kg. The sample from SB-10 exceeds both the RDCL (2.1 mg/kg) and the IDCL (32 mg/kg). However, the result does not exceed the RISC direct contact closure level of 100 mg/kg. This sample was collected below an outside vent from the former plating facility.

Zinc was detected in all nine of the soil samples collected and ranged in concentration from 58.4 mg/kg to 10,000 mg/kg. These results are below the RDCL and IDCL of 10,000 mg/kg. The 10,000 mg/kg result was collected from SB-8 (0-2 feet bgs). SB-8 is located just outside of the west door of the former plating facility.

#### *Total Petroleum Hydrocarbons (TPH)*

Three (3) soil samples were analyzed for TPH-DRO/ERO. TPH-DRO was detected in detected in SB-6 (4-5 feet bgs) at 90.7 mg/kg, which exceeds the RDCL of 80 mg/kg. TPH-ERO was detected in SB-6 at 156 mg/kg and SB-7 (0-1 feet bgs) at 135 mg/kg. These results exceed the RDCL of 80 mg/kg, but do not exceed the IDCL of 1,000 mg/kg.

### **3.3 WATER TABLE DEPTH, ELEVATION AND FLOW DIRECTIONS**

Three (3) soil boring locations were converted to monitoring wells, MW-2, MW-9 and MW-10. Water level data collected from the monitoring wells and borings on October 22, 2008 is presented in Table 4. The depth to the water table ranged from 5.12 to 18.98 feet bgs. The water table in the three (3) monitoring wells ranged from 5.92 to 11.81 feet bgs. Groundwater was not encountered in SB-4, located at the center of the site and at a depth of 19.22 feet bgs. It should be noted that the majority of the site is covered with concrete, which is likely creating a mounding effect. Groundwater flow across the site is also likely influenced by the concrete that covers the site. General groundwater flow in the area is to the northwest. A groundwater flow map for the site is presented in Figure 4

### 3.4 LABORATORY ANALYTICAL RESULTS FOR GROUNDWATER

Groundwater samples were collected from seven of the soil borings, including the three (3) monitoring wells. Laboratory analytical results for groundwater samples are summarized on Table 5 and Figure 6. The results are evaluated below for each constituent group.

#### *VOCs*

Groundwater samples were collected from MW-10, SB-06 and MW-2 were analyzed for VOCs... Eight VOCs were detected in the samples. VOCs detected in MW-10 included cis-1,2 DCE at 0.0647 mg/l, below the RDCL of 0.07 mg/l; TCE at 0.112 mg/l, above the RDCL of 0.005 mg/l and the IDCL of 0.0072 mg/l; and vinyl chloride at 0.0571 mg/l, which is above the RDCL of 0.002 mg/l and the IDCL of 0.004 mg/l.

VOCs detected in a groundwater sample from MW-2 included methylene chloride at 0.324 mg/l, which is above the RDCL of 0.005 mg/l. Methylene Chloride is a common laboratory artifact and may be present in the samples from the analysis process. The only other groundwater sample with methylene chloride is the MW-2 duplicate sample. Tetrachloroethene (PCE) was also detected at 0.007 mg/l in MW-2, which exceeds the RDCL of 0.005 mg/l. 1,1-Dichloroethene was detected at 0.0084 mg/l, above the RDCL of 0.007 mg/l. TCE was detected at 4.96 mg/l, above the IDCL of 0.0072 mg/l. Vinyl was detected at 0.0025 mg/l, above the RDCL of 0.002 mg/l.

#### *Metals*

Groundwater samples for metals were collected for both total metals and dissolved metals (field filtered) from MW-2, SB-5, SB-6, MW-9 and MW-10.

Eight (8) metals were detected in the groundwater samples from MW-2, those exceeding the RDCL or IDCL include: Arsenic in both the filtered and unfiltered samples at 0.0149 mg/l and 0.0179 mg/l respectively. These results exceeded the RDCL of 0.01 mg/l; copper in both the filtered and unfiltered samples at 351 mg/l and 329 mg/l respectively. The IDCL for copper is 4.1 mg/l; Lead in both filtered and unfiltered samples at 0.0323 mg/l and 0.0276 mg/l. The RDCL for lead is 0.015 mg/l; Nickel was identified in both samples at 18.5 mg/l and 15.7 mg/l which exceed the IDCL of 2 mg/l.

Three metals were detected in the filtered samples collected from SB-5: chromium at 0.172 mg/l, above the RDCL of 0.1 mg/l; copper at 0.0455 mg/l, below the RDCL of 1.3 mg/l; and nickel at 0.243 mg/l, below the RDCL of 0.73 mg/l.

Six (6) metals were detected in SB-6, barium, chromium, copper, lead and zinc. Only lead in the unfiltered sample at .032 mg/l exceeded the RDCL of 0.015 mg/l. The field filtered sample analytical result was <0.005 mg/l.

No metals were detected in the filtered sample collected from MW-9.

Three (3) metals were detected in MW-10; barium, copper and zinc. Only zinc was present in both the filtered and unfiltered samples. No samples exceed the RDCLs.

### *PAHs*

Three (3) samples were collected for analysis of PAH compounds. All results for this analysis were below detection levels.

## **Section 4.0**

### **CONCLUSIONS AND RECOMMENDATIONS**

One of the initial goals of the sampling plan for this investigation was to identify potential metal impacts to the surface soil and the extent of VOC impacts in groundwater. Surface soil impacts identified during this investigation include cadmium and arsenic in limited areas at the site. Zinc, chromium, and lead were also identified, but at concentrations below the residential direct contact levels.

Impacts to the groundwater included VOCs at the northern portion of the Site, which parallels the VOC levels identified in the previous investigation conducted north of the Site. The concentrations of TCE and vinyl chloride detected in the monitoring wells on the north and south sides of the Site seem to indicate that impacts detected in MW-10 are from the plume identified north of the site.

Final redevelopment land use is still being planned at this time. In the event that property reuse will be residential, limited soil removal during concrete removal would be warranted to limit exposure to metals identified in the surface soil. Considerations in developing any remedial plan for the Site would include the footprint for any building, parking lots, and landscaped areas. The fill material identified on the northeast portion of the site would also need to be addressed during discussions on redevelopment, this approach would also remediate the subsurface impacts, TPH and PAHs, identified in this area.

Potential risks associated with the concentrations detected at the site include direct contact with the small area where cadmium was identified in the surface soil, however presently this area is under concrete. The impacts to groundwater present the greatest potential risk; however, groundwater is not used in the area due to the availability of the municipal water supply. The site is in an urban area, so ecological risks are not present.

## **Section 5.0 REFERENCES**

American Society for Testing and Materials, "Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process," ASTM Designation E 1527-05, published September 2006.

Alt & Witzig Engineering, Inc., "Phase I Environmental Assessment Mystery District", August 2, 2001.

Alt & Witzig Engineering, Inc., "Phase II Subsurface Investigation Mystery District", March 15, 2004.

American Environmental, "Phase I Environmental Site Assessment Kiser Corporation", September 28, 1998.

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Environmental Data Resources, The EDR Radius Map with Geocheck®, Former Car Doctors Site – 1004 South Burlington, Muncie, IN 47302; Inquiry No. 2239444, June 9, 2008.

The Hydrotech Corporation, "Drilling and Sampling Report Mystery District Properties", September 28, 2001.

Muncie Sanitary District, "Monitoring Well Results from Community Development Wells near S. Howard and E. Elm Streets", September 24, 2003.

Symbiont, "Phase I Environmental Assessment Former Kiser Plating", June 23, 2008.

### **Web Sites**

Delaware County – <http://www.co.delaware.in.us/>

Indiana Department of Natural Resources – [http://www.in.gov/gis-dnr-web/website/DNR\\_WaterWells\\_II/viewer.htm](http://www.in.gov/gis-dnr-web/website/DNR_WaterWells_II/viewer.htm)

Indiana Geological Survey GIS Atlas of Indiana – <http://igs.indiana.edu/>

Live Search Maps – <http://maps.live.com/>

Yahoo Maps – <http://www.yahoo.com/>

## TABLES

Table 1  
Field Screening Results  
Former Kiser Plating Facility  
Phase II Environmental Site Assessment  
401 E. Howard  
Muncie, Indiana

Soil Boring Screening Sample/Depth in feet bgs	PID Result	Four Gas Meter	Hydrogen Cyanide Meter
SB-1 (0-4)	NA	ND	ND
SB-1 (4-8)	NA	ND	ND
SB-1 (8-12)	NA	ND	ND
SB-1 (12-16)	NA	ND	ND
SB-2 (0-4)	NA	ND	ND
SB-2 (4-8)	NA	ND	ND
SB 2 (8-12)	NA	ND	ND
SB-2 (12-16)	NA	ND	ND
SB-2 (16-20)	NA	ND	ND
SB-3 (0-4)	NA	ND	ND
SB-3 (4-8)	NA	ND	ND
SB 3 (8-12)	NA	ND	ND
SB-3 (12-16)	NA	ND	ND
SB-3 16-20)	NA	ND	ND
SB-4 (0-4)	0.00	ND	ND
SB-4 (4-8)	0.00	ND	ND
SB 4 (8-12)	0.00	ND	ND
SB-4 (12-16)	0.00	ND	ND
SB-4 (16-20)	0.00	ND	ND
SB-5 (0-4)	NA	ND	ND
SB-5 (4-8)	NA	ND	ND
SB 5 (8-12)	NA	ND	ND
SB-5 (12-16)	NA	ND	ND
SB-5 (16-20)	NA	ND	ND
SB-5 (0-4)	NA	ND	ND
SB-5 (4-8)	NA	ND	ND
SB 5 (8-12)	NA	ND	ND
SB-5 (12-16)	NA	ND	ND
SB-5 (16-20)	NA	ND	ND

Notes:

Data collected October 22, 2008

SB - Soil Boring

bgs - below ground surface

NA - Not Analyzed

ND - Not Detected

PID - Photoionization Detector



TABLE 2  
PROPOSED FIELD AND LABORATORY ANALYSES FOR SOIL  
FORMER KISER PLATING - 401 EAST HOWARD STREET  
SITE SPECIFIC SAMPLING AND ANALYSIS PLAN  
MUNCIE, INDIANA

Site ID	Est. Borehole Depth (ft)	Rationale for Boring	Constituent of Concern; Analytical Method; Sample Depth, Frequency, and/or Rationale for Sample Selection								
			VOCs		Metals			Free Cyanide	PAHs	TPH - GRO	TPH - ERO
			PID Field Screening	Lab Analysis 5035A	RCRA Metals	Ni, Cu, and Zn	Hex Chrome	Lab Analysis 9010	Lab Analysis 8270 SIM	Lab Analysis 8015	Lab Analysis 8015
Lab Analysis 6010	Lab Analysis 6010	Lab Analysis 7196									
SB-1	20	Evaluate conditions on the northeastern portion of the Site.	Field screen soil at all boring locations for VOCs at discrete soil horizons or on 2-foot intervals.	Analyze select soil samples having the highest PID field readings. At locations with significant VOC impacts in multiple samples (based on field PID readings), additional samples may be analyzed from the suspected base of the contamination.					Analyze up to 5 samples with evidence of fill, petroleum staining and/or free product.	Analyze up to 3 samples with evidence of petroleum staining and/or free product	Analyze up to 3 samples with evidence of petroleum staining and/or free product.
SB-2		Evaluate conditions on the north-central portion of the Site, near B-13									
SB-3		Evaluate conditions on the northwestern portion of the Site.									
SB-4		Evaluate conditions adjancet to and north/west of former building.			One sample per boring to be collected from near-surface soil or from fill material	One sample per boring to be collected from near-surface soil or from fill material					
SB-5		Evaluate conditions beneath former building slab.					1 smpl. from same horiz. as RCRA smpl.				
SB-6		Evaluate conditions adjacent to and east of the former building.									
SB-7		Evaluate conditions near southwest corner of former building foudnaiton and near the former soil boring locaiton 4.									
SB-8		Evaluate conditions near B-12 and adjacent to the exisiting plating building						1 sample from near-surface soil			
SB-9		Evaluate conditions adjacent to and east of the existing plating building.			1 smpl. from same horiz. as RCRA smpl.	1 sample from near-surface soil					
SB-10		Evaluate conditions adjacent to and south of the existing plating building.			1 smpl. from same horiz. as RCRA smpl.	1 sample from near-surface soil					
ESTIMATED TOTAL NUMBER OF INVESTIGATIVE SAMPLES			NA	5	7	7	3	3	5	3	3
MS	Matrix Spike	Verify laboratory techniques	0	0	1	1	0	0	1	0	0
MSD	Matrix Spike Dup	Verify laboratory techniques	0	0	1	1	0	0	1	0	0
TB-1	Trip Blank	Verify that proper handling procedures were followed.	0	1	0	0	0	0	0	0	0
SB-#-FD-1	Field Duplicate	Assess the quality of the data and collection techniques.	0	1	1	1	1	1	1	1	1
ESTIMATED TOTAL NUMBER OF QUALITY ASSURANCE/QUALITY CONTROL SAMPLES			0	2	3	3	1	1	3	1	1

Notes:

DRO = diesel range organics  
ERO = extended range organics  
PAH = polynuclear aromatic hydrocarbon  
PID = photoionization detector

SIM = selected ion monitoring  
TPH = total petroleum hydrocarbon  
VOC = volatile organic compound

TABLE 3  
ANALYTICAL SOIL DATA  
KISER PLATING  
MUNCIE, INDIANA

Group and Lab Method	Constituent	Unit of Measure	IDEM RISC Residential Con- struction Closure Level (mg/kg)	IDEM RISC Residential Direct Contact Closure Level (mg/kg)	IDEM RISC Residential Migration to GW Closure Level (mg/kg)	IDEM RISC Residential Default Closure Level (mg/kg)	IDEM RISC Industrial Default Closure Level (mg/kg)	Site Location, Sample ID, Lab Sample ID, Sample Date, Sample Depth (Feet Below Ground Surface)					
								3_SB-7-(0.0-1.0)	3_SB-8-(0.0-2.0)	3_SB-9-(0.0-2.0)	3_SB-5-(0.0-2.0)	3_SB-6-(4-5)	3_SB-9-(0.0-2.0)
								5020073001	5020073002	502007003	5020073004	5020056005	5020073006
								10/21/2008	10/21/2008	10/21/2008	10/21/2009	10/21/2009	10/21/2009
								(0.0-1.0)	(0.0-2.0)	(0.0-2.0)	(0.0-2.0)	(4.0-5.0)	(0.0-2.0)
								Measured Concentrations					
VOCs (5035/8260)	Trichloroethene <sup>1</sup>	(mg/kg)	210	4.9	0.057	0.057	0.35	n/a	n/a	n/a	n/a	n/a	n/a
	Toluene	(mg/kg)	49000	8800	12	12	96	n/a	n/a	n/a	n/a	n/a	n/a
	1,1-Dichloroethene	(mg/kg)	2200	310	0.058	0.058	42	n/a	n/a	n/a	n/a	n/a	n/a
	cis-1,2-Dichloroethene	(mg/kg)	750	110	0.4	0.4	0.58	n/a	n/a	n/a	n/a	n/a	n/a
	trans-1,2-Dichloroethene	(mg/kg)	1200	180	0.68	0.68	14	n/a	n/a	n/a	n/a	n/a	n/a
	Vinyl chloride	(mg/kg)	250	1.5	0.013	0.013	0.027	n/a	n/a	n/a	n/a	n/a	n/a
Metals (6010)	Arsenic	(mg/kg)	320	3.9	5.8	3.9	5.8	6.3	4.9	n/a	6.6	8.5	5.8
	Barium	(mg/kg)	220000	63000	1600	1600	10000	73.7	39.9	n/a	71.6	336	57.6
	Cadmium	(mg/kg)	590	12	7.5	7.5	77	8.8	2.4	n/a	68.7	2.6	n/a
	Chromium	(mg/kg)	1000000	520000	1000000	10000	10000	138	51.7	n/a	73.9	125	41.2
	Hexavalent Chromium (7196)	(mg/kg)	3400	430	38	38	120	n/a	n/a	< 5.5	n/a	n/a	< 5.8
	Copper	(mg/kg)	42000	13000	580	580	1700	232	126	n/a	102	129	61.2
	Lead	(mg/kg)	970	400	81	81	230	133	57.6	n/a	20	123	41.8
	Mercury (method 7471)	(mg/kg)	340	100	2.1	2.1	32	< 0.35	< 0.37	n/a	< 0.39	< 0.46	< 0.40
	Nickel	(mg/kg)	23000	6900	950	950	2700	284	211	n/a	43.9	56.4	21.1
	Selenium	(mg/kg)	5700	1700	5.2	5.2	53	< 2.0	< 2.0	n/a	n/a	< 2.7	< 2.2
	Silver	(mg/kg)	5700	1700	31	31	87	< 2.0	< 2.0	n/a	n/a	< 2.7	< 2.2
	Zinc	(mg/kg)	340000	100000	14000	10000	10000	4760	10000	n/a	59.7	1770	791
PAHs (8270 SIM)	Acenaphthene	(mg/kg)	50000 <sup>2</sup>	9500 <sup>2</sup>	130 <sup>2</sup>	130 <sup>2</sup>	1800 <sup>2</sup>	< 0.0265	n/a	n/a	n/a	< 0.0518	n/a
	Acenaphthylene	(mg/kg)	5900	1100	18	18	180	0.0605	n/a	n/a	n/a	0.292	n/a
	Anthracene	(mg/kg)	250000 <sup>2</sup>	47000 <sup>2</sup>	2700 <sup>2</sup>	2000 <sup>2</sup>	2000 <sup>2</sup>	0.0871	n/a	n/a	n/a	0.419	n/a
	Benzo(a)anthracene	(mg/kg)	790	5	19	5	15	0.348	n/a	n/a	n/a	0.913	n/a
	Benzo(a)pyrene	(mg/kg)	79	0.5	8.2	0.5	1.5	0.356	n/a	n/a	n/a	0.766	n/a
	Benzo(b)fluoranthene	(mg/kg)	790 <sup>2</sup>	5 <sup>2</sup>	59 <sup>2</sup>	5 <sup>2</sup>	15 <sup>2</sup>	0.472	n/a	n/a	n/a	0.631	n/a
	Benzo(g,h,i)perylene	(mg/kg)	NE	NE	NE	NE	NE	0.275	n/a	n/a	n/a	0.439	n/a
	Benzo(k)fluoranthene	(mg/kg)	7900 <sup>2</sup>	50 <sup>2</sup>	590 <sup>2</sup>	50 <sup>2</sup>	150 <sup>2</sup>	0.344	n/a	n/a	n/a	0.689	n/a
	Chrysene	(mg/kg)	79000 <sup>2</sup>	500 <sup>2</sup>	1900 <sup>2</sup>	500 <sup>2</sup>	1500 <sup>2</sup>	0.419	n/a	n/a	n/a	0.891	n/a
	Dibenz(a,h)anthracene	(mg/kg)	79	0.5	18	0.5	1.5	0.135	n/a	n/a	n/a	0.19	n/a
	Fluoranthene	(mg/kg)	33000 <sup>2</sup>	6300 <sup>2</sup>	6400 <sup>2</sup>	2000 <sup>2</sup>	2000 <sup>2</sup>	0.621	n/a	n/a	n/a	2.82	n/a
	Fluorene	(mg/kg)	33000 <sup>2</sup>	6300 <sup>2</sup>	170 <sup>2</sup>	170 <sup>2</sup>	2000 <sup>2</sup>	< 0.0265	n/a	n/a	n/a	0.14	n/a
	Indeno(1,2,3-cd)pyrene	(mg/kg)	790 <sup>2</sup>	5 <sup>2</sup>	170 <sup>2</sup>	5 <sup>2</sup>	15 <sup>2</sup>	0.264	n/a	n/a	n/a	0.405	n/a
	2-Methylnaphthalene	(mg/kg)	3300	630	3.1	3.1	42	0.461	n/a	n/a	n/a	0.0579	n/a
	Naphthalene	(mg/kg)	17000	3200	0.7	0.7	170	0.294	n/a	n/a	n/a	0.165	n/a
	Phenanthrene	(mg/kg)	2500	470	13	13	170	0.388	n/a	n/a	n/a	1.51	n/a
	Pyrene	(mg/kg)	25000 <sup>2</sup>	4700 <sup>2</sup>	4600 <sup>2</sup>	2000 <sup>2</sup>	2000 <sup>2</sup>	0.526	n/a	n/a	n/a	1.68	n/a
Free Cyanide (9014)	Cyanide	(mg/kg)	23000	6900	950	950	2700	n/a	< 0.54	< 0.55	n/a	n/a	< 0.58
GCS THC (8015)	TPH-Diesel	(mg/kg)	NE	NE	NE	80	1,000	70.7	n/a	n/a	n/a	90.7	n/a
TPH ERO (8015M)	TPH-ERO	(mg/kg)	NE	NE	NE	80	1000	135	n/a	n/a	n/a	156	n/a

TABLE 3  
ANALYTICAL SOIL DATA  
KISER PLATING  
MUNCIE, INDIANA

Group and Lab Method	Constituent	Unit of Measure	IDEM RISC Residential Construction Closure Level (mg/kg)	IDEM RISC Residential Direct Contact Closure Level (mg/kg)	IDEM RISC Residential Migration to GW Closure Level (mg/kg)	IDEM RISC Residential Default Closure Level (mg/kg)	IDEM RISC Industrial Default Closure Level (mg/kg)	Site Location, Sample ID, Lab Sample ID, Sample Date, Sample Depth (Feet Below Ground Surface)					
								3_SB-10-(0.0-2.0)	3_SB-5-(6.0-7.0)	3_SB-4-(0.0-1.0)	3_SB-4-(0.0-1.0) DUP	3_SB-5-(6.0-7.0)	3_SB-3-(0.0-1.0)
								5020073007	5020073008	5020073009	5020073010	5020073011	5020073012
								10/21/2009	10/21/2009	10/21/2009	10/21/2008	10/21/2009	10/21/2009
								(0.0-2.0)	(6.0-7.0)	(0.0-1.0)	(0.0-1.0)	(6.0-7.0)	(0.0-1.0)
								Measured Concentrations					
VOCs (5035/8260)	Trichloroethene <sup>1</sup>	(mg/kg)	210	4.9	0.057	0.057	0.35	n/a	n/a	n/a	n/a	32.6	n/a
	Toluene	(mg/kg)	49000	8800	12	12	96	n/a	n/a	n/a	n/a	0.0068	n/a
	1,1-Dichloroethene	(mg/kg)	2200	310	0.058	0.058	42	n/a	n/a	n/a	n/a	0.045	n/a
	cis-1,2-Dichloroethene	(mg/kg)	750	110	0.4	0.4	0.58	n/a	n/a	n/a	n/a	5.39	n/a
	trans-1,2-Dichloroethene	(mg/kg)	1200	180	0.68	0.68	14	n/a	n/a	n/a	n/a	4.81	n/a
	Vinyl chloride	(mg/kg)	250	1.5	0.013	0.013	0.027	n/a	n/a	n/a	n/a	0.356	n/a
Metals (6010)	Arsenic	(mg/kg)	320	3.9	5.8	3.9	5.8	7.8	n/a	7.8	9	n/a	8.4
	Barium	(mg/kg)	220000	63000	1600	1600	10000	76.7	n/a	73.9	89.5	n/a	110
	Cadmium	(mg/kg)	590	12	7.5	7.5	77	< 2.0	n/a	< 2.3	10.6	n/a	n/a
	Chromium	(mg/kg)	1000000	520000	1000000	10000	10000	24	n/a	44.1	96.3	n/a	13.8
	Hexavalent Chromium (7196)	(mg/kg)	3400	430	38	38	120	< 5.6	n/a	n/a	n/a	n/a	n/a
	Copper	(mg/kg)	42000	13000	580	580	1700	24	n/a	123	422	n/a	30.4
	Lead	(mg/kg)	970	400	81	81	230	62.2	n/a	26.5	44.3	n/a	61.6
	Mercury (method 7471)	(mg/kg)	340	100	2.1	2.1	32	75.8	n/a	0.55	< 0.43	n/a	n/a
	Nickel	(mg/kg)	23000	6900	950	950	2700	25.6	n/a	32.2	95.5	n/a	28.4
	Selenium	(mg/kg)	5700	1700	5.2	5.2	53	< 2.0	n/a	< 2.3	< 2.3	n/a	n/a
	Silver	(mg/kg)	5700	1700	31	31	87	< 2.0	n/a	< 2.3	< 2.3	n/a	n/a
	Zinc	(mg/kg)	340000	100000	14000	10000	10000	378	n/a	58.4	99.3	n/a	184
PAHs (8270 SIM)	Acenaphthene	(mg/kg)	50000 <sup>2</sup>	9500 <sup>2</sup>	130 <sup>2</sup>	130 <sup>2</sup>	1800 <sup>2</sup>	n/a	< 28.1	n/a	n/a	n/a	n/a
	Acenaphthylene	(mg/kg)	5900	1100	18	18	180	n/a	< 28.1	n/a	n/a	n/a	n/a
	Anthracene	(mg/kg)	250000 <sup>2</sup>	47000 <sup>2</sup>	2700 <sup>2</sup>	2000 <sup>2</sup>	2000 <sup>2</sup>	n/a	< 28.1	n/a	n/a	n/a	n/a
	Benzo(a)anthracene	(mg/kg)	790	5	19	5	15	n/a	< 28.1	n/a	n/a	n/a	n/a
	Benzo(a)pyrene	(mg/kg)	79	0.5	8.2	0.5	1.5	n/a	< 28.1	n/a	n/a	n/a	n/a
	Benzo(b)fluoranthene	(mg/kg)	790 <sup>2</sup>	5 <sup>2</sup>	59 <sup>2</sup>	5 <sup>2</sup>	15 <sup>2</sup>	n/a	< 28.1	n/a	n/a	n/a	n/a
	Benzo(g,h,i)perylene	(mg/kg)	NE	NE	NE	NE	NE	n/a	< 28.1	n/a	n/a	n/a	n/a
	Benzo(k)fluoranthene	(mg/kg)	7900 <sup>2</sup>	50 <sup>2</sup>	590 <sup>2</sup>	50 <sup>2</sup>	150 <sup>2</sup>	n/a	< 28.1	n/a	n/a	n/a	n/a
	Chrysene	(mg/kg)	79000 <sup>2</sup>	500 <sup>2</sup>	1900 <sup>2</sup>	500 <sup>2</sup>	1500 <sup>2</sup>	n/a	< 28.1	n/a	n/a	n/a	n/a
	Dibenz(a,h)anthracene	(mg/kg)	79	0.5	18	0.5	1.5	n/a	< 28.1	n/a	n/a	n/a	n/a
	Fluoranthene	(mg/kg)	33000 <sup>2</sup>	6300 <sup>2</sup>	6400 <sup>2</sup>	2000 <sup>2</sup>	2000 <sup>2</sup>	n/a	< 28.1	n/a	n/a	n/a	n/a
	Fluorene	(mg/kg)	33000 <sup>2</sup>	6300 <sup>2</sup>	170 <sup>2</sup>	170 <sup>2</sup>	2000 <sup>2</sup>	n/a	< 28.1	n/a	n/a	n/a	n/a
	Indeno(1,2,3-cd)pyrene	(mg/kg)	790 <sup>2</sup>	5 <sup>2</sup>	170 <sup>2</sup>	5 <sup>2</sup>	15 <sup>2</sup>	n/a	< 28.1	n/a	n/a	n/a	n/a
	2-Methylnaphthalene	(mg/kg)	3300	630	3.1	3.1	42	n/a	< 28.1	n/a	n/a	n/a	n/a
	Naphthalene	(mg/kg)	17000	3200	0.7	0.7	170	n/a	< 28.1	n/a	n/a	n/a	n/a
	Phenanthrene	(mg/kg)	2500	470	13	13	170	n/a	< 28.1	n/a	n/a	n/a	n/a
	Pyrene	(mg/kg)	25000 <sup>2</sup>	4700 <sup>2</sup>	4600 <sup>2</sup>	2000 <sup>2</sup>	2000 <sup>2</sup>	n/a	< 28.1	n/a	n/a	n/a	n/a
Free Cyanide (9014)	Cyanide	(mg/kg)	23000	6900	950	950	2700	< 0.56	n/a	n/a	n/a	n/a	n/a
GCS THC (8015)	TPH-Diesel	(mg/kg)	NE	NE	NE	80	1,000	n/a	< 11.2	n/a	n/a	n/a	n/a
TPH ERO (8015M)	TPH-ERO	(mg/kg)	NE	NE	NE	80	1000	n/a	< 11.2	n/a	n/a	n/a	n/a

TABLE 4  
Survey and Groundwater Level Measurements  
Former Kiser Plating Facility  
401 E. Howard  
Muncie, Indiana  
October 22, 2008  
Phase II ESA

Boring/Well	Elevation of the Top of the Well Casing (ft amsl) <sup>(1)</sup>	Elevation of the Top of the Ground (ft amsl) <sup>(1)</sup>	Depth to Bottom of Well (ft below TOC)	Depth to Water (ft below TOC)	Depth to Water (10/22/08) (ft bgs)	Elevation of Water Table (10/22/2008) (ft amsl) <sup>(1)</sup>
1			20.05	20.00	20.3	
2			14.94	5.85	5.92	
3			19.94	5.07	5.12	
4			19.22	Dry	Dry	
5			15.30	9.8	10.02	
6			14.86	7.11	7.3	
7			19.87	18.88	18.98	
8			19.93	10.29	10.32	
9			14.75	11.81	11.81	
10			15.02	5.64	5.71	

Note:

(1) Measurements expressed in feet above mean sea level based on the NAVD 88 datum. A medallion placed by the Indiana Flood Control Water Resource Commission (ELK 20 1995) is 792.428 feet (NGVD 1929) and is located at the Madison Street Bridge. The medallion was surveyed and serves as a staff gauge location "Bridge-Site 3" for the purpose of this study. VERTCOM Version 2.1 ([www.ngs.noaa.gov/PC\\_PROD/VERTCON/](http://www.ngs.noaa.gov/PC_PROD/VERTCON/)) was used to convert the elevation of the medallion from NGVD 1929 to NAVD 88. The elevation of the medalion in NAVD 88 is 792.03 feet amsl.

ft = Feet

amsl = above mean sea level

TOC = Top of Well Casing

bgs = below ground surface

NGVD 1929 = National Geodetic Vertical Datum of 1929

NAVD 88 = North American Vertical Datum of 1988

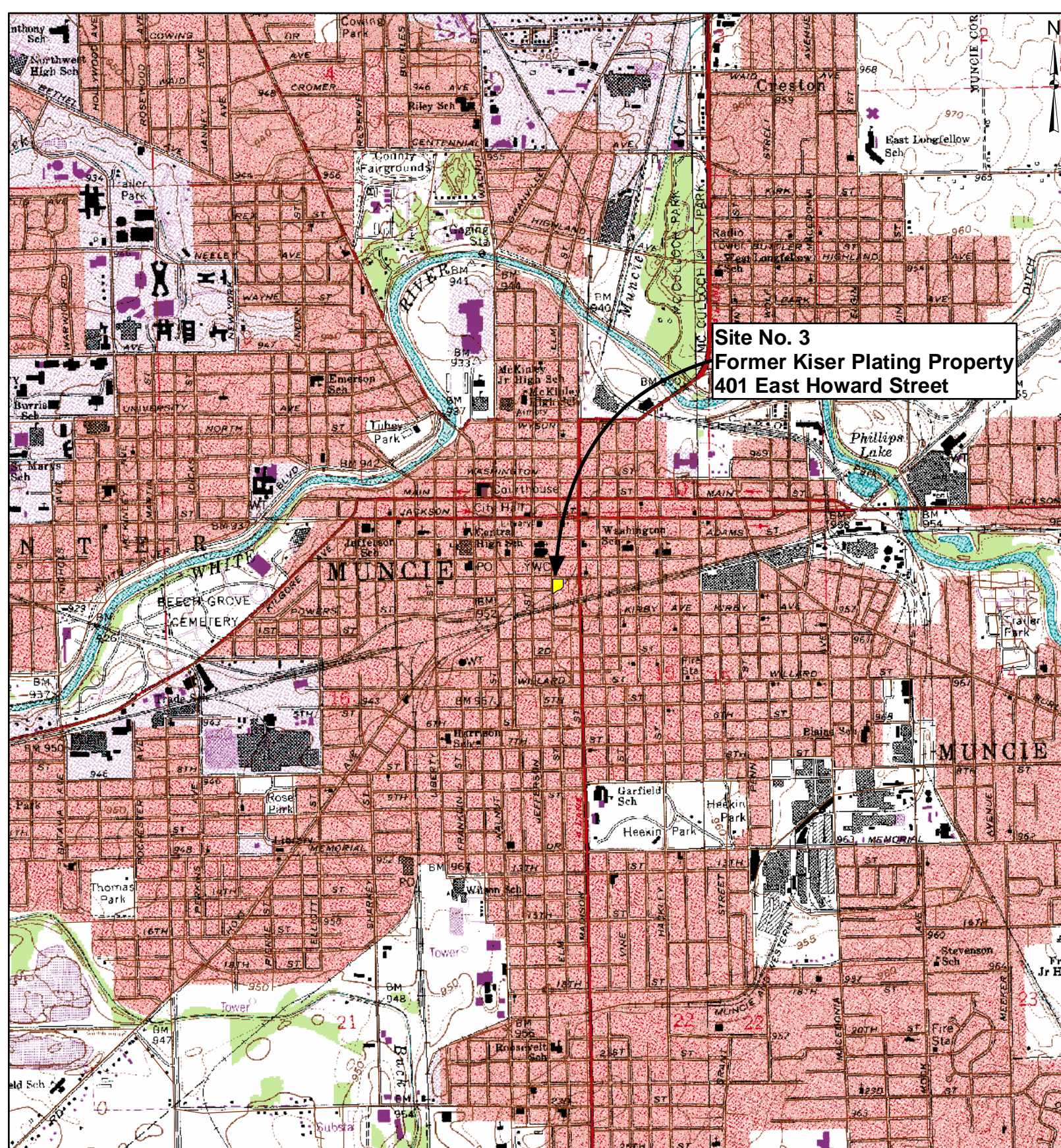
TABLE 5  
GROUNDWATER ANALYTICAL DATA  
KISER PLATING  
MUNCIE, INDIANA

Group	Constituent	U.S. EPA Method	RISC Default Residential Closure Level (mg/L)	RISC Default Industrial Closure Level (mg/L)	Site Location, Sample ID, Lab Sample ID, Sample Date								
					3_MW-10-01	3_TW-08-01	3_TW-03-01	3_TW-06-01	3_TW-06-01 DUP	3_MW-02-01	3_MW-02-01 DUP	3_TW-05-01	3_MW-09
					5020176001	5020176002	5020176003	5020176004	5020176005	5020176006	5020176007	5020176008	5020176009
					10/22/2008	10/22/2008	10/22/2008	10/22/2008	10/22/2008	10/22/2008	10/22/2008	10/22/2008	10/22/2008
Measured Concentrations (milligrams per liter)													
Total Metals	Arsenic	6010	0.01	0.01	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	0.0179	n/a	n/a	n/a
	Barium	6010	2	20	0.113	< 0.100	< 0.100	0.217	0.192	0.104	n/a	n/a	n/a
	Cadmium	6010	0.005	0.051	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	n/a	n/a	n/a
	Chromium	6010	0.1	0.31	< 0.010	< 0.010	< 0.010	0.0998	0.0839	0.014	n/a	n/a	n/a
	Copper	6010	1.3	4.1	0.0974	< 0.020	< 0.020	0.0894	0.0674	351	n/a	n/a	n/a
	Lead	6010	0.015	0.042	< 0.010	< 0.010	< 0.010	0.032	0.023	0.0323	n/a	n/a	n/a
	Mercury	7470	0.002	0.031	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	n/a	n/a	n/a
	Nickel	6010	0.73	2	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	18.5	n/a	n/a	n/a
	Selenium	6010	0.05	0.51	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	0.0134	n/a	n/a	n/a
	Silver	6010	0.18	0.51	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	n/a	n/a	n/a
	Zinc	6010	11	31	0.243	< 0.050	< 0.051	0.276	0.204	0.0683	n/a	n/a	n/a
Dissolved Metals	Arsenic	6010	0.01	0.01	< 0.010	n/a	n/a	< 0.010	< 0.010	0.0149	n/a	< 0.010	< 0.010
	Barium	6010	2	20	< 0.100	n/a	n/a	0.148	0.14	< 0.100	n/a	< 0.100	< 0.100
	Cadmium	6010	0.005	0.051	< 0.005	n/a	n/a	< 0.005	< 0.005	< 0.005	n/a	< 0.005	< 0.005
	Chromium	6010	0.1	0.31	< 0.010	n/a	n/a	< 0.010	< 0.010	< 0.010	n/a	0.172	< 0.010
	Copper	6010	1.3	4.1	< 0.020	n/a	n/a	< 0.020	< 0.020	329	n/a	0.0455	< 0.020
	Lead	6010	0.015	0.042	< 0.010	n/a	n/a	< 0.005	< 0.005	0.0276	n/a	< 0.010	< 0.010
	Mercury	7470	0.002	0.031	< 0.002	n/a	n/a	< 0.002	< 0.002	< 0.002	n/a	< 0.002	< 0.002
	Nickel	6010	0.73	2	< 0.050	n/a	n/a	< 0.050	< 0.050	15.7	n/a	0.243	< 0.050
	Selenium	6010	0.05	0.51	< 0.010	n/a	n/a	< 0.010	< 0.010	0.0155	n/a	< 0.010	< 0.010
	Silver	6010	0.18	0.51	< 0.050	n/a	n/a	< 0.050	< 0.050	< 0.050	n/a	< 0.050	< 0.050
	Sodium	6010	NE	NE	n/a	n/a	n/a	n/a	n/a	1090	n/a	n/a	n/a
Zinc	6010	11	31	0.204	n/a	n/a	< 0.050	< 0.050	< 0.050	n/a	< 0.050	< 0.050	
Detected VOCS (list of 71)	Acetone	8260	6.9	92	< 0.100	n/a	n/a	< 0.100	n/a	0.391	0.422	n/a	n/a
	2-Butanone (MEK)	8260	8.4	61	< 0.025	n/a	n/a	< 0.025	n/a	0.0703	0.0851	n/a	n/a
	Methylene chloride	8260	0.005	0.38	< 0.005	n/a	n/a	< 0.005	n/a	0.324	0.314	n/a	n/a
	Tetrachloroethene	8260	0.005	0.055	< 0.005	n/a	n/a	< 0.005	n/a	0.007	0.008	n/a	n/a
	cis-1,2-Dichloroethene	8260	0.07	1	0.0647	n/a	n/a	< 0.005	n/a	0.0164	0.0194	n/a	n/a
	trans-1,2-Dichloroethene	8260	0.1	2	< 0.005	n/a	n/a	< 0.005	n/a	0.0167	0.0179	n/a	n/a
	1,1-Dichloroethane	8260	0.99	10	< 0.005	n/a	n/a	< 0.005	n/a	0.007	0.0071	n/a	n/a
	1,1-Dichloroethene	8260	0.007	5.1	< 0.005	n/a	n/a	< 0.005	n/a	0.0084	0.0083	n/a	n/a
	Trichloroethene	8260	0.005	0.0072	0.112	n/a	n/a	< 0.005	n/a	4.96	5.12	n/a	n/a
	Vinyl chloride	8260	0.002	0.004	0.0571	n/a	n/a	< 0.002	n/a	0.0025	0.0023	n/a	n/a
PAHs (list of 17)	Multiple	Varios	Various	Various	BDL	n/a	n/a	BDL	n/a	BDL	BDL	n/a	n/a
HEX Cr	Hexavalent Chromium	7196	0.1	0.31	< 0.00005	n/a	n/a	< 0.00005	< 0.00005	< 0.0005	n/a	n/a	n/a

Note:  
RISC = Risk Integrated System for Closure  
U.S. EPA = United States Environmental Protection Agency  
mg/L = Milligrams per Liter  
n/a = Not Analyzed  
NE = Not Established  
VOCs = Volatile Organic Compounds  
BDL = Concentrations of Constituents Were All Below Applicable Detection Levels  
Shading designates concentrations that exceed either the RISC default residential closure level or RISC default industrial closure level.  
With respect to VOCs, only constituents within a group detected in at least one sample are shown on this table.  
Default Residential and Industrial Closure Levels as noted in Appendix 1 and Chapter 8 of the Indiana Department of Environmental Management RISC Technical Guide (January 31, 2006 Update) available online at [http://www.in.gov/idem/programs/land/risc/tech\\_guide/index.html](http://www.in.gov/idem/programs/land/risc/tech_guide/index.html); Last accessed November 28, 2008.

## FIGURES





# SCALE

0 0.25 0.5 1 Miles

0 1,500 3,000 6,000 Feet

CONTOUR INTERVAL 10 FEET  
 NATIONAL GEODETIC VERTICAL

MODIFIED FROM

U.S.G.S 7.5'

MUNCIE EAST & MUNCIE

WEST QUADRANGLES

Source: Indiana Spatial Data Services

Downloaded March, 2008




**FIGURE 1**  
**SITE LOCATION AND LOCAL TOPOGRAPHY**  
 Site No. 3 – Former Kiser Plating Property  
 401 East Howard Street, Muncie, IN 47302

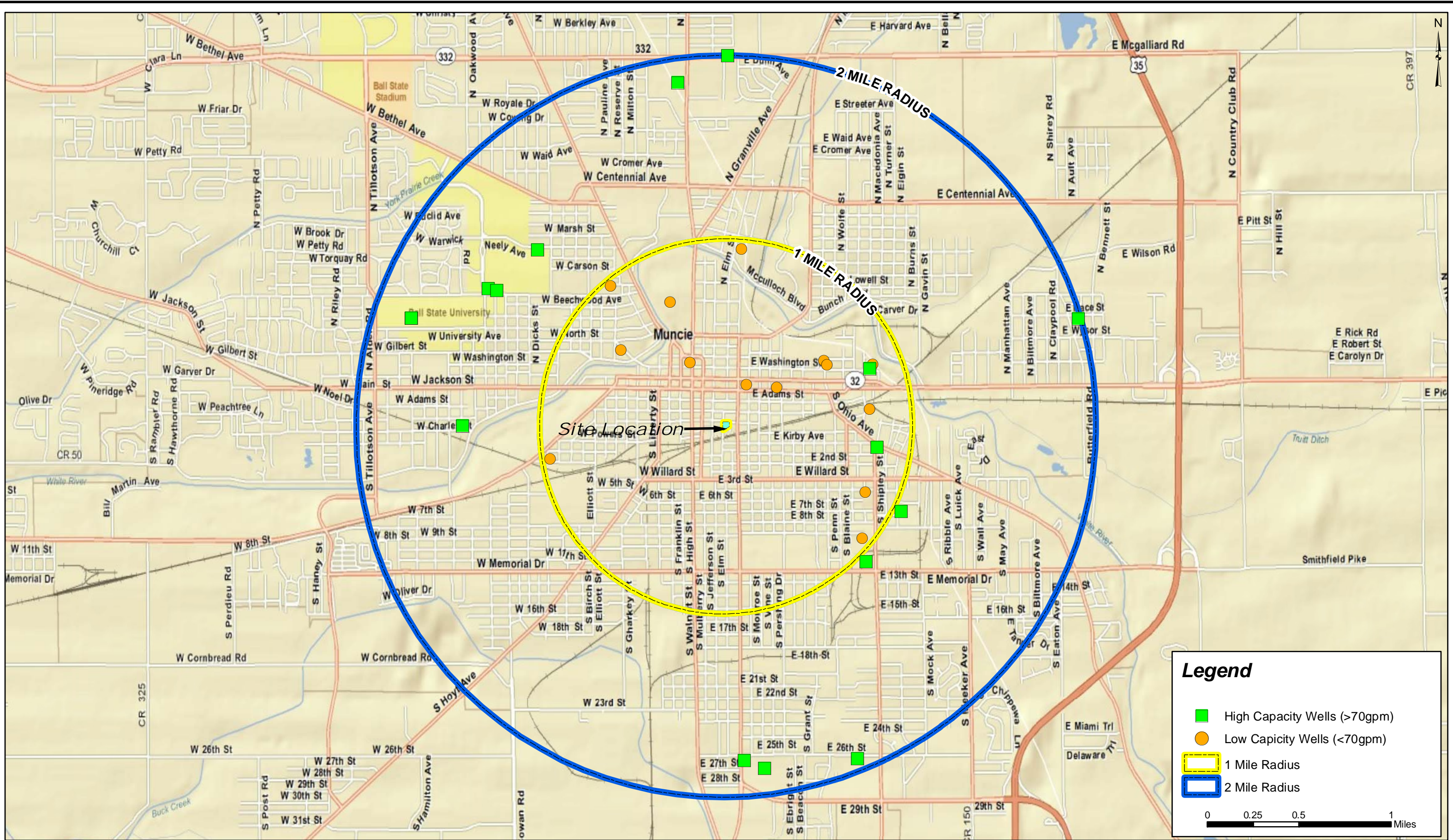




SITE NO. 3  
FORMER KISER PLATING PROPERTY  
401 EAST HOWARD STREET  
MUNCIE, IN 47302

 6737 West Washington Street Suite 3440 West Allis, Wisconsin 53214 414.291.8840 FAX 414.291.8841	DSGN: RED	CHK:	CITY OF MUNCIE, INDIANA U.S. EPA BROWNFIELD SITE ASSESSMENT GRANT IMPLEMENTATION	Figure 2-Site Basemap Site No. 3 Former Kiser Plating Property 401 East Howard Street Muncie, IN 47302	SCALE 1 in = 100 ft	
	DR: RED	APVD:			DWG S3-02-W083470	
	G:\Projects\Muncie, City of\W083470\Map Documents\Site No. 3 - Former Kiser Plating Property\S3-02-W083470.mxd				DATE JUNE 2008	
					PROJ NO. W083470	





  
6737 WEST WASHINGTON STREET  
SUITE 3440  
WEST ALLIS, WISCONSIN 53214  
414.291.8840  
FAX 414.291.8841

- |  |  |                                   |
|--|--|-----------------------------------|
| • WASTEWATER TREATMENT/CONVEYANCE      | • INVESTIGATION, REMEDIATION, AND SITE CLOSURE | • PROCESS ENGINEERING             |
| • FACILITIES ENGINEERING               | • HEALTH CARE FACILITIES DESIGN                | • WATER RESOURCES PLANNING/DESIGN |
| • ENVIRONMENTAL MANAGEMENT             | • WATER SUPPLY AND DISTRIBUTION                | • STORM WATER MANAGEMENT          |
| • AIR QUALITY                          | • SOLID AND HAZARDOUS WASTE MANAGEMENT         | • GIS SERVICES                    |
| • DESIGN/BUILD CONSTRUCTION MANAGEMENT |  | • BROWNFIELDS                     |

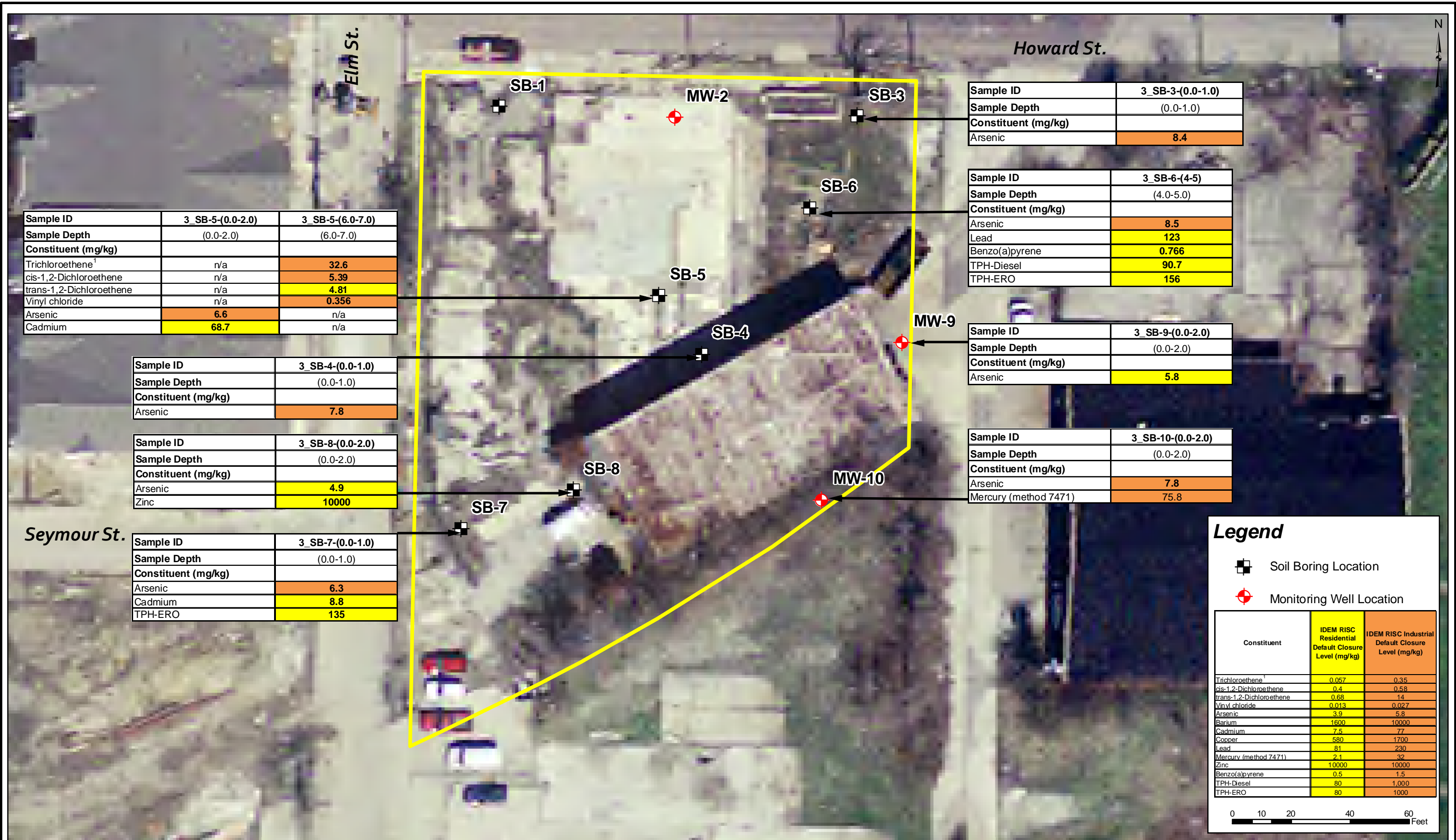
DSGN:	RED	CHK:	
DR:	RED	APVD:	
PAT:			

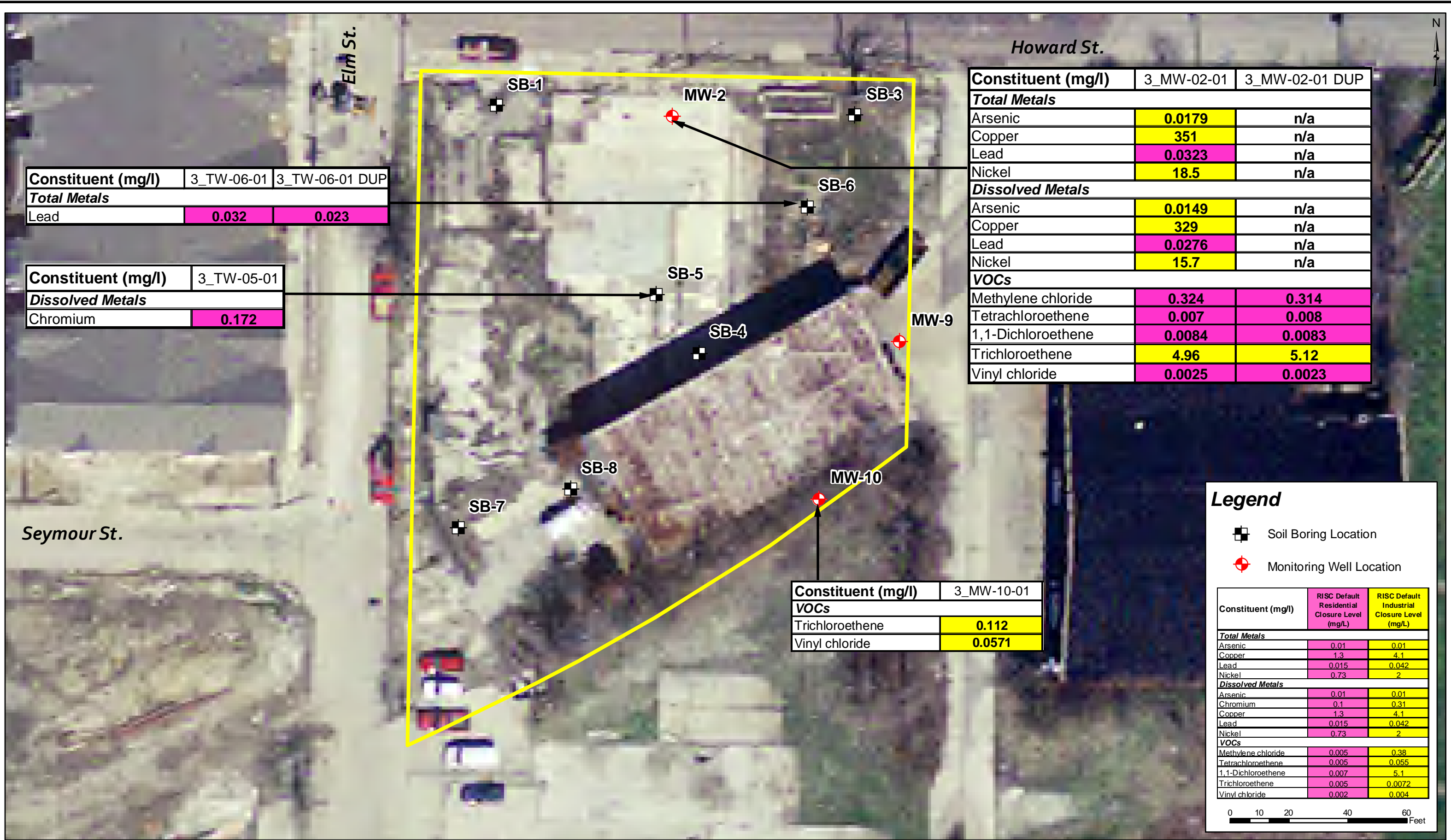
**CITY OF MUNCIE, INDIANA  
U.S. EPA BROWNFIELD  
SITE ASSESSMENT  
GRANT IMPLEMENTATION**

FIGURE 3  
IDNR WELL LOCATION MAP  
SITE NO. 3 - FORMER KISER PLATING PROPERTY  
401 EAST HOWARD STREET  
MUNCIE, IN 47302

SHEET NO.	
DWG	S3-06
DATE	APRIL 2009
PROJ NO.	W083470







Constituent (mg/l)	3_TW-06-01	3_TW-06-01 DUP
Total Metals		
Lead	0.032	0.023

Constituent (mg/l)	3_TW-05-01
Dissolved Metals	
Chromium	0.172

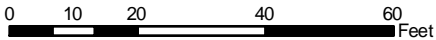
Constituent (mg/l)	3_MW-02-01	3_MW-02-01 DUP
Total Metals		
Arsenic	0.0179	n/a
Copper	351	n/a
Lead	0.0323	n/a
Nickel	18.5	n/a
Dissolved Metals		
Arsenic	0.0149	n/a
Copper	329	n/a
Lead	0.0276	n/a
Nickel	15.7	n/a
VOCs		
Methylene chloride	0.324	0.314
Tetrachloroethene	0.007	0.008
1,1-Dichloroethene	0.0084	0.0083
Trichloroethene	4.96	5.12
Vinyl chloride	0.0025	0.0023

Constituent (mg/l)	3_MW-10-01
VOCs	
Trichloroethene	0.112
Vinyl chloride	0.0571

Legend

- Soil Boring Location
- Monitoring Well Location

Constituent (mg/l)	RISC Default Residential Closure Level (mg/L)	RISC Default Industrial Closure Level (mg/L)
Total Metals		
Arsenic	0.01	0.01
Copper	1.3	4.1
Lead	0.015	0.042
Nickel	0.73	2
Dissolved Metals		
Arsenic	0.01	0.01
Chromium	0.1	0.31
Copper	1.3	4.1
Lead	0.015	0.042
Nickel	0.73	2
VOCs		
Methylene chloride	0.005	0.38
Tetrachloroethene	0.005	0.055
1,1-Dichloroethene	0.007	5.1
Trichloroethene	0.005	0.0072
Vinyl chloride	0.002	0.004



- WASTEWATER TREATMENT/CONVEYANCE
- FACILITIES ENGINEERING
- ENVIRONMENTAL MANAGEMENT
- AIR QUALITY
- DESIGN/BUILD CONSTRUCTION MANAGEMENT
- INVESTIGATION, REMEDIATION, AND SITE CLOSURE
- HEALTH CARE FACILITIES DESIGN
- WATER SUPPLY AND DISTRIBUTION
- SOLID AND HAZARDOUS WASTE MANAGEMENT
- PROCESS ENGINEERING
- WATER RESOURCES PLANNING/DESIGN
- STORM WATER MANAGEMENT
- GIS SERVICES
- BROWNFIELDS

DSGN:	RED	CHK:	
DR:	RED	APVD:	
PATH:	S3-05-W083470-GW2		

CITY OF MUNCIE, INDIANA  
U.S. EPA BROWNFIELD  
SITE ASSESSMENT  
GRANT IMPLEMENTATION

FIGURE 5  
GROUNDWATER CONCENTRATIONS EXCEEDING  
RISC RESIDENTIAL/INDUSTRIAL LEVELS  
SITE NO. 3 - FORMER KISER PLATING PROPERTY  
401 EAST HOWARD STREET  
MUNCIE, IN 47302

SHEET NO.	
DWG	S3-05
DATE	APRIL 2009
PROJ NO.	W083470









## **APPENDICES**

# **APPENDIX A**

## **WELL LOGS**



## Record of Water Well

## Indiana Department of Natural Resources

<b>Reference Number</b> <b>323</b>	<b>Driving directions to well</b> NEXT TO GRIBBLES STATION ON SR32		<b>Date completed</b> Apr 24, 1964	
<b>Owner-Contractor</b>	<b>Name</b>	<b>Address</b>	<b>Telephone</b>	
Owner	JAY DRYER	YORKTOWN IN		
Driller	JOE BROWN	R1 GASTON IN		
Operator	JACK DOUGHTY&JOE BROWN	License: null		
<b>Construction Details</b>				
Well	<b>Use:</b> Home	<b>Drilling method:</b> Cable Tool	<b>Pump type:</b>	
	<b>Depth:</b> 132.0	<b>Pump setting depth:</b>	<b>Water quality:</b>	
Casing	<b>Length:</b> 132.0	<b>Material:</b>	<b>Diameter:</b> 4.0	
Screen	<b>Length:</b>	<b>Material:</b>	<b>Diameter:</b> Slot size:	
<b>Well Capacity Test</b>	<b>Type of test:</b> Bailing	<b>Test rate:</b> gpm for hrs.	<b>BailTest rate:</b> 8.0 gpm for 1.0 hrs.	
	<b>Drawdown:</b> ft.	<b>Static water level:</b> 45.0 ft.	<b>Bailer Drawdown</b> 15.0 ft.	
<b>Grouting Information</b>	<b>Material:</b>		<b>Depth:</b> from to	
	<b>Installation Method:</b>		<b>Number of bags used:</b>	
<b>Well Abandonment</b>	<b>Sealing material:</b>		<b>Depth:</b> from to	
	<b>Installation Method:</b>		<b>Number of bags used:</b>	
<b>Administrative</b>	<b>County:</b> DELAWARE		<b>Township:</b> 20N <b>Range:</b> 9E	
	<b>Section:</b> NE of the SE of the SW of Section 13		<b>Topo map:</b> MUNCIE WEST	
	<b>Grant Number:</b>			
	<b>Field located by:</b> RY?		<b>on:</b> Aug 06, 1964	
	<b>Courthouse location by:</b>		<b>on:</b>	
	<b>Location accepted w/o verification by:</b>		<b>on:</b>	
	<b>Subdivision name:</b>		<b>Lot number:</b>	
	<b>Ft W of EL:</b> 2900.0	<b>Ft N of SL:</b> 800.0	<b>Ft E of WL:</b>	<b>Ft S of NL:</b>
	<b>Ground elevation:</b> 944.0	<b>Depth to bedrock:</b>	<b>Bedrock elevation:</b>	<b>Aquifer elevation:</b> 812.0
	<b>UTM Easting:</b> 631724.0		<b>UTM Northing:</b> 4448760.0	
<b>Well Log</b>	Top	Bottom	Formation	
	0.0	20.0	CLAY	
	20.0	45.0	SAND	
	45.0	118.0	BLUE CLAY	
	118.0	130.0	RED CLAY	
	130.0	132.0	GRAVEL	
<b>Comments</b>	BSU UTM			

## Record of Water Well

## Indiana Department of Natural Resources

<b>Reference Number</b> <b>353</b>	<b>Driving directions to well</b> 3RD BUILDING E OF 500W ON SR32 S SIDE		<b>Date completed</b> Feb 14, 1964	
<b>Owner-Contractor</b>	<b>Name</b>	<b>Address</b>	<b>Telephone</b>	
Owner	DELRAY	YORKTOWN LUMBER YORKTOWN		
	MCKINLEY	IN		
Driller	M.T. RYDER	2615 N JEFFERSON MUNCIE IN		
Operator	M T RYDER	License: null		
<b>Construction Details</b>				
Well	<b>Use:</b> Industry	<b>Drilling method:</b> Cable Tool	<b>Pump type:</b>	
	<b>Depth:</b> 52.0	<b>Pump setting depth:</b>	<b>Water quality:</b>	
Casing	<b>Length:</b> 25.0	<b>Material:</b>	<b>Diameter:</b> 4.0	
Screen	<b>Length:</b>	<b>Material:</b>	<b>Diameter:</b> Slot size:	
<b>Well Capacity Test</b>	<b>Type of test:</b> Bail / Pump	<b>Test rate:</b> 8.3 gpm for 2.0 hrs.	<b>BailTest rate:</b> 8.3 gpm for 2.0 hrs.	
	<b>Drawdown:</b> 0.0 ft.	<b>Static water level:</b> 29.0 ft.	<b>Bailer Drawdown</b> 0.0 ft.	
<b>Grouting Information</b>	<b>Material:</b>		<b>Depth:</b> from to	
	<b>Installation Method:</b>		<b>Number of bags used:</b>	
<b>Well Abandonment</b>	<b>Sealing material:</b>		<b>Depth:</b> from to	
	<b>Installation Method:</b>		<b>Number of bags used:</b>	
<b>Administrative</b>	<b>County:</b> DELAWARE		<b>Township:</b> 20N <b>Range:</b> 9E	
	<b>Section:</b> NE of the SW of the SW of Section 14		<b>Topo map:</b> MUNCIE WEST	
	<b>Grant Number:</b>			
	<b>Field located by:</b> LW		<b>on:</b> Aug 06, 1964	
	<b>Courthouse location by:</b>		<b>on:</b>	
	<b>Location accepted w/o verification by:</b>		<b>on:</b>	
	<b>Subdivision name:</b>		<b>Lot number:</b>	
	<b>Ft W of EL:</b> 4000.0	<b>Ft N of SL:</b> 900.0	<b>Ft E of WL:</b>	<b>Ft S of NL:</b>
	<b>Ground elevation:</b> 932.0	<b>Depth to bedrock:</b> 25.0	<b>Bedrock elevation:</b> 907.0	<b>Aquifer elevation:</b>
	<b>UTM Easting:</b> 629766.0		<b>UTM Northing:</b> 4448717.0	
<b>Well Log</b>	Top	Bottom	Formation	
	0.0	14.0	FILL DIRT & TOP SOIL	
	14.0	21.0	DIRTY GRAY SAND	
	21.0	25.0	GRAVEL (GRAY SANDY)	
	25.0	52.0	LIMESTONE	
<b>Comments</b>	BSU UTM			

## Record of Water Well

## Indiana Department of Natural Resources

<b>Reference Number</b> <b>354</b>	<b>Driving directions to well</b> YORKTOWN RR2 ABOUT 2.5MI E OF YORKTOWN ON SR32 ON S SIDE OF ROAD		<b>Date completed</b> Jan 11, 1964
<b>Owner-Contractor</b>	<b>Name</b>	<b>Address</b>	<b>Telephone</b>
Owner	ORVILLE GERNARCH?	R2 YORKTOWN IN	
Driller	WOODY CLARE & SON	R4 BX307H ANDERSON IN	
Operator	WOODY CLIRE	License: null	
<b>Construction Details</b>			
Well	<b>Use:</b> Home	<b>Drilling method:</b> Cable Tool	<b>Pump type:</b>
	<b>Depth:</b> 105.0	<b>Pump setting depth:</b>	<b>Water quality:</b>
Casing	<b>Length:</b>	<b>Material:</b>	<b>Diameter:</b> 4.0
Screen	<b>Length:</b>	<b>Material:</b>	<b>Diameter:</b> Slot size:
<b>Well Capacity Test</b>	<b>Type of test:</b> Bail / Pump	<b>Test rate:</b> 12.7 gpm for 2.0 hrs.	<b>Bail Test rate:</b> 10.0 gpm for 0.5 hrs.
	<b>Drawdown:</b> 2.0 ft.	<b>Static water level:</b> 35.0 ft.	<b>Bailer Drawdown:</b> 1.0 ft.
<b>Grouting Information</b>	<b>Material:</b>	<b>Depth:</b> from to	
	<b>Installation Method:</b>	<b>Number of bags used:</b>	
<b>Well Abandonment</b>	<b>Sealing material:</b>	<b>Depth:</b> from to	
	<b>Installation Method:</b>	<b>Number of bags used:</b>	
<b>Administrative</b>	<b>County:</b> DELAWARE		<b>Township:</b> 20N <b>Range:</b> 9E
	<b>Section:</b> NE of the SE of the SE of Section 14		<b>Topo map:</b> MUNCIE WEST
	<b>Grant Number:</b>		
	<b>Field located by:</b> RSB		<b>on:</b> Jul 16, 1962
	<b>Courthouse location by:</b>		<b>on:</b>
	<b>Location accepted w/o verification by:</b>		<b>on:</b>
	<b>Subdivision name:</b>		<b>Lot number:</b>
	<b>Ft W of EL:</b> 600.0	<b>Ft N of SL:</b> 800.0	<b>Ft E of WL:</b> <b>Ft S of NL:</b>
	<b>Ground elevation:</b> 935.0	<b>Depth to bedrock:</b> 100.0	<b>Bedrock elevation:</b> 835.0 <b>Aquifer elevation:</b>
	<b>UTM Easting:</b> 630800.0		<b>UTM Northing:</b> 4448710.0
<b>Well Log</b>	Top	Bottom	Formation
	0.0	100.0	OVERBURDEN
	100.0	105.0	LIMESTONE
<b>Comments</b>	BSU UTM		

## Record of Water Well

## Indiana Department of Natural Resources

<b>Reference Number</b> <b>355</b>	<b>Driving directions to well</b> BEVERLY HEIGHTS ADDITION; WEST OF MUNCIE ON SR32, LOT 60		<b>Date completed</b> Jul 10, 1961
<b>Owner-Contractor</b>	<b>Name</b>	<b>Address</b>	<b>Telephone</b>
Owner	JOHN SMITH	R4 KOKOMO IN	
Driller	GEORGE SKINNER	R2 YORKTOWN IN	
Operator	GEORGE SKINNER	License: null	
<b>Construction Details</b>			
Well	<b>Use:</b> Home	<b>Drilling method:</b>	<b>Pump type:</b>
	<b>Depth:</b> 150.0	<b>Pump setting depth:</b>	<b>Water quality:</b>
Casing	<b>Length:</b> 55.0	<b>Material:</b>	<b>Diameter:</b> 4.0
Screen	<b>Length:</b>	<b>Material:</b>	<b>Diameter:</b> Slot size:
<b>Well Capacity Test</b>	<b>Type of test:</b> Pumping	<b>Test rate:</b> 6.7 gpm for 7.0 hrs.	<b>BailTest rate:</b> gpm for hrs.
	<b>Drawdown:</b> 20.0 ft.	<b>Static water level:</b> 19.0 ft.	<b>Bailer Drawdown</b> ft.
<b>Grouting Information</b>	<b>Material:</b>	<b>Depth:</b> from to	
	<b>Installation Method:</b>	<b>Number of bags used:</b>	
<b>Well Abandonment</b>	<b>Sealing material:</b>	<b>Depth:</b> from to	
	<b>Installation Method:</b>	<b>Number of bags used:</b>	
<b>Administrative</b>	<b>County:</b> DELAWARE		<b>Township:</b> 20N <b>Range:</b> 9E
	<b>Section:</b> NE of the NE of the SE of Section 14		<b>Topo map:</b> MUNCIE WEST
	<b>Grant Number:</b>		
	<b>Field located by:</b> RLT		<b>on:</b> Jul 17, 1962
	<b>Courthouse location by:</b>		<b>on:</b>
	<b>Location accepted w/o verification by:</b>		<b>on:</b>
	<b>Subdivision name:</b> BEVERLY HEIGHTS ADDN		<b>Lot number:</b> 60
	<b>Ft W of EL:</b> 850.0	<b>Ft N of SL:</b> 2300.0	<b>Ft E of WL:</b> <b>Ft S of NL:</b>
	<b>Ground elevation:</b> 915.0	<b>Depth to bedrock:</b> 55.0	<b>Bedrock elevation:</b> 860.0
	<b>UTM Easting:</b> 630738.0		<b>Aquifer elevation:</b>
			<b>UTM Northing:</b> 4449207.0
<b>Well Log</b>	Top	Bottom	Formation
	0.0	8.0	CLAY
	8.0	12.0	DRY GRAVEL
	12.0	29.0	BLUE CLAY
	29.0	33.0	MUD GRAVEL
	33.0	52.0	YELLOW CLAY
	52.0	55.0	MUDDY GRAVEL SHALE STONE
	55.0	150.0	STONE
<b>Comments</b>	BSU UTM,NEED EW LINE		

## Record of Water Well

## Indiana Department of Natural Resources

<b>Reference Number</b> <b>356</b>	<b>Driving directions to well</b> LOT 19 BEVERLY HEIGHTS ADDITION E OF YORKTOWN W OF MUNCIE ON SR32		<b>Date completed</b> Jun 30, 1961
<b>Owner-Contractor</b>	<b>Name</b>	<b>Address</b>	<b>Telephone</b>
Owner	JOHN SMITH	R4 KOKOMO IN	
Driller	GEORGE SKINNER	R2 YORKTOWN IN	
Operator	GEORGE SKINNER	License: null	
<b>Construction Details</b>			
Well	<b>Use:</b> Home	<b>Drilling method:</b>	<b>Pump type:</b>
	<b>Depth:</b> 80.0	<b>Pump setting depth:</b>	<b>Water quality:</b>
Casing	<b>Length:</b> 47.0	<b>Material:</b>	<b>Diameter:</b> 4.0
Screen	<b>Length:</b>	<b>Material:</b>	<b>Diameter:</b> Slot size:
<b>Well Capacity Test</b>	<b>Type of test:</b> Pumping	<b>Test rate:</b> 10.0 gpm for 2.0 hrs.	<b>BailTest rate:</b> gpm for hrs.
	<b>Drawdown:</b> 2.0 ft.	<b>Static water level:</b> 10.0 ft.	<b>Bailer Drawdown:</b> ft.
<b>Grouting Information</b>	<b>Material:</b>	<b>Depth:</b> from to	
	<b>Installation Method:</b>	<b>Number of bags used:</b>	
<b>Well Abandonment</b>	<b>Sealing material:</b>	<b>Depth:</b> from to	
	<b>Installation Method:</b>	<b>Number of bags used:</b>	
<b>Administrative</b>	<b>County:</b> DELAWARE		<b>Township:</b> 20N <b>Range:</b> 9E
	<b>Section:</b> NE of the SE of the SE of Section 14		<b>Topo map:</b> MUNCIE WEST
	<b>Grant Number:</b>		
	<b>Field located by:</b> KAB	<b>on:</b> Jul 17, 1962	
	<b>Courthouse location by:</b>	<b>on:</b>	
	<b>Location accepted w/o verification by:</b>	<b>on:</b>	
	<b>Subdivision name:</b> BEVERLY HEIGHTS ADDN	<b>Lot number:</b> 19	
	<b>Ft W of EL:</b> 600.0	<b>Ft N of SL:</b> 1500.0	<b>Ft E of WL:</b> <b>Ft S of NL:</b>
	<b>Ground elevation:</b> 932.0	<b>Depth to bedrock:</b> 47.0	<b>Bedrock elevation:</b> 885.0
	<b>UTM Easting:</b> 630770.0	<b>UTM Northing:</b> 4448927.0	
<b>Well Log</b>	Top	Bottom	Formation
	0.0	6.0	CLAY
	6.0	22.0	DRY GRAVEL
	22.0	43.0	BLUE CLAY
	43.0	47.0	GRAVEL & SHALE STONE
	47.0	80.0	LIMESTONE
<b>Comments</b>	BSU UTM		

## Record of Water Well

## Indiana Department of Natural Resources

<b>Reference Number</b> <b>362</b>	<b>Driving directions to well</b> 7204-7206 HABISCAS DUPLEX BEVERLY HILL [HEIGHTS?] ADD S OF MUNCIE ON SR32		<b>Date completed</b> Mar 01, 1987
<b>Owner-Contractor</b>	<b>Name</b>	<b>Address</b>	<b>Telephone</b>
Owner	JACK MALARKEY	301 ROOSEVELT MUNCIE IN	
Driller	BUEL BROWN	R9 BX462 MUNCIE IN	
Operator	BUEL BROWN	License: null	
<b>Construction Details</b>			
Well	<b>Use:</b> Home	<b>Drilling method:</b> Rotary	<b>Pump type:</b>
	<b>Depth:</b> 201.0	<b>Pump setting depth:</b>	<b>Water quality:</b>
Casing	<b>Length:</b> 106.0	<b>Material:</b>	<b>Diameter:</b> 4.0
Screen	<b>Length:</b>	<b>Material:</b>	<b>Diameter:</b> Slot size:
<b>Well Capacity Test</b>	<b>Type of test:</b> Bail / Pump	<b>Test rate:</b> 7.0 gpm for 0.5 hrs.	<b>BailTest rate:</b> 7.0 gpm for 0.5 hrs.
	<b>Drawdown:</b> 35.0 ft.	<b>Static water level:</b> 35.0 ft.	<b>Bailer Drawdown</b> 35.0 ft.
<b>Grouting Information</b>	<b>Material:</b>	<b>Depth:</b> from to	
	<b>Installation Method:</b>	<b>Number of bags used:</b>	
<b>Well Abandonment</b>	<b>Sealing material:</b>	<b>Depth:</b> from to	
	<b>Installation Method:</b>	<b>Number of bags used:</b>	
<b>Administrative</b>	<b>County:</b> DELAWARE		<b>Township:</b> 20N <b>Range:</b> 9E
	<b>Section:</b> SE of the SE of Section 14		<b>Topo map:</b> MUNCIE WEST
	<b>Grant Number:</b>		
	<b>Field located by:</b>		<b>on:</b>
	<b>Courthouse location by:</b>		<b>on:</b>
	<b>Location accepted w/o verification by:</b>		<b>on:</b>
	<b>Subdivision name:</b> BEVERLY HEIGHTS ADDN		<b>Lot number:</b>
	<b>Ft W of EL:</b>	<b>Ft N of SL:</b>	<b>Ft E of WL:</b> <b>Ft S of NL:</b>
	<b>Ground elevation:</b>	<b>Depth to bedrock:</b>	<b>Bedrock elevation:</b> <b>Aquifer elevation:</b>
	<b>UTM Easting:</b>		<b>UTM Northing:</b>
<b>Well Log</b>	Top	Bottom	Formation
	0.0	28.0	CLAY
	28.0	35.0	FINE SAND
	35.0	103.0	CLAY
	103.0	201.0	STONE
<b>Comments</b>	7204 AND 7206 HABISCAS (DUPLEX)		

## Record of Water Well

## Indiana Department of Natural Resources

<b>Reference Number</b> <b>365</b>	<b>Driving directions to well</b> BEVERLY HEIGHTS ADDITION W ON SR32 W OF NEBO RD ON N SIDE OF SR32		<b>Date completed</b> Jun 17, 1961
<b>Owner-Contractor</b> Owner Driller Operator	<b>Name</b> JOHN SMITH GEORGE SKINNER GEORGE SKINNER	<b>Address</b> R2 YORKTOWN IN License: null	<b>Telephone</b>
<b>Construction Details</b> Well Casing Screen	<b>Use:</b> Home <b>Depth:</b> 180.0 <b>Length:</b> 77.0 <b>Length:</b>	<b>Drilling method:</b> Cable Tool <b>Pump setting depth:</b> <b>Material:</b> <b>Material:</b>	<b>Pump type:</b> <b>Water quality:</b> <b>Diameter:</b> 4.0 <b>Diameter: Slot size:</b>
<b>Well Capacity Test</b>	<b>Type of test:</b> Pumping <b>Drawdown:</b> 3.0 ft.	<b>Test rate:</b> 15.0 gpm for 4.0 hrs. <b>Static water level:</b> 25.0 ft.	<b>BailTest rate:</b> gpm for hrs. <b>Bailer Drawdown</b> ft.
<b>Grouting Information</b>	<b>Material:</b> <b>Installation Method:</b>	<b>Depth:</b> from to <b>Number of bags used:</b>	
<b>Well Abandonment</b>	<b>Sealing material:</b> <b>Installation Method:</b>	<b>Depth:</b> from to <b>Number of bags used:</b>	
<b>Administrative</b>	<b>County:</b> DELAWARE <b>Section:</b> SE of the SE of Section 14 <b>Grant Number:</b> <b>Field located by:</b> RLB <b>Courthouse location by:</b> <b>Location accepted w/o verification by:</b> <b>Subdivision name:</b> BEVERLY HEIGHTS ADDN <b>Ft W of EL:</b> <b>Ft N of SL:</b> <b>Ground elevation:</b> 932.0 <b>Depth to bedrock:</b> 77.0 <b>UTM Easting:</b>		<b>Township:</b> 20N <b>Range:</b> 9E <b>Topo map:</b> MUNCIE WEST <b>on:</b> Jul 17, 1962 <b>on:</b> <b>on:</b> <b>Lot number:</b> <b>Ft E of WL:</b> <b>Ft S of NL:</b> <b>Bedrock elevation:</b> 855.0 <b>Aquifer elevation:</b> <b>UTM Northing:</b>
<b>Well Log</b>	Top	Bottom	Formation
	0.0	10.0	CLAY
	10.0	25.0	DRY GRAVEL
	25.0	28.0	BLUE CLAY
	28.0	35.0	WET FINE SAND
	35.0	69.0	LIGHT BROWN CLAY
	69.0	72.0	COURSE SAND
	72.0	75.0	BROWN CLAY
	75.0	77.0	GRAVEL AND SHALE STONE
	77.0	180.0	LIMESTONE
<b>Comments</b>			

## Record of Water Well

## Indiana Department of Natural Resources

<b>Reference Number</b> <b>367</b>	<b>Driving directions to well</b> SKETCH MAPS LOOKS LIKE BEVERLY HEIGHTS ADDN		<b>Date completed</b> May 17, 1965	
<b>Owner-Contractor Name</b>		<b>Address</b>	<b>Telephone</b>	
Owner		MELVIN STOTTLEMYER	1610 W 17 ST MUNCIE IN	
Driller		MIDWESTERN DRILLING CONTR	BOX 2455 ANDERSON IN	
Operator		CHARLES & ELWOOD NORRIS	License: null	
Company		DAVIS HOMES		
<b>Construction Details</b>				
Well	<b>Use:</b> Home	<b>Drilling method:</b> Rotary	<b>Pump type:</b>	
	<b>Depth:</b> 145.0	<b>Pump setting depth:</b>	<b>Water quality:</b>	
Casing	<b>Length:</b> 18.0	<b>Material:</b>	<b>Diameter:</b> 4.25	
Screen	<b>Length:</b>	<b>Material:</b>	<b>Diameter:</b> Slot size:	
<b>Well Capacity Test</b>	<b>Type of test:</b> Pumping	<b>Test rate:</b> gpm for 0.5 hrs.	<b>BailTest rate:</b> gpm for hrs.	
	<b>Drawdown:</b> 35.0 ft.	<b>Static water level:</b> 45.0 ft.	<b>Bailer Drawdown</b> ft.	
<b>Grouting Information</b>	<b>Material:</b>		<b>Depth:</b> from to	
	<b>Installation Method:</b>		<b>Number of bags used:</b>	
<b>Well Abandonment</b>	<b>Sealing material:</b>		<b>Depth:</b> from to	
	<b>Installation Method:</b>		<b>Number of bags used:</b>	
<b>Administrative</b>	<b>County:</b> DELAWARE		<b>Township:</b> 20N <b>Range:</b> 9E	
	<b>Section:</b> SE of Section 14		<b>Topo map:</b> MUNCIE WEST	
	<b>Grant Number:</b>			
	<b>Field located by:</b>		<b>on:</b>	
	<b>Courthouse location by:</b>		<b>on:</b>	
	<b>Location accepted w/o verification by:</b>		<b>on:</b>	
	<b>Subdivision name:</b>		<b>Lot number:</b>	
	<b>Ft W of EL:</b>	<b>Ft N of SL:</b>	<b>Ft E of WL:</b>	<b>Ft S of NL:</b>
	<b>Ground elevation:</b>	<b>Depth to bedrock:</b>	<b>Bedrock elevation:</b>	<b>Aquifer elevation:</b>
	<b>UTM Easting:</b>		<b>UTM Northing:</b>	
<b>Well Log</b>	Top	Bottom	Formation	
	0.0	2.0	TOP SOIL	
	2.0	12.0	YELLOW CLAY	
	12.0	16.0	RED SAND	
	16.0	57.0	GRAY CLAY	
	57.0	115.0	BROWN LIMESTONE	
	115.0	123.0	BLUE SHALE	
	123.0	134.0	GRAY LIMESTONE	
	134.0	145.0	WHITE LIMESTONE AND WATER	
<b>Comments</b>	CLASS DM 6/65			



## Record of Water Well

## Indiana Department of Natural Resources

<b>Reference Number</b> <b>368</b>	<b>Driving directions to well</b> BEVERLY HEIGHTS ADDITION SARASOTA DR W OF MUNCIE ON SR32		<b>Date completed</b> Jun 19, 1963	
<b>Owner-Contractor</b>	<b>Name</b>	<b>Address</b>	<b>Telephone</b>	
Owner	LAWRENCE LEMONS	R2 YORKTOWN IN		
Driller	GEORGE SKINNER	R2 BX155 YORKTOWN IN		
Operator	GEORGE SKINNER	License: null		
<b>Construction Details</b>				
Well	<b>Use:</b> Home	<b>Drilling method:</b> Cable Tool	<b>Pump type:</b>	
	<b>Depth:</b> 90.0	<b>Pump setting depth:</b>	<b>Water quality:</b>	
Casing	<b>Length:</b> 39.0	<b>Material:</b>	<b>Diameter:</b> 4.0	
Screen	<b>Length:</b>	<b>Material:</b>	<b>Diameter:</b> Slot size:	
<b>Well Capacity Test</b>	<b>Type of test:</b> Pumping	<b>Test rate:</b> 12.1 gpm for 3.0 hrs.	<b>BailTest rate:</b> gpm for hrs.	
	<b>Drawdown:</b> 13.0 ft.	<b>Static water level:</b> 12.0 ft.	<b>Bailer Drawdown:</b> ft.	
<b>Grouting Information</b>	<b>Material:</b>	<b>Depth:</b> from to		
	<b>Installation Method:</b>	<b>Number of bags used:</b>		
<b>Well Abandonment</b>	<b>Sealing material:</b>	<b>Depth:</b> from to		
	<b>Installation Method:</b>	<b>Number of bags used:</b>		
<b>Administrative</b>	<b>County:</b> DELAWARE		<b>Township:</b> 20N <b>Range:</b> 9E	
	<b>Section:</b> SE of Section 14		<b>Topo map:</b> MUNCIE WEST	
	<b>Grant Number:</b>			
	<b>Field located by:</b>		<b>on:</b>	
	<b>Courthouse location by:</b>		<b>on:</b>	
	<b>Location accepted w/o verification by:</b>		<b>on:</b>	
	<b>Subdivision name:</b> BEVERLY HEIGHTS ADDN		<b>Lot number:</b>	
	<b>Ft W of EL:</b>	<b>Ft N of SL:</b>	<b>Ft E of WL:</b>	<b>Ft S of NL:</b>
	<b>Ground elevation:</b>	<b>Depth to bedrock:</b>	<b>Bedrock elevation:</b>	<b>Aquifer elevation:</b>
	<b>UTM Easting:</b>	<b>UTM Northing:</b>		
<b>Well Log</b>	Top	Bottom	Formation	
	0.0	8.0	CLAY	
	8.0	21.0	DRY GRAVEL	
	21.0	32.0	BLUE CLAY	
	32.0	36.0	MUDDY SAND AND GRAVEL	
	36.0	39.0	GRAVEL & SHALE-LIMESTONE	
	39.0	90.0	LIMESTONE	
<b>Comments</b>	PROC WD 6/63			

## Record of Water Well

## Indiana Department of Natural Resources

<b>Reference Number</b> <b>369</b>	<b>Driving directions to well</b> YORKTOWN-GASTON RD 1MI N OF YORKTOWN ON LOT 17 IN YORKCESTER PARK		<b>Date completed</b> Jan 18, 1964
<b>Owner-Contractor</b>	<b>Name</b>	<b>Address</b>	<b>Telephone</b>
Owner	WM. PLUMMER	RR YORKTOWN IN	
Driller	LOGAN HENSLEY	R2 ALEXANDRIA IN	
Operator	LOGAN HENSLEY	License: null	
<b>Construction Details</b>			
Well	<b>Use:</b> Home	<b>Drilling method:</b> Cable Tool	<b>Pump type:</b>
	<b>Depth:</b> 169.0	<b>Pump setting depth:</b>	<b>Water quality:</b>
Casing	<b>Length:</b> 99.0	<b>Material:</b>	<b>Diameter:</b> 4.0
Screen	<b>Length:</b>	<b>Material:</b>	<b>Diameter:</b> Slot size:
<b>Well Capacity Test</b>	<b>Type of test:</b> Bail / Pump	<b>Test rate:</b> 15.0 gpm for 12.0 hrs.	<b>BailTest rate:</b> 15.0 gpm for 1.0 hrs.
	<b>Drawdown:</b> 0.0 ft.	<b>Static water level:</b> 30.0 ft.	<b>Bailer Drawdown</b> 0.0 ft.
<b>Grouting Information</b>	<b>Material:</b>	<b>Depth:</b> from to	
	<b>Installation Method:</b>	<b>Number of bags used:</b>	
<b>Well Abandonment</b>	<b>Sealing material:</b>	<b>Depth:</b> from to	
	<b>Installation Method:</b>	<b>Number of bags used:</b>	
<b>Administrative</b>	<b>County:</b> DELAWARE		<b>Township:</b> 20N <b>Range:</b> 9E
	<b>Section:</b> NE of the NW of the SW of Section 15		<b>Topo map:</b> MUNCIE WEST
	<b>Grant Number:</b>		
	<b>Field located by:</b> JC	<b>on:</b> Aug 16, 1964	
	<b>Courthouse location by:</b>	<b>on:</b>	
	<b>Location accepted w/o verification by:</b>	<b>on:</b>	
	<b>Subdivision name:</b> YORKCHESTER PARK ADD		<b>Lot number:</b> 17
	<b>Ft W of EL:</b> 4350.0	<b>Ft N of SL:</b> 2500.0	<b>Ft E of WL:</b> <b>Ft S of NL:</b>
	<b>Ground elevation:</b> 926.0	<b>Depth to bedrock:</b> 99.0	<b>Bedrock elevation:</b> 827.0
	<b>UTM Easting:</b> 628056.0	<b>UTM Northing:</b> 4449175.0	
<b>Well Log</b>	Top	Bottom	Formation
	0.0	20.0	CLAY
	20.0	54.0	SAND & GRAVEL
	54.0	99.0	CLAY
	99.0	169.0	LIMESTONE
<b>Comments</b>	BSU UTM,NEW POINT		

## Record of Water Well

## Indiana Department of Natural Resources

<b>Reference Number</b> <b>370</b>	<b>Driving directions to well</b> YORKTOWN-GASTON RD APPROX 1MI N OF YORKTOWN LOT 10 YORKCHESTER PARK		<b>Date completed</b> Jun 05, 1964
<b>Owner-Contractor</b>	<b>Name</b>	<b>Address</b>	<b>Telephone</b>
Owner	LEON CALVERT	R1 DALEVILLE IN	
Driller	LOGAN HENSLEY	R2 ALEXANDRIA IN	
Operator	LOGAN HENSLEY	License: null	
Company	LEON CALVERT	RR1 DALEVILLE IN	
<b>Construction Details</b>			
Well	<b>Use:</b> Home	<b>Drilling method:</b> Cable Tool	<b>Pump type:</b>
	<b>Depth:</b> 165.0	<b>Pump setting depth:</b>	<b>Water quality:</b>
Casing	<b>Length:</b> 54.0	<b>Material:</b>	<b>Diameter:</b> 4.0
Screen	<b>Length:</b>	<b>Material:</b>	<b>Diameter:</b> Slot size:
<b>Well Capacity Test</b>	<b>Type of test:</b> Bail / Pump	<b>Test rate:</b> 12.0 gpm for 0.5 hrs.	<b>Bail Test rate:</b> 12.0 gpm for 1.0 hrs.
	<b>Drawdown:</b> 0.0 ft.	<b>Static water level:</b> 28.0 ft.	<b>Bailer Drawdown:</b> 0.0 ft.
<b>Grouting Information</b>	<b>Material:</b>	<b>Depth:</b> from to	
	<b>Installation Method:</b>	<b>Number of bags used:</b>	
<b>Well Abandonment</b>	<b>Sealing material:</b>	<b>Depth:</b> from to	
	<b>Installation Method:</b>	<b>Number of bags used:</b>	
<b>Administrative</b>	<b>County:</b> DELAWARE		<b>Township:</b> 20N <b>Range:</b> 9E
	<b>Section:</b> SE of the NW of the SW of Section 15		<b>Topo map:</b> MUNCIE WEST
	<b>Grant Number:</b>		
	<b>Field located by:</b> WHO?		<b>on:</b> Aug 06, 1964
	<b>Courthouse location by:</b>		<b>on:</b>
	<b>Location accepted w/o verification by:</b>		<b>on:</b>
	<b>Subdivision name:</b> YORKCHESTER PARK ADD		<b>Lot number:</b> 10
	<b>Ft W of EL:</b> 4350.0	<b>Ft N of SL:</b> 1700.0	<b>Ft E of WL:</b> <b>Ft S of NL:</b>
	<b>Ground elevation:</b> 926.0	<b>Depth to bedrock:</b> 54.0	<b>Bedrock elevation:</b> 872.0 <b>Aquifer elevation:</b>
	<b>UTM Easting:</b> 628026.0		<b>UTM Northing:</b> 4448946.0
<b>Well Log</b>	Top	Bottom	Formation
	0.0	20.0	CLAY
	20.0	54.0	DUSTY SAND & GRAVEL
	54.0	165.0	LIMESTONE
<b>Comments</b>	BSU UTM,NEW POINT		

## Record of Water Well

## Indiana Department of Natural Resources

<b>Reference Number</b> <b>371</b>	<b>Driving directions to well</b> YORKTOWN-GASTON RD APPROX 1MI N OF YORKTOWN LOT9 YORKCHESTER PARK		<b>Date completed</b> Mar 14, 1964
<b>Owner-Contractor</b>	<b>Name</b>	<b>Address</b>	<b>Telephone</b>
Owner	LEON CALVERT	R1 DALEVILLE IN	
Driller	LOGAN HENSLEY	R2 ALEXANDRIA IN	
Operator	LOGAN HENSLEY	License: null	
Company	LEON CALVERT	RR1 DALEVILLE IN	
<b>Construction Details</b>			
Well	<b>Use:</b> Home	<b>Drilling method:</b> Cable Tool	<b>Pump type:</b>
	<b>Depth:</b> 174.0	<b>Pump setting depth:</b>	<b>Water quality:</b>
Casing	<b>Length:</b> 69.0	<b>Material:</b>	<b>Diameter:</b> 4.0
Screen	<b>Length:</b>	<b>Material:</b>	<b>Diameter:</b> Slot size:
<b>Well Capacity Test</b>	<b>Type of test:</b> Bail / Pump	<b>Test rate:</b> 15.0 gpm for 6.0 hrs.	<b>BailTest rate:</b> 15.0 gpm for 1.0 hrs.
	<b>Drawdown:</b> 0.0 ft.	<b>Static water level:</b> 32.0 ft.	<b>Bailer Drawdown</b> 0.0 ft.
<b>Grouting Information</b>	<b>Material:</b>	<b>Depth:</b> from to	
	<b>Installation Method:</b>	<b>Number of bags used:</b>	
<b>Well Abandonment</b>	<b>Sealing material:</b>	<b>Depth:</b> from to	
	<b>Installation Method:</b>	<b>Number of bags used:</b>	
<b>Administrative</b>	<b>County:</b> DELAWARE		<b>Township:</b> 20N <b>Range:</b> 9E
	<b>Section:</b> SE of the NW of the SW of Section 15		<b>Topo map:</b> MUNCIE WEST
	<b>Grant Number:</b>		
	<b>Field located by:</b> JS	<b>on:</b> Apr 23, 1914	
	<b>Courthouse location by:</b>	<b>on:</b>	
	<b>Location accepted w/o verification by:</b>	<b>on:</b>	
	<b>Subdivision name:</b> YORKCHESTER PARK ADD	<b>Lot number:</b> 9	
	<b>Ft W of EL:</b> 4100.0	<b>Ft N of SL:</b> 1700.0	<b>Ft E of WL:</b> <b>Ft S of NL:</b>
	<b>Ground elevation:</b> 926.0	<b>Depth to bedrock:</b> 69.0	<b>Bedrock elevation:</b> 857.0 <b>Aquifer elevation:</b>
	<b>UTM Easting:</b> 628094.0	<b>UTM Northing:</b> 4448932.0	
<b>Well Log</b>	Top	Bottom	Formation
	0.0	20.0	CLAY
	20.0	52.0	SAND & GRAVEL
	52.0	69.0	CLAY
	69.0	174.0	LIMESTONE
<b>Comments</b>	BSU UTM,NEW POINT		

## Record of Water Well

## Indiana Department of Natural Resources

<b>Reference Number</b> <b>372</b>	<b>Driving directions to well</b> WESTCHESTER PK ON RIVER RD 1MI N OF YORKTOWN		<b>Date completed</b> Mar 19, 1960
<b>Owner-Contractor</b>	<b>Name</b>	<b>Address</b>	<b>Telephone</b>
Owner	DON HOUSE	1240 KILGORE AVE MUNCIE IN	
Driller	TRUMAN ATNIP	R2 YORKTOWN IN	
Operator	TRUMAN ATNIP	License: null	
<b>Construction Details</b>			
Well	<b>Use:</b> Home	<b>Drilling method:</b> Cable Tool	<b>Pump type:</b>
	<b>Depth:</b> 126.0	<b>Pump setting depth:</b>	<b>Water quality:</b>
Casing	<b>Length:</b> 61.0	<b>Material:</b>	<b>Diameter:</b> 4.0
Screen	<b>Length:</b>	<b>Material:</b>	<b>Diameter:</b> Slot size:
<b>Well Capacity Test</b>	<b>Type of test:</b> Bail / Pump	<b>Test rate:</b> 12.0 gpm for 2.0 hrs.	<b>BailTest rate:</b> 12.0 gpm for hrs.
	<b>Drawdown:</b> 5.0 ft.	<b>Static water level:</b> 25.0 ft.	<b>Bailer Drawdown</b> 5.0 ft.
<b>Grouting Information</b>	<b>Material:</b>	<b>Depth:</b> from to	
	<b>Installation Method:</b>	<b>Number of bags used:</b>	
<b>Well Abandonment</b>	<b>Sealing material:</b>	<b>Depth:</b> from to	
	<b>Installation Method:</b>	<b>Number of bags used:</b>	
<b>Administrative</b>	<b>County:</b> DELAWARE		<b>Township:</b> 20N <b>Range:</b> 9E
	<b>Section:</b> NE of the NE of the SW of Section 15		<b>Topo map:</b> MUNCIE WEST
	<b>Grant Number:</b>		
	<b>Field located by:</b> STEEN		<b>on:</b> May 01, 1961
	<b>Courthouse location by:</b>		<b>on:</b>
	<b>Location accepted w/o verification by:</b>		<b>on:</b>
	<b>Subdivision name:</b> WESTCHESTER PARK AD.		<b>Lot number:</b>
	<b>Ft W of EL:</b>	<b>Ft N of SL:</b> 2400.0	<b>Ft E of WL:</b> 2100.0 <b>Ft S of NL:</b>
	<b>Ground elevation:</b> 920.0	<b>Depth to bedrock:</b> 61.0	<b>Bedrock elevation:</b> 859.0 <b>Aquifer elevation:</b>
	<b>UTM Easting:</b> 628363.0		<b>UTM Northing:</b> 4449156.0
<b>Well Log</b>	Top	Bottom	Formation
	0.0	6.0	TOP SOIL
	6.0	35.0	CLAY (YELLOW)
	35.0	45.0	GRAY CLAY
	45.0	61.0	SAND & GRAVEL
	61.0	112.0	LIMESTONE & MUD STREAKS
	112.0	126.0	LIMESTONE
<b>Comments</b>	BSU UTM		

## Record of Water Well

## Indiana Department of Natural Resources

<b>Reference Number</b> <b>373</b>	<b>Driving directions to well</b> WESTCHESTER PARK 1MI NW OF YORKTOWN IN		<b>Date completed</b> Jul 02, 1960	
<b>Owner-Contractor</b>	<b>Name</b>	<b>Address</b>	<b>Telephone</b>	
Owner	JOE D. SNYDER	437 S MOUND ST MUNCIE IN		
Driller	BUEL A. BROWN	R1 GASTON IN		
Operator	BUEL A. BROWN	License: null		
<b>Construction Details</b>				
Well	<b>Use:</b> Home	<b>Drilling method:</b>	<b>Pump type:</b>	
	<b>Depth:</b> 40.0	<b>Pump setting depth:</b>	<b>Water quality:</b>	
Casing	<b>Length:</b>	<b>Material:</b>	<b>Diameter:</b>	
Screen	<b>Length:</b>	<b>Material:</b>	<b>Diameter: Slot size:</b>	
<b>Well Capacity Test</b>	<b>Type of test:</b> Bailing	<b>Test rate:</b> gpm for hrs.	<b>BailTest rate:</b> 7.5 gpm for 1.5 hrs.	
	<b>Drawdown:</b> 28.0 ft.	<b>Static water level:</b> ft.	<b>Bailer Drawdown</b> 8.0 ft.	
<b>Grouting Information</b>	<b>Material:</b>		<b>Depth:</b> from to	
	<b>Installation Method:</b>		<b>Number of bags used:</b>	
<b>Well Abandonment</b>	<b>Sealing material:</b>		<b>Depth:</b> from to	
	<b>Installation Method:</b>		<b>Number of bags used:</b>	
<b>Administrative</b>	<b>County:</b> DELAWARE		<b>Township:</b> 20N <b>Range:</b> 9E	
	<b>Section:</b> NE of the NE of the SW of Section 15		<b>Topo map:</b> MUNCIE WEST	
	<b>Grant Number:</b>			
	<b>Field located by:</b> STEEN		<b>on:</b> Jun 01, 1961	
	<b>Courthouse location by:</b>		<b>on:</b>	
	<b>Location accepted w/o verification by:</b>		<b>on:</b>	
	<b>Subdivision name:</b> WESTCHESTER PARK AD.		<b>Lot number:</b>	
	<b>Ft W of EL:</b>	<b>Ft N of SL:</b>	<b>Ft E of WL:</b>	<b>Ft S of NL:</b>
	<b>Ground elevation:</b> 920.0	<b>Depth to bedrock:</b>	<b>Bedrock elevation:</b>	<b>Aquifer elevation:</b> 880.0
	<b>UTM Easting:</b>		<b>UTM Northing:</b>	
<b>Well Log</b>	Top	Bottom	Formation	
	0.0	3.0	TOP SOIL	
	3.0	15.0	CLAY (RED & SANDY)	
	15.0	35.0	BOULDERS IN HARD PAN	
	35.0	40.0	GRAY GRAVEL CONTAINING WATER	
<b>Comments</b>				

## Record of Water Well

## Indiana Department of Natural Resources

<b>Reference Number</b> <b>377</b>	<b>Driving directions to well</b> WESTCHESTER PARK N OF YORKTOWN ON 575S TO END THEN E TO 1ST ADDITION		<b>Date completed</b> May 02, 1961	
<b>Owner-Contractor</b>	<b>Name</b>	<b>Address</b>	<b>Telephone</b>	
Owner	BILL HUDSON	ANDERSON IN		
Driller	PERRY WELL DRILLING	ANDERSON IN		
Operator	JIM PERRY	License: null		
<b>Construction Details</b>				
Well	<b>Use:</b> Home	<b>Drilling method:</b> Cable Tool	<b>Pump type:</b>	
	<b>Depth:</b> 44.0	<b>Pump setting depth:</b>	<b>Water quality:</b>	
Casing	<b>Length:</b> 44.0	<b>Material:</b>	<b>Diameter:</b> 4.0	
Screen	<b>Length:</b>	<b>Material:</b>	<b>Diameter:</b> Slot size:	
<b>Well Capacity Test</b>	<b>Type of test:</b> Bail / Pump	<b>Test rate:</b> 12.0 gpm for 1.0 hrs.	<b>BailTest rate:</b> 6.0 gpm for 1.0 hrs.	
	<b>Drawdown:</b> 0.0 ft.	<b>Static water level:</b> 23.0 ft.	<b>Bailer Drawdown:</b> 0.0 ft.	
<b>Grouting Information</b>	<b>Material:</b>		<b>Depth:</b> from to	
	<b>Installation Method:</b>		<b>Number of bags used:</b>	
<b>Well Abandonment</b>	<b>Sealing material:</b>		<b>Depth:</b> from to	
	<b>Installation Method:</b>		<b>Number of bags used:</b>	
<b>Administrative</b>	<b>County:</b> DELAWARE		<b>Township:</b> 20N <b>Range:</b> 9E	
	<b>Section:</b> NE of the NE of the SW of Section 15		<b>Topo map:</b> MUNCIE WEST	
	<b>Grant Number:</b>			
	<b>Field located by:</b> STEEN		<b>on:</b> May 01, 1961	
	<b>Courthouse location by:</b>		<b>on:</b>	
	<b>Location accepted w/o verification by:</b>		<b>on:</b>	
	<b>Subdivision name:</b> WESTCHESTER PARK AD.		<b>Lot number:</b>	
	<b>Ft W of EL:</b>	<b>Ft N of SL:</b> 2400.0	<b>Ft E of WL:</b> 2600.0	<b>Ft S of NL:</b>
	<b>Ground elevation:</b> 924.0	<b>Depth to bedrock:</b>	<b>Bedrock elevation:</b>	<b>Aquifer elevation:</b> 880.0
	<b>UTM Easting:</b> 628502.0		<b>UTM Northing:</b> 4449147.0	
<b>Well Log</b>	Top	Bottom	Formation	
	0.0	40.0	YELLOW CLAY	
	40.0	44.0	YELLOW GRAVEL	
<b>Comments</b>	BSU UTM			

## Record of Water Well

## Indiana Department of Natural Resources

<b>Reference Number</b> <b>405</b>	<b>Driving directions to well</b> .25MI N OF 100S ON 900W(EAST WELL),160 ACRES IN NAME OF BYRON NIXON		<b>Date completed</b> May 10, 1972	
<b>Owner-Contractor</b>	<b>Name</b>	<b>Address</b>	<b>Telephone</b>	
Owner	NIXON GRAIN & FERTIL.	264 S YORKTOWN RD		
Driller	CO	MUNCIE IN		
Operator	BUSBY DRILLING CO	R6 BX345 ANDERSON IN 46011		
Company	WILLIAM B HOBBS JR	License: null		
	KENNETH COOK	121 N 5TH ST MIDDLETOWN IN		
<b>Construction Details</b>				
Well	<b>Use:</b> Stock	<b>Drilling method:</b> Rotary	<b>Pump type:</b>	
	<b>Depth:</b> 60.0	<b>Pump setting depth:</b>	<b>Water quality:</b>	
Casing	<b>Length:</b> 55.0	<b>Material:</b>	<b>Diameter:</b> 5.0	
Screen	<b>Length:</b> 5.0	<b>Material:</b>	<b>Diameter:</b> 5.0 <b>Slot size:</b> #40 COOK	
<b>Well Capacity Test</b>	<b>Type of test:</b> Pumping	<b>Test rate:</b> 80.0 gpm for 2.0 hrs.	<b>BailTest rate:</b> gpm for hrs.	
	<b>Drawdown:</b> 4.0 ft.	<b>Static water level:</b> 16.0 ft.	<b>Bailer Drawdown:</b> ft.	
<b>Grouting Information</b>	<b>Material:</b>		<b>Depth:</b> from to	
	<b>Installation Method:</b>		<b>Number of bags used:</b>	
<b>Well Abandonment</b>	<b>Sealing material:</b>		<b>Depth:</b> from to	
	<b>Installation Method:</b>		<b>Number of bags used:</b>	
<b>Administrative</b>	<b>County:</b> DELAWARE		<b>Township:</b> 20N <b>Range:</b> 9E	
	<b>Section:</b> SW of the SW of Section 18		<b>Topo map:</b> GILMAN	
	<b>Grant Number:</b>			
	<b>Field located by:</b> HCK		<b>on:</b> Feb 01, 1971	
	<b>Courthouse location by:</b>		<b>on:</b>	
	<b>Location accepted w/o verification by:</b> HCK		<b>on:</b>	
	<b>Subdivision name:</b>		<b>Lot number:</b>	
	<b>Ft W of EL:</b>	<b>Ft N of SL:</b>	<b>Ft E of WL:</b>	<b>Ft S of NL:</b>
	<b>Ground elevation:</b>	<b>Depth to bedrock:</b>	<b>Bedrock elevation:</b>	<b>Aquifer elevation:</b>
	<b>UTM Easting:</b>		<b>UTM Northing:</b>	
<b>Well Log</b>	Top	Bottom	Formation	
	0.0	16.0	RED CLAY	
	16.0	26.0	GRAY CLAY	
	26.0	60.0	WATER BEARING GRAVEL	
<b>Comments</b>	PLATBOOK LOCATION HCK 3/76, SEE 406,407			



## Record of Water Well

## Indiana Department of Natural Resources

<b>Reference Number</b> <b>435</b>	<b>Driving directions to well</b> W EDGE OF YORKTOWN S OF SR32 ON YORK AVE		<b>Date completed</b> Jun 22, 1963	
<b>Owner-Contractor Name</b>	<b>Address</b>		<b>Telephone</b>	
Owner	HAROLD MCVICKERS 303 DEPOT ST YORKTOWN IN			
Driller	GEORGE SKINNER R2 YORKTOWN IN			
Operator	GEORGE SKINNER License: null			
<b>Construction Details</b>				
Well	<b>Use:</b> Home	<b>Drilling method:</b> Cable Tool	<b>Pump type:</b>	
	<b>Depth:</b> 170.0	<b>Pump setting depth:</b>	<b>Water quality:</b>	
Casing	<b>Length:</b> 78.0	<b>Material:</b>	<b>Diameter:</b> 4.0	
Screen	<b>Length:</b>	<b>Material:</b>	<b>Diameter:</b> Slot size:	
<b>Well Capacity Test</b>	<b>Type of test:</b> Pumping	<b>Test rate:</b> 15.0 gpm for 3.0 hrs.	<b>BailTest rate:</b> gpm for hrs.	
	<b>Drawdown:</b> 4.0 ft.	<b>Static water level:</b> 24.0 ft.	<b>Bailer Drawdown</b> ft.	
<b>Grouting Information</b>	<b>Material:</b>		<b>Depth:</b> from to	
	<b>Installation Method:</b>		<b>Number of bags used:</b>	
<b>Well Abandonment</b>	<b>Sealing material:</b>		<b>Depth:</b> from to	
	<b>Installation Method:</b>		<b>Number of bags used:</b>	
<b>Administrative</b>	<b>County:</b> DELAWARE		<b>Township:</b> 20N <b>Range:</b> 9E	
	<b>Section:</b> of Section 21		<b>Topo map:</b> GILMAN	
	<b>Grant Number:</b>			
	<b>Field located by:</b>		<b>on:</b>	
	<b>Courthouse location by:</b>		<b>on:</b>	
	<b>Location accepted w/o verification by:</b>		<b>on:</b>	
	<b>Subdivision name:</b>		<b>Lot number:</b>	
	<b>Ft W of EL:</b>	<b>Ft N of SL:</b>	<b>Ft E of WL:</b>	<b>Ft S of NL:</b>
	<b>Ground elevation:</b>	<b>Depth to bedrock:</b>	<b>Bedrock elevation:</b>	<b>Aquifer elevation:</b>
	<b>UTM Easting:</b>		<b>UTM Northing:</b>	
<b>Well Log</b>	Top	Bottom	Formation	
	0.0	10.0	CLAY	
	10.0	24.0	DRY GRAVEL W/CLAY	
	24.0	58.0	BLUE CLAY	
	58.0	74.0	MUDDY BLUE SAND	
	74.0	78.0	YELLOW CLAY SHALESTONE	
	78.0	170.0	LIMESTONE	
<b>Comments</b>	PROC. BY WD 7/63			

## Record of Water Well

## Indiana Department of Natural Resources

<b>Reference Number</b> <b>436</b>	<b>Driving directions to well</b> YORKTOWN HEIGHTS ADD 1MI W YRKTWN ON SR32 IN FRONT MCVICKY GRAV PIT		<b>Date completed</b> Aug 29, 1968	
<b>Owner-Contractor</b>	<b>Name</b>	<b>Address</b>	<b>Telephone</b>	
Owner	GRAVER	R2 YORKTOWN IN		
Driller	JOE BROWN	R1 GASTON IN		
Operator	JOE BROWN	License: null		
<b>Construction Details</b>				
Well	<b>Use:</b> Home	<b>Drilling method:</b> Cable Tool	<b>Pump type:</b>	
	<b>Depth:</b> 40.0	<b>Pump setting depth:</b>	<b>Water quality:</b>	
Casing	<b>Length:</b> 40.0	<b>Material:</b>	<b>Diameter:</b> 4.0	
Screen	<b>Length:</b> 4.0	<b>Material:</b>	<b>Diameter:</b> 3.0 <b>Slot size:</b> 60.000	
<b>Well Capacity Test</b>	<b>Type of test:</b> Bail / Pump	<b>Test rate:</b> 15.0 gpm for 1.0 hrs.	<b>Bail Test rate:</b> 40.0 gpm for 1.0 hrs.	
	<b>Drawdown:</b> 0.0 ft.	<b>Static water level:</b> 20.0 ft.	<b>Bailer Drawdown:</b> 2.0 ft.	
<b>Grouting Information</b>	<b>Material:</b>		<b>Depth:</b> from to	
	<b>Installation Method:</b>		<b>Number of bags used:</b>	
<b>Well Abandonment</b>	<b>Sealing material:</b>		<b>Depth:</b> from to	
	<b>Installation Method:</b>		<b>Number of bags used:</b>	
<b>Administrative</b>	<b>County:</b> DELAWARE		<b>Township:</b> 20N <b>Range:</b> 9E	
	<b>Section:</b> SW of Section 21		<b>Topo map:</b> GILMAN	
	<b>Grant Number:</b>			
	<b>Field located by:</b>		<b>on:</b>	
	<b>Courthouse location by:</b>		<b>on:</b>	
	<b>Location accepted w/o verification by:</b>		<b>on:</b>	
	<b>Subdivision name:</b> YORKTOWN HEIGHTS ADD		<b>Lot number:</b>	
	<b>Ft W of EL:</b>	<b>Ft N of SL:</b>	<b>Ft E of WL:</b>	<b>Ft S of NL:</b>
	<b>Ground elevation:</b>	<b>Depth to bedrock:</b>	<b>Bedrock elevation:</b>	<b>Aquifer elevation:</b>
	<b>UTM Easting:</b>		<b>UTM Northing:</b>	
<b>Well Log</b>	Top	Bottom	Formation	
	0.0	5.0	RED CLAY	
	5.0	20.0	DRY GRAVEL	
	20.0	31.0	DRY RED GRAVEL	
	31.0	35.0	RED SAND	
	35.0	40.0	RED GRAVEL	
<b>Comments</b>	CLASS BY MJH			

## Record of Water Well

## Indiana Department of Natural Resources

<b>Reference Number</b> <b>438</b>	<b>Driving directions to well</b> CAN'T READ XEROX (TOO LIGHT)		<b>Date completed</b> Jul 17, 1941	
<b>Owner-Contractor</b>	<b>Name</b>	<b>Address</b>	<b>Telephone</b>	
Owner	UNITED MILK ??? CO.	YORKTOWN IN		
Driller	LAYNE NORTHERN CO INC	MISHAWAKA IN		
Operator	ROBERT STEWART??	License: null		
<b>Construction Details</b>				
Well	<b>Use:</b>	<b>Drilling method:</b>	<b>Pump type:</b>	
	<b>Depth:</b>	<b>Pump setting depth:</b>	<b>Water quality:</b>	
Casing	<b>Length:</b>	<b>Material:</b>	<b>Diameter:</b>	
Screen	<b>Length:</b>	<b>Material:</b>	<b>Diameter: Slot size:</b>	
<b>Well Capacity Test</b>	<b>Type of test:</b>	<b>Test rate:</b> 192.0 gpm for hrs.	<b>BailTest rate:</b> gpm for hrs.	
	<b>Drawdown:</b> ft.	<b>Static water level:</b> 24.0 ft.	<b>Bailer Drawdown</b> ft.	
<b>Grouting Information</b>	<b>Material:</b>	<b>Depth:</b> from to		
	<b>Installation Method:</b>	<b>Number of bags used:</b>		
<b>Well Abandonment</b>	<b>Sealing material:</b>	<b>Depth:</b> from to		
	<b>Installation Method:</b>	<b>Number of bags used:</b>		
<b>Administrative</b>	<b>County:</b> DELAWARE		<b>Township:</b> 20N <b>Range:</b> 9E	
	<b>Section:</b> of Section 22		<b>Topo map:</b> MUNCIE WEST	
	<b>Grant Number:</b>			
	<b>Field located by:</b>		<b>on:</b>	
	<b>Courthouse location by:</b>		<b>on:</b>	
	<b>Location accepted w/o verification by:</b>		<b>on:</b>	
	<b>Subdivision name:</b>		<b>Lot number:</b>	
	<b>Ft W of EL:</b>	<b>Ft N of SL:</b>	<b>Ft E of WL:</b>	<b>Ft S of NL:</b>
	<b>Ground elevation:</b>	<b>Depth to bedrock:</b>	<b>Bedrock elevation:</b>	<b>Aquifer elevation:</b>
	<b>UTM Easting:</b>		<b>UTM Northing:</b>	
<b>Well Log</b>	Top	Bottom	Formation	
<b>Comments</b>	CAN'T READ XEROX CHECK ALL ENTRIES			

## Record of Water Well

## Indiana Department of Natural Resources

<b>Reference Number</b> <b>439</b>	<b>Driving directions to well</b> YORKTOWN, (NOTE: DRILLER SAID 9W RATHER THAN 9E FOR RANGE)			<b>Date completed</b>
<b>Owner-Contractor</b> Owner Driller	<b>Name</b> MARSH FOODLINER INC. LAYNE	<b>Address</b> YORKTOWN IN	<b>Telephone</b>	
<b>Construction Details</b>				
Well	<b>Use:</b> Industry	<b>Drilling method:</b>	<b>Pump type:</b>	
Casing	<b>Depth:</b>	<b>Pump setting depth:</b>	<b>Water quality:</b>	
Screen	<b>Length:</b>	<b>Material:</b>	<b>Diameter:</b>	
	<b>Length:</b>	<b>Material:</b>	<b>Diameter: Slot size:</b>	
<b>Well Capacity Test</b>	<b>Type of test:</b>	<b>Test rate:</b> gpm for hrs.	<b>BailTest rate:</b> gpm for hrs.	
	<b>Drawdown:</b> ft.	<b>Static water level:</b> ft.	<b>Bailer Drawdown:</b> ft.	
<b>Grouting Information</b>	<b>Material:</b>		<b>Depth:</b> from to	
	<b>Installation Method:</b>		<b>Number of bags used:</b>	
<b>Well Abandonment</b>	<b>Sealing material:</b>		<b>Depth:</b> from to	
	<b>Installation Method:</b>		<b>Number of bags used:</b>	
<b>Administrative</b>	<b>County:</b> DELAWARE		<b>Township:</b> 20N <b>Range:</b> 9E	
	<b>Section:</b> of Section 22		<b>Topo map:</b> MUNCIE WEST	
	<b>Grant Number:</b>			
	<b>Field located by:</b>		<b>on:</b>	
	<b>Courthouse location by:</b>		<b>on:</b>	
	<b>Location accepted w/o verification by:</b>		<b>on:</b>	
	<b>Subdivision name:</b>		<b>Lot number:</b>	
	<b>Ft W of EL:</b>	<b>Ft N of SL:</b>	<b>Ft E of WL:</b>	<b>Ft S of NL:</b>
	<b>Ground elevation:</b>	<b>Depth to bedrock:</b>	<b>Bedrock elevation:</b>	<b>Aquifer elevation:</b>
	<b>UTM Easting:</b>		<b>UTM Northing:</b>	
<b>Well Log</b>	Top	Bottom	Formation	
<b>Comments</b>	#1 WELL 60TD, #2 170TD, CLASS DB 7/64 WROTE 9W FOR RANGE!			

## Record of Water Well

## Indiana Department of Natural Resources

<b>Reference Number</b> <b>440</b>	<b>Driving directions to well</b> NE OF INTERSECT STEWART RD (BROADWAY SAME) & NYC R.R. 1600' AND THEN N 500'		<b>Date completed</b> Dec 03, 1966
<b>Owner-Contractor</b>	<b>Name</b>	<b>Address</b>	<b>Telephone</b>
Owner	YORKTOWN CITY	YORKTOWN IN	
Driller	LAYNE-NORTHERN CO	MISHAWAKA IN	
Operator	HOYT FOSTER	License: null	
<b>Construction Details</b>			
Well	<b>Use:</b> Public Supply	<b>Drilling method:</b>	<b>Pump type:</b>
	<b>Depth:</b> 210.0	<b>Pump setting depth:</b>	<b>Water quality:</b>
Casing	<b>Length:</b> 38.5	<b>Material:</b> STEEL	<b>Diameter:</b> 12.0
Screen	<b>Length:</b>	<b>Material:</b>	<b>Diameter:</b> Slot size:
<b>Well Capacity Test</b>	<b>Type of test:</b> Pumping	<b>Test rate:</b> 330.0 gpm for 2.0 hrs.	<b>BailTest rate:</b> gpm for hrs.
	<b>Drawdown:</b> 60.0 ft.	<b>Static water level:</b> 10.0 ft.	<b>Bailer Drawdown</b> ft.
<b>Grouting Information</b>	<b>Material:</b>	<b>Depth:</b> from to	
	<b>Installation Method:</b>	<b>Number of bags used:</b>	
<b>Well Abandonment</b>	<b>Sealing material:</b>	<b>Depth:</b> from to	
	<b>Installation Method:</b>	<b>Number of bags used:</b>	
<b>Administrative</b>	<b>County:</b> DELAWARE		<b>Township:</b> 20N <b>Range:</b> 9E
	<b>Section:</b> SE of the SW of the NE of Section 22		<b>Topo map:</b> MUNCIE WEST
	<b>Grant Number:</b>		
	<b>Field located by:</b> BSUSAM		<b>on:</b> Jul 23, 1993
	<b>Courthouse location by:</b>		<b>on:</b>
	<b>Location accepted w/o verification by:</b>		<b>on:</b>
	<b>Subdivision name:</b>		<b>Lot number:</b>
	<b>Ft W of EL:</b>	<b>Ft N of SL:</b> 2800.0	<b>Ft E of WL:</b> 3800.0 <b>Ft S of NL:</b>
	<b>Ground elevation:</b> 910.0	<b>Depth to bedrock:</b> 38.0	<b>Bedrock elevation:</b> 872.0 <b>Aquifer elevation:</b>
	<b>UTM Easting:</b> 628893.0	<b>UTM Northing:</b> 4447693.0	
<b>Well Log</b>	Top	Bottom	Formation
	0.0	1.0	TOP SOIL
	1.0	24.0	DRY SAND&GRAVEL W/CLAY&BOLDERS
	24.0	38.0	BLUE CLAY W/SILT
	38.0	39.0	LIMESTONE
	39.0	50.0	CREVICE W/SAND & GRAVEL
	50.0	71.0	LIMESTONE
	71.0	210.0	LIMESTONE
<b>Comments</b>	BSU LOC & UTM BASE ON EMPLOYEE VERIF.,IS IN LION'S PARK (1 OF 3 TOWN WELLS)		

## Record of Water Well

## Indiana Department of Natural Resources

<b>Reference Number</b> <b>441</b>	<b>Driving directions to well</b> WHITE OAK FARM N OF 200S ON 600W		<b>Date completed</b> Feb 24, 1967	
<b>Owner-ContractorName</b>	<b>Address</b>		<b>Telephone</b>	
Owner	DR.WILL MOORE WHITE OAK FARM R1 YORKTOWN IN			
Driller	GEORGE I SKINNERR2 BX422 YORKTOWN IN			
Operator	GEORGE I SKINNERLicense: null			
<b>Construction Details</b>				
Well	<b>Use:</b> Stock	<b>Drilling method:</b> Cable Tool	<b>Pump type:</b>	
	<b>Depth:</b> 133.0	<b>Pump setting depth:</b>	<b>Water quality:</b>	
Casing	<b>Length:</b> 50.0	<b>Material:</b>	<b>Diameter:</b> 4.0	
Screen	<b>Length:</b>	<b>Material:</b>	<b>Diameter:</b> Slot size:	
<b>Well Capacity Test</b>	<b>Type of test:</b> Pumping	<b>Test rate:</b> 15.0 gpm for 5.0 hrs.	<b>BailTest rate:</b> gpm for hrs.	
	<b>Drawdown:</b> 1.0 ft.	<b>Static water level:</b> 10.0 ft.	<b>Bailer Drawdown</b> ft.	
<b>Grouting Information</b>	<b>Material:</b>		<b>Depth:</b> from to	
	<b>Installation Method:</b>		<b>Number of bags used:</b>	
<b>Well Abandonment</b>	<b>Sealing material:</b>		<b>Depth:</b> from to	
	<b>Installation Method:</b>		<b>Number of bags used:</b>	
<b>Administrative</b>	<b>County:</b> DELAWARE		<b>Township:</b> 20N <b>Range:</b> 9E	
	<b>Section:</b> of Section 22		<b>Topo map:</b> MUNCIE WEST	
	<b>Grant Number:</b>			
	<b>Field located by:</b>		<b>on:</b>	
	<b>Courthouse location by:</b>		<b>on:</b>	
	<b>Location accepted w/o verification by:</b>		<b>on:</b>	
	<b>Subdivision name:</b>		<b>Lot number:</b>	
	<b>Ft W of EL:</b>	<b>Ft N of SL:</b>	<b>Ft E of WL:</b>	<b>Ft S of NL:</b>
	<b>Ground elevation:</b>	<b>Depth to bedrock:</b>	<b>Bedrock elevation:</b>	<b>Aquifer elevation:</b>
	<b>UTM Easting:</b>		<b>UTM Northing:</b>	
<b>Well Log</b>	Top	Bottom	Formation	
	0.0	9.0	CLAY	
	9.0	18.0	DRY GRAVEL	
	18.0	24.0	COURSE SAND & GRAVEL	
	24.0	46.0	MUDDY SAND	
	46.0	48.0	BLUE CLAY	
	48.0	50.0	BLUE CLAY W/ SHALE STONE	
	50.0	133.0	LIMESTONE	
<b>Comments</b>	CLASS BY MJH			

## Record of Water Well

## Indiana Department of Natural Resources

<b>Reference Number</b> <b>442</b>	<b>Driving directions to well</b> N OF YORKTOWN ON SR32 TO ANDREWS RD,S TO HURST ACRES,W TO 1ST ST S		<b>Date completed</b> Nov 28, 1983	
<b>Owner-Contractor</b> Driller Operator	<b>Name</b> BUEL BROWN BUEL BROWN	<b>Address</b> R9 BX462 MUNCIE IN License: null	<b>Telephone</b>	
<b>Construction Details</b> Well Casing Screen	<b>Use:</b> Home <b>Depth:</b> <b>Length:</b> 44.0 <b>Length:</b>	<b>Drilling method:</b> Rotary <b>Pump setting depth:</b> <b>Material:</b> <b>Material:</b>	<b>Pump type:</b> <b>Water quality:</b> <b>Diameter:</b> 4.0 <b>Diameter: Slot size:</b>	
<b>Well Capacity Test</b>	<b>Type of test:</b> Bail / Pump <b>Drawdown:</b> 10.0 ft.	<b>Test rate:</b> 15.0 gpm for 0.5 hrs. <b>Static water level:</b> ft.	<b>BailTest rate:</b> 15.0 gpm for 0.5 hrs. <b>Bailer Drawdown</b> 10.0 ft.	
<b>Grouting Information</b>	<b>Material:</b> <b>Installation Method:</b>		<b>Depth:</b> from to <b>Number of bags used:</b>	
<b>Well Abandonment</b>	<b>Sealing material:</b> <b>Installation Method:</b>		<b>Depth:</b> from to <b>Number of bags used:</b>	
<b>Administrative</b>	<b>County:</b> DELAWARE <b>Section:</b> NE of the SE of Section 22 <b>Grant Number:</b> <b>Field located by:</b> <b>Courthouse location by:</b> <b>Location accepted w/o verification by:</b> <b>Subdivision name:</b> <b>Ft W of EL:</b> <b>Ground elevation:</b> <b>UTM Easting:</b>		<b>Township:</b> 20N <b>Range:</b> 9E <b>Topo map:</b> MUNCIE WEST <b>on:</b> <b>on:</b> <b>on:</b> <b>Lot number:</b> <b>Ft E of WL:</b> <b>Ft S of NL:</b> <b>Bedrock elevation:</b> <b>Aquifer elevation:</b> <b>UTM Northing:</b>	
<b>Well Log</b>	Top	Bottom	Formation	
	0.0	44.0	CLAY	
	44.0	110.0	STONE	
<b>Comments</b>	PART OF 'DRIVE' COVERED BY SLIP BUT ENDS IN 'RIGHT SIDE'			

## Record of Water Well

## Indiana Department of Natural Resources

<b>Reference Number</b> <b>444</b>	<b>Driving directions to well</b> WEST MUNCIE		<b>Date completed</b> May 17, 1964
<b>Owner-Contractor Name</b>	<b>Address</b>	<b>Telephone</b>	
Owner	CECIL DRAGOO	508 SMITH RD YORKTOWN IN	
Driller	GEORGE I SKINNER	R2 BX155 YORKTOWN IN	
Operator	GEORGE I SKINNER	License: null	
<b>Construction Details</b>			
Well	<b>Use:</b> Home	<b>Drilling method:</b> Cable Tool	<b>Pump type:</b>
	<b>Depth:</b> 200.0	<b>Pump setting depth:</b>	<b>Water quality:</b>
Casing	<b>Length:</b> 84.0	<b>Material:</b>	<b>Diameter:</b> 4.0
Screen	<b>Length:</b>	<b>Material:</b>	<b>Diameter:</b> Slot size:
<b>Well Capacity Test</b>	<b>Type of test:</b> Pumping	<b>Test rate:</b> 5.0 gpm for 5.0 hrs.	<b>BailTest rate:</b> gpm for hrs.
	<b>Drawdown:</b> ft.	<b>Static water level:</b> 24.0 ft.	<b>Bailer Drawdown:</b> ft.
<b>Grouting Information</b>	<b>Material:</b>	<b>Depth:</b> from to	
	<b>Installation Method:</b>	<b>Number of bags used:</b>	
<b>Well Abandonment</b>	<b>Sealing material:</b>	<b>Depth:</b> from to	
	<b>Installation Method:</b>	<b>Number of bags used:</b>	
<b>Administrative</b>	<b>County:</b> DELAWARE		<b>Township:</b> 20N <b>Range:</b> 9E
	<b>Section:</b> NE of the NW of the NE of Section 22		<b>Topo map:</b> MUNCIE WEST
	<b>Grant Number:</b>		
	<b>Field located by:</b> ??		<b>on:</b> Aug 06, 1964
	<b>Courthouse location by:</b>		<b>on:</b>
	<b>Location accepted w/o verification by:</b>		<b>on:</b>
	<b>Subdivision name:</b>		<b>Lot number:</b>
	<b>Ft W of EL:</b> 1450.0	<b>Ft N of SL:</b> 4900.0	<b>Ft E of WL:</b> <b>Ft S of NL:</b>
	<b>Ground elevation:</b> 923.0	<b>Depth to bedrock:</b> 84.0	<b>Bedrock elevation:</b> 839.0 <b>Aquifer elevation:</b>
	<b>UTM Easting:</b> 628913.0		<b>UTM Northing:</b> 4448340.0
<b>Well Log</b>	Top	Bottom	Formation
	0.0	8.0	CLAY
	8.0	18.0	HARD PAN
	18.0	38.0	COURSE SAND
	38.0	83.0	BLUE HARD PAN
	83.0	84.0	BLUE CLAY & SAND
	84.0	200.0	LIMESTONE
<b>Comments</b>	BSU UTM, DNR CONFLICT BETWEEN SW/NE AND 4900N OF S-LINE, CHOSE S-LINE AND CHANGED TO NW/NE		



## Record of Water Well

## Indiana Department of Natural Resources

<b>Reference Number</b> <b>491</b>	<b>Driving directions to well</b> S OF SR32 ON ANDREWS RD(500W) & 126S LOT 27 ANDREW'S ADDN.		<b>Date completed</b> Apr 06, 1964	
<b>Owner-Contractor</b>	<b>Name</b>	<b>Address</b>	<b>Telephone</b>	
Driller	GEORGE I SKINNER	R2 BX 155 YORKTOWN IN		
Operator	GEORGE I SKINNER	License: null		
Company	MARSHAL SISK	BREWINGTON WOODS, MUNCIE IN		
<b>Construction Details</b>				
Well	<b>Use:</b> Home	<b>Drilling method:</b> Cable Tool	<b>Pump type:</b>	
	<b>Depth:</b> 65.0	<b>Pump setting depth:</b>	<b>Water quality:</b>	
Casing	<b>Length:</b> 26.0	<b>Material:</b>	<b>Diameter:</b> 4.0	
Screen	<b>Length:</b>	<b>Material:</b>	<b>Diameter:</b> Slot size:	
<b>Well Capacity Test</b>	<b>Type of test:</b> Pumping	<b>Test rate:</b> 10.0 gpm for 4.0 hrs.	<b>BailTest rate:</b> gpm for hrs.	
	<b>Drawdown:</b> 0.0 ft.	<b>Static water level:</b> 17.0 ft.	<b>Bailer Drawdown</b> ft.	
<b>Grouting Information</b>	<b>Material:</b>		<b>Depth:</b> from to	
	<b>Installation Method:</b>		<b>Number of bags used:</b>	
<b>Well Abandonment</b>	<b>Sealing material:</b>		<b>Depth:</b> from to	
	<b>Installation Method:</b>		<b>Number of bags used:</b>	
<b>Administrative</b>	<b>County:</b> DELAWARE		<b>Township:</b> 20N <b>Range:</b> 9E	
	<b>Section:</b> SW of the NW of Section 23		<b>Topo map:</b> MUNCIE WEST	
	<b>Grant Number:</b>			
	<b>Field located by:</b>		<b>on:</b>	
	<b>Courthouse location by:</b>		<b>on:</b>	
	<b>Location accepted w/o verification by:</b>		<b>on:</b>	
	<b>Subdivision name:</b> ANDREW ACRES ADDN.		<b>Lot number:</b> 27	
	<b>Ft W of EL:</b>	<b>Ft N of SL:</b>	<b>Ft E of WL:</b>	<b>Ft S of NL:</b>
	<b>Ground elevation:</b>	<b>Depth to bedrock:</b>	<b>Bedrock elevation:</b>	<b>Aquifer elevation:</b>
	<b>UTM Easting:</b>		<b>UTM Northing:</b>	
<b>Well Log</b>	Top	Bottom	Formation	
	0.0	7.0	CLAY	
	7.0	14.0	HARD PAN W/SMALL STONE	
	14.0	26.0	MUDDY GRAVEL W/SMALL STONE	
	26.0	65.0	LIMESTONE	
<b>Comments</b>	THERE WERE NO ENTRIES IN THE ADMIN SECTION			

## Record of Water Well

## Indiana Department of Natural Resources

<b>Reference Number</b> <b>561</b>	<b>Driving directions to well</b> EVAN PARK ADD ON CORNBREAD RD		<b>Date completed</b> Feb 18, 1963	
<b>Owner-Contractor</b>	<b>Name</b>	<b>Address</b>	<b>Telephone</b>	
Owner	GEORGE VISE	R2 YORKTOWN IN		
Driller	GEORGE I SKINNER	R2 YORKTOWN IN		
Operator	GEORGE I SKINNER	License: null		
<b>Construction Details</b>				
Well	<b>Use:</b> Home	<b>Drilling method:</b>	<b>Pump type:</b>	
	<b>Depth:</b> 45.0	<b>Pump setting depth:</b>	<b>Water quality:</b>	
Casing	<b>Length:</b> 45.0	<b>Material:</b>	<b>Diameter:</b> 4.0	
Screen	<b>Length:</b>	<b>Material:</b>	<b>Diameter:</b> Slot size:	
<b>Well Capacity Test</b>	<b>Type of test:</b> Pumping	<b>Test rate:</b> 13.3 gpm for 1.0 hrs.	<b>BailTest rate:</b> gpm for hrs.	
	<b>Drawdown:</b> 2.0 ft.	<b>Static water level:</b> 16.0 ft.	<b>Bailer Drawdown</b> ft.	
<b>Grouting Information</b>	<b>Material:</b>	<b>Depth:</b> from to		
	<b>Installation Method:</b>	<b>Number of bags used:</b>		
<b>Well Abandonment</b>	<b>Sealing material:</b>	<b>Depth:</b> from to		
	<b>Installation Method:</b>	<b>Number of bags used:</b>		
<b>Administrative</b>	<b>County:</b> DELAWARE		<b>Township:</b> 20N <b>Range:</b> 9E	
	<b>Section:</b> SW of the NE of Section 24		<b>Topo map:</b> MUNCIE WEST	
	<b>Grant Number:</b>			
	<b>Field located by:</b>		<b>on:</b>	
	<b>Courthouse location by:</b>		<b>on:</b>	
	<b>Location accepted w/o verification by:</b>		<b>on:</b>	
	<b>Subdivision name:</b> EVAN PARK ADDN.		<b>Lot number:</b>	
	<b>Ft W of EL:</b>	<b>Ft N of SL:</b>	<b>Ft E of WL:</b>	<b>Ft S of NL:</b>
	<b>Ground elevation:</b>	<b>Depth to bedrock:</b>	<b>Bedrock elevation:</b>	<b>Aquifer elevation:</b>
	<b>UTM Easting:</b>	<b>UTM Northing:</b>		
<b>Well Log</b>	Top	Bottom	Formation	
	0.0	16.0	CLAY	
	16.0	23.0	DRY GRAVEL WITH CLAY	
	23.0	33.0	BLUE CLAY	
	33.0	41.0	YELLOW CLAY	
	41.0	45.0	BROWN COARSE SAND (WATER)	
<b>Comments</b>	WELL LOG PROCESSED BY WD 2/14/63			

## Record of Water Well

## Indiana Department of Natural Resources

<b>Reference Number</b> <b>562</b>	<b>Driving directions to well</b> LOT 6 EVAN PARK ADD ON CORNBREAD RD 450W 150S		<b>Date completed</b> May 08, 1963	
<b>Owner-Contractor</b>	<b>Name</b>	<b>Address</b>	<b>Telephone</b>	
Owner	HUGO COOK	1903 SPRUCE ST MUNCIE IN		
Driller	GEORGE I SKINNER	R2 YORKTOWN IN		
Operator	GEORGE I SKINNER	License: null		
<b>Construction Details</b>				
Well	<b>Use:</b> Home	<b>Drilling method:</b> Cable Tool	<b>Pump type:</b>	
	<b>Depth:</b> 63.0	<b>Pump setting depth:</b>	<b>Water quality:</b>	
Casing	<b>Length:</b> 63.0	<b>Material:</b>	<b>Diameter:</b> 4.0	
Screen	<b>Length:</b>	<b>Material:</b>	<b>Diameter:</b> Slot size:	
<b>Well Capacity Test</b>	<b>Type of test:</b> Pumping	<b>Test rate:</b> 10.0 gpm for 2.0 hrs.	<b>BailTest rate:</b> gpm for hrs.	
	<b>Drawdown:</b> ft.	<b>Static water level:</b> 12.0 ft.	<b>Bailer Drawdown</b> ft.	
<b>Grouting Information</b>	<b>Material:</b>		<b>Depth:</b> from to	
	<b>Installation Method:</b>		<b>Number of bags used:</b>	
<b>Well Abandonment</b>	<b>Sealing material:</b>		<b>Depth:</b> from to	
	<b>Installation Method:</b>		<b>Number of bags used:</b>	
<b>Administrative</b>	<b>County:</b> DELAWARE		<b>Township:</b> 20N <b>Range:</b> 9E	
	<b>Section:</b> SW of the NE of Section 24		<b>Topo map:</b> MUNCIE WEST	
	<b>Grant Number:</b>			
	<b>Field located by:</b>		<b>on:</b>	
	<b>Courthouse location by:</b>		<b>on:</b>	
	<b>Location accepted w/o verification by:</b>		<b>on:</b>	
	<b>Subdivision name:</b> EVAN PARK ADDN.		<b>Lot number:</b> 6	
	<b>Ft W of EL:</b>	<b>Ft N of SL:</b>	<b>Ft E of WL:</b>	<b>Ft S of NL:</b>
	<b>Ground elevation:</b>	<b>Depth to bedrock:</b>	<b>Bedrock elevation:</b>	<b>Aquifer elevation:</b>
	<b>UTM Easting:</b>		<b>UTM Northing:</b>	
<b>Well Log</b>	Top	Bottom	Formation	
	0.0	8.0	CLAY	
	8.0	15.0	SOFT MUDDY CLAY	
	15.0	23.0	DRY GRAVEL	
	23.0	44.0	BLUE CLAY	
	44.0	60.0	QUICK SAND	
	60.0	63.0	COARSE SAND & GRAVEL	
<b>Comments</b>	WELL LOG PROCESSED BY WD 5/20/63			

## Record of Water Well

## Indiana Department of Natural Resources

<b>Reference Number</b> <b>3162</b>	<b>Driving directions to well</b> SE1/4 SW1/4 SW1/4 SEC34		<b>Date completed</b> Nov 05, 1963
<b>Owner-Contractor Name</b>		<b>Address</b>	<b>Telephone</b>
Owner HABBIN LAUNDRY		424 E MCGALLIARD MUNCIE IN	
Driller FARM & CITY WELL SER		500E MCGALLIARD MUNCIE IN	
Operator BYRON RUSSELL		License: null	
<b>Construction Details</b>			
Well	<b>Use:</b> Home	<b>Drilling method:</b> Rotary	<b>Pump type:</b>
	<b>Depth:</b> 183.0	<b>Pump setting depth:</b>	<b>Water quality:</b>
Casing	<b>Length:</b> 96.0	<b>Material:</b>	<b>Diameter:</b> 4.5
Screen	<b>Length:</b>	<b>Material:</b>	<b>Diameter:</b> Slot size:
<b>Well Capacity Test</b>	<b>Type of test:</b> Air / Bailing	<b>Test rate:</b> 80.0 gpm for hrs.	<b>BailTest rate:</b> 60.0 gpm for hrs.
	<b>Drawdown:</b> 165.0 ft.	<b>Static water level:</b> 18.0 ft.	<b>Bailer Drawdown</b> 95.0 ft.
<b>Grouting Information</b>	<b>Material:</b>	<b>Depth:</b> from to	
	<b>Installation Method:</b>	<b>Number of bags used:</b>	
<b>Well Abandonment</b>	<b>Sealing material:</b>	<b>Depth:</b> from to	
	<b>Installation Method:</b>	<b>Number of bags used:</b>	
<b>Administrative</b>	<b>County:</b> DELAWARE		<b>Township:</b> 21N <b>Range:</b> 10E
	<b>Section:</b> SW of the SE of the SW of Section 34		<b>Topo map:</b> MUNCIE WEST
	<b>Grant Number:</b>		
	<b>Field located by:</b> NZ	<b>on:</b> Aug 05, 1964	
	<b>Courthouse location by:</b>	<b>on:</b>	
	<b>Location accepted w/o verification by:</b>	<b>on:</b>	
	<b>Subdivision name:</b>	<b>Lot number:</b>	
	<b>Ft W of EL:</b>	<b>Ft N of SL:</b> 50.0	<b>Ft E of WL:</b> 1150.0 <b>Ft S of NL:</b>
	<b>Ground elevation:</b> 955.0	<b>Depth to bedrock:</b> 93.0	<b>Bedrock elevation:</b> 862.0 <b>Aquifer elevation:</b>
	<b>UTM Easting:</b> 637618.0	<b>UTM Northing:</b> 4453118.0	
<b>Well Log</b>	Top	Bottom	Formation
	0.0	12.0	CLAY
	12.0	22.0	FINE SAND
	22.0	26.0	SANDY GRAVEL
	26.0	59.0	CLAY
	59.0	74.0	SHARP SAND & FINE CLAY
	74.0	93.0	CLAY
	93.0	96.0	LIMESTONE (SET CASING)
	96.0	183.0	LIMESTONE
<b>Comments</b>	UTMS BY BSU		

## Record of Water Well

## Indiana Department of Natural Resources

<b>Reference Number</b> <b>21083</b>	<b>Driving directions to well</b> 100 W WASHINGTON ST MUNCIE IN		<b>Date completed</b> Jul 05, 1990	
<b>Owner-Contractor</b>	<b>Name</b>	<b>Address</b>	<b>Telephone</b>	
Owner	DELAWARE COUNTY JUSTIC			
Driller	HAMILTON BROS INC	4025 ROCKVILLE RD INDPLS IN	(000) 241-2571	
Operator	DAVID R HARNESS	License: 35		
Company	SATER ELECTRIC INC	PO BOX 292 DALEVILLE IN		
<b>Construction Details</b>				
Well	<b>Use:</b>	<b>Drilling method:</b>	<b>Pump type:</b>	
	<b>Depth:</b> 245.0	<b>Pump setting depth:</b>	<b>Water quality:</b> CLEAR	
Casing	<b>Length:</b> 69.0	<b>Material:</b> STEEL	<b>Diameter:</b> 8.0	
Screen	<b>Length:</b>	<b>Material:</b>	<b>Diameter:</b> Slot size:	
<b>Well Capacity Test</b>	<b>Type of test:</b>	<b>Test rate:</b> gpm for hrs.	<b>BailTest rate:</b> gpm for hrs.	
	<b>Drawdown:</b> ft.	<b>Static water level:</b> ft.	<b>Bailer Drawdown:</b> ft.	
<b>Grouting Information</b>	<b>Material:</b> NEAT CEMENT		<b>Depth:</b> from 10.0 to 69.0	
	<b>Installation Method:</b> TREM		<b>Number of bags used:</b> 25.0	
<b>Well Abandonment</b>	<b>Sealing material:</b>		<b>Depth:</b> from to	
	<b>Installation Method:</b>		<b>Number of bags used:</b>	
<b>Administrative</b>	<b>County:</b> DELAWARE		<b>Township:</b> 20N <b>Range:</b> 10E	
	<b>Section:</b> NE of the SE of the SE of Section 9		<b>Topo map:</b> MUNCIE WEST	
	<b>Grant Number:</b>			
	<b>Field located by:</b> BSU		<b>on:</b> Jun 01, 1993	
	<b>Courthouse location by:</b>		<b>on:</b>	
	<b>Location accepted w/o verification by:</b>		<b>on:</b>	
	<b>Subdivision name:</b>		<b>Lot number:</b>	
	<b>Ft W of EL:</b> 150.0	<b>Ft N of SL:</b> 750.0	<b>Ft E of WL:</b>	<b>Ft S of NL:</b>
	<b>Ground elevation:</b> 945.0	<b>Depth to bedrock:</b> 67.0	<b>Bedrock elevation:</b> 878.0	<b>Aquifer elevation:</b>
	<b>UTM Easting:</b> 637324.0		<b>UTM Northing:</b> 4450426.0	
<b>Well Log</b>	Top	Bottom	Formation	
	0.0	12.0	FILL	
	12.0	18.0	CLAY	
	18.0	20.0	GRAV	
	20.0	36.0	CLAY	
	36.0	39.0	GRAV	
	39.0	52.0	CLAY	
	52.0	55.0	GRAV	
	55.0	63.0	CLAY	

63.0	65.0	GRAV
65.0	67.0	CLAY
67.0	245.0	LS

<b>Comments</b>	WELL 2 OF 2
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## Record of Water Well

## Indiana Department of Natural Resources

<b>Reference Number</b> <b>22706</b>	<b>Driving directions to well</b> FROM I 69, TAKE 67 E TO 67/35/3 AROUND E SIDE OF MUNCIE TO SR 32, W TO OHIO ST, N TO WASHINGTON ST, E TO CITY MACHINE		<b>Date completed</b> Feb 01, 1990
<b>Owner-Contractor</b>	<b>Name</b>	<b>Address</b>	<b>Telephone</b>
Owner	CITY MACHINE TOOL & DIE	1302 E WASHINGTON ST MUNCIE IN	(317) 288-4431
Driller	JOSEPH HUSER SERVICES INC	5728 S EMERSON AVE INDPLS IN	(317) 784-4264
Operator	SHAWN R COREY, JEFFREY M COREY	License: 436, 881	
<b>Construction Details</b>			
Well	<b>Use:</b> Other	<b>Drilling method:</b>	<b>Pump type:</b>
Casing	<b>Depth:</b>	<b>Pump setting depth:</b>	<b>Water quality:</b>
Screen	<b>Length:</b>	<b>Material:</b>	<b>Diameter:</b>
	<b>Length:</b>	<b>Material:</b>	<b>Diameter: Slot size:</b>
<b>Well Capacity Test</b>	<b>Type of test:</b> Air	<b>Test rate:</b> 5.0 gpm for hrs.	<b>BailTest rate:</b> gpm for hrs.
	<b>Drawdown:</b> ft.	<b>Static water level:</b> ft.	<b>Bailer Drawdown:</b> ft.
<b>Grouting Information</b>	<b>Material:</b> BENT		<b>Depth:</b> from 4.0 to 150.0
	<b>Installation Method:</b> PUMP		<b>Number of bags used:</b> 3.0
<b>Well Abandonment</b>	<b>Sealing material:</b>		<b>Depth:</b> from to
	<b>Installation Method:</b>		<b>Number of bags used:</b>
<b>Administrative</b>	<b>County:</b> DELAWARE		<b>Township:</b> 20N <b>Range:</b> 10E
	<b>Section:</b> NW of the SE of the SE of Section 10		<b>Topo map:</b> MUNCIE EAST
	<b>Grant Number:</b>		
	<b>Field located by:</b> EL		<b>on:</b> Sep 16, 1993
	<b>Courthouse location by:</b>		<b>on:</b>
	<b>Location accepted w/o verification by:</b>		<b>on:</b>
	<b>Subdivision name:</b>		<b>Lot number:</b>
	<b>Ft W of EL:</b> 1250.0	<b>Ft N of SL:</b> 700.0	<b>Ft E of WL:</b> <b>Ft S of NL:</b>
	<b>Ground elevation:</b> 947.0	<b>Depth to bedrock:</b> 35.0	<b>Bedrock elevation:</b> 912.0 <b>Aquifer elevation:</b>
	<b>UTM Easting:</b> 638529.438		<b>UTM Northing:</b> 4450421.0
<b>Well Log</b>	Top	Bottom	Formation
	0.0	2.0	GRAVEL, PARKING LOT
	2.0	10.0	DARK CLAY
	10.0	28.0	S & G, SOME CLAY
	28.0	35.0	S & STICKY CLAY
	35.0	150.0	LS
<b>Comments</b>	MC912, WELL VERIFIED BY EMPLOYEE, LOCATION W OF PLANT IN SMALL PUMPHOUSE, 5 GPM WHILE DRILLING STONE		

## **APPENDIX B**

### **BORING LOGS**






# SOIL BORING LOG INFORMATION

Page 1 of 2

Facility/Project Name <b>Kiser Plating</b>			License/Permit/Monitoring Number		Boring Number <b>SB-1</b>	
Boring Drilled By (Firm name and name of crew chief) <b>Midwest Probing - John Gridder</b>			Date Drilling Started <b>10/21/2008</b>		Date Drilling Completed <b>10/21/2008</b>	
Unique Well No.			Well ID No.		Common Well Name	
Final Static Water Level <b>Feet BGS</b>			Surface Elevation <b>Feet MSL</b>		Borehole Diameter <b>2" Inches</b>	
Boring Location or Local Grid Origin (Check if estimated: <input type="checkbox"/> ) State Plane 1/4 of 1/4 of Section , T N, R			Lat. ° ' " Long. ° ' "		Local Grid Location (If applicable) <input type="checkbox"/> N <input type="checkbox"/> E <input type="checkbox"/> S <input type="checkbox"/> W	

Facility ID	County	County Code	Civil Town/City/ or Village <b>Muncie</b>
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Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	PID/FID	Soil Properties					RQD/ Comments
									Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	
			1	<b>0.0-4.0 FEET:</b> FILL; 0-4" brown silt and fine to coarse sand; 4-14" brown fine sand; 14-33" brown sand and clay; moderate soft; moist.	FILL									
			2											
			3											
			4											
			5	<b>4.0-8.0 FEET:</b> SILT; brown silt and clay with some sand and trace gravel; moist.	ML									
			6											
			7											
			8											
			9	<b>8.0-12.0 FEET:</b> SILT; brown silt and clay with little sand; moist	ML									
			10											
			11											
			12											

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature	Firm <b>Symbiont</b> <b>6737 W. Washington St., Suite 3440, West Allis, WI</b>	Tel: 414-291-8840 Fax: 414-291-8841
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## SOIL BORING LOG INFORMATION SUPPLEMENT

Boring Number

SB-1

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Page 2 of 2[illegible]

# SOIL BORING LOG INFORMATION

Page 1 of 2

Facility/Project Name <b>Kiser Plating</b>			License/Permit/Monitoring Number		Boring Number <b>SB-10_MW-10</b>	
Boring Drilled By (Firm name and name of crew chief) <b>Midwest Probing - John Gridder</b>			Date Drilling Started <b>10/21/2008</b>		Date Drilling Completed <b>10/21/2008</b>	
Unique Well No.		Well ID No.	Common Well Name		Borehole Diameter <b>2" Inches</b>	
			Final Static Water Level <b>Feet BGS</b>		Surface Elevation <b>Feet MSL</b>	
Boring Location or Local Grid Origin (Check if estimated: <input type="checkbox"/> ) State Plane <b>S / C / N</b>			Lat. <b>° ' "</b>		Local Grid Location (If applicable) <input type="checkbox"/> N <input type="checkbox"/> E <input type="checkbox"/> S <input type="checkbox"/> W	
1/4 of <b>T</b> N, R			Long. <b>° ' "</b>		Feet <input type="checkbox"/> Feet <input type="checkbox"/> W	

Facility ID	County	County Code	Civil Town/City/ or Village <b>Muncie</b>
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Sample		Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	PID/FID	Soil Properties						RQD/ Comments
Number and Type	Length Att. & Recovered (in)								Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200		
1	48 21		1 2 3 4	<b>0.0-4.0 FEET:</b> FILL; Light and dark brown silty clay sand and gravel; moist.	FILL			0		moist					
2	48 26		5 6 7 8	<b>4.0-8.0 FEET:</b> SILT; 0-9" Brown silty clay with some moist sand. 9-26" Dark brown clay with little silt and trace sand. moist.	SM			0		moist					
3	48 43		9 10 11 12	<b>8.0 12.0 FEET:</b> SILT; 0-9' Dark brown clay with little silt and trace sand. 9-37" Brown sand. 37-43" grey brown silt and clay; moist to 9.5' wet below 9.5'.	SM			moist to 9.5' wet below 9.5'							

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature	Firm <b>Symbiont</b> <b>6737 W. Washington St., Suite 3440, West Allis, WI</b>	Tel: 414-291-8840 Fax: 414-291-8841
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## SOIL BORING LOG INFORMATION SUPPLEMENT

Boring Number

SB-10\_MW-10

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Page 2 of 2



Sample		Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	PID/FID	Soil Properties						RQD/ Comments
Number and Type	Length Att. & Recovered (in)								Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200		
4	48 12		13 14 15 16	<b><u>12.0-16.0 FEET:</u></b> 0-12" grey brown silt and clay.	SM					wet					
				<b><u>16.0 FEET E.O.B.</u></b>  A soil sample was taken from 0.0 to 2.0 feet and analyzed for metals, hex chrome, and CN.											

# SOIL BORING LOG INFORMATION

Page 1 of 2

Facility/Project Name <b>Kiser Plating</b>			License/Permit/Monitoring Number		Boring Number <b>SB-2</b>	
Boring Drilled By (Firm name and name of crew chief) <b>Midwest Probing - John Gridder</b>			Date Drilling Started <b>10/21/2008</b>		Date Drilling Completed <b>10/21/2008</b>	
Unique Well No.		Well ID No.	Common Well Name		Borehole Diameter <b>2" Inches</b>	
			Final Static Water Level <b>Feet BGS</b>		Surface Elevation <b>Feet MSL</b>	
Boring Location or Local Grid Origin (Check if estimated: <input type="checkbox"/> ) State Plane 1/4 of 1/4 of Section , T N, R			Lat. ° ' " Long. ° ' " Local Grid Location (If applicable) <input type="checkbox"/> N <input type="checkbox"/> E <input type="checkbox"/> S <input type="checkbox"/> W			

Facility ID	County	County Code	Civil Town/City/ or Village <b>Muncie</b>
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Sample		Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	PID/FID	Soil Properties					RQD/ Comments
Number and Type	Length Att. & Recovered (in)								Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	
			1	<b>0.0-8.0 FEET:</b> FILL; 0-12" brown clay and silt with little sand; 12-18" brown clay with little silt and trace sand; 18-31" silt and clay with little sand; moist.	FILL									
			2											
			3											
			4											
			5											
			6											
			7											
			8	<b>8.0-20.0 FEET:</b> SILT; 0-34" brown clay and silt with little sand; 34-40" brown medium sand; 40-48" brown to gray brown silt and clay with little sand.										
			9											
			10											
			11											
			12											

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature	Firm <b>Symbiont</b> <b>6737 W. Washington St., Suite 3440, West Allis, WI</b>	Tel: 414-291-8840 Fax: 414-291-8841
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## SOIL BORING LOG INFORMATION SUPPLEMENT

Boring Number

SB-2

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Page 2 of 2[illegible]

# SOIL BORING LOG INFORMATION

Page 1 of 2

Facility/Project Name <b>Kiser Plating</b>			License/Permit/Monitoring Number		Boring Number <b>SB-3</b>	
Boring Drilled By (Firm name and name of crew chief) <b>Midwest Probing - John Gridder</b>			Date Drilling Started <b>10/21/2008</b>		Date Drilling Completed <b>10/21/2008</b>	
Unique Well No.		Well ID No.	Common Well Name		Borehole Diameter <b>2" Inches</b>	
Boring Location or Local Grid Origin (Check if estimated: <input type="checkbox"/> ) State Plane 1/4 of 1/4 of Section , T N, R			Final Static Water Level <b>Feet BGS</b>		Surface Elevation <b>Feet MSL</b>	
Lat. ° ' "			Local Grid Location (If applicable) <input type="checkbox"/> N <input type="checkbox"/> E <input type="checkbox"/> S <input type="checkbox"/> W			
Long. ° ' "			Feet <input type="checkbox"/> S <input type="checkbox"/> W			

Facility ID	County	County Code	Civil Town/City/ or Village <b>Muncie</b>
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Sample		Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	PID/FID	Soil Properties					RQD/ Comments
Number and Type	Length Att. & Recovered (in)								Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	
			1	<b>0.0-4.0 FEET:</b> FILL; 0-1" topsoil; 1-10" brown to black silt and sand with little fine gravel and clay; 10-26" brown fine sand and silt with trace clay; 26-33" brown clay and silt with little fine sand and gravel.	FILL									
			2											
			3											
			4											
			5	<b>4.0-8.0 FEET:</b> SILT; 0-9" brown silt and clay; stiff; 9-23" brown clay with little silt and trace sand; 23-31" brown silt and clay with little sand and trace gravel; moist.	ML									
			6											
			7											
			8											
			9	<b>8.0-20.0 FEET:</b> CLAY; 0-18" brown clay and little silt and trace sand; 18-42" brown silt and clay with little sand; stiff; moist.										
			10											
			11											
			12											

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature	Firm <b>Symbiont</b> <b>6737 W. Washington St., Suite 3440, West Allis, WI</b>	Tel: 414-291-8840 Fax: 414-291-8841
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## SOIL BORING LOG INFORMATION SUPPLEMENT

Boring Number

SB-3

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Page 2 of 2[illegible]






# SOIL BORING LOG INFORMATION

Page 1 of 2

Facility/Project Name <b>Kiser Plating</b>			License/Permit/Monitoring Number		Boring Number <b>SB-4_MW-4</b>	
Boring Drilled By (Firm name and name of crew chief) <b>Midwest Probing - John Gridder</b>			Date Drilling Started <b>10/21/2008</b>		Date Drilling Completed <b>10/21/2008</b>	
Unique Well No.		Well ID No.	Common Well Name		Borehole Diameter <b>2" Inches</b>	
			Final Static Water Level <b>Feet BGS</b>		Surface Elevation <b>Feet MSL</b>	
Boring Location or Local Grid Origin (Check if estimated: <input type="checkbox"/> ) State Plane <b>S / C / N</b>			Lat. <b>° ' "</b>		Local Grid Location (If applicable) <input type="checkbox"/> N <input type="checkbox"/> E <input type="checkbox"/> S <input type="checkbox"/> W	
1/4 of <b>T</b> 1/4 of Section <b>N, R</b>			Long. <b>° ' "</b>		Feet <input type="checkbox"/> Feet <input type="checkbox"/> Feet <input type="checkbox"/> Feet <input type="checkbox"/>	

Facility ID	County	County Code	Civil Town/City/ or Village <b>Muncie</b>
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Sample			Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	PID/FID	Soil Properties						RQD/ Comments
Number and Type	Length Att. & Recovered (in)	Compressive Strength								Moisture Content	Liquid Limit	Plasticity Index	P 200			
1 CS	48 30		1	<b>0.0-4.0 FEET:</b> FILL; 0-9" concrete pieces; 9-16" light brown clay sand with little silt; 16-30" brown clay with some silt and little sand; moist.	FILL			0		moist						
			2													
			3													
			4													
2 CS	48 17		5	<b>4.0-8.0 FEET:</b> SILT; grey clay and silt with some fine sand; soft; moist/wet.	ML			0		moist/wet						
			6													
			7													
			8													
3 CS	48 34.5		9	<b>12.0-16.0 FEET:</b> SILT; brown silt and clay with little sand and trace gravel.	ML			0		moist/wet						
			10													
			11													
			12													

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature	Firm <b>Symbiont</b> <b>6737 W. Washington St., Suite 3440, West Allis, WI</b>	Tel: 414-291-8840 Fax: 414-291-8841
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## SOIL BORING LOG INFORMATION SUPPLEMENT

Boring Number

SB-4\_MW-4

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Page 2 of 2



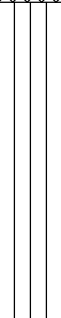
Sample		Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	PID/FID	Soil Properties					RQD/ Comments
Number and Type	Length Att. & Recovered (in)								Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	
4 CS	36 36		12	<b><u>12.0-20.0 FEET:</u></b> SILT; grey silt and clay with little sand and trace gravel.	ML			0	moist/wet					
5 CS	36 36		15			0	moist/wet							
6 CS	24 24		18			0	moist/wet							
			20	<b><u>20.0 FEET E.O.B.</u></b>										
				A soil sample was taken from 0.0-1.0 feet and analyzed for RCRA metals, Ni, Cu, and Zn.										

# SOIL BORING LOG INFORMATION

Page 1 of 2

Facility/Project Name <b>Kiser Plating</b>			License/Permit/Monitoring Number		Boring Number <b>SB-5</b>	
Boring Drilled By (Firm name and name of crew chief) <b>Midwest Probing - John Gridder</b>			Date Drilling Started <b>10/21/2008</b>		Date Drilling Completed <b>10/21/2008</b>	
Unique Well No.			Well ID No.		Common Well Name	
Final Static Water Level <b>Feet BGS</b>			Surface Elevation <b>Feet MSL</b>		Borehole Diameter <b>2' Inches</b>	
Boring Location or Local Grid Origin (Check if estimated: <input type="checkbox"/> ) State Plane 1/4 of 1/4 of Section , T N, R			Lat. ° ' " Long. ° ' "		Local Grid Location (If applicable) <input type="checkbox"/> N <input type="checkbox"/> E <input type="checkbox"/> S <input type="checkbox"/> W	

Facility ID	County	County Code	Civil Town/City/ or Village <b>Muncie</b>
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Sample		Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	PID/FID	Soil Properties					RQD/ Comments
Number and Type	Length Att. & Recovered (in)								Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	
			1	<b>0.0-4.0 FEET:</b> FILL; 0-6" pieces of concrete; 6-15' light brown fine sand silt and clay; soft; 15-25" brown clay and silt little sand; moist.	FILL									
			2											
			3											
			4											
			5	<b>4.0-8.0 FEET:</b> FILL; 0-11" brown clay some silt with little sand and trace gravel; 11-34" brown clay and some silt with little sand; stiff; moist.	FILL									
			6											
			7											
			8											
			9	<b>8.0-12.0 FEET:</b> brown silt and clay with little sand and trace gravel; stiff; moist.	ML									
			10											
			11											
			12											

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature	Firm <b>Symbiont</b> <b>6737 W. Washington St., Suite 3440, West Allis, WI</b>	Tel: 414-291-8840 Fax: 414-291-8841
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## SOIL BORING LOG INFORMATION SUPPLEMENT

Boring Number

SB-5

Page 2 of 2




[illegible]

# SOIL BORING LOG INFORMATION

Page 1 of 2

Facility/Project Name <b>Kiser Plating</b>			License/Permit/Monitoring Number		Boring Number <b>SB-6</b>	
Boring Drilled By (Firm name and name of crew chief) <b>Midwest Probing - John Gridder</b>			Date Drilling Started <b>10/21/2008</b>		Date Drilling Completed <b>10/21/2008</b>	
Unique Well No.			Well ID No.		Common Well Name	
Final Static Water Level <b>Feet BGS</b>			Surface Elevation <b>Feet MSL</b>		Borehole Diameter <b>2" Inches</b>	
Boring Location or Local Grid Origin (Check if estimated: <input type="checkbox"/> ) State Plane 1/4 of 1/4 of Section , T N, R			Lat. ° ' " Long. ° ' "		Local Grid Location (If applicable) <input type="checkbox"/> N <input type="checkbox"/> E <input type="checkbox"/> S <input type="checkbox"/> W	

Facility ID	County	County Code	Civil Town/City/ or Village <b>Muncie</b>
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Sample		Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	PID/FID	Soil Properties					RQD/ Comments
Number and Type	Length Att. & Recovered (in)								Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	
			1	<b>0.0-4.0 FEET:</b> FILL; 0-11" brown meduim sand with little coarse sand; 11-15" brick and concrete fragments.	FILL									
			2											
			3											
			4											
			5	<b>4.0-8.0 FEET:</b> FILL; 0-10" grey sand and gravel with some silt; 10-25" brown clay with little silt and trace gravel; moist.	FILL									
			6											
			7											
			8											
			9	<b>8.0-12.0 FEET:</b> SILT; brown silt and clay with little sand and gravel; moist.	ML									
			10											
			11											
			12											

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature	Firm <b>Symbiont</b> <b>6737 W. Washington St., Suite 3440, West Allis, WI</b>	Tel: 414-291-8840 Fax: 414-291-8841
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## SOIL BORING LOG INFORMATION SUPPLEMENT

Boring Number

SB-6

Page 2 of 2



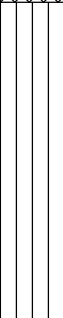
Sample		
Number and Type	Length Att. & Recovered (in)	Blow Counts
Depth In Feet		
Soil/Rock Description  And Geologic Origin For  Each Major Unit		
USCS	Graphic Log	Well Diagram
PID/FID	Soil Properties	
Compressive Strength	Moisture Content	Liquid Limit
	Plasticity Index	P 200
RQD/ Comments		

# SOIL BORING LOG INFORMATION

Page 1 of 2

Facility/Project Name <b>Kiser Plating</b>			License/Permit/Monitoring Number		Boring Number <b>SB-7</b>	
Boring Drilled By (Firm name and name of crew chief) <b>Midwest Probing - John Gridder</b>			Date Drilling Started <b>10/21/2008</b>		Date Drilling Completed <b>10/21/2008</b>	
Unique Well No.		Well ID No.	Common Well Name		Borehole Diameter <b>2" Inches</b>	
			Final Static Water Level <b>Feet BGS</b>		Surface Elevation <b>Feet MSL</b>	
Boring Location or Local Grid Origin (Check if estimated: <input type="checkbox"/> ) State Plane <b>S / C / N</b>			Lat. <b>° ' "</b>		Local Grid Location (If applicable) <input type="checkbox"/> N <input type="checkbox"/> E <input type="checkbox"/> S <input type="checkbox"/> W	
1/4 of <b>T</b> 1/4 of Section <b>N, R</b>			Long. <b>° ' "</b>		Feet <input type="checkbox"/> Feet <input type="checkbox"/> Feet <input type="checkbox"/> Feet <input type="checkbox"/>	

Facility ID	County	County Code	Civil Town/City/ or Village <b>Muncie</b>
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Sample		Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	PID/FID	Soil Properties					RQD/ Comments	
Number and Type	Length Att. & Recovered (in)								Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200		
1 CS	48 39		1	<b>0.0-4.0 FEET:</b> FILL; Brown to black fill; light brown fine sand and silt with trace clay; slight odor; moist.	FILL			3		moist					
		2													
		3													
2 CS	48 38		4	<b>4.0-8.0 FEET:</b> FILL; 0-4" brown clay and silt; 4-38" brown fine to medium sand; moist.	FILL			0		moist					
		5													
		6													
		7													
		8													
		9													
		10													
		11													
3 CS	48 34		8	<b>8.0-20.0 FEET:</b> SILT; brown grading grey brown silt and clay with little sand and trace gravel, stiff, moist.				0		moist					
		9													
		10													
		11													
		12													

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature	Firm <b>Symbiont</b> <b>6737 W. Washington St., Suite 3440, West Allis, WI</b>	Tel: 414-291-8840 Fax: 414-291-8841
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## SOIL BORING LOG INFORMATION SUPPLEMENT

## Boring Number

SB-7

Page 2 of 2

Sample		Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	PID/FID	Soil Properties					RQD/ Comments
Number and Type	Length Att. & Recovered (in)								Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	
4 CS	48 48		12 13 14 15 16 17 18 19 20		ML			0		moist				
5 CS	48 48			<b><u>20.0 FEET E.O.B.</u></b>				0		moist				






# SOIL BORING LOG INFORMATION

Page 1 of 2

Facility/Project Name <b>Kiser Plating</b>			License/Permit/Monitoring Number		Boring Number <b>SB-8_MW-9</b>	
Boring Drilled By (Firm name and name of crew chief) <b>Midwest Probing - John Gridder</b>			Date Drilling Started <b>10/21/2008</b>		Date Drilling Completed <b>10/21/2008</b>	
Unique Well No.		Well ID No.	Common Well Name		Borehole Diameter <b>2' Inches</b>	
			Final Static Water Level <b>Feet BGS</b>		Surface Elevation <b>Feet MSL</b>	
Boring Location or Local Grid Origin (Check if estimated: <input type="checkbox"/> ) State Plane <b>S / C / N</b>			Lat. <b>° ' "</b>		Local Grid Location (If applicable) <input type="checkbox"/> N <input type="checkbox"/> E <input type="checkbox"/> S <input type="checkbox"/> W	
1/4 of <b>T</b> 1/4 of Section <b>N, R</b>			Long. <b>° ' "</b>		Feet <input type="checkbox"/> Feet <input type="checkbox"/> Feet <input type="checkbox"/> Feet <input type="checkbox"/>	

Facility ID	County	County Code	Civil Town/City/ or Village <b>Muncie</b>
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Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	PID/FID	Soil Properties					RQD/ Comments
									Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	
1 CS	48 38		1	<b>0.0-4.0 FEET:</b> FILL; 0-4" Concrete pieces; 4-16" Brown to light brown silt and sand; 16-32" silt and fine sand; 32-38" clay and fine sand with some silt; moist.	FILL			5		moist				
2 CS	48 40		4	<b>4.0-8.0 FEET:</b> CLAY; 0-18" Brown clay and silt with little fine sand; 18-28" brown fine sand and silt; soft; 28-40" grey brown silt and trace clay; moist 0-18"; moist/wet 18-28"; wet 28-40"	ML			0		moist/wet				
3 CS	48 48		8	<b>8.0-12.0 FEET:</b> CLAY; Brown silt and clay with little sand and trace gravel; moist.				0		moist				

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature	Firm <b>Symbiont</b> <b>6737 W. Washington St., Suite 3440, West Allis, WI</b>	Tel: 414-291-8840 Fax: 414-291-8841
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## SOIL BORING LOG INFORMATION SUPPLEMENT

Boring Number

SB-8\_MW-9

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Page 2 of 2[illegible]

# SOIL BORING LOG INFORMATION

Page 1 of 2

Facility/Project Name <b>Kiser Plating</b>			License/Permit/Monitoring Number		Boring Number <b>SB-9</b>	
Boring Drilled By (Firm name and name of crew chief) <b>Midwest Probing - John Gridder</b>			Date Drilling Started <b>10/21/2008</b>		Date Drilling Completed <b>10/21/2008</b>	
Unique Well No.		Well ID No.	Common Well Name		Borehole Diameter <b>2" Inches</b>	
			Final Static Water Level <b>Feet BGS</b>		Surface Elevation <b>Feet MSL</b>	
Boring Location or Local Grid Origin (Check if estimated: <input type="checkbox"/> ) State Plane <b>S / C / N</b>			Lat. <b>° ' "</b>		Local Grid Location (If applicable) <input type="checkbox"/> N <input type="checkbox"/> E <input type="checkbox"/> S <input type="checkbox"/> W	
1/4 of <b>T</b> 1/4 of Section <b>N, R</b>			Long. <b>° ' "</b>		Feet <input type="checkbox"/> Feet <input type="checkbox"/> Feet <input type="checkbox"/> Feet <input type="checkbox"/>	

Facility ID	County	County Code	Civil Town/City/ or Village <b>Muncie</b>
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Sample		Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	PID/FID	Soil Properties					RQD/ Comments					
Number and Type	Length Att. & Recovered (in)								Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200						
1 CS	48 31		1	<b>0.0-4.0 FEET:</b> FILL; 0-5" concrete, 5-12" Fill; tan to brown mixed sand, silt, and clay; 12-31" dark brown clay with little silt and trace sand; very soft; moist.	FILL			0		moist									
2 CS	48 28		4					<b>4.0-8.0 FEET:</b> FILL; 0-8" dark brown clay with little silt and trace sand; 8-28" Brown clay some silt and little sand; soft; brick fragments near top; moist.	FILL		0		moist						
			5									<b>8.0-20.0 FEET:</b> CLAY; 0-15" Dark tan and orange brown clay with some silt and trace sand; 15-34" grey brown silt and clay with little sand; moist; stiff.			0		moist		
3 CS	48 34		8																
			9																
			10																
			11																
			12																

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature	Firm <b>Symbiont</b> <b>6737 W. Washington St., Suite 3440, West Allis, WI</b>	Tel: 414-291-8840 Fax: 414-291-8841
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**APPENDIX C**  
**LABORATORY/ANALYTICAL DATA**

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	Symbiont	Report To:	Karla McDonald	Attention:	Karla McDonald
Address:	3850 Pharcy Way South Ok	Copy To:		Company Name:	Symbiont
				Address:	same
Email To:		Purchase Order No.:		Pace Quote Reference:	
				Pace Project Manager:	
Phone:	317-660-4997	Project Name:	Kisee Plating	Pace Profile #:	
Requested Due Date/TAT:		Project Number:			

Page:	1	of	2
1184119			
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 checked="" type="checkbox"/> OTHER	EPA
Site Location:		STATE:	
		IN	

[illegible]

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	TEMP IN °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
WI Chain 22/08 OK ORIGINAL Client del	Karla McDonald	08/22/08	0945	Karla McDonald	08/22/08		084532°C	Y	Y	Y
<b>SAMPLER NAME AND SIGNATURE</b>										
PRINT Name of SAMPLER:										
SIGNATURE OF SAMPLER:										
Kara McDonald										
08/22/08										

WICHITA 22/22 OFFICIAL  
C/10-2-20





# Sample Condition Upon Receipt

Client Name: SynBio

Project # 502007B

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

Tracking #: \_\_\_\_\_

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

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☐ None ☒ Other \_\_\_\_\_

Thermometer Used 123456

Type of Ice: Wet Blue None

☐ Samples on ice, cooling process has begun

Cooler Temperature 3.2°C

Biological Tissue is Frozen: Yes

Date and Initials of person examining contents: 10/22/08

Temp should be above freezing to 6°C

Comments:

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

Client Notification/ Resolution:

Field Data Required?

Y / N

Person Contacted: Harri Byers

Date/Time: 10/23/08

Comments/ Resolution:

Level 4 per H. Byers.

Project Manager Review: ML

Date: 10/23/08

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)



October 31, 2008

Ms. Karla McDonald  
Symbiont Indianapolis  
3850 Priority Way South Drive  
Indianapolis, IN 46240

RE: Project: Kiser Plating  
Pace Project No.: 5020073

Dear Ms. McDonald:

Enclosed are the analytical results for sample(s) received by the laboratory on October 22, 2008. The results relate only to the samples included in this report. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

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

Sincerely,



Mark Davis

mark.davis@pacelabs.com  
Project Manager

Illinois/NELAC Certification Number: 100418

Indiana Certification Number: C-49-06

Kansas Certification Number: E-10247

Kentucky Certification Number: 0042

Ohio VAP: CL0065

Pennsylvania: 68-00791

West Virginia Certification Number: 330

Enclosures

cc: Accounts Payable, Symbiont

## REPORT OF LABORATORY ANALYSIS

Page 1 of 36

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



## SAMPLE SUMMARY

Project: Kiser Plating

Pace Project No.: 5020073

Lab ID	Sample ID	Matrix	Date Collected	Date Received
5020073001	3_SB-7-(0-1)	Solid	10/21/08 11:00	10/22/08 08:45
5020073002	3_SB-8-(0-2)	Solid	10/21/08 10:35	10/22/08 08:45
5020073003	3_SB-9-(0-2)	Solid	10/21/08 09:55	10/22/08 08:45
5020073004	3_SB-5-(0-2)	Solid	10/21/08 13:05	10/22/08 08:45
5020073005	3_SB-6-(4-5)	Solid	10/21/08 13:40	10/22/08 08:45
5020073006	3_SB-9-(0-2)	Solid	10/21/08 09:55	10/22/08 08:45
5020073007	3_SB-10-(0-2)	Solid	10/21/08 08:55	10/22/08 08:45
5020073008	3_SB-5-(6-7)	Solid	10/21/08 12:40	10/22/08 08:45
5020073009	3_SB-4-(0-1)	Solid	10/21/08 12:35	10/22/08 08:45
5020073010	3_SB-4-(0-1) DUP	Solid	10/21/08 12:35	10/22/08 08:45
5020073011	3_SB-5-(6-7)	Solid	10/21/08 12:40	10/22/08 08:45
5020073012	3_SB-3-(0-1)	Solid	10/21/08 14:20	10/22/08 08:45

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## SAMPLE ANALYTE COUNT

Project: Kiser Plating

Pace Project No.: 5020073

Lab ID	Sample ID	Method	Analysts	Analytes Reported
5020073001	3_SB-7-(0-1)	ASTM D2974-87	RAK	1
		EPA 6010	FRW	10
		EPA 7471	LLB	1
		EPA 8015 Mod Ext	RRB	2
		EPA 8015 Modified	RRB	2
		EPA 8270 by SIM	DMT	19
5020073002	3_SB-8-(0-2)	ASTM D2974-87	RAK	1
		EPA 6010	FRW	10
		EPA 7471	LLB	1
		EPA 9014 Free Cyanide	CLS	1
5020073003	3_SB-9-(0-2)	ASTM D2974-87	RAK	1
		EPA 7196A	TPD	1
		EPA 9014 Free Cyanide	CLS	1
5020073004	3_SB-5-(0-2)	ASTM D2974-87	RAK	1
		EPA 6010	FRW	10
		EPA 7471	LLB	1
5020073005	3_SB-6-(4-5)	ASTM D2974-87	RAK	1
		EPA 6010	FRW	10
		EPA 7471	LLB	1
		EPA 8015 Mod Ext	RRB	2
		EPA 8015 Modified	RRB	2
		EPA 8270 by SIM	DMT	19
5020073006	3_SB-9-(0-2)	ASTM D2974-87	RAK	1
		EPA 6010	FRW	10
		EPA 7196A	TPD	1
		EPA 7471	LLB	1
		EPA 9014 Free Cyanide	CLS	1
5020073007	3_SB-10-(0-2)	ASTM D2974-87	RAK	1
		EPA 6010	FRW	10
		EPA 7196A	TPD	1
		EPA 7471	LLB	1
		EPA 9014 Free Cyanide	CLS	1
5020073008	3_SB-5-(6-7)	ASTM D2974-87	RAK	1
		EPA 8015 Mod Ext	RRB	2
		EPA 8015 Modified	RRB	2
		EPA 8270 by SIM	DMT	19
		ASTM D2974-87	RAK	1

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## SAMPLE ANALYTE COUNT

Project: Kiser Plating

Pace Project No.: 5020073

Lab ID	Sample ID	Method	Analysts	Analytes Reported
5020073010	3_SB-4-(0-1) DUP	EPA 6010	FRW	10
		EPA 7471	LLB	1
		ASTM D2974-87	RAK	1
		EPA 6010	FRW	10
5020073011	3_SB-5-(6-7)	EPA 7471	LLB	1
		ASTM D2974-87	RAK	1
		EPA 8260	JLF	72
5020073012	3_SB-3-(0-1)	ASTM D2974-87	RAK	1
		EPA 6010	FRW	10
		EPA 7471	LLB	1

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## ANALYTICAL RESULTS

Project: Kiser Plating

Pace Project No.: 5020073

Sample: 3\_SB-7-(0-1) Lab ID: 5020073001 Collected: 10/21/08 11:00 Received: 10/22/08 08:45 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8015 GCS THC-Diesel</b>								
Analytical Method: EPA 8015 Modified Preparation Method: EPA 3546								
Diesel Components	70.7	mg/kg	53.1	5	10/23/08 21:30	10/27/08 13:32		
n-Pentacosane (S)	143	%	45-170	5	10/23/08 21:30	10/27/08 13:32	629-99-2	
<b>8015M TPH ERO</b>								
Analytical Method: EPA 8015 Mod Ext Preparation Method: EPA 3546								
TPH-ERO	135	mg/kg	53.1	5	10/23/08 21:30	10/27/08 13:32		
n-Pentacosane (S)	143	%	45-170	5	10/23/08 21:30	10/27/08 13:32	629-99-2	
<b>6010 MET ICP</b>								
Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Arsenic	6.3	mg/kg	2.0	1	10/23/08 00:00	10/27/08 15:23	7440-38-2	
Barium	73.7	mg/kg	2.0	1	10/23/08 00:00	10/27/08 15:23	7440-39-3	
Cadmium	8.8	mg/kg	2.0	1	10/23/08 00:00	10/27/08 15:23	7440-43-9	
Chromium	138	mg/kg	2.0	1	10/23/08 00:00	10/27/08 15:23	7440-47-3	
Copper	232	mg/kg	2.0	1	10/23/08 00:00	10/27/08 15:23	7440-50-8	
Lead	133	mg/kg	2.0	1	10/23/08 00:00	10/27/08 15:23	7439-92-1	
Nickel	284	mg/kg	2.0	1	10/23/08 00:00	10/27/08 15:23	7440-02-0	
Selenium	ND	mg/kg	2.0	1	10/23/08 00:00	10/27/08 15:23	7782-49-2	
Silver	ND	mg/kg	2.0	1	10/23/08 00:00	10/27/08 15:23	7440-22-4	
Zinc	4760	mg/kg	2.0	1	10/23/08 00:00	10/27/08 15:23	7440-66-6	
<b>7471 Mercury</b>								
Analytical Method: EPA 7471 Preparation Method: EPA 7471								
Mercury	ND	mg/kg	0.35	1	10/24/08 00:00	10/29/08 10:08	7439-97-6	
<b>8270 MSSV PAH by SIM 5ML</b>								
Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546								
Acenaphthene	ND	ug/kg	26.5	1	10/27/08 21:20	10/28/08 23:57	83-32-9	
Acenaphthylene	60.5	ug/kg	26.5	1	10/27/08 21:20	10/28/08 23:57	208-96-8	
Anthracene	87.1	ug/kg	26.5	1	10/27/08 21:20	10/28/08 23:57	120-12-7	
Benzo(a)anthracene	348	ug/kg	26.5	1	10/27/08 21:20	10/28/08 23:57	56-55-3	
Benzo(a)pyrene	356	ug/kg	26.5	1	10/27/08 21:20	10/28/08 23:57	50-32-8	
Benzo(b)fluoranthene	472	ug/kg	26.5	1	10/27/08 21:20	10/28/08 23:57	205-99-2	
Benzo(g,h,i)perylene	275	ug/kg	26.5	1	10/27/08 21:20	10/28/08 23:57	191-24-2	
Benzo(k)fluoranthene	344	ug/kg	26.5	1	10/27/08 21:20	10/28/08 23:57	207-08-9	
Chrysene	419	ug/kg	26.5	1	10/27/08 21:20	10/28/08 23:57	218-01-9	
Dibenz(a,h)anthracene	135	ug/kg	26.5	1	10/27/08 21:20	10/28/08 23:57	53-70-3	
Fluoranthene	621	ug/kg	26.5	1	10/27/08 21:20	10/28/08 23:57	206-44-0	
Fluorene	ND	ug/kg	26.5	1	10/27/08 21:20	10/28/08 23:57	86-73-7	
Indeno(1,2,3-cd)pyrene	264	ug/kg	26.5	1	10/27/08 21:20	10/28/08 23:57	193-39-5	
2-Methylnaphthalene	461	ug/kg	26.5	1	10/27/08 21:20	10/28/08 23:57	91-57-6	
Naphthalene	294	ug/kg	26.5	1	10/27/08 21:20	10/28/08 23:57	91-20-3	
Phenanthrene	388	ug/kg	26.5	1	10/27/08 21:20	10/28/08 23:57	85-01-8	
Pyrene	526	ug/kg	26.5	1	10/27/08 21:20	10/28/08 23:57	129-00-0	
2-Fluorobiphenyl (S)	97	%	45-120	1	10/27/08 21:20	10/28/08 23:57	321-60-8	
Terphenyl-d14 (S)	93	%	41-120	1	10/27/08 21:20	10/28/08 23:57	1718-51-0	
<b>Percent Moisture</b>								
Analytical Method: ASTM D2974-87								
Percent Moisture	5.8	%	0.10	1		10/23/08 18:30		

Date: 10/31/2008 11:07 AM

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## ANALYTICAL RESULTS

Project: Kiser Plating

Pace Project No.: 5020073

Sample: 3\_SB-8-(0-2) Lab ID: 5020073002 Collected: 10/21/08 10:35 Received: 10/22/08 08:45 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP</b> Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Arsenic	4.9	mg/kg	2.0	1	10/23/08 00:00	10/27/08 15:29	7440-38-2	
Barium	39.9	mg/kg	2.0	1	10/23/08 00:00	10/27/08 15:29	7440-39-3	
Cadmium	2.4	mg/kg	2.0	1	10/23/08 00:00	10/27/08 15:29	7440-43-9	
Chromium	51.7	mg/kg	2.0	1	10/23/08 00:00	10/27/08 15:29	7440-47-3	
Copper	126	mg/kg	2.0	1	10/23/08 00:00	10/27/08 15:29	7440-50-8	
Lead	57.6	mg/kg	2.0	1	10/23/08 00:00	10/27/08 15:29	7439-92-1	
Nickel	211	mg/kg	2.0	1	10/23/08 00:00	10/27/08 15:29	7440-02-0	
Selenium	ND	mg/kg	2.0	1	10/23/08 00:00	10/27/08 15:29	7782-49-2	
Silver	ND	mg/kg	2.0	1	10/23/08 00:00	10/27/08 15:29	7440-22-4	
Zinc	10000	mg/kg	2.0	1	10/23/08 00:00	10/27/08 15:29	7440-66-6	
<b>7471 Mercury</b> Analytical Method: EPA 7471 Preparation Method: EPA 7471								
Mercury	ND	mg/kg	0.37	1	10/24/08 00:00	10/29/08 10:09	7439-97-6	
<b>Percent Moisture</b> Analytical Method: ASTM D2974-87								
Percent Moisture	7.7	%	0.10	1		10/23/08 18:30		
<b>9014 Cyanide, Free</b> Analytical Method: EPA 9014 Free Cyanide Preparation Method: EPA 9013A Free Cyanide EXT								
Cyanide	ND	mg/kg	0.54	1	10/25/08 12:14	10/27/08 16:36	57-12-5	

## ANALYTICAL RESULTS

Project: Kiser Plating

Pace Project No.: 5020073

**Sample:** 3\_SB-9-(0-2) **Lab ID:** 5020073003 Collected: 10/21/08 09:55 Received: 10/22/08 08:45 Matrix: Solid

**Results reported on a "dry-weight" basis**

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>Percent Moisture</b>		Analytical Method: ASTM D2974-87						
Percent Moisture	8.4	%	0.10	1		10/23/08 18:30		
<b>7196 Chromium, Hexavalent</b>		Analytical Method: EPA 7196A Preparation Method: EPA 3060A						
Chromium, Hexavalent	ND	mg/kg	5.5	5	10/23/08 15:16	10/27/08 10:25	18540-29-9	
<b>9014 Cyanide, Free</b>		Analytical Method: EPA 9014 Free Cyanide Preparation Method: EPA 9013A Free Cyanide EXT						
Cyanide	ND	mg/kg	0.55	1	10/25/08 12:14	10/27/08 16:38	57-12-5	

## ANALYTICAL RESULTS

Project: Kiser Plating

Pace Project No.: 5020073

Sample: 3\_SB-5-(0-2) Lab ID: 5020073004 Collected: 10/21/08 13:05 Received: 10/22/08 08:45 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP</b> Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Arsenic	6.6	mg/kg	2.3	1	10/23/08 00:00	10/27/08 15:52	7440-38-2	
Barium	71.6	mg/kg	2.3	1	10/23/08 00:00	10/27/08 15:52	7440-39-3	
Cadmium	68.7	mg/kg	2.3	1	10/23/08 00:00	10/27/08 15:52	7440-43-9	
Chromium	73.9	mg/kg	2.3	1	10/23/08 00:00	10/27/08 15:52	7440-47-3	
Copper	102	mg/kg	2.3	1	10/23/08 00:00	10/27/08 15:52	7440-50-8	
Lead	20.0	mg/kg	2.3	1	10/23/08 00:00	10/27/08 15:52	7439-92-1	
Nickel	43.9	mg/kg	2.3	1	10/23/08 00:00	10/27/08 15:52	7440-02-0	
Selenium	ND	mg/kg	2.3	1	10/23/08 00:00	10/27/08 15:52	7782-49-2	
Silver	ND	mg/kg	2.3	1	10/23/08 00:00	10/27/08 15:52	7440-22-4	
Zinc	59.7	mg/kg	2.3	1	10/23/08 00:00	10/27/08 15:52	7440-66-6	
<b>7471 Mercury</b> Analytical Method: EPA 7471 Preparation Method: EPA 7471								
Mercury	ND	mg/kg	0.39	1	10/24/08 00:00	10/29/08 10:10	7439-97-6	
<b>Percent Moisture</b> Analytical Method: ASTM D2974-87								
Percent Moisture	15.6	%	0.10	1		10/23/08 18:30		



## ANALYTICAL RESULTS

Project: Kiser Plating

Pace Project No.: 5020073

Sample: 3\_SB-6-(4-5) Lab ID: 5020073005 Collected: 10/21/08 13:40 Received: 10/22/08 08:45 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8015 GCS THC-Diesel</b>								
Analytical Method: EPA 8015 Modified Preparation Method: EPA 3546								
Diesel Components	90.7	mg/kg	69.0	5	10/23/08 21:30	10/27/08 13:39		
n-Pentacosane (S)	90	%	45-170	5	10/23/08 21:30	10/27/08 13:39	629-99-2	
<b>8015M TPH ERO</b>								
Analytical Method: EPA 8015 Mod Ext Preparation Method: EPA 3546								
TPH-ERO	156	mg/kg	69.0	5	10/23/08 21:30	10/27/08 13:39		
n-Pentacosane (S)	90	%	45-170	5	10/23/08 21:30	10/27/08 13:39	629-99-2	
<b>6010 MET ICP</b>								
Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Arsenic	8.5	mg/kg	2.7	1	10/23/08 00:00	10/27/08 11:56	7440-38-2	
Barium	336	mg/kg	2.7	1	10/23/08 00:00	10/27/08 11:56	7440-39-3	
Cadmium	2.6	mg/kg	2.7	1	10/23/08 00:00	10/27/08 11:56	7440-43-9	
Chromium	125	mg/kg	2.7	1	10/23/08 00:00	10/27/08 11:56	7440-47-3	
Copper	129	mg/kg	2.7	1	10/23/08 00:00	10/27/08 11:56	7440-50-8	
Lead	123	mg/kg	2.7	1	10/23/08 00:00	10/27/08 11:56	7439-92-1	
Nickel	56.4	mg/kg	2.7	1	10/23/08 00:00	10/27/08 11:56	7440-02-0	
Selenium	ND	mg/kg	2.7	1	10/23/08 00:00	10/27/08 11:56	7782-49-2	
Silver	ND	mg/kg	2.7	1	10/23/08 00:00	10/27/08 11:56	7440-22-4	
Zinc	1770	mg/kg	2.7	1	10/23/08 00:00	10/27/08 11:56	7440-66-6	
<b>7471 Mercury</b>								
Analytical Method: EPA 7471 Preparation Method: EPA 7471								
Mercury	ND	mg/kg	0.46	1	10/24/08 00:00	10/29/08 10:12	7439-97-6	
<b>8270 MSSV PAH by SIM 5ML</b>								
Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546								
Acenaphthene	ND	ug/kg	51.8	1	10/29/08 21:12	10/30/08 14:39	83-32-9	
Acenaphthylene	292	ug/kg	51.8	1	10/29/08 21:12	10/30/08 14:39	208-96-8	
Anthracene	419	ug/kg	51.8	1	10/29/08 21:12	10/30/08 14:39	120-12-7	
Benzo(a)anthracene	913	ug/kg	51.8	1	10/29/08 21:12	10/30/08 14:39	56-55-3	
Benzo(a)pyrene	766	ug/kg	51.8	1	10/29/08 21:12	10/30/08 14:39	50-32-8	
Benzo(b)fluoranthene	631	ug/kg	51.8	1	10/29/08 21:12	10/30/08 14:39	205-99-2	
Benzo(g,h,i)perylene	439	ug/kg	51.8	1	10/29/08 21:12	10/30/08 14:39	191-24-2	
Benzo(k)fluoranthene	689	ug/kg	51.8	1	10/29/08 21:12	10/30/08 14:39	207-08-9	
Chrysene	891	ug/kg	51.8	1	10/29/08 21:12	10/30/08 14:39	218-01-9	
Dibenz(a,h)anthracene	190	ug/kg	51.8	1	10/29/08 21:12	10/30/08 14:39	53-70-3	
Fluoranthene	2820	ug/kg	51.8	1	10/29/08 21:12	10/30/08 14:39	206-44-0	
Fluorene	140	ug/kg	51.8	1	10/29/08 21:12	10/30/08 14:39	86-73-7	
Indeno(1,2,3-cd)pyrene	405	ug/kg	51.8	1	10/29/08 21:12	10/30/08 14:39	193-39-5	
2-Methylnaphthalene	57.9	ug/kg	51.8	1	10/29/08 21:12	10/30/08 14:39	91-57-6	
Naphthalene	165	ug/kg	51.8	1	10/29/08 21:12	10/30/08 14:39	91-20-3	
Phenanthrene	1510	ug/kg	51.8	1	10/29/08 21:12	10/30/08 14:39	85-01-8	
Pyrene	1680	ug/kg	51.8	1	10/29/08 21:12	10/30/08 14:39	129-00-0	
2-Fluorobiphenyl (S)	82	%	45-120	1	10/29/08 21:12	10/30/08 14:39	321-60-8	
Terphenyl-d14 (S)	67	%	41-120	1	10/29/08 21:12	10/30/08 14:39	1718-51-0	
<b>Percent Moisture</b>								
Analytical Method: ASTM D2974-87								
Percent Moisture	27.6	%	0.10	1		10/23/08 18:30		

Date: 10/31/2008 11:07 AM

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## ANALYTICAL RESULTS

Project: Kiser Plating

Pace Project No.: 5020073

Sample: 3\_SB-9-(0-2) Lab ID: 5020073006 Collected: 10/21/08 09:55 Received: 10/22/08 08:45 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP</b> Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Arsenic	5.8	mg/kg	2.2	1	10/23/08 00:00	10/27/08 12:02	7440-38-2	
Barium	57.6	mg/kg	2.2	1	10/23/08 00:00	10/27/08 12:02	7440-39-3	
Cadmium	ND	mg/kg	2.2	1	10/23/08 00:00	10/27/08 12:02	7440-43-9	
Chromium	41.2	mg/kg	2.2	1	10/23/08 00:00	10/27/08 12:02	7440-47-3	
Copper	61.2	mg/kg	2.2	1	10/23/08 00:00	10/27/08 12:02	7440-50-8	
Lead	41.8	mg/kg	2.2	1	10/23/08 00:00	10/27/08 12:02	7439-92-1	
Nickel	21.1	mg/kg	2.2	1	10/23/08 00:00	10/27/08 12:02	7440-02-0	
Selenium	ND	mg/kg	2.2	1	10/23/08 00:00	10/27/08 12:02	7782-49-2	
Silver	ND	mg/kg	2.2	1	10/23/08 00:00	10/27/08 12:02	7440-22-4	
Zinc	791	mg/kg	2.2	1	10/23/08 00:00	10/27/08 12:02	7440-66-6	
<b>7471 Mercury</b> Analytical Method: EPA 7471 Preparation Method: EPA 7471								
Mercury	ND	mg/kg	0.40	1	10/24/08 00:00	10/29/08 10:13	7439-97-6	
<b>Percent Moisture</b> Analytical Method: ASTM D2974-87								
Percent Moisture	14.5	%	0.10	1		10/23/08 18:31		
<b>7196 Chromium, Hexavalent</b> Analytical Method: EPA 7196A Preparation Method: EPA 3060A								
Chromium, Hexavalent	ND	mg/kg	5.8	5	10/23/08 15:16	10/27/08 10:25	18540-29-9	
<b>9014 Cyanide, Free</b> Analytical Method: EPA 9014 Free Cyanide Preparation Method: EPA 9013A Free Cyanide EXT								
Cyanide	ND	mg/kg	0.58	1	10/25/08 12:14	10/27/08 16:39	57-12-5	

## ANALYTICAL RESULTS

Project: Kiser Plating

Pace Project No.: 5020073

Sample: 3\_SB-10-(0-2) Lab ID: 5020073007 Collected: 10/21/08 08:55 Received: 10/22/08 08:45 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP</b> Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Arsenic	7.8	mg/kg	2.0	1	10/23/08 00:00	10/27/08 12:07	7440-38-2	
Barium	76.7	mg/kg	2.0	1	10/23/08 00:00	10/27/08 12:07	7440-39-3	
Cadmium	ND	mg/kg	2.0	1	10/23/08 00:00	10/27/08 12:07	7440-43-9	
Chromium	24.0	mg/kg	2.0	1	10/23/08 00:00	10/27/08 12:07	7440-47-3	
Copper	24.0	mg/kg	2.0	1	10/23/08 00:00	10/27/08 12:07	7440-50-8	
Lead	62.2	mg/kg	2.0	1	10/23/08 00:00	10/27/08 12:07	7439-92-1	
Nickel	25.6	mg/kg	2.0	1	10/23/08 00:00	10/27/08 12:07	7440-02-0	
Selenium	ND	mg/kg	2.0	1	10/23/08 00:00	10/27/08 12:07	7782-49-2	
Silver	ND	mg/kg	2.0	1	10/23/08 00:00	10/27/08 12:07	7440-22-4	
Zinc	378	mg/kg	2.0	1	10/23/08 00:00	10/27/08 12:07	7440-66-6	
<b>7471 Mercury</b> Analytical Method: EPA 7471 Preparation Method: EPA 7471								
Mercury	75.8	mg/kg	36.3	100	10/24/08 00:00	10/29/08 12:13	7439-97-6	1d
<b>Percent Moisture</b> Analytical Method: ASTM D2974-87								
Percent Moisture	11.1	%	0.10	1		10/23/08 18:31		
<b>7196 Chromium, Hexavalent</b> Analytical Method: EPA 7196A Preparation Method: EPA 3060A								
Chromium, Hexavalent	ND	mg/kg	5.6	5	10/23/08 15:16	10/27/08 10:25	18540-29-9	
<b>9014 Cyanide, Free</b> Analytical Method: EPA 9014 Free Cyanide Preparation Method: EPA 9013A Free Cyanide EXT								
Cyanide	ND	mg/kg	0.56	1	10/25/08 12:14	10/27/08 16:40	57-12-5	

## ANALYTICAL RESULTS

Project: Kiser Plating

Pace Project No.: 5020073

Sample: 3\_SB-5-(6-7) Lab ID: 5020073008 Collected: 10/21/08 12:40 Received: 10/22/08 08:45 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8015 GCS THC-Diesel</b>								
Analytical Method: EPA 8015 Modified Preparation Method: EPA 3546								
Diesel Components	ND	mg/kg	11.2	1	10/23/08 21:30	10/24/08 21:11		
n-Pentacosane (S)	54	%	45-170	1	10/23/08 21:30	10/24/08 21:11	629-99-2	
<b>8015M TPH ERO</b>								
Analytical Method: EPA 8015 Mod Ext Preparation Method: EPA 3546								
TPH-ERO	ND	mg/kg	11.2	1	10/23/08 21:30	10/24/08 21:11		
n-Pentacosane (S)	54	%	45-170	1	10/23/08 21:30	10/24/08 21:11	629-99-2	
<b>8270 MSSV PAH by SIM 5ML</b>								
Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546								
Acenaphthene	ND	ug/kg	28.1	1	10/27/08 21:20	10/29/08 00:32	83-32-9	
Acenaphthylene	ND	ug/kg	28.1	1	10/27/08 21:20	10/29/08 00:32	208-96-8	
Anthracene	ND	ug/kg	28.1	1	10/27/08 21:20	10/29/08 00:32	120-12-7	
Benzo(a)anthracene	ND	ug/kg	28.1	1	10/27/08 21:20	10/29/08 00:32	56-55-3	
Benzo(a)pyrene	ND	ug/kg	28.1	1	10/27/08 21:20	10/29/08 00:32	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	28.1	1	10/27/08 21:20	10/29/08 00:32	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	28.1	1	10/27/08 21:20	10/29/08 00:32	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	28.1	1	10/27/08 21:20	10/29/08 00:32	207-08-9	
Chrysene	ND	ug/kg	28.1	1	10/27/08 21:20	10/29/08 00:32	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	28.1	1	10/27/08 21:20	10/29/08 00:32	53-70-3	
Fluoranthene	ND	ug/kg	28.1	1	10/27/08 21:20	10/29/08 00:32	206-44-0	
Fluorene	ND	ug/kg	28.1	1	10/27/08 21:20	10/29/08 00:32	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	28.1	1	10/27/08 21:20	10/29/08 00:32	193-39-5	
2-Methylnaphthalene	ND	ug/kg	28.1	1	10/27/08 21:20	10/29/08 00:32	91-57-6	
Naphthalene	ND	ug/kg	28.1	1	10/27/08 21:20	10/29/08 00:32	91-20-3	
Phenanthrene	ND	ug/kg	28.1	1	10/27/08 21:20	10/29/08 00:32	85-01-8	
Pyrene	ND	ug/kg	28.1	1	10/27/08 21:20	10/29/08 00:32	129-00-0	
2-Fluorobiphenyl (S)	84	%	45-120	1	10/27/08 21:20	10/29/08 00:32	321-60-8	
Terphenyl-d14 (S)	83	%	41-120	1	10/27/08 21:20	10/29/08 00:32	1718-51-0	
<b>Percent Moisture</b>								
Analytical Method: ASTM D2974-87								
Percent Moisture	10.9	%	0.10	1		10/23/08 18:31		

## ANALYTICAL RESULTS

Project: Kiser Plating

Pace Project No.: 5020073

Sample: 3\_SB-4-(0-1) Lab ID: 5020073009 Collected: 10/21/08 12:35 Received: 10/22/08 08:45 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP</b> Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Arsenic	7.8	mg/kg	2.3	1	10/23/08 00:00	10/27/08 12:13	7440-38-2	
Barium	73.9	mg/kg	2.3	1	10/23/08 00:00	10/27/08 12:13	7440-39-3	
Cadmium	ND	mg/kg	2.3	1	10/23/08 00:00	10/27/08 12:13	7440-43-9	
Chromium	44.1	mg/kg	2.3	1	10/23/08 00:00	10/27/08 12:13	7440-47-3	
Copper	123	mg/kg	2.3	1	10/23/08 00:00	10/27/08 12:13	7440-50-8	
Lead	26.5	mg/kg	2.3	1	10/23/08 00:00	10/27/08 12:13	7439-92-1	
Nickel	32.2	mg/kg	2.3	1	10/23/08 00:00	10/27/08 12:13	7440-02-0	
Selenium	ND	mg/kg	2.3	1	10/23/08 00:00	10/27/08 12:13	7782-49-2	
Silver	ND	mg/kg	2.3	1	10/23/08 00:00	10/27/08 12:13	7440-22-4	
Zinc	58.4	mg/kg	2.3	1	10/23/08 00:00	10/27/08 12:13	7440-66-6	
<b>7471 Mercury</b> Analytical Method: EPA 7471 Preparation Method: EPA 7471								
Mercury	0.55	mg/kg	0.38	1	10/24/08 00:00	10/29/08 10:16	7439-97-6	
<b>Percent Moisture</b> Analytical Method: ASTM D2974-87								
Percent Moisture	15.5	%	0.10	1		10/23/08 18:31		

## ANALYTICAL RESULTS

Project: Kiser Plating

Pace Project No.: 5020073

**Sample:** 3\_SB-4-(0-1) DUP **Lab ID:** 5020073010 **Collected:** 10/21/08 12:35 **Received:** 10/22/08 08:45 **Matrix:** Solid

**Results reported on a "dry-weight" basis**

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP</b> Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Arsenic	9.0	mg/kg	2.3	1	10/23/08 00:00	10/27/08 12:19	7440-38-2	
Barium	89.5	mg/kg	2.3	1	10/23/08 00:00	10/27/08 12:19	7440-39-3	
Cadmium	10.6	mg/kg	2.3	1	10/23/08 00:00	10/27/08 12:19	7440-43-9	
Chromium	96.3	mg/kg	2.3	1	10/23/08 00:00	10/27/08 12:19	7440-47-3	
Copper	422	mg/kg	2.3	1	10/23/08 00:00	10/27/08 12:19	7440-50-8	
Lead	44.3	mg/kg	2.3	1	10/23/08 00:00	10/27/08 12:19	7439-92-1	
Nickel	95.5	mg/kg	2.3	1	10/23/08 00:00	10/27/08 12:19	7440-02-0	
Selenium	ND	mg/kg	2.3	1	10/23/08 00:00	10/27/08 12:19	7782-49-2	
Silver	ND	mg/kg	2.3	1	10/23/08 00:00	10/27/08 12:19	7440-22-4	
Zinc	99.3	mg/kg	2.3	1	10/23/08 00:00	10/27/08 12:19	7440-66-6	
<b>7471 Mercury</b> Analytical Method: EPA 7471 Preparation Method: EPA 7471								
Mercury	ND	mg/kg	0.43	1	10/24/08 00:00	10/29/08 10:17	7439-97-6	
<b>Percent Moisture</b> Analytical Method: ASTM D2974-87								
Percent Moisture	19.6	%	0.10	1		10/23/08 18:31		

## ANALYTICAL RESULTS

Project: Kiser Plating

Pace Project No.: 5020073

Sample: 3\_SB-5-(6-7) Lab ID: 5020073011 Collected: 10/21/08 12:40 Received: 10/22/08 08:45 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV 5035A VOA</b>		Analytical Method: EPA 8260						
Acetone	ND	ug/kg	78.6	1		10/28/08 20:12	67-64-1	
Acrolein	ND	ug/kg	78.6	1		10/28/08 20:12	107-02-8	
Acrylonitrile	ND	ug/kg	78.6	1		10/28/08 20:12	107-13-1	
Benzene	ND	ug/kg	3.9	1		10/28/08 20:12	71-43-2	
Bromobenzene	ND	ug/kg	3.9	1		10/28/08 20:12	108-86-1	
Bromochloromethane	ND	ug/kg	3.9	1		10/28/08 20:12	74-97-5	
Bromodichloromethane	ND	ug/kg	3.9	1		10/28/08 20:12	75-27-4	
Bromoform	ND	ug/kg	3.9	1		10/28/08 20:12	75-25-2	
Bromomethane	ND	ug/kg	3.9	1		10/28/08 20:12	74-83-9	
2-Butanone (MEK)	ND	ug/kg	19.6	1		10/28/08 20:12	78-93-3	
n-Butylbenzene	ND	ug/kg	3.9	1		10/28/08 20:12	104-51-8	
sec-Butylbenzene	ND	ug/kg	3.9	1		10/28/08 20:12	135-98-8	
tert-Butylbenzene	ND	ug/kg	3.9	1		10/28/08 20:12	98-06-6	
Carbon disulfide	ND	ug/kg	7.9	1		10/28/08 20:12	75-15-0	
Carbon tetrachloride	ND	ug/kg	3.9	1		10/28/08 20:12	56-23-5	
Chlorobenzene	ND	ug/kg	3.9	1		10/28/08 20:12	108-90-7	
Chloroethane	ND	ug/kg	3.9	1		10/28/08 20:12	75-00-3	
Chloroform	ND	ug/kg	3.9	1		10/28/08 20:12	67-66-3	
Chloromethane	ND	ug/kg	3.9	1		10/28/08 20:12	74-87-3	
2-Chlorotoluene	ND	ug/kg	3.9	1		10/28/08 20:12	95-49-8	
4-Chlorotoluene	ND	ug/kg	3.9	1		10/28/08 20:12	106-43-4	
Dibromochloromethane	ND	ug/kg	3.9	1		10/28/08 20:12	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/kg	3.9	1		10/28/08 20:12	106-93-4	
Dibromomethane	ND	ug/kg	3.9	1		10/28/08 20:12	74-95-3	
1,2-Dichlorobenzene	ND	ug/kg	3.9	1		10/28/08 20:12	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	3.9	1		10/28/08 20:12	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	3.9	1		10/28/08 20:12	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/kg	78.6	1		10/28/08 20:12	110-57-6	
Dichlorodifluoromethane	ND	ug/kg	3.9	1		10/28/08 20:12	75-71-8	
1,1-Dichloroethane	ND	ug/kg	3.9	1		10/28/08 20:12	75-34-3	
1,2-Dichloroethane	ND	ug/kg	3.9	1		10/28/08 20:12	107-06-2	
1,1-Dichloroethene	40.5	ug/kg	3.9	1		10/28/08 20:12	75-35-4	
cis-1,2-Dichloroethene	5390	ug/kg	191	50		10/29/08 12:06	156-59-2	
trans-1,2-Dichloroethene	4810	ug/kg	191	50		10/29/08 12:06	156-60-5	
1,2-Dichloropropane	ND	ug/kg	3.9	1		10/28/08 20:12	78-87-5	
1,3-Dichloropropane	ND	ug/kg	3.9	1		10/28/08 20:12	142-28-9	
2,2-Dichloropropane	ND	ug/kg	3.9	1		10/28/08 20:12	594-20-7	
1,1-Dichloropropene	ND	ug/kg	3.9	1		10/28/08 20:12	563-58-6	
cis-1,3-Dichloropropene	ND	ug/kg	3.9	1		10/28/08 20:12	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/kg	3.9	1		10/28/08 20:12	10061-02-6	
Ethylbenzene	ND	ug/kg	3.9	1		10/28/08 20:12	100-41-4	
Ethyl methacrylate	ND	ug/kg	7.9	1		10/28/08 20:12	97-63-2	
Hexachloro-1,3-butadiene	ND	ug/kg	3.9	1		10/28/08 20:12	87-68-3	
2-Hexanone	ND	ug/kg	78.6	1		10/28/08 20:12	591-78-6	
Iodomethane	ND	ug/kg	78.6	1		10/28/08 20:12	74-88-4	
Isopropylbenzene (Cumene)	ND	ug/kg	3.9	1		10/28/08 20:12	98-82-8	

Date: 10/31/2008 11:07 AM

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: Kiser Plating

Pace Project No.: 5020073

Sample: 3\_SB-5-(6-7) Lab ID: 5020073011 Collected: 10/21/08 12:40 Received: 10/22/08 08:45 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV 5035A VOA</b>		Analytical Method: EPA 8260						
p-Isopropyltoluene	ND	ug/kg	3.9	1		10/28/08 20:12	99-87-6	
Methylene chloride	ND	ug/kg	15.7	1		10/28/08 20:12	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	19.6	1		10/28/08 20:12	108-10-1	
Methyl-tert-butyl ether	ND	ug/kg	3.9	1		10/28/08 20:12	1634-04-4	
Naphthalene	ND	ug/kg	3.9	1		10/28/08 20:12	91-20-3	
n-Propylbenzene	ND	ug/kg	3.9	1		10/28/08 20:12	103-65-1	
Styrene	ND	ug/kg	3.9	1		10/28/08 20:12	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/kg	3.9	1		10/28/08 20:12	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	3.9	1		10/28/08 20:12	79-34-5	
Tetrachloroethene	ND	ug/kg	3.9	1		10/28/08 20:12	127-18-4	
Toluene	6.8	ug/kg	3.9	1		10/28/08 20:12	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/kg	3.9	1		10/28/08 20:12	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/kg	3.9	1		10/28/08 20:12	120-82-1	
1,1,1-Trichloroethane	ND	ug/kg	3.9	1		10/28/08 20:12	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	3.9	1		10/28/08 20:12	79-00-5	
Trichloroethene	32600	ug/kg	19100	5000		10/29/08 12:38	79-01-6	
Trichlorofluoromethane	ND	ug/kg	3.9	1		10/28/08 20:12	75-69-4	
1,2,3-Trichloropropane	ND	ug/kg	3.9	1		10/28/08 20:12	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/kg	3.9	1		10/28/08 20:12	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/kg	3.9	1		10/28/08 20:12	108-67-8	
Vinyl acetate	ND	ug/kg	78.6	1		10/28/08 20:12	108-05-4	
Vinyl chloride	356	ug/kg	191	50		10/29/08 12:06	75-01-4	
Xylene (Total)	ND	ug/kg	7.9	1		10/28/08 20:12	1330-20-7	
Dibromofluoromethane (S)	98 %		80-124	1		10/28/08 20:12	1868-53-7	
Toluene-d8 (S)	101 %		58-145	1		10/28/08 20:12	2037-26-5	
4-Bromofluorobenzene (S)	96 %		61-131	1		10/28/08 20:12	460-00-4	

### Percent Moisture

Analytical Method: ASTM D2974-87

Percent Moisture	10.8 %	0.10	1	10/23/08 18:31
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## ANALYTICAL RESULTS

Project: Kiser Plating

Pace Project No.: 5020073

Sample: 3\_SB-3-(0-1) Lab ID: 5020073012 Collected: 10/21/08 14:20 Received: 10/22/08 08:45 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP</b> Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Arsenic	8.4	mg/kg	2.1	1	10/23/08 00:00	10/27/08 12:24	7440-38-2	
Barium	110	mg/kg	2.1	1	10/23/08 00:00	10/27/08 12:24	7440-39-3	
Cadmium	ND	mg/kg	2.1	1	10/23/08 00:00	10/27/08 12:24	7440-43-9	
Chromium	13.8	mg/kg	2.1	1	10/23/08 00:00	10/27/08 12:24	7440-47-3	
Copper	30.4	mg/kg	2.1	1	10/23/08 00:00	10/27/08 12:24	7440-50-8	
Lead	61.6	mg/kg	2.1	1	10/23/08 00:00	10/27/08 12:24	7439-92-1	
Nickel	28.4	mg/kg	2.1	1	10/23/08 00:00	10/27/08 12:24	7440-02-0	
Selenium	ND	mg/kg	2.1	1	10/23/08 00:00	10/27/08 12:24	7782-49-2	
Silver	ND	mg/kg	2.1	1	10/23/08 00:00	10/27/08 12:24	7440-22-4	
Zinc	184	mg/kg	2.1	1	10/23/08 00:00	10/27/08 12:24	7440-66-6	
<b>7471 Mercury</b> Analytical Method: EPA 7471 Preparation Method: EPA 7471								
Mercury	ND	mg/kg	0.37	1	10/24/08 00:00	10/29/08 10:22	7439-97-6	
<b>Percent Moisture</b> Analytical Method: ASTM D2974-87								
Percent Moisture	9.2	%	0.10	1		10/23/08 18:31		

## QUALITY CONTROL DATA

Project: Kiser Plating

Pace Project No.: 5020073

QC Batch: MPRP/3612

Analysis Method: EPA 6010

QC Batch Method: EPA 3050

Analysis Description: 6010 MET

Associated Lab Samples: 5020073001, 5020073002, 5020073004

METHOD BLANK: 225584

Matrix: Solid

Associated Lab Samples: 5020073001, 5020073002, 5020073004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Arsenic	mg/kg	ND	2.0	10/27/08 15:12	
Barium	mg/kg	ND	2.0	10/27/08 15:12	
Cadmium	mg/kg	ND	2.0	10/27/08 15:12	
Chromium	mg/kg	ND	2.0	10/27/08 15:12	
Copper	mg/kg	ND	2.0	10/27/08 15:12	
Lead	mg/kg	ND	2.0	10/27/08 15:12	
Nickel	mg/kg	ND	2.0	10/27/08 15:12	
Selenium	mg/kg	ND	2.0	10/27/08 15:12	
Silver	mg/kg	ND	2.0	10/27/08 15:12	
Zinc	mg/kg	ND	2.0	10/27/08 15:12	

LABORATORY CONTROL SAMPLE: 225585

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/kg	50	52.3	105	85-118	
Barium	mg/kg	50	52.9	106	84-118	
Cadmium	mg/kg	50	51.4	103	83-115	
Chromium	mg/kg	50	51.7	103	82-117	
Copper	mg/kg	50	49.8	100	82-117	
Lead	mg/kg	50	50.2	100	83-116	
Nickel	mg/kg	50	48.7	97	83-115	
Selenium	mg/kg	50	51.1	102	82-116	
Silver	mg/kg	25	23.4	94	77-123	
Zinc	mg/kg	50	49.7	99	80-118	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 225586

225587

Parameter	Units	5019938002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Arsenic	mg/kg	4.0	56.1	57.2	55.4	58.9	92	96	70-127	6	20	
Barium	mg/kg	30.7	56.1	57.2	81.7	85.0	91	95	60-140	4	20	
Cadmium	mg/kg	ND	56.1	57.2	45.0	47.4	80	82	65-120	5	20	
Chromium	mg/kg	10.1	56.1	57.2	56.9	60.9	83	89	60-130	7	20	
Copper	mg/kg	16.3	56.1	57.2	63.1	67.0	83	89	60-135	6	20	
Lead	mg/kg	6.3	56.1	57.2	50.8	53.5	79	83	60-140	5	20	
Nickel	mg/kg	16.0	56.1	57.2	55.9	59.8	71	77	60-130	7	20	
Selenium	mg/kg	ND	56.1	57.2	50.5	53.6	89	93	60-130	6	20	
Silver	mg/kg	ND	28	28.5	24.3	25.8	87	90	70-130	6	20	
Zinc	mg/kg	37.7	56.1	57.2	77.2	80.2	70	74	60-130	4	20	

## QUALITY CONTROL DATA

Project: Kiser Plating

Pace Project No.: 5020073

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 225588 225589											
Parameter	Units	5019986005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual
Arsenic	mg/kg	6.9	56.8	53.1	61.8	56.9	97	94	70-127	8	20
Barium	mg/kg	57.1	56.8	53.1	116	113	104	105	60-140	3	20
Cadmium	mg/kg	ND	56.8	53.1	46.5	42.3	81	79	65-120	9	20
Chromium	mg/kg	10.5	56.8	53.1	61.5	56.9	90	87	60-130	8	20
Copper	mg/kg	16.0	56.8	53.1	67.8	62.6	91	88	60-135	8	20
Lead	mg/kg	6.8	56.8	53.1	53.7	49.4	83	80	60-140	8	20
Nickel	mg/kg	16.5	56.8	53.1	61.1	60.0	78	82	60-130	2	20
Selenium	mg/kg	ND	56.8	53.1	52.9	47.5	93	89	60-130	11	20
Silver	mg/kg	ND	28.4	26.6	25.5	23.3	90	88	70-130	9	20
Zinc	mg/kg	38.9	56.8	53.1	82.4	79.0	76	75	60-130	4	20

## QUALITY CONTROL DATA

Project: Kiser Plating

Pace Project No.: 5020073

QC Batch: MPRP/3614

Analysis Method: EPA 6010

QC Batch Method: EPA 3050

Analysis Description: 6010 MET

Associated Lab Samples: 5020073005, 5020073006, 5020073007, 5020073009, 5020073010, 5020073012

METHOD BLANK: 225779

Matrix: Solid

Associated Lab Samples: 5020073005, 5020073006, 5020073007, 5020073009, 5020073010, 5020073012

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Arsenic	mg/kg	ND	2.0	10/27/08 11:33	
Barium	mg/kg	ND	2.0	10/27/08 11:33	
Cadmium	mg/kg	ND	2.0	10/27/08 11:33	
Chromium	mg/kg	ND	2.0	10/27/08 11:33	
Copper	mg/kg	ND	2.0	10/27/08 11:33	
Lead	mg/kg	ND	2.0	10/27/08 11:33	
Nickel	mg/kg	ND	2.0	10/27/08 11:33	
Selenium	mg/kg	ND	2.0	10/27/08 11:33	
Silver	mg/kg	ND	2.0	10/27/08 11:33	
Zinc	mg/kg	ND	2.0	10/27/08 11:33	

LABORATORY CONTROL SAMPLE: 225780

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/kg	50	52.7	105	85-118	
Barium	mg/kg	50	53.7	107	84-118	
Cadmium	mg/kg	50	52.3	105	83-115	
Chromium	mg/kg	50	52.7	105	82-117	
Copper	mg/kg	50	50.6	101	82-117	
Lead	mg/kg	50	51.0	102	83-116	
Nickel	mg/kg	50	50.4	101	83-115	
Selenium	mg/kg	50	51.2	102	82-116	
Silver	mg/kg	25	24.0	96	77-123	
Zinc	mg/kg	50	52.5	105	80-118	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 225781

225782

Parameter	Units	5020073012 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Arsenic	mg/kg	8.4	53	52	58.3	57.1	94	94	70-127	2	20	
Barium	mg/kg	110	53	52	158	162	90	100	60-140	3	20	
Cadmium	mg/kg	ND	53	52	44.5	42.7	83	81	65-120	4	20	
Chromium	mg/kg	13.8	53	52	60.8	58.5	89	86	60-130	4	20	
Copper	mg/kg	30.4	53	52	79.7	76.2	93	88	60-135	4	20	
Lead	mg/kg	61.6	53	52	148	106	163	84	60-140	33	20	2d,3d
Nickel	mg/kg	28.4	53	52	67.2	66.0	73	72	60-130	2	20	
Selenium	mg/kg	ND	53	52	49.5	48.1	93	92	60-130	3	20	
Silver	mg/kg	ND	26.4	26	23.8	23.3	90	89	70-130	2	20	
Zinc	mg/kg	184	53	52	278	233	177	93	60-130	18	20	M3

## QUALITY CONTROL DATA

Project: Kiser Plating

Pace Project No.: 5020073

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 225783 225784											
Parameter	Units	5020056015 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual
Arsenic	mg/kg	6.0	52.2	56.8	54.3	60.4	93	96	70-127	11	20
Barium	mg/kg	34.3	52.2	56.8	79.5	106	87	126	60-140	28	20 3d
Cadmium	mg/kg	ND	52.2	56.8	47.2	51.7	91	91	65-120	9	20
Chromium	mg/kg	5.7	52.2	56.8	53.6	59.1	92	94	60-130	10	20
Copper	mg/kg	50.3	52.2	56.8	81.4	88.5	60	67	60-135	8	20
Lead	mg/kg	21.1	52.2	56.8	65.9	68.6	86	84	60-140	4	20
Nickel	mg/kg	9.4	52.2	56.8	53.1	58.9	84	87	60-130	10	20
Selenium	mg/kg	ND	52.2	56.8	47.7	53.2	89	91	60-130	11	20
Silver	mg/kg	ND	26	28.4	22.2	24.8	85	87	70-130	11	20
Zinc	mg/kg	15.8	52.2	56.8	62.5	71.2	90	98	60-130	13	20

## QUALITY CONTROL DATA

Project: Kiser Plating

Pace Project No.: 5020073

QC Batch: WET/3700

Analysis Method: EPA 7196A

QC Batch Method: EPA 3060A

Analysis Description: 7196 Chromium, Hexavalent

Associated Lab Samples: 5020073003, 5020073006, 5020073007

METHOD BLANK: 225801

Matrix: Solid

Associated Lab Samples: 5020073003, 5020073006, 5020073007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chromium, Hexavalent	mg/kg	ND	1.0	10/27/08 10:25	

LABORATORY CONTROL SAMPLE: 225802

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chromium, Hexavalent	mg/kg	760	632	83	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 225803

225804

Parameter	Units	5020073003 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	885	942	561	607	63	64	75-125	8	20	4d,M3

## QUALITY CONTROL DATA

Project: Kiser Plating

Pace Project No.: 5020073

QC Batch: PMST/3034

Analysis Method: ASTM D2974-87

QC Batch Method: ASTM D2974-87

Analysis Description: Dry Weight/Percent Moisture

Associated Lab Samples: 5020073001, 5020073002, 5020073003, 5020073004, 5020073005, 5020073006, 5020073007, 5020073008, 5020073009, 5020073010, 5020073011, 5020073012

SAMPLE DUPLICATE: 225901

Parameter	Units	5019916002 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	7.1	7.0	2	5	

SAMPLE DUPLICATE: 225902

Parameter	Units	5020073012 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	9.2	8.5	7	5	R2

## QUALITY CONTROL DATA

Project: Kiser Plating

Pace Project No.: 5020073

QC Batch: OEXT/10022 Analysis Method: EPA 8015 Modified

QC Batch Method: EPA 3546 Analysis Description: 8015 Solid GCSV

Associated Lab Samples: 5020073001, 5020073005, 5020073008

METHOD BLANK: 225917 Matrix: Solid

Associated Lab Samples: 5020073001, 5020073005, 5020073008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Diesel Components	mg/kg	ND	10.0	10/24/08 20:07	
n-Pentacosane (S)	%	70	45-170	10/24/08 20:07	

LABORATORY CONTROL SAMPLE: 225918

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Diesel Components	mg/kg	83.3	44.7	54	41-139	
n-Pentacosane (S)	%			66	45-170	



## QUALITY CONTROL DATA

Project: Kiser Plating

Pace Project No.: 5020073

QC Batch: OEXT/10023 Analysis Method: EPA 8015 Mod Ext  
QC Batch Method: EPA 3546 Analysis Description: EPA 8015 Modified  
Associated Lab Samples: 5020073001, 5020073005, 5020073008

METHOD BLANK: 225919 Matrix: Solid

Associated Lab Samples: 5020073001, 5020073005, 5020073008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
TPH-ERO	mg/kg	ND	10.0	10/24/08 20:07	
n-Pentacosane (S)	%	70	45-170	10/24/08 20:07	

LABORATORY CONTROL SAMPLE: 225920

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
TPH-ERO	mg/kg	83.3	44.7	54	41-139	
n-Pentacosane (S)	%			66	45-170	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 225921 225922

Parameter	Units	5019990001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
TPH-ERO	mg/kg	18.6	89.1	89.1	54.8	32.7	41	16	40-146	50	20	M0,R1
n-Pentacosane (S)	%						61	32	45-170		20	R1,S0

## QUALITY CONTROL DATA

Project: Kiser Plating

Pace Project No.: 5020073

QC Batch: MERP/1852

Analysis Method: EPA 7471

QC Batch Method: EPA 7471

Analysis Description: 7471 Mercury

Associated Lab Samples: 5020073001, 5020073002, 5020073004, 5020073005, 5020073006, 5020073007, 5020073009, 5020073010, 5020073012

METHOD BLANK: 226098

Matrix: Solid

Associated Lab Samples: 5020073001, 5020073002, 5020073004, 5020073005, 5020073006, 5020073007, 5020073009, 5020073010, 5020073012

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	mg/kg	ND	0.33	10/29/08 10:05	

LABORATORY CONTROL SAMPLE: 226099

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/kg	.5	0.51	102	85-119	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 226100 226101

Parameter	Units	5020073012 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	.57	.57	0.75	0.72	107	102	50-150	4	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 226103 226104

Parameter	Units	5020136006 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	.58	.58	0.67	0.67	101	101	50-150	0	20	

## QUALITY CONTROL DATA

Project: Kiser Plating

Pace Project No.: 5020073

QC Batch: WETA/2974 Analysis Method: EPA 9014 Free Cyanide

QC Batch Method: EPA 9013A Free Cyanide EXT Analysis Description: 9014 Free Cyanide

Associated Lab Samples: 5020073002, 5020073003, 5020073006, 5020073007

METHOD BLANK: 226327

Matrix: Water

Associated Lab Samples: 5020073002, 5020073003, 5020073006, 5020073007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Cyanide	mg/kg	ND	0.50	10/27/08 16:32	

LABORATORY CONTROL SAMPLE: 226328

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cyanide	mg/kg	10	11.3	113	90-110	L3

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 226329

226330

Parameter	Units	5020073002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Cyanide	mg/kg	ND	10.8	10.8	12.2	12.3	111	112	75-125	0	20	

## QUALITY CONTROL DATA

Project: Kiser Plating

Pace Project No.: 5020073

QC Batch: OEXT/10072

Analysis Method: EPA 8270 by SIM

QC Batch Method: EPA 3546

Analysis Description: 8270 MSSV PAH by SIM

Associated Lab Samples: 5020073001, 5020073008

METHOD BLANK: 226896

Matrix: Solid

Associated Lab Samples: 5020073001, 5020073008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
2-Methylnaphthalene	ug/kg	ND	25.0	10/28/08 23:21	
Acenaphthene	ug/kg	ND	25.0	10/28/08 23:21	
Acenaphthylene	ug/kg	ND	25.0	10/28/08 23:21	
Anthracene	ug/kg	ND	25.0	10/28/08 23:21	
Benzo(a)anthracene	ug/kg	ND	25.0	10/28/08 23:21	
Benzo(a)pyrene	ug/kg	ND	25.0	10/28/08 23:21	
Benzo(b)fluoranthene	ug/kg	ND	25.0	10/28/08 23:21	
Benzo(g,h,i)perylene	ug/kg	ND	25.0	10/28/08 23:21	
Benzo(k)fluoranthene	ug/kg	ND	25.0	10/28/08 23:21	
Chrysene	ug/kg	ND	25.0	10/28/08 23:21	
Dibenz(a,h)anthracene	ug/kg	ND	25.0	10/28/08 23:21	
Fluoranthene	ug/kg	ND	25.0	10/28/08 23:21	
Fluorene	ug/kg	ND	25.0	10/28/08 23:21	
Indeno(1,2,3-cd)pyrene	ug/kg	ND	25.0	10/28/08 23:21	
Naphthalene	ug/kg	ND	25.0	10/28/08 23:21	
Phenanthrene	ug/kg	ND	25.0	10/28/08 23:21	
Pyrene	ug/kg	ND	25.0	10/28/08 23:21	
2-Fluorobiphenyl (S)	%	111	45-120	10/28/08 23:21	
Terphenyl-d14 (S)	%	105	41-120	10/28/08 23:21	

LABORATORY CONTROL SAMPLE: 226897

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
2-Methylnaphthalene	ug/kg	1670	1720	103	48-120	
Acenaphthene	ug/kg	1670	1640	98	54-118	
Acenaphthylene	ug/kg	1670	1660	99	54-129	
Anthracene	ug/kg	1670	1760	105	46-136	
Benzo(a)anthracene	ug/kg	1670	1700	102	55-125	
Benzo(a)pyrene	ug/kg	1670	1820	109	46-140	
Benzo(b)fluoranthene	ug/kg	1670	1740	104	46-137	
Benzo(g,h,i)perylene	ug/kg	1670	1630	98	41-124	
Benzo(k)fluoranthene	ug/kg	1670	1820	109	44-132	
Chrysene	ug/kg	1670	1680	101	54-121	
Dibenz(a,h)anthracene	ug/kg	1670	1760	106	44-133	
Fluoranthene	ug/kg	1670	1760	106	57-131	
Fluorene	ug/kg	1670	1690	102	56-123	
Indeno(1,2,3-cd)pyrene	ug/kg	1670	1750	105	42-133	
Naphthalene	ug/kg	1670	1660	100	48-117	
Phenanthrene	ug/kg	1670	1660	100	55-120	
Pyrene	ug/kg	1670	1730	104	56-124	
2-Fluorobiphenyl (S)	%			97	45-120	

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## QUALITY CONTROL DATA

Project: Kiser Plating

Pace Project No.: 5020073

LABORATORY CONTROL SAMPLE: 226897

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Terphenyl-d14 (S)	%			104	41-120	

## QUALITY CONTROL DATA

Project: Kiser Plating

Pace Project No.: 5020073

QC Batch: MSV/12390

Analysis Method: EPA 8260

QC Batch Method: EPA 8260

Analysis Description: 8260 MSV 5035A Volatile Organics

Associated Lab Samples: 5020073011

METHOD BLANK: 227343

Matrix: Solid

Associated Lab Samples: 5020073011

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	ND	5.0	10/28/08 13:10	
1,1,1-Trichloroethane	ug/kg	ND	5.0	10/28/08 13:10	
1,1,2,2-Tetrachloroethane	ug/kg	ND	5.0	10/28/08 13:10	
1,1,2-Trichloroethane	ug/kg	ND	5.0	10/28/08 13:10	
1,1-Dichloroethane	ug/kg	ND	5.0	10/28/08 13:10	
1,1-Dichloroethene	ug/kg	ND	5.0	10/28/08 13:10	
1,1-Dichloropropene	ug/kg	ND	5.0	10/28/08 13:10	
1,2,3-Trichlorobenzene	ug/kg	ND	5.0	10/28/08 13:10	
1,2,3-Trichloropropane	ug/kg	ND	5.0	10/28/08 13:10	
1,2,4-Trichlorobenzene	ug/kg	ND	5.0	10/28/08 13:10	
1,2,4-Trimethylbenzene	ug/kg	ND	5.0	10/28/08 13:10	
1,2-Dibromoethane (EDB)	ug/kg	ND	5.0	10/28/08 13:10	
1,2-Dichlorobenzene	ug/kg	ND	5.0	10/28/08 13:10	
1,2-Dichloroethane	ug/kg	ND	5.0	10/28/08 13:10	
1,2-Dichloropropane	ug/kg	ND	5.0	10/28/08 13:10	
1,3,5-Trimethylbenzene	ug/kg	ND	5.0	10/28/08 13:10	
1,3-Dichlorobenzene	ug/kg	ND	5.0	10/28/08 13:10	
1,3-Dichloropropane	ug/kg	ND	5.0	10/28/08 13:10	
1,4-Dichlorobenzene	ug/kg	ND	5.0	10/28/08 13:10	
2,2-Dichloropropane	ug/kg	ND	5.0	10/28/08 13:10	
2-Butanone (MEK)	ug/kg	ND	25.0	10/28/08 13:10	
2-Chlorotoluene	ug/kg	ND	5.0	10/28/08 13:10	
2-Hexanone	ug/kg	ND	100	10/28/08 13:10	
4-Chlorotoluene	ug/kg	ND	5.0	10/28/08 13:10	
4-Methyl-2-pentanone (MIBK)	ug/kg	ND	25.0	10/28/08 13:10	
Acetone	ug/kg	ND	100	10/28/08 13:10	
Acrolein	ug/kg	ND	100	10/28/08 13:10	
Acrylonitrile	ug/kg	ND	100	10/28/08 13:10	
Benzene	ug/kg	ND	5.0	10/28/08 13:10	
Bromobenzene	ug/kg	ND	5.0	10/28/08 13:10	
Bromochloromethane	ug/kg	ND	5.0	10/28/08 13:10	
Bromodichloromethane	ug/kg	ND	5.0	10/28/08 13:10	
Bromoform	ug/kg	ND	5.0	10/28/08 13:10	
Bromomethane	ug/kg	ND	5.0	10/28/08 13:10	
Carbon disulfide	ug/kg	ND	10.0	10/28/08 13:10	
Carbon tetrachloride	ug/kg	ND	5.0	10/28/08 13:10	
Chlorobenzene	ug/kg	ND	5.0	10/28/08 13:10	
Chloroethane	ug/kg	ND	5.0	10/28/08 13:10	
Chloroform	ug/kg	ND	5.0	10/28/08 13:10	
Chloromethane	ug/kg	ND	5.0	10/28/08 13:10	
cis-1,2-Dichloroethene	ug/kg	ND	5.0	10/28/08 13:10	
cis-1,3-Dichloropropene	ug/kg	ND	5.0	10/28/08 13:10	
Dibromochloromethane	ug/kg	ND	5.0	10/28/08 13:10	

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## QUALITY CONTROL DATA

Project: Kiser Plating

Pace Project No.: 5020073

METHOD BLANK: 227343

Matrix: Solid

Associated Lab Samples: 5020073011

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Dibromomethane	ug/kg	ND	5.0	10/28/08 13:10	
Dichlorodifluoromethane	ug/kg	ND	5.0	10/28/08 13:10	
Ethyl methacrylate	ug/kg	ND	10.0	10/28/08 13:10	
Ethylbenzene	ug/kg	ND	5.0	10/28/08 13:10	
Hexachloro-1,3-butadiene	ug/kg	ND	5.0	10/28/08 13:10	
Iodomethane	ug/kg	ND	100	10/28/08 13:10	
Isopropylbenzene (Cumene)	ug/kg	ND	5.0	10/28/08 13:10	
Methyl-tert-butyl ether	ug/kg	ND	5.0	10/28/08 13:10	
Methylene chloride	ug/kg	ND	20.0	10/28/08 13:10	
n-Butylbenzene	ug/kg	ND	5.0	10/28/08 13:10	
n-Propylbenzene	ug/kg	ND	5.0	10/28/08 13:10	
Naphthalene	ug/kg	ND	5.0	10/28/08 13:10	
p-Isopropyltoluene	ug/kg	ND	5.0	10/28/08 13:10	
sec-Butylbenzene	ug/kg	ND	5.0	10/28/08 13:10	
Styrene	ug/kg	ND	5.0	10/28/08 13:10	
tert-Butylbenzene	ug/kg	ND	5.0	10/28/08 13:10	
Tetrachloroethene	ug/kg	ND	5.0	10/28/08 13:10	
Toluene	ug/kg	ND	5.0	10/28/08 13:10	
trans-1,2-Dichloroethene	ug/kg	ND	5.0	10/28/08 13:10	
trans-1,3-Dichloropropene	ug/kg	ND	5.0	10/28/08 13:10	
trans-1,4-Dichloro-2-butene	ug/kg	ND	100	10/28/08 13:10	
Trichloroethene	ug/kg	ND	5.0	10/28/08 13:10	
Trichlorofluoromethane	ug/kg	ND	5.0	10/28/08 13:10	
Vinyl acetate	ug/kg	ND	100	10/28/08 13:10	
Vinyl chloride	ug/kg	ND	5.0	10/28/08 13:10	
Xylene (Total)	ug/kg	ND	10.0	10/28/08 13:10	
4-Bromofluorobenzene (S)	%	98	61-131	10/28/08 13:10	
Dibromofluoromethane (S)	%	99	80-124	10/28/08 13:10	
Toluene-d8 (S)	%	101	58-145	10/28/08 13:10	

LABORATORY CONTROL SAMPLE: 227344

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	50	51.5	103	65-124	
1,1,1-Trichloroethane	ug/kg	50	45.8	92	61-135	
1,1,2,2-Tetrachloroethane	ug/kg	50	55.4	111	66-124	
1,1,2-Trichloroethane	ug/kg	50	50.2	100	74-127	
1,1-Dichloroethane	ug/kg	50	42.2	84	62-132	
1,1-Dichloroethene	ug/kg	50	42.4	85	61-123	
1,1-Dichloropropene	ug/kg	50	47.6	95	74-128	
1,2,3-Trichlorobenzene	ug/kg	50	61.2	122	60-125	
1,2,3-Trichloropropane	ug/kg	50	52.1	104	61-120	
1,2,4-Trichlorobenzene	ug/kg	50	60.5	121	58-126	
1,2,4-Trimethylbenzene	ug/kg	50	56.5	113	72-120	
1,2-Dibromoethane (EDB)	ug/kg	50	47.6	95	74-119	

Date: 10/31/2008 11:07 AM

## REPORT OF LABORATORY ANALYSIS

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## QUALITY CONTROL DATA

Project: Kiser Plating

Pace Project No.: 5020073

LABORATORY CONTROL SAMPLE: 227344

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dichlorobenzene	ug/kg	50	56.9	114	75-117	
1,2-Dichloroethane	ug/kg	50	42.1	84	62-135	
1,2-Dichloropropane	ug/kg	50	44.7	89	74-124	
1,3,5-Trimethylbenzene	ug/kg	50	57.7	115	73-122	
1,3-Dichlorobenzene	ug/kg	50	58.4	117	73-120	
1,3-Dichloropropane	ug/kg	50	50.4	101	71-122	
1,4-Dichlorobenzene	ug/kg	50	55.1	110	72-118	
2,2-Dichloropropane	ug/kg	50	47.8	96	53-136	
2-Butanone (MEK)	ug/kg	250	312	125	33-190	
2-Chlorotoluene	ug/kg	50	55.6	111	72-122	
2-Hexanone	ug/kg	250	331	132	44-168	
4-Chlorotoluene	ug/kg	50	56.9	114	72-120	
4-Methyl-2-pentanone (MIBK)	ug/kg	250	189	76	58-126	
Acetone	ug/kg	250	439	176	30-190	
Acrolein	ug/kg	1000	2100	210	30-190 L0	
Acrylonitrile	ug/kg	1000	783	78	65-129	
Benzene	ug/kg	50	44.1	88	76-123	
Bromobenzene	ug/kg	50	54.8	110	74-116	
Bromochloromethane	ug/kg	50	48.9	98	56-143	
Bromodichloromethane	ug/kg	50	44.3	89	67-123	
Bromoform	ug/kg	50	48.2	96	58-117	
Bromomethane	ug/kg	50	38.8	78	47-147	
Carbon disulfide	ug/kg	100	75.2	75	56-141	
Carbon tetrachloride	ug/kg	50	46.7	93	54-136	
Chlorobenzene	ug/kg	50	52.7	105	75-115	
Chloroethane	ug/kg	50	39.7	79	57-147	
Chloroform	ug/kg	50	44.7	89	74-123	
Chloromethane	ug/kg	50	26.2	52	31-155	
cis-1,2-Dichloroethene	ug/kg	50	43.5	87	76-119	
cis-1,3-Dichloropropene	ug/kg	50	48.0	96	56-110	
Dibromochloromethane	ug/kg	50	46.7	93	63-122	
Dibromomethane	ug/kg	50	44.0	88	70-127	
Dichlorodifluoromethane	ug/kg	50	24.8	50	30-170	
Ethyl methacrylate	ug/kg	50	47.0	94	58-126	
Ethylbenzene	ug/kg	50	53.1	106	78-121	
Hexachloro-1,3-butadiene	ug/kg	50	62.5	125	65-128	
Iodomethane	ug/kg	100	105	105	38-173	
Isopropylbenzene (Cumene)	ug/kg	50	57.1	114	75-128	
Methyl-tert-butyl ether	ug/kg	100	81.2	81	59-142	
Methylene chloride	ug/kg	50	40.0	80	30-170	
n-Butylbenzene	ug/kg	50	60.5	121	70-123	
n-Propylbenzene	ug/kg	50	57.9	116	70-126	
Naphthalene	ug/kg	50	58.9	118	60-128	
p-Isopropyltoluene	ug/kg	50	58.4	117	65-125	
sec-Butylbenzene	ug/kg	50	59.5	119	72-125	
Styrene	ug/kg	50	56.4	113	75-118	
tert-Butylbenzene	ug/kg	50	55.3	111	61-114	
Tetrachloroethene	ug/kg	50	47.3	95	63-117	

Date: 10/31/2008 11:07 AM

## REPORT OF LABORATORY ANALYSIS

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## QUALITY CONTROL DATA

Project: Kiser Plating

Pace Project No.: 5020073

LABORATORY CONTROL SAMPLE: 227344

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Toluene	ug/kg	50	48.8	98	72-123	
trans-1,2-Dichloroethene	ug/kg	50	47.3	95	70-122	
trans-1,3-Dichloropropene	ug/kg	50	47.4	95	55-107	
trans-1,4-Dichloro-2-butene	ug/kg	50	46.6J	93	49-127	
Trichloroethene	ug/kg	50	44.8	90	74-121	
Trichlorofluoromethane	ug/kg	50	41.0	82	55-156	
Vinyl acetate	ug/kg	200	136	68	46-127	
Vinyl chloride	ug/kg	50	34.3	69	50-146	
Xylene (Total)	ug/kg	150	161	107	77-120	
4-Bromofluorobenzene (S)	%			100	61-131	
Dibromofluoromethane (S)	%			98	80-124	
Toluene-d8 (S)	%			101	58-145	

## QUALITY CONTROL DATA

Project: Kiser Plating

Pace Project No.: 5020073

QC Batch: OEXT/10101

Analysis Method: EPA 8270 by SIM

QC Batch Method: EPA 3546

Analysis Description: 8270 MSSV PAH by SIM

Associated Lab Samples: 5020073005

METHOD BLANK: 227594

Matrix: Solid

Associated Lab Samples: 5020073005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
2-Methylnaphthalene	ug/kg	ND	25.0	10/30/08 14:04	
Acenaphthene	ug/kg	ND	25.0	10/30/08 14:04	
Acenaphthylene	ug/kg	ND	25.0	10/30/08 14:04	
Anthracene	ug/kg	ND	25.0	10/30/08 14:04	
Benzo(a)anthracene	ug/kg	ND	25.0	10/30/08 14:04	
Benzo(a)pyrene	ug/kg	ND	25.0	10/30/08 14:04	
Benzo(b)fluoranthene	ug/kg	ND	25.0	10/30/08 14:04	
Benzo(g,h,i)perylene	ug/kg	ND	25.0	10/30/08 14:04	
Benzo(k)fluoranthene	ug/kg	ND	25.0	10/30/08 14:04	
Chrysene	ug/kg	ND	25.0	10/30/08 14:04	
Dibenz(a,h)anthracene	ug/kg	ND	25.0	10/30/08 14:04	
Fluoranthene	ug/kg	ND	25.0	10/30/08 14:04	
Fluorene	ug/kg	ND	25.0	10/30/08 14:04	
Indeno(1,2,3-cd)pyrene	ug/kg	ND	25.0	10/30/08 14:04	
Naphthalene	ug/kg	ND	25.0	10/30/08 14:04	
Phenanthrene	ug/kg	ND	25.0	10/30/08 14:04	
Pyrene	ug/kg	ND	25.0	10/30/08 14:04	
2-Fluorobiphenyl (S)	%	111	45-120	10/30/08 14:04	
Terphenyl-d14 (S)	%	115	41-120	10/30/08 14:04	

LABORATORY CONTROL SAMPLE: 227595

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
2-Methylnaphthalene	ug/kg	1670	1890	113	48-120	
Acenaphthene	ug/kg	1670	1720	103	54-118	
Acenaphthylene	ug/kg	1670	1690	102	54-129	
Anthracene	ug/kg	1670	1830	110	46-136	
Benzo(a)anthracene	ug/kg	1670	1750	105	55-125	
Benzo(a)pyrene	ug/kg	1670	1910	114	46-140	
Benzo(b)fluoranthene	ug/kg	1670	1900	114	46-137	
Benzo(g,h,i)perylene	ug/kg	1670	1610	96	41-124	
Benzo(k)fluoranthene	ug/kg	1670	1800	108	44-132	
Chrysene	ug/kg	1670	1750	105	54-121	
Dibenz(a,h)anthracene	ug/kg	1670	1810	109	44-133	
Fluoranthene	ug/kg	1670	1950	117	57-131	
Fluorene	ug/kg	1670	1870	112	56-123	
Indeno(1,2,3-cd)pyrene	ug/kg	1670	1790	107	42-133	
Naphthalene	ug/kg	1670	1750	105	48-117	
Phenanthrene	ug/kg	1670	1730	104	55-120	
Pyrene	ug/kg	1670	1680	101	56-124	
2-Fluorobiphenyl (S)	%			114	45-120	

Date: 10/31/2008 11:07 AM

## REPORT OF LABORATORY ANALYSIS

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## QUALITY CONTROL DATA

Project: Kiser Plating

Pace Project No.: 5020073

LABORATORY CONTROL SAMPLE: 227595

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Terphenyl-d14 (S)	%			106	41-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 227596

227597

Parameter	Units	5020232003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
2-Methylnaphthalene	ug/kg	ND	1670	1670	1570	1480	94	89	25-123	6	20	
Acenaphthene	ug/kg	ND	1670	1670	1430	1350	86	81	27-126	6	20	
Acenaphthylene	ug/kg	ND	1670	1670	1420	1350	85	81	23-138	4	20	
Anthracene	ug/kg	ND	1670	1670	1510	1420	90	85	22-136	6	20	
Benzo(a)anthracene	ug/kg	ND	1670	1670	1440	1340	87	81	20-134	7	20	
Benzo(a)pyrene	ug/kg	ND	1670	1670	1550	1450	93	87	20-137	7	20	
Benzo(b)fluoranthene	ug/kg	ND	1670	1670	1540	1520	92	91	20-138	1	20	
Benzo(g,h,i)perylene	ug/kg	ND	1670	1670	1220	1090	73	65	20-116	12	20	
Benzo(k)fluoranthene	ug/kg	ND	1670	1670	1440	1390	86	83	15-136	4	20	
Chrysene	ug/kg	ND	1670	1670	1450	1330	87	80	16-136	8	20	
Dibenz(a,h)anthracene	ug/kg	ND	1670	1670	1430	1250	86	75	15-129	14	20	
Fluoranthene	ug/kg	ND	1670	1670	1590	1460	96	88	11-155	8	20	
Fluorene	ug/kg	ND	1670	1670	1570	1460	94	88	20-141	7	20	
Indeno(1,2,3-cd)pyrene	ug/kg	ND	1670	1670	1420	1240	85	74	10-129	14	20	
Naphthalene	ug/kg	ND	1670	1670	1450	1410	87	84	18-137	3	20	
Phenanthrene	ug/kg	ND	1670	1670	1410	1340	85	80	20-180	5	20	
Pyrene	ug/kg	ND	1670	1670	1380	1340	83	80	18-142	3	20	
2-Fluorobiphenyl (S)	%						80	77	45-120		20	
Terphenyl-d14 (S)	%						84	81	41-120		20	

## QUALIFIERS

Project: Kiser Plating

Pace Project No.: 5020073

### DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

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

### ANALYTE QUALIFIERS

- |    |   |
|----|---|
| 1d | Re-prep and re-analysis resulted in a value of 0.95 mg/kg, indicating the Non-Homogeneous nature of Mercury in the sample matrix.   |
| 2d | Matrix spike recovery is outside of control limits due to sample non-homogeneity.   |
| 3d | RPD is outside of control limits due to sample non-homogeneity.   |
| 4d | Redox and pH values suggest the sample matrix creates a reducing environment, accounting for low MS/MSD recoveries.   |
| L0 | Analyte recovery in the laboratory control sample (LCS) was outside QC limits.  |
| L3 | Analyte recovery in the laboratory control sample (LCS) exceeded QC limits. Analyte presence below reporting limits in associated samples. Results unaffected by high bias. |
| M0 | Matrix spike recovery was outside laboratory control limits.  |
| M3 | Matrix spike recovery was outside laboratory control limits due to matrix interferences.  |
| R1 | RPD value was outside control limits.   |
| R2 | RPD value was outside control limits due to matrix interference   |
| S0 | Surrogate recovery outside laboratory control limits.   |



## 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:	Symbiant	Report To:	Karla MacDonald	Attention:	Karla MacDonald
Address:	4850 Priority St. Indian- IN	Copy To:		Company Name:	Symbiant
Email To:	Karla.MacDonald@Symbiant.com	Purchase Order No.:		Address:	Same
Phone:	317-660-4999 317	Project Name:	Formerly Platting	Face Quote Reference:	
Requested Due Date/TAT:		Project Number:	W683470	Face Project Manager:	
				Face Profile #:	
				REGULATORY AGENCY	
				<input type="checkbox"/> NPDES	<input type="checkbox"/> GROUND WATER
				<input type="checkbox"/> UST	<input checked="" type="checkbox"/> RCRA
				<input type="checkbox"/> DRINKING WATER	<input type="checkbox"/> OTHER
				11841111	
				Page: of	
				IN	
				Site Location	
				STATE:	

[illegible]

**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.07. 15-May-2007



# Sample Condition Upon Receipt

Client Name: Symbiant Project # \_\_\_\_\_

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

Tracking #: 856516019874

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

Packing Material: ☐ Bubble Wrap ☒ Bubble Bags ☐ None ☐ Other \_\_\_\_\_

Thermometer Used 123456

Type of Ice: Wet Blue None

☐ Samples on ice, cooling process has begun

Cooler Temperature 4.6°C

Biological Tissue Is Frozen: Yes ☒ No

Date and Initials of person examining container: 10/24/08

Temp should be above freezing to 6°C

Comments:

Chain of Custody Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody Filled Out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody Relinquished:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler Name & Signature on COC:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples Arrived within Hold Time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Short Hold Time Analysis (<72hr):	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	6.
Rush Turn Around Time Requested:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	7.
Sufficient Volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8. <u>1 Lt. have less than 1 Lt of samples</u>
Correct Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
-Pace Containers Used:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Containers Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	10.
Filtered volume received for Dissolved tests	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Sample Labels match COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	12.
-Includes date/time/ID/Analysis Matrix: <u>Water</u>		
All containers needing preservation have been checked.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	13.
All containers needing preservation are found to be in compliance with EPA recommendation.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	<u>PH = 7</u> <u>1-250ppb</u> <u>TW-02-01</u> <u>metals</u>
exceptions: VOA, coliform, TOC, O&G, WI-DRO (water)	<input type="checkbox"/> Yes <input type="checkbox"/> No	Initial when completed
Samples checked for dechlorination:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	14.
Headspace in VOA Vials (>6mm):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	15. <u>TW-02 1 vial has headspace</u>
Trip Blank Present:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	16.
Trip Blank Custody Seals Present	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Pace Trip Blank Lot # (if purchased):		<u>024/08</u>

Client Notification/ Resolution:

Field Data Required?

Y / N

Person Contacted:

Karla McDonald

Date/Time:

Comments/ Resolution:

Troy Thompson

Can't do d/35 on 008/009. only received

containers for 008/009 field trip. preserved sample.  
logged TW-02 Dup in for VOC. per email.  
Med client sent vials.

Project Manager Review:

Date:

10/24/08

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)

November 05, 2008

Ms. Karla McDonald  
Symbiont Indianapolis  
3850 Priority Way South Drive  
Indianapolis, IN 46240

RE: Project: KISER PLATING W083470  
Pace Project No.: 5020176

Dear Ms. McDonald:

Enclosed are the analytical results for sample(s) received by the laboratory on October 24, 2008. The results relate only to the samples included in this report. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

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

Sincerely,



Mark Davis

mark.davis@pacelabs.com  
Project Manager

Illinois/NELAC Certification Number: 100418

Indiana Certification Number: C-49-06

Kansas Certification Number: E-10247

Kentucky Certification Number: 0042

Ohio VAP: CL0065

Pennsylvania: 68-00791

West Virginia Certification Number: 330

Enclosures

cc: Accounts Payable, Symbiont

## REPORT OF LABORATORY ANALYSIS

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## SAMPLE SUMMARY

Project: KISER PLATING W083470

Pace Project No.: 5020176

Lab ID	Sample ID	Matrix	Date Collected	Date Received
5020176001	3_MW-10-01	Water	10/22/08 11:05	10/24/08 11:10
5020176002	3_TW-08-01	Water	10/22/08 12:00	10/24/08 11:10
5020176003	3_TW-03-01	Water	10/22/08 13:18	10/24/08 11:10
5020176004	3_TW-06-01	Water	10/22/08 13:35	10/24/08 11:10
5020176005	3_TW-06-01 DUP	Water	10/22/08 13:35	10/24/08 11:10
5020176006	3_TW-02-01	Water	10/22/08 14:35	10/24/08 11:10
5020176007	3_TW-02-01 DUP	Water	10/22/08 14:35	10/24/08 11:10
5020176008	3_TW-05-01	Water	10/22/08 15:25	10/24/08 11:10
5020176009	3_MW-09	Water	10/22/08 15:35	10/24/08 11:10
5020176010	TRIP BLANK	Water	10/22/08 08:00	10/24/08 11:10

## REPORT OF LABORATORY ANALYSIS

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## SAMPLE ANALYTE COUNT

Project: KISER PLATING W083470

Pace Project No.: 5020176

Lab ID	Sample ID	Method	Analysts	Analytes Reported
5020176001	3_MW-10-01	EPA 6010	FRW	10
		EPA 6010	FRW	10
		EPA 7196	TPD	1
		EPA 7470	LLB	1
		EPA 7470	LLB	1
		EPA 8260	ALA	73
		EPA 8270 by SIM	DMT	19
5020176002	3_TW-08-01	EPA 6010	FRW	7
		EPA 6010	FRW	7
		EPA 7470	LLB	1
		EPA 7470	LLB	1
5020176003	3_TW-03-01	EPA 6010	FRW	7
		EPA 7470	LLB	1
5020176004	3_TW-06-01	EPA 6010	FRW	10
		EPA 6010	FRW	10
		EPA 7196	TPD	1
		EPA 7470	LLB	1
		EPA 7470	LLB	1
		EPA 8260	ALA	73
		EPA 8270 by SIM	DMT	19
5020176005	3_TW-06-01 DUP	EPA 6010	FRW	10
		EPA 6010	FRW	10
		EPA 7196	TPD	1
		EPA 7470	LLB	1
		EPA 7470	LLB	1
		EPA 8260	ALA	73
5020176006	3_TW-02-01	EPA 6010	FRW	11
		EPA 6010	FRW	10
		EPA 7196	TPD	1
		EPA 7470	LLB	1
		EPA 7470	LLB	1
		EPA 8260	ALA	73
		EPA 8270 by SIM	DMT	19
5020176007	3_TW-02-01 DUP	EPA 8260	ALA	73
		EPA 8270 by SIM	DMT	19
5020176008	3_TW-05-01	EPA 6010	FRW	10
		EPA 7470	LLB	1
5020176009	3_MW-09	EPA 6010	FRW	10

## REPORT OF LABORATORY ANALYSIS

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## SAMPLE ANALYTE COUNT

Project: KISER PLATING W083470

Pace Project No.: 5020176

Lab ID	Sample ID	Method	Analysts	Analytes Reported
5020176010	TRIP BLANK	EPA 7470	LLB	1
		EPA 8260	ALA	73

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: KISER PLATING W083470

Pace Project No.: 5020176

Sample: 3_MW-10-01		Lab ID: 5020176001	Collected: 10/22/08 11:05	Received: 10/24/08 11:10	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP</b>		Analytical Method: EPA 6010 Preparation Method: EPA 3010						
Arsenic	ND ug/L		10.0	1	10/29/08 00:00	11/03/08 20:42	7440-38-2	
Barium	113 ug/L		100	1	10/29/08 00:00	11/03/08 20:42	7440-39-3	
Cadmium	ND ug/L		5.0	1	10/29/08 00:00	11/03/08 20:42	7440-43-9	
Chromium	ND ug/L		10.0	1	10/29/08 00:00	11/03/08 20:42	7440-47-3	
Copper	97.4 ug/L		20.0	1	10/29/08 00:00	11/03/08 20:42	7440-50-8	
Lead	ND ug/L		10.0	1	10/29/08 00:00	11/03/08 20:42	7439-92-1	
Nickel	ND ug/L		50.0	1	10/29/08 00:00	11/03/08 20:42	7440-02-0	
Selenium	ND ug/L		10.0	1	10/29/08 00:00	11/03/08 20:42	7782-49-2	
Silver	ND ug/L		50.0	1	10/29/08 00:00	11/03/08 20:42	7440-22-4	
Zinc	243 ug/L		50.0	1	10/29/08 00:00	11/03/08 20:42	7440-66-6	
<b>6010 MET ICP, Dissolved</b>		Analytical Method: EPA 6010 Preparation Method: EPA 3010						
Arsenic, Dissolved	ND ug/L		10.0	1	10/26/08 00:00	10/29/08 00:28	7440-38-2	
Barium, Dissolved	ND ug/L		100	1	10/26/08 00:00	10/29/08 00:28	7440-39-3	
Cadmium, Dissolved	ND ug/L		5.0	1	10/26/08 00:00	10/29/08 00:28	7440-43-9	
Chromium, Dissolved	ND ug/L		10.0	1	10/26/08 00:00	10/29/08 00:28	7440-47-3	
Copper, Dissolved	ND ug/L		20.0	1	10/26/08 00:00	10/29/08 00:28	7440-50-8	
Lead, Dissolved	ND ug/L		5.0	1	10/26/08 00:00	10/29/08 00:28	7439-92-1	
Nickel, Dissolved	ND ug/L		50.0	1	10/26/08 00:00	10/29/08 00:28	7440-02-0	
Selenium, Dissolved	ND ug/L		10.0	1	10/26/08 00:00	10/29/08 00:28	7782-49-2	
Silver, Dissolved	ND ug/L		50.0	1	10/26/08 00:00	10/29/08 00:28	7440-22-4	
Zinc, Dissolved	204 ug/L		50.0	1	10/26/08 00:00	10/29/08 00:28	7440-66-6	
<b>7470 Mercury</b>		Analytical Method: EPA 7470 Preparation Method: EPA 7470						
Mercury	ND ug/L		2.0	1	10/29/08 00:00	10/30/08 11:10	7439-97-6	
<b>7470 Mercury, Dissolved</b>		Analytical Method: EPA 7470 Preparation Method: EPA 7470						
Mercury, Dissolved	ND ug/L		2.0	1	10/29/08 00:00	10/30/08 10:43	7439-97-6	
<b>8270 MSSV PAH by SIM</b>		Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510						
Acenaphthene	ND ug/L		1.0	1	10/28/08 00:00	10/30/08 00:12	83-32-9	
Acenaphthylene	ND ug/L		1.0	1	10/28/08 00:00	10/30/08 00:12	208-96-8	
Anthracene	ND ug/L		0.10	1	10/28/08 00:00	10/30/08 00:12	120-12-7	
Benzo(a)anthracene	ND ug/L		0.10	1	10/28/08 00:00	10/30/08 00:12	56-55-3	
Benzo(a)pyrene	ND ug/L		0.10	1	10/28/08 00:00	10/30/08 00:12	50-32-8	
Benzo(b)fluoranthene	ND ug/L		0.10	1	10/28/08 00:00	10/30/08 00:12	205-99-2	
Benzo(g,h,i)perylene	ND ug/L		0.10	1	10/28/08 00:00	10/30/08 00:12	191-24-2	
Benzo(k)fluoranthene	ND ug/L		0.10	1	10/28/08 00:00	10/30/08 00:12	207-08-9	
Chrysene	ND ug/L		0.51	1	10/28/08 00:00	10/30/08 00:12	218-01-9	
Dibenz(a,h)anthracene	ND ug/L		0.10	1	10/28/08 00:00	10/30/08 00:12	53-70-3	
Fluoranthene	ND ug/L		1.0	1	10/28/08 00:00	10/30/08 00:12	206-44-0	
Fluorene	ND ug/L		1.0	1	10/28/08 00:00	10/30/08 00:12	86-73-7	
Indeno(1,2,3-cd)pyrene	ND ug/L		0.10	1	10/28/08 00:00	10/30/08 00:12	193-39-5	
2-Methylnaphthalene	ND ug/L		1.0	1	10/28/08 00:00	10/30/08 00:12	91-57-6	
Naphthalene	ND ug/L		1.0	1	10/28/08 00:00	10/30/08 00:12	91-20-3	
Phenanthrene	ND ug/L		1.0	1	10/28/08 00:00	10/30/08 00:12	85-01-8	

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## ANALYTICAL RESULTS

Project: KISER PLATING W083470

Pace Project No.: 5020176

Sample: 3_MW-10-01		Lab ID: 5020176001		Collected: 10/22/08 11:05		Received: 10/24/08 11:10		Matrix: Water	
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 3510							
Pyrene	ND ug/L		1.0	1	10/28/08 00:00	10/30/08 00:12	129-00-0		
2-Fluorobiphenyl (S)	57 %		35-116	1	10/28/08 00:00	10/30/08 00:12	321-60-8		
Terphenyl-d14 (S)	61 %		25-117	1	10/28/08 00:00	10/30/08 00:12	1718-51-0		
8260 MSV		Analytical Method: EPA 8260							
Acetone	ND ug/L		100	1		10/31/08 22:41	67-64-1		
Acrolein	ND ug/L		100	1		10/31/08 22:41	107-02-8		
Acrylonitrile	ND ug/L		100	1		10/31/08 22:41	107-13-1		
Benzene	ND ug/L		5.0	1		10/31/08 22:41	71-43-2		
Bromobenzene	ND ug/L		5.0	1		10/31/08 22:41	108-86-1		
Bromochloromethane	ND ug/L		5.0	1		10/31/08 22:41	74-97-5		
Bromodichloromethane	ND ug/L		5.0	1		10/31/08 22:41	75-27-4		
Bromoform	ND ug/L		5.0	1		10/31/08 22:41	75-25-2		
Bromomethane	ND ug/L		5.0	1		10/31/08 22:41	74-83-9		
2-Butanone (MEK)	ND ug/L		25.0	1		10/31/08 22:41	78-93-3		
n-Butylbenzene	ND ug/L		5.0	1		10/31/08 22:41	104-51-8		
sec-Butylbenzene	ND ug/L		5.0	1		10/31/08 22:41	135-98-8		
tert-Butylbenzene	ND ug/L		5.0	1		10/31/08 22:41	98-06-6		
Carbon disulfide	ND ug/L		10.0	1		10/31/08 22:41	75-15-0		
Carbon tetrachloride	ND ug/L		5.0	1		10/31/08 22:41	56-23-5		
Chlorobenzene	ND ug/L		5.0	1		10/31/08 22:41	108-90-7		
Chloroethane	ND ug/L		5.0	1		10/31/08 22:41	75-00-3		
Chloroform	ND ug/L		5.0	1		10/31/08 22:41	67-66-3		
Chloromethane	ND ug/L		5.0	1		10/31/08 22:41	74-87-3		
2-Chlorotoluene	ND ug/L		5.0	1		10/31/08 22:41	95-49-8		
4-Chlorotoluene	ND ug/L		5.0	1		10/31/08 22:41	106-43-4		
Dibromochloromethane	ND ug/L		5.0	1		10/31/08 22:41	124-48-1		
1,2-Dibromoethane (EDB)	ND ug/L		5.0	1		10/31/08 22:41	106-93-4		
Dibromomethane	ND ug/L		5.0	1		10/31/08 22:41	74-95-3		
1,2-Dichlorobenzene	ND ug/L		5.0	1		10/31/08 22:41	95-50-1		
1,3-Dichlorobenzene	ND ug/L		5.0	1		10/31/08 22:41	541-73-1		
1,4-Dichlorobenzene	ND ug/L		5.0	1		10/31/08 22:41	106-46-7		
trans-1,4-Dichloro-2-butene	ND ug/L		100	1		10/31/08 22:41	110-57-6		
Dichlorodifluoromethane	ND ug/L		5.0	1		10/31/08 22:41	75-71-8		
1,1-Dichloroethane	ND ug/L		5.0	1		10/31/08 22:41	75-34-3		
1,2-Dichloroethane	ND ug/L		5.0	1		10/31/08 22:41	107-06-2		
1,1-Dichloroethene	ND ug/L		5.0	1		10/31/08 22:41	75-35-4		
cis-1,2-Dichloroethene	64.7 ug/L		5.0	1		10/31/08 22:41	156-59-2		
trans-1,2-Dichloroethene	ND ug/L		5.0	1		10/31/08 22:41	156-60-5		
1,2-Dichloropropane	ND ug/L		5.0	1		10/31/08 22:41	78-87-5		
1,3-Dichloropropane	ND ug/L		5.0	1		10/31/08 22:41	142-28-9		
2,2-Dichloropropane	ND ug/L		5.0	1		10/31/08 22:41	594-20-7		
1,1-Dichloropropene	ND ug/L		5.0	1		10/31/08 22:41	563-58-6		
cis-1,3-Dichloropropene	ND ug/L		5.0	1		10/31/08 22:41	10061-01-5		
trans-1,3-Dichloropropene	ND ug/L		5.0	1		10/31/08 22:41	10061-02-6		
Ethylbenzene	ND ug/L		5.0	1		10/31/08 22:41	100-41-4		
Ethyl methacrylate	ND ug/L		100	1		10/31/08 22:41	97-63-2		

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## ANALYTICAL RESULTS

Project: KISER PLATING W083470

Pace Project No.: 5020176

Sample: 3_MW-10-01		Lab ID: 5020176001	Collected: 10/22/08 11:05	Received: 10/24/08 11:10	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>		Analytical Method: EPA 8260						
Hexachloro-1,3-butadiene	ND ug/L		5.0	1		10/31/08 22:41	87-68-3	
n-Hexane	ND ug/L		5.0	1		10/31/08 22:41	110-54-3	
2-Hexanone	ND ug/L		25.0	1		10/31/08 22:41	591-78-6	
Iodomethane	ND ug/L		10.0	1		10/31/08 22:41	74-88-4	
Isopropylbenzene (Cumene)	ND ug/L		5.0	1		10/31/08 22:41	98-82-8	
p-Isopropyltoluene	ND ug/L		5.0	1		10/31/08 22:41	99-87-6	
Methylene chloride	ND ug/L		5.0	1		10/31/08 22:41	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND ug/L		25.0	1		10/31/08 22:41	108-10-1	
Methyl-tert-butyl ether	ND ug/L		4.0	1		10/31/08 22:41	1634-04-4	
Naphthalene	ND ug/L		5.0	1		10/31/08 22:41	91-20-3	
n-Propylbenzene	ND ug/L		5.0	1		10/31/08 22:41	103-65-1	
Styrene	ND ug/L		5.0	1		10/31/08 22:41	100-42-5	
1,1,1,2-Tetrachloroethane	ND ug/L		5.0	1		10/31/08 22:41	630-20-6	
1,1,2,2-Tetrachloroethane	ND ug/L		5.0	1		10/31/08 22:41	79-34-5	
Tetrachloroethene	ND ug/L		5.0	1		10/31/08 22:41	127-18-4	
Toluene	ND ug/L		5.0	1		10/31/08 22:41	108-88-3	
1,2,3-Trichlorobenzene	ND ug/L		5.0	1		10/31/08 22:41	87-61-6	
1,2,4-Trichlorobenzene	ND ug/L		5.0	1		10/31/08 22:41	120-82-1	
1,1,1-Trichloroethane	ND ug/L		5.0	1		10/31/08 22:41	71-55-6	
1,1,2-Trichloroethane	ND ug/L		5.0	1		10/31/08 22:41	79-00-5	
Trichloroethene	112 ug/L		5.0	1		10/31/08 22:41	79-01-6	
Trichlorofluoromethane	ND ug/L		5.0	1		10/31/08 22:41	75-69-4	
1,2,3-Trichloropropane	ND ug/L		5.0	1		10/31/08 22:41	96-18-4	
1,2,4-Trimethylbenzene	ND ug/L		5.0	1		10/31/08 22:41	95-63-6	
1,3,5-Trimethylbenzene	ND ug/L		5.0	1		10/31/08 22:41	108-67-8	
Vinyl acetate	ND ug/L		10.0	1		10/31/08 22:41	108-05-4	
Vinyl chloride	57.1 ug/L		2.0	1		10/31/08 22:41	75-01-4	
Xylene (Total)	ND ug/L		10.0	1		10/31/08 22:41	1330-20-7	
Dibromofluoromethane (S)	98 %		80-123	1		10/31/08 22:41	1868-53-7	
4-Bromofluorobenzene (S)	97 %		70-126	1		10/31/08 22:41	460-00-4	
Toluene-d8 (S)	101 %		80-116	1		10/31/08 22:41	2037-26-5	
<b>7196 Chromium, Hexavalent</b>		Analytical Method: EPA 7196						
Chromium, Hexavalent	ND mg/L		0.050	5		10/27/08 11:50	18540-29-9	

## ANALYTICAL RESULTS

Project: KISER PLATING W083470

Pace Project No.: 5020176

Sample: 3_TW-08-01		Lab ID: 5020176002	Collected: 10/22/08 12:00	Received: 10/24/08 11:10	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP</b>		Analytical Method: EPA 6010 Preparation Method: EPA 3010						
Arsenic	ND ug/L		10.0	1	10/29/08 00:00	11/03/08 20:47	7440-38-2	
Barium	ND ug/L		100	1	10/29/08 00:00	11/03/08 20:47	7440-39-3	
Cadmium	ND ug/L		5.0	1	10/29/08 00:00	11/03/08 20:47	7440-43-9	
Chromium	ND ug/L		10.0	1	10/29/08 00:00	11/03/08 20:47	7440-47-3	
Lead	ND ug/L		10.0	1	10/29/08 00:00	11/03/08 20:47	7439-92-1	
Selenium	ND ug/L		10.0	1	10/29/08 00:00	11/03/08 20:47	7782-49-2	
Silver	ND ug/L		50.0	1	10/29/08 00:00	11/03/08 20:47	7440-22-4	
<b>6010 MET ICP, Dissolved</b>		Analytical Method: EPA 6010 Preparation Method: EPA 3010						
Arsenic, Dissolved	ND ug/L		10.0	1	10/26/08 00:00	10/29/08 00:34	7440-38-2	
Barium, Dissolved	ND ug/L		100	1	10/26/08 00:00	10/29/08 00:34	7440-39-3	
Cadmium, Dissolved	ND ug/L		5.0	1	10/26/08 00:00	10/29/08 00:34	7440-43-9	
Chromium, Dissolved	ND ug/L		10.0	1	10/26/08 00:00	10/29/08 00:34	7440-47-3	
Lead, Dissolved	ND ug/L		5.0	1	10/26/08 00:00	10/29/08 00:34	7439-92-1	
Selenium, Dissolved	ND ug/L		10.0	1	10/26/08 00:00	10/29/08 00:34	7782-49-2	
Silver, Dissolved	ND ug/L		50.0	1	10/26/08 00:00	10/29/08 00:34	7440-22-4	
<b>7470 Mercury</b>		Analytical Method: EPA 7470 Preparation Method: EPA 7470						
Mercury	ND ug/L		2.0	1	10/29/08 00:00	10/30/08 11:12	7439-97-6	
<b>7470 Mercury, Dissolved</b>		Analytical Method: EPA 7470 Preparation Method: EPA 7470						
Mercury, Dissolved	ND ug/L		2.0	1	10/29/08 00:00	10/30/08 10:47	7439-97-6	

## ANALYTICAL RESULTS

Project: KISER PLATING W083470

Pace Project No.: 5020176

Sample: 3_TW-03-01		Lab ID: 5020176003	Collected: 10/22/08 13:18	Received: 10/24/08 11:10	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP, Dissolved</b>		Analytical Method: EPA 6010 Preparation Method: EPA 3010						
Arsenic, Dissolved	ND ug/L		10.0	1	10/26/08 00:00	10/29/08 00:39	7440-38-2	
Barium, Dissolved	ND ug/L		100	1	10/26/08 00:00	10/29/08 00:39	7440-39-3	
Cadmium, Dissolved	ND ug/L		5.0	1	10/26/08 00:00	10/29/08 00:39	7440-43-9	
Chromium, Dissolved	ND ug/L		10.0	1	10/26/08 00:00	10/29/08 00:39	7440-47-3	
Lead, Dissolved	ND ug/L		5.0	1	10/26/08 00:00	10/29/08 00:39	7439-92-1	
Selenium, Dissolved	ND ug/L		10.0	1	10/26/08 00:00	10/29/08 00:39	7782-49-2	
Silver, Dissolved	ND ug/L		50.0	1	10/26/08 00:00	10/29/08 00:39	7440-22-4	
<b>7470 Mercury, Dissolved</b>		Analytical Method: EPA 7470 Preparation Method: EPA 7470						
Mercury, Dissolved	ND ug/L		2.0	1	10/29/08 00:00	10/30/08 10:48	7439-97-6	

## ANALYTICAL RESULTS

Project: KISER PLATING W083470

Pace Project No.: 5020176

Sample: 3_TW-06-01		Lab ID: 5020176004	Collected: 10/22/08 13:35	Received: 10/24/08 11:10	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP</b>		Analytical Method: EPA 6010 Preparation Method: EPA 3010						
Arsenic	ND ug/L		10.0	1	10/29/08 00:00	11/03/08 20:53	7440-38-2	
Barium	217 ug/L		100	1	10/29/08 00:00	11/03/08 20:53	7440-39-3	
Cadmium	ND ug/L		5.0	1	10/29/08 00:00	11/03/08 20:53	7440-43-9	
Chromium	99.8 ug/L		10.0	1	10/29/08 00:00	11/03/08 20:53	7440-47-3	
Copper	89.4 ug/L		20.0	1	10/29/08 00:00	11/03/08 20:53	7440-50-8	
Lead	30.2 ug/L		10.0	1	10/29/08 00:00	11/03/08 20:53	7439-92-1	
Nickel	ND ug/L		50.0	1	10/29/08 00:00	11/03/08 20:53	7440-02-0	
Selenium	ND ug/L		10.0	1	10/29/08 00:00	11/03/08 20:53	7782-49-2	
Silver	ND ug/L		50.0	1	10/29/08 00:00	11/03/08 20:53	7440-22-4	
Zinc	276 ug/L		50.0	1	10/29/08 00:00	11/03/08 20:53	7440-66-6	
<b>6010 MET ICP, Dissolved</b>		Analytical Method: EPA 6010 Preparation Method: EPA 3010						
Arsenic, Dissolved	ND ug/L		10.0	1	10/26/08 00:00	10/29/08 00:45	7440-38-2	
Barium, Dissolved	148 ug/L		100	1	10/26/08 00:00	10/29/08 00:45	7440-39-3	
Cadmium, Dissolved	ND ug/L		5.0	1	10/26/08 00:00	10/29/08 00:45	7440-43-9	
Chromium, Dissolved	ND ug/L		10.0	1	10/26/08 00:00	10/29/08 00:45	7440-47-3	
Copper, Dissolved	ND ug/L		20.0	1	10/26/08 00:00	10/29/08 00:45	7440-50-8	
Lead, Dissolved	ND ug/L		5.0	1	10/26/08 00:00	10/29/08 00:45	7439-92-1	
Nickel, Dissolved	ND ug/L		50.0	1	10/26/08 00:00	10/29/08 00:45	7440-02-0	
Selenium, Dissolved	ND ug/L		10.0	1	10/26/08 00:00	10/29/08 00:45	7782-49-2	
Silver, Dissolved	ND ug/L		50.0	1	10/26/08 00:00	10/29/08 00:45	7440-22-4	
Zinc, Dissolved	ND ug/L		50.0	1	10/26/08 00:00	10/29/08 00:45	7440-66-6	
<b>7470 Mercury</b>		Analytical Method: EPA 7470 Preparation Method: EPA 7470						
Mercury	ND ug/L		2.0	1	10/29/08 00:00	10/30/08 11:13	7439-97-6	
<b>7470 Mercury, Dissolved</b>		Analytical Method: EPA 7470 Preparation Method: EPA 7470						
Mercury, Dissolved	ND ug/L		2.0	1	10/29/08 00:00	10/30/08 10:50	7439-97-6	
<b>8270 MSSV PAH by SIM</b>		Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510						
Acenaphthene	ND ug/L		1.2	1	10/28/08 00:00	10/30/08 00:29	83-32-9	
Acenaphthylene	ND ug/L		1.2	1	10/28/08 00:00	10/30/08 00:29	208-96-8	
Anthracene	ND ug/L		0.12	1	10/28/08 00:00	10/30/08 00:29	120-12-7	
Benzo(a)anthracene	ND ug/L		0.12	1	10/28/08 00:00	10/30/08 00:29	56-55-3	
Benzo(a)pyrene	ND ug/L		0.12	1	10/28/08 00:00	10/30/08 00:29	50-32-8	
Benzo(b)fluoranthene	ND ug/L		0.12	1	10/28/08 00:00	10/30/08 00:29	205-99-2	
Benzo(g,h,i)perylene	ND ug/L		0.12	1	10/28/08 00:00	10/30/08 00:29	191-24-2	
Benzo(k)fluoranthene	ND ug/L		0.12	1	10/28/08 00:00	10/30/08 00:29	207-08-9	
Chrysene	ND ug/L		0.58	1	10/28/08 00:00	10/30/08 00:29	218-01-9	
Dibenz(a,h)anthracene	ND ug/L		0.12	1	10/28/08 00:00	10/30/08 00:29	53-70-3	
Fluoranthene	ND ug/L		1.2	1	10/28/08 00:00	10/30/08 00:29	206-44-0	
Fluorene	ND ug/L		1.2	1	10/28/08 00:00	10/30/08 00:29	86-73-7	
Indeno(1,2,3-cd)pyrene	ND ug/L		0.12	1	10/28/08 00:00	10/30/08 00:29	193-39-5	
2-Methylnaphthalene	ND ug/L		1.2	1	10/28/08 00:00	10/30/08 00:29	91-57-6	
Naphthalene	ND ug/L		1.2	1	10/28/08 00:00	10/30/08 00:29	91-20-3	
Phenanthrene	ND ug/L		1.2	1	10/28/08 00:00	10/30/08 00:29	85-01-8	

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## ANALYTICAL RESULTS

Project: KISER PLATING W083470

Pace Project No.: 5020176

Sample: 3_TW-06-01		Lab ID: 5020176004		Collected: 10/22/08 13:35		Received: 10/24/08 11:10		Matrix: Water	
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 3510							
Pyrene	ND ug/L		1.2	1	10/28/08 00:00	10/30/08 00:29	129-00-0		
2-Fluorobiphenyl (S)	64 %		35-116	1	10/28/08 00:00	10/30/08 00:29	321-60-8		
Terphenyl-d14 (S)	62 %		25-117	1	10/28/08 00:00	10/30/08 00:29	1718-51-0		
8260 MSV		Analytical Method: EPA 8260							
Acetone	ND ug/L		100	1		10/31/08 23:17	67-64-1		
Acrolein	ND ug/L		100	1		10/31/08 23:17	107-02-8		
Acrylonitrile	ND ug/L		100	1		10/31/08 23:17	107-13-1		
Benzene	ND ug/L		5.0	1		10/31/08 23:17	71-43-2		
Bromobenzene	ND ug/L		5.0	1		10/31/08 23:17	108-86-1		
Bromochloromethane	ND ug/L		5.0	1		10/31/08 23:17	74-97-5		
Bromodichloromethane	ND ug/L		5.0	1		10/31/08 23:17	75-27-4		
Bromoform	ND ug/L		5.0	1		10/31/08 23:17	75-25-2		
Bromomethane	ND ug/L		5.0	1		10/31/08 23:17	74-83-9		
2-Butanone (MEK)	ND ug/L		25.0	1		10/31/08 23:17	78-93-3		
n-Butylbenzene	ND ug/L		5.0	1		10/31/08 23:17	104-51-8		
sec-Butylbenzene	ND ug/L		5.0	1		10/31/08 23:17	135-98-8		
tert-Butylbenzene	ND ug/L		5.0	1		10/31/08 23:17	98-06-6		
Carbon disulfide	ND ug/L		10.0	1		10/31/08 23:17	75-15-0		
Carbon tetrachloride	ND ug/L		5.0	1		10/31/08 23:17	56-23-5		
Chlorobenzene	ND ug/L		5.0	1		10/31/08 23:17	108-90-7		
Chloroethane	ND ug/L		5.0	1		10/31/08 23:17	75-00-3		
Chloroform	ND ug/L		5.0	1		10/31/08 23:17	67-66-3		
Chloromethane	ND ug/L		5.0	1		10/31/08 23:17	74-87-3		
2-Chlorotoluene	ND ug/L		5.0	1		10/31/08 23:17	95-49-8		
4-Chlorotoluene	ND ug/L		5.0	1		10/31/08 23:17	106-43-4		
Dibromochloromethane	ND ug/L		5.0	1		10/31/08 23:17	124-48-1		
1,2-Dibromoethane (EDB)	ND ug/L		5.0	1		10/31/08 23:17	106-93-4		
Dibromomethane	ND ug/L		5.0	1		10/31/08 23:17	74-95-3		
1,2-Dichlorobenzene	ND ug/L		5.0	1		10/31/08 23:17	95-50-1		
1,3-Dichlorobenzene	ND ug/L		5.0	1		10/31/08 23:17	541-73-1		
1,4-Dichlorobenzene	ND ug/L		5.0	1		10/31/08 23:17	106-46-7		
trans-1,4-Dichloro-2-butene	ND ug/L		100	1		10/31/08 23:17	110-57-6		
Dichlorodifluoromethane	ND ug/L		5.0	1		10/31/08 23:17	75-71-8		
1,1-Dichloroethane	ND ug/L		5.0	1		10/31/08 23:17	75-34-3		
1,2-Dichloroethane	ND ug/L		5.0	1		10/31/08 23:17	107-06-2		
1,1-Dichloroethene	ND ug/L		5.0	1		10/31/08 23:17	75-35-4		
cis-1,2-Dichloroethene	ND ug/L		5.0	1		10/31/08 23:17	156-59-2		
trans-1,2-Dichloroethene	ND ug/L		5.0	1		10/31/08 23:17	156-60-5		
1,2-Dichloropropane	ND ug/L		5.0	1		10/31/08 23:17	78-87-5		
1,3-Dichloropropane	ND ug/L		5.0	1		10/31/08 23:17	142-28-9		
2,2-Dichloropropane	ND ug/L		5.0	1		10/31/08 23:17	594-20-7		
1,1-Dichloropropene	ND ug/L		5.0	1		10/31/08 23:17	563-58-6		
cis-1,3-Dichloropropene	ND ug/L		5.0	1		10/31/08 23:17	10061-01-5		
trans-1,3-Dichloropropene	ND ug/L		5.0	1		10/31/08 23:17	10061-02-6		
Ethylbenzene	ND ug/L		5.0	1		10/31/08 23:17	100-41-4		
Ethyl methacrylate	ND ug/L		100	1		10/31/08 23:17	97-63-2		

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## ANALYTICAL RESULTS

Project: KISER PLATING W083470

Pace Project No.: 5020176

Sample: 3_TW-06-01		Lab ID: 5020176004	Collected: 10/22/08 13:35	Received: 10/24/08 11:10	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>		Analytical Method: EPA 8260						
Hexachloro-1,3-butadiene	ND ug/L		5.0	1		10/31/08 23:17	87-68-3	
n-Hexane	ND ug/L		5.0	1		10/31/08 23:17	110-54-3	
2-Hexanone	ND ug/L		25.0	1		10/31/08 23:17	591-78-6	
Iodomethane	ND ug/L		10.0	1		10/31/08 23:17	74-88-4	
Isopropylbenzene (Cumene)	ND ug/L		5.0	1		10/31/08 23:17	98-82-8	
p-Isopropyltoluene	ND ug/L		5.0	1		10/31/08 23:17	99-87-6	
Methylene chloride	ND ug/L		5.0	1		10/31/08 23:17	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND ug/L		25.0	1		10/31/08 23:17	108-10-1	
Methyl-tert-butyl ether	ND ug/L		4.0	1		10/31/08 23:17	1634-04-4	
Naphthalene	ND ug/L		5.0	1		10/31/08 23:17	91-20-3	
n-Propylbenzene	ND ug/L		5.0	1		10/31/08 23:17	103-65-1	
Styrene	ND ug/L		5.0	1		10/31/08 23:17	100-42-5	
1,1,1,2-Tetrachloroethane	ND ug/L		5.0	1		10/31/08 23:17	630-20-6	
1,1,2,2-Tetrachloroethane	ND ug/L		5.0	1		10/31/08 23:17	79-34-5	
Tetrachloroethene	ND ug/L		5.0	1		10/31/08 23:17	127-18-4	
Toluene	ND ug/L		5.0	1		10/31/08 23:17	108-88-3	
1,2,3-Trichlorobenzene	ND ug/L		5.0	1		10/31/08 23:17	87-61-6	
1,2,4-Trichlorobenzene	ND ug/L		5.0	1		10/31/08 23:17	120-82-1	
1,1,1-Trichloroethane	ND ug/L		5.0	1		10/31/08 23:17	71-55-6	
1,1,2-Trichloroethane	ND ug/L		5.0	1		10/31/08 23:17	79-00-5	
Trichloroethene	ND ug/L		5.0	1		10/31/08 23:17	79-01-6	
Trichlorofluoromethane	ND ug/L		5.0	1		10/31/08 23:17	75-69-4	
1,2,3-Trichloropropane	ND ug/L		5.0	1		10/31/08 23:17	96-18-4	
1,2,4-Trimethylbenzene	ND ug/L		5.0	1		10/31/08 23:17	95-63-6	
1,3,5-Trimethylbenzene	ND ug/L		5.0	1		10/31/08 23:17	108-67-8	
Vinyl acetate	ND ug/L		10.0	1		10/31/08 23:17	108-05-4	
Vinyl chloride	ND ug/L		2.0	1		10/31/08 23:17	75-01-4	
Xylene (Total)	ND ug/L		10.0	1		10/31/08 23:17	1330-20-7	
Dibromofluoromethane (S)	100 %		80-123	1		10/31/08 23:17	1868-53-7	
4-Bromofluorobenzene (S)	96 %		70-126	1		10/31/08 23:17	460-00-4	
Toluene-d8 (S)	100 %		80-116	1		10/31/08 23:17	2037-26-5	
<b>7196 Chromium, Hexavalent</b>		Analytical Method: EPA 7196						
Chromium, Hexavalent	ND mg/L		0.050	5		10/27/08 11:50	18540-29-9	

## ANALYTICAL RESULTS

Project: KISER PLATING W083470

Pace Project No.: 5020176

Sample: 3_TW-06-01 DUP		Lab ID: 5020176005	Collected: 10/22/08 13:35	Received: 10/24/08 11:10	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP</b>		Analytical Method: EPA 6010 Preparation Method: EPA 3010						
Arsenic	ND ug/L		10.0	1	10/29/08 00:00	11/03/08 20:59	7440-38-2	
Barium	192 ug/L		100	1	10/29/08 00:00	11/03/08 20:59	7440-39-3	
Cadmium	ND ug/L		5.0	1	10/29/08 00:00	11/03/08 20:59	7440-43-9	
Chromium	83.9 ug/L		10.0	1	10/29/08 00:00	11/03/08 20:59	7440-47-3	
Copper	67.4 ug/L		20.0	1	10/29/08 00:00	11/03/08 20:59	7440-50-8	
Lead	23.0 ug/L		10.0	1	10/29/08 00:00	11/03/08 20:59	7439-92-1	
Nickel	ND ug/L		50.0	1	10/29/08 00:00	11/03/08 20:59	7440-02-0	
Selenium	ND ug/L		10.0	1	10/29/08 00:00	11/03/08 20:59	7782-49-2	
Silver	ND ug/L		50.0	1	10/29/08 00:00	11/03/08 20:59	7440-22-4	
Zinc	204 ug/L		50.0	1	10/29/08 00:00	11/03/08 20:59	7440-66-6	
<b>6010 MET ICP, Dissolved</b>		Analytical Method: EPA 6010 Preparation Method: EPA 3010						
Arsenic, Dissolved	ND ug/L		10.0	1	10/26/08 00:00	10/29/08 00:51	7440-38-2	
Barium, Dissolved	140 ug/L		100	1	10/26/08 00:00	10/29/08 00:51	7440-39-3	
Cadmium, Dissolved	ND ug/L		5.0	1	10/26/08 00:00	10/29/08 00:51	7440-43-9	
Chromium, Dissolved	ND ug/L		10.0	1	10/26/08 00:00	10/29/08 00:51	7440-47-3	
Copper, Dissolved	ND ug/L		20.0	1	10/26/08 00:00	10/29/08 00:51	7440-50-8	
Lead, Dissolved	ND ug/L		5.0	1	10/26/08 00:00	10/29/08 00:51	7439-92-1	
Nickel, Dissolved	ND ug/L		50.0	1	10/26/08 00:00	10/29/08 00:51	7440-02-0	
Selenium, Dissolved	ND ug/L		10.0	1	10/26/08 00:00	10/29/08 00:51	7782-49-2	
Silver, Dissolved	ND ug/L		50.0	1	10/26/08 00:00	10/29/08 00:51	7440-22-4	
Zinc, Dissolved	ND ug/L		50.0	1	10/26/08 00:00	10/29/08 00:51	7440-66-6	
<b>7470 Mercury</b>		Analytical Method: EPA 7470 Preparation Method: EPA 7470						
Mercury	ND ug/L		2.0	1	10/29/08 00:00	10/30/08 11:15	7439-97-6	
<b>7470 Mercury, Dissolved</b>		Analytical Method: EPA 7470 Preparation Method: EPA 7470						
Mercury, Dissolved	ND ug/L		2.0	1	10/29/08 00:00	10/30/08 10:51	7439-97-6	
<b>7196 Chromium, Hexavalent</b>		Analytical Method: EPA 7196						
Chromium, Hexavalent	ND mg/L		0.050	5		10/27/08 11:50	18540-29-9	

## ANALYTICAL RESULTS

Project: KISER PLATING W083470

Pace Project No.: 5020176

Sample: 3_TW-02-01		Lab ID: 5020176006	Collected: 10/22/08 14:35	Received: 10/24/08 11:10	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP</b>		Analytical Method: EPA 6010 Preparation Method: EPA 3010						
Arsenic	17.9 ug/L		10.0	1	10/29/08 00:00	11/03/08 21:04	7440-38-2	
Barium	104 ug/L		100	1	10/29/08 00:00	11/03/08 21:04	7440-39-3	
Cadmium	ND ug/L		5.0	1	10/29/08 00:00	11/03/08 21:04	7440-43-9	
Chromium	14.0 ug/L		10.0	1	10/29/08 00:00	11/03/08 21:04	7440-47-3	
Copper	351000 ug/L		100	5	10/29/08 00:00	11/03/08 21:39	7440-50-8	
Lead	32.3 ug/L		10.0	1	10/29/08 00:00	11/03/08 21:04	7439-92-1	
Nickel	18500 ug/L		50.0	1	10/29/08 00:00	11/03/08 21:04	7440-02-0	
Selenium	13.4 ug/L		10.0	1	10/29/08 00:00	11/03/08 21:04	7782-49-2	
Silver	ND ug/L		50.0	1	10/29/08 00:00	11/03/08 21:04	7440-22-4	
Zinc	68.3 ug/L		50.0	1	10/29/08 00:00	11/03/08 21:04	7440-66-6	
<b>6010 MET ICP, Dissolved</b>		Analytical Method: EPA 6010 Preparation Method: EPA 3010						
Arsenic, Dissolved	14.9 ug/L		10.0	1	10/26/08 00:00	10/29/08 01:14	7440-38-2	
Barium, Dissolved	ND ug/L		100	1	10/26/08 00:00	10/29/08 01:14	7440-39-3	
Cadmium, Dissolved	ND ug/L		5.0	1	10/26/08 00:00	10/29/08 01:14	7440-43-9	
Chromium, Dissolved	ND ug/L		10.0	1	10/26/08 00:00	10/29/08 01:14	7440-47-3	
Copper, Dissolved	329000 ug/L		100	5	10/26/08 00:00	10/29/08 01:37	7440-50-8	
Lead, Dissolved	27.6 ug/L		5.0	1	10/26/08 00:00	10/29/08 01:14	7439-92-1	
Nickel, Dissolved	15700 ug/L		50.0	1	10/26/08 00:00	10/29/08 01:14	7440-02-0	
Selenium, Dissolved	15.5 ug/L		10.0	1	10/26/08 00:00	10/29/08 01:14	7782-49-2	
Silver, Dissolved	ND ug/L		50.0	1	10/26/08 00:00	10/29/08 01:14	7440-22-4	
Sodium, Dissolved	1090000 ug/L		5000	5	10/26/08 00:00	10/29/08 01:37	7440-23-5	
Zinc, Dissolved	ND ug/L		50.0	1	10/26/08 00:00	10/29/08 01:14	7440-66-6	
<b>7470 Mercury</b>		Analytical Method: EPA 7470 Preparation Method: EPA 7470						
Mercury	ND ug/L		2.0	1	10/29/08 00:00	10/30/08 11:16	7439-97-6	
<b>7470 Mercury, Dissolved</b>		Analytical Method: EPA 7470 Preparation Method: EPA 7470						
Mercury, Dissolved	ND ug/L		2.0	1	10/29/08 00:00	10/30/08 10:52	7439-97-6	
<b>8270 MSSV PAH by SIM</b>		Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510						
Acenaphthene	ND ug/L		1.1	1	10/28/08 00:00	10/30/08 00:47	83-32-9	
Acenaphthylene	ND ug/L		1.1	1	10/28/08 00:00	10/30/08 00:47	208-96-8	
Anthracene	ND ug/L		0.11	1	10/28/08 00:00	10/30/08 00:47	120-12-7	
Benzo(a)anthracene	ND ug/L		0.11	1	10/28/08 00:00	10/30/08 00:47	56-55-3	
Benzo(a)pyrene	ND ug/L		0.11	1	10/28/08 00:00	10/30/08 00:47	50-32-8	
Benzo(b)fluoranthene	ND ug/L		0.11	1	10/28/08 00:00	10/30/08 00:47	205-99-2	
Benzo(g,h,i)perylene	ND ug/L		0.11	1	10/28/08 00:00	10/30/08 00:47	191-24-2	
Benzo(k)fluoranthene	ND ug/L		0.11	1	10/28/08 00:00	10/30/08 00:47	207-08-9	
Chrysene	ND ug/L		0.56	1	10/28/08 00:00	10/30/08 00:47	218-01-9	
Dibenz(a,h)anthracene	ND ug/L		0.11	1	10/28/08 00:00	10/30/08 00:47	53-70-3	
Fluoranthene	ND ug/L		1.1	1	10/28/08 00:00	10/30/08 00:47	206-44-0	
Fluorene	ND ug/L		1.1	1	10/28/08 00:00	10/30/08 00:47	86-73-7	
Indeno(1,2,3-cd)pyrene	ND ug/L		0.11	1	10/28/08 00:00	10/30/08 00:47	193-39-5	
2-Methylnaphthalene	ND ug/L		1.1	1	10/28/08 00:00	10/30/08 00:47	91-57-6	
Naphthalene	ND ug/L		1.1	1	10/28/08 00:00	10/30/08 00:47	91-20-3	

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## ANALYTICAL RESULTS

Project: KISER PLATING W083470

Pace Project No.: 5020176

Sample: 3_TW-02-01		Lab ID: 5020176006		Collected: 10/22/08 14:35		Received: 10/24/08 11:10		Matrix: Water	
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 3510							
Phenanthrene	ND ug/L		1.1	1	10/28/08 00:00	10/30/08 00:47	85-01-8		
Pyrene	ND ug/L		1.1	1	10/28/08 00:00	10/30/08 00:47	129-00-0		
2-Fluorobiphenyl (S)	58 %		35-116	1	10/28/08 00:00	10/30/08 00:47	321-60-8		
Terphenyl-d14 (S)	44 %		25-117	1	10/28/08 00:00	10/30/08 00:47	1718-51-0		
8260 MSV		Analytical Method: EPA 8260							
Acetone	391 ug/L		100	1		10/31/08 23:53	67-64-1		
Acrolein	ND ug/L		100	1		10/31/08 23:53	107-02-8		
Acrylonitrile	ND ug/L		100	1		10/31/08 23:53	107-13-1		
Benzene	ND ug/L		5.0	1		10/31/08 23:53	71-43-2		
Bromobenzene	ND ug/L		5.0	1		10/31/08 23:53	108-86-1		
Bromochloromethane	ND ug/L		5.0	1		10/31/08 23:53	74-97-5		
Bromodichloromethane	ND ug/L		5.0	1		10/31/08 23:53	75-27-4		
Bromoform	ND ug/L		5.0	1		10/31/08 23:53	75-25-2		
Bromomethane	ND ug/L		5.0	1		10/31/08 23:53	74-83-9		
2-Butanone (MEK)	70.3 ug/L		25.0	1		10/31/08 23:53	78-93-3		
n-Butylbenzene	ND ug/L		5.0	1		10/31/08 23:53	104-51-8		
sec-Butylbenzene	ND ug/L		5.0	1		10/31/08 23:53	135-98-8		
tert-Butylbenzene	ND ug/L		5.0	1		10/31/08 23:53	98-06-6		
Carbon disulfide	ND ug/L		10.0	1		10/31/08 23:53	75-15-0		
Carbon tetrachloride	ND ug/L		5.0	1		10/31/08 23:53	56-23-5		
Chlorobenzene	ND ug/L		5.0	1		10/31/08 23:53	108-90-7		
Chloroethane	ND ug/L		5.0	1		10/31/08 23:53	75-00-3		
Chloroform	ND ug/L		5.0	1		10/31/08 23:53	67-66-3		
Chloromethane	ND ug/L		5.0	1		10/31/08 23:53	74-87-3		
2-Chlorotoluene	ND ug/L		5.0	1		10/31/08 23:53	95-49-8		
4-Chlorotoluene	ND ug/L		5.0	1		10/31/08 23:53	106-43-4		
Dibromochloromethane	ND ug/L		5.0	1		10/31/08 23:53	124-48-1		
1,2-Dibromoethane (EDB)	ND ug/L		5.0	1		10/31/08 23:53	106-93-4		
Dibromomethane	ND ug/L		5.0	1		10/31/08 23:53	74-95-3		
1,2-Dichlorobenzene	ND ug/L		5.0	1		10/31/08 23:53	95-50-1		
1,3-Dichlorobenzene	ND ug/L		5.0	1		10/31/08 23:53	541-73-1		
1,4-Dichlorobenzene	ND ug/L		5.0	1		10/31/08 23:53	106-46-7		
trans-1,4-Dichloro-2-butene	ND ug/L		100	1		10/31/08 23:53	110-57-6		
Dichlorodifluoromethane	ND ug/L		5.0	1		10/31/08 23:53	75-71-8		
1,1-Dichloroethane	7.0 ug/L		5.0	1		10/31/08 23:53	75-34-3		
1,2-Dichloroethane	ND ug/L		5.0	1		10/31/08 23:53	107-06-2		
1,1-Dichloroethene	8.4 ug/L		5.0	1		10/31/08 23:53	75-35-4		
cis-1,2-Dichloroethene	16.4 ug/L		5.0	1		10/31/08 23:53	156-59-2		
trans-1,2-Dichloroethene	16.7 ug/L		5.0	1		10/31/08 23:53	156-60-5		
1,2-Dichloropropane	ND ug/L		5.0	1		10/31/08 23:53	78-87-5		
1,3-Dichloropropane	ND ug/L		5.0	1		10/31/08 23:53	142-28-9		
2,2-Dichloropropane	ND ug/L		5.0	1		10/31/08 23:53	594-20-7		
1,1-Dichloropropene	ND ug/L		5.0	1		10/31/08 23:53	563-58-6		
cis-1,3-Dichloropropene	ND ug/L		5.0	1		10/31/08 23:53	10061-01-5		
trans-1,3-Dichloropropene	ND ug/L		5.0	1		10/31/08 23:53	10061-02-6		
Ethylbenzene	ND ug/L		5.0	1		10/31/08 23:53	100-41-4		

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## ANALYTICAL RESULTS

Project: KISER PLATING W083470

Pace Project No.: 5020176

Sample: 3_TW-02-01		Lab ID: 5020176006	Collected: 10/22/08 14:35	Received: 10/24/08 11:10	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>		Analytical Method: EPA 8260						
Ethyl methacrylate	ND	ug/L	100	1		10/31/08 23:53	97-63-2	
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		10/31/08 23:53	87-68-3	
n-Hexane	ND	ug/L	5.0	1		10/31/08 23:53	110-54-3	
2-Hexanone	ND	ug/L	25.0	1		10/31/08 23:53	591-78-6	
Iodomethane	ND	ug/L	10.0	1		10/31/08 23:53	74-88-4	
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		10/31/08 23:53	98-82-8	
p-Isopropyltoluene	ND	ug/L	5.0	1		10/31/08 23:53	99-87-6	
Methylene chloride	324	ug/L	50.0	10		11/03/08 13:05	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		10/31/08 23:53	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	4.0	1		10/31/08 23:53	1634-04-4	
Naphthalene	ND	ug/L	5.0	1		10/31/08 23:53	91-20-3	
n-Propylbenzene	ND	ug/L	5.0	1		10/31/08 23:53	103-65-1	
Styrene	ND	ug/L	5.0	1		10/31/08 23:53	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		10/31/08 23:53	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		10/31/08 23:53	79-34-5	
Tetrachloroethene	7.0	ug/L	5.0	1		10/31/08 23:53	127-18-4	
Toluene	ND	ug/L	5.0	1		10/31/08 23:53	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		10/31/08 23:53	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		10/31/08 23:53	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		10/31/08 23:53	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		10/31/08 23:53	79-00-5	
Trichloroethene	4960	ug/L	500	100		11/03/08 13:42	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		10/31/08 23:53	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	5.0	1		10/31/08 23:53	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		10/31/08 23:53	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		10/31/08 23:53	108-67-8	
Vinyl acetate	ND	ug/L	10.0	1		10/31/08 23:53	108-05-4	
Vinyl chloride	2.5	ug/L	2.0	1		10/31/08 23:53	75-01-4	
Xylene (Total)	ND	ug/L	10.0	1		10/31/08 23:53	1330-20-7	
Dibromofluoromethane (S)	100	%	80-123	1		10/31/08 23:53	1868-53-7	
4-Bromofluorobenzene (S)	97	%	70-126	1		10/31/08 23:53	460-00-4	
Toluene-d8 (S)	100	%	80-116	1		10/31/08 23:53	2037-26-5	
<b>7196 Chromium, Hexavalent</b>		Analytical Method: EPA 7196						
Chromium, Hexavalent	ND	mg/L	0.50	50		10/27/08 11:50	18540-29-9	



## ANALYTICAL RESULTS

Project: KISER PLATING W083470

Pace Project No.: 5020176

Sample: 3_TW-02-01 DUP		Lab ID: 5020176007	Collected: 10/22/08 14:35	Received: 10/24/08 11:10	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV PAH by SIM</b>		Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510						
Acenaphthene	ND ug/L		1.0	1	10/28/08 00:00	10/30/08 01:04	83-32-9	
Acenaphthylene	ND ug/L		1.0	1	10/28/08 00:00	10/30/08 01:04	208-96-8	
Anthracene	ND ug/L		0.10	1	10/28/08 00:00	10/30/08 01:04	120-12-7	
Benzo(a)anthracene	ND ug/L		0.10	1	10/28/08 00:00	10/30/08 01:04	56-55-3	
Benzo(a)pyrene	ND ug/L		0.10	1	10/28/08 00:00	10/30/08 01:04	50-32-8	
Benzo(b)fluoranthene	ND ug/L		0.10	1	10/28/08 00:00	10/30/08 01:04	205-99-2	
Benzo(g,h,i)perylene	ND ug/L		0.10	1	10/28/08 00:00	10/30/08 01:04	191-24-2	
Benzo(k)fluoranthene	ND ug/L		0.10	1	10/28/08 00:00	10/30/08 01:04	207-08-9	
Chrysene	ND ug/L		0.51	1	10/28/08 00:00	10/30/08 01:04	218-01-9	
Dibenz(a,h)anthracene	ND ug/L		0.10	1	10/28/08 00:00	10/30/08 01:04	53-70-3	
Fluoranthene	ND ug/L		1.0	1	10/28/08 00:00	10/30/08 01:04	206-44-0	
Fluorene	ND ug/L		1.0	1	10/28/08 00:00	10/30/08 01:04	86-73-7	
Indeno(1,2,3-cd)pyrene	ND ug/L		0.10	1	10/28/08 00:00	10/30/08 01:04	193-39-5	
2-Methylnaphthalene	ND ug/L		1.0	1	10/28/08 00:00	10/30/08 01:04	91-57-6	
Naphthalene	ND ug/L		1.0	1	10/28/08 00:00	10/30/08 01:04	91-20-3	
Phenanthrene	ND ug/L		1.0	1	10/28/08 00:00	10/30/08 01:04	85-01-8	
Pyrene	ND ug/L		1.0	1	10/28/08 00:00	10/30/08 01:04	129-00-0	
2-Fluorobiphenyl (S)	57 %		35-116	1	10/28/08 00:00	10/30/08 01:04	321-60-8	
Terphenyl-d14 (S)	45 %		25-117	1	10/28/08 00:00	10/30/08 01:04	1718-51-0	

### 8260 MSV Analytical Method: EPA 8260

Acetone	422 ug/L		100	1		11/01/08 01:42	67-64-1	
Acrolein	ND ug/L		100	1		11/01/08 01:42	107-02-8	
Acrylonitrile	ND ug/L		100	1		11/01/08 01:42	107-13-1	
Benzene	ND ug/L		5.0	1		11/01/08 01:42	71-43-2	
Bromobenzene	ND ug/L		5.0	1		11/01/08 01:42	108-86-1	
Bromochloromethane	ND ug/L		5.0	1		11/01/08 01:42	74-97-5	
Bromodichloromethane	ND ug/L		5.0	1		11/01/08 01:42	75-27-4	
Bromoform	ND ug/L		5.0	1		11/01/08 01:42	75-25-2	
Bromomethane	ND ug/L		5.0	1		11/01/08 01:42	74-83-9	
2-Butanone (MEK)	85.1 ug/L		25.0	1		11/01/08 01:42	78-93-3	
n-Butylbenzene	ND ug/L		5.0	1		11/01/08 01:42	104-51-8	
sec-Butylbenzene	ND ug/L		5.0	1		11/01/08 01:42	135-98-8	
tert-Butylbenzene	ND ug/L		5.0	1		11/01/08 01:42	98-06-6	
Carbon disulfide	ND ug/L		10.0	1		11/01/08 01:42	75-15-0	
Carbon tetrachloride	ND ug/L		5.0	1		11/01/08 01:42	56-23-5	
Chlorobenzene	ND ug/L		5.0	1		11/01/08 01:42	108-90-7	
Chloroethane	ND ug/L		5.0	1		11/01/08 01:42	75-00-3	
Chloroform	ND ug/L		5.0	1		11/01/08 01:42	67-66-3	
Chloromethane	ND ug/L		5.0	1		11/01/08 01:42	74-87-3	
2-Chlorotoluene	ND ug/L		5.0	1		11/01/08 01:42	95-49-8	
4-Chlorotoluene	ND ug/L		5.0	1		11/01/08 01:42	106-43-4	
Dibromochloromethane	ND ug/L		5.0	1		11/01/08 01:42	124-48-1	
1,2-Dibromoethane (EDB)	ND ug/L		5.0	1		11/01/08 01:42	106-93-4	
Dibromomethane	ND ug/L		5.0	1		11/01/08 01:42	74-95-3	
1,2-Dichlorobenzene	ND ug/L		5.0	1		11/01/08 01:42	95-50-1	
1,3-Dichlorobenzene	ND ug/L		5.0	1		11/01/08 01:42	541-73-1	

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## ANALYTICAL RESULTS

Project: KISER PLATING W083470

Pace Project No.: 5020176

Sample: 3_TW-02-01 DUP		Lab ID: 5020176007	Collected: 10/22/08 14:35	Received: 10/24/08 11:10	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>		Analytical Method: EPA 8260						
1,4-Dichlorobenzene	ND	ug/L	5.0	1		11/01/08 01:42	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		11/01/08 01:42	110-57-6	
Dichlorodifluoromethane	ND	ug/L	5.0	1		11/01/08 01:42	75-71-8	
1,1-Dichloroethane	7.1	ug/L	5.0	1		11/01/08 01:42	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		11/01/08 01:42	107-06-2	
1,1-Dichloroethene	8.3	ug/L	5.0	1		11/01/08 01:42	75-35-4	
cis-1,2-Dichloroethene	19.4	ug/L	5.0	1		11/01/08 01:42	156-59-2	
trans-1,2-Dichloroethene	17.9	ug/L	5.0	1		11/01/08 01:42	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		11/01/08 01:42	78-87-5	
1,3-Dichloropropane	ND	ug/L	5.0	1		11/01/08 01:42	142-28-9	
2,2-Dichloropropane	ND	ug/L	5.0	1		11/01/08 01:42	594-20-7	
1,1-Dichloropropene	ND	ug/L	5.0	1		11/01/08 01:42	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		11/01/08 01:42	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		11/01/08 01:42	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		11/01/08 01:42	100-41-4	
Ethyl methacrylate	ND	ug/L	100	1		11/01/08 01:42	97-63-2	
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		11/01/08 01:42	87-68-3	
n-Hexane	ND	ug/L	5.0	1		11/01/08 01:42	110-54-3	
2-Hexanone	ND	ug/L	25.0	1		11/01/08 01:42	591-78-6	
Iodomethane	ND	ug/L	10.0	1		11/01/08 01:42	74-88-4	
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		11/01/08 01:42	98-82-8	
p-Isopropyltoluene	ND	ug/L	5.0	1		11/01/08 01:42	99-87-6	
Methylene chloride	314	ug/L	50.0	10		11/03/08 14:18	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		11/01/08 01:42	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	4.0	1		11/01/08 01:42	1634-04-4	
Naphthalene	ND	ug/L	5.0	1		11/01/08 01:42	91-20-3	
n-Propylbenzene	ND	ug/L	5.0	1		11/01/08 01:42	103-65-1	
Styrene	ND	ug/L	5.0	1		11/01/08 01:42	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		11/01/08 01:42	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		11/01/08 01:42	79-34-5	
Tetrachloroethene	8.0	ug/L	5.0	1		11/01/08 01:42	127-18-4	
Toluene	ND	ug/L	5.0	1		11/01/08 01:42	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		11/01/08 01:42	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		11/01/08 01:42	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		11/01/08 01:42	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		11/01/08 01:42	79-00-5	
Trichloroethene	5120	ug/L	500	100		11/03/08 14:55	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		11/01/08 01:42	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	5.0	1		11/01/08 01:42	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		11/01/08 01:42	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		11/01/08 01:42	108-67-8	
Vinyl acetate	ND	ug/L	10.0	1		11/01/08 01:42	108-05-4	
Vinyl chloride	2.3	ug/L	2.0	1		11/01/08 01:42	75-01-4	
Xylene (Total)	ND	ug/L	10.0	1		11/01/08 01:42	1330-20-7	
Dibromofluoromethane (S)	102	%	80-123	1		11/01/08 01:42	1868-53-7	
4-Bromofluorobenzene (S)	99	%	70-126	1		11/01/08 01:42	460-00-4	
Toluene-d8 (S)	100	%	80-116	1		11/01/08 01:42	2037-26-5	

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## ANALYTICAL RESULTS

Project: KISER PLATING W083470

Pace Project No.: 5020176

Sample: 3_TW-05-01		Lab ID: 5020176008	Collected: 10/22/08 15:25	Received: 10/24/08 11:10	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP, Dissolved</b>		Analytical Method: EPA 6010 Preparation Method: EPA 3010						
Arsenic, Dissolved	ND	ug/L	10.0	1	10/30/08 00:00	11/03/08 20:19	7440-38-2	
Barium, Dissolved	ND	ug/L	100	1	10/30/08 00:00	11/03/08 20:19	7440-39-3	
Cadmium, Dissolved	ND	ug/L	5.0	1	10/30/08 00:00	11/03/08 20:19	7440-43-9	
Chromium, Dissolved	172	ug/L	10.0	1	10/30/08 00:00	11/03/08 20:19	7440-47-3	
Copper, Dissolved	45.5	ug/L	20.0	1	10/30/08 00:00	11/03/08 20:19	7440-50-8	
Lead, Dissolved	ND	ug/L	5.0	1	10/30/08 00:00	11/03/08 20:19	7439-92-1	
Nickel, Dissolved	243	ug/L	50.0	1	10/30/08 00:00	11/03/08 20:19	7440-02-0	
Selenium, Dissolved	ND	ug/L	10.0	1	10/30/08 00:00	11/03/08 20:19	7782-49-2	
Silver, Dissolved	ND	ug/L	50.0	1	10/30/08 00:00	11/03/08 20:19	7440-22-4	
Zinc, Dissolved	ND	ug/L	50.0	1	10/30/08 00:00	11/03/08 20:19	7440-66-6	
<b>7470 Mercury, Dissolved</b>		Analytical Method: EPA 7470 Preparation Method: EPA 7470						
Mercury, Dissolved	ND	ug/L	2.0	1	10/29/08 00:00	10/30/08 10:57	7439-97-6	

## ANALYTICAL RESULTS

Project: KISER PLATING W083470

Pace Project No.: 5020176

Sample: 3_MW-09		Lab ID: 5020176009	Collected: 10/22/08 15:35	Received: 10/24/08 11:10	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP, Dissolved</b>		Analytical Method: EPA 6010 Preparation Method: EPA 3010						
Arsenic, Dissolved	ND ug/L		10.0	1	10/30/08 00:00	11/03/08 20:25	7440-38-2	
Barium, Dissolved	ND ug/L		100	1	10/30/08 00:00	11/03/08 20:25	7440-39-3	
Cadmium, Dissolved	ND ug/L		5.0	1	10/30/08 00:00	11/03/08 20:25	7440-43-9	
Chromium, Dissolved	ND ug/L		10.0	1	10/30/08 00:00	11/03/08 20:25	7440-47-3	
Copper, Dissolved	ND ug/L		20.0	1	10/30/08 00:00	11/03/08 20:25	7440-50-8	
Lead, Dissolved	ND ug/L		5.0	1	10/30/08 00:00	11/03/08 20:25	7439-92-1	
Nickel, Dissolved	ND ug/L		50.0	1	10/30/08 00:00	11/03/08 20:25	7440-02-0	
Selenium, Dissolved	ND ug/L		10.0	1	10/30/08 00:00	11/03/08 20:25	7782-49-2	
Silver, Dissolved	ND ug/L		50.0	1	10/30/08 00:00	11/03/08 20:25	7440-22-4	
Zinc, Dissolved	ND ug/L		50.0	1	10/30/08 00:00	11/03/08 20:25	7440-66-6	
<b>7470 Mercury, Dissolved</b>		Analytical Method: EPA 7470 Preparation Method: EPA 7470						
Mercury, Dissolved	ND ug/L		2.0	1	10/29/08 00:00	10/30/08 10:58	7439-97-6	

## ANALYTICAL RESULTS

Project: KISER PLATING W083470

Pace Project No.: 5020176

Sample: TRIP BLANK		Lab ID: 5020176010	Collected: 10/22/08 08:00	Received: 10/24/08 11:10	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>		Analytical Method: EPA 8260						
Acetone	ND ug/L		100	1		11/01/08 02:19	67-64-1	
Acrolein	ND ug/L		100	1		11/01/08 02:19	107-02-8	
Acrylonitrile	ND ug/L		100	1		11/01/08 02:19	107-13-1	
Benzene	ND ug/L		5.0	1		11/01/08 02:19	71-43-2	
Bromobenzene	ND ug/L		5.0	1		11/01/08 02:19	108-86-1	
Bromochloromethane	ND ug/L		5.0	1		11/01/08 02:19	74-97-5	
Bromodichloromethane	ND ug/L		5.0	1		11/01/08 02:19	75-27-4	
Bromoform	ND ug/L		5.0	1		11/01/08 02:19	75-25-2	
Bromomethane	ND ug/L		5.0	1		11/01/08 02:19	74-83-9	
2-Butanone (MEK)	ND ug/L		25.0	1		11/01/08 02:19	78-93-3	
n-Butylbenzene	ND ug/L		5.0	1		11/01/08 02:19	104-51-8	
sec-Butylbenzene	ND ug/L		5.0	1		11/01/08 02:19	135-98-8	
tert-Butylbenzene	ND ug/L		5.0	1		11/01/08 02:19	98-06-6	
Carbon disulfide	ND ug/L		10.0	1		11/01/08 02:19	75-15-0	
Carbon tetrachloride	ND ug/L		5.0	1		11/01/08 02:19	56-23-5	
Chlorobenzene	ND ug/L		5.0	1		11/01/08 02:19	108-90-7	
Chloroethane	ND ug/L		5.0	1		11/01/08 02:19	75-00-3	
Chloroform	ND ug/L		5.0	1		11/01/08 02:19	67-66-3	
Chloromethane	ND ug/L		5.0	1		11/01/08 02:19	74-87-3	
2-Chlorotoluene	ND ug/L		5.0	1		11/01/08 02:19	95-49-8	
4-Chlorotoluene	ND ug/L		5.0	1		11/01/08 02:19	106-43-4	
Dibromochloromethane	ND ug/L		5.0	1		11/01/08 02:19	124-48-1	
1,2-Dibromoethane (EDB)	ND ug/L		5.0	1		11/01/08 02:19	106-93-4	
Dibromomethane	ND ug/L		5.0	1		11/01/08 02:19	74-95-3	
1,2-Dichlorobenzene	ND ug/L		5.0	1		11/01/08 02:19	95-50-1	
1,3-Dichlorobenzene	ND ug/L		5.0	1		11/01/08 02:19	541-73-1	
1,4-Dichlorobenzene	ND ug/L		5.0	1		11/01/08 02:19	106-46-7	
trans-1,4-Dichloro-2-butene	ND ug/L		100	1		11/01/08 02:19	110-57-6	
Dichlorodifluoromethane	ND ug/L		5.0	1		11/01/08 02:19	75-71-8	
1,1-Dichloroethane	ND ug/L		5.0	1		11/01/08 02:19	75-34-3	
1,2-Dichloroethane	ND ug/L		5.0	1		11/01/08 02:19	107-06-2	
1,1-Dichloroethene	ND ug/L		5.0	1		11/01/08 02:19	75-35-4	
cis-1,2-Dichloroethene	ND ug/L		5.0	1		11/01/08 02:19	156-59-2	
trans-1,2-Dichloroethene	ND ug/L		5.0	1		11/01/08 02:19	156-60-5	
1,2-Dichloropropane	ND ug/L		5.0	1		11/01/08 02:19	78-87-5	
1,3-Dichloropropane	ND ug/L		5.0	1		11/01/08 02:19	142-28-9	
2,2-Dichloropropane	ND ug/L		5.0	1		11/01/08 02:19	594-20-7	
1,1-Dichloropropene	ND ug/L		5.0	1		11/01/08 02:19	563-58-6	
cis-1,3-Dichloropropene	ND ug/L		5.0	1		11/01/08 02:19	10061-01-5	
trans-1,3-Dichloropropene	ND ug/L		5.0	1		11/01/08 02:19	10061-02-6	
Ethylbenzene	ND ug/L		5.0	1		11/01/08 02:19	100-41-4	
Ethyl methacrylate	ND ug/L		100	1		11/01/08 02:19	97-63-2	
Hexachloro-1,3-butadiene	ND ug/L		5.0	1		11/01/08 02:19	87-68-3	
n-Hexane	ND ug/L		5.0	1		11/01/08 02:19	110-54-3	
2-Hexanone	ND ug/L		25.0	1		11/01/08 02:19	591-78-6	
Iodomethane	ND ug/L		10.0	1		11/01/08 02:19	74-88-4	
Isopropylbenzene (Cumene)	ND ug/L		5.0	1		11/01/08 02:19	98-82-8	

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## ANALYTICAL RESULTS

Project: KISER PLATING W083470

Pace Project No.: 5020176

Sample: TRIP BLANK		Lab ID: 5020176010	Collected: 10/22/08 08:00	Received: 10/24/08 11:10	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>		Analytical Method: EPA 8260						
p-Isopropyltoluene	ND ug/L		5.0	1		11/01/08 02:19	99-87-6	
Methylene chloride	ND ug/L		5.0	1		11/01/08 02:19	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND ug/L		25.0	1		11/01/08 02:19	108-10-1	
Methyl-tert-butyl ether	ND ug/L		4.0	1		11/01/08 02:19	1634-04-4	
Naphthalene	ND ug/L		5.0	1		11/01/08 02:19	91-20-3	
n-Propylbenzene	ND ug/L		5.0	1		11/01/08 02:19	103-65-1	
Styrene	ND ug/L		5.0	1		11/01/08 02:19	100-42-5	
1,1,1,2-Tetrachloroethane	ND ug/L		5.0	1		11/01/08 02:19	630-20-6	
1,1,2,2-Tetrachloroethane	ND ug/L		5.0	1		11/01/08 02:19	79-34-5	
Tetrachloroethene	ND ug/L		5.0	1		11/01/08 02:19	127-18-4	
Toluene	ND ug/L		5.0	1		11/01/08 02:19	108-88-3	
1,2,3-Trichlorobenzene	ND ug/L		5.0	1		11/01/08 02:19	87-61-6	
1,2,4-Trichlorobenzene	ND ug/L		5.0	1		11/01/08 02:19	120-82-1	
1,1,1-Trichloroethane	ND ug/L		5.0	1		11/01/08 02:19	71-55-6	
1,1,2-Trichloroethane	ND ug/L		5.0	1		11/01/08 02:19	79-00-5	
Trichloroethene	ND ug/L		5.0	1		11/01/08 02:19	79-01-6	
Trichlorofluoromethane	ND ug/L		5.0	1		11/01/08 02:19	75-69-4	
1,2,3-Trichloropropane	ND ug/L		5.0	1		11/01/08 02:19	96-18-4	
1,2,4-Trimethylbenzene	ND ug/L		5.0	1		11/01/08 02:19	95-63-6	
1,3,5-Trimethylbenzene	ND ug/L		5.0	1		11/01/08 02:19	108-67-8	
Vinyl acetate	ND ug/L		10.0	1		11/01/08 02:19	108-05-4	
Vinyl chloride	ND ug/L		2.0	1		11/01/08 02:19	75-01-4	
Xylene (Total)	ND ug/L		10.0	1		11/01/08 02:19	1330-20-7	
Dibromofluoromethane (S)	103 %		80-123	1		11/01/08 02:19	1868-53-7	
4-Bromofluorobenzene (S)	98 %		70-126	1		11/01/08 02:19	460-00-4	
Toluene-d8 (S)	99 %		80-116	1		11/01/08 02:19	2037-26-5	

## QUALITY CONTROL DATA

Project: KISER PLATING W083470

Pace Project No.: 5020176

QC Batch: MPRP/3624

Analysis Method: EPA 6010

QC Batch Method: EPA 3010

Analysis Description: 6010 MET Dissolved

Associated Lab Samples: 5020176001, 5020176002, 5020176003, 5020176004, 5020176005, 5020176006

METHOD BLANK: 226620

Matrix: Water

Associated Lab Samples: 5020176001, 5020176002, 5020176003, 5020176004, 5020176005, 5020176006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Arsenic, Dissolved	ug/L	ND	10.0	10/28/08 22:51	
Barium, Dissolved	ug/L	ND	100	10/28/08 22:51	
Cadmium, Dissolved	ug/L	ND	5.0	10/28/08 22:51	
Chromium, Dissolved	ug/L	ND	10.0	10/28/08 22:51	
Copper, Dissolved	ug/L	ND	20.0	10/28/08 22:51	
Lead, Dissolved	ug/L	ND	5.0	10/28/08 22:51	
Nickel, Dissolved	ug/L	ND	50.0	10/28/08 22:51	
Selenium, Dissolved	ug/L	ND	10.0	10/28/08 22:51	
Silver, Dissolved	ug/L	ND	50.0	10/28/08 22:51	
Sodium, Dissolved	ug/L	ND	1000	10/28/08 22:51	
Zinc, Dissolved	ug/L	ND	50.0	10/28/08 22:51	

LABORATORY CONTROL SAMPLE: 226621

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic, Dissolved	ug/L	1000	1040	104	85-118	
Barium, Dissolved	ug/L	1000	1010	101	85-116	
Cadmium, Dissolved	ug/L	1000	1010	101	85-115	
Chromium, Dissolved	ug/L	1000	996	100	83-117	
Copper, Dissolved	ug/L	1000	978	98	84-116	
Lead, Dissolved	ug/L	1000	1010	101	82-117	
Nickel, Dissolved	ug/L	1000	996	100	85-115	
Selenium, Dissolved	ug/L	1000	1020	102	85-119	
Silver, Dissolved	ug/L	500	491	98	82-118	
Sodium, Dissolved	ug/L	10000	10300	103	85-117	
Zinc, Dissolved	ug/L	1000	1010	101	82-119	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 226622

226623

Parameter	Units	5020151009 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Arsenic, Dissolved	ug/L	ND	1000	1000	917	947	92	95	71-135	3	20	
Barium, Dissolved	ug/L	ND	1000	1000	944	969	85	87	60-138	3	20	
Cadmium, Dissolved	ug/L	ND	1000	1000	861	884	86	88	65-129	3	20	
Chromium, Dissolved	ug/L	ND	1000	1000	857	881	86	88	65-128	3	20	
Copper, Dissolved	ug/L	ND	1000	1000	852	876	85	88	61-130	3	20	
Lead, Dissolved	ug/L	ND	1000	1000	868	893	87	89	65-130	3	20	
Nickel, Dissolved	ug/L	ND	1000	1000	845	870	84	87	60-130	3	20	
Selenium, Dissolved	ug/L	ND	1000	1000	907	928	90	93	63-130	2	20	
Silver, Dissolved	ug/L	ND	500	500	432	442	86	88	70-130	2	20	

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## QUALITY CONTROL DATA

Project: KISER PLATING W083470

Pace Project No.: 5020176

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 226622 226623											
Parameter	Units	5020151009 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual
Sodium, Dissolved	ug/L	16000	10000	10000	23200	24100	71	81	60-140	4	20
Zinc, Dissolved	ug/L	ND	1000	1000	876	903	85	88	80-118	3	20

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 226624 226625											
Parameter	Units	5020074004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual
Arsenic, Dissolved	ug/L	ND	1000	1000	1060	1020	106	102	71-135	4	20
Barium, Dissolved	ug/L	360	1000	1000	1360	1310	100	95	60-138	4	20
Cadmium, Dissolved	ug/L	ND	1000	1000	987	946	99	95	65-129	4	20
Chromium, Dissolved	ug/L	ND	1000	1000	986	940	99	94	65-128	5	20
Copper, Dissolved	ug/L	ND	1000	1000	976	930	97	92	61-130	5	20
Lead, Dissolved	ug/L	ND	1000	1000	994	953	99	95	65-130	4	20
Nickel, Dissolved	ug/L	ND	1000	1000	962	919	96	92	60-130	5	20
Selenium, Dissolved	ug/L	ND	1000	1000	1030	987	103	98	63-130	4	20
Silver, Dissolved	ug/L	ND	500	500	492	473	98	95	70-130	4	20
Sodium, Dissolved	ug/L	18200	10000	10000	30300	28900	121	107	60-140	5	20
Zinc, Dissolved	ug/L	ND	1000	1000	981	950	98	95	80-118	3	20

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 226626 226627											
Parameter	Units	5020176006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual
Arsenic, Dissolved	ug/L	14.9	1000	1000	1170	1150	115	114	71-135	1	20
Barium, Dissolved	ug/L	ND	1000	1000	1030	1020	97	95	60-138	1	20
Cadmium, Dissolved	ug/L	ND	1000	1000	1020	1010	102	101	65-129	1	20
Chromium, Dissolved	ug/L	ND	1000	1000	999	988	99	98	65-128	1	20
Copper, Dissolved	ug/L	329000	1000	1000	312000	313000	-1654	-1575	61-130	0	20 P6
Lead, Dissolved	ug/L	27.6	1000	1000	1080	1070	105	104	65-130	1	20
Nickel, Dissolved	ug/L	15700	1000	1000	17200	17300	148	154	60-130	0	20 P6
Selenium, Dissolved	ug/L	15.5	1000	1000	1120	1110	111	110	63-130	1	20
Silver, Dissolved	ug/L	ND	500	500	528	522	105	104	70-130	1	20
Sodium, Dissolved	ug/L	109000 0	10000	10000	1330000	1330000	2400	2420	60-140	0	20 P6
Zinc, Dissolved	ug/L	ND	1000	1000	1110	1100	107	106	80-118	1	20

## QUALITY CONTROL DATA

Project: KISER PLATING W083470

Pace Project No.: 5020176

QC Batch: WETA/2980

Analysis Method: EPA 7196

QC Batch Method: EPA 7196

Analysis Description: 7196 Chromium, Hexavalent

Associated Lab Samples: 5020176001, 5020176004, 5020176005, 5020176006

METHOD BLANK: 226754

Matrix: Water

Associated Lab Samples: 5020176001, 5020176004, 5020176005, 5020176006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chromium, Hexavalent	mg/L	ND	0.010	10/27/08 11:50	

LABORATORY CONTROL SAMPLE: 226755

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chromium, Hexavalent	mg/L	.5	0.48	95	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 226756

226757

Parameter	Units	5020176006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chromium, Hexavalent	mg/L	ND	25	25	1.2	0.85	5	3	45-135	34	20	1d,M3

## QUALITY CONTROL DATA

Project: KISER PLATING W083470

Pace Project No.: 5020176

QC Batch: OEXT/10075

Analysis Method: EPA 8270 by SIM

QC Batch Method: EPA 3510

Analysis Description: 8270 Water PAH by SIM MSSV

Associated Lab Samples: 5020176001, 5020176004, 5020176006, 5020176007

METHOD BLANK: 226907

Matrix: Water

Associated Lab Samples: 5020176001, 5020176004, 5020176006, 5020176007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
2-Methylnaphthalene	ug/L	ND	1.0	10/29/08 21:33	
Acenaphthene	ug/L	ND	1.0	10/29/08 21:33	
Acenaphthylene	ug/L	ND	1.0	10/29/08 21:33	
Anthracene	ug/L	ND	0.10	10/29/08 21:33	
Benzo(a)anthracene	ug/L	ND	0.10	10/29/08 21:33	
Benzo(a)pyrene	ug/L	ND	0.10	10/29/08 21:33	
Benzo(b)fluoranthene	ug/L	ND	0.10	10/29/08 21:33	
Benzo(g,h,i)perylene	ug/L	ND	0.10	10/29/08 21:33	
Benzo(k)fluoranthene	ug/L	ND	0.10	10/29/08 21:33	
Chrysene	ug/L	ND	0.50	10/29/08 21:33	
Dibenz(a,h)anthracene	ug/L	ND	0.10	10/29/08 21:33	
Fluoranthene	ug/L	ND	1.0	10/29/08 21:33	
Fluorene	ug/L	ND	1.0	10/29/08 21:33	
Indeno(1,2,3-cd)pyrene	ug/L	ND	0.10	10/29/08 21:33	
Naphthalene	ug/L	ND	1.0	10/29/08 21:33	
Phenanthrene	ug/L	ND	1.0	10/29/08 21:33	
Pyrene	ug/L	ND	1.0	10/29/08 21:33	
2-Fluorobiphenyl (S)	%	46	35-116	10/29/08 21:33	
Terphenyl-d14 (S)	%	93	25-117	10/29/08 21:33	

LABORATORY CONTROL SAMPLE: 226908

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
2-Methylnaphthalene	ug/L	10	5.4	54	40-110	
Acenaphthene	ug/L	10	5.9	59	48-117	
Acenaphthylene	ug/L	10	6.5	65	50-121	
Anthracene	ug/L	10	8.0	80	53-127	
Benzo(a)anthracene	ug/L	10	8.6	86	63-122	
Benzo(a)pyrene	ug/L	10	9.0	90	50-133	
Benzo(b)fluoranthene	ug/L	10	9.7	97	51-136	
Benzo(g,h,i)perylene	ug/L	10	8.7	87	39-126	
Benzo(k)fluoranthene	ug/L	10	8.2	82	49-124	
Chrysene	ug/L	10	8.6	86	61-116	
Dibenz(a,h)anthracene	ug/L	10	9.1	91	44-130	
Fluoranthene	ug/L	10	9.2	92	65-128	
Fluorene	ug/L	10	7.3	73	54-120	
Indeno(1,2,3-cd)pyrene	ug/L	10	9.3	93	43-129	
Naphthalene	ug/L	10	5.7	57	42-120	
Phenanthrene	ug/L	10	7.4	74	56-120	
Pyrene	ug/L	10	8.0	80	61-123	
2-Fluorobiphenyl (S)	%			38	35-116	

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## QUALITY CONTROL DATA

Project: KISER PLATING W083470

Pace Project No.: 5020176

LABORATORY CONTROL SAMPLE: 226908

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Terphenyl-d14 (S)	%			88	25-117	

## QUALITY CONTROL DATA

Project: KISER PLATING W083470

Pace Project No.: 5020176

QC Batch:	MERP/1859	Analysis Method:	EPA 7470
QC Batch Method:	EPA 7470	Analysis Description:	7470 Mercury Dissolved
Associated Lab Samples:	5020176001, 5020176002, 5020176003, 5020176004, 5020176005, 5020176006, 5020176008, 5020176009		

METHOD BLANK:	227281	Matrix:	Water
Associated Lab Samples:	5020176001, 5020176002, 5020176003, 5020176004, 5020176005, 5020176006, 5020176008, 5020176009		

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury, Dissolved	ug/L	ND	2.0	10/30/08 10:40	

LABORATORY CONTROL SAMPLE: 227282						
Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury, Dissolved	ug/L	5	4.9	97	75-117	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 227283													227284		
Parameter	Units	5020176006 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	3.8	4.1	76	81	52-133	7	20				

## QUALITY CONTROL DATA

Project: KISER PLATING W083470

Pace Project No.: 5020176

QC Batch: MERP/1860 Analysis Method: EPA 7470  
QC Batch Method: EPA 7470 Analysis Description: 7470 Mercury  
Associated Lab Samples: 5020176001, 5020176002, 5020176004, 5020176005, 5020176006

METHOD BLANK: 227286 Matrix: Water  
Associated Lab Samples: 5020176001, 5020176002, 5020176004, 5020176005, 5020176006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	ug/L	ND	2.0	10/30/08 11:06	

LABORATORY CONTROL SAMPLE: 227287

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	5	5.1	102	75-117	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 227288 227289

Parameter	Units	5020176006 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	3.8	3.7	76	74	52-133	3	20	M0

## QUALITY CONTROL DATA

Project: KISER PLATING W083470

Pace Project No.: 5020176

QC Batch: MPRP/3634 Analysis Method: EPA 6010  
QC Batch Method: EPA 3010 Analysis Description: 6010 MET  
Associated Lab Samples: 5020176001, 5020176002, 5020176004, 5020176005, 5020176006

METHOD BLANK: 227574 Matrix: Water  
Associated Lab Samples: 5020176001, 5020176002, 5020176004, 5020176005, 5020176006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Arsenic	ug/L	ND	10.0	11/03/08 20:30	
Barium	ug/L	ND	100	11/03/08 20:30	
Cadmium	ug/L	ND	5.0	11/03/08 20:30	
Chromium	ug/L	ND	10.0	11/03/08 20:30	
Copper	ug/L	ND	20.0	11/03/08 20:30	
Lead	ug/L	ND	10.0	11/03/08 20:30	
Nickel	ug/L	ND	50.0	11/03/08 20:30	
Selenium	ug/L	ND	10.0	11/03/08 20:30	
Silver	ug/L	ND	50.0	11/03/08 20:30	
Zinc	ug/L	ND	50.0	11/03/08 20:30	

LABORATORY CONTROL SAMPLE: 227575

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic	ug/L	1000	990	99	85-118	
Barium	ug/L	1000	982	98	85-116	
Cadmium	ug/L	1000	1000	100	85-115	
Chromium	ug/L	1000	969	97	83-117	
Copper	ug/L	1000	942	94	84-116	
Lead	ug/L	1000	1010	101	82-117	
Nickel	ug/L	1000	1030	103	85-115	
Selenium	ug/L	1000	1010	101	85-119	
Silver	ug/L	500	483	97	82-118	
Zinc	ug/L	1000	992	99	82-119	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 227576 227577

Parameter	Units	5020176006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Arsenic	ug/L	17.9	1000	1000	1090	1140	107	112	71-135	4	20	
Barium	ug/L	104	1000	1000	1040	1080	94	98	60-138	4	20	
Cadmium	ug/L	ND	1000	1000	1010	1050	101	105	65-129	4	20	
Chromium	ug/L	14.0	1000	1000	970	1020	96	100	65-128	5	20	
Copper	ug/L	351000	1000	1000	323000	332000	-2767	-1855	61-130	3	20 P6	
Lead	ug/L	32.3	1000	1000	1060	1110	103	108	65-130	4	20	
Nickel	ug/L	18500	1000	1000	18300	19100	-22	54	60-130	4	20 P6	
Selenium	ug/L	13.4	1000	1000	1100	1140	108	113	63-130	4	20	
Silver	ug/L	ND	500	500	519	531	103	106	70-130	2	20	
Zinc	ug/L	68.3	1000	1000	1090	1140	102	107	60-130	5	20	

## QUALITY CONTROL DATA

Project: KISER PLATING W083470

Pace Project No.: 5020176

QC Batch: MPRP/3637

Analysis Method: EPA 6010

QC Batch Method: EPA 3010

Analysis Description: 6010 MET Dissolved

Associated Lab Samples: 5020176008, 5020176009

METHOD BLANK: 228041

Matrix: Water

Associated Lab Samples: 5020176008, 5020176009

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Arsenic, Dissolved	ug/L	ND	10.0	11/03/08 19:51	
Barium, Dissolved	ug/L	ND	100	11/03/08 19:51	
Cadmium, Dissolved	ug/L	ND	5.0	11/03/08 19:51	
Chromium, Dissolved	ug/L	ND	10.0	11/03/08 19:51	
Copper, Dissolved	ug/L	ND	20.0	11/03/08 19:51	
Lead, Dissolved	ug/L	ND	5.0	11/03/08 19:51	
Nickel, Dissolved	ug/L	ND	50.0	11/03/08 19:51	
Selenium, Dissolved	ug/L	ND	10.0	11/03/08 19:51	
Silver, Dissolved	ug/L	ND	50.0	11/03/08 19:51	
Zinc, Dissolved	ug/L	ND	50.0	11/03/08 19:51	

LABORATORY CONTROL SAMPLE: 228042

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic, Dissolved	ug/L	1000	998	100	85-118	
Barium, Dissolved	ug/L	1000	981	98	85-116	
Cadmium, Dissolved	ug/L	1000	1000	100	85-115	
Chromium, Dissolved	ug/L	1000	972	97	83-117	
Copper, Dissolved	ug/L	1000	940	94	84-116	
Lead, Dissolved	ug/L	1000	1010	101	82-117	
Nickel, Dissolved	ug/L	1000	1040	104	85-115	
Selenium, Dissolved	ug/L	1000	1020	102	85-119	
Silver, Dissolved	ug/L	500	488	98	82-118	
Zinc, Dissolved	ug/L	1000	990	99	82-119	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 228043

228044

Parameter	Units	5020213002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Arsenic, Dissolved	ug/L	ND	1000	1000	1020	1030	101	103	71-135	2	20	
Barium, Dissolved	ug/L	220	1000	1000	1200	1230	98	101	60-138	2	20	
Cadmium, Dissolved	ug/L	ND	1000	1000	993	1010	99	101	65-129	2	20	
Chromium, Dissolved	ug/L	ND	1000	1000	966	993	97	99	65-128	3	20	
Copper, Dissolved	ug/L	ND	1000	1000	963	983	96	98	61-130	2	20	
Lead, Dissolved	ug/L	ND	1000	1000	1000	1020	100	102	65-130	2	20	
Nickel, Dissolved	ug/L	ND	1000	1000	1010	1030	101	103	60-130	2	20	
Selenium, Dissolved	ug/L	ND	1000	1000	1030	1050	103	105	63-130	2	20	
Silver, Dissolved	ug/L	ND	500	500	502	507	100	101	70-130	1	20	
Zinc, Dissolved	ug/L	ND	1000	1000	968	989	96	98	80-118	2	20	

## QUALITY CONTROL DATA

Project: KISER PLATING W083470

Pace Project No.: 5020176

QC Batch: MSV/12502 Analysis Method: EPA 8260  
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV  
Associated Lab Samples: 5020176001, 5020176004, 5020176006, 5020176007, 5020176010

METHOD BLANK: 229280 Matrix: Water  
Associated Lab Samples: 5020176001, 5020176004, 5020176006, 5020176007, 5020176010

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	5.0	10/31/08 22:06	
1,1,1-Trichloroethane	ug/L	ND	5.0	10/31/08 22:06	
1,1,2,2-Tetrachloroethane	ug/L	ND	5.0	10/31/08 22:06	
1,1,2-Trichloroethane	ug/L	ND	5.0	10/31/08 22:06	
1,1-Dichloroethane	ug/L	ND	5.0	10/31/08 22:06	
1,1-Dichloroethene	ug/L	ND	5.0	10/31/08 22:06	
1,1-Dichloropropene	ug/L	ND	5.0	10/31/08 22:06	
1,2,3-Trichlorobenzene	ug/L	ND	5.0	10/31/08 22:06	
1,2,3-Trichloropropane	ug/L	ND	5.0	10/31/08 22:06	
1,2,4-Trichlorobenzene	ug/L	ND	5.0	10/31/08 22:06	
1,2,4-Trimethylbenzene	ug/L	ND	5.0	10/31/08 22:06	
1,2-Dibromoethane (EDB)	ug/L	ND	5.0	10/31/08 22:06	
1,2-Dichlorobenzene	ug/L	ND	5.0	10/31/08 22:06	
1,2-Dichloroethane	ug/L	ND	5.0	10/31/08 22:06	
1,2-Dichloropropane	ug/L	ND	5.0	10/31/08 22:06	
1,3,5-Trimethylbenzene	ug/L	ND	5.0	10/31/08 22:06	
1,3-Dichlorobenzene	ug/L	ND	5.0	10/31/08 22:06	
1,3-Dichloropropane	ug/L	ND	5.0	10/31/08 22:06	
1,4-Dichlorobenzene	ug/L	ND	5.0	10/31/08 22:06	
2,2-Dichloropropane	ug/L	ND	5.0	10/31/08 22:06	
2-Butanone (MEK)	ug/L	ND	25.0	10/31/08 22:06	
2-Chlorotoluene	ug/L	ND	5.0	10/31/08 22:06	
2-Hexanone	ug/L	ND	25.0	10/31/08 22:06	
4-Chlorotoluene	ug/L	ND	5.0	10/31/08 22:06	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	25.0	10/31/08 22:06	
Acetone	ug/L	ND	100	10/31/08 22:06	
Acrolein	ug/L	ND	100	10/31/08 22:06	
Acrylonitrile	ug/L	ND	100	10/31/08 22:06	
Benzene	ug/L	ND	5.0	10/31/08 22:06	
Bromobenzene	ug/L	ND	5.0	10/31/08 22:06	
Bromochloromethane	ug/L	ND	5.0	10/31/08 22:06	
Bromodichloromethane	ug/L	ND	5.0	10/31/08 22:06	
Bromoform	ug/L	ND	5.0	10/31/08 22:06	
Bromomethane	ug/L	ND	5.0	10/31/08 22:06	
Carbon disulfide	ug/L	ND	10.0	10/31/08 22:06	
Carbon tetrachloride	ug/L	ND	5.0	10/31/08 22:06	
Chlorobenzene	ug/L	ND	5.0	10/31/08 22:06	
Chloroethane	ug/L	ND	5.0	10/31/08 22:06	
Chloroform	ug/L	ND	5.0	10/31/08 22:06	
Chloromethane	ug/L	ND	5.0	10/31/08 22:06	
cis-1,2-Dichloroethene	ug/L	ND	5.0	10/31/08 22:06	
cis-1,3-Dichloropropene	ug/L	ND	5.0	10/31/08 22:06	
Dibromochloromethane	ug/L	ND	5.0	10/31/08 22:06	

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## QUALITY CONTROL DATA

Project: KISER PLATING W083470

Pace Project No.: 5020176

METHOD BLANK: 229280

Matrix: Water

Associated Lab Samples: 5020176001, 5020176004, 5020176006, 5020176007, 5020176010

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Dibromomethane	ug/L	ND	5.0	10/31/08 22:06	
Dichlorodifluoromethane	ug/L	ND	5.0	10/31/08 22:06	
Ethyl methacrylate	ug/L	ND	100	10/31/08 22:06	
Ethylbenzene	ug/L	ND	5.0	10/31/08 22:06	
Hexachloro-1,3-butadiene	ug/L	ND	5.0	10/31/08 22:06	
Iodomethane	ug/L	ND	10.0	10/31/08 22:06	
Isopropylbenzene (Cumene)	ug/L	ND	5.0	10/31/08 22:06	
Methyl-tert-butyl ether	ug/L	ND	4.0	10/31/08 22:06	
Methylene chloride	ug/L	ND	5.0	10/31/08 22:06	
n-Butylbenzene	ug/L	ND	5.0	10/31/08 22:06	
n-Hexane	ug/L	ND	5.0	10/31/08 22:06	
n-Propylbenzene	ug/L	ND	5.0	10/31/08 22:06	
Naphthalene	ug/L	ND	5.0	10/31/08 22:06	
p-Isopropyltoluene	ug/L	ND	5.0	10/31/08 22:06	
sec-Butylbenzene	ug/L	ND	5.0	10/31/08 22:06	
Styrene	ug/L	ND	5.0	10/31/08 22:06	
tert-Butylbenzene	ug/L	ND	5.0	10/31/08 22:06	
Tetrachloroethene	ug/L	ND	5.0	10/31/08 22:06	
Toluene	ug/L	ND	5.0	10/31/08 22:06	
trans-1,2-Dichloroethene	ug/L	ND	5.0	10/31/08 22:06	
trans-1,3-Dichloropropene	ug/L	ND	5.0	10/31/08 22:06	
trans-1,4-Dichloro-2-butene	ug/L	ND	100	10/31/08 22:06	
Trichloroethene	ug/L	ND	5.0	10/31/08 22:06	
Trichlorofluoromethane	ug/L	ND	5.0	10/31/08 22:06	
Vinyl acetate	ug/L	ND	10.0	10/31/08 22:06	
Vinyl chloride	ug/L	ND	2.0	10/31/08 22:06	
Xylene (Total)	ug/L	ND	10.0	10/31/08 22:06	
4-Bromofluorobenzene (S)	%	97	70-126	10/31/08 22:06	
Dibromofluoromethane (S)	%	97	80-123	10/31/08 22:06	
Toluene-d8 (S)	%	102	80-116	10/31/08 22:06	

LABORATORY CONTROL SAMPLE: 229281

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	50	49.4	99	69-130	
1,1,1-Trichloroethane	ug/L	50	48.2	96	69-136	
1,1,2,2-Tetrachloroethane	ug/L	50	52.1	104	69-131	
1,1,2-Trichloroethane	ug/L	50	52.8	106	77-132	
1,1-Dichloroethane	ug/L	50	46.6	93	67-133	
1,1-Dichloroethene	ug/L	50	51.9	104	63-128	
1,1-Dichloropropene	ug/L	50	49.5	99	75-134	
1,2,3-Trichlorobenzene	ug/L	50	47.8	96	58-131	
1,2,3-Trichloropropane	ug/L	50	48.3	97	60-131	
1,2,4-Trichlorobenzene	ug/L	50	45.9	92	60-130	
1,2,4-Trimethylbenzene	ug/L	50	53.7	107	73-130	

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## QUALITY CONTROL DATA

Project: KISER PLATING W083470

Pace Project No.: 5020176

LABORATORY CONTROL SAMPLE: 229281

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dibromoethane (EDB)	ug/L	50	48.5	97	75-126	
1,2-Dichlorobenzene	ug/L	50	52.5	105	76-124	
1,2-Dichloroethane	ug/L	50	47.3	95	69-139	
1,2-Dichloropropane	ug/L	50	51.2	102	76-129	
1,3,5-Trimethylbenzene	ug/L	50	54.3	109	74-130	
1,3-Dichlorobenzene	ug/L	50	53.2	106	76-125	
1,3-Dichloropropane	ug/L	50	50.1	100	74-126	
1,4-Dichlorobenzene	ug/L	50	50.6	101	75-122	
2,2-Dichloropropane	ug/L	50	45.8	92	53-144	
2-Butanone (MEK)	ug/L	250	175	70	47-189	
2-Chlorotoluene	ug/L	50	53.4	107	72-128	
2-Hexanone	ug/L	250	237	95	57-167	
4-Chlorotoluene	ug/L	50	53.1	106	73-124	
4-Methyl-2-pentanone (MIBK)	ug/L	250	235	94	61-135	
Acetone	ug/L	250	194	78	30-170	
Acrylonitrile	ug/L	1000	999	100	67-136	
Benzene	ug/L	50	50.9	102	78-127	
Bromobenzene	ug/L	50	51.6	103	62-139	
Bromochloromethane	ug/L	50	41.7	83	54-162	
Bromodichloromethane	ug/L	50	45.8	92	69-133	
Bromoform	ug/L	50	48.3	97	60-127	
Bromomethane	ug/L	50	53.1	106	30-170	
Carbon disulfide	ug/L	100	125	125	58-152	
Carbon tetrachloride	ug/L	50	48.1	96	62-143	
Chlorobenzene	ug/L	50	51.9	104	75-123	
Chloroethane	ug/L	50	47.5	95	56-153	
Chloroform	ug/L	50	47.1	94	74-131	
Chloromethane	ug/L	50	47.0	94	35-147	
cis-1,2-Dichloroethene	ug/L	50	49.3	99	74-128	
cis-1,3-Dichloropropene	ug/L	50	50.9	102	58-123	
Dibromochloromethane	ug/L	50	48.0	96	66-131	
Dibromomethane	ug/L	50	48.2	96	73-133	
Dichlorodifluoromethane	ug/L	50	45.0	90	30-170	
Ethyl methacrylate	ug/L	50	49.8J	100	59-138	
Ethylbenzene	ug/L	50	53.6	107	81-126	
Hexachloro-1,3-butadiene	ug/L	50	49.2	98	70-130	
Iodomethane	ug/L	100	98.7	99	41-170	
Isopropylbenzene (Cumene)	ug/L	50	51.5	103	80-130	
Methyl-tert-butyl ether	ug/L	100	95.8	96	66-147	
Methylene chloride	ug/L	50	51.1	102	32-164	
n-Butylbenzene	ug/L	50	52.6	105	68-135	
n-Hexane	ug/L	50	58.1	116	69-157	
n-Propylbenzene	ug/L	50	55.3	111	71-132	
Naphthalene	ug/L	50	46.1	92	61-135	
p-Isopropyltoluene	ug/L	50	52.5	105	66-131	
sec-Butylbenzene	ug/L	50	55.6	111	73-130	
Styrene	ug/L	50	53.2	106	74-128	
tert-Butylbenzene	ug/L	50	51.1	102	63-117	

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## QUALITY CONTROL DATA

Project: KISER PLATING W083470

Pace Project No.: 5020176

LABORATORY CONTROL SAMPLE: 229281

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Tetrachloroethene	ug/L	50	52.1	104	60-119	
Toluene	ug/L	50	50.8	102	75-129	
trans-1,2-Dichloroethene	ug/L	50	51.3	103	71-126	
trans-1,3-Dichloropropene	ug/L	50	45.9	92	54-123	
trans-1,4-Dichloro-2-butene	ug/L	50	43.8J	88	47-141	
Trichloroethene	ug/L	50	51.5	103	74-130	
Trichlorofluoromethane	ug/L	50	45.7	91	62-150	
Vinyl acetate	ug/L	200	175	87	41-145	
Vinyl chloride	ug/L	50	46.9	94	55-141	
Xylene (Total)	ug/L	150	160	106	76-132	
4-Bromofluorobenzene (S)	%			98	70-126	
Dibromofluoromethane (S)	%			96	80-123	
Toluene-d8 (S)	%			101	80-116	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 229282

229283

Parameter	Units	5020176006 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/L	ND	50	50	46.4	49.5	93	99	55-131	7	20	
1,1,1-Trichloroethane	ug/L	ND	50	50	47.6	49.2	95	98	64-143	3	20	
1,1,2,2-Tetrachloroethane	ug/L	ND	50	50	49.8	52.3	100	105	64-142	5	20	
1,1,2-Trichloroethane	ug/L	ND	50	50	52.8	54.1	100	103	71-143	3	20	
1,1-Dichloroethane	ug/L	7.0	50	50	55.6	56.8	97	100	68-139	2	20	
1,1-Dichloroethene	ug/L	8.4	50	50	59.4	60.5	102	104	55-140	2	20	
1,1-Dichloropropene	ug/L	ND	50	50	46.1	47.7	92	95	66-140	3	20	
1,2,3-Trichlorobenzene	ug/L	ND	50	50	43.1	43.7	86	87	33-140	2	20	
1,2,3-Trichloropropane	ug/L	ND	50	50	45.7	48.1	91	96	58-133	5	20	
1,2,4-Trichlorobenzene	ug/L	ND	50	50	41.4	41.5	83	83	28-140	0	20	
1,2,4-Trimethylbenzene	ug/L	ND	50	50	50.1	50.9	100	102	39-146	2	20	
1,2-Dibromoethane (EDB)	ug/L	ND	50	50	45.2	46.9	90	94	67-134	4	20	
1,2-Dichlorobenzene	ug/L	ND	50	50	48.7	49.8	97	100	48-137	2	20	
1,2-Dichloroethane	ug/L	ND	50	50	49.1	51.0	98	102	63-148	4	20	
1,2-Dichloropropane	ug/L	ND	50	50	48.6	50.0	97	100	70-136	3	20	
1,3,5-Trimethylbenzene	ug/L	ND	50	50	50.6	51.3	101	103	39-145	1	20	
1,3-Dichlorobenzene	ug/L	ND	50	50	49.2	49.7	98	99	40-143	1	20	
1,3-Dichloropropane	ug/L	ND	50	50	46.8	50.1	94	100	65-133	7	20	
1,4-Dichlorobenzene	ug/L	ND	50	50	46.3	47.4	93	95	38-142	2	20	
2,2-Dichloropropane	ug/L	ND	50	50	43.6	49.2	87	98	35-157	12	20	
2-Butanone (MEK)	ug/L	70.3	250	250	262	324	77	102	62-132	21	20 R1	
2-Chlorotoluene	ug/L	ND	50	50	48.4	50.0	97	100	44-143	3	20	
2-Hexanone	ug/L	ND	250	250	226	245	91	98	61-141	8	20	
4-Chlorotoluene	ug/L	ND	50	50	48.7	49.8	97	100	43-140	2	20	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	250	250	229	249	92	99	57-135	8	20	
Acetone	ug/L	391	250	250	654	719	105	132	30-170	10	20	
Acrolein	ug/L	ND	1000	1000	5210	5530	521	553	30-170	6	20 M0	
Acrylonitrile	ug/L	ND	1000	1000	956	1020	96	102	66-137	7	20	
Benzene	ug/L	ND	50	50	46.7	48.5	93	97	63-141	4	20	

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## QUALITY CONTROL DATA

Project: KISER PLATING W083470

Pace Project No.: 5020176

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 229282 229283											
Parameter	Units	5020176006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual
Bromobenzene	ug/L	ND	50	50	48.7	50.8	97	102	57-128	4	20
Bromochloromethane	ug/L	ND	50	50	49.3	49.9	99	100	65-157	1	20
Bromodichloromethane	ug/L	ND	50	50	45.6	46.7	91	93	63-135	2	20
Bromoform	ug/L	ND	50	50	46.2	48.9	92	98	58-124	6	20
Bromomethane	ug/L	ND	50	50	35.7	38.4	71	77	30-170	7	20
Carbon disulfide	ug/L	ND	100	100	115	119	115	119	46-162	4	20
Carbon tetrachloride	ug/L	ND	50	50	46.9	49.4	94	99	54-145	5	20
Chlorobenzene	ug/L	ND	50	50	48.3	50.0	97	100	56-133	3	20
Chloroethane	ug/L	ND	50	50	48.0	54.9	96	110	54-157	13	20
Chloroform	ug/L	ND	50	50	50.5	51.6	101	103	67-134	2	20
Chloromethane	ug/L	ND	50	50	52.5	51.8	105	104	36-137	1	20
cis-1,2-Dichloroethene	ug/L	16.4	50	50	66.9	74.1	101	115	65-132	10	20
cis-1,3-Dichloropropene	ug/L	ND	50	50	46.6	48.1	93	96	46-121	3	20
Dibromochloromethane	ug/L	ND	50	50	48.0	49.4	96	99	64-124	3	20
Dibromomethane	ug/L	ND	50	50	47.3	48.9	95	98	67-144	3	20
Dichlorodifluoromethane	ug/L	ND	50	50	42.4	43.7	85	87	30-163	3	20
Ethyl methacrylate	ug/L	ND	50	50	46.8J	49.8J	94	100	52-140		20
Ethylbenzene	ug/L	ND	50	50	49.8	50.7	100	101	44-151	2	20
Hexachloro-1,3-butadiene	ug/L	ND	50	50	44.6	45.3	89	91	30-145	2	20
Iodomethane	ug/L	ND	100	100	70.5	84.5	70	84	28-168	18	20
Isopropylbenzene (Cumene)	ug/L	ND	50	50	47.5	48.9	95	98	40-148	3	20
Methyl-tert-butyl ether	ug/L	ND	100	100	92.2	97.5	92	98	52-156	6	20
Methylene chloride	ug/L	324	50	50	381	372	115	97	46-154	2	20
n-Butylbenzene	ug/L	ND	50	50	47.6	48.5	95	97	27-153	2	20
n-Hexane	ug/L	ND	50	50	52.2	54.5	104	109	32-176	4	20
n-Propylbenzene	ug/L	ND	50	50	50.5	52.0	101	104	40-148	3	20
Naphthalene	ug/L	ND	50	50	41.3	43.6	83	87	44-138	5	20
p-Isopropyltoluene	ug/L	ND	50	50	48.2	48.8	96	98	34-146	1	20
sec-Butylbenzene	ug/L	ND	50	50	51.2	52.8	102	106	38-150	3	20
Styrene	ug/L	ND	50	50	50.1	50.7	100	101	38-141	1	20
tert-Butylbenzene	ug/L	ND	50	50	42.3	48.3	85	97	32-133	13	20
Tetrachloroethene	ug/L	7.0	50	50	53.4	54.9	93	96	25-146	3	20
Toluene	ug/L	ND	50	50	48.2	49.6	91	94	59-142	3	20
trans-1,2-Dichloroethene	ug/L	16.7	50	50	68.7	69.4	104	105	60-137	1	20
trans-1,3-Dichloropropene	ug/L	ND	50	50	42.9	45.1	86	90	43-117	5	20
trans-1,4-Dichloro-2-butene	ug/L	ND	50	50	45.2J	47.5J	90	95	44-139		20
Trichloroethene	ug/L	4960	50	50	3400	3280	-3120	-3362	61-137	4	20 MO
Trichlorofluoromethane	ug/L	ND	50	50	43.0	44.4	86	89	53-162	3	20
Vinyl acetate	ug/L	ND	200	200	159	167	80	84	24-132	5	20
Vinyl chloride	ug/L	2.5	50	50	43.7	45.0	82	85	51-144	3	20
Xylene (Total)	ug/L	ND	150	150	147	151	98	101	44-152	3	20
4-Bromofluorobenzene (S)	%						98	100	70-126		20
Dibromofluoromethane (S)	%						99	100	80-123		20
Toluene-d8 (S)	%						99	99	80-116		20

## QUALIFIERS

Project: KISER PLATING W083470

Pace Project No.: 5020176

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### DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

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

### BATCH QUALIFIERS

Batch: MSSV/3323

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

### ANALYTE QUALIFIERS

1d	Strongly reducing sample matrix may be converting Cr6+ to Cr3+, accounting for significant matrix suppression.
M0	Matrix spike recovery was outside laboratory control limits.
M3	Matrix spike recovery was outside laboratory control limits due to matrix interferences.
P6	Matrix spike recovery was outside laboratory control limits due to a parent sample concentration notably higher than the spike level.
R1	RPD value was outside control limits.